

# Appendix C



south side of parcel  
1170' elevation

north side of parcel  
1060' elevation

14.5 feet maximum height  
panels from the ground

West

13.3'

3'

East

Panels rotate from east to  
west. At night the panels  
return to the east position.

Combined there are more than 215  
tracking motors used to rotate the  
13.3 feet wide panels. Location of  
motors is shown on the mechanical  
drawing plans.

Solar Law 3.j. No discernable noise  
difference at the property line. Is the  
Project compliant with Solar Law 3.j.?

Each row of solar panels is 13.3 feet wide. The rows are oriented on the north south axis.  
When stored flat, parallel to the ground, for high winds and storms the panels are 9 feet in height

100' set back to 8 foot tall fence

Zoning Ordinance 5.7.1 limits fence height to 6 feet.  
Has the Applicant obtained a zoning variance?

74.00-2-5.1

74.00-3-18

Example of tracking solar panel installation at Oak Hill Solar 2, LLC parcel 74.00-2-5.1.  
During storm and high wind conditions the solar panels, represented in blue, may be stored flat, parallel to the ground. The rows of solar panels are 9 feet in height and 13.3 feet wide. The rows of solid surfaces may be constructed on a 10 to 15% downward slope from the south to the north. The Project's solar panel installation combined with the site's steep slope and 100% poorly drained soils is very likely to cause increased stormwater run off into the abutting parcels 74.00-3-18 and 74.00-3-19. This may result in erosion, gully formation, loss of use and diminished property value to abutting parcels.

N

In storm and high wind conditions solar panels may be stored flat, parallel to the ground.  
A bird's eye view of Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC may resemble this image by Pexels.

water flow



water flow



Oak Hill Solar 2, LLC  
South  
1170 feet in elevation

Oak Hill Solar 2, LLC  
North  
1060 feet in elevation

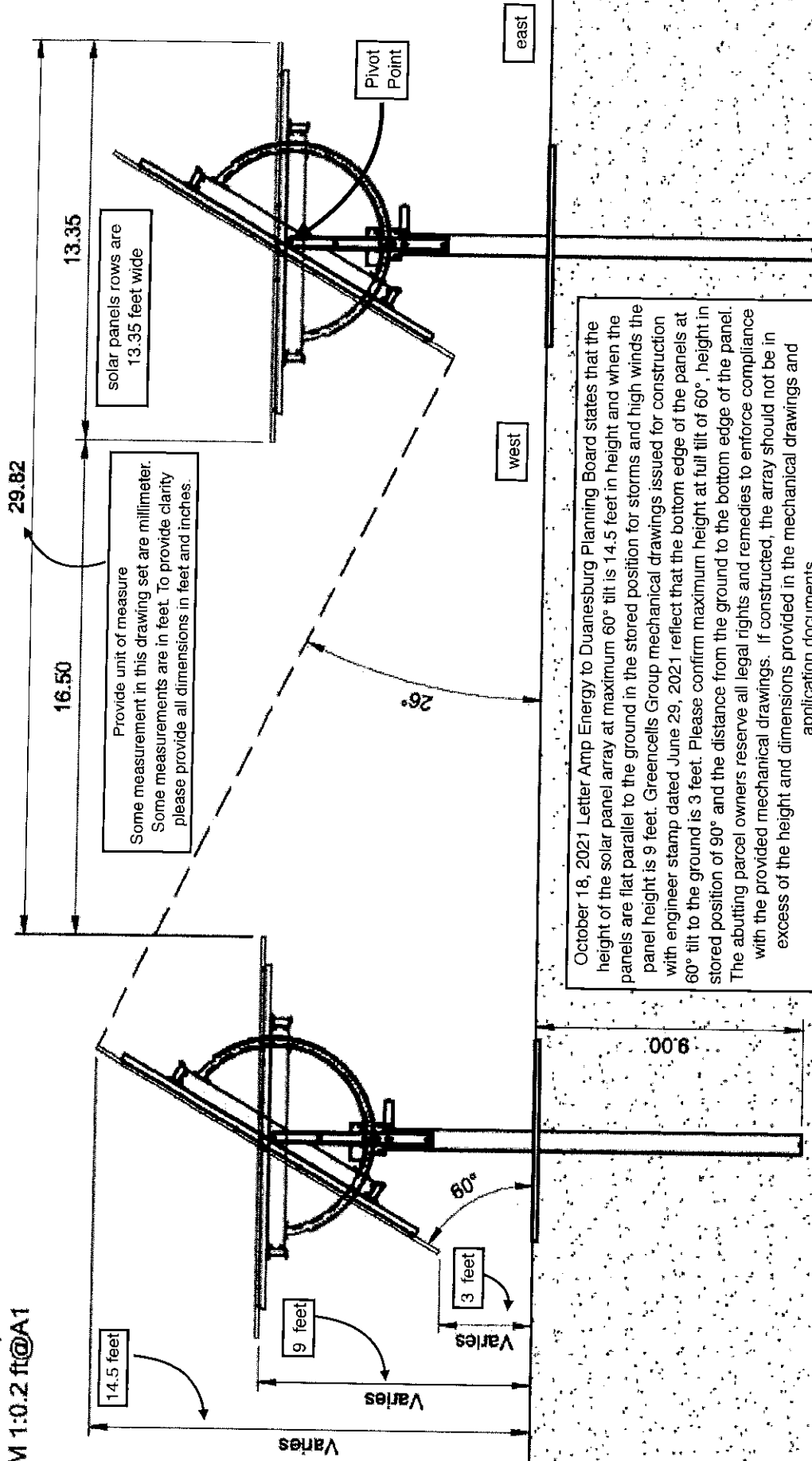
Tracker panels rotate  
east to west



The Project's lowest point is the north east corner of the two sites. The Full Environmental Assessment Form indicates that the Project site is 100% poor drainage on clay soils and has a steep 10% slope. The Project drains into parcel 74.00-3-18 to the east and parcel 74.00-3-19 to the north east which is an active revenue generating hayfield. A drainage system installed on parcel 74.00-3-19 permits the land to be used for agricultural purposes. Parcel 74.00-3-18 has existing erosion from stormwater drainage forming a gully along the shared property line and drains to the north into parcel 74.00-3-19.

Image: Pexels

**DETAIL A | Frame side view**  
**M 1:0.2 ft@A1**



October 18, 2021 Letter Amp Energy to Duaneburg Planning Board states that the height of the solar panel array at maximum 60° tilt is 14.5 feet in height and when the panels are flat parallel to the ground in the stored position for storms and high winds the panel height is 9 feet. Greencells Group mechanical drawings issued for construction with engineer stamp dated June 29, 2021 reflect that the bottom edge of the panels at 60° tilt to the ground is 3 feet. Please confirm maximum height at full tilt of 60°, height in stored position of 90° and the distance from the ground to the bottom edge of the panel. The abutting parcel owners reserve all legal rights and remedies to enforce compliance with the provided mechanical drawings. If constructed, the array should not be in excess of the height and dimensions provided in the mechanical drawings and application documents.

**TABLE A | Piles quantity for different pole length range**  
 Please refer to *GRC1026-100B Oak Hill 2 Pole Lengths [2021-06-14].xlsx spreadsheet for detailed piles distribution information*

Jeffery Schmitt, Chairman  
Members of Duanesburg Planning Board  
Town of Duanesburg  
5853 Western Turnpike  
Duanesburg, NY 12056

4 February 2022

Dear Chairman Schmitt and Planning Board Members,

Pamela Rowling, owner parcel 74.-3-19 comprised of 71.4 acres on Youngs Road and abutting the proposed Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC proposed solar farm development.

As previously expressed to the both the Town and Planning Boards, I continue to have significant concerns regarding water management during both construction and post construction phases of this proposed project. These concerns have not been addressed to my satisfaction by the most recent updated SWPPP (Stormwater Pollution Prevention Program) dated 6 January 2022.

I am requesting that minimally, the Easternmost proposed project, Oak Hill Solar 2, LLC be denied a Building Permit due to anticipated stormwater damage and exacerbation of current water burden to parcels 74.00-3-18 and 74.00-3-19.

For clarification I am attaching a series of photos, Appendix A, which provides an overall orientation of properties involved. These images depict current condition, proximity to abutting parcels, some general topographic features and overall conditions of vegetative cover including forest, hayfields and hedgerows.

In the SWPPP (6 January 2022) it appears that water management is proposed to be accomplished using wet swales around impervious equipment pads (which will support battery storage and related equipment, if approved by the Board). On the broader expanse of the Solar Array (encompassing approximately 32.68 acres Oak Hill Solar 1, LLC and 32.68 acres Oak Hill Solar 2, LLC), the proposal is to manage

lands and will seek legal action if proposed construction and ongoing operational activities damage my property.

I require clarification about how this water is to be handled. I feel that inadequate consideration has been given to the difficulty of the soils in this area with high water tables, low permeability and high compaction and erosion characteristics. All those who farm these areas know that one cannot access fields, even those with subsurface drainage (as in my case), until they have dried out. Not only would equipment get mired in the mud, but the soils would become increasingly compacted further exacerbating the problem. A solar field intensifies the force of stormwater runoff due to the impermeable nature of the panels and concentration of flow at the dripline (Appendix C). Solar facilities require monitoring and access during all seasons for general maintenance as well as in the case of emergencies. Building of usable pervious access roads will provide many challenges in consideration of our soil and groundwater characteristics.

I continue to encourage members of the Board to perform an onsite visit to the proposed project site to gain a more thorough understanding of the many issues of concern. I recommend sturdy boots for the visit.

A valuable article should be reviewed by all "Lessons learned: Solar projects present unique stormwater management challenges" by Jason Sharp, Adam O'Connor and Mark Priddle (<https://esemag.com/stormwater/lessons-learned-solar-projects-present-unique-stormwater-management-challenges/>). This article details experiences with stormwater management of similar size to the proposed Oak Hill Solar project over time in Ontario, Canada.

I am glad to have been finally provided in the SWPPP O&M Manual contact information for Greencells USA, Inc. who is apparently the owner of the proposed Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC projects.

project.

Thank you for your time and consideration in this matter,

Pamela H. Rowling

Owner parcel 74.-3-19 comprised of 71.4 acres abutting proposed project

**TOWN OF DUANESBURG**

**APPLICATION FOR SITE/ SKETCH DEVELOPMENT PLAN APPROVAL**

Preliminary  Date: \_\_\_\_\_ Final  Date: \_\_\_\_\_  
(Check appropriate box)

Name of proposed development Barrett minor subdivision

**Applicant:**

Name James Barrett  
Address 159 Hilltop Road  
Pattersonville NY 12137  
Telephone 518-779-3059

**Plans Prepared by:**

Name James Barrett  
Address 159 Hilltop Road  
Pattersonville NY 12137  
Telephone 518-779-3059

**Owner (if different):**

Name Michael J Fisher  
Address 200 E. Palmer Ave  
Schenectady NY 12303  
Telephone 518-522-8658

(if more than one owner, provide information for each)

**Ownership intentions, i.e., purchase options**

Purchase property and add to my parcel

**Location of site**

Section D 35.06 Block 1 Lot 4.1

Current zoning classification Lake District (L-1)

State and federal permits needed (list type and appropriate department)

**Proposed use(s) of site**

Lake Access/License

Total site area (square feet or acres) 902 square feet

Anticipated construction time NA

Will development be phased? NA

Current land use of site (agricultural, commercial, underdeveloped, etc.)

Underdeveloped

Current condition of site (buildings, brush, etc.)

Vacant land

Character of surrounding lands (suburban, agricultural, wetlands, etc.)

Rural/Vacant

Estimated cost of proposed improvement \$

Anticipated increase in number of residents, shoppers, employees, etc. (as applicable)

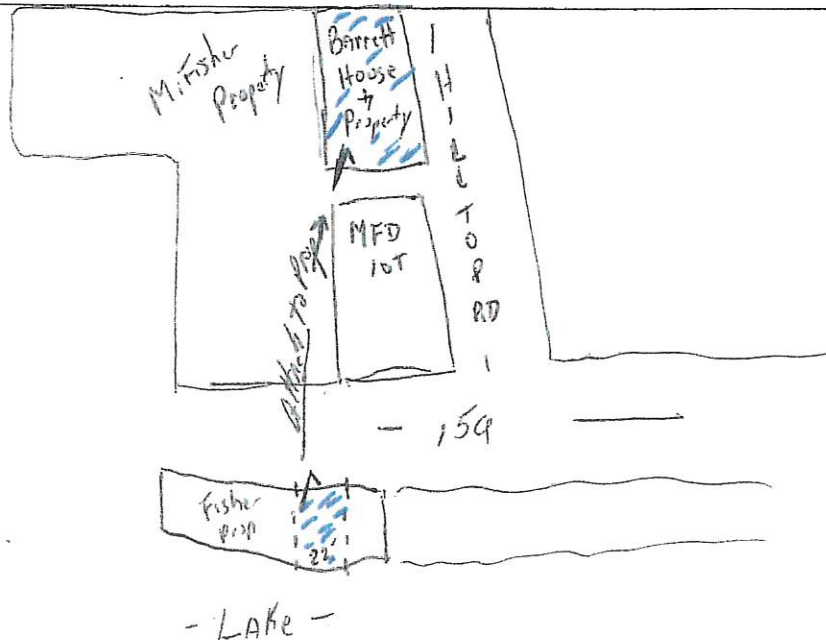
NA

Describe proposed use, including primary and secondary uses; ground floor area; height; and number of stories for each building:

- for residential buildings include number of dwelling units by size (efficiency, one-bedroom, two-bedroom, three or more bedrooms) and number of parking spaces to be provided.
- For non-residential buildings, include total floor area sales area; number of automobile and truck parking spaces,
- Other proposed structures.

(Use separate sheet if needed)

Propose purchase of approx 22' x 40' to be attached to my current property across the street for purposes of future lake house

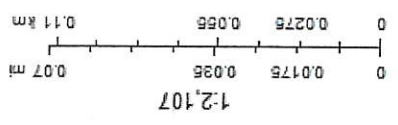




# 159 Hilltop



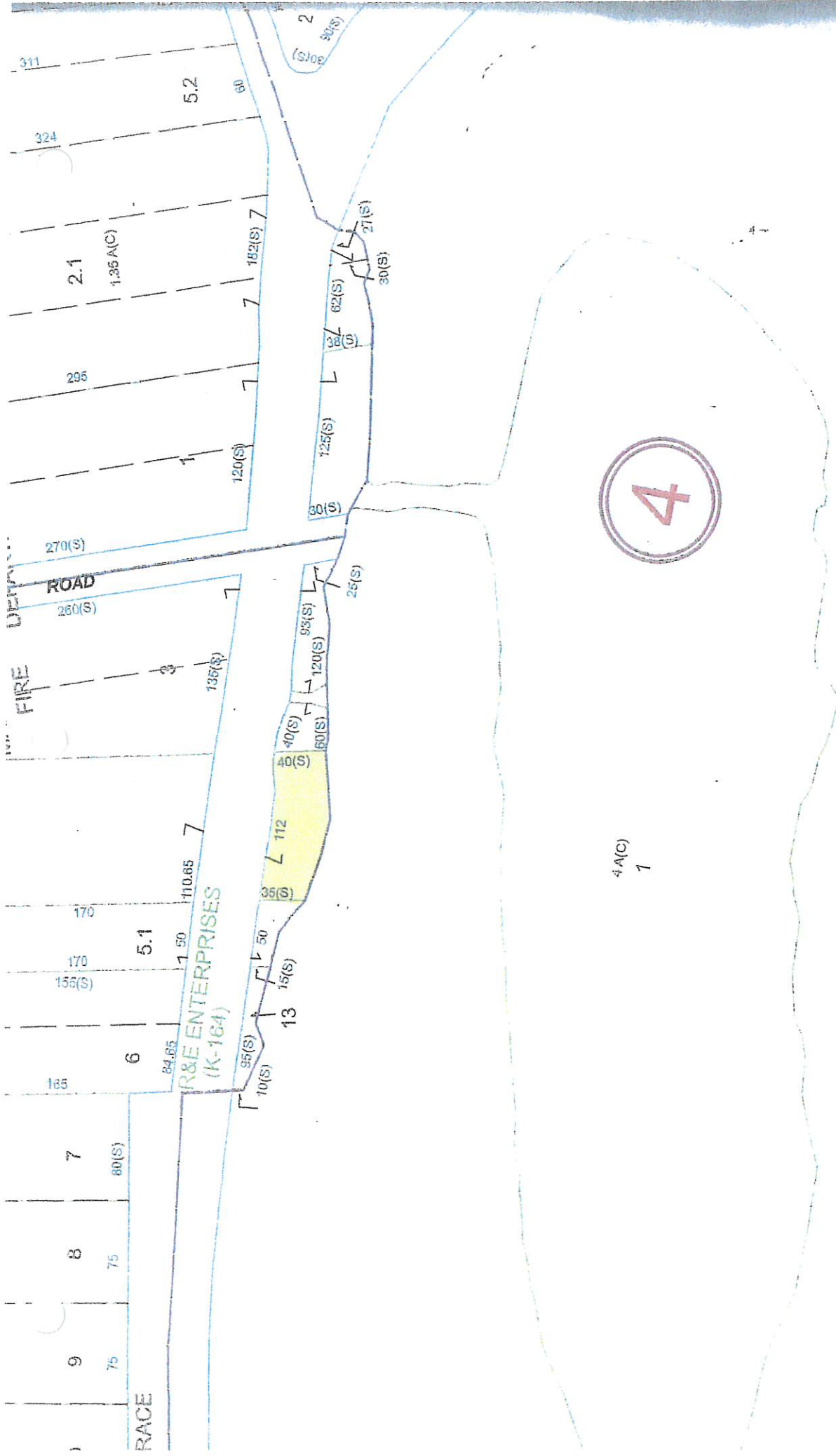
January 10, 2022  
Parcels



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

No Author  
This map and information is provided as is. We make no warranties or guarantees, expressed or implied. The user assumes all risks and responsibility for determining whether this map is suitable for purposes intended. The data is deemed reliable but not guaranteed.

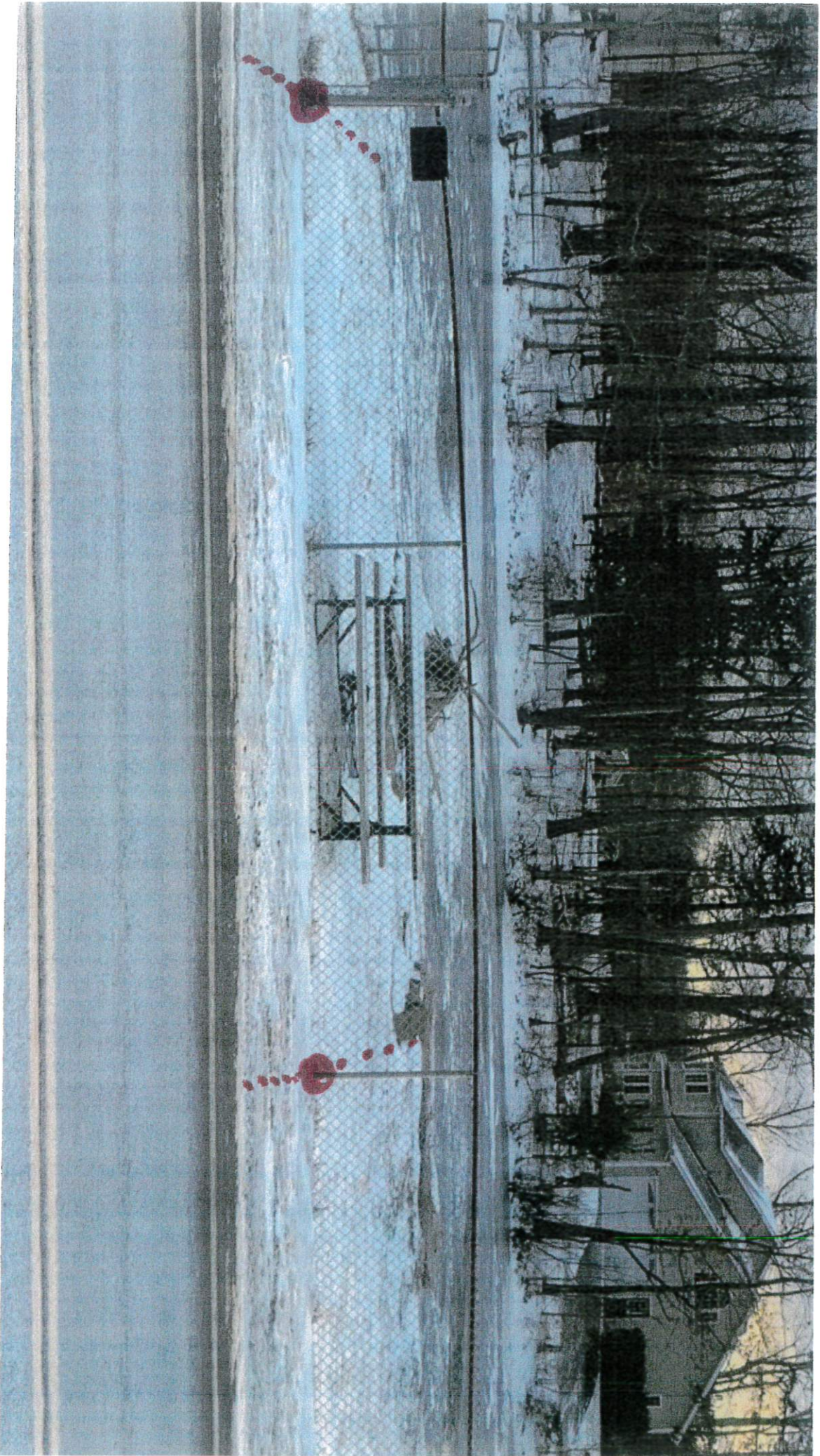




MARIAVILLE

4

4 A(C)  
1



**TOWN OF DUANESBURG**

**APPLICATION FOR SITE/ SKETCH DEVELOPMENT PLAN APPROVAL**

Preliminary  Date: \_\_\_\_\_ Final  Date: 1/28/22  
(Check appropriate box)

Name of proposed development Boundary move added to 401 South Shore Road

**Applicant:**

Name John L. Buehler  
Address 401 South Shore Road  
Delanson NY 12053  
Telephone 518-221-6234

**Plans Prepared by:**

Name Frederick Metzger Jr. P.L.C.  
Address PO Box 237  
Latham NY 12110  
Telephone 518-783-0688

**Owner (if different):**

Name John Buehler (Same)  
Address \_\_\_\_\_  
Telephone \_\_\_\_\_

(if more than one owner, provide information for each)

**Ownership intentions, i.e., purchase options**

Boundary move of approx. 5 acres from 451 South Shore Road to 401 South Shore Road

**Location of site**

35.00-3-9 to 35.10-10-27

Section 35 Block 00 Lot 3-9

Current zoning classification Residential

**State and federal permits needed (list type and appropriate department)**

N/A

**Proposed use(s) of site**

Boundry move of approx. 5 acres

Total site area (square feet or acres) \_\_\_\_\_

Anticipated construction time No Construction

Will development be phased? N/A

Current land use of site (agricultural, commercial, underdeveloped, etc.)

Residential/agricultural

Current condition of site (buildings, brush, etc.) Brush - Field

Character of surrounding lands (suburban, agricultural, wetlands, etc.) Residential/Agricultural

Estimated cost of proposed improvement \$ None

Anticipated increase in number of residents, shoppers, employees, etc. (as applicable)

N/A

Describe proposed use, including primary and secondary uses; ground floor area; height; and number of stories for each building;

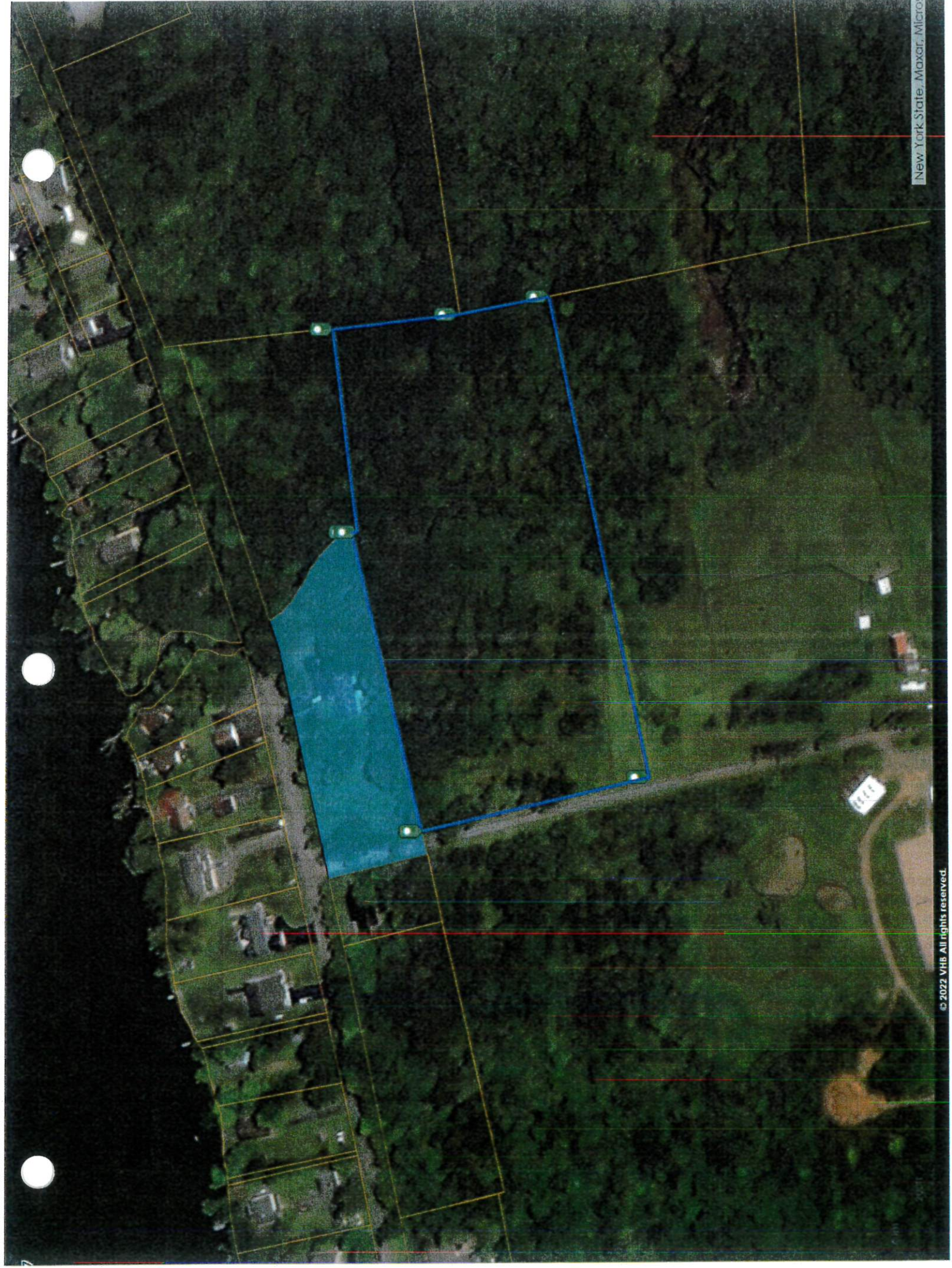
- for residential buildings include number of dwelling units by size (efficiency, one-bedroom, two-bedroom, three or more bedrooms) and number of parking spaces to be provided.
  - For non-residential buildings, include total floor area sales area; number of automobile and truck parking spaces,
  - Other proposed structures.
- (Use separate sheet if needed)

The purpose of the Boundary move is to add 5 acres to the current 1.5 acres of 401 South Shore Road

Tax ID# 35,10-1-27 from the land of 451 South Shore Road that currently has 175,2 acres. Tax ID# 35.00-3-9

Owners = Tracy and Brian Perersen

See enclosed Sketch Map



# **Brett L. Steenburgh, P.E., PLLC**

**2832 Rosendale Road  
Niskayuna, NY 12309  
(518) 365-0675**

January 14, 2022

Town of Duanesburg  
Building Department  
5853 Western Turnpike  
Duanesburg, NY 12056

Re: The Ultimate Wishy Wash

Attn: Dale Warner

Dear Dale:

This has been notified that there have been several concerns regarding the construction of the truck parking area adjacent to The Ultimate Wishy Wash car wash. On Monday December 13, 2021 we performed a field inspection of the construction with the owner and contractor to discuss the issues raised as well as field changes that occurred. The following is a summary of these issues and discussions:

- During clearing and grubbing three drain tiles running north to south through the parcel were discovered. The drain tiles discharged at the adjoining property line with lands of Wren. These drain tiles were terminated to prevent future runoff to the adjoin property. The termination now drains into the drainage swale around the pad. It is our understanding that you inspected the site with Spiro and the contractor when the drain tiles were located.
- It was determined upon clearing that he existing grade at the southeast corner of the pad was significantly lower than the grade at the southwest corner and the natural flow of drainage flows northwest to southeast across the meadow.
- Jamie Malcolm, P.E. from the New York State Department of Environmental Conservation visited the site after receiving complaints from the neighbors. I was told that Mr. Malcolm suggested that they maintain the existing drainage pattern and drain the pad to the southeast corner and not try to create the swale towards the car wash driveway and down to US Route 20. He stated that it may cause problems within the highway drainage system and inundate the existing culverts under the driveways of Wren and Chilton. He also requested that the diversion ditch around the parking area be filled with crushed stone to prevent erosion.



**CIVIL ENGINEERING  
ENVIRONMENTAL ENGINEERING  
STRUCTURAL ENGINEERING**



Our inspection revealed that the crusher run parking area has been graded to pitch to the southeast corner as suggested above. While we do not have an issue with this construction we will need to verify that we are not discharging stormwater at a rate greater than the existing rate to this location. We reviewed the discharge location to verify that there is a defined drainage channel off the site. Currently there is an existing swale that runs north to south along the Wishy Wash / Thomas common property line. This swale turns east at the common property corner of Wishy Wash, Thomas, Wren and Chilton and parallels the rear of the Chilton property line to the existing stream channel. The preliminary walk of the channel revealed that there is adequate capacity and pitch to convey the stormwater to the existing stream channel and under US Route 20. However, there are a few areas where lawn debris should be removed from the swale to assure maximum flow.

The owner will need to provide attenuation on the existing crusher run pad to assure that the rate of runoff to this swale does not exceed the pre-development rate of runoff.

We have completed our design of the on-site attenuation and control structure for the parking area. We are proposing a 3' high crusher run berm at the low point. The berm will continue along the west and south sides of the parking area with a constant top elevation until it meets the grade of the parking lot. At the low point a 3" PVC culvert pipe will drain the storm water off the parking area and a 1' wide broad crested weir will be constructed for extreme precipitation events. Based upon this design the peak rate of runoff will be reduced for both the 10 year and 100 year storm events. The rate of runoff will be reduced by 0.22 CFS and 0.03 CFS respectively. Attached to this document is the complete storm water analysis for your reference.

If you have any questions please feel free to contact me.

Sincerely

Brett L. Steenburgh, P.E.



NO.	DATE	REVISION

Do not scale drawings - use dimensions shown.  
 verify all dimensions on site. Inadequacy of  
 information or omissions in this document is a  
 violation of Sec. 7209 Sub. 2 of the MFS  
 Statutes. (See Copyright 2012 Brett L. Steinhilber)  
 Brett L. Steinhilber, P.E.  
 the engineer of record in connection with this  
 production of materials is permitted without  
 limitation of liability.

Brett L. Steinhilber, P.E.  
 1520 W. 15th St.  
 Lincoln, NE 68502  
 (402) 441-1111

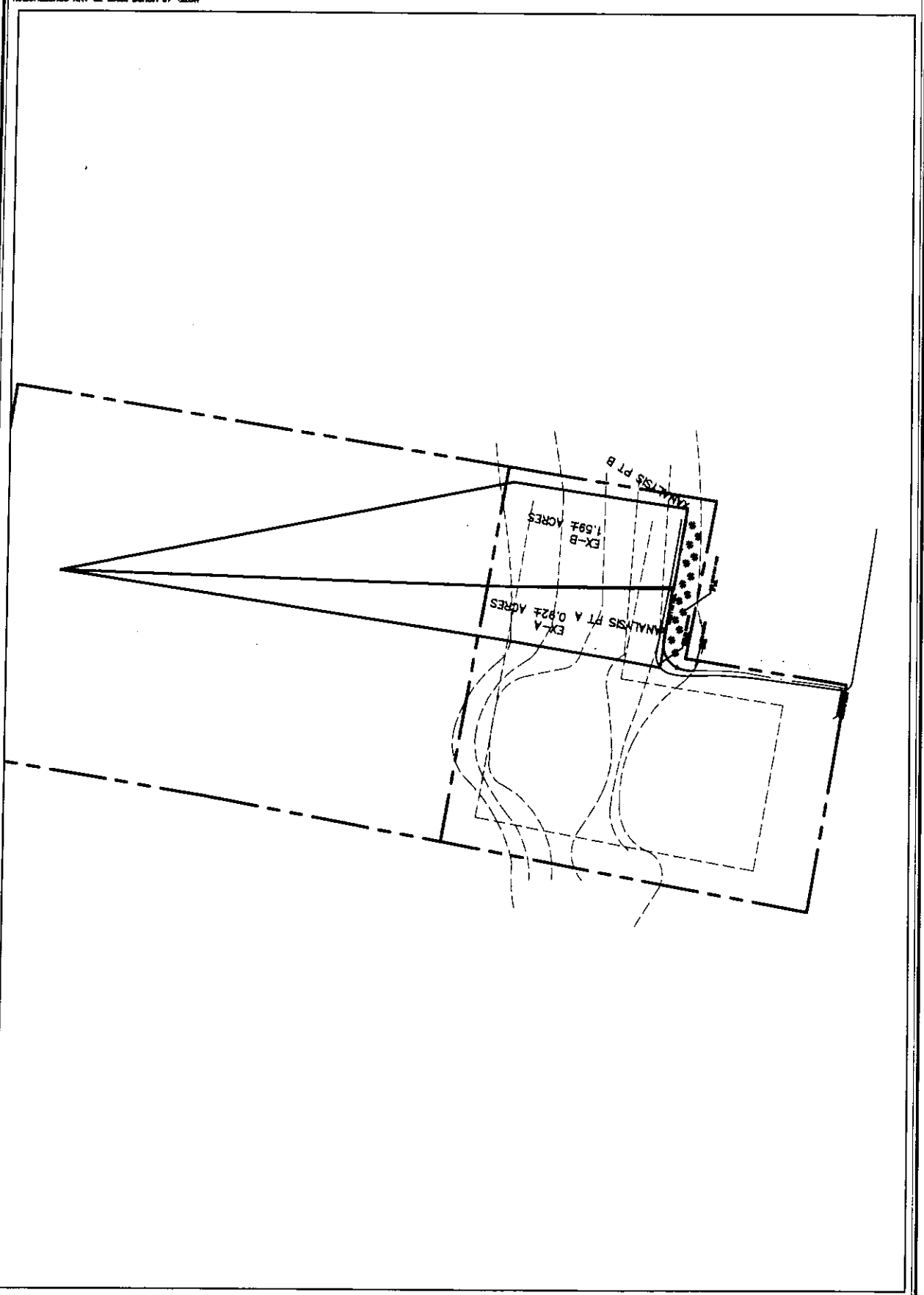
**DR. ENGINEERING, INCORPORATED**  
 1520 W. 15th St.  
 Lincoln, NE 68502  
 (402) 441-1111  
**BRETT L. STEINHIHLER, P.E. P.L.C.**



**EX. DRAINAGE AREAS**  
 US STATE HIGHWAY 30  
 WESTERN TRENCH  
 COUNTY OF SHERBURN  
 STATE OF NEBRASKA  
 SHEET 1 OF 1

FOR INFORMATION ONLY  
 NOT FOR CONSTRUCTION

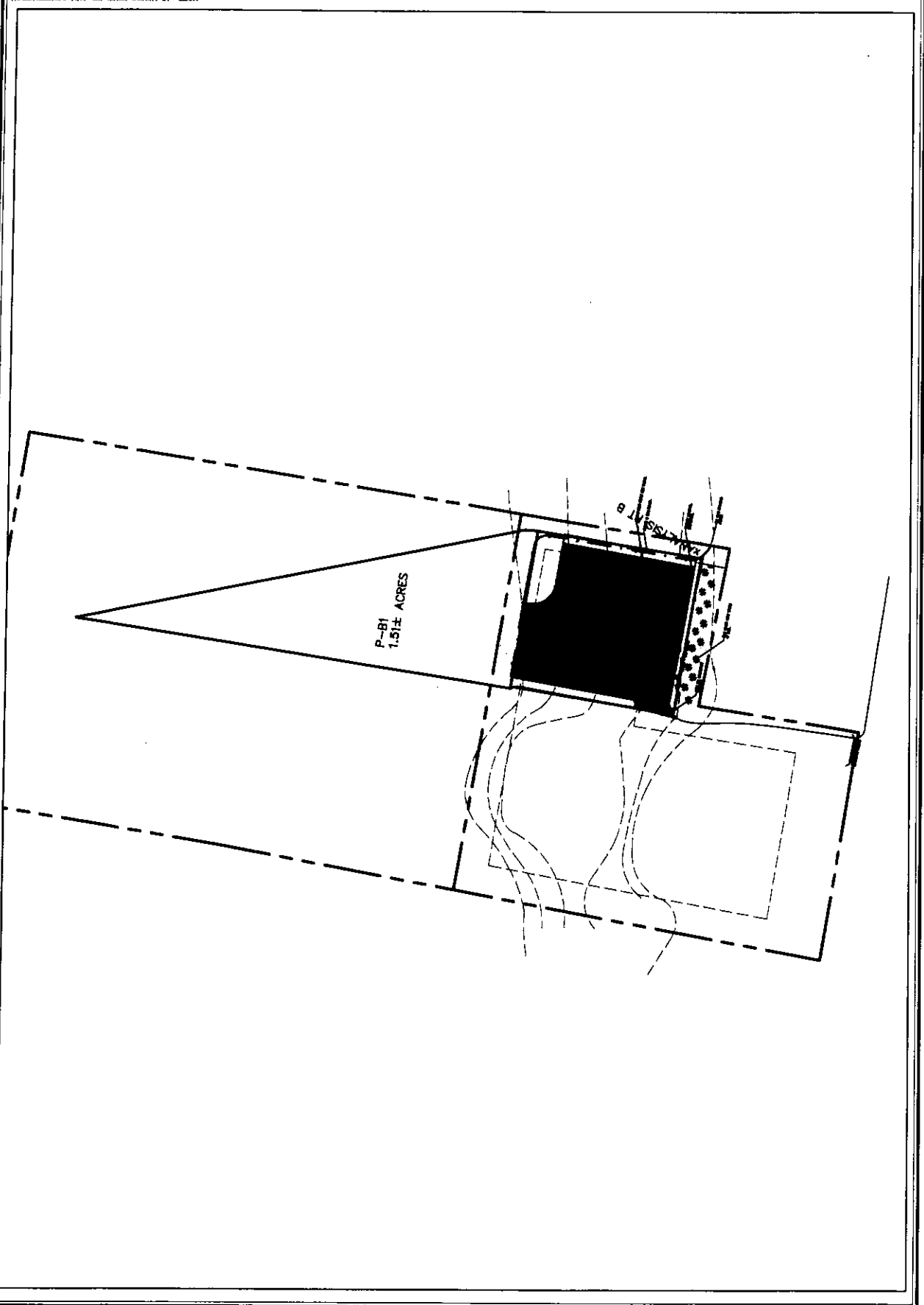
NOTE: AS HEARD FROM TO ANY CONSTRUCTION  
 CONTRACTOR, THE CONTRACTOR SHALL CONTACT  
 THE U.S.P.O. TO LOCATE ALL UNDERGROUND  
 UTILITIES. 1-800-832-7022



PROP. DRAINAGE AREAS ULTIMATE NIGHT BASH MEMBER NUMBER SCALE 1" = 100' SHEET 1 OF 1		ONE DIMENSIONAL SURVEYING 1000 WEST 100TH STREET SUITE 100 WEST L. STAMBOURG, P.E. FILED		WEST L. STAMBOURG, P.E. FILED THE EXPERT WITHIN COMEAT OF EVELL L. STAMBOURG, P.E. FILED THE PRODUCTION OF MATERIALS IS PROVIDED BY THE EXPERT WITHIN COMEAT OF EVELL L. STAMBOURG, P.E. FILED. LOCATION: 1000 WEST 100TH STREET, WEST L. STAMBOURG, P.E. FILED. DATE OF SURVEY: 2012 DATE OF THIS DOCUMENT: 2012 ANY OTHER DIMENSIONS OR AREAS SHOWN IN THIS DOCUMENT ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION.	
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FOR INFORMATION ONLY  
 NOT FOR CONSTRUCTION

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONTACT THE U.S.D.O. TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-992-7882





Existing Runoff To Rear Yard of Resident



Existing Runoff To Rear to swale



P-B1



NEW SWALE 2



P-B2



Ponding on parking Area



SWALE



### Routing Diagram for Kegas

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**Kegas**

Prepared by Brett L. Steenburgh PE PLLC  
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**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
1.200	89	<50% Grass cover, Poor, HSG D (EX-A, EX-B)
0.140	80	>75% Grass cover, Good, HSG D (P-B2)
0.860	98	Water Surface, HSG A (P-B2)
2.820	77	Woods, Good, HSG D (EX-A, EX-B, P-B1)
<b>5.020</b>	<b>84</b>	<b>TOTAL AREA</b>

**Kegas**

**Soil Listing (all nodes)**

Area (acres)	Soil Group	Subcatchment Numbers
0.860	HSG A	P-B2
0.000	HSG B	
0.000	HSG C	
4.160	HSG D	EX-A, EX-B, P-B1, P-B2
0.000	Other	
<b>5.020</b>		<b>TOTAL AREA</b>

**Kegas**

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**Ground Covers (all nodes)**

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	1.200	0.000	1.200	<50% Grass cover, Poor	EX-A, EX-B
0.000	0.000	0.000	0.140	0.000	0.140	>75% Grass cover, Good	P-B2
0.860	0.000	0.000	0.000	0.000	0.860	Water Surface	P-B2
0.000	0.000	0.000	2.820	0.000	2.820	Woods, Good	EX-A, EX-B, P-B1
<b>0.860</b>	<b>0.000</b>	<b>0.000</b>	<b>4.160</b>	<b>0.000</b>	<b>5.020</b>	<b>TOTAL AREA</b>	

**Kegas**

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**Pipe Listing (all nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)
1	Ponding on park	881.00	880.90	10.0	0.0100	0.012	0.0	3.0	0.0



**Kegas**

TYPE II-2 Rainfall=3.57"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 EX-A: Existing Runoff To** Runoff Area=0.920 ac 0.00% Impervious Runoff Depth>1.92"  
Flow Length=700' Tc=35.0 min CN=85 Runoff=1.18 cfs 0.147 af

**Subcatchment EX-B: Existing Runoff To** Runoff Area=1.590 ac 0.00% Impervious Runoff Depth>1.69"  
Flow Length=700' Tc=35.0 min CN=82 Runoff=1.80 cfs 0.224 af

**Subcatchment P-B1: P-B1** Runoff Area=1.510 ac 0.00% Impervious Runoff Depth>1.35"  
Flow Length=526' Tc=32.6 min CN=77 Runoff=1.40 cfs 0.170 af

**Subcatchment P-B2: P-B2** Runoff Area=1.000 ac 86.00% Impervious Runoff Depth>2.84"  
Flow Length=235' Slope=0.0300 '/' Tc=6.4 min CN=95 Runoff=3.21 cfs 0.237 af

**Reach EX SWALE: SWALE** Avg. Flow Depth=0.28' Max Vel=3.93 fps Inflow=1.64 cfs 0.369 af  
n=0.012 L=45.0' S=0.0100 '/' Capacity=103.68 cfs Outflow=1.64 cfs 0.369 af

**Reach SWALE 2: NEW SWALE 2** Avg. Flow Depth=0.27' Max Vel=1.79 fps Inflow=1.40 cfs 0.170 af  
n=0.041 L=427.0' S=0.0200 '/' Capacity=44.80 cfs Outflow=1.38 cfs 0.169 af

**Pond Ponding on park: Ponding on parking** Peak Elev=883.19' Storage=5,029 cf Inflow=3.21 cfs 0.237 af  
Outflow=0.27 cfs 0.200 af

**Total Runoff Area = 5.020 ac Runoff Volume = 0.779 af Average Runoff Depth = 1.86"**  
**82.87% Pervious = 4.160 ac 17.13% Impervious = 0.860 ac**

**Summary for Subcatchment EX-A: Existing Runoff To Rear Yard of Resident**

Runoff = 1.18 cfs @ 12.49 hrs, Volume= 0.147 af, Depth> 1.92"

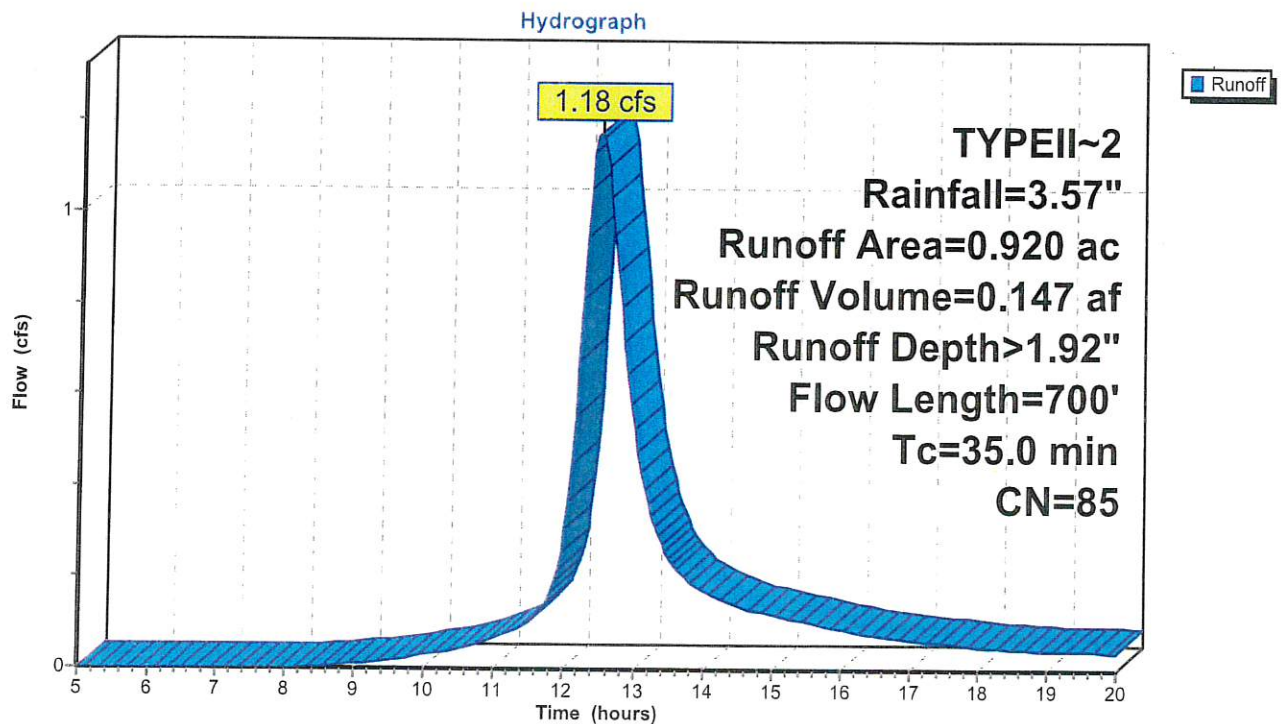
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=3.57"

Area (ac)	CN	Description
0.320	77	Woods, Good, HSG D
0.600	89	<50% Grass cover, Poor, HSG D
0.920	85	Weighted Average
0.920		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
13.5	350	0.0300	0.43		<b>Shallow Concentrated Flow,</b> Forest w/Heavy Litter Kv= 2.5 fps
1.6	250	0.0300	2.60		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
35.0	700	Total			

**Subcatchment EX-A: Existing Runoff To Rear Yard of Resident**



**Summary for Subcatchment EX-B: Existing Runoff To Rear to swale**

Runoff = 1.80 cfs @ 12.50 hrs, Volume= 0.224 af, Depth> 1.69"

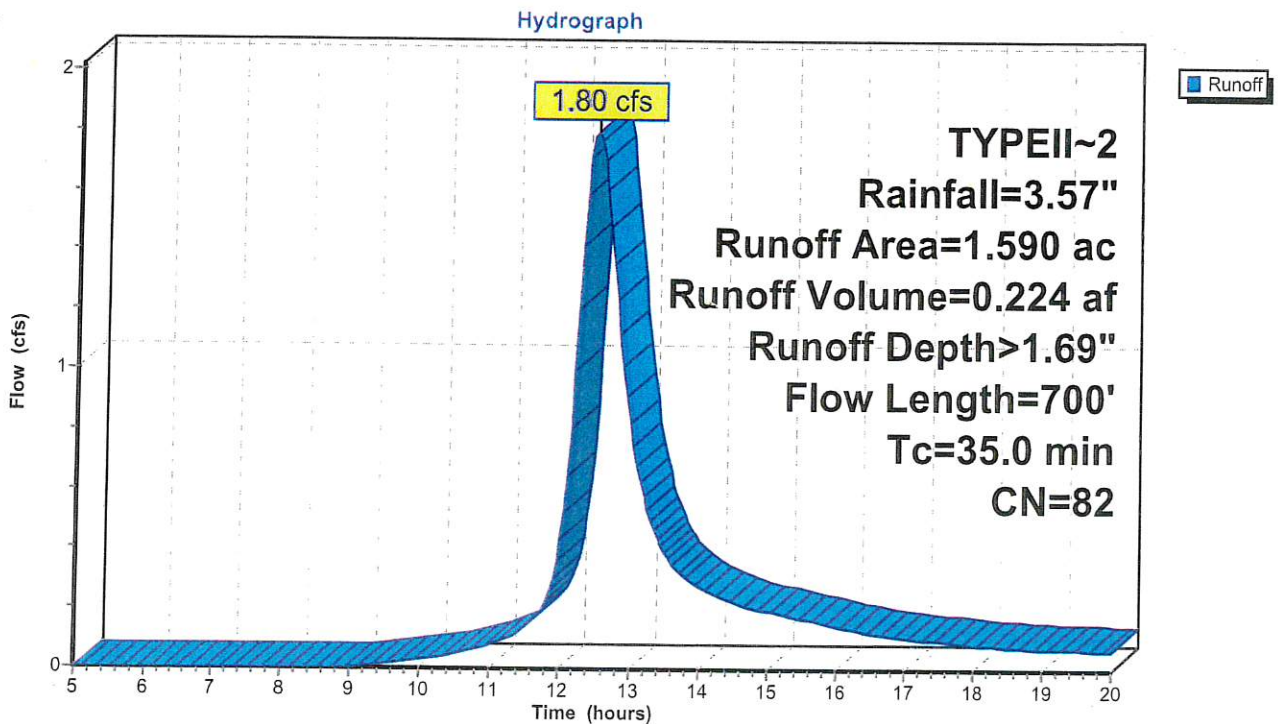
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
TYPEII~2 Rainfall=3.57"

Area (ac)	CN	Description
0.990	77	Woods, Good, HSG D
0.600	89	<50% Grass cover, Poor, HSG D
1.590	82	Weighted Average
1.590		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
13.5	350	0.0300	0.43		<b>Shallow Concentrated Flow,</b> Forest w/Heavy Litter Kv= 2.5 fps
1.6	250	0.0300	2.60		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
35.0	700	Total			

**Subcatchment EX-B: Existing Runoff To Rear to swale**



**Kegas**

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TYPEII~2 Rainfall=3.57"

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**Summary for Subcatchment P-B1: P-B1**

Runoff = 1.40 cfs @ 12.47 hrs, Volume= 0.170 af, Depth> 1.35"  
 Routed to Reach SWALE 2 : NEW SWALE 2

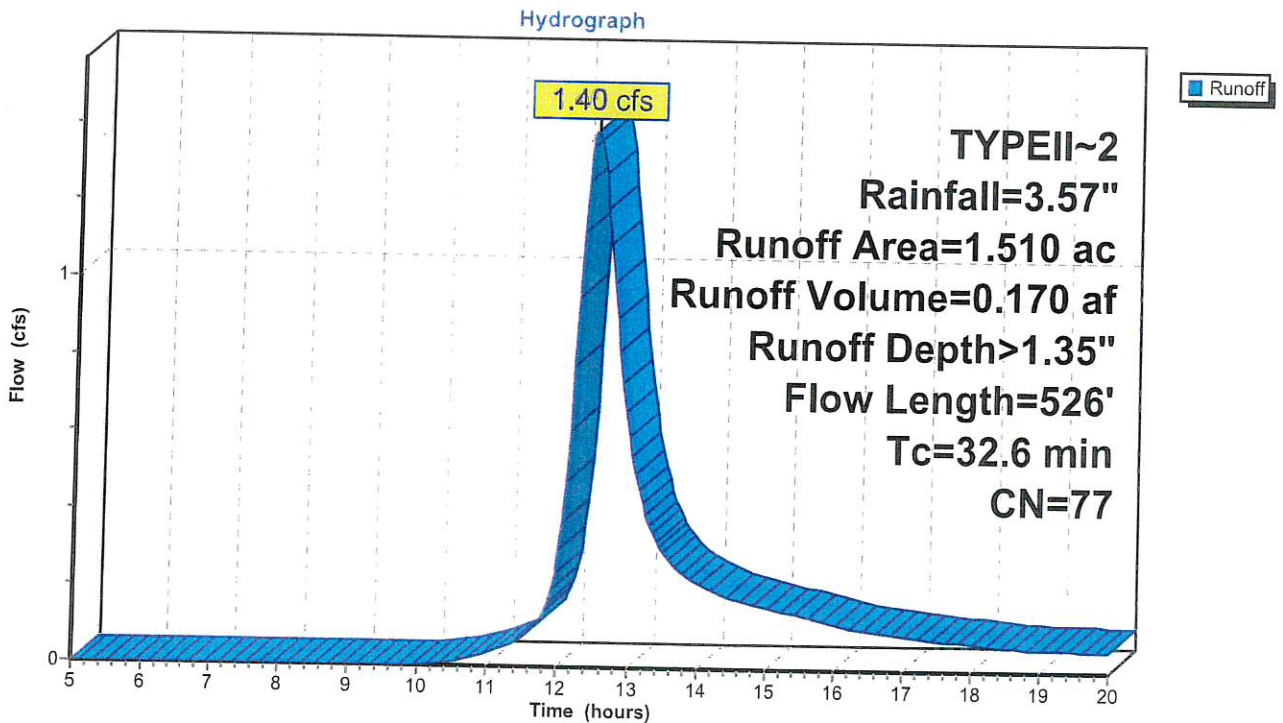
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=3.57"

Area (ac)	CN	Description
1.510	77	Woods, Good, HSG D
1.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		<b>Sheet Flow,</b>
12.7	426	0.0500	0.56		Woods: Light underbrush n= 0.400 P2= 2.70" <b>Shallow Concentrated Flow,</b>
32.6	526	Total			Forest w/Heavy Litter Kv= 2.5 fps

**Subcatchment P-B1: P-B1**



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TYPEII~2 Rainfall=3.57"

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**Summary for Subcatchment P-B2: P-B2**

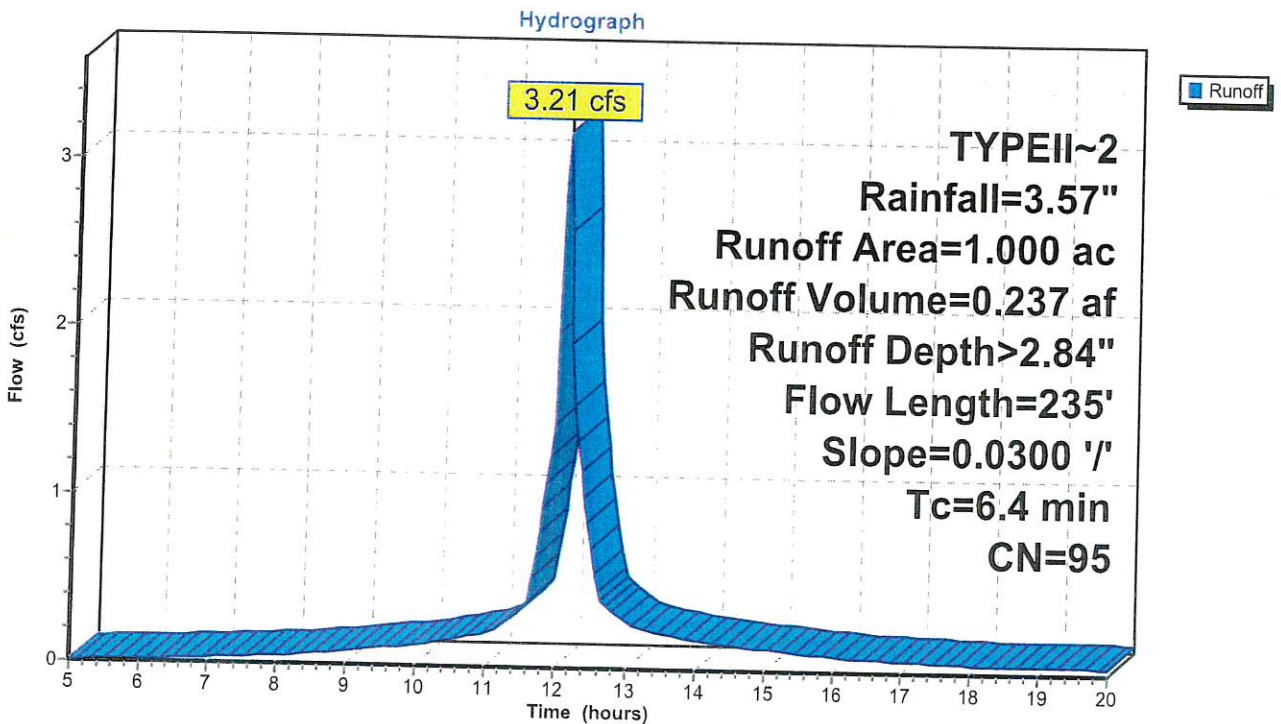
Runoff = 3.21 cfs @ 12.09 hrs, Volume= 0.237 af, Depth> 2.84"  
 Routed to Pond Ponding on park : Ponding on parking Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=3.57"

Area (ac)	CN	Description
0.860	98	Water Surface, HSG A
0.140	80	>75% Grass cover, Good, HSG D
1.000	95	Weighted Average
0.140		14.00% Pervious Area
0.860		86.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.2	235	0.0300	1.76		<b>Sheet Flow,</b> Smooth surfaces n= 0.011 P2= 2.70"
4.2					<b>Direct Entry, Add to make TR-55 min of 6min</b>
6.4	235	Total			

**Subcatchment P-B2: P-B2**



### Summary for Reach EX SWALE: SWALE

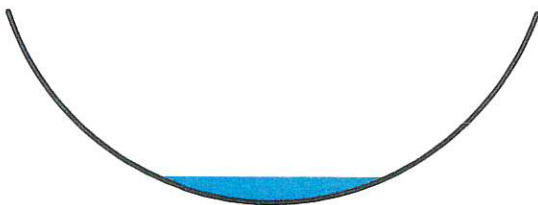
[65] Warning: Inlet elevation not specified

Inflow Area =	2.510 ac, 34.26% Impervious, Inflow Depth > 1.76"
Inflow =	1.64 cfs @ 12.59 hrs, Volume= 0.369 af
Outflow =	1.64 cfs @ 12.60 hrs, Volume= 0.369 af, Atten= 0%, Lag= 0.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 3.93 fps, Min. Travel Time= 0.2 min  
 Avg. Velocity = 2.08 fps, Avg. Travel Time= 0.4 min

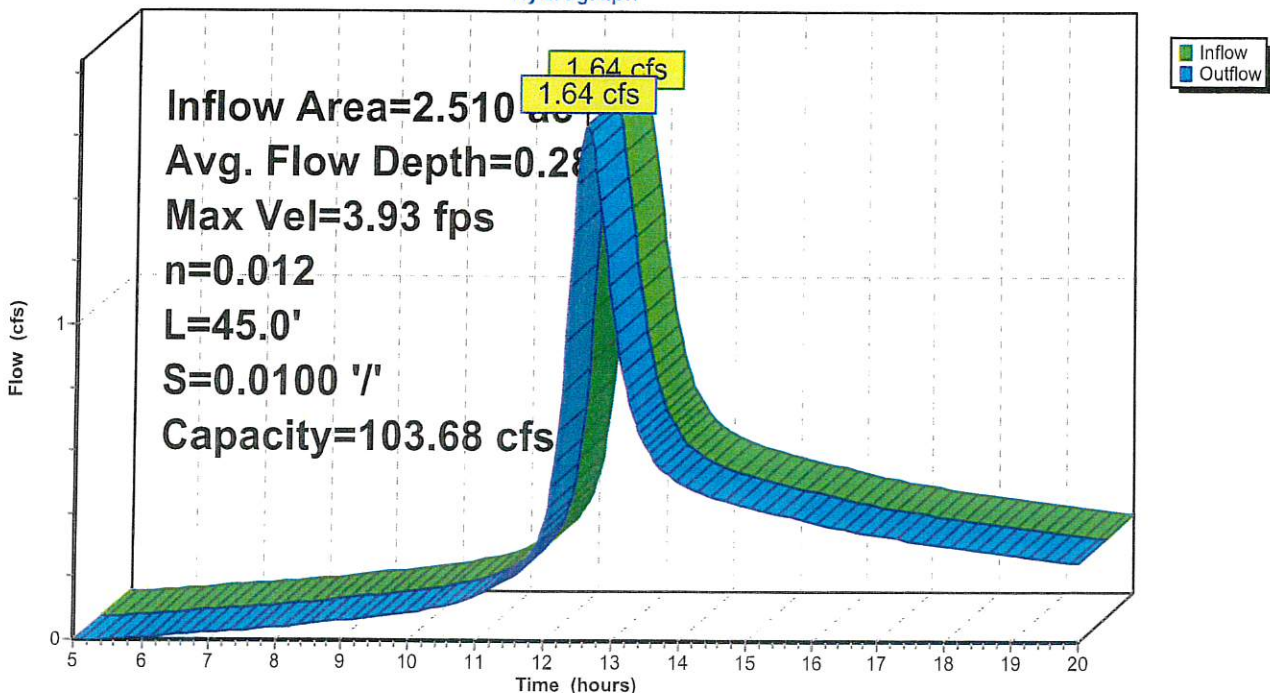
Peak Storage= 19 cf @ 12.59 hrs  
 Average Depth at Peak Storage= 0.28' , Surface Width= 2.24'  
 Bank-Full Depth= 2.00' Flow Area= 8.0 sf, Capacity= 103.68 cfs

6.00' x 2.00' deep Parabolic Channel, n= 0.012  
 Length= 45.0' Slope= 0.0100 '/'  
 Inlet Invert= 0.00', Outlet Invert= -0.45'



### Reach EX SWALE: SWALE

Hydrograph



### Summary for Reach SWALE 2: NEW SWALE 2

[65] Warning: Inlet elevation not specified

Inflow Area = 1.510 ac, 0.00% Impervious, Inflow Depth > 1.35"  
Inflow = 1.40 cfs @ 12.47 hrs, Volume= 0.170 af  
Outflow = 1.38 cfs @ 12.59 hrs, Volume= 0.169 af, Atten= 2%, Lag= 7.0 min  
Routed to Reach EX SWALE : SWALE

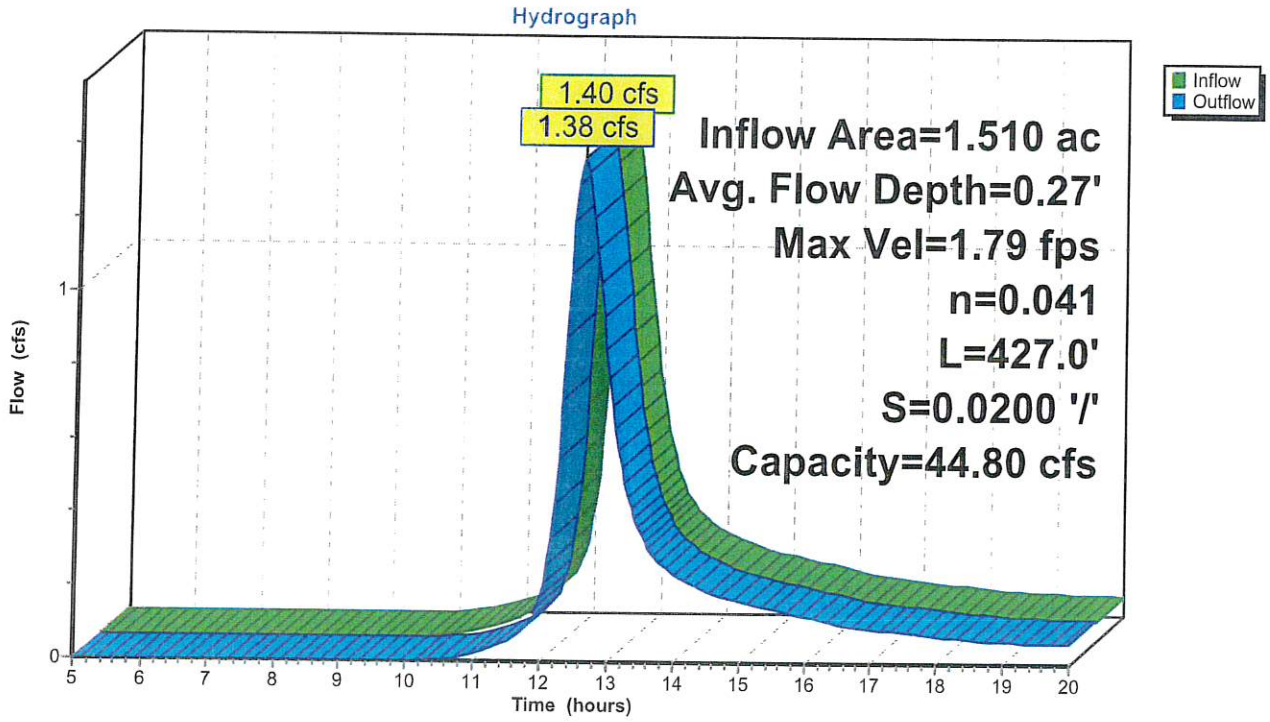
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Max. Velocity= 1.79 fps, Min. Travel Time= 4.0 min  
Avg. Velocity = 0.82 fps, Avg. Travel Time= 8.7 min

Peak Storage= 329 cf @ 12.52 hrs  
Average Depth at Peak Storage= 0.27' , Surface Width= 3.64'  
Bank-Full Depth= 1.50' Flow Area= 9.8 sf, Capacity= 44.80 cfs

2.00' x 1.50' deep channel, n= 0.041 Riprap, 2-inch  
Side Slope Z-value= 3.0 ' / ' Top Width= 11.00'  
Length= 427.0' Slope= 0.0200 ' / '  
Inlet Invert= 0.00', Outlet Invert= -8.54'



Reach SWALE 2: NEW SWALE 2





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TYPEII-2 Rainfall=3.57"

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**Summary for Pond Ponding on park: Ponding on parking Area**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.000 ac, 86.00% Impervious, Inflow Depth > 2.84"  
 Inflow = 3.21 cfs @ 12.09 hrs, Volume= 0.237 af  
 Outflow = 0.27 cfs @ 13.06 hrs, Volume= 0.200 af, Atten= 92%, Lag= 58.3 min  
 Primary = 0.27 cfs @ 13.06 hrs, Volume= 0.200 af  
 Routed to Reach EX SWALE : SWALE

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 883.19' @ 13.06 hrs Surf.Area= 5,162 sf Storage= 5,029 cf

Plug-Flow detention time= 177.7 min calculated for 0.200 af (84% of inflow)  
 Center-of-Mass det. time= 132.6 min ( 883.9 - 751.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	10,750 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	500	0	0
882.00	1,750	1,125	1,125
883.00	4,250	3,000	4,125
884.00	9,000	6,625	10,750

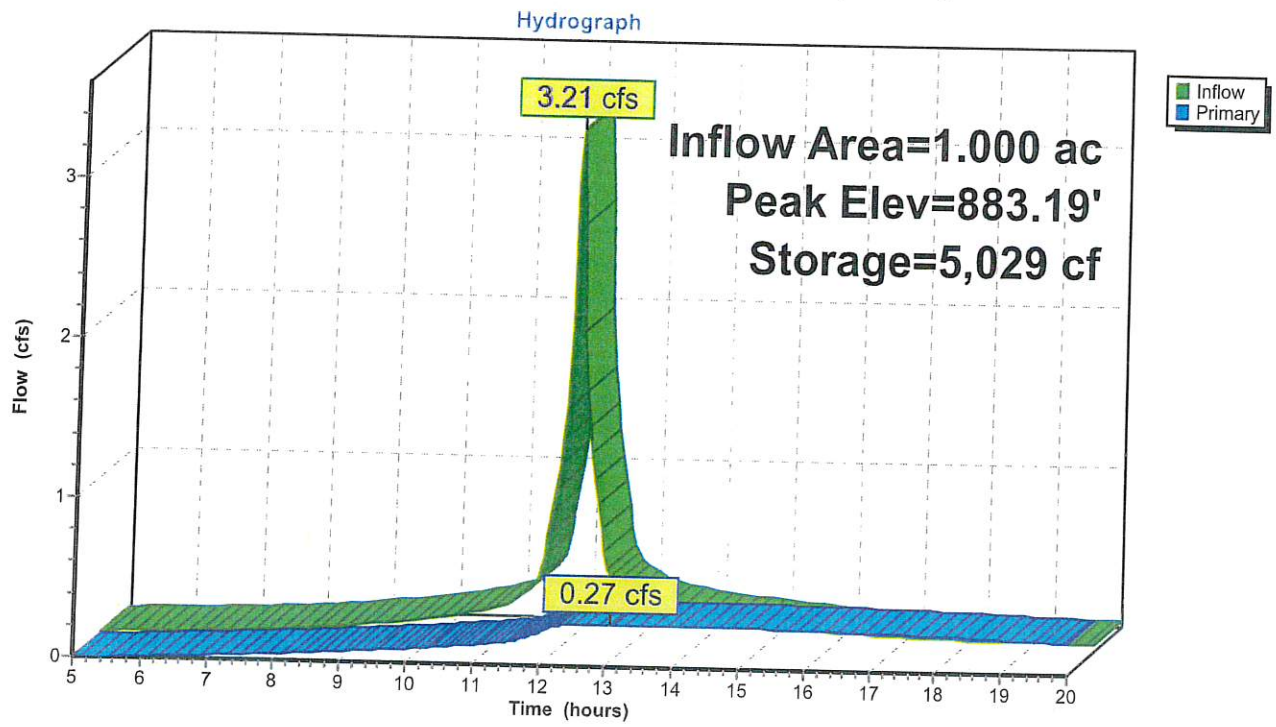
Device	Routing	Invert	Outlet Devices
#1	Primary	883.50'	<b>0.5' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Primary	881.00'	<b>3.0" Round Culvert</b> L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 881.00' / 880.90' S= 0.0100 '/ Cc= 0.900 n= 0.012, Flow Area= 0.05 sf

**Primary OutFlow** Max=0.27 cfs @ 13.06 hrs HW=883.19' (Free Discharge)

1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

2=Culvert (Inlet Controls 0.27 cfs @ 5.47 fps)

### Pond Ponding on park: Ponding on parking Area





Existing Runoff To Rear  
Yard of Resident



Existing Runoff To Rear  
to swale



P-B1



NEW SWALE 2



P-B2



Ponding on parking  
Area



SWALE



**Routing Diagram for Kegas**

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**Kegas**

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**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
1.200	89	<50% Grass cover, Poor, HSG D (EX-A, EX-B)
0.140	80	>75% Grass cover, Good, HSG D (P-B2)
0.860	98	Water Surface, HSG A (P-B2)
2.820	77	Woods, Good, HSG D (EX-A, EX-B, P-B1)
<b>5.020</b>	<b>84</b>	<b>TOTAL AREA</b>

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**Soil Listing (all nodes)**

Area (acres)	Soil Group	Subcatchment Numbers
0.860	HSG A	P-B2
0.000	HSG B	
0.000	HSG C	
4.160	HSG D	EX-A, EX-B, P-B1, P-B2
0.000	Other	
<b>5.020</b>		<b>TOTAL AREA</b>

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**Ground Covers (all nodes)**

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	1.200	0.000	1.200	<50% Grass cover, Poor	EX-A, EX-B
0.000	0.000	0.000	0.140	0.000	0.140	>75% Grass cover, Good	P-B2
0.860	0.000	0.000	0.000	0.000	0.860	Water Surface	P-B2
0.000	0.000	0.000	2.820	0.000	2.820	Woods, Good	EX-A, EX-B, P-B1
<b>0.860</b>	<b>0.000</b>	<b>0.000</b>	<b>4.160</b>	<b>0.000</b>	<b>5.020</b>	<b>TOTAL AREA</b>	

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**Pipe Listing (all nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)
1	Ponding on park	881.00	880.90	10.0	0.0100	0.012	0.0	3.0	0.0

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TYPE II ~2 Rainfall=5.94"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 EX-A: Existing Runoff To** Runoff Area=0.920 ac 0.00% Impervious Runoff Depth>3.97"  
Flow Length=700' Tc=35.0 min CN=85 Runoff=2.37 cfs 0.304 af

**Subcatchment EX-B: Existing Runoff To** Runoff Area=1.590 ac 0.00% Impervious Runoff Depth>3.66"  
Flow Length=700' Tc=35.0 min CN=82 Runoff=3.83 cfs 0.485 af

**Subcatchment P-B1: P-B1** Runoff Area=1.510 ac 0.00% Impervious Runoff Depth>3.17"  
Flow Length=526' Tc=32.6 min CN=77 Runoff=3.30 cfs 0.399 af

**Subcatchment P-B2: P-B2** Runoff Area=1.000 ac 86.00% Impervious Runoff Depth>5.03"  
Flow Length=235' Slope=0.0300 '/' Tc=6.4 min CN=95 Runoff=5.52 cfs 0.419 af

**Reach EX SWALE: SWALE** Avg. Flow Depth=0.41' Max Vel=5.05 fps Inflow=3.80 cfs 0.703 af  
n=0.012 L=45.0' S=0.0100 '/' Capacity=103.68 cfs Outflow=3.80 cfs 0.703 af

**Reach SWALE 2: NEW SWALE 2** Avg. Flow Depth=0.43' Max Vel=2.30 fps Inflow=3.30 cfs 0.399 af  
n=0.041 L=427.0' S=0.0200 '/' Capacity=44.80 cfs Outflow=3.27 cfs 0.397 af

**Pond Ponding on park: Ponding on parking** Peak Elev=883.83' Storage=9,316 cf Inflow=5.52 cfs 0.419 af  
Outflow=0.56 cfs 0.305 af

**Total Runoff Area = 5.020 ac Runoff Volume = 1.607 af Average Runoff Depth = 3.84"**  
**82.87% Pervious = 4.160 ac 17.13% Impervious = 0.860 ac**



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TYPEII~2 Rainfall=5.94"

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**Summary for Subcatchment EX-A: Existing Runoff To Rear Yard of Resident**

Runoff = 2.37 cfs @ 12.47 hrs, Volume= 0.304 af, Depth> 3.97"

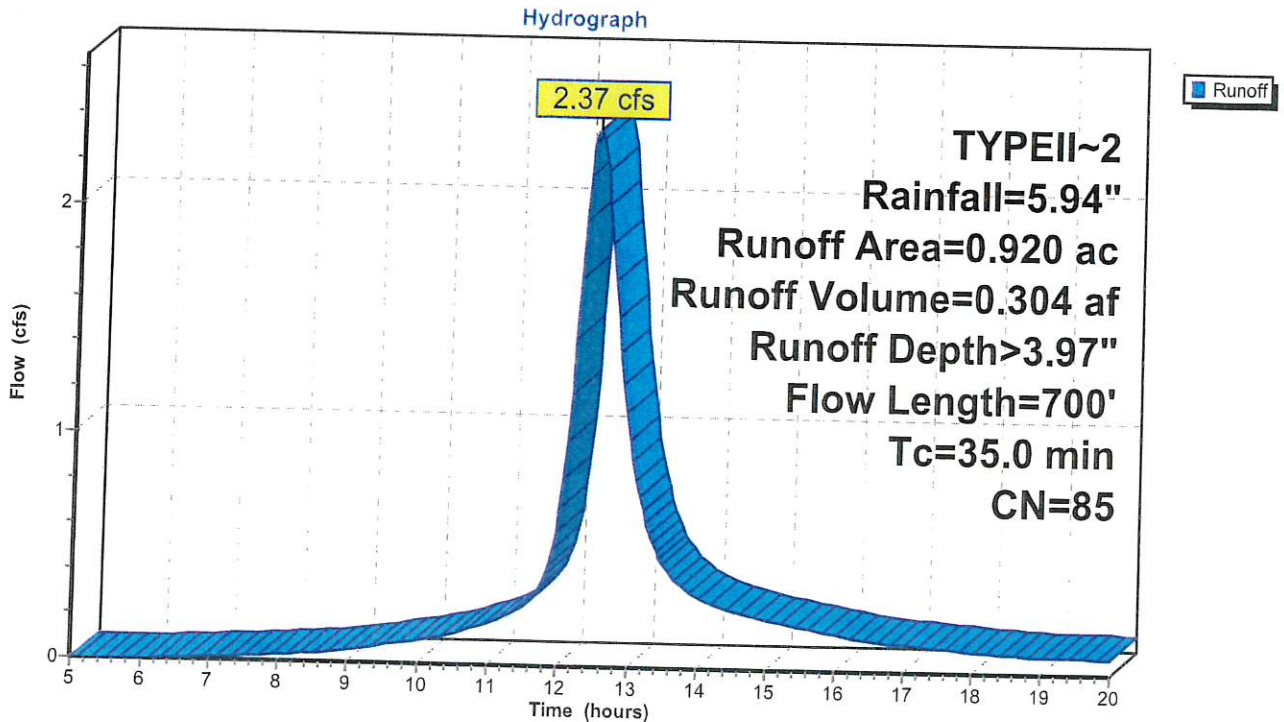
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=5.94"

Area (ac)	CN	Description
0.320	77	Woods, Good, HSG D
0.600	89	<50% Grass cover, Poor, HSG D
0.920	85	Weighted Average
0.920		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.70"
13.5	350	0.0300	0.43		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
1.6	250	0.0300	2.60		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
35.0	700	Total			

**Subcatchment EX-A: Existing Runoff To Rear Yard of Resident**



**Summary for Subcatchment EX-B: Existing Runoff To Rear to swale**

Runoff = 3.83 cfs @ 12.48 hrs, Volume= 0.485 af, Depth> 3.66"

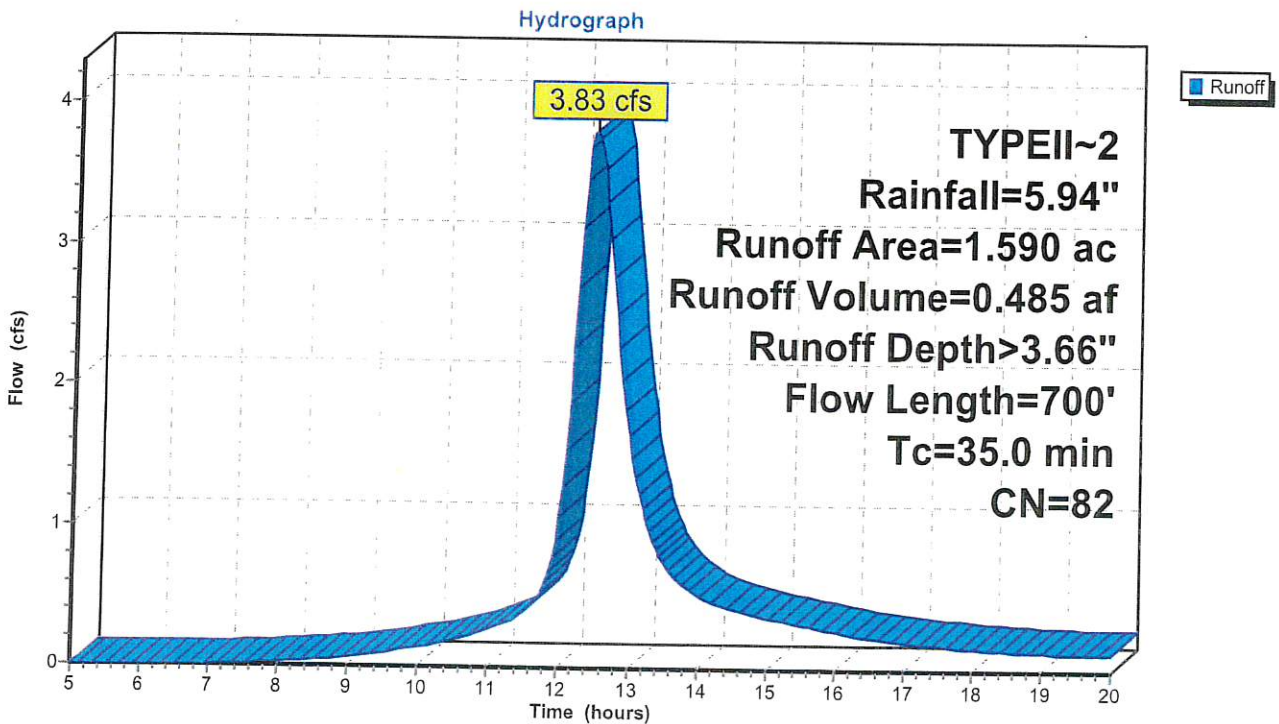
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=5.94"

Area (ac)	CN	Description
0.990	77	Woods, Good, HSG D
0.600	89	<50% Grass cover, Poor, HSG D
1.590	82	Weighted Average
1.590		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
13.5	350	0.0300	0.43		<b>Shallow Concentrated Flow,</b> Forest w/Heavy Litter Kv= 2.5 fps
1.6	250	0.0300	2.60		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
35.0	700	Total			

**Subcatchment EX-B: Existing Runoff To Rear to swale**



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TYPEII~2 Rainfall=5.94"

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**Summary for Subcatchment P-B1: P-B1**

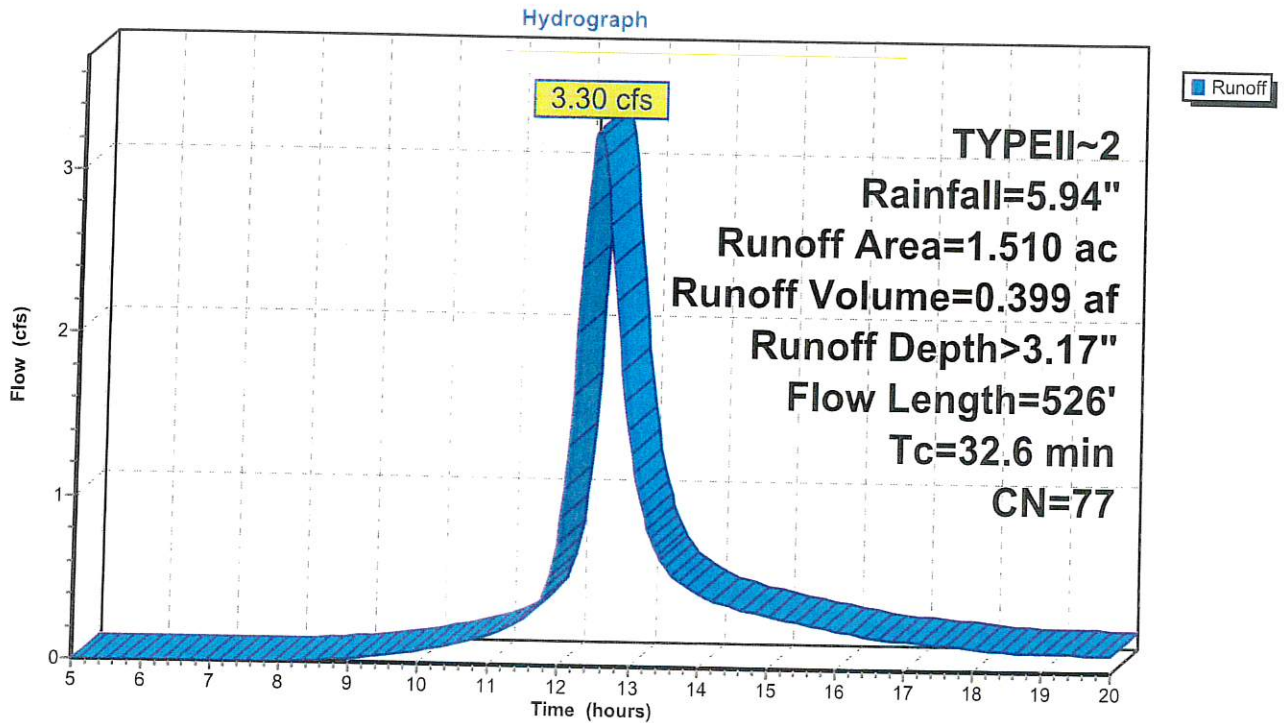
Runoff = 3.30 cfs @ 12.45 hrs, Volume= 0.399 af, Depth> 3.17"  
 Routed to Reach SWALE 2 : NEW SWALE 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=5.94"

Area (ac)	CN	Description
1.510	77	Woods, Good, HSG D
1.510		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.9	100	0.0300	0.08		<b>Sheet Flow,</b>
12.7	426	0.0500	0.56		Woods: Light underbrush n= 0.400 P2= 2.70" <b>Shallow Concentrated Flow,</b>
32.6	526	Total			Forest w/Heavy Litter Kv= 2.5 fps

**Subcatchment P-B1: P-B1**



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TYPEII~2 Rainfall=5.94"

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**Summary for Subcatchment P-B2: P-B2**

Runoff = 5.52 cfs @ 12.09 hrs, Volume= 0.419 af, Depth> 5.03"  
 Routed to Pond Ponding on park : Ponding on parking Area

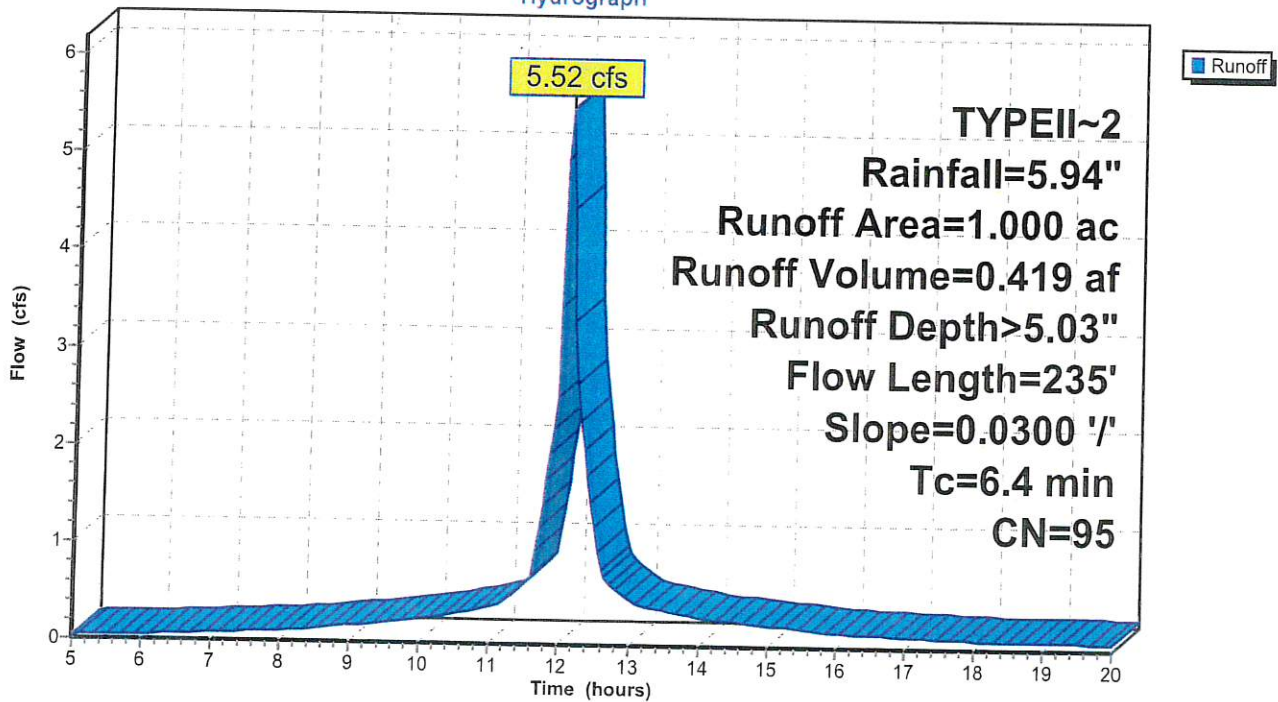
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 TYPEII~2 Rainfall=5.94"

Area (ac)	CN	Description
0.860	98	Water Surface, HSG A
0.140	80	>75% Grass cover, Good, HSG D
1.000	95	Weighted Average
0.140		14.00% Pervious Area
0.860		86.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.2	235	0.0300	1.76		<b>Sheet Flow,</b> Smooth surfaces n= 0.011 P2= 2.70"
4.2					<b>Direct Entry, Addl to make TR-55 min of 6min</b>
6.4	235	Total			

**Subcatchment P-B2: P-B2**

Hydrograph



Summary for Reach EX SWALE: SWALE

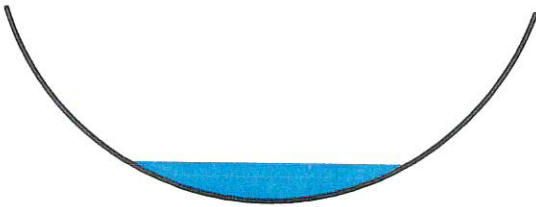
[65] Warning: Inlet elevation not specified

Inflow Area = 2.510 ac, 34.26% Impervious, Inflow Depth > 3.36"  
 Inflow = 3.80 cfs @ 12.55 hrs, Volume= 0.703 af  
 Outflow = 3.80 cfs @ 12.56 hrs, Volume= 0.703 af, Atten= 0%, Lag= 0.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 5.05 fps, Min. Travel Time= 0.1 min  
 Avg. Velocity = 2.52 fps, Avg. Travel Time= 0.3 min

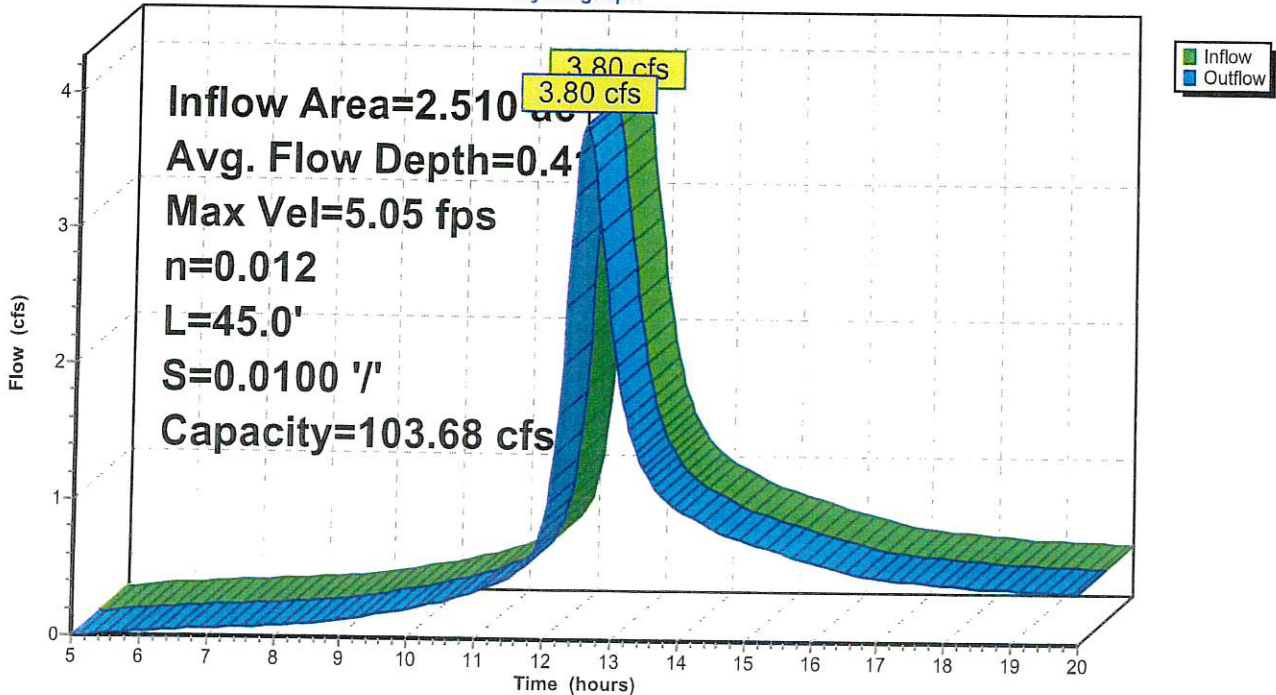
Peak Storage= 34 cf @ 12.55 hrs  
 Average Depth at Peak Storage= 0.41' , Surface Width= 2.73'  
 Bank-Full Depth= 2.00' Flow Area= 8.0 sf, Capacity= 103.68 cfs

6.00' x 2.00' deep Parabolic Channel, n= 0.012  
 Length= 45.0' Slope= 0.0100 '/'  
 Inlet Invert= 0.00', Outlet Invert= -0.45'



Reach EX SWALE: SWALE

Hydrograph



### Summary for Reach SWALE 2: NEW SWALE 2

[65] Warning: Inlet elevation not specified

Inflow Area = 1.510 ac, 0.00% Impervious, Inflow Depth > 3.17"  
 Inflow = 3.30 cfs @ 12.45 hrs, Volume= 0.399 af  
 Outflow = 3.27 cfs @ 12.54 hrs, Volume= 0.397 af, Atten= 1%, Lag= 5.5 min  
 Routed to Reach EX SWALE : SWALE

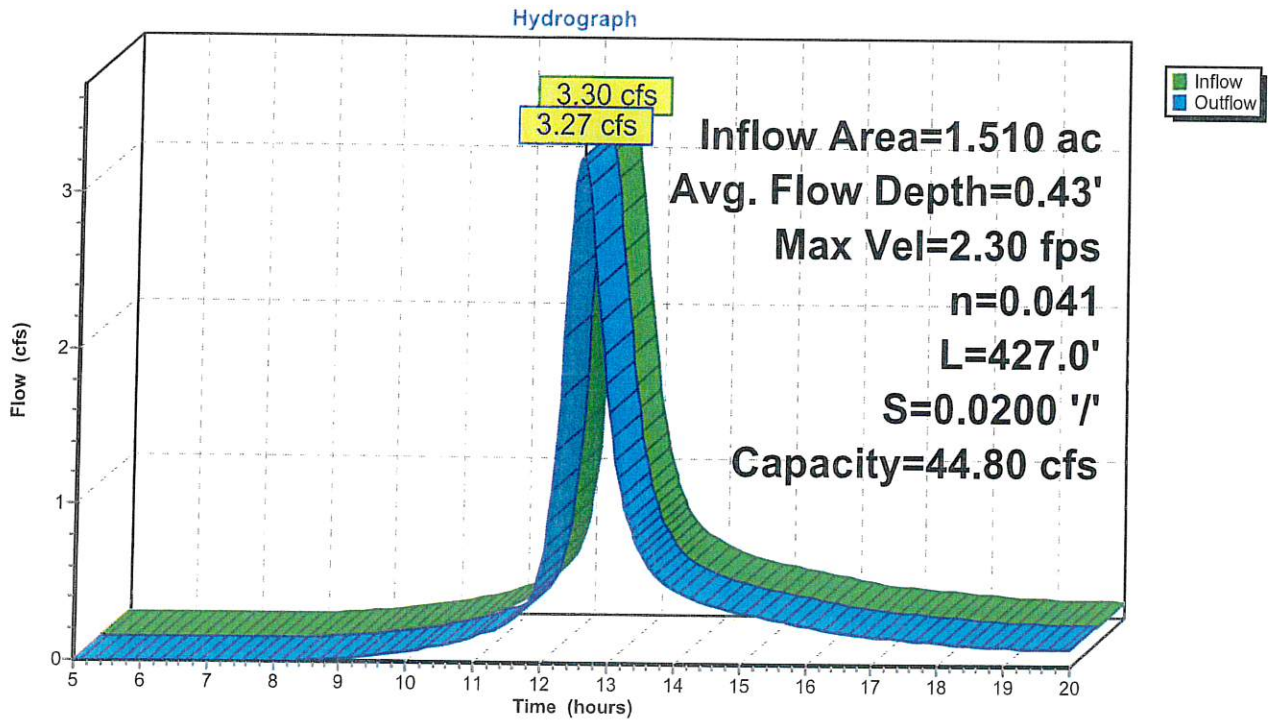
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.30 fps, Min. Travel Time= 3.1 min  
 Avg. Velocity = 0.99 fps, Avg. Travel Time= 7.2 min

Peak Storage= 607 cf @ 12.49 hrs  
 Average Depth at Peak Storage= 0.43', Surface Width= 4.59'  
 Bank-Full Depth= 1.50' Flow Area= 9.8 sf, Capacity= 44.80 cfs

2.00' x 1.50' deep channel, n= 0.041 Riprap, 2-inch  
 Side Slope Z-value= 3.0 '/' Top Width= 11.00'  
 Length= 427.0' Slope= 0.0200 '/'  
 Inlet Invert= 0.00', Outlet Invert= -8.54'



### Reach SWALE 2: NEW SWALE 2



**Summary for Pond Ponding on park: Ponding on parking Area**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.000 ac, 86.00% Impervious, Inflow Depth > 5.03"  
 Inflow = 5.52 cfs @ 12.09 hrs, Volume= 0.419 af  
 Outflow = 0.56 cfs @ 12.87 hrs, Volume= 0.305 af, Atten= 90%, Lag= 46.7 min  
 Primary = 0.56 cfs @ 12.87 hrs, Volume= 0.305 af  
 Routed to Reach EX SWALE : SWALE

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 883.83' @ 12.87 hrs Surf.Area= 8,208 sf Storage= 9,316 cf

Plug-Flow detention time= 178.2 min calculated for 0.304 af (73% of inflow)  
 Center-of-Mass det. time= 114.8 min ( 857.5 - 742.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	881.00'	10,750 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
881.00	500	0	0
882.00	1,750	1,125	1,125
883.00	4,250	3,000	4,125
884.00	9,000	6,625	10,750

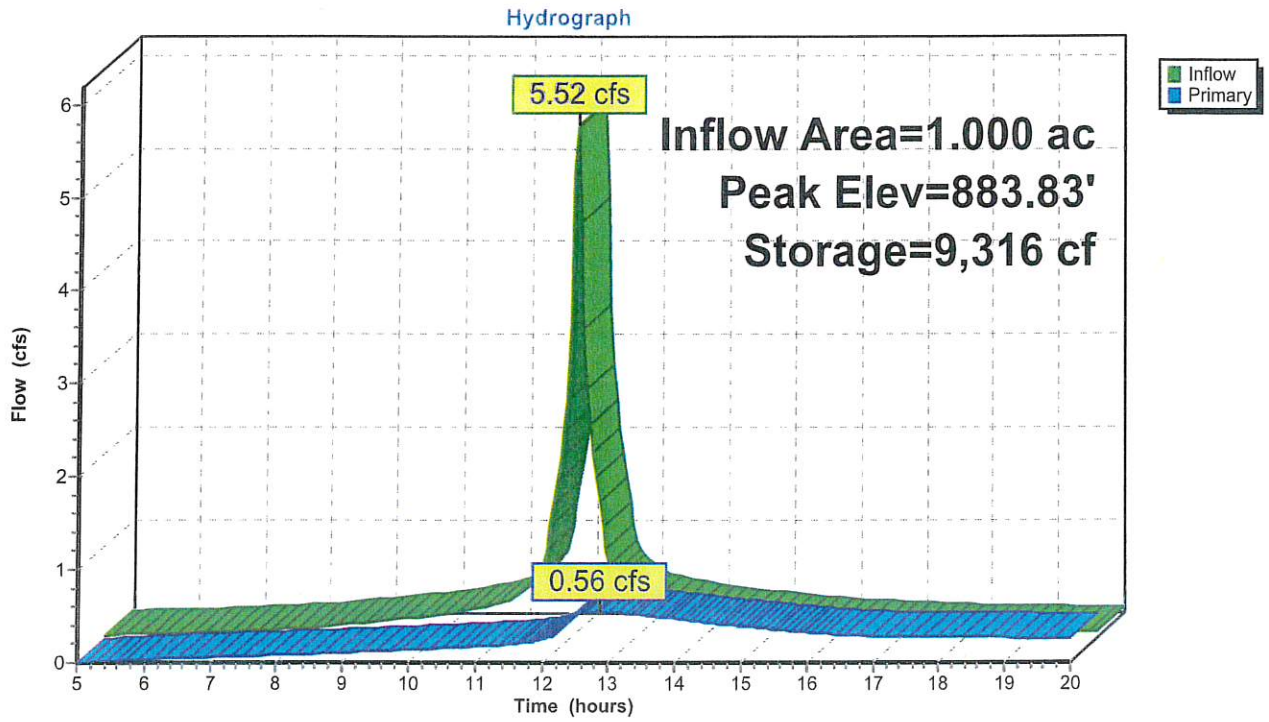
Device	Routing	Invert	Outlet Devices
#1	Primary	883.50'	<b>0.5' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Primary	881.00'	<b>3.0" Round Culvert</b> L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 881.00' / 880.90' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.05 sf

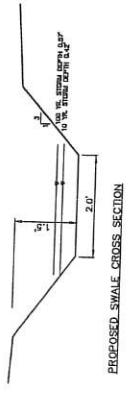
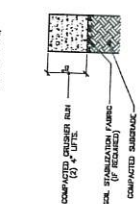
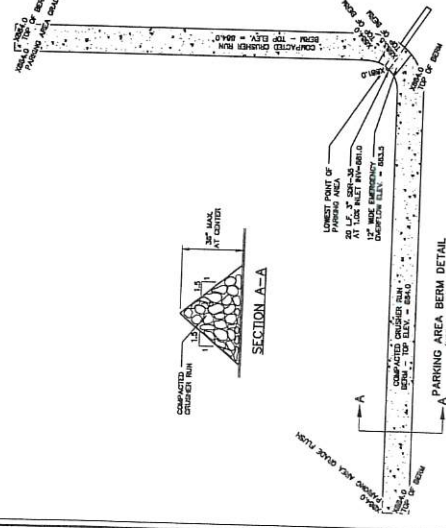
**Primary OutFlow** Max=0.56 cfs @ 12.87 hrs HW=883.83' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 0.25 cfs @ 1.49 fps)  
 2=Culvert (Inlet Controls 0.31 cfs @ 6.26 fps)



### Pond Ponding on park: Ponding on parking Area





**SITE ZONING**  
 ZONE C-1 COMMERCIAL  
 MINIMUM LOT SIZE: 100,000 S.F.  
 MINIMUM LOT COVERAGE: 10%  
 MAXIMUM LOT COVERAGE: 50%  
 MINIMUM FRONT YARD: 60 FT  
 MINIMUM REAR YARD: 40 FT

**SITE STATISTICS**  
 OWNER: ULTIMATE WASH CAR/TRUCK  
 APPLICANT: ULTIMATE WASH CAR/TRUCK  
 899 ESPERANCE ROAD  
 DANEBURG, NY 12048  
 AREA = 206,800 SQ. FT. = 4.72 ACRES  
 USE: CAR/TRUCK WASH  
 AREA OF DISTURBANCE = 632 SQ. FT.  
 AREA OF DISTURBANCE = 0.014 ACRES

**TOPOGRAPHY NOTE:**  
 EXISTING TOPOGRAPHY SHOWN ON THIS PLAN IS BASED OFF  
 SURVEY DATA AND A FIELD EDITION. IT IS SHOWN AS APPROXIMATE  
 FOR DRAINAGE PATTERNS ONLY.

UNDERGROUND UTILITIES: 1-800-922-7822

Jeffery Schmitt, Planning Board Chair  
Michael Harris, Vice Chairman  
Dale Warner, Town Planner  
Melissa Deffer, Clerk  
Teresa Bakner, Board Attorney



Elizabeth Novak, Board Member  
Joshua Houghton, Board Member  
Michael Santulli, Board Member  
Matthew Hoffman, Board Member  
Michael Walpole, Board Member

TOWN OF DUANESBURG  
SCHENECTADY COUNTY

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Town of Duanesburg  
Planning Board Minutes  
December 16<sup>th</sup>, 2021  
**Draft Copy**

**MEMBERS PRESENT:** Jeffery Schmitt Chairman, Michael Harris Vice Chairman, Elizabeth Novak-VIA zoom, Joshua Houghton, Michael Santulli, Matthew Hoffman, Michael Walpole, Planning Board Attorney Teresa Bakner, Town Planer Dale Warner and Clerk Melissa Deffer.

**INTRODUCTION:** Chairman Jeffery Schmitt opened the meeting and welcomed everyone to tonight's Planning Board meeting. Schmitt asked for the board to introduce themselves to the public: Jeff Schmitt- Chairman, Elizabeth Novak- Planning Board Member, Teresa Bakner- Legal Counsel for the Planning Board, Mike Walpole- Planning Board Member, Matt Hoffman- Planning Board Member, Josh Houghton- Planning Board Member, Mike Santulli- Planning Board Member, Mike Harris- Vice Chairperson, Dale Warner- Town Planner and Melissa Deffer-Planning Board Clerk.

**OPEN FORUM:**

**Schmitt/Hoffman** made a motion to open the open forum at 7:03 pm.  
Schmitt yes, Hoffman yes, Walpole yes, Houghton yes, Santulli yes, Harris yes, Novak yes.  
**Approved.**

Lynne Bruning located at 13388 Duanesburg Rd (**Please see attachment**)  
Board Counsel stated that no new solar project applications have been submitted to the Planning Board and any solar projects subject to 94C would go first to the State Offices of Renewable Energy Siting rather than to the Town.

Patrick Wren located at 9866 Western Turnpike wanted to update the board that nothing has changed at the Wishy Wash car wash and since the last meeting a truck was parked overnight twice that they have noticed.

Town Planner explained that he has gone up to the property to talk to Spiro about the drainage issues and putting a gate up. The original gates are on back order, Spiro is going to order a smaller size gate to use until the bigger gate can be delivered. The Signs are up, and the music was told to Spiro that was an issue and he agreed to turn the sound down. Town Attorney talked to the applicant's attorney Donald Zee and shared with him all the concerns that the Board has

Town Hall • 5853 Western Turnpike • Duanesburg, NY 12056 • (518) 895-8920

Over →

brought up and they are aware of the issues and the only option at this point is to come back before the Planning Board to have the project reviewed again.  
Heidi Chilton located at 9848 Western Turnpike is still concerned with the amount of water on the back of her property that was never there before.

Schmitt/Santulli made a motion to close the open forum at 7:20 pm.  
Schmitt yes, Santulli yes, Harris yes, Novak yes, Hoffman yes, Walpole yes, Houghton yes.  
**Approved.**

#### **PUBLIC HEARINGS:**

**#21-03 Sisson, Joe and Debbie:** SBL#52.00-1-41, (R-2) located at Braman Corners Rd is seeking a 3 lot Major Subdivision under section 3.5 of the Town of Duanesburg Subdivision Ordinance.

Schmitt/Hoffman made a motion to open the public hearing for the **#21-03 Sisson, Joe and Debbie** application.

Schmitt yes, Hoffman yes, Walpole yes, Houghton yes, Santulli yes, Harris yes, Novak yes.  
**Approved.**

Mr. Sisson gave his presentation to the public.

**No Public Comment Was Made.**

Schmitt/Novak made a motion to close the public hearing for the **#21-03 Sisson, Joe and Debbie** application.

Schmitt yes, Novak yes, Harris yes, Santulli yes, Houghton yes, Walpole yes, Hoffman yes.  
**Approved.**

Novak/Walpole made a motion to reaffirm the preliminary SEQRA findings of a negative impact declaration for the **#21-03 Sisson, Joe and Debbie** application.

Novak yes, Walpole yes, Houghton yes, Santulli yes, Harris yes, Schmitt yes, Hoffman yes.  
**Approved.**

Harris/Houghton made a motion to approve the 3 lot major subdivision for application of **#21-03 Sisson, Joe and Debbie** with a condition of a DOT driveway permit be obtained.

Harris yes, Houghton yes, Santulli yes, Novak yes, Schmitt yes, Hoffman yes, Walpole yes.  
**Approved.**

#### **NEW BUSINESS:**

**#21-21 Serth, Joseph:** SBL# 35.05-1-19.2, (R-1) located at 8496 Mariaville Rd is seeking a Special Use Permit for use for an event venue under Local Law #1 2021 of the Town of Duanesburg Zoning Ordinance. Mr. Serth explained that he recently rebuilt a preexisting 150-year-old barn and would like to use it for commercial weddings, Graduation parties, and other events. Joe does not plan on making any physical changes to the property. Currently on the property there are 7 asphalt parking spots and 2 gravel parking spots for anyone who needs handicap accessibility. Joe does not plan to have porta johns for bathrooms, he is going to open the apartment up for bathroom facilities. For the next meeting the Board would like to have the following:

1. A traffic study
2. Site plan

3. A revised copy of the FEAF with the changes to the total acreage, Page 5 C and D are a yes, top of page 10, check yes, there is a daycare down the road.
4. Obtain any permits needed from the department of health, Schenectady County planning and DPW.
5. A sign off from the local fire departments chief for driveway
6. Neighbor signoff stating Mr. Serth can use the driveway for emergency services if needed.

**Santulli/Harris** made a motion to table the #21-21 Serth, Joseph application until January 20<sup>th</sup>, 2022, meeting.

Santulli yes, Harris yes, Houghton yes, Walpole yes, Hoffman yes, Schmitt yes, Novak yes.  
**Approved.**

#21-16 Kirker, Richard: SBL#65.00-1-31.131, (R-2) located at 696 Gage Rd is seeking a Minor Subdivision under section 3.4 of the Town of Duanesburg Subdivision Ordinance. Project Manager John Hitchcock, Jr from ABD Engineers, LLP represent Mr. Richard Kirker. John explained that Mr. Kirker is purposing a 2-lot subdivision. Lot one to the North of the property will be 10.7 acre. Lot 2 will be 5.61 acres. Last meeting the Board asked for an agreement and a turn around on the drawings. John explained he forwarded on the agreement to their lawyers and put a turn around on the drawings. The Board would like for the next meeting the following:

1. A copy of the easement for the driveways
2. The Variance approval

**Novak/Santulli** made a motion to declare the preliminary SEQRA determination for the #21-16 Kirker, Richard application. (Please See Attachment)

Novak yes, Santulli yes, Harris yes, Schmitt yes, Hoffman yes, Walpole yes, Houghton yes.  
**Approved.**

**Houghton/Walpole** made a motion to set a public hearing on January 20<sup>th</sup>, 2022, for the application of #21-16 Kirker, Richard.

Houghton yes, Walpole yes, Hoffman yes, Schmitt yes, Novak yes, Harris yes, Santulli yes.  
**Approved.**

#21-18 Armstrong, Glenn: SBL#44.00-1-12, (R-2) located at 2663 Duanesburg Churches Rd is seeking a Minor Subdivision under section 3.4 of the Town of Duanesburg Subdivision Ordinance. David Bogardus from the Northeast Land Survey & Land Development Consultants, P.C. representing the Armstrong estate. At the November meeting the Board asked for Mr. Romeo to provide a title search of the reservoir which showed the Village of Delanson owns the whole reservoir and the property line goes around the body of water. Mr. Bogardus also included the fire and school district on the new map.

**Harris/Santulli** made a motion that the proposed action is a type 2 action under SEQRA and that Planning board determines that the proposed action neither creates nor increases any significant planning issues with respect to the existing or potential future use of any involved parcels, that only one additional lot will be created as a result of the proposed action. The Planning Board declares the proposed action to be further exempt from any further subdivision review pursuant

to this article and refers the application to the Code Enforcement Officer to complete administration of the same.

Harris yes, Santulli yes, Houghton yes, Walpole yes, Hoffman yes, Schmitt yes, Novak yes.  
**Approved.**

**#21-14 Tazin, Sergei:** SBL# 52.00-1-20.12, (R-2) located at State Route 30 is seeking a Minor Subdivision under section 3.4 of the Town of Duanesburg Subdivision Ordinance.

Mrs. Tazin explained that she and her husband would like to subdivide the land because the neighbor John Orlop would like to buy the land surrounding his property. Irina reached out to Mr. Orlop and he has decided to keep the land two separate parcels. The Town Planner has received a sign off from SHPO.

**Harris/Santulli** made a motion to table the **#21-14 Tazin, Sergei** application until January 20<sup>th</sup>, 2022, meeting.

Harris yes, Santulli yes, Houghton yes, Walpole yes, Hoffman yes, Schmitt yes, Novak yes.  
**Approved.**

### **OLD BUSINESS:**

**#21-13 Obour, Jules:** SBL# 74.00-2-9, (R-2) located at 13998 Duanesburg Rd is seeking a Special Use Permit for use of motor vehicle sales under Local Law #6 2017 of the Town of Duanesburg Zoning Ordinance Section 8.4(18). Attorney Gerald Dwyer is representing Mr. Obour. Jules does not want to do repairs to any vehicles, he will only be selling 1-2 cars will be on the property at a given time. If there is any work that needs to be done, he will outsource it because Mr. Jules does not want to do repairs. Mr. Dwyer has revised the EAF as requested by the Board, Board Member Walpole stated when he did a drive by of the property there was more than 2 vehicles already on the site along with a couple skid steers. For the next meeting the board would like the following:

1. Town Code Enforcement to go to the site and do an inspection of the property and note all his findings.
2. Board counsel to draw a resolution for the applicant

**Harris/Walpole** made a motion to table the **#21-13 Obour, Jules** application until January 20<sup>th</sup>, 2022, meeting.

Harris yes, Walpole yes, Houghton yes, Santulli yes, Novak yes, Schmitt yes, Hoffman yes.  
**Approved.**

The amendment of application **#19-12 Murray, Richard/Eden Renewables:** SBL#74.00-2-5, (R-2) located at 13590 Duanesburg Rd is seeking an amendment to an existing special use permit under local law #1-2016 of the solar energy facilities law and section 14.6.2.5 of the Town of Duanesburg Zoning Ordinance.

Bill Pederson a representative from AMP introduced himself and explained that since the November meeting AMP has had a perc test done and the findings were not what they expected. The SWPPP will be revised and resubmitted as there will be a small change made to the infiltration trenches, they will most likely be swales. Before they can be sure the swales will work, they must run the calculations to see if they will work. A revised document will be sent to

Prime AE as soon as AMP can. The Town is still waiting for Paul Rogers to send in the escrow for the annual training for the fire protection. For the next meeting the Board would like to have:

1. Paul Rogers proposal for the training- Chairman Schmitt agreed to reach out to Paul
2. The revised SWPPP

**Schmitt/Harris** made a motion to table the amendment of application **#19-12 Murray, Richard/Eden Renewables** until January 20<sup>th</sup>, 2022, meeting.

Schmitt yes, Harris yes, Santulli yes, Houghton yes, Walpole yes, Hoffman yes, Novak yes.  
**Approved.**

**SKETCH PLAN REVIEW:**

None

**OTHER:**

Chairman Schmitt would like to recommend that the Town Attorney write a letter to Spiro Kagas and his attorney Donald Zee outlining the Planning Boards concerns with the implementation of the approved plans. Also, the screening does not comply with the requirements of 13.2.4.

**Schmitt/Hoffman** made a motion to have a letter sent to Mr. Kagas asking him to come to the January 20<sup>th</sup>, 2022, Planning Board meeting with the intentions of amending his current Special Use Permit.

Schmitt yes, Hoffman yes, Walpole yes, Houghton yes, Santulli yes, Harris yes, Novak yes.  
**Approved.**

**MINUTES APPROVAL:**

**Harris/Santulli** made the motion to approve November 18<sup>th</sup>, 2021, Planning Board minutes with no corrections but would like the clerk to start bulleting what the applicant needs for the next meeting.

Harris yes, Santulli yes, Houghton yes, Walpole yes, Hoffman yes, Schmitt yes, Novak yes.  
**Approved.**

**ADJOURNMENT:**

**Walpole/Houghton** made the motion to adjourn at 8:50 pm.

Walpole yes, Houghton yes, Santulli yes, Harris yes, Novak yes, Schmitt yes, Hoffman yes.  
**Approved.**

## Melissa Deffer

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**From:** lynne bruning <lynnebruning@gmail.com>  
**Sent:** Thursday, December 16, 2021 7:14 PM  
**To:** Melissa Deffer  
**Subject:** December 16 2021 Planning Board privilege of the floor

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please include my comments in the planning board meeting minutes as posted on the Town website.

Please confirm receipt of this email to [lynnebruning@gmail.com](mailto:lynnebruning@gmail.com)

At the November planning board meeting Mr. Wren presented a slideshow of color images concerning Possible contaminants at the retention pond for the car wash. The draft meeting minutes included black and white images that were essentially illegible and did not convey any of Mr Wrens information. I submitted a letter requesting that the draft minutes include color images. Within 24 hours the minutes were re-posted with color images. It's important that the minutes accurately convey with the residents, developers and members say and present at the meeting. The more transparent and accountable the town is when reviewing planning projects the better those projects will be for the entire town.

NYCERDAs website indicates that there is an application for a 94C state mandated 20MWac solar project on Humphreys Road. Has the developer approach the planning board? When might the residents expect the developer to provide a public information session?

Thank you for your time and consideration.

Respectfully,

Lynne Bruning  
720-272-0956  
[lynnebruning@gmail.com](mailto:lynnebruning@gmail.com)



PO Box 160  
Quaker Street, NY 12141

Town Board  
Planning Board  
Town of Duanesburg  
5853 Western Turnpike  
Duanesburg, NY 12056

Transmitted via email [jhowe@duanesburg.net](mailto:jhowe@duanesburg.net), [mdeffer@duanesburg.net](mailto:mdeffer@duanesburg.net)

December 16, 2021

RE: 2021 Application the Oak Hill Solar southern Project boundary is 800 feet north of Duanesburg Road. In 2019 it was 1,500 feet another of Duanesburg Road. The Project is significantly changed its foot print.

Dear Supervisor Tidball and Chairman Schmitt,

The November 19, 2021 Full Environmental Assessment Form Part 3 included in the December 16, 2021 Planning Board Meeting Agenda was posted to the town website on December 15, 2021.

Paragraph one states that the Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC (the "Project") is approximately "800 feet from Duanesburg Road, Route 7".

The 2019 Application includes a letter from EDP to the Board dated March 11, 2019. The "Plans" section item number 6 states that the project is 1,500 ft north of Route 7 and 1,600 ft from the nearest neighboring home. Exhibit A

The 2021 Amended Application reflects that the Project is 700 feet closer to Duanesburg Road than as presented to the Board and residents in 2019. It appears that the 2021 Project will span the entire 2,000 feet western property line of Biggs's parcel tax id 74.00-3-18 from north to south. This is not what was presented to the town, board, residents or taxpayers in the 2019 marketing renderings, visual impact analysis and 2019 site plan sheets 1 through 11. Exhibit B

It appears that the November 12, 2021 construction plans Revision E and the 2021 visual analysis may also be misleading and misrepresent the Project's southern boundary and fence line.

Additionally, the March 11, 2019 letter erroneously states that the Project is 1,600 feet from the nearest home. According to the November 19, 2021 FEAF Part 3 placing the Project just 800 feet

north of Duanesburg Road the Project's 14.5 feet tall solar array may be 600 feet directly west of the Biggs home, which is the most south west structure on parcel tax id 74.00-3-18.

The 2021 Project appears to be significantly different from what was reviewed and approved at the September 19, 2019 planning board meeting. The fenced area foot print is significantly increased in size and is now more than 8,200 linear feet. The Project site does not provide any existing evergreen screening along the entire 2,000 feet long eastern property line shared with the Biggs. The approved June 2021 Visual Maintenance Agreement to provide evergreen screening along 1,600 feet eastern property line north to south appears not to be filed with the Schenectady County Clerk as required. Screening along 1,600 feet appears to be inadequate to protect the Biggs, and any future property owner, use, enjoyment and future development of the property from the towering array and noisy electrical equipment.

Since 2019 the Applicant has presented a site plan and renderings that showed their Project's proposed boundary and southern fence line to be approximately 1,500 feet north of Duanesburg Road. The September 19, 2019 site plan sheets 1 through 11 as well as the Project's November 12, 2021 construction drawings sheets 1 through 29 reflect that the Project's southern fence line to be in-line with Biggs' pond. Exhibit C.

The Schenectady County SIMS website reflects the 2021 Application distance of 800 feet from Duanesburg Road (Route 7) to the north along the Project's eastern property line. This location is essentially the intersection point of Biggs' southern parcel tax id 74.00-3-16.3, Biggs northern parcel tax id 74.00-3-18, and Oak Hill Solar 2, LLC parcel tax id 74.00-2-5.1. This point is approximately 585 feet from Biggs home which is the most south western structure on parcel tax id 74.00-3-18. Exhibit D.

There are two different sets of "November 12, 2021 Revision E" uploaded to Amp drop box. Biggs and Bruning requested that the Applicant provide GPS coordinates for the Project's fence corner posts. Both sets of construction drawings provide two numbers near each corner fence post. These numbers do not appear to match any GPS coordinates. In November I submitted a detailed letter concerning these number and requested clarification of GPS coordinates. I was not provided a response or any additional information.

It is likely that the Project's location, height and noise and lack of evergreen screening 600 feet west of the Biggs' second story windows will likely diminish the property's value.

Furthermore, in July and August 2021 the Applicant indicated that an additional 9 acres of forest would need to be removed. The Applicant was informed of the town solar law which restricts clear cutting to 20,000 square feet. The October 2021 SWPPP indicated 4 acres to be clear cut. During the public hearings in July, August and September 2019 neighbors raised concerns that the Applicant clear cut acres upon acres of forest while SEQRA was in effect in 2018 and 2019. A satellite image from October 2018 to June 2019 appears to show acres of forest removed and possible storm water damage. Exhibit E

During review of the Amendment in 2021 neighbors raised concerns of the likelihood that the Applicant may remove more mature growth forest. This should not be permitted.

Amps 2021 Amendment is significantly different in foot print size and scope than what was presented by Eden in 2019. Oak Hill Solar's impact upon the Biggs' residence is significant. It appears that the Applicant misrepresented their Project to the Board and has misled the town and residents. There appears to be a pattern of errors, omissions and misrepresentations. When the Applicant is given the opportunity to correct the drawings and respectfully engage with the neighbors they continue to mislead and misrepresent their Project. I request that the Board deny the entire Project and request the Applicant to resubmit the Project so that the paperwork is accurate and transparent.

Kicking the can down the road allows the errors, omissions to snowball and may present more costly remedies for the town and taxpayers in years to come.

Thank you for your time and consideration.

Lynne Bruning

Susan Biggs

720-272-0956

lynnebruning@gmail.com

Enc: Exhibits A through E



**ENVIRONMENTAL DESIGN  
PARTNERSHIP, LLP.**

Shaping the physical environment.

300 Route 148 Clifton Park, NY 12065  
(P) 518.271.2521 (F) 518.271.9540 edp@edp.com

March 11, 2019

Mr. Phillip Sexton  
Planning Board Chairman

Town of Duaneburg  
Planning and Zoning Office  
5853 Western Turnpike  
Duaneburg, NY 12058

Regarding: Edan Renewables  
Oak Hill Solar Projects 1&2  
Duaneburg Road

Dear Mr. Sexton:

We are in receipt of a review letter by Mr. Doug Cole of PrimeAE for the referenced project, dated September 11, 2018 and offer the following comments and additional submittal documents.

FEAF

1. In the submitted FEAF, there are several questions that are unanswered...  
An updated FEAF has been provided and is enclosed.
2. In Item E.1.b., there is no acreage listed for wetlands or the land uses and cover types for the project site.  
The Applicant will complete a full wetland delineation as the weather permits in the spring. If wetlands are determined to be present any disturbance will be fully permitted with the Army Corp of Engineers.

Plans

1. The wetlands that are mentioned in the FEAF are not shown on the conceptual site plan. Therefore, it cannot be determined if the solar arrays and access road on the site have been situated to avoid wetland disturbance. We recommend that a new site plan be submitted showing the wetland locations and any wetland mitigation that will need to be completed.  
As noted above, the Applicant will complete a full wetland delineation as the weather permits in the spring. If wetlands are determined to be present any disturbance will be fully permitted with the Army Corp of Engineers.
2. The Site Plan shows that the electrical and control equipment is enclosed within a chain link fence. However, the height of the fence is not shown on the drawing. Confirmation that the proposed fence is six feet tall, as required by the Solar Law, will be needed.  
The Applicant is proposing the use of a livestock style fence with a height of 6 ft as shown on the updated Site Plan. Additionally, the use of a livestock style fence has been requested by neighboring land owner.
3. Details of the proposed warning signs need to be provided, as well as showing the proposed locations on the Site Plan.  
Proposed locations of warning signs have been shown on the Site Plan. Applicant is in the

process of obtaining details for the signs, once they are received, they will be added to the plans.

4. The proposed gravel access road is shown on the Site Plan; however, the width is not labeled. The design of the access road should be confirmed with the design engineer to meet the minimum requirements for firefighting equipment and the width stated on the plans.  
The Applicant is proposing a 12 ft wide access road as noted on the updated Site Plan.

5. The height of the solar panels cannot be determined since a detail was not submitted. We suggest that a solar panel detail be submitted to ensure that they are less than the 20 ft maximum height permitted. The solar panels are proposed at a height of 7.75 ft; a detail has been provided within the updated Site Plan.

6. We suggest that a visual impact plan be submitted to ensure that the minimum twenty-five-foot perimeter buffer, consisting of natural and undisturbed vegetation, will be provided around all mechanical equipment and solar panels as required by the Solar Law.

The solar array is proposed to be installed nearly 1,500 ft north of Route 7 and 1,600 ft from the nearest neighboring home with substantial existing vegetation existing between the field and nearest visual receptors.

7. The completed Oak Hill Solar 1 project is slated to cover 45.71 acres of the 97.24 acre parcel, which equates to approximately 47% lot coverage. This is below the allowable 60% lot coverage.  
The Oak Hill Solar 1 project will cover 32.2 acres and the parcel size will be 87.4 acres or 36.8 % lot coverage.

8. The completed Oak Hill Solar 2 project is slated to cover 45.63 acres of the 87.18 acre parcel, which equates to approximately 52.4% lot coverage. This is below the allowable 60% lot coverage.  
The Oak Hill Solar 2 project will cover 33 acres and the parcel size will be 105.2 acres or 31.4 % lot coverage.

9. The required 100' setback line is shown on the plans from the neighboring residential parcels with Tax ID's 74.00-3-16, 121 and 74.00-3-18 and no construction is shown in this area. However, the setback around the neighboring residential parcel with Tax ID 74.00-2-6 is only shown to be 40 ft. As required by the Solar Law, this setback needs to be increased to 100 ft.  
The setback has been increased to 100 ft on the revised Site Plan.

10. The plans do not show the inverter locations on the site. We suggest that these locations be shown on resubmitted plans and that a Project Narrative be submitted which states the decibel level expected from this equipment and the distance it will be from neighboring residences.  
The inverter locations have been shown on the revised Site Plan. Information from the proposed transformer equipment supplier indicates anticipated peak NEMA TR-1 noise levels of 62 db. Based on proposed equipment layout for the solar fields we anticipate that the transformers will be situated 140 feet or more from any property line. Given the operational noise level of 62 db and separation distance to the property line, transformer noise levels will be attenuated to approximately 19 db at 140 feet. Typical background noise for "quiet rural areas" is reported as 30 db; the proposed transformers will have no discernable impact on noise levels at the property line.

SWPPP

1. A SWPPP was not provided for review. Since the applicant has stated in FEAF Item D.1.b.b. that 1.15 +/- acres are planned to be disturbed, a full SWPPP is triggered since the area disturbed is greater than 1 acre. We would suggest that the applicant provide a full SWPPP for review. While the project footprint covers on the order of 65 acres, the actual acreage considered disturbed pursuant to NYSDEC Stormwater guidance is 0.96 acres. The FEAF has been updated to reflect this acreage and because disturbance is under 1.0 acres, a SWPPP is not required.

Decommissioning Plan

1. A written Decommissioning Plan has been submitted which details the proposed removal of solar energy system components at site restoration. A drawing of the proposed decommissioning work should be provided so that a future contractor will know what is required to properly remove equipment and restore the property to its predevelopment condition. This would be especially important if the Town must utilize the decommissioning fund to complete the work. Upon review of this comment and conversations between Eden and the Town Engineer it has been determined that a drawing is not necessary if decommissioning work has been explained effectively in the Decommissioning Plan. Furthermore, it has been determined the activities performed on site in the Decommissioning process would be difficult to effectively portray on in a drawing set.
2. An itemized breakdown of decommissioning costs, including estimated salvage value, should also be provided so that we can review and verify these costs. A decommissioning fund will also need to be provided with either a surety bond or an irrevocable standby Letter of Credit. An itemized breakdown of decommissioning costs as well as a surety bond form has been provided in the Decommissioning Plan.

The application has been revised to include a site plan, a two (2) lot Minor Subdivision and a lot line adjustment of the existing parcel that allows both the Oak Hill solar 1 and Oak Hill solar 2 project to proceed in conformance with the allowable lot coverage. In support of the revised application, enclosed please find the following information, prepared on behalf of Eden Renewables, for a two (2) 5 MW photovoltaic solar array located on Duaneburg Road.

- 2 full size and 10 reductions of the proposed plan sheets including
  - Lot Line Adjustment Plan
  - Minor Subdivision Plan
  - Site Plan
- 12 copies of revised subdivision application
- 12 copies of revised Site / Sketch Development Plan Application
- 12 copies of a revised Full Environmental Assessment Form
- 12 copies of a decommissioning plan

Mr. Phillip Sexton  
March 11, 2019

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**  
Shaping the physical environment

---

Please do not hesitate to contact our office if you have any questions or require additional information.

Sincerely,

---

**Travis J. Mitchell, P.E.**  
Environmental Design Partnership

cc: Giovanni Maruca, Applicant (via email)

# Exhibit B 2019 Application for Oak Hill Solar Special Use Permit

## OAK HILL SOLAR FARMS NEW YORK



### EDUCATIONAL BENEFITS

We organize trips to the solar farm so children from local schools can learn about science, technology and energy generation.



### SECURITY

Traditional rural fencing and discreet CCTV cameras will be used around the perimeter of the site to maintain security.



### WILDFLOWER MEADOWS

The land around and beneath the solar panels will be sown with native wildflowers and grasses to support habitats for bees and other pollinators.



### EXISTING TREES

The site is surrounded by mature trees and forestry, which screens it effectively from public view as well as providing important wildlife habitats.

### BEEHIVES

Beehives on the solar farm will provide pollination services to support local farmers and agriculture.



### BIRD AND BAT BOXES

These will be located around the perimeter of the site to encourage bats to roost and birds to nest.



### Biggs Pond Omitted



### SHEEP GRAZING

The land around the solar panels will be maintained where economically feasible by sheep grazing in autumn after the meadows have seeded, to keep land in food production.

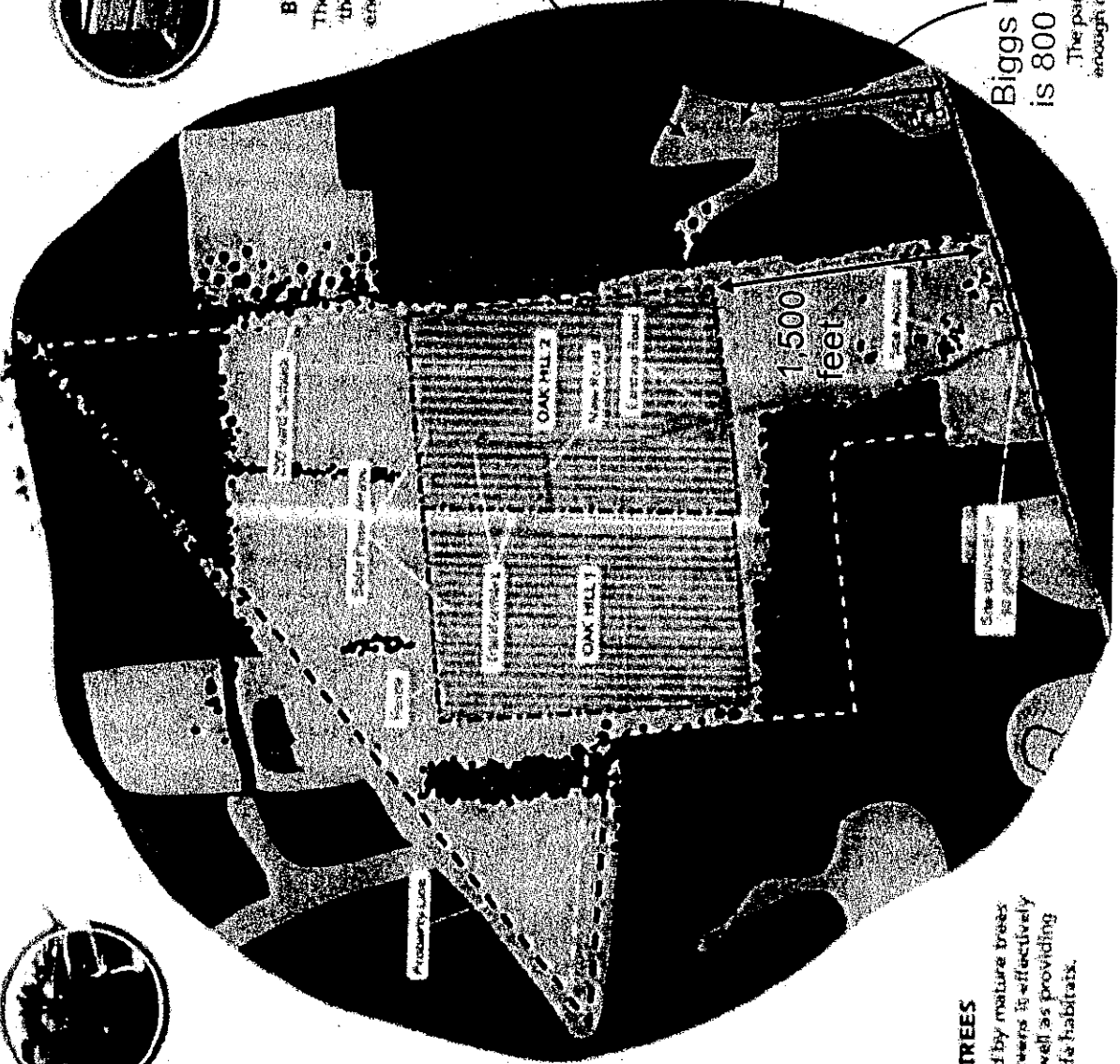
### Biggs House Omitted



### Biggs Driveway is 800 feet

### SOLAR PANELS

The panel arrays are single axis trackers and will generate enough clean power for the equivalent of over 1,225 homes.





## PROPOSED COMMUNITY SOLAR FARMS AT OAK HILL FARM



EDEN  
RENEWABLES

### DESIGN

- The land will continue in agricultural use, with sheep grazing between the panels.
- Panels cover 30% of the total site area, but only 5% is disturbed by the actual footprint.
- The site is bounded on all sides by existing woodland, bushes and hedges, which screens it effectively. New hedges will be planted to further enhance the screening.
- The land is average agricultural value and is currently farmed with a mix of crops and hay. We are developing a Landscape and Ecological Management Plan, which will substantially improve the ecology over the lifetime of the park.
- The existing field boundary woodland and grassland habitats will be retained and protected. They will be complemented by sowing an appropriate native grass and wildflower mix around the panels improving the biodiversity potential of the land and creating a pollinator-friendly habitat for birds, bees and butterflies.

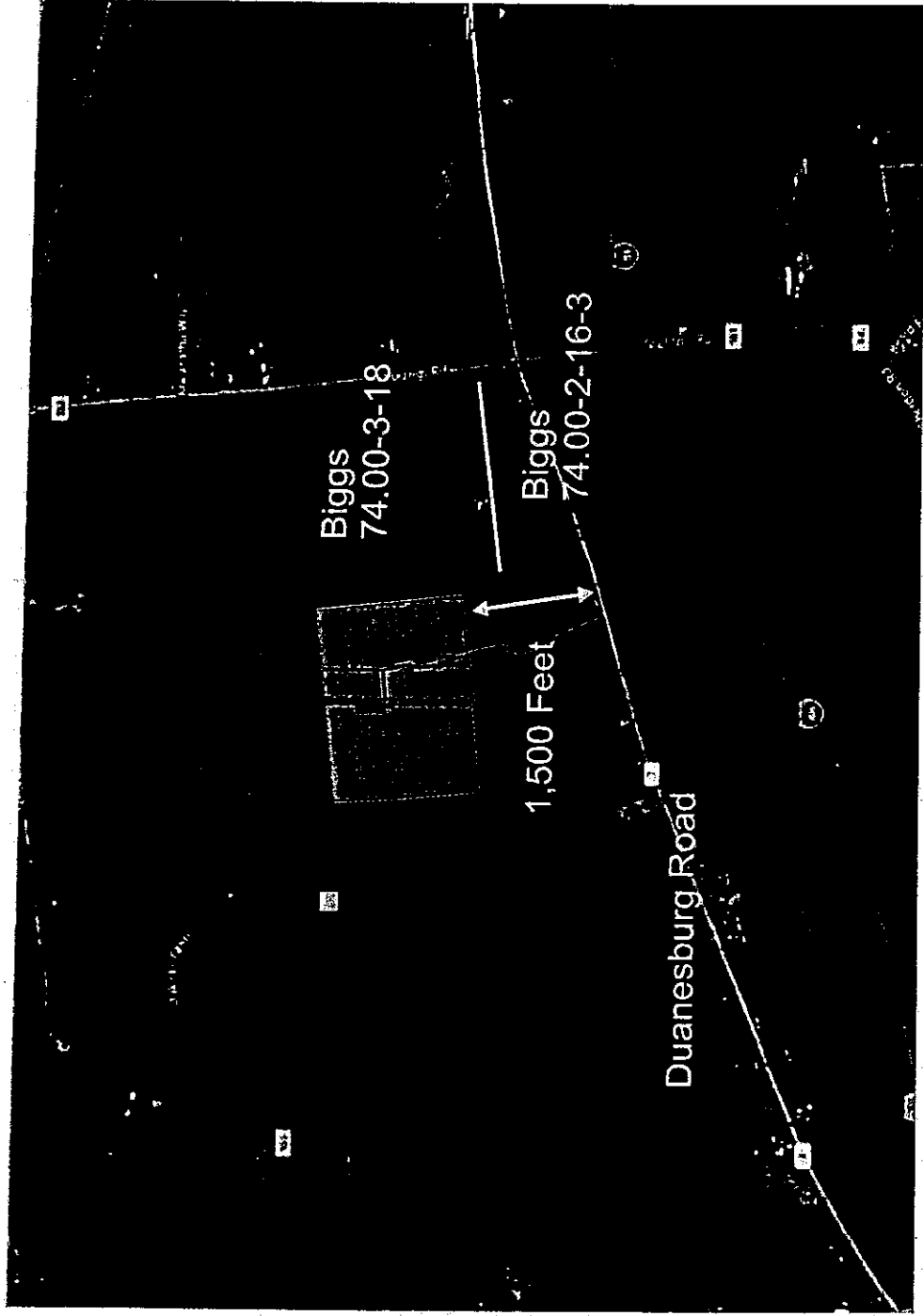


Exhibit B 2019 Application for Oak Hill Solar Special Use Permit

Environmental Design  
Visual Impact Assessment  
Oak Hill Solar Project  
Town of Queensbury  
Source: Google Earth 2019  
Schenectady County, NY  
August 13, 2019

Figures:  
4

218 KINGS BRIDGE  
DESIGN PARTNERSHIP, LLP  
© 2019

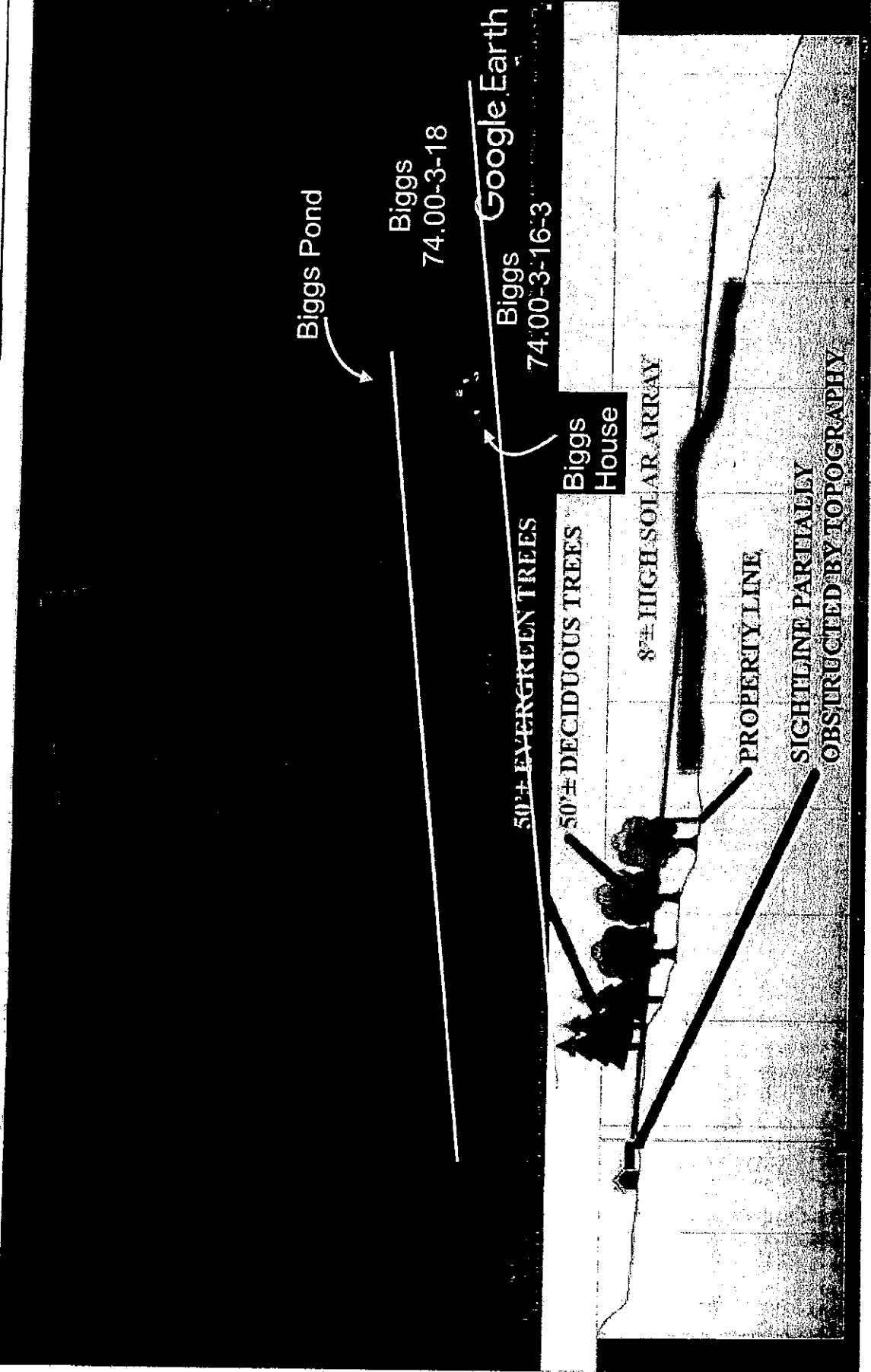
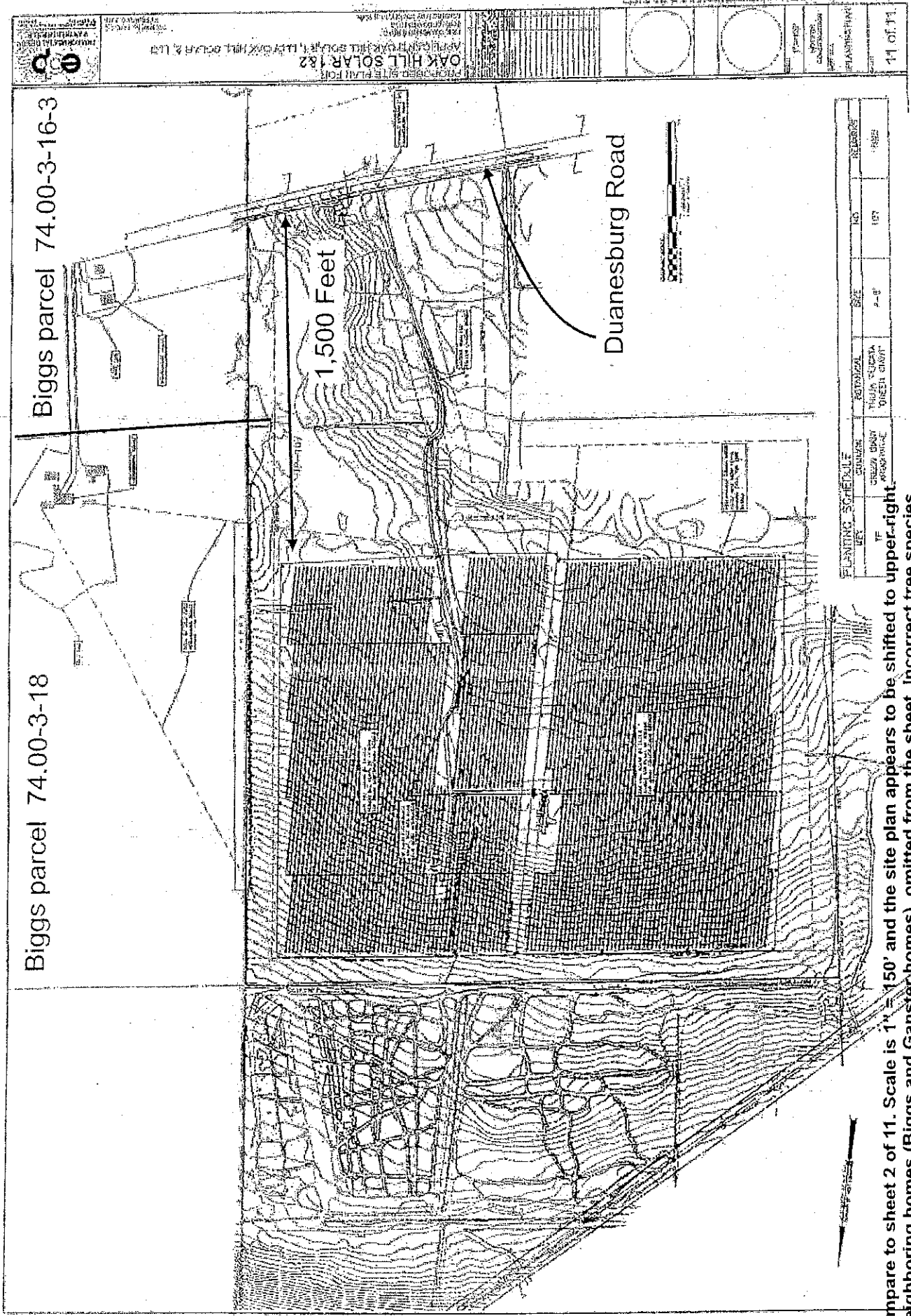


Exhibit B 2019 Application for Special Use Permit



Compare to sheet 2 of 11. Scale is 1" = 150' and the site plan appears to be shifted to upper-right. Neighboring homes (Biggs and Ganster homes) omitted from the sheet. Incorrect tree species. Incorrect date - Planting Plan provided in August 2019.

# Exhibit C

## 2019 Applicant measurements to Projects southern boundary

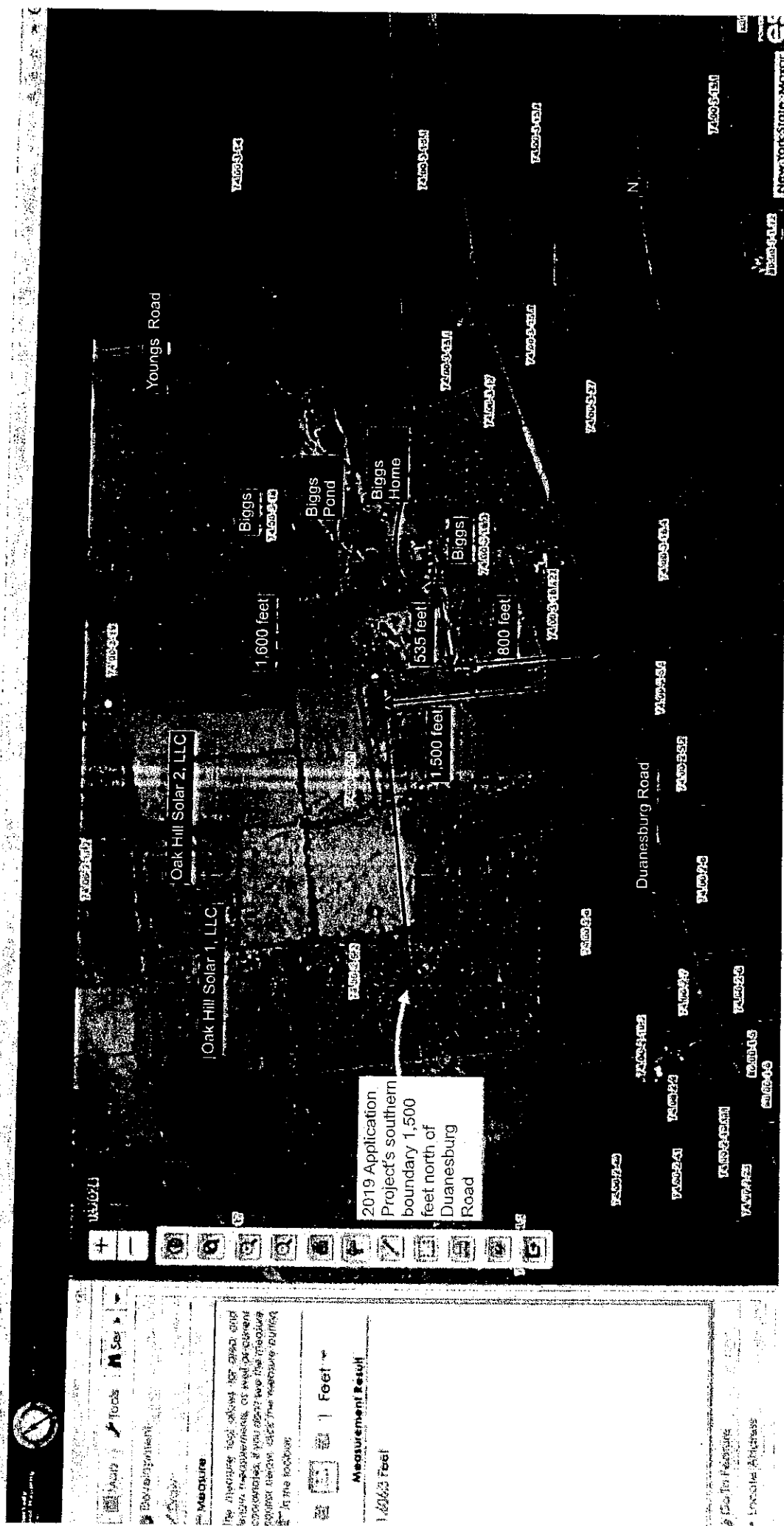
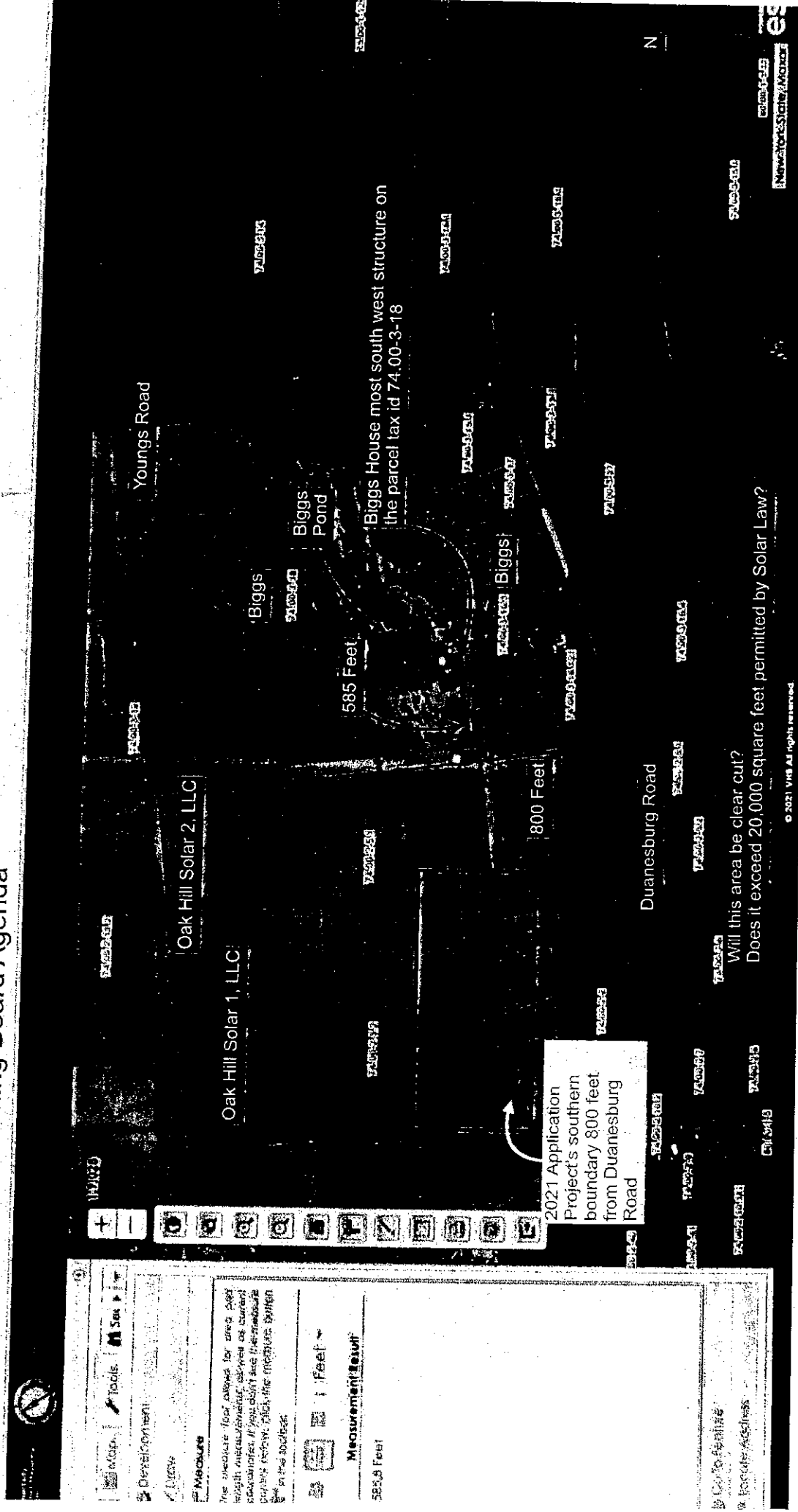


Exhibit D: 2021 Application  
 Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC according to FEAF  
 Part 3 dated November 19, 2021 found in the December 16, 2021  
 Planning Board Agenda





2018.10.05



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2019.06.09

Local law limits tree clearing to 22,000 sq ft.

Clear cutting occurred while SEQRA was in effect.

Possible violation of §17.5 (c)  
Project sponsor may not commence any physical alteration to an action until SEQRA has been completed with...



© Planet Labs, Inc.

Project: **Kirker Minor Subdivision**

Date: **10/27/21**

### Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

The Town of Duaneburg Planning Board has completed an environment assessment of the proposed minor subdivision consisting of two lots. Lot #1 consisting of 10.7 acres with 43.46' road frontage (variance required) and Lot #2 consisting of 5.61 acres with 60' road frontage. The proposed subdivision is consistent with the Town Comprehensive Plan and compliant with the Zoning Ordinance for the R-2 Agricultural Residential Zoning District. There is anticipated construction of single family dwellings on each lot. The proposed action will have little or no effect on the existing character of the community with no aesthetic impacts anticipated. The proposed action will not have an impact on the environmental characteristics that would cause the establishment of a Critical Environmental Area. The proposed action will have little or no impact or any adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway. The proposed action will have little or no impact on energy usage. Any construction will require a well to be drilled and a permit from Schenectady County Health Department for a Septic System. The Parcels are not listed on the National Register of Historic Places and have no known archaeological sites. The subdivision is not within a 100 year flood plain or remediation site. The proposed action should not increase any potential erosion or flooding, future construction will have limited disturbance, include appropriate stormwater controls. NYSDEC has records of rare, threatened and endangered species, primarily the Northern Long Eared Bats have been identified. Any tree removal activities must occur between October 31st and March 31st. If these dates can not be accommodated, an on-site assessment by the DEC staff will be required. The proposed action should not create a hazard to environmental resources or human health.

Therefore, based on this information, the Planning Board has determined that the proposed Minor Subdivision will not have any significant adverse impacts on the environment and a Negative Declaration is made for the purposes of Article 8 of the Environmental Conservation Law.

<input type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.	
<input checked="" type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.	
Duaneburg Planning Board <small>Name of Lead Agency</small>	_____ <small>Date</small>
Jeffrey Schmitt <small>Print or Type Name of Responsible Officer in Lead Agency</small>	_____ <small>Title of Responsible Officer</small>
_____ <small>Signature of Responsible Officer in Lead Agency</small>	_____ <small>Signature of Preparer (if different from Responsible Officer)</small>

**PRINT FORM**

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OCT 27 2021

ORIGINAL





Jeffery Schmitt, Planning Board Chair  
Michael Harris, Vice Chairman  
Dale Warner, Town Planner  
Melissa Deffer, Clerk  
Teresa Bakner, Board Attorney



Elizabeth Novak, Board Member  
Joshua Houghton, Board Member  
Michael Santulli, Board Member  
Matthew Hoffman, Board Member  
Michael Walpole, Board Member

TOWN OF DUANESBURG  
SCHENECTADY COUNTY

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Town of Duanesburg  
Planning Board Minutes  
January 20<sup>th</sup>, 2022  
**Draft Copy**

**There was no meeting held on January 20<sup>th</sup>, 2022, due to COVID-19 situation.**

**DRAFT**