

Charles Collins  
68 Hickory Drive  
Permit Application  
Part I – Responses

- A. Applicant Information
  - a. Name - Charles E. Collins
  - b. Address - 68 Hickory Drive, South Glastonbury, CT
  - c. Phone Number – 860-985-3407
- B. Landowner Information – Same as applicant
- C. Applicant's Interest in the land – Home residence
- D. Geographical Location – See attachment A
- E. Land Description – See Attachment A
- F. Narrative – Installation of a 8" PVC pipe to convey flow from upstream neighbor's driveway drainage pipe through the lawn section in the rear of the household.
- G. Not Applicable – Activity subject to permit approval is completed and permanently stabilized
- H. Not Applicable – Activity subject to permit approval is completed and permanently stabilized
- I. Not Applicable – Activity subject to permit approval is completed and permanently stabilized
- J. Not Applicable – Activity subject to permit approval is completed and permanently stabilized
- K. See Attachment B
- L. Not Applicable
- M. Abutting Neighbors
  - a. 84 Hickory Drive
    - i. Jeff P. Caiola & Kathleen A. Caiola
  - b. 56 Hickory Drive
    - i. Margaret M Kenney
- N. I certify I am aware of all information provided within this application

- O. Not Applicable
- P. Not Applicable – Activity subject to permit approval is completed and permanently stabilized
- Q. I Charles Collins authorize members and designated agent(s) of the agency to inspect the property for compliance with the permit.
- R. Not Applicable
- S. Filing Fee – Attached with application – Approx 500 sq ft of wetlands regulated and approx. 200 sq ft disturbed when pipe was installed. – Application Fee \$63.00
- T. Certifications for Adjoining Municipalities
  - a. Property is not within 500' of an adjoining municipality
  - b. Not applicable
  - c. Not Applicable
  - d. Not Applicable
- U. Not Applicable
- V. See Attachment C – Engineer's Report for installed pipeline

Signature of Applicant



Date

5/14/20



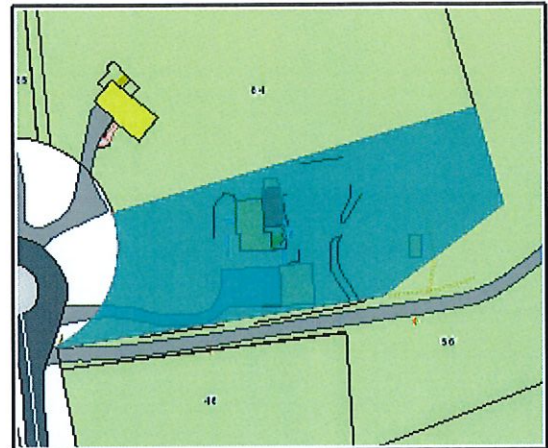
Owner of Record

**GIS ID:** 30000068  
**Owner:** COLLINS CHARLES E IV+MARY ELIZABETH  
**Co-Owner:**  
**Address:** 68 HICKORY DR  
**City, State ZIP:** S GLASTONBURY, CT 06073-3212

**Account Number:** 30000068  
**Property Address:** 68 HICKORY DR

Parcel Information

**Map/Street/Lot** E13 / 3000 / E0003A **Property ID:** 2296  
**Developer Lot ID:** 0001 **Water:** Well  
**Parcel Acreage:** 1.04 **Sewer:** Septic  
**Zoning Code:** AA **Census:** 5205.01



Property highlighted in blue

Valuation Summary

Item	Appraised Value	Assessed Value
<b>Buildings</b>	201100	140800
<b>Land</b>	132300	92600
<b>Appurtenances</b>	59700	41800
<b>Total</b>	<b>393100</b>	<b>275200</b>

Owner of Record

Owner of Record	Deed / Page	Sale Date	Sale Price
COLLINS CHARLES E IV+MARY ELIZABETH	2414/0181	01/29/2007	335000
MONZEGLIO CHARLES I+REBECCA C	1374/0242	09/11/2000	207500
FIORA WILLIAM J+KIRSTIE C	1139/0240	02/10/1998	0
FIORA WILLIAM J+KIRSTIE C	1077/0098	05/01/1997	170000
DIMMETT EMMA L	0173/0596	10/13/1970	0

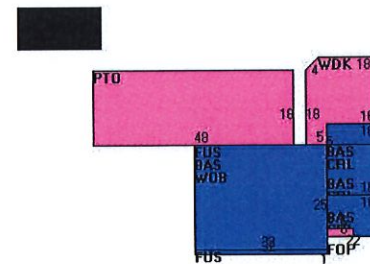


Building Information

**Building ID** 2296

**Year Constructed :** 1960  
**Building Type :** Residential  
**Style :** Colonial  
**Occupancy :** Single Family  
**Stories :** 2  
**Building Zone :** AA  
**Roof Type :** Gable  
**Roof Material :** Asphalt Shingl  
**Est. Gross S.F. :** 4504  
**Est. Living S.F. :** 2052

**Number of Rooms :** 6  
**Number of Bedrooms :** 03  
**Number of Bathrooms :** 1  
**Number of Half-Baths :** 1  
**Exterior Wall :** Wood Shingles  
**Interior Wall :** Drywall  
**Interior Floor :** Hardwood  
**Interior Floor #2 :** No entry  
**Air Conditioning Type :** Central  
**Heat Type :** Hot Water  
**Fuel Type :** Oil

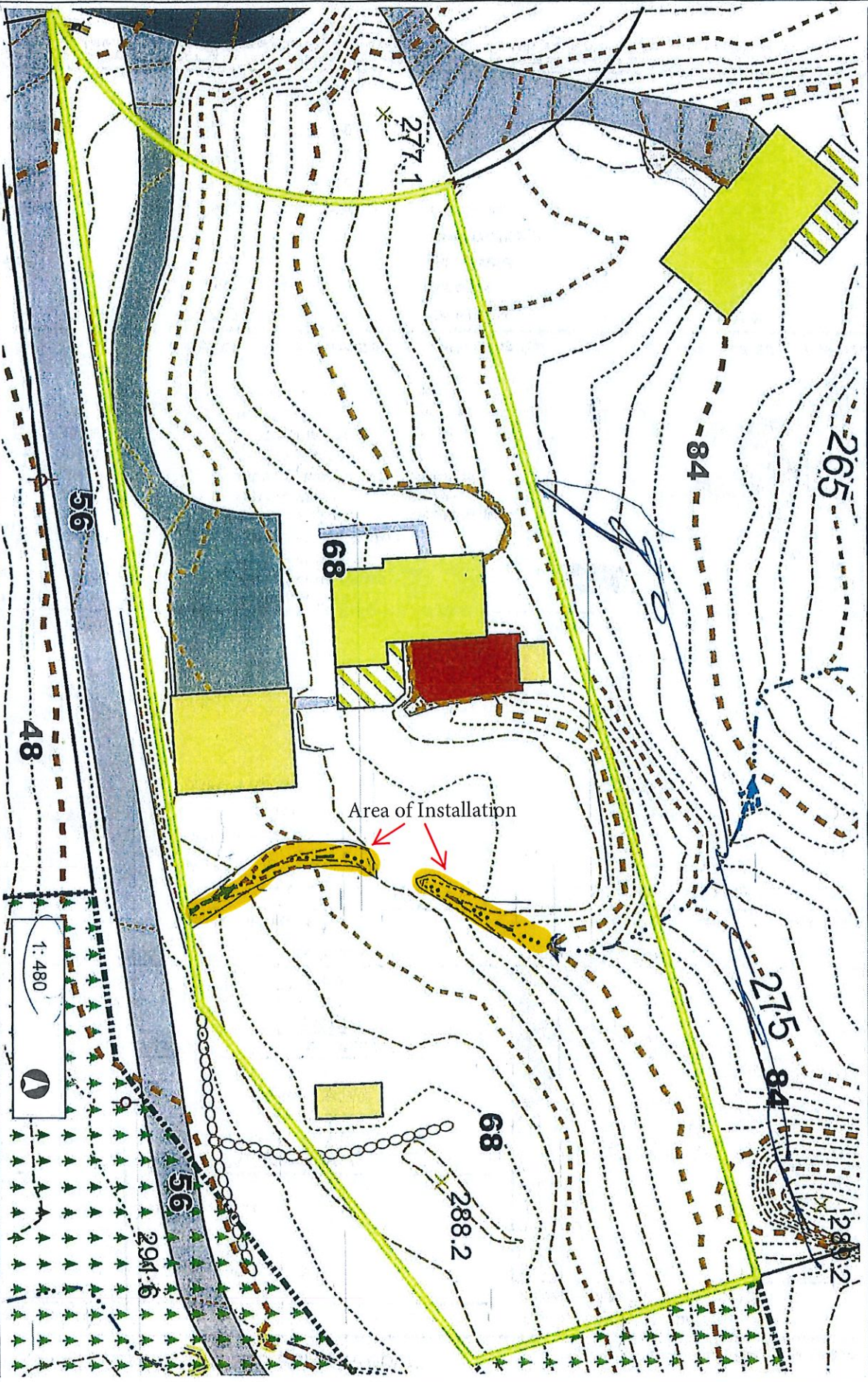


Subarea Type	Est. Gross S.F.	Est. Living S.F.	Outbuilding Type	Est. Gross S.F.	Comments
First Floor	1220	1220	Gar w/1.5 St	1008.00	
Crawl	420	0	Generator	1.00	
Fin. Lower Level	600	0	Patio-Concrete	600.00	
Porch, Open	12	0	Shed-Wood/Comp	240.00	
Upper Story, Finished	832	832	Pool IG Vinyl	1200.00	
Patio	864	0			
Wood Deck	356	0			
Walk out basement	200	0			

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*Att. Addendum A*

**1-foot contours & a 150-foot URA (Grindale Bk)**



NAD\_1983\_StatePlane\_Connecticut\_FIPS\_0600\_Feet  
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**THIS MAP IS NOT TO BE USED FOR NAVIGATION**

Attachment C

**MEGSON, HEAGLE & FRIEND**  
CIVIL ENGINEERS & LAND SURVEYORS, LLC  
81 RANKIN ROAD  
GLASTONBURY, CONNECTICUT 06033  
PHONE (860) 659-0587  
FAX (860) 657-4429

March 27, 2020

Mr. Tom Mocko  
Environmental Planner  
Community Development  
Glastonbury Town Hall  
2155 Main Street  
PO Box 6523  
Glastonbury, CT 06033

Re: Engineers Report  
Charles Collins  
68 Hickory Drive  
South Glastonbury, CT 06073

Dear Tom:

I have been retained by Mr Charles Collins and his wife Mary to respond to the concerns of the Glastonbury Conservation Commission/Inland Wetlands and Watercourses Agency in relation to a Notice of Violation Order Concerning the Piping of and Intermittent Watercourse dated February 5, 2020. Pursuant to our phone discussion I visited the property on March 26<sup>th</sup> to observe the existing conditions and pipe installation. You indicated a drainage analysis of the pipe was in order to assess the stability and adequacy of the installation. Accordingly, I am including the results of my analysis in this letter report.

The intent of my site visit was to determine the extent of the drainage area the pipe is receiving. I also needed to measure the pipe diameter. In addition, the neighbor's driveway, immediately to the south at 56 Hickory Drive, also has a culvert which picks up the same drainage area. I wanted to measure the size of that pipe and observe how it appeared to be functioning. I took pictures of the area and have included a few with this report with an index of where the photos were taken.

The following are my observations from the site visit:

- The existing pipe on the Collins property is an 8" PVC pipe approximately 90' long. The Glastonbury GIS website indicates the pipe should have an approximate slope of 5.5%.
- According to the homeowner this pipe was installed in the spring of 2018 to convey flow previously directed through a stone lined drainage ditch. This ditch was located about 50-80' behind the house and through the back yard.

- A shorter culvert was previously located in the ditch that was approximately 20' long. This provided access to the rear portion of the property.
- The ditch was filled and the area is now a manicured lawn.
- The pipe on 56 Hickory Drive is a 10" PVC pipe.
- The pipe on 56 Hickory Drive appears to be partially filled in with sediments.
- No channelization is present uphill of the driveway of 56 Hickory Drive leading to the inlet of the 10" pipe which would indicate a concentrated surface flow.
- No erosion or evidence of overland flow was observed in the area of both culverts which would indicate the culverts capacities had been exceeded.
- The culverts appear to be receiving groundwater as the primary source of flow.

My onsite observations in conjunction with the topographic information available on the Glastonbury GIS website indicate the drainage area to the culverts is approximately 0.60 acres. A map is attached depicting this area. The peak runoff for a 100 years storm would be 1.0 cfs as calculated with the Rational Method. Utilizing Hydroflow Storm Sewers, the capacity of the 8" pipe is 2.9 cfs. Therefore, the pipe has more than adequate capacity to convey the surface runoff and groundwater flow it receives

In conclusion and based on my onsite observations, the contributing drainage area is relatively small and the 8" pipe is adequately conveying the flow it collects. The attached drainage calculations support these observations. Based on this, the area is expected to stay stable and the installed pipe should function as intended.

If you have any questions or comments please do not hesitate to call.

Sincerely,



Mark W. Friend, Principal  
P.E., Soil Scientist, LEED AP

MEGSON, HEAGLE & FRIEND  
Civil Engineers & Land Surveyors, LLC  
81 Rankin Road  
Glastonbury, Connecticut 06033  
(860) 659-0587

JOB 61-18 COLUNS  
SHEET NO. 1 OF 1  
CALCULATED BY MWF DATE 3-26-20  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SCALE \_\_\_\_\_

### SURFACE RUNOFF TO 8" PVC CULVERT

$Q = CiA$        $C =$  COEFFICIENT OF IMPERVIOUSNESS  
 $i =$  RAINFALL INTENSITY  
 $A =$  DRAINAGE AREA

$C = 0.25$  (WOODED)

$A = 0.60$  AC

SLOPE = 8.3%

LENGTH = 240'

$T_L = 15$  MIN

$i = 4.2$  (10 YR STORM)

$6.3$  (100 YR STORM)

$$Q = CiA = (0.25)(6.3)(0.60) = \underline{1.0 \text{ CFS}}$$

$$\text{CAPACITY OF 8" PVC @ 5.5\%} = \underline{2.9 \text{ CFS}}$$

# Hydraulic Grade Line Computations

Line	Size (in)	Q (cfs)	Downstream								Len (ft)	Upstream						Check		JL coeff (K)	Minor loss (ft)						
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)			Ave Sf (%)	Energy loss (ft)				
1	8	2.85	282.00	282.99	0.67	0.35	8.16	1.03	284.02	5.558	90.0	287.00	287.99	0.67	0.35	8.15	1.03	289.03	5.556	5.557	5.001	1.00	1.03				
Project File: Newstm																											
Number of lines: 1														Run Date: 03-30-2020													



# Storm Sewer Tabulation

Station	Len	Drng Area		Rnofr coeff	Area x C		Tc		Rain (l)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
		Incr	Total		Incr	Total	Inlet Syst	Inlet					Size	Slope	Up	Dn	Up	Dn	Up	Dn	
Line To Line	(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	90.0	0.00	0.00	0.00	0.00	0.0	0.0	0.0	2.85	2.85	8.16	8	5.56	287.00	282.00	287.99	282.99	0.00	0.00	
Project File: Newstm																					
Number of lines: 1															Run Date: 03-30-2020						
NOTES: Intensity = 69.87 / (Inlet time + 13.10) ^ 0.87; Return period = 2 Yrs. ; Total flows limited to full flow capacities.																					

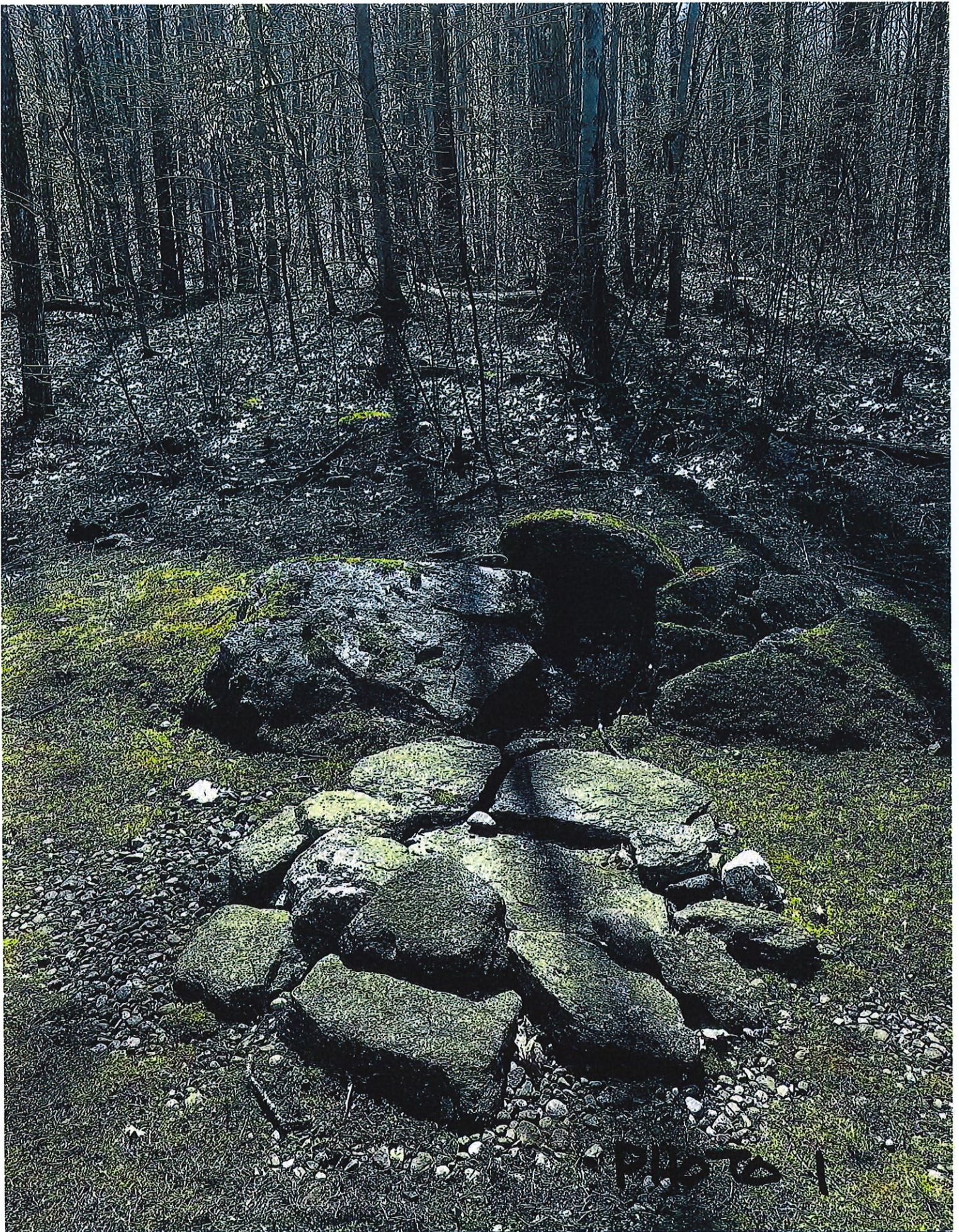


PHOTO 1

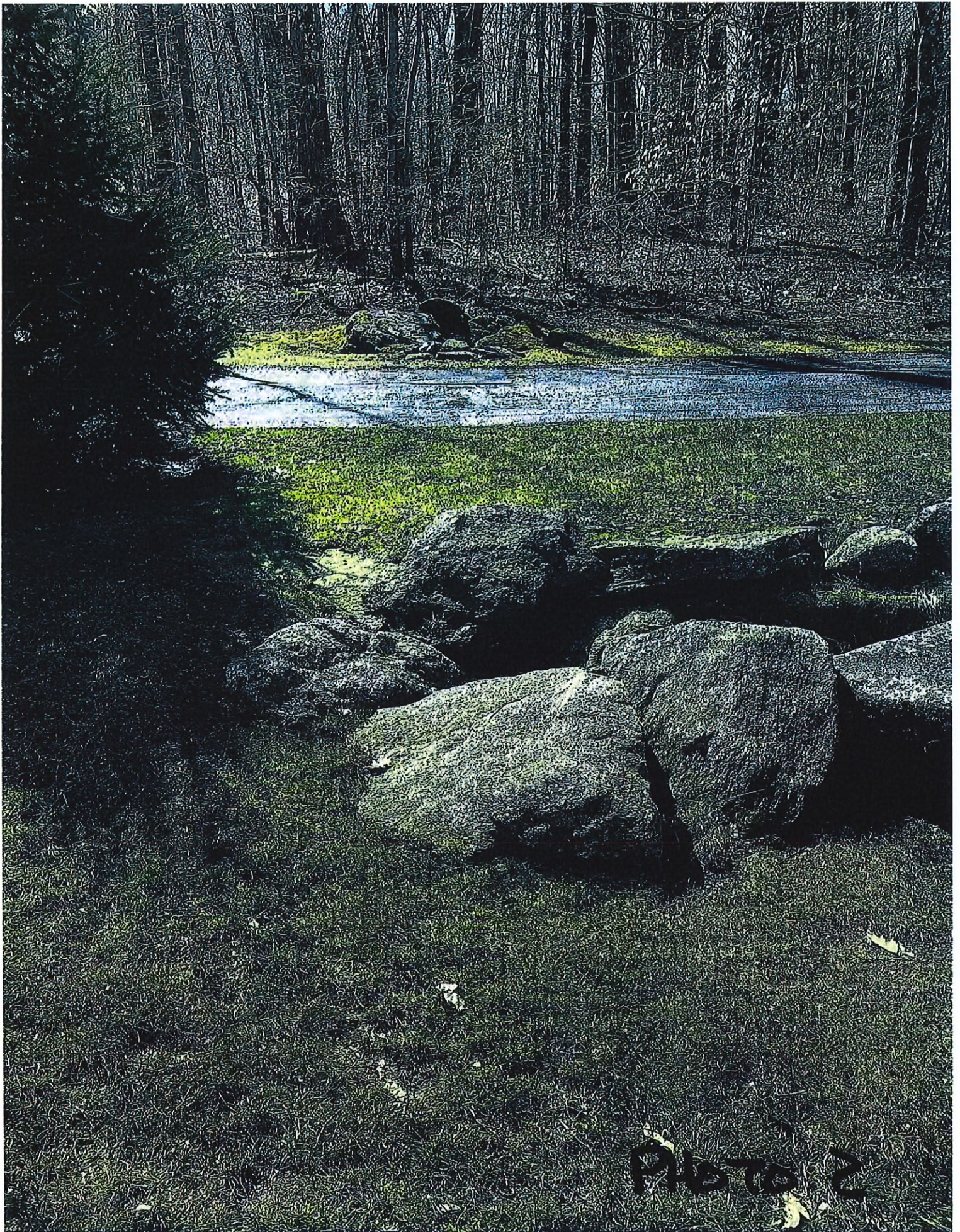
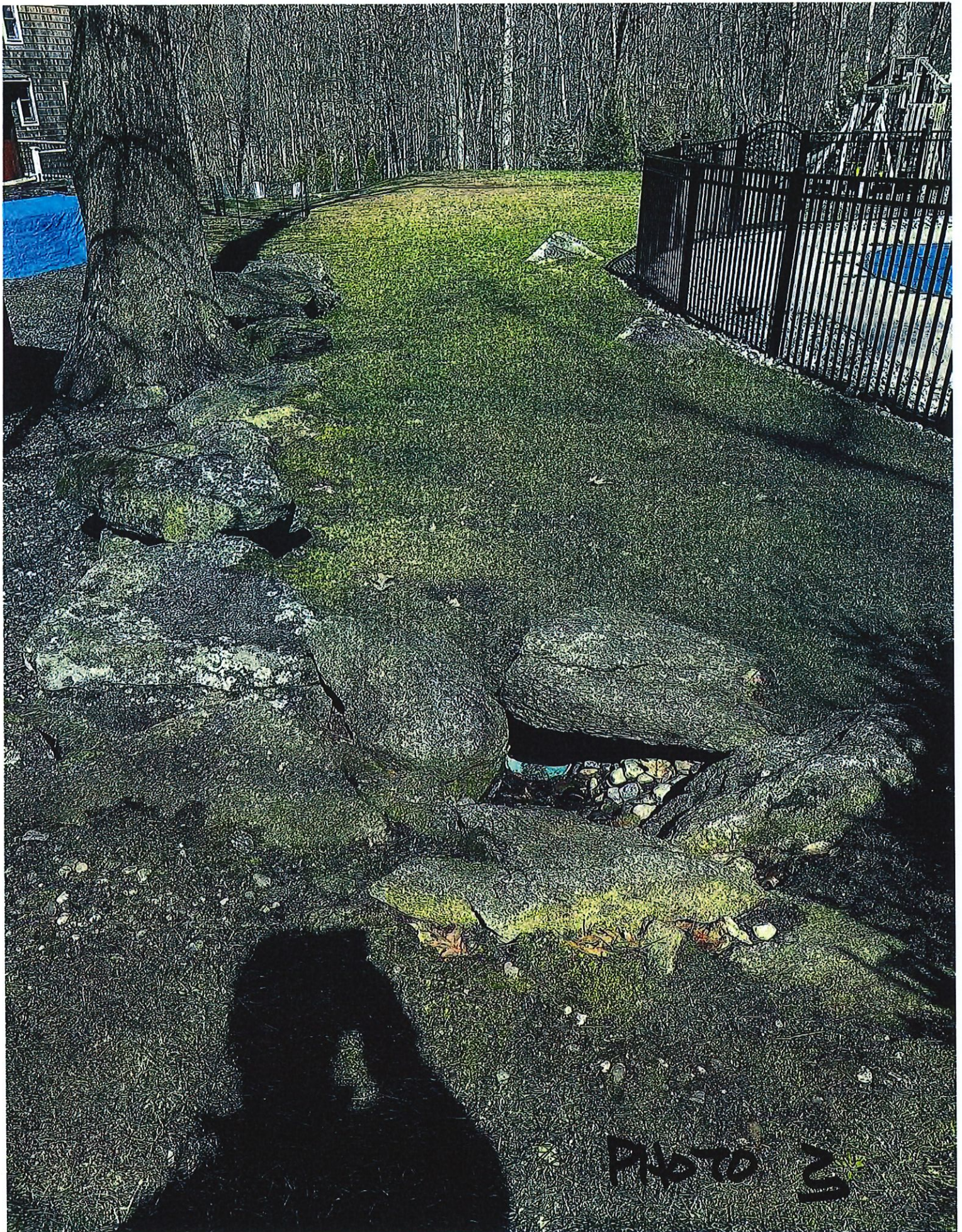


Photo 2



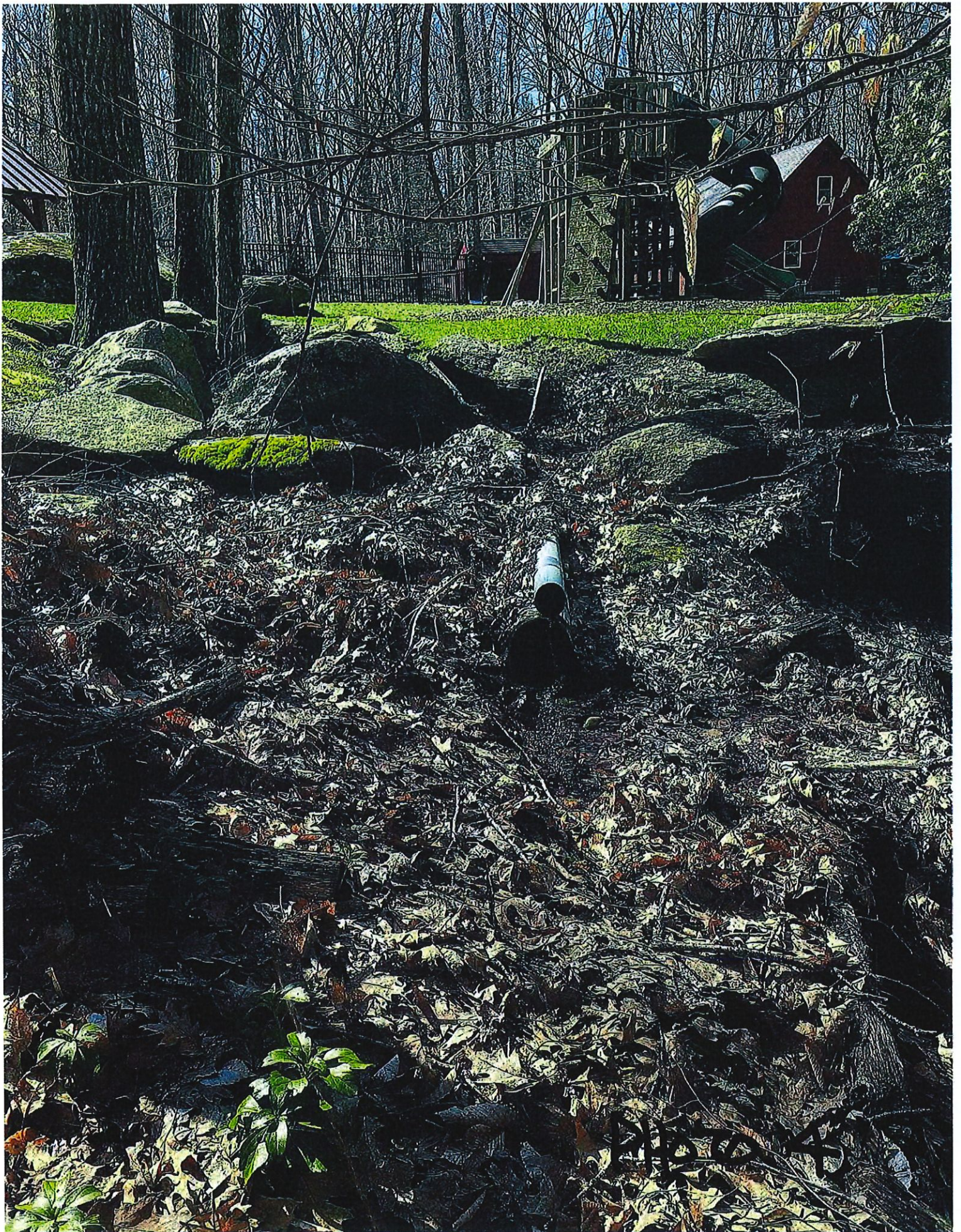




PHOTO 5



0 20 40 Feet  
NAD\_1983\_StatePlane\_Connecticut\_FIPS\_6000\_Feet  
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**Legend**

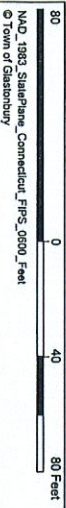
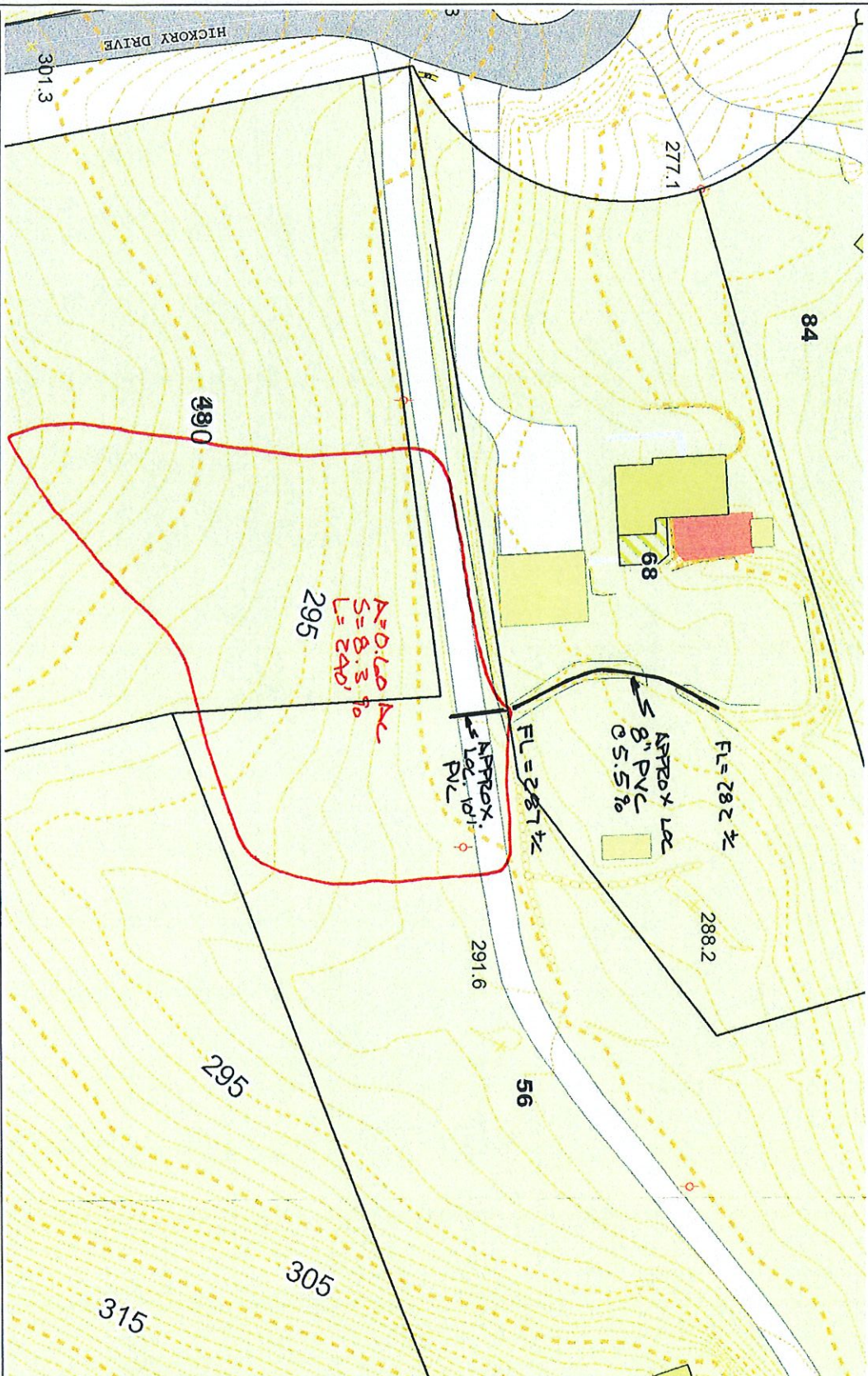
- Property Lines
- Address
- Lot & Address
- Center
- Street
- Street Type
- Street Name
- Center Line
- Center Line Type
- Center Line Width
- Center Line Color
- Center Line Style
- Center Line Thickness
- Center Line Opacity
- Center Line Z-Index
- Center Line Layer
- Center Line Visibility
- Center Line Color
- Center Line Style
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- Center Line Color
- Center Line Style
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- Center Line Opacity
- Center Line Z-Index
- Center Line Layer
- Center Line Visibility

1:240



**Notes**  
This map was automatically generated using Geographic Essentials.

**COLLINS PAR  
3-26-20  
GASTONBURY DR  
GASTONBURY**



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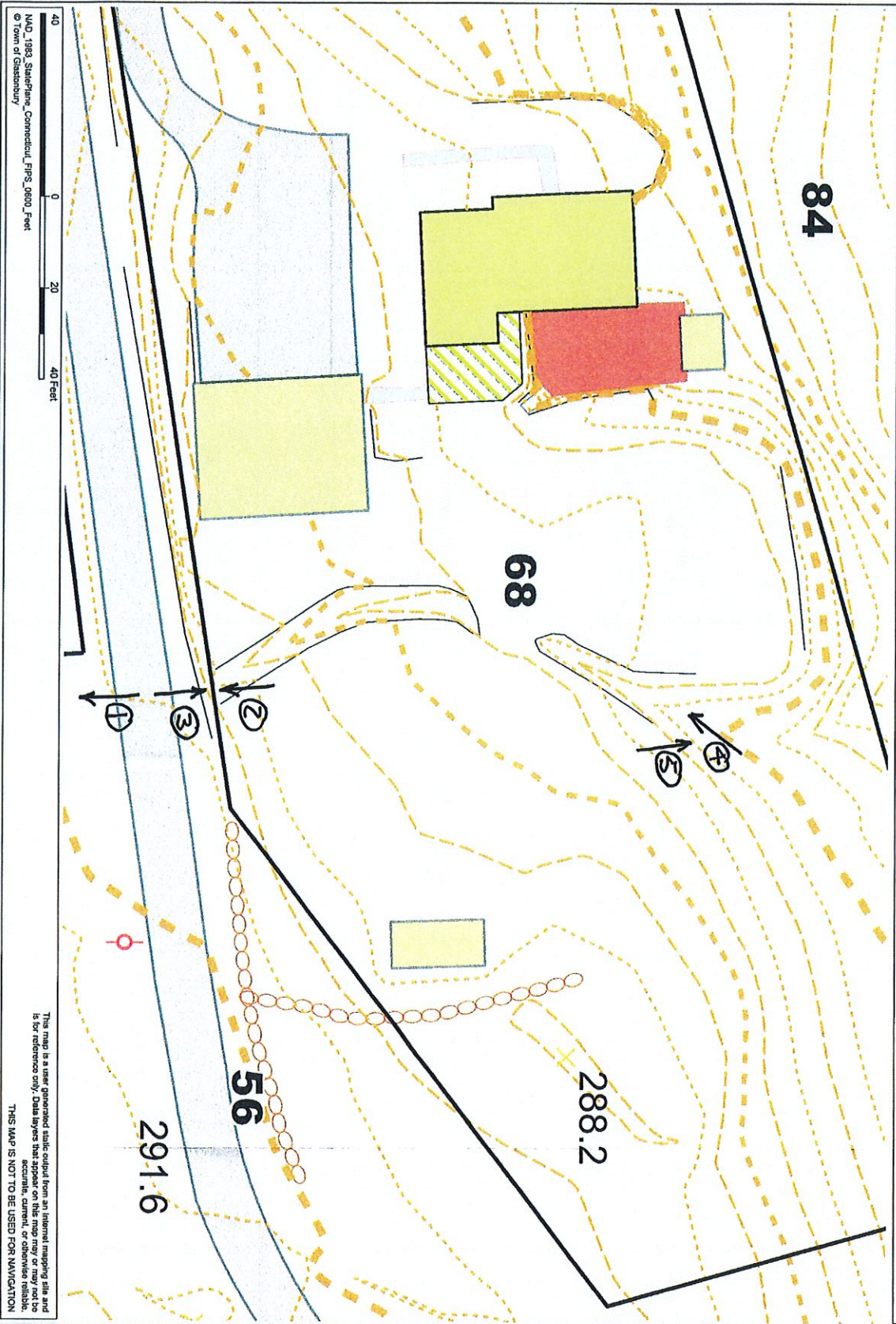
Notes  
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1:480



**DRAINAGE AREA**  
3-26-20  
61-18 COLUNS  
68 HICKORY DR  
GLASTONBURY

- Legend**
- Property Line
  - Address
  - Lot & Address
  - Contour
  - Street
  - 151 Number AD
  - Contour PS
  - House Footprint
  - 11 House
  - 11 Contour
  - Address Point
  - Contour Point





MAD\_1983\_StatePlane\_Connecticut\_EPS\_8000\_Feet  
© Town of Glastonbury

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**Legend**

- Property Line
- House Number
- Color
- Street

**Notes**

This map was automatically generated using GeoSource Essentials.

1:240

**PHOTO INDEX**  
3-26-20  
61-18 COLUMN  
63 HICKORY DR  
Glastonbury