PROPERTY OWNER AUTHORIZATION

To Whom It May Concern:

I hereby declare that I am the owner of the premises described as follows:

7 Hill End Lane
Street Address/Job Site Location

Weston CT 06883
City State Zip Code

That John Kaeser is duly authorized for and on my behalf to execute an
(Name of individual)

application for health permits and/or approval on my property.

Date: 1/10/2024

Owner: (*Please print name*): John Ward

Owner's Signature: [signature]

Owner's Telephone #: 646-660-0502 Owner's e-mail address: JSWard45@gmail.com
(Include area code)

Owner's Representative: (*Please print name*): John Kaeser

Representative's Signature [signature]

Rep's.Telephone #: 203 856 0192 Rep's. e-mail address: JKaeser1BCazzer1@aol.com

LOT DEVELOPMENT APPLICATION
ZONING PERMIT APPLICATION

An appointment to submit this application to the Code Enforcement Officer is recommended. Please call Jim Pjura at 222-2559.

(Please submit an A-2 Survey and a ~~$110.00~~ 160.00 filing fee with this application. Check # 1738

LOCATION: 7 HILL'S END
PROJECT DESCRIPTION: NEW HOME SEPTIC, DRAINAGE, POOL
OWNER'S NAME: WORD
OWNER'S ADDRESS: 7 HILLS END
OWNER'S PHONE: (203) 856 0192

PLEASE ANSWER THE FOLLOWING QUESTIONS. IF YES, SUPPLY A COPY OF THE RESOLUTION/APPROVAL

	(CIRCLE ONE)
1. IS A SPECIAL PERMIT REQUIRED FOR THIS PROPERTY?	Y (N) NA
IF YES, WAS A SPECIAL PERMIT APPROVED BY THE PLANNING & ZONING COMMISSION?	Y N (NA)
IN HOME OCCUPATION	Y N NA
APARTMENT	Y N NA
2. IS THE PROPERTY LOCATED IN A SUBDIVISION?	(Y) N NA
IF YES, IS THE SUBDIVISION SITE SPECIFIC?	Y (N) NA
3. IS PROJECT LOCATED WITHIN A FLOODPLAIN?	Y (N) NA
IF YES, WAS A FLOODPLAIN DEVELOPMENT PERMIT ISSUED BY THE PLANNING & ZONING COMMISSION?	Y N NA
4. WAS A VARIANCE GRANTED BY THE ZONING BOARD OF APPEALS?	Y (N) NA
5. WAS A CONSERVATION COMMISSION REGULATED ACTIVITY PERMIT ISSUED FOR THIS PROPERTY?	Y (N) NA

APPLICATION DATE: 1/29/2024
SIGNATURE OF OWNER: John Kaeser

JOHN KAESER.
email KAESERBLAZZER@AOL.COM

I HEREBY CERTIFY THAT THIS APPLICATION IS BEING FILED BY THE UNDERSIGNED AS AGENT FOR THE OWNER NAMED HEREIN.

SIGNATURE OF AGENT: John Kaeser
AGENT'S ADDRESS: 73 OLD HYDE RD
AGENT'S PHONE: (203) 856 0192

BY SIGNING THIS APPLICATION, YOU HEREBY GRANT THE CODE ENFORCEMENT OFFICER THE RIGHT TO ENTER ONTO THE PROPERTY TO CONDUCT NECESSARY INSPECTIONS.

FOR OFFICE USE ONLY BELOW THIS LINE

A-2 PROPERTY SURVEY	(Y) N
FOUNDATION AS BUILT BEFORE FRAMING	Y N
DRIVEWAY PERMIT REQUIRED	Y (N)
LOCATED IN HISTORIC DISTRICT	Y (N)

CODE ENFORCEMENT OFFICER SIGNATURE: _____
DATE: _____

RECEIVED
JAN 29 2024
RICHELLE HODZA
LAND USE DIRECTOR

Frangione Engineering, LLC
15 Snowberry Lane
New Canaan, CT 06840
Phone: 203.554.9551
Web: www.frangione.net

Drainage Summary Report
Prepared for Kaeser Custom Homes
7 Hills End Lane, Weston, CT

The owner proposes constructing a house and driveway on their property at 7 Hills End Lane. The parcel is presently a wooded, vacant lot. The proposed improvements to the 2.182-acre site will result in the creation of approximately 7,500 square feet of impervious area. This report will show that there will be no increase in runoff from new impervious surfaces and that there will not be an adverse impact on downslope properties or drainage facilities caused by this project.

Presently runoff from the site flows generally to two (2) points of concern ("POC"). There is an existing stone wall that bifurcates the property and acts as a delineator of the two sub-watersheds to the two POCs. Runoff from the western portion of the parcel flows generally from south to north across the property towards the wetlands and woods and ultimately adjacent parcels. This sub-watershed has been identified as "Site West" in the enclosed hydrologic analysis and will remain undeveloped. Runoff from the eastern portion of the site flows generally from southwest to northeast and has been identified as "Site East" in the enclosed hydrologic analysis. All proposed development and impervious areas will occur in this sub-watershed. The POCs do not change for the post-development condition. All of the proposed activities are occurring in the portions of the site with well-draining, Hydrologic Soil Group "C" soils. The proposed activities will not alter the overall drainage pattern of the site.

Using the SCS TR-20 Method, we have computed the existing and proposed runoff rates for the 1-, 2-, 5- 10-, 25-, and 50-Year, 24-Hour Storms generated by the proposed activities. In the existing conditions hydrologic analysis, the site has been identified as "Site West" and "Site East". The majority of the proposed driveway, as well as the front of the house and the lawn that will drain to the front of the house, has been identified as "To Front Cultecs"; the area of the rear of the house and remainder of the driveway by the proposed garage has been identified as "To Rear Cultecs" in the post-development analysis. The remainder of the site, which includes the proposed lawn areas near the house and driveway, is included in the "Site East" sub-watershed. Tables I & II summarize the existing and proposed runoff rates generated by the two sub-watersheds.

Table I – Summary of Runoff Rates from Site West

Storm Event	Flow/Volume	Existing	Proposed	Δ	Δ(%)
1-Year	q (cfs)	0.95	0.95	0.00	0.00%
	v (CF)	4,051.00	4,051.00	0.00	0.00%
2-Year	q (cfs)	1.38	1.38	0.00	0.00%
	v (CF)	5,739.00	5,739.00	0.00	0.00%
5-Year	q (cfs)	2.13	2.13	0.00	0.00%
	v (CF)	8,751.00	8,751.00	0.00	0.00%
10-Year	q (cfs)	2.77	2.77	0.00	0.00%
	v (CF)	11,381.00	11,381.00	0.00	0.00%

25-Year	q (cfs)	3.68	3.68	0.00	0.00%
	v (CF)	15,159.00	15,159.00	0.00	0.00%
50-Year	q (cfs)	4.38	4.38	0.00	0.00%
	v (CF)	18,070.00	18,070.00	0.00	0.00%

Table II – Summary of Runoff Rates from Site East

Storm Event	Flow/Volume	Existing	Proposed	Δ	Δ(%)
1-Year	q (cfs)	0.59	0.53	-0.06	-10.17%
	v (CF)	2,910.00	2,563.00	-347.00	-11.92%
2-Year	q (cfs)	0.97	0.86	-0.11	-11.34%
	v (CF)	4,449.00	3,877.00	-572.00	-12.86%
5-Year	q (cfs)	1.69	1.46	-0.23	-13.61%
	v (CF)	7,343.00	6,329.00	-1,014.00	-13.81%
10-Year	q (cfs)	2.33	2.01	-0.32	-13.73%
	v (CF)	9,968.00	8,776.00	-1,192.00	-11.96%
25-Year	q (cfs)	3.27	2.80	-0.47	-14.37%
	v (CF)	13,846.00	12,730.00	-1,116.00	-8.06%
50-Year	q (cfs)	4.01	4.00	-0.01	-0.25%
	v (CF)	16,896.00	15,826.00	-1,070.00	-6.33%

Runoff from the front of the house and majority of the driveway will flow to eighteen (18) Cultec Recharger 330XL units with a storage volume of 1,426.7 CF. Runoff from the rear of the house and remainder of the driveway will flow to eight (8) Cultec Recharger 330XL units with a storage volume of 634.1 CF. The Cultec units will have more than enough volume to store the Water Quality Volume (WQV) of 419.3 CF for the new impervious areas in the front and 204.8 CF for the new impervious area in the rear. Cultec units have a Total Suspended Solids ("TSS") removal rate that exceeds 80%. Once runoff has backed up in the Cultec units it will be metered out via a 6" PVC pipe to a splash pad in the rear yard. Runoff will then continue to flow along existing drainage paths.

Furthermore, this project employs "Low Impact Development" or "LID" techniques as outlined in the August 2011 addendum to the Manual entitled, "Low Impact Development Appendix to the *Connecticut Stormwater Quality Manual*". LID techniques specifically incorporated in this project include:

- Disconnection of impervious surfaces –Runoff from the house and driveway will be detained in underground rechargers. The amount of disconnected area is equal to 100% of the proposed impervious area increase.
- Infiltration of runoff from new impervious areas;
- Preservation of existing storm water travel paths;
- Minimizing site disturbance – the house and driveway will be constructed towards the front of the property to lessen the amount of driveway required.
- Protection of existing trees – all development is proposed greater than 100 feet from wetlands, and thus all the trees from the 100-foot upland review limit to the western property line will remain. The trees along the northern and eastern property lines will remain and be protected during construction.

With the proposed drainage structures in place, it is our professional opinion that there will be no adverse hydrological or hydraulic impacts caused to surrounding or downstream properties or drainage facilities by this development. To the best of my knowledge, this drainage proposal complies with the Town of Weston Planning and Zoning Regulations.

Respectfully submitted,
Frangione Engineering, LLC

Robert M. Frangione, P.E.
Owner & Chief Engineer
January 11, 2024

Enclosures

Frangione Engineering, LLC
15 Snowberry Lane
New Canaan, CT 06840
Phone: 203.554.9551
Web: www.frangione.net

Storm Water Quality Calculations
Property of Kaeser Custom Homes – 7 Hills End Lane, Weston, CT
January 11, 2024

Water Quality Volume (WQV) – Front:

Proposed Impervious Area (House & driveway) = 5,031 SF

WQV = (1" x A)/12

= (1" x 5,031 SF)/12 in./ft. = 419.3 CF

Proposed Detention Facility: (18) Cultec Recharger 330XL units surrounded by 12" of stone.

Volume of Storage Provided: 18 units x 79.26 CF/unit = 1,426.7 CF >> WQV

Water Quality Volume (WQV) – Rear:

Proposed Impervious Area (House & driveway) = 2,457 SF

WQV = (1" x A)/12

= (1" x 2,457 SF)/12 in./ft. = 204.8 CF

Proposed Detention Facility: (8) Cultec Recharger 330XL units surrounded by 12" of stone.

Volume of Storage Provided: 8 units x 79.26 CF/unit = 634.1 CF >> WQV

Subcat Reach Pond Link

Routing Diagram for 7 Hills End Existing
Prepared by Frangione Engineering, LLC, Printed 1/10/2024

Events for Subcatchment 2S: Site East

Event	Runoff (cfs)	Volume (cubic-feet)
1-Year	0.59	2,910
2-Year	0.97	4,449
5-Year	1.69	7,343
10-Year	2.33	9,968
25-Year	3.27	13,846
50-Year	**4.01**	**16,896**

Events for Subcatchment 1S: Site West

Event	Runoff (cfs)	Volume (cubic-feet)
1-Year	0.95	4,051
2-Year	1.38	5,739
5-Year	2.13	8,751
10-Year	2.77	11,381
25-Year	3.68	15,159
50-Year	**4.38**	**18,070**

Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 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 1S: Site West Runoff Area=44,341 sf 0.00% Impervious Runoff Depth>1.10"
Flow Length=238' Tc=15.2 min CN=78 Runoff=0.95 cfs 4,051 cf

Subcatchment 2S: Site East Runoff Area=50,693 sf 0.00% Impervious Runoff Depth>0.69"
Flow Length=252' Tc=16.2 min CN=70 Runoff=0.59 cfs 2,910 cf

Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 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 1S: Site West Runoff Area=44,341 sf 0.00% Impervious Runoff Depth>1.55"
Flow Length=238' Tc=15.2 min CN=78 Runoff=1.38 cfs 5,739 cf

Subcatchment 2S: Site East Runoff Area=50,693 sf 0.00% Impervious Runoff Depth>1.05"
Flow Length=252' Tc=16.2 min CN=70 Runoff=0.97 cfs 4,449 cf

Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

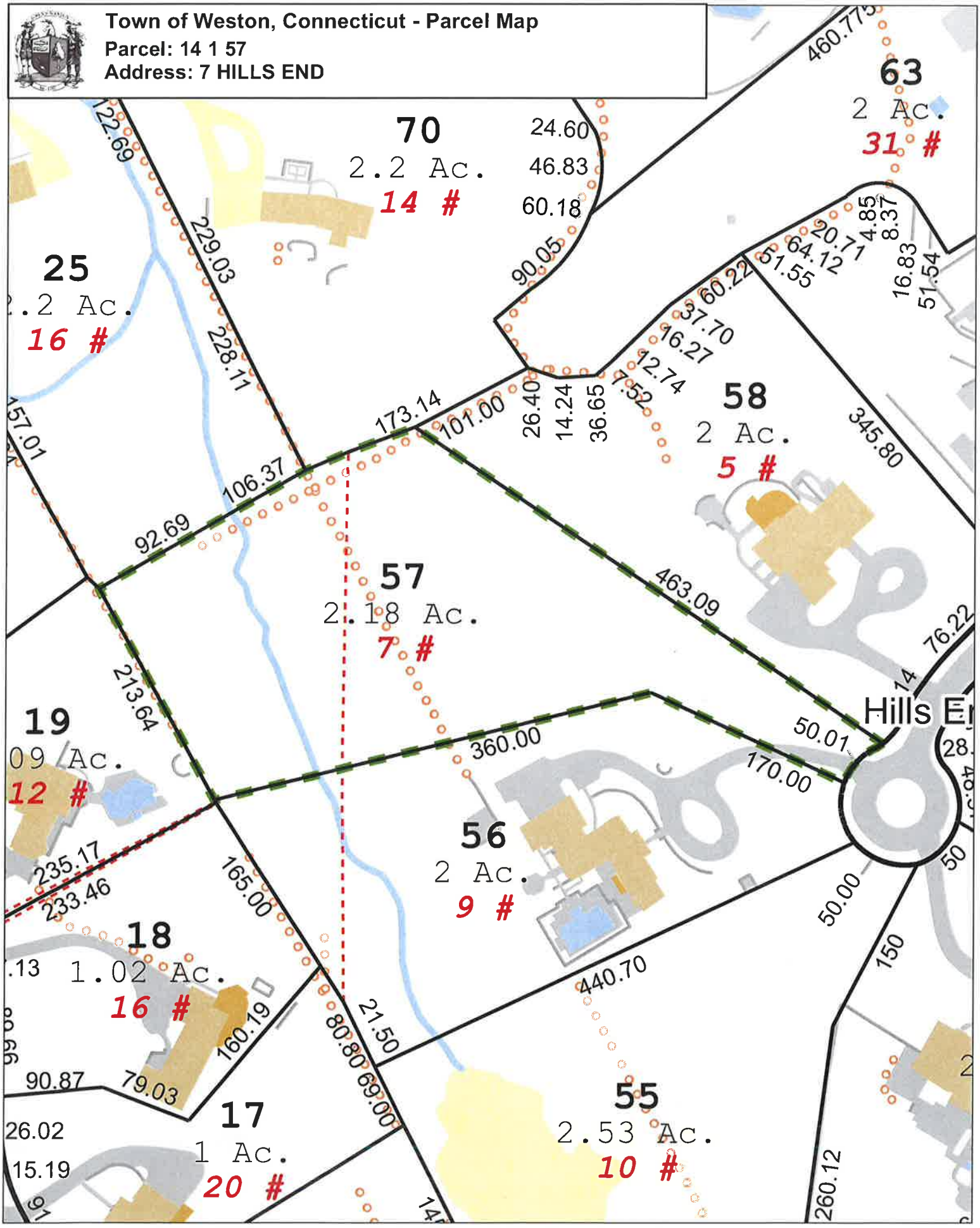
Subcatchment 1S: Site West Runoff Area=44,341 sf 0.00% Impervious Runoff Depth>2.37"
Flow Length=238' Tc=15.2 min CN=78 Runoff=2.13 cfs 8,751 cf

Subcatchment 2S: Site East Runoff Area=50,693 sf 0.00% Impervious Runoff Depth>1.74"
Flow Length=252' Tc=16.2 min CN=70 Runoff=1.69 cfs 7,343 cf

Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 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 1S: Site West Runoff Area=44,341 sf 0.00% Impervious Runoff Depth>3.08"
Flow Length=238' Tc=15.2 min CN=78 Runoff=2.77 cfs 11,381 cf

Subcatchment 2S: Site East Runoff Area=50,693 sf 0.00% Impervious Runoff Depth>2.36"
Flow Length=252' Tc=16.2 min CN=70 Runoff=2.33 cfs 9,968 cf


Town of Weston, Connecticut - Parcel Map
Parcel: 14 1 57
Address: 7 HILLS END
70
2.2 Ac.
14 #
63
2 Ac.
31 #
25
.2 Ac.
16 #
58
2 Ac.
5 #
57
2.18 Ac.
7 #
19
09 Ac.
12 #
56
2 Ac.
9 #
18
1.02 Ac.
16 #
17
1 Ac.
20 #
55
2.53 Ac.
10 #
Hills E
460.77
122.69
229.03
228.11
24.60
46.83
60.18
90.05
64.12
20.71
4.85
8.37
51.55
16.83
51.54
60.22
37.70
16.27
12.74
7.52
26.40
14.24
36.65
173.14
101.00
345.80
157.01
106.37
92.69
463.09
213.64
76.22
14
50.01
360.00
170.00
28.
235.17
233.46
165.00
50.00
50
150
440.70
21.50
80.80
69.00
160.19
90.87
79.03
26.02
15.19
260.12
Approximate Scale:
0 20 40 60 80
Feet
Disclaimer: This map is for informational purposes only.
All information is subject to verification by any user.
The Town of Weston and its mapping contractors
assume no legal responsibility for the information contained herein.
Map Produced
May 2023

BYEBROOK SUBDIVISION
Approved Dec 1990