



February 15, 2022

Mr. Michael F. Gagan, Chair
Planning Board
c/o Ms. Jen Hager
Planning and Economic Development Director
Municipal Building
4 Uxbridge Road
Sutton, Massachusetts 01590

Re: Form C Application for a Definitive Plan-Residential Subdivision
61 Duval Road
Sutton, MA, 01590

Dear Mr. Gagan and Members of the Board:

On Behalf of the Applicant, Flynn Build & Develop (FBD), we are submitting herewith a Form C Application for a Definitive Plan associated with a 31-lot single-family residential development located at 61 Duval Road in Sutton and Mumford Street and 5 Forest Street in Douglas on several properties owned by Sutton Douglas Development, LLC. This filing is being made in accordance with *Section 3.C of the Rules and Regulations Governing the Subdivision of Land in Sutton* and *Section 4.2 of the Rules and Regulations Governing the Subdivision of Land in Douglas*.

We have enclosed the following plans, supporting documents and fees:

1. One (1) original plus six (6) copies of the completed Form C Application;
2. A Total Application Fee (Admin & Review) of \$9,200 (check #1601934).
3. One (1) original plus six (6) copies of the Project Description/ Narrative with impacts summary/ Waivers contained herein;
4. One (1) original plus six (6) copies of each Certified List of Abutters for the two subject properties contained in the development;
5. Six (6) copies of the USGS Map indicating project location;
6. Six (6) copies of the FEMA Map indicating project location;
7. Six (6) copies of the NRCS Map;
8. Six (6) copies of the soils testing;
9. Six (6) copies of the current deeds for the property;
10. Two (2) copies of Plans (24x36) entitled "Definitive Plan for "Sutton Douglas Development, Sutton & Douglas, Massachusetts", prepared by Land Design Collaborative, dated February 10, 2022;
11. Six (6) copies of Plans (11x17) entitled "Definitive Plan for "Sutton Douglas Development, Sutton & Douglas, Massachusetts", prepared by Land Design Collaborative, dated February 10, 2022;
12. Two (2) copies of Stormwater Management Report entitled "Residential Subdivision" prepared for Sutton Douglas Development c/o Flynn Build & Develop, prepared by Land Design Collaborative, dated February 2022;
13. Two (2) copies of Traffic Access and Impact Study for Proposed Residential Development, prepared by Tetra Tech, dated September 2021;
14. Two (2) copies of Hydrogeologic Assessment, Sutton Douglas Development, prepared by Corporate Environmental Advisors (CEA) Tetra Tech, dated December 17, 2021;
15. Entire submittal packet in PDF format provided on thumb drive;

PROJECT DESCRIPTION NARRATIVE

Pre-submission Permitting

FBD filed an Abbreviated Order of Resource Area Delineation (ANRAD) application with the Douglas Conservation Commission seeking confirmation of the delineated resource areas on site. The Conservation Commission confirmed the delineation by issuing an Order of Resource Area Delineation (ORAD) in May of this year, MassDEP File # 143-1018. An ANRAD was not filed with the Sutton Commission as no work is proposed within the jurisdiction of the Sutton Conservation Commission. The project also received Preliminary Plan Approvals from the Sutton and Douglas Planning Boards in the fall of 2021.

Existing Site

The subject property is located in both the town of Sutton and Douglas and is comprised of several combined and contiguous parcels totaling 130.76± acres, the majority of which lies in the Town of Douglas with only 4.68± acres in Sutton. The property obtains its frontage from 61 Duval Road (existing developed residential lot) in Sutton and Mumford Street (20'-wide strip), 5 Forest Street (existing developed residential lot), Conservation Drive (20'-wide strip), all in Douglas. The property is zoned Residential Rural (R-1) in Sutton and Rural Agricultural (RA) in Douglas. Except for the developed residential lots, most of the property is undeveloped with physical access gained through the developed properties. The properties are recorded at the Worcester District Registry of Deeds; Deed Book 27939 Page 293, Deed Book 45533 Page 331, & Deed Book 64513 Page 31, and Deed Book 65809 Page 101.

Topography across the site is variable with slopes ranging from less than five percent to over twenty percent. Low lying wetlands bordering intermittent streams and the Mumford River are generally located bifurcating the site as the river flows under Conservation Drive easterly through the site and easterly under Mumford Street. These resource areas were confirmed by the Conservation Commission in May.

No portion of the property is located within the Special Flood Hazard Area (SFHA; aka 100-year flood) based on the FEMA flood Maps 25027C0984E & 25027C1003E, effective date 7/4/2011. A portion of the site, adjacent to the Mumford River, contains an area of Estimated Habitat of Rare Wildlife or according to the NHESP Atlas dated August 1st, 2017.

United States Department of Agriculture Natural Resources Conservation Service (NRCS) mapping identifies the soils of the subject site; Canton-Hydrologic Soil Group B (HSG B), Charlton - (HSG C), Woodbridge -(HSG C), Montauk - (HSG C), Scituate-(HSG C/D) and Ridgebury-(HSG D). Exploratory soil testing was performed by LDC & McCarty Engineering, Inc. earlier this year to verify the NRCS mapping, and the results were consistent.

There are no public water and sewer services to the property and the developed lots of the project and surrounding properties are served by private wells and sewage disposal systems.

Proposed Project

The property owner is seeking to develop the property as a 31-lot single family subdivision requiring filings in both Sutton and Douglas. The subdivision will obtain access from two locations, 61 Duval Road in Sutton and 5 Forest Street in Douglas, both lots currently developed as single-family house lots which will be reconfigured and incorporated into the subdivision. The main (spine) road obtains its access at Duval Road, measures approximately 2,717' (473' in Sutton) and is referred to as Road A. Road B is a loop road which connects to Road A at 2 locations (one of which is in Sutton) and measures 1,322'±. A cul de sac, Road C measures 679'± and begins at the approximate midpoint of Road B. Road D measures 853'±, connects to Forest Street and terminates at a location on Road A where the remainder of Road A to the terminus maintains compliance with the maximum 1,000' dead end road length of the Douglas Subdivision Rules and Regulations. The lots are designed in accordance with the zoning bylaws of each community's respective zone districts with Lots 22 & 23 being the only reduced frontage lots in the subdivision with only Lots 1 & 29 being in Sutton.

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Planning Board
Sutton, Massachusetts 01590
February 15, 2022

Each lot will be serviced by private sewage disposal systems and wells and the subdivision will be supplied with underground electric, telephone, and cable utilities. While some of the work is proposed within the 100-foot buffer zone in Douglas, no work is proposed within the Sutton Conservation Commission's jurisdiction.

The work being performed will not result in adverse environmental impacts to any properties located in Sutton as the development is proposed in 5 phases, each of which have been designed in accordance with the Mass DEP Stormwater Regulations as detailed in the attached comprehensive Stormwater Management Report. All work will be performed upgradient of the proper erosions and sediment control measures as illustrated in the plans and additional erosion and sediment control measure will be employed as presented in the Erosion and Sediment Control Plans to ensure no impact to the downstream receiving resource areas.

The property is not provided with municipal water or wastewater services and therefore private individual wells and septic systems will serve each lot providing recharge to the drawn water with recharge from the sewage disposal systems. The attached hydrogeologic study indicates that there will be no adverse impact on the neighboring properties.

As discussed, the roads are intended to become public with two connection points proposed allowing for direct response by both community's public safety responders. Following several meetings with Town staff and public safety officials in both communities, it was determined that each home would be sprinklered drawing water from each home's private well.

The topographic changes proposed associated with the roads and stormwater management systems are a result of the state stormwater regulations and local subdivision regulations. To reduce the topographic changes, cut slopes of 2:1 with slope stabilization in lieu of the required 3:1 slope are proposed to reduced cuts and fills and limits of tree clearing. Unmitigated stormwater runoff from the upgradient subdivision is diverted around the proposed stormwater management system as not to result in unnecessarily massive stormwater management basins. Topographic changes due to lot development will be limit to lot access, hose area and sewage disposal system development, resulting in minimum lot development envelopes.

Soils on site will not be adversely impacted as no discharge of contaminants are likely due to the nature of the development unlike other uses. Soil materials processing is proposed on the Douglas portion of the property to minimize hauling of materials to and from the site. All exposed soils will be stabilized as discussed in the Erosion and Sediment Control Plans.

As discussed within the attached Traffic Access Impact Study, the team's traffic consultant had performed traffic counts and performed field observations of the traffic speed along Duval Road and is currently analyzing the traffic impacts on both communities based on the current design. LDC performed independent Lines of Sight (LOS) observations at both public way connection points. The traffic consultant also performed observations for lines of sight for both the Stopping Sight Distance (SSD) condition and Intersection Sight Distance (ISD) condition. LDC performed an independent site check of the SSD condition. Based on our team's observations, there are no traffic speed signs posted along Duval Road. The Site Plans depict lines of sight in Duval Road as well as within the proposed subdivision. Mitigation measures are proposed as Advance Warning Signs- Intersection Ahead (MUTCD W2-2) which are to be located in accordance with the MUTCD requirements. Stop signs will be located at all intersections within the subdivision and at the public way intersections.

As presented in this narrative, 55± acres of open space in Douglas will be set aside and left in its current state. As also discussed, and presented on the plans, disturbance to the natural features on site will be minimized by employing measures to reduce the development footprint to the greatest extant allowable and practicable.

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 Planning Board
 Sutton, Massachusetts 01590
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Anticipated Waiver Requests

Town of Sutton Subdivision Rules & Regulations

Regulation Number	Regulation	Waiver Request and Justification for Granting Waiver
4. A. Streets		
3.	Width (pavement)- The minimum width of street right-of-way shall be 50 feet. Greater width shall be required by the Board when deemed necessary for present and future vehicular travel, safety, and snow removal. The minimum roadway width for a 50 foot right-of-way shall be 26 feet. The minimum road width for a 60-foot right-of-way shall be 36 feet. This section may also be applied to access roads to the subdivision. Sidelines and centerline shall be parallel.	As discussed with town staff, the pavement width for Road A is proposed at 24' which is 2' wider than that of Duval Road. Reducing the pavement width on this street would reduce the amount of impervious area and tree clearing, be consistent with LID Principles, calm traffic and be more in line with the area streets approaching the subdivision. Granting a waiver would not be a detriment to the public interest.
5.Required Improvements		
G.1.	Curbing- Curbing shall be provided along each side of all roadways and shall be granite.	The curbing proposed is a Type 3 bituminous concrete curb consistent with the Town of Douglas Subdivision Rules and Regulations. Their regulations require granite curbing at road entrance roundings and at catch basins. With the majority of the project being located in the Town of Douglas and the cost of granite curb, the developer is proposing the bituminous concrete curb. Granting a waiver would not be a detriment to the public interest.
J.4.	Planting Strips (street trees) Along each street and on both sides, the subdivider shall plant trees so that with existing trees they shall be an average of 100 feet apart within twenty feet of the roadway. The new plantings will be one and one half (1 1/2) to two (2) inches caliper with a minimum height of ten (10) feet. Each tree shall be supported with a 2" x 2" x 8' wooden stake and shall be fastened at the top with loop of rubber or suitable fabric hosing. All trees shall be guaranteed by the subdivider until the street is accepted by the Town as a public way.	Given that the property is maturely wooded, and the proposed limits of tree clearing are not extensive, the developer would like to preserve trees along the narrow clearing swaths in lieu of planting additional trees in order that the existing trees can continue to flourish and not compete with new trees to establish a new defined treelined. Additional street trees would be planted at the required interval in those areas where the roadway off grading results in wider clearing swaths. Granting a waiver would not be a detriment to the public interest.

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Planning Board
Sutton, Massachusetts 01590
February 15, 2022

In closing, we trust that you that the project has been designed to comply with the requirements of the Subdivision Rules and Regulations apart from the waivers requested herein.

We thank you in advance for your attention to the information provided and look forward to meeting with the Board to discuss the enclosed Application at the next available agenda.

Sincerely,

LAND DESIGN COLLABORATIVE

Wayne M. Belec, Project Manager
Principal

cc: Ms. Laura Caruso, Town Clerk
Mr. Tim Flynn, Flynn Build & Develop

21-0083 DEF SuttonPB ltr01



TOWN OF SUTTON, MASSACHUSETTS
FORM C
Application for Approval of a Definitive Subdivision

Date of filing by delivery, certified mail (date received) or in open meeting: _____ (td by Town staff)

The undersigned, being the applicant as defined under Chapter 41 § 81-L, for approval of a proposed definitive subdivision plan hereby submits said definitive plan in accordance with the Rules and Regulations of the Town of Sutton and M.G.L., Ch. 41.

Subdivision Name: Sutton Douglas Development

Plans Dated: February 10, 2022 Calculations Dated: February 10, 2022 Fee: \$ 9200

Engineer and/or Land Surveyor: Michael J. Scott, Land Design Collaborative/Joseph R. Zambuto, Feldman Land Surveyors

Address: 45 Lyman Street, Suite 1, Terrace North, Westborough, MA 01581 / 152 Hampden St., Boston MA 02119

Phone: 508-592-6300 / 978-302-6746 Email: mscott@ldcollaborative.com / jzambuto@feldmangeo.com

Owner's Name, Address, Phone Number and Email:

Sutton Douglas Development LLC, John R. Cahaly, 3 D J Murphy Lane, Hopkington, MA 01748
774-412-3039

Applicant's Name, Address, Phone Number and Email (if different than owner):

Flynn Group Consulting DBA Flynn Build & Develop, Timothy Flynn 945 Concord Street Suite 100 Framingham, MA
01701 508-620-5378 tflynn@flynnbd.com

Address of Subject Property: 61 Duval Road

Assessor's map and parcel number of land: Map 54 Parcel 113

Land Recorded in Worcester District Registry of Deeds Book 45533 Page 331

Land is free of encumbrances, except for: N/a

Said plan ☒ has ☐ has not evolved from a preliminary plan submitted to the Board on 9/1/2021.

The undersigned hereby applies for the approval of said definitive plan by the Planning Board and hereby agrees to abide by the Town's Rules and Regulations.

Property Owner's Signature: 

Applicant's Signature: 





definitive_subdivision_-_form_c_-_blank

Final Audit Report

2022-02-14

Created:	2022-02-14
By:	Tim Flynn (tflynn@flynnngroupconsulting.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAATTAgjrUq-Nh5J34Jfdx3yV_kh-98pBeO

"definitive_subdivision_-_form_c_-_blank" History

-  Document created by Tim Flynn (tflynn@flynnngroupconsulting.com)
2022-02-14 - 12:39:38 PM GMT- IP address: 71.174.206.203
-  Document emailed to John R Cahaly Jr. (jcahaly@eci.com) for signature
2022-02-14 - 12:39:59 PM GMT
-  Email viewed by John R Cahaly Jr. (jcahaly@eci.com)
2022-02-14 - 1:39:34 PM GMT- IP address: 174.196.203.232
-  Document e-signed by John R Cahaly Jr. (jcahaly@eci.com)
Signature Date: 2022-02-14 - 1:40:43 PM GMT - Time Source: server- IP address: 174.196.203.232
-  Agreement completed.
2022-02-14 - 1:40:43 PM GMT



300 foot Abutters List Report

Sutton, MA
February 07, 2022

Subject Property:

Parcel Number: 54-112
CAMA Number: 54-112
Property Address: 37 DUVAL RD

Mailing Address: SUTTON DOUGLAS DEVELOPMENT LLC
3 DJ MURPHY LN
HOPKINTON, MA 01748

Abutters:

Parcel Number: 54-11
CAMA Number: 54-11
Property Address: 24 MUMFORD RD

Mailing Address: POLSENO DYLAN A
24 MUMFORD RD
SUTTON, MA 01590

Parcel Number: 54-5
CAMA Number: 54-5
Property Address: 49 DUVAL RD

Mailing Address: DAVID CHRISTOPHER J
49 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-6
CAMA Number: 54-6
Property Address: 39 DUVAL RD

Mailing Address: BUSH VANESSA
39 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-7
CAMA Number: 54-7
Property Address: 29 DUVAL RD

Mailing Address: LESSARD DANIEL J
29 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-85
CAMA Number: 54-85
Property Address: 43 DUVAL RD

Mailing Address: HOEKSTRA SHARON
43 DUVAL RD
SUTTON, MA 01590

To: Planning Board

Board of Assessors:



Date:

2/7/2022

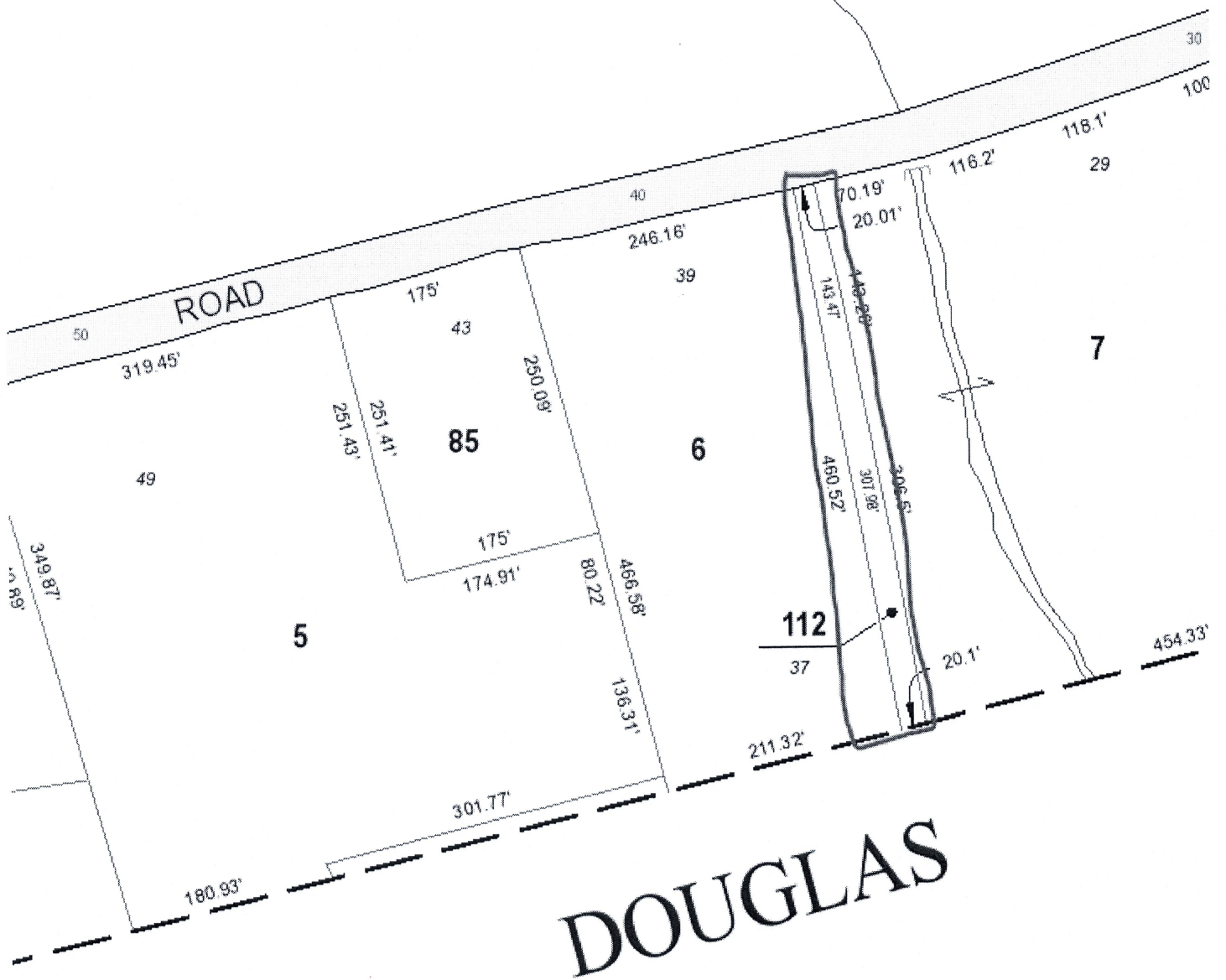


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2/7/2022

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Please be advised that the Attorney General has ruled that communication via electronic mail in the public domain is not confidential and is considered a matter of public record. Furthermore, all communications (including this one) will be retained for 10 years.



LIST OF ABUTTERS

Owner's Name: Wayne Belloc

Address of Property Affected: 61 Huron Rd

Map Number: 54 113 Parcel Number: _____

In accordance with the provisions of of M.G.L., c. 40A§11, parties of interest shall mean the petitioner, abutters, owners of land directly opposite on any public or private street or way, and abutters to the abutters within three hundred (300) feet of the property line of the petitioner as they appear on the most recent applicable tax list, notwithstanding that the land of any such owner is located in another city or town

Map	Parcel	Map	Parcel	Map	Parcel	Map	Parcel
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See the attached certified list from the Board of Assessors.

Contact: Planning X 8729 The Planning Department takes full responsibility for getting a certified copy of this abutters list to the applicant.

Planning Board: 300' Abutters (special permit/Site Plan) - 2 sets of labels please



300 foot Abutters List Report

Sutton, MA

February 01, 2022

Subject Property:

Parcel Number: 54-113
CAMA Number: 54-113
Property Address: 61 DUVAL RD

Mailing Address: SUTTON DOUGLAS DEVELOPMENT LLC
3 D J MURPHY LN
HOPKINTON, MA 01748

Abutters:

Parcel Number: 54-109
CAMA Number: 54-109
Property Address: 72 DUVAL RD

Mailing Address: MCCLURE STEVEN B
72 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-11
CAMA Number: 54-11
Property Address: 24 MUMFORD RD

Mailing Address: POLSENO DYLAN A
24 MUMFORD RD
SUTTON, MA 01590

Parcel Number: 54-110
CAMA Number: 54-110
Property Address: 70 DUVAL RD

Mailing Address: SENEAL GERARD C
PO BOX 247
MANCHAUG, MA 01526

Parcel Number: 54-114
CAMA Number: 54-114
Property Address: 66 DUVAL RD

Mailing Address: BESSETTE PAUL C
PO BOX 346
MANCHAUG, MA 01526

Parcel Number: 54-119
CAMA Number: 54-119
Property Address: 60 DUVAL RD

Mailing Address: BANVILLE JAMES P
60 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-12
CAMA Number: 54-12
Property Address: 68 DUVAL RD

Mailing Address: BESSETTE FAMILY IRREVOCABLE
TRUST
PO BOX 101
MANCHAUG, MA 01526

Parcel Number: 54-122
CAMA Number: 54-122
Property Address: 71 DUVAL RD

Mailing Address: GUERIN TIMOTHY J
71 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-2
CAMA Number: 54-2
Property Address: 65 DUVAL RD

Mailing Address: WOJCIK JOSEPH JR
PO BOX 353
MANCHAUG, MA 01526

Parcel Number: 54-3
CAMA Number: 54-3
Property Address: 59 DUVAL RD

Mailing Address: MAYNARD PAUL A
59 DUVAL RD
SUTTON, MA 01590

Parcel Number: 54-4
CAMA Number: 54-4
Property Address: 55 DUVAL RD

Mailing Address: CONVERY PAUL W
PO BOX 42
MANCHAUG, MA 01526



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2/1/2022

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300 foot Abutters List Report

Sutton, MA

February 01, 2022

Parcel Number: 54-5
CAMA Number: 54-5
Property Address: 49 DUVAL RD

Mailing Address: DAVID CHRISTOPHER J
49 DUVAL RD
SUTTON, MA 01590

To: Conservation Commission

Board of Assessors: Joyce S. Sudaqola

Date: 1/31/2022



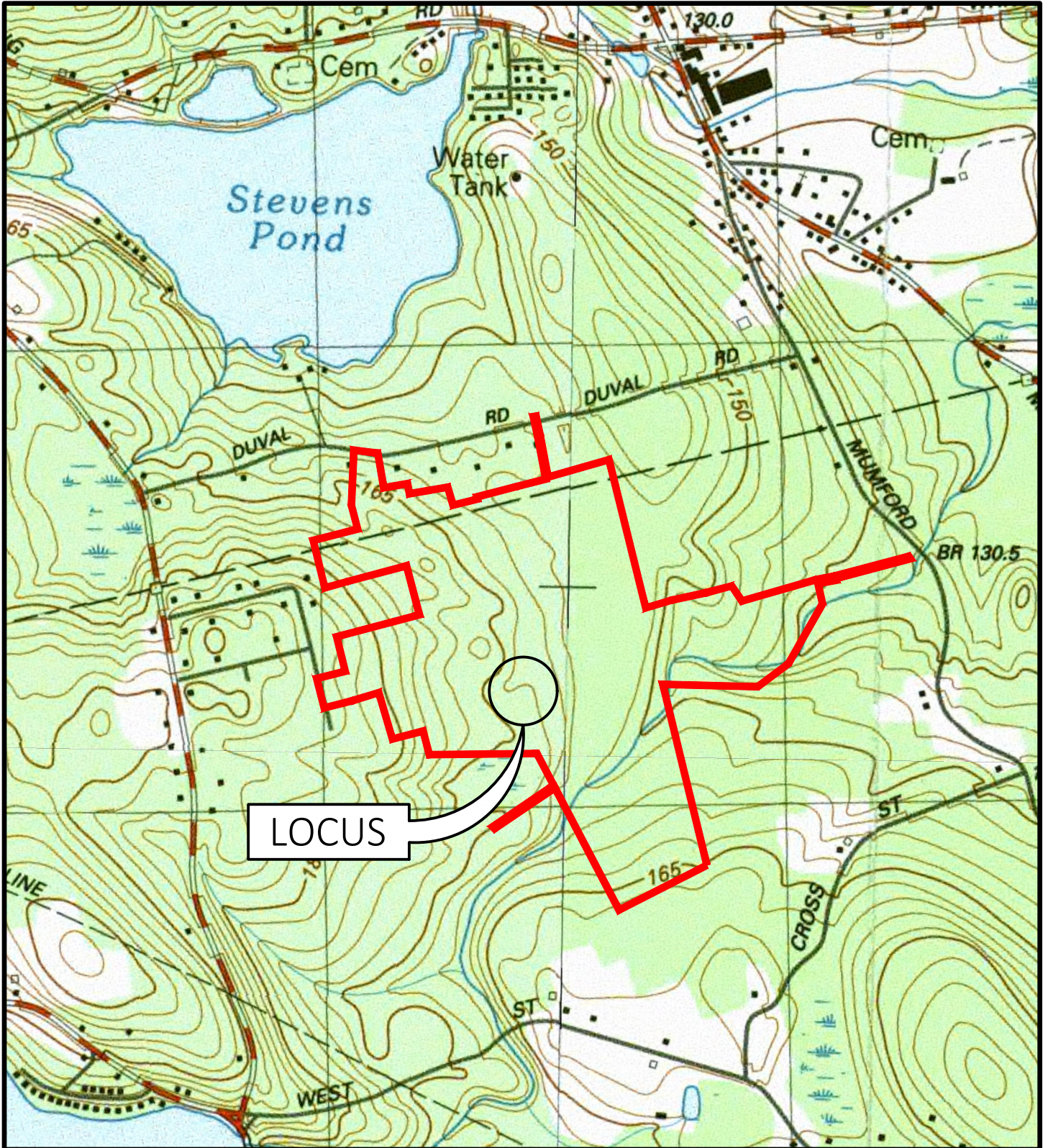
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2/1/2022

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Abutters List Report - Sutton, MA



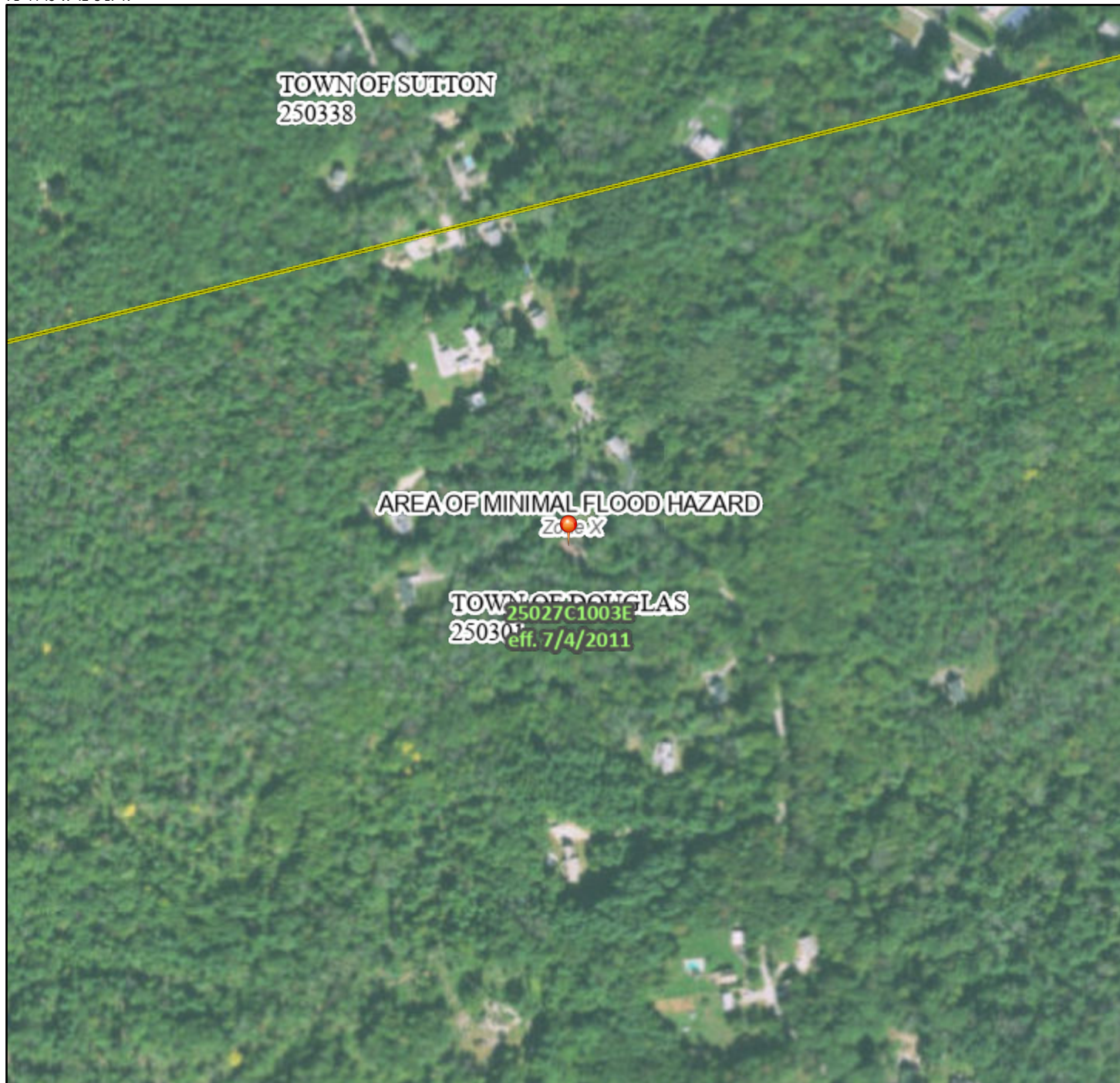
Project Title: 61 Duval Road Sutton, MA		Sheet Title: Locus Plan 61 Duval Road Sutton, MA					
Date: __/__/2020		Project No.: 21-0083		Reference Plan No.: C-__		Drawn By: CMP Checked By: __	
				Scale: 1" = 1000'		SKC-1	
LAND DESIGN COLLABORATIVE Chauncy Place Terrace North Suite 1 45 Lyman Street Westborough, MA 01581 508.952.6300 LDCollaborative.com							

C:\Users\WayneBelec\Land Design Collaborative\Land Design Collaborative - Documents\PROJECTS\21-0083 - Duval Road Sutton & Douglas\DWG\21-0083 C-000.dwg

National Flood Hazard Layer FIRMMette



71°44'48"W 42°5'17"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

71°44'11"W 42°4'51"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



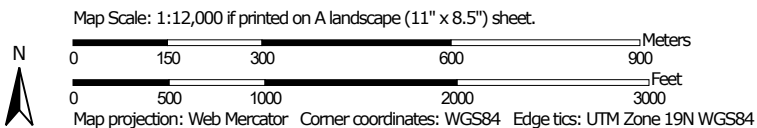
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **5/28/2021 at 9:25 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Soil Map—Worcester County, Massachusetts, Southern Part



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

12/8/2021
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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Worcester County, Massachusetts, Southern Part

Survey Area Data: Version 14, Sep 3, 2021

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

Date(s) aerial images were photographed: May 18, 2019—Jul 9, 2019

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Water	16.5	2.2%
3A	Scarboro and Walpole soils, 0 to 3 percent slopes	4.6	0.6%
51A	Swansea muck, 0 to 1 percent slopes	1.2	0.2%
71A	Ridgebury fine sandy loam, 0 to 3 percent slopes, extremely stony	13.9	1.9%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	48.1	6.4%
245C	Hinckley loamy sand, 8 to 15 percent slopes	0.7	0.1%
254A	Merrimac fine sandy loam, 0 to 3 percent slopes	1.5	0.2%
254B	Merrimac fine sandy loam, 3 to 8 percent slopes	6.6	0.9%
255A	Windsor loamy sand, 0 to 3 percent slopes	0.4	0.0%
300C	Montauk fine sandy loam, 8 to 15 percent slopes	7.6	1.0%
302B	Montauk fine sandy loam, 0 to 8 percent slopes, extremely stony	129.4	17.3%
302C	Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony	14.3	1.9%
307B	Paxton fine sandy loam, 0 to 8 percent slopes, extremely stony	18.7	2.5%
307C	Paxton fine sandy loam, 8 to 15 percent slopes, extremely stony	1.6	0.2%
307E	Paxton fine sandy loam, 15 to 35 percent slopes, extremely stony	10.7	1.4%
310B	Woodbridge fine sandy loam, 3 to 8 percent slopes	2.9	0.4%
312B	Woodbridge fine sandy loam, 0 to 8 percent slopes, extremely stony	11.2	1.5%
315B	Scituate fine sandy loam, 3 to 8 percent slopes	1.2	0.2%
317B	Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony	253.3	33.8%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
420B	Canton fine sandy loam, 3 to 8 percent slopes	7.6	1.0%
420C	Canton fine sandy loam, 8 to 15 percent slopes	6.2	0.8%
422B	Canton fine sandy loam, 0 to 8 percent slopes, extremely stony	148.5	19.8%
422C	Canton fine sandy loam, 8 to 15 percent slopes, extremely stony	26.7	3.6%
422E	Canton fine sandy loam, 15 to 35 percent slopes, extremely stony	15.9	2.1%
Totals for Area of Interest		749.3	100.0%



Commonwealth of Massachusetts

City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Owner Name SUTTON DOUGLAS DEVELOPMENT LLC
Street Address 3 PJ MURPHY LANE Map/Lot # 135-12
City HOPKINTON State MA Zip Code 01743

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade ☐ Repair

2. Soil Survey Available? ☒ Yes ☐ No If yes: NRCS SOIL SURVEY

Source

Soil Map Unit

73A
302B
317B
422C

Soil Name

Soil Limitations

LOAMY SAND

KAME TERRACE

Soil Parent material

Landform

3. Surficial Geological Report Available? ☐ Yes ☐ No

If yes:

Year Published/Source

Map Unit

SITUATE GRANITE GNEISS

Description of Geologic Map Unit:

4. Flood Rate Insurance Map Within a regulatory floodway? ☐ Yes ☒ No

5. Within a velocity zone? ☐ Yes ☒ No

6. Within a Mapped Wetland Area? ☐ Yes ☒ No

If yes, MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):

Month/Day/ Year

Range: ☐ Above Normal

☒ Normal

☐ Below Normal

8. Other references reviewed:



Commonwealth of Massachusetts
City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-01 Hole # 3/24/21 Date AM Time SUNNY 30° Weather Latitude Longitude: 2-8% Slope (%)

1. Land Use WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) OAKS PINES, MAPLES Vegetation FIELD Surface Stones (e.g., cobbles, stones, boulders, etc.)

Description of Location: _____

2. Soil Parent Material: LOESSIC SAND Landform NAME Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 31

Depth (in)	Soil Horizon / Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-4"</u>	<u>Ap</u>	<u>SANDY LOESS</u>	<u>2.5Y 3/3</u>								
<u>4-18"</u>	<u>Bu</u>	<u>LOESS</u>	<u>10YR 5/6</u>								
<u>18-130"</u>	<u>C</u>	<u>LOESSY SAND</u>	<u>5Y 4/2</u>	<u>47"</u>	<u>7.5Y 5/6</u>	<u>5%</u>		<u>10%</u>			

Additional Notes:

EVIDENCE OF REDOX AT 29"
ICE PRACTICE AT 120"
GROUNDED WATER AT 127"



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-02 3/24/21 AM SUNNY 30's
 Hole # Date Time Weather Latitude Longitude:

1. Land Use: WOODLAND oaks, pines, maples FEW 2-8%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND KAME BACK SLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 19

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-4"	Ap	SANDY LOAM	2.5Y 3/3								
4-24"	Bcd	↓	10YR 5/6								
24-121"	C	LOAMY SAND	5Y 4/2	36"	7.5Y 5/6	5%		5%			

Additional Notes:

EVIDENCE OF REDOX @ 24"
 WEEPAGE @ 81"
 GROUNDWATER @ 110"



Commonwealth of Massachusetts

City/Town of Douglas

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-03

Hole #

Date 3/24/21Time AMWeather SUNNY 30°

Latitude

Longitude:

1. Land Use: WOODLAND

(e.g., woodland, agricultural field, vacant lot, etc.)

Vegetation OAKS, PINES, MAPLES FEW

Surface Stones (e.g., cobbles, stones, boulders, etc.)

Slope (%) 2-8%

Description of Location:

2. Soil Parent Material: LOAMY SAND / SANDLandform KATIEPosition on Landscape (SU, SH, BS, FS, TS) BACKSLOPE

3. Distances from: Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No

If Yes:

☐ Disturbed Soil☐ Fill Material☐ Weathered/Fractured Rock☐ Bedrock5. Groundwater Observed: ☒ Yes ☐ No

If yes:

_____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil Log @ LOT 20

Depth (in)	Soil Horizon / Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-6"	AP	SANDY LOAM	2.5YR 3/3								
6-25"	B ₁ & B ₂	↓	10YR 5/6								
25-125"	C	LOAMY SAND	5Y 4/2	37"	7.5Y 5/6	5%		5%			

Additional Notes:

HELPIES OF MED. SANDINTERPAC 0.110"GROUNDWATER @ 120"



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-04 3/24/21 AM SUNNY 30'S
 Hole # Date Time Weather Latitude Longitude:

1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-8%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOESSY SAND WETLAND BACK SLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 21

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-2"	AB	SANDY LOESS	2.5Y 3/3								
2-21"	Bw	↓	10YR 5/6								
21-138"	C	LOESSY SAND	5Y 4/2	40"	7.5Y 4/6	5%		10%			

Additional Notes:

EVIDENCE OF REDOX @ 27"
WETLANDS OF SAND



Commonwealth of Massachusetts
City/Town of POULIN

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-05 3/24/21 AM SUNNY 30'S _____
 Hole # Date Time Weather Latitude Longitude:
 1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-3%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: SANDY LOAM KARNE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable
 Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 26

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0"-8"	AP	<u>SANDY LOAM</u>	<u>2.5Y4/3</u>								
8"-26"	B ₁ W		<u>10YR5/6</u>								
26"-110"	C		<u>2.5Y4/3</u>	<u>47"</u>	<u>7.5Y4/5/6</u>	<u>5%</u>		<u>10%</u>			

Additional Notes:

EVIDENCE OF REDOX @ 26"
IDEAL AT 83"
LARGE UNGLAZED BOULDERS



Commonwealth of Massachusetts
City/Town of DOUBLEDAY

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-06 Hole # 3/24/21 Date AM Time SUNNY 30'S Weather
Latitude _____ Longitude: 2-8% Slope (%)
1. Land Use: WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) OAKS, PINES, MAPLES Vegetation FEW Surface Stones (e.g., cobbles, stones, boulders, etc.)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND Landform KAME Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 27

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0'-2"</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>2.5YR 3/3</u>								
<u>2'-25"</u>	<u>BW</u>	<u>✓</u>	<u>10YR 5/6</u>								
<u>25'-121"</u>	<u>C</u>	<u>LOAMY SAND</u>	<u>5Y 4/2</u>	<u>35"</u>	<u>7.5Y 2 5/6</u>	<u>5%</u>		<u>10%</u>			

Additional Notes:

EVIDENCE OF REDOX @ 27"
IDEAL @ 20"
GROUNDWATER @ 115"
BUT ROCKS WITHIN HOLE



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-07 Hole # 3/24/21 Date APR Time SUNNY 30° Weather
 1. Land Use: WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) CRACKS, PILES, TRAPLES Vegetation FIELD Surface Stones (e.g., cobbles, stones, boulders, etc.) 2-8% Slope (%)

Description of Location: _____

2. Soil Parent Material: LOOSELY SANDY Landform KATIE Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 29

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-4"	Ap	SANDY LOAM	2.5YR 3/3								
4-30"	B ₁	↓	10YR 5/6								
30-140"	C	LOOSELY SANDY	5YR 4/2	47"	7.5YR 6/6	5%		10%	LOOSELY SINGLE CLUSTERS		

Additional Notes:

EVIDENCE OF REDOX @ 33"
WEEPAGE @ 130"



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-03 3/24/21 AM SUNNY 30°
 Hole # Date Time Weather Latitude Longitude: 2-8°

1. Land Use: WOODLAND OAKS, PINES, MAPLES FEU
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 26

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-6"	Ap	SANDY LOAM	2.5Y2/3								
6-36"	Bw	✓	10Y2/5/6	37"	7.5Y2/5/6	5%		10%	LOOSE SINGULAR CLUMBS		
36-131"	C	LOAMY SAND	5Y4/2								

Additional Notes:

KEEP PAGE @ 123"



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-09 3/24/21 AM SUNNY 30° _____
 Hole # Date Time Weather Latitude Longitude: 2-89
 1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOESSY SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 30

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-10"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>2.5Y 3/3</u>								
<u>10-25"</u>	<u>BW</u>	<u>1</u>	<u>10YR 5/6</u>								
<u>25-118"</u>	<u>C</u>	<u>LOESSY SAND</u>	<u>5Y 4/2</u>	<u>37"</u>	<u>7.5Y 5/6</u>	<u>5%</u>		<u>5%</u>	<u>LOOSE SILT-LIMESTONE CLASTS</u>		

Additional Notes:

LENSES OF SAND



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-10

Hole #

3/31/21

Date

AM

Time

CLOUDY SUN

Weather

Latitude

Longitude:

1. Land Use:

WOODLAND

(e.g., woodland, agricultural field, vacant lot, etc.)

OAKS, PINES, MAPLES

Vegetation

FEW

Surface Stones (e.g., cobbles, stones, boulders, etc.)

2-8%

Slope (%)

Description of Location:

2. Soil Parent Material:

LOAMY SAND

Landform

KATIE

Position on Landscape (SU, SH, BS, FS, TS)

BACKSLOPE

3. Distances from:

Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present:

☐ Yes☒ No

If Yes:

☐ Disturbed Soil☐ Fill Material☐ Weathered/Fractured Rock☐ Bedrock

5. Groundwater Observed:

☐ Yes☒ No

If yes:

_____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil Log A LOT 2

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-4"</u>	<u>Ap</u>	<u>SANDY LOAM</u>	<u>5YR 7/1</u>								
<u>4-24"</u>	<u>Bw</u>	<u>S</u>	<u>7.5Y 5/6</u>								
<u>24-95"</u>	<u>C</u>	<u>LOAMY SAND</u>	<u>7.5Y 4/4</u>	<u>38"</u>	<u>7.5Y 5/6</u>	<u>5%</u>		<u>10%</u>	<u>LOOSE</u> <u>2.14/1.15</u> <u>2.12/1.12</u>		

Additional Notes:

REFUSAL @ 95"
EVIDENCE OF REDOX @ 32"



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-11

Hole #

3/31/21

Date

AM

Time

Cloudy Sky

Weather

Latitude

Longitude:

1. Land Use:

WOODLAND

(e.g., woodland, agricultural field, vacant lot, etc.)

OAKS, PINES, MAPLES

Vegetation

FEW

Surface Stones (e.g., cobbles, stones, boulders, etc.)

2-5%

Slope (%)

Description of Location:

2. Soil Parent Material:

LOAMY SAND

Landform

KARNEBACKSLOPE

Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from:

Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present:

☐ Yes ☒ No

If Yes:

☐ Disturbed Soil☐ Fill Material☐ Weathered/Fractured Rock☐ Bedrock5. Groundwater Observed: ☐ Yes☒ No

If yes: _____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil Log LOT 3

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-4"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5YR 2/1</u>								
<u>4-32"</u>	<u>BW</u>	<u>✓</u>	<u>2.5Y 5/6</u>								
<u>32-123"</u>	<u>C</u>	<u>LOAMY SAND</u>	<u>2.5Y 4/4</u>	<u>56"</u>	<u>7.5Y 5/6</u>	<u>5%</u>		<u>15%</u>	<u>PLATY</u>		

Additional Notes:

EVIDENCE OF REDUX @ 36"



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-12

Hole #

Date

Time

Weather

Latitude

Longitude:

1. Land Use:

WOODLAND
(e.g., woodland, agricultural field, vacant lot, etc.)OAKS, PINES, MAPLES
VegetationFEW
Surface Stones (e.g., cobbles, stones, boulders, etc.)2-3%
Slope (%)

Description of Location:

2. Soil Parent Material:

LOESSY SAND

Landform

KATE

Position on Landscape (SU, SH, BS, FS, TS)

BACKSLOPE

3. Distances from:

Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☐ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock5. Groundwater Observed: ☐ Yes ☐ No

If yes: _____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil Log E LOT 4

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-3"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5YR 2/1</u>								
<u>3-26"</u>	<u>B₁₀</u>	<u>4</u>	<u>2.5Y 4.5/4</u>								
<u>26-100"</u>	<u>C</u>	<u>LOESSY SAND</u>	<u>2.5Y 4.5/4</u>	<u>29"</u>	<u>7.5Y 4.5/6</u>	<u>5%</u>					

Additional Notes:

TOP OF ROCK @ 48" / REFUSAL @ 100"
LELIES OF SAND



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-13

Hole #

3/31/21

Date

AM

Time

CLOUDY SUN

Weather

Latitude

Longitude:

1. Land Use:

WOODLAND

(e.g., woodland, agricultural field, vacant lot, etc.)

OAKS PINES TREES

Vegetation

FEW

Surface Stones (e.g., cobbles, stones, boulders, etc.)

2-8%

Slope (%)

Description of Location:

2. Soil Parent Material:

Landform

Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present:

☐ Yes ☒ No

If Yes:

☐ Disturbed Soil☐ Fill Material☐ Weathered/Fractured Rock☐ Bedrock5. Groundwater Observed: ☐ Yes☒ No

If yes: _____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil LogP 2075

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-3"	AP	SANDY LOAM	5YR 2/1								
3-27"	B ₁₀	CL	7.5Y 5/6								
27-35"	C	LOAMY SAND	7.5Y 6/4	30"	7.5Y 6/4	5%		15%	PLATY		

Additional Notes:

BOULDERS @ 35"
LENSES OF SAND



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-14 3/31/21 AM CLOUDY SO'S
 Hole # Date Time Weather Latitude Longitude: 2-38

1. Land Use: WOODLAND ONKS, PINES, MAPLES FEW
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND KAME BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 6

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-3"</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>5YR2/1</u>								
<u>3-28"</u>	<u>B₁₀</u>	<u>4</u>	<u>2.5Y5/4</u>								
<u>28-122"</u>	<u>C</u>	<u>LOAMY SAND</u>	<u>2.5Y4/4</u>	<u>40"</u>	<u>7.5YR5/6</u>	<u>5%</u>		<u>10%</u>	<u>PLATY</u>		

Additional Notes:

EVIDENCE OF REDOX @ 32" / DEEPER @ 112" / GROUNDWATER @ 120"
LENSES OF SAND



Commonwealth of Massachusetts

City/Town of DOUHLIS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-15 3/31/21 AM Cloudy 50's

Hole #

Date

Time

Weather

Latitude

Longitude:

1. Land Use: WOODLAND OAKS PINES PINEAPPLES FEW 2-5%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location:

2. Soil Parent Material: LOAMY SAND KAME BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in HoleSoil Log @ LOT 7

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0'-4'	Ap	<u>SANDY LOAM</u>	<u>5YR2/1</u>								
4'-30"	B10	<u>LOAMY SAND</u>	<u>2.5Y5/6</u>								
30'-124'	C	<u>LOAMY SAND</u>	<u>2.5Y6/6</u>	<u>36"</u>	<u>7.5YR5/6</u>		<u>20%</u>	<u>→</u>	<u>PLASTY</u>		

Additional Notes:

WETTER OF SAND
SURFACE ROCKS AND BOULDERS



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-16 3/31/21 AM CLOUDY 50°
 Hole # Date Time Weather Latitude Longitude:
 1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-5%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable
 Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 17

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-5"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5YR2/1</u>								
<u>5-28"</u>	<u>B₀</u>	<u>S</u>	<u>2.5Y5/6</u>								
<u>28-110"</u>	<u>C</u>	<u>LOAMY SAND</u>	<u>2.5Y4/4</u>	<u>35"</u>	<u>7.5YR5/4</u>	<u>5%</u>		<u>10%</u>	<u>PASTY</u>		

Additional Notes:

LENSES OF SAND
REFUSAL AT 110"



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-17 3/31/21 AM CLOUDY 50°
 Hole # Date Time Weather Latitude Longitude:
 1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-3%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOAMY SAND KNIFE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 16 OR LOT 18

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-4"	AP	SANDY LOAM	5YR 2/1								
4-29"	B ₁	↓	2.5Y 5/6								
29-111"	C	LOAMY SAND	2.5Y 6/4	39"	7.5Y 5/6	5%		5%	PLATIC		

Additional Notes:

LENSES OF SAND
EVIDENCE OF REDOX AT 33"
TOP OF ROCK AT 54"



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-13 Hole # 3/3/21 Date AM Time Cloudy Weather 50° Latitude _____ Longitude: 2-34

1. Land Use: WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) OAKS, PINES, MAPLES Vegetation FIELD Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOESSY SAND Landform KATIE Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log A LOT 9

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-4"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5YR 2/1</u>								
<u>4-28"</u>	<u>BW</u>	<u>↓</u>	<u>2.5Y 5/6</u>								
<u>28-105"</u>	<u>C</u>	<u>LOESSY SAND</u>	<u>2.5Y 4/4</u>	<u>38"</u>	<u>7.5Y 5/6</u>	<u>5%</u>		<u>5%</u>	<u>rusty</u>		

Additional Notes:

EVIDENCE OF REDOX AT 28"
LENDS OF SAND
REFUSAL AT 105"

SURFACE ROCKS AND BOULDERS



Commonwealth of Massachusetts
City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-19 3/31/21 APR CLOUDY SUN FEW 2-8
 Hole # Date Time Weather Latitude Longitude:
 1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-8
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: MEDIUM SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
 3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
 4. Unsuitable
 Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
 5. Groundwater Observed: ☐ Yes ☒ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 8

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0'-4'</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>5YR2/1</u>								
<u>4'-29"</u>	<u>B10</u>	<u>✓</u>	<u>2.5Y5/4</u>								
<u>29'-99"</u>	<u>C</u>	<u>MED. SAND</u>	<u>2.5Y4/4</u>	<u>32"</u>	<u>7.5Y5/4</u>	<u>5%</u>		<u>10%</u>			

Additional Notes:

TOP OF ROCK @ 99"



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-20 3/31/21 AM CLOUDY SO
 Hole # Date Time Weather Latitude Longitude: 2.5%
 1. Land Use: WOODLAND OAKS PINES MAPLES Surface Stones (e.g., cobbles, stones, boulders, etc.)
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Slope (%)

Description of Location: _____

2. Soil Parent Material: MEDIUM SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable
 Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 10

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-5"</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>5YR 2/1</u>								
<u>5-25"</u>	<u>B1U</u>	<u>LOAMY SAND</u>	<u>2.5Y 5/6</u>								
<u>25-99"</u>	<u>C</u>	<u>SAND</u>	<u>2.5Y 6/4</u>	<u>56"</u>	<u>7.5YR 5/6</u>	<u>5%</u>			<u>LOOSE</u>		

Additional Notes:

EVIDENCE OF REDOX @ 33"
GROUNDWATER AT 99"
MTH. LAUREL



Commonwealth of Massachusetts

City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 32121 Hole # 3/31/21 Date AM Time Cloudy So Weather
 1. Land Use: WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation OAKS PINES, MAPLES Surface Stones (e.g., cobbles, stones, boulders, etc.) FEW Slope (%) 2-8%

Description of Location:

2. Soil Parent Material: MEDIUM SAND Landform KARST Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE
 3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
 4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
 5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 11

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-6"	AP	SANDY LOAM	5YR 2/1								
6-30"	Bu	LOAMY SAND	2.5Y 5/6	25"	7.5YR 5/6	5%		15%	LOOSE SINGLE CLUSTERS		
30-103"	C	MED. SAND	2.5Y 6/4								

Additional Notes:

KEEPAGE AT 70"
ALLOT OF COBBLES
WITH LAUREL



Commonwealth of Massachusetts

City/Town of Douglas**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-22 3/31/21 AM Cloudy Sun _____
 Hole # Date Time Weather Latitude Longitude:

1. Land Use: WOODLAND OAKS, PINE, MAPLES FEW 2-3%
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: FINE SAND KARNE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 12

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-5"</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>5YR 2/1</u>								
<u>5-15"</u>	<u>BLU</u>	<u>LOAMY SAND</u>	<u>2.5Y 5/6</u>								
<u>15-60"</u>	<u>C</u>	<u>FINE SAND</u>	<u>2.5Y 7/3</u>					<u>5%</u>			

Additional Notes:

DEEPAGE AT 20"
GROUNDWATER AT 22"
REDOX THROUGHOUT
LENSES OF COARSE SAND



Commonwealth of Massachusetts

City/Town of Douglas

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-23 3/31/21 AM CLOUDY SO'S
 Hole # Date Time Weather Latitude Longitude: 2-8°

1. Land Use: WOODLAND OAKS, PINE TREES FEW
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOESS SAND KATIE BACKSLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 14

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-8"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5Y2/1</u>								
<u>8-28"</u>	<u>B₁₀</u>	<u>S</u>	<u>2.5Y5/6</u>								
<u>28-109"</u>	<u>C</u>	<u>LOESSY SAND</u>	<u>2.5Y4/4</u>	<u>30"</u>	<u>7.5Y5/6</u>	<u>5%</u>		<u>5%</u>			

Additional Notes:

KEEPAGE AT 100"
EVIDENCE OF REDOX 18"
LENSES OF SAND



Commonwealth of Massachusetts

City/Town of POUILLOUS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-24 3/31/21 AM CL-CLUDY SO'S
 Hole # Date Time Weather Latitude Longitude: 2-84

1. Land Use: WOODLAND OAKS PINES, MAPLES FEW
 (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: LOESSIAL SAND KAME BACK-SLOPE
 Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
 Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☐ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log LOT 13

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0"-8"</u>	<u>AP</u>	<u>SANDY LOESS</u>	<u>5-10 2/1</u>								
<u>8"-28"</u>	<u>B₁₀</u>	<u>↓</u>	<u>2.5-1 5/6</u>								
<u>28"-108"</u>	<u>C</u>	<u>LOESSIAL SAND</u>	<u>2.5-1 4/4</u>	<u>28"</u>	<u>7.5-10 5/6</u>	<u>5%</u>		<u>5%</u>			

Additional Notes:

SOIL LLET
LENSES OF LOESS AT BOTTOM



Commonwealth of Massachusetts

City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-25 Hole # 3/31/21 Date 1PM Time CLOUDY Weather FW Latitude _____ Longitude: 2-8% Slope (%)

1. Land Use: WOODLAND (e.g., woodland, agricultural field, vacant lot, etc.) OAKS, PINES, MAPLES Vegetation FW Surface Stones (e.g., cobbles, stones, boulders, etc.) 2-8% Slope (%)

Description of Location: _____

2. Soil Parent Material: SANDY LOESS Landform KNEE Position on Landscape (SU, SH, BS, FS, TS) BACKSLOPE

3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log A LOT 25

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-4"	AP	SANDY LOESS	5YR 2/1								
4-25"	Bu	!	2.5Y 5/6								
25-61"	C ₁	LOESSY SAND	2.5Y 4/4	31"	7.5YR 5/6	5%					
61-107"	C	SANDY LOESS	2.5Y 4/2								

Additional Notes:

1. DEEPAGE AT 98"
GROUNDWATER AT 109"



Commonwealth of Massachusetts
City/Town of POUILIAC

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 321-24 3/31/21 AM CLOUDY SUN
Hole # Date Time Weather Latitude Longitude:
1. Land Use: WOODLAND OAKS, PINES, MAPLES FEW 2-5%
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: SANDY LOAM KATIE BACKSLOPE
Landform Position on Landscape (SU, SH, BS, FS, TS)
3. Distances from: Open Water Body _____ feet Drainage Way _____ feet Wetlands _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet
4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock
5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole

Soil Log @ LOT 24

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-3"	AP	SANDY LOAM	5YR 2/1								
3-23"	B ₁₀		2.5Y 5/6								
23"-29"	C		2.5Y 4/4	27"	7.5Y 5/6	5%		5%			

Additional Notes:

LEAKAGE AT 30"
EVIDENCE OF REDOX AT 18"
LENSES OF FINE SAND



Commonwealth of Massachusetts

City/Town of DOUGLAS**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal****C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)Deep Observation Hole Number: 321-27

Hole #

Date 3/31/21Time 1:00 PMWeather CLOUDY SUN

Latitude _____

Longitude: _____

1. Land Use: WOODLAND

(e.g., woodland, agricultural field, vacant lot, etc.)

Vegetation OAKS, PINES, MAPLESSurface Stones (e.g., cobbles, stones, boulders, etc.) FEWSlope (%) 2-8%

Description of Location: _____

2. Soil Parent Material: SANDY LOAMLandform KAMEPosition on Landscape (SU, SH, BS, FS, TS) BACKSLOPE

3. Distances from: Open Water Body _____ feet

Drainage Way _____ feet

Wetlands _____ feet

Property Line _____ feet

Drinking Water Well _____ feet

Other _____ feet

4. Unsuitable

Materials Present: ☐ Yes ☒ NoIf Yes: ☐ Disturbed Soil☐ Fill Material☐ Weathered/Fractured Rock☐ Bedrock5. Groundwater Observed: ☒ Yes ☐ No

If yes: _____ Depth Weeping from Pit

_____ Depth Standing Water in Hole

Soil Log @ LOT 22

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
<u>0-5"</u>	<u>AP</u>	<u>SANDY LOAM</u>	<u>5YR2/1</u>								
<u>5-27"</u>	<u>B₁₀</u>		<u>2.5Y5/6</u>								
<u>27-105"</u>	<u>C</u>		<u>2.5Y7/3</u>	<u>28"</u>	<u>7.5YR5/6</u>	<u>5%</u>		<u>5%</u>			

Additional Notes:

WEEDS AT 36"
LEAVES OF SAND



Commonwealth of Massachusetts

City/Town of Douglas

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:

☒ Depth observed standing water in observation hole

☒ Depth weeping from side of observation hole

☒ Depth to soil redoximorphic features (mottles)

☐ Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology)

Obs. Hole # _____

_____ inches

Obs. Hole # _____

_____ inches

_____ inches

_____ inches

_____ inches

_____ inches

_____ inches

_____ inches

Index Well Number _____

Reading Date _____

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 1/2 inches VISIBLE

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

☒ Yes ☐ No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: _____

_____ inches

VISIBLE
Lower boundary: _____

_____ inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____

_____ inches

Lower boundary: _____

_____ inches




Commonwealth of Massachusetts

City/Town of DOUGLAS

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.


Signature of Soil Evaluator
LAURENCE L. GREENE 2685
Typed or Printed Name of Soil Evaluator / License #

7/8/2021
Date
6/30/2022
Expiration Date of License

Name of Approving Authority Witness

Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with [Percolation Test Form 12](#).

Field Diagrams: Use this area for field diagrams:



Commonwealth of Massachusetts
City/Town of Douglas
Percolation Test
Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

SUTTON DOUGLAS DEVELOPMENT LLC

Owner Name

3 P.J. MURPHY LANE

Street Address or Lot #

HOPKINTON

City/Town

MA

State

01946

Zip Code

Contact Person (if different from Owner)

Telephone Number

B. Test Results

Observation Hole #

3/24/21
Date

Time

321-01 LOT 31

3/24/21
Date

Time

321-02 LOT 19

Depth of Perc

50"

50"

Start Pre-Soak

End Pre-Soak

Time at 12"

10:50

11:00

Time at 9"

11:02

11:07

Time at 6"

11:22

11:19

Time (9"-6")

20 min

12 min

Rate (Min./Inch)

7 min/inch

4 min/inch

Test Passed:



Test Failed:



Test Passed:



Test Failed:



LAR GREENE

Test Performed By:

Board of Health Witness

Comments:



Commonwealth of Massachusetts
City/Town of DOUGLAS
Percolation Test
Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

SUTTON DOUGLAS DEVELOPMENT LLC

Owner Name

3RD MURPHY LANE

Street Address or Lot #

NORWINTON

City/Town

MA

State

01745

Zip Code

Contact Person (if different from Owner)

Telephone Number

B. Test Results

Observation Hole #

3/24/21
Date

Time

321-04 LOT 21

Date

Time

321-07 LOT 29

Depth of Perc

45"

52"

Start Pre-Soak

End Pre-Soak

Time at 12"

11:05

9:48

Time at 9"

11:13

10:01

Time at 6"

11:29

10:18

Time (9"-6")

16 MIN

17 MIN

Rate (Min./Inch)

6 MIN/INCH

6 MIN/INCH

Test Passed:



Test Failed:



Test Passed:



Test Failed:



Test Performed By:

LAR GREENE

Board of Health Witness

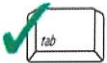
Comments:



Commonwealth of Massachusetts
City/Town of Douglas
Percolation Test
Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Site Information

SUTTON DOUGLAS DEVELOPMENT LLC
Owner Name
3PJ MURPHY LANE
Street Address or Lot #
HOPKINTON MA 01748
City/Town State Zip Code

Contact Person (if different from Owner) Telephone Number

B. Test Results

	<u>3/24/21</u> Date	Time	<u>3/31/21</u> Date	Time
Observation Hole #	<u>321-06</u>	<u>LOT 27</u>	<u>321-14</u>	<u>LOT 6</u>
Depth of Perc	<u>46"</u>		<u>44"</u>	
Start Pre-Soak				
End Pre-Soak				
Time at 12"	<u>9:55</u>		<u>12:17</u>	
Time at 9"	<u>10:04</u>		<u>12:25</u>	
Time at 6"	<u>10:17</u>		<u>12:34</u>	
Time (9"-6")	<u>13 min</u>		<u>9</u>	
Rate (Min./Inch)	<u>5 min/inch</u>		<u>3 min/inch</u>	
Test Passed:	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Test Failed:	<input type="checkbox"/>		<input type="checkbox"/>	

LAR GREENE
Test Performed By:

Board of Health Witness

Comments:

215930

CONFIRMATORY DEED

4/5/20*

We, **TAMMY RENAUD SCLAR**, formerly known as **TAMMY RENAUD** and **SUZANNE B. COTE**, Trustees of Eveningside Realty Trust under a Declaration of Trust dated October 4, 1993 and recorded in the Worcester District Registry of Deeds, Book 15865, Page 95, of Northbridge, Worcester County, Massachusetts, for consideration paid and in full consideration of less than one hundred (\$100.00) dollars, grant to

EVENINGSIDE REALTY CORPORATION, a Massachusetts business corporation having a usual place of business at 15 West Street, #4, Douglas, Massachusetts 01516,

with **QUITCLAIM COVENANTS**

A certain tract or parcel of land partially in the Town of Douglas and partially in the Town of Sutton, County of Worcester, Commonwealth of Massachusetts, containing 110.20 acres, more or less, and shown as Parcel "A" on a plan entitled "Plan of Land in Douglas, Massachusetts, prepared for Eveningside Realty Trust", scale: 1' = 200', dated May 23, 1996, recorded in the Worcester District Registry of Deeds, Plan Book 787, Plan 24.

For grantors' title see deed dated October 4, 1993, recorded in Worcester District Registry of Deeds, Book 15865, Page 105.

This deed is given to confirm and correct a deed dated February 12, 2001, and recorded in Book 23624, Page 365, which has an incorrect parcel and plan reference.

The grantors hereby certify that said Trust is in full force and effect, that said Trust has not been amended or revoked, that they are the sole Trustees, and that they have been authorized by the beneficiaries to execute this deed.

Witness our hands and seals this 29th day of October, 2002.

Tammy Renaud Sclar, Trustee
Tammy Renaud Sclar, Trustee

Suzanne B. Cote, Trustee
Suzanne B. Cote, Trustee

02 OCT 31 AM 10:15

Conservation Drive, Douglas, MA
Duval Road, Sutton, MA

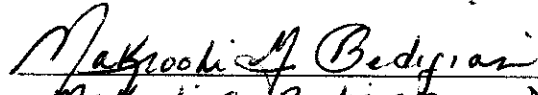
RETURN TO
LANE AND HAMER, P.C.
100 MAIN STREET
WHITINSVILLE, MA 01588

COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

October 29, 2002

Then personally appeared the above named Tammy Renaud Sclar and acknowledged the foregoing instrument to be her free act and deed as Trustee of Eveningside Realty Trust, before me,


Makroohi G. Bedigian, Notary Public
My commission expires: 11-6-03

nal/5493

ATTEST: WORC. Anthony J. Vigliotti, Register



QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS, that Stephen E. Cenedella and Clare M. Cenedella, husband and wife as tenants by the entirety, of Sutton, Worcester County, Massachusetts, for Five Hundred Fifty-nine Thousand, Six Hundred One and 96/100 Dollars (\$559,601.96) ~~and other good and valuable~~ consideration paid, hereby grant to Sutton Douglas Development LLC, a Massachusetts limited liability company with a principal address of 3 D J Murphy Lane, Hopkinton, Massachusetts, with QUITCLAIM COVENANTS, all right title and interest in and to the land with buildings thereon, in Sutton on the Southerly side of Duval Road, and in Douglas, said Worcester County shown as Lot #2 on a plan entitled "Plan of Land in Douglas, Mass. and Sutton, Mass., surveyed for Albert T. Fougere, et al", which Plan is recorded in the WORCESTER District Registry of Deeds in Plan Book 706, as Plan 112, and further bounded and described as follows:

BEGINNING at a drill hole on the southerly line of Duval Road which point is the most northerly corner of the lot herein described;

THENCE S. 68° 13' 59" E, 145.76 feet by the Southerly line of Duval Road to a point;

THENCE S. 72° 09' 47" E., 29.34 feet by the Southerly line of Duval Road to a drill hole;

THENCE S. 04° 34' 22" W., 255.58 feet by land now or formerly of Maynard to a point;

THENCE S. 85° 34' 59" E., 175.66 feet by the Southerly line of said Maynard to an iron pin;

THENCE S. 04° 20' 53" W., 75.27 feet by land now or formerly of Convery to a drill hole;

THENCE S. 85° 37' 19" E., 281.29 feet by land now or formerly of said Convery to a point;

THENCE S. 02° 22' 26" E., 136.36 feet by Lot #1 on said plan to a point;

THENCE S. 89° 48' 06" E., 180.93 feet by said Lot #1 on the Douglas and Sutton town line to a point;

Property Address: Lot 2, Duval Road, Sutton and Douglas, MA

PRINCE, LOBEL, GLOVSKY & TYE LLP
ATTORNEYS AT LAW
100 CAMBRIDGE STREET
SUITE 2200
BOSTON, MASSACHUSETTS 02114

MASSACHUSETTS EXCISE TAX
 Worcester District ROD #20 001
 Date: 03/08/2010 09:40 AM
 Ctr# 091979 12918 Doc# 00023195
 Fee: \$2,553.60 Cons: \$559,601.96

3

THENCE S. 00° 39' 37" W., 719.95 entering the Town of Douglas and partly by a stone wall to a stone bound;

THENCE S. 89° 31' 34" W., 604.99 feet to a drill hole

THENCE N. 00° 23' 30" W., 365.68 feet to a drill hole;

THENCE S. 89° 25' 44" W., 445.14 feet to a drill hole;

THENCE S. 88° 25' 53" W., 168.32 feet by a stone wall to a point;

THENCE N. 00° 29' 24" E., 355.24 feet partially by a stone wall to a point;

THENCE S. 89° 48' 06" E., 332.02 feet by the Douglas and Sutton Town line to a point;

THENCE N. 00° 00' 00" E., 178.56 feet by land now or formerly of Guerin to a point;

THENCE N. 16° 38' 23" E., 399.83 feet by land now or formerly of Wojcik to the point of beginning.

Containing 19.47 acres of land, more or less, according to said plan.

Subject to and with the benefit of all matters of record.

Subject to and with the benefit of all easements, appurtenances, liens, restrictions, rights, conditions, reservations, rights-of-way, covenants, provisions, orders, takings and agreements of record in so far as the same are in force and applicable.

Intending to convey all of the property contained in and granted to Grantors in deed recorded in said deeds on 08/19/1997 in Book 19091, Page 192 at the WORCESTER SOUTH County Registry of Deeds.

Witness our hands and seals as of this 16th day of January 2010.


STEPHEN E. CENEDELLA


CLARE M. CENEDELLA

COMMONWEALTH OF MASSACHUSETTS

County of Worcester

On this 16 day of January, 2010 before me, the undersigned notary public, personally appeared STEPHEN E. CENEDELLA, proved to me through satisfactory evidence of identification, which was MDC, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Linda Kuindersma
Notary Public

My Commission Expires:

COMMONWEALTH OF MASSACHUSETTS

County of: Worcester

Notary Public
Linda Kuindersma
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires July 12, 2013

On this 16 day of January, 2010 before me, the undersigned notary public, personally appeared CLARE M. CENEDELLA proved to me through satisfactory evidence of identification, which was MDC, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose.

Linda Kuindersma

Notary Public

My Commission Expires:



Notary Public
Linda Kuindersma
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires July 12, 2013

MASSACHUSETTS QUITCLAIM DEED

I, **Lynne McPherson**, being unmarried, of Whitinsville, Massachusetts, 01588

For consideration paid, and in full consideration of **Three Hundred Sixty Thousand and 00/100 (\$360,000.00) Dollars**

grant to

Sutton Douglas Development, LLC, a Massachusetts Limited Liability Company,
With an address of 3 D J Murphy Lane, Hopkinton, MA 01748

with Quitclaim covenants

The land with the buildings thereon in the Town of Douglas, Worcester County, Massachusetts being shown as Lot 21R on a plan entitled "Subdivision plan of Property owned by Paul J. Conn, Fairfax East Development, Birch Street, Douglas, Massachusetts; December 5, 1973; Cullinan Engineering Co., Inc.; Auburn, Massachusetts" and recorded with the Worcester District Registry of Deeds in Plan Book 394, Plan 29 and bounded and described as follows:

BEGINNING at the Southwesterly corner of said Lot 21R on the Easterly sideline of Forest Street, said point of beginning being at the Northwesterly corner of Lot 26R as described in said plan;

THENCE N. 3 degrees 52' 8" W. by the easterly sideline of Forest Street 220.00 feet to the point;

THENCE N. 86 degrees 7' 52" E. by Lot 16R on said plan 212.86 feet to a point;

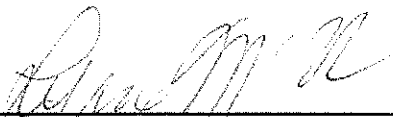
THENCE S. 03 degrees 30' 0" E. by land of Peters 220.00 feet to a point;

This conveyance is made subject to and with the benefit of restrictions and easements of record so far as now in force and applicable.

Meaning and intending to convey the same premises conveyed to the herein named Grantor(s) by deed dated March 28, 2003 and recorded with Worcester County Registry of Deeds in Book 29546, Page 368. See Death Certificate of Peter V. McPherson recorded with said Deeds in Book 35324 Page 396.

The signatories to this document hereby waive and release any and all rights of homestead to the subject property and further state under the pains and penalties of perjury that there are no others entitled to the right of homestead in subject property.

Witness my hand and seal this 18 day of February, 2021.



Lynne McPherson

COMMONWEALTH OF MASSACHUSETTS

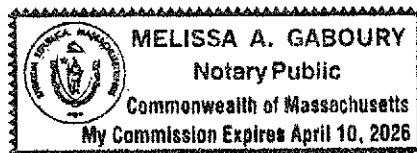
Middlesex County, ss.

On this 18 day of **February, 2021**, before me, the undersigned notary public, personally appeared Lynne McPherson, proved to me through satisfactory evidence of identification, which was a MADL, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose as her free act and deed.



Notary Public:

My Commission Expires: 4/10/2026



ATTEST: WORC Kathryn A. Toomey, Register

QUITCLAIM DEED

YALE UNIVERSITY, a corporation specially chartered by the General Assembly of the Colony and State of Connecticut, with a principal place of business in New Haven, Connecticut, for consideration paid of TWENTY THOUSAND and 00/100 (\$20,000.00) Dollars grants to

SUTTON DOUGLAS DEVELOPMENT LLC, a Massachusetts limited liability company with a business address of 3 D J Murphy Lane, Hopkinton, MA 01748

With QUITCLAIM COVENANTS

All of its right title and interest in the tract of woodland lying in Douglas, Massachusetts containing 5 acres, more or less, bounded as follows:

Beginning at the northwest corner of land formerly belonging to Jacob Morse;

THENCE East on said Jacob Morse land about 37 rods to a stake and stones;

THENCE North 8° West about 22 rods on Stephen Himpton land;

THENCE West 9° South about 37 rods to a heap of stones;

THENCE South 8° East about 22 rods to the bound first mentioned.

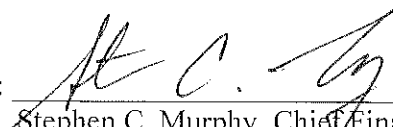
For additional information with respect to the location of the premises see deed of Jonathan Leland to Obadiah Morse dated September 1, 1816, and recorded in the Worcester District Registry of Deeds in Book 206, Page 92, the premises being the second tract described in said deed.

For Grantor's title see the will of Alison Pitman, Waldo County (Maine) Probate Court Docket No. 2005-0227.

To Grantor's knowledge, the premises are vacant land and not the homestead of any individual.

IN WITNESS WHEREOF, Grantor has caused this Quitclaim Deed to be signed on this 3rd day of August, 2021.

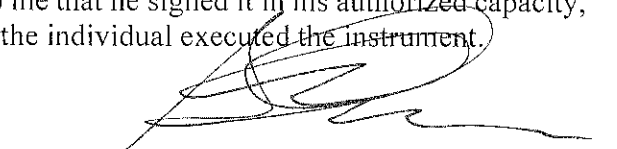
YALE UNIVERSITY

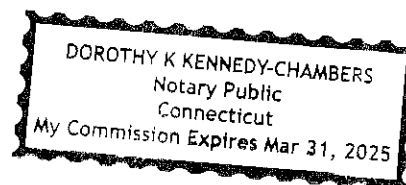
By: 
 Stephen C. Murphy, Chief Financial
 Officer & Vice President for Finance and
 Administration

STATE OF CONNECTICUT

COUNTY OF NEW HAVEN

On this 3rd day of August, 2021, before me, the undersigned notary public, personally appeared the above named Stephen C. Murphy, Chief Financial Officer & Vice President for Finance and Administration for Yale University, a corporation specially chartered by the Assembly of the Colony and State of Connecticut, personally known to me or proved to me on the basis of satisfactory evidence to be the person who signed the preceding or attached instrument and acknowledged to me that he signed it in his authorized capacity, and that by his signature on the instrument, the individual executed the instrument.


 Notary Public
 My Commission Expires: 3-31-2025



ATTEST: WORC Kathryn A. Toomey, Register