

Franklin Ford

NHESP Priority Habitats of Rare Species



NHESP Estimated Habitats of Rare Wildlife



NHESP Certified Vernal Pools



Property Tax Parcels



Town of Franklin Conservation Commission

RESOURCE AREA IMPACT SUMMARY FORM

**The Franklin Wetlands Protection Bylaw
Franklin Town Code Section 181**

Resource Area	Alteration Proposed	Mitigation Proposed
Bordering Vegetated Wetland (SF)	0	0
Bank (LF)	0	0
Land Under Water Bodies (SF)	0	0
Isolated Wetland (SF)	0	0
Vernal Pool (SF)	0	0
Buffer Zone (SF)	9,930	0
Riverfront (SF)	0	0
100-Year Floodplain (CF)	0	0
(SF) = Square Feet (LF) = Linear Feet (CF) = Cubic Feet Flood Storage		



Site Evaluation & Wetland delineation

July 17, 2021

**175 East Central Street
Franklin, Massachusetts**

Prepared for

**United Consultants, Inc.
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Prepared by

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**Site Evaluation and Wetland Delineation
175 East Central Street
Franklin, Massachusetts**

Introduction

A site evaluation was conducted at the above referenced property on July 15, 2021. Wetland resource areas protectable under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40), the implementing *Regulations* (310 CMR 10.00), and the Town of Franklin *Wetlands Protection Bylaw* (Chapter 181) and *Conservation Rules and Regulations* were identified and characterized. The upland/wetland boundary to Bordering Vegetated Wetland (BVW) was delineated in the field with red flagging tape. Resulting data describing the floristic, edaphic, and topographic characteristics of the property has been utilized in the preparation of this *Site Evaluation Report*. The following narrative provides a general site description, resource area delineation methodology, and wetland resource descriptions.

General Site Description

The subject property encompasses a commercial parcel of land located northerly of East Central Street (Route 140) and westerly of Chestnut Street in Franklin, Massachusetts. Topography of the site is generally flat. The Franklin Ford auto sales company occupies the southern portion of the property. The remainder of the site is forested. Commercial development abuts the site to the southeast and southwest. Residential development abuts the site to the east and northwest. Forested land lies to the north.

Forested Upland Description

A moderately dense canopy of Northern Red Oak (*Quercus rubra*), White Oak (*Quercus alba*), Shagbark Hickory (*Carya ovata*), White Ash (*Fraxinus americana*), Red Maple (*Acer rubrum*), Norway Maple (*Acer platanoides*), Box Elder (*Acer negundo*), American Hop Hornbeam (*Ostrya virginiana*), Black Cherry (*Prunus serotina*), Eastern White Pine (*Pinus strobus*), American Beech (*Fagus grandifolia*), and Slippery Elm (*Ulmus rubra*) dominates vegetation within the forested uplands. The woody understory is comprised of saplings from the canopy, Japanese Barberry (*Berberis thunbergii*), Glossy Buckthorn (*Frangula alnus*), Highbush Blueberry (*Vaccinium corymbosum*), Poison Ivy (*Toxicodendron radicans*), Witch-hazel (*Hamamelis virginiana*), and Oriental Bittersweet (*Celastrus orbiculatus*). Ground cover species include seedlings from the canopy and understory, Wild Sarsaparilla (*Aralia nudicaulis*), Lily-of-the Valley (*Convallaria majalis*), Pennsylvania Sedge (*Carex pennsylvanica*), Canada Mayflower (*Maianthemum canadense*), Dewberry (*Rubus* spp.), various Asters (*Aster* sp.), Virginia Creeper (*Parthenocissus quinquefolia*), Cinnamon Fern (*Osmunda cinnamomea*), Hay-Scented Fern (*Dennstaedtia punctilobula*), and Japanese Knotweed (*Polygonum cuspidatum*).

Soils

Soils underlying the site consist of excessively drained Merrimac-Urban land complex (MnB 626B), 0% to 8% slopes and very poorly drained Swansea muck (Fm, 52), 0 to 1% slopes (USDA SCS 1989, Map #36, www.nesoil.com).

Wetland Delineation Methodology

The extent of vegetated wetland was determined through observations of the existing plant communities while verifying wetland hydrology through interpretation of soil characteristics and other indications of surface hydrology. Soils were analyzed for texture and color to determine soil morphology in accordance with the most up to date standards. Evidence of surface hydrology was determined through visual inspection of existing site conditions including typical indicators such as water marks, drift-lines, water-stained leaves, sediment deposits, and drainage patterns.

Wetland Resource Description

Wetland resources associated with the site include Bordering Vegetated Wetland (BVW). Seasonally saturated to seasonally flooded Forested Swamp is located within or adjacent to the northern portion of the site. Topography within the BVW is generally flat with distinct pit and mound micro-topography, drainage patterns, leaf staining, and surface water evident throughout. A moderately dense canopy of Red Maple and Slippery Elm dominates vegetation within the wetland. The woody understory is comprised of saplings from the canopy, Highbush Blueberry, Winterberry (*Ilex verticillata*), Silky Dogwood (*Cornus amomum*), Southern Arrowwood (*Viburnum dentatum*), Poison Ivy, and Common Elderberry (*Sambucus canadensis*). Ground cover species include seedlings from the canopy and understory, Cinnamon Fern, Sensitive Fern (*Onoclea sensibilis*), Royal Fern (*Osmunda regalis*), Skunk Cabbage (*Symplocarpus foetidus*), Sphagnum Moss (*Sphagnum* sp.), Jewelweed (*Impatiens capensis*) and Japanese Knotweed.

The upland/wetland boundary to BVW is delineated in the field with AES flagging stations #1 through #10.

FEMA Floodplain Designation

Based on the *Federal Emergency Management Agency Flood Insurance Rate Map* for the Town of Franklin, Massachusetts, (Map No. 25021C0309E), the site is located within Zone X (non-shaded), *Areas determined to be outside the 0.2% annual chance and Zone X (shaded), Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% chance annual flood.*

NHESP Estimated & Priority Habitat

According to the *Massachusetts Natural Heritage and Endangered Species Program* habitat map, the site is not located within an Estimated Habitat of Rare Wildlife or a Priority Habitat of Rare Species.

Water Supply Protection Areas

According to the Massachusetts Geographic Information Systems *Water Supply Protection Areas Map*, the site is located within a Zone II groundwater recharge area but not an Interim Wellhead Protection Area (IWPA).

Outstanding Resource Water (ORW)

According to the Massachusetts Geographic Information Systems *Outstanding Resource Waters Map*, the site is not located within a contributing watershed to an ORW.

Buffer Zone

Buffer Zone, as defined at 310 CMR 10.04, means:

The area of land extending 100 feet horizontally outward from the boundary of any area specified in 310 CMR 10.02(1)(a).

Under Section XVI of the Town of Franklin *Conservation Rules and Regulations*, Buffer Zone Protections:

Currently as established by precedent, the Franklin Conservation Commission (Commission) has instituted a 25-Foot no disturb buffer zone from the defined/delineated resource area.

Under Section XVI A: 0 to 25-Foot Buffer Zone Resource Area:

1. *An applicant shall demonstrate that no work/disturbance including grading activities is proposed within the 25-foot buffer zone resource area.*

Under Section XVI B: 25 to 50-Foot Buffer Zone Resource Area:

1. *Any applicant proposing a project within the 25 to 50-foot buffer zone resource area shall indicate that there are no structures including, but not limited to, concrete, stone, or other impervious foundations and/or slabs for construction purposes that for all intents and purposes would significantly increase runoff. Alteration within the 25 to 50-foot buffer zone resource area is limited to grading, tree clearing, storm water management components, lawns, gardens, and other low impact uses as determined by the Commission or as otherwise approved by the*

Commission by the variance procedures set forth under Section XVII of these regulations.

2. *Areas disturbed prior to June 29, 2006: When there is a pre-existing disturbance (disturbed as part of a previously record Certificate of Compliance or was disturbed prior to the enactment of the Wetlands Protection Act and the Franklin Wetlands Protection Bylaw), and the work proposed is entirely within the previously disturbed area, the applicant may propose impervious surfaces such as pools, buildings, porches, and sheds within the 25 to 50-foot buffer zone resource area. The Commission shall evaluate the proposed uses based upon the demonstration by the applicant that the functions and characteristics of the resource area will not be adversely affected.*

Under Section XVI C: 50 to 100-Foot Buffer Zone Resource Area:

Alterations including structures are allowed in the 50-100-foot buffer zone resource area. The Commission may require additional mitigation offsets when the slope within the buffer zone is steeper than 10%. Additionally, mitigation offsets may be required by the Commission when the applicant proposes that more than 30% of the 50-100-foot buffer zone resource area is proposed to be impervious surface. Mitigation offsets may include, but is not limited to, plantings, conversion of impervious to pervious surfaces, and other practices consistent with the Town of Franklin Best Development Practice Handbook.

The southern portion of the property is contained within the regulatory Buffer Zones.

References

Federal Emergency Management Agency, FEMA Map Service Center, www.fema.gov.

Massachusetts Geographic Information Systems, www.massgis.ma.state.us.

Natural Resources Conservation Service, www.nesoil.com, websoilsurvey.nrcs.usda.gov.

United States Department of Agriculture, Soil Conservation Service, 1989. *Soil Survey of Norfolk and Suffolk Counties, Massachusetts*.

Appendix A
DEP Bordering Vegetated Wetland (310 CMR 10.55)
Delineation Field Data Forms

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: Applied Ecological Sciences (AES) Project location: 175 E. Central Street Franklin, MA DEP File #: _____

- Check all that apply:
- Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
 - Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
 - Method other than dominance test used (attach additional information)

DP-1 @ AES #9 - #10

Section I. Vegetation	Observation Plot Number:	DP-1 UPL	Transect Number:	1	Date of Delineation:	7/15/2021
A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or dominance ratio)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category		
<u>Trees</u>						
Red Maple (<i>Acer rubrum</i>)	63.0	100%	yes	FAC*		
TOTAL COVER = 63.0						
<u>Woody Vines:</u>						
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	63.0	93%	yes	NA		
Poison Ivy (<i>Toxicodendron radicans</i>)	5.0	7%	no	FACW*		
TOTAL COVER = 68.0						
<u>Saplings</u>						
Black Cherry (<i>Prunus serotina</i>)	63.0	62%	yes	FACU		
Norway Maple (<i>Acer platanoides</i>)	38.0	38%	yes	NA		
TOTAL COVER = 101.0						
<u>Shrubs</u>						
Black Cherry (<i>Prunus serotina</i>)	38.0	78%	yes	FACU		
Japanese Barberry (<i>Berberis thunbergii</i>)	10.5	22%	yes	FACU		
TOTAL COVER = 48.5						
<u>Ground Cover</u>						
Poison Ivy (<i>Toxicodendron radicans</i>)	63.0	50%	yes	FACW*		
Dewberry sp. (<i>Rubus</i> spp.)	63.0	50%	yes	NA		
TOTAL COVER = 126.0						

Vegetation conclusion:
 Number of dominant wetland indicator plants: **2** Number of dominant non-wetland indicator plants: **3**
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? **No**

Section II. Indicators of Hydrology
Hydric Soil Interpretation

DP-1 UPL

1. Soil Survey

Is there a published soil survey for this site? Yes

title/date: Soil Survey of Norfolk & Suffolk Counties, Massachusetts, 1989.

map number: 36

soil type mapped: Merrimac-Urban land complex (MnB, 626B), ED, 0% to 8% slopes

hydric soil inclusions: None

Are field observations consistent with soil survey? No

Remarks: Disturbed commercial site.

2. Soil Description

Horizon	Depth	Matrix color	Redoximorphic features
A	0" - 14"	2.5Y 3/2 gsl	
Bw1	14" - 16"+	10YR 5/6 gsl	

Remarks: Refusal at 16"

3. Other: Sunny, dry

Conclusion: Is soil hydric? No

Other indicators of Hydrology: (check all that apply)

- Site inundated:
- Depth to free water in observation hole:
- Depth to soil saturation in observation hole:
- Water marks:
- Drift lines:
- Sediment deposits:
- Drainage patterns in BVW:
- Oxidized rhizospheres:
- Water-stained leaves:
- Recorded data (stream, lake, or tidal gauge; aerial photo; other)
- Other:

Vegetation and Hydrology Conclusion:

- Number of wetland indicator plants greater than or equal to non-wetland indicator plants? yes no
- Wetland hydrology present?
- hydric soil present?
- other indicators of hydrology present?
- Sample location is in a BVW

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: Applied Ecological Sciences (AES) Project location: 175 E. Central Street Franklin, MA DEP File #: _____

- Check all that apply:
- Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
 - Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
 - Method other than dominance test used (attach additional information)

DP-2 @ AES #9 - #10

Section I. **Vegetation** Observation Plot Number: DP-2 WET Transect Number: 1 Date of Delineation: 7/15/2021

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or dominance ratio)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category
Trees				
Red Maple (<i>Acer rubrum</i>)	63.0	75%	yes	FAC*
Eastern White Pine (<i>Pinus strobus</i>)	10.5	13%	no	FACU
Red Spruce (<i>Picea rubens</i>)	10.5	13%	no	FACU
TOTAL COVER = 84.0				
Woody Vines:				
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	63.0	62%	yes	NA
Poison Ivy (<i>Toxicodendron radicans</i>)	38.0	38%	yes	FACW*
TOTAL COVER = 101.0				
Saplings				
Black Cherry (<i>Prunus serotina</i>)	63.0	100%	yes	FACU
TOTAL COVER = 63.0				
Shrubs				
Japanese Barberry (<i>Berberis thunbergii</i>)	38.0	100%	yes	FACU
TOTAL COVER = 38.0				
Ground Cover				
Royal Fern (<i>Osmunda regalis</i>)	63.0	25%	yes	OBL*
New York Fern (<i>Thelypteris noveboracensis</i>)	63.0	25%	yes	FAC*
Virginia Creeper (<i>Parthenocissus quinquefolia</i>)	63.0	25%	yes	FACU
Sensitive Fern (<i>Onoclea sensibilis</i>)	63.0	25%	yes	FACW*
TOTAL COVER = 252.0				

Vegetation conclusion:
 Number of dominant wetland indicator plants: **5** Number of dominant non-wetland indicator plants: **3**
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? **Yes**

Section II. Indicators of Hydrology
Hydric Soil Interpretation

DP-2 WET

1. Soil Survey

Is there a published soil survey for this site? Yes

title/date: Soil Survey of Norfolk & Suffolk Counties, Massachusetts, 1989.

map number: 36

soil type mapped: Freetown muck (Fm, 52), VPD, 0% to 1% slopes

hydric soil inclusions: Swansea, Scarborough, Whitman

Are field observations consistent with soil survey? No

Remarks: Disturbed commercial site.

2. Soil Description

Horizon	Depth	Matrix color	Redoximorphic features
A	0" - 18"	2.5Y 4/1 sl	
2Cg1	18"+	2.5Y 5/1 gls	

Remarks:

3. Other: Sunny, dry

Conclusion: Is soil hydric? Yes

Other indicators of Hydrology: (check all that apply)

- Site inundated:
- Depth to free water in observation hole: 18"
- Depth to soil saturation in observation hole: 10"
- Water marks:
- Drift lines:
- Sediment deposits:
- Drainage patterns in BVW:
- Oxidized rhizospheres:
- Water-stained leaves:
- Recorded data (stream, lake, or tidal gauge; aerial photo; other)
- Other:

Vegetation and Hydrology Conclusion:

Number of wetland indicator plants greater than or equal to non-wetland indicator plants?

yes no

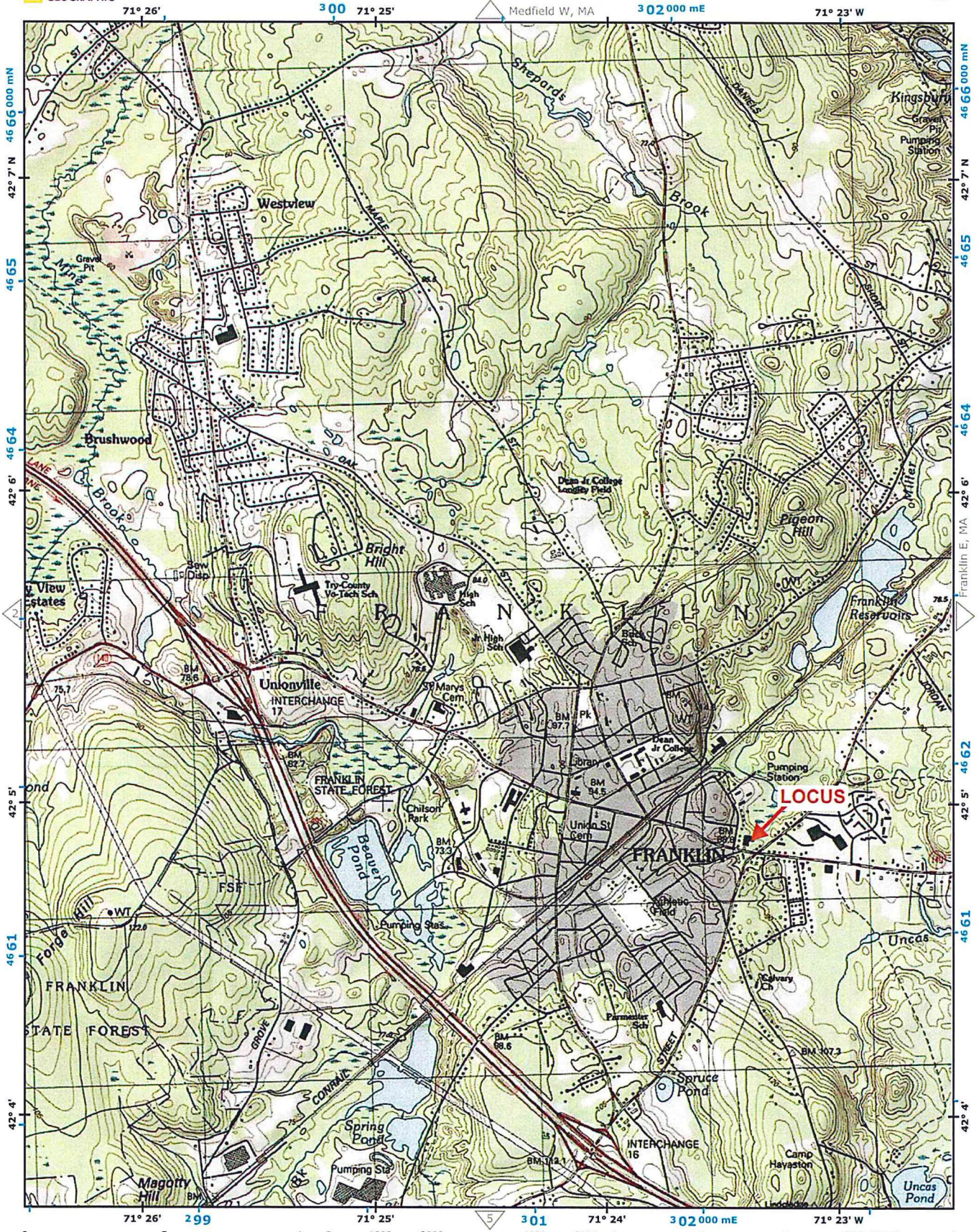
Wetland hydrology present?

hydric soil present?

other indicators of hydrology present?

Sample location is in a BVW

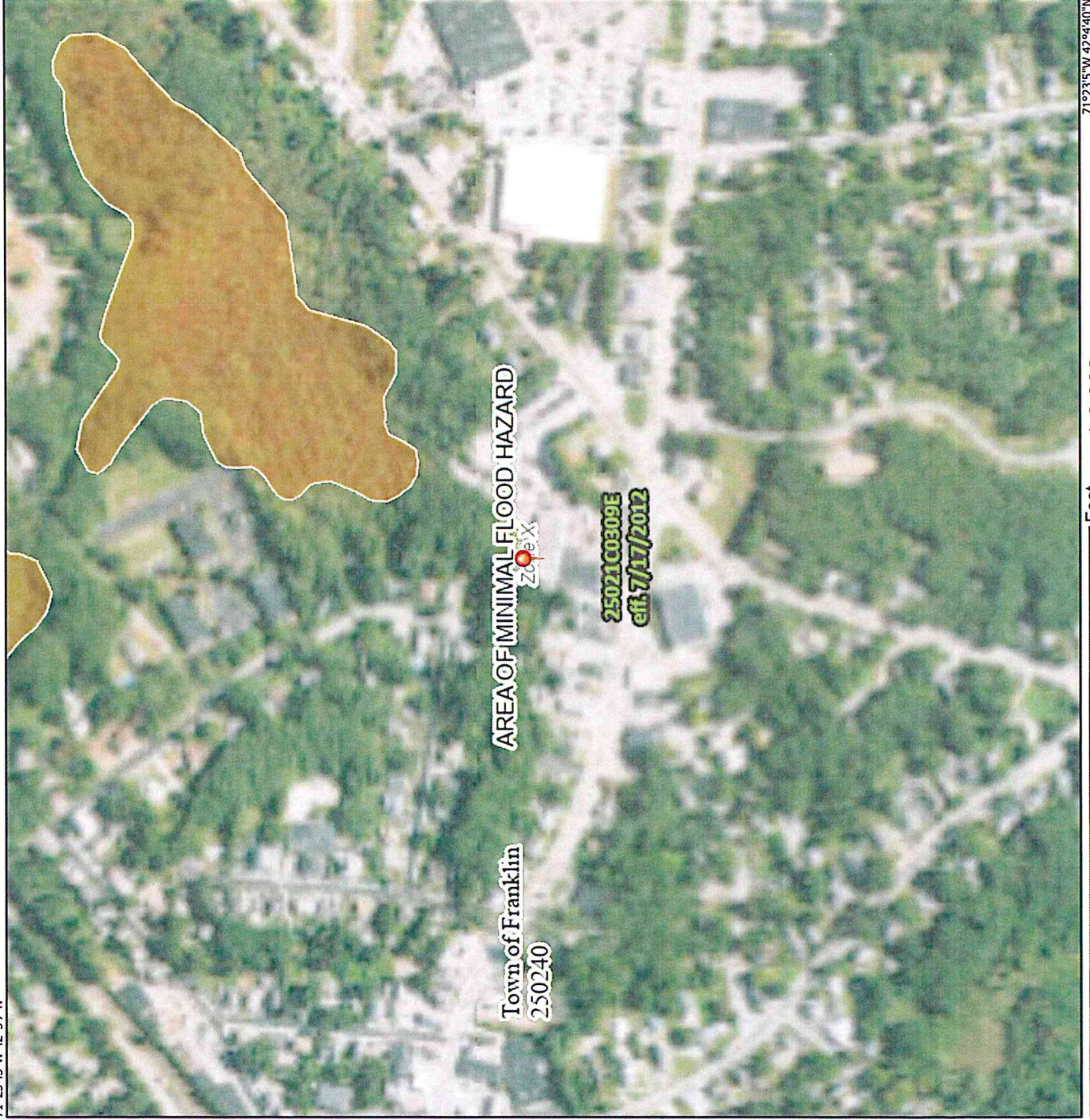
Appendix B
U.S.G.S. Topographic Map
FEMA Map



National Flood Hazard Layer FIRMette



71°23'43"W 42°57'7"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

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

Legend

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

	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	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
	NO SCREEN
	Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance
	Water Surface Elevation
	Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	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 6/29/2021 at 3:19 PM 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.