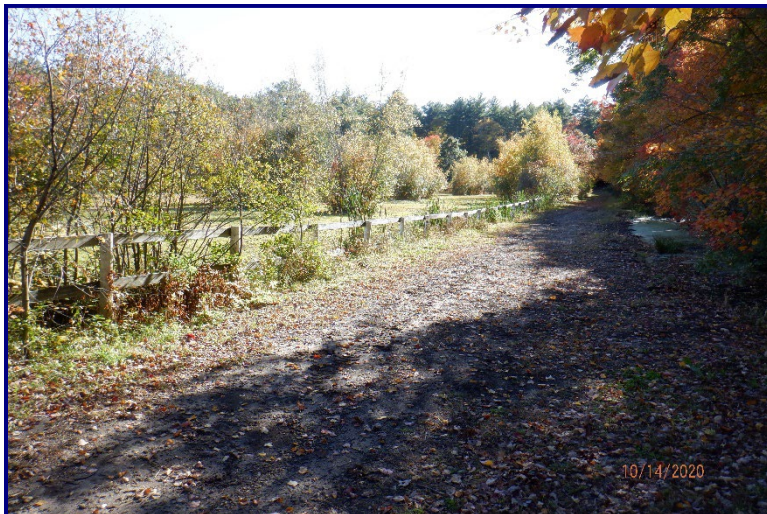


REQUEST FOR DETERMINATION OF APPLICABILITY

Proposed Maintenance & Improvement Plan

Chrislar Horse Farm, 944 Haverhill Street
Rowley, Massachusetts



SUBMITTED TO:

Town of Rowley Conservation Commission
Town Hall Annex Room #4
39 Central Street, P.O. Box 24
Rowley, Massachusetts 01969

PREPARED FOR:

Chrislar Farm
c/o Lawrence Cassenti
944 Haverhill Street
Rowley, Massachusetts 01969

PREPARED BY:

Lucas Environmental, LLC
500A Washington Street
Quincy, Massachusetts 02169

IN ASSOCIATION WITH:

Decoulos & Company, LLC
185 Alewife Brook Parkway
Cambridge, Massachusetts, 02138

REPORT DATE: August 22, 2022





500A Washington Street, Quincy, MA 02169

August 22, 2022

Town of Rowley Conservation Commission
Town Hall Annex Room #4
39 Central Street, P.O. Box 24
Rowley, Massachusetts 01969

Re: Request for Determination of Applicability
Chrislar Horse Farm – Proposed Maintenance & Improvement Plan
944 Haverhill Street
Rowley, Massachusetts

Members of the Rowley Conservation Commission:

On behalf of the Applicant, Lawrence Cassenti, and in association with Decoulos & Company, LLC, Lucas Environmental, LLC (LE) is pleased to submit this Request for Determination of Applicability (RDA) to the Rowley Conservation Commission for a proposed maintenance and improvement plan at Chrislar Horse Farm and Equestrian Center, located at 944 Haverhill Street in Rowley, Massachusetts. As currently designed, proposed work includes farm maintenance and improvement activities exempted from the Wetlands Protection Act (WPA). Maintenance and improvement activities are proposed to occur within Bordering Vegetated Wetlands (BVW), Inland Bank, and the 100-Foot Buffer Zone to these resource areas. This RDA is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.) and the Rowley Wetlands Protection Bylaw and associated Regulations.

Enclosed please find one original and one (1) copy of the RDA, supporting documentation, and Project Plans. The RDA application package includes the WPA Form 1, RDA Checklist, project narrative, figures, photographic documentation, and bylaw filing fee. The Project Plans are provided separately. A link to an electronic copy of the pdf file of the RDA application and supporting documentation will be provided concurrently with this submittal. We respectfully request that you place this matter on your agenda for the September 13, 2022 Public Hearing. If you have any questions, please do not hesitate to contact Curtis Young at 978.500.4295 or cry@lucasenviro.com, or Joseph Orzel at 617.405.4118 or jho@lucasenviro.com. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC

Joseph H. Orzel, PWS, CWS
Project Manager/Wetland Scientist

Curtis R. Young, PWS
Senior Wetland Consultant

cc: Lawrence Cassenti, Chrislar Farm
Decoulos & Company, LLC
MassDEP – NERO



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SECTION I – FORMS



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:

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



1. Applicant:

Lawrence Name	Cassenti E-Mail Address
944 Haverhill Street Mailing Address	
Rowley City/Town	MA State
617.335.2222 Phone Number	01969 Zip Code
	Fax Number (if applicable)

2. Representative (if any):

Lucas Environmental, LLC Firm	
Curtis Young Contact Name	cry@lucasenviro.com E-Mail Address
500A Washington Street Mailing Address	
Quincy City/Town	MA State
978.500.4295 Phone Number	02169 Zip Code
	617.405.4465 Fax Number (if applicable)

B. Determinations

1. I request the Rowley Conservation Commission make the following determination(s). Check any that apply:
- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
 - b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
 - c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
 - d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Rowley
Name of Municipality
 - e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

The proposed work consists of farm maintenance and improvement activities, as defined under 310 CMR 10.04, that are exempted from the Wetlands Protection Act (WPA). As stated in the WPA, the provisions of the WPA shall not apply to "...work performed for normal maintenance or improvement of land in agricultural use or in aquacultural use...".

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



WPA Form 1 - Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Lawrence Cassenti
Name

944 Haverhill Street
Mailing Address

Rowley
City/Town

MA
State

01969
Zip Code

Signatures:

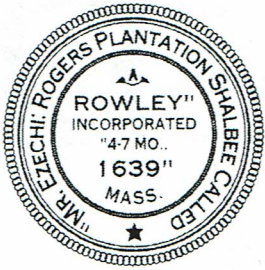
I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.


Signature of Applicant

July 20, 2022
Date


Signature of Representative (if any)

August 1, 2022
Date



Town of Rowley

Conservation Commission

Phone: (978) 948-2330 Fax: (978) 948-7196

Conservation@townofrowley.org

REQUEST TO DETERMINE APPLICABILITY CHECKLIST

Send the following by certified mail, return receipt requested, or hand deliver to:

Rowley Conservation Commission, PO Box 24, or 39 Central Street, Room #4, Rowley MA 01969

Two copies of the Application including:

Completed WPA Form 1 – revised July 2020

Section of U.S. Geologic Survey (USGS) quadrangle locating site (8 ½" x 11")

An appropriately sized section of the Assessor's map clearly identifying the property and all others within a hundred feet See Figure 5.

Plans and calculations clearly describing the location and the nature of the proposed work

Proof of mailing or hand delivery of Application to DEPNE regional office (address below)

One copy of permission to enter form with original signature of property owner

NA Proof of mailing or delivery of Application to property owner if not applicant

One electronic submission in "PDF" form of all Application documents and plans.

One copy of the Wetland Bylaw Fee Calculation Form with check for appropriate fee.

Send by certified mail, return receipt requested, or hand deliver to:

DEP NERO, Wetlands Div. 205B Lowell Street, Wilmington, MA 01887

One copy of the Application including:

Completed WPA Form 1 – revised July 2020.

Section of U.S. Geologic Survey (USGS) quadrangle locating site (8 ½" x 11").

An appropriately sized section of the Assessor's map clearly identifying the property and all others within a hundred feet.

Plans and calculations clearly describing the location and the nature of the proposed work.

PERMISSION TO ENTER

I, Lawrence Cassenti, hereby grant the Rowley Conservation Commission and its
(NAME OF PROPERTY OWNER)

officials permission to enter upon my property at 944 Haverhill Street to
(STREET ADDRESS AND ASSESSOR'S MAP/PARCEL/LOT)

review the filed Request to Determine Applicability and future site conditions for compliance with the issued Determination of Applicability. The sole purpose of this document is to allow Commissioners and their officials to perform their duties under the Wetlands Protection Act (M.G.L. c. 131 s. 40) and the Town of Rowley Wetlands Protection Bylaw.

Signed: _____

(PROPERTY OWNER)

(DATE)

Rev. 7/30/20

Town Hall Annex • Room 4 • 39 Central Street • P.O. Box 24 • Rowley, MA
01969



SECTION II – PROJECT NARRATIVE



PROJECT NARRATIVE

1.0 INTRODUCTION

On behalf of the Applicant, Lawrence Cassenti, and in association with Decoulos & Company, LLC, Lucas Environmental, LLC (LE) is pleased to submit this Request for Determination of Applicability (RDA) to the Rowley Conservation Commission for proposed farm maintenance and improvement activities at the Chrislar Horse Farm and Equestrian Center, located at 944 Haverhill Street in Rowley, Massachusetts (the “Study Area”). The primary purpose and need for the proposed activities are for horse and rider safety. An Order of Conditions (OOC), MassDEP File # 63-0726 was recently issued by the Rowley Conservation Commission (RCC) on May 5, 2022, for work associated with the construction of a new horse paddock at Chrislar Horse Farm (see Appendix C). The proposed work is separate from the OOC permitted activities.

The proposed work consists of agricultural maintenance and improvement activities, as defined under 310 CMR 10.04, that are exempted from the Wetlands Protection Act (WPA). As stated in the WPA, the provisions of the WPA shall not apply to “...work performed for normal maintenance or improvement of land in agricultural use or in aquacultural use...”.

The work is also exempted from the Bylaw, as defined in Bylaw Section V.2. for “normal maintenance of land in agricultural use, as defined in 310 CMR 10.04 Agriculture (b), and normal improvement of land in agricultural use, as defined in 310 CMR 10.04 Agriculture (c).”

Specifically, proposed activities include maintaining outdoor training ring and paths, pruning of shrubs and trees for horse and rider safety, repair, replacement and addition of paddock and pasture fences, maintenance of existing drainage structures, and maintenance of the existing horse tracks. Proposed activities will occur within Bordering Vegetated Wetlands (BVW), Inland Bank, and the 100-Foot Buffer Zone to these resource areas.

This RDA is submitted in accordance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.) and the Rowley Wetlands Protection Bylaw and associated Regulations. This project narrative describes the existing conditions, wetland resource areas, proposed design, project impacts, and regulatory compliance for work within jurisdictional areas on the site. Decoulos & Company, LLC has prepared the attached Project Plans (2 sheets).

2.0 EXISTING CONDITIONS

The 10.2-acre parcel of land (Parcel ID 4-15-2) is currently utilized as the Chrislar Horse Farm and Equestrian Center which includes a residence, a 40-stall barn, indoor and outdoor training rings, several paddocks, a grazing pasture, and a training track (See Figure 1 – USGS Map and Figure 2 – Aerial Map).

The parcel is bound to the north by Haverhill Street, to the east by residential property, to the south by forested land of the Georgetown-Rowley State Forest, and to the west by residential property. Wetlands are present in the western, eastern, and southern portions of the property.

A previously permitted man-made drainage swale is present along the western edge of the training track. Muddy Brook is located approximately 1,000 feet west of the Study Area, where it is mapped as intermittent, and approximately 235 feet to the north of the Study Area, where it is mapped as perennial.

Elevations range from approximately 90 feet (NAVD 88) along the southern edge of the site to elevation 71 feet or lower within at the central and western portions of the property. Under existing conditions, stormwater drains to both the north and south within a drainage swale along the western edge of the training track and northerly paddocks, to a culvert that crosses under the existing paddock areas where it combines with other drainage pipes before discharging to an intermittent stream at the eastern property line.

A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage and Endangered Species Program (NHESP) indicates that the Study Area is not located within Estimated Habitat of Rare Wildlife or within Priority Habitat of Rare Species (See Figure 3 – NHESP Map). No Certified Vernal Pools (CVP) under the jurisdiction of the Wetlands Protection Act Regulations (310 CMR 10.00 et seq.) or the Massachusetts Endangered Species Act (321 CMR 10.00 et seq.) occur within proximity to the proposed work. A CVP and a Potential Vernal Pool (PVP) are mapped approximately 275 feet south of the property, well away from any proposed work.

According to the July 3, 2012 FEMA Flood Insurance Rate Map (FIRM) for Essex County, Massachusetts, Map Number 25009C0254F, the Study Area is located in a Zone X Area of Minimal Flood Hazard, which is classified as areas outside the 0.2% Annual Chance Flood Hazard (500-year floodplain; See Figure 4 – FEMA Map). As no portion of the site is within the mapped 100-year floodplain, Bordering Land Subject to Flooding (BLSF) is not present within the Study Area.

The Study Area is not located within an Area of Critical Environmental Concern (ACEC) or Outstanding Resource Water (ORW). All but the northern edge of the property is located within a Zone II MassDEP Wellhead Protection Area (Zone II #420, Rowley Water Department). As indicated on the most recent USGS US Topo Map (Georgetown, Massachusetts Quadrangle, 2021), no perennial streams are mapped within 200 feet of the Study Area, the closest being Muddy Brook approximately 250 feet north of the Study Area.

3.0 WETLAND RESOURCE AREAS

Professional Wetland Scientists (PWS) from LE conducted a site investigation at 944 Haverhill Street (Assessor's Parcel ID Map 4, Parcel 15, Lot 2) in Rowley, Massachusetts on October 14, 2020, January 21, 2021, and April 7, 2021 to determine if wetland resources were present within the Study Area.

The investigation was performed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 *et seq.*); Section 404 of the Clean Water Act (33 U.S.C. 1344); Massachusetts Department of Environmental Protection (MassDEP) publication "Delineating Bordering Vegetated Wetlands" under the Massachusetts Wetlands Protection Act (1995); the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987); and the Northcentral and Northeast Regional Supplement (2012).

The wetland resource areas identified within the Study Area include BVW and Inland Bank, as well as the 100-Foot Buffer Zone and Zone II Groundwater Protection Area under the Bylaw. The wetland resource boundaries at the site, as indicated on the attached Project Plans, were recently approved through an Order of Conditions issued by the RCC for work associated with construction of a new paddock (See Appendix C). Under the WPA and Bylaw, the wetland resource areas on and near the site are regulated as follows.

3.1 Inland Bank – 310 CMR 10.54

Section 310 CMR 10.54 of the WPA defines a Bank as *the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level.* Under the Bylaw, the same definition applies. Inland Bank is present within the Study Area along a man-made drainage swale located along the western edge of the training track. The delineated Bank is described below.

3.2 Bordering Vegetated Wetland – 310 CMR 10.55

Section 310 CMR 10.55 of the WPA defines BVW as *freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.* Under the Bylaw, the same definition applies. The delineated BVW areas are described below.

3.3 Resource Area Descriptions

Inland Bank 1

Inland Bank is associated with a man-made drainage swale located along the western edge of the training track, generally along the tree line. This area consists of a shallow swale that collects runoff from both the north and south and directs it to a culvert that crosses under the property and discharges to an intermittent stream along the eastern property line.

This resource would be considered an intermittent stream under the WPA and Rowley regulations and LE delineated the associated Bank with blue flagging tape numbered sequentially BF1-1 to BF1-50. Vegetation within the swale consists variably of grasses and low herbaceous species in locations and dense shrub growth including speckled alder (*Alnus incana*), multiflora rose (*Rosa multiflora*) and Oriental bittersweet (*Celastrus orbiculatus*) in other locations. Forty-five linear feet of this Bank is proposed to be filled and culverted in order to provide access to the proposed new paddock area under Order of Conditions, MassDEP File #63-0726, issued on May 5, 2022.

Wetland A

Wetland A is located generally between the training track and the western property line. LE delineated Wetland A with pink flagging tape numbered sequentially WFA-1 to WFA-102. This wetland consists of a red maple swamp with common vegetation including red maple (*Acer rubrum*), sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinium corymbosum*), northern arrowwood (*Viburnum recognitum*), winterberry holly (*Ilex verticillata*), common elderberry (*Sambucus nigra*), glossy buckthorn (*Frangula alnus*), pussy willow (*Salix discolor*), jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), and bristly dewberry (*Rubus hispidus*). Common vegetation in adjacent uplands includes red oak (*Quercus rubra*), white pine (*Pinus strobus*), black cherry (*Prunus serotina*), white oak (*Quercus alba*), common buckthorn (*Rhamnus cathartica*), pokeweed (*Phytolacca americana*), Oriental bittersweet, multiflora rose, and eastern hayscented fern (*Dennstaedtia punctilobula*).

Soils within the wetland were generally dark, loamy fine sand with shallow redoximorphic features over a cemented hardpan generally occurring 10 to 12 inches below the surface. Upland soils were characterized by a deeper hardpan and B-horizons of chroma 4 with no redoximorphic features observed in the upper part of the soil. Indicators of wetland hydrology include seasonal inundation and saturation, drainage patterns, and high groundwater. Local, state, and federal boundaries are coincident.

Wetland B

Wetland B is located generally between the training track and the eastern property line. Vegetation in this wetland is separated from Wetland C by the training track; however, there are areas of hydric soil connecting between the two areas. LE delineated Wetland B with pink flagging tape numbered sequentially WFB-1 to WFB-22. This wetland does not appear to border on any stream east of the Study Area. This wetland consists of a red maple swamp with vegetation similar to that described for wetland A. Wetland B soils generally consist of a histic epipedon or shallow depleted matrix, with upland soils exhibiting a chroma 3 or 4 B-horizon. Indicators of wetland hydrology include seasonal inundation and saturation, drainage patterns, and high groundwater. Local, state, and federal boundaries are coincident.

Wetland C

Wetland C includes portions of fenced pasture and paddock areas and is located within the perimeter of the training track. Vegetation in this wetland is separated from Wetlands A and B by the training track. This wetland does not appear to border on any stream and has drain pipes along its east and west boundaries; however, there are areas of hydric soil across the track connecting between this wetland and both Wetland A and B. LE delineated Wetland C with pink flagging tape numbered sequentially WFC-1 to WFC-33. This wetland consists of both vegetated wet pasture and bare soil areas within the riding paddocks. Wetland C soils generally consist of a shallow depleted matrix, with adjacent upland soils exhibiting a chroma 3 or 4 B-horizon. Indicators of wetland hydrology include seasonal inundation and saturation, drainage patterns, and high groundwater. Local, state, and federal boundaries are coincident.

Wetland D

Wetland D is located off-site near the southwest property corner. The 100-Foot Buffer Zone from this wetland extends onto the property. This wetland borders on a ponded area located south of the site (the location of mapped CVP and PVP). LE delineated Wetland D with pink flagging tape numbered sequentially WFD-1 to WFD-6.

This wetland consists of a relatively open canopy red maple swamp with vegetation similar to that described for Wetland A. Wetland D soils are generally similar to that described for Wetland A; however, are somewhat deeper to the restrictive layer, with adjacent upland soils again exhibiting a chroma 3 or 4 B-horizon. Indicators of wetland hydrology include seasonal inundation and saturation, drainage patterns, and high groundwater. Local, state, and federal boundaries are coincident.

Wetland E

Wetland E is located along the eastern property line at the point where the site drainage pipes discharge to the intermittent stream. LE delineated Wetland E with pink flagging tape numbered sequentially WFE-1 to WFE-5. This wetland borders on an intermittent stream that flows to the east, east of the Study Area. This wetland consists of a red maple swamp with vegetation similar to that described for Wetland A, with the addition of eastern hemlock (*Tsuga canadensis*). Soils were not evaluated within this wetland as it was off-site beyond a fenced area. Indicators of wetland hydrology include seasonal inundation and saturation, drainage patterns, and high groundwater. Local, state, and federal boundaries are coincident.

4.0 PROPOSED WORK

The proposed project involves farm maintenance and improvement activities, as defined under 310 CMR 10.04, that are exempted from the Wetlands Protection Act (WPA). As stated in the WPA, the provisions of the WPA shall not apply to “...work performed for normal maintenance or improvement of land in agricultural use or in aquacultural use...” The project meets the definitions of Land in Agricultural Use, Normal Maintenance of Land in Agricultural Use, and Normal Improvement of Land in Agricultural Use within the regulated areas.

The work is also exempted from the Bylaw, as defined in Bylaw Section V.2. for “normal maintenance of land in agricultural use, as defined in 310 CMR 10.04 Agriculture (b), and normal improvement of land in agricultural use, as defined in 310 CMR 10.04 Agriculture (c).”

Specifically, the proposed work includes the following:

1. In pasture Areas #1 and #2, shallow depressions will be brought to grade by filling with structural fill and geotextile cloth, loamed, and seeded. These depressions appear to be old stumps or stump dumps that have subsided over the years as the wood decayed and will be restored to grade for normal and safe horse activity and feeding.
2. The drainage channel along the western edge of the track and paddocks #2 to #5, will be regraded to maintain a channel configuration to eliminate a deep area where it appears an old stump dump has subsided. The channel will be regraded to meet the up and down gradient channel banks and depths. This subsided area is generally in the area of BF1-31 to 37.
3. Maintenance of the drainage channel between Paddocks #2 and #6, including the settling basin, to provide clear flowing drainage to the 12-inch corrugated metal pipe (CMP) near wetland flag BF1-43. Subsequent to the initial regrading, the channel and settling basin will be kept clean of woody debris/leaves and any trash to maintain drainage. This routine maintenance is to be done by non-mechanized equipment.

4. A post and rope or other relatively soft barrier will be added between the restored channel and the horse track from approximately BF1-31 to 37 to act as a visual barrier to horses and riders.
5. The horse track will be elevated sufficiently, approximately 1.5 feet, to keep it from flooding. This will require addition of pervious structural fill and a geotextile layer and subdrains (such as geotextile wrapped crushed stone beds under the track to discharge groundwater and surface flows from the pasture to the drainage channel).
6. Sandy soils will be recovered from the stockpiles in the northeast corner of the lot (from outside the 25-Foot No Disturb Zone) for regrading the Pasture and track (See Project Plans).
7. The fence line that has subsided in the vicinity of the track will be restored. Paddock fencing will be repaired/replaced as needed.
8. New fencing will be added within the existing Pasture #1 and Pasture #2. The proposed fencing will consist of four-inch by four-inch by eight-foot pressure treated poles every eight feet with one-inch by six-inch by sixteen-foot pressure treated boards (as the existing fence is for Paddock #1 and the existing pasture perimeter fencing).
9. Paddocks #1 to #6 will be regraded as needed to maintain dry surface conditions, drainage, and safe contours.
10. Mowing all areas and pruning shrubs and trees will be pruned to eliminate risk to horses, riders, and farm structures.
11. The existing drainage system will be maintained/repaired/replaced as needed to maintain existing drainage patterns and flows.
12. General facility and grounds maintenance related to the training, rearing, and breeding of livestock.

Erosion and sedimentation control Best Management Practices (BMPs) have been incorporated into the project design in order to control runoff and prevent siltation to the wetland resource area during construction (See Plans). This will consist primarily of a compost filter sock. Erosion controls will be installed prior to the start of activities and will be maintained until disturbed soils are stabilized.

5.0 SUMMARY

The proposed project involves farm maintenance and improvement activities at the Chrislar Horse Farm and Equestrian Center. Proposed work will occur within BVW, Inland Bank, and the 100-Foot Buffer Zone to these resource areas; however, the proposed work consists of agricultural maintenance and improvement activities, as defined under 310 CMR 10.04, and is exempted from the Wetlands Protection Act (WPA), as well as the Bylaw per Section V.2.

It is LE's opinion, based on our professional education, training, and familiarity with the project site, that the proposed work will not have any adverse effect on any interests identified in the Wetlands Protection Act or the Rowley Wetlands Protection Bylaw, and the project is designed to minimize adverse effects on the resource areas as follows:

- The project is designed to avoid and minimize wetland impacts to the extent practicable;



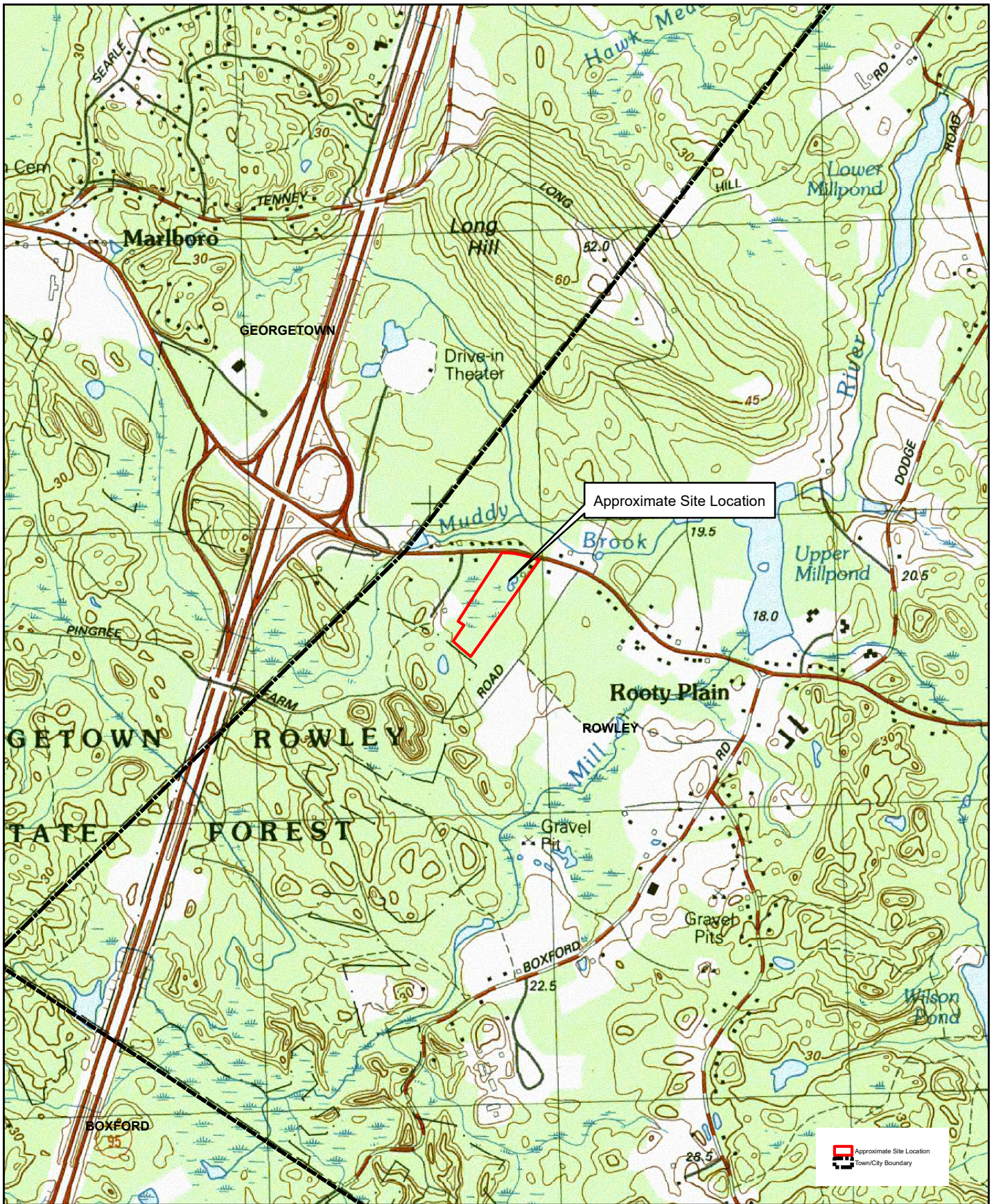
PROJECT NARRATIVE

- The project meets the definitions of Land in Agricultural Use, Normal Maintenance of Land in Agricultural Use, and Normal Improvement of Land in Agricultural Use within the regulated areas.; and is therefore exempted from regulation under the WPA; and
- Erosion controls will be installed prior to the start of construction and be maintained throughout construction until the site is stabilized.

The proposed design achieves the goals of the Applicant, while being sensitive to adjacent regulated resource areas. Accordingly, the Applicant respectfully requests that the Conservation Commission issue a Negative Determination, approving the project as described in this RDA application and as shown on the attached Project Plans.

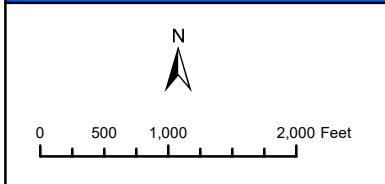


SECTION III – FIGURES



Approximate Site Location
 Town/City Boundary

Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Topographic Quadrangle Images

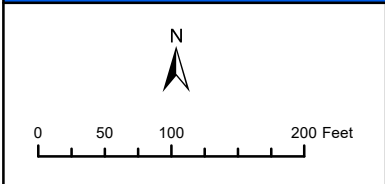


USGS Map
 Chrislar Horse Farm
 944 Haverhill Street
 Rowley, MA 01969

FIGURE 1



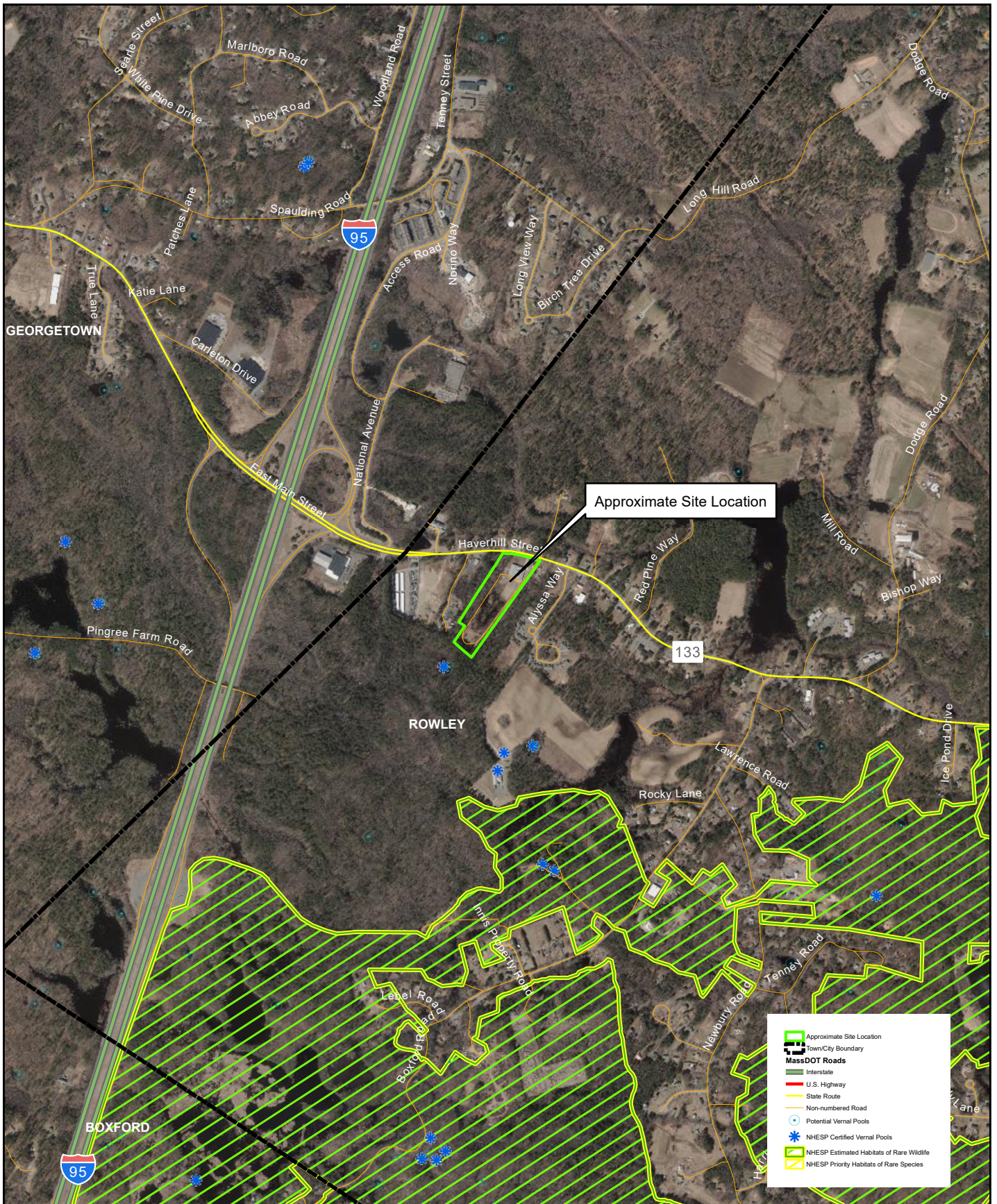
Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 15cm (2019)



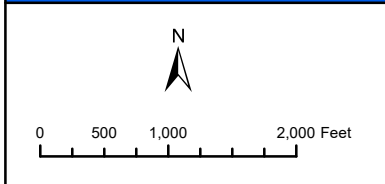
Aerial Map
Chrislar Horse Farm
944 Haverhill Street
Rowley, MA 01969

FIGURE 2

LUCAS
 ENVIRONMENTAL, LLC



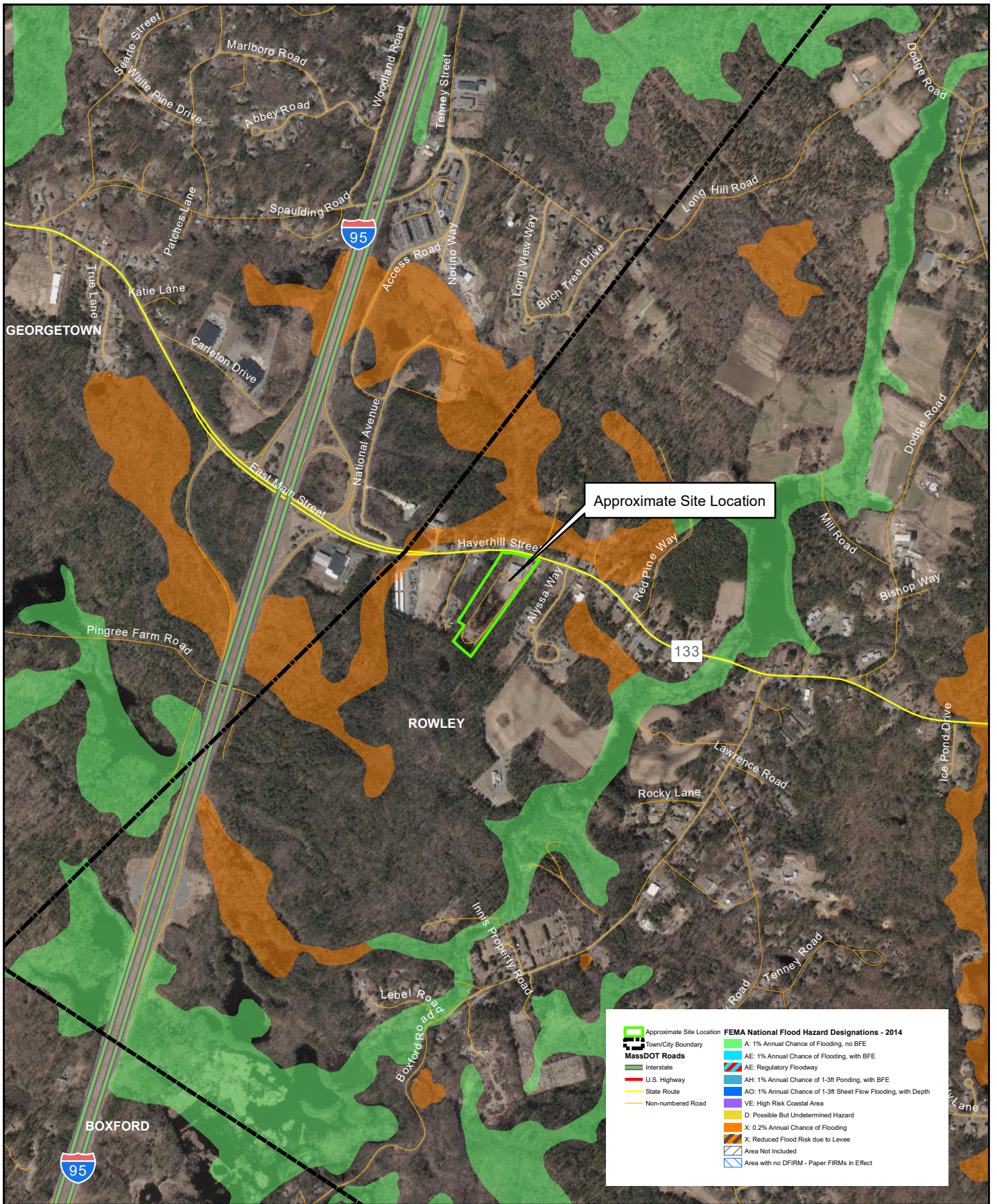
Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 15cm (2019)



NHESP Map
Chrislar Horse Farm
944 Haverhill Street
Rowley, MA 01969

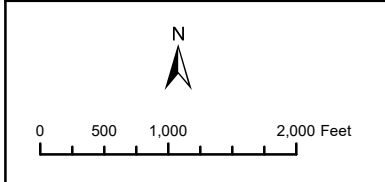
FIGURE 3

LUCAS
 ENVIRONMENTAL, LLC



Approximate Site Location	FEMA National Flood Hazard Designations - 2014
Town/City Boundary	A: 1% Annual Chance of Flooding, no BFE
MassDOT Roads	AE: 1% Annual Chance of Flooding, with BFE
Interstate	AE: Regulatory Floodway
U.S. Highway	AH: 1% Annual Chance of 1-3ft Ponding, with BFE
State Route	AD: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with Depth
Non-numbered Road	VE: High Risk Coastal Area
	D: Possible But Undetermined Hazard
	X: 0.2% Annual Chance of Flooding
	X: Reduced Flood Risk due to Levee
	Area Not Included
	Area with no DFIRM - Paper FIRMs in Effect

Source: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs; USGS Color Ortho Imagery - 15cm (2019)



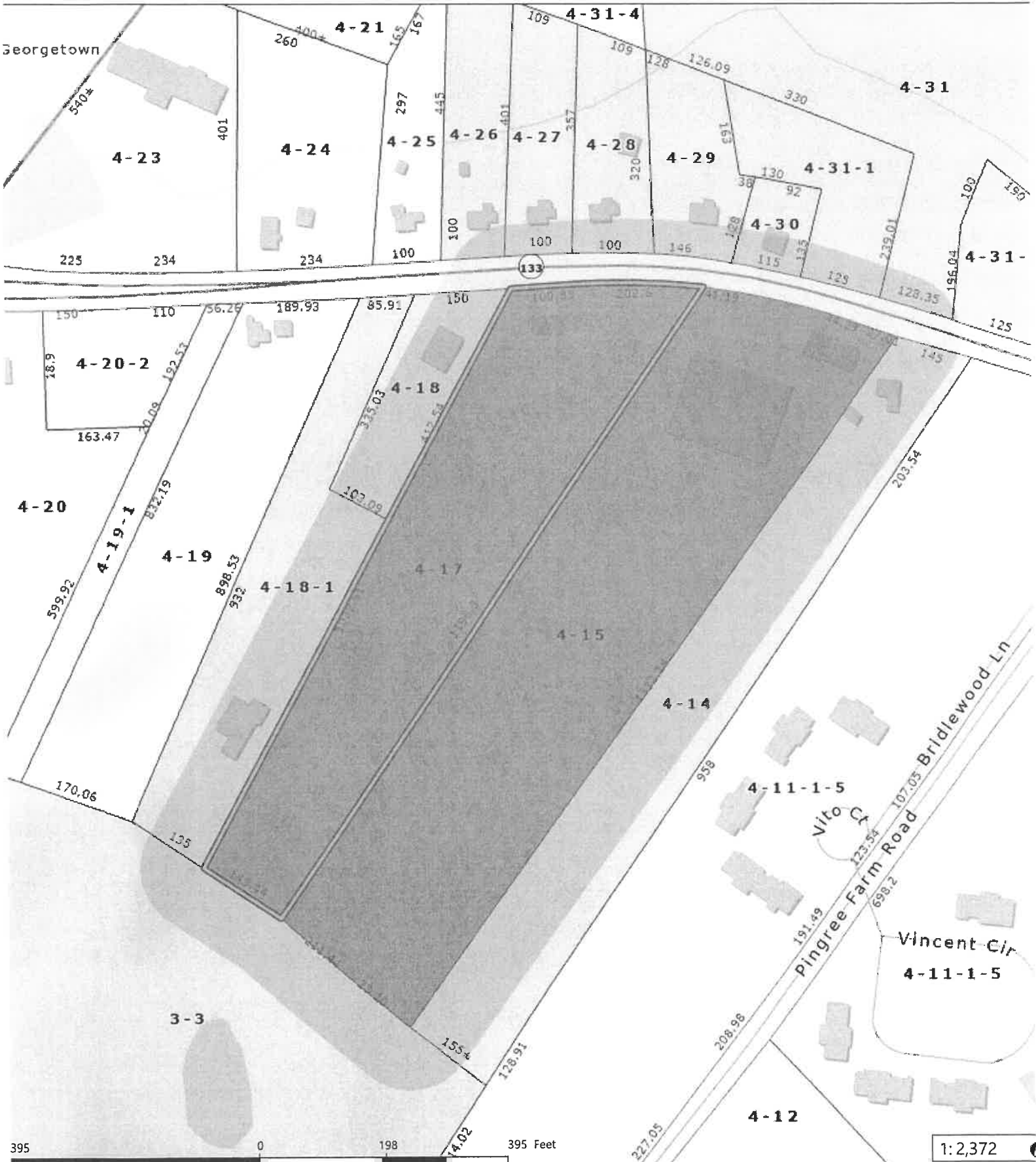
FEMA Map
Chrislar Horse Farm
944 Haverhill Street
Rowley, MA 01969

FIGURE 4

LUCAS
 ENVIRONMENTAL, LLC

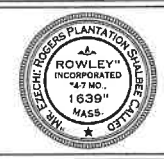
Town of Rowley

01/13/202



Data Sources: Produced by Merrimack Valley Planning Commission (MVPC) using data provided by the Town of Rowley & MassGIS/MassGIS.

MVPC AND THE TOWN OF ROWLEY MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF ROWLEY AND MVPC DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION



- | | | | | | |
|---------------------|-----------------------|------------|------------|------------|---------|
| Municipal Boundary | Roads | Interstate | Major Road | Local Road | Parcels |
| Building Footprints | Hydrographic Features | Streams | | | |

1:2,372

FIGURE 5



SECTION IV – APPENDICES



APPENDIX A

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC DOCUMENTATION

DATE: October 14, 2020



Photograph 1: View of wetland near flag WFA-5.



Photograph 2: View of wetland edge near flag WFA-17.

PHOTOGRAPHIC DOCUMENTATION

DATE: October 14, 2020



Photograph 3: View of wetland in general area between flags WFA-17 to WFA-25.



Photograph 4: View of wetland edge near flag WFA-40.

PHOTOGRAPHIC DOCUMENTATION

DATE: October 14, 2020

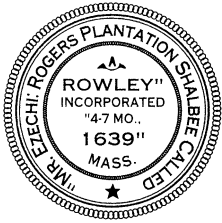


Photograph 5: View of wetland edge near flag WFA-44.



Photograph 6: View of wetland edge and drainage swale near flag WFA-47.

FILING FEE INFORMATION



Town of Rowley Conservation Department

Town Hall Annex – Room 4
 39 Central St, P.O. Box 24, Rowley, MA 01969
 Phone: 978-948-2330 Fax: 978-948-7196
conservation@townofrowley.org

WETLAND BYLAW FEE CALCULATION FORM

Property Address: 944 Haverhill Street	Map: 4	Parcel: 15	Lot: 2
APPLICATION NAME / ACTIVITY	LOCAL BYLAW FEE	# of Activities or Measurement	Subtotal
Request for a Determination of Applicability (RDA)	\$75	1	\$75.00
Abbrev. Notice of Resource Area Delineation (ANRAD)			
Single Family House Project	\$1/linear foot, first 100'; \$0.50/lf, second 100'; \$0.10/lf, each additional foot		
All Other Projects	*\$1/linear foot, first 1000'; \$0.50/lf, second 1000'; \$0.10/lf, each additional foot		
Notices of Intent (NOI)			
Category 1 Activity	\$100		
Category 2 Activity	\$250		
Category 3 Activity	\$525		
Category 4 Activity	\$725		
Category 5 Activity	\$2/foot		
Category 6 Activity - If no ANRAD was filed for the project site, then a local Cat. 6 fee must be paid in accordance with the ANRAD fee schedule	See ANRAD fee schedule		
Request to Amend an OOC (RAOC)	\$100		
Resource Area Alterations (for NOI & RAOC)			
Buffer Zone, 50'-100' from resource area boundary	\$0.05 / square foot		
Buffer Zone, 25'-50' from resource area boundary	\$0.10 / square foot		
Buffer Zone, 0'-25' from resource area boundary	\$0.25 / square foot		
Bordering Vegetated Wetlands & Salt Marsh	\$0.35 / square foot		
Bank	\$5 / linear foot		
Land Under Water & Waterways	\$0.35 / square foot		
Bordering Land Subject to Flooding & CLSSF**	\$0.05 / square foot		
***Riverfront Area only	\$0.05 / square foot		
Isolated Vegetated Wetlands	\$0.35 / square foot		
Land within Groundwater Protection Area Zone I	\$0.25 / square foot		
Land within Groundwater Protection Area Zone II	\$0.05 / square foot		
Other Local-only Jurisdictional Resource Areas	\$0.05 / square foot		
Extension Permit	\$100		
Certificate of Compliance	Projects under one acre in size: \$100 - over an acre in size \$250		
For filings resulting from enforcement action, double the Local Bylaw Fee Total			
LOCAL BYLAW FEE TOTAL			\$75.00
As Determined by the Commission, Fee Total not to exceed \$15,000 except Enforcement			
NOTES:			
*Local Bylaw Fee maximum of \$100, if, when determined necessary by Commission, applicant agrees to ANRAD review by outside consultant under M.G.L. Ch. 44, sec. 53G			
**Coastal Land Subject to Storm Flowage			
***Local Bylaw Fees for RDA, NOI, & RAOC increase 50% when project is also proposed within a Riverfront Area			
Local Bylaw Fees passed by a Unanimous vote of the Commission on 10/1/2019, effective 10/2/2019			

ORDER OF CONDITIONS



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 63-0726
 MassDEP File #

 eDEP Transaction #
 Rowley
 City/Town

A. General Information

Please note:
 this form has been modified with added space to accommodate the Registry of Deeds Requirements

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



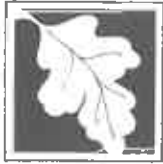
1. From: Rowley Conservation Commission
 Conservation Commission

2. This issuance is for (check one):
 a. Order of Conditions b. Amended Order of Conditions

3. To: Applicant:
 Lawrence Cassenti
 a. First Name b. Last Name
 Chrislar Horse Farm and Equestrian Center
 c. Organization
 944 Haverhill St
 d. Mailing Address
 Rowley MA 01969
 e. City/Town f. State g. Zip Code

4. Property Owner (if different from applicant):
 Lawrence Cassenti
 a. First Name b. Last Name
 944 Haverhill Street Realty Nominee Trust
 c. Organization
 944 Haverhill St
 d. Mailing Address
 Rowley MA 01969
 e. City/Town f. State g. Zip Code

5. Project Location:
 944 Haverhill Street Rowley
 a. Street Address b. City/Town
 4 15 Lot 2
 c. Assessors Map/Plat Number d. Parcel/Lot Number
 Latitude and Longitude, if known: d m s e. Longitude
 _____ d m s _____ d m s



Massachusetts Department of Environmental Protection
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A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
Essex South Registry of Deeds

a. County	b. Certificate Number (if registered land)	
<u>36005 40215</u>	<u>203, 205, 332, 335</u>	
c. Book	d. Page	
<u>1/25/2022</u>	<u>4/4/2022</u>	<u>5/5/2022</u>

7. Dates: a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
Chrislar Horse Farm, Rowley, Massachusetts (4 sheets)

a. Plan Title	James J. Decoulos	
<u>Decoulos & Company, LLC</u>	b. Prepared By	
<u>3/30/2022</u>	c. Signed and Stamped by	
d. Final Revision Date	<u>As Noted</u>	
	e. Scale	
f. Additional Plan or Document Title	g. Date	

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

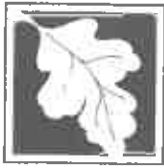
Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- | | | |
|---|--|---|
| a. <input checked="" type="checkbox"/> Public Water Supply | b. <input type="checkbox"/> Land Containing Shellfish | c. <input checked="" type="checkbox"/> Prevention of Pollution |
| d. <input checked="" type="checkbox"/> Private Water Supply | e. <input type="checkbox"/> Fisheries | f. <input checked="" type="checkbox"/> Protection of Wildlife Habitat |
| g. <input checked="" type="checkbox"/> Groundwater Supply | h. <input checked="" type="checkbox"/> Storm Damage Prevention | i. <input type="checkbox"/> Flood Control |

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



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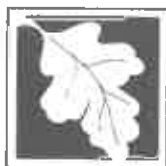
B. Findings (cont.)

Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. **Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a)** 5.00
a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. <input type="checkbox"/> Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. <input type="checkbox"/> Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	_____ a. square feet	_____ b. square feet		
	_____ c. c/y dredged	_____ d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input type="checkbox"/> Coastal Beaches	_____ a. square feet	_____ b. square feet	_____ c. nourishment cu yd	_____ d. nourishment cu yd
14. <input type="checkbox"/> Coastal Dunes	_____ a. square feet	_____ b. square feet	_____ c. nourishment cu yd	_____ d. nourishment cu yd
15. <input type="checkbox"/> Coastal Banks	_____ a. linear feet	_____ b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	_____ a. square feet	_____ b. square feet		
17. <input type="checkbox"/> Salt Marshes	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	_____ a. square feet	_____ b. square feet		
	_____ c. c/y dredged	_____ d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	_____ a. c/y dredged	_____ b. c/y dredged		
21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____ a. square feet	_____ b. square feet		
22. <input type="checkbox"/> Riverfront Area	_____ a. total sq. feet	_____ b. total sq. feet		
Sq ft within 100 ft	_____ c. square feet	_____ d. square feet	_____ e. square feet	_____ f. square feet
Sq ft between 100-200 ft	_____ g. square feet	_____ h. square feet	_____ i. square feet	_____ j. square feet



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B. Findings (cont.)

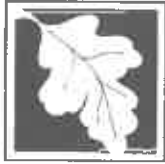
* #22. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

22. <input type="checkbox"/> Restoration/Enhancement *:	0.00	0.00
	a. square feet of BVW	b. square feet of salt marsh
23. <input type="checkbox"/> Stream Crossing(s):	0	0
	a. number of new stream crossings	b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 5/5/2025 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



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C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
"File Number 63-0726 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



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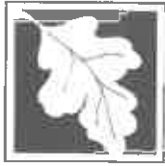
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
19. The work associated with this Order (the "Project")
- (1) is subject to the Massachusetts Stormwater Standards
 - (2) is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
- i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii.* as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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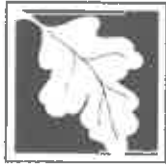
C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See Attached Pages Incorporated Herein and Made Part of This Order

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 63-0726
 MassDEP File #
 eDEP Transaction #
 Rowley
 City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No
2. The Rowley Conservation Commission hereby finds (check one that applies):
Conservation Commission
- a. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw	2. Citation
Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.	

- b. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

<u>Wetlands Protection Bylaw</u>	<u>III A 2, 5 and</u>
1. Municipal Ordinance or Bylaw	2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.
 The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

The variable width No Cut/No Disturbance Zone as indicated on the approved plan shall be maintained to protect the wetland resource areas. The approved 25' minimum No Cut/No Disturbance Zone shall be kept in a natural state in perpetuity and marked with permanent signage.



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E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

5/5/2022

Please indicate the number of members who will sign this form.

1. Date of Issuance

This Order must be signed by a majority of the Conservation Commission.

4

2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

*The names typed below represent the intent to sign the foregoing document electronically in accordance with MGL c 110G and pursuant to the Commission's electronic signature vote 10/27/20 and recorded 10/30/20 at the Essex South Registry of Deeds Bk 39120/Pg 588.

Signature	/s/ Daniel R. Shinnick, Chairman
	Printed Name
Signature	/s/ Jennifer A. Haag
	Printed Name
Signature	/s/ Howard R. Terrien
	Printed Name
Signature	/s/ Ann S. Witzig
	Printed Name
Signature	
	Printed Name
Signature	
	Printed Name
Signature	
	Printed Name

by hand delivery on

by certified mail, return receipt requested, on

5/5/2022

Date

Date



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

63-0726

MassDEP File #

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Rowley

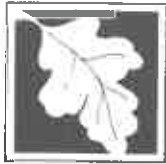
City/Town

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
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 Rowley
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G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Rowley Conservation Commission
 Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Rowley Conservation Commission
 Conservation Commission

Please be advised that the Order of Conditions for the Project at:

944 Haverhill Street
 Project Location

63-0726
 MassDEP File Number

Has been recorded at the Registry of Deeds of:

Essex South Registry of Deeds
 County

Book

Page

for: Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

5/5/2022

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

2038

State and Municipal Conditions

This Order of Conditions addresses proposed construction of a horse paddock (9,425 sq. ft.) requiring filling of 9,325 sq. ft. of 100' Buffer Zone to Bordering Vegetated Wetlands (BVW) and intrusion into 1,911 sq. ft. of restricted No Cut/No Disturbance Zone directly adjacent to the delineated Bordering Vegetated Wetlands. The intrusion is compensated for by proposing 4,840 sq. ft. of expanded No Cut/No Disturbance Zone along the northern side property boundary line. The proposed filling of BVW was eliminated. Proposed activities include tree clearing, grading, paddock construction, and a stormwater quality swale.

The Rowley Conservation Commission (RCC) makes the following findings:
The property contains 100' Buffer Zone to Bordering Vegetated Wetlands, Bordering Vegetated Wetlands, Intermittent Stream, Inland Bank, and DEP Approved Groundwater Protection Area Zone II.

Unless extended this Order of Conditions (OC) DEP # 63-0726 will expire on May 5, 2025.

GENERAL CONDITIONS (Continued from page 7)

Please review the preceding General Conditions on the DEP WPA Form 5 Section C. 1 through 20, particularly Condition 1.

21. Work on this project site **shall be performed according to the following listed plans and documents**. Should any conflicts be found to exist between these plans and documents and the conditions of this OC, the RCC/staff shall be contacted for a clarification:
 - a. Notice of Intent prepared by Lucas Environmental, LLC (500A Washington St, Quincy, MA 02169), submitted 1/25/22 revised application and narrative dated 3/21/22;
 - b. Plan entitled "Chrislar Horse Farm, Rowley, MA" (consisting of 4 sheets), prepared by Decoulos & Company (185 Alewife Brook Parkway, Cambridge, MA 02138), dated 1/5/22, last revised 3/30/22;
22. **Proof of recording** this OC at the Registry of Deeds must be submitted to the RCC **within sixty (60) days** of permit issuance (proof may be a copy of the recorded document with Registry stamp showing date, book and page of recording).
23. The OC granted to the Applicant/Property Owner in this permit decision **does not imply consent or approval** of any other board, commission or legal authority of any kind. The Applicant is **responsible for obtaining** all other required consents and approvals.
24. This Order of Conditions **shall apply to any successor(s) in interest or successor(s) in control and shall survive the issuance of the Certificate of Compliance**. Within ten (10) calendar days after the transfer of ownership of the subject parcel, in whole or in part, including lots conveyed under individual deeds, the RCC shall be notified in writing by the seller of the name, address (if different from property address) and contact information including telephone number(s) and email address (if available) of the new Property Owner. Within ten (10) calendar days after such transfer, a notarized affidavit shall be filed with the RCC by the seller, signed by the seller and the buyer, stating that the new Property Owner(s) has read and understood the Order of Conditions and all terms applicable to the purchased lot and intends to comply with all provisions of the Order of Conditions, including obtaining of a Certificate of Compliance if the seller has not already done so. In addition, this affidavit shall include the following sentence: "I, _____, the new Property Owner of _____, understand that any work within 100' of wetlands or within 200' of perennial streams requires approval by the RCC and that no dumping of yard waste, brush, or other materials is allowed in wetlands." This letter shall have attached a plan of the lot accurately indicating the wetland boundary, location of building(s), No Cut/No Disturbance Zone(s) and any other relevant features. All current and future tenants shall be provided with a copy of this Order of Conditions and an affidavit (or copy of the lease) acknowledging receipt of this Order of Conditions

and signed by the Property Owner and the tenant shall be provided to the RCC within thirty (30) days of the commencement of the tenancy.

25. With appropriate notice, members and agents of the RCC, **shall have the right to enter at a reasonable hour and inspect the property to evaluate compliance** with this OC, the Wetlands Protection Act, Wetlands Protection Bylaw, and require submittal of any data deemed necessary by the RCC/staff for that evaluation.
26. The Applicant shall abide by the **Town of Rowley Wetlands Protection Bylaw, Stormwater Management and Erosion Control Bylaw, Earth Removal Bylaw and all Protective-Zoning Bylaws** including Section 4.10: Floodplain District.
27. The on-site foreman, directing engineer or designated construction manager contractor **shall have a copy of this OC and the final approved plans at the site** and available for inspection during all phases of construction. It is the Applicant's responsibility to provide the contractors with a set of the approved documents, plans, and OC, and to ensure that the contractors are aware and follow the OC's provisions. This OC shall be made part of all project construction related documents. If the OC is not clear, the RCC/staff should be asked for clarification.
28. **Any change in the plans** approved under this OC, including those due to review by other boards or resulting from the aforementioned conditions, **must be submitted to the RCC in writing** for approval prior to implementation. The RCC/staff will decide whether the change is substantial enough to require a new Notice of Intent application or a request for an amendment to this OC. Any errors found in the plans or information submitted by the Applicant shall be considered as changes.
29. **Upon completion of this project or the issuance of an occupancy permit**, the Property Owner or his designee shall submit the following to the RCC to receive a Certificate of Compliance per Condition 12:
 - a. A **written request** from the Property Owner or his designee for a Certificate of Compliance (WPA Form 8A);
 - b. A **written statement from a Registered Professional Engineer of the Commonwealth** certifying that the work has been completed in compliance with this OC, documents, and the approved plans referenced herein (or approved revisions). Including photographic images documenting the installation of subsurface infiltrators on site prior to burial or placement of fill. Any discrepancies or deviations between the proposed plan and post-construction conditions shall be noted and explained.
 - c. An **as-built topographic plan** of the same scale as the approved plan, **signed and stamped by a Registered Professional Engineer or Land Surveyor of the Commonwealth**, showing post-construction conditions for the public record. This plan will include as-built elevations of all drainage ways constructed within 100' of any wetland or 200' of a perennial stream, distances to all structures, and all elevations within 100' of wetlands and 200' of perennial streams. The as-built plan must show all wetland resource area boundaries with associated buffer zones and any No Cut/No Disturbance Zones (called out by diagonal fill) taken from the plan(s) approved in this OC. The as-built plan must show elevations of all filled, altered, or replicated wetlands.
30. No driveway, footing, or roof drain with an above-ground or subsurface discharge, any garage floor drain, deck, addition, shed or pool, inconsistent with prior approved plans, **shall be installed within the 100' Buffer Zone to a wetland resource area or the 200' Riverfront Area without prior written permission** of the RCC.
31. Failure of the Applicant to comply with one or more individual conditions set forth in this OC **does not exonerate the Property Owner, successor in control, or successor in interest** of the

property described in the Notice of Intent in meeting or complying with the remaining conditions in this OC.

TIME LIMITS

32. All **disturbed areas in the Buffer Zone** will be stabilized by vegetation, heavy mulching, sodding, or matting **prior to November 1 each year**. No work within the Buffer Zone or resource areas may be done between **November 1 and March 15** of each year, unless given prior approval by the RCC/staff. After prior written request, approval shall be granted when the capacity to effectively manage disturbed soils, eliminate sedimentation and off-site transport of soils, and demonstrated ability to maintain site stability are verified to the satisfaction of the RCC/staff.

PROJECT SPECIAL CONDITIONS

33. The Applicant/Responsible Party **shall ensure a hazardous materials spill containment kit is maintained on site at all times** throughout construction. The kit **shall be appropriately sized** for the cumulative volumetric capacity of hazardous fluids contained by on-site equipment.
34. The Vegetation Management Area (designated on approved plan) **shall be capable of being pruned and selective thinning of woody stemmed vegetation solely for the purpose of allowing sight lines** for vehicles entering Haverhill Street from the applicant's property. This doesn't allow for mowing of the herbaceous layer but does allow for pruning and thinning of vegetation that obstructs visibility from three feet high to seven feet in height. Mature trees (3" dbh or more) shall be preserved if lower limbs can be pruned to allow a line of sight not obstructing oncoming traffic. This condition shall survive the expiration of this OC and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.
35. The property owner in consultation with the Conservation Agent/staff, **may engage in selective control and suppression of invasive plant species on the property on a seasonal basis** with approval of specific methods and timing of removal and methods utilized supported by best practices and current knowledge. **This shall be included as a continuing condition in perpetuity on the Certificate of Compliance.**

PRIOR TO CONSTRUCTION

Please review the preceding General Conditions 7, 8, and 9.

36. The Applicant shall **notify the RCC in writing** (by mail, fax or email) at least **48 hours before** any activity commences on site. At this time the Applicant **shall also supply the RCC with a list of names, addresses, emails, and emergency phone numbers of those parties responsible for compliance with this OC** on the site, including the EM, if there is one.
37. Prior to any work on site, the **wetland boundaries shall be clearly and prominently marked with flags or stakes and shall be confirmed** by the RCC/staff. These markers **shall be maintained until construction has been completed**. If markers disappear or are moved during construction, it will be the contractor, Property Owner, or responsible party's responsibility to have them replaced accurately, and to notify the RCC of this occurrence. While this OC is in effect, should any modification to the wetland delineations be found to be necessary by the RCC/staff, the Applicant **shall submit a revised plan** reflecting the modified delineations.
38. Prior to the commencement of work, and again prior to completion of construction and finish site grading, the Applicant **shall collect and remove by hand all trash, compost, and loose man-made debris** from the construction site, including regulated resource areas and buffer zones.
39. Prior to the commencement of any on-site activity other than the placement of erosion control and/or limit-of-work marker-stakes, **the Applicant shall arrange with the RCC/staff to conduct a Pre-Activity Meeting** between the Applicant and/or the Applicant's representative, the person(s)/supervisor responsible for the work.

40. **No clearing of vegetation, including trees, or disturbance of soil shall occur prior to the Pre-Activity Meeting.** Minimal disturbance of shrubs and herbaceous plants may be allowed prior to the Pre-Activity Meeting if absolutely necessary in order to place erosion control marker-stakes and to establish stakes designating the "limit of work" where required.
41. To insure the accuracy of the tree cutting, the RCC/staff **requires implementing a two color system for marking the limit of work line.** The trees on the edge of the limit of work line to be cut should be sprayed with orange marking paint on the stump and then at breast height. The trees on the other side of the limit of work line NOT to be cut should have yellow caution tape tied around the trunk to provide a visual distinction to inform the tree clearing firm to reduce the possibility of excessive clearing.
42. Prior to any work within 100' of wetland resource area(s) or within 200' of a perennial stream, **erosion control devices must be inspected and approved by the RCC/staff.** The Property Owner or his designee **shall meet with the RCC/staff to review the proposed work** and measures designed to mitigate any impact on the wetlands and ensure all of the conditions of this OC are understood.
43. It is the Applicant's responsibility to **ensure that the work to be performed hereunder will be properly supervised** by the design engineer and the wetlands biologist, or by persons of equivalent qualifications. Upon written request by the RCC/staff, within fourteen (14) days of the receipt of the request, the Applicant shall submit a report from the design engineer or wetlands biologist, or other qualified person, describing the project's compliance with this OC, and addressing any other concerns identified in the request relative to compliance to the Wetlands Protection Bylaw and the Wetlands Protection Act.
44. Every attempt to **prevent invasive plant species** from entering the site shall be taken. This is especially important in the drainage basins and wetland replication areas. **Machinery** that has been working where purple loosestrife or common reed (Phragmites) occur **shall be cleaned of plant parts and soil before entering the construction site.** The basins and replication area shall be checked monthly during the first growing season for evidence of invasive plant species. Purple loosestrife and common reed **shall be removed by hand immediately.** If the infestation cannot be controlled by hand removal, the RCC/staff shall request the contractor and Property Owner to submit an action plan to the RCC for approval.
45. **No additional clearing or grading** in the 100' Buffer Zone to wetlands, other than what is shown on the approved plans, may be done without written approval of the RCC/staff.

SEDIMENT AND EROSION CONTROLS

46. Accepted and usual methods for controlling sedimentation and erosion (e.g., straw wattles, bark mulch/compost filter sock, silt fence, staked hay bales, etc.) shall be used during all phases of construction to prevent material from entering wetlands and surface waters. **There shall be no erosion or sedimentation into wetlands and surface waters during any phase of construction or after completion of the project.** Installed erosion control shall be **properly maintained and kept in effective functioning condition** at all times.
47. **Work shall be sequenced and conducted to avoid or minimize problems from erosion and sedimentation** due to stripped slopes and grade changes over large areas. **Best Management Practices, such as outlined in the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas, shall be employed to maintain control over the site.** Should any of the proposed measures fail, the contractor and Property Owner shall immediately consult with the RCC/staff and design engineer to devise and implement protective measures so that the wetland resource areas are in no way damaged by erosion, siltation, or pollution.

48. If trucking and construction equipment access shall be directly off the traveled right of way then installation of **temporary gravel or crushed stone construction entrance/exit pad** (30' x 50' minimum) to reduce off site transport of soils thus reducing deposition into the roadway **Haverhill Street shall occur prior to earth disturbance activities**. Possible specifications are: 6–10 inch depth of 2-3 inch coarse aggregate over a geotextile fabric to stabilize the foundation.
49. Erosion controls shall be placed according to the final approved plan(s) referenced in Condition 21 above **prior to any activity on site. An engineer or surveyor will mark the locations**. If, during construction, **additional temporary erosion control (TEC)** is needed in the opinion of the RCC/staff or the erosion control monitor, it **shall be placed according to their direction**.
50. Temporary erosion control **shall consist of 9" to 12" bark mulch/compost filter sock correctly installed** with bare ground contact, overlapped ends, and anchored in place with wooden stakes not breaking the mesh as per manufacturer specifications (plan detail).
51. The erosion controls **shall function throughout the project to prevent erosion and sedimentation**. They will be **inspected and maintained routinely** by the Applicant or his contractor throughout the duration of the project and after every storm event of one half inch of precipitation or more within 24 hours. **Breaks in the line shall be immediately repaired** to prevent siltation into the wetlands. **An adequate stockpile of additional erosion control devices will be available on site** at all times for emergency or routine replacement and shall include materials to repair silt fences, filter sock, stone-riprap, filter dikes or other devices planned for use during construction.
52. **If soils are to be disturbed for longer than two months**, a temporary cover of rye or other grass (conservation mix) shall be established to prevent erosion. Once final grading is completed, loaming and seeding of each area shall be completed promptly. **Vegetative cover**, either temporary or permanent, **shall be established prior to winter**. If the season is not appropriate for plant growth, exposed soils shall be stabilized with jute netting, staked mulches, or other U. S. Natural Resource Conservation Service methods.
53. **The limit of work shall be the erosion control devices beyond which no work may occur**. The RCC reserves the right to require additional erosion control and storm damage prevention measures at any time if it deems necessary. **Erosion control devices shall be inspected regularly and after any major storm event (one-half inch of precipitation or more within 24 hours)**. Any entrapped silt or other materials shall be removed to an area outside the 100' Buffer Zone. Erosion control devices shall be replaced as necessary.
54. If the project site drains to existing inlet(s) (catch basins) on a public way, **then inlet control measures shall be installed and maintained for the duration of the construction activities** until the site is entirely stabilized.
55. The Property Owner or his designee **shall report any problems with erosion control immediately** to the RCC office at 978 948-2330.
56. **Erosion control devices and wetland flags shall remain in place until all disturbed surfaces have been stabilized with final vegetative cover**. Only upon inspection by the RCC/staff to verify establishment of full vegetative cover may authorization to remove the erosion control line be given.
57. **The contractor shall be responsible for erosion and sedimentation control on-site**. The contractor shall use a method of operation and construction and all necessary erosion and sedimentation control measures, even if not specified herein or on the plans, to minimize erosion damage on and off-site. *DEP/MCZM Stormwater Technical Handbook Volume II Best Management Practices* should be used as a guide for erosion and sedimentation control, but they do not replace good judgment, common sense and thoughtful, environmentally sensitive construction practices.

58. The RCC/staff reserves the right to impose additional conditions on portions of this project to mitigate any impacts pursuant to applicable law which could result from site erosion or any noticeable degradation of surface water quality discharging from the site.

SOIL STOCKPILES AND FILL STORAGE

59. Stockpiled earth and other materials shall be located on the upland side of the temporary erosion control or limit-of-work line and shall be stabilized to prevent erosion into wetland resource areas. If stockpiles sprout invasive plant species, the RCC/staff may direct that appropriate control methods be employed to combat the invasive plants.

STORMWATER MANAGEMENT

60. There shall be no direct discharge of runoff into streams or wetlands. Runoff from the site shall be directed overland to maximize groundwater recharge and cleansing of the runoff through contact with natural soils and vegetation. Discharges from detention basins shall be offset from any wetland resource areas. All discharges shall be rip rapped to minimize erosion.
61. Roof runoff shall be directed to a stormwater quality swale to provide groundwater recharge as depicted on the final approved plans. The system used shall meet the design criteria outlined in the DEP/MCZM *Stormwater Technical Handbook Volume II Best Management Practices*.
62. The proposed stormwater quality swale shall be effectively maintained and kept functioning in perpetuity. Maintenance shall be as proscribed in the DEP/MCZM *Stormwater Technical Handbook Volume II Best Management Practices*. This condition shall survive the expiration of this OC and be included as a continuing condition in perpetuity on the Certificate of Compliance.

OTHER CONDITIONS

63. If any unforeseen problem occurs during construction, which affects any of the eight (8) statutory interests of the Wetlands Protection Act, M.G.L. Chapter 131, Section 40, upon discovery, the Applicant shall notify the RCC and an immediate meeting shall be held between the RCC/staff, the Applicant, the engineer, contractor, and other concerned parties to determine the corrective measures to be employed. The Applicant shall then act to correct the problems using the corrective measures agreed upon.
64. Equipment fuel storage, refueling, and lubrication operations shall be situated in an upland area at least 100' from any wetland resource area and outside the 200' Riverfront Area.
65. Heavy equipment shall be stored in an upland area at least 100' from any wetland resource area and outside the 200' Riverfront Area when not in use or overnight.
66. All grubbed stumps, brush, slash, waste products, and construction debris shall be removed from the site. This material shall be disposed of promptly and properly at an off-site facility licensed to receive the material. Covered dumpsters shall be maintained on-site for appropriate materials. Records as to the destination of all materials including stumps, brush, and excess fill shall be kept and supplied to the RCC if requested.
67. If weather conditions cause the terrain to be excessively soft, the RCC/staff may halt work until dry conditions permit work to proceed and continued site work no longer threatens the integrity of installed erosion controls and site stability.
68. Any new plantings utilized in the landscaping of this project shall not be a plant species (listed at the time of intended planting) on the published MIPAG list of plant species designated as "invasive", "likely invasive", or "potentially invasive" as listed by the Department of Agricultural Resources.

69. **Pesticides and herbicides** shall not be used within the restricted No Cut/No Disturbance Zone and adjacent undeveloped wetland resource area(s). This condition shall survive the expiration of this OC, and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.
70. Any **fertilizer** for landscaping or lawn care used within the developed portion of the property within 100' of a wetland resource area or within the 200' Riverfront Area **shall be slow-release organic granular type fertilizers, low in nitrogen content**. This condition shall survive the expiration of this OC, and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.

NO CUT/NO DISTURBANCE ZONE

71. A **variable width No Cut/No Disturbance Zone**, demarcated on the approved site plan **shall be maintained to protect the wetlands** from the effects of development. The appropriate **No Cut/No Disturbance Zone** line shall be labeled and depicted on the final approved plan. The approved **No Cut/No Disturbance Zone shall be kept in a natural state in perpetuity**. This condition shall survive the expiration of this OC and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.
72. The **No Cut/No Disturbance Zone** shall have **permanent signage** installed on durable posts that announce "**Do Not Disturb or Cut – Protected Resource Area**" to prevent possible encroachment into and protect the wetland resource area. The **signs shall be of durable material** of sufficient size and mounted on four-inch square (4"x 4") rot resistant wooden posts (not CCA) extending 42" above the ground and sunk below the frost line (approx. 48"). Locations shall be as depicted on the final approved plans or field determined by RCC/staff. The post(s) and sign(s) **shall be maintained by the Property Owner to ensure their continued function**. This condition shall survive the expiration of this OC and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.

SNOW AND ICE CONTROL

73. **Sodium Chloride shall not be used within the project site for the purpose of ice control**. This condition shall survive the expiration of this OC, and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.
74. Only the following de-icing chemicals - **calcium chloride (CaCl₂)**, **calcium magnesium acetate (CMA)** and any non-sodium based DEP approved de-icing compounds - are **allowed for minimal usage**. This condition shall survive the expiration of this OC and **shall be included as a continuing condition in perpetuity** on the Certificate of Compliance.