

Staff Report

Date: December 4, 2019
To: Conservation Commission
From: Whitney McClees, Conservation Agent
Subject: **277 Bridge Street – Stormwater As-Built – DEP# 023-1246**

DOCUMENTS REVIEWED

- Notice of Intent
- Order of Conditions issued September 11, 2017
- Field Change Memo dated September 19, 2019
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Stormwater As-Built dated November 23, 2019

RESOURCE AREAS ON/NEAR SITE

- **Bordering Vegetated Wetland (310 CMR 10.55)**
 - *Significance:* Bordering vegetated wetlands are likely to be significant to public or private water supply, to groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, and to wildlife habitat. Plants and soils of bordering vegetated wetlands remove or detain sediments, nutrients, and toxic substances that occur in run-off and flood waters.

The vegetation in bordering vegetated wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and the resulting damage to private and public property. During dry periods, the water retained in bordering vegetated wetlands is essential to the maintenance of base flow levels in rivers and streams, which is important to the protection of water quality and water supplies.

Wetland vegetation provides shade which moderates water temperatures important to fish life. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat, and cover for fish.

Bordering vegetated wetlands are probably the Commonwealth's most important inland habitat for wildlife. The hydrologic regime, plant community composition and structure, topography, and water chemistry of bordering vegetated wetlands provide important food, shelter, migratory and overwintering areas, and breeding and nesting areas for many birds, mammals, amphibians, reptiles, and insects.

- **Bank (310 CMR 10.54)**
 - *Significance:* Banks are likely to be significant to public or private water supply, to groundwater supply, to flood control, to storm damage prevention, to the prevention of

pollution, and to the protection of fisheries and wildlife habitat. When banks are composed of concrete, asphalt, or other artificial impervious material, said banks are likely to be significant to flood control and storm damage prevention.

Banks are areas where groundwater discharges to the surface and where, under some circumstances, surface water recharges the groundwater. Where banks are partially or totally vegetated, the vegetation serves to maintain the banks' stability, which in turn protects water quality by reducing erosion and siltation.

Banks may also provide shade that moderates water temperatures, as well as providing breeding habitat, escape cover, and food, all of which are significant to the protection of fisheries. The topography, plant community composition and structure, and soil structure of banks together provide important food, shelter, migratory and overwintering areas, and breeding areas for wildlife.

Banks act to confine floodwaters during the most frequent storms, preventing the spread of water to adjacent land. Because banks confine water during such storms to an established channel, they maintain water temperature and depths necessary for the protection of fisheries.

An alteration of a bank that permits water to frequently and consistently spread over a large and more shallow area increases the amount of property which is routinely flooded, as well as elevating water temperature and reducing fish habitat within the main channel, particularly during warm weather.

PROJECT SUMMARY

- The applicant was permitted to construct a convenience store/gas station with associated parking and utilities.

COMMENTS

- The engineer has submitted a signed and stamped drainage as-built dated November 23, 2019.
- In reviewing the plans, there appeared to be some slight deviations from the approved plans:
 - The sediment forebay appears to be entirely rip-rap rather than a sediment forebay with a membrane liner, so it appears there is more rip-rap than was on the approved plans
 - The rip-rap associated with the southern end of the detention pond is slightly larger than on the original plans, but not by much
 - There is no elevation listed south of the rip-rap on the southern end of the detention pond, so I'm not sure if it matches what was on the permitted plans
 - The as-built does not specify the type of Stormceptor units that were installed
 - The elevation on the rip-rap spillway is listed as ± 26.6 . The surrounding elevation seems to be about 2 feet lower than that. There was not an elevation listed for the spillway in the approved plans.
 - There was a grassed swale noted on the western end of the sediment forebay on the approved plans that does not appear on the as-built. Has this been constructed or is it planned to be constructed?

RECOMMENDATION

- Save for the comments above, the as-built seems to mostly match the approved plans.

Staff Report

Date: December 5, 2019

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **6 Emerson Avenue – Notice of Intent – DEP# 023-1302, Fairhaven CON 19-066**

DOCUMENTS REVIEWED

- Notice of Intent and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zone VE
 - *Significance:* Land subject to coastal storm flowage is likely to be significant to flood control and storm damage prevention. LSCSF can slow down flood waters and allow them to flow across a natural landform surface, providing frictional resistance and reducing their energy and destruction potential. It can allow flood waters to spread over a wide area without obstructions. Obstructions can cause the channelization of flood waters and storm-wave overwash and an increase in the velocity and volume of flow to adjacent or landward areas. LSCSF can also allow flood waters to be detained, absorbed into the ground, or evaporated into the atmosphere. LSCSF also protects the land from storm erosion by providing a substrate for vegetation that helps to stabilize sediments and slow down flood waters.

Where LSCSF overlaps other coastal resource areas, it plays an important role in determining the delineation and function of these resource areas, specifically coastal beaches and dunes, barrier beaches, and coastal banks.

Particular physical characteristics of LSCSF that are critical to the protection of the flood control and storm damage prevention interests include: topography, slope, surface area, soil characteristics (i.e., composition, size, shape, and density of material), vegetation, erodability, and permeability of sediments. Topography, slope, and permeability are critical for determining how effective an area is in dissipating wave energy, absorbing flood waters, and protecting areas within and landward of these zones from storm damage and flooding.

- Coastal Beach, Barrier Beach, Marsh: No work proposed in these resource areas
 - *Buffer Zone Significance:* Buffer Zones play an important role in preservation of the physical, chemical, and biological characteristics of the adjacent resource area (Coastal Beach). The potential for adverse impacts to resource areas from work in the buffer zone increases with the extent of work and the proximity to the resource area.

PROJECT SUMMARY

- Notice of Intent filed for the installation of a garage, stamped patio, and concrete driveway.
- Entire project takes place within Land Subject to Coastal Storm Flowage Zone VE.
- Only the proposed stamped patio falls within the buffer zone to Coastal Beach.
- According to the plan, impervious surface is increasing from 5,416 square feet (30.3%) to 7,703 square feet (43.1%).

COMMENTS

- The amount of impervious surface that is proposed seems to be a large amount for a velocity flood zone area. How might that impact the property itself and the surrounding area?
- The property also falls within Buffer Zone to Barrier Beach and Buffer Zone to Marsh. It is important to consider how diverting any potential flood water or any runoff through the increase of impervious surface might affect the nearby resource areas.
 - The Barrier Beach and Marsh are located south of the property across Emerson Avenue.
- The applicant re-advertised and will need to provide proof of abutter re-notification at the hearing.
- The applicant has not yet provided revised plans, so I am unable to comment on them.

RECOMMENDATION

- I have not yet received revised plans, so I am unable to make a recommendation at this time.

Staff Report

Date: December 4, 2019

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **19 Abbey Street – Request for Determination of Applicability – No DEP#, Fairhaven CON 023-104**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zone VE
 - *Significance:* Land subject to coastal storm flowage is likely to be significant to flood control and storm damage prevention. LSCSF can slow down flood waters and allow them to flow across a natural landform surface, providing frictional resistance and reducing their energy and destruction potential. It can allow flood waters to spread over a wide area without obstructions. Obstructions can cause the channelization of flood waters and storm-wave overwash and an increase in the velocity and volume of flow to adjacent or landward areas. LSCSF can also allow flood waters to be detained, absorbed into the ground, or evaporated into the atmosphere. LSCSF also protects the land from storm erosion by providing a substrate for vegetation that helps to stabilize sediments and slow down flood waters.

Where LSCSF overlaps other coastal resource areas, it plays an important role in determining the delineation and function of these resource areas, specifically coastal beaches and dunes, barrier beaches, and coastal banks.

Particular physical characteristics of LSCSF that are critical to the protection of the flood control and storm damage prevention interests include: topography, slope, surface area, soil characteristics (i.e., composition, size, shape, and density of material), vegetation, erodability, and permeability of sediments. Topography, slope, and permeability are critical for determining how effective an area is in dissipating wave energy, absorbing flood waters, and protecting areas within and landward of these zones from storm damage and flooding.

- Bordering Vegetated Wetland (310 CMR 10.55)
 - *Significance:* Bordering vegetated wetlands are likely to be significant to public or private water supply, to groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, and to wildlife habitat. Plants and soils of

bordering vegetated wetlands remove or detain sediments, nutrients, and toxic substances that occur in run-off and flood waters.

The vegetation in bordering vegetated wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and the resulting damage to private and public property. During dry periods, the water retained in bordering vegetated wetlands is essential to the maintenance of base flow levels in rivers and streams, which is important to the protection of water quality and water supplies.

Wetland vegetation provides shade which moderates water temperatures important to fish life. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat, and cover for fish.

Bordering vegetated wetlands are probably the Commonwealth's most important inland habitat for wildlife. The hydrologic regime, plant community composition and structure, topography, and water chemistry of bordering vegetated wetlands provide important food, shelter, migratory and overwintering areas, and breeding and nesting areas for many birds, mammals, amphibians, reptiles, and insects.

PROJECT SUMMARY

- The applicant is proposing to construct a 16' x 16' deck with a 4' x 4' wrap around for stairway access. The deck is proposed to be constructed on ten 10-inch sonotubes as well as attached to the house foundation.

COMMENTS

- The outer edge of the proposed deck appears to be greater than 50 feet away from the nearby wetland.
- The only impact to the ground appears to be the 10 sonotubes.
- Primarily this is a project in a velocity flood zone. The deck will be anchored via the sonotubes and attaching to the foundation.

RECOMMENDATION

- I recommend closing the public hearing and issuing a Negative 2 and Negative 6 Determination.

Staff Report

Date: December 5, 2019

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **Violations/Enforcement Orders/Cease and Desist Notices**

44 Torrington Road

- At the November 25, 2019 meeting, the Commission voted to issue a fine of \$6,900 for cutting down 22 trees in a Bordering Vegetated Wetland and grinding out one stump after being told that all stumps are to remain.
- The Commission also voted to issue an Enforcement Order for a restoration plan by a licensed professional to be submitted within 90 days and to cease and desist all activity on the entire property, including the removal of existing debris.
- In the process of drafting the Enforcement Order and associated violation letter, I received a letter from the property owner, dated November 25, 2019, as a way of “appearing” at the meeting. I did not receive it before the November 25 meeting.
- I have drafted an Enforcement Order that the Commission could opt to sign at the meeting rather than ratifying it at the following meeting.

7 Waybridge Road

- This property is owned by the same property owners as 44 Torrington Road, though it appears to be rented.
- There has been one tree definitely cut down and possibly a second. I will be performing a site visit tomorrow to verify the number of trees that have been cut down on the property.
- How would the Commission like to proceed for this location?

Staff Report

Date: December 5, 2019

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **497 Sconticut Neck Road – DEP# 023-1291, Fairhaven CON-19-037**

DOCUMENTS REVIEWED

- Notice of Intent and associated documents
- Order of Conditions
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)

RESOURCE AREAS ON/NEAR SITE

- **Bordering Vegetated Wetland (310 CMR 10.55)**
 - *Significance:* Bordering vegetated wetlands are likely to be significant to public or private water supply, to groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, and to wildlife habitat. Plants and soils of bordering vegetated wetlands remove or detain sediments, nutrients, and toxic substances that occur in run-off and flood waters.

The vegetation in bordering vegetated wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and the resulting damage to private and public property. During dry periods, the water retained in bordering vegetated wetlands is essential to the maintenance of base flow levels in rivers and streams, which is important to the protection of water quality and water supplies.

Wetland vegetation provides shade which moderates water temperatures important to fish life. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat, and cover for fish.

Bordering vegetated wetlands are probably the Commonwealth's most important inland habitat for wildlife. The hydrologic regime, plant community composition and structure, topography, and water chemistry of bordering vegetated wetlands provide important food, shelter, migratory and overwintering areas, and breeding and nesting areas for many birds, mammals, amphibians, reptiles, and insects.

- **Land Subject to Coastal Storm Flowage (LSCSF) Zone AE**
 - *Significance:* Land subject to coastal storm flowage is likely to be significant to flood control and storm damage prevention. LSCSF can slow down flood waters and allow them to flow across a natural landform surface, providing frictional resistance and reducing their energy and destruction potential. It can allow flood waters to spread over

a wide area without obstructions. Obstructions can cause the channelization of flood waters and storm-wave overwash and an increase in the velocity and volume of flow to adjacent or landward areas. LSCSF can also allow flood waters to be detained, absorbed into the ground, or evaporated into the atmosphere. LSCSF also protects the land from storm erosion by providing a substrate for vegetation that helps to stabilize sediments and slow down flood waters.

Where LSCSF overlaps other coastal resource areas, it plays an important role in determining the delineation and function of these resource areas, specifically coastal beaches and dunes, barrier beaches, and coastal banks.

Particular physical characteristics of LSCSF that are critical to the protection of the flood control and storm damage prevention interests include: topography, slope, surface area, soil characteristics (i.e., composition, size, shape, and density of material), vegetation, erodability, and permeability of sediments. Topography, slope, and permeability are critical for determining how effective an area is in dissipating wave energy, absorbing flood waters, and protecting areas within and landward of these zones from storm damage and flooding.

PROJECT SUMMARY

- The Notice of Intent was submitted in response to an Enforcement Order dated April 9, 2018 unpermitted activities on the property, including construction of a horse paddock, shell driveway, and barn within jurisdictional areas.
- The Notice of Intent was filed February 4, 2019 for the removal of a horse paddock encroaching on Bordering Vegetated Wetland and the creation of a new paddock in an upland area.
- The Order of Conditions was issued July 8, 2019.

COMMENTS

- Special Condition C17 states that the wetland replication area shall be the initial phase of the project.
- Special Condition E44 states that planting shall occur in the fall of 2019 at the end of the growing season (April 2-November 11) before the first frost. Shrubs and trees may be planted up to November 15, weather permitting.
- To my knowledge, no planting has been done. The location of the new paddock has been staked out, but the existing paddock has not yet been removed nor has the replication area been started.
- Erosion controls have not yet been installed to my knowledge. I have not yet been contacted to inspect them.

RECOMMENDATION

- If the Commission feels that the applicant is in violation of the Order of Conditions, would you like me to send a letter to the applicant and her representative outlining the areas of non-compliance?

Staff Report

Date: December 5, 2019

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **General Business**

Bills

- Fairhaven Neighborhood News: \$65.00 for ads for the November 25 meeting
- Whitney McClees: \$24.50 for reimbursement for travel to the Climate Adaptation Conference

Town Committee Questionnaire

- This year, the Board of Selectmen are asking each Board or Committee to complete a short questionnaire regarding the Board/Committee's work. They have requested that the questionnaire be put on the next agenda so that it can be discussed by the entire board in formulating the responses.
- The questions are:
 - Does the Town of Fairhaven provide you with sufficient resources for your committee to conduct your business and carry out your responsibilities?
 - Yes, No, Don't Know
 - If no, what additional resources would you like to have?
 - Does the Town of Fairhaven provide adequate information and training to ensure compliance with the State's Open Meeting Law (MGL Ch. 30A, Sections 18-25), Conflict of Interest Law (MGL Ch. 268A), Procurement Law (MGL Ch. 30B), and other similar statutes?
 - Yes, No, Don't Know
 - If no, in what areas would you like to have additional information and training?
 - Does your Committee develop a written work plan, annual or otherwise, that provides information on what you are working on or wish to accomplish?
 - Yes, No, Don't Know
 - If yes, please provide a copy of your most recent work plan.
 - Does your committee collaborate with other town committees on matters of joint interest?
 - Yes, No, Don't Know
 - If yes, please provide examples of this collaboration.
 - If no, would you like to collaborate with other committees and in what areas?
 - Is there a state-wide organization or group that provides advocacy and training opportunities to your committee and similar committees in other municipalities?
 - Yes, No, Don't Know
 - If yes, please provide the name of the organization
 - If yes, is your committee an active member in the organization?
 - Do you think the Board of Selectmen and the Town Administrator can do a better job in supporting the work of your committee?

- Yes, No, Don't Know
 - If yes, how?
- Are you aware of any Federal or State Grant Programs that are available to your committee to assist you in carrying out your work?
 - Yes, No, Don't Know
 - If yes, please provide information regarding the granting agency and what work the grant would fund.
- Any other comments?