

**DRAFT**

# MEMORANDUM

**TO:** Margaret Hoffman, Kate Mallory – Town of Wenham  
**FROM:** Mel Higgins, PWS  
**DATE:** October 22, 2021  
**SUBJECT:** 21 Longfellow Rd. Peer Review

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The Town of Wenham has contracted with Weston & Sampson Engineers, Inc. (WS) to conduct a peer review of the request for amendment to order of conditions for a project at 21 Longfellow Road in Wenham, Massachusetts (MassDEP file number 326-0362). Below is a discussion of project background, peer review work conducted by WS, observations, and recommendations.

## **Background**

The previous single family house at 21 Longfellow Road was damaged due to fire. A Notice of Intent was filed to demolish the damaged house and build a new single family house. The project was approved during the September 11, 2017 public meeting and the Order of Conditions was recorded at the Registry of Deeds on July 24, 2018. Work at the site started in November 2019 but was stopped due to nonconformance to construction plans. The proponents retained Fodera Engineering to help with the permitting requirements. On September 21, 2021, Fodera Engineering submitted a request for amendment to order of conditions (RAOoC) for this project. This submission included a comprehensive discussion on project history, environmental resources, existing as-built conditions, proposed conditions, and environmental impacts. Also included was a plan set that included an as-built plan sheet, with the original plan sheet to compare the differences of what currently exists to what was originally proposed, as well as an updated proposed conditions sheet.

Before the project was stopped, the following work was done at the site:

- Demolition of the damaged house,
- Construction of new building foundation, wall framing and roof,
- Grading of site, and
- Installation of three (3) stormwater dry wells

Below is a discussion of work conducted as part of this peer review, followed by observations and recommendations.

### **Peer Review Work Conducted**

As part of this peer review, WS reviewed the following documents:

- Amendment to Order of Conditions – 21 Longfellow Road, September 21, 2021, Fodera Engineering
- Town of Wenham Chapter 242 Water Resource Protection bylaw
- Town of Wenham Chapter 500 Water Resource Protection Regulations
- Town of Wenham Zoning By-laws
- Massachusetts Wetlands Protection Act (310 CMR 10.00)
- Massachusetts Title V Regulations (310 CMR 15.00)
- Massachusetts Stormwater Handbook – Volume 1
- Deed restriction for 21 Longfellow Road, filed at Registry of Deeds on July 24, 2018
- Septic deed restriction for 21 Longfellow Road, dated July 19, 2018
- Order of Conditions for 21 Longfellow Road, signed September 25, 2017

In addition to file reviews, a site visit was conducted on October 21, 2021.

A discussion of observations made during the file review and site visit are presented, below.

### **Observations**

Through the file review and site visit, the following observations were made:

1. House has been constructed southeast from the originally approved location. This results in a much smaller area of house being within the buffer zones.
2. New roof overhang will be within the 200-foot buffer to Pleasant Pond. The overhang will be 196 feet from the pond at its closest location.
3. Dry-well 3 was constructed in the Fairview Street right of way (ROW). Updated plans propose relocation of this dry well outside of the ROW.
4. Dry wells 1 and 2 were constructed within the 100-foot buffer zone, whereas they were originally located outside the buffer zone.
5. None of the three dry wells were finished with a beehive grate as shown on the project details on the plans.
6. Proposing a new 3-foot tall landscape wall (not previously approved) on the southeast and northeast property boundary. Part of this wall is on the property boundary limit, along Fairview Street. Per Section 5.2.7.2 of the zoning by-law, fences that obstruct vision that is within 20-feet of a street can be no more than 3-feet tall. Section 5.2.7.2 discusses “boundary fences, walls and hedges”. Because the bylaw does not define fences or walls, it is interpreted that a reference to “fence” in this section also includes walls. As such, the landscape wall is subject to the requirement of being no greater than 3-feet in height if within 20-feet of a street.
7. Per section 5.1 of the zoning bylaws, primary building structure setback are as follows:
  - i. Front yard: 20 feet
  - ii. Rear and side yard: 15 feet
 It is assumed that outside stairs are not included as part of the house that needs to meet these setbacks since language to the contrary was not found in the bylaws. As such, the house meets these bylaw setbacks.
8. Stormwater peak flow reduced for flow towards wetlands. No calculated stormwater flow was present towards Pleasant Pond.

9. Because this is a single family house, it is exempt from the Massachusetts Stormwater Policy and Handbook requirements per page 2 of the Massachusetts Stormwater Handbook – Volume 1.
10. Both deed restrictions note that the house must be a 2-bedroom house and not change in the future.
11. Originally approved work within the 50- to 100-foot buffer zone includes:
  - i. Portions of garage and house
  - ii. Pervious walk
  - iii. Landscape bed
  - iv. Boulder embankment
  - v. Block wall
  - vi. shed
  - vii. Re-grading
12. New proposed work in the 50- to 100-foot buffer zone includes:
  - i. Extremely minimal area of house (~10 square feet)
  - ii. Pervious paver ADA walking path
  - iii. Arborvitae landscape strip
  - iv. Boulder embankment
  - v. Pervious driveway
  - vi. Two (2) dry wells
  - vii. Re-grading
13. Originally approved work within the 200-foot buffer zone includes:
  - i. One (1) dry-well
  - ii. Regrading (on property, but not in Fairview Street)
14. New proposed work in the 200-foot buffer zone includes:
  - i. Relocation of existing dry well 3 out of Fairview Street and into property boundary within 200-foot buffer)
  - ii. 10' x 12' Jacuzzi
  - iii. Pervious patio
  - iv. 3-foot high landscape wall
  - v. Small portion of roof overhang
  - vi. Re-grading within Fairview Street
15. Entire site is within Town's Aquifer Overlay District (AOD). Per section 12.1.6 of the town by-laws, no more than 20% of a site within AOD can be impervious area. Impervious area is considered the proposed house footprint (3,121 sf, which includes the originally approved 2,944 sf + additional 177 sf of new garage area). The lot size is 17,023 square feet (sf). Impervious area is estimated to be 18.3% of lot size.
16. Driveway and re-grading is extended into Oak Street.
17. One tree is proposed to be removed that is outside owner's property limits. Tree is on town-owned property.
18. Test pits for new, proposed septic systems were not shown on the plans.
19. Newly proposed septic system locations appear to be less than 10 feet from building foundation.
20. There is a proposed slope of 1:1 in the 100-foot buffer zone.
21. Erosion controls were no longer functioning properly.
22. A previously existing, natural ditch in the front of the house, located off property boundaries, was partially filled in.

## Recommendations

WS is making several recommendations based on its peer review, including the following:

1. An environmental benefit to the bordering vegetated wetlands is occurring by relocating the house almost completely outside the 100-foot buffer zone.
2. Because a pervious walk, landscaping bed, boulder embankment, and re-grading within the 100-foot buffer zone were originally approved, the following items should be **allowed** within this same 100-foot buffer zone:
  - i. Extremely minimal area of house (~10 square feet)
  - ii. Pervious paver ADA walking path
  - iii. Arborvitae landscape strip
  - iv. Boulder embankment
  - v. Re-grading

The commission should ask for an explanation on why the dry wells 1 and 2 and parts of the driveway need to be in the buffer zone when they originally were not located there. The commission can then decide if this additional work in the buffer zone should be allowed.

3. Because dry well 3 and regrading on the property was originally approved in the 200-foot buffer zone, this should also be allowed for this project. Per Chapter 242-7.D of the town water protection bylaws, the proponent needs to provide “a preponderance of evidence that there is no practicable alternative to the proposed project with less adverse effects.” The proponent should address the proposed Jacuzzi and pervious patio in the 200-foot buffer zone. The previously approved plans did not include a Jacuzzi, and the footprint of the patio is much smaller in the original plans. The commission is within their rights to not allow this work.
4. Work is being proposed outside the owners property limit, but within two paper roads, including Fairview Street and Oak Street. Work includes re-grading in Fairview Street. This regrading should not be allowed as it is not considered an improvement to the street. Similarly, while not in the commission’s jurisdiction, the newly proposed driveway section in Oak Street and regrading should not be allowed unless town approval is provided. The work in paper streets should be approved by the planning board.
5. The small roof overhang in the 200-foot buffer is considered minimal, and could be approved by the commission.
6. It should be required that the three dry wells be covered with beehive grates as noted on the project details provided on the plans.
7. The 3-foot landscaping wall conforms to local bylaw sizing requirements. The updated plans call out “+/- 3’ high landscape wall”. The commission should put in the order of conditions that the wall, if allowed, should be no taller than 3 feet high per bylaw requirements of walls within 20-feet of a street.
8. The current house location conforms to the zoning by-law setbacks.
9. This project is exempt from the Massachusetts stormwater policy and handbook requirements because it is a single family home per page 2 of the Massachusetts Stormwater Handbook Volume 1 (under the “Applicability” section).
10. Title V definition of “bedrooms” is provided in 310 CMR 15.002. Single family homes are assumed to have at least 3 bedrooms, however this number can be reduced if a deed restriction is obtained which limits the number of bedrooms to a number smaller than 3 bedrooms. This property does have deed restrictions for the house to be considered a 2-bedroom house.
11. The proposed impervious area is allowed under the Town’s Aquifer Overlay District requirements. Pervious pavers are not always considered “pervious” by conservation commissions. Some conservation commissions consider pervious pavers as impervious area since, over time, pervious

pavers often become clogged if not maintained and become an impervious surface. If there is precedence for the commission to consider pervious pavers as impervious area, it can do the same in this situation. If the commission considers pervious pavers as pervious area, it should require an operations and maintenance document for the pervious pavers that the proponent needs to adhere to so that the pervious pavers do not become impervious area in the future

12. The proponent will need to gain town approval before removing the tree noted on the plans that is on town owned property.
13. Evidence of test pits in the location of the new proposed septic system locations should be provided. Test pits in the newly proposed septic areas should be conducted if not previously done.
14. Per 310 CMR 15.211, minimum setback distance of septic systems to cellar or slab foundations is 10 feet. Based on the updated plans, it appears that both septic system components are less than 10 feet from the house foundation. As such, the septic system should be moved so that it is at least 10 feet from the foundation.
15. There is a proposed ADA walkway in the 100-foot buffer zone. The proponent should document that the walkway meets all ADA requirements, including change in slope.
16. Section 9.3 (Erosion Control) of the Town's zoning by-law states that slopes greater than 15% will require a special permit from the Planning Board. The planning board should be consulted as there are proposed 1:1 slopes (45%) within the 100-foot buffer zone. Based on the documents reviewed, it could not be determined if a special permit from the planning board would also be required per section 10.1.1 of the Town's Zoning By-laws. Section 10.1.1 states that a special permit is required if topographic contours are altered by more than 5 feet and more than 500 cubic yards of earth is being redistributed. Proponent should provide these numbers to the commission to determine if a special permit is required
17. New erosion controls should be installed as noted on the plans as the existing erosion controls are no longer functioning properly.
18. The previously existing ditch that was filled in in front of the house, off property boundaries, should be returned to previous conditions to restore previous hydrology.