

Project Narrative for Proposed Site Improvements
11 Flora Street, Newburyport, Ma. 01950

Dated: March 15, 2022
Revised: April 27, 2022

Site Location & Description

The subject site is a 14,451 SF parcel of land containing one single-family multi-story residential structure and is located on the northern side of Flora Street approximately 300-ft east of the Old Point Road intersection. The site is primarily covered by the primary structure, a small shed, a gravel driveway, and areas of both sand yard and vegetative landscaping/vegetative groundcover.

Project Description

The applicant(s), Michael & Michelle Ywuc, propose construction activities within an area subject to the Massachusetts Wetlands Protection Act and the City of Newburyport Wetlands Ordinance which are subject to review and approval by the Newburyport Conservation Commission and the State of Massachusetts Department of Environmental Protection.

Construction activities shall include the demolition and removal of the existing multi-story decks and the construction of a new residential addition on a pile supported foundation. Associated site improvements include a new multi-story deck with a 3rd floor balcony above and minor landscape plantings. It is the intent of this application to limit construction/staging areas to the existing driveway and to the north and northeast side of the structure. Other than limited access and minor disturbances proposed, no proposed construction/staging area shall be located or permitted within any vegetated areas. Orange construction fencing shall be installed as proposed to ensure no work or damage occurs outside of authorized work areas.

All work shall be performed in accordance with the attached project plans, the approved order of conditions and shall comply with any, and all state and local conditions or requirements.

Resource Area Delineation Methodology

In October of 2021, Mark West of West Environmental, Inc. conducted a review of existing aerial maps, available online data, and completed an onsite evaluation. At that time, it was determined that the following resource areas existed on or directly adjacent to the work area:

- 1) Coastal Dunes (310 CMR 10.28)
- 2) Barrier Beaches (310 CMR 10.29)
- 3) Rocky Intertidal Shores (310 CMR 10.31)
- 4) Estimated Habitats of Rare Wildlife for Coastal Wetlands (310 CMR 10.37)
- 5) Riverfront Area (310 CMR 10.58)
- 6) Land Subject to Coastal Storm Flowage

Compliance with Performance Standards & Presumption of Significance

The applicant acknowledges that the resource areas identified above are present on their site and are significant to storm damage prevention and the protection of the wetland values listed in Massachusetts Wetlands Protection Act. Compliance, to the maximum extent feasible, with those performance standards has been demonstrated as follows:

Coastal Dunes (310 CMR 10.28)

In accordance with 310 CMR 10.28, coastal dunes are considered significant to storm damage prevention, flood control, marine fisheries, and the protection of wildlife habitat. In accordance with the definition and delineation methodology contained within the Massachusetts Wetlands Protection Act, it has been determined that all of the proposed construction activities are located within this regulated resource area. It is our professional opinion that work proposed is in compliance with the specific performance standards listed in 310 CMR 10.28(3) as the proposed construction activities will 1) not affect the ability of waves to remove sand to and from the dune, 2) will minimize disturbance to existing vegetative cover which may result in the destabilization of the dune, 3) will not modify the dune in a way that would increase the potential storm or flood damage, 4) will not interfere with the landward or lateral movement of the dune, 5) will not cause artificial removal of sand from the dune, and 6) will not interfere with mapped or otherwise identified bird nesting habitats. No construction activities have been proposed which would directly or indirectly impact or have an adverse effect on the productivity or functionality of the coastal dune.

Barrier Beach (310 CMR 10.29)

In accordance with 310 CMR 10.29(3), barrier beaches are considered significant to storm damage prevention, flood control, marine fisheries, and the protection of wildlife habitat. In accordance with the definition and delineation methodology contained within the Massachusetts Wetlands Protection Act, it has been determined that all the proposed construction activities are located within this regulated resource area. It should be noted that no specific performance standards are outlined in 310 CMR 10.29 however the proposed construction activities will 1) not reduce the natural ability of the land to absorb and contain floodwaters, 2) will not displace or divert floodwaters to other areas, 3) will not cause or create the likelihood of damage to other structures or land as debris (collateral damage), 4) will not cause ground, surface or salt-water pollution triggered by coastal storm flowage, and 5) will not restrict the natural movement of sand or floodwaters. No construction activities have been proposed which would directly or indirectly impact or have an adverse effect on the productivity or functionality of the barrier beach.

Rocky Intertidal Shores (310 CMR 10.31)

In accordance with 310 CMR 10.31(3)&(4), Rocky Intertidal Shores are considered significant to storm damage prevention, marine fisheries, and the protection of wildlife habitat. In accordance with the definition and delineation methodology contained within the Massachusetts Wetlands Protection Act, it has been determined that all the proposed construction activities are located outside of this regulated resource area. Therefore it is our professional opinion that work proposed is in compliance with the specific performance standards listed in 310 CMR 10.31(3)&(4) as the proposed construction activities will 1) not affect the form or volume of exposed intertidal bedrock and boulders, 2) will minimize or eliminate adverse effects to the resource area, 3) will have no adverse effects on water circulation, or water quality, and 4) will not interfere with mapped or otherwise identified bird nesting habitats or marine fisheries. No construction activities have been proposed which would directly or indirectly impact or have an adverse effect on the productivity or functionality of the Rocky Intertidal Shore.

Estimated Habitat of Rare Wildlife for Coastal Wetlands (310 CMR 10.37)

Attached, please find a copy of the current Natural Heritage and Endangered Species Program map dated August 1, 2021. The map shows that a portion of the proposed construction activities are located within a mapped, known, or certified area of “*Priority Habitat of Rare Species*”, “*Estimated Habitat of Rare Wildlife*”, and/or “*Certified Vernal Pools*”. For this reason, a copy of the Notice of Intent plan and application has been filed with the Natural Heritage and Endangered Species Program.

Riverfront Area (310 CMR 10.58)

All proposed project activities shall take place within this resource area and therefore direct impacts are being proposed. The following performance standards have been addressed:

10.58(4)(a) – Protection of Other Resource Areas

As identified above, other resource areas do exist on or adjacent to the construction site and, when appropriate, have been delineated onsite and shown on the attached plan. The site contains a single-family residential home on a full foundation and vegetated areas consisting of dune grasses, landscaped/mulched planting beds, and a large residential lawn a majority of which are identified as areas previously disturbed. The majority of the proposed construction activities, with the exception of the staging area for pile installation, are located within these previously disturbed areas and therefor minimal disturbances are proposed. The existing lawn and dune vegetation shall be covered using plywood or other approved ground cover protective surface prior to the start of work to protect the vegetation to the maximum extent possible. Where/If damage does occur, the applicant shall replace the vegetation with dune grass or other approved vegetation as identified on the attached plans and the list of approved planting species supplied by the Massachusetts Department of Coastal Zone Management. Other planting areas shown are intended to replace existing mulched landscape areas and shall improve both the riverfront area as well as the other protected resource areas by returning those areas to a naturalized planting area by removing non-native mulch and plantings and replacing them with approved native species from the same list mentioned herein. Therefore, it is our professional opinion that, we are in full compliance with this section of the WPA.

10.58(4)(b) – Protection of Rare Species

The NHESP map and attached plans show that a portion of the proposed construction activities are located within a mapped, known, or certified area of “*Priority Habitat of Rare Species*”, “*Estimated Habitat of Rare Wildlife*”, and/or “*Certified Vernal Pools*”. For this reason, a copy of the Notice of Intent plan and application has been filed with the Natural Heritage and Endangered Species Program. Provided approval from NHESP is granted, and all conditions are followed, it is our belief that the work proposed can be completed without any adverse effects to this resource area. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA.

10.58(4)(c) – Practicable and Substantially Equivalent Economic Alternatives

10.58(4)(c)(1)(a) – Cost

As demonstrated on the accompanying plans, the majority of the proposed construction activities are located in previously disturbed areas. As a result, the costs for proposed construction activities are minimized by reducing vegetation clearing, regrading, and environmental impacts. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA.

10.58(4)(c)(1)(b) – Existing Technology

MEI is unaware of any existing technologies currently available that would allow for the construction of the proposed residential addition or other proposed site improvements in a way that would further reduce impacts or protect the interests outlined in the MA WPA. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA.

10.58(4)(c)(1)(c) – Proposed Use

The proposed residential addition and other associated site improvements are located in a residential neighborhood. The applicant has no desire to change the characteristic of the neighborhood and believes this use is best for the neighborhood. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA.

10.58(4)(c)(1)(d) – Logistics

In considering the logistics of the site and proposed construction methods the applicant proposes to use the shortest distance between the site access and staging area and shall install plywood or another approved alternative ground cover protect method to protect the existing vegetation. No other access, location, or construction methods known to MEI shall accomplish the same goal while providing further separation or enhanced protection for the resource areas. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA.

10.58(4)(c)(2) – Scope of Alternatives

In accordance with 310 CMR 10.58(4)(c)(2)(a) the area under consideration for practicable alternatives is limited to the lot for activities associated with the construction or expansion of a single-family house on a lot recorded on or before August 1, 1996. This parcel is shown on Registry of Deeds plan book 34 plan 22 which is dated May of 1920 and therefor only the subject parcel is in consideration. For this reason, it is our professional opinion that we are in full compliance with this section of the WPA.

Conclusion

It is our professional opinion that the construction of the proposed single-family addition and the other associated site improvements, as presented, was the most feasible option with the least financial and environmental impacts to both the applicants, the neighbors, and the resource areas. No other practicable and substantially equivalent economic alternative was identified which would potentially have less impacts to the interests identified in the WPA.

10.58(4)(d) – No Significant Adverse Impacts

It is our professional opinion that the work being proposed within the Riverfront Area shall provide no significant adverse impacts to the resource area and is in compliance with this section of the state environmental code:

310 CMR 10.58(4)(d)(1) allows for the alteration of 5,000 SF of alteration or 10% of the riverfront within the lot, whichever is greater. The entire 14,451 SF lot is located within the Riverfront area the maximum amount of alteration is 5,000 SF. Because the majority of the proposed construction activities are located within previously disturbed areas and the other activities are designed to restore or improve the resource area it is our belief that we are in full compliance with this section of the WPA.

310 CMR 10.52(4)(d)(1)(a) requires that a minimum 100 foot wide corridor of undisturbed vegetation is provided. The commission has the authority to approve work which does not provide the required 100 foot corridor of undisturbed vegetation provided that the applicant provides a rebuttal of the presumptions of significance to justify a lesser area of undisturbed

vegetation. As such we offer the following as a rebuttal of the presumption; 1) an existing corridor of undisturbed vegetation does not currently exist, 2) work proposed shall not result in the removal or reduction of any existing native/natural riverfront vegetation within the inner riparian zone; 3) the area effected by work proposed within the inner riparian is previously disturbed areas, 4) a portion of the work proposed is designed to restore or improve the resource area by removing non-native mulch and plantings then replacing them with native plantings.

310 CMR 10.58(4)(d)(1)(b) requires stormwater is to be managed according to standards established by the Department in its Stormwater Policy. Because this work is related to improvements to a single-family house lot the work proposed is exempt from the Stormwater Policy.

310 CMR 10.58(4)(d)(1)(c) requires that work not impair the riverfront areas ability to provide important wildlife functions and will not impair its capacity to provide vernal pool habitat. The majority of construction activities are proposed in previously disturbed areas and provided approval from NHESP is granted, and all conditions are followed, it is our belief that the work proposed can be completed without any adverse effects to this resource area. Therefore, it is our professional opinion that we are in full compliance with this section of the WPA

310 CMR 10.58(4)(d)(1)(d) requires that work not impair the groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution. It is our professional opinion that the use of silt fence erosion controls, and/or temporary construction fencing during construction shall not attenuate nonpoint pollution and is therefore in compliance with this section of the WPA.

Land Subject to Coastal Storm Flowage

Although mapped as a FEMA AE9 zoned floodplain on the latest FEMA map, the elevations collected during the on-ground survey show that the majority of the site and proposed construction activities are in areas above the base flood elevation. Regardless, all proposed construction/project activities shall take place within this mapped regulated resource area and therefore indirect/direct impacts are being proposed. It is our professional opinion that the work proposed is in compliance with the specific performance standards listed as the proposed residential addition and deck shall be constructed on an open piles foundation system at an elevation above base flood in accordance with state and local requirements and new no impervious surfaces are proposed. Proposed construction activities will not have an increased or adverse effect on the resources ability to contain flood waters, will not displace, deflect, or impact the natural movement of water or sediment.

City of Newburyport Wetlands Protection Regulation Section 8(E)(2)(d) – Relative Sea Level Rise Considerations

In accordance with building code requirements all living space proposed to be constructed within a FEMA AE floodplain must have the lowest floor of the proposed living space situated at an elevation at least 1-foot above the mapped flood elevation. The base flood elevation in the area of this project is elevation 9. In accordance with local conservation commission requirements a relative sea level rise of 40-inches, or 3.33', was also applied to this project requiring that all proposed living space be at or above elevation 12.33. As shown on the attached site plan and architectural plan set, the bottom of the lowest horizontal steel support is set at elevation 12 with a proposed floor thickness of more than 1-foot. As such, all proposed living space is designed in consideration of and above the 40-inch projected sea level rise.

Preliminary Construction Schedule
11 Flora Street, Newburyport, Ma. 01950
Dated: March 15, 2022

The following construction schedule is provided as a guide to help ensure proper compliance with the conservation commission approval. The contractor shall always keep a copy of the approved plans and the approved order of conditions onsite and available for inspection while work is being performed. Any changes to construction or this schedule should be discussed with the design engineer, project architect, and the conservation commission agent prior to implementing the change to ensure proper compliance with the approval and all code requirements. If there is a conflict between the details in this document, the approved plans, and the approved order of conditions issued by the Conservation Commission, the order of conditions shall supersede and be adhered to at all times.

- 1) Contact the Conservation Commission Agent (978) 465-4400 to schedule a pre-construction site walk to inspect any construction fencing or erosion control installation, if required, and discuss any special conditions and/or questions pertaining to the approval.
- 2) Complete any site work prep needed prior to beginning any construction activities. Contact appropriate utility companies and Digsafe to ensure all utility services are marked out, turned off, and/or disconnected from the existing dwelling.
- 3) Install plywood protective surface over vegetation on the Southern side of the building as shown on the approved notice of intent plan. All machinery, heavy equipment, and heavy foot traffic is limited to this area during demolition and construction activities.
- 4) Completely demolish the existing multi-story deck and dispose of all debris appropriately in accordance with all local and state requirements. Additional demolition requirements or conditions may have been imposed by the conservation commission or the building inspector, so the contractor is to completely review all state and local requirements and any special conditions listed in the approved Order of Conditions and the building permit.
- 5) Begin installation of new pilings and start construction of the addition and decks.
- 6) Upon completion of all activities described above in #3, #4, and #5 the proposed plywood protective surface shall be removed and disposed of in accordance with any state or local requirements.
- 7) Contractor shall inspect all vegetative surfaces and replace any damage with appropriate native plant species shown on the approved plan or an approved alternative species as listed on the Massachusetts Coastal Zone Management list of approved plants. Alternate species must be approved by the conservation commission agent prior to purchase and installation.
- 8) Begin installation of native shrubs and dune grass mitigation area by cutting existing sod and appropriately disposing of material in accordance with federal, state, and local requirements. Low areas resulting from sod removal shall be shimmed using appropriate dune quality sand material prior to installation of new shrubs and dune grass plantings.
- 9) Upon completion of all construction activities, site stabilization, and any monitoring period, if any is required, the applicant/homeowner shall contact their engineer/surveyor to produce and submit an As-Built plan along with the application to request a certificate of compliance stamped by the engineer or surveyor. This request shall point out all the inconsistencies with the approved design plan and with what is presented on the As-Built plans. It is highly recommended that the contractor and/or homeowner submit copies of records showing plant quantity and species to both the conservation commission and their engineer as well as retaining a copy for their records until such time that the certificate of compliance is issued.