

CITY OF PORTSMOUTH

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Memo

TO: Conservation Commission Members

Peter Britz, Environmental Planner FROM:

September 3, 2021 DATE:

September 8, 2021 Conservation Commission Meeting SUBJ:

0 Shearwater

The Conservation Commission reviewed an application for Wetland Conditional Use at their June 9, 2021 meeting. This application was postponed at the request of the applicant to the August then again to this September meeting. At the June meeting the Commission requested the applicant provide information pertaining to proposed plantings, signage and management of the site. The applicant has provided a Concept Plan which includes proposed plantings, signage and maintenance. All of the components of the plan appear to be in compliance with the City's ordinance for cutting, pesticide and fertilizer use in the wetland buffer. In addition there is a plan to remove and limit future invasive species growth on the property. Staff believes this plan adequately addresses the prior violation on the site and recommends approval of this project as presented.

7 Curriers Cove

The applicant is proposing to replace a failing culvert under the Currier's Cove roadway with 192 square feet of wetland disturbance and 1,208 square feet of wetland buffer disturbance. The existing 36"corrugated metal culvert is proposed to be replaced with a reinforced concrete culvert four feet shorter than the existing culvert with new concrete headwalls for both the inlet and outlet location with areas of rip rap proposed to dissipate energy on the outlet side and to protect the inlet side from erosion and undercutting. The application also proposes removal of existing vegetation and includes a planting plan for new vegetation.

- 1. The land is reasonably suited to the use activity or alteration. This is a culvert replacement project which is intended to restore function to the culvert, stop ongoing erosion impacts and correct a safety concern where there is a sinkhole adjacent to the roadway.
- 2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

This is a culvert replacement project therefore this is the only place where this project is appropriate.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties. The proposed culvert is intended to be more permanent than the existing culvert which should prevent future impacts. The headwalls and stone riprap at the inlet and outlet of the culvert will protect against undercutting at the inlet and erosion at the outlet of the culvert. The proposed project should protect against future adverse impacts in a way that current culvert did not.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

The replacement culvert will require removal of established arborvitaes over the culvert which will be replaced with rhododendron. The entire area of disturbance will be reseeded with a conservation seed mix upon project completion.

5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

The replacement of the culvert is the appropriate solution to a problem of a failing culvert. The reinforced concrete culvert was chosen as a more long term solution and a better material than plastic as it has more roughness which is preferable for the passage of wildlife.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible. The applicant is proposing to plant rhodeodendron and a conservation seed mix in the project area upon completion of the culvert installation.

Recommendation: Staff recommends approval of this project as presented.

797 Elwyn Road

This application is for an in-kind septic replacement and a new addition at the rear of the house within 100' of a wetland drainage swale.

According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project.

- 1. The land is reasonably suited to the use activity or alteration. The replacement septic system is an in-kind replacement in the same location as the existing septic system. This is the location of the existing septic system which has become out of date and needs replacement.
- 2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration. The applicant explored options to locate the septic system outside of the 100' wetland buffer but the possible locations were constrained by ledge outcrops and stormwater impacts. Therefore this is the only reasonable location for the septic system replacement.
- 3. There will be no adverse impact on the wetland functional values of the site or surrounding properties. Given that the location proposed for the septic system is where the current system exists today and they are able to replace this system with a similar size system there should not be impacts to the wetlands. The small addition at the rear of the house will create a new area of impervious surface in the buffer but there is a good deal of separation to the wetland system in the rear. It is not clear if the runoff from the roof is being captured but an infiltration trench or dry well to infiltrate the stormwater would reduce any possible impacts.
- 4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals. The project is proposed where there is currently lawn. There is no change proposed to any area that is not existing lawn. This project could benefit from buffer plantings to replace lawn adjacent to the wetland.
- 5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section. The applicant has proposed an in-kind septic replacement in the most appropriate location. The alternative of leaving the existing, out of date, septic system could cause greater impacts than the proposed system. The impact of the addition can be reduced with infiltration of stormwater from the proposed addition and from new buffer plantings.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible. The plan does not propose any new vegetation in the buffer. While the new addition is being proposed in an area of lawn and the proposed septic also is in an existing lawn area. Given that the rear yard appears to be lawn all the way to the edge of wetlands it would be a benefit to the wetland functions and values to include more plantings in the wetland buffer such as shrubs and/or trees or even some low growing vegetation that is not regularly mowed.

Recommendation: Staff recommends approval of this application as presented but recommends the addition of buffer plantings to enhance the wetland and infiltrate stormwater from the new addition into a stone infiltration strip a drywell, rain garden or other approach as appropriate.

137 Northwest Street

This application is to subdivide the property currently with a single family home into two lots with a new home proposed on the new vacant lot. The proposed new home is partially within the 100' tidal buffer zone of the North Mill Pond. In addition to the new home the applicant is proposing to remove an existing gravel turn around and install a new paved parking apron for City vehicles to turn around. This new turnaround and the City pump station are all within a new easement. In addition, there is a plan to upgrade the stormwater outfall to protect against erosion.

According to Article 10 Section 10.1017.50 the applicant must satisfy the following conditions for approval of this project.

- 1. The land is reasonably suited to the use activity or alteration. The project to remove a large gravel area from the buffer and create a paved turnaround will result in a net reduction in impervious surface and a more efficient use of tidal buffer space to service a municipal pump station. The repair of the outfall pipe is similarly appropriate work within the buffer as it is necessary to prevent impacts to the North Mill Pond. The creation of a single family home lot was done with a portion of the house in the wetland buffer. The size of the home does not appear appropriate for this location as a significant portion of the structure is within the tidal buffer zone.
- 2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration. The proposal is to construct a new single family home. There has been no justification as to why the proposed home cannot be placed outside of the wetland buffer.
- 3. There will be no adverse impact on the wetland functional values of the site or surrounding properties. The pump station and gravel turn around are existing impacts in the tidal buffer zone. The removal of the gravel turnaround will be a net improvement to this site. If the proposed turn around is designed to infiltrate stormwater with porous pavers or other technique this will reduce any new impervious surface running directly in to a catch basin at the new turn around. Additionally, the house could be moved outside of the buffer zone to reduce impervious surface in the buffer. There is no information provided about the type of vegetation in the wetland buffer. It appears as if the buffer includes saltmarsh vegetation which is sensitive stormwater runoff the reduction of which through infiltration and treatment is important for this location.
- 4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.
 There is vegetation in the area proposed for the new home which will be removed according to the plan.
- 5. The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this section.

The proposed project does not appear to be the least impacting alternative.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible. The plan does not show any new vegetation proposed. It is a very narrow site with limited opportunity to for new plantings. However, a planting plan should be developed to enhance, where possible, the buffer function for this site.

Recommendation: Staff recommends the applicant provide a revised plan which removes the home and an new impervious surface from the wetland buffer, a landscape plan for plantings proposed in the buffer and an approach to construct the turnaround with pervious surface or an infiltration approach to reduce any stormwater runoff to the North Mill Pond.