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1.0 INTRODUCTION

New England Environmental Inc. (NEE) has prepared the following Notice of Intent to conduct restoration activities within the 100-foot buffer zone to inland bank associated with Great Island Pond in Plymouth as required by the Enforcement Order (EO) issued by the Town of Plymouth and dated August 30, 2007 (A copy of the EO is presented in Appendix A). The area of restoration that lies within the buffer zone is 17,224 square feet (SF), and the area outside the buffer zone to be restored is 4,163 SF. The entire 21,387 SF area lies with designated open space associated with the Great Island Pond Community. As such, NEE is providing the Plymouth Conservation Commission (the Commission) with two copies of WPA Form 3, Notice of Intent (NOI) and five copies of the associated restoration plan for review of the work proposed within the buffer zone.

The area of restoration is proposed for Lots S-111 and S-77 (Map 78D) located in the immediate vicinity of the residential homes on Lots 16-456, 16-457 and 16-458 (Figure 3). These three lots correspond to 41, 43 and 45 White Trellis respectively, in the Great Island Community. Figure 1, the USGS Locus and Figure 2, the Ortho Photograph illustrate the approximate location of the subject lots. Figure 3, the Assessors Map illustrates the location of the residential homes as stated, and Lots S-111 and S-77 where restoration within the buffer zone is proposed.

This NOI is being submitted in response to an EO issued by the Commission to Great Island Community, LLC/D.B.A. The EO was issued in response to the unauthorized clearing of understory vegetation and mature trees within the 100-foot buffer zone to Great Island Pond. This clearing was conducted sometime in late July or early August of 2007 and the EO issued on August 30, 2007. Clearing of vegetation was conducted on portions of Lot S-111 and Lot S-77, east of the residential homes at 41, 43 and 45 White Trellis. Lot S-111 and Lot S-77 were lots established as open space during the construction of Great Island Community. This NOI is being submitted to provide a restoration plan and method of restoring vegetation to the areas of land that were cleared on Lot S-77 and Lot S-111 and lie within in the buffer zone. While the work clearing of vegetation was not conducted by Pulte Homes of New England, L.L.C., (Pulte) the EO was issued to Pulte as the work was done on their land, by adjacent homeowners.

The area in which restoration is proposed is 21,387 SF located primarily on Lot S-77 with some of the restoration area located on Lot S-111 (see Sheet 1, Disturbance Area Restoration Plan). Lot S-77 extends north to south abutting the western border of Great Island Pond. Lot S-111 abuts Lot





S-77 at its eastern boundary and the residential home at Lot 16-456 (41 White Trellis) to its north. A narrow strip of Lot S-111 also extends north to south along the eastern boundary of Lots 16-456, 16-457 and 16-458.

The area where vegetation is to be restored is located within the 100-foot buffer zone to Inland Bank of Great Island Pond, and lies primarily between the east side of the houses at 41, 43 and 45 White Trellis and the west side of Great Island Pond. Work within this buffer zone is jurisdictional under the Massachusetts Wetland Regulations and the Plymouth Wetland Regulations and By-laws. The restoration proposed for Lot S-111 that is along the southern edge of house Lot 16-456, as well as a narrow strip of land along the east side of this lot and Lots 16-457 and 16-458 is outside the 100-foot buffer zone. This work is not jurisdictional under either the State or Town wetland regulations or bylaws. However, this area will be restored as part of the proposed plan.

As stated this project will involve the restoration of buffer zone associated with Great Island Lake. ***There will be no wetland alteration or impact to other resource areas conducted as part of the restoration. The restoration will be limited to work only in the buffer zone.***

This NOI is being submitted to the Commission requesting approval to complete restoration work within the 100-foot buffer zone to inland bank. This work will be conducted in accordance with the Massachusetts Wetland Act and its regulations (310 CMR 10.00) and the Town of Plymouth's Rules and Regulations for Wetlands Protection Bylaw. In accordance with the Town's regulations a fee of \$55.00 is required to be submitted with the filing of this NOI and a fee of \$55.00 is required to advertise the hearing date for this project in the local community newspaper.

NEE is also filing this NOI in accordance with the 310 CMR 10.03(7) (c) 1. Category I. A \$110.00 fee is associated with all Category I projects. The associated Town fee is calculated to be \$67.50 and the associated State fee is calculated to be \$42.50. A copy of the Commonwealth of Massachusetts Fee Transmittal Form is presented in Appendix B.

Three checks are included with this filing. Two are made out to the Town of Plymouth in the amount of \$55.00 and \$67.50, respectively. A third check in the amount of \$55.00 is made out to the Community News Company. A check in the amount of \$42.50 has been submitted to the Massachusetts Department of Environmental lock box. Copies of all checks are presented in Appendix B.





As part of the NOI preparation and submittal, NEE obtained a certified list of abutters within 300 feet of the subject parcels. Those abutters located within 100 feet of the site, as established by the certified list, were notified by certified mail that the subject NOI has been filed with the Commission. A copy of the certified abutters list and a copy of the notification to abutters within 100 feet of the subject work area are presented in Appendix C. A copy of the notification to Abutters, return receipts for this mailing will be submitted to the Commission at the public hearing.

The Commission will notify all abutters within 300 feet of the subject work of the time and date of the public hearing.

2.0 SITE DESCRIPTION

The area in which restoration is proposed is 21,387 SF located primarily on Lot S-77 with a portion located on Lot S-111. This land is an area of upland woods that grades away from the residential homes toward Great Island Lake, with the slope becoming steeper nearer the Lake. The lower portion of the slope, closest to the Lake, is referred to as Disturbance Area A. The upper slope of this land is identified as Disturbance Area B. Both areas were disturbed during the clearing of under-story and cutting of mature trees that occurred in the summer of 2007.

Currently, vegetation in the canopy of the restoration area is dominated by Pitch Pine (*Pinus rigida*), White Oak (*Quercus alba*), Red Maple (*Acer rubrum*) and Red Oak (*Quercus rubra*). The under-story, is starting to show signs of re-growth with young oaks and pines are present. Vegetation within the first 25 feet of the waters edge was not removed during the vegetation clearing that occurred in 2007. This area remains dominated by Winterberry Holly (*Ilex verticillata*), Swamp Rose (*Rosa palustris*) and Swamp Azalea (*Rhododendron viscosum*). Photographs illustrating current site conditions are presented in Appendix D.

The soils for this area are mapped as Carver and Gloucester soils (CcD), 8 to 35 percent slopes. These soils occupy moraines in the southeastern part of the county. Sandy Carver soils make up about two-thirds of this unit, and extremely stony Gloucester soils make up the rest. These soils were mapped as unit because of their irregular and complex slopes (Upham, 1969).





3.0 PROJECT DESCRIPTION

The proposed work associated with this NOI is the restoration of the open space areas on Lots S-111 and S-77. The total area of restoration is 21,387 SF, and 17,224 SF of this area is present in the buffer zone to the inland bank associated with Great Island Lake. As previously stated, the lower slope of the area of land that was cleared is identified as Disturbance Area A and the upper slope is identified as Disturbance Area B. Plant species have been selected for planting in both areas of the slope so that they similar to those species that were present prior to the clearing activities. A plant list for both Disturbance Area A and B is presented in Sheet I. Seed mixes for these areas are also presented in Sheet I.

The installation of plants is proposed to be completed by hand using only hand tools. Heavy equipment will not be used to restore these area. The areas of disturbance will also be seeded following the installation of plants. Following the installation of plants and seed, weed free mulch will be used to cover the area of work.

Table I summarizes the areas of work within and outside the buffer zone for each of the disturbance areas where restoration is proposed.

**Table I
Areas of Disturbance and Proposed Restoration**

Area of Work	Disturbance Area A	Disturbance Area B	Total Area of work in the Buffer Zone
Area within Buffer Zone	5,378 SF	11,846 SF	17,224 SF
Area outside Buffer Zone	0	4,163 SF	0
Totals	5,378 SF	16,009 SF	17,224 SF

Total area of designated Open Space associated with Disturbance Area A and B: 21,387 SF.





4.0 MASSGIS DATABASE REVIEW

As part of the preparation of this NOI, NEE reviewed the Massachusetts Geographic Information System (MassGIS) to determine if the property was located within or had areas designated as priority habitat of rare species or estimated habitats of rare wildlife, certified vernal pools or potential vernal pools. These designations are made by the Natural Heritage and Endangered Species Program (NHESP). The information provided by NHESP, as illustrated on Figure 4, the area of proposed restoration **is located** in both priority habitat of rare species and estimated habitat of rare wildlife. There **are no certified or potential vernal pools located in the immediate vicinity of the proposed work area**. A copy of this NOI is being submitted to NHESP at the same time the submittal to the Commission. A copy of the certified mailing is included in Appendix E.

Flood insurance rate maps were also evaluated. The Flood Insurance Rate Map indicates that the area of work is within an area designated as a 500-year flood zone. Flood Zones are illustrated on Figure 5.

NEE also reviewed the MassGIS system to determine if the site was located within Outstanding Resource Waters (ORW) or an Area of Critical Environmental Concern (ACEC). ORWs are watershed areas that have been classified as such under the Massachusetts Surface Water Quality Standards. These watersheds constitute an outstanding resource as determined by their important socioeconomic, recreational, ecological and/or aesthetic values. These areas have been identified so that they may be protected and maintained (MassGIS, 2002). There **are no ORWs** located in the immediate vicinity of Great Island Lake.

An ACEC is also an area designated in Massachusetts that receives special recognition because of the quality, uniqueness and significance of its natural and cultural resources (MassGIS, 2007). **There are no ACEC located within the vicinity of the proposed work area.**

5.0 SUMMARY

This NOI is being filed to comply with the EO requiring restoration planting within an area of altered open space (21,387 SF) located on Lots S-111 and S-77 of the Great Island Lake Community. This work is being proposed in response to an EO issued by the Commission to the property owner, Pulte. Of the 21,387 SF of open space, 17,224 SF are located within the 100-foot





buffer zone to Inland Bank associated with Great Island Lake. This area of buffer zone is located on Lot S-77 east of residential homes at 41, 43 and 45 White Trellis and west of Great Island Lake. The area of restoration slopes from the homes west toward the Lake, with the slope becoming steeper closest to the Lake. This work would be jurisdictional under Massachusetts Wetland Regulations and the Plymouth Wetland Regulations and By-laws.

A smaller area of open space (4,163 SF), located outside the buffer zone, will be restored as part of this project work. However, as this area is outside the buffer zone it is not jurisdictional under the State or Local regulations. This area is still considered open space established as part of the Great Island Community.

The proposed restoration will include the installation of plants by hand within the 21,387 SF area. Plants have been selected based on previous plants reported to have been present in the area prior to the clearing and based on a review of existing remaining plants. Plant selections were also made based on their proposed installation along the slope that extends from the existing houses toward Great Island Lake.

The area of proposed restoration is within priority habitat of rare species and estimated habitats of rare wildlife. There are no potential or certified vernal pools located in the immediate vicinity of the proposed restoration area. A copy of this NOI is to be submitted to the NHESP at the same time the NOI is submitted to the Commission.

Review of the Mass GIS data layers indicates that Great Island Pond is located within a 500-year zone. The area of proposed work is not located in or within the vicinity of an ORW or ACEC.





6.0 REFERENCES

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