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Subject: **Tidewater Landing Phase 1B**
CRMC File No. D2025-04-090
Vegetation and Wildlife Habitat Assessment

INTRODUCTION

On September 22, 2025, November 4, 2025, and November 14, 2025, BETA Group, Inc (BETA) staff conducted an onsite assessment of the Tidewater Landing Phase 1B (the Project) site at 45 Division Street in Pawtucket, RI (the Site). The Site assessment was conducted to collect additional information in response to the Preliminary Determination (PD) received from the Rhode Island Coastal Resources Management Council (CRMC) on August 29, 2025. This memorandum details observations made at the Site with regard to existing conditions within the Natural Heritage Area (NHA) Critical Habitat; the CRMC-mapped Area of Particular Concern (APC) and Development Zone; and the Urban Coastal Greenway (UCG) and overlapping Buffer Zone.

AREA OF PARTICULAR CONCERN AND DEVELOPMENT ZONE

The CRMC has mapped the southern portion of the Site as an APC and the northern portion of the Site as a Development Zone. The portions of the UCG and Buffer Zone associated with the Seekonk River are located within these areas. The APC and the sections of the Development Zone within and adjacent to where work is proposed were assessed to characterize the existing vegetative communities. Specifically, the assessment occurred to determine the Sites capacity to provide habitat and natural resource functions/values. Due to the Project's proposed vegetative clearing, grading, and construction, this analysis is required to qualify the resulting impacts. Figure 1 – Tree Assessment, Figure 2 – Understory Assessment, and Figure 3 – Notable Features, depict the vegetation and features identified within the Project's proposed limits of work as described below.

Plant Community

The APC and Development Zone at the Site are predominantly forested but also include several open areas vegetated with herbaceous plant species (Photos 1, 2, 8, and 11). A number of tree species throughout the Site are mature and create a well-established canopy. These trees include a mix of native, non-native, and invasive species, with the highest percentage consisting of non-native species. During the Site assessment, 862 trees were mapped and identified within the APC and the Development Zone and are listed in Table 1.

Table 1: Existing Trees

Common Name	Scientific Name	Strata	Native/Non-native/Invasive	Frequency
Black locust	<i>Robinia pseudoacacia</i>	Tree	Non-native	292
Norway maple	<i>Acer platanoides</i>	Tree	Invasive	106
Boxelder	<i>Acer negundo</i>	Tree	Native	95
American elm	<i>Ulmus americana</i>	Tree	Native	79
Sycamore maple	<i>Acer pseudoplatanus</i>	Tree	Invasive	53
White mulberry	<i>Morus alba</i>	Tree	Invasive	39
Quaking aspen	<i>Populus tremuloides</i>	Tree	Native	35
Eastern cottonwood	<i>Populus deltoides</i>	Tree	Native	27
Red oak	<i>Quercus rubra</i>	Tree	Native	20
Black oak	<i>Quercus velutina</i>	Tree	Native	18
Tree of heaven	<i>Ailanthus altissima</i>	Tree	Invasive	17
Catalpa	<i>Catalpa speciosa</i>	Tree	Non-native	14
Crab apple	<i>Malus spp.</i>	Tree	Non-native	13
Common hackberry	<i>Celtis occidentalis</i>	Tree	Native	11
European buckthorn	<i>Rhamnus cathartica</i>	Tree	Invasive	9
White ash	<i>Fraxinus americana</i>	Tree	Native	9
Black cherry	<i>Prunus serotina</i>	Tree	Native	7
Honey locust	<i>Gleditsia triacanthos</i>	Tree	Non-native	7
White oak	<i>Quercus alba</i>	Tree	Native	3
American beech	<i>Fagus grandifolia</i>	Tree	Native	2
Sweet birch	<i>Betula lenta</i>	Tree	Native	2
Sycamore	<i>Platanus occidentalis</i>	Tree	Native	2
Autumn olive	<i>Elaeagnus umbellata</i>	Tree	Invasive	1
Bebs willow	<i>Salix bebbiana</i>	Tree	Native	1
TOTAL				862

The non-native species, black locust, was the most common tree identified, making up 33% of all trees located. Invasive tree species account for 26% of the surveyed trees, while non-native tree species account for 38%, and native tree species account for 36%.

The understory throughout the Site varies with regard to the composition of vegetation (Photo 3, 4, and 5). Several clearings and walking paths have been created by human occupation that do not support vegetation due to human activity and the presence of tents and debris (Photos 6, 7, and 8). Dense stands

of shrubs that are listed as invasive by the Rhode Island Invasive Species Council (RIISC) Invasive Species List¹ dominate the understory throughout portions of the APC and Development Zone. Invasive shrubs include amur honeysuckle (*Lonicera maackii*), burning bush (*Euonymus alatus*), Privet (*Ligustrum* spp.), and multiflora rose (*Rosa multiflora*) (Photos 3 and 4). The remaining understory is densely vegetated with Japanese knotweed (*Fallopia japonica*) within the central clearing and onsite coastal wetland and is also interspersed throughout forested portions of the APC (Photos 1, 2, and 5).

Climbing vines were also identified throughout the Site (Photo 3). These species include Asiatic bittersweet (*Celastrus orbiculatus*) and grape (*Vitis labrusca*). Vines were not as abundant as trees and shrubs; however, they were more commonly identified in disturbed areas and along clearings. Roundleaf greenbrier (*Smilax rotundifolia*) was observed growing in dense thickets in the northern portion of the APC. Additionally, a large population of the invasive sweet autumn clematis (*Clematis terniflora*) is present within the northern section of the Development Zone (Photo 13).

Invasive Species Presence

The RIISC invasive species list was consulted to identify invasive plant species on the Site. Generally, invasive plant species make up a large percentage of the vegetation identified during the assessment (Photos 1 through 5 and Photo 13). While the tree canopy is generally mixed, approximately 26% of tree species identified during the assessment were listed as invasive, with an additional 36% of trees listed as non-native. Understory species in the shrub and herbaceous layer almost entirely consist of invasive species as shown in Figure 2.

Anthropogenic Effects

In addition to invasive vegetation, evidence of frequent disturbance from human habitation was observed throughout the Site. These include active encampments, piles of trash, debris, and clearings that serve as walking paths and living areas (Photos 6, 7, and 8). Four (4) notable encampments were observed on the Site. Two (2) are located in the southern portion of the APC, between the central clearing and the Seekonk River, a third is located in the northern portion of the APC, and the final encampment is located within the northern section of the Development Zone. All of these areas have been cleared of vegetation to make room for tents and other temporary structures and appear to be actively in use. Additionally, a ramp and retaining wall is present on the northern side of the Development Zone (Photo 12) with vegetation growing through the concrete ramp.

Large piles of trash and other debris were also observed adjacent to the encampments, as well as a large pile of debris located in the central portion of the APC. Scattered litter is also abundant within the wetland along the Seekonk River.

Habitat Features

During the Site assessment, features were identified that may provide wildlife habitat and could be retained, as well as trees that may require removal or maintenance during construction. Notable habitat features including snags with a diameter at breast height (DBH) of 8 inches or greater which are large enough to contain cavities and provide shelter habitat, and trees with a DBH of 12 inches or greater that provide a variety of wildlife habitat and provide canopy cover. Trees with visible damage or signs of disease were identified, as well as trees that appear unstable due to erosion. These features are shown on Figure 3 – Notable Features.

¹ [Invasive-and-Weedy-Plants-in-RI-2020 -FINAL.pdf](#)

NATURAL HERITAGE AREA

The entirety of the Site is mapped as a NHA by the Rhode Island Natural History Survey. A Natural Heritage Report was acquired for the Site that lists the following flora and fauna species in the vicinity of the Site:

- Northern Diamondback Terrapin (*Malaclemys terrapin*)
- Salt Reedgrass/ Big Cordgrass (*Spartina cynosuroides*)
- Tall White/ Foxglove beard-tongue (*Penstemon digitalis*)

The Site was assessed for general habitat conditions and critical habitat associated with the species listed above as described in more detail below.

NORTHERN DIAMONDBACK TERRAPIN

The Northern diamondback terrapin is primarily aquatic, only venturing onto land to lay eggs. This species nests in dry sandy areas that do not get submerged by tidal flows and hunts for food in salt marshes and coastal wetlands. The majority of the Site is forested upland that does not contain suitable wetland habitat for foraging. These upland areas are also densely vegetated and do not contain open sandy areas that could be used for nesting.

The coastal wetland located along the western portion of the Site was observed to be partially submerged during high tide, however the area was almost entirely vegetated with Japanese knotweed that restricts water flow, outcompetes native wetland vegetation, and creates a physical barrier preventing access to the wetland (Photo 9). This area is also littered with trash and debris. These conditions make this area unsuitable habitat for wildlife such as fish or crustaceans that the terrapin may use as a food source, making this unsuitable feeding habitat. One area of sandy / gravelly beach was observed at the southwest corner of the APC (Photo 10); however, this area was observed to be submerged during high tide and is therefore unsuitable for nesting.

SALT REEDGRASS / BIG CORDGRASS

Salt reedgrass can typically be found in coastal wetlands. The area of wetland located on the Site is periodically submerged by tidal water; however, no occurrences of this species were observed. The wetland is dominated by Japanese knotweed, with a stand of phragmites was observed along the Seekonk River. These species create monocultures in their respective areas that outcompete native wetland vegetation throughout the wetland (Photo 9). Existing vegetation combined with the widespread trash and debris previously described make this area poor habitat that would require management to provide suitable habitat for this species.

FOXGLOVE BEARD-TONGUE

Foxglove beard-tongue can typically be found in open fields and meadows. The majority of the Site is forested and therefore not suitable habitat for this species. Three (3) open areas with no canopy cover were identified on the Site during the assessment and assessed for occurrences of this species (Photo 8 and 11). The first area is located within the central portion of the APC and is dominated by stands of Japanese knotweed or cleared by human activity. The other two (2) area are located within the Development Zone. These area are open fields vegetated primarily with invasive grasses. No individuals of this species were identified throughout the Site.

SUMMARY

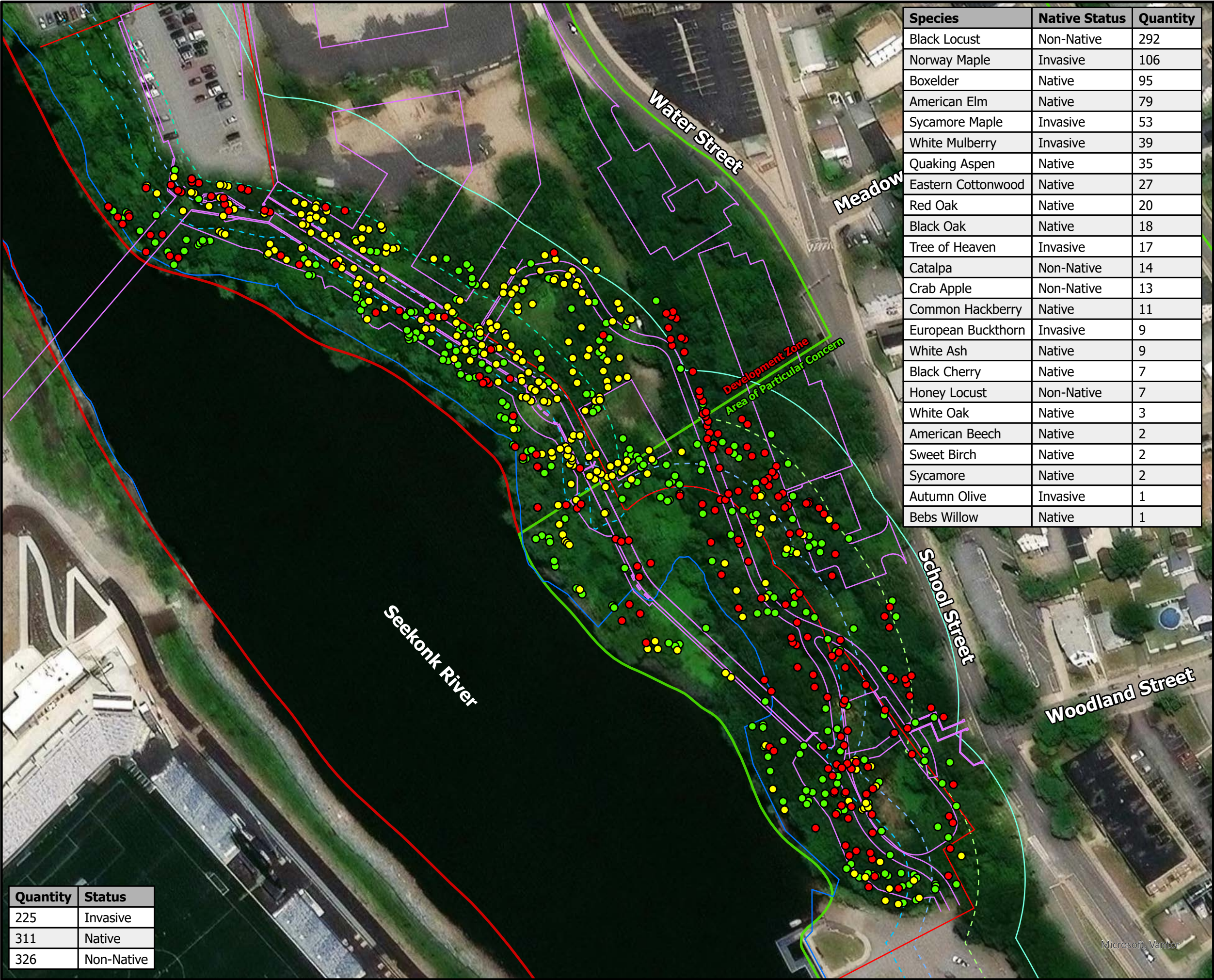
The assessment of the UCG, APC, Development Zone, and NHA identified large stands of invasive and non-native vegetation throughout the Site. The abundance of invasive vegetation combined with the widespread anthropogenic impacts create poor habitat conditions. No NHA-listed species were observed on the Site, and due to the poor habitat conditions, no critical habitat for these species was observed.

Clearing of vegetation on the Site will remove the invasive and non-native species that outcompete native species and provide opportunities for restoration of the Site through native plantings and seeding. However, retaining vegetation that is determined to be significant for habitat purposes should be prioritized. Restoration of the Site aims to improve habitat conditions for a wide range of plants and wildlife along the Seekonk River.

Attachments:

1. Figure 1 – Tree Assessment Figure
2. Figure 2 – Shrub Assessment Figure
3. Figure 3 – Notable Features
4. Figure 4 – Photo Locations
5. Photographic Documentation

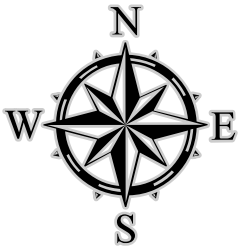
Figure 1
Tree Assessment
Tidewater Landing
Pawtucket, RI



Species	Native Status	Quantity
Black Locust	Non-Native	292
Norway Maple	Invasive	106
Boxelder	Native	95
American Elm	Native	79
Sycamore Maple	Invasive	53
White Mulberry	Invasive	39
Quaking Aspen	Native	35
Eastern Cottonwood	Native	27
Red Oak	Native	20
Black Oak	Native	18
Tree of Heaven	Invasive	17
Catalpa	Non-Native	14
Crab Apple	Non-Native	13
Common Hackberry	Native	11
European Buckthorn	Invasive	9
White Ash	Native	9
Black Cherry	Native	7
Honey Locust	Non-Native	7
White Oak	Native	3
American Beech	Native	2
Sweet Birch	Native	2
Sycamore	Native	2
Autumn Olive	Invasive	1
Beds Willow	Native	1

Legend

- Proposed Layout
- Tree Species**
 - Native
 - Non-Native
 - Invasive
- Urban Coastal Greenway**
 - Area of Particular Concern
 - Development Zone
 - 200' CRMC Jurisdiction
 - 150' Buffer
 - 100' Buffer
 - 75' Buffer
 - 25' Construction Setback
 - Coastal Feature
 - UCG



0 100 200 Feet
1 inch = 100 feet

Figure 2
Understory Assessment
Tidewater Landing
Pawtucket, RI



Legend

— Proposed Layout

Understory

▨ Burning Bush, Privet, Amur Honeysuckle, and Multiflora Rose

▨ Clematis

▨ Knotweed

▨ Phragmites

Urban Coastal Greenway

— Area of Particular Concern

— Development Zone

— 200' CRMC Jurisdiction

— 150' Buffer

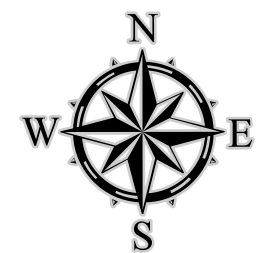
— 100' Buffer

— 75' Buffer

— 25' Construction Setback

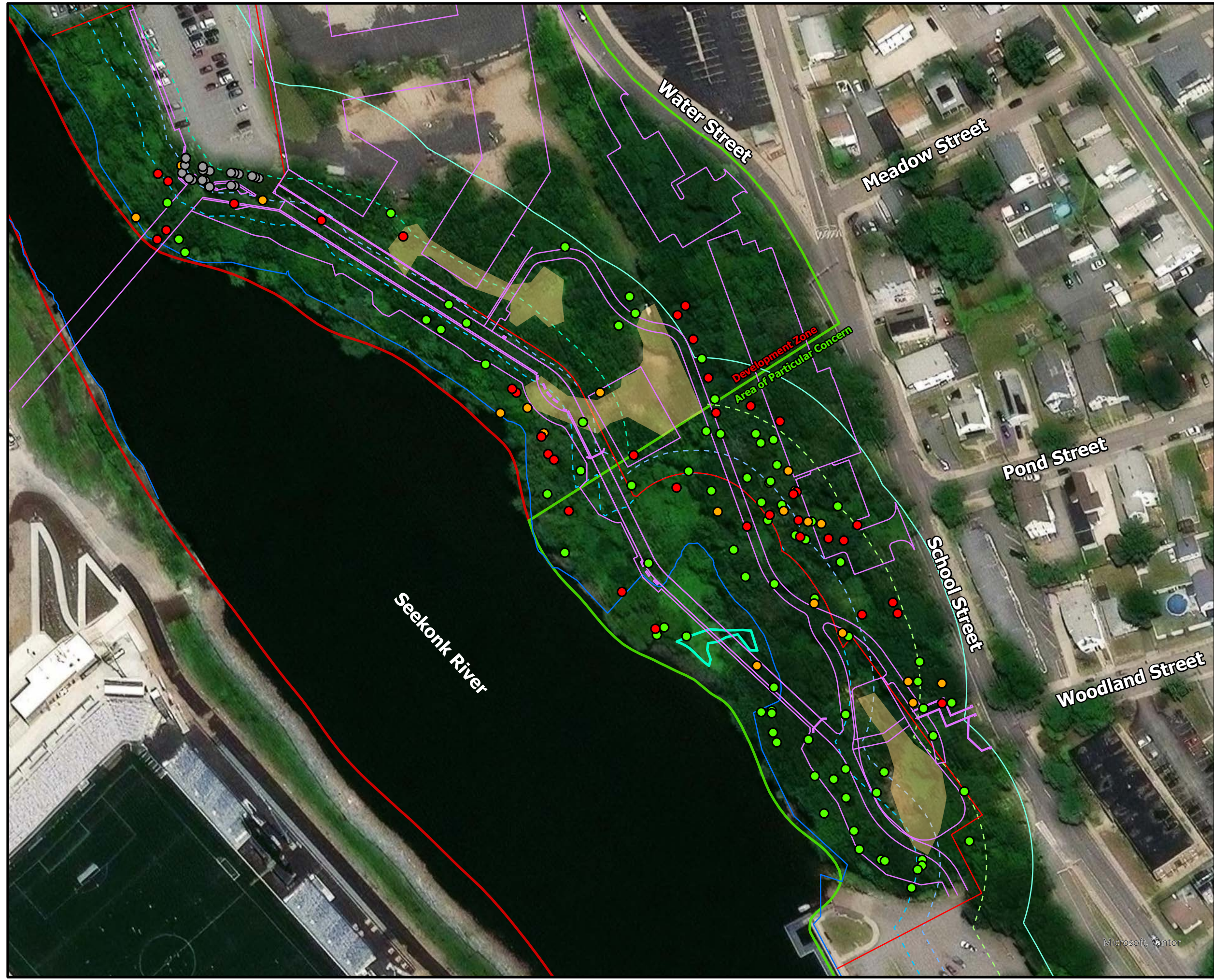
— Coastal Feature

— UCG



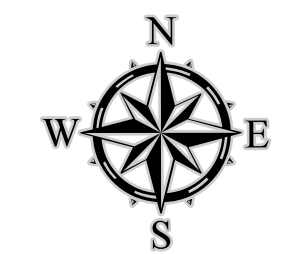
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1 inch = 100 feet

Figure 3
Notable Features
Tidewater Landing
Pawtucket, RI



Legend

- Proposed Site Layout
 - Wetland Boundary
 - Existing Clearing
- Notable Trees**
- Large Canopy Tree >12" DBH
 - Snag >8" DBH
 - Damaged, Diseased or Unstable
 - Located on Retaining Wall
- Urban Coastal Greenway**
- Area of Particular Concern
 - Development Zone
 - 200' CPMC Jurisdiction
 - 150' Buffer
 - 100' Buffer
 - 75' Buffer
 - 25' Construction Setback
 - Coastal Feature
 - UCG



0 100 200
 Feet
 1 inch = 100 feet



Microsoft, Vantor

Figure 4
Photo Location Map
Tidewater Landing
Pawtucket, RI



Legend

- Photo Location
- Proposed Site Layout
- Urban Coastal Greenway**
- Area of Particular Concern
- Development Zone



0 100 200 Feet
1 inch = 100 feet

Photo 1



View of the central clearing and stands of Japanese knotweed (*Fallopia japonica*) - facing south.

Photo 2



Typical view of a forested area at the Site—facing north.

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

Photographs Documented September 22, 2025 and November 4, 2025

Photo 3



Typical view of the invasive vegetation within the understory of the APC—facing east.

Photo 4



Typical view of the understory within the Development Zone—facing east.

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

Photographs Documented September 22, 2025 and November 4, 2025

Photo 5



Typical view of a stand of Japanese knotweed within the central clearing and surrounding canopy cover—facing east.

Photo 6



Typical view of anthropogenic debris at the Site—facing south.

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing

Pawtucket, Rhode Island

Photographs Documented September 22, 2025 and November 5, 2025

Photo 7



Another view of anthropogenic debris at the Site—facing northeast.

Photo 8



View of an open field/meadow north of the APC—facing north

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

Photographs Documented September 22, 2025

Photo 9



Typical view of the coastal wetland—facing west

Photo 10



View of the sandy/ gravelly area at the southwest portion of the Site—facing north

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

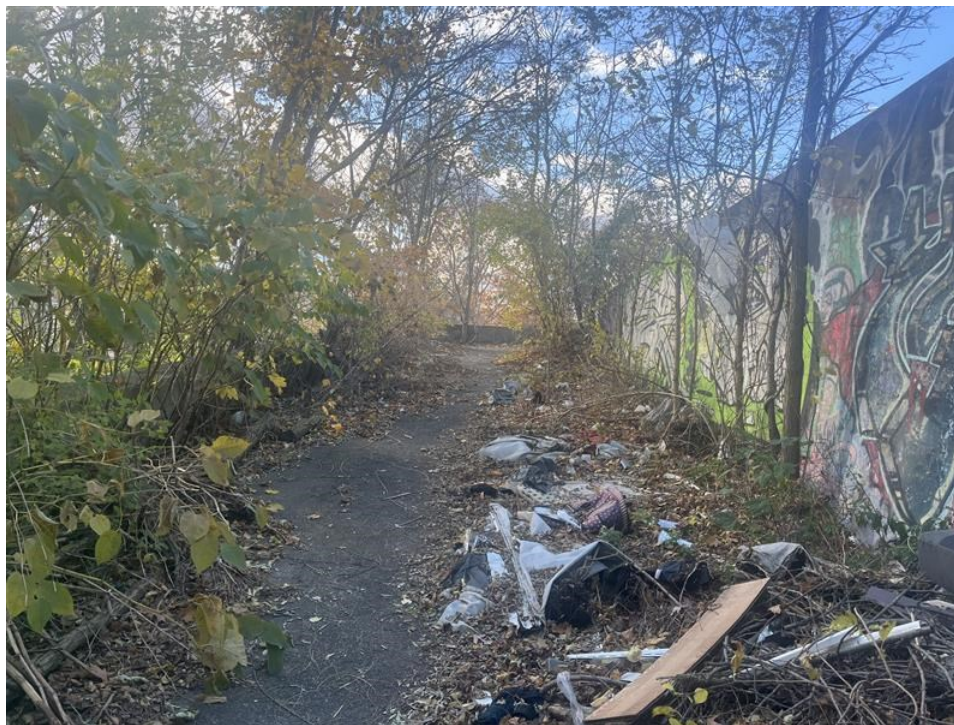
Photographs Documented September 22, 2025

Photo 11



View of the open field within the Development Zone—facing south.

Photo 12



View of the conditions of the ramp/retaining wall on the northern side of the Development Zone—facing west.

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

Photographs Documented November 14, 2025

Photo 13



View of a population of sweet autumn clematis within the Development Zone—facing south.

PHOTOGRAPHIC DOCUMENTATION

Tidewater Landing APC

Pawtucket, Rhode Island

Photographs Documented November 5, 2025 and November 14, 2025