

**DRAFT ENVIRONMENTAL IMPACT STATEMENT**  
NOVEMBER, 2013



## **Mashpee Wampanoag Tribe**

*Fee-to-Trust Acquisition and Casino Project  
Mashpee and Taunton, Massachusetts*

**LEAD AGENCY:**



United States Department of the Interior  
Bureau of Indian Affairs  
Eastern Regional Office  
545 Marriott Drive, Suite 700  
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# ***SECTION 1.0***

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## **EXECUTIVE SUMMARY**

# SECTION 1.0

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## EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

This Draft Environmental Impact Statement (DEIS) has been prepared pursuant to the National Environmental Policy Act (NEPA) to assess the impacts of transferring approximately 151 acres of property in the City of Taunton, Massachusetts and approximately 170 acres of property in the Town of Mashpee, Massachusetts from fee ownership by the Mashpee Wampanoag Tribe (the Tribe) to the United States to be held in trust for the beneficial use of the Tribe, the issuance of a reservation proclamation for these lands, and the subsequent development of a destination resort casino and ancillary facilities in Taunton and tribal facilities in Mashpee.

The Secretary of the Interior, through the Bureau of Indian Affairs (BIA), has discretionary authority to take land in trust and issue a reservation proclamation pursuant the Indian Reorganization Act, 25 U.S.C. §§ 465 and 467. For the purpose of this EIS, the BIA serves as the Lead Agency for compliance with NEPA, with the Tribe as a Cooperating Agency.

### 1.2 PURPOSE AND NEED

The Tribe requests that the BIA take title to the land in trust in order to establish the Tribe's initial reservation and provide the Tribe with opportunities for long term, stable economic development and self-government. The Tribe is federally recognized but does not currently have the benefit of a federally protected reservation or trust lands. The subject properties include approximately 170 acres in Mashpee, Massachusetts and approximately 151 acres in Taunton, Massachusetts. Taunton and Mashpee are both located within the Mashpee Wampanoag Tribe's aboriginal homelands. The proposed federal actions of acquiring title to the lands in trust and issuing a reservation proclamation would serve the needs of the Tribe and its members allowing the Tribe to rebuild its land base and pursue opportunities for economic development and self-government.

The lands in Mashpee have been owned or used by the Tribe or by organizations controlled by or related to the Tribe for many years, and are currently used for Tribal administration, preservation and cultural purposes. These uses will not change under the Proposed Action. Tribal housing and new governmental facilities planned for a portion of the Mashpee lands will continue regardless of the lands' trust status. Acquisition of the Mashpee parcels into trust is necessary to aid the Tribe in accomplishing its goals of self-determination and self-governance, including its mission to house, educate, and otherwise provide for its members.

The Tribe needs economic development to create the revenues necessary to meet Tribal needs. Many Tribal members face unemployment and incomes below the poverty level. Long term, stable economic development would provide employment opportunities for Tribal members, ensured by the Tribe's Tribal and Native American hiring and contracting policies. A 2002 health survey conducted by the Tribe together with the Massachusetts Department of Public Health found that the percentage of Wampanoag in poor health was two times higher than the general Massachusetts adult population. The Tribe also faces

serious needs among its members for improved access to healthcare and housing. Revenues from economic development would be used to expand health services and combat the recent inflation of housing prices in the Town of Mashpee.. Specifically, these revenues would fund construction of Tribal housing and programs such as the Wampanoag Housing Program and the Low Income Home Energy Assistance Program (LIHEAP).

Revenue from economic development and the acquisition of trust lands will also enable the Tribe to adequately preserve its community and cultural history. Revenues would be used to fund the restoration and preservation of cultural sites in Mashpee such as the Tribe's museum and historic burial grounds. The Tribe would also apply revenue from economic development to important educational, cultural, and employment programs for Tribal youth, including the Language Reclamation Project, GED tutoring, and education scholarships. By supporting these programs, the Tribe could provide its youth a valuable opportunity to learn about their cultural values, traditions, and skills to participate and lead healthy lives in their Tribal community and the larger society.

Revenue from economic development would permit the Tribe to achieve its goals of providing affordable housing, achieving self-government, pursuing economic development and preserving Tribal lands for future generations. The establishment of a recognized land base and implementing the proposed uses in Mashpee and Taunton are essential in order for the Tribe to achieve these stated purposes and to meet its significant Tribal needs. More information on the purpose and need of the action proposed in this DEIS can be found in **Section 3.0**.

## **1.3 PROPOSED ACTION AND ALTERNATIVES**

The Proposed Action in this DEIS involves the BIA taking into trust and issuing a reservation proclamation for approximately 321 acres on behalf of the Tribe. The land acquisition consists of approximately 170 acres located in Mashpee, Massachusetts and approximately 151 acres located in Taunton, Massachusetts. Because of their distinct locations and proposed development programs, the environmental consequences related to Mashpee and the land in Taunton have been evaluated separately and in further detail in **Sections 6.0 and 8.0** of this DEIS.

### **1.3.1 MASHPEE**

The eleven parcels proposed to be taken into trust by the BIA in Mashpee are currently owned in fee by the Tribe or by entities controlled by or related to the Tribe. The eleven parcels include the Tribal Meeting House, Cemetery, Parsonage, Tribal Museum, Tribal governmental offices, and conservation land. **Figure 2.1-2** shows the locations of the parcels in Mashpee.

The Proposed Action does not include foreseeable, new development projects for the Mashpee parcels. While the Tribe has commenced construction of a housing development on one of the parcels and the construction of a new government center building on another, these projects are ongoing and are not connected with the Tribe's application for land into trust, i.e., the projects are able to move ahead regardless of whether the land is put into trust or remains under fee ownership of the Tribe. Acquisition of the Mashpee parcels into trust would, however, aid the Tribe in accomplishing its missions of self-

determination and self-governance; cultural preservation; and housing, educating, and otherwise providing for its members.

### **1.3.2 TAUNTON**

The land proposed to be taken into trust by the BIA in Taunton comprises approximately 151 acres located within and adjacent to the Liberty & Union Industrial Park (LUIP) (Project Site). The Project Site is generally bounded to the north by Middleborough Avenue, which is residential; to the east by Stevens Street, which is residential and commercial; to the south by Route 140; and to the west by Route 24. Both Routes 140 and 24 are limited access highways. The LUIP is a commercial/industrial development park created in 2003 and operated by the private, non-profit entity Taunton Development Corporation (TDC) for the purpose of generating economic development opportunities in the City of Taunton. Existing development on these parcels consists of five light industrial/warehouse/office buildings and three residences totaling approximately 250,400 square feet and associated parking. Other upland areas have been graded, but not yet built upon. The Project Site is well developed with a central access roadway (O'Connell Way) and utilities and stormwater detention ponds already in place. An active freight rail line runs east-west through the site. Approximately 50 acres of the Project Site are located north of the railroad, consisting of mature forest and former agricultural fields. The area north of the rail line includes Barstow's Pond, a small man-made impoundment of the Cotley River. **Figure 2.1-3** shows the land in Taunton.

#### **Alternative A: Proposed Development**

Alternative A includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Under Alternative A, the Tribe would subsequently develop the lands in Taunton into a resort casino complex. Alternative A does not include foreseeable, new development projects for the Mashpee parcels.

The proposed phased development in Taunton would include an approximately 400,000 square-foot casino including 4,400 gaming positions, three 300-room hotels, an events center, fine dining, a 24 hour restaurant, an international buffet, a food court, retail stores, a 25,000 square-foot water park, a 4,431-space parking garage, and approximately 1,940 surface parking spaces.

#### **Alternative B: Reduced Intensity I**

Alternative B includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Like Alternative A, Alternative B does not include foreseeable, new development projects for the Mashpee parcels. Under Alternative B, the Tribe would still develop the lands in Taunton but the scale of the complex would be reduced from Alternative A.

The phased development in Taunton would include an approximately 195,000 square-foot casino including 2,330 gaming positions, one 300-room hotel, an international buffet, a food court, retail stores, a 25,000 square-foot water park, a 3,012-space parking garage, and approximately 1,940 surface parking spaces. Among the elements included in Alternative A but eliminated under Alternative B are the two hotels adjacent to the casino, the events center, and fine dining restaurants.

### **Alternative C: Reduced Intensity II**

Alternative C includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Like Alternative A, Alternative C does not include foreseeable, new development projects for the Mashpee parcels. Under Alternative C, the Tribe would still develop the lands in Taunton but the footprint of the complex would be reduced from Alternative A.

The phased development in Taunton would be the same as that of Alternative A in its casino, restaurant, and parking garage facilities. Alternative C would include two 300-room hotels. Alternative C would eliminate the proposed water park and the affiliated hotel, and 500 surface parking spaces described in Alternative A. The need for the construction of a railroad crossing would also be eliminated.

### **Alternative D: No Action**

The No Action Alternative assumes that no lands in Mashpee or Taunton would be taken into trust on behalf of the Tribe. The Tribe would not establish an initial reservation nor develop a destination resort casino.

Without land being taken into trust, it is assumed that the parcels would continue to develop to their capacity as currently zoned and permitted. At complete build-out under this Alternative, the Taunton parcels would consist of approximately 663,400 square feet of commercial-industrial-warehouse use, approximately 69,900 square feet of office use, and approximately 3,600 square feet of residential use.

## **1.4 AREAS OF CONTROVERSY**

The BIA published a Notice of Intent (NOI) in the Federal Register on May 31, 2012, opening up a public comment period which lasted until July 2, 2012. During that period, the BIA accepted letters and heard comments on the Proposed Development at two public Scoping meetings, held June 20, 2012 at Taunton High School and June 21, 2012 at Mashpee High School. The results of these Scoping activities were made available in a Scoping Report published by the BIA in November 2012. Issues raised during Scoping that were deemed relevant to NEPA and the EIS process generally fell into the following categories:

- Traffic
- Wetlands
- Water Supply and Wastewater
- Water Quality and Flooding

- Rare Species and Wildlife
- Community Character (includes Noise and Visual Aesthetics)
- Air Quality
- Cultural and Historic Resources
- Sustainability
- Solid Waste
- Utilities
- Socioeconomic Impacts
- Greenhouse Gas
- Indirect and Growth-Inducing Effects
- Cumulative Impacts
- Land Use Regulation

The vast majority of relevant comments focused on potential impacts to the proposed Project Site in Taunton; none mentioned Mashpee in any substantial way. To the extent required by NEPA, this Draft EIS has addressed the issues and concerns identified during the Scoping process.

## 1.5 SUMMARY OF IMPACTS

The environmental consequences of the Alternatives analyzed in this EIS are summarized below in **Table 1.5-1**. Mitigation measures identified in the design and negotiation processes have been incorporated into the project description. In addition, the table below includes measures to mitigate specific effects identified during Scoping and the preparation of the EIS. The table is organized into the four Alternatives described above, in which A, B, and C involve the taking of land into trust in both Taunton and Mashpee, and Alternative D involves no action. The only potentially significant impacts involving the land in Mashpee were identified as socioeconomic and Environmental Justice-related. All other impacts and mitigation measures described below apply to the land in Taunton. For detailed discussions of environmental consequences and mitigation measures, please see **Sections 6.0, 8.0 and 9.0** of this document.

**TABLE 1.5-1  
SUMMARY OF IMPACTS**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Transportation</b>				
Construction Impacts	The construction period would generate construction traffic associated with employees and the transport of equipment and materials to the Project Site.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impact would most likely be reduced and drawn out over time compared to Alternative A.
Mitigation	<p>A. The Tribe would work with the City of Taunton to develop a comprehensive Construction Traffic Management Plan, which would include the definition of designated routes for all associated construction truck traffic developed in close coordination with MassDOT and City staff prior to start of construction. A separate TMP would be developed specific to roadway improvements and the construction of the new water main and sewer extension, which would take place partly in public roadways.</p> <p>B. Construction equipment, material deliveries and personnel vehicular travel to the Project Site in connection with construction activities would use only the designated service road from Route 140 onto Stevens Street rather than accessing Stevens Street from the Middleboro Avenue side.</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	<p>AE. Developers would construct temporary service roads and staging/waiting areas for construction vehicles as appropriate for each building project.</p> <p>AF. Developers would create plans for construction worker parking, shuttling, public transit and carpool access, and on-site storage as appropriate for each building project.</p> <p>AG. Developers would undertake traffic flow minimization and safety measures as appropriate for each building project.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Transportation</b>				
	<p>C. Construction workers would have off-site parking and would be shuttled to/from the Project Site. They would be encouraged to carpool, and would be able to store tools and equipment on Site.</p> <p>D. Should a partial street closure be necessary in order to transport or off-load construction materials and/or to complete construction-related activities, the closure would be limited to off-peak periods.</p>			
Operational Impacts	The operation of Alternative A would result in an increase in vehicle traffic on surrounding roadways.	Impacts would be reduced compared to Alternative A.	Impacts would be the same as for Alternative A.	Operations would generally remain the same, with some intersections and interchanges worsening.
Mitigation	<p>E. Route 24 SB Ramp (Exit 12B/County Street (Route 140) Improvements (All mitigation measures proposed for Alternative A are detailed in <b>Section 8.1.3.4.</b>)</p> <p>F. Route 24 NB Ramp (Exit 12A)/County Street (Route 140) Improvements</p> <p>G. Galleria Mall Drive South/County Street/Route 140 SB Ramps (Exit 11A) Improvements</p> <p>H. Overpass Connector/Route 140 NB Ramps/Stevens Street Intersection Improvements:</p> <ul style="list-style-type: none"> <li>• Option 1: New Route 140 NB Ramp, or</li> <li>• Option 2: Stevens Street Improvements</li> </ul>	<p>AB. O'Connell Way/Stevens Street/Revolutionary Road (Main Driveway) Improvements (All mitigation measures proposed for Alternative A are detailed in <b>Section 8.1.3.6.</b>)</p> <p>AC. Overpass Connector/Route 140 NB Ramps/Stevens Street Improvements</p> <p>AD. Route 24/Route 140 Interchange SB Off-Ramp Improvements</p> <p>AE. A secondary site driveway would be constructed on Stevens Street for passenger vehicles wanting to exit the Project Site to travel northbound on Stevens Street and all trucks entering the Site.</p>	Mitigation would be the same as Alternative A.	Necessary mitigation would be covered by measures already planned, including South Coast Rail, Hart's Four Corners Intersection Improvements, MassDOT Improvements at Route 24/Route 140 Interchange, and Middleborough Rotary Improvements (See <b>Section 8.1.2.2.</b> ).

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Transportation</b>	<p>I. Route 24 NB to Route 140 NB Access Improvements</p> <ul style="list-style-type: none"> <li>• Option 3: New Route 24 SB Slip Ramp to Route 140 NB, or</li> <li>• Option 4: Intersection Improvements at Route 140</li> </ul> <p>J. Route 140 NB widened between Exit 11 and Exit 12</p> <p>K. O'Connell Way/Stevens Street Improvements</p> <p>L. Secondary service road constructed north of the parking garage to accommodate service vehicles generated by casino and Crossroads Center</p> <p>M. Mozzone Boulevard/County Street (Route 140) Improvements</p> <p>N. Bristol-Plymouth High School Drive/County Street (Route 140) Improvements</p> <p>O. Erica Drive/County Street (Route 140) Improvements</p> <p>P. Hart's Four Corners [Hart Street/County Street (Route 140)] Improvements</p> <p>Q. County Street (Route 140)/Gordon M. Owen Riverway Extension Improvement</p>			

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Transportation</b>				
	R. High Street/Winthrop Street Improvements S. Winthrop Street (Route 44) at Highland Street Improvement T. Thirteen existing traffic signals to be outfitted with emergency vehicle priority equipment to allow rapid response from firehouse to Project Site U. Traffic calming measures and monitoring in the East Taunton neighborhood would be evaluated and funded. V. Bristol-Plymouth HS Drive/Hart Street/Poole Street Improvements W. Stevens Street/Middleboro Avenue Improvements X. Stevens Street/Pinehill Street Improvements Y. Middleboro Avenue/Pinehill Street/Caswell Street Improvements Z. Middleboro Avenue/Old Colony Avenue/Liberty Street Improvements AA. East Taunton Elementary Driveway at Stevens Street Improvements			
<b>Floodplain, Wetlands and Other Waters of the U.S.</b>				
Construction Impacts	Heavy equipment and earth movement during construction pose risks to wetlands including erosion.	Risk of impact would be the same as Alternative A.	Risk of impact would be the same as Alternative A, except that construction would not take place north of the rail line on the Project Site.	Risk of impact would be the same as Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<p><b>Floodplain, Wetlands and Other Waters of the U.S.</b></p> <p>Mitigation</p>	<p>A. The Tribe would implement a Stormwater Pollution Prevention Plan (SWPPP) to prevent impacts to the wetlands during the construction of the Proposed Development. The program would incorporate Best Management Practices (BMPs) specified in guidelines developed by the EPA and would comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges for Construction Activities.</p> <p>B. The contractor would establish site trailers and staging areas to minimize impacts on natural resources.</p> <p>C. The Construction Manager (CM) would establish an “environmental safety” zone establishing a 10-foot buffer zone around the wetland areas on the site.</p> <p>D. Any refueling of construction vehicles and equipment would take place outside of the 10-foot wetlands buffer zone and would not be conducted in proximity to sedimentation basins or diversion swales.</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>Any developers' projects that involve the disturbance of more than one acre of land would be subject to the provisions of NPDES. The SWPPP would be implemented during construction to comply with the requirements of the NPDES General Permit.</p> <p>It can be assumed that site preparation, construction staging steps, and vehicle fueling and storage requirements for Alternative D would be similar those described for Alternative A. These measures would minimize impacts to natural resources during construction.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Floodplain, Wetlands and Other Waters of the U.S.</b>				
	<p>E. No on-site disposal of solid waste, including building materials, would be allowed in the 10-foot buffer zone. Stumps would be removed from the site.</p> <p>F. No materials would be disposed of into the wetlands or existing or proposed drainage systems. All subcontractors, including concrete suppliers, painters and plasterers, would be informed that the cleaning of equipment would be prohibited in areas where wash water would drain directly into wetlands or stormwater collection systems.</p> <p>G. The contractor would establish a water resource, e.g., "cistern supply area," to supply a "water truck," or other means, to provide moisture for dust control and irrigation. Water would not be withdrawn from wetland areas.</p>			
Direct Impacts (immediate loss of aquatic ecosystem within footprint of fill)	<p>On Site: Alternative A would involve approximately 5,526 square feet temporary direct impacts and approximately 6,318 square feet permanent direct impacts due to wetland fill and stream crossing on site.</p> <p>Off Site: With the Route 140 NB ramp proposed under Option 1, approximately 3,180 square feet temporary and 9,115 square feet permanent direct impact to</p>	<p>On Site: Alternative B would involve the same on-site direct impacts to wetlands as Alternative A.</p> <p>Off Site: Alternative B would involve no significant impacts to wetlands off site.</p>	<p>On Site: Alternative C would involve approximately 4,573 temporary direct impacts and approximately 4,387 permanent direct impacts due to wetland fill and stream crossing on site.</p> <p>Off Site: Alternative C would involve the same off-site direct impacts to wetlands as Alternative A.</p>	Alternative D would involve approximately 17,600 square feet of total permanent alterations to waters of the U.S. and no temporary alterations to waters of the U.S.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Floodplain, Wetlands and Other Waters of the U.S.</b>				
	<p>wetlands would be added to Alternative A. These subtotals would be eliminated under Option 2.</p> <p>With the new ramp from Route 24 SB to Route 140 NB proposed under Option 3, approximately 7,930 square feet temporary impacts to wetlands, 400 linear feet/1,720 square feet impacts to land under water, and 35,700 square feet permanent impacts to wetlands. Option 4 would add 7,630 square feet temporary and 6,655 square feet permanent impacts to wetlands.</p>			
Mitigation	<p>H. In compliance with Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands), and EPA Section 404(b)(1) review by the Army Corps of Engineers, impacts to wetlands, floodplain, and other waters of the U.S. were avoided and minimized to the maximum extent practicable in project design.</p> <p>I. Compensatory mitigation for unavoidable impacts to wetlands and other waters of the U.S. would be provided in accordance with the ratios contained in the "Revision of New England District Compensatory</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	L. In compliance with the Massachusetts Wetlands Protection Act and the Taunton Wetlands Protection Bylaw, impacts to Bordering Vegetated Wetlands would be mitigated by creating new Bordering Vegetated Wetlands in the vicinity of the impact areas.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Floodplain, Wetlands and Other Waters of the U.S.</b>				
	<p>Mitigation Guidance (Corps; July 20, 2010). The preferred approach would be to create or enhance wetlands on the Project Site and/or proximate to each impact location at the Route 24/140 Intersection, proposed Route 140 Northbound Entrance Ramp (if Option 1 is selected), and proposed Route 140 Northbound exit from Route 24 Southbound (if Option 3 is selected) at an agreed upon mitigation ratio.</p> <p>J. Compensatory flood storage would be provided for all flood storage that would be lost within the 100 year floodplain so as not to cause an increase, incremental or otherwise, in the horizontal extent and level of flood waters during peak flows.</p>			
Secondary Effects (impacts associated with discharge of dredged or fill material, outside footprint of fill)	Alternative A involves an access road leading to north parcel to develop hotel and water park facilities, construction of a loop road around the proposed casino complex, and a parking area on Parcel 12 that would result in a secondary effects impact area of approximately 82,235 square feet.	Impacts would be the same as Alternative A.	Alternative C involves construction of a loop road around the proposed casino complex and a parking area on Parcel 12 that would result in a secondary effects impact area of approximately 63,026 square feet.	Depending on designs and construction plans determined by one or more developers, Alternative D could result in some secondary effects to upland forest and/or Critical Terrestrial Habitat.
Mitigation	K. In compliance with Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands), and EPA Section 404(b)(1) review by the Corps, impacts to wetlands, floodplain, and other waters of the U.S. were avoided and minimized to the maximum extent practicable in project design.	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	M. It can be assumed that developers would comply with the Massachusetts Wetlands Protection Act and the Taunton Wetlands Protection Bylaw as necessary, and impacts would be minimized and mitigated to the maximum extent practicable.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Stormwater</b>				
On-site Impacts	The increase in impervious area related to development would increase stormwater runoff on-site.	Impacts would be similar to Alternative A, but reduced due to the reduced footprint of development.	Impacts would be similar to Alternative A, but reduced due to the reduced footprint of development.	An increase in impervious area related to development would increase stormwater runoff on-site.
Mitigation	<p>A. Stormwater from the majority of the existing (and proposed) roadways would be collected in a closed conduit piping system fitted with 4-foot, deep-sump catch basins with hooded outlets.</p> <p>B. Runoff from the roadway and parking areas, once routed through the initial pollutant attenuation stage of the collection system, would be conveyed to the existing extended detention basin located at the end of O'Connell Way.</p> <p>C. For the areas currently flowing to the large combined existing extended detention basin, runoff from a portion of the roadway, parking/loading areas and building, once routed through the initial pollutant attenuation stage of the collection system, would be conveyed to the existing sediment forebay.</p> <p>D. A level spreader sump would be provided down gradient of all stormwater management BMPs to reduce the channeled flow velocities and induce non-erosive sheet flow conditions prior to discharge to the receiving wetland.</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A, but would not involve work north of the railroad tracks on the Project Site.	K. It can be assumed that developers of new commercial, industrial, warehouse, and office buildings resulting in increased impervious areas would expand and create stormwater management measures as necessary and would comply with the MassDEP Standards.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Stormwater</b>	<p>E. Where feasible, roof drainage from the proposed building structures would be serviced by individual subsurface recharge systems. In areas where unsuitable soils and/or groundwater conditions prohibit the proper placement of subsurface recharge systems, above ground retention storage would be provided.</p> <p>F. A multi-cell water quality swale would intercept runoff from parking areas.</p> <p>G. Stormwater from much of the paved remote surface parking areas would discharge directly to bioretention areas.</p>			
Off-site Impacts	Stormwater would increase off-site due to significant roadway improvements at the Route 24/Route 140 Intersection and the potential Route 140 Northbound Ramp from Stevens Street.	Significant off-site impacts would not occur under Alternative B.	Impacts would be the same as Alternative A.	Significant off-site impacts would not occur under Alternative D.
Mitigation	H. Under Option 1, stormwater runoff generated by the Route 140 Northbound Entrance Ramp would be collected in a closed drainage system. Deep sump catch basins would collect the roadway runoff and then the water would be discharged into a water quality treatment unit. Once the stormwater passed through the water quality treatment unit it would be recharged into the ground through an infiltration BMP installed below the proposed roadway.	N/A	Mitigation would be the same as Alternative A.	N/A

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<p><b>Stormwater</b></p>	<p>If Option 2 were selected, the existing stormwater management system on Stevens Street would be upgraded to accommodate the roadway widening necessary to improve the traffic flow. These upgrades would likely include new deep sump catch basins, piping, and water quality units.</p> <p>I. Under Option 3, ongoing design development will meet MassDEP Stormwater Standards to the extent possible. The recommended approach to addressing stormwater requirements consists of providing additional treatment at BMP # 2 and treating existing stormwater on Route 24 using potential BMPs # 4 and # 5 as shown on <b>Figure 8.3-4</b>.</p> <p>Proposed stormwater improvements at the Route 24/Route 140 Intersection under Option 4 include retrofitting the existing closed drainage system by relocating or providing new deep sump catch basins, piping, manholes, headwalls, drainage swales, sediment forebays and stormwater basins.</p>			

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Geology and Soils</b>				
On-site Impacts to Topography	The Proposed Development would involve clearing and grading. Topographic features of the Site would be altered by earthwork; however, due to the relatively flat nature of the site and prior grading and earthwork, the general topographic features of the Project Site would be preserved. The banks of the Cotley River and the River itself would not be impacted within the onsite Project Site as a result of Alternative A. Impacts to topography would be minimal and less than significant. No mitigation would be required.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A, except that Alternative C would involve no earthwork north of the rail line on the Project Site.	Alternative D would involve clearing and grading. Topographic features of the Project Site would be altered by earthwork; however, due to the relative flat nature of the Site and prior grading and earthwork, the general topographic features would be preserved. The Cotley River and its banks are protected by the Wetlands Protection Act, therefore it is unlikely that the River would be impacted. It can be assumed that developers of new commercial, industrial, warehouse, and office buildings resulting in increased impervious areas would expand and create stormwater management measures as necessary and would comply with the MassDEP Standards. The use of appropriate soil erosion and sediment control techniques would minimize and mitigate the potential for erosion and sedimentation. Impacts to topography would be minimal and, therefore, less than significant.
Off-site Impacts to Topography	Under Alternative A and C, the project proposes to potentially construct the proposed Route 140 Northbound Entrance Ramp (Option 1). At this location, topographic gradients would generally be maintained, and roadway improvements located adjacent to steep slopes and embankments would be protected during construction utilizing	N/A	Impacts would be the same as Alternative A.	N/A

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Geology and Soils</b>	<p>stormwater best management practices. The crossing of the Cotley River required for the Route 140 Northbound Entrance Ramp under Option 1 would involve a bridge spanning the River and its downcut banks, but strict engineering protocol would be utilized to protect the River and land immediately adjacent from future erosion.</p> <p>Under Alternative A and C, the project proposes to upgrade the existing Route 24/Route 140 intersection with a new slip ramp (Option 3) or improvements to the existing ramp (Option 4). Under Option 3, the new ramp would involve altering the existing topography to include a constructed fill landform for the new ramp, associated steep fill slopes and a retaining wall. Under Option 4, existing topographic gradients would be largely maintained.</p> <p>Under all Options, as a result of construction and permanent sediment and erosion control best management practices, impacts to the existing topography would be minimal and, therefore, less than significant. No mitigation would be required.</p>			

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Geology and Soils</b>  Impacts to Soils	Development would impact approximately 15.6 acres of currently undeveloped Prime Soils and approximately 7.9 acres of currently undeveloped State Important Soils. Soils would not be impacted by a change in agricultural use. Therefore, no significant impacts to prime soils or state important soils would result from implementation of Alternative A, and no mitigation would be required.  The use of appropriate soil erosion and sediment control techniques would minimize the potential for erosion and sedimentation, and no additional mitigation would be required.	Impacts would be the same as Alternative A.	Development would impact approximately 13.2 acres of Prime Soils and approximately 6.4 acres of currently undeveloped State Important Soils. Soils would not be impacted by a change in agricultural use. Therefore, no significant impacts to prime soils or state important soils would result from implementation of Alternative C, and no mitigation would be required.  The use of appropriate soil erosion and sediment control techniques would minimize the potential for erosion and sedimentation, and no additional mitigation would be required.	Alternative D would impact approximately 13.9 acres of Prime Soils and approximately 7.0 acres of State Important Soils. Soils would not be impacted by a change in agricultural use. Therefore, no significant impacts to prime soils or state important soils would result from implementation of Alternative D, and no mitigation would be required.  The use of appropriate soil erosion and sediment control techniques would minimize the potential for erosion and sedimentation, and no additional mitigation would be required.
Impacts to Mineral and Paleontological Resources	The proposed grading and landform alteration associated with Alternative A and the two off-site options would not adversely affect known or recorded mineral or paleontological resources. No mitigation is required.	Grading and landform alteration would not adversely affect known or recorded mineral or paleontological resources. No mitigation would be required.	Grading and landform alteration associated with on-site and off-site work would not adversely affect known or recorded mineral or paleontological resources. No mitigation would be required.	Grading and landform alteration would not adversely affect known or recorded mineral or paleontological resources. No mitigation would be required.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Rare Species and Wildlife Habitat</b>				
Impact to Habitat on Project Site	No work is planned in areas mapped as Core Habitats, Critical Natural Landscapes, or Living Waters Critical Supporting Watersheds. Secondary impacts to upland forest communities and impacts to Critical Terrestrial Habitat associated with the vernal pool in Wetland Series 7 would be minimized. No mitigation would be necessary.	Impact would be the same as Alternative A.	Impact would be the same as Alternative A, except that impacts to Critical Terrestrial Habitat associated with the vernal pool in Wetland Series 7 would be avoided entirely. No mitigation would be necessary.	It is assumed that project proponents would take measures to avoid sensitive habitats under Alternative D.
Off-Site Impacts to Habitat	Proposed improvements at Route 24 and 140 and the potential Route 140 Northbound Entrance Ramp would be confined to previously disturbed and developed areas and/or to areas not mapped as sensitive habitat, thus resulting in negligible impacts to wildlife habitat. No mitigation would be necessary.	Alternative B would involve no significant off-site improvements. No mitigation would be necessary.	Impacts would be the same as Alternative A.	Alternative B would involve no significant off-site improvements. No mitigation would be necessary.
Impacts to Threatened and Endangered Species	The project would have no adverse effects on state or federally listed threatened or endangered species. No mitigation would be necessary.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.
<b>Hazardous Materials</b>				
Risk of Encounter	There is the potential to encounter soil contamination associated with the 1988 gasoline release at 61 Stevens Street, and soil may be impacted along the property line with the auto salvage yard at 57 Stevens Street. Lead paint and asbestos containing materials may be encountered on the parcel.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A, except that Alternative C would not have the potential to encounter the lead paint, asbestos containing materials, metal debris, gas cans, and 55-gallon drums found north of the railroad.	Impact would be the same as Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Hazardous Materials</b>				
	north of the railroad, which also contains metal debris, gas cans, and unlabeled 55-gallon drums			
Mitigation	<p>A. Prior to construction, the Tribe would further investigate the potential to encounter OHM on the Project Site. Should any OHM be found to be present on the Project Site, it would be remediated in full compliance with all applicable regulations.</p> <p>B. In the event that contaminated soil and/or groundwater or other hazardous materials were encountered during construction-related earth-moving activities, all work would be halted until a qualified individual could assess the extent of contamination. The release would be evaluated and responded to in a manner consistent with the requirements of the MassDEP and the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000).</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	E. It can be assumed that, for each project on the site, each developer would ensure compliance with all applicable regulations, guidelines, and SOPs.
Risk of Release	The most likely possible incidents would involve the dripping of fuels, oil, and grease from construction equipment. The small quantities of fuel, oil, and grease that may drip would have relatively low toxicity and concentrations, but an accident involving a service or refueling truck could occur.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Hazardous Materials</b>				
Mitigation	<p>C. All hazardous materials necessary for the operation of the facilities shall be stored and handled according to State, Federal, and manufacturer's guidelines. All flammable liquids shall be stored in a labeled secured container, encircled within a secondary containment enclosure.</p> <p>D. Personnel shall follow written standard operating procedures (SOP) for filling and servicing construction equipment and vehicles.</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	F. It can be assumed that, for each project on the site, each developer would ensure compliance with all applicable regulations, guidelines, and SOPs.
<b>Water Supply</b>				
Impacts to Water Supply	Total water demand is approximately 309,000 gallons per day or 0.309 MGD. With a total of 0.988 MGD of available supply capacity before the City of Taunton reaches the Water Management Act withdrawal limit and 2.834 MGD capacity available at the City's Water Treatment Plant, no mitigation of demand or new supply is necessary.	Total water demand is approximately 163,000 gallons per day or 0.163 MGD. With a total of 0.988 MGD of available supply capacity before the City of Taunton reaches the Water Management Act withdrawal limit and 2.834 MGD capacity available at the City's Water Treatment Plant, no mitigation of demand or new supply is necessary.	Total water demand is approximately 245,000 gallons per day or 0.245 MGD. With a total of 0.988 MGD of available supply capacity before the City of Taunton reaches the Water Management Act withdrawal limit and 2.834 MGD capacity available at the City's Water Treatment Plant, no mitigation of demand or new supply is necessary.	Total water demand is approximately 29,200 gallons per day or 0.029 MGD. With a total of 0.988 MGD of available supply capacity before the City of Taunton reaches the Water Management Act withdrawal limit and 2.834 MGD capacity available at the City's Water Treatment Plant, no mitigation of demand or new supply is necessary.
Impacts to Water System	For the distribution system to provide the required fire flow of 3,500 gpm, some existing water mains and appurtenances would need to be upgraded in size and some new water mains would need to be added to the system within the Project Site.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A, except that no water supply would be required north of the railroad on the Project Site.	New buildings would need to be serviced by the water system.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Water Supply</b>	<p>Mitigation</p> <p>A. The proposed water system improvements include upgrading the Stevens Street water main from a 12 inch main to a 16-inch water main and replacing the 12-inch water main and 8-inch water main on Pine Hill Street with one 16-inch water main.</p> <p>B. The second point of connection for the Project Site would be at the emergency entrance on Middleboro Avenue/Hart Street. This would then provide a 12-inch water main through the Project Site, which would be connected to the existing 12-inch water main in O'Connell Way.</p> <p>C. Hydrants, valves and other appurtenances would be installed as part of the new water main construction.</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>Mitigation would be the same as Alternative A, except that Alternative C would not require a second point of connection on Middleboro Ave/Hart Street, so mitigation measure B would be eliminated.</p>	<p>D. Water service would be provided to the new buildings off the existing 12-inch water main in O'Connell Way or off the existing water mains surrounding the Project Site.</p>
<b>Wastewater</b>	<p>Impacts to Wastewater Collection System</p> <p>Two new dedicated sewer pumping stations (PS) would be constructed to service the Project Site. Approximately 176,700 GPD wastewater from the Casino PS would be pumped via a new force main and into an existing gravity sewer to the Route 140 PS. The Route 140 PS has a capacity of 2.3 MGD and currently receives only approximately 0.76 GPD at peak. Approximately 48,500 GPD wastewater from the Water Park</p>	<p>Two new dedicated sewer pumping stations (PS) would be constructed to service the Project Site. Approximately 54,500 GPD wastewater from the Casino PS would be pumped via a new force main and into an existing gravity sewer to the Route 140 PS. The Route 140 PS has a capacity of 2.3 MGD and currently receives only approximately 0.76 GPD at peak. Approximately 48,500 GPD wastewater from the Water Park</p>	<p>One new dedicated sewer pumping station would be constructed to service the Project Site. Alternative C would yield an average daily flow of approximately 176,700 gallons that would be pumped into the collection system, with all of the wastewater discharged to the Route 140 PS. Gravity sewers between the new sewer PS and the WWTF have adequate capacity, and no further mitigation would be necessary.</p>	<p>Additional flows estimated at 23,200 GPD would be pumped into the Stevens Street sewer.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Wastewater</b>				
	PS would be pumped directly into the force main on Middleborough Avenue. Gravity sewers between the new sewer PSs and the Wastewater Treatment Facility (WWTF) have adequate capacity, and no further mitigation would be necessary.	PS would be pumped directly into the force main on Middleborough Avenue. Gravity sewers between the new sewer PSs and the WWTF have adequate capacity, and no further mitigation would be necessary.		
Impacts to Wastewater Treatment System	Approximately 225,000 GPD of wastewater would be added to the WWTF. This flow is within the WWTF's current available capacity.	Approximately 103,000 GPD of wastewater would be added to the WWTF. This flow is within the WWTF's current available capacity.	Approximately 176,700 GPD of wastewater would be added to the WWTF. This flow is within the WWTF's current available capacity.	Wastewater generated from full build-out of the LUIP is estimated at 23,200 GPD. This flow is within the WWTF's current available capacity.
Mitigation	A. The Tribe would contribute to the City's infiltration and inflow (I/I) removal program at a ratio of 5:1 (i.e. 5 gallons of I/I removed for each gallon of wastewater added) to remove 1.125 million gallons of peak I/I from the sewer collection system. This would reduce the frequency of combined sewer overflows (CSOs) and create an effective increase in WWTF capacity. The Tribe would also rehabilitate the existing Route 140 Pumping Station.	C. The Tribe would remove 0.5 million gallons of peak I/I from the sewer collection system. This would reduce the frequency of CSOs and create an effective increase in WWTF capacity. The Route 140 Pumping Station would be rehabilitated.	D. The Tribe would remove 0.88 million gallons of peak I/I from the sewer collection system. This would reduce the frequency of CSOs and create an effective increase in WWTF capacity. The Route 140 Pumping Station would be rehabilitated.	E. A total of 115,000 gallons of peak I/I would be removed from the sewer collection system. Rehabilitation of the Route 140 PS would be by the City of Taunton. The Route 140 Pumping Station could be rehabilitated by the City.
<b>Utilities</b>				
Impacts of Electricity	The anticipated electrical power requirement for the Proposed Development is 22,428 MWh/year.	The anticipated electrical power requirement for Alternative B is 15,561 MWh/year.	The anticipated electrical power requirement for Alternative C is 20,563 MWh/year.	The anticipated electrical power requirement for Alternative D is 12,721 MWh/year.
Mitigation	A. A new substation would be constructed on the Project Site to fulfill electrical demand.	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	D. Infrastructure updates would be undertaken by the City of Taunton as necessary.
Impacts of Gas	The anticipated gas requirement for the Proposed Development is 122,400 MMBtu/year.	The anticipated gas requirement for Alternative B is 58,300 MMBtu/year.	The anticipated gas requirement for Alternative C is 90,200 MMBtu/year.	The anticipated gas requirement for Alternative C is between 1,674 CFH and 23,600 MMBtu.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Utilities</b>				
Mitigation	<p>B. Columbia Gas has made a preliminary determination that the gas mains in the vicinity of the Project Site are capable of supplying the estimated gas demand. A portion of the gas leading to the area in Route 140 would be upgraded to meet the project requirements.</p> <p>C. Gas service would be extended from Middleboro Avenue to provide for the water park.</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A, except there would be no need to extend gas service from Middleboro Avenue to the Project Site north of the railroad, so mitigation measure C would be eliminated.	E. Infrastructure updates would be undertaken by the City of Taunton as necessary.
<b>Solid Waste</b>				
Construction/Demolition Waste	The demolition and rehabilitation of the current buildings on the Project Site that would be required under Alternative A would generate approximately 2,600 cubic yards of waste, of which approximately 1,000 cubic yards would be recycled. Construction would generate approximately 4,700 cubic yards of waste, approximately 3,300 cubic yards of which would be recycled. Waste that cannot be recycled would be disposed of by a private company at a properly licensed facility that accepts construction/demolition materials in compliance with all applicable regulations. Waste has been minimized to the greatest extent possible; no further mitigation would be necessary.	Demolition waste and recycling would be slightly less than Alternative A, because Alternative B involves maintaining part of the current 97,000 square foot building located at 50 O'Connell Way. Construction waste and recycling would be less than Alternative A. Waste would be minimized to the greatest extent possible; no further mitigation would be necessary.	Demolition waste and recycling would be the same as Alternative A. Construction waste and recycling would be less than Alternative A. Waste would be minimized to the greatest extent possible; no further mitigation would be necessary.	Demolition waste and recycling would be significantly less than Alternative A, because the No Action Alternative only involves the renovation of one existing building. Because of its estimated new building square footage, the No Action Alternative could generate substantial construction waste and recycling comparable to Alternative A. It can be assumed that waste would be minimized to the greatest extent possible; no further mitigation would be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Solid Waste</b>				
Operational Waste	Alternative A would generate approximately 2,087.4 tons per year of solid waste. The Tribe would contract with a private solid waste management company for solid waste and recycling collection and disposal services. A recycling program allowing casino patrons to dispose of all items without sorting would minimize non-recycled solid waste to the maximum extent practicable; no further mitigation would be necessary.	Alternative B would generate approximately 1,286.4 tons per year of solid waste. Collection, disposal, and recycling would be the same as Alternative A.	Alternative C would generate approximately 1,725.9 tons per year of solid waste. Collection, disposal, and recycling would be the same as Alternative A.	Alternative D would generate approximately 1,822.3 tons per year of solid waste. The approximately 6.6 tons of solid waste per year generated by the residences on the Project Site would continue to be handled by the City of Taunton's hauling and disposal services. It can be assumed that owners of the office and commercial-industrial-warehouse facilities would be required to obtain contracts with private waste hauling companies. Programs could vary widely and cannot be guaranteed to minimize non-recycled solid waste to the maximum extent practicable.
<b>Air Quality</b>				
Construction Impacts	Construction equipment, motor vehicles, and fugitive dust from disturbed soil surface areas could impact air quality during construction.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.
Mitigation	A. Subcontractors would be required to adhere to all applicable regulations regarding control of dust and emissions. This would include maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices.	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	E. Adherence to all applicable regulations regarding dust control and emissions would minimize the impact to air quality during construction.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Air Quality</b>				
	B. Dust generated from earthwork and other construction activities would be controlled by spraying with water. If necessary, other dust suppression methods would be implemented to ensure minimization of the off-site transport of dust. There would also be regular sweeping of the pavement of adjacent roadway surfaces during the construction period.			
Regional Mesoscale (Indirect Emissions)	The 2022 Build condition shows increases of approximately 29 percent in VOC and 63 percent in NOx emissions compared to 2022 No Action conditions.	The 2022 Build condition shows increases of approximately 26 percent in VOC and 61 percent in NOx emissions compared to 2022 No Action conditions.	Impacts would be the same as Alternative A.	The 2022 No Action condition shows 38.9 tons per year VOC and approximately 43.4 tons per year NOx emissions.
Mitigation	Transportation mitigation measures E-Z would result not only in travel improvements but also in air quality impact reductions. With the new ramp included, mitigation measures would reduce VOCs by 1.7% and NOx emissions by 0.4%. Without the new ramp, Alternative A VOCs would be reduced by 1.5% and NOx emissions by 0.3%.	Transportation mitigation measures AA-AD would result not only in travel improvements but also in air quality impact reductions. Mitigation measures would reduce VOCs by 0.5% and NOx emissions by 0.1%.	Mitigation would be the same as Alternative A.	F. Mitigation would be the responsibility of individual developers, owners and tenants. Mitigation measures could vary widely.
Microscale (Ground-Level CO)	Modeled concentrations plus background are well below the NAAQS for all cases and peak hours of the three modeled intersections. Therefore, there would be no adverse air quality impacts resulting from anticipated traffic in the area, and mitigation would not be necessary.	The intersections analyzed (Hart Street & Route 140, Dean Street, Longmeadow Road, & the Gordon M. Owen Riverway, and Route 44 & Orchard Street) would not be affected by this Alternative. Mitigation would not be necessary.	Modeled concentrations plus background are well below the NAAQS for all cases and peak hours of the three modeled intersections. Therefore, there are no adverse air quality impacts resulting from anticipated traffic in the area, and mitigation would not be necessary.	Modeled concentrations plus background are well below the NAAQS for all cases and peak hours of the three modeled intersections. Therefore, there are no adverse air quality impacts resulting from anticipated traffic in the area, and mitigation would not be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Air Quality</b>				
Stationary Sources	Stationary sources, including sources including boilers and emergency generators, would also cause unavoidable adverse effects to air quality.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.
Mitigation	C. Equipment subject to the Massachusetts Environmental Results Program (ERP) would meet emissions standards and other performance and maintenance requirements.  D. Carbon monoxide monitors would be installed within loading docks and parking garages.	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.
<b>Greenhouse Gas</b>				
Direct GHG Emissions (fuel combustion for heating/cooling) and Indirect GHG Emissions (electricity use)	Alternative A would generate approximately 8,350 short tons per year direct CO2 emissions without mitigation. With mitigation measures, listed below, Alternative A would generate approximately 7,154 short tons per year direct CO2 emissions.  Alternative A would generate approximately 12,254 short tons per year indirect CO2 emissions without mitigation. With mitigation measures, listed below, Alternative A would generate approximately 9,287 short tons per year indirect CO2 emissions.	Alternative B would generate approximately 3,924 short tons per year direct CO2 emissions without mitigation. With mitigation measures, Alternative B would generate approximately 3,408 short tons per year direct CO2 emissions.  Alternative B would generate approximately 7,970 short tons per year indirect CO2 emissions without mitigation. With mitigation measures, Alternative B would generate approximately 6,450 short tons per year indirect CO2 emissions.	Alternative C would generate approximately 6,366 short tons per year direct CO2 emissions without mitigation. With mitigation measures, Alternative C would generate approximately 5,274 short tons per year direct CO2 emissions.  Alternative C would generate approximately 11,333 short tons per year indirect CO2 emissions without mitigation. With mitigation measures, Alternative C would generate approximately 8,524 short tons per year indirect CO2 emissions.	Alternative D would generate approximately 1,417 short tons per year direct CO2 emissions.  Alternative D would generate approximately 5,272 short tons per year indirect CO2 emissions.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<p><b>Greenhouse Gas</b></p> <p>Mitigation</p>	<p>A. A condenser heat recovery system would use a heat recovery exchanger to allow the reclamation of heat energy that is typically wasted and rejected via the chiller condenser.</p> <p>B. High-efficiency water cooled chillers would use enhanced controls, enlarged and improved condenser sections, and high-efficiency compressors.</p> <p>C. Air and water side economizers would allow the use of ambient air for cooling when outside temperatures are low enough.</p> <p>D. Variable air volume systems, variable speed pumping, and variable speed cooling tower fans would reduce the energy use during periods when full motor capacity is not required.</p> <p>E. Kitchen exhaust would be demand controlled to reduce unnecessary operation.</p> <p>F. Improved air filtration would allow the system to meet indoor air quality requirements with less outdoor air makeup, reducing the energy needed to heat or cool the outdoor air makeup.</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>Mitigation would be the responsibility of individual developers, owners and tenants. Measures could vary widely.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Greenhouse Gas</b>	<p>G. A high efficiency building shell generally includes greater insulation values in the building shell and glazing selection that combines functionality and high insulating properties. The casino design would include a high efficiency shell to minimize the energy required to maintain desired interior conditions.</p> <p>H. Green roofing would provide insulation.</p> <p>I. Reflective roofing aids in reducing urban heat island effect in summer and so would be utilized on most roof surfaces except where green roofing is employed.</p> <p>J. By shading building structures, exterior shading devices can reduce the cooling requirements for those structures.</p> <p>K. Premium electric motors are more efficient than standard motors and would be specified for all significant uses such as HVAC equipment and elevators.</p> <p>L. For ventilation systems where a large percentage of fresh air makeup must be used, a heat exchanger would use exhaust air to pre-warm incoming air on cold days, and pre-cool incoming air on hot days.</p>			

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Greenhouse Gas</b>	<p>M. Ventilation systems would be demand controlled to reduce unnecessary operation.</p> <p>N. Room occupancy sensors would be used in offices, conference rooms, bathrooms and storage areas to turn off or reduce lighting when the space is not occupied. Similarly, HVAC would be designed to minimize energy use when hotel rooms were unoccupied.</p> <p>O. Building shells would maximize daylight penetration, reducing the need for indoor electric lighting during the daytime.</p> <p>P. High-efficiency lighting and dimmer lighting would be installed to reduce electricity use.</p> <p>Q. Low flow fixtures would provide an energy benefit by reducing the amount of water that needs to be treated and pumped to the Site.</p> <p>R. Energy Star appliances would be utilized wherever they were available for the intended function.</p> <p>S. Rainwater harvesting would provide an energy benefit by reducing the amount of water that needed to be treated and pumped to the Site for irrigation.</p>			

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Greenhouse Gas</b>				
	<p>T. An energy management system would provide the operators with real-time data on system performance, allowing optimization of the system to reduce energy demand and cost.</p> <p>U. To ensure proper implementation of energy-saving measures, enhanced commissioning would include additional oversight of the construction and startup phases.</p> <p>V. Because refrigerants can be GHGs, an enhanced refrigerant management would ensure that the systems used have the minimum feasible global warming potential, and that leaks were prevented.</p>			
Transportation-Related GHG Emissions	Transportation related to Alternative A would generate approximately 5,876.3 tons per year as CO <sub>2</sub> . This estimate accounts for Transportation mitigation measures E-Z above, and no further mitigation would be necessary.	Transportation related to Alternative B would generate approximately 5,547.2 tons per year as CO <sub>2</sub> . This estimate accounts for Transportation mitigation measures AA-AD above, and no further mitigation would be necessary.	Transportation related to Alternative C would generate approximately 4,131.3 tons per year as CO <sub>2</sub> . This estimate accounts for Transportation mitigation measures E-Z above, and no further mitigation would be necessary.	Transportation related to Alternative D would generate approximately 228.4 tons per year as CO <sub>2</sub> .
<b>Cultural Resources</b>				
Potential Impacts	Alternative A would impact the First Light 1-4 sites and the East Taunton Industrial Park 2 Site (19-BR-500).	Impacts would be the same as Alternative A.	Alternative C would impact the First Light 1 Site but avoid the First Light 2-4 sites and the East Taunton Industrial Park 2 Site (19-BR-500).	Impacts would be the same as Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<p><b>Cultural Resources</b></p> <p>Mitigation</p>	<p>A. If the Tribe, in consultation with the MHC and BIA, were to determine that avoidance of the First Light 1-4 sites would not be possible, then further investigations at the site examination level would be undertaken to collect sufficient information on site characteristics to determine if the sites meet the National Register criteria to be eligible for listing. If any of the sites were determined eligible for listing, the Tribe would consult with the MHC and BIA to consider alternatives to avoid, minimize or mitigate adverse effects to the sites under Section 106. If avoidance were not possible, the Tribe, through its THPO, would consult with the MHC and BIA under Section 106 to enter into a Memorandum of Agreement (MOA) that would include a data recovery program to mitigate the adverse effects to the sites.</p> <p>B. It is anticipated the MHC will determine the East Taunton Industrial Park 2 Site (19-BR-500) as eligible for listing on the National Register. If, following consultation, it were determined avoidance of the Site would not be possible, the Tribe, through its</p>	<p>Mitigation would be the same as Alternative A.</p>	<p>C. If the Tribe, in consultation with the MHC and BIA, were to determine that avoidance of the First Light 1 Site would not be possible, then further investigations at the site examination level would be undertaken to collect sufficient information on site characteristics to determine if the site meets the National Register criteria to be eligible for listing. If the site were determined eligible for listing, the Tribe would consult with the MHC and BIA to consider alternatives to avoid, minimize or mitigate adverse effects to the site under Section 106. If avoidance were not possible, the Tribe, through its THPO, would consult with the MHC and BIA under Section 106 to enter into a Memorandum of Agreement (MOA) that would include a data recovery program to mitigate the adverse effects to the site.</p>	<p>D. The project proponent(s) for the site build-out would be required to comply with State Register Review and/or Section 106 if state and/or federal funding, licensing, permits and/or approvals were required. The project proponent(s) would be required to conduct a site examination for First Light 1-4 to determine if any of the sites meet the criteria for National Register eligibility, and conduct a site examination if avoidance were not possible. The project proponent(s) would be required to avoid the East Taunton Industrial Park 2 Site (19-BR-900) that was recommended as eligible for listing in the National Register. If avoidance were not possible, the site would be subject to data recovery.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Cultural Resources</b>				
	THPO, would consult with the MHC and BIA under Section 106 to enter into a Memorandum of Agreement (MOA) that would include a data recovery program to mitigate the adverse effects to the site.			
<b>Noise</b>				
Construction Impacts	Construction of the Proposed Development would require the use of equipment that could be audible from off-site locations. The principal noise-generating activities would include: earth moving equipment, steel erection and concrete placement, building finishing, diesel truck traffic moving to and from the Project Site, and construction vehicles operating on-site.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.
Mitigation	<p>A. Construction equipment would be required to have installed and properly operating appropriate noise muffler systems.</p> <p>B. All exterior construction activities would typically be limited to normal working hours. Off-hour work would be minimized, to the extent practicable, to avoid excess noise generating work at sensitive times.</p> <p>C. Appropriate traffic management techniques to mitigate roadway traffic noise impacts would be implemented during the construction period.</p>	Mitigation would be the same as Alternative A.	Mitigation would be the same as Alternative A.	Although mitigation would be the responsibility of individual developers, it can be assumed that measures would be the same as Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Noise</b>				
	D. Excessive idling of construction equipment engines would be prohibited.  E. All exhaust mufflers would be in good working order, and regular maintenance and lubrication of equipment would be required.			
Operational Impacts	Mechanical equipment used to heat, cool, and supply back-up power to the facility would not create significant additional noise in the surrounding neighborhood, based on Massachusetts Department of Environmental Protection Noise Policy standards. Therefore, no mitigation would be necessary.	Impacts would be the same as Alternative A, except that one location would experience louder noise due to the removal of the 15-story casino hotels and their shielding of mechanical equipment. Alternative B would not significant additional noise, based on Massachusetts Department of Environmental Protection Noise Policy standards. Therefore, no mitigation would be necessary.	Impacts would be the same as Alternative A, except that one location would experience less noise under Alternative C than Alternative A due to the removal of the water park and related facilities. Alternative C would not significant additional noise, based on Massachusetts Department of Environmental Protection Noise Policy standards. Therefore, no mitigation would be necessary.	It is impossible to assign a dBA value to this Alternative without knowing specific mechanical equipment needs, which can vary significantly among industrial buildings. By definition, it would be equal to or louder than the existing condition sound levels measured in November 2012.
<b>Visual</b>				
Community Character/Regional Impacts	The casino hotels, parking garage, and water park hotel would be partially visible from parts of their surroundings, but would largely be blocked by topography and trees. This impact is minimal and would not require additional mitigation.	The parking garage and water park hotel would be partially visible from parts of their surroundings, but would largely be blocked by topography and trees. This impact is minimal and would not require additional mitigation.	The casino hotels and parking garage would be partially visible from parts of their surroundings, but would largely be blocked by topography and trees. This impact is minimal and would not require additional mitigation.	Based on development in industrial parks, these buildings are not likely to be more than two stories tall. Their visibility would be almost entirely limited to their immediate surroundings due to the extent of tree-cover in the area. This impact is minimal and would not require additional mitigation.
Architectural Impacts	The Project Site would be altered from an industrial park-style development to a destination resort casino.	Impact would be the same as Alternative A.	Impact would be the same as Alternative A.	The Project Site would continue to be developed in an industrial park style.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Visual</b>				
Shadow Impacts	Shadow from new buildings would be limited to small areas of the Project Site, except for limited periods in the late afternoon. In late afternoon during spring, summer, and fall, some shadow from the casino hotels and parking garage on the southern end of the Site would fall on Stevens Street near the Project Site entrance. Significant shadows would be cast on and across Stevens Street during late afternoon hours around the Winter Solstice, when shadows are at their longest.	Impacts would be similar but reduced compared to Alternative A, as the elimination of the two casino hotels under Alternative B would reduce shadow impact to Stevens Street.	Impacts would be similar but reduced compared to Alternative A, as the elimination of the water park and related development north of the railroad tracks under Alternative C would eliminate some minor shadow on the Project Site.	Because industrial park buildings are not typically greater than two stories in height, shadow impacts would be insignificant under this Alternative.
Lighting Impacts	The Project Site would include outdoor lighting at levels determined based on the goal of protecting public health and safety at night. The highest lighting levels would be at building entrances and exits, as well as driveways near the parking garage. Lighting in the entry courtyard and on the hotel roof terrace would be prevented from reaching neighboring properties or the night sky by screens created by building structures.	Impacts would be similar but reduced compared to Alternative A. Overall lighting impacts would be reduced compared to Alternative A due to the elimination of the casino hotels.	Impacts would be similar but reduced compared to Alternative A. Overall lighting impacts would be reduced compared to Alternative A due to the elimination of the water park and related facilities.	Lighting on the Project Site under Alternative D would be expected to meet safety requirements, but would not impact neighboring properties or the night sky.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
Mashpee Parcels				
Impacts to Tax Revenues	The taking of the Mashpee Parcels into federal trust action would deprive the Town of Mashpee of approximately \$17,564 in property tax revenues annually. This total represents a 0.03 percent decrease in annual property tax revenue for the Town of Mashpee, and is not considered a significant impact.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	If no action were taken with regard to the Mashpee Parcels, they would remain part of the Town of Mashpee's annual tax revenues.
Impacts to Community Infrastructure	If the Mashpee Parcels were taken into trust, criminal jurisdiction over crimes that occur on those trust lands would be split between the United States, the Tribe, and the Commonwealth, depending on the type of crime, the tribal status of the offender, and the tribal status of the victim. Civil (non-criminal) jurisdiction would also transfer from the state/town to the Tribe upon the lands' acquisition in trust. It is not anticipated that crimes committed on trust lands would add a significant burden to any of the entities who may exercise jurisdiction, so no additional mitigation would be necessary.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	Any criminal activity taking place on the parcels would continue to primarily be under the jurisdiction of the Town of Mashpee and, when necessary, the Commonwealth of Massachusetts.
Taunton Parcels				
Impacts to Tax Revenues	The taking of the Project Site into federal trust would remove approximately \$370,000 from the City of Taunton's annual tax revenues. Because the tax revenues generated by the Project Site parcels represent a small proportion of total property tax	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	The Project Site would remain part of the City of Taunton's annual tax revenues.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
	revenues for the City and the Tribe would provide impact payments as described below, the removal of the Project Site parcels from the tax roll would not have an adverse impact on the City of Taunton.			
Impacts to Local Police	New employees and visitors to the Proposed Development would create additional demand for police services.	As under Alternative A, new employees and visitors would create additional demand for police services. However, due to the decrease in the number of project-related jobs and visitors, demand would be less compared with Alternative A.	As under Alternative A, new employees and visitors would create additional demand for police services. However, due to the decrease in the number of project-related jobs and visitors, demand would be less compared with Alternative A.	Alternative D is not expected to result in any significant adverse impacts on law enforcement.
Mitigation	A. The Tribe would pay a one-time cost of approximately \$2.982 million and annual costs of \$2.5 million to fund the creation of a new police substation to accommodate the increased daily population in East Taunton, the purchase of new patrol cars, and the hiring of additional officers.	E. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A in proportion to the reduction in the size of the development program.	I. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A in proportion to the reduction in the size of the development program.	No mitigation would be necessary.
Impacts to Individuals Suffering Gambling Addiction	The development of a destination resort casino may negatively affect people who suffer from problem or pathological gambling addiction disorders.	As under Alternative A, the development of a destination resort casino could negatively affect people who suffer from problem or pathological gambling addiction disorders. However, due to the decrease in the number of casino visitors, these incidences would be less compared with Alternative A.	Impacts would be the same as Alternative A.	Alternative D is not expected to negatively affect people who suffer from problem or pathological gambling addiction disorders.
Mitigation	B. The Tribe would support problem gambling education, awareness, and treatment through a one-time contribution of \$60,000 and annual contributions of \$30,000 to a local center for the	F. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A	Mitigation would be the same as Alternative A.	No mitigation would be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
	treatment of compulsive gambling. The Tribe would provide training to front line staff in recognizing compulsive gamblers and make information available and accessible for such individuals seeking assistance.	in proportion to the reduction in the size of the development program.		
Impacts to the Criminal Justice System	The Proposed Development would not result in a significant adverse impact to the criminal justice system. The most likely scenario to put a burden on the criminal justice system would be the presence of pathological gamblers, who have higher arrest rates than non-pathological gamblers. As described above, the Tribe's payment of the creation of a local center for the treatment of compulsive gambling would serve to lessen any additional burden on the criminal justice system.	Like Alternative A, Alternative B would not result in a significant adverse impact to the criminal justice system.	Impacts would be the same as Alternative A.	Alternative D is not expected to result in any significant adverse impact to the criminal justice system.
Impacts to Fire Protection	The Proposed Development would place additional burdens on the Taunton Fire Department due to the increase in visitors to the area and the additional households expected as a result of project-generated employment.	As under Alternative A, new employees and visitors would create additional demand for fire protection services. However, due to the decrease in the number of project-related jobs and visitors, demand would be less compared with Alternative A.	As under Alternative A, new employees and visitors would create additional demand for fire protection services. However, due to the decrease in the number of project-related jobs and visitors, demand would be less compared with Alternative A.	Alternative D is not expected to result in any significant adverse impact to the Taunton Fire Department.
Mitigation	C. The Tribe would pay the City a one-time cost of \$2.14 million for Phase 1 of the Proposed Development, a one-time cost of \$720,000 for Phase 2, and annual costs of \$1.5 million for fire protection infrastructure improvements.	G. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A in proportion to the reduction in the size of the development program.	J. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A in proportion to the reduction in the size of the development program.	No mitigation would be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
Impacts to Emergency Medical Services and Hospitals	The new visitors, residents, and employees introduced to the area by the Proposed Development would create new demands on existing ambulance and hospital services, including in-patient and outpatient (emergency room) services. These visits would represent marginal increases compared to the 7,496 households served by Morton Hospital in fiscal year 2011 and the 52,794 emergency room cases handled by Morton Hospital annually. Overall, the Proposed Development would not result in any significant adverse impacts to emergency medical services and hospitals. No mitigation would be necessary.	As under Alternative A, there would be no significant adverse impacts to emergency medical services and hospitals, and no mitigation would be necessary.	As under Alternative A, there would be no significant adverse impacts to emergency medical services and hospitals, and no mitigation would be necessary.	Alternative D is not expected to result in any significant adverse impact to the emergency medical services and hospitals. No mitigation would be necessary.
Impacts to Schools	The Proposed Development would likely introduce new households to the area. While some of these households would increase demand for school seats in the Taunton Public School District, others would be broadly dispersed over approximately 317 schools in Bristol and Plymouth Counties and would not overburden any particular district.	As under Alternative A, new employees would create some additional demand for school seats. However, due to the decrease in the number of project-related jobs, demand would be less compared with Alternative A.	As under Alternative A, new employees would create some additional demand for school seats. However, due to the decrease in the number of project-related jobs, demand would be less compared with Alternative A.	Alternative D is not expected to result in any significant adverse impact to schools.
Mitigation	D. The Tribe would pay the City of Taunton \$370,000 annually as increased local contribution to the Taunton School District. The Taunton School District could use these additional funds as needed	H. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A	K. Payments from the Tribe to the City of Taunton, which are based on estimated services necessitated by the project-induced demand, would be reduced compared to Alternative A.	No mitigation would be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
	based on any new burdens that result from an increased student population.	in proportion to the reduction in the size of the development program.	in proportion to the reduction in the size of the development program	
Impacts on Employment	The 3,500 jobs introduced by the Proposed Development would increase the number of jobs in the City by 12.3 percent, and could substantially decrease the unemployment rate. In the larger two-county area, the 3,500 Proposed Development jobs would increase employment by 0.7 percent, and assuming that approximately 75 percent of the Project Site jobs would be filled by residents of the two-county area, the project would decrease the unemployment rate in the area from 9.0 percent to 8.5 percent. This represents a benefit, and thus requires no mitigation.	Alternative B would create fewer jobs compared with Alternative A. Alternative B would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.	Alternative C would create fewer jobs compared with Alternative A. Alternative C would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.	With a total of approximately 673 new jobs, Alternative D would generate fewer direct jobs than Alternative A. Alternative D would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.
Impacts on Local Housing	It is anticipated that the limited number of workers that may move to Taunton or the broader labor shed area to work at the proposed project would be able to relocate to existing vacant housing units. Because these houses would not involve new construction, this does not represent a significant impact and thus requires no mitigation.	Alternative B would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.	Alternative C would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.	Alternative D would not result in a significant adverse impact on the study area's workforce, and thus would require no mitigation.
Impacts of Patrons	The Proposed Development's introduction of an estimated 5.3 million visitors per year is expected to result in an overall gradual strengthening of the regional economy, mainly through direct spending on-site that supports the jobs and purchases of goods and	Annual visitation would be substantially less under Alternative B compared with Alternative A, due to the smaller casino and associated hotel and restaurant space. Off-site visitor spending and its positive effects on area businesses would therefore be	Annual visitation to the casino would be substantially the same under Alternatives A and C, because the casino would be the same size. However, total visitation to the Project Site would be less under Alternative C due to the lack of a water park and fewer	Annual visitation to the Project Site would be minimal under Alternative D, and visitors would be traveling for business rather than entertainment purposes. Alternative D would not result in a significant adverse impact with respect to project visitors.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>				
	services by the Proposed Development's operations. Spending by casino patrons on incidental purchases off-site in non-casino enterprises—restaurants, hotels, motels, retail establishments, etc.—are also expected to create economic benefits in the local and regional economies. No mitigation would be necessary.	reduced compared to Alternative A. Overall benefits in the local and regional economies would still be expected, and no mitigation would be necessary.	hotel rooms compared with Alternative A. Off-site visitor spending and its positive effects on area businesses would be somewhat reduced compared to Alternative A. Overall benefits in the local and regional economies would still be expected, and no mitigation would be necessary.	
Impacts of Shifts in Local Spending	The existing business community could experience alterations of local consumer spending behavior through which a portion of leisure spending would be shifted toward the casino amenities and away from established leisure and entertainment businesses. However, the negative consequences of this effect on particular businesses is expected to be offset by the continued support of economic activity, such as wages, purchases, and taxes, within the overall local economic sphere, and further offset by the increase in local and regional spending brought on by new employees to the casino and to positions vacated by new casino employees. No mitigation would be necessary.	The casino developed under Alternative B, though smaller than Alternative A, would still provide nearby residents with an alternative leisure and entertainment venue that would compete with existing local entertainment and leisure businesses. Overall benefits of consumer spending would remain in the local and regional economies, and no mitigation would be necessary.	The casino developed under Alternative C would provide nearby residents with the same alternative leisure and entertainment venue as Alternative A, and like Alternative A, this casino would compete with existing local entertainment and leisure businesses. Overall benefits of consumer spending would remain in the local and regional economies, and no mitigation would be necessary.	Annual visitation to the Project Site would be minimal under Alternative D, and visitors would be traveling for business rather than entertainment purposes. Alternative D would not result in a significant adverse impact with respect to project visitors.
Economic Impacts of Construction	Construction of the Proposed Development is expected to directly employ an average of 287 full-time equivalent jobs in Bristol and Plymouth Counties per year during the eight year construction	Like Alternative A, Alternative B would result in substantial economic benefits derived from new jobs during project construction. However, the reduced development program	Like Alternative A, Alternative C would result in substantial economic benefits derived from new jobs during project construction. However, the lack of water park and related	Although some employment growth would occur due to construction of new commercial-industrial-warehouse businesses, economic activity under Alternative D, including jobs, employee

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Socioeconomic</b>	<p>period, and would support an additional 712 person-years of indirect employment (industries that provide goods and services to contractors) and 893 person-years of induced employment (jobs generated by new economic demand from household spending salaries earned through direct and indirect jobs) within the two-county region. Total direct, indirect, and induced employee compensation resulting in the two-county region from construction of the Proposed Development is estimated at \$192.86 million. These impacts would be beneficial to the local and regional economy.</p>	<p>proposed under Alternative B would result in reduced economic benefits. Total employment, employee compensation, and economic output associated with the construction of Alternative B would decrease roughly proportionately with decreases in the square feet of particular uses compared to Alternative A.</p>	<p>development proposed under Alternative C would result in reduced economic benefits. Total employment, employee compensation, and economic output associated with the construction of Alternative C would decrease roughly proportionately with decreases in the square feet of particular uses compared to Alternative A.</p>	<p>compensation, and economic output, would be small compared with the other Alternatives.</p>
Economic Impacts from Annual Operations	<p>Direct employment for the project is estimated at 3,500 permanent, full- and part-time jobs. the Proposed Development would generate an additional 1,540 permanent jobs within the two-county area, bringing the total number of direct, indirect, and induced jobs from the annual operation of the development to 5,040 full- and part-time jobs within Bristol and Plymouth Counties. Total direct, indirect, and induced employee compensation resulting in Bristol and Plymouth counties from the annual operation of the completed development is estimated at \$147.57 million. These impacts would be beneficial to the local and regional economy.</p>	<p>Economic benefits associated with ongoing operation of the Project would also be substantially reduced under Alternative B compared to Alternative A. Alternative B includes roughly 54 percent of the casino space, one third of the hotel rooms, 43 percent of the restaurant seats, and fewer employee dining room seats compared to Alternative A. Both non-payroll and payroll expenses associated with these uses would be less under Alternative B compared with Alternative A, and would support fewer direct, indirect and induced jobs, less employee compensation, and less economic output.</p>	<p>Because Alternative C does not include a water park and includes 300 fewer hotel rooms compared to Alternative A, this Alternative would result in reduced economic benefits, measured in terms of jobs, employee compensation, and economic output during construction ongoing operation of the project.</p>	<p>Although some employment growth would occur due to expansion of existing businesses or establishment of new commercial-industrial-warehouse businesses, economic activity under Alternative D, including jobs, employee compensation, and economic output, would be small compared with the other Alternatives.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Environmental Justice</b>				
Mashpee Parcels				
Beneficial Impacts	The Mashpee Wampanoag Tribe qualifies as an Environmental Justice Community. The taking of the Mashpee Parcels into trust would strengthen the Tribe's ability to fulfill its responsibilities under its governmental and social programs. The action would facilitate Tribal self-determination and would ensure that the lands were preserved for future generations of Mashpee Indians. Therefore, the proposed action would not result in any disproportionate adverse impacts on this Environmental Justice Community, and would instead benefit the Tribe.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	If the lands in Mashpee were not taken into federal trust, they would remain under the ownership of the Tribe and related entities. The Tribe, which is an Environmental Justice Community, would not receive the financial benefits or opportunities for self-determination anticipated under the proposed action.
Taunton Parcels				
Impacts	Increases in traffic may affect the Environmental Justice Community in Census Tract 6141.01 Block Group 3.	Increases in traffic affecting the Environmental Justice Community in Census Tract 6141.01 Block Group 3 would be commensurably less than Alternative A.	Impacts would be the same as Alternative A.	Traffic operations and other potential impacts to the Environmental Justice Community in Census Tract 6141.01 Block Group 3 would generally remain the same as existing conditions.
Mitigation	A. Traffic improvements described above as Transportation mitigation measures E-Z, especially those within the Block Group at Mozzone Boulevard, Erika Drive, and High Street, would mitigate any undue traffic burden Alternative A could cause to the nearby Environmental Justice Community.	B. Traffic improvements described above as Transportation mitigation measures AA-AD would mitigate any undue traffic burden Alternative A could cause to the nearby Environmental Justice Community.	Mitigation would be the same as Alternative A.	Mitigation measures would not be necessary.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Environmental Justice</b>				
Beneficial Impacts	<p>The proposed casino development would create employment opportunities for Tribal members and would generate revenues to support Tribal programs that serve Tribal members.</p> <p>Employment opportunities would be open to Tribe members, potentially alleviating the nearly 50 percent unemployment rate the Tribe currently suffers.</p> <p>Gaming revenue would support Tribal investment in housing and healthcare, which currently represent great needs among Tribe members as the percentage of Wampanoag in poor health has been shown to be two times higher than the general Massachusetts adult population, and there is an identified unmet rental housing need for approximately 100 families.</p> <p>Gaming revenues and trust lands would also allow the Tribe to adequately preserve its community and cultural history through cultural site upkeep and investment in cultural education programs.</p>	<p>The development of the Reduced Intensity I casino would have smaller but similar positive impacts on the Tribe in terms of revenue and cultural preservation.</p>	<p>The development of the Reduced Intensity II casino would have smaller but similar positive impacts on the Tribe in terms of revenue and cultural preservation.</p>	<p>The No Action Alternative would not provide any benefits to the Tribe.</p>

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Indirect and Growth Inducing Effects</b>				
Effects of Off-site Transportation Improvements	The proposed off-site transportation improvements (Transportation mitigation measures E-AA above) are not expected to result in any significant impacts.	The proposed off-site transportation improvements (Transportation mitigation measures AB-AE above) are not expected to result in any significant impacts.	Impacts would be the same as Alternative A.	Alternative D does not include any specific new off-site transportation improvements tied directly to the build-out of the Project Site. Therefore, it would not have associated indirect impacts.
Effects of Off-site Water and Sewer Improvements	No significant impacts are expected to occur as a result of the water main installation on Pinehill and Stevens Street.  The proposed improvements to reduce I/I and upgrade the Route 140 Pumping Station are not expected to result in any significant adverse environmental impacts.	Impacts would be the same as Alternative A.	Impacts would be the same as Alternative A.	The minor water supply improvements necessary under Alternative D would not be expected to have any adverse environmental impacts.  The proposed improvements to reduce I/I and upgrade the Route 140 Pumping Station are not expected to result in any significant adverse environmental impacts.
Effects of Employment	Wages earned by new employees would most likely be spent in the local economy. Businesses and industries serving resident communities with these goods and services would experience increased demands, resulting in further investments in capital and labor needed to meet these increased demands. Opportunities for the expansion of existing businesses and the opening of new businesses would exist. These effects are considered benefits and would not require mitigation.	The level of employment and its effects on the local and regional economies would be reduced compared to Alternative A.	The level of employment and its effects on the local and regional economies would be reduced compared to Alternative A.	The level of employment and its effects on the local and regional economies would be reduced compared to Alternative A.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Indirect and Growth Inducing Effects</b>				
Effects of Operation on Local Economy	The operation of the proposed casino and related facilities would require the ongoing purchase of a wide range of goods and services, many of which would be purchased within the local and regional market areas. The demand the local and regional economies experience would represent opportunities for the expansion and creation of businesses, such as wholesalers, to serve the operational needs of the Proposed Development. New spending and investment by these businesses would induce growth leading to approximately 710 indirect jobs throughout Bristol and Plymouth Counties and a total of 740 indirect jobs in Massachusetts. The additional investment and employment are considered benefits and would not require mitigation.	The effects of local and regional investment related to casino operations would be similar but reduced compared to Alternative A.	The effects of local and regional investment related to casino operations would be similar but reduced compared to Alternative A.	The effects of local and regional investment related to the operation of a built-out industrial park on the Project Site could vary significantly based on the types of businesses on the Site, but would be expected to be reduced significantly compared to Alternative A.
Effects of Operation on Community Services	The induced growth created by the Proposed Development would create additional demand for community services, including police, fire, and emergency services, schools, and health and welfare-related services. The increased demand would be offset by spending and associated tax revenue to the County and State. In addition, new property tax revenues would be generated by any induced residential construction, and would be collected by County, municipal,	The effects of induced employment on local and regional community services would be similar but reduced compared to Alternative A. As under Alternative A, these impacts would be offset by additional tax revenues.	The effects of induced employment on local and regional community services would be similar but reduced compared to Alternative A. As under Alternative A, these impacts would be offset by additional tax revenues.	The effects of induced employment on local and regional community services would be expected to be reduced compared to Alternative A. As under Alternative A, these impacts would be offset by additional tax revenues.

**TABLE 1.5-1  
SUMMARY OF IMPACTS (CONTINUED)**

Resource	Alternative A: Proposed Development	Alternative B: Reduced Intensity I	Alternative C: Reduced Intensity II	Alternative D: No Action
<b>Indirect and Growth Inducing Effects</b>				
	school, and special district taxing authorities. Therefore, no significant impacts to community services are expected to result from induced growth.			
Effects of Visitors	Visitors to the casino and related facilities would be expected to spend money in the local and regional economies on food, transportation, lodging, and entertainment. The Proposed Development is expected to generate over 10,000 incoming automobile trips per day, representing substantial visitor and tourist spending potential. Traffic impacts would be mitigated through Transportation mitigation measures E-Z above. Visitor spending in the local and regional economies would be considered a benefit and would not require mitigation.	Alternative B would generate over 5,000 incoming automobile trips per day, so visitor spending in the local and regional economies would be similar but reduced compared to Alternative A. Traffic impacts would be mitigated by Transportation mitigation measures AA-AD above, and visitor spending would be considered a benefit and would not require mitigation.	Impacts and mitigation would be the same as Alternative A.	Incoming automobile trips to the Project Site under Alternative D would be significantly reduced compared to the Development Alternatives and would not be expected to generate significant local and regional spending.



# ***SECTION 2.0***

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## **INTRODUCTION**

# SECTION 2.0

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## INTRODUCTION

### 2.1 The National Environmental Policy Act

The National Environmental Policy Act (NEPA) provides a national policy to integrate environmental considerations into the planning process and decisions of federal agencies. NEPA provides an interdisciplinary framework to ensure that federal agency decision-makers consider environmental factors. A key procedure required by NEPA is the preparation of an Environmental Impact Statement (EIS) for any major federal action that may significantly affect the quality of the environment. The Indian Reorganization Act (IRA) at 25 U.S.C. § 465 provides discretionary authority to the Secretary of the Interior to determine whether to acquire land in trust for tribes. The IRA at 25 U.S.C. at § 467 also provides discretionary authority to the Secretary of the Interior to issue reservation proclamations for land taken into trust.

The Bureau of Indian Affairs (BIA) has prepared this Draft EIS for the proposed fee-to-trust transfer of approximately 151 acres in Taunton, Massachusetts and approximately 170 acres in Mashpee, Massachusetts. The land would be placed in federal trust for the Mashpee Wampanoag Tribe (the Tribe). The Tribe is proposing to use the land in Taunton to develop a destination resort casino, and the land in Mashpee to preserve and develop Tribal facilities including government offices and housing. The EIS will focus on foreseeable consequences associated with either approving or denying the current application for taking into federal trust the subject properties located in n Taunton and Mashpee, Massachusetts.

#### 2.1.1 PROPOSED FEDERAL ACTION: FEE-TO-TRUST TITLE TRANSFER AND RESERVATION PROCLAMATION

The Tribe is a federally-recognized Indian tribe and was acknowledged as such in 2007 after completion of the federal recognition process at 25 C.F.R. Part 83. The Tribe does not have an Indian reservation or other protected trust lands and is proposing that title to land be taken into trust by the United States for the benefit of the Tribe. The Indian Reorganization Act (IRA) at 25 U.S.C. § 465 and its implementing regulations at 25 C.F.R. Part 151 govern trust acquisitions for Indian tribes. Because the Mashpee Wampanoag are a landless tribe without the benefits of a recognized Indian reservation, the Tribe has also requested that the Secretary issue a reservation proclamation pursuant to 25 U.S.C. § 467, and to issue a determination that the subject lands will, upon acceptance into trust, constitute the initial reservation of the Tribe upon which it may lawfully conduct gaming activities pursuant to IGRA. The Indian Gaming Regulatory Act at 25 U.S.C. §§ 2701-2721 (IGRA) allows tribes to conduct class II (e.g., bingo) and class III (e.g., high-stakes, slots) gaming on land acquired in trust after 1988 if the land meets certain exceptions set forth in Section 20 of IGRA. Section 20 provides an exception for lands taken into trust as part of a tribe's "initial reservation" following federal recognition. See 25 U.S.C. 2719(b)(1)(B)(ii) . The regulations governing the Department's implementation of the "initial reservation" exception are set forth in 25 C.F.R. § 292.6.

Pursuant to Part 151, the BIA is responsible for reviewing and approving fee-to-trust applications. The decision to acquire land into trust for the benefit of the Tribe and to issue a reservation proclamation constitutes “major federal actions” as defined in 40 C.F.R. § 1508.18. Thus, the Department’s decision on whether to acquire lands into trust and proclaim a new Indian reservation constitutes the “Proposed Action.” The subject lands consist of approximately 151 acres in Taunton and approximately 170 acres in Mashpee. **Figure 2.1-1** shows the regional locations of these lands. **Figures 2.1-2 and 2.1-3** show the Mashpee and Taunton parcels, respectively. The Mashpee parcels, as further described in **Section 5.0**, would be used for Tribal purposes, including offices, housing, conservation, and cultural purposes. The Taunton parcels, as further described in **Section 7.0**, will be the location of the Tribe’s proposed gaming facility.

This Draft Environmental Impact Statement (DEIS) was completed in compliance with the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq. (NEPA) and the Council on Environmental Quality (CEQ) Guidelines for Implementing NEPA, 40 C.F.R. Parts 1500-1508.

The Tribe’s trust application is undergoing the Department of the Interior’s consideration, which is dependent on the completion of the NEPA process. After completion of the NEPA process, the Department, by and through the Assistant Secretary—Indian Affairs, will issue a “Record of Decision” with its determination whether to approve the proposed trust acquisition, issue a reservation proclamation and determine that the lands are eligible for gaming as the Tribe’s initial reservation.

### **2.1.2 EIS PROCESS AND SCHEDULE**

NEPA requires the preparation of an Environmental Impact Statement (EIS) for major Federal actions with the potential to significantly affect the quality of the human environment, 42 U.S.C. § 4332. This document has been completed in accordance with the requirements of NEPA at 42 U.S.C. § 4321 *et seq.*, the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA at 40 C.F.R. Parts 1500-1508, and the BIA NEPA Handbook (59 IAM 3-H).

This Draft EIS has been prepared to analyze and document the environmental consequences associated with the approval of the fee-to-trust transfer of title to lands in Mashpee and Taunton and the development of a destination resort casino on the lands in Taunton. Additionally, the Draft EIS analyzes a reasonable range of alternatives including three development alternatives and a no-action alternative.

### **Scoping**

The BIA published a Notice of Intent (NOI) in the *Federal Register* on May 31, 2012, describing the Proposed Action and announcing the intent to prepare an EIS. The NOI commenced a public comment period, open through July 2, 2012, by providing an address and deadline for comments. It also announced two public scoping meetings to be held in Taunton and Mashpee. In accordance with NEPA scoping requirements, letters including the details of how to participate in the scoping of this action were sent directly to officials at federal agencies, agencies of the Commonwealth of Massachusetts, regional bodies, the City of Taunton, and Town of Mashpee, elected representatives, and federally-recognized Indian tribes in the region. Because of the nature of the Proposed Action, elected officials and planners from the

towns bordering Taunton were also sent invitations. The Tribe also published legal notices announcing the scoping meetings in two local newspapers, the Taunton Daily Gazette and Cape Cod Times, on June 14, 2012.

The BIA held public scoping meetings, at 6 p.m. on June 20 and 21, 2012 at the Taunton High School and Mashpee High School auditoriums, respectively. Attendees were provided with informational materials that included cards for written comments and were asked to sign-in if they wished to speak. Following a presentation summarizing the proposed land into trust and scoping process, elected officials and members of the public were given the opportunity to comment. The meetings did not conclude until everyone interested had the opportunity to present all of their comments. A court reporter was present for both scoping meetings and complete transcripts of the meetings were made. The comments presented at the scoping meetings supplement the 78 comment letters that were submitted to the BIA during the public comment period.

A Scoping Report, titled *Mashpee Wampanoag Tribe, Fee-to-Trust Acquisition and Destination Resort Casino, Mashpee and Taunton, Massachusetts* was published by the BIA in November, 2012. The Scoping Report is available for inspection at the BIA Eastern Region Office at 545 Marriott Drive, Suite 700, Nashville, TN 37214. Alternatively, it is available online at [www.mwteis.com](http://www.mwteis.com). The Scoping Report summarizes the comments received by mail and fax and presented at the scoping meetings. Further, it outlines the relevant issues of public concern to be addressed in this EIS and includes other documentation related to scoping, such as the NOI, the informational materials provided at the scoping meetings, and meeting transcripts.

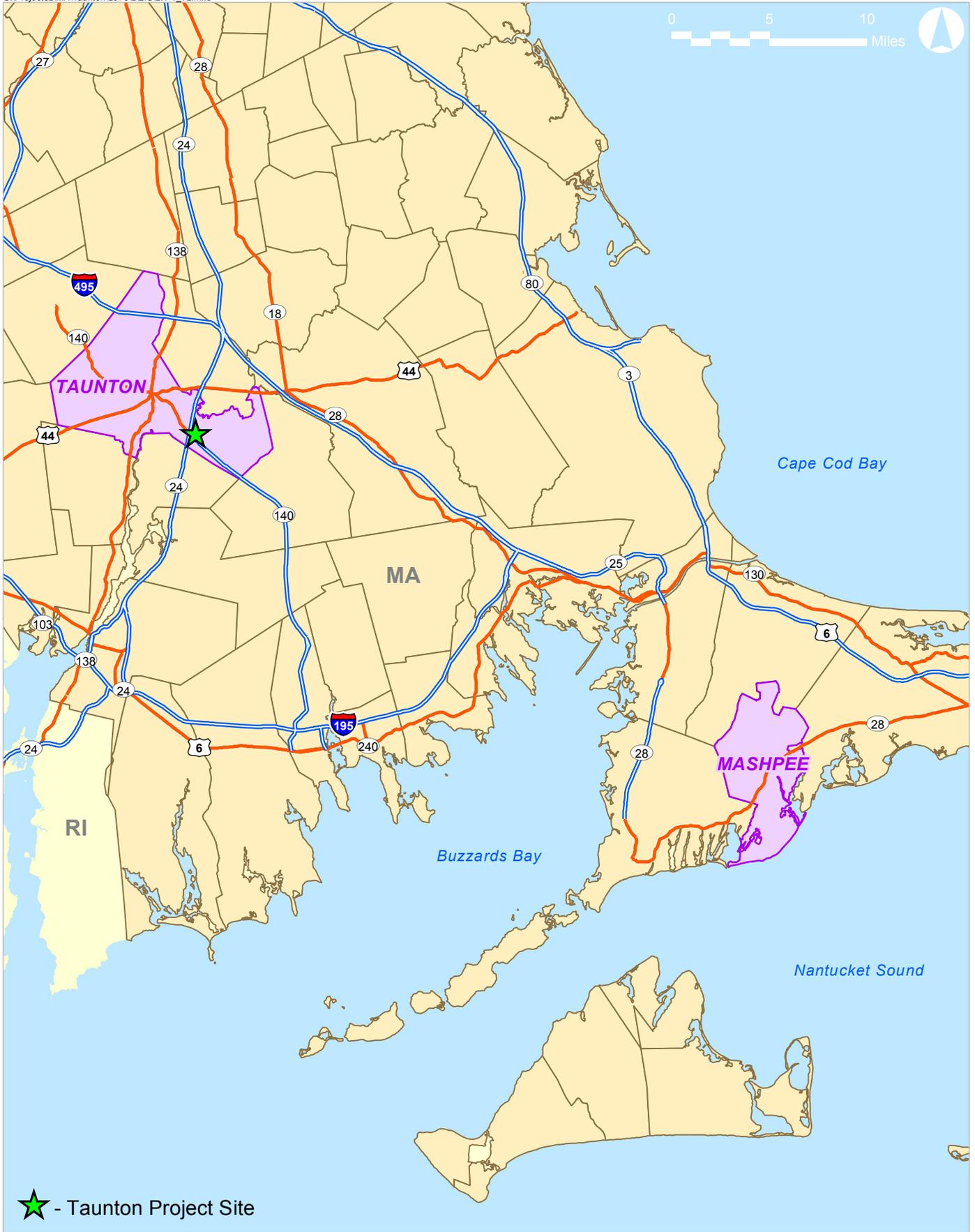
## **Public Review of the Draft EIS**

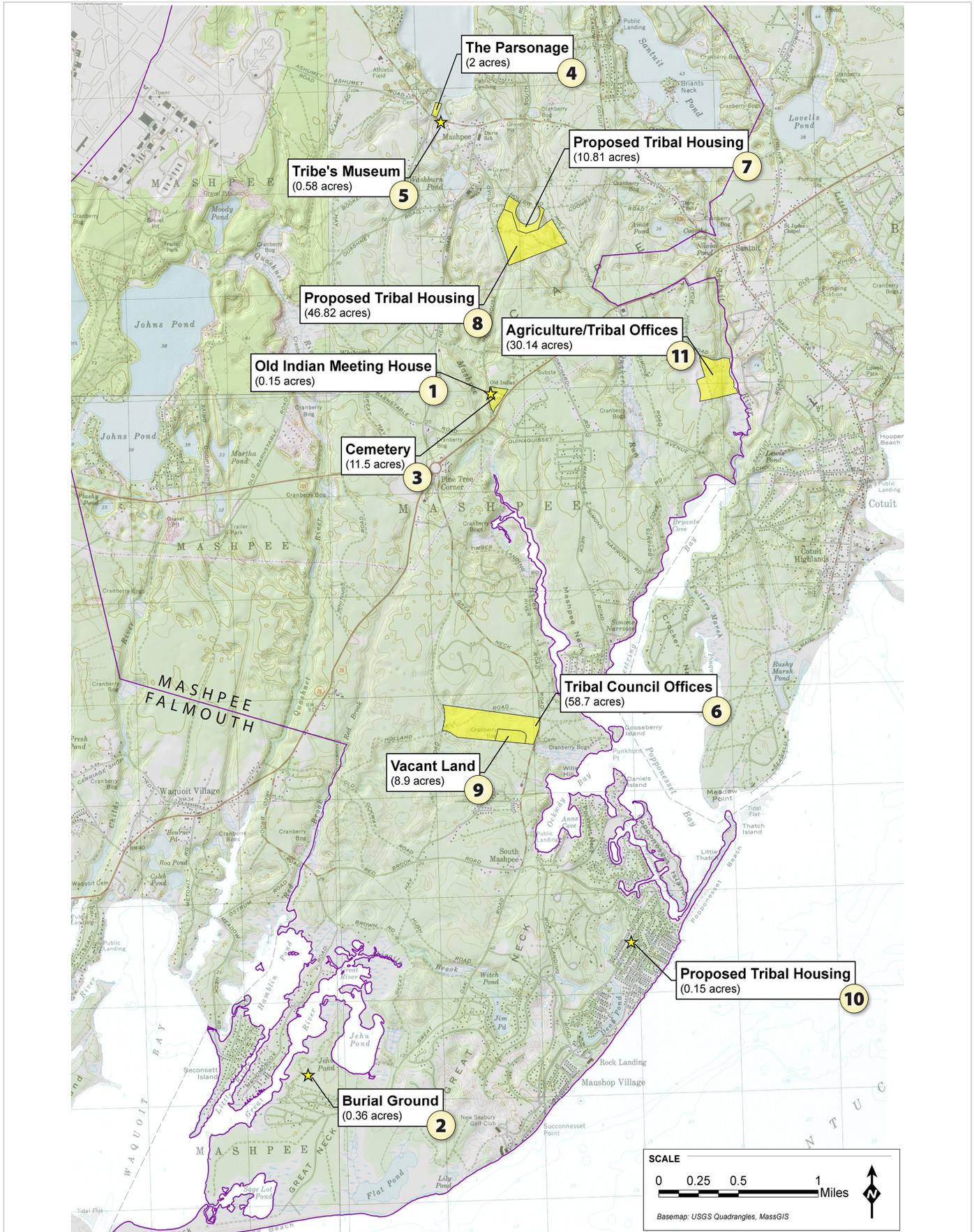
This Draft EIS has been distributed to Federal, Tribal, State, and local agencies, as well as other interested parties for a 45-day review and comment period. The review and comment period begins following publication of a Notice of Filing in the Federal Register by the United States Environmental Protection Agency (EPA). The Notice of Availability (NOA) published simultaneously by the BIA provides information on local public hearing(s), similar to that provided during the scoping process.

The BIA will carefully consider and respond to timely comments on this Draft EIS. The BIA will take comments received during the Draft EIS comment period into consideration when making a decision about the Proposed Action. Members of the public who choose to submit a comment on the Proposed Action for the agency's consideration must do so during the comment period for this Draft EIS. Comments may address any portion of the document or the Proposed Action.

## **Final EIS and Record of Decision**

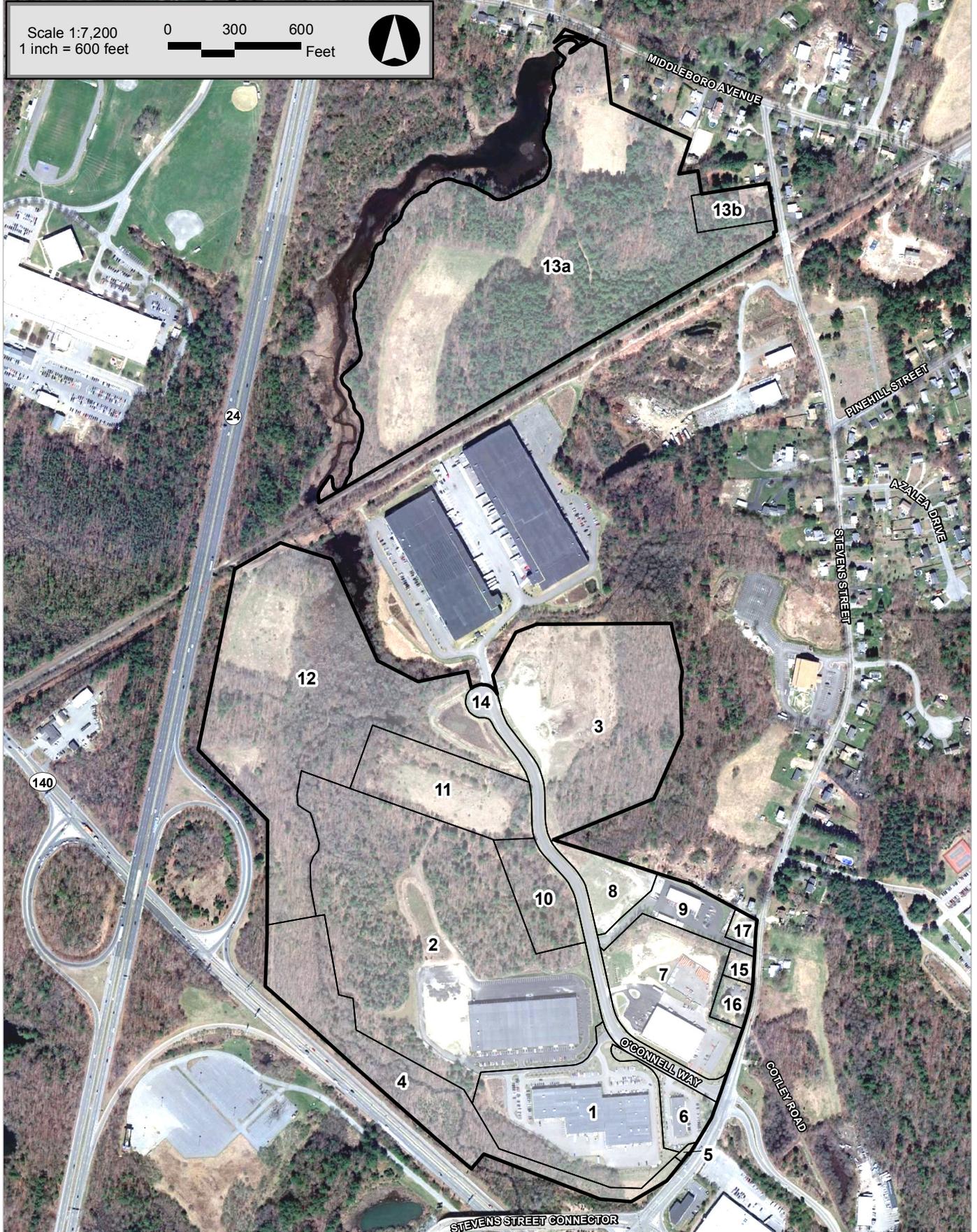
Written comments received during the DEIS comment period, including those submitted or recorded at the public hearing(s), will be addressed in the Final EIS. A Record of Decision (ROD) will be issued after the Final EIS has been completed.





SOURCE: Epsilon Associates, Inc.

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS  
**Figure 2.1-2**  
 Mashpee Lands Proposed to be Taken Into Trust



SOURCE: 2011 Bing Aerial Imagery, ESRI

Mashpee Wampanoag Tribe - Fee to Trust Acquisition - Draft EIS  
**Figure 2.1-3**  
Taunton Lands Proposed to be Taken Into Trust

## **Mitigation Monitoring**

CEQ directs all federal agencies to include in an EIS the appropriate means to mitigate adverse environmental impacts not addressed through project design (40 C.F.R. 1502.16(h)). CEQ also requires that a Mitigation Monitoring and Enforcement Plan (MMEP) be adopted and summarized in the ROD (40 C.F.R. 1505.2(c)) that is issued after the FEIS. The BIA will comply with these CEQ requirements in the Draft and Final FEIS.

## **2.2 Coordination**

### **2.2.1 COOPERATING AGENCIES**

The BIA, as the “lead agency” for the preparation of the EIS, may request that other federal agencies having jurisdiction by law or with particular expertise with regard to relevant environmental issues serve as a “cooperating agency.” Cooperating agencies participate in the scoping process and may develop materials for parts of the EIS at the lead agency’s request. See 40 C.F.R. § 1501.6.

The Tribe is serving as a Cooperating Agency to the BIA through this EIS process. The BIA and the Tribe have executed a Memorandum of Understanding that confirms the Tribe’s role as a Cooperating Agency and which sets out the roles and responsibilities of the BIA and the Tribe for the preparation of this EIS.

### **2.2.2 COMMONWEALTH OF MASSACHUSETTS**

The Tribe negotiated a tribal-state gaming compact (Compact) with the Commonwealth of Massachusetts. The Compact, a requirement of IGRA in order for the Tribe to conduct class III gaming, was executed by the Tribe and Governor Deval Patrick on March 27, 2013. As of September 2013, the Compact was awaiting a vote by the by the Massachusetts Legislature on its approval. . The Compact set out agreements between the Tribe and the Commonwealth concerning the operation of class III gaming in Taunton, Massachusetts.

### **2.2.3 CITY OF TAUNTON**

The Tribe negotiated an Intergovernmental agreement (IGA) with the City of Taunton, which sets forth terms for the operation of a gaming facility in Taunton. The Taunton City Council voted to approve the IGA on May 31, 2012 and it became effective on July 10, 2012. The IGA includes provisions that require the Tribe to allocate approximately \$33 million in up-front mitigation payments and approximately \$13 million annually to the City based on slot revenues, payments in lieu of taxes (also called PILOT payments), and allocations to public institutions, including police and schools. Among the stipulations agreed to by the Tribe in the IGA are the following:

- **Up-front Payment.** The Tribe agreed to make a non-refundable payment to the City in the amount of \$1.5 million within 30 days of the Compact being approved by the State Legislature. This payment occurred on August 22, 2012.
- **Continuing Payments.** The Tribe will pay the City 2.05% of the Casino's net revenues generated from slot machines and other electronic games. In no event, however, could this amount be less than \$8 million per year.
- **Payment in Lieu of Taxes (PILOT).** The Tribe will pay the City an annual amount equal to the property tax that would be payable on the subject parcels located within Taunton (Taunton Parcels) based upon an assessed value of the Taunton Parcels determined as of the date the Taunton Parcels are taken into trust or May 17, 2012, whichever value is greater, plus a three percent per year increase on the previous year's payment. This increase will be capped after year 10, but the PILOT will continue indefinitely.
- **Infrastructure costs.** The Tribe is obligated to pay for all up-front infrastructure costs necessary to improve and upgrade the City's police, fire, water, sewer, administrative and other facilities, as well as the City's ongoing costs resulting from the City's hiring of additional police, fire, administrative and other personnel, as related to the planned development.

The full IGA can be found in **Appendix A**.

On June 9, 2012, the City of Taunton held a ballot referendum concerning the proposed gaming facility. The ballot question read:

*“Shall the City of Taunton, pursuant to Section 91 of Chapter 194 of the Acts of 2011, approve the operation of a tribal gaming establishment proposed by the Mashpee Wampanoag Tribe to be located east of Route 24 in the immediate vicinity of the intersection of Route 24 and Route 140?”*

This ballot referendum passed with 7,696 yes votes cast out of 12,271 total votes.

## 2.3 Other Regulatory Programs

### 2.3.1 MASSACHUSETTS ENVIRONMENTAL POLICY ACT

The Tribe has commenced the environmental review process set forth under the Massachusetts Environmental Policy Act at M.G.L c. 30, sections 61 through 62H (MEPA). The MEPA process is similar to the federal NEPA process and provides additional opportunity for the public to comment and have input regarding the proposed gaming facility. The MEPA process is administered by the MEPA Office within the Massachusetts Executive Office of Energy and Environmental Affairs (EEA).

On July 2, 2012, the Tribe filed an Environmental Notification Form (ENF) with the MEPA Office to initiate the MEPA review process. The ENF, which described the plans for the proposed casino and provided preliminary evaluations of its environmental impacts, was noticed in the *Environmental Monitor*, an online publication of EEA, on July 11, 2012. Its availability was announced in the *Taunton*

*Gazette* newspaper that same day, along with the date of a MEPA scoping meeting for public comments and instructions for the formal submission of written comments.

A MEPA scoping meeting was held at Taunton High School on July 24, 2012. Similar to the NEPA scoping meeting held on June 20, 2012, the MEPA scoping meeting included a presentation summarizing the proposal. The meeting was well-attended and provided individuals and elected officials with the opportunity to present informal comments to representatives of the MEPA Office. Attendees were made aware that, pursuant to the MEPA regulations, only written comments are formally considered part of the MEPA record. Meeting attendees were provided with pre-addressed comment cards which could be mailed to the MEPA Office. At the request of the Tribe, the MEPA Office extended the comment period on the ENF by two weeks to August 14, 2012. On August 24, 2012, the Secretary of EEA issued a Certificate requiring the preparation of an Environmental Impact Report (EIR).

The Tribe prepared a Draft EIR (DEIR) and submitted it to the MEPA Office on May 15, 2013. The DEIR was circulated to review agencies and the public in accordance with the MEPA regulations. The DEIR was noticed in the *Environmental Monitor* on May 22, 2013. The MEPA Office accepted written comments on the DEIR until July 12, 2013. On July 19, 2013, the Secretary of EEA issued a Certificate on the Draft EIR finding that the DEIR adequately and properly complied with MEPA and requiring the preparation of a Final EIR (FEIR). The Certificate included a Scope for the FEIR that the FEIR must be responsive to in order to comply with MEPA. The Tribe is currently preparing the FEIR and expects to submit it to the MEPA Office roughly concurrently with the publication of the Final EIS by the BIA..

### **2.3.2 STATE AND LOCAL REGULATION AND PERMITTING**

Federally-recognized tribes possess both the right and the authority to regulate activities on their reservation and trust lands independently from state and local controls. Tribes can enact and enforce stricter or more lenient laws and regulations than those of the state in which they are located. Tribes can, however, collaborate and cooperate with states through compacts or other agreements on matters of mutual concern, such as environmental protection and law enforcement.

If the BIA takes title to the lands in Mashpee and Taunton into trust on behalf of the Tribe, the lands will become federal lands and projects that are undertaken by the Tribe on these lands will not be subject to the regulatory requirements of state and local jurisdictions. Federal laws, however, will generally continue to apply on the site. This means, for example, that the local zoning laws of Mashpee and Taunton would not apply to the trust lands, nor would state laws such as the Massachusetts Wetlands Protection Act (MGL Ch.131 § 40).

In Taunton, the proposed casino requires, for example, roadway and sewer improvements that are proposed to be constructed on land outside of the proposed trust acquisition. Any such work on non-Tribal lands would be fully subject to state and local laws and regulatory permitting programs.

### 2.3.3 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

Federal environmental regulations apply to various aspects of the proposed actions in Mashpee and Taunton. Actions on the trust lands will only be subject to federal permits and regulations. The proposed action and future actions on the property may be governed and regulated by a number of federal statutes and Executive Orders, including but not limited to:

- National Historic Preservation Act
- Endangered Species Act
- Clean Water Act
- Safe Drinking Water Act
- Clean Air Act
- Fish and Wildlife Coordination Act
- Comprehensive Environmental Response, Compensation and Liability Act
- Resource Conservation and Recovery Act
- Federal Insecticide, Fungicide and Rodenticide Act
- Toxic Substances Control Act
- Farmland Protection Policy Act
- Executive Order 11988 Floodplain Management
- Executive Order 11990 Protection of Wetlands
- Executive Order 12898 Environmental Justice
- Executive Order 13101 Greening the Government
- Executive Order 13007 Sacred Sites
- Indian Gaming Regulatory Act

Construction of the gaming facility on the Taunton lands would likely require three federal permits related to wetlands and stormwater as described below.

**Clean Water Act Section 404 Permit.** Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into “waters of the United States” at specified disposal sites. “Waters of the United States” is broadly defined in the federal regulations that implement the Clean Water Act. It includes tidal waters, rivers, streams, lakes, ponds and wetlands. 33 C.F.R. Part 328.3(a). The Corps approves discharges at particular sites through application of the EPA’s Section 404(b)(1) Guidelines at 40 C.F.R. Part 230 (EPA Guidelines).

**Clean Water Act Section 401 Permit.** Under Section 401 of the Clean Water Act, a federal permit or license that results in a discharge to waters of the United States cannot be issued unless the EPA, an Indian tribe, or State certifies that the discharge is consistent with standards and other water quality goals (or otherwise waives certification).

On tribal lands, the EPA administers the Section 401 Program on behalf of tribes that are not authorized to administer it. The Tribe is not currently authorized. In order for the Corps to issue the Section 404 Permit described above, the EPA will need to issue a Section 401 Water Quality Certification (WQC). The Tribe will apply for the Section 401 WQC to the EPA concurrent with its application to the Corps for a Section 404 Permit.

With regard to off-site roadway improvement work that is not located on lands to be acquired in trust, the 401 Program is administered through state regulations (310 CMR 9.00) by MassDEP to ensure that activities resulting in a discharge of dredged or fill material into wetlands and waterways comply with state water quality standards (314 CMR 4.00). The Tribe will file a separate 401 WQC with the MassDEP that demonstrates compliance with the relevant performance standards at 314 CMR 9.06 (Criteria for Evaluation of Applications for Dredged or Fill Material). The application will be prepared in accordance with MassDEP's application checklist and will be filed concurrently with the EPA Section 401 WQC and Corps 404 application described above.

**Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) Construction General Permit.** The EPA has issued a Construction General Permit (CGP) for stormwater discharges associated with construction activities under the National Pollutant Discharge Elimination System program. The CGP authorizes storm water discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the United States or a municipal separate storm sewer system (MS4) leading to surface waters of the United States. A construction project that is part of a larger common plan that will ultimately disturb one or more acres of land must also comply.

**Table 2.2-1** lists the federal, state, and local approvals environmental approvals that are anticipated to be required.

**TABLE 2.2-1  
POTENTIAL PERMITS AND APPROVALS REQUIRED**

<b>Agency</b>	<b>Permit or Approval</b>	<b>Alternative</b>
<b>Federal</b>		
Secretary of the Interior	Transfer approximately 321 acres in Mashpee, MA and Taunton, MA into Federal trust status for the Mashpee Wampanoag Tribe	A, B, C
Bureau of Indian Affairs	Section 106 Historic Preservation Act Clearance	A, B, C
U.S. Environmental Protection Agency	Clean Water Act Section 401 Permit	A, B, C
	Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) Construction General Permit	A, B, C
	Clean Water Act Section 404 Permit	A, B, C
<b>State</b>		
Massachusetts Department of Transportation	Highway Access Permit	A, B, C
Massachusetts Department of Environmental Protection	Ch. 91 License for crossing of Cotley River Sewer Connection Permit Section 401 Water Quality Certification for off-site wetland impacts.	A Option 1, C Option 1
Massachusetts Historical Commission	State Register Review State Archaeology Permit	A, B, C
<b>Local</b>		
City of Taunton Conservation Commission	Order of Conditions under the Massachusetts Wetlands Protection Act for wetland impacts related to off-site roadway improvements.	A, B, C

# ***SECTION 3.0***

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## **PURPOSE AND NEED**

# SECTION 3.0

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## PURPOSE AND NEED

NEPA requires that an EIS include a discussion of the underlying purpose and need in pursuing the proposed action (40 CFR 1502.13). The purpose and need statement assists the Lead Agency in selecting an adequate and appropriate range of alternatives to be evaluated in the EIS.

The Tribe requests that the BIA take title to land into trust for the benefit of the Tribe in order to establish the Tribe's initial reservation and provide the Tribe opportunities for long term, stable economic development and self-government. The Tribe is federally-recognized but does not currently have the benefit of a federally protected reservation or trust lands. The subject properties include approximately 170 acres in Mashpee, Massachusetts (**Figure 2.1-2**) and approximately 151 acres in Taunton, Massachusetts (**Figure 2.1-3**).

### 3.1 DESCRIPTION OF THE PROPOSED LANDS

#### 3.1.1 MASHPEE

The Tribe was federally recognized in 2007. However, the Tribe remains landless and seeks to establish its tribal land base. The lands located in Mashpee, shown on **Figure 2.1-2**, have been owned or used by the Tribe or by entities controlled by or related to the Tribe for many years. The eleven Mashpee parcels include several parcels currently owned by the Tribe in its own name, some by the Tribal Council (the Tribe's governing body), one by a non-profit organization owned by the Tribe, and one by a domestic limited liability company owned by the Tribe. (Refer to **Table 5-1** for a detailed list of the parcels.) These parcels include the Tribal Meeting House, cemetery, Parsonage, Tribal Museum, Tribal offices, and conservation land. Currently, the Mashpee parcels are primarily used for Tribal administration, preservation and cultural purposes. Acquisition into trust of the Mashpee parcels will assist the Tribe meeting the needs of its members by providing housing, education and other social and welfare necessities.

#### 3.1.2 TAUNTON

The Taunton site is located near Boston, Cape Cod, and Providence, Rhode Island. As shown on **Figure 2.1.3**, it lies in and adjacent to the Liberty and Union Industrial Park, located near the junction of two major roadways. In addition, the City of Taunton has designated this site for economic development purposes. The evaluation process that led to the Tribe's decision to pursue the site in Taunton is described further in **Section 4.2.3**.

## 3.2 TRIBAL NEED

The acquisition of land would provide economic development opportunities and sustainable income for the Tribe and its members. Mashpee Tribal members have an unemployment rate of nearly 50 percent (as compared to 7.8 percent nationally)<sup>1</sup> and there are few job opportunities within the Town of Mashpee (where roughly 40 percent of Tribal members reside). The median household income of reporting Tribal members was \$29,601.11 as of August 31, 2012. This is compared with a median household income of \$64,509 in Massachusetts and \$51,914 nationally.<sup>2</sup> Revenue from economic development will create employment opportunities for Tribal members while generating revenues to support Tribal programs and other membership needs.

Revenue from economic development would support not only Tribal employment, but also other Tribal needs such as education, healthcare, and housing. Many Tribal members have ongoing health issues. A 2002 health survey conducted by the Tribe together with the Massachusetts Department of Public Health found that the percentage of Wampanoag in poor health was two times higher than the general Massachusetts adult population. The same survey also found that the percentage of Wampanoags in poor emotional health was one-and-a-half times higher than the Massachusetts adult population. Adult Tribal members were less likely to have ready access to dental care, and more likely to be obese and to have diabetes and high blood pressure, as compared to the general Massachusetts adult population. Revenue from economic development will support Tribal health programs to aid its members.

Revenue from economic development will in part be used to address Tribal members' substantial housing needs. In recent years, the demand for real estate on Cape Cod, and Mashpee in particular, has increased substantially, creating a scarcity of affordable housing. In Mashpee, new home construction is aimed at high income levels and most Tribal members cannot afford the marketing value. Although a number of Tribal members reside on ancestral home lots along historic Main Street, recent zoning laws prevent members from further subdividing these lots to create multi-family housing to serve relatives. Additionally, the average Tribal household size is 2.73 persons greater than the average household size in either the Town of Mashpee or Barnstable County (where the Tribal headquarters are located).

The Tribe's 2011 Indian Housing Plan (IHP) shows the following needs for the 661 families identified as making up the Tribal population: 524 (79 percent) are identified as low income; 431 (65 percent) include an elderly family member; 37 (almost six percent) live in substandard housing with inadequate plumbing or cooking facilities; and there is an identified unmet rental housing need for 100 families (15 percent of the population).

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<sup>1</sup> Unemployment rate according to the *Bureau of Labor Statistics* as of January 2013. Retrieved at: <http://www.bls.gov/home.htm>.

<sup>2</sup> Median household income provided by the *U.S. Census Bureau*. Retrieved at: <http://quickfacts.census.gov/qfd/states/25000.html>.

Revenue from economic development will allow the Tribe to meet Tribal housing needs within Mashpee; furthermore, revenues will also support Tribal programs such as the Wampanoag Housing Program and the Low Income Home Energy Assistance Program (LIHEAP). Revenue from economic development will also enable construction of senior living facilities and housing. One of the Tribe's stated goals is to provide safe affordable housing to eligible Tribal members, and other Native Americans who reside within the Tribe's service area. Current programs related to housing include:

- Eviction Prevention
- Foreclosure Prevention
- First, Last, Security Deposit
- Landlord Negotiations
- Down Payment Assistance
- Home Rehab and Weatherization
- Housing Search
- Scattered Site, Sanitation Facilities Construction
- Budgeting/Financial Literacy

Revenue from economic development and trust lands are also needed so that the Tribe may adequately preserve its community and cultural history. Revenue from economic development will be used to fund the restoration and preservation of cultural sites in Mashpee such as the Tribe's museum and historic burial grounds. The Tribe will also apply revenue from economic development to important educational, cultural, and employment programs for Tribal youth, including the Language Reclamation Project, GED tutoring, and education scholarships, as well as the Tribal Youth Council, Youth Cultural Activities, Mashpee Wampanoag Youth Survival Skills training, and the Youth Sobriety Pow Wow. By supporting these programs, the Tribe can provide its youth a valuable opportunity to learn about their cultural values, traditions, and skills to participate and lead healthy lives in their community and the larger society.

Thus, revenue from economic development will provide the Tribe funding necessary to construct affordable housing, pursue economic development opportunities and preserve Tribal lands for future generations of its members. The establishment of a recognized land base and proposed uses in Mashpee and Taunton support the Tribe's endeavor to achieve self-government and meet significant Tribal needs.

# ***SECTION 4.0***

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**ALTERNATIVES**

# SECTION 4.0

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## ALTERNATIVES

This section describes the several alternatives studied in this EIS. A reasonable range of alternatives has been selected based on the purpose and need of the Proposed Action (as described in **Section 3.0**), Scoping comments, and mitigating environmental factors. The Alternatives include three Development Alternatives and a No Action Alternative as provided in the Section 1502.14 of the CEQ Guidelines. Each Development Alternative involves the BIA taking into trust approximately 321 acres on behalf of the Tribe. Of this land, approximately 170 acres is located in Mashpee, Massachusetts, and approximately 151 acres is located in Taunton, Massachusetts. Because of their distinct locations and proposed development programs, the environmental consequences related to Mashpee and the land in Taunton have been evaluated separately and in further detail in **Sections 6.0 and 8.0** of this DEIS, respectively.

Alternatives that were considered previously by the Tribe but which have been dismissed from further consideration are also reviewed. The process that led to the selection of the current proposed trust land in Taunton is described. Two access/egress alternatives to the Project Site in Taunton are also described.

### 4.1 MASHPEE PROJECT DESCRIPTION

The Tribe is proposing to have eleven parcels in Mashpee taken into trust by the United States. These parcels are shown in **Figure 2.1-2** and described in detail in **Section 5.0**. The Proposed Action does not include foreseeable, new development projects for the Mashpee parcels. The Tribe has commenced construction of a tribal housing development on one of the parcels as well as the construction of a new government center building on another, these projects are ongoing and are not connected with the Tribe's application for land into trust, i.e., the projects are able to move ahead regardless of whether the land is put into trust or remains under fee ownership of the Tribe.

### 4.2 TAUNTON PROJECT DESCRIPTION

Since gaining federal recognition in 2007, the Tribe has sought to establish an initial reservation and to provide revenues to meet the Tribe's economic needs in order to achieve self-determination. The Tribe has examined a number of alternatives aimed at achieving this need. After careful examination of other options, the Tribe has determined that a resort casino is the only feasible economic engine to meet its significant tribal needs. Further, the proposed Project Site in Taunton is the only practicable site for such a project.

This section describes other types of development that were considered as alternatives to a gaming facility and other proposed sites that were studied but which have dismissed from further consideration.

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### 4.2.1 FINANCIAL VENTURES ALTERNATIVES

The Tribe considered various financial venture alternatives as potential methods for improving its economic self-sufficiency to satisfy tribal needs. A casino operation was considered the only feasible financial venture that met the Tribe's basic purpose and need. Gaming is a revenue source with relatively high profit margins, maximizing income to development risks and costs when compared with other types of enterprises. Furthermore, a casino operation would allow the Tribe to take advantage of the gaming opportunities afforded to it under IGRA. No other project type, such as manufacturing, light industry, retail, or housing could be expected to generate revenues significant enough to be considered a viable alternative for the Tribe to gain adequate financing and to achieve economic self-sufficiency and the ability to address tribal housing, governmental, social, and cultural needs. A casino resort would also provide the highest economic benefit to the region and provide the best vehicle for infrastructure improvements. It would minimize potential operational environmental impacts, particularly in comparison to manufacturing and industrial ventures. Lastly, a casino would allow the Tribe to create quality employment opportunities for its members and the surrounding community in a safe environment.

Under IGRA, a tribe may construct and operate either Class II or Class III gaming. Class II gaming includes bingo (including electronic linked bingo machines), pull-tabs, games similar to bingo, and certain nonbanking card games. Class III gaming includes slot machines, banked card games such as blackjack and poker, and table games such as roulette and craps. Class III gaming is subject to a compact between the state and the tribe under IGRA, whereas Class II gaming may be conducted by the tribe without a compact. IGRA imposes on states a requirement to negotiate a tribal-state gaming compact in good faith. As described in **Section 2.2**, the Tribe has negotiated a gaming compact with Massachusetts that is currently awaiting an approval vote by the Massachusetts Legislature. If approved, it would then be forwarded to the U.S. Department of the Interior for review and approval. In the event that a compact agreement does not become effective, the Tribe could pursue remedies under federal law, either in court, or through "secretarial procedures," which would allow the Tribe to engage in Class III gaming under procedures promulgated by the Secretary of the Interior, pursuant to federal regulations (25 C.F.R. Part 291).

Compared to Class II gaming, Class III facilities typically generate more revenues and can support additional multi-use facilities (i.e., hotels, retail, service station, upscale food services, etc.) both in terms of construction costs and clientele. A Class III gaming facility is optimal for the Tribe as it would generate the amount of revenues necessary to meet Tribal needs, while providing additional revenues to the region through a negotiated compact. A Class III facility would also more fully meet the City of Taunton's economic development goals as well as Massachusetts Governor Deval Patrick's goal of constructing a destination resort casino. As such, the selected financial venture for the Taunton parcels is Class III gaming within a destination resort casino.

The Tribe conducted a thorough analysis to determine the optimal size and class of a gaming facility in Taunton to maximize its financial benefit and reduce environmental impacts. Considering the proximities and offerings of existing and potential gaming operations across the Northeast region, the Tribe determined that it would need to offer a Class III gaming program consisting of approximately 4,400

gaming positions in order to draw the number of visitors required to make the casino a success and generate the revenues required for maximizing tribal self-sufficiency.

The Tribe considers amenities such as the hotels, specialty shops, restaurants, and event center integral parts of a successful Class III casino development. Recreational and family components such as the water park will provide additional attractions and opportunities for patrons, enhancing the draw of the facility.

## **4.2.2 PREVIOUS SITES CONSIDERED**

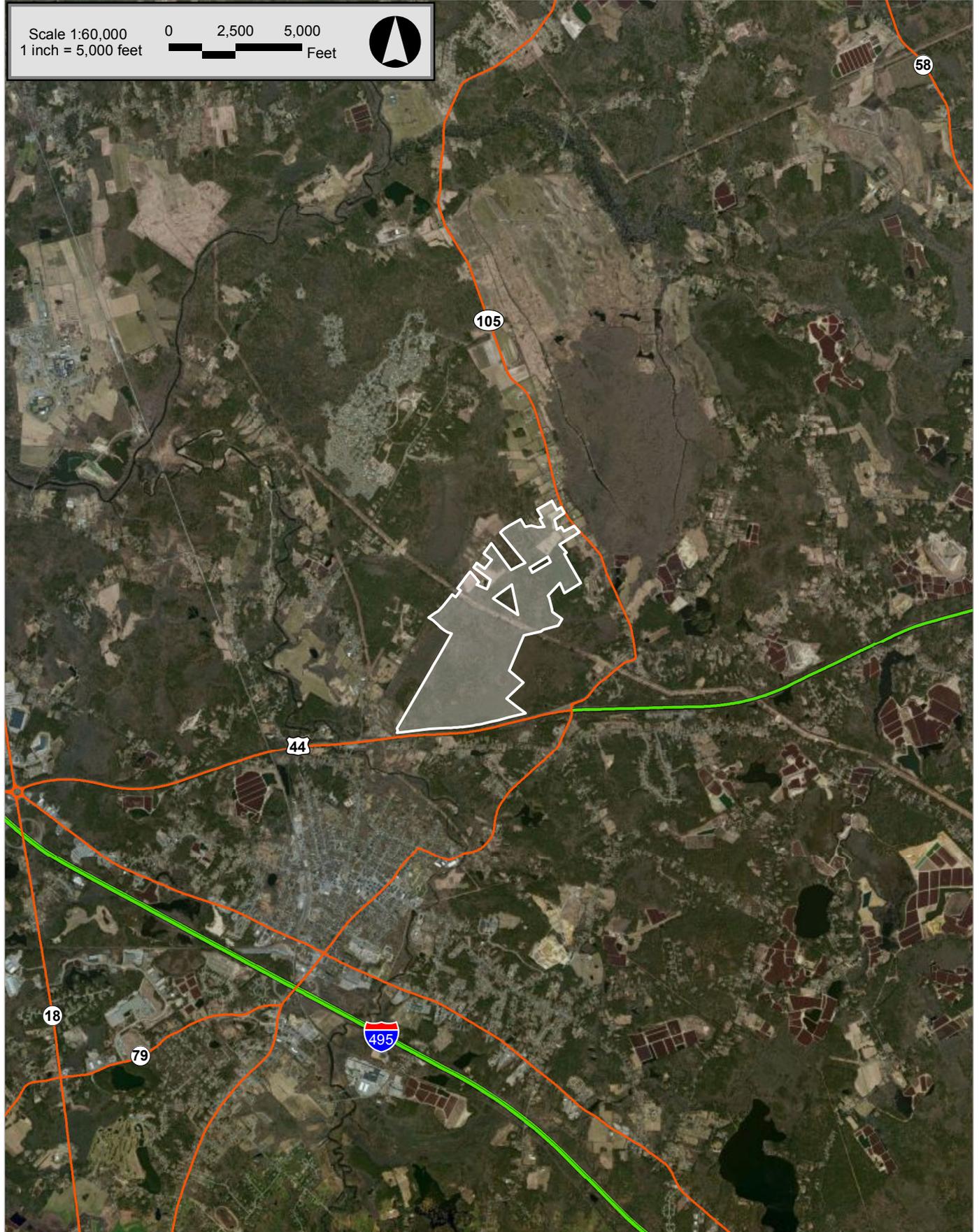
### **4.2.2.1 Route 44 Middleborough Alternative**

The Tribe has explored potential initial reservation and casino sites within its ancestral homelands since its federal recognition in February, 2007. In 2007, with a prior investor, the Tribe began negotiations with the Town of Middleborough, Massachusetts to develop a casino on a 539-acre site off of Route 44 (See **Figure 4.2-1**). On August 30, 2007, the Tribe filed an application with the BIA to accept land into trust for this site, along with land in Mashpee. The Tribe prepared a comprehensive preliminary Draft EIS for the Middleborough site, which was submitted to the BIA for review. However, the DEIS was never finalized or published in the Federal Register.

The preferred alternative for the site in Middleborough (See **Figure 4.2-2**) was substantially larger than what is currently being considered in Taunton. The Preferred Alternative in Middleborough included 4,000 slot machines and 200 gaming stations, a 1,000-room, 18-story hotel, a 5,000-seat event center, and a number of retail and restaurant options in a 598,000 square-foot main facility. A total of 10,500 parking spaces were included in both surface lots and structured parking for patrons and employees. The proposal also included a gas station with up to 24 pumps and a 9,000 square-foot convenience store. An 80,000 square-foot utility yard plant was proposed to the west of the casino. In a later phase, an 18-hole golf course, club house, and proshop was to have been developed in the northern part of the site.

A comprehensive and detailed environmental impact analysis of the Middleborough site revealed that the project would have had significant environmental impacts. Estimated wetlands impacts of the preferred alternative in Middleborough were substantially higher than those of any of the Alternatives now being considered in Taunton. Wetland impacts of the Middleborough preferred alternative included approximately 3.2 acres (139,000 square feet) of fill, 0.6 acres (26,000 square feet) bridged over, and 2.9 acres (126,000 square feet) of overstory clearing.

The estimated trip generation of the Middleborough project was also much higher than that of any of the Alternatives currently being considered in Taunton. The Middleborough preferred alternative was projected to generate approximately 33,500 vehicle trips per day to area roads on weekdays, and approximately 41,400 vehicle trips per day on Saturdays.

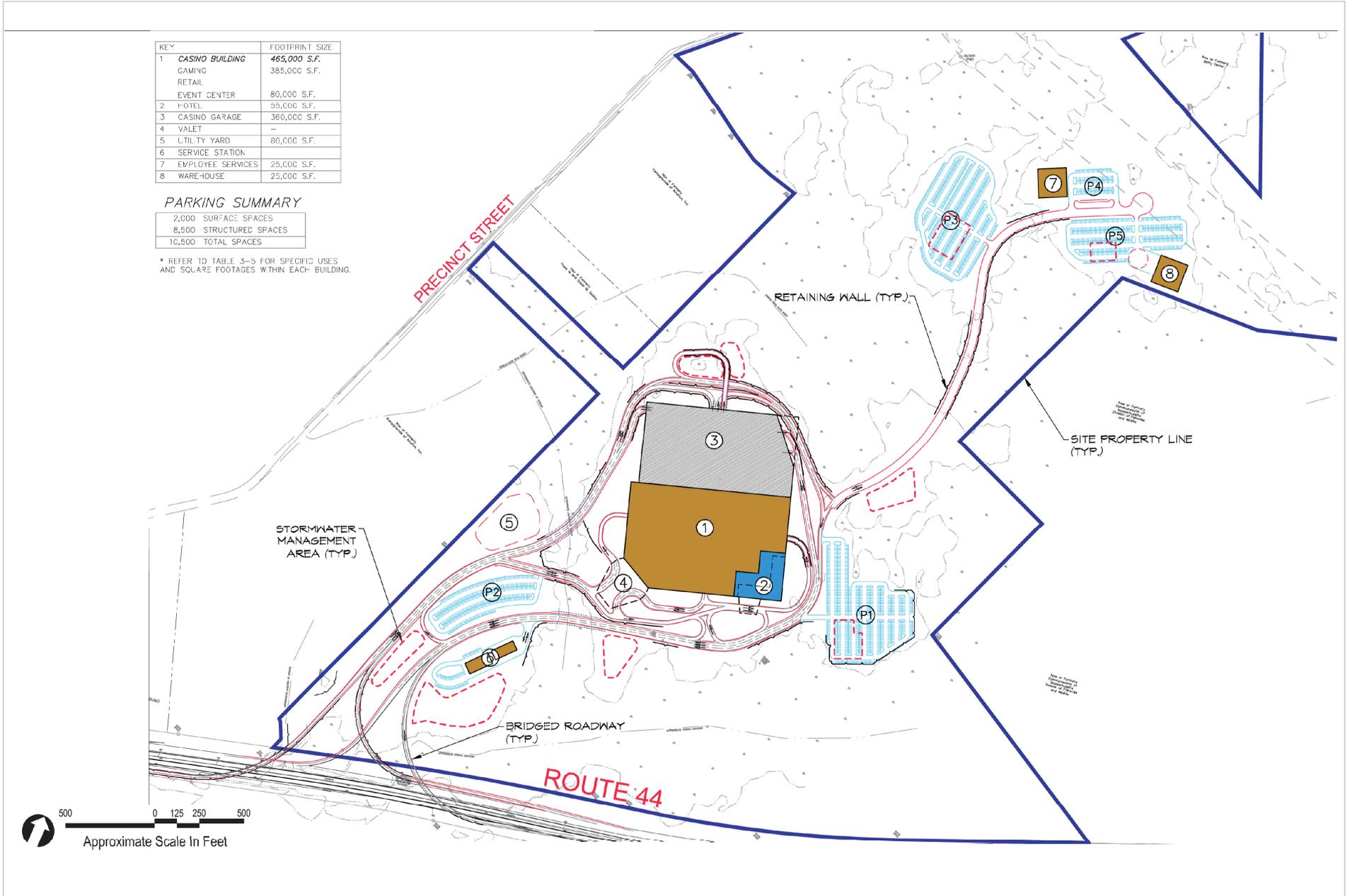


SOURCE: 2011 Bing Aerial Imagery, ESRI

*Mashpee Wampanoag Tribe - Fee to Trust Acquisition - Draft EIS*

**Figure 4.2-1**

Location of Previously Proposed Casino in Middleborough



SOURCE: Tetra Tech Rizzo

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 4.2-2**  
Preferred Alternative Site Plan for Previously Proposed Casino in Middleborough

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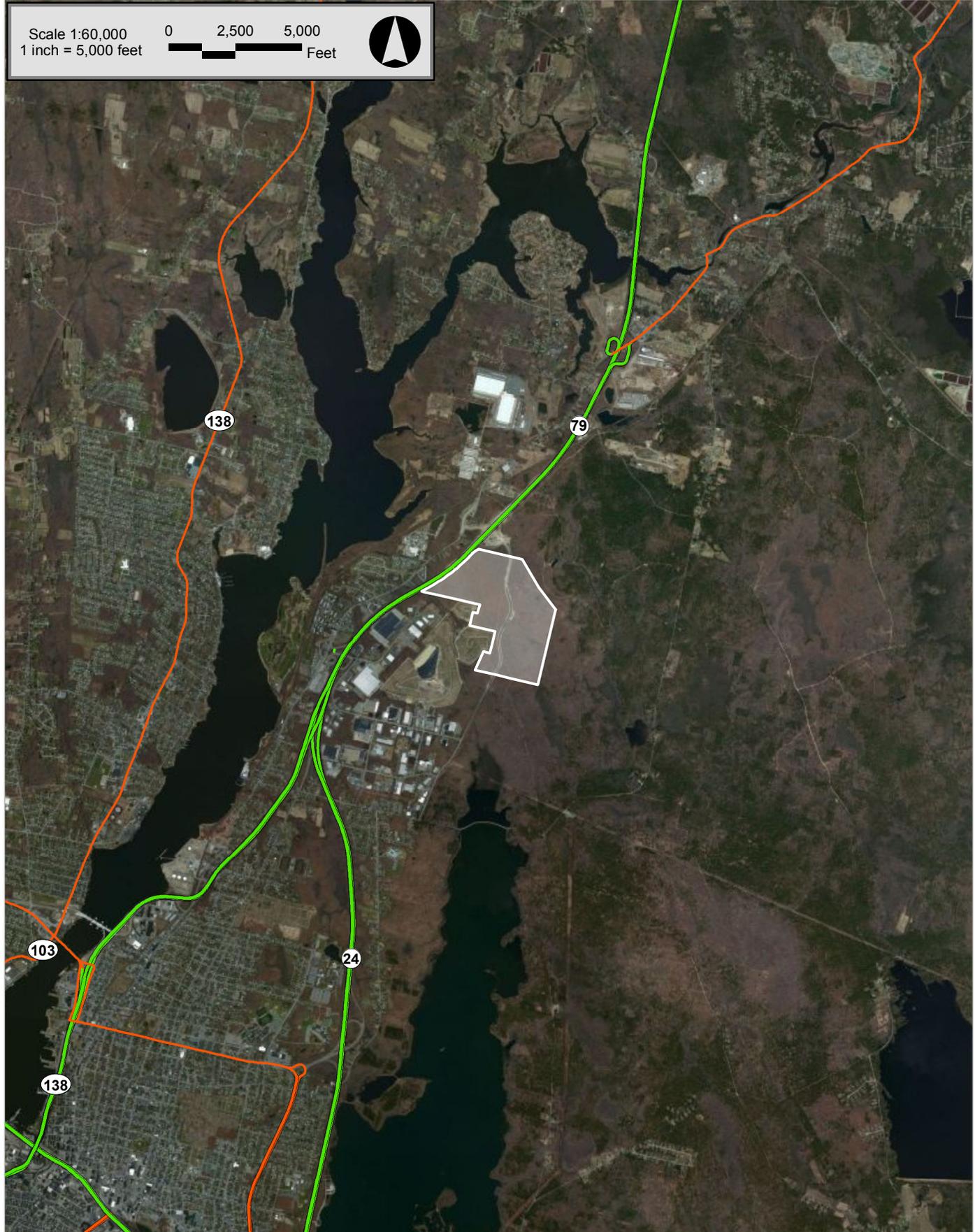
Infrastructure on and around the Middleborough site would have required substantial improvements. In part due to the inordinate costs for the infrastructure improvements that would have been necessary to develop the Middleborough site, the Tribe determined that the site was not economically viable and therefore could not satisfy the project's purpose and need of providing for the Tribe's economic development. The Tribe officially ended its pursuit of land for initial reservation and a gaming facility in Middleborough in May, 2010 when it amended its trust application to remove the land in Middleborough.

#### **4.2.2.2 Fall River Executive Park Alternative**

On July 13, 2010, the Tribe amended its Land Into Trust application with the BIA to include an approximately 300-acre parcel adjacent to Route 24 in the City of Fall River, Massachusetts in an area known as the Fall River Executive Park (FREP) (See **Figure 4.2-3**). The FREP was owned by the Fall River Redevelopment Authority. Access to the site from Route 24 was to be provided by a new, fully directional interchange (Exit 8B) to be built by MassDOT (now completed). The FREP site had undergone extensive State environmental review under MEPA and had originally been conceived as an executive industrial park. The Supplemental Final Environmental Impact Report (SFEIR), submitted to the MEPA Office in July 2008, described the park as comprising up to three million square feet of development, including up to 1.5 million square feet of office space in eleven 3- and 4-story buildings and the capacity for an additional 1.5 million square feet of light industrial space within another 11 buildings at a lesser height. The site was marketed as a "biopark" specifically designed to accommodate biotech manufacturing, medical device manufacturing, life science and IT industries.

The Tribe reached an agreement with Redevelopment Authority and the City to purchase the land in May 2010. The Tribe's preliminary plans for the development included a casino and entertainment complex, hotels, a variety of restaurant types, an 18-hole golf course and club house, convention facilities, a showroom, a spa, retail, a multi-screen movie theater, an indoor water park, and parking. **Figure 4.2-4** depicts the preliminary plan for the casino development overlaid on the approved plans for the FREP.

The Tribe continued to pursue the Fall River site throughout 2010. Plans for the site eventually had to be abandoned, however, because of insurmountable legal obstacles to its development. The Executive Park site was located on land within the Southeastern Massachusetts Bioserve (Chapter 266 of the Acts of 2002). A provision of that law specifically prohibited the development of a casino on the site. The Tribe determined that it would likely not be feasible to overcome this restriction and that without a change in the legal status of the land, an agreement on a Compact with the Governor was also not likely. Therefore, the site could not be developed as a casino and would not meet the Tribe's needs for economic development. Subsequently, on March 7, 2012, the Tribe amended its trust application to remove the lands in Fall River.



SOURCE: 2011 Bing Aerial Imagery, ESRI

Mashpee Wampanoag Tribe - Fee to Trust Acquisition - Draft EIS

**Figure 4.2-3**

Location of Previously Proposed Casino in Fall River Executive Park



SOURCE: Mashpee Wampanoag Tribe

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 4.2-4**

Preliminary Site Plan for Previously Proposed Casino in Fall River Executive Park

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### 4.2.3 SELECTION OF THE CURRENT SITE IN TAUNTON

After abandoning its pursuit of the Fall River Executive Park, the Tribe continued to search for a suitable site for the development of a resort casino within the Tribe's ancestral homelands. The Tribe made a thorough, systematic review of potential sites based upon a number of economic, social, and environmental criteria. With the help of community planners, local economic development agencies, and real estate and environmental consultants, the Tribe reviewed a number of sites in Bristol and Plymouth Counties.

The overall area encompassed by the search was limited by two important criteria: the site had to be within the Tribe's ancestral homelands as required under IGRA (which includes all of southeastern Massachusetts); and the site needed to be within Region C as defined in the Massachusetts' Expanded Gaming Act (Chapter 194 of the Acts of 2011) (the Act). Section 19 of the Act anticipates that under IGRA a federally recognized tribe may seek to conduct gaming in Region C. Region C includes Bristol, Plymouth, Nantucket, Dukes and Barnstable Counties.

Among the other key considerations were:

- Size of the parcel (at least 100 acres was considered optimal);
- Transportation infrastructure and ease of access to regional highways;
- Utility infrastructure to support the development, particularly water and sewer;
- Perceived level of local support within the host municipality;
- Zoning compatibility or ability to obtain necessary permits regarding off-site improvements;
- Cost to obtain land and construct Project and infrastructure;
- Environmental factors such as wetlands, rare species, waterbodies, and floodplain; and
- Potential impacts to surrounding community.

The Tribe considered numerous potential sites in relation to the above list and evaluated approximately ten sites in greater detail. Among those considered in detail, the Tribe eliminated many because they were not for sale or would be prohibitively costly to obtain and/or to develop, they lacked adequate transportation infrastructure, or were severely constrained by environmentally sensitive areas.

The Tribe determined that the current proposed Project Site within and adjacent to the LUIP to be the only site reasonably available that was capable of accommodating the proposed development, and importantly within a host community receptive to a casino project.

The current site offers a number of important advantages. It is proximate to two regional highways, Routes 140 and 24. It is largely within an existing and already developed industrial park well served by public infrastructure. Much of the Project Site has already been developed and disturbed. Therefore, the project will not have the impacts that a "green field" project would.

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As described in **Section 2.2.3**, the Tribe has signed an Intergovernmental Agreement (IGA) with the City of Taunton that sets forth terms for the operation of a casino at the proposed site. The City also passed a referendum vote on the proposed project with approximately 63 percent of voters approving the project.

#### **4.2.4 DEVELOPMENT ALTERNATIVES**

The Tribe has developed three Development Alternatives and a No Action Alternative that are analyzed in detail in **Section 6.0 and 8.0**. All three of the Development Alternatives are proposed mainly on previously developed and disturbed areas. All three involve the adaptive reuse of the three existing buildings at 50 O'Connell Way, 60 O'Connell way, and 73 Stevens Street in Taunton.

### **4.3 DESCRIPTION OF PROJECT ALTERNATIVES**

#### **4.3.1 ALTERNATIVE A: PROPOSED DEVELOPMENT**

Alternative A includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Under Alternative A, the Tribe would subsequently develop the lands in Taunton into a resort casino complex. Alternative A does not include foreseeable new development projects for the Mashpee parcels.

The Proposed Development, under Alternative A, of the Taunton parcels is shown on **Figure 4.3-1** as it was described during the Scoping process held by the BIA in Taunton and Mashpee, and in the IGA signed by the Tribe and the City of Taunton, with slight modifications to gaming numbers and construction footprint. The gaming facility would cover approximately 400,000 square feet. It would be located south of the railroad tracks on the Project Site. The gaming floor would be approximately 132,000 square feet and feature an open design. It would hold 3,000 slot machines, 150 multi-game tables, and 40 poker tables – resulting in 4,400 gaming positions. Other casino features would include a five- to six-venue food court with seating for approximately 135 patrons, a 400-seat buffet restaurant, an entertainment bar/lounge with 200 seats, and a 24-hour restaurant with seating for 120 patrons. Other support facilities required for the casino floor and restaurants would include an employee dining room with 325 seats.

Two hotels, each 15 stories tall and having 300 rooms, would be constructed adjacent to the casino.

The parking structure proposed across from the casino would be connected by an elevated, 10,000 square-foot pedestrian bridge. The parking structure proposed would contain space for 4,431 cars. There would be additional casino surface parking on site for 1,440 cars.

Alternative A would include a water park and related facility development on the parcel that lies north of the rail line. This development would feature a 25,000 square-foot indoor/outdoor water park and a 300-room hotel. Surface parking has been analyzed on a preliminary basis to allow for 500 cars on site, based on the assumption that the hotel and water park are dual uses.

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### 4.3.2 ALTERNATIVE B: REDUCED INTENSITY I

Alternative B includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Like Alternative A, Alternative B does not include foreseeable new development projects for the Mashpee parcels. Under Alternative B, the Tribe would still develop the lands in Taunton but the scale of the complex would be reduced from Alternative A.

The proposed development under Alternative B, as shown in **Figure 4.3-2**, differs from Alternative A by removing the two casino hotels and casino space, thereby reducing operations and footprint. The casino facility would cover approximately 195,000 square feet. The Gaming Floor would be approximately 78,000 square feet and feature an open design. It would hold 1,850 slot machines and 60 multi-game tables – resulting in 2,330 gaming positions. Other casino features would include a five- to six-venue food court with seating area for 135 patrons, a 250-seat buffet restaurant (reduced compared to Alternative A), and an entertainment bar/lounge with 200 seats. The 24-hour restaurant included in Alternative A would be eliminated. Other support facilities required for the casino floor and restaurants would include an employee dining room with 225 seats, again representing a reduction from Alternative A.

The parking structure proposed adjacent to the casino would be connected by an elevated pedestrian bridge of approximately 10,000 square feet. It would contain space for 3,012 cars. There would be additional casino surface parking on site for 1,440 cars.

No hotels would be constructed south of the railroad tracks.

Development north of the rail line would also be included under Alternative B, and would feature a 25,000 square-foot indoor/outdoor water park and a 300-room hotel. Surface parking has been analyzed on a preliminary basis to allow for 500 cars on site, based on the assumption that the hotel and water park are dual uses.

### 4.3.3 ALTERNATIVE C: REDUCED INTENSITY II

Alternative C includes the transfer of approximately 151 acres in Taunton and 170 acres in Mashpee of fee land owned by the Tribe into federal trust. Like Alternative A, Alternative C does not include foreseeable new development projects for the Mashpee parcels. Under Alternative C, the Tribe would still develop the lands in Taunton but the footprint of the complex would be reduced from Alternative A.

The proposed development under Alternative C, as shown in **Figure 4.3-3**, differs from Alternative A by removing all development north of the railroad tracks. The casino facility would cover approximately 400,000 square feet. The Gaming Floor would be approximately 132,000 square feet and feature an open design. It would hold 3,000 slot machines, 150 multi-game tables, and 40 poker tables – resulting in 4,400 gaming positions. Other casino features would include a five- to six-venue food court with seating area for approximately 135 patrons, a 400-seat buffet restaurant, a casino entertainment bar/lounge with 200 seats, and a 24-hour restaurant able to seat 120 patrons. Other support facilities required for the casino floor and restaurants would include an employee dining room with 325 seats.

Two hotels of 15 stories and 300 rooms each would also be constructed adjacent to the casino. The parking structure proposed adjacent to the casino would be connected by an elevated pedestrian bridge of approximately 10,000 square feet. The parking structure proposed would contain space for 4,431 cars. There would be additional casino surface parking on site for 1,440 cars.

The water park and all related development would not take place under Alternative C.

#### 4.3.4 SUMMARY OF DEVELOPMENT ALTERNATIVES

Table 4.3-1 summarizes the Development Alternatives that are evaluated in detail in Section 8.0.

**TABLE 4.3-1  
SUMMARY OF DEVELOPMENT ALTERNATIVES**

	Alternative A	Alternative B	Alternative C
<b>TAUNTON</b>			
<b>CASINO</b>			
Square footage - Total	400,019	195,000	400,019
Square footage - Gaming floor	132,156	78,000	132,156
Gaming positions	4,400	2,330	4,400
Slot machines	3,000	1,850	3,000
Multi-game tables	150	60	150
Poker tables	40	NA	40
<b>EVENTS CENTER</b>			
Square footage	23,423	NA	23,423
<b>RESTAURANTS</b>			
Dining square footage - Total	41,165	12,000	41,165
Food court venues	5-6	5-6	5-6
Food court seats	135	135	135
Buffet restaurant seats	400	250	400
Feature bar/lounge seats	200	200	200
Fine dining restaurant seats	310	NA	310
24-hour restaurant seats	120	NA	120

**TABLE 4.3-1  
SUMMARY OF DEVELOPMENT ALTERNATIVES (CONTINUED)**

	Alternative A	Alternative B	Alternative C
<b>BACK OF HOUSE</b>			
BOH square footage	101,052	90,740	101,052
Employee dining room seats	325	225	325
<b>RETAIL</b>			
Square footage	7,872	1,160	7,872
<b>HOTELS</b>			
Number of hotels	3	1	2
Number of rooms	900	300	600
<b>WATER PARK</b>			
Square footage	25,000	25,000	NA
<b>PARKING</b>			
Garage spaces	4,431	3,012	4,431
Surface spaces	1,940	1,940	1,440
<b>MASHPEE</b>			
No foreseeable, new development projects			

### 4.3.5 ALTERNATIVE D: NO ACTION ALTERNATIVE

Under the No Action Alternative, no land would be taken into federal trust for the Tribe. The Tribe would not establish an initial reservation nor develop a destination resort casino.

Without land being taken into trust, the development projects underway in Mashpee would continue and the Tribe would continue to own the remaining parcels in fee. Further, without a trust acquisition, it is assumed that the parcels within and adjacent to the LUIP in Taunton would continue to develop to their capacity as currently zoned and permitted. Theoretical plans for this build-out were designed using information from the Taunton Development Corporation's original proposal for the site, details of building permits held by current owners, and professional estimates on the ability to build out vacant lots.

The Taunton parcels involved in the fee-to-trust application currently contain buildings totaling approximately 250,400 square feet. These buildings include commercial-industrial-warehouse and office space, as well as three residences. Under the No Action Alternative, there would be up to approximately 487,000 square feet of new development on the Project Site, including approximately 263,000 square feet of building space on the parcel north of the rail line. Existing development would be maintained in its current condition as shown in **Table 4.3-2**. Therefore, under the No Action Alternative, the Taunton parcels would contain in total approximately 663,400 square feet of commercial-industrial-warehouse

space, approximately 69,900 square feet of office space, and approximately 3,600 square feet of residential space. These buildings and additions could be developed concurrently or over a period of years by one or more developers. This Alternative is shown conceptually in **Figure 4.3-4**.

**TABLE 4.3-2  
TAUNTON PARCELS UNDER NO ACTION ALTERNATIVE**

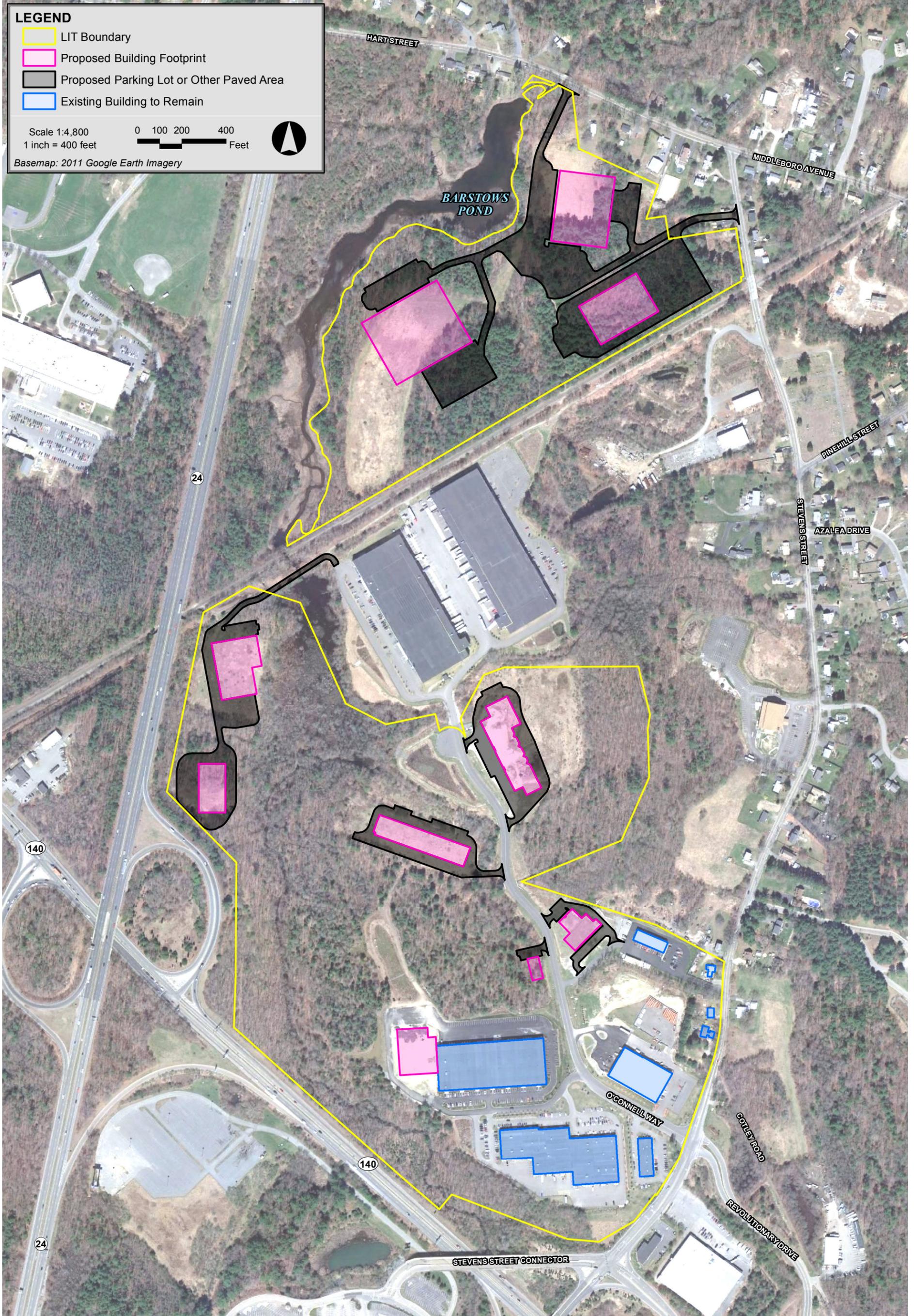
<b>Parcel Number</b>	<b>Owner</b>	<b>Location</b>	<b>Existing Building Square Footage</b>	<b>Building Square Footage Added under No Action</b>
1	One Stevens, LLC	50 O'Connell Way	97,134	
2	Two Stevens, LLC	60 O'Connell Way	100,416	34,500 (addition)
3	L&U, LLC	Lot 11 O'Connell Way	0	51,760 (permitted)
4	OCTS Realty Trust	O'Connell Way	0	Non-buildable
5	OCTS Realty Trust	Stevens Street	0	Non-buildable
6	Jamins, LLC	73 Stevens Street	9,253	
7	71 Stevens Street, LLC	71 Stevens Street	31,500	
8	Daniel G. DaRosa & Laurie B. DaRosa	O'Connell Way	0	17,888 (permitted)
9	Daniel G. DaRosa & Laurie B. DaRosa	61R Stevens Street	8,463	
10	Taunton Development Corporation	O'Connell Way (Lot 9A)	0	5,000 (estimated)
11	Taunton Development Corporation	O'Connell Way (Lot 9B)	0	39,920 (estimated)
12	Taunton Development Corporation	O'Connell Way (Lot 13)	0	74,300 (estimated)
13a	Taunton Development Corporation	Middleborough Avenue (Lot 14)	0	263,200 (estimated)
13b	Taunton Development Corporation	Stevens Street north of rail line	0	Non-buildable
14	Taunton Development Corporation	O'Connell Way roadway and gap parcel	0	Non-buildable
15	John M. Allen	65 Stevens Street	1,092 (residential)	
16	Kathleen Williams and Kenneth Williams	67 Stevens Street	1,218 (residential)	
17	Daniel G. DaRosa	61F Stevens Street	1,315 (residential)	

As under Alternatives A, B, and C, no foreseeable new development projects would occur on the Mashpee parcels under Alternative D (No Action).









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## 4.3.6 TRAFFIC MITIGATION ALTERNATIVES

### 4.3.6.1 Access/Egress to Taunton Parcels

This Draft EIS considers two options to provide access/egress to the Project Site in Taunton. One involves a new ramp from the intersection of O'Connell Way and Stevens Street onto Route 140 Northbound. The other does not include this ramp and instead provides a wider cross section on Stevens Street to accommodate additional turn-lanes. Because of projected impacts to traffic, described in **Section 8.1**, Alternatives A and C are considered with each of the two access/egress options. Alternative B is only considered with Option 2, the improvements to Stevens Street described below. The No Action Alternative would not include either of the access/egress options.

#### ***Option 1 – New Route 140 NB Ramp***

The majority of site traffic will access the Project Site from the west using Route 140 southbound (to Stevens Street) and exit the Site toward Route 140 northbound. With the added trips to and from Route 140, Option 1 proposes a new Route 140 NB ramp to remove the conflict between the northbound through traffic and southbound left-turns at the intersection of the Overpass Connector/Route 104 NB Ramp/Stevens Street. A right-entering on-ramp is proposed to connect Stevens Street southbound to Route 140 northbound prior to the signal prior at the Overpass Connector/Route 104 NB Ramp/Stevens Street intersection.

The new entrance-ramp will eliminate the need for the double southbound left-turn onto Route 140 NB ramp at this intersection, requiring only a single shared through/right-turn lane on the Stevens Street southbound approach. The northbound Stevens Street Overpass Approach will have three through lanes including a channelized right-turn to the existing Route 140 NB on-ramp. Both the northbound and eastbound approaches will continue to access Route 140 NB as they currently do. The proposed entrance ramp for Option 1 is shown in **Figure 4.3-5**. The proposed ramp location is proximate to wetland resources and will require a bridge crossing of the Cotley River. This Option has benefits of eliminating intersection conflicts but would result in impacts to wetlands as described further in **Section 8.2**. Because of the impacts, Option 2 is also considered as a potential solution to servicing exiting traffic from the site and Stevens Street onto Route 140 NB.

#### ***Option 2 – Stevens Street Signal Improvements***

Option 2 utilizes the existing Route 140 NB on-ramp from Stevens Street. In order to accommodate the increase in traffic from the Project Site, additional travel and approach lanes are necessary at O'Connell Way/Stevens Street and Overpass Connector/Route 140 NB Ramps/Stevens Street in order to minimize delay and queuing in this area. As shown in **Figure 4.3-6**, the right-turn out of the site driveway will be signalized to prevent weaving between vehicles traveling through on Stevens Street and those making a left-turn onto the Route 140 NB ramp. Two lanes will be provided out to the driveway to prevent excessive on site queuing. Traffic from the site onto Stevens Street will access the Route 140 NB via a double left turn onto the existing ramp.

For both options, this intersection will be coordinated with the intersection of O’Connell Way/Stevens Street. Intersection improvements will include updating all traffic signal equipment. All planning, permitting, design and construction costs associated with implementing these improvements are included in this improvement.

### **Comparison of Access/Egress Options**

**Table 4.3-3** shows a comparison of the overall level of service at the Overpass Connector/Route 140 NB Ramps/Stevens Street for both of the options. Detailed LOS tables and Synchro reports can be found in **Appendix B-3**.

As shown in the table, the intersection operates acceptably under both conditions. Option 1 would provide uninterrupted access from Stevens Street SB onto Route 140 NB.

Option 2 would require the widening of Stevens Street between the bridge and the casino entrance to a seven lanes cross-section. There is more potential for traffic to grid-lock if incidents occur or a higher than expected peak is temporarily realized. With such congestion, air quality would also be diminished. The overall LOS for this critical intersection is minimally worse under this scenario. However, any foreseeable environmental impacts associated with the ramp described under Option 1, such as impacts to wetlands or traffic during construction, would be minimized and mitigated as described in **Sections 8.2.3, 8.3.2, 8.4, and 8.19.3**.

**TABLE 4.3-3  
COMPARISON OF OVERPASS CONNECTOR/ROUTE 140 NB RAMPS/STEVENS STREET OPTIONS**

Analysis Period	Option 1		Option 2	
	LOS	Delay (sec.)	LOS	Delay (sec.)
AM Peak Hour	B	10.0	B	17.5
PM Peak Hour	B	10.5	C	28.8
Saturday Midday Peak Hour	B	13.2	C	21.7

#### **4.3.6.2 Access to Route 140 Northbound via Route 24 Southbound**

This Draft EIS considers two additional traffic mitigation options to provide vehicles traveling on Route 24 Southbound with access to Route 140 Northbound. One option involves the construction of a new slip ramp to connect Route 24 SB directly to Route 140 NB. The other does not include this new ramp and instead provides substantial improvements to the existing Exit 12 exit-ramp from Route 24 SB providing access to Route 140 NB and Route 140 SB. Because of their projected impacts to traffic, described in **Section 8.1**, Alternatives A and C are considered with each of these two options. Alternative B is only considered with Option 4, the improvements to Exit 12 described below. The No Action Alternative would not include either one of these two options.

#### **Option 3 – New Route 24 SB Slip Ramp to Route 140 NB**

Option 3 features the construction of a new slip ramp in the northwest quadrant of the Route 24/140 Interchange to directly connect Route 24 SB to Route 140 NB, allowing the existing Route 24 SB exit ramp to handle solely traffic headed for Route 140 SB. This would allow for the elimination of a traffic

signal phase at the intersection of the Route 24 SB exit ramp and Route 140. In addition to the new Route 24 SB to Route 140 NB ramp, Option 3 also improves the existing Route 24 SB exit ramp by providing a single channelized right-turn lane to Route 140 SB. This proposed Option is shown in **Figure 4.3-7**. This Option results in impacts to wetlands, described further in **Section 8.2**. Because of the impacts, Option 4 is also considered as a potential solution to servicing traffic from the Route 24 SB to Route 140 NB.

#### **Option 4 – Intersection Improvements at Route 140**

Option 4 proposes that the Route 140 NB approach at the Route 24 SB ramps be widened to accommodate two left-turn lanes and two through lanes just north of the Route 24 overpass, as shown in **Figure 4.3-8**. The Route 24 SB exit-ramp would continue to be one lane as it diverges from Route 24. It would be widened to two lanes north the curve in the ramp, but far enough back from the Route 140 intersection to accommodate the 95th percentile queue length. At the Route 24 SB approach to Route 140, two left-turn lanes and a single channelized right-turn lane would be provided. The channelized right-turn lane will enter Route 140 SB in its own lane, allowing for free, uninterrupted movement. The Route 140 SB approach would be widened to allow two through-lanes and a channelized right-turn lane, capable of accommodating the resultant queues. The right-turn lane would be signalized so as not to conflict with the Route 140 northbound double left-turning movement. Route 140 SB beneath Route 24 would be widened to accommodate two through-lanes and a barrier-separated through-lane, which would accommodate the free right-turn from the Route 24 SB exit-ramp.

#### **Comparison of Route 140 Northbound Access Alternatives**

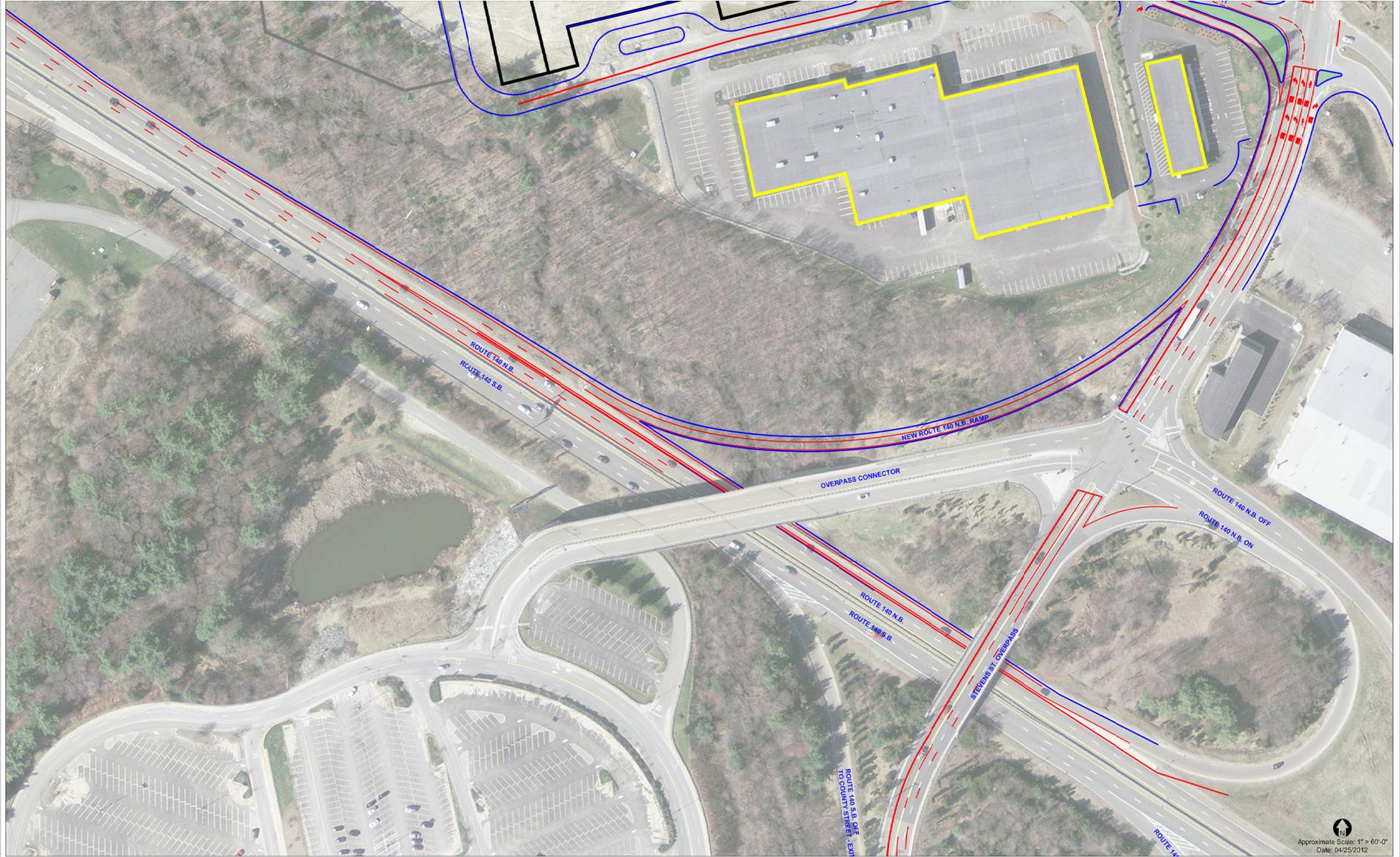
**Table 4.3-4** shows a comparison of the intersection operations for the signals at the Route 24/Route 140 interchange for both mitigation options.

**TABLE 4.3-4  
COMPARISON OF ROUTE 24 AT ROUTE 140 INTERCHANGE OPTIONS**

Analysis Period	Option 3		Option 4	
	LOS	Delay (sec.)	LOS	Delay (sec.)
<b>Route 24 NB at Route 140</b>				
AM Peak Hour	A	8.2	A	8.4
PM Peak Hour	A	6.3	A	6.0
Saturday Midday Peak Hour	A	6.9	A	5.4
<b>Route 24 SB at Route 140</b>				
AM Peak Hour	A	3.7	A	7.1
PM Peak Hour	D	38.8	D	37.7
Saturday Midday Peak Hour	A	6.3	A	9.0

As shown in the table, the intersection operations are generally the same for both options at the intersection of Route 140 and the Route 24 ramp. While the left-turn movement and associated traffic signal phase would be removed from the intersection in Option 3, the amount of delay caused by the left-turn in Option 4 is very low compared to the other movements at the intersection.

Option 3 would require the construction of a new ramp in wetlands, and would involve in total approximately 35,700 square feet of permanent impacts to wetlands. Option 4 would involve in total approximately 6,655 square feet of permanent impacts to wetlands. Foreseeable environmental impacts associated with the ramp described under Option 3 would be minimized and mitigated as described in **Sections 8.2.3, 8.3.2, and 8.4.**



SOURCE: Howard/Stein-Hudson Associates, Inc.

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 4.3-5**

Transportation Alternative A: New Route 140 Northbound Entrance Ramp



SOURCE: Howard/Stein-Hudson Associates, Inc.

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 4.3-6**

Transportation Alternative B: Without Route 140 Northbound Entrance Ramp



Not to scale.



Not to scale.

SOURCE: Fay, Spofford & Thorndike

**Figure 4.3-8**

Transportation Option 4: Route 24/140 Interchange Improvements

# ***SECTION 5.0***

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**AFFECTED ENVIRONMENT, MASHPEE**

# SECTION 5.0

## AFFECTED ENVIRONMENT, MASHPEE

This section describes the existing environment in Mashpee affected by the Project and the Alternatives. Mashpee is a coastal community on the southwestern edge of Barnstable County. The Tribe owns approximately 170 acres of land in Mashpee which it uses for council offices, housing, and cultural and recreational use for the Tribe.

### 5.1 PARCEL DESCRIPTIONS

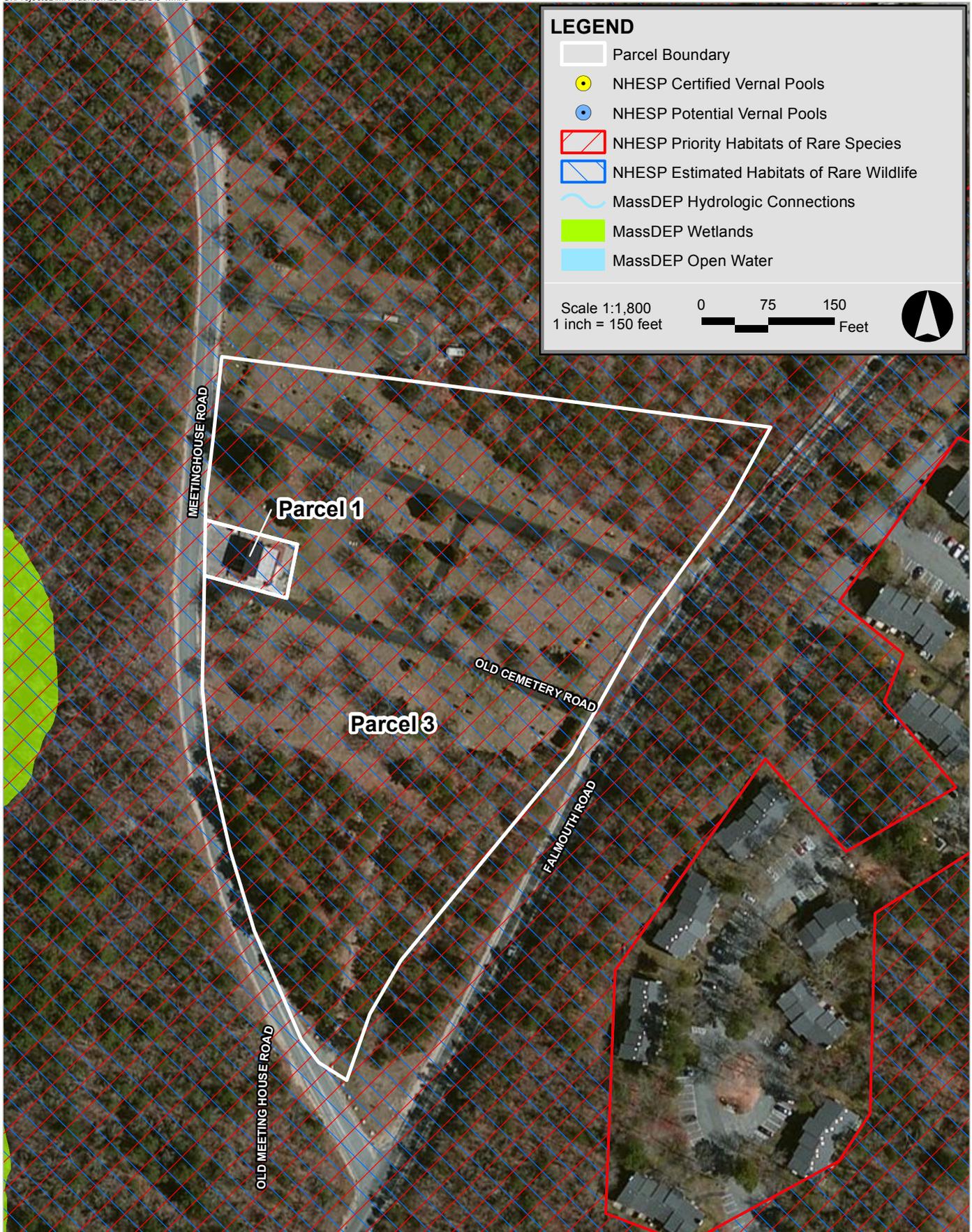
**Figure 2.1-2** shows the general location of the eleven parcels of interest in Mashpee to be placed in trust. **Table 5.1-1** provides a summary of their characteristics and uses. Additional detail of the existing conditions is provided below.

**TABLE 5.1-1  
MASHPEE PARCELS PROPOSED TO BE TAKEN INTO TRUST**

	Owner	Location	Current Use	Proposed Use	Acreage
1	MWT	410 Meetinghouse Road	Old Indian Meetinghouse	Same	0.15
2	MWITC	17 Mizzenmast	Burial Ground/Cemetery	Same	0.361
3	MWT	414 Meetinghouse Road	Cemetery	Same	11.5
4	MWT	431 Main Street	Parsonage	Same	2.0
5	MWT	414 Main Street	Tribe Museum	Same	0.58
6	MWITC	483 Great Neck Road South	Tribal Offices	Tribal Government Center	58.7
7	MWITC	41 Hollow Road	Vacant	Conservation	10.81
8	MOIMHA	Meetinghouse Road	Vacant	Tribal housing	46.82
9	MWITC	483 Great Neck Road South	Cultural/Recreational	Same	8.9
10	MWITC	56 Uncle Percy's Road	Vacant	Same	0.15
11	Maushop, LLC (MWT)	213 Sampsons Mill Road	Agricultural/Tribal Offices	Same	30.138

#### 5.1.1 PARCEL 1 – OLD INDIAN MEETING HOUSE

Parcel 1, the Old Indian Meeting House, is approximately 0.15 acres, with access from Meetinghouse Road (**Figure 5.1-1**). The parcel, a generally flat site, consists primarily of the Old Indian Meeting House and associated parking. It is located with the Cemetery (Parcel 3) between Meetinghouse Road and Route 28.



The Old Indian Meeting House was built in 1684 along Santuit Pond on Bryan's Point as the original Indian church, with the help of Richard Bourne.<sup>1</sup> It was moved to its current location in 1717 and enlarged to its present size in 1854. It is the oldest church building on Cape Cod. The Tribe uses this site for worship, meetings, and social activities. The Old Indian Meeting House is listed in the National Register of Historic Places and the State Register of Historic Places, and it is subject to a Preservation Restriction (MHC #MAS.19 and MAS.B). It underwent renovations to its foundation and exterior between 2005 and 2009.

Massachusetts Natural Heritage and Endangered Species Program (NHESP) mapping indicates that entire site is located within Priority Habitat and Estimated Habitat.

### **5.1.2 PARCEL 2 – BURIAL GROUND**

Parcel 2, the Burial Ground, is approximately 0.361 acres with access from Mizzenmast Drive, as shown in **Figure 5.1-2**. The property, generally flat, primarily consists of a landscaped vacant lot.

Parcel 2's use as a Mashpee Indian Burial Ground dates to the 17<sup>th</sup> and 18<sup>th</sup> centuries.<sup>2</sup> The site contains the graves of at least 17 individuals. Historic maps reveal that the lot was formerly owned by Rosanna Jonas, a member of a prominent Mashpee Indian family in the 19<sup>th</sup> century, suggesting that the graves may be descendants of the Jonas family as well as other Mashpee Indians living in South Mashpee. The Burial Ground is listed in the State Register of Historic Places as it is subject to a Preservation Restriction (MHC #MAS.803).

### **5.1.3 PARCEL 3 – CEMETERY**

Parcel 3, known as the cemetery, is approximately 11.5 acres that surround the Old Indian Meeting House, as shown on **Figure 5.1-1**. The property, generally flat, primarily consists of a landscaped cemetery.

The cemetery, also known as the Old Indian Meeting House Burial Ground, contains documented graves dating to 1770 (Zacheus Popmunnet).<sup>3</sup> There are 37 graves documented between 1770 and 1885 in the Cape Cod Cemetery List. The cemetery is still used today as a burial ground for Mashpee residents. It is listed in the National Register of Historic Places and the State Register of Historic Places, and it is subject to a Preservation Restriction (MHC #MAS.800 and MAS.B).

NHESP mapping indicates that entire site is located within Priority Habitat and Estimated Habitat.

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<sup>1</sup> Public Archaeology Laboratory (PAL), Mashpee Wampanoag Trust Parcels, Mashpee, Massachusetts, Archaeological Sensitivity Assessment, June 10, 2008.

<sup>2</sup> PAL, 2008.

<sup>3</sup> PAL, 2008.

#### **5.1.4 PARCEL 4 – THE PARSONAGE**

Parcel 4, the Parsonage, is approximately 2.0 acres with access from Main Street (Route 130), as shown on **Figure 5.1-3**. The property includes the Parsonage at the front of the lot, with wooded areas at the back of the lot. The Parsonage had historically been used for small events, but has been closed for many years.

Built around 1849, the Parsonage was initially owned by the district overseer, and eventually sold to the Mashpee Baptist parish in 1852. Historic maps from 1880 and 1907 note its use as a parsonage. The building was briefly used by the Tribal Council for offices in the mid-1970s, and had also been rented out by the Council as a residence to community members. The Parsonage is listed in the State Register of Historic Places as a contributing resource to the Mashpee Local Historic District (MHC #MAS.10 and MAS.H).

Parcel 4 is a generally flat, slightly rolling site. The site contains and lies adjacent to upland woods, landscaped areas, and freshwater scrub-shrub and deep marsh wetlands, as shown on **Figure 5.1-3**. The Mashpee River, an anadromous fish run, is located to the east. NHESP mapping indicates that the eastern portion of the site is located within Priority Habitat and Estimated Habitat.

#### **5.1.5 PARCEL 5 – MASHPEE WAMPANOAG MUSEUM**

Parcel 5, the Mashpee Wampanoag Museum, is approximately 0.58 acres with access from Main Street (Route 130). It is located across Main Street from the Parsonage, as shown in **Figure 5.1-3**. The property primarily consists of the Museum and associated parking lot.

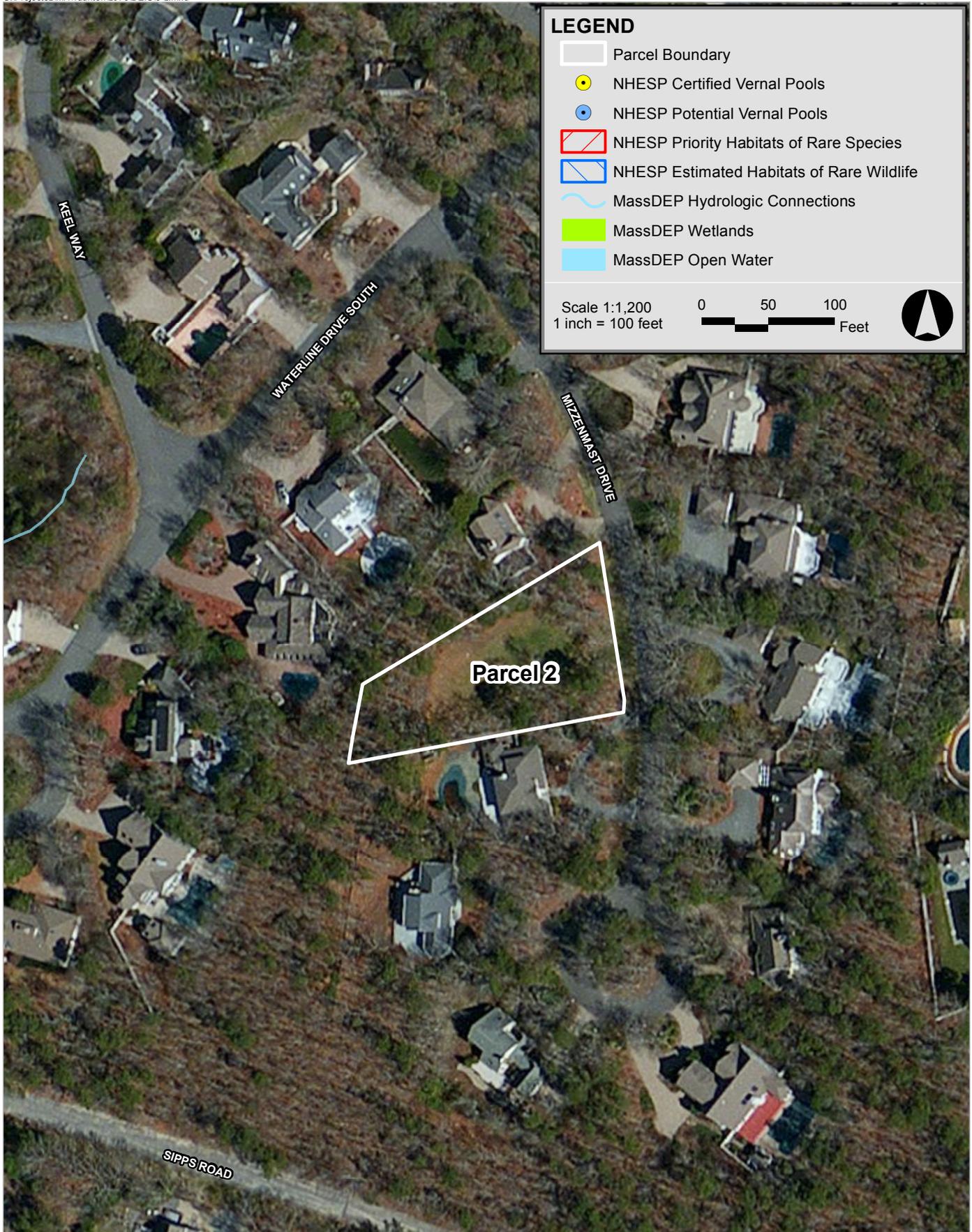
The Museum, also known as the Avant House, is one of the earliest surviving residential structures in Mashpee, built circa 1830.<sup>4</sup> Captain John Phinney owned and lived in the house to the 1850s. It was also the homestead of Timothy Pocknet after he purchased it in 1863. The house was the residence of Mabel Avant from 1924 until it was sold to the Town in 1970. The Museum is listed on the National Register of Historic Places (MHC 9; NRIND 12/3/98; PR 1998, 2001).

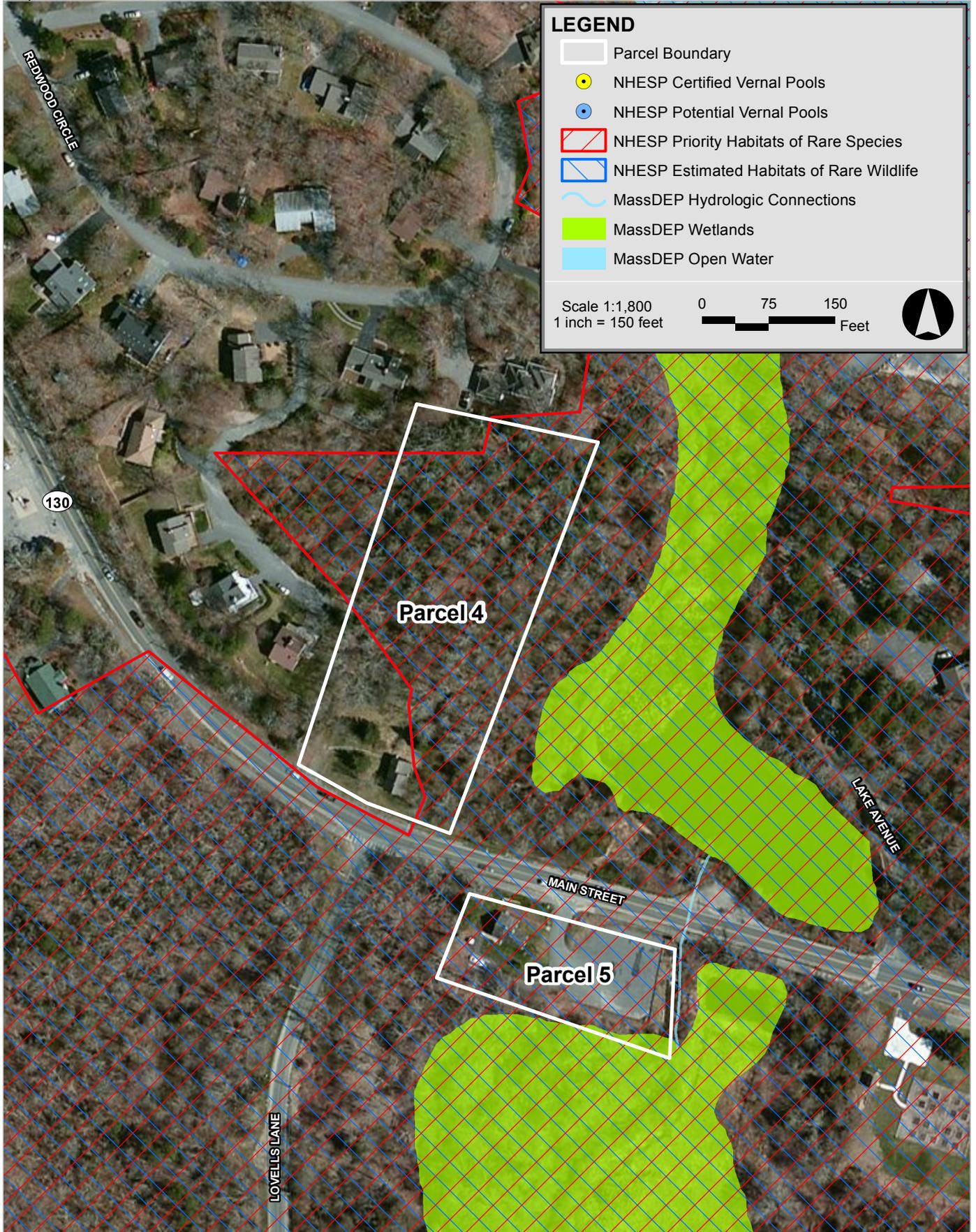
The site contains landscaped areas around the museum and freshwater forested and shallow marsh wetlands, a shown on **Figure 5.1-3**. The Mashpee River, an anadromous fish run, is located to the east. The Tribe, in conjunction with the Town of Mashpee, had provided drainage improvements for the area, located along the back of the site. These improvements capture and treat runoff from the road and parking lot for the Museum.

NHESP mapping indicates that the site is located within Priority Habitat and Estimated Habitat. A wetland listed by the Massachusetts Department of Environmental Protection (MassDEP) encroaches on the southeast corner of Parcel 5.

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<sup>4</sup> PAL, 2008.





### 5.1.6 PARCEL 6 – TRIBAL GOVERNMENT CENTER

Parcel 6, currently consisting of the Tribal Offices, is approximately 58.7 acres with access from Great Neck Road South, as shown on **Figure 5.1-4**. There is parking at the front of the lot, with wooded areas at the back of the lot and includes one dirt road. Potable water service is currently provided through a private well. Wastewater disposal services are provided through an existing septic system.

The property includes the tribal offices, an area for the annual Powwow, and cultural meeting areas, and Parcel 6 has been determined to be a Traditional Cultural Property (TCP).<sup>5</sup>

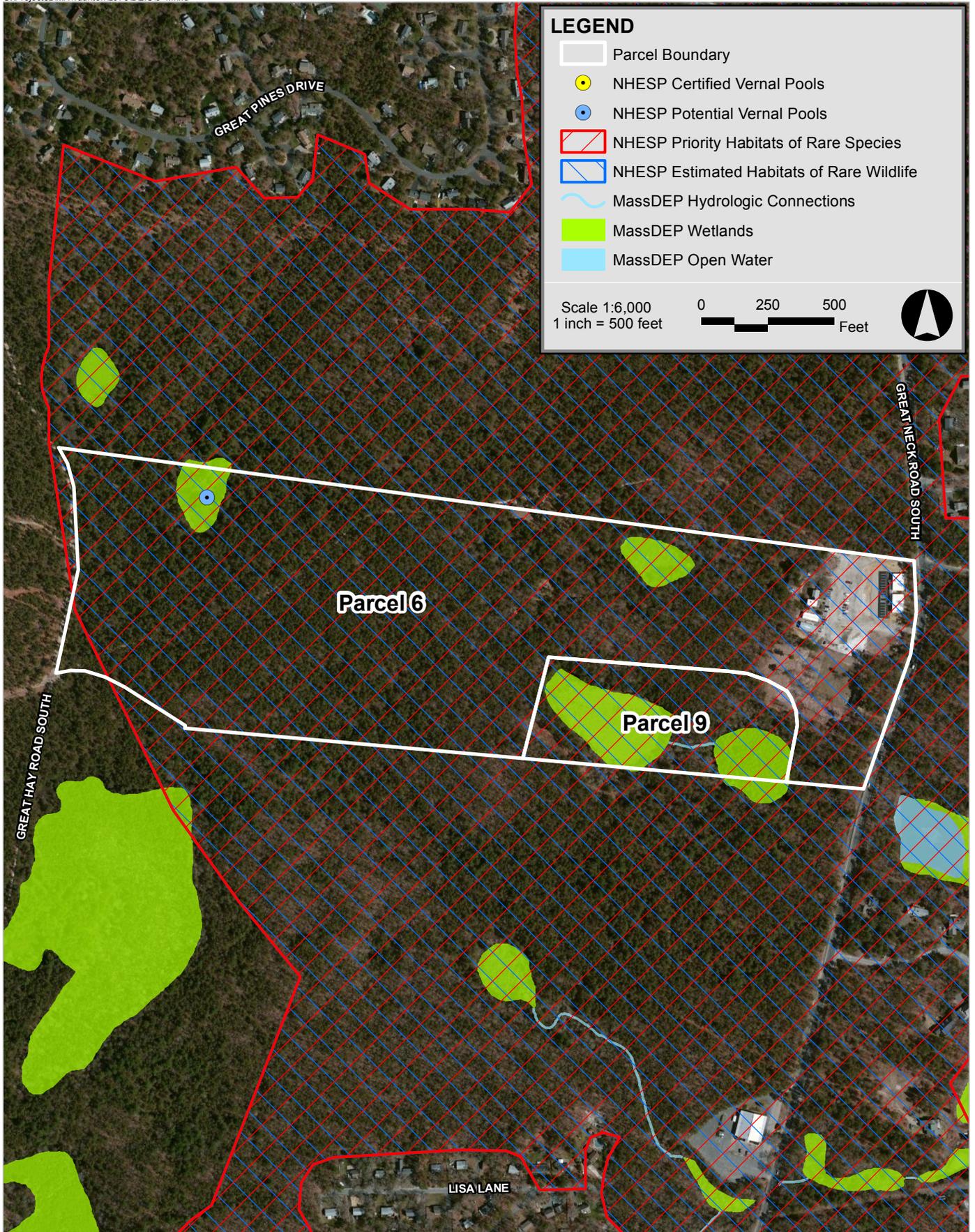
The majority of Parcel 6 is mapped as Priority Habitat and Estimated Habitat. NHESP mapping indicates a potential vernal pool in the northwestern portion of the site and a MassDEP-listed wetland farther to the east, but no development exists or is planned for those areas.

Construction of a new Tribal Government Center on Parcel 6, shown in **Figures 5.1-5 and 5.1-6**, began in September, 2012. This 46,000 square foot, two story steel framed building with a partial basement of approximately 11,000 square feet will include government and medical offices, archives, meeting rooms and teaching spaces, a gymnasium, and food preparation space to meet the needs of the Tribe. The Tribe received a \$12.7 million loan for the project from U.S. Department of Agriculture (USDA) Rural Development, financed by the American Recovery and Reinvestment Act.

Since the Tribe has received the proper permits and clearances and is allowed to develop the Mashpee parcels in either fee or trust status, any planned or future development of the property is not a “connected action,” as defined in 40 C.F.R. 1508.25, with the BIA’s approval or denial of the Tribe’s fee-to-trust application.

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<sup>5</sup> PAL, 2008.





SOURCE: C&A Engineering Services, LLC

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 5.1-5**  
Tribal Government Center Layout



SOURCE: RKB Architects Inc

*Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS*

**Figure 5.1-6**  
Tribal Government Center Design

### 5.1.7 PARCEL 7 – CONSERVATION

Parcel 7, presently vacant land, is approximately 10.8 acres with access from Goodspeed Road, as shown in **Figure 5.1-7**. The property primarily consists of undeveloped upland wooded areas. As shown on **Figure 5.1-7**, Parcel 7 is proximate to MassDEP-listed wetlands as well as one potential and one certified vernal pool, but no development exists or is planned near that area.

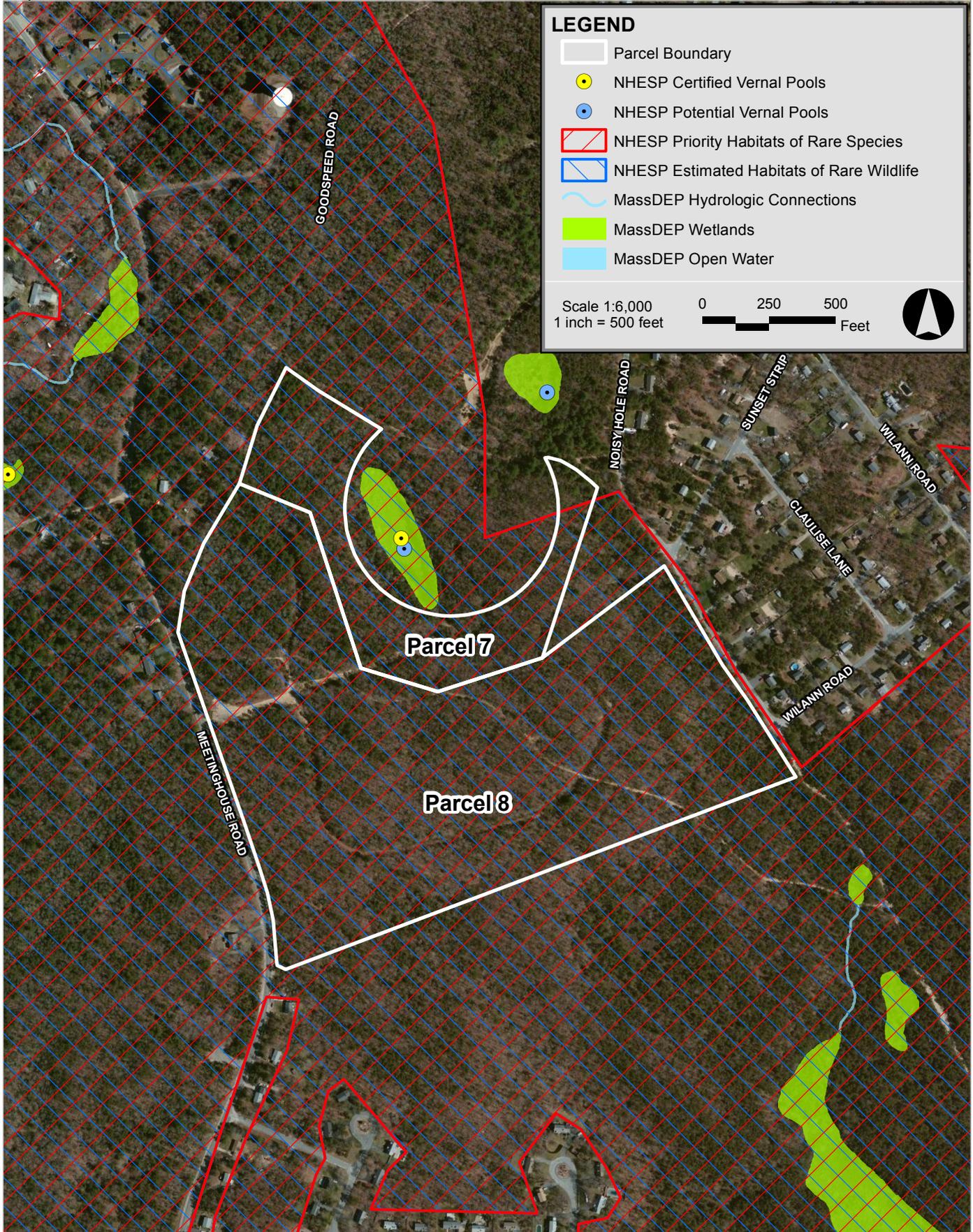
Because the area is listed as Priority Habitat for the Eastern Box Turtle, a Species of Special Concern under the Massachusetts Endangered Species Act, the Tribe has worked with NHESP to determine mitigation measures, including turtle protection measures during construction, a long-term Eastern Box Turtle study, and the creation and maintenance of areas for nesting and early succession habitat. Housing plans have been limited to Parcel 8, and the Tribe has agreed to strengthen an existing Conservation Restriction by prohibiting the construction of all structures on Parcel 7.

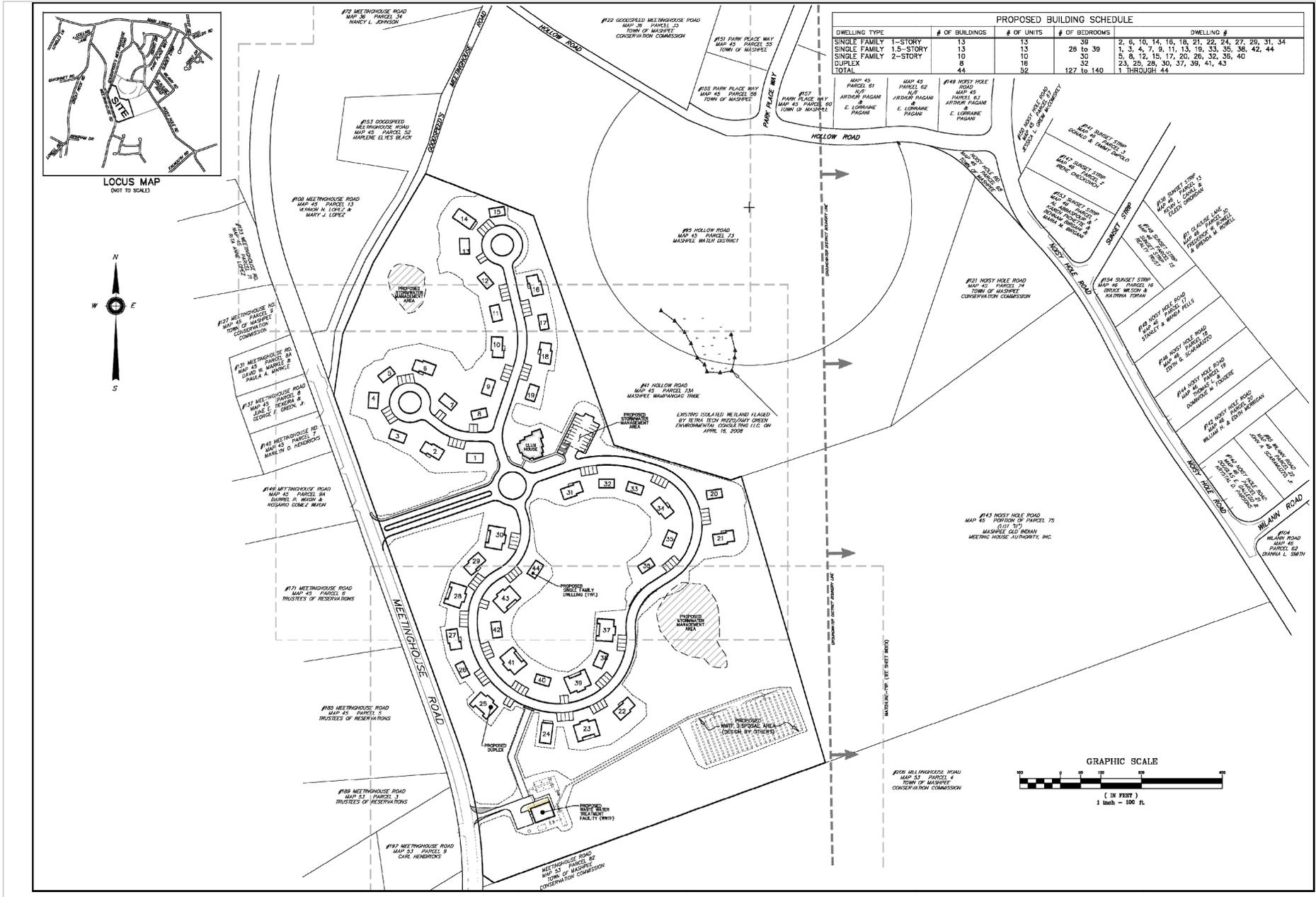
### 5.1.8 PARCEL 8 – TRIBAL HOUSING

Parcel 8, presently vacant land, is approximately 46.8 acres with access from Meetinghouse Road, as shown in **Figure 5.1-7**. The property primarily consists of undeveloped upland wooded areas and includes several dirt roads. NHESP mapping indicates that the entire parcel is Priority Habitat and Estimated Habitat.

In order to meet unmet housing needs, the Tribe's Housing Department developed plans for units on this parcel to provide affordable housing to low and moderate income Tribal members, and to other Native Americans who are eligible to received housing assistance under the Native American Housing Assistance and Self Determination Act (NAHASDA). **Figure 5.1-8** shows the specific plans that have been developed for 52 units on a portion of Parcel 8. Construction of the wastewater treatment facility shown in **Figure 5.1-8** was completed in 2012.

Like the Tribal Government Center described in **Section 5.1.6**, since the Tribe is allowed to develop the Mashpee parcels in either fee or trust status, any planned or future development of the property is not a "connected action," as defined in 40 C.F.R. 1508.25, with the BIA's approval or denial of the Tribe's fee-to-trust application.





SOURCE: Bracken Engineering, Inc.

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 5.1-8**  
Tribal Housing Layout

### **5.1.9 PARCEL 9 – CULTURAL/RECREATIONAL LAND**

Parcel 9 is approximately 8.9 acres with no access from an improved road. As shown in **Figure 5.1-4**, Parcel 9 lies adjacent to Parcel 6, which will host the new Tribal Government Center. The property primarily consists of undeveloped wooded areas, an abandoned cranberry bog and a forested swamp.

Parcel 9 is a generally flat site with two depressions in which wetlands occur. It includes a relatively short manmade stream which connects the abandoned cranberry bog to forested swamp.

### **5.1.10 PARCEL 10 – VACANT**

Parcel 10 consists of a single lot of approximately 0.15 acres located at 56 Uncle Percy's Road. It is a vegetated lot within a residential neighborhood, as shown in **Figure 5.1-9**. The parcel is suitable for the development of a one- or two-family home, and could eventually be used for the purpose of Tribal housing. Presently, however, the Tribe has no plans for alterations of Parcel 10 in the foreseeable future.

### **5.1.11 PARCEL 11 – AGRICULTURAL/TRIBAL OFFICES**

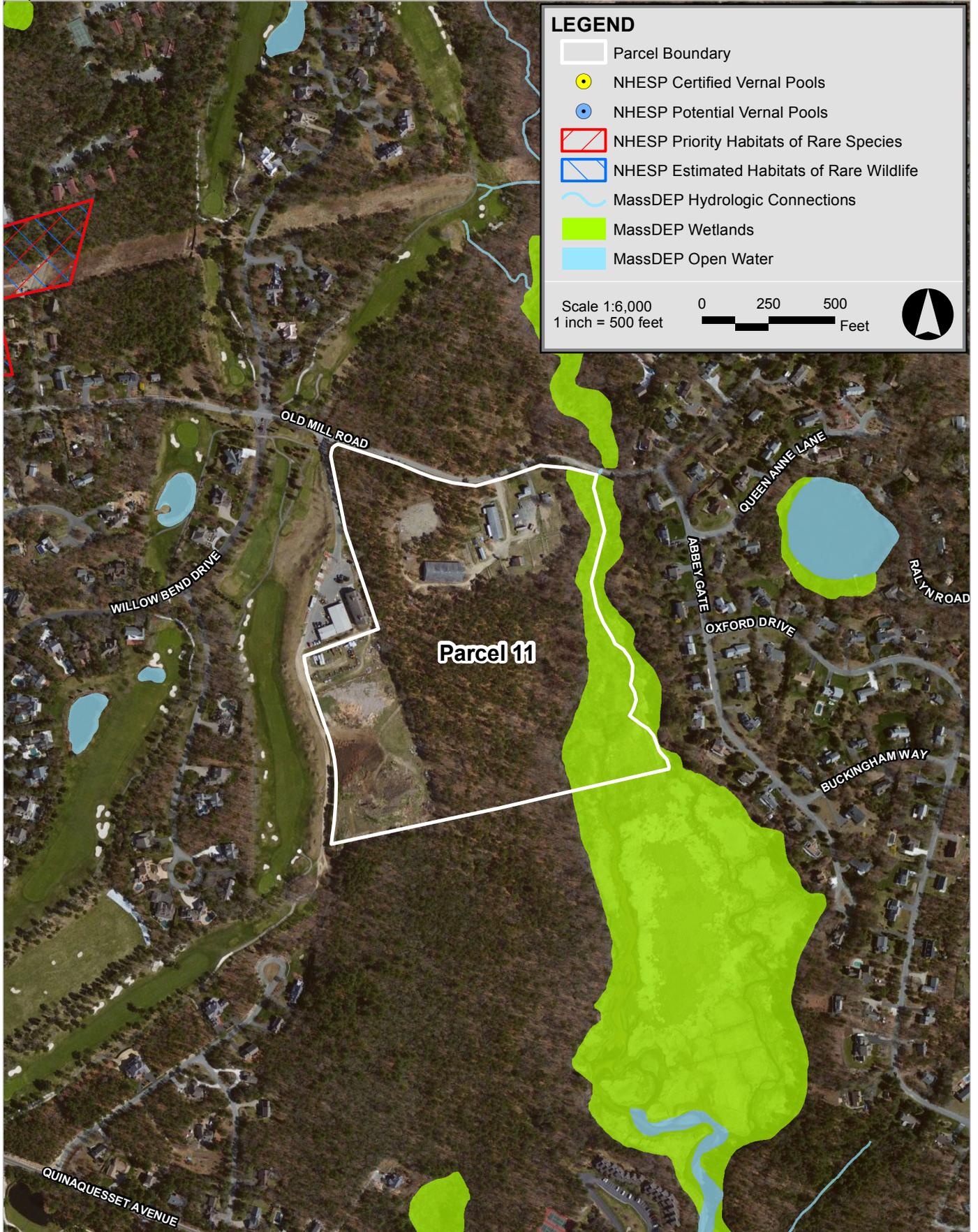
Parcel 11 comprises approximately 30.138 acres accessible from Sampsons Mill Road, as shown in **Figure 5.1-10**. The parcel includes Tribal offices and agricultural buildings and fields, some of which the Tribe is currently renovating. Specifically, of two buildings on the site originally constructed as residences, one now houses the Tribe's Natural Resources Department and the other is currently vacant. The parcel also includes a former horse boarding stable that is now used for the Tribe's aquaculture program, and another building being renovated into a Hazard Analysis and Critical Control Points (HACCP) facility; both buildings are critical to the Tribe's development of a shellfish wholesale operation. Also on Parcel 11 are an equipment storage building and a former horse riding rink currently being renovate for future uses.

The majority of Parcel 11 is wooded, and approximately two-thirds of the parcel is under a conservation restriction prohibiting any new development or ground disturbance. The Santuit River and surrounding wetlands run along the eastern side of the parcel.

## **5.2 ENVIRONMENTAL CONDITIONS**

No new development is being proposed as part of the fee-to-trust process for the Mashpee parcels. All Mashpee parcels, as described above, would remain in their present or previously evaluated conditions whether or not they were taken into trust by the BIA on behalf of the Tribe. These parcels would simply be maintained as historic Tribal sites, offices, housing, recreational lands, and other property types as described above. The action of taking these properties into trust will not, in itself, affect environmental conditions.





Tribal members currently regularly travel to several of the Mashpee parcels for cultural, social, and governmental purposes and needs, and would continue to do so were the parcels taken into trust. Traffic in Mashpee was not raised as a concern during project Scoping. In the foreseeable future, traffic volumes may increase, and correspondingly air quality may be impacted, near the parcels where the new Government Center and Tribal housing are being constructed. However, these impacts would not be the result of the taking of land into trust and are not expected to be significant.

Several of the Mashpee parcels include land designated as sensitive environment. Specifically, part or all of Parcels 1, 3, 4, 5, 6, 7, 8, and 9 have been designated by NHESP as Priority Habitat and Estimated Habitat. Parcels 4 and 5 contain small areas of wetlands and lie adjacent to wetlands and the Mashpee River, an anadromous fish run. NHESP mapping indicates a potential vernal pool and MassDEP-listed wetlands on Parcel 6 and a certified vernal pool, potential vernal pools, and MassDEP-listed wetlands near but not within Parcel 7. Parcel 9 includes two wetlands and a manmade stream, and Parcel 11 is bordered by the Santuit River and surrounding wetlands. The Tribe has no plans to develop the majority of these parcels, and thus their environmental conditions will be preserved. Ongoing developments on Parcels 6, 7, and 8 will occur regardless of whether the parcels are taken into trust by the BIA on behalf of the Tribe.

The Mashpee parcels also include several historic and cultural sites. The National Register of Historic Places includes the Old Indian Meeting House (Parcel 1), the cemetery (Parcel 3), and the Museum (Parcel 5). The Massachusetts State Register of Historic Places includes the Old Indian Meeting House (Parcel 1), the Burial Ground (Parcel 2), the cemetery (Parcel 3), and the Parsonage (Parcel 4). The Tribe has no plans to alter these sites whether or not the parcels are taken into trust by the BIA. Parcel 6, which currently includes Tribal offices, has been determined to be a Tribal Cultural Property. Following construction of the Tribal Government Center, Parcel 6 will continue to be used collectively by members of the Tribe for a wide range of tribal social and cultural activities including social gatherings, education of tribal members, and ceremonial activities.

Because the fee-to-trust transfer would involve a change to federal ownership of these parcels, local socioeconomic conditions could experience some impacts, and are thus described below. Because the Tribe meets the criteria of an Environmental Justice Community, the environmental justice impact of the BIA taking the Mashpee parcels into trust on behalf of the Tribe has also been evaluated.

## **5.3 SOCIOECONOMIC CONDITIONS**

### **5.3.1 STUDY AREAS**

The analysis of potential impacts on socioeconomic conditions focuses on a study area that is most likely to be affected by the proposed project. The study area for the socioeconomic analysis is the Town of Mashpee (See **Figure 5.3-1**). Comparative data is provided for Barnstable County, where the Town of Mashpee is located, as well as Massachusetts.

### 5.3.2 DATA SOURCES

Data on demographics, income, housing, and job distribution were obtained from the US Census Bureau's Decennial Census, and the 2006-2010 American Community Survey (ACS). Labor force and employment data were collected from the Massachusetts Executive Office of Labor and Workforce Development. All dollar values are presented in 2012 adjusted dollars, unless otherwise indicated. Tribal demographic data were obtained from the Tribe. Property tax data were obtained from the Town of Mashpee Assessor.

Information about community infrastructure in the Town of Mashpee was obtained from the websites of the Town of Mashpee, the Commonwealth of Massachusetts, the Barnstable County Sheriff's Office, Cape Cod Healthcare, and the Massachusetts Department of Education, as well as the 2011 Annual Report for the Town of Mashpee.

### 5.3.3 DEMOGRAPHIC TRENDS

#### 5.3.3.1 Population

According to Census 2010 data, the population in the Town of Mashpee is 14,006 (See **Table 5.3-1**). This represents an increase of 8.2 percent since 2000. Over the same time, the population of Barnstable County decreased by 2.9 percent and the population of Massachusetts as a whole increased by 3.1 percent.

**TABLE 5.3-1  
POPULATION: 2000, 2010**

Area	2000	2010	Percent Change
Town of Mashpee	12,946	14,006	8.2
Barnstable County	222,230	215,888	-2.9
Massachusetts	6,349,097	6,547,629	3.1
<b>Source:</b> US Census			

#### 5.3.3.2 Housing

The total housing units in the Town of Mashpee increased between 2000 and 2010 by 18.7 percent, outpacing population growth (See **Table 5.3-2**). The number of housing units also increased in Barnstable County and Massachusetts over this same time, by 9 percent and 7.1 percent, respectively. The residential vacancy rate increased in all three study areas over this time; the Town of Mashpee had a vacancy rate of 38.1 percent in 2010, which was lower than that in Barnstable County (40.3 percent) but significantly higher than in Massachusetts as a whole (9.3 percent).

The high vacancy rate in the Town of Mashpee and Barnstable County is in part due to the prevalence of seasonal and recreational housing units. The location along the Atlantic Ocean and Cape Cod Bay has made Barnstable County, including the Town of Mashpee, attractive destinations for second home owners



SOURCE: AKRF

Mashpee Wampanoag Tribe – Fee to Trust Acquisition – Draft EIS

**Figure 5.3-1**  
Socioeconomic Analysis Study Area

and seasonal rentals. In 2010, 34.5 percent of vacant housing units in the Town of Mashpee and 35.5 percent in Barnstable County were attributable to seasonal or recreational use, as compared to 4.1 percent in all of Massachusetts. The percent of vacant housing units in the Town of Mashpee that were for seasonal or recreational use increased by 1.5 percentage points over this time.

**TABLE 5.3-2  
HOUSING CHARACTERISTICS: 2000, 2010**

Area	Total Housing Units			Vacancy		Percent of Vacant Housing Units for Seasonal/Recreational Use	
	2000	2010	Percent Change	2000	2010	2000	2010
Town of Mashpee	8,325	9,882	18.7%	36.9	38.1	33.0	34.5
Barnstable County	147,083	160,281	9.0%	35.5	40.3	32.0	35.5
Massachusetts	2,621,989	2,808,254	7.1%	6.8	9.3	3.6	4.1

**Source:** US Census

### 5.3.3.3 Income

According to 2006-2010 ACS data, the median household income in the Town of Mashpee was \$65,891 (See **Table 5.3-3**). This represents an 8.1 percent decrease since 2000. The 2010 median household income in the Town of Mashpee was higher than in Barnstable County (\$63,442) and lower than in Massachusetts as a whole (\$67,851).

**TABLE 5.3-3  
MEDIAN HOUSEHOLD INCOME: 2000, 2006-2010**

Area	2000	2006-2010	Percent Change
Town of Mashpee	\$71,702	\$65,891	-8.1%
Barnstable County	\$64,173	\$63,442	-1.1%
Massachusetts	\$70,557	\$67,851	-3.8%

**Notes:** All amounts presented in 2012 dollars.  
**Sources:** US Census, American Community Survey

### 5.3.4 WORKFORCE CAPACITY AND OPPORTUNITIES

Major employers in the Town of Mashpee include New Seabury Properties and Popponesset Inn Restaurant—each employing between 250 and 499 workers. Both of these companies are related to the New Seabury upscale resort community, reflecting the importance of the Nantucket Sound to the Town of Mashpee’s economy. In Barnstable County as a whole, Cape Cod Healthcare and the Woods Hole Oceanographic Institution each employ between 1,000 and 4,999 workers. The Air National Guard is also a notable employer in the county, which includes the Otis Air National Guard Base.

### 5.3.4.1 Labor Force, Employment, and Unemployment

As shown in **Table 5.3-4**, the labor force in the Town of Mashpee increased between 2001 and 2011 by 12.7 percent. This was a higher increase over the same time than in both Barnstable County (4.5 percent) and Massachusetts as a whole (1.6 percent).

**TABLE 5.3-4  
ANNUAL AVERAGE LABOR FORCE**

Area	2001	2011	Percent Change
Town of Mashpee	7,169	8,080	12.7%
Barnstable County	115,308	120,515	4.5%
Massachusetts	3,401,333	3,456,442	1.6%
<b>Notes:</b> Data not seasonally adjusted.			
<b>Source:</b> Massachusetts Executive Office of Labor and Workforce Development			

As shown in **Table 5.3-5**, employment in the Town of Mashpee increased by 8 percent between 2001 and 2011—a rate slightly lower than the labor force over the same time. The average annual employment rate decreased over the same time in Barnstable County and Massachusetts as a whole, by 0.2 percent and 2.2 percent, respectively.

**TABLE 5.3-5  
AVERAGE ANNUAL EMPLOYMENT**

	2001	2011	Percent Change
Town of Mashpee	6,924	7,476	8.0%
Barnstable County	110,854	110,635	-0.2%
Massachusetts	3,275,350	3,202,267	-2.2%
<b>Notes:</b> Data not seasonally adjusted.			
<b>Source:</b> Massachusetts Executive Office of Labor and Workforce Development			

As shown in **Table 5.3-6**, almost 25 percent of employment in the Town of Mashpee is attributed to the educational services and health care and social assistance sector. Retail accounts for the second highest percentage of employment, with 15.8 percent, and professional, scientific, and management, and administrative and waste management services account for another 12 percent of employment. The educational services and health care and social assistance sector also accounts for the largest percentage of employment in both Barnstable County and Massachusetts as a whole, at 23.9 percent and 26.7 percent of jobs, respectively. Like the Town of Mashpee, retail and professional, scientific, and management, and administrative and waste management services account for the next highest proportions of employment in Barnstable County. However, unlike the Town of Mashpee and Barnstable County, professional, scientific, and management, and administrative and waste management services account for the second highest proportion of employment in Massachusetts as a whole, followed by retail.

**TABLE 5.3-6  
JOB DISTRIBUTION BY NAICS SECTORS (PERCENT), 2006-2010**

NAICS Sector	Town of Mashpee	Barnstable County	Massachusetts
Agriculture, forestry, fishing and hunting, and mining	0.1	0.8	0.4
Construction	10.9	10.0	5.9
Manufacturing	3.2	4.3	9.9
Wholesale Trade	1.0	2.1	2.7
Retail Trade	15.8	12.7	10.7
Transportation and warehousing, and utilities	3.4	4.1	3.8
Information	2.2	2.3	2.7
Finance and insurance, and real estate and rental and leasing	5.2	6.5	8.1
Professional, scientific, and management, and administrative and waste management services	12.0	11.6	12.7
Educational services, and health care and social assistance	24.6	23.9	26.7
Arts, entertainment, and recreation, and accommodation and food services	9.4	11.1	8.0
Other services, except public administration	4.8	5.5	4.5
Public administration	7.3	5.1	4.1
<b>Sources:</b> US Census, 2006-2010 American Community Survey			

As shown in **Table 5.3-7**, the Town of Mashpee had a lower proportion of the population 16 years and older in the work force in 2010 than in Massachusetts as a whole. However, this proportion was larger than that in Barnstable County. Mean travel time to work was lower in the Town of Mashpee and Barnstable County than in Massachusetts as a whole. The Town of Mashpee had a higher proportion of the population 25 years and older with a high school diploma or higher than in both Barnstable County and Massachusetts; however compared to the two other study areas, the Town of Mashpee had the lower proportion of the population 25 years and older with a bachelor's degree or higher.

**TABLE 5.3-7  
CHARACTERISTICS OF THE LABOR POOL, 2006-2010**

	Town of Mashpee	Barnstable County	Massachusetts
<b>Economic Characteristics</b>			
Percent of Population (16 years and over) in labor force	63.4	60.7	67.7
Mean Travel Time to Work	24.2	23.9	27.3
<b>Social Characteristics</b>			
Percent of population with high school diploma or higher (25 years and over)	95.9	88.7	94.7
Percent of population with bachelor's degree or higher (25 years and over)	34.1	38.3	40.5
<b>Sources:</b> US Census, 2006-2010 American Community Survey			

As shown in **Table 5.3-8**, between 2001 and 2011, the number of people unemployed increased in the Town of Mashpee and Barnstable County. Over the same time, the number of people unemployed decreased in Massachusetts. The unemployment rate increased in all of the study areas during this time, remaining highest in Barnstable County (8.2 percent). In 2001, the unemployment rate in the Town of Mashpee was the lowest of all of the study areas (3.4 percent). By 2011 the Town of Mashpee's unemployment rate was higher than that in Massachusetts as a whole.

**TABLE 5.3-8  
UNEMPLOYMENT**

Area	Unemployed		Unemployment Rate	
	2001	2011	2001	2011
Town of Mashpee	245	604	3.4	7.5
Barnstable County	4,454	9,880	3.9	8.2
Massachusetts	3,275,350	3,202,267	3.7	7.4

**Notes:** Data not seasonally adjusted.  
**Source:** Massachusetts Executive Office of Labor and Workforce Development

As shown in **Table 5.3-9**, average weekly wages in the Town of Mashpee are generally lower than in Barnstable County and Massachusetts as whole. Average weekly wages in Barnstable County are also generally lower than in the state as a whole.

**TABLE 5.3-9  
AVERAGE WEEKLY WAGES BY NAICS SECTORS, 2010**

	Town of Mashpee	Barnstable County	Massachusetts
Agriculture, forestry, fishing and hunting, and mining	NA	\$758	\$982
Construction	\$797	\$972	\$1,238
Manufacturing	\$810	\$1,043	\$1,519
Wholesale Trade	\$858	\$1,143	\$1,604
Retail Trade	\$443	\$563	\$561
Transportation and warehousing	\$773	\$835	\$953
Information	\$624	\$890	\$1,785
Finance and insurance	\$969	\$1,404	\$2,333
Real estate and rental and leasing	\$705	\$686	\$1,215
Professional and technical services	\$1,093	\$1,252	\$2,039
Management of companies and enterprises	NA	\$955	\$2,114
Administrative and waste services	\$728	\$697	\$779
Educational services	NA	\$954	\$1,071
Healthcare and social assistance	\$711	\$928	\$1,051
Arts, entertainment, and recreation	\$486	\$555	\$684
Accommodation and food services	\$340	\$412	\$391
Other services	\$527	\$583	\$557
Total, all government	NA	\$1,104	\$1,202

**Notes:** All values reported in 2012 dollars, based on US Department of Labor, Bureau of Labor Statistics Consumer Price Index for all urban consumers in the northeast.

**Sources:** Massachusetts Executive Office of Labor and Workforce Development (EOLWD)

### 5.3.4.2 Seasonal Employment

Employment trends in the Barnstable Metropolitan New England City and Town Area (NECTA), which includes the Town of Mashpee, are highly seasonal in nature, reflecting the influx of tourists and second-home owners during the summer months and their departure at the end of the season. Employment in the leisure and hospitality industry in the Barnstable Metropolitan NECTA increases dramatically during the summer months, peaking in August and then decreasing through the fall.

### 5.3.5 MASHPEE WAMPANOAG TRIBE

#### 5.3.5.1 Population

As shown in **Table 5.3-10**, the Mashpee Wampanoag Tribe has 2,647 members. Of this total, 1,646 live in Massachusetts, and 1,098 within Barnstable County. Within Barnstable County, approximately, 466 members live in the Town of Mashpee where tribal headquarters are located.

**TABLE 5.3-10  
MASHPEE WAMPANOAG TRIBAL ROLL**

Jurisdiction	Tribal Members
Barnstable County	1,098
Plymouth County	183
Bristol County	153
Suffolk County	97
Norfolk County	43
Other Massachusetts Counties	72
Total Members in Massachusetts	1,646
Total Members elsewhere (or unknown address)	1,001
Total Mashpee Membership Roll	2,647
<b>Source:</b> Mashpee Wampanoag Tribe	

#### 5.3.5.2 Income

The median household income of reporting Tribal members was \$29,601.11 as of August 31, 2012. This represents less than half of the median household income in the Town of Mashpee, as well as in Barnstable County and Massachusetts. In that same year, approximately 50 percent of Tribal members lived in poverty.

### 5.3.5.3 Tax Revenues

Based on assessed valuations and the fiscal year 2012 tax rates from the Town of Mashpee, the Mashpee parcels proposed to be taken into trust will generate approximately \$17,564 in property tax revenues during fiscal year 2012 for the town. This total represents 0.03 percent of the total property tax revenue for the Town of Mashpee. **Table 5.3-11** lists the assessed value and estimated taxes for each of the project site parcels in the Town of Mashpee.

**TABLE 5.3-11  
MASHPEE-WAMPANOAG PARCELS, TAXABLE VALUE, TAX RATES, AND TAX PAYMENTS IN TOWN OF MASHPEE**

Number	Parcel ID Number	Location	Estimated Total Taxes Paid
1	61-58A-0-R	410 Meetinghouse Road	Exempt
2	125-238-0-E	17 Mizzenmast	Exempt
3	68-13A-0-E	414 Meetinghouse Road	Exempt
4	27-42-0-R	431 Main Street	\$1,384.79
5	35-30-0-R	414 Main Street	Exempt
6	95-7-0-R	483 Great Neck Road	Exempt
7	45-73-A-R	41 Hollow Road	\$637.72
8	45-75-0-R	Meetinghouse Road	\$6,918.42
9	99-38-0-R	Es Res Great Next Road	Exempt
10	117-173-0-R	56 Uncle Percy's Road	\$122.95
11	63-10-0-R	213 Sampsons Mill Road	\$8,500.01
<b>Total</b>			<b>\$17,563.89</b>
<b>Total Property Taxes for the Town of Mashpee</b>			<b>\$54,080,834</b>
<b>Percent of Total Property Taxed for the Town of Mashpee</b>			<b>0.03%</b>
<b>Notes:</b> Tax rates represent fiscal year 2012 rates.			
<b>Sources:</b> Town of Mashpee Assessor			

### 5.3.5.4 Community Infrastructure

This section discusses the community facilities that serve the properties of the Mashpee Wampanoag Tribe and surrounding areas within the Town of Mashpee.

#### *CRIMINAL JUSTICE SYSTEM*

The Town of Mashpee is under the jurisdiction of the Falmouth District Court, which handles civil and criminal cases for many of the municipalities in Barnstable County. The Falmouth District Court is a branch of the Massachusetts Trial Court system established under Chapter 478 of the Acts of 1978. Local courts on Cape Cod provide civil and criminal justice services for illegal activities occurring within their areas of coverage. For felonies that do not fall within the jurisdiction of the District Court, probable cause hearings are conducted to determine if a defendant should be bound over to the Superior Court. Civil cases referred by the Falmouth District Court would be handled by the Barnstable County Superior Court.

*POLICE*

*Mashpee Police Department*

The Mashpee Police Department (MPD) is located at 19 Frank Hicks Drive, in the town of Mashpee. MPD staff includes a chief, captain, two lieutenants, six sergeants, six detectives, 19 officers, seven public safety dispatchers, and four civilian personnel.

*Barnstable County Sheriff's Department*

The Barnstable County Sheriff's Office (BCSO), located at 6000 Sheriff's Place in the Town of Bourne, works with local Cape Cod police to ensure public safety. The BCSO has four divisions with separate responsibilities.

The Bureau of Criminal Investigation (BCI), located in the Village of Barnstable, is made up of eight Criminal Identification Officers that assist local, state, and federal law enforcement with criminal investigations throughout Cape Cod, and occasionally on Martha's Vineyard and Nantucket. The BCI gathers and analyzes evidence at crime and accident scenes, including fingerprints and DNA analysis, as well as other forensic disciplines. Approximately 3,000 calls per year are made to the BCI that generally involve the processing of a crime scene, automobile accidents, assaults, home invasions, and robberies.

The BCSO also operates a K-9 Unit that consists of five dogs and five K-9 officers. Four of the dogs are trained for patrol, and one is specialized in identifying narcotics. The K-9 Unit assists local police departments for various crimes, including breaking and entering, armed robberies, home invasions, warrant apprehensions and missing persons.

The Communications Division of the BCSD serves a variety of functions related to public safety communications. It coordinates communication between various emergency service personnel including fire departments, police departments, paramedics, and hospitals, and serves as a 911 Public Safety Answering Point for several towns, including Mashpee. The Centralized Medical Emergency Dispatch system processes over 42,000 calls each year for approximately 60 ambulances and four area hospitals. Dispatch services are also provided for area fire departments, including the Mashpee Fire Department, as well as the district hazmat team, local gas and electric companies, and the Massachusetts Emergency Management Agency. The Division employs 23 staff members including a director, 20 full-time telecommunicators, and five part-time telecommunicators. All staff members are certified in CPR, First Responder, and Association of Public Safety Communication Officials basic telecommunicator and emergency medical dispatch.

The BCSO employs a Technical Division to design, plan, implement, and maintain all public safety communications equipment systems, including all radios, support equipment, dispatch consoles, and the Sheriff's mobile emergency communications vehicle.

*Massachusetts State Police*

The Town of Mashpee falls under the jurisdiction of Station D-7 (Bourne), under Troop D of the Massachusetts State Police. Troop D is responsible for patrolling southeastern Massachusetts, and includes seven stations with separate jurisdictions. Station D-7 is located at the Bourne Rotary, Route 28 in the Town of Bourne, and is responsible for patrolling 42 miles of state and US highways, including Route 3, Route 6, Route 25, Interstate 495, and Interstate 195. Station D-7 also provides secondary roadway coverage for 114 miles of Routes 28, 3A and 6.

*MASHPEE FIRE DEPARTMENT*

The Mashpee Fire Department (MFD) is located at 20 Frank Hicks Drive in the Town of Mashpee. In 2011 it employed 34 full-time staff members and two part time staff. MFD personnel comprises 31 operational members (including four captains, four lieutenants, 22 firefighters, and one call firefighter), four administrative members (including a Chief, Deputy Chief, Administrative Secretary and Billing Clerk), and one Fire Prevention Inspector. In 2011, the MFD responded to 2,874 emergencies, with an average response time of 7.05 minutes. The MFD has 16 pieces of fire apparatus, including engines/pumpers, an aerial tower, brush breakers, a tanker, and advanced life support (ALS) ambulances.

*HOSPITALS*

Falmouth Hospital and Cape Cod Hospital treat patients from the Town of Mashpee. Falmouth Hospital is a 95-bed facility located at 100 Ter Heun Drive in the Town of Falmouth, and its Emergency Department treats approximately 40,000 patients each year. Cape Cod Hospital is located at 27 Park Street in the village of Hyannis and has 259 beds and a staff of more than 1,700, including 300 physicians. Cape Cod Hospital provides cardiovascular services, inpatient and outpatient surgery, cancer services, and imaging services. Each year, the hospital's emergency department treats more than 85,000 patients. Both hospitals are managed by Cape Cod Healthcare, which employs over 4,600 people, including 400 physicians, throughout Cape Cod.

*SCHOOLS*

The Town of Mashpee is within the Mashpee Public School District, which includes four schools with a total enrollment of 1,737 students for the 2011-2012 school year. For that school year, the Kenneth C. Coombs Elementary School had 471 students enrolled in prekindergarten through second grade. The Quashnet Elementary School had 558 students in grades 3 through 6. The Mashpee Middle School (grades 7 and 8) and the Mashpee High School (grades 9 through 12) share a campus at 500 Old Barnstable Road with a total enrollment of 708 students. Enrollment has decreased slightly since 2008, from a total enrollment of 2,054 students.

The proposed budget for the Mashpee Public School District for the 2013 fiscal year is approximately \$18.75 million. The appropriated school budgets for fiscal years 2011 and 2012 were approximately \$18.26 million and \$18.56 million, respectively. The Mashpee Public School District received approximately \$4.2 million in Chapter 70 State Aid for fiscal year 2012.

## 5.4 ENVIRONMENTAL JUSTICE

### 5.4.1 INTRODUCTION

On February 11, 1994, President Clinton issued Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”<sup>6</sup> This Executive Order was designed to ensure that each federal agency “shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

An assessment of environmental justice considers the following:

- The areas in which a proposed project may result in significant adverse environmental effects;
- The presence and characteristics of potentially affected minority and/or low-income populations (“communities of concern”) residing in these study areas; and
- The extent to which these communities are disproportionately affected in comparison to the effects experienced by the population of the greater geographic area within which the affected area is located is determined.

Guidance documents define minorities as including American Indian or Alaskan natives, Asian or Pacific Islanders, Black, or Hispanic persons. For the purposes of this analysis, a community may be considered to have a minority population when the percentage of minorities in a study area is “meaningfully greater” than the minority percentage of the general population. The composition of the affected area population is therefore compared to the characteristics of the population in the next larger geographic area or political jurisdiction.

A community of concern can also be similarly identified by the presence of low-income populations within the affected study area. The existence of these populations can be identified using the poverty thresholds available from the U.S. census and a comparison to the general population sets the context for the assessment. Poverty level is defined by the U.S. Census Bureau, which considers a variety of factors including family size, number of children and the age of the householder. To determine a person’s poverty status, total family income over a 12-month period is compared against the poverty threshold appropriate for that person’s family size and composition. Since poverty status is defined at the family level and not the household level, the poverty status of a household is determined by the poverty status of the householder. Households are classified as poor when the total income in a 12-month period is below the appropriate poverty threshold. Income thresholds are not adjusted for regional or local variations in the cost of living.

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<sup>6</sup> Exec. Order No. 12898, Fed. Reg. Vol. 59, No. 32 (Feb. 16, 1994). Available at: <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>.

For race and ethnicity, the tables below include Asian, Black, Hispanic, and white populations. The “other” category includes respondents to U.S. Census surveys who did not identify with any listed racial groups (white, Black, Asian), or who indicated that they are of more than one race than the U.S. census defines. The U.S. Census Bureau defines persons of Hispanic origin as those respondents who classified themselves in one of the specific Hispanic origin categories in the census questionnaire, such as “Mexican,” “Cuban” or “Puerto Rican,” as well as those who indicated that they were of “Other Spanish/Hispanic/Latino” origin. These respondents include those whose origins are from Spain, the Spanish-speaking countries of Central and South American or the Dominican Republic, or who are persons of Hispanic origin who identify themselves generally as Spanish, Spanish-American, Hispanic or Latino. Persons of Hispanic origin may be of any race.

The study area for the environmental justice analysis encompasses the area most likely to be affected by the proposed project and considers the area where potential impacts resulting from construction and operation of the proposed project could occur. The study area for this environmental justice assessment is defined as the Town of Mashpee, including members of the Wampanoag Tribe living in the Town of Mashpee. These populations are compared to Barnstable County and the Commonwealth of Massachusetts as the context for assessment. Population and demographic data used in this analysis was obtained from the Tribe, the 2010 U.S. Census and the 2006-2010 American Community Survey.

#### **5.4.2 ENVIRONMENTAL JUSTICE COMMUNITIES IN THE TOWN OF MASHPEE**

As shown in **Table 5.4-1**, the majority of the population in both the Town of Mashpee and Barnstable County as a whole identified themselves as white. However, the Town of Mashpee had a slightly higher proportion of minority population (12.3 percent) than Barnstable County (8.6 percent). The Town of Mashpee also had a slightly higher percentage of population living below the poverty level (7.6 percent) than in Barnstable County (7.2 percent). While the Town of Mashpee had a slightly higher proportion of minorities and people living below the poverty level than Barnstable County as a whole, the difference would not be considered “meaningfully greater.” In addition, both the minority population and the population living below the poverty level were significantly lower proportions of the population of Mashpee than in Massachusetts as a whole. Therefore, the Town of Mashpee is not considered an Environmental Justice Community.

**TABLE 5.4-1  
POPULATION AND ECONOMIC CHARACTERISTICS**

Area	Total Population	Race (Percent of Population)					Total Minority (Percent)	Below the Poverty Level (Percent)
		White	Black or African American	Asian	Other	Hispanic		
Town of Mashpee	14,006	87.7	2.2	1.2	6.6	2.2	12.3	7.6
Barnstable County	215,888	91.4	1.8	1.0	3.6	2.2	8.6	7.2
Massachusetts	6,547,629	76.1	6.0	5.3	3.0	9.6	23.9	10.5

**Notes:** 1. The racial and ethnic categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); Other (American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; Some other race alone, not Hispanic or Latino); Two or more races, not Hispanic or Latino); Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).  
2. Population with income below established poverty level; the U.S. Census Bureau's established income thresholds define poverty level.

**Sources:** U.S. Census Bureau, Census 2010, SF1, American Community Survey 2006-2010

### 5.4.3 MASHPEE WAMPANOAG TRIBE

**Table 5.4-2** shows enrollment for the Mashpee Wampanoag Tribe, including members who are residents in the Town of Mashpee. The Tribe includes 2,647 total members, over 40 percent of which live in Barnstable County. The Town of Mashpee has a Tribal population of 458 members, or 17.3 percent of the total Tribal enrollment.

**TABLE 5.4-2  
MASPHEE WAMPANOAG TRIBAL ROLL**

Jurisdiction	Tribal Members
Total Mashpee Wampanoag Tribe	2,647
Massachusetts	1,646
Barnstable County, MA	1,098
<b>Town of Mashpee</b>	<b>458</b>
<b>Percent of Tribe living in Mashpee</b>	<b>17.3%</b>
<b>Source:</b> Mashpee Wampanoag Tribe	

The median household income of reporting Tribal members was \$29,601.11 as of August 31, 2012. In that same year, approximately 50 percent of Tribal members lived in poverty. As a minority population with a large proportion of members living below the poverty level, the Tribe is considered an Environmental Justice Community.

# ***SECTION 6.0***

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## **ENVIRONMENTAL CONSEQUENCES, MASHPEE**

# SECTION 6.0

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## ENVIRONMENTAL CONSEQUENCES, MASHPEE

This section describes the environmental consequences that would result from the BIA's taking of the Mashpee, Massachusetts parcels, described in **Section 5.0**, into trust on behalf of the Mashpee Wampanoag Tribe. The analysis presented in this section has been prepared in accordance with the Council on Environmental Quality's (CEQ) National Environmental Policy Act (NEPA) Regulations Section 1502.16. As explained in **Section 5.0**, the taking of the Mashpee parcels into trust could have socioeconomic and environmental justice effects. These effects are described in this section.

Because of their distinct locations and proposed development actions, the environmental consequences related to the land in Mashpee and the land in Taunton have been evaluated separately. The environmental consequences anticipated on the Taunton site under each Alternative are detailed in **Section 8.0** of this DEIS.

CEQ regulations (40 CFR Section 1508.27) define significance of effects in terms of context and intensity. Significance criteria are more precisely defined in standard practices, environmental compliance criteria, or in the statutes or ordinances of the jurisdictional entities. Thus, the BIA's determination of significance of impacts may be accomplished with the assistance of governmental entities that have jurisdiction or special expertise for each resource. Further, BIA may use the standard practices and criteria already established by those entities prior to the preparation of this EIS.

Consistent with 40 CFR 1508.15 and 1508.26, the BIA identified several parties having jurisdiction by law to approve, veto, or finance all or part of the proposal and/or special expertise regarding the project alternatives. These entities may assist the BIA in the determination of significant impact for the alternatives for areas within their jurisdiction and/or area of special expertise. These agencies have agreed to serve as NEPA Cooperating Agencies, to comment on the Draft EIS or to otherwise provide consultation in the analysis process.

### 6.1 MASHPEE PARCELS

Within the Town of Mashpee, the Proposed Action would result in the United States' acquisition of approximately 170 acres of land on eleven parcels currently owned by the Tribe and used for Tribal administration and cultural purposes and as conservation land. The Tribe plans to continue the existing uses on the parcels. As described in **Section 5.1**, Parcel 8 has been designated for housing development, and Parcel 6 is currently undergoing redevelopment into a new Tribal Government Center, including educational, cultural, and health-related uses.

### 6.2 ENVIRONMENTAL IMPACTS

Trust status is not required for the Tribe's plans with respect to the Mashpee Parcels and it may choose to develop the Mashpee Parcels in fee or to seek trust status. Therefore, any planned future development of

any of the Mashpee Parcels is not a “connected action,” as defined in 40 C.F.R. §1508.25, to the BIA’s approval or denial of the Tribe’s fee-to-trust application.

As described in **Section 5.1.6**, the Tribe received a \$12.7 million loan for the development of a Tribal Government Center from U.S. Department of Agriculture (USDA) Rural Development, financed by the American Recovery and Reinvestment Act. Mashpee Parcels 7 and 8 have been designated for the construction of tribal housing units. As described in **Section 5.1.8**, the Tribe’s Housing Department developed plans to provide affordable housing to low and moderate income Tribal members and to other Native Americans who are eligible to receive housing assistance under the Native American Housing Assistance and Self Determination Act (NAHASDA). As described in **Section 5.1.7**, the Tribe agreed to maintain Parcel 7 as conservation land to protect habitat of the Eastern Box Turtle, a Species of Special Concern under the Massachusetts Endangered Species Act.

No new development is being proposed as part of the fee-to-trust process for the Mashpee Parcels. All Mashpee Parcels, as described in the previous Section, would remain in their present or previously proposed conditions whether or not they were taken into trust by the United States on behalf of the Tribe.

### **6.3 SOCIOECONOMIC IMPACTS**

The Proposed Action, i.e., the Department’s acquisition of the Mashpee Parcels as trust lands for the Tribe, is not expected to have any significant adverse impacts in any environmental categories related to the natural environment. The action may, however, have minor socioeconomic consequences for the Tribe and the Town. These parcels will become exempt from taxation upon acquisition into federal trust. As was shown in **Table 5.3-12**, based on assessed valuations and the fiscal year 2012 tax rates from the Town of Mashpee, this action would deprive the Town of Mashpee of approximately \$17,564 in property tax revenues during fiscal year 2012. This total represents a 0.03 percent decrease in annual property tax revenue for the Town of Mashpee.

Should the Mashpee parcels be taken into trust, criminal jurisdiction over crimes that occur on those trust lands will be split between the United States, the Tribe, and the Commonwealth, depending on the type of crime, the tribal status of the offender, and the tribal status of the victim. Civil (non-criminal) jurisdiction will also transfer from the state/town to the Tribe upon the lands’ acquisition in trust.

As described above, the housing project involving Mashpee Parcels 7 and 8 and the construction of a Tribal Government Center on Parcel 6 do not constitute connected actions with the Proposed Action. Nevertheless, it should be noted that these ongoing developments that will continue to take place if the parcels are taken into trust will have little to no impacts on the local socioeconomic conditions.

The ongoing project on Parcels 7 and 8 will provide affordable housing for Tribe members. Barnstable County has the largest population of Mashpee-Wampanoag Tribe members of any county (approximately 1,098 members). The Tribe has unmet housing needs in Mashpee, where most tribal members cannot afford housing due to the inflation of housing costs caused by the demand for vacation homes and upscale

housing. In addition, lots along Main Street in Mashpee are restricted from further subdivision, limiting development for Tribal members who currently reside on ancestral homelands in the area.

The housing development will help to meet the housing needs for Tribe members who already reside in Mashpee most real estate is prohibitively expensive for Tribal members. By serving existing Mashpee residents with housing needs, the housing units are not expected to introduce new households to the Town of Mashpee. These units would therefore not create any new demand for community services in the Town of Mashpee. Even if some of the housing units were occupied by Tribal members who move into Mashpee, these housing units represent a small fraction of the total housing in the Town of Mashpee. The government, education, cultural, and health-related uses of other parcels would not create any additional demand for community services in the Town of Mashpee. Instead, these uses would strengthen the Tribe's ability to provide governmental and social programs. For these reasons, the proposed project and ongoing uses of the lands in Mashpee are not expected to result in any significant adverse impacts on law enforcement, criminal justice, fire protection, emergency medical services, or schools in the Town of Mashpee.

## 6.4 ENVIRONMENTAL JUSTICE

As described above in **Section 6.3**, the project would involve the provision of affordable housing for Tribe members within the Town of Mashpee, and would strengthen the Tribe's ability to fulfill its responsibilities under its governmental and social programs. The transfer of these lands into trust in the Town of Mashpee would facilitate Tribal self-determination and would ensure that the lands were preserved for future generations of Mashpee Indians. Therefore, the Proposed Action of this EIS would not result in any disproportionate adverse impacts on this Environmental Justice Community, and would instead benefit the Tribe. In addition, the Proposed Action would be in compliance with all applicable NEPA and HUD regulations related to environmental justice protections. Therefore, there are no environmental justice concerns expected with the Proposed Action in the Town of Mashpee.

## 6.5 INDIRECT AND GROWTH INDUCING EFFECTS

NEPA requires that an EIS analyze both the indirect and growth-inducing effects of a proposed action (40 C.F.R. Section 1502.16[b], 40 C.F.R. Section 1508[b]). As defined in NEPA regulations, indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth, and related effects on ... natural systems."

The taking of land into trust in the Town of Mashpee presents no potential for indirect off-site impacts, as this Action involves no alterations on any land off-site. Similarly, the taking of these lands into trust will not, in itself, induce growth in the surrounding region. As described previously, portions of the lands proposed to be taken into trust are presently undergoing developments that will add affordable tribal housing and expand the Tribal Government Center. Because these projects do not constitute connected

actions with the Proposed Action, their effects cannot be considered growth induced by the Proposed Action.

The only foreseeable growth inducing effects of the Proposed Action to take these lands into trust in Mashpee come from Tribe's participation in the local and regional economy. Under the Proposed Action, the Tribe would be relieved of property taxes on trust lands and thus able to provide additional affordable housing and other services to its underserved members. Presumably, these reductions in economic burdens would allow Tribal members to increase spending on necessities of life for themselves and their families, including food, clothing, health care, and other services and goods. The Tribal government would be able to make similar investments related to citizen services and future construction. To the extent that the majority of these purchases are made locally, businesses and industries serving resident communities with these goods and services would experience increased demands. These demands would result in further investments in capital and labor and in some cases opportunities for expansion or opening of new businesses.

## 6.6 CUMULATIVE EFFECTS

Cumulative effects are defined as effects to the environment resulting from the incremental effect of the Proposed Action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). A cumulative effects analysis broadens the scope of analysis to include effects beyond those attributable solely to the implementation of the Proposed Action. The purpose of the cumulative effects analysis, as stated by the Council on Environmental Quality (CEQ) "is to ensure that federal decisions consider the full range of consequences" (CEQ, 1997:3). A cumulative effects analysis expands or reduces the geographic and temporal study areas to adequately and appropriately analyze the effects of the Proposed Action depending on the specific resource being analyzed.

In consideration of potential cumulative effects that could result from the Proposed Action of taking the lands into trust in Mashpee, a geographic boundary was set to include Mashpee and its closest surrounding towns, or Barnstable, Bourne, Falmouth, and Sandwich, Massachusetts. These five Cape Cod towns were used as the study area for the evaluation of potential cumulative effects related to both environmental and socioeconomic conditions. Potential cumulative effects were generally considered in a timeframe of ten years around the Proposed Action in Mashpee.

The eleven parcels considered for trust acquisition by the BIA are located within Mashpee, a town with a population of approximately 14,000 and an area of approximately 27.2 square miles. Mashpee is bordered by Sandwich to the north, Barnstable to the east, Falmouth to the west, and Nantucket sound to the south. The Town of Bourne lies to the northwest of Mashpee, within two miles of its boundary. These towns generally include a mix of urban, suburban, rural, and beach areas. Significant natural spaces in the study area include the South Cape Beach State Park in Mashpee, Scusset Beach State Reservation in Sandwich, Shawme-Crowell State Forest in Sandwich, the Barnstable Great Marsh Wildlife Sanctuary (managed by MassAudubon), and Lowell Holly Reservation area at Wakeby and

Mashpee Ponds in Mashpee and Sandwich (managed by The Trustees of Reservation). At 22,000 acres, the Massachusetts Military Reservation (MMR) covers a significant portion of the study area across Bourne, Mashpee, and Sandwich. The northern 15,000 acres of the MMR comprise the largest piece of undeveloped land on Cape Cod, and the remaining area includes the Otis Air National Guard Base and the Camp Edwards military training installation.

The CEQ regulations require that the cumulative effects analysis examine past actions. Past actions on the parcels considered for trust acquisition have been described in **Section 5.1**. These actions include the construction and/or rehabilitation of the Old Indian Meeting House, the Parsonage, the Mashpee Wampanoag Museum, and agricultural/tribal offices. Construction is currently underway for the Tribal Government Center on Parcel 6 and Tribal housing on Parcel 8.

Other projects in the study area that may contribute to cumulative impacts were identified based on MEPA filings. MEPA (M.G.L. c. 30, sections 61 through 62H, inclusive) is similar to NEPA in its procedures and purpose. MEPA requires that state agencies study the environmental consequences of their actions, including permitting and financial assistance. MEPA applies to private projects that exceed MEPA review thresholds and that require a state agency action, such as a permit, financial assistance, or land transfer from state agencies. MEPA typically requires that a proponent prepare an Environmental Impact Report (EIR), which is similar to an EIS, for large scale development projects because they are likely to have significant environmental impacts. Therefore, a review was made of other projects in the vicinity of the Mashpee parcels being considered for trust acquisition that have recently or are currently under MEPA review.

The projects shown below in **Table 6.6-1** generally include the construction of mixed-use developments and improvements to utilities and communications infrastructure. These projects represent environmental and socioeconomic impacts including alterations to land use and impervious areas, changes in traffic volumes, and modifications to demand and supply of electric, gas, and wastewater utilities.

As described above, the act of the BIA taking the Mashpee parcels into federal trust, the only Action proposed for these parcels in this EIS process, will not, by itself, result in any environmental or socioeconomic impacts. The two development projects currently underway on these properties do not constitute connected actions with the Proposed Action. Furthermore, any future development on these parcels is limited by the Tribe's agreement to adhere to conservation restrictions on the most substantial vacant areas on Parcels 7 and 11, which are described further in **Section 5.1**. For these reasons, it has been established that the BIA's Proposed Action on lands within the Town of Mashpee will not result in any significant environmental or socioeconomic impacts. Therefore, the Proposed Action will not result in any cumulative effects relative to projects proposed or underway in the area in and around Mashpee.

**TABLE 6.6-1  
ROJECTS UNDERGOING MEPA REVIEW**

MEPA #	Name	Town	Address	Description	MEPA Documents	Date
14755	Comcast Fiber Optic Cable	Falmouth	Mill Road in Falmouth and Main Street in Tisbury	Installation of a fiber optic feeder cable under Vineyard Sound	EENF, SEIR	2012
14600	GPCS Fiber Communications Fairhaven to Martha's Vineyard Fiber Optic Cable	Falmouth	---	Installation of a fiber optic feeder cable under Buzzards Bay and Vineyard Sound	ENF	2010
14559	Woods Hole, Martha's Vineyard & Nantucket Steamship Authority Parking Improvements	Falmouth	Thomas B. Landers Road and Palmer Avenue	Expansion of Palmer Avenue parking lot by up to 500 spaces and construction of a consolidated parking facility off Thomas Landers Road to replace three seasonal satellite lots	ENF, DEIR, FEIR/NPC	2011
14654	Lower SEMA 345 KV Transmission Project	Bourne, Sandwich, Barnstable	---	NSTAR improvements to transmission system, including 18 miles of new overhead transmission line and a new substation in West Barnstable	ENF, DEIR, FEIR	2011
14784	South Sandwich Village	Sandwich	331 Cotuit Road	Construction of approximately 886,600 sf mixed-use space and regional wastewater treatment facility	ENF, DEIR, FEIR	2012
14512	Forestdale Village Local Initiative Program	Sandwich	130 Forestdale Street	Construction of approximately 60,160 sf commercial space, a wastewater treatment plant building, 56,300 sf assisted living facilities, 17 single family homes and seven apartment units	EENF	2009
13543	KeySpan Sagamore Line Reinforcement	Sandwich, Barnstable	Service Road, White Path, Great Western Road	Construction of approximately 13.1 miles (6.6 miles in Sandwich and Barnstable) of new high-pressure distribution pipeline to parallel and tie into existing KeySpan system	ENF, DEIR, FEIR, NPC (2)	2006/2012
14896	Town of Barnstable Comprehensive Wastewater Management Plan	Barnstable	382 Falmouth Road, Hyannis	Evaluation of management plans for control of future nutrient loading to marine embayments, evaluation of wastewater treatment options, and design and implementation of a comprehensive wastewater management plan.	ENF	2012
14642	Barnstable Municipal Airport Master Plan	Barnstable	480 Barnstable Road	Implementation of part or all Master Plan elements including modification and construction of additional hangars and aprons	ENF, DEIR, FEIR	2012