

## 7 Recommended Alternative

The purpose of this study was to evaluate the feasibility of various trail facility alternatives and identify a recommended alternative, or combination of alternatives, that could be presented to the Committee and the Town of Orleans for consideration. Based on the information presented within this study, a recommended alternative has been identified within each study area section, that when combined, provides a connection between South Orleans and Orleans Center.

A facility along the Route 28 corridor was deemed the most direct route between the two villages, and the residential and open space areas. However, as discussed within the study, following discussions with MassHighway and a detailed assessment of anticipated construction impacts, it was determined that the construction of a shared use trail along the Route 28 corridor would result in roadside impacts. Furthermore, MassHighway indicated that Route 28 would need to be upgraded to current design standards prior to the construction of any bicycle or pedestrian improvements (i.e. shared use trail, sidewalk or bike lanes). It is anticipated that such a project would take years to complete, especially as improvements to the Route 28 corridor are not on the State's priority list at this time. The Town will need to begin the project initiation process in order to have the project placed on the State's priority list. Although there is an unknown timeframe for any Route 28 corridor improvements, it is conceivable that when the long-awaited sewer main improvements (Phases 3 and 5 of the sewer phasing plan) occur along the Route 28 corridor, a shared-use trail could be constructed concurrently.

There may also be the option to construct segments of the trail facility parallel to, but located outside of, the Route 28 layout. Such construction would require easements or takings from private property owners or Town entities with oversight on the property (i.e. Conservation Commission, Board of Water Commissioners). It is unlikely that easements could be secured along the entire length of Route 28 given the anticipated impacts. However, it is recommended that consideration be given to securing easements on a location specific basis for the purpose of providing a continuous connection between recommended trail segments.

Based on the constraints associated with a trail along the Route 28 corridor, the focus was shifted to identifying an alternative within the watershed property that could be implemented in the near term. The 500-acre watershed property is an environmentally sensitive area characterized by public water supply protection zones, storm water critical areas, wetland resources, Pleasant Bay ACEC, and rare species habitat. Given the sensitivity of this area and existing topography, the complexity of constructing a shared use path and the extent of anticipated land and vegetative disturbance is magnified. In addition, existing uses are limited to passive recreation in the form of walking, jogging, and cross-country skiing. Biking within the watershed would require a change in the permitted use. In the adjacent community of Harwich, bike use is permitted in their watershed area. At some time in the future, the Town of Orleans may want to reconsider allowing some sort of recreational bike use in the watershed area.

The recommended alternative is the best possible alternative that provides a direct connection to the village centers, and has some elements or sections that can be completed in the near term. After taking into account the opportunities, constraints and trade-offs of each alternative, the recommended alignment is comprised of the following alternatives:

### Section 1 (See Figure 115)

The recommended alternative in Section 1 includes:

- **Route 28 Right-of-Way (Alternative 1A):** A shared-use trail within the Route 28 right-of-way (ROW) that connects the Route 39/Route 28 intersection in South Orleans Village north towards Orleans Center.
- **Crossing of Route 28 at Namequoit Road.** Provide a spur connection to Namequoit Road to improve access to nearby residential and open space areas. A crosswalk in this location will require MassHighway approval.

Alternates to the recommended alignment include:

- **Power Line Corridor (Alternative 1D):** Like the Route 28 corridor, a greenway trail following the existing power line corridor provides a direct north-south connection. Though not scenic, this alignment does offer some hilly terrain for the recreationalists. This greenway trail could potentially be upgraded to a shared use trail in the future.
- **Eastern Watershed Perimeter (Alternative 1B) with a trail spur to Monument Road:** New greenway trail along the eastern edge of the watershed brings users through a scenic, natural area while still traveling in a direct north-south direction. It will be important to minimize impacts to abutting residences and sensitive environmental resource areas. Requires Board of Water Commissioners approval. Connection to Monument Road would require MassHighway approval and easements from two private owners.
- **Northern Fire Road (Alternative 1G):** Greenway trail along northern fire road as a connection to the other watershed alternatives. Formalize trail along this unimproved access road. Improvements include limited vegetative disturbance, minor grading in select locations, and installation of directional signage. Requires Board of Water Commissioners approval.

### Section 2 (See Figure 116)

The recommended alternative in Section 2 includes:

- **Route 28 Right-of-Way (Alternative 2A):** A shared-use trail within the Route 28 right-of-way (ROW) that connects the Route 39/Route 28 intersection in South Orleans Village north towards Orleans Center.

Alternates to the recommended alignment include:

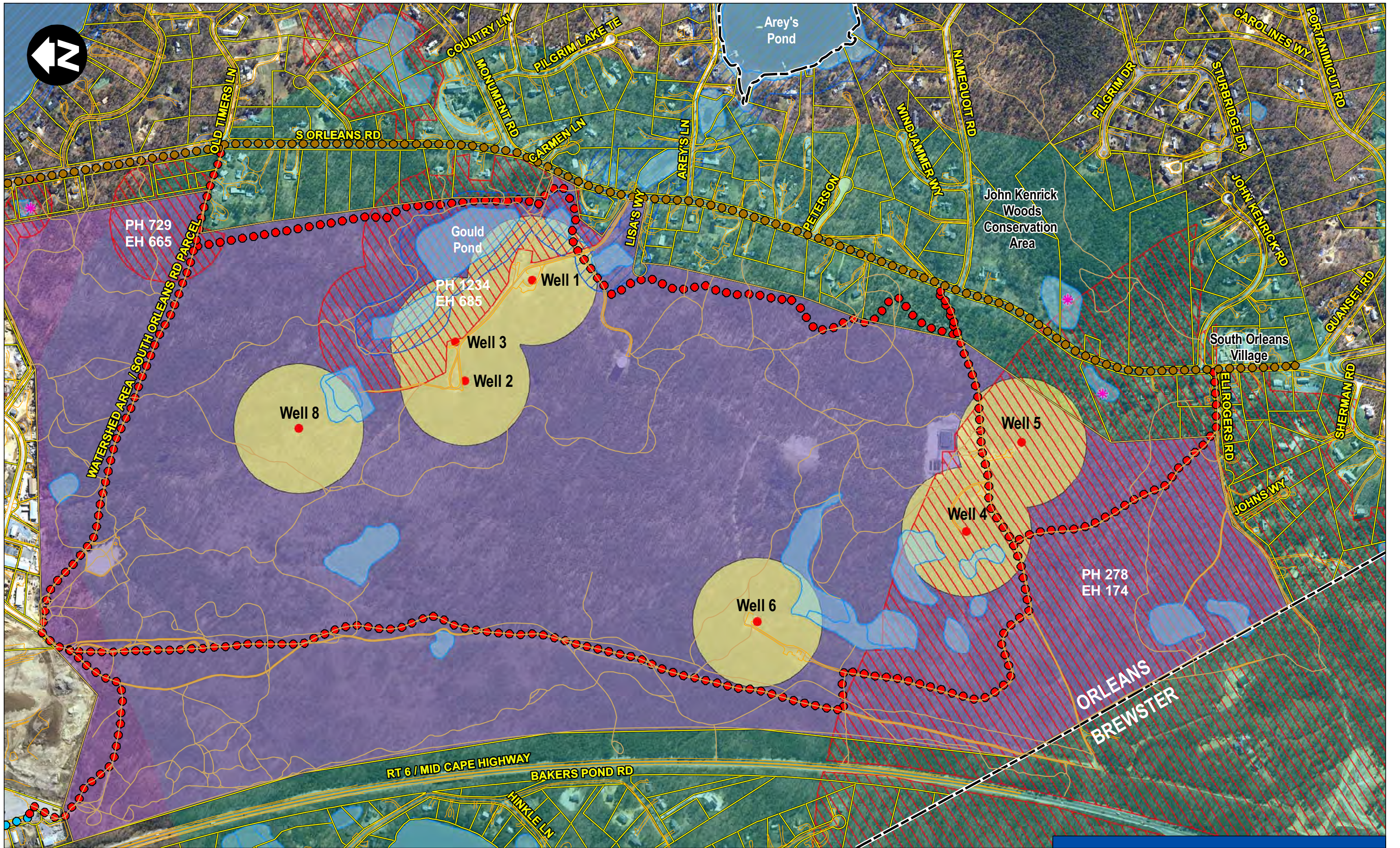
- **Connection from watershed along local roadways (Alternative 2D or 2E):** From the end of O'Connor Way, these alternatives propose a bike route along local roadways and a sidewalk along one side of each roadway through the industrial area. Alternative 2D requires the conversion of Nickerson Road into a two-way roadway at Finlay Road. Alternative 2E retains Nickerson Road as a one-way roadway at Finlay Road and instead brings users along Kettle Pond Way, Daley's Terrace and Marston's Way. Both alternatives bring users to an existing crosswalk across Eldredge Park Way.

**Section 3 (See Figure 117)**

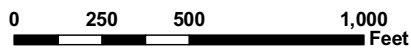
The recommended alternatives in Section 3 include:

- **Middle School Campus (Alternative 3B):** Sidewalk/walkway through Middle School campus from Eldredge Park Way to Main Street. Sidewalk connection from Eldredge Park Way either in front of or behind of the Nauset Public Schools Administration Office. Formalizes existing use through the campus and upgrades the facility to be ADA accessible. Connects to the Main Street area via connection through the Village Green. This connection would provide ADA accessible access from the school to the library.
- **Eldredge Park Way to West Road (Alternative 3D):** Facility along Eldredge Park Way and West Road to connect users to the Cape Cod Rail Trail. Pedestrians would use existing sidewalk. Bicyclists would follow a bike route or travel along the existing sidewalk. Town bylaws allow bikes on sidewalks except in village areas.

The recommended alternatives described above are graphically shown on the following pages.



Data Source: The Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs, and Town of Orleans.



Legend	
	Shared Use Trail
	Bike Route & Sidewalk
	Greenway Trail
	Bike Route
	Existing Trail
	Property Lines
	DEP Wetlands
	Stream
	NHESP Certified Vernal Pool
	Watershed Property
	Water Well Location
	Zone I Wellhead Protection Area (400' Radius)
	Zone II Wellhead Protection Area
	Rare Species Habitat
	Pleasant Bay Area of Critical Environmental Concern (ACEC)

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 Figure 115: Section 1 Recommended Alternative

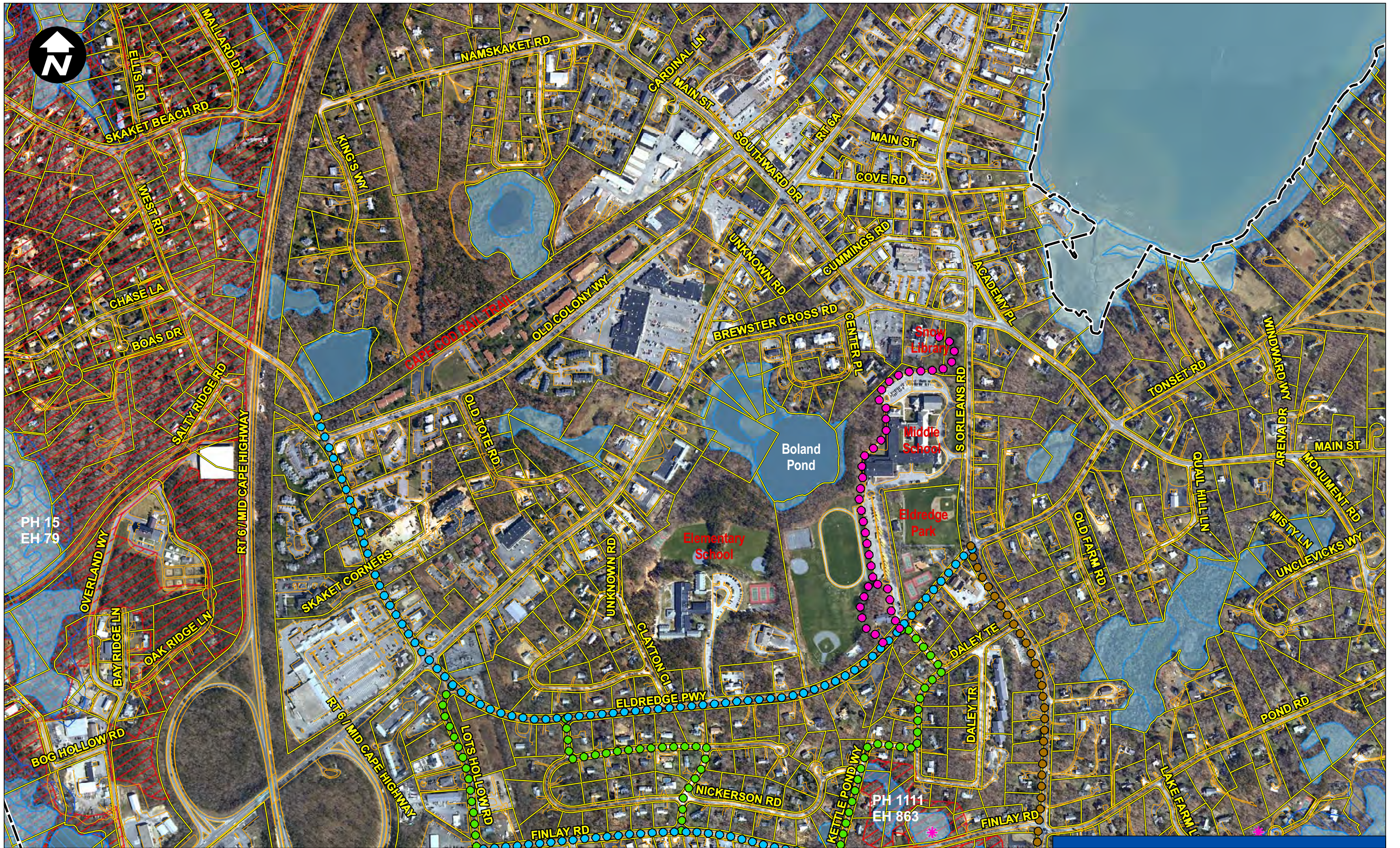


Data Source: The Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs, and Town of Orleans.

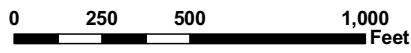


Legend	
	Shared Use Trail
	Bike Route & Sidewalk
	Greenway Trail
	Bike Route
	Sidewalk (Walkway)
	Existing Trail
	Property Lines
	DEP Wetlands
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	NHESP Certified Vernal Pool
	Zone II Wellhead Protection Area
	Rare Species Habitat
	Pleasant Bay Area of Critical Environmental Concern (ACEC)

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 Figure 116: Section 2 Recommended Alternative



Data Source: The Office of Geographic and Environmental Information (MassGIS) Commonwealth of Massachusetts Executive Office of Environmental Affairs, and Town of Orleans.



Legend	
	Shared Use Trail
	Bike Route & Sidewalk
	Greenway Trail
	Sidewalk (Walkway)
	Bike Route
	Existing Trail
	Property Lines
	DEP Wetlands
	Stream
	Watershed Property
	Water Well Location
	Zone I Wellhead Protection Area (400' Radius)
	NHESP Certified Vernal Pool
	Zone II Wellhead Protection Area
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 Figure 117: Section 3 Recommended Alternative