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Subject: Article 97 Alternative Analysis
Myricks Street/ Rhode Island Road (Route 79) Roadway Improvements (Taunton/Lakeville)

ARTICLE 97 – ALTERNATIVES ANALYSIS

In accordance with the Executive Office of Energy and Environmental Affairs (EEA) and the Guidance on Public Lands Preservation Act (PLPA) Implementation issued February 2023, the Town of Lakeville issues the following alternatives analysis for alterations related to proposed roadway improvements along Myricks Street/ Rhode Island Road (Route 79) in Lakeville and Taunton, Massachusetts (the Project). The purpose of the alternatives analysis is to demonstrate that no feasible or substantially equivalent alternative exists that avoids or further minimizes impacts to the publicly owned open space land adjacent to the Project that is subject to Article 97. The subject property is located in the City of Taunton in the northwest quadrant of the intersection with Route 79 (Rhode Island Road) and Turner Street and the Town of Lakeville is the project proponent.

PROPOSED ACTION AND PUBLIC PURPOSE

The Project proposes to construct a new stormwater control measure (SCM) and discharge along Route 79 at Cain Pond, a property subject to Article 97 and owned by the City of Taunton Conservation Commission. The proposed action will include constructing an outfall pipe fitted with a flared end section, a grassed swale and check dams. This work is located within a forested area along Route 79 and will require vegetation clearing on Article 97 land and the acquisition of a 2,297 square foot permanent easement for maintenance of the proposed SCM. The size of the proposed SCM has been minimized to the extent practicable to reduce the amount of clearing needed, while providing necessary water quality improvements, and the proposed work area will be surrounded by erosion controls to prevent indirect impacts to nearby wetlands during construction.

The purpose of the Project is to improve the Route 79 corridor to provide pedestrian and bicycle accommodations, reconstruct pavement and stormwater infrastructure, as well as, improve safety for all users.

PROJECT ALTERNATIVES

Three other alternatives were considered and evaluated:

1. No Action.
2. Relocate the proposed outfall.
3. Remove proposed edge treatment and maintain country drainage.

DISCUSSION OF ALTERNATIVES

The alternatives listed above were considered not feasible for the following reasons.

1. *NO ACTION*

Under this alternative, the proposed roadway improvements would not be completed and the Article 97 property would remain unchanged. The current layout of Route 79 utilizes "country drainage" that does not provide treatment of stormwater runoff from the roadway which ultimately travels overland and untreated into Cain Pond. There is no curb, berm or other edge treatment along the edge of pavement which has resulted in erosion and pavement deterioration as a result of stormwater runoff. In addition, this alternative does not meet the Project's goals of providing safe and efficient transportation for motorists, pedestrians and bicyclists along Route 79 and therefore was not considered.

2. *RELOCATE THE PROPOSED OUTFALL*

The proposed outfall location was selected based on the topography of Route 79 and the adjacent land, proximity to the catch basin structures in the roadway, and the public ownership of the property. Alternative locations for the outlet were considered but are not feasible due to right-of-way and topographical constraints along Route 79. The next proposed outlet is located approximately 1,400 feet to the east along Route 79 at an existing culvert. Continuing the closed drainage system to this location would require the outlet elevation to be lower than the existing culvert.

A second alternative considered design of a new outlet however this would have required the acquisition of a significant area of private property with an outlet location at a significant distance from the public way resulting in a challenging location for maintenance. In addition, these alternative locations lack adequate right of way to incorporate appropriate stormwater treatment Best Management Practices (BMP's) that are proposed as part of the preferred alternative.

3. *REMOVE PROPOSED EDGE TREATMENT AND UTILIZE COUNTRY DRAINAGE*

This alternative would involve the design of the roadway improvements along Route 79, without the proposed hot mix asphalt berm for edge treatment along the roadway and no closed drainage system. Stormwater would be removed from the roadway by "country drainage", draining off the pavement onto the adjacent land and continuing downgradient to Cain Pond. This is not considered feasible, as the new widened roadway will produce additional, untreated, stormwater runoff to the adjacent Article 97 property. This design alternative would result in a risk to downstream wetlands and Cain Pond, which would be negatively impacted by untreated runoff.

SUMMARY

The Route 79 Roadway Improvements Project proposes to construct a stormwater outfall, swale, and check dams within publicly-owned open space property subject to Article 97 jurisdiction. This work is necessary to provide stormwater treatment to the maximum extent practicable for runoff from the Route 79 roadway layout. As described previously, there are no feasible alternatives to this action due to right-of-way and topographical constraints