



## SCOPE OF WORK

UPWP 2012 TASK 3.4

ROUTE 6A LIVING STREET CORRIDOR PROJECT

### **Background:**

Living streets combine the tenets and best management practices of complete streets with those of green street design. In so doing, living streets accommodate a universal group of users, including bicycles, pedestrians, disabled patrons and automobiles while also serving to help clean our air and water through Low Impact Development (LID). LID utilizes a natural systems approach to manage stormwater through on-site infiltration, either as part of new construction or as retrofits in tandem with traffic calming and pedestrian upgrades. Liveable streets help to increase safety, reduce flooding, improve downstream water quality and enhance quality of life. They are lined with vegetation, which improves aesthetics, facilitates bicycling and walking, reduces asthma rates by enhancing air quality, and mitigates the heat island effect.

The project team has selected a limited area of Route 6A (identified on the map on page 5) as a study area to initiate a living street pilot project that includes a retrofit of a portion of the 6A corridor both to improve multi-modal transportation accommodations and provide enhanced stormwater management. The project team will identify a planning and design approach for living street implementation that can be applied to subsequent project areas along 6A.

The 1.7 mile long length of road identified spans the town boundary of Brewster and Orleans, connecting Nickerson State Park and adjacent Cape Cod Rail Trail with the shopping, banking and services of Orleans village center while creating a safe passage across a busy commuter intersection. This section of road was selected due to its manageable size and proximity to both State recreational land (Nickerson State Park) and community amenities (connectivity to Orleans village Center).



### **About Route 6A:**

Route 6A, the “Old King’s Highway,” consists of approximately 34 miles of state highway that extends along the Cape Cod shoreline, traversing seven communities from the Cape Cod Canal in Bourne to the Orleans/Eastham rotary on U.S. Highway Route 6. The Massachusetts state legislature designated the roadway as a Scenic Byway in 1992, in recognition of its distinctive scenic and historic character. In 1995, the Cape Cod Commission (CCC) issued the Route 6A Corridor Management Plan (CMP), SB-1992-MA and issued an update to the plan in 2010, SB-2002-MA-50208. The focus of both documents is how to address the traffic and safety concerns along the roadway while preserving its scenic and historic character.

Cape Cod receives an annual precipitation of approximately 44”, much of which comes in the form of rain. Frequent flooding along Route 6A, from heavy coastal precipitation and the region’s high water table, is a primary concern. The flooded areas are difficult to maneuver, as they affect site distance and narrow the roadway to impact the safety of motorists, pedestrians and bicyclists.

### **Objectives of this Study:**

The goal of this study is to create initial designs for a living street retrofit of Route 6A in Brewster/Orleans through a publically-vetted planning process in partnership with MassDOT for the proposed limit of work (see map on page 5). Designs will utilize complete street guidelines to improve safety, provide amenities, increase multi-modal transportation connectivity, and also consider low impact development (LID) techniques to mitigate stormwater runoff.

Tasks will include the identification of areas of pedestrian disconnect inside the limit of work, impediments to safe bicycling, and problem stormwater flooding areas, as well as extensive public outreach (see schedule on page 5 for more information). The project team will develop ranking criteria based on site attributes (e.g. sidewalk condition, safety information, land uses, vegetation characteristics, topography, culverts, etc.) and mapping analysis to prioritize and guide future siting decisions within the limit of work. Design emphasis will be placed upon sites that would best promote regional sustainability through the triple-bottom line



achievement of economic, environmental and social benefits (ie: the siting of a stormwater mitigation strategy and pedestrian upgrades in a highly used area to demonstrate the benefits of liveable street design).

A final report and public presentation will include conceptual design plans for the study area and standard details for design elements, as well as a recommendation for future phases along the 6A corridor and implementation guide for design and construction.

### **Previous Work:**

- ✓ Adoption of the 2009 Cape Cod Regional Policy Plan setting forth standards for low-impact development. See: <http://www.capecodcommission.org/RPP>
- ✓ Route 6A Corridor Management Plan Update (2010)

### **Procedures:**

**Task 1: Project Initiation:** Gather research and develop plan for analysis of pilot study area.

**Task 2: Data Collection/Mapping:** Gather appropriate mapping information and develop matrix to evaluate suitability for design components.

**Task 3: Public Outreach:** Hold public kickoff event and subsequent taskforce meetings including Town officials and MassDOT District 5 representative to review and evaluate proposed concepts and develop priorities. Hold final public meeting to review proposed plans.

**Task 4: On-Site Reconnaissance:** Visit study area to evaluate and photograph ground-level conditions.

**Task 5: Development of conceptual design plans and applicable options with standard details.**

**Task 6: Final report and phasing plan:** Compile information into final document and present to public.



**Products:**

- GIS suitability maps and matrices of prioritization criteria.
- Public facilitation including the establishment of a stakeholder committee.
- Matrix of priority implementation sites.
- Planting and materials listings.
- Standard engineering details suitable for selected areas along Route 6A.
- Presentation and Final report.

**Funding:**

Funding/Staffing breakdown:

| <u>Funding source</u> | <u>Amount</u> |
|-----------------------|---------------|
| FHWA/MassDOT          | \$ 58,063     |

**Staff Team:**

Project Manager: **Tabitha Harkin**, LEED GA  
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Planner II

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GIS Analyst



### STUDY AREA MAP:

