BSC GROUP

803 SUMMER STREET, BOSTON, MA 02127 - www.bscgroup.com

TEL 617-896-4300 - 800-288-8123

Nature-Based Solutions Implementation Resource Guide

Nature-based Solution (NbS): Lighting Modifications

Project Number per matrix: **19**

PREREQUISITES

- Obtain approval of DPW, landowner, and/or municipal planning or conservation commission.
- Ensure existing fixtures are HID or older legacy lamps.
- Ensure connection to the electrical system is intact.
- Assess site for lighting needs per DOT IESMA Illumination Engineering Society of America.
- Assess existing bases, bolts, poles, and wiring for reuse.
- Assess light pollution impacts and how to reduce them.
- Assess smart control, schedule off hours, dimming, and motion sensing options.
- Perform a photometric survey for baseline ambient light sources.

RECOMMENDED IMPLEMENTATION STEPS

- **Project Planning and Administration**
  - Coordinate these installations as part of a larger system to maximize value.
  - Evaluate cost to value and project life cycle.
  - Assess visibility and safety concerns.
- **NbS Installation**
  - Site preparation to include erosion control and stockpile/mobilize staging area.
  - Conduct pavement and related improvements.
  - Replace existing equipment. Add or remove fixtures as needed.
- **Maintenance**
  - General annual maintenance for constructed features.

NATURE-BASED SOLUTION SPECS

- Typical project size: Variable; Modular by unit.

BUDGET ESTIMATE

- Typical project budget (order of magnitude): variable
- Use the BSC Group Nature-based Solutions budget tool to develop more detailed concept budgets

SCHEDULE ESTIMATE

- 4 days of construction per unit.