

wattage may decrease the overall watts-per-mile. Effectively, the long-term operational cost would be lower.

- Architectural lighting provides very little house-side shielding. The designer must consider the impact of these lights on the residents. If the lights are too bright, the municipality may be forced to retrofit the fixtures with lower wattage lamps. As a result, the intended lighting design will be compromised.
- Architectural roadway lighting is normally placed in a utility strip between the curb and the sidewalk or multipurpose trail. The lighting designer must closely check the clear zone requirements not only for the roadway, but also for the multipurpose trail.
- The lighting designer must coordinate with landscapers to insure the poles, junction boxes and trenching operations do not conflict with trees and shrubs. Tree pits are typically 5 feet in diameter. Depending on the sequence of construction, the electrical contractor may cut the tree roots, or the landscaper may damage the installed conduit.

3.12 SIGN LIGHTING

Overhead sign structures must be lighted wherever roadway lighting is employed. The number of luminaires installed on a sign structure must be determined before the design engineer can develop the electrical plan for the lighting system. Refer to [TEDM Section V – Roadway Lighting, Chapter 4, 4.5.1](#) for a complete discussion of these procedures.

VDOT installs and maintains only 150-watt HPS sign luminaires. Luminaires on overhead sign structures are mounted 2 feet below the lower edge of the sign and 4 feet in front of the sign (reference [VDOT Road and Bridge Standards, Section 1300, OSS-1 & BSS-1](#)).

The illumination criteria for sign structure lighting are found in the IESNA RP-19 and the AASHTO Roadway Lighting Design Guide.