

#### 4.9 STEP #8 - DETERMINING SALVAGE AND REMOVAL ITEMS

The lighting designer should incorporate all components of the existing lighting system into the proposed lighting plan.

- In most situations, a field review of the site will be the only way to verify the type of roadway lighting currently utilized on the site.
- The engineer should collect all as-built plans of the site.
- The lighting engineer should make every attempt to understand the layout of existing lighting systems and Traffic Management Systems.

Once the lighting designer has a good understanding of the existing lighting system, the Regional Traffic Engineer must be contacted to determine those items that should be maintained, removed, replaced, modified, or abandoned.

[VDOT Road and Bridge Specifications, Section 510](#) provides procedures for working with existing lighting systems.

#### 4.10 STEP #9 - DETERMINING QUANTITIES

The VDOT Specifications provide measurement and payment for most items in a roadway lighting project. Specific items not covered under the Specifications are addressed through Special Provisions or Special Provision Copied Notes, as referenced in the [TEDM Section 1 – General, Chapter 3, 3.8](#).

The pay item on the Summary of Quantities sheet should exactly match the standard VDOT pay items. Refer to [Appendix VA-3](#) for an example of a Summary of Quantities Sheet. Refer also to [Appendix VB-2](#) for an explanation of some VDOT standard pay items related to a lighting plan. A current list of standard pay items can be found on the VDOT web site.

The following section describes items that require special attention in calculating estimated quantities.

##### 4.10.1 Conduit, Cable, and Trench

The Summary of Quantities includes the amount of conduit required for each plan sheet. However, in computing the amount of conduit, cable and trenching required on a plan sheet, the lighting designer should make some consideration for cable splices and conduit bends around the various drainage structures and other features found along the roadway, i.e., variation of terrain. Similarly, conductor cable will not lie perfectly straight or flat in the conduit.