

**Delaware Department of Transportation  
Division of Transportation Solutions  
Design Guidance Memorandum**

**Memorandum Number: 1-27**

- |                          |                            |                                  |
|--------------------------|----------------------------|----------------------------------|
| 1. Road Design Manual    | 2. Bridge Design Manual    | 3. Utilities Design Manual       |
| 4. Right of Way Manual   | 5. Standard Specifications | 6. Standard Construction Details |
| 7. Traffic Design Manual |                            |                                  |

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Title: Electric Power Service Request for Roadway Lighting, Traffic Signals and ITS Equipment  
Effective Date: 4-07-2020

Sections to Implement:

<u>X</u> Project Development	<u>X</u> Planning	<u>    </u> DTC
<u>X</u> Bridge	<u>    </u> Quality	<u>X</u> Traffic
<u>X</u> Team Support	<u>X</u> Maintenance &	<u>    </u> Other
<u>X</u> Utilities	Operations	

**I. Purpose**

To establish the procedures for processing the request for new electric power service for any DelDOT roadway lighting, traffic signal and/or ITS equipment as part of any new construction, or repair/upgrades to existing roadways on public use facilities.

**II. Applicability**

DelDOT recognizes the benefits of streamlining the electrical power needs across multiple sections within the Department to account for the type, size, location, maintenance responsibility, monthly billing arrangements, and installation cost specific to each project. This guidance only applies to Capital projects. Traffic led projects, projects involving construction of buildings, tariff based (i.e. utility owned) lighting on Capital projects, and any other projects will be addressed separately.

**III. Design Guidance**

1. For Capital Projects the ‘designer’ will identify power supply needs for roadway appurtenances (typically roadway lighting, traffic signals, and ITS devices) as early in the design phase as possible. For consultant led Capital projects, the designer will be the consultant’s engineer whereas for internal DelDOT led Capital projects, the designer will be DelDOT’s assigned traffic engineer within Traffic’s System Design Section.
2. The designer should coordinate with DelDOT’s Project Development (PD)/Bridge or Planning Project Manager, Traffic Section, and Utility Section regarding power source needs. The designer shall arrange a field meeting with the utility company to determine the power needs, location of the power source, type of power, cost to the department, and whether service will be metered or tariff. DelDOT’s Project Manager and Utility Engineer will attend the field meeting, as necessary. However, if the highway design is led by PD then their highway designer should attend the field meeting as well. Additional support is available to the designer working with the utility company via DelDOT’s monthly utility coordination meetings.
3. DelDOT Project Manager, Utility Engineer, and Traffic System Design Manager will coordinate to determine whether there is any reimbursable utility work on the project. If there is any reimbursable utility work, DelDOT Utility Section will request a cost estimate from the utility company for the installation of new power source. If there is no reimbursable

- utility work associated with the Capital Project, then the cost estimate for power source will be obtained by the designer in coordination with the Utility Section and provided to the Traffic Section to be added to the traffic statement.
4. After the designer and utility company representatives have agreed upon the power source location, the designer is responsible to properly display the necessary information on the project plans and provide the plans to DelDOT's Project Manager, Traffic System Design Manager, and Utility Section. Additionally, the utility statement for the project should incorporate the power source and other relevant information. In the case of lighting design, the location of utility pole-based tariff lighting should also be provided on the utility statement.
  5. If there are multiple power source requests in a project area, the utility company may request a gang meter where one combined meter setup with separate billing can be accommodated for multiple service requests (i.e. signals, ITS, lighting). In such case, the designer shall coordinate with DelDOT Traffic Signal Construction group and utility company for the feasibility of a gang meter (cluster of meters with a single power source) in their project assuming that voltage drops will not be an issue.
  6. The utility statement shall provide the description of the work and identify the responsible parties for installation of the work associated with the provision of new electrical service. The utility statement should also identify responsibility of payment for installation of power service (whether by DelDOT Utility Section or Traffic Section) and parties responsible for payment of usage of service. If applicable, the utility statement should also provide information on gang meter and the type of services connected there.
  7. DelDOT Utility Section will fund the power service work if there is any reimbursable work for utility relocation. If there is no reimbursable utility work, then DelDOT Traffic Section will address the funding need of the work through the traffic statement. Utility Engineer will support the Traffic Section, as necessary. A utility bar chart, showing the work schedule shall be prepared by the designer in coordination with the Utility section and the power company to show the timing of the power supply work and included in the Utility Statement.
  8. DelDOT's Traffic Signal Construction group will be responsible for the preparation and delivery of the power service application with the support of the designer. Traffic personnel handling these requests can be confirmed through the Traffic Field Operations. For projects where there are more than two power service requests, a display map showing all the power source locations and the type of services should be provided by the designer and will be part of the power service application. A copy of the Utility Statement and power service application shall be sent to Traffic, the M&O Districts and Business Management at the time of PS&E.
  9. The timing of the electric service processing, including when the service application will be submitted, should be discussed at the pre-con meeting. If the utility company isn't present at the pre-con meeting, then a separate meeting should be arranged soon after the pre-con meeting. That meeting will ensure (to the extent possible) that DelDOT Construction group, Traffic Signal Construction group, and the utility company are in agreement for the utility service schedule. However, no major utility change that may trigger any redesign of the Roadway Lighting, Traffic Signals, or ITS Equipment should be considered after PS&E. DelDOT Utility Section, designer, and others will assist the meeting, as necessary. The final Utility Statement and the power service application shall be sent to the utility company at the agreed upon time as determined during the meeting.
  10. Once funding is setup and a Purchase Order established, the DelDOT Utility Section or Traffic Section will issue a Notice to Proceed (NTP) to the utility company who will be completing the power supply work. The NTP will authorize the utility company to order the necessary materials and to coordinate with DelDOT Construction (i.e. Construction) as to initiating work on the project site.
  11. Utility company will coordinate the timing of the power service work with Construction Section and complete the work. If the NTP is issued by Traffic Finance Section, then the

utility company will submit the invoice to the Construction Section. However, if the NTP is issued by the Utility Section then the invoice will be submitted to the Utility Section who will review it and then forward to the Construction Section.

12. The Construction Section will review and confirm the quantities of power service work listed in the invoice and forward to the Utility Section for payment for reimbursable utility work. For non-reimbursable utility work, Construction Section will forward the invoice to Traffic Finance Section for payment. DeIDOT Utility Section or Traffic Section will pay the invoice based on the type of work.
13. Bills for electric power usage will be sent to and paid by the appropriate Division/ Section as identified on the power service application form. This is typically the Business Management Section in the Division of Maintenance & Operations for lighting and the Traffic Section in the Division of Transportation Solutions for signals, ITS, and any other traffic devices.

#### IV. Justification

In order to promote efficiency and effective project delivery.

Prepared by: Traffic Engineering Section

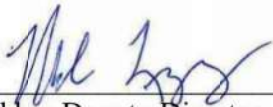
Date: April 07, 2020

*Peter Haag* 

4/8/2020

Recommended by: Chief of Traffic Engineering

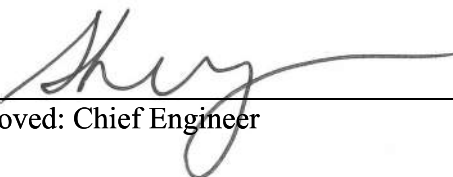
Date



Reviewed by: Deputy Director - Design

04/08/2020

Date

  
Approved: Chief Engineer

4/8/2020

Date

Distribution:  
Transportation Solutions  
Utilities  
Maintenance & Operations District Engineers  
Consultants  
DOT Internal Site

# ELECTRIC POWER SERVICE REQUEST FOR ROADWAY LIGHTING, TRAFFIC SIGNALS, AND ITS EQUIPMENT FOR CAPITAL PROJECTS

