DMS - 11085
ELECTRICAL SERVICES — PEDESTAL (PS)

EFFECTIVE DATE: JANUARY 2012

11085.1. Description. This specification governs the materials, composition, and quality of pedestal (PS) electrical services. Comply with the requirements of DMS-11080 and the applicable DMS-11081 through DMS-11083 for Types A, C, and D electrical services in addition to the following requirements.

11085.2. Units of Measurements. The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

11085.3. Material Producer List. The Traffic Operations Division (TRF) maintains the Material Producer List (MPL) of all materials conforming to the requirements of this specification. Electrical services appearing on the MPL, entitled “Roadway Illumination and Electrical Supplies,” need no further sampling or testing unless deemed necessary by the Project Engineer or TRF.

11085.4. Bidders’ and Suppliers’ Requirements. The Department will purchase or allow on projects only those products listed by manufacturer and product code on the MPL. Use of pre-qualified product does not relieve the contractor of the responsibility to provide products that meet this specification. The Department may inspect or test material at any time and reject any material that does not meet the specifications.

Notify the Department in writing of selected electrical services from the MPL intended for use on each project. Provide evidence of Underwriters Laboratories (UL) certification to produce and build electrical services and service enclosures.

11085.5. Pre-Qualification Procedure. Comply with the pre-qualification requirements of DMS-11080 and applicable DMS-11081 through DMS-11083.

11085.6. Material Requirements. Provide all PS enclosures with a dead front trim. Construct removable interior dead front cover without hinges. Interior cover is to be held securely with a minimum of two retainable bolts, fasteners, or other means of attachment.

Provide aluminum or stainless steel enclosures for PS electrical service assemblies as required by the electrical service data and DMS-11080.

Construct PS enclosures as schematically detailed on current Electrical Detail (ED) standards. Do not use galvanized steel for PS enclosures.
Provide lockable stainless steel door latches or handle to secure exterior door in place at two or more points. Do not provide door closure clamps. Provide a stainless steel piano hinge with stainless steel pin for stainless steel enclosures, a continuous stainless steel or aluminum piano hinge with stainless steel pin for aluminum enclosures to attach the pedestal front door.

Permanently label the exterior of the pedestal service door with an engraved placard indicating its use (e.g., Roadway Lighting, Traffic Signals). Ensure the placard is neat and professional in appearance. Use 1 in. (min.) letter height. Permanently label the front of the interior dead front trim, “DANGER HIGH VOLTAGE,” with an OSHA-style label.

Provide a removable utility access door with a handle and provide provisions for padlocking the door. The utility section must have a minimum depth of 5 in. and be able to accommodate a 4 in. PVC conduit without modification. Protect incoming line terminations from incidental contact.

Dimensions of PS enclosures may vary to accommodate required equipment, utility company requirements, or manufacturer’s standard equipment dimensions. Construct enclosures with a minimum 48 in. height, 16 in. width, and 17 in. depth.

Provide a lockable meter access compartment.

Provide mounting hardware and ensure service installation details meet utility company specifications. Contact the local utility company and obtain their approval for the pedestal details before constructing. Notify the Department in writing and wait for Department approval of changes required by the utility company. When required by utilities, provide meter socket that meets local utility company requirements.

Construct anchor mounting holes in the base of the pedestal service located at each corner of the enclosure.

Locate the three-position Hand-Off-Auto (HOA) switch so it extends through the dead front trim but not through the outer door. Mounting the HOA in a separate NEMA 1 enclosure is not required.

A shield to control stray light is allowable for photocell window.

Do not provide a separate or auxiliary enclosure for the contactor, photocell, and HOA switch. All components are to be mounted in the PS enclosure.

Include an equipment mounting panel inside the enclosure on collar studs or tapped bosses, and construct it out of 12 gauge (min.) galvanized steel. Prepare and submit a schematic drawing specific to each individual service.

Use electrical conductors and components rated for 75°C. Provide service entrance conductors as shown on the electrical service data chart.