Requirements and Procedures for Optional and Non-Standard Illumination Pole Designs and Shop Drawings

Following are requirements and procedures of submittals for approval of roadway illumination pole designs and shop drawings for,

A. Multi-sided steel pole optional designs to TxDOT’s Roadway Illumination Pole 2011 standards (RIP-11);
B. Aluminum pole optional designs to TxDOT’s Roadway Illumination Pole 2011 standards (RIP-11); and
C. Steel or aluminum pole non-standard designs required when these poles are installed in areas where basic wind speeds and/or pole base mounting heights above surrounding terrain are in excess of that shown on TxDOT’s Roadway Illumination Pole 2011 standards (RIP-11).

1. Associate all submittals with a TxDOT construction or maintenance let project or GSD purchase order. The Department may pre-approve shop drawings for optionally designed poles or for poles with non-standard mounting heights or basic wind speeds for included mounting heights and arm lengths submitted.

2. Upon the manufacturer’s request at the time of submittal and only after shop drawings are approved for fabrication, the Traffic Operations Division will add Bridge Division selected and approved details (shop drawings) to the TxDOT material producer list (MPL) under Item 610 for pre-approved use on future projects.

3. Submit the details (shop drawings) and calculations electronically for approval in accordance with Standard Specification Item 5, “Control Of The Work” and include:
   - design calculations supporting the alternative details prepared in accordance with the governing AASHTO specifications;
   - the illumination pole details (shop drawings), including details and material specifications for all associated members, attachments, base plates and bolt circles, connections, hardware, and assemblies;
   - design wind speed and mounting height of base, if different from that shown on the RIP-11 standards;
   - documentation of the design load sufficiency and crash worthiness of transformer bases upon which the poles are to be erected; and
   - a statement requesting some or all of the submitted shop drawings to be considered for pre-approved use on future projects.

Note: All calculations and detailed shop drawings must be dated, uniquely identified, and sealed by a Texas Professional Engineer. Computer output is not acceptable for calculations unless accompanied by sufficient documentation demonstrating design methods and data used. Additional submittals may be required to correct calculations and shop drawings. The Department will not pre-approve details upon which the reviewer must make corrections as noted exceptions.

4. Manufacture poles according to the approved details without deviation.

5. Upon placement of the shop drawings to the MPL, TxDOT will notify the manufacturer by identifying each approved drawing added. The letter will include limitations on use of the pre-approved pole shop drawings.