Index 715-010 High Mast Lighting

Design Criteria

_AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (LRFDLTS-1); Structures Manual (SM),_ Volume 3, FDOT Modifications to LRFDLTS-1; _Structures Manual (SM)_ Introduction, I.6
References; _FDOT Design Manual (FDM)_

Design Assumptions and Limitations

See notes on _Index 715-010, FDM 231, FDM 261_, and _Structures Manual (SM)_ Volume 3.

Design wind pressure is based on a maximum fill height of 25 feet.

Poles are designed for up to a 6 mil galvanization thickness.

Foundations are based upon the following conservative soil criteria (which covers the majority of soil types found in Florida)

- Classification = Cohesionless (Fine Sand)
- Friction Angle = 30 degrees
- Unit Weight = 50 pcf (Submerged)

Only in cases where the Designer considers the soil types at the specific site location to be of lesser strength properties should an analysis be required. Auger borings, SPT borings or CPT soundings may be utilized as needed to verify the assumed soil properties, and at relatively uniform sites, a single boring or sounding may cover several foundations. Furthermore, borings in the area that were performed for other purposes may be used to confirm the assumed soil properties.

Use _Index 715-010_ in conjunction with the _High Mast-LRFD v1.0_ Mathcad 15 computer program located on the _Structures Design Programs Library_ website.

Plan Content Requirements

See _FDM 326_.

Payment

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<th>Item number</th>
<th>Item Description</th>
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<td>715-19-ABC</td>
<td>High Mast Light Pole, Complete</td>
<td>EA</td>
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See the _BOE_ and _Specification 715_ for additional information on payment, pay item use and compensation.