

## Index 17723 Steel Strain Pole (Rev. 11/16)

### Design Criteria

**AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (LRFDLTS-1); Structures Manual** Volume 3, FDOT Modifications to LRFDLTS-1; **Structures Manual** Introduction, I.6 References.

### Design Assumptions and Limitations

The maximum span length for the Steel Strain Poles with Signal Cable is 250 feet. See the [PPM](#), Volume 1, Chapter 29 for more information.

See notes on the **Design Standard** and **Structures Manual** Volume 3.

Use this **Design Standard** in conjunction with the following design programs available for use on the [Structures Design Office Website](#):

- FDOT Strain Pole Program
- University of Florida Bridge Software Institute ATLAS Program

Foundation designs are based on the following conservative soil criteria which cover the great majority of soil types found in Florida:

Classification = Cohesionless (Fine Sand)

Friction Angle = 30 degrees

Unit Weight = 50 pcf (assumed submerged)

When the designer considers soil types at the specific site location to be of lesser strength properties than shown above, an analysis is required. Auger borings, SPT borings, or CPT soundings may be used as needed to verify the assumed soil properties, and at sites confirmed to be uniform, a single boring or sounding may cover several foundations. Borings in the area that were performed for other purposes may be used to confirm the assumed soil properties.

### Plan Content Requirements

See [PPM](#) Volume 2, Chapter 24.

### Payment

Item number	Item description	Unit Measure
649-1-ABC	Steel Strain Pole	EA