



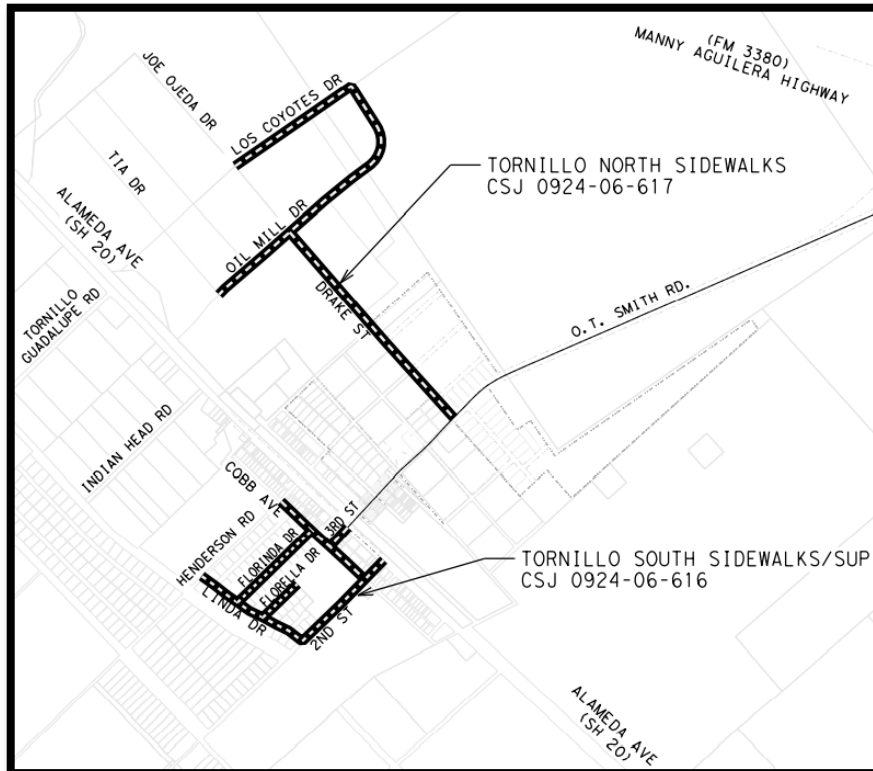
# TORNILLO NORTH AND SOUTH SIDEWALKS/SUP

EL PASO COUNTY, TEXAS

CSJ 0924-06-616, ETC.

PROJECT  
STP 2021(473)TP  
LG Project #: 22-003

TECHNICAL SPECIFICATIONS  
100% SUBMITTAL SUBMITTED  
09/14/2021



Camino Real Regional Mobility Authority  
801 Texas Ave.  
El Paso, Texas 79901

## **SPECIAL SPECIFICATIONS**

# Special Specification ELP1

## Fixed Bollards




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### 1. DESCRIPTION

This Item shall govern for all materials and work necessary for the installation of fixed bollards as shown on the plans and as provided for in the specifications for this project.

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### 2. MATERIALS

Provide new materials that comply with the details shown on the plans, and the requirements of this item.

Contractor must submit shop drawings for approval.

Fixed bollards shall consist of 6" galvanized standard steel pipe filled with Class A concrete and with form domed cap. All pipe, plates and other required steel parts shall be galvanized in accordance with:

- Item 442, "Metal for Structures"
- Item 445, "Galvanizing"
- Item 421, "Hydraulic Cement Concrete," Class A

Foundation concrete shall meet the following TxDOT requirements:

- Item 421, "Hydraulic Cement Concrete," Class C

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### 3. CONSTRUCTION

Install bollards to the depth as shown with the details on the plans or as directed. Clean bollard holes free of loose dirt and debris, and thoroughly compact bottom of hole for placement of bollards. Backfill with concrete as shown on the plans.

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### 4. MEASUREMENT

This Item will be measured by each fixed bollard installed and, complete in place as shown on the plans.

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### 5. PAYMENT

The work performed, and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Fixed Bollards". This price is full compensation for furnishing, preparing, hauling and installing all materials, for excavation and backfill, and for all labor, tools, equipment and incidentals necessary to complete the work.

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# Special Specification ELP2

## Pedestrian Illumination

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### 1. DESCRIPTION

Furnish and install pole mounted (SOLAR) LED pedestrian illumination assemblies for the pedestrian illumination system.

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### 2. MATERIALS

Provide new materials that comply with the details shown on the plans, the requirements of this item, and the pertinent requirements of the following items:

- Item 416, "Drill Shaft Foundations"
- Item 441, "Steel Structures,"
- Item 442, "Metal for Structures,"
- Item 449, "Anchor Bolts"
- Item 610, "Roadway Illumination Assemblies"

Provide 6 sets of submittals showing the pole and LED fixtures to the Engineer for approval at the project address. Obtain the Engineer's approval on the submittals before purchasing materials and beginning work. Furnish 2 copies of the completed material identification form to the Engineer prior to beginning fabrication. Furnish as per drawings and/or manufacturer recommendation.

Contractor must submit shop drawings of the complete assembly in accordance with the plans.

Provide luminaire with County of El Paso approved Dark Green Powder Coat finish.

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### 3. CONSTRUCTION

Perform work in accordance with the details shown on the plans and the requirements of this item.

Use established industry and utility safety practices when installing poles. Consult with the Chief Project Inspector or the County of El Paso representative prior to beginning work.

Prevent scarring or marring of the luminaires, mounting plates and poles. Replace damaged components. Repair damaged painted areas if needed.

Fabricate and install pedestrian illumination standard components in accordance with the details, dimensions, and requirements shown on the plans. Test installed solar pedestrian illumination in accordance with manufacturers recommended testing instructions.

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**4. MEASUREMENT**

This Item will be measured as each mounted pedestrian illumination assembly or as each pole mounted pedestrian illumination assembly installed.

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**5. PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for solar "Pedestrian Illumination" assemblies of the type specified. This price is full compensation for furnishing, installing, and testing solar fixtures; poles, LEDs, drivers, anchor bolts, mounting plates, batteries, and connections; manufacturer recommended performance testing; and for furnishing equipment, labor, tools, and incidentals.