PAY QUANTITY NOTES

(TC-25) **Construction Traffic Control will be installed in a manner approved by the Engineer, in accordance with Chapter VI of the Manual on Uniform Traffic Control Devices, current edition, and applicable O.D.O.T. Standard Drawings. Price bid for this item shall be payment in full for the installation, maintenance and subsequent removal of all necessary construction traffic control devices and pavement markings required for completion of the project.**

All signs and barricades, which are shown with Type "A" Lights in the Standard Drawings shall have the corresponding light attached during non-daylight hours.

(TP-1) **Payment for this item will be based on plan quantity. See the 2009 Specifications for Highway Construction.**

(1) **Any salvageable equipment shall be returned to the City.**

(SP-1) **Pay Item SIGNAL SYSTEM CONTROLLER UPGRADE includes 336 GTI LED (Incandescent Look) Countdown Pedestrian Signal Modules (16" X 18") manufactured by General Electric, or approved equal, and 4 Station Mount, Offset for APS Push Button Station, Aluminum Pelco #SP-3096-OK-PNC.**

(SP-2) **This project will require Accessible Pedestrian Signal (APS) capabilities. The pedestrian pushbutton assembly shall be the 2-Wire iNav Accessible Pedestrian Signal (APS) as manufactured by Polara Engineering, Inc., of Corona, CA or approved equal. The iNavigator pushbuttons shall be black in color and shall feature a custom voice message. The sign to be used is the Option T 9"x15" retroreflective with countdown detail. The buttons will also be programmed using Bluetooth (BLE) to the buttons or Wi-Fi connecting to the iCCU. Price shall include iCCU, interconnect board, 50 pin connector and SDLC cable for each intersection of the 30 intersections that will receive APS button upgrades. The spares for future locations are for three future four-legged intersections with crosswalks on all legs and would feature three iCCUs including the above mentioned components for each iCCU. Also, included in this project will be six (6) Configurators with Bluetooth and Wi-Fi capability.**

(SP-3) **LED International Heads displaying fully-illuminated symbols (walking person and upraised hand) shall be required on this project. The units to be installed on this project shall be GTI LED (Incandescent Look) Countdown Pedestrian Signal Modules (16" X 18") manufactured by General Electric, or approved equal. These units shall be 16" McCain Pedestrian Signal Housing with Vantage Visor and all necessary mounting hardware.**

(SP-4) **For mast arm mounted street name signs shown on the plans that are larger than the existing sign to be replaced, the contractor and supplier shall provide design calculations for higher loading requirements. Price bid for each mast arm street name sign installation should include removal of one existing sign. Mast-arm mounted street name signs are to be 3M's Diamond Grade 3(cubed), 4090, retro-reflective sheeting, or equivalent.**

(SP-5) **The luminaires to be installed (87 total fixtures as shown on Sheet 4 of 8) on this project shall be an LED Holophane LEDgend fixture in accordance with the latest City of Norman standards and specifications, or an approved equal. In order to be considered an equal fixture, the proposed fixture will need to meet the following requirements:**

Voltage	**= 120**
Controlled by	**= Photocell**
Lamp Type	**= LED**
Lamp Color (Nominal)	**= 4,4000K**
Vertical Distribution	**= Medium**
Lateral Distribution	**= Type 3**
Distribution Control	**= Cutoff**
Style	**= Cutoff Design**

SCOPES OF WORK—PEDESTRIAN EQUIPMENT

This Scope applies to Sites 1, 10, 12, 16, 19, 25, 31, 32, 40, 42, 44, and 46.
Install a countdown pedestrian module in each of the existing pedestrian signal heads and upgrade each of the existing pedestrian push buttons to Navigator push buttons.

This Scope applies to Sites 2, 3, 4, 5, 6, 7, 9, 15, 23, 24, 26, 27, 29, 30, 33, 34, 35, 36, 41, 43, 47, 50, 51, 54, and 55.
Install a countdown pedestrian module in all of the existing pedestrian signal heads.

This Scope applies to Site 8.
Replace the existing pedestrian head on the northeast corner of the intersection controlling northbound pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head. Install a countdown pedestrian module in the remaining seven pedestrian signal heads.

This Scope applies to Site 11.
Replace the existing pedestrian head on the southeast corner of the intersection controlling southbound pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head. Install a countdown pedestrian module in the remaining seven pedestrian signal heads. Change out the existing cabinet.

This Scope applies to Sites 13, 20, 22, 28, 37, 39, and 53.
Replace the existing pedestrian heads controlling all pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head for each of the heads. Upgrade existing pedestrian push buttons to Navigator push buttons.

This Scope applies to Site 14.
Upgrade existing pedestrian push buttons to Navigator push buttons.

This Scope applies to Sites 17 and 18.
Replace the existing pedestrian heads controlling all pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head for each of the heads. Upgrade existing pedestrian push buttons to Navigator push buttons. It will also require 21-conductor cable run from the cabinet to all corners (Site 17) and from the cabinet to the northeast, southeast, and southwest corners (Site 18).

This Scope applies to Sites 21 and 38.
Replace the existing pedestrian heads controlling all pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head for each of the heads.

This Scope applies to Site 45.
Install a countdown pedestrian module in all of the existing pedestrian signal heads. This will also require 21-conductor signal cable be run from the cabinet to all four corners of the intersection.

This Scope applies to Site 48.
Install a countdown pedestrian module in each of the existing pedestrian signal heads and upgrade each of the existing pedestrian push buttons to Navigator push buttons. This intersection also needs two Pelco offset mounting brackets in the southeast corner of the intersection.

This Scope applies to Site 49.
Install a countdown pedestrian module in each of the existing pedestrian signal heads and upgrade each of the existing pedestrian push buttons to Navigator push buttons. This will also require that 21-conductor signal cable be run from the cabinet to the northwest and southeast corners of the intersection.

This Scope applies to Site 52.
Replace the existing pedestrian heads controlling all pedestrian movements. This will require 12-feet of 5-conductor signal cable from the pole base to the pedestrian signal head for each of the heads and two Pelco offset mounting brackets in the southeast corner of the intersection. Upgrade existing pedestrian push buttons to Navigator push buttons. This intersection will also require removal of the existing push button system and installation of new 2-conductor wire for the new push buttons.