

SECTION 410 -- DETECTORS

410.01 -- Description

The Contractor shall furnish and install pedestrian pushbuttons and vehicle detectors of the type and size shown in the plans.

410.02 -- Material Requirements

1. Vehicle detectors shall be in conformance with requirements in Section 1073.
2.
 - a. Pedestrian pushbuttons shall be of the type and style specifically intended for this application. They shall be housed in a durable casting and be weathertight. The button and mechanism shall be of sufficient size and rugged design to withstand some abuse and discourage vandalism. The internal switching device shall be closed by physical contact with the buttons.
 - b. Signs shall be provided for mounting directly above the pedestrian pushbuttons indicating which pedestrian signal is associated with that particular button. These signs shall be of the size, type, and style specifically intended for that purpose. Each sign shall include an arrow to indicate the direction of the crossing to which the button applies.

410.03 -- Construction Methods

1. The Contractor shall install all detectors shown in the plans, including any identified as Department-furnished detectors.
2. The Contractor shall install preformed loop vehicle detectors under new pavement. Saw cut loop detectors shall be installed in existing pavement and shall not be substituted for preformed detectors.
3. The Contractor shall install magnetic detectors for 2-lane approaches under the lane line between lanes. Magnetic detectors installed under 1-lane approaches shall be installed under the outside edge of the lane.
4.
 - a. The Contractor shall exercise care to prevent damage to the wires when installing the loops in the sawed slots in pavement.
 - b. The slots shall be blown clean of all stones and dirt.
 - c. The wire shall be tamped as deeply as possible into the slot using a blunt stick.
 - d. The use of sharp instruments such as screwdrivers, etc., is not allowed.
 - e. Caution shall be exercised at all corners and sharp bends so as not to damage the insulation or introduce undue stresses in the wire.

f. Testing of the loops during and after installation shall be performed in the manner described by the Engineer.

5. The Contractor shall place preformed loops 1 inch below the surface of the subgrade or base course before paving. Care shall be taken to prevent damage to the loop during the paving operation.

6. A splice between the detector and the lead-in cable shall be made in the pull box nearest the detector. No other splice shall be made in the detector leads.

7. Pedestrian pushbuttons shall be installed as shown in the plans.

410.04 -- Method of Measurement

Vehicle detectors and pedestrian pushbuttons shall be measured by the each.

410.05 -- Basis of Payment

<u>1.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
	Vehicle Detector, Type TD _____	Each (ea)
	Vehicle Detector, Type ____ Preformed	Each (ea)
	Install Vehicle Detector, Type TD _____	Each (ea)
	Install Vehicle Detector, Type ____ Preformed	Each (ea)
	Pedestrian Pushbutton, Type PPB	Each (ea)
	Install Pedestrian Pushbutton	Each (ea)
<u>2.</u>	Payment is full compensation for all work prescribed in this Section.	