Florida Department of Transportation

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ESTIMATES BULLETIN 12-17

DATE: January 14, 2013

TO: District Estimates Coordinators; District Design Engineers

FROM: Phillip Greg Davis, State Estimates Engineer

COPIES TO: Duane Brautigam, David Sadler, Tim Lattner, Mark Wilson, Robert Robertson, Rudy Powell, Stefanie Maxwell, Chester Henson, Trey Tillander

SUBJECT: Vehicle Detection System

ISSUE BACKGROUND: Over the past few years, the Department has used inductive loop, video, and other types of vehicle detection systems. As part of the ongoing effort to consolidate material requirements from the Minimum Specifications for Traffic Control Signals and Devices (MSTCSD) and the Standard Specifications, Section 660 of the specifications has been updated to include vehicle detectors for signals and ITS applications.

Section 786 of the specifications, Intelligent Transportation Systems- Vehicle Detection and Data Collection, will be deleted, along with related 786 pay items.

Section 663 previously included Vehicle Detector Assemblies; this section will be revised to include Signal Pre-Emption. Until a specification is available, a Technical Special Provision will be required for signal pre-emption assemblies.

IMPLEMENTATION: Effective with projects let July 1, 2013, update plans, including the tabulation sheets, pay items, and quantities, to coordinate with the new specification.

The new specification requires that major system components and virtual detection zones for non-intrusive devices be depicted in the plans. Placement of detectors that are physically installed in the roadway must also be depicted. Refer to the figures below for examples.

Update Pay Items: The *2013 Basis of Estimates Manual (BOE)* will be updated to reflect the above changes. The following pay items are valid through June 30, 2013:

663- 74- AB	**Vehicle Detector Assemblies, EA**
786-1-AB	**ITS Vehicle Detection System, EA**
E660-2-109	**Loop Assembly, F&I, Modified, AS**
E660-4-4	**Loop Material, F&I, AWG #14 Lead-in cable, LF**

The following pay items will remain valid:

660-1-ABB Inductive Loop Detector, EA
660-2-ABB Loop Assembly, AS

The following pay items will be effective July 1, 2013:

660-3- AB Vehicle Detection System- Microwave, EA

A= Operation
- 1 (Furnish & Install)
- 3 (Install) Department furnished equipment
- 4 (Relocate)
- 5 (Adjust/Modify)
- 8 (Preventative Maintenance) B=0
- 0 (Diagnosis and Misc Repair) B=0

B= Component
- 0 (Complete System) only for A=8, 0
- 1 (Cabinet Equipment)
  - Note: Pay item callout shall be used in plans to depict QTY and location of system components installed in cabinet.
- 2 (Above ground Equipment)
  - Note: Pay item callout shall be used in plans to depict QTY and location of sensor(s). Mounting hardware and cabling is considered incidental to sensor.

660-4- AB Vehicle Detection System- Video, EA

A= Operation
- 1 (Furnish & Install)
- 3 (Install) Department furnished equipment
- 4 (Relocate)
- 5 (Adjust/Modify)
- 8 (Preventative Maintenance) B=0
- 0 (Diagnosis and Misc Repair) B=0

B= Component
- 0 (Complete System) only for A=8, 0
- 1 (Cabinet Equipment)
  - Note: Pay item callout shall be used in plans to depict QTY and location of shelf-mount or detector-card style video processor(s). Supplemental interface hardware, cabling, and other system components are considered incidental to video processor(s).
- 2 (Above ground Equipment)
  - Note: Pay item callout shall be used in plans to depict QTY and location of camera(s). Mounting hardware and cabling is considered incidental to camera(s).

660-5- AB Vehicle Detection System- Wireless Magnetometer, EA

A= Operation

1 (Furnish & Install)

3 (Install) Department furnished equipment

4 (Relocate)

5 (Adjust/Modify)

8 (Preventative Maintenance) B=0

0 (Diagnosis and Misc Repair) B=0

B= Component

0 (Complete System) only for A=8, 0

1 (Cabinet Equipment)

Note: Pay item callout shall be used in plans to indicate QTY and location of shelf mount or detector-card style cabinet interface hardware required. Cabling, and other system components are considered incidental to interface card(s).

2 (Above ground Equipment)

Note: Pay item callout shall be used in plans to indicate QTY and location of access point(s) or repeater(s) required. Mounting hardware and cabling is considered incidental to access point(s) and repeater(s).

3 (In-Road Electronics)

Note: Pay item callout shall be used in plans to indicate QTY and location of wireless magnetometer sensors embedded in roadway.

660-6- AB Vehicle Detection System- AVI, EA

A= Operation

1 (Furnish & Install)

3 (Install) Department furnished equipment

4 (Relocate)

5 (Adjust/Modify)

8 (Preventative Maintenance) BC=00

0 (Diagnosis and Misc Repair) BC=00

B= System Type

1 (Transponder)

2 (Bluetooth)

3 (License Plate)

C= Component

0 (Complete System) only for A=8, 0

1 (Cabinet Equipment)

Note: Pay item callout shall be used in plans to depict QTY and location of processing equipment. Supplemental interface hardware, cabling, and other system components are considered incidental to processing hardware.

2 (Above ground Equipment)

Note: Pay item callout shall be used in plans to depict QTY and location of cameras required by license plate system, QTY and location of antennas required by transponder or Bluetooth® systems. Additional pole-mounted hardware is considered incidental to camera(s) or antenna(s).

663-1-ABC Signal Pre-Emption, AS

A= Operation

1 (Furnish & Install)

3 (Install) Department furnished equipment, B=0

4 (Relocate) BC=00

5 (Adjust/Modify) BC=00

B= Type

1 (Optical)

2 (GPS)

C= Components

0 (Complete System)

Update Plans and Pay Item Notes: For applicable projects, update the tabulation sheets and Proposal Summary of Quantities (Trns•port report) in the plans.

Specifications: Specifications will be available with the July 2013 workbook.

If you have any questions regarding the above items, please contact Melissa Hollis 850-414-4182.

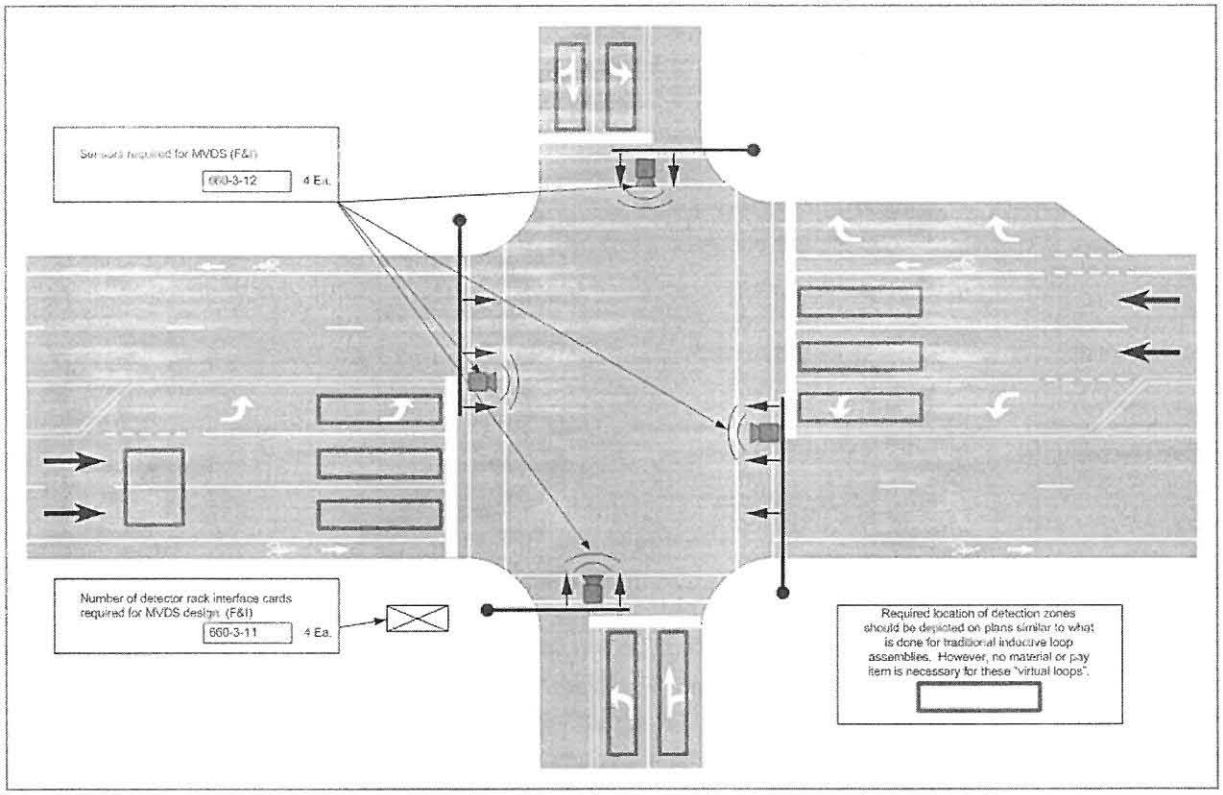

FIGURE 1: Example of pay item use for intersection MVDS

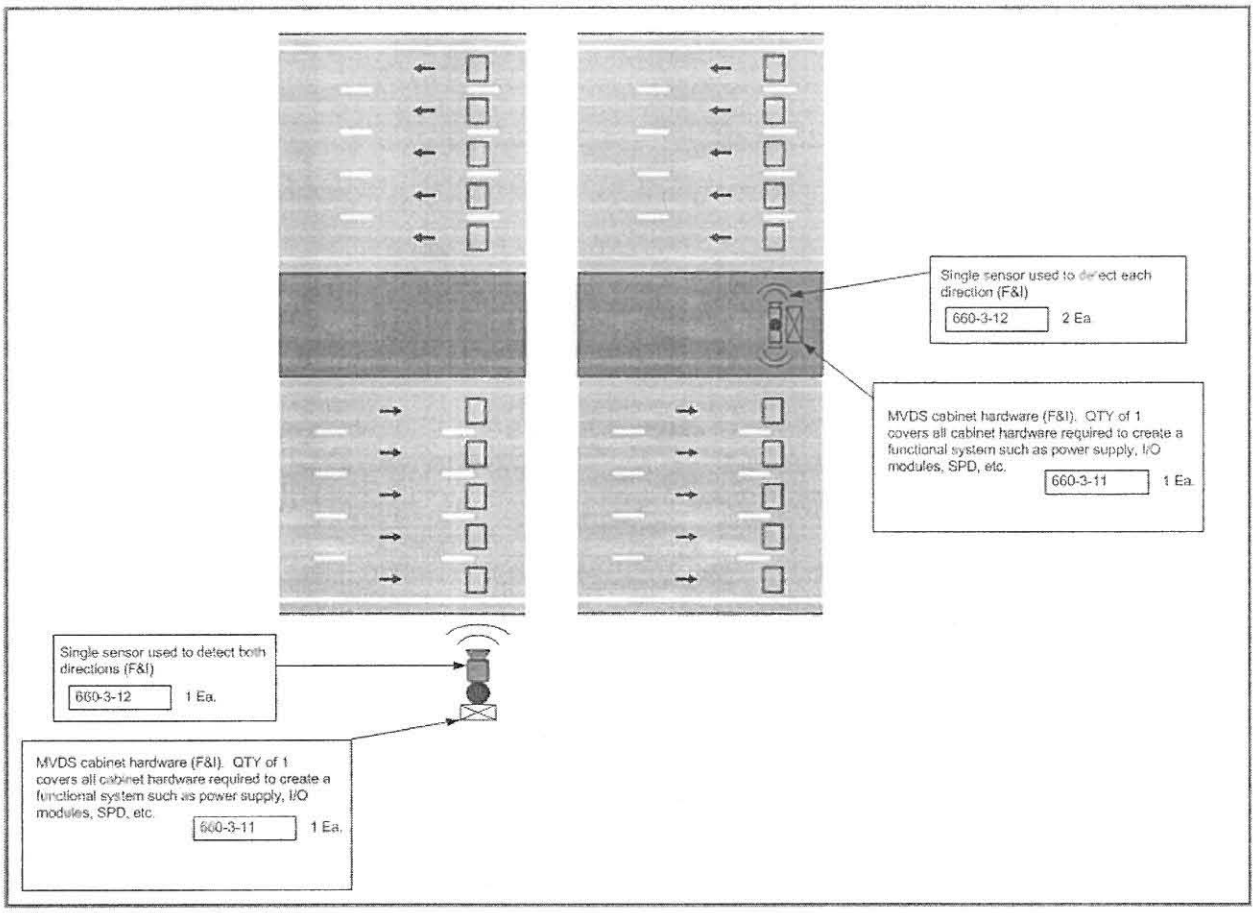

FIGURE 2: Example of pay item use for interstate MVDS

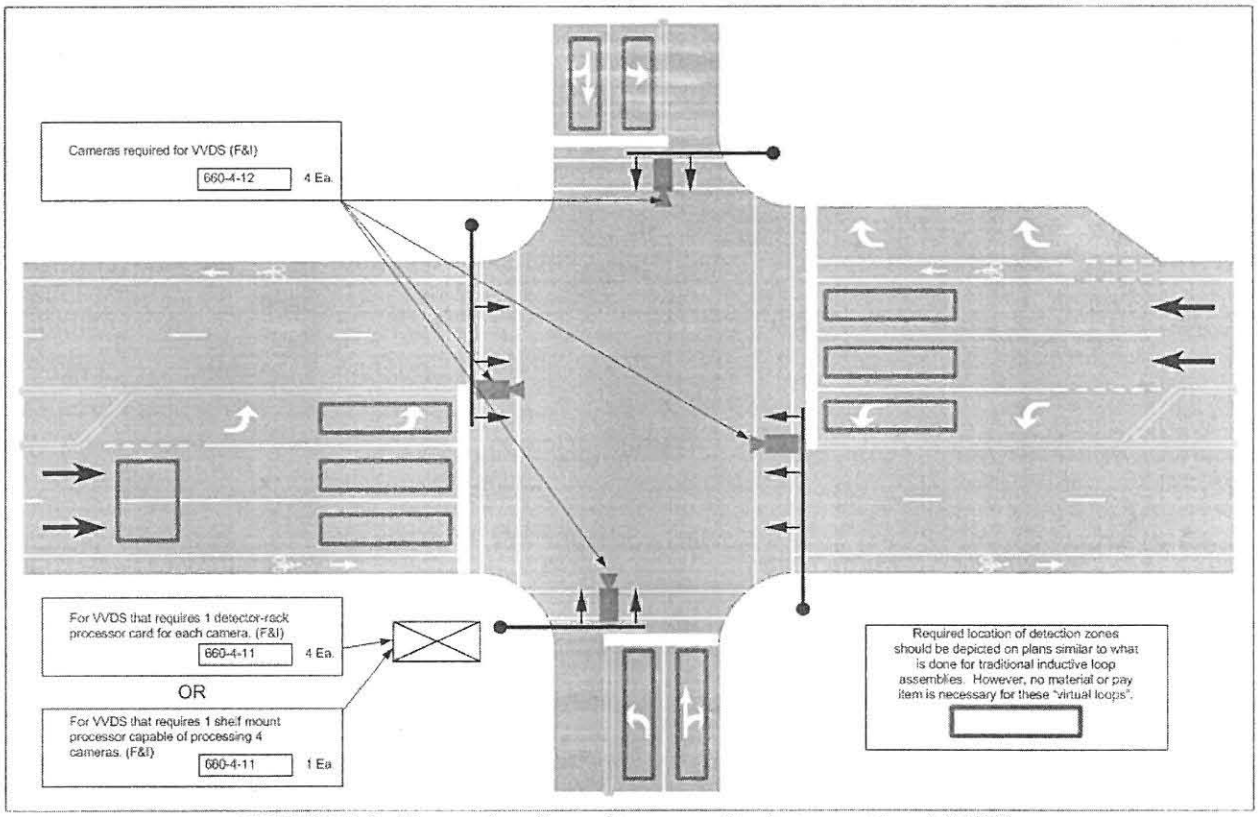

FIGURE 3: Example of pay item use for intersection VVDS

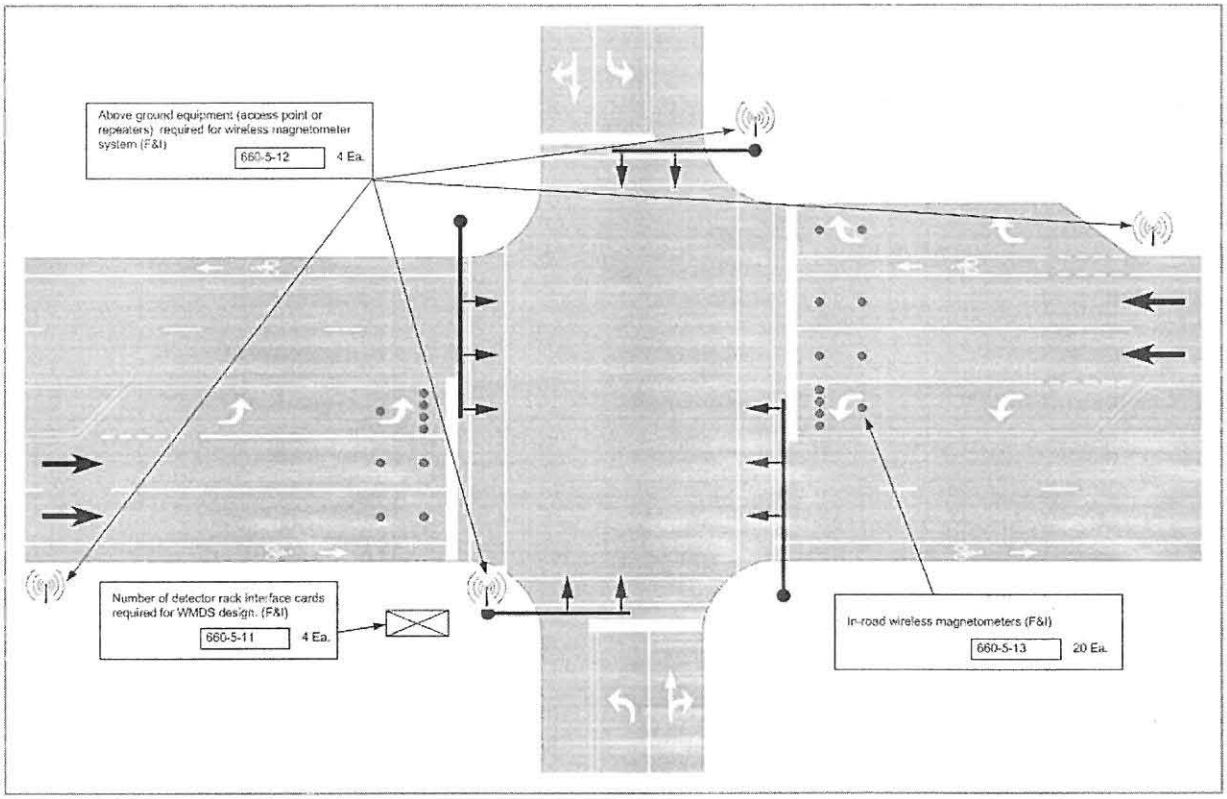

FIGURE 4: Example of pay item use for intersection WMDS

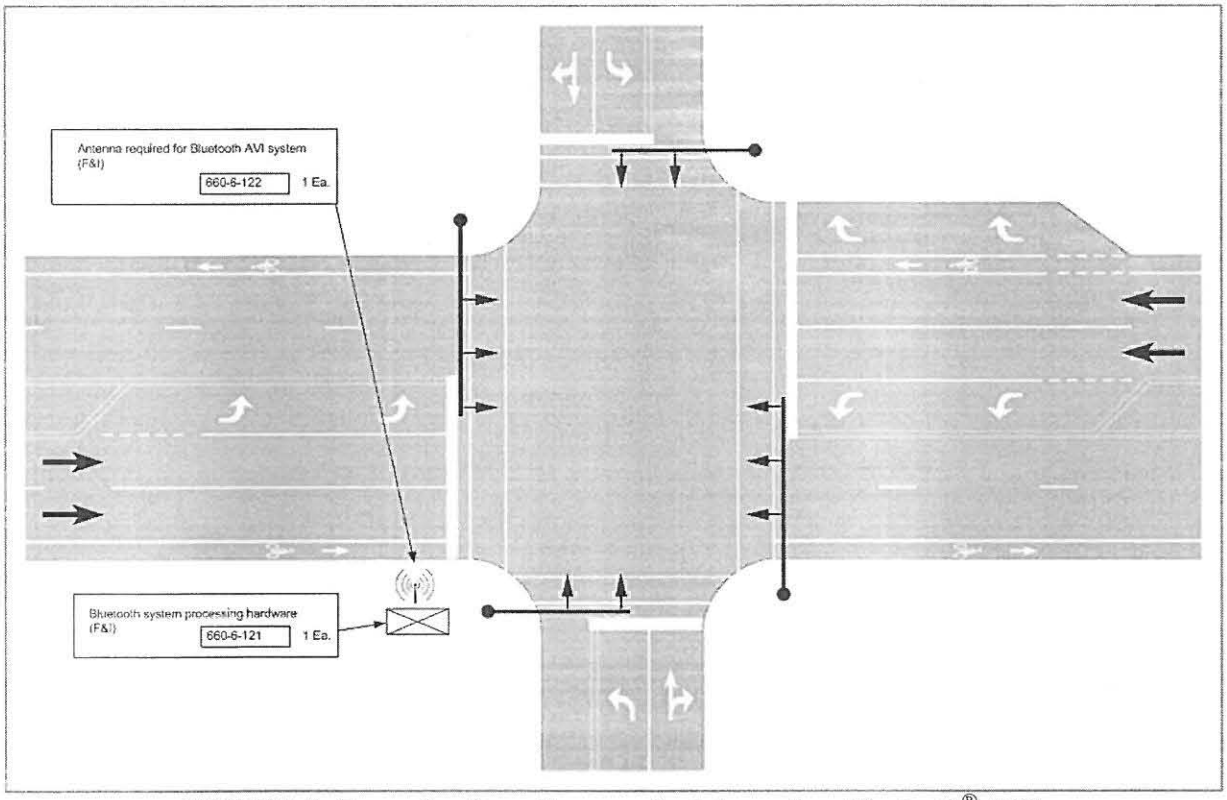

FIGURE 5: Example of pay item use for intersection Bluetooth® AVI