



Florida Department of Transportation

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SECRETARY

January 13, 2009

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 786
Proposed Specification: 7860205 ITS – Vehicle Detection and Data Collection

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

This change was proposed by Gene Glotzbach for clarification of design requirements.

Please review and transmit your comments, if any, within four weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4110.

Sincerely,

Signature on File

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/ft

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

INTELLIGENT TRANSPORTATION SYSTEMS – VEHICLE DETECTION AND DATA COLLECTION.

(REV 4-1-08 ~~12-1-08~~) (FA 4-3-08) (1-09)

SUBARTICLE 786-2.5.2 (of the Supplemental Specifications) is deleted and following substituted:

786-2.5.2 Wind Loads: ~~Verify~~ *Ensure* that the detection system, mounting hardware, and any related material that is exposed to the environment can withstand *150 mph* sustained wind speeds ~~and are in accordance with~~ *meet the requirements of the Structures Manual, Volume 9* ~~and as shown in the Plans Preparation Manual, Volume I, Chapter 29~~ *Volume I, tables 29.1 and 29.2.*

~~Ensure that enclosures are capable of withstanding 150 mph wind speeds as specified in and are in accordance with the Plans Preparation Manual, Volume I, Chapter Section 29, and the Structures Manual Volume 9. designed in accordance with the AASHTO 1994 Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (25-year reoccurrence).~~

ARTICLE 786-4 (of the Supplemental Specifications) is deleted and following substituted:

786-4 Installation.

Install, configure and demonstrate a fully functional vehicle detection system, as shown in the plans. Connect all field hardware and TMC components to the existing communication network, and provide all materials specified in the Contract Documents. Install all equipment according to the manufacturer's recommendations or as directed by the Engineer.

Ensure that the MVDS, the VVDS and AVDS can be mounted on existing poles or sign structures, or on new poles, for a side-fire configuration. Utilize prestressed concrete or steel poles that comply with Section 641, Section 649, ~~and~~ *or* 785-3, as appropriate. ~~Ensure that poles can withstand sustained wind loads and gust factors according to the Plans Preparation Manual (PPM) and the Design Standards.~~ The support structure and network communication infrastructure shall be paid for under separate pay items.

SUBARTICLE 786-10.3 (of the Supplemental Specifications) is deleted and following substituted:

786-10.3 Installation of AVDS: ~~Ensure that the AVDS can be mounted on existing poles or sign structures, or on new poles, for a side-fire configuration. Utilize prestressed concrete or steel poles that comply with Section 641 and Section 649, respectively, and that can withstand sustained wind loads and gust factors according to the PPM and the Design Standards. The support structure and network communication infrastructure shall be paid for under separate pay items.~~

Verify that the acoustic detector setback distance and mounting height for the side-fire mounted configuration is set to produce the required detection accuracy from the lanes that need to be covered, according to the manufacturer's recommendations. A 25- to 40-foot mounting height shall produce the degree of accuracy these specifications require. From a side-fire mounted position, taking into account the necessary clear zone, the detector's required location for the production of data to the specified accuracy shall not exceed 40 feet.

Ensure that the acoustic detector is programmed so all lanes have detection zones generating data that meets the accuracy specifications.

INTELLIGENT TRANSPORTATION SYSTEMS – VEHICLE DETECTION AND DATA COLLECTION.

(REV 12-1-08) (~~FA 4-3-08~~) (~~1-09~~)

SUBARTICLE 786-2.5.2 (of the Supplemental Specifications) is deleted and following substituted:

786-2.5.2 Wind Loads: Ensure that the detection system, mounting hardware, and any related material that is exposed to the environment can withstand 150 mph wind speeds and meet the requirements of the Structures Manual, Volume 9.

ARTICLE 786-4 (of the Supplemental Specifications) is deleted and following substituted:

786-4 Installation.

Install, configure and demonstrate a fully functional vehicle detection system, as shown in the plans. Connect all field hardware and TMC components to the existing communication network, and provide all materials specified in the Contract Documents. Install all equipment according to the manufacturer's recommendations or as directed by the Engineer.

Ensure that the MVDS, the VVDS and AVDS can be mounted on existing poles or sign structures, or on new poles, for a side-fire configuration. Utilize prestressed concrete or steel poles that comply with Section 641, Section 649, or 785-3, as appropriate. The support structure and network communication infrastructure shall be paid for under separate pay items.

SUBARTICLE 786-10.3 (of the Supplemental Specifications) is deleted and following substituted:

786-10.3 Installation of AVDS: Verify that the acoustic detector setback distance and mounting height for the side-fire mounted configuration is set to produce the required detection accuracy from the lanes that need to be covered, according to the manufacturer's recommendations. A 25- to 40-foot mounting height shall produce the degree of accuracy these specifications require. From a side-fire mounted position, taking into account the necessary clear zone, the detector's required location for the production of data to the specified accuracy shall not exceed 40 feet.

Ensure that the acoustic detector is programmed so all lanes have detection zones generating data that meets the accuracy specifications.