

ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

(The person who receives or originates the issue and needs to forward the issue for action.)

Modify Specification _____.
Section/File number

New Section 780 _____.
Section number

Subject: Intelligent Transportation Systems – General Requirements

Origination date: 10-11-05

Originator: Gene Glotzbach
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Problem statement: Standard Specifications are needed for the Intelligent Transportation System components.

Information source: FDOT ITS Section

Background data: To bring consistency to construction of ITS deployments statewide and provide for approval of components to be listed on the Approved Product List (APL).

Recommended Usage Note: Use on all ITS projects.

Desired implementation date: Beginning with the July 2006 letting.



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

DENVER J. STUTLER, JR.
SECRETARY

MEMORANDUM

DATE: October 26, 2005
TO: Specification Review Distribution List
FROM: Duane F. Brautigam, P.E., State Specifications Engineer
SUBJECT: **Proposed Specifications Change: 7800000 Intelligent Transportation Systems – General Requirements**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification for Intelligent Transportation Systems General Requirements.

This change was proposed by Gene Glotzbach of the Traffic Operations Office to develop Standard Specifications for the Intelligent Transportation System components.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965DB or duane.brautigam@dot.state.fl.us. Comments received after November 23, 2005 may not be considered. Your input is encouraged.

DFB/ft

Attachment

COMMENTS:

Submitted by:

Phone #:

**Intelligent Transportation Systems – General Requirements
(REV 10-7-05)**

Page 766. The following new Section is added after Section 715:

**SECTION 780
INTELLIGENT TRANSPORTATION SYSTEMS
GENERAL REQUIREMENTS**

780-1 Description.

The provisions contained in this Section include general requirements for all intelligent transportation system (ITS) devices and equipment used on Florida's limited-access and non-limited-access corridors and in transportation management centers (TMCs).

780-2 Equipment and Materials.

Use only ITS equipment and components that meet the requirements of these specifications, and which are listed on the Department's Approved Product List (APL). Use only new equipment and materials, except as specified in the Contract Documents. Ensure that firmware and software furnished and installed as part of the ITS project are the most current and approved releases or versions. Firmware and software updates released during Contractor and manufacturer warranty periods shall be made available at no cost to the Department.

Meet requirements in Section 603.

Meet requirements in Section 608.

Meet requirements in Section 611.

780-3 Installation Requirements.

Install ITS equipment as detailed in the plans, following the manufacturer's recommendations, and with the review and approval of the Engineer.

Furnish all tools, equipment, materials, supplies, and manufactured hardware necessary for a complete installation. Perform all operations and equipment integration necessary to ensure that the finished ITS equipment functions as depicted in the plans.

780-4 Grounding and Transient Voltage Surge Suppression

Properly ground all ITS equipment and materials to provide personnel and equipment protection against faults, surge currents, and lightning transients. Ensure that the grounding system used meets the grounding requirements defined in Section 620 and in Section 785-1.

Install all ITS components with surge suppressors and lightning arrestors as shown in the plans and according to the ITS device manufacturer's recommendations. Ensure that the surge suppressors and lightning arrestors are capable of meeting or exceeding the device protection requirements as contained in Section 785-1 and that they are listed on the Department's APL. Consider multiple devices installed in the same field cabinet to be a single installation for the purpose of providing grounding and surge suppression under this paragraph. On devices having both electric power and data or video communication connections, protect both lines.

780-5 Testing

Perform the required tests for the ITS equipment installed. Notify the Engineer of ITS installation testing at least 14 days in advance.

Provide the test procedures to the Engineer for approval prior to commencement of testing. Ensure that the test plan demonstrates each and every functional requirement specified for the device or system under test.

Furnish all equipment, software, and supplies necessary for conducting the tests. Include in the test documentation the last calibration date of all test equipment, along with the test parameters as set on the equipment.

All test results shall be compared with their corresponding specifications. Failure to conform to the specifications of any test shall be considered a defect and the equipment shall be subject to rejection by the Engineer. Rejected equipment may be offered again for a retest, provided that all deficiencies have been corrected and evidence thereof has been submitted to the Engineer.