ORIGINATION FORM

Date: March 27, 2012
Originator: Gene Glotzbach
Contact Information:
Traffic Engineering and Operations, ITS Section, Central Office
850-410-5616

Specification Title:
PRESERVATION OF PROPERTY – INTELLIGENT TRANSPORTATION SYSTEMS
Specification Section, Article, or Subarticle Number: 7-11.7

Why does the existing language need to be changed? The specification needs to be expanded to incorporate language that helps ensure ITS and related components are sufficiently protected from damage that causes failure or disruption of normal operations. The language proposed has commonly been incorporated on past projects using a modified special provision requested by multiple Districts and approved by Central Office. The language needs to be incorporated into a statewide standard to promote consistency and ensure that all ITS is protected.

Summary of the changes: Section 7-11 has been expanded to include requirements to protect FDOT ITS assets within project areas and provides for damage recovery based upon user cost calculations and reasonable estimates.

Are these changes applicable to all Department jobs? If not, what are the restrictions? These requirements should be applied whenever ITS systems or components are located within project boundaries.

Will these changes result in an increase or decrease in project costs? If yes, what is the estimated change in costs? No significant increase or decrease in project costs have been evident as a result of incorporating this language into contracts through the MSP process. Therefore, no significant cost impact is predicted for statewide adoption.

With who have you discussed these changes? Central Office and District ITS Engineers, Construction Engineers, and Specifications Engineers.

What offices will be impacted by these changes? Traffic Operations, Specifications, Construction.

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? No.

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? To be determined.

Contact the State Specifications Office for assistance in completing this form.
Frances Thomas 850-414-4101 frances.thomas@dot.state.fl.us
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ANANTH PRASAD, P.E.
SECRETARY

M E M O R A N D U M

DATE: May 3. 2012

TO: Specification Review Distribution List

FROM: Duane F. Brautigam, Director, Office of Design

SUBJECT: Proposed Specification: 0071107 Preservation of Property – Intelligent Transportation Systems

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

The changes are proposed by Gene Glotzbach to allow for damage recover/user costs to be assessed on projects where Department owned ITS may be impacted.

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 email at RD967DB or duane.brautigam@dot.state.fl.us. Comments received after **May 30, 2012,** may not be considered. Your input is encouraged.

DB/ft
Attachment

0071107
Use on projects where Department
owned ITS may be impacted.

PRESERVATION OF PROPERTY - INTELLIGENT TRANSPORTATION SYSTEMS. (REV 4-27-12)

ARTICLE 7-11 (pages 66- 70) is expanded by the following new Subarticle:

7-11.7 Intelligent Transportation Systems (ITS): *Protect all Department ITS and related components from damage causing failure or disruption of normal operation. The Department will not require the Contractor to provide routine repairs or maintenance. Coordinate with Sunshine One Call to locate all ITS underground infrastructure within the construction limits from the issuance of notice to proceed, and register with Sunshine One Call for all temporary and permanent ITS underground infrastructure installed by the contractor.*

711-7.1 Damage Recovery/User Cost: *By execution of the Contract, both parties acknowledge and agree that failure to timely restore any Department ITS and related component that has failed or has a disruption in operation with regard to their previous condition and normal operation will result in damages being suffered by the Department and/or the traveling public which are difficult to ascertain with certainty. Parties further acknowledge and agree that the amount of damage recovery/user cost is a best estimate of the actual damages that would be suffered and is a reasonable amount based on the best available information.*

Whenever actions of the Contractor or vandalism cause the Department's ITS or related components to fail or disrupt normal operations, as determined by the Engineer, restore the Department's ITS and related components to their previous condition and normal operation within the allowable time in Table 1 at no expense to the Department. If the Department's ITS and related components are not restored within the allowable time, a damage recovery/user cost will be assessed and continue for each additional time period. The allowable time begins with the actual knowledge of the Contractor of the Department's ITS or related component failure or notification to the Contractor by the Engineer of the Department's ITS or related component failure. The damage recovery/user cost will not exceed $25,000.00 over a 24-hour period.

Whenever actions of a third party cause the Department's ITS or related components to fail or cause a disruption of normal operation, as determined by the Engineer, either restore the Department's ITS and related components to their previous condition and normal operation or provide access and coordinate with the Department's Maintenance Contractor in accordance with 8-4.4 as directed by the Engineer. The Department will, with the exception of any damage resulting from vandalism, compensate the Contractor for restoring the Department's existing ITS and related components in accordance with 4-3.4. If the Department performs the work, through in-house forces or contract maintenance, no damage recovery/user costs will be assessed. At the discretion of the Engineer, the damage recovery/user cost will not be assessed or time can be extended if the failure to have the Department's ITS and related components restored and operating properly is beyond the Contractor's control and is applicable to damage caused by third parties only.

If multiple systems are affected at the same time, the higher damage recovery/user cost will apply and will not end until the system and all components are properly operating The Department will have the right to apply as payment on such damages any money, which is due to the Contractor by the Department.

Intelligent Transportation System Component Failures and disruption of normal operation include, but are not limited to the following:

Telecommunications - This includes the failure, partial failure, or cutting of any telecommunications including but not limited to fiber optic cable, composite cable, or data lines that brings down the system in whole or any part of the system or its functions that include communication between the Master Hubs. Telecommunications failure also includes causing a system to fail over to a redundant path or the removal of a redundant path without written permission from the Engineer.

Camera System - This includes the loss of Video or Pan, Tilt or Zoom from a specific camera site. This also includes any change in the height, angle, or location of the support structure of the camera caused by the contractor.

Vehicle Detection System - This includes the loss of correct data flow from the field device to the Department's Software system located in the Regional Traffic Management Center (RTMC). This includes data for all lanes of travel. If a temporary detection system is used it shall maintain all standards that the existing system is currently using.

Road Weather Information System (RWIS) - This includes complete or partial failure of hardware, software, surge suppression, grounding system, or communications.

Highway Advisory Radio (HAR) System/Subsystem – This includes complete or partial failure of hardware, software, antennas, beacons, surge suppression, grounding system or communications. This also includes the inability to send data to a HAR and/or the inability of the RTMC operator to verify a HAR message is broadcasting and/or the beacons are correctly flashing.

Dynamic Message System (DMS) - This entails the failure or partial failure for a Dynamic Message Sign. This is to include the inability to send or receive data to a DMS and or the inability for the Operator at the RTMC to display, blank, change, or verify a message sent to the sign.

Power Systems – This includes the complete or partial failure of power to all systems including but not limited to cameras, vehicle detection systems, and dynamic message signs.

Table 1
Allowable Time and Damage Recovery/User Cost

Item	*Allowable Time*	*Damage Recovery/User Cost for Repairs Not Completed During Allowable Time*	*Additional Time Period*	*Damage Recovery/User Cost for Each Additional Time Period*
Telecommunications	*12 hours*		*6 hours*	
Camera System	*12 hours*		*6 hours*	
Vehicle Detection System	*48 hours*		*12 hours*	
Road Weather Information System	*24 hours*		*6 hours*	
Highway Advisory Radio System	*24 hours*		*6 hours*	
Dynamic Message System	*12 hours*		*6 hours*	

Power Systems	*12 hours*		*6 hours*	

Unless otherwise noted, provide all removed devices to the Department within five calendar days of removal from functional service, and properly dispose of all poles, fiber, conduit, pull boxes, DMS, loops, and loop detectors.

711-7.2 ITS Repair Plan: *Submit an ITS repair plan to the Engineer at the pre-construction conference. Outline the procedures, resources and points of contact for a step-by-step guideline in the event the Contractor damages the ITS infrastructure.*

Make permanent repair to ITS fiber optic cable within 90 days of the temporary repairs. Replace the entire cable from termination point to termination point, unless otherwise directed by the Engineer.

Provide detailed plans to the Engineer showing how damage to any ITS facility will be remedied, when required. The detailed plans will become part of the as-built plans package. Remediation plans must follow the same guidelines for development and presentation of the as-built plans and must be approved by the Engineer before any remediation work proceeds.