

TECHNICAL SPECIAL PROVISIONS
FOR THE
CITY OF TALLAHASSEE
ADVANCED TRANSPORTATION MANAGEMENT SYSTEM
REVISION – OCTOBER 2004

These Technical Special Provisions (TSP) expand the current Florida Department of Transportation's Standard Specifications for Road and Bridge Construction in areas as described in this document. Any area not covered by these technical special provisions shall be referenced to the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, the District Three (3) TSP'S, and Florida Department of Transportation's Minimum Specifications for Traffic Control Signal Devices – July 2000. These technical special provisions are to replace any previous specifications or special provisions of the City of Tallahassee Traffic Control System Field Equipment.

GENERAL NOTES

- 1. Traffic Control Assemblies** The Traffic Control Assembly described in these Tallahassee TSP's represents major changes from the previous versions. A Certificate of Conformance (COC) certification number shall be placed inside the every cabinet built to this TSP.

All Traffic Controller Assemblies SHALL meet the conditions of these Technical Special Provisions for use within the City of Tallahassee and Leon County Traffic Signal Systems.

- 2. Electrical Services:** Any Signalized Intersection(s) within Leon County that requires a new electrical service to be built or replaced SHALL require the Contractor to secure all permits. The Contractor shall be required to coordinate with the City of County and set up the utility account that is to be transferred to the City or County. After FINAL acceptance and the maintenance turned over to the City or the County, the City of County shall be responsible for payment of electrical power consumed.

3. **Controller phasing of the intersection:** The controller phasing of the intersection(s) shall conform to the following phasing. On a roadway that the major street is in the north-south orientation, then controller phase 2 **SHALL** be north bound as the traffic flows. On a roadway that the major street is in the east-west orientation, then controller phase 2 **SHALL** be west bound as the traffic flows. Any roadway that has one leg of the major movement in more of a north-east or north-west orientation, then that roadway shall be deemed to be a north-south roadway. Likewise, if one leg of the major movement is more in a north-west to south-west orientation, then that roadway shall be deemed to be an east-west roadway.
4. **Signal Cable Color Codes:** The Contractor shall coordinate all Signal Cable Color Codes with the COT-TE Signal Construction Supervisor if not so identified in the charts that are included in these TSP.
5. **Sidewalk Fiber Optic Duct:** In new construction or any existing roadway project that includes the addition of sidewalk being added within the limits of the project then a fiber optic duct, (4 inch diameter) Schedule 40 PVC Duct] shall be installed under a sidewalk through the entire length of all new roadway projects. The fiber optic duct bank shall be installed only on one side of the roadway and not both unless spelled out in the contract.
6. **Fiber Optic Conduit:** The conduit installed shall contain a 1-1/4 inch ribbed inner-duct installed in all 4 inch diameter conduit. The conduit shall have a #12 or larger copper wire installed for the purpose of locating the fiber cable. This pull wire shall be bonded together at all pull boxes.
7. **Fiber optic specifications:** The details the specifications of the fiber optic cable to be used in this project are in Section 684 of these TSP.
8. **Large pull boxes:** There shall be large pull boxes as described in Section 635 of these TSP installed at least every 400 feet throughout the length of the duct line.
9. **Vehicle Loop Detection** --In the design stage of a project, the design engineer may elect to provide video detection equipment in lieu of replacement of the vehicle loops at an intersection. Any Video Detection System that is on the Approved Products List of the State of Florida with a current Certificate of Conformance certificate (COC) and that conforms to the rack mount or size requirements of the City of Tallahassee's 170 Traffic Controller Assemblies shall be approved for use in Tallahassee Leon County. The City of Tallahassee currently uses and operates the Econolite AutoScope Solo Pro system, Traficon VIP3 Vehicle Presence Detectors, and Itreris Vantage Edge2 system. Should another brand of equipment be selected for use in the field, then the first system shall include all equipment and software plus 40 hours of training necessary to set up, modify and use the system. The video detection set up equipment shall become the property of the FDOT or the City of Tallahassee depending upon the funding of the intersection equipment at the completion of the project. All Field equipment shall be considered the assets of the intersection and shall be included in the normal maintenance of the intersection.

- 10. Destruction of Vehicle Loops:** All existing Traffic Signal intersections that have the Traffic Signal Loops Cut or Destroyed due to construction, the Contractor shall notify the COT Traffic Engineer of cutting or destruction at least twenty-four (24) hours in advance of such destruction. The Contractor **shall** install a Video Detection System and **shall** have operational within thirty-six (36) hours of said destruction.
- 11. Video Detection:** In the case where a video detection system is employed, the contractor may elect, if approved by the FDOT and the COT, to transfer ownership of all such detection equipment at the completion of the project in exchange for eliminating restoration of traffic signal loops at subject intersection.
- 12 Traffic Signal Heads:** All Traffic Signals Heads shall employ the use of LED's (Light Emitting Diodes). The Red and Green colors shall be as approved by the Florida Department of Transportation. The yellow color shall conform to the ITE (Institute of Transportation Engineers) standards for light output. See Section 650
- 13. Training:** The City of Tallahassee Traffic Engineering Division is the major user of this equipment and shall be the party in determining whether a vendor that manufacturers the traffic signal controller assemblies is currently or has been under a City of Tallahassee Annual Price Agreement (COT/APA) for traffic signal controller assemblies within the past two (2) years. If that vendor has not been under a COT/APA at the time of the purchase and/or project, then the City of Tallahassee MAY require the Vendor to do the following:
- Arrange for at least twenty-four (24) hours of training sessions in the City of Tallahassee for the maintenance personnel of the City and of any personnel from the Florida Department of Transportation as recommended by the Traffic Operations Engineer from District Three. The training sessions will cover controllers, fiber optic modems, telemetry transceivers or any other specialized equipment that may be furnished with the installation of a traffic signal/camera location. This school will be scheduled within 60 days following the delivery of equipment. There shall be no tuition charge for the participants to attend these sessions. Expenses involving travel, meals and lodging shall be sustained by the attending personnel. The vendor shall have materials available for a minimum of six participants.
- 14. Video Subsystem:** The Tallahassee Advanced Transportation management System (TATMS) details of the specifications for the video subsystem are included in Section 686 of these TSP.