

TECHNICAL SPECIAL PROVISION

FOR

Telephone Connection Box

FINANCIAL PROJECT NO.: 437501-1-52-01

LAKE COUNTY

The official record of this Technical Special Provision is the electronic file signed and sealed under rule 61G 15-23.004, F.A.C.

PREPARED BY:
Paul Mannix, P.E, PTOE
Fla. License No. 57712
Certificate of Authorization No. 24

Atkins ANA
482 South Keller Road
Orlando, Florida 32810

Date: 1/12/2016

T685-127 TELEPHONE CONNECTION BOX

T685-8-1 Description.

Furnish and install a leased one hundred (100) Megabit Ethernet communications circuit for data and video communications for intelligent transportation system (ITS) projects. Ensure that the communications provides for gigabit wire-speed fast Ethernet connectivity at transmission rates of 1 gigabit per second to and from the FDOT ITS network located in the Regional Traffic Management Center at 133 South Semoran Boulevard, Orlando, Florida.

T685-8-2 Materials.

T685-8-2.1 General: Ensure that the FDOT ITS network administrator will be able to manage each ITS device and MHES over this leased communications line for switch configuration, performance monitoring, and troubleshooting.

The leased communications line, including any installation costs, shall be obtained by the contractor and paid for a period of two (2) years starting from the time of project acceptance.

The communications system shall include all necessary cabling, enclosures, splicing, jumpers, media converters and patch chords to make a complete communications connection at both ends of the circuit.

T685-8-3 Installation Requirements.

T685-8-3.1 General.

The communications cabling shall utilize the proposed conduit raceways entering in through the ITS Masterhub foundation as specified in the plans. The fiber optic cable shall terminate into a wall mounted enclosure mounted on the particle board mounted to the wall of the ITS masterhub.

The contractor shall provide jumpers from the wall mounted cabinet along the wiring ladders along the ceiling to the 19" communications rack.

The contractor shall install the media converter in the 19" communications rack and ground the device accordingly. A patch chord will be installed from this media converter to the proposed Layer 3 switch.

T685-8-3.2 Testing.

The contractor shall submit a subsystem test for approval. The test shall include at a minimum, remotely testing all functions of each device and network switch from the Regional Traffic Management Center and viewing of all CCTV streams at once on the video wall at a resolution equivalent to the size of one cube or monitor.

T685-8-4 Warranty.

The contractor shall ensure that the leased line contract language includes restoration of communications within 4 hours of a communications loss at no expense to the Department.

T685-8-5 Method of Measurement.

The unit cost for providing a fully operational communications link as specified within this section shall be Lump Sum.

T685-8-6 Basis of Payment.

Price and payment will be full compensation for all work specified in this Technical Special Provision.

Payment will be made under:
Item No. 685-127 Telephone Connection Box/100M communications circuit LS