

SECTION 632

CABLE

(FIBER OPTIC INTERCONNECT)

The requirements of Section 632 are expanded and modified as follows:

632-2 General Requirements, are expanded as follows:

1.0 GENERAL REQUIREMENTS

The City of Tallahassee requires Fiber Optic Cable as interconnect and therefore the bidders are required to perform various test(s) and other work as described in Section 684 of these TSP's. There shall be full documentation of all test performed on the fiber optic network. The fiber optic network will support voice, data (FDDI) and video communications. The installation and cable must be in accordance with the National Electric Code.

2.0 INSTALLATION

A loose tube duct/aerial cable shall be installed for the complete project from patch panel to patch panel. The fiber optic cable shall be installed along a route consisting of underground conduit and aerial poles. If a project calls for new sidewalk to be installed in that project, then one 4-inch conduit will be installed in new sidewalk construction with pull boxes located at a maximum of 390 foot intervals. Should there be sidewalks installed both sides of the roadway, then only one sidewalk shall have the fiber optic conduit installed beneath it. The fiber optic duct bank shall be along the same side of the roadway in all sections unless directed to change sides of the roadway by the engineer. Should this be necessary, then connecting conduit across the roadway shall be installed. The size of the pull box shall be in accordance to pull box sizes as defined in Section 635 of these TSP's.

2.1 Aerial Installation

The aerial cable will maintain a minimum of 18 feet in height over roadways and commercial driveways. The cable will be a minimum of 12 inches above other joint users such as CATV and 40 inches below the electric neutral. 5/16 inch stranded steel messenger shall support the cable. The cable will be self-supporting or lashed to the steel messenger. Cable installation shall conform to all NESC regulations.

NOTE: The cable will vary from side to side down pole line to avoid trees. Rigid Conduit Risers will be installed when cable is to be installed down a pole. The rigid conduit shall be installed on the pole away from the side nearest any moving traffic.

2.2 Underground installation

When installing conduit a minimum of 36" of cover is required. A #12 awg or larger stranded copper wire will be installed in the conduit for the purpose of locating the fiber cable and as a pull wire.. A warning tape will be installed 12" above conduit.

NOTE: A 1 1/4 inch corrugated inter-duct will be installed in all four inch conduit.
A #12 awg wire will be installed parallel to fiber cable in all underground installations.

3.0 CABLE SPECIFICATIONS

3.1 See Section 684 of these TSP's.

4.0 TERMINATIONS AND TERMINATION HARDWARE

4.1 See Section 684 of these TSP's.

5.0 SPLICING

5.1 See Section 684 of these TSP's

6.0 SYSTEM TESTING

6.1 See Section 684 of these TSP's

7.0 DOCUMENTATION

7.1 See Section 684 of these TSP's