6.3.4 Cable Splicing

The following are minimum requirements for splicing and connecting of the specified fiber optic cables.

a) All required brackets and other racking hardware required shall be provided for the fiber optic cable racking operations as specified.

b) All splicing equipment shall be in good working order, properly calibrated, and meet all industry standards and safety regulations. Cable preparation, closure installation and splicing shall be accomplished in accordance with respective manufacturer's procedure.

c) Upon completion of the splicing operation, all waste material shall be deposited in containers, removed from the job site, and disposed of in an environmentally acceptable manner. Determination for appropriate disposal of waste material shall be at the discretion of the Purchaser.

d) Contractor shall use the fusion method for all fiber optic splicing.

e) The average splice loss of each fiber shall be 0.15 dB or less. The average splice loss is defined as the summation of the attenuation as measured in both directions through the fusion splice, divided in half.

f) No individual splice loss measured in a single direction shall exceed 0.25 dB.

g) Splices shall be contained in a splice joint box designed for use on fiber optic cables.

6.3.5 Cable Termination

Optical fibers shall be terminated by means of a fusion splice connection to a factory connectorized pigtail. Pigtail terminations shall be accomplished in accordance with the design drawings.

Cable armour shall be grounded/bonded in accordance with EIA/TIA 607.

6.3.6 Optical Link Testing and Acceptance

An advanced notification of fourteen (14) working days of any test shall be provided. All tests shall be witnessed. Upon completion of the fiber optic cable installation (and splicing) the following tests shall be performed and documented:

- Verify and record the total attenuation of all passive components in the link and ensure it is within the design parameters.
- Verify and record the passive components were installed properly.
- Establish accountability when circuits are configured with multiple links connected together, including links installed by others.
- Provide a benchmark for comparing future measurements.