

STATEMENT OF OBJECTIVES (SOO)

FOR

LEWIS & CLARK INN MALMSTROM AFB
CABLING INFRASTRUCTURE UPGRADE FOR COMMERCIAL WIRELESS
ACCESS POINT INSTALLATION



Overview:

The Lewis & Clark Inn located on Malmstrom AFB is seeking to improve their wireless Internet service.

This requirement is to upgrade the cabling infrastructure between lodging buildings and inside each building to allow for upgraded commercial wireless access points to be installed for better performance, higher throughput and improved wireless coverage.

Scope of Work:

Contractor will provide labor and parts to run the new inside and outside cabling, terminate and test the cabling and then install and test the new commercial wireless Internet access points.

1. Pull, terminate, test and label approximately 79 category 6 wireless access point cables to locations determined at time of installation to ensure full WiFi coverage. Each end of each category 6 cable shall be terminated with modular category 6 insert in the TIA/EIA 568B wiring scheme and shall be certified as a standard's compliant category 6 permanent link with Fluke DSX 5000 Cable Analyzer, or tool with similar functionality. Each link shall be certified and all test reports shall be provided at completion of installation. Outlet end of each cable shall be dressed into a multi-port cover plate. Telecommunications room end shall be dressed into rack mounted patch panel and all work shall be dressed with appropriate slack and installed in a workmanlike manner. All work shall comply with applicable ANSI/TIA/EIA standards.
 - a. Building 1680 – Install 29 wireless access point locations.
 - b. Building 1681 – Install 10 wireless access point locations.
 - c. Building 1682 – Install 10 wireless access point locations.
 - d. Building 1683 – Install 10 wireless access point locations.
 - e. Building 1620 – Install 20 wireless access point locations.
2. Install (1) patch panel in existing rack location in building 1680 and route all wireless access point cables to new patch panel.
3. Install (1) wall mounted cabinet in existing electrical room, telecom room or storage room in buildings 1681, 1682, 1683 and 1620. Install (1) patch panel in each new rack location and route all wireless access point cables to new patch panel. Install cable management in each new rack. Ground rack to existing building ground or structural steel. Place rack in location with existing convenience electrical outlet within 8' and/or add 120v electrical outlet as needed for power to equipment rack.
4. Install j-hook supports as needed for cabling above ceilings and in attic spaces.
5. Install, terminate/splice, test and label (1) single mode fiber optic cable to each of the buildings as scheduled below. Each end of each fiber optic cable strand shall be terminated with LC APC-style fiber pigtail or spliced into existing fiber cables. Each remote end of fiber shall be routed into wall mounted or rack mounted fiber termination shelf equipped with LC APC-style bulkhead and splice trays/cassettes as needed and as applicable. Each main end of fiber shall be routed into rack mounted

fiber termination shelf equipped with LC APC-style bulkhead and splice trays/cassettes as needed and as applicable. All fiber panels shall be labeled according to the ANSI/TIA/EIA 606 series of standards. Each fiber shall be installed in a system of existing ducts, innerducts and hand holes as designed in project plans.

- a. Building 1680 to building 1681 – 12-strand single mode fiber cable.
 - b. Building 1680 to building 1682 – 12-strand single mode fiber cable
 - c. Building 1680 to building 1683 – 12-strand single mode fiber cable
 - d. Building 1680 to building 1620 – 12-strand single mode fiber cable
6. Construction of OSP consists of cabling in existing duct system.
- a. Install innerduct with over-ride installation of existing cabling per drawings to establish new pathway within existing ducts. Utilize fish tape/push rod to establish pathway for mesh innerduct.
 - b. Install approximately 2,750 LF of single mode fiber optic cable (footage includes slack and storage). All fiber shall be manufactured as single jacket single armor.
7. Install (5) rack mounted fiber termination shelves.
8. Splice (96) strands of single mode fiber to LC APC pigtail assemblies within telecommunications rooms.
9. Provide length and loss testing of all fiber optic cabling end-to-end with optical loss modules/power meter by Fluke Networks (DSX-5000 or DSX-8000).
10. Provide as-built documentation, test reports and standard warranty for project. All as-built documentation shall be turned over at completion of each building installation with cable test reports and certifications.

Projected Timelines:

Contract Signed:	Day	0
Project Commencement:	Day	1
Project Completion:	Day	180