

**PERFORMANCE WORK STATEMENT FOR**

**LONG RANGE ETHERNET WITH HIGH  
SPEED ETHERNET OVER COPPER  
SYSTEM REPLACEMENT SERVICE**

**Francis E. Warren Air Force Base, Wyoming**

**27 February 2023**

## Table of Contents

1. Description of Services.....	3
1.1. Basic Services.....	3
1.2. Testing, Drawings, and Acceptance.....	4
1.3. Deliverables.....	5
2. Services Summary.....	6
3. Government Furnished Property and/or Services.....	6
3.1. Government Furnished Property.....	6
3.2. Government Furnished Services.....	6
3.3. Government Property Incidental to the Place of Performance.....	6
4. General Information.....	7
4.1. Quality Control.....	7
4.2. Quality Assurance.....	7
4.3. Security Requirements.....	7
4.4. Physical Security.....	7
4.5. Operational Security (OPSEC).....	8
4.6. Location/Hours of Operation.....	8
4.7. Conservation of Utilities.....	9
4.8. Environmental Controls.....	9
4.9. Safety Requirements.....	10
4.10. Permits.....	10
4.11. Contractor Personnel.....	10
4.12. Records.....	11
4.13. Warranty.....	11
5. Appendices.....	11
APPENDIX A.....	12
APPENDIX B.....	13

## 1. Description of Services.

The contractor shall provide all management, tools, materials, supplies, equipment, and labor necessary to perform the replacement of the Long Range Ethernet over Copper System with a new Long Range Ethernet over Copper System at F.E. Warren Air Force Base, Wyoming, in accordance with all applicable federal, state, local laws and regulations and this performance work statement (PWS). Appendix A contains a list of documents reference in this PWS or are hereby recognized as a standard of good practice to follow during the performance of all work.

**1.1. Basic Services.** The contractor shall install, configure, and demonstrate the operations of a new Long Range Ethernet over Copper System and remove and dispose the current Long Range Ethernet over Copper System. The contractor will be responsible for any other work as defined in this PWS.

**1.1.1. Parallel Install.** The contractor shall install the new system components parallel to the existing system and then perform a cutover. The Contractor shall coordinate with the 90 CS Project Manager in advance of the cutover to coordinate the outage if the implementation necessitates disruption of service, (e.g., communications, electrical, or other utilities).

**1.1.1.1.** The availability of rack space is provided in Appendix B.

**1.1.1.2.** The contractor shall use wire wrapped termination blocks at the head end where each star chassis is being connected.

**1.1.1.3.** The government does not have extra telephone wire wrap blocks or a DC Power supply. The contractor will have to provide these as needed for the project.

**1.1.2. Service Outages.** The contractor shall be responsible for preventing any unscheduled, Contractor-caused interruptions of communications capabilities that are properly identified (i.e. cutting or disabling any in-service cables or equipment). The Contractor shall coordinate planned outages with the 90 CS POC in advance of the outage if the implementation necessitates disruption of service, (e.g., communications, electrical, or other utilities).

**1.1.3. Project Residue.** All residues from this project shall be disposed of off base and in accordance with Federal, State, Local, and base environmental laws and regulations.

**1.1.4. Identification/Marking.** The contractor shall clearly mark all Contractor-Furnished Property and Equipment (CFP/CFE) being shipped to the base with their company's name. The Contractor shall place a legible, readily visible sign (minimum 8.5" x 11") on large containers, construction equipment, or un-manned rental vehicles while on the Government installation indicating the company name along with both the Contractor and site POC's names and local telephone numbers.

**1.1.5. Equipment.** The contractor is required to provide the brand name system Actelis Networks ML2300 or equal. The Actelis Networks ML2300 aggregation switch delivers high speed Carrier Ethernet 2.0 services.

**1.1.5.1. Salient Characteristics.** The Actelis Networks ML2300 or equal system must have the following characteristics:

- 2- Service Data Unit (SDU) 450
- 3- Mean Length of Utterance (MLU) 64 with power rectifier
- 41- Mean Length (ML) 624i Customer Premises Equipment (CPEs)
- Four Rack Unit (RU) high
- 6 slot environmentally hardened platform
- Supports 32 to 256 copper pairs (64 pairs/RU) and up to 128 customers (links) per chassis
- Interface slots must be equipped with up to two SDU (control, switching and aggregation) module cards for redundancy
- Allow carriers to offer higher bandwidth per pair and longer reach per service in real world environments along with the most stable and reliable transmission
- Aggregation switches must offer advanced clock transmission mechanism to ensure best clock accuracy and reliability over copper or fiber networks
- Easy integration into existing carrier/enterprise networks
- Supporting advanced Ethernet features along with comprehensive spectral compliance
- DSL Quad Cables

**1.1.6. Manuals and Practices.** The Contractor shall provide the latest version of operation, installation, and maintenance manuals (i.e. practices, user's guide, etc.) for each system installed as provided by the original manufacturer with all new equipment.

**1.1.7. Workplace Condition.** At day's end, the Contractor shall remove all debris and surplus materials from the work place. Equipment and materials required to complete the work effort may remain on site as long as they are organized/stored in the lay-down area in a manner that does not cause a safety hazard. The workplace shall be clean of all debris and restored to original or better condition upon completion of the project.

**1.1.8. Schedule of Work.** The work shall be started within 90 days of award of the contract to the Contractor. The work shall be completed within 5 business days of starting work. Contractor shall propose a schedule of work within 7 days of notice of award to the Government Project Manager. The Government Project Manager will review the proposed schedule of work and will coordinate with the Contractor if the proposed schedule is not feasible. The approved schedule of work will be determined within 14 days of contract award.

## **1.2. Testing, Drawings, and Acceptance.**

**1.2.1. Contractor Testing Plan.** The Contractor shall provide a test plan as to how the system will be tested to demonstrate to the Government that the system is fully operational, meets/exceeds the specified requirements, and is fully ready to be placed into service. The Contractor shall test the system to demonstrate to the Government quality assurance evaluation of the system prior to removing and disposing of the old Long Range Ethernet over Copper System. These tests shall be accomplished prior to the system being placed into service and the old system removed.

**1.2.2. Contractor Testing.** The Contractor shall conduct on-site testing in accordance with Original Equipment Manufacturer (OEM's) installation manuals, practices, and the appropriate vendor's test procedures. The Contractor shall furnish all test equipment and personnel required to conduct all required testing. During any testing phase, the Government reserves the right to perform any of the Contractor-performed inspections and tests to assure solutions conform to prescribed requirements. The Contractor shall provide on-site support during the acceptance testing. The Contractor shall participate with the Government in the testing of the complete communications system. When any test of the system, subsystem, or its components fails to meet the requirements of the test, Government acceptance and payment will be withheld until the cause of the failure is corrected and meets the Government's satisfaction. The Contractor shall make all corrective actions discovered upon testing to bring any deficiencies up to compliance as specified. After appropriate corrective action has been taken, all tests, including those previously completed (i.e. failed test and those related to the corrective action), shall be repeated and successfully completed prior to Government acceptance.

**1.2.3. Drawings.** The Contractor shall provide drawings reflecting "AS-BUILT" configuration to 90 CS. The final drawings will be provided to 90 CS prior to the final acceptance of the work to perform final review of drawings and inspect installation. There are no existing "AS BUILT" drawings of the system.

**1.2.4. Acceptance.** The Government will review the Contractor's installation to ensure all PWS requirements are met, and all required items were complied with.

### 1.3. Deliverables.

Deliverable	Requirement	PWS Paragraph	Government PoC
Contract Manager Information	Within 3 days of contract award	4.11.1.	Project Manager
Proposed Schedule of Work	Within 7 days of contract award	1.1.8.	Project Manager
Approved Schedule of Work	Within 14 days of contract award	1.1.8.	Project Manager
Project start date	Within 90 days of contract award	1.1.8.	N/A
Project completion date	Within 5 days of project start date	1.1.8.	N/A
Contract Personnel List	No later than 14 days before project start date	4.3.	Project Manager
Test and acceptance plan	Upon arrival at work site.	1.2.2	Project Manager
As-Built Package	Upon project completion	1.2.3.	Project Manager
Written procedures and required information for warranty services at or prior to site acceptance.	Prior to site acceptance	4.13.	Project Manager
Operation, installation, and maintenance manuals	Prior to site acceptance	1.1.6.	Project Manager

## 2. Services Summary.

The contractor service delivery requirements are summarized into performance objectives that relate directly to standards of performance required to meet mission essential needs. For the Performance Objective to be met, service delivery must be in substantial compliance with applicable performance standards. The Performance Threshold describes the minimum overall levels of service delivery required for acceptable quality control. Failure to meet these Performance Thresholds means that contractor Quality Control is unacceptable. The following is a list of the key performance objectives that will be verified as contractually compliant by Government personnel; however, inspection of any contract requirement is authorized.

Performance Objective	PWS Para.	Performance Threshold	
SS-1: Install, configure, and demonstrate the operations new system and remove and dispose the current system	1.1.	Services must meet all service installation standards as identified or referenced.  Any deviation from standard must be approved by 90 CS.	Periodic Surveillance Final Walkthrough Customer Feedback
SS-2: Conduct on-site testing	1.2	Testing must meet all testing standards as identified or referenced in the approved testing plan.	100% Inspection
SS-3: Submit Deliverables	1.3.	No more than one (1) late deliverable	100% Inspection

## 3. Government Furnished Property and/or Services

### 3.1. Government Furnished Property.

3.1.1. None

### 3.2. Government Furnished Services.

3.2.1. Utilities. The Government will furnish the electricity, water, and sewage services (as necessary) for the accomplishment of service IAW this PWS.

### 3.3. Government Property Incidental to the Place of Performance.

3.3.1. None

## 4. General Information.

### 4.1. Quality Control.

The contractor is required to control the quality of service delivery and offer to the Government for acceptance only services which conform to contract requirements. The overall control of quality must meet the specified performance thresholds for each requirement in the Services Summary.

### 4.2. Quality Assurance

The Government will evaluate the contractor's performance by monitoring the contractor's performance to ensure services are received. The Government will evaluate the contractor's performance through on-site inspections and receipt of customer complaints. The Government will inspect each task as completed. The Government will investigate complaints received from customers. The Government shall make final determination of the validity of customer complaint(s) in cases of disagreement with customer(s). Remedies for non-conforming services will be resolved IAW the applicable Inspection/Acceptance clause attached within the contract.

4.2.1. Any matter concerning a change to the scope, prices, terms or conditions of this contract shall be referred to the Contracting Officer and **NOT** to the authorized representative(s).

4.2.2. The services to be performed by the contractor during the period of this contract shall (at all times and places) be subject to review by the Contracting Officer or authorized representative(s).

### 4.3. Security Requirements.

The Government will provide the contractor with access to the buildings necessary to perform the work under this PWS. The contractor shall be subject to all Department of Defense rules and regulations while working on this military installation. The contractor shall provide all necessary personnel information for base access to the Government Project manager at least 14 days prior to beginning work.

4.3.1. **Personnel Information.** The Contractor shall submit a written request on company letterhead to the Project Manager listing the following: contract number, location of work site, start and stop dates, and names of contractor personnel needing access to the base. When reporting to the registration office, the authorized Contractor personnel must provide a valid driver's license for each individual and valid vehicle insurance certificate or rental agreement for each vehicle, to obtain access to the base.

4.3.2. **Security Clearance.** The stated work and associated products shall be performed at the UNCLASSIFIED level. Individuals performing work under this contract shall comply with applicable program security requirements. The work will take place in secure areas where Contractor employees must be escorted at all times. The Contractor must coordinate access to secure areas with 90 CS Project Manager upon arrival at the work site. It is the Government's responsibility to provide escorts.

### 4.4. Physical Security.

The contractor shall be responsible for safeguarding all Government property provided for contractor use. At the close of each work period, Government facilities, property, and materials shall be secured.

4.4.1. **Contractor Property.** The contractor shall be responsible for safeguarding all contractor property. The Government is not responsible for lost or stolen contractor property.

#### 4.5. Operational Security (OPSEC).

The contractor shall adhere to the following minimum requirements in support of this requirement:

4.5.1. Contractor personnel shall not discuss government operations in public or over unprotected or unencrypted communications. Official Business, controlled unclassified information may only be transmitted as directed in the PWS.

4.5.2. The Contractor shall not post to company websites, publications, newsletters or other media any images, data or information that reveal sensitive government operations, personnel, equipment, and/or classified or controlled unclassified information. When in doubt, company press releases related to this contract should be coordinated through the Contracting Officer Representative (COR) or Contracting Officer, as applicable.

4.5.3. Because observation of events, operations, physical changes, etc. may reveal National Security information, specific restrictions are needed to preclude unintentional release of this information to unauthorized parties. (Unauthorized disclosure and transfer of National Security Information is punishable under 18 USC § 793.) Therefore, contractor personnel shall not disclose to unauthorized third parties, post to unofficial sites (including Social Networking sites) any images, data or information, or observed events that reveal sensitive government operations, personnel, equipment, including, but not limited to:

4.5.3.1. Tactics, techniques and procedures, production or work schedules, any visible or concealed modifications, upgrades, additions to vessels, aircraft, or weapons or equipment; increases, change, or decreases in work/deployment frequency or government personnel, vehicle, vessel or aircraft movements; specialized equipment orders, deliveries, shipments, etc., Unauthorized disclosures and attempts to solicit this type of information by unauthorized third parties or others not affiliated with this contract shall be reported to the COR or Contracting Officer, as applicable.

4.5.3.2. Government issued badges, identification shall be removed and/or concealed from plain sight when off base and shall not be left in vehicles or unprotected. Badges and passes may not be duplicated, copied or loaned to others. Lost or stolen identification badges, vehicle passes etc. will be immediately reported to the COR, Contracting Officer, and/or installation Security Office.

#### 4.6. Location/Hours of Operation.

4.6.1. **Location.** Place of performance is at FE Warren AFB WY. Telework shall not be permitted for this contract.

4.6.2. **Normal Hours of Operation.** The contractor shall perform the services required under this contract during the normal operating hours of the site. The average workweek consists of 7:30 AM and 4:30 PM (MST), Monday through Friday, excluding holidays and base closures. During the planning phase of the project, the Government will identify any locations that require installation and cutover after normal business hours to avoid unnecessary operational mission impact. Any site work requested by the Contractor to be performed outside of normal duty hours shall be coordinated with the 90 CS Project Manager and Contracting Officer at least 7 working days in advance. The contractor shall accomplish the installation with minimum disruption of daily resident.



**4.6.3. Recognized Holidays.** The contractor is not required to provide service on the following days:

New Year's Day	Labor Day
Martin Luther King Day	Columbus Day
Presidents Day	Veteran's Day
Memorial Day	Thanksgiving Day
Juneteenth	Christmas Day
Independence Day	

If the holiday falls on Saturday, it is observed on Friday. If the holiday falls on a Sunday, it is observed on Monday.

#### **4.7. Conservation of Utilities.**

The contractor shall instruct employees in utilities conservation practices. The contractor shall be responsible for operating under conditions which prevent the waste of utilities which include the following:

**4.7.1.** Lights shall be used only in areas where and when work is actually being performed.

**4.7.2.** Mechanical equipment controls for heating, ventilation, and air conditioning systems shall not be adjusted by the contractor or by contractor employees unless authorized.

**4.7.3.** Water faucets or valves shall be turned off after the required use has been accomplished.

**4.7.4.** Government telephones shall be used only for official Government business.

#### **4.8. Environmental Controls.**

**4.8.1. Compliance with Laws and Regulations.** The contractor shall be knowledgeable of and comply with all applicable Interstate, Federal, State, and Local laws, regulations, and requirements regarding environmental protection. In the event environmental laws/regulations change during the term of this contract, the contractor is required to comply as such laws come into effect. If there is an increase or decrease in cost as a result of the change, the contractor shall inform the Contracting Officer pursuant to notice requirements and negotiate a modification to the contract.

**4.8.2. Notification of Environmental Spills.** If the contractor spills or releases any substance contained in 40 CFR 302 into the environment, the contractor or its agent shall immediately report the incident to the F.E. Warren AFB Fire Dept at 911 (landline) or 307-773-2931 (cell phone). The liability for the spill or release of such substances rests solely with the contractor and its agent.

**4.8.3. Hazardous Material (HM).** In the event that hazardous materials will be used in the execution of this contract, the contractor shall comply with all federal, state and local regulations concerning the use, storage, and reporting of HM in accordance with AFI 32-7086, Hazardous Materials Management. The contractor shall be required to obtain authorization per the Installation Hazardous Materials Management Program before ordering or purchasing any hazardous product and may not bring a HM onto F.E. Warren AFB property, nor use a HM, until the contractor receives all required authorizations. This authorization process may take up to three weeks.

**4.8.4. Green Procurement Program (GPP).** In performance of this contract, contractors shall use Environmental Protection Agency (EPA) designated recycled content products, Information Technology (IT) Energy Star products/appliances, Federal Energy Management Program (FEMP) Designated Energy Efficient Low Stand By Power products/appliances, U.S. Department of Agriculture (USDA) Bio based/Bio preferred products, Environmentally preferable products, Electronic Product Environmental Assessment Tool (EPEAT) registered products, Water Sense or other water efficient products, non- or Low Ozone depleting substances under the Significant New Alternatives Policy (SNAP), non or Low toxic or hazardous constituents (e.g. non-VOC paint) and any other environmentally sustainable product/method, to the greatest extent possible.

**4.8.5. Asbestos.** Due to the age of the building, the contractor must test for asbestos and lead prior to drilling into the real property. The government will not provide an asbestos report and it is incumbent upon the contractor to conduct the testing and abatement if required for installation. If the contractor detects asbestos or lead, the contractor must properly abate and dispose of the asbestos/lead (released during any drilling) IAW applicable laws and regulations. When testing, abating, or disposing, the contractor must take the necessary precautions to protect their employees, the public, and building occupants. If desired by the contractor, the contractor can hire a sub-contractor to conduct the asbestos/lead testing and abatement; however, ensuring proper qualifications will be the responsibility of the contractor.

#### **4.9. Safety Requirements.**

**4.9.1.** In performing work under this contract, the contractor shall:

**4.9.1.1.** Conform to the safety requirements contained in the contract for all activities related to the accomplishment of the work.

**4.9.1.2.** Record and report promptly (within one hour), to the project manager or contracting officer, all available facts relating to each instance of damage to Government property or injury to either contractor or Government personnel.

**4.9.1.3.** In the event of an accident/mishap, take reasonable and prudent action to establish control of the accident/mishap scene, prevent further damage to persons or property, and preserve evidence until released by the accident/mishap investigative authority through the contracting officer.

**4.9.2. Confined Spaces.** If applicable the Contractors entering confined spaces during the execution of this effort are responsible for the safety of their personnel and for their confined space permit program as outlined in AFI 91-203, Air Force Consolidated Occupational Safety Instruction. All confined space operations must be coordinated with the Base Safety Office prior to start of work. The primary Contractor is responsible for all Sub-Contractor confined space operations.

#### **4.10. Permits.**

The Contractor shall be responsible to coordinate, complete, and process all permits required to complete the installation.

#### **4.11. Contractor Personnel.**

**4.11.1. Contract Manager:** the contractor shall provide a contract manager who shall be responsible for the performance of the services. The contract manager must be able to read, write, speak, and understand English.

4.11.1.1 The contract manager shall have full authority to act for the contractor on all contract matters relating to daily operations of this contract.

4.11.1.2 The contract manager shall be available within 24 hours of a request by the Government to meet to discuss problems.

4.11.2. **Contractor Employees:** the contractor shall not employ persons for work on this contract if such employee is a potential threat to the health, safety, security, general wellbeing or operational mission of the installation and its population.

4.11.2.1. Contractor personnel shall present a neat appearance and be easily recognized as contractor employees. This may be accomplished by wearing distinctive clothing bearing the name of the company or by wearing appropriate badges, which contain the company name and employee name in English.

4.11.2.2. The contractor shall utilize employees who have adequate training, skills, and knowledge to perform the requirements in this PWS.

4.11.2.3. The consumption of alcoholic beverages by Contractor personnel while on duty is strictly forbidden. The use of illegal drugs by Contractor Personnel is strictly forbidden. The Contractor shall immediately remove any personnel who is under the influence of alcohol or drugs.

4.12. **Records.** The contractor shall be responsible for creating, maintaining, and disposing of only those government required records that are specifically cited in this PWS or required by the provisions of a mandatory directive listed in the 90th Telecommunications Installation Criteria Handbook, Applicable Publications and Forms. If requested by the Government, the contractor shall provide the original record, or a reproducible copy of any such record within five working days of receipt of the request.

#### 4.13. **Warranty.**

4.13.1. **Contractor Warranty.** The contractor shall provide a warranty on the equipment and installation. The Contractor's minimum warranty provisions shall include:

4.13.1.1 The contractor shall provide a warranty not less than 1-years on the installation.

4.13.1.2 The contractor shall provide a warranty on the equipment of not less than 1-year or the manufacturer's standard commercial warranty, whichever is longer.

4.13.2. The warranty period shall begin on the date of the final acceptance of the installed product.

4.13.3. Provision of all parts and labor shall be at no additional charge to the Government.

## 5. Appendices

A. Applicable Standards

B. Current Equipment Locations

## APPENDIX A

### APPLICABLE STANDARDS

The following list is not all-exclusive. The Contractor shall comply with applicable commercial codes and standards

OSHA CFR 29 Part 1910-268 – Telecommunications

ANSI/TIA-606-B Administration Standard for Telecommunications Infrastructure

TIA-568-C Commercial Building Telecommunications (568C.1, 568C.2, 568C.3) Cabling Standard

ANSI/TIA-607-B Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications

TIA-569-C - Commercial Building Standard for Telecommunications Pathways and Spaces TIA-570-C –Residential Telecommunications Infrastructure Standard

TIA-758 B - Customer-owned Outside Plant Telecommunication Infrastructure Standard

BICSI TDM Manual - Building Industries Consulting Services International Telecommunications Distribution Methods (TDM) Manual

RUS Bulletin 1751F-801 – Electrical Protection Fundamentals

NFPA 70 - National Electric Code

## APPENDIX B

### PUBLICATIONS/INSTRUCTIONS

Building# A Equipment type	Building # B Equipment type	Replacement Item	Rack units (RU) required	Rack mount Kit needed (Y/N)	Is there sufficient Rack Space available?	AC or DC Power use?	After hours cutover requirement? Y/N	# of Copper Pairs	Distance in Ft	Termination block style use for the pairgain and LRE chassis connections?
BLDG 65. Chassis Campus-Star CMU 810 W/ADC Campus RS Line Unit	BLDG 65. Chassis Campus-Star CMU 810 W/ADC Campus RS Line Unit	ML2300 DSL Concentrator	4	Y	Y	AC	N	25 Pairs	80	Wire Wrap
	B228 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	2,066	110 Block
	B236 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,674	110 Block
	B21 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	N	AC	N	2 Pairs	2,686	110 Block
	B305 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	NA	N	AC	N	2 Pairs	.81 miles	110 Block
	B79 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	N	AC	N	2 Pairs	1,919	110 Block

	B41 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	1,244	110 Block
	B111 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	.62 miles	110 Block
	B234 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,081	110 Block
	B356 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,965	110 Block
BLDG 65. Chassis Campus-Star CMU 710 W/ADC Campus RS Line Unit	B114 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	.63 miles	110 Block
	B226 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	N	AC	N	2 Pairs	1,131	110 Block
	B47 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	890	110 Block
	B47 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	890	110 Block

	B218 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	.86 miles	110 Block
	B72 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	995	110 Block
	B220 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	2,174	110 Block
BLDG 65. Chassis Campus-Star CMU 710 W/ADC Campus RS Line Unit	B93 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	2,080	110 Block
	B251 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	1.13 miles	110 Block
	B80 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	Y	AC	N	2 Pairs	1,850	110 Block
BLDG 65. Chassis Campus-Star CMU 810 W/ADC Campus RS Line Unit	B21 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y-Wood	N	AC	N	2 Pairs	2,686	110 Block
	B465 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	1.04 miles	110 Block

	B232/233 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,025	110 Block
	B356 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,965	110 Block
	B262 Campus-HRS Desktop Unit W/ Campus-REX2 RS or REX3 interface card	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	3,136	110 Block
BLDG 65. Chassis CISCO 2950 LRE	B314 Cisco Systems 585 LRE	ML624i DSL Modem	1	N	N	AC	N	2 Pairs	1,522	110 Block
	B217 Cisco Systems 585 LRE	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	2,843	110 Block
	B916 Cisco Systems 585 LRE	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	1,032	110 Block
	B2145 Cisco Systems 585 LRE	ML624i DSL Modem	1	Y	Y	AC	N	2 Pairs	3,277	110 Block