PERFORMANCE WORK STATEMENT

FOR

MULTIPLE BUILDING

90 CS PREMISE WIRING UPGRADE

Francis E. Warren Air Force Base, Wyoming

2 Feb 24

Table of Contents

1. Description of Services.

This contract is a single award 5-year Indefinite Delivery, Indefinite Quantity (IDIQ) contract.
Minimum: The total amount to be issued as first task order at time of award.
Maximum: The total amount of all cable replacement services as modified throughout the contract period, limited only to contract scope (currently estimated to be $2M).

The contractor shall provide all management, tools, supplies, equipment, and labor necessary to perform cable replacement services at F.E. Warren Air Force Base, Wyoming, in buildings 207, 208, 212, 214, 215, 216, 245, 316, 320, 322, 332, 341, 363, 665, 762, 781, 837, 916, 930, 934, 1240, 1245, 1247, 1270, 1274, 1285, 1501, 4328, in accordance with Attachment 1a - 90th Communications Squadron (CS) Telecommunications Installation Criteria Handbook (TIC) where applicable, and applicable federal, state, local laws and regulations and this performance work statement (PWS). Appendix C 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. This list of cable replacement services is complete as of the time of this solicitation; however, it is reasonably anticipated that some deletions, changes, and/or additions may be added to this contract during the performance period of this contract.

1.1. Basic Services. The contractor shall remove Category 5 (CAT 5) or older cables that run from the Main Communications Equipment Room (CER) to each communication jack. The cables connected to the jacks identified in Attachment 1b – Floor Plans shall be replaced with new Category 6 (CAT 6) cables. Analog cables terminated to 66 termination punch down Blocks shall be removed unless otherwise directed. All outdated cabling shall be removed from the building by the contractor as defined in this PWS and disposed of. Additional work shall include but is not limited to install faceplates, patch panel(s), cable management, terminations, labeling, and any other work as identified in this PWS.

1.1.1. Cable Management. The contractor should use existing cable pathways where there are no defects to the support system and cable fill will not exceed the 40% rule as stipulated in the National Electrical Code (NFPA 70). If new cable pathways need to be installed the contractor will use the most direct route available and adhere to the TIC standards of installation (TIC page 4). All cable pathways, currently existing or newly installed, will be secured per TIC standards. The Contractor shall be responsible to define the space and cable pathway (equipment rooms, telephone closets, conduits, and wire ways) at the sites and obtain COR approval prior to position in new pathway. The estimated percentage of type of material (ceilings/walls) the contractor may encounter for all planned buildings projects is 75% drop ceilings and 25% solid ceilings, and 80% sheetrock walls and 20% solid walls. The Contractor shall not make any alterations to real property.

1.1.2. Cable Replacement. The contractor shall remove current cables that run from the communications room that are terminated to patch panels and 66 block, to the communication jack and replace with new CAT 6 cable. Each communication jack in a duplex outlet will have two CAT 6 cables, one for voice (White Bezel) and one for data (Green Bazel) in Appendix A and B. Each cable run shall be a continuous individual cable from the communication jack to the CER (TIC page 2). The cable jacket for voice shall be white in color and the Lan cable jacket shall be blue in color. The CAT 6 cable shall be labeled (TIC page 7) and meet the technical specifications (TIC page 2) of the TIC.

1.1.2.1 Cable Removal. All CAT 5 or older cables must be removed from the building and disposed of. No cables shall be left in place.

1.1.3. Analog Cable Removal. The analog cables connect to 66 termination punch down block shall be removed from the building and disposed of.

1.1.3.1 Analog Block Removal. The contractor shall remove and dispose of the analog block after the analog cables are removed. No cables shall be left in place.

1.1.4. Faceplate Installation. All existing outlet faceplates shall be removed and replaced, like for like, with a new faceplate. The faceplate color shall be the same as the buildings existing faceplate color, white or ivory. The faceplate shall be able to comply with the labeling requirements (TIC page 8). The faceplates shall be labelled as per the TIC labeling requirements (TIC page 8). The faceplates must be name brand IAW Appendix D. The bezel color for Voice shall be white and LAN shall be green.

1.1.5. Jack Assembly Termination. The contractor shall use CAT 6 RJ45 jack assembly. The jack assembly shall meet the RJ45 Pinout T-568B standard (TIC page 9), see Appendix A for diagram.

1.1.6. Patch Panel Installation. The contractor shall install new CAT 6 patch panel with 110 interfaces, punch down style in the CER rack. The patch panel shall have a minimum of 12 spare ports after all cables are connected. The contractor shall make the connections to each port. Each jack from a communication jack outlet shall be terminated on the same patch panel in consecutive order (White first, then Blue corresponding) (TIC page 5), see Appendix B for diagram. The patch panel shall be labelled as per the TIC labeling requirements (TIC page 7).

1.1.6.1. Patch Panel Removal. The contractor shall remove the old patch panel from the rack after all the cables have been removed and the new patch panel has been installed.

1.1.7. Workplace Condition. The workplace shall be clean of all debris and restored to original. The contractor may be required to move furniture in some buildings to access work locations. It is estimated that approximately 50% of the buildings will require furniture to be moved to access work location. Furniture may include but not limited to desks, wall lockers, and cabinets.

1.1.8. Drop Ceiling Panels. The Contractor shall be responsible for replacing ceiling panels that are damaged by contractor personnel.

1.1.9. Service Outages. The Contractor shall coordinate planned outages with the Contracting Officer Representative (COR) at least 7 calendar days in advance of the outage if the implementation necessitates disruption of service, (e.g., communications, electrical, or other utilities). The Contractor shall be responsible for preventing any unscheduled outages (i.e., cutting or disabling any in-service cables or equipment).

1.1.9.1 Service Impact. The Government will attempt to provide alternative work sites for the government employees to provide minimum impact on the contractor in performance of the work. However, if alternative work locations cannot be arranged by the Government for the government employees in an area, the contractor shall leave the current lines in place as needed for the government employee to continue to work until the cutover has occurred and will then remove and dispose of the old cables. No cables shall be left in place. The Contractor shall be required to work around government employees to accomplish the requirements specified in the PWS.

1.1.10. Cable Management. In addition, the contractor shall secure the pathway with fire stop/block material.

1.1.11. Orders.

1.1.11.1. Issuing Task Orders. For each task order (TO), the Contracting Officer will furnish the Contractor one copy of the Task Order Proposal Request (TOPR), which lists all due dates and pertinent information pertaining to the task order. Upon receipt and COR validation of the contractor's proposal, the contracting officer will issue a task order pursuant to FAR 16.505 "Ordering."

1.1.11.2. Pre-TOPR Site Visit. Prior to negotiating any individual TO, the Government and the contractor will conduct a pre-proposal site visit for each TO. Discussions may include, but are not limited to, scope of work, CLIN quantities, method of completion, sequence of operations, progress schedule, means of access to project site, delivery and storage of materials and equipment, work restrictions, coordination requirements, project goals, liquidated damages, and potential difficulties/problems.

1.1.11.3. TOPR Response Time. The time for submittal of the contractor's proposal for each individual requirement will be determined by the Government, but will normally be:
1) Ten (10) business days for routine task orders.
2) Five (5) business days for quick response task orders.

1.2. Period of Performance.

1.2.1. The period of performance shall consist of a 5-year ordering period, from the date of award, with no options periods. TOs issued under the contract will be in accordance with the Defense Federal Acquisition Regulation Supplement (DFARS) Clause 252.216-7006 Ordering and Federal Acquisition Regulation (FAR) 52.216-22 Indefinite Quantity of this solicitation/contract. The base period of performance for TOs shall start prior to the end of the 5-year ordering period.

1.2.2. Schedule of Work. Start date and completion date shall be identified in task order. Contractor shall submit schedule of work within 7 calendar days of issuance of the order to the COR. The COR will review the schedule of work and will coordinate with the Contractor if the schedule is not feasible. The approved schedule of work will be determined before issuance of order.

1.3. Standards, Testing, Drawings, and Acceptance.

1.3.1. Standards. The Contractor will be furnished with one electronic copy of the Performance Work Statement (PWS), 90 CS TIC Handbook, and Floorplans. The Contractor may reproduce the floorplans and specifications at the Contractor's own expense if additional copies are needed. The Contractor shall check all floorplans and PWS immediately upon receipt for discrepancies and notify the CO immediately of any/all discrepancies found in the form of a Request for Information (RFI). The Contractor shall compare all floorplans and verify the installation before laying out the work and shall be responsible for any errors which might have been avoided thereby.

1.3.2. Contractor Testing. The Contractor shall certify and test all telecommunication cable as required (TIC page 6). A copy of the results shall be provided to the COR using common electronic software (i.e., PDF, Word, etc.) prior to acceptance of the order. The Contractor shall make all corrective actions discovered upon testing to bring any deficiencies up to compliance as specified (TIC page 6).

1.3.3. Drawings. The Contractor shall provide drawings reflecting "AS-BUILT" conditions to the COR with the cable certification records. These shall include overall routing of new cable and butterfly drawings of each communication conduit used indicating entry and exit of the installed cabling in those conduits, as well items identified in the TIC (TIC page 7). The final drawings shall be provided to the COR prior to acceptance of the order. COR will complete a final review of drawings and inspect installation (TIC page 6 and 7).

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

1.4. Deliverables Table

Deliverable	Requirement	PWS Paragraph	Government PoC
Contract Manager Information	Within 3 business days of contract award	4.9.1.	COR
Proposed Schedule of Work	Within 7 calendar days of issuance of order	1.2.2.	COR
Contract Personnel List	No later than 14 calendar days before project start date	4.3.1.	COR
Strand test results	Upon project completion	1.3.1.	COR
As-Built Package	Upon project completion	1.3.2.	COR

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 shall be verified as contractually compliant by Government personnel; however, inspection of any contract requirement is authorized.

Performance Objective	PWS Para.	Performance Threshold	Method of Surveillance
SS-1: Replace Cat 5 and older cables with CAT 6 cables and associated work	1.3.3.	Services must meet all Service Installation Standards and Requirements as identified or referenced. Any deviation from standard must be approved by 90 CS.	Periodic Surveillance Final walkthrough Customer Feedback
SS-2: Test CAT 6 cables	1.3.1.	100% of installed CAT 6 cables are fully functional	100% Inspection
SS-3: Submit Deliverables	1.4.	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 shall evaluate the contractor's performance by monitoring the contractor's performance to ensure services are received. The Government shall evaluate the contractor's performance through on-site inspections and receipt of customer complaints. The Government shall inspect each task as completed. The Government shall 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 shall be resolved IAW the applicable Inspection/Acceptance clause attached within the contract.

4.2.1. 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 shall 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 COR 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 no later than 14 calendar days before beginning work. 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. Anti-Terrorism. If the Contractor (contract employees/subcontractors) identify any suspicious activity, they shall contact the Base Defense Operations Center (BDOC) at 307-773-3501 (On-installation)/Missile Security Control (MSC) at 307-773-2701 (Off-installation) and notify the CO and COR that they contacted the BDOC and/or MSC.

4.3.2. Physical Security. The Contractor shall be responsible for all contractor property on Government property. At the close of each work period, Government facilities, Contractor property, and Contractor materials shall be secured. The Government shall not be held responsible for any loss experience by the contractor resulting from theft or vandalism.

4.4. Operational Security (OPSEC).

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

4.4.1. 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.

4.4.2. 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 COR or Contracting Officer, as applicable.

4.4.3. 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:

4.4.3.1. 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 Project Manager or Contracting Officer, as applicable.

4.4.3.2. 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. shall be immediately reported to the Project Manager, Contracting Officer, and/or installation Security Office.

4.5. Location/Hours of Operation.

4.5.1. Location. Place of performance is at F. E. Warren AFB WY. Telework shall not be permitted for this task order/contract.

4.5.2. 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 (MDT), Monday through Friday, excluding holidays and base closures. During the planning phase of the project, the Government shall 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 COR at least 7 working days in advance. The contractor shall accomplish the installation with minimum disruption of daily resident.

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

- New Year's Day (January 1).
- Birthday of Martin Luther King, Jr. (Third Monday in January).
- Washington's Birthday (Third Monday in February).
- Memorial Day (Last Monday in May).
- Juneteenth National Independence Day (June 19).
- Independence Day (July 4).
- Labor Day (First Monday in September).
- Columbus Day (Second Monday in October).
- Veterans Day (November 11).
- Thanksgiving Day (Fourth Thursday in November).
- Christmas Day (December 25).

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

4.6. 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:

4.6.1. Lights shall be used only in areas where and when work is being performed.

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

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

4.6.4. Government telephones shall be used only for official Government business.

4.7. Environmental Controls.

4.7.1. 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 because of the change, the contractor shall inform the Contracting Officer pursuant to notice requirements and negotiate a modification to the contract.

4.7.2. 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 substance rests solely with the contractor and its agent.

4.7.3. Hazardous Material (HM). If hazardous materials shall 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 AFMAN 32-7002, Environmental Compliance and Pollution Prevention. 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.

4.7.4. 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.

4.7.5. 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 shall 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 shall be the responsibility of the contractor.

4.8. Safety Requirements.

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

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

4.8.1.2. 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.

4.8.1.3. 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.

4.8.2. 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 DAFMAN 91-203. All confined space operations must be coordinated with the Base Safety Office prior to start of work. The primary Contractor is responsible for all Subcontractor confined space operations.

4.9. Contractor Personnel.

4.9.1. Contract Manager: The contractor shall provide a contract manager to the COR within three (3) business days of task order award who is knowledgeable of telecommunication cable installations and shall

be responsible for the performance of the services. The contract manager must be able to read, write, speak, and understand English.

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

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

4.9.2. 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.

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

4.9.2.2. 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. Contractor personnel who interact with Government personnel shall be able to communicate effectively in English.

4.9.2.3. 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.

4.10. 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.

4.11. Warranty.

4.11.1. Contractor Warranty. The contractor shall provide a warranty not less than 1-years on all cabling and equipment installed. The contractor shall provide any OEM pass through warranty and standard commercial warranties applicable to the products being purchased at no cost. The warranty shall be at a minimum one year or manufacturers standard warranty, whichever is longer. All warranty periods shall start from the date of system and/or project acceptance. The Contractor shall provide written procedures and required information for warranty services at/or prior to site acceptance to the project manager. The Contractor's minimum warranty provisions shall include:

4.11.1.1 Should the failure exceed maintenance support capabilities; the contractor shall complete the corrective action no later than 45 days after being notified of the problem.

4.11.1.2 The corrective action may not include splicing of existing lines. The entire line must be replaced if it is a problem.

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

5. Appendices

A. CAT 6 Wiring, Termination, & Connections

B. Sample Floor Plan W/Cable Numbering

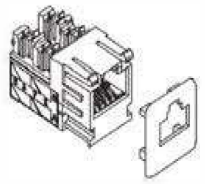
C. Documents

D. Brand Name Requirement

E. Attachments

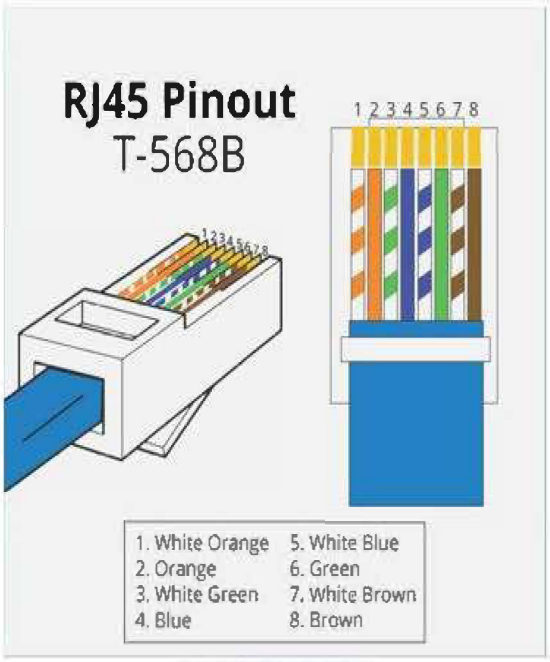
APPENDIX A

CAT 6 WIRING, TERMINATION & CONNECTIONS

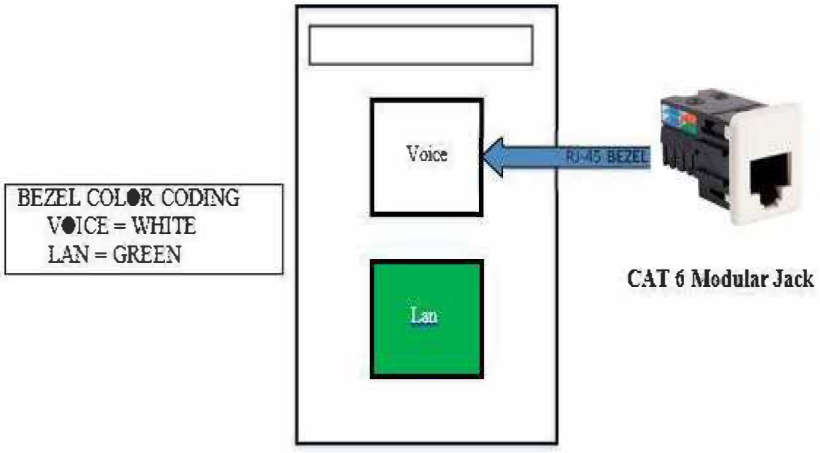


Jack Assembly Detail

CAT 6 Modular Jack



568 B Wiring Pattern



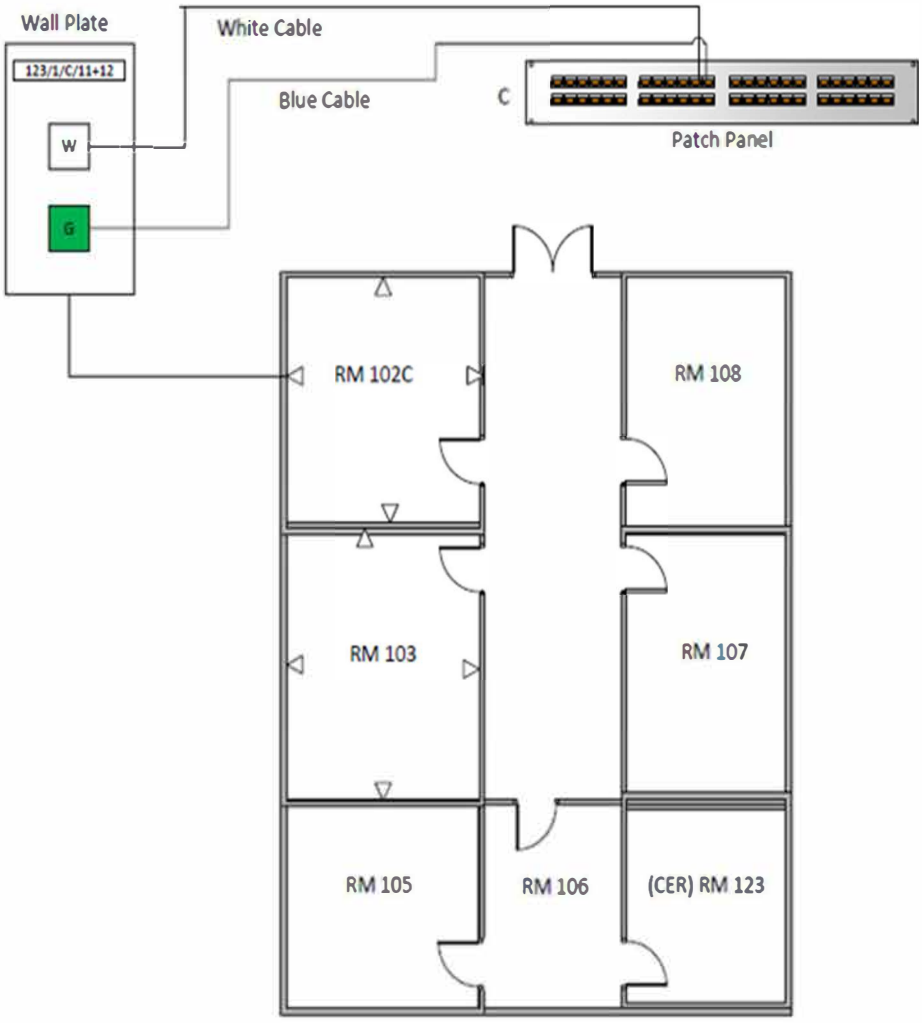
CAT 6 Modular Jack

Duplex Single Gang Outlet
RJ45 Telecommunications Outlet

INFORMATION OUTLET WALL PLATE DETAIL

APPENDIX B

SAMPLE FLOOR PLAN W/CABLE NUMBERING



Sample Floor Plan

Mark each cable at each end for cable identification. Label each faceplate with the CER Number, Rack Number, Patch Panel Letter, and Port Number(s): (123/1/C/11+12). Jacks installed on the same faceplate will be punched down and numbered consecutively on the patch panel (11+12). White cable will terminate on a faceplate using a modular jack with a removable white bezel; blue cable on a modular jack with a removable green bezel. Post the drawing with the identification of outlets and room numbers in the CER upon completion.

Sample Cable Numbering Plan

APPENDIX C

The following documents are referenced within this document or are hereby recognized as a standard of good practice to be followed during the performance of all work.

National Fire Protection Association	NFPA 70 *National Electrical Code*
Underwriter's Laboratories	*UL Standards for CAT 6 UTP Wire*
Rural Utility Service	PE-39 *Specifications for Filled Telephone Cable*
	PE-80 *Specifications for Gas Tube Surge Arrestors*
	PE-89 *Specifications for Filled Telephone Cable with Expanded Insulation*
	Uniform Building Code (UBC)
NEMA	
Manufacturer's Association	AFR 88-15 *Criteria for AF Construction*
Air Force Documents	AF TB 95-03 *Cabling and Distribution Systems*
	AFSSI 7010 *Emission Security Assessment*
	AFSSM 7011 *Emission Security Countermeasures* Review
	UFC 3-580-01 *Telecommunications Interior Infrastructure Planning and Design*
	MIL-HDBK-419A (Vol. 1 & 2) *Grounding, Bonding, and Shielding for Electronic Equipment and Facilities*
	MIL-STD-188-124B --- Grounding, Bonding and Shielding for Common Long Haul/Tactical Communications Systems Including Ground Based Communications-Electronics Facilities and Equipment
	FAA-STD-019 REV E --- Lighting and Surge Protection, Grounding, Bonding, and Shielding Requirements for Facilities and Electronic Equipment
	UL467 --- Grounding & Bonding Equipment
ANSI/TIA Standards	ANSI/TIA-526-7-A Measurement of Optical Power Loss of Installed Single-Mode Fiber Cable Plant, Adoption of IEC 61280-4-2 edition 2: Fiber-Optic Communications Subsystem Test Procedures – Part 4-2: Installed Cable Plant – Single-Mode Attenuation and Optical Return Loss Measurement
	ANSI/TIA-526-14-C Optical Power Loss

Measurement of Installed Multimode Fiber Cable Plant; Modification of IEC 61280-4-1 edition 2, Fiber-Optic Communications Subsystem Test Procedures- Part 4-1: Installed Cable Plant-Multimode Attenuation Measurement

ANSI/TIA-568-B *Commercial Building Telecommunications Cabling Standard*

ANSI/TIA-568-C.O *Generic Telecommunications Cabling for Customer Premises*

ANSI/TIA-568-C.0-1 *Generic Telecommunications Cabling for Customer Premises – Addendum 1, Updated References for Balanced Twisted Pair*

ANSI/TIA-568 *Generic Telecommunications Cabling for Customers Premises – Addendum 2, General Updates*

ANSI/TIA-568 *Commercial Building Telecommunications Cabling Standard*

ANSI/TIA-568 *Commercial Building Telecommunications Cabling Standard (Addendum 1 – Pathways and Spaces*

ANSI/TIA -568 *Commercial Building Telecommunications Cable Standard-Addendum 2, General Updates*

ANSI/TIA-568 *Balanced Twisted Telecommunications Cabling and Components Standards*

ANSI/TIA-568*-Errata Sheet*

ANSI/TIA-568 *Optical Fiber Cabling Components Standard*

ANSI/TIA-568 *Optical Fiber Cabling Components Standard – Addendum 1, Addition of OM4 Cabled Optical Fiber and Array Connectivity*

ANSI/TIA-568 *Broadband Coaxial Cabling and Components Standards*

ANSI/TIA-569 *Telecommunications Pathways and Spaces*

ANSI/TIA-569 *Telecommunications pathways and Spaces Addendum 1 – Revised temperature and Humidity Requirements for telecommunications Spaces*

ANSI/TIA-569*-Errata Sheet*

ANSI/TIA-570 *Residential Telecommunications Infrastructure Standard*

ANSI/TIA-598-*Residential Telecommunications Infrastructure Standard*

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

	ANSI/TIA-606-C-1 *Administration Standard for Telecommunications Infrastructure, Addendum 1* ANSI/TIA-607 *Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises* ANSI/TIA-607-C-1 *Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises, Addendum 1* ANSI/TIA-758 *Customer-owned Outside Plant Telecommunications Infrastructure Standard* ANSI/TIA-942 TSB 36 *Cable Requirements for Digital Systems* TSB 40 *Termination Components* TSB 67 *Cable Testing* SP2840 *CAT 6 Component Specifications*
International Electrical and Electronics Engineers Association	IEEE 802.6 *MAN System requirements* IEEE 802.8 *Fiber Optic Advisory Board Standards* IEEE 802.9 *Integration of Voice and Data Systems* IEEE 802.10 *LAN Security Measures* IEEE 802.3U *100BaseT and 100BaseX Standards* IBC International Building Code
Unified Facilities Criteria	UFC 3-380-01 Telecommunications Building Cabling Systems Planning and Design
BITSEP Handbook	Version 3.0 August 2010

90th Communications Squadron Telecommunications Installation Criteria

Air Force Instructions 91-203 Air Force Consolidated Occupational Safety Instruction

APPENDIX D

90th Communication Squadron has a small supply of Optical Cable Corporation parts to replace damaged jacks, bezels, or faceplates. The table below is a list of manufacturer's part number and is a list of products that meet the product specifications of the PWS and TIC Handbook 2022. This list is not a comprehensive list of Optical Cable Corporation part numbers.

Description	Manufacturer Part Number
Duplex Faceplate / Office White	FPSR0201
Duplex Faceplate / Ivory	FPSR0200
Quad-plex Faceplate / Office White	FPSR0401
Quad-plex Faceplate / Ivory	FPSR0400
Jack UMJ CAT6 568A/B / Office White	UMJA601
Jack UMJ CAT6 568A/B / Green	UMJA604
Jack UMJ CAT6 568A/B / Black	UMJA602D

APPENDIX E

ATTACHMENTS
Attachment 1a – TIC Handbook
Attachment 1b – Floor Plans