

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

PROJECT TITLE:

Replace Fire Alarm System, Bldg. 9230

CONTRACT NUMBER:

1. Timeline:

- 1.1. Contract Period 360 days.
- 1.2. Project Walk: _____.
- 1.3. Proposal Due: _____.
- 1.4. Construction Start Date: _____.
- 1.5. Construction Completion Date: _____.

2. Bid Process:

3. Document Level: 35% Design.

4. Bid Documents:

- 4.1. Statement of work
- 4.2. Drawings
- 4.3. Specifications

GENERAL:

1. **The Project:** The current internal FA system is outdated and is vulnerable to catastrophic failure at any point. There are no significant faults in the current system, but several active troubles that do not affect the safe monitoring of the building. This project will replace the existing fire alarm system with the building's new fire alarm and mass notification systems. The new fire alarm and mass notification system is required to meet the current UFC 3-600-01 (Change 6) Fire Protection Engineering for Facilities, UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings, UFC 4-021-01 Design and O&M of Mass Notification Systems, AR 420-1 Army regulation, and all the applicable (NFPA) codes and standards requirements. This is a central fire alarm and mass notification system replacement project.
2. **General Execution Requirements:** Work shall be performed as described in the Drawings and Specifications prepared by the Director of Public Works (DPW), Fort Moore, which are conveyed as the 35% design. This shall also include the engineering design service and drafting required to provide a complete, 100% set of design drawings and specifications to DPW for review and approval before starting work. No work can be done until the government approves the design. To meet base requirements for occupied spaces, the existing fire alarm system will stay online during the install and testing of the new system. Only after the new fire alarm and mass notification system is tested and passed, will the existing system be taken offline, and demolition of the old/existing system start. The execution of the commissary side of the building will need careful coordination between the contractor and government. The commissary will have to remain fully operational during the entire project.
3. **Design and Engineering:** Fort Moore's DPW Engineering Division will provide the 35% engineered construction drawings and SOW. Contractor shall provide timeline schedule for work completion. The timeline shall include major benchmarks and milestones to provide knowledge of the project

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

and objectives to be completed within the construction time scheduled. This is the 35% design bid document. The Contractor must submit the 65%, 95%, and 100% design for the government approval before starting their work.

1. All work shall be by (IAW) all applicable codes and standards, including but not limited to:
 - a. American Electrical Institute (AEI)
 - b. Technical Manual (TM) 5-811-1
 - c. National Electrical Safety Code
 - d. National Electrical Code
 - e. National Fire Protection Agency requirements.
 - f. Installation Design Guide
 - g. TM 111 Guidance provided in Fort Moore Environmental Considerations as listed on the project FM-144R.
 - h. United States Army Training and Doctrine Command (TRADOC) Force Protection Program (FPP)
 - i. Unified Facilities Criteria (UFC) 3-600-01 (Current Edition)
 - j. Unified Facilities Criteria (UFC) 4-010-01 (Current Edition)
 - k. Unified Facilities Criteria (UFC) 4-021-01 (Current Edition)
 - l. All Memorandums, Fort Moore, Fire Department Requirement
 - m. Construction to be per Ft. Moore Environmental Protection Requirements, Section 01560
 - n. Construction is to be per Ft. Moore Material Requirements, Construction Products, Construction to be per DOD criteria, Army criteria, Ft. Moore criteria, Uniform Building Code, NFPA, Life Safety Code, and local requirements, codes, and restrictions.
 - p. Access to the site shall be coordinated with the DPW Engineering office.

2. Implied specifications: When written specifications are not furnished, the work standards shall be by Unified Facilities Criteria (UFC), industry standards, and Ft. Moore guide specs issued by the Savannah District Corps of Engineers.

4. **Preparation:** The contractor shall be responsible for field/site visits to obtain and verify measurements and site conditions and to determine existing site conditions, dimensions, and structural support requirements IAW accepted local, state, and federal building practices. All drawings provided to the contractor are for reference/information only and may or may not be current or to scale. The contractor shall provide for any/all deviations to accept local, state, and federal building practices/codes and bring these to the attention of the Construction Inspector and Contracting officer's Representative for review/consideration by the government. Review the project's FB-144R Record of Environmental Consideration for compliance before initiating any work.

5. **Coordination with Other Contractors:** Contractor will need to coordinate with users daily to help prevent any issues with commissary operations.

6. **Building occupancy:** Yes. All areas of the building will be occupied at any point. The safety and health of occupancy will be top priority. Careful measures will be taken to keep the public away from

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

hazardous area. An Accident Prevention Plan (APP) will be required to include these measures stated above. No exceptions to any feature of work that will place potential harm or death to any persons will be accepted.

7. **Selective Building Demolition:** Yes. Install new fire alarm system prior to demolition of the existing fire alarm system. After the new fire alarm is connected and monitoring, demolition of all existing fire alarm components, wire, fire alarm conduits, power conduits back to the power source, and anything associated with the old system is to start. Any outdated component that is recognized to be hard to obtain that could be re-used by TIYA fire alarm shop, should be left to the side for TIYA fire alarm shop to assess and determine if the shop can use the components.
8. **Salvage:** Any outdated FACP equipment that is known to be hard to replace/acquire should be kept on-site for the TIYA FA shop to salvage.
9. **Disposal of Construction Waste:** The Contractor shall be responsible for removing and disposal of all debris created by this project IAW local, state, and federal guidelines and laws. The contractor shall dispose of all debris created by this project in a Georgia/Alabama-approved Landfill at the contractor's expense. The contractor shall maintain and provide upon request by the KO or the designed representative receipts and haul tickets or bills of laden that construction debris from this contract has been disposed of IAW with local, state, and federal guidelines and laws.
10. **Safety:** The contractor shall comply with all governing codes and standards. The contractor shall comply with Fort Moore Safety and Environmental laws and regulations. The contractor shall perform all work IAW government procedures for entering and working at Fort Moore. The government reserves the right to stop work anytime for safety and security reasons and national defense at no cost to the government. Careful coordination will need to be done to insure the safety of all patriates and workers in the commissary side.
11. **Accessibility to Work Site:** Abnormal/Normal working hours: Monday-Friday, 0730 to 1630 in multipurpose areas and outside. Monday-Sunday, Commissary's closed hours in the Commissary/Warehouse area. These hours exclude Federal Holidays or as approved by KO.
12. **Daily Housekeeping:** The contractor shall keep the work area clean and remove all unneeded construction debris daily, as directed by the Construction Inspector or Contracting Officer's Representative.
13. **SUBMITTALS:** The contractor shall provide the following information for review and evaluation by the Engineer:
 - 13.1. Shop Drawings.
 - 13.2. Wire and Cable cut sheets.
 - 13.3. HVAC equipment cut sheets.
 - 13.4. Conduit entry location, cable termination sizes, mounting.
 - 13.5. Fire Alarm equipment, devices, cables, and conduits cut sheets.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

13.6. Accident Prevention Plan (APP)

14. QUALITY ASSURANCE:

- 14.1. Provide materials and equipment that are products of manufacturers regularly engaged in producing products of equal material, design, and artistry. Products shall have been in satisfactory commercial or industrial use for five years before bid opening.
- 14.2. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the five years. Products manufactured more than two years before the delivery date to the site shall not be used unless specified otherwise.
- 14.3. The equipment items shall be supported by service organizations that are reasonably convenient to the equipment installation to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.
- 14.4. Contractor shall provide detailed QC plan prior to starting work.

Replace the Fire Alarm System in Building 9230

General:

Replace the existing fire alarm system in Building 9230 with a new mass notification system. The contractor shall provide and design a new fire alarm and mass notification system in Building 9230 to meet current Fort Moore Fire Department requirements. The new fire alarm system must be designed to meet current UFC 3-600-01 (Change 6) Fire Protection Engineering for Facilities, UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings, UFC 4-021-01 Design and O&M of Mass Notification Systems, AR 420-1 Army regulation, and all the applicable (NFPA) codes and standards requirements due to recently changes in the building construction, renovation, and occupancy.

IMCOM has chosen the Honeywell Brand Silent Knight Fire Alarm Control Panel across the Army.

Project Deliverables Checklist:

- 1) This checklist is to be used as a minimum guideline for deliverables for this project.
- 2) Deliverables shall consist of drawings, narratives, reports, analyses, models, renderings, etc., deemed appropriate and necessary to convey the proposed work's scope and existing conditions properly.
- 3) Provide new EMT conduits as required for this project.
- 4) Provide new fire alarm wiring and cables for this project.
- 5) Provide automatic power shut-down capability for all HVAC equipment in Building 9230.
- 6) Connect fiber optic cable(s) from the FACP/MNS panel(s) to the server at the communication rack located in the rear mechanical room.
- 7) Provide and install a workable fire alarm and mass notification system to meet Fort Moore Fire Department requirements.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

- 8) Provide the design of the new fire alarm system and mass notification system layout plan throughout building 9230 in AutoCAD 2020 or newer format. The design drawings shall include all the fire alarm devices, notification appliance devices, and initiating devices. The acceptable design drawings in AutoCAD must show the initiating device, notification appliance circuits, and signaling line circuits.
- 9) Contractor shall insure that the FACP is installed in a conditioned space.
- 10) Provide QC plan.
- 11) Provide Submittal Register

New Fire Alarm and Mass Notification System:

The fire alarm contractor shall perform work/design work in Building 9230 using all the latest editions of the Fort Moore Fire Alarm Standard Operating Procedure (SOP), 13855N Fire Alarm Specification, and UFC 3-600-01 (Change 6) Fire Protection Engineering for Facilities, UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings, UFC 4-021-01 Design and O&M of Mass Notification Systems, AR 420-1 Army regulation, and all the applicable (NFPA) codes and standards. Provide an integrated non-proprietary Class "X" new fire alarm and mass notification systems (MNS). The Mass Notification System shall be able to provide live voice messages and playback at least nine pre-recorded emergency messages. The proposed MNS panel shall meet the 10-minute time-out requirement (It requires the MNS message to automatically end after 10 minutes for overriding fire alarm signals). Fire alarm contractors shall ensure a signal is sent to the 911 Center by MNS, including a description of a specific event code (not a generic code) for each message. Local operator consoles (LOC) will be provided next to the fire alarm control panel and, if applicable, on every floor; therefore, no occupant must travel more than 200 feet to reach a LOC console. Visible notification appliances must provide a clear lens marked "Alert." The use of "Fire" is not permitted. Provide FA/MNS speakers mounted on the exterior wall around the building at entrances/exits and outdoor areas (such as courtyards, covered break areas, designated smoking areas, and sidewalks leading from the building's exit doors to a public street or from parking areas for a distance up to 16- foot from the building) commonly used by the building occupants. More required work for new FA/MNS systems is listed below in two new work sections:

New work Section 1:

1. Replace the existing fire alarm system in Building 9230 with the new fire alarm and mass notification system.
2. Remove the existing Fire Alarm Control Panel from Building 9230
3. Remove all existing fire alarm devices (such as remote power supplies and power cabinets, pull stations, smoke detectors, heat detectors, control modules, monitor modules, relay modules, strobe/horn, strobe only, ceiling mount strobe, fire alarm cables, and so on) from Building 9230.
4. The contractor shall design the new fire alarm system and mass notification system layout plan throughout building 9230 in AutoCAD format. The design drawings shall

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

include all the fire alarm devices, notification appliance devices, and initiating devices. The acceptable design drawings in AutoCAD must show the initiating device, notification appliance circuits, and signaling line circuits.

5. The use of proprietary fire alarm systems is prohibited. The system must be replaced with a Honeywell brand Silent Knight Fire Alarm Control Panel with compatible detection devices and mass notification systems.
6. New fire alarms and mass notification systems require text signs. LED-type text signs must be installed for the new fire alarm and mass notification systems. These text signs activate with voice messages over the mass notification or fire alarm system. Provide and install text signs in Building 9230. The common signs used on the base are the rectangular box style with two indicators that read "Announcement" and "Evacuate."
7. In UFC 4-021-01, 5-4.4 Notification Appliance Network, a notification appliance network consists of audio speakers, strobes, and text signs to alert occupants and provide intelligible voice and written instructions. Text signs are installed over the door to each egress stairwell and the substantial means of egress from the discharge level. Exterior exit doors from a single room (e.g., mechanical or electrical rooms) do not require a text sign.
8. Only single clear lens strobes marked "Alert" are required for the new fire alarm and mass notification systems. The use of "Fire" is not permitted. Amber strobes must no longer be used. Instead of amber strobes, clear or white strobes marked with the word "Alert" must be used for the new mass notification systems. Clear or white strobes must be provided for shared use by the facility's combined mass notification and fire alarm system. The clear or white strobes activate with the voice messages over the mass notification or fire alarm system.
9. The contractor shall remove the equipment required to accomplish the new work as shown or implied. The contractor shall refer to the scope of work and plans for work shown to determine the extent of demolition required. The contractor shall protect the existing fire alarm system during new construction to allow the existing system to remain online.
10. The area affected by the demolition works shall be repaired and repainted to match the surrounding condition.
11. When removing electrical equipment and systems. All precautions shall be taken to prevent structural damage to the building. The contractor shall coordinate the installation of any structural supports required, temporary or permanent.
12. The contractor shall coordinate and schedule all power interruptions with DPW in writing. Chain of communication for this process is recommended: Inspection branch, COR branch, PM branch, and Engineering team.
13. The contractor shall take all necessary precautions during demolition and construction to maintain the integrity and operation of existing life safety and emergency egress equipment.
14. The new fire alarm and mass notification system in Building 9230 must meet the current UFC 3-600-01 (Change 6) Fire Protection Engineering for Facilities, UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings, UFC 4-021-01 Design and O&M of Mass Notification Systems, AR 420-1 Army Regulation, and all the applicable NFPA Codes and

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

Standards requirements due to recently changes in the building construction, renovation, and occupancy.

15. The contractor shall visit the site and carefully examine the site location affected by this work before submitting proposals to become familiar with the existing conditions and difficulties that will affect the execution of the work. Submission of a proposal will construe as evidence that such an examination has been made, and later claims for labor, equipment, or materials required because of difficulties encountered shall not be recognized.
16. The drawings from this bid document are only 35% of the design. The contractor shall complete the design to 100%, and the final (fire protection) design shall meet all the applicable codes and standards required by the Fort Moore Fire Department.
17. 65% of the design submittal shall be delivered and reviewed by the DPW engineer and Fort Moore Fire Department Inspector.
18. 95% of the design submittal with comments incorporated from the 65% design review shall be stamped and signed by a fire protection professional engineer. No new construction work shall start until 95% of the design submittals are approved and returned to the contractor.
19. 100% of the design submittal and engineered as-built construction documents shall include all final design materials, modifications, and revisions during construction. The acceptable As-Built drawings must show all the circuits (such as signaling line circuits, initiating devices, and notification appliance circuits) connected to the fire alarm and mass notification systems.
20. The Army requires construction (shop) drawings and calculations to be prepared by, or prepared under the immediate supervision of, the Qualified Fire Protection Engineer (QFPE).
21. A registered P.E. in a related engineering discipline with a minimum of 5 years of experience dedicated to fire protection engineering shall be verified with documentation.
22. Upon request, the QFPE shall submit a written copy of their resume indicating education, professional registration, and work experience, along with a letter attesting to their compliance with the requirements of this Section. The letter must include an imprint of their professional engineering stamp with their signature.
23. Two sets of full-size fire alarm design drawings and fire alarm equipment submittal shall be delivered (one set) to the Lead Inspector's Office for DES-FP review (7180 Yeager Ave, Fort Moore, GA 31905) as well as (one set) to DPW Engineering Department for review.
24. All Major Projects (this project) require the design, review, and oversight services of a Qualified Fire Protection Engineer (QFPE). A QFPE must be involved in every aspect of the design, construction, and testing/commissioning related to fire protection and life safety. This includes, but is not limited to, building code analysis, life safety code analysis, design of automatic fire alarm, detection and suppression systems, water supply analysis, a multi-discipline review of the entire project, construction inspections, and witnessing of fire protection acceptance testing/commissioning. This requirement applies to engineering services for design-bid-build projects and all phases of design-build projects, including RFP development, design development, and construction.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

25. The QFPE must review the shop drawings, calculations, and material submittals. The shop drawings must bear the Review Stamp of the QFPE before submitting the fire alarm system shop drawings to the DFPE.
26. The QFPE must monitor the installation of the fire alarm system and certify in writing that the fire alarm system has been constructed and operates as intended in the design plans and specifications.
27. The QFPE must review the complete 100 percent design drawings and specification submission and document in writing that the design follows the current UFC 3-600-01 and all applicable fire protection and life safety design criteria.
28. With criteria not included in this UFC (UFC 3-600-01, Change 6), fire protection criteria must conform to the requirements of the latest editions of the National Fire Codes. Where criteria are unavailable from the National Fire Codes, a fire protection design analysis must be submitted to the Designated Fire Protection Engineer (DFPE) for approval.
29. The QFPE must affix their professional engineering stamp with signature to the shop drawings, calculations, and material data sheets, indicating approval before submitting the fire alarm system shop drawing to the DFPE.
30. Fire protection criteria must conform to the requirements of standards, codes, and guides as modified or referenced in this UFC. The primary references include the most recent National Fire Codes (NFPA) editions and FM Global Property Loss Prevention Data Sheets. NFPA 5000, State or Local building or fire codes must not be used.
31. A fire protection design analysis and life safety plans must be provided for all major projects, and the project's fire protection requirements must be addressed as required by UFC 3-600-01, Change 6.
32. The fire protection design analysis and life safety plans must be submitted with the initial design submission, separate from other disciplines. The final design analysis and life safety plans must be signed and sealed by the QFPE.
33. During construction, the contractor shall comply with all listed safety codes, including National Fire Protection Association (NFPA) 241 and USACOE EM 385-1-1 under the most current edition. The contractor shall coordinate with the Fort Moore Fire Department and their requirement on Building 9230.
34. A Hot Work Permit is required for any operations for which work is accomplished IAW NFPA 51B.
35. Requirements for hot work permits shall be coordinated with the Lead Inspector's office before any hot work operation. Due to scheduling and mission requirements, it is recommended that the initial license be required seven (7) business days before work starts.

New Work Section 2:

1. Provide and install a class "X," 4-wire intelligent/analog addressable fire alarm system by federal and Army regulations. The contractor shall verify and recommend the location of the new fire alarm control panel.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

2. Provide and install a mass notification system as the drawing indicates. The contractor shall verify and recommend the location of the new mass notification panel.
3. The new class "X" fire alarm control panel shall be able to broadcast audible messages, live voice messages, fire messages, and voice recording messages throughout the building.
4. The fire alarm control panel must be able to store at least 400 events in the history log. These events must be stored in a non-volatile memory and remain in the memory until the memory is downloaded or cleared manually.
5. Resetting the fire alarm control panel must not clear the memory retrieved on the integral LCD.
6. The fire alarm control panel must have an integral LCD 80-character (minimum) alphanumeric display.
7. Provide all smoke detectors connected to the FACP with an adjustable alarm verification feature. Initially, set the alarm verification at 20 seconds.
8. Fire alarm wiring shall be Class X with a single fault on a pathway connected to the addressable devices shall not cause the loss of more than 50 addressable devices, and if less than 50, no more than half of the addressable devices shall not be lost with IP communication.
9. All fire alarm systems shall be UL 864, current compliant. All MNS shall be Underwriters Laboratory (UL) 2572 compliant.
10. Secondary power shall be 48 hours for all systems, including all the associated appliances and devices.
11. Provide and install exterior weatherproof FA/MNS speakers on Building 9230 to meet the requirements of the current Unified Facilities Criteria (UFC).
12. Provide and install local operator consoles (LOC) throughout Building 9230; therefore, no occupant must travel more than 200 feet to reach an LOC console.
13. Device priorities shall be as follows: MNS main panel MIC, LOCs, MNS main panel prerecorded messages circuits 1-9 with circuit one (1) with the highest priority going to circuit nine (9), fire alarm system, carbon monoxide, and finally general PA system.
14. MNS LOCs installed in the areas that are open to the public shall have unrestricted access to the LOC.
15. If a remote fire alarm panel (remote annunciator) is provided in the structure, a LOC shall be provided next to the remote fire alarm panel.
16. All LOCs that are not easily identifiable shall be labeled on the front of the LOC cabinet in a minimum of 1-inch lettering in contrasting colors.
17. MNS announcements shall be provided inside all occupied spaces, including, but not limited to, the elevator, mechanical, POL, storage, or other areas determined by the AHJ.
18. Any room containing the fire alarm control panel (FACP) shall have a door sign indicating FACP. The sign shall contrast (for example, red/white) with 2-inch lettering.
19. Carbon monoxide detection shall be installed to provide coverage in all facilities serviced by natural gas, propane, or any other combustible gases or liquids.
20. All detection devices require backup FA/MNS system power. Nine (9) volt batteries shall not be permitted.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

21. All local operating consoles (LOC) shall be installed at the same height as a manual pull station.
22. The MNS shall require transmitting trouble, supervisory, and alarm functions to Fort Moore Central Station while meeting the requirements of NFPA 72. All messages shall be point addressable regardless of how activated.
23. Smoke/heat detectors and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
24. Provide a smoke detector not closer than 3 feet from the air-supply diffuser or return-air opening.
25. Provide a smoke detector not closer than 12 inches from any part of the lighting fixture.
26. Ensure smoke detector spacing does not exceed 30 feet in diameter.
27. Provide a minimum of one notification appliance circuit per floor. Each notification appliance circuit must include 25 percent spare capacity.
28. Visible notification must be provided in all normally occupied, public, and common-use areas (e.g., break rooms, corridors, auditoriums, or conference rooms).
29. Visible notification must be provided in all normally unoccupied areas (such as mechanical, electrical, janitor, storage, communication closets, and other similar spaces) greater than 900 ft².
30. Visible notification is required in any normally unoccupied area where the ambient noise is loud enough to require hearing protection (e.g., compressor room).
31. Visible notification must be provided in all offices designed for or may contain, more than four people at any one time.
32. Visible notification is not required in single-person offices unless the office is assigned to a person with a hearing impairment that would require a visible notification appliance.
33. Visible notification is not required in bathrooms serving single-person offices unless the office is assigned to a person with a hearing impairment that would require a visible notification appliance.
34. Visible notification appliances must provide a clear lens marked "Alert." The use of "Fire" is not permitted.
35. For systems using voice evacuation or combined with the mass notification system, the default fire alarm voice evacuation message should be a female voice.
36. Manual pull stations must be provided at all exits, regardless of occupancy. Manual pull stations must be located within five feet of the exit door. The 200-foot travel distance to a manual pull station noted in NFPA 101 is not applicable.
37. Provide addressable double-action type manual pull stations with mechanical reset features. If the manual pull station requires a key for reset, it must be the same key for the fire alarm control panel.
38. Provide a minimum ¾" EMT conduit for all fire alarm wiring by Fort Moore Fire Alarm and Mass Notification SOP. All conductors must be installed in the EMT conduit.
39. Pull all conductors splice-free; conductors must be continuous from device to device. Wire nuts, crimped connectors, or twisting of conductors is prohibited.
40. All signaling line circuits must be a minimum of 18 AWG. Initiating device and notification appliance circuits must be a minimum of 16 AWG.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

41. All devices must have screw terminals. Where devices are only provided with pigtails from the manufacturer, pigtails must land on terminal strips mounted within the junction box.
42. All terminations must be at a terminal strip or the device screw terminals. Terminal strips are only permitted where direct connection to a device is impossible. (e.g., pigtails off a rate-compensating heat detector).
43. Provide surge suppression (SPD) for all signaling line circuits, initiating device circuits, or notification appliance circuits that leave or enter a Facility's exterior enclosure.
44. SPD must provide at the first location where connections are made that are close to where the circuit enters or leaves the facility before connecting to any other devices when feasible.
45. SPD does not require devices connected directly to the facility exterior when the facility provides lightning protection (i.e., an electric bell or speakers mounted on the exterior wall).
46. Provide primary power by UFC 3-520-01. This includes the provision of a lock-on circuit breaker.
47. Provide SPD on all 120 VAC circuits to control panels, subpanels, transmitters, amplifiers, and booster panels. SPD must have a UL 1449 and UL 1283 listing in an adjacent hinged terminal box.
48. Fire alarm control panels used for control or release of fire suppression systems must be listed by an NRTL for releasing service.
49. Provide a separate releasing panel independent of the facility fire alarm system panel to activate the system.
50. An NRTL must list electronic solenoids used to release the suppression system for use with both the releasing panel and the suppression equipment.
51. Provide rechargeable batteries per NFPA 72 to operate the releasing panel under supervisory conditions for 48 hours and alarm conditions for an additional 15 minutes. Include the total current draw of the solenoid in the battery calculation.
52. When more than one panel is used, each panel must be monitored independently by the Facility fire alarm control panel. Ensure the fire alarm control panel connects to the primary service ground. Install a ground wire from the main service ground to the fire alarm control panel
53. The fire alarm system shall transmit using an IP transmitter with or without a DACT communicator. DSC TL 300CF is a compatible transmitter, but any IP transmitter compatible with a DSC Sur-Gard III IP receiver shall permit.
54. Provide an IP transmitter to communicate between the fire alarm control panel and post-fire stations' telephone/Mastermind Automated System (MAS) at the 911 Center by the MAS format/template.
55. Provide or ensure fiber is installed for the fire alarm transmitter.
56. The new fire alarm system shall be able to drive Notification Appliance Circuit (NAC) devices.
57. The contractor's lead on-site fire alarm technician must be at least a NICET Level III technician and factory-certified by the installed equipment manufacturer.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

58. A certified factory-trained fire alarm designer is required to design the complete working Fire Alarm System.
59. A certified fire alarm technician is required to supervise the fire alarm installation, adjustment, preliminary testing, and final testing of the system and to provide (operation and maintenance instructions) training to the government personnel as required.
60. Provide and obtain a dedicated 120V AC service (primary power circuit) from the incoming power source ahead of all building services and disconnect switches.
61. Provide a secondary power circuit as a backup power source for the fire alarm control panel to meet the requirements of NFPA 72.
62. Provide surge suppression on all incoming 120 VAC circuits.
63. Specify and design class "A" Style 6/7 Signaling Line Circuit (SLC) configuration installed throughout the building.
64. Ensure system SLC configuration in class "A" Style 6/7 Initiating Device Circuit and Notification Appliance Circuit (NAC) in class "A" Style Z configuration.
65. Provide rechargeable battery (Lead-Calcium) with sufficient ampere-hour rating to operate the system for at least 48 hours usually and 5 minutes alarm time for horn/strobe systems, and 15 minutes for speaker/strobe systems by NFPA 72.
66. Provide two conduits, one for outgoing and another for returning circuit wires, to ensure a single accident cannot impair the entire system.
67. Ensure the supply and return portions of the risers shall not be in the same stairwell or shaft.
68. Factory-painted red enamel on all concealed fire alarm conduits and conduits located in storage rooms, mechanical rooms, and utility rooms.
69. Provide a fire alarm system by NFPA 72. The system must strategically have an outside electric horn with alarm switches throughout the project. Electric power for the alarm must be taken from the house-current supply line on the line side of the main switch through an independent switch and circuit breaker.
70. Maintain NFPA 101 Life Safety requirements throughout the building.
71. The Mass Notification system shall be able to broadcast at least nine pre-recorded emergency messages.
72. The contractor's lead on-site fire alarm technician must be at least a NICET Level IV in the fire alarm system to supervise the design of the Mass Notification System.
73. The contractor must verify the above-required lead technician's qualifications; failure to meet these qualifications will disallow the contractor from bidding on the system.
74. The submitted final set of fire alarm drawings must be stamped by a fire protection professional engineer as required by the UFC.
75. UFC 4-021-01, Section 4-4.5 Power Supply Features requires an MNS/FACP system that meets at least the minimum NFPA 72 requirements for standby power capacity. In addition, secondary (standby) power should be provided as follows: immediately upon loss of standard AC power, the standby power source shall give a minimum of 60 minutes of mass notification at the maximum connected load.
76. The contractor shall be responsible for providing a fire alarm system capable of transmitting the correct output to the 911 Center by the MAS format or template.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

77. If necessary, The contractor shall replace the compatible supervisory tamper and water-flow switch with the building's new fire alarm control panel. The water-flow switch must have no time delay capability.
78. Contractors shall replace the compatible tamper switch for each fire protection system control and the compatible vane-type water flow detectors for wet pipe sprinkler systems with the new fire alarm control panel.
79. Connect the existing fire sprinkler system to the new fire alarm and mass notification system.
80. The contractor must upgrade the layout of the Fire alarm strobe speaker and the MNS strobe speaker to meet/obtain the required CIS requirement (score of 0.8) per UFC 4-021-01. The contractor shall evaluate speaker coverage and dB setting in the apparatus bay area to obtain the CIS score 0.8.
81. All penetrations in smoke or fire-rated walls resulting from construction, repair, or other work are sealed with fire department-approved material.
82. The fire alarm system shall monitor the HVAC shutdown devices required by UFC 4-010-01. The LOC can be programmed to shut down the HVAC or have a standalone button.
83. Provide and install an emergency power off (EPO) station to de-energize equipment during an electrical fire. Connect the EPO station to the fire alarm control panel. Consider an emergency power shutdown management system or equal.
84. Replace the compatible supervisory tamper and water-flow switch with the new fire alarm control panel, per the manufacturer's recommendations. Connect the fire sprinkler system to the new fire alarm control panel (FACP).
85. Contractors shall furnish all labor and provide and install all materials and equipment per federal, state, and local codes and standards.
86. The contractor shall coordinate work with all other trades, project drawings, project manager's instruction, and the owner's direction.
87. All work performed by the contractor shall be free from material and workmanship defects for one year after the date of final acceptance.
88. Acceptance of the submittals or portions thereof does not relieve the contractor from complying with the contracting documents and applicable codes and standards.

New Work Section 3:

New Mechanical Work.

1. Ensure the area (mechanical room) where the new FACP is installed is sufficiently conditioned.
2. Insulate area in preparation for conditioning of the area.
3. Install new mini split to provide conditioning to the area.
4. Run power to Mini split from a nearby panel that has sufficient spare capacity.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

15. **Statement of Work-General:** Work shall include this SOW, Drawings, and Specifications as titled but not limited to all materials, labor, supervision, support services, equipment, and tools required to replace the fire alarm system.

5. Customer Approval:

15.1. Business Name (print) _____

15.2. Signature: _____
Officer or Business owner

15.3. Name and Title (print) _____

Date: _____

STATEMENT OF WORK

1. Antiterrorism / Operations Security Requirements

The Contractor shall comply with Government personal identity verification procedures implemented in Homeland Security Presidential Directive (HSPD) – 12, Office of Management and Budget (OMB) Guidance M-05-24, and Federal Information Processing Standards Publication (FIPS PUB) number 201. The contractor and all associated subcontractor employees shall comply with applicable installation, facility and area commander installation/facility access, and local security policies and procedures provided by the government representative. The contractor shall also provide all information required for background checks to meet installation access requirements to be accomplished by the installation Provost Marshal Office, Director of Emergency Services, or Security Office. The contractor workforce shall comply with all personal

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

identity verification requirements as directed by the Department of Defense (DoD), Headquarters Department of the Army (HQDA), and local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

1. AT Level I Training: All contractor employees, including subcontractor employees, requiring access to Army installations, facilities, and controlled access areas shall complete AT Level I awareness training within 30 calendar days after the contract start date or the effective date of incorporation of this requirement into the contract, whichever is applicable. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee to the COR or the contracting officer if a COR is not assigned within 30 calendar days after the completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: <http://jko.jten.mil>. AT Level I training is an annual requirement if option years are exercised.

2. Access and General Protection/Security Policy and Procedures: The contractor and all associated sub-contractor employees shall provide all information required for background checks to meet installation access requirements to be accomplished by the installation Provost Marshal Office, Director of Emergency Services, or Security Office. The contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA, and local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.
 - a. Contractors Requiring a Common Access Card (CAC): N/A.

 - b. Contractors that do not Require CAC but Require Access to a DoD Facility or Installation: The contractor and all associated sub-contractors employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-III) and Terrorist Screening Database (TSDB) (Army Directive 2014-05/AR 190-13), applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative), or, at OCONUS locations, by status of forces agreements and other theater regulations.

SCOPE OF WORK
PROJECT NUMBER: EA-00017-4J
5 FEB 2024

3. AT Awareness Training for Contractor Personnel Traveling Overseas: N/A.
4. iWATCH Training: The contractor and all associated sub-contractors shall brief all employees on the local iWATCH program (training standards provided by the required activity ATO). This locally developed training will inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and 30 calendar days of new employees commencing performance, with the results reported to the COR NLT 30 calendar days after contract award.
5. Army Training Certification Tracking System (ATCTS) Registration for Contractor Employees who Require Access to Government Information Systems: N/A.
6. OPSEC Standing Operating Procedure/Plan: The contractor shall adhere to the Government's Operations Security (OPSEC) Standard Operating Procedure (SOP)/Plan during the entire performance period.
7. Operations Security (OPSEC) Training: N/A.
8. Information Assurance (IA)/Information Technology (IT) Training: N/A.
9. Information Assurance (IA)/Information Technology (IT) certification: N/A.
10. Contractors Authorized to Accompany the Force: N/A.
11. Performance or Delivery in a Foreign Country: N/A.
12. Handling or Access to Classified Information: N/A.
13. Threat Awareness Reporting Program: N/A.

Additionally, the contractor shall adhere to all safety, security, and attendance requirements for the supported office. The contractor must attend and participate in all organizational meetings, training, and emergency preparedness events and vacate the Government office work site when no sufficient Government oversight is available.

-- End of Antiterrorism / Operations Security SOW --