|  |  |
| --- | --- |
| Minor Project Number: |  |
| UCF FP&C Project Manager: |  |
| Project Location: |  |
| Building Number: |  |
| Room / Area: | Building |
| Project Description: | Upgrade Fire Alarm System and MNS |

**PROJECT OBJECTIVE / SCOPE OF WORK:**

Project Objective:

The following MP Number (XXXXXXXX) requests to Upgrade Fire Alarm System and Mass Notification System in Building XXXXXXXXX. Contractor to remove existing outdated and unsupported fire alarm devices and provide and install new fire alarm devices, stations, panels, speakers, relays and related equipment to meet current NFPA and NEC code.

Scope of Work:

1. Project Specifics:
   1. Contractor shall furnish and install all labor, materials, tools, equipment, taxes, P&P Bond, coordination, supervision and all appurtenances to complete the Work.
   2. Installers shall be experienced in fire alarm work.
   3. Contractor to remove existing fire alarm system cabinet, components, devices, necessary conduit and conductors.
   4. Contractor to install a new Class A fire alarm control panel with point ID at the same location as existing FACP.
   5. Contractor will include programming of the Head End unit in PD for the Point ID as required.
   6. Contractor to install a new wall as necessary at the current FACP location to conceal equipment and conduit installations. This wall will be painted to match existing.
   7. Contractor to install Class A fire alarm system conductors throughout entirety of the Building.
   8. Contractor to install Class A fire alarm system conduit if found damaged and/or not meeting code or UCF standards.
   9. Contractor shall install new fire alarm pull stations at the entrances to meet code requirements.
   10. Contractor to install new fire alarm ceiling mounted Audio-Visual Speaker devices throughout entirety of the Building.
   11. Contractor to install new fire alarm smoke detector devices as necessary per code.
   12. Contractor to provide documents for submission to BCO and SFM for permitting and inspections.
   13. Contractor to provide and install a Mass Notification System in conjunction with the fire alarm Voice Evac system with all related components for a complete functioning system.
   14. Provide and install the Mass Notification System antenna at the exterior of the building for connection to MNS Head End equipment at UCF PD Public Safety Bldg.
   15. Contractor to include all equipment and lifts needed to complete the work. Floor protection will be included.
   16. Contractor to provide any drywall repairs and patching as required. This should include finish painting to match existing wall finish.
   17. Contractor to provide sealing of all new penetrations as per the existing wall type. This includes smoke and fire rated wall penetration sealing
   18. Contractor to ensure all existing electrical supply will support new fire alarm system requirements, Mass Notification and Voice Evac System.
   19. Contractor to provide and install relays for the Audio/Speaker sound system to shunt when the fire alarm system is activated. Coordination with the AV department will be by owner.
   20. The new fire alarm system will meet NFPA 72, NFPA 101, FL Building/Signaling Code, NEC and UCF Standards for Design, Construction & Renovations.
   21. The warranty for the FACP, Mass notification and Voice Evac is two years, parts and labor.
   22. Contractor to turn over existing devices to UCF to retain parts for attic stock.
   23. Contractor to replace wire per UCF wire code as applicable.
   24. Contractor to provide housekeeping daily.
   25. Contractor to follow all OSHA safety requirements.
   26. Once new FA system is live and UCF begins owner response, the contractor must immediately provide the program, maps, passwords and point list.  This may not wait for the FCCO/closeout process.
   27. Contractor must submit 72 papers, dB readings, and sensitivity readings for review by UCF FO, to verify completeness and accuracy prior to FCCO process.
   28. Contractor to submit closeout documents within 20 days of final completion regardless of final payment status.
   29. Subcontractors must be listed on the quote for the fire alarm installation.
2. Submittals and Permit Drawings must include the following, and specifically mention and acknowledge:
   1. Fire alarm must be noted as being in conduit, and whether new/reused.  Existing may only be reused if in good condition to current standards.   Underground not permitted.  Contractor must verify compression fittings and red labeling, etc.
   2. Facility coverage must be maintained or fire watch provided within contractor scope.  Fire watch must be dedicated and cannot be the same individual performing the install.
   3. Knox box must be covered in sequence and plan notes, and must be self-resetting and non-latching.  UCF EHS must be notified of new/modified Knox access box in order to secure keys.
   4. LSC 28.3.4.3 requires annunciation and annunciation zoning.  Provide narrative on how this will be met.
   5. Output Matrix - Smoke detectors notes must make mention of UCF sequence for room smoke alarms to function as following:
   6. Must sound within the suite only on the first alarm and report as supervisory
   7. Must sound on the second alarm to the entire building for evacuation
   8. This will require in-depth programming to link device addresses in shared suites.
   9. Sequence Matrix must indicate shutdown of HVAC on general alarm as required by UCF standards.
   10. Plans must must mention that all identifiers to indicate at remote monitoring with point ID with full address/location information per UCF standard.
   11. Must include any AV devices existing and to remain from original construction.
   12. Information on bypass buttons may not be generically noted, and must provide specific device type information.
   13. Must indicate wire colors meeting UCF Standards for wires to control points (HVAC, Elevator, Electrical, etc).
   14. Must include reference to location for PIV or Backflow Preventer (BFP) and any conductor runs serving same.
   15. ADA units and visual devices must be indicated in any ADA guest rooms and appropriate ADA percentage. When existing facility FA system is being upgraded this number must be calculated as a factor of total guest rooms and be dispersed to different room location types. Example: 51-75 rooms require 7 rooms with ADA communication features. 76-100 rooms require 9 rooms with ADA communication features.  Recommend that RA suite included the ADA AV.
       1. Please also note the following code excerpts:

FAC 2020

224.7 Housing at a place of education. Housing at a place of education shall comply with the requirements for transient lodging guest rooms in sections 224 and 806, subject to the following exceptions. The term “sleeping room” is intended to be used interchangeably with the term “guest room” as it is used in the transient lodging standards.

1. ALARM SYSTEMS

215.1 General. Where fire alarm systems provide audible alarm coverage, alarms shall comply with 215.

EXCEPTION: In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

215.2 Public and Common Use Areas. Alarms in public use areas and common use areas shall comply with 702.

215.4 Transient Lodging. Guest rooms required to comply with 224.4 shall provide alarms complying with 702.

215.5 Residential Facilities. Where provided in residential dwelling units required to comply with 809.5, alarms shall comply with 702.

1. ALARM SYSTEMS

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see “Referenced Standards” in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

* 1. Conduit must be called out in cut sheets.
  2. Per standards, initiating control modules shall be dedicated to the type of component served for individual programming control. HVAC shutdown and other control functions shall be accomplished from the FACP rather than by individual smoke detector relays.
  3. Plans must include both panel riser and system riser diagrams.
  4. Programmable function keys shall be provided for each of the following actions:
  5. Alarm signals bypass
  6. HVAC shutdown bypass
  7. Door hold-open device bypass
  8. Elevator recall bypass
  9. Any others actions determined by the Owner.

1. Contractor will be responsible for Closeout Items, to include:
2. NFPA 72 papers completed and signed, with all device counts and accurate information
3. dB readings throughout
4. Sensitivity reading for all detectors.
5. Locator map posted, aesthetically framed, and pdf in files. Note: The Locator map is not considered an as-built.  Device addresses and accurate room numbers to be legible. Provide photo documentation confirming map is posted.
6. Record of the owner training session and recording of same.
7. Receipt of turnover of spare keys (10 + 1), per standards.
8. Receipt of turnover of any spare parts requested during design (UCF standards allow for owner to request spare parts).
9. Receipt of turnover of a copy of the program and device list (typically USB).
10. If new Knox box installed on exterior of building, provide receipt of turnover of access box cover. Note OCFR standard require 6’ AFF and hinged.
11. Ensure final actual submittals are included in turnover if any changes from original proposed.
12. Schedule:
    1. Work to be completed based on the following timeline after Notice to Proceed (NTP) has been provided to the Vendor:
       1. The Work is to be completed 125 work days after Notice to Proceed has been provided to the selected Vendor.
       2. Contractor shall provide a draft schedule with bid. Contractor shall provide a detailed schedule of construction activities 30 days from the NTP to the FP&C PM for approval. Schedule to include all significant project milestones to complete the project. Including but not limited to submittals for approval, major equipment delivery/lead time, installation, commissioning and closeout.
       3. Project work duration of 60 working days.
       4. Building Code Review
          1. 7 Days
       5. State Fire Marshall Review (if required)
          1. 40 Days (Begins 1 week after the commencement of the Building Code Review)
    2. Changes that will affect the schedule must be coordinated prior to the Commencement of the Work so the Schedule can be adjusted accordingly. The Vendor shall inform the UCF FP&C PM if changes to the Schedule is during Construction. The UCF FP&C PM must be informed and agree to the schedule revision prior to the Vendor assuming the change in duration.
13. Building Code Office (BCO) Requirements:
    1. Include all design services required to obtain permits, certificate of occupancy, certificate of completion and approval of work from State Fire Marshall. Submissions to the Building Code office must include at a minimum:
       * 1. Coversheet (Include MP Number, building name / number, and all current applicable codes, regulations / standards.)
         2. Minor Project number, building name, and building number on all pages of submission
         3. Site Location map showing where on campus the project is located
         4. Building Location map showing where the project is located within a building
         5. Floor plan and reflected ceiling plan with furniture, sprinklers, HVAC, lighting, exit signs and fire alarm devices – for review of egress, fire alarm, sprinkler and ADA issues. Ensure that there is a clear distinction between existing conditions versus new work pertaining to the project.
         6. Elevation of objects that do not go to the ceiling, i.e. systems furniture (if applicable)
         7. For electrical modifications, show location of electrical room, indicate lengths of circuit runs, and include revised panel schedule(s).
         8. Complete all work in accordance with all applicable Florida Building Codes, Florida Fire Prevention Codes, and the most current UCF Design, Construction and Renovation Standards found on the UCF Facilities Planning and Construction website: [http://www.fp.ucf.edu](http://www.fp.ucf.edu/).
         9. All applicable and latest Codes, Standards and Regulations affecting the project must be listed and included in the cover page. Refer to the following link for the latest information: <http://www.ehs.ucf.edu/bcstandards>
         10. Ensure that all projects have the proper inspections and approvals required to obtain a Certificate of Completion or Substantial Completion Certification and Certificate of Occupancy. Where applicable, submit all relevant documents required by UCF’s Substantial Completion Checklist form.
    2. Contractor shall refer to the following link for additional information relating to UCF Building Code Information and Requirements: <http://www.ehs.ucf.edu/Buildingcode>
14. **PROJECT LOGISTICS**:
    1. Contractor shall coordinate building access, working hours (7 AM to 5 PM), and all other items related to this work UCF Project Manager. Contractor shall coordinate key requests with the UCF FP&C Project Manager and complete the following Key Request letter:
       1. Vendor GGM Key Request Letter: <http://fo.ucf.edu/sites/default/files/pictures/VendorGGMRequest.docx>
       2. Vender Key Request Letter for Building Master or Electrical / Mechanical: <http://fo.ucf.edu/sites/default/files/pictures/VendorKeyRequest.docx>
    2. All contractor vehicles parked on campus shall have a valid UCF parking pass. Refer to the following link for UCF Parking Services: <http://parking.ucf.edu/permits/permit-fees/>. Vehicles parked on the grass, sidewalks, service vehicle parking spaces, fire lanes or other non-designated areas are subject to ticketed or towed at owner’s expense.
    3. Provide final clean-up and removal from site of all trash, debris and dust. Dumpster location(s) to be coordinated with the UCF Project Manager. Contractor shall not use UCF spaces (such as electrical/mechanical/custodial rooms, etc.) as staging or storage areas for project materials, tools or equipment, unless approved in writing by the UCF Project Manager.
    4. The Contractor shall coordinate any building shutdowns or service interruptions with the UCF Project Manager in accordance with UCF Policies. Contractor is to identify all such shutdowns and interruptions on their construction schedule and provide notice of shutdown requirements thirty (30) days prior to the event.
    5. Within five (5) days of project award, Contractor shall submit the construction project schedule, schedule of values, submittal and procurement schedule, ODP schedule, project contact list, and HAZCOM program for approval.
    6. The Contractor shall coordinate with the UCF FP&C PM regarding all existing furnishings and equipment being removed and/or treated as surplus prior to the start of Work.
    7. Provide temporary protection of all existing conditions to remain which are not part of this scope. Any damage done as part of this work to existing conditions must be repaired by this vendor at no additional cost to Owner. Return all affected areas to existing or better conditions.
15. **GENERAL REQUIREMENTS:**
    1. All work is to be installed per UCF Standards, current version as of the date of Purchase Order. Any exceptions must be approved via the deviation process prior to the start of construction.
    2. The Contractor shall coordinate with the UCF FP&C PM if an HVAC Air Flow test is required of the existing is needed for documentation. The UCF FP&C PM will provide a third party service as required.
    3. Ensure that the project meets all items required by all UCF Department Standards. All documents can be acquired from the Department List below. If any questions or concerns arise that will affect the project, the Contractor shall coordinate these issues with the UCF FP&C PM. All departments affected by this project will need to provide input and review to ensure all necessary requirements are met. These issues or concerns shall be discussed during a Pre-Construction meeting or prior to any associated Work being executed.

Facilities & Safety (F&S):

[www.fs.ucf.edu](http://www.fs.ucf.edu)

Facilities Planning & Construction (FP&C):

[www.fp.ucf.edu](http://www.fp.ucf.edu)

Utilities & Energy Services (UES):

[www.energy.ucf.edu](http://www.energy.ucf.edu)

Environmental Health & Safety (EH&S):

[www.ehs.ucf.edu](http://www.ehs.ucf.edu)

Landscape & Natural Resources (LNR):

[www.green.ucf.edu](http://www.green.ucf.edu)

UCF IT Telecommunications: <https://it.ucf.edu/our-services/telecommunications/>

Office of Instructional Resources (OIR):

[www.oir.ucf.edu](https://oir.ucf.edu/)

Resource Management (RM):

<http://www.rm.fs.ucf.edu/>

Facilities Operations (FO):

[www.fo.ucf.edu](http://www.fo.ucf.edu)

Business Services:

[https://businessservices.ucf.edu/index.ht](https://businessservices.ucf.edu)

[ml](https://businessservices.ucf.edu)

Space Planning, Analysis & Administration (SPAA):

<http://provost.ucf.edu/academic-affairs/space-planning-analysis-and-administration/>

* 1. Prior to acquiring any existing UCF documents related to this project, the Contractor shall submit a completed Non-Disclosure Agreement (FP-100) form to UCF. [(http://fp.ucf.edu/sites/default/files/forms/Request%20for%20Approval%20(FP100).pdf)](http://fp.ucf.edu/sites/default/files/forms/DOCUMENT%20REQUEST%20FORM%20%28FP100%29.pdf)
  2. All project related communication must include the UCF FP&C PM. If the UCF FP&C PM is not informed or not aware of project related communication that will affect the direction of the project, this will not be acknowledged or accepted as the project progresses. Final decisions regarding project direction will be the responsibility of the UCF FP&C PM.
  3. The Contractor shall be responsible for providing and maintaining meeting minutes as related to the project. The meeting minutes will be provided to the UCF FP&C PM within three (3) business days of each meeting.
  4. The Contractor shall be required to coordinate all Work with building system’s Commissioning (Cx) events as required by the project. Commissioning is required for all projects which will involve the review from a Third Party Commissioning Agent and UCF Utilities and Energy Services.
  5. The Contractor shall meet all Project Milestones as listed in Section 2, Schedule.
  6. At the completion of each project, the UCF FP&C PM will complete a Contractor Evaluation Form (FPC4200) which will be shared with the Contractor and kept on file for evaluation of future work in compliance with F&S policy (FS2016 FS0018)
  7. Dispose all items designated for removal but not included in the UCF Inventory. Coordinate disposal methods with UCF requirements / standards. Any disposal of hazardous waste must be coordinated with UCF EH&S.
  8. All material and equipment as part of this scope of work must be new and free of defects.
  9. Provide submittals on all new material and equipment for review and approval by the UCF Project Manager prior to their procurement.
  10. Contractor to provide As-Built drawings upon completion of the project. A/E to provide Record Documents upon completion of the project, incorporating comments on the contractor’s as-built drawings.
  11. Contractors are prohibited from playing radios, compact disc players, televisions, etc. while working on any UCF project. Contractors will ensure that their employees and subcontractors’ employees maintain a neat and orderly appearance wearing company identification tags or clothing at all times. Contractors will clean work areas daily and keep areas of egress free and clear. Smoking is prohibited everywhere on campus properties.
  12. All contractors must comply with OSHA and UCF safety standards at all times. Any contractor not in compliance may be removed from the project site.
  13. Hazardous Material Training: Contractors shall provide training for their employees as required by OSHA’s Hazard Communication Standard. The training shall include; physical and health hazards associated with chemicals in the work area, availability of MSDS, for those chemicals, and the precautions, safety/emergency procedures, and personal protective equipment that must be used in the work area. EH&S shall approve use of all chemicals products prior to their arrival on campus. MSDS’s shall be provided to EH&S for this purpose. All hazardous waste must be disposed of through a reputable waste contractor. The UCF EPA ID number must be used on all material manifest and copies of the manifests must be provided to EH&S. A representative from EH&S shall verify all hazardous waste is properly managed prior to its transportation off campus.

1. Accounting:
   1. The Contractor shall submit the following information to the UCF FP&C PM:
      * 1. Understanding of the Construction Scope of Work provided by UCF with listings of project exclusions, allowances and alternates.
        2. Project Milestone of accepted and/or agreed to Construction Phases and Completion dates.
        3. Construction Quote Matrix. The Contractor shall provide a cost breakdown by division of work as outlined by the latest version of Master Format. The matrix will include the Contractor’s Fee as coordinated with their Continuing Services Contract.
   2. Submit all invoices and payment applications to the UCF Project Manager for approval and processing.
      * 1. Contractors shall submit all Payment Applications using the UCF Certificate of Partial Payment form as a cover sheet, which can be accessed through the following link: <http://www.rm.fs.ucf.edu/Forms/UCF%20CERTIFICATE%20OF%20PARTIAL%20PAYMENT.pdf>
        2. It is highly recommended to review such invoices and payment applications with the UCF Project Manager prior to submission to ensure that UCF is in agreement with the amounts invoiced and that they are in the proper format.
        3. Invoices and Payment Applications that are not properly submitted are subject to rejection.
        4. All invoices will included a Schedule of Values (SOV): <http://www.rm.fs.ucf.edu/Forms/Schedule%20of%20Values.xls>
   3. All equipment and materials greater than $5000 in value will be required to be purchased through the UCF Owner Direct Purchase (ODP) Requirement Process, unless written approval for not following this policy is provided by the UCF Project Manager.
      * 1. Direct Owner Purchase Order Instructions: <https://prezi.com/4aptsx2cjgvl/direct-owner-purchase-order-instructions/?utm_campaign=share&utm_medium=copy>
        2. Direct Owner Purchase Order Instructions – Detailed: <http://www.rm.fs.ucf.edu/Forms/Direct%20Owner%20Purchase%20Program%20Instructions-Detailed.pdf>
   4. For awarded contracts over $100,000.00 in value, contractor must provide performance and payment bond within five days of project award.
2. Substantial / Final Completion / Close Out Requirements:
   1. As part of the Substantial / Final Completion phases, the Professional Service Vendor must provide and comply with the requirements set forth by the following UCF checklists and forms:
      * 1. Substantial Completion Checklist: <http://fp.ucf.edu/sites/default/files/forms/Substantial%20Completion%20Checklist.pdf>
        2. Substantial completion Approval Form:

<http://fp.ucf.edu/sites/default/files/forms/Substantial%20Completion%20Approval%20Form.pdf>

* + - 1. Final Completion Checklist:

<http://fp.ucf.edu/sites/default/files/forms/Final%20Completion%20Checklist.pdf>

* + - 1. Final Completion Approval Form: <http://fp.ucf.edu/sites/default/files/forms/Final%20Completion%20Approval%20Form.pdf>