

22 May 2024
Addendum No 2
Columbus County 911 Center

The following addendum shall supersede previous information and does hereby become part of the contract documents.

- Drawings, D-1: The existing wall between approximate gridline B-9.5 and C-9.5 to be removed as required to construct the new Hall 119. G.C. to coordinate all items to be removed to construct new plan A-1.
- Wall section 5/A.5: Remove one existing GWB layer to apply sound batts, new 2 layers 5/8" GWB Type X. All new GWB for this wall to be National Gypsum 5/8" XP Soundbreak – Floor to underside of roof deck.
- Job site office can be inside the existing building in a location approved by the county. Staging can be in grassy area adjacent to main parking lot. Contractor shall be responsible for site repairs at completion of project. Staging area to be fenced in by the G. C.
- Bollard installation: contractor is to be advised that there is existing concrete under the existing pavers in the courtyard.
- The contractor will be responsible for all repairs required in the existing portion of the building necessary for work required for construction of this project. (for example existing E.O.C. area repairs to adjoining walls and ceiling will be required for rated wall, construction and structural upgrade for mechanical area on the roof.)
- The owner has had existing asbestos removed from the work area.
- Existing perimeter wall along Column line C: The contractor will be responsible for all existing wall repairs (inside and out) for removal of existing window.
- Spec section 08211, 2.2B. Doors to be factory finished.
- Spec section 0960, 3.2B: GWB to receive Level 4 finish in lieu of Level 5.
- Drawing, D – 1, Keynote 5: The contractor shall assume that where new floor finishes are to go on the existing slab, the existing slab will need grinding and skim/leveling coat appropriate for the new finishes.
- See BD-1 for detail at Storefront at 120/ 911 Center 117
- See attached specification section 09511 Acoustical Panel Ceilings.
- Specifications, Table of Contents, 212200: Clean – Agent fire extinguishing systems included in the specifications, was not listed in table of contents.
- Fire alarm: the fire alarm system will not be a requirement for this project.
- Allowances: add a \$10,000 testing allowance to the contract.
- Drawings A-1.1 access flooring information as per specification 10270.
- Clarification: the antenna rail system shown on 8/85.2 is the responsibility of the G. C.

- Clarification: See accountability spreadsheet to assist with identifying responsibilities of Owner & Contractor.
- The roofer that recently put the new roof on the building is Hawks Roofing – 910-641-7829 (Jerry Hawks). All warranties are to be maintained.
- Clarification: CMU walls to be high density block, contractor to grout the bottom course solid and dowel into existing slab W/ epoxy dowels @ 24" O.C. All cells need to be grout filled w/ Type-M mortar.
- Minutes of Pre-Bid meeting and Sign-in sheet is posted on Architects website.
- Fixture schedule calls for cast iron floor drain bodies. Can these be PVC instead? PVC is acceptable
- M2 Note 12 calls out 1200 CFM exhaust fan for clean agent system. Provide order of operations and control sequence schematics

Provide motor operated gasketed damper in the ductwork at the intake for EF-3 to remain closed unless the Fire Suppression System is activated. Interlock the fan and damper to operate upon user control as noted below. Provide a lighted, labeled switch, outside server room door within sight of the alarm notification for the fire suppression system. Provide labeling that indicates "When the Fire Suppression System activates, Prior to entering the room, the user shall activate the exhaust fan switch, which will open the damper and activate the exhaust fan to clear the agent from the room".

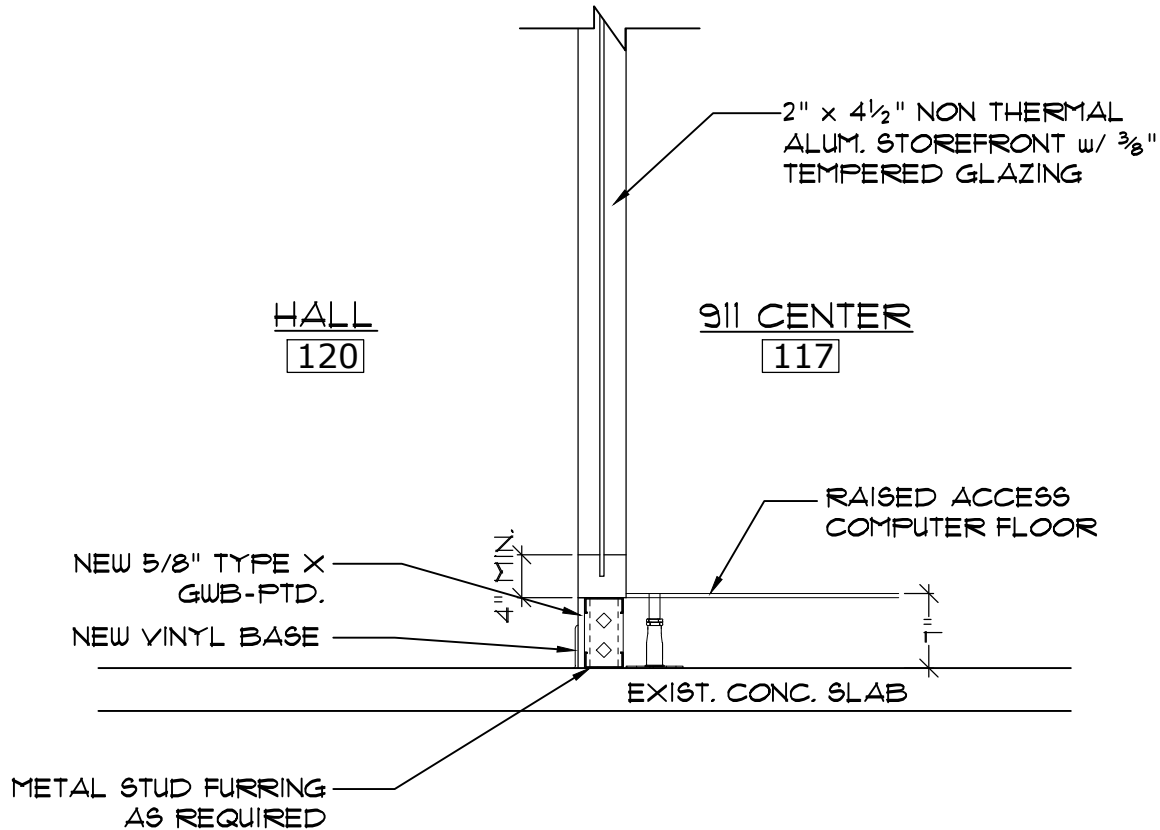
- Provide schedule for MTS shown on riser diagram E5.1. Provide ASCO Model# J07MTSB30400N50U
- Conflicting details for ATS shown on sheet E5.1. Please confirm if we should follow ATS schedule or Generator Schedule.

Provide ASCO Model# J07AUSB30400N50V, ATS must be rated for Critical Systems Operation.

- Is Cummins an acceptable manufacturer of the new generator? Also, will a sound rating of 73dBA be accepted ILO the specified 72dBA? Cummins is an acceptable manufacturer, 73dBA is acceptable.
- HVAC: Equal products by L.G. will be acceptable.

End of Addendum 2

COLUMBUS COUNTY
911 CENTER
WHITEVILLE, NORTH CAROLINA



**DETAIL AT STOREFRONT
HALLWAY 120/911 CENTER 117**

1
BD-1

3/4" = 1' = 0"

22001

ISSUED: 05/22/24

DWG BY: SKC

CKD BY: LDD

REVISIONS

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| | |

SHEET NO.

BD-1

OF 1

SECTION 09511 – ACOUSTICAL PANEL CEILINGS

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes acoustical panels and exposed suspension systems for interior ceilings.
- B. Products furnished, but not installed under this Section, include anchors, clips, and other ceiling attachment devices to be cast in concrete.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified, 6 inches in size.
- C. Delegated-Design Submittal: For seismic restraints for ceiling systems.
 - 1. Include design calculations for seismic restraints including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
 - 1. Ceiling suspension-system members.
 - 2. Structural members to which suspension systems will be attached.
 - 3. Method of attaching hangers to building structure.
 - a. Furnish layouts for cast-in-place anchors, clips, and other ceiling attachment devices whose installation is specified in other Sections.
 - 4. Carrying channels or other supplemental support for hanger-wire attachment where conditions do not permit installation of hanger wires at required spacing.
 - 5. Size and location of initial access modules for acoustical panels.
 - 6. Items penetrating finished ceiling and ceiling-mounted items including the following:
 - a. Lighting fixtures.
 - b. Diffusers.
 - c. Grilles.
 - d. See plans for additional items.
 - 7. Minimum Drawing Scale: 1/8 inch = 1 foot.

- B. Evaluation Reports: For each acoustical panel ceiling suspension system and anchor and fastener type, from ICC-ES.
- C. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For finishes to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Acoustical Ceiling Units: Full-size panels equal to 2 percent of quantity installed.
 - 2. Suspension-System Components: Quantity of each exposed component equal to 2 percent of quantity installed.
 - 3. Hold-Down Clips: Equal to 2 percent of quantity installed.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical panels, suspension-system components, and accessories to Project site and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.

1.8 FIELD CONDITIONS

- A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of acoustical ceiling panel and its supporting suspension system from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design seismic restraints for ceiling systems.
- B. Seismic Performance: Suspended ceilings shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
- C. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: Class A according to ASTM E1264.

2. Smoke-Developed Index: 50 or less.
- D. Fire-Resistance Ratings: Comply with ASTM E119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
1. Indicate design designations from UL or from the listings of another qualified testing agency.

2.3 ACOUSTICAL PANELS

- A. Basis of Design: Subject to compliance with requirements, provide basis of design indicated or comparable product by one of the following:
1. Armstrong World Industries.
 2. CertainTeed Corp.
 3. Hunter Douglas
 4. USG Corp.
- B. Acoustical Panel Standard: Provide manufacturer's standard panels according to ASTM E1264 and designated by type, form, pattern, acoustical rating, and light reflectance unless otherwise indicated.
- C. Acoustical Panel Ceilings: (ACT-1) (General use, office, halls, etc.)
1. Basis of Design: Armstrong; Ultima 1910.
 2. Type and Form: Type IV, mineral base with membrane-faced overlay; Form 2, water felted.
 3. Pattern: E (lightly textured).
 4. Color: White.
 5. Light Reflectance (LR): Not less than 0.88.
 6. Ceiling Attenuation Class (CAC): Not less than 35.
 7. Noise Reduction Coefficient (NRC): Not less than 0.75.
 8. Edge/Joint Detail: Squared Edge.
 9. Thickness: 3/4 inch.
 10. Modular Size: 24 by 24 inches.
- D. Acoustical Panel Ceilings: (ACT-2) (911 Call Center 117, Training 116, and Server/IT Equip. Room 118)
1. Basis of Design: Armstrong; Optima 3152.
 2. Texture: Fine.
 3. Color: White.

4. Light Reflectance (LR): Not less than 0.88.
5. Noise Reduction Coefficient (NRC): Not less than 0.95.
6. Articulation Class (AC): Not less than 190.
7. Edge/Joint Detail: Square.
8. Thickness: 1-inch. 1
9. Modular Size: 24 by 24 inches.

E. Acoustical panel ceilings (ACT-3) (Toilets 109, 110)

1. Ceramaguard 605: Square Edge.
2. Color: White.

2.4 METAL SUSPENSION SYSTEM

A. Manufacturers: Subject to compliance with requirements, provide products from one of the following:

1. Armstrong World Industries.
2. CertainTeed Corp.
3. USG Corp

B. Metal Suspension-System Standard: Provide manufacturer's standard, direct-hung, metal suspension system and accessories according to ASTM C635/C635M and designated by type, structural classification, and finish indicated.

1. High-Humidity Finish: Where indicated, provide coating tested and classified for "severe environment performance" according to ASTM C635/C635M. (Toilets 109,110)

C. Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet; prepainted, electrolytically zinc coated, or hot-dip galvanized, G30 coating designation; with prefinished 15/16-inch- wide metal caps on flanges.

1. Basis of Design: Armstrong World Industries; 15/16" Prelude XL - (White)

2.5 ACCESSORIES

A. Attachment Devices: Size for five times the design load indicated in ASTM C635/C635M, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.

B. Wire Hangers, Braces, and Ties: Provide wires as follows:

1. Zinc-Coated, Carbon-Steel Wire: ASTM A641/A641M, Class 1 zinc coating, soft temper.
2. Size: Wire diameter sufficient for its stress at three times hanger design load (ASTM C635/C635M, Table 1, "Direct Hung") will be less than yield stress of wire, but not less than 0.106-inch- diameter wire.

- C. Hold-Down Clips: Manufacturer's standard hold-down.
- D. Seismic Clips: Manufacturer's standard seismic clips designed to secure acoustical panels in place during a seismic event.
- E. Seismic Stabilizer Bars: Manufacturer's standard perimeter stabilizers designed to accommodate seismic forces.
- F. Seismic Struts: Manufacturer's standard compression struts designed to accommodate seismic forces.

2.6 METAL EDGE MOLDINGS AND TRIM

- A. Basis of Design: Subject to compliance with requirements, provide products by one of the following:
 - 1. Armstrong World Industries.
 - 2. CertainTeed Corp.
 - 3. USG Corp.
- B. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension-system runners.
 - 1. Edge moldings shall fit acoustical panel edge details and suspension systems indicated and match width and configuration of exposed runners unless otherwise indicated.
 - 2. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.
 - 3. For penetrations, provide 2-inch oversized ring or sleeve through the ceiling to allow for free movement of at least 1 inch in all horizontal directions.
 - 4. Wall Angle: 7/8-inch wide, approved for use in seismic areas.
 - a. Armstrong Seismic RX with BERC2 Clips.
 - b. Certainteed; CTSPC clips system
 - c. USG; DX main and cross runners with ACM7 clips.

2.7 AUXILIARY MATERIALS

- A. Acoustical Sealant: As specified in Section 079219 "Acoustical Joint Sealants."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements

for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

- B. Examine acoustical panels before installation. Reject acoustical panels that are wet, moisture damaged, or mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders unless otherwise indicated, and comply with layout shown on reflected ceiling plans.
- B. Layout openings for penetrations centered on the penetrating items.

3.3 INSTALLATION

- A. Install acoustical panel ceilings according to ASTM C636/C636M, seismic design requirements, and manufacturer's written instructions.
- B. Suspend ceiling hangers from building's structural members and as follows:
 - 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
 - 2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
 - 3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
 - 4. Secure wire hangers to ceiling-suspension members and to supports above with a minimum of three tight turns. Connect hangers directly to structure or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
 - 5. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast in-place hanger inserts, postinstalled mechanical or adhesive anchors, or power-actuated fasteners that extend through forms into concrete.
 - 6. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
 - 7. Do not attach hangers to steel deck tabs.
 - 8. Do not attach hangers to steel roof deck. Attach hangers to structural members.
 - 9. Space hangers not more than 48 inches o.c. along each member supported directly from hangers unless otherwise indicated; provide hangers not more than 8 inches from ends of each member.

10. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards.
 11. Install hanger wire as specified above within 6 inches of each corner of the grid at every light, air diffuser, air return grille, and other equipment items which are installed within or penetrate the ceiling system.
- C. Where area of ceiling exceeds 2500 square feet provide seismic separation joints as indicated, or, if not indicated, as directed by Architect.
- D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
 2. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends. Miter corners accurately and connect securely.
 3. Do not use exposed fasteners, including pop rivets, on moldings and trim.
 4. Install seismic edge molding in accordance with manufacturer's written recommendations with all accessories necessary to comply with ICC evaluation report.
- E. Install suspension-system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- F. Install acoustical panels with undamaged edges and fit accurately into suspension-system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide precise fit.
1. Arrange directionally patterned acoustical panels as follows: a. As indicated on reflected ceiling plans.
 2. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension-system runners and moldings.
 3. For reveal-edged panels on suspension-system members with box-shaped flanges, install panels with reveal surfaces in firm contact with suspension-system surfaces and panel faces flush with bottom face of runners.
 4. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
 5. Install seismic clips in areas indicated; space according to panel manufacturer's written instructions unless otherwise indicated.
 6. Install hold-down clips at entrances and in areas required by authorities having jurisdiction; space as recommended by panel manufacturer's written instructions, unless otherwise indicated.
 7. Protect lighting fixtures and air ducts according to requirements indicated for fire-resistance-rated assembly.

3.4 ERECTION TOLERANCES

- A. Suspended Ceilings: Install main and cross runners level to a tolerance of 1/8 inch in 12 feet, non-cumulative.
- B. Moldings and Trim: Install moldings and trim to substrate and level with ceiling suspension system to a tolerance of 1/8 inch in 12 feet, non-cumulative.

3.5 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Periodic inspection during the installation of suspended ceiling grids according to ASCE/SEI 7.
- B. Acoustical panel ceiling hangers, anchors, and fasteners will be considered defective if they do not pass tests and inspections.
- C. Prepare test and inspection reports.

3.6 CLEANING

- A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.
- B. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 09511

ACCOUNTABILITIES

Project: Columbus County 911
 Project Manager: Coastal Architecture

OFOI = Owner Furnished / Owner Installed
 OFCI = Owner Furnished / Contractor Installed
 CFCI = Contractor Furnished / Contractor Installed
 OFVI = Owner Furnished / Owner's Vendor Installed

| | OFOI | OFCI | CFCI | OFVI | Vendor Responsible, as applicable |
|---|------|------|------|------|-----------------------------------|
| Infrastructure | | | | | |
| Low Voltage Cabling - Voice, Data (install, terminate, label, and test) | | | X | | |
| Low Voltage Cabling - Access Control (install, terminate, label, and test) | | | X | | |
| Low Voltage Cabling - Security intrusion detection and surveillance (install, terminate, label, and test) | | | X | | |
| Low Voltage Cabling - Audiovisual (install, terminate, label, and test) | | | X | | |
| Cabling for NetClock display(s) | | | X | | |
| Audiovisual display blocking, and power/data/coax, as applicable | | | X | | |
| Cabling from Demarc into facility | | | X | | |
| Cable Tray / Basket and pathways | | | X | | |
| Conduit (interior / exterior), handholds, pull string, and boxes | | | X | | |
| Wiring poles / Vertical Conduit Chases (if applicable) | | | X | | |
| Grounding and Bonding per project requirements | | | X | | |
| Lightning Protection System | | | X | | |
| Equipment room cabinets / racks | | X | | | radio and phone vendor provided |
| Facility UPS(s) (excludes data center cabinet mounted units) | | | X | | |
| Generator(s) | | | X | | |
| External (alternate) Generator Connection Panel | | | X | | |
| Access Control System / Intercom / Remote Release | | | | X | |
| Security Cameras and Security System (including gate access, access control, intrusion detection, intercom) | | | | X | |
| BDA/DAS/ERRS | | | X | | |
| Firestopping, fire detection, fire suppression | | | X | | |
| Lighting | | | X | | |
| HVAC / CRAC / Redundant HVAC needs | | | X | | |
| Acoustic panels, sound absorption | | | X | | |
| Remote Annunciator Panels (fire/security/BAS/generator/UPS) | | | X | | |
| Raised Flooring | | | X | | |
| Flood Detection System | | | X | | |
| Building Management System (BMS) | | | X | | |
| Building Mounted Antenna Mounting Array | | | | | |
| Network / Systems / Technology | | | | | |
| Active Network - Switches, Routers, Firewalls, WAPs | | | | X | |
| Servers, Workstations, Monitors | | | | X | |
| 911 Call-handling Equipment (CHE) | | | | X | |
| Administrative Phone System and Handsets | | | | X | |
| Computer-aided Dispatch | | | | X | |
| Radio Consoles | | | | X | |
| Portable Radios | | | | X | |
| Consolette Radios / Backup Radios | | | | X | |
| Control Stations | | | | X | |
| Antennas and Coax Cabling | | | | X | |
| Tower or Antenna structure | | | | X | |
| Grounding of antennas, coax, and radio equipment | | | | X | |
| Amateur Radio Emergency Service (ARES) Equipment | | | | X | |
| Satellite Phones | | | | X | |
| Logging Recorder | | | | X | |
| NetClock hardware with Displays | | | | X | |
| Audiovisual backroom System | | | | X | |
| Audiovisual Displays, encoders, decoders, and cable boxes | | | | X | |
| Furnishings | | | | | |
| Dispatch Furniture / Chairs | | | | X | |
| Office Furniture | | | | X | |
| FFE - Small appliances, refrigerators, ice makers, dishwashers, etc | | | X | | |