October 22, 2021

FROM: AMHI Center Building Storage Addendum 1

TO: Prospective Bidders, Suppliers, and Other Parties

RE: Addendum No**. 1 (One)** to the Bidding Documents

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated September 27, 2021. Acknowledge receipt of this Addendum in the space provided on the Proposal Form. Failure to do so may subject Bidder to disqualification.

GENERAL:

1. **Bid Attendance List Provided as attachment**

CONTRACTOR QUESTIONS/RESPONSES:

1. See Attached Question & Response Table

SPECIFICATIONS & ATTACHMENTS:

1. **DELETE** specifications Section001113 Notice to Contractors in its entirety. **ADD** in its place Section 001113R Notice to Contractors_210616_Addendum 1 in its entirety (Attached)
2. **DELETE** specifications Section_073126 - Slate Shingles in its entirety. **ADD** in its place 073126R- Slate Shingles_Addendum 1
3. **DELETE** specifications Section_ 283111-digital, addressable fire-alarm system. **ADD** in its place 283111-digital, addressable fire-alarm system _Addendum 1

PLANS:

1. **SHEET 1 of 1 – WATER SERVICE PLAN – CENTRAL BUILDING**
   a. Water line service
2. **SHEET A1.10 – OVERALL FIRST FLOOR PLAN**
   a. Changes to Mechanical Room #106
3. **SHEET AD1.12 – ENLARGED REMOVALS PLAN – SOUTH**
   a. Changes to Mechanical Room #106
4. **SHEET AD1.13 – ENLARGED REMOVALS PLAN – SOUTH**
   a. Changes to Mechanical Room #106
5. **SHEET SF-101 – STRUCTURAL – ROOF FRAMING PLAN**
   a. Changes to Mechanical Room #106
6. **SHEET EL-110 – FIRST FLOOR LIGHTING PLAN**
   a. Changes to Mechanical Room #106
7. **SHEET EY-110 – FIRST FLOOR SYSTEMS PLAN**
   a. Changes to Mechanical Room #106

ATTACHMENTS:

A.	Addendum Summary Document	(1 Page)
B.	Bidder Attendance List	(1 Page)
C.	Plan Sheets and Sketches	(7 Pages)
D.	Specifications & Attachments	(25 Pages)
E.	Questions/Response Table	(1 Page)

Total Page Count 35 Pages

Allied Engineering
Structural Mechanical Electrical Plumbing

Attendance Sign-In Sheet: **Pre-Bid Walkthrough 10/12/21**

AEI Project Name: AMHI Center Building Museum Storage

AEI Project Number: 21050

Name	Firm	Email Address	Phone Number
Jeff Becker	Blane Casey	JBecker@blanecasey.com	622-5600
Taylor Coffin	Doten's	Taylor@dotens.com	233-9005
Kris Rickett	Lakeside Concrete Cutting	KRickett@lakesideap.com	831-4905
Ryan Peters	Lakeside Concrete Cutting	RPeters@lakesideap.com	745-5567
Angela Legasse	Nickerson & O'Day	ALegasse@nickoday.com	949-6372
Bob McClintock	PC Construction	RMcClintock@pcconstruction.com	802-233-8897
Chad Chandler	Benchmark Construction	CChandler@benchmarkconstruction.org	

AMHI Center Building Storage, Augusta ME

ADDENDUM 01 - 10.21.2021

					1/19/2021
Question #	Contractor/Vendor	**Sheet**	**Plan/Spec**	**Question**	**AEI Team Response/Resolution**
1	Blaine Casey Building Contractor, Inc.			Slate specifications call for Snow Guards but I don't see anything referencing snow guards on the roof plans. Are they required?	AEI: Snow rails/guards are not a part of contract. Disregard any reference to snow rails/guards.
2	Blaine Casey Building Contractor, Inc.			The plans have 2" Closed-Cell Foam against the existing masonry exterior walls. This configuration is not recommended unless a drainage plane can be created at the exterior. I did not see enough detail provided to know if there is a drainage plane at the exterior or not. Can you provide any more information?	The exterior walls are solid masonry walls consisting of exterior courses of brick and an interior course of concrete block. It is not a brick veneer incorporating and air cavity. In speaking to technical representatives of Johns Manville, it is understood that the use of their JM Corbond IV would be acceptable for this condition. Please note that we have learned that the Certainteed CertaSpray referenced within specification section 07 21 40 has been discontinued. The basis of design shall now be the Johns Manville Corbond IV as referenced above. The Physical and Mechanical Properties shall remain as noted within 07 21 40-2.2.A.1. Equal applicable products will be considered.

END ADDENDUM 1 QUESTIONS

SECTION 07 31 26 - SLATE SHINGLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Slate shingles.
2. Underlayment.
3. Snow guards.

B. Related Sections:
1. Section 07 62 00 "sheet metal flashing and Trim" for Valley, Hip and Ridge cap flashing.

1.3 DEFINITIONS

A. Roofing Terminology: See ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Initial Selection: Of each color, size, texture, and shape.

1. Include similar Samples of trim and accessories involving color selection.

C. Samples for Verification: For the following products, of sizes indicated, to verify color selected:

1. Slate Shingle: Full size, of each color, size, texture, and shape.
2. Fasteners: Three fasteners of each type, length, and finish.
3. Snow Guard: Base, bracket, and 12-inch-long rail.

1.5 INFORMATIONAL SUBMITTALS

A. Material Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each slate variety.

B. Warranty: Sample of special warranty.

1.6 QUALITY ASSURANCE

A. Source Limitations: Obtain each color of slate shingle from single quarry capable of producing slate of consistent quality in appearance and physical properties.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store underlayment rolls on end, on pallets or other raised surfaces. Do not double stack rolls.

1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members.

B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.

1.8 PROJECT CONDITIONS

A. Environmental Limitations: Proceed with installation of self-adhering sheet underlayment only within the range of ambient and substrate temperatures recommended by manufacturer.

1.9 WARRANTY

A. Special Warranty: Standard form in which roofing Installer agrees to repair or replace slate roofing that fails in materials or workmanship within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SLATE SHINGLES

A. Slate Shingles: ASTM C 406, Grade S1; hard, dense, and sound; chamfered edges, with nail holes machine punched or drilled and countersunk. No broken or cracked slates, no broken exposed corners, and no broken corners on covered ends that could sacrifice nailing strength or laying of a watertight roof.

001113 NOTICE TO CONTRACTORS

The Work of Project is defined by the Contract Documents and consists of the following infrastructure improvements:

The Maine State Museum (MSM) is looking for approximately 6,000 square feet of area for their agricultural collections and Bureau of General Service (BGS) is looking to renovate approximately 4,000 square feet for general storage as well. There is a basement directly below these spaces and multiple stories above the back portion of the proposed spaces.

Exterior envelope upgrades will address many of the water infiltration conditions associated with the low roof to main multi-story building intersections. Additional scope work includes, but it not limited to, roof slate replacement/repair, roof wall termination upgrades with counterflashing installation, roof drain installations with polyisocyanurate taper modifications and EPDM applications, masonry repointing, copper roof valley replacements, window replacements/modifications wood façade and trim removal/replacements.

Water service upgrades inclusive of sprinkler, HVAC, plumbing, and sewer. It will be the intent to seal the spaces from rodent and insect infiltration as best practices allow.

Structural/Envelope Repairs

A. First floor framing upgrades for storage capacity.
B. Address storage space ceilings and walls as independent systems within the building and separate from the existing building environment.
C. Overhead door installation in exterior wall adjacent to the current loading dock.
D. Envelope repairs including, but not limited to:
    1. Base wall flashing,
    2. Main roof slate repair and open joint repairs/replacements.
    3. Roof valley, shed-to slope tie-in repairs, and eave flashing replacements,
    4. Dormer envelope repairs,
    5. Masonry repointing above low roof intersections with main building walls, all four (4) sides of upper main building.
    6. Windowsill modifications and window replacement to facilitate proper EPDM (low roof) to main building masonry sidewalls.

Mechanical, Plumbing, and Fire Protection

A. New system of Heating, Ventilation, and Air Conditioning (HVAC) to serve the proposed Museum Storage Area. System shall include humidification and dehumidification control as well as temperature control.
B. New system of HVAC to serve the proposed BGS Storage Area (General Storage)
C. Space heat for new mechanical and sprinkler rooms
D. Integrate new HVAC systems with the existing campus Honeywell Building Automation System
E. Plumbing to serve humidification and condensate drainage systems
F. Put into service, domestic water and sprinkler risers to serve the occupied spaces
G. New system of automatic sprinkler protection to serve the conditioned areas

Electrical Scope:

A. New fire alarm system to serve renovated space and include addressable control, monitoring and detection devices related to HVAC and fire protection systems (expandable for balance of building).
B. New LED lighting design for renovated space and for two means of egress from the renovated space.
C. Ceiling mounted vacancy sensor array for light control (manual on, auto off).
D. Ceiling mounted occupancy sensor array for egress paths and manual control for loading dock lighting (as well as MEPFP back of house rooms).
E. Power provisions for the new HVAC , plumbing and fire protection equipment serving the renovated spaces.
F. Survey and evaluation of power distribution equipment in the main electrical room currently serving the building to confirm the equipment has available capacity and is capable of being modified to suit program needs (the room was inaccessible the day of the walk through). We assume the equipment is not beyond its useful life (less than 20 years old) since the main electrical room is currently serving a campus data equipped room located in the building.
G. New power distribution branch panels (for lighting and power) and feeders for larger mechanical system equipment electrical loads. New electrical distribution equipment shall be served by the existing power distribution equipment in the existing main electrical room.
H. Provide small stand-by power distribution system (diesel generator, ATS and power panel) to support selected HVAC equipment necessary to prevent freeze protection of the systems and area withing the renovated space.
I. Conduit, boxes and line voltage power provisions required for supporting a security system to serve the renovated space (system designed by a state managed vendor)
J. Conduit, boxes and line voltage power provisions required for supporting a CCTV system to serve the renovated space (system designed by a state managed vendor)
K. Conduit, boxes and line voltage power provisions required for supporting an access control system to serve the renovated space (system designed by a state managed vendor)
L. Conduit, boxes and line voltage power provisions required for supporting tel/com service/devices to serve the renovated space (system designed by a state managed vendor)
M. The renovated space consists of a new Museum Storage Area and a BGS Storage Area (general storage) within a portion of the existing building envelope.

The cost of the work is approximately $2.0 million. The work to be performed under this contract shall be completed on or before the Final Completion date of ***March 25, 2022***. However, to complete interior work, the roof system work at all levels, including the EPDM wall/flashing modifications at windows must be made watertight, requiring completion of this portion of the work on or before December 15, 2021.

1. Submit bids on a completed Contractor Bid Form, plus bid security when required, all scanned and included as an attachment to an email with the subject line marked "**Bid for *Center Building Renovations for Temporary Storage***" and addressed to the Bid Administrator at BGS.Architect@Maine.gov, so as to be received no later than **2:00:00 p.m.** on ***November 3, 2021***.

   Bid submissions will be opened and read aloud at the time and date noted above at the Bureau of General Services office, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to BGS.Architect@Maine.gov.

   Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. The Bid Administrator may require the Bidder to surrender a valid paper copy of the bid form or the bid security document in certain circumstances.

Questions on the bid opening process shall be addressed to the Bid Administrator: Jill M. Instasi, Senior Project Manager, Division of Planning, Design & Construction, Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077, BGS.Architect@Maine.gov.

2. The bid shall be submitted on the Contractor Bid Form (section 00 41 13) provided in the Bid Documents. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.

3. Bid security is required on this project. If noted above as required, the Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.

4. Performance and Payment Bonds are required on this project. If noted above as required, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.

5. Filed Sub-bids are not required on this project.

6. There are no Pre-qualified General Contractors on this project. If Pre-qualified General Contractors are identified for this project, the name of each company, with their city and state, are listed below.

7. An on-site pre-bid conference *will* be conducted for this project. If a pre-bid conference is scheduled, it is *mandatory* for General Contractors and optional for Subcontractors and suppliers. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding. ***October 12, 10:00 AM at the Center Building, AMHI Campus, Hospital Street, Augusta, ME 04330***.

8. Property Insurance for this construction contract, described in the Insurance Requirements section of the General Conditions of the contract, shall be *Renovation or addition insured by Contractor.*

Bid Documents - full sets only - will be available on or about *September 27, 2021,* and may be obtained *"at no cost"* from: *The Bureau of General Services contracts website address below:*

https://www.maine.gov/dafs/brem/business-opportunities#invitationforbid

9. Bid Documents may be examined at:

AGC Maine
188 Whitten Road
Augusta, ME 04332
Phone 207-622-4741 Fax 207-622-1625

Construction Summary
734 Chestnut Street
Manchester, NH 03104
Phone 603-627-8856 Fax 603-627-4524

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

    a. American Slate Company.
    b. Black Diamond Slate.
    c. Burlington Natstone Inc.
    d. Echeguren Slate, Inc.
    e. Evergreen Slate Company.
    f. Greenstone Slate Company, Inc.
    g. New England Slate Company (The).
    h. North Country Slate.
    i. Slate International, Inc.
    j. Structural Slate Company (The).
    k. Tatko Stone Products, Inc.
    l. U.S. Quarried Slate Products, Inc.
    m. Vermont Structural Slate Company, Inc.
    n. Virginia Slate Company (The).
    o. Williams & Sons Slate & Tile, Inc.

2. Thickness: to match existing slate
3. Surface Texture: to match existing slate Shingles
4. Size: to match existing slate shingles
5. Nail Holes: Minimum two per shingle, may require more per shingle width and max spacing of 4".
6. Butt Shape: Standard square cut.
7. Color: to match range of existing slate shingles

B. UNDERLAYMENT MATERIALS

1. Basis-of-Design Product: Subject to compliance with requirements, provide Henry Blueskin PE 200 HT or comparable product by one of the following:

    a. Carlisle Coatings & Waterproofing, Inc.
    b. Grace, W. R. & Co. - Conn.
    c. Henry Company.
    d. Johns Manville.
    e. Owens Corning.

~~2.2 SNOW GUARDS~~ Deleted Addendum 1 10/21/2021

~~A. Snow Guard Rails: Units fabricated from metal baseplate anchored to fixed bracket and equipped with three bars.~~

~~1. Basis-of-Design Product: Subject to compliance with requirements, provide Alpine PP 125 3 pipe snow rails or comparable product by one of the following:~~

~~a. Alpine SnowGuards, a division of Vermont Slate & Copper Services, Inc.~~
~~b. M. J. Mullane Company, Inc.~~
~~c. Sieger Snow Guards Inc.~~
~~d. SnoGuard.~~

~~e. Snow Management Systems.~~
~~f. TRA-Mage, Inc.~~

~~2. Brackets and Baseplate: Aluminum.~~
~~3. Bars: Aluminum, clear anodized.~~

2.3 ACCESSORIES

A. Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.

B. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied.

C. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in slate-shingle roofing and remain watertight.

D. Slating Nails: ASTM F 1667, copper, or stainless-steel, smooth shanked, wire nails; 0.135-inch minimum thickness; sharp pointed; with 3/8-inch-minimum diameter flat head; of sufficient length to penetrate a minimum of 3/4 inch into sheathing.

1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.

E. Ridge Cap and Hip cap: Custom-fabricated metal covers with noncorrosive components complete with internal anchoring lag screws, compression plates,

1. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings.
2. Type: Cap, nonventilating.
3. Metal Components: Copper, 24-oz./sq. ft.-thick sheet.
4. Accessories: Splices, end caps, and other accessories of matching metal and finish.

2.4 METAL FLASHING AND TRIM

A. General: Comply with requirements in Section 07 62 00 "Sheet Metal Flashing and Trim."

1. Sheet Metal: Copper.

B. Fabricate sheet metal flashing and trim to comply with recommendations that apply to design, dimensions, metal, and other characteristics of the item in SMACNA's "Architectural Sheet Metal Manual."

1. Apron Flashings:

a. Building A porch roof: Fabricate with lower flange extending a minimum of 6 inches over and 4 inches beyond each side of downslope slate shingles and 6 inches up the vertical surface.
b. Buildings D and C Main roofs at dormer or side wall intersections. Match current dimensions of in-place system.

2. Step Flashings: Fabricate with a head lap of 3 inches and a minimum extension of 5 inches both horizontally and vertically.
3. Hip Flashings: Fabricate to length of slate shingle and to extend 3 inches beyond joint of hip shingle with adjoining roof shingle.
4. Open-Valley Flashings: Fabricate in lengths not exceeding 10 feet with 1-inch-high, inverted-V profile at center of valley and equal flange widths of matching the current valley widths.
5. Drip Edges: Fabricate in lengths not exceeding 10 feet with 2-inch roof-deck flange and 1-1/2-inch fascia flange with 3/8-inch drip at lower edge.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored and that provision has been made for flashings and penetrations through roofing.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

A. General: Comply with underlayment manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.

B. Self-Adhering Sheet Underlayment: Install, wrinkle free, on roof deck. Comply with low-temperature installation restrictions of underlayment manufacturer if applicable. Install at locations indicated below, lapped in direction to shed water. Lap sides not less than 3-1/2 inches. Lap ends not less than 6 inches, staggered 24 inches between courses. Roll laps with roller. Cover underlayment within seven days.

1. Building A Porch roof: Apply to full roof surface and turn up 4 inches under step flashing.
2. Valleys: Extend from lowest to highest point 12 inches on each side.
3. Hips: Apply to full open areas beneath hip flashing and up over slate 2” minimum.
4. Ridges: Apply to full open areas beneath hip flashing and up over slate 2” minimum.
5. Sidewalls: Extend 8 inches beyond sidewalls and return vertically against sidewalls not less than 4 inches.
6. Roof-Slope Transitions: Extend 12 inches on each roof slope.

3.3 METAL FLASHING INSTALLATION

A. General: Install metal flashings and other sheet metal to comply with requirements in Section 07 62 00 "Sheet Metal Flashing and Trim."

1. Install metal flashings according to recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."

B. Apron Flashings: Extend lower flange over and beyond each side of downslope slate shingles and up the vertical surface.

C. Hip Flashings: Install centrally over hip with lower edge of flashing concealed by butt of overlying slate shingle. Fasten to roof deck.

D. Open-Valley Flashings: Install centrally in valleys, lapping ends at least 8 inches in direction to shed water. Fasten upper end of each length to roof deck beneath overlap.

1. Secure hemmed flange edges into metal cleats spaced 12 inches apart and fastened to roof deck.
2. Adhere 9-inch- wide strips of self-adhering sheet to metal flanges and to self-adhering sheet underlayment.

3.4 SLATE-SHINGLE INSTALLATION

A. Install first and succeeding shingle courses with chamfered face up. Install full-width first course at rake edge.

1. Offset joints of uniform-width slate shingles by half the shingle width in succeeding courses.
2. Offset joints of random-width slate shingles a minimum of 3 inches in succeeding courses.

B. Match existing and adjacent minimum head lap between succeeding shingle courses.

C. Maintain uniform exposure of shingle courses midway between eaves and ridge and increase head lap of succeeding shingle courses to ensure uniform exposure on remaining shingle courses.

D. Extend shingle starter course and first course to match existing over fasciae at eaves.

E. Extend shingle starter course and succeeding courses to match existing over fasciae at rakes.

F. Cut and fit slate neatly around roof vents, pipes, ventilators, and other projections through roof.

G. Hang slate with minimum of 2 slating nails (4” max on-center spacing) for each shingle with nail heads lightly touching slate. Do not drive nails home drawing slates downward or leave nail head protruding enough to interfere with overlapping shingle above.

~~3.5 SNOW GUARD INSTALLATION~~ Deleted Addendum 1 10/21/2021

~~A. Snow Guard Rails: Install 3 rows of snow guard rails at locations indicated according to manufacturer's written installation instructions. Manufacturer to provide design for locations and spacing of snow rail system.~~

3.6 ACCESSORIES INSTALLATION

A. Ridge Caps: Install units according to The NRCA Roofing and Waterproofing Manual.

3.7 ADJUSTING AND CLEANING

A. Remove and replace damaged or broken slate shingles.

B. Remove excess slate and debris from Project site.

3.8 ROOFING INSTALLER'S WARRANTY

A. WHEREAS <**Insert name**> of <**Insert address**>, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:

1. Owner: <**Insert name of Owner**>.
2. Address: <**Insert address**>.
3. Building Name/Type: <**Insert information**>.
4. Address: <**Insert address**>.
5. Area of Work: <**Insert information**>.
6. Acceptance Date: <**Insert date**>.
7. Warranty Period: <**Insert time**>.
8. Expiration Date: <**Insert date**>.

B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:

a. Lightning;
b. Peak gust wind speed exceeding 90 mph;
c. Fire;

d. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
e. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
f. Vapor condensation on bottom of roofing; and
g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of the foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this <**Insert day**> day of <**Insert month**>, <**Insert year**>.

1. Authorized Signature: <**Insert signature**>.
2. Name: <**Insert name**>.
3. Title: <**Insert title**>.

END OF SECTION

SECTION 28 31 11 - DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Fire-alarm control unit.
2. Manual fire-alarm boxes.
3. System smoke detectors.
4. Heat detectors.
5. Notification appliances.
6. Magnetic door holders.
7. Remote annunciator.
8. Addressable interface device.
9. Digital alarm communicator transmitter.

B. Related Requirements:

1. Division 08 for knox boxes.

2. Division 21 (specifications and delegated fire protection design submittals) for all tamper, low pressure and flow switch quantities and locations

1.3 DEFINITIONS

A. LED: Light-emitting diode.

B. NICET: National Institute for Certification in Engineering Technologies.

1.4 SYSTEM DESCRIPTION

A. Noncoded addressable system, with automatic sensitivity control of certain smoke detectors and multiplexed signal transmission, dedicated to fire-alarm service only.

1.5 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Fire-alarm control unit and raceways shall withstand the effects of earthquake motions determined according to SEI/ASCE 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For fire-alarm system. Include plans, elevations, sections, details, and attachments to other work.

1. Comply with recommendations in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72.
2. Include voltage drop calculations for notification appliance circuits.
3. Include battery-size calculations.
4. Include performance parameters and installation details for each detector, verifying that each detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
5. Include plans, sections, and elevations of heating, ventilating, and air-conditioning ducts, drawn to scale and coordinating installation of duct smoke detectors and access to them. Show critical dimensions that relate to placement and support of sampling tubes, detector housing, and remote status and alarm indicators. Locate detectors according to manufacturer's written recommendations.
6. Include floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits.

C. General Submittal Requirements:

1. Submittals shall be approved by authorities having jurisdiction prior to submitting them to Architect.
2. Shop Drawings shall be prepared by persons with the following qualifications:

a. Trained and certified by manufacturer in fire-alarm system design.
b. NICET-certified fire-alarm technician.
c. Licensed or certified by authorities having jurisdiction.

D. Seismic Qualification Certificates: For fire-alarm control unit, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

E. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 include the following:

1. Comply with the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
2. Provide "Record of Completion Documents" according to NFPA 72 article "Permanent Records" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter.
3. Record copy of site-specific software.
4. Provide "Maintenance, Inspection and Testing Records" according to NFPA 72 article of the same name and include the following:

    a. Frequency of testing of installed components.
    b. Frequency of inspection of installed components.
    c. Requirements and recommendations related to results of maintenance.
    d. Manufacturer's user training manuals.

5. Manufacturer's required maintenance related to system warranty requirements.
6. Abbreviated operating instructions for mounting at fire-alarm control unit.

F. Software and Firmware Operational Documentation:

1. Software operating and upgrade manuals.
2. Program Software Backup: On magnetic media or compact disk, complete with data files.
3. Device address list.
4. Printout of software application and graphic screens.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.

B. Source Limitations for Fire-Alarm System and Components: Obtain fire-alarm system from single source from single manufacturer.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. NFPA Certification: Obtain certification according to NFPA 72 by a UL-listed alarm company.

1.8 PROJECT CONDITIONS

A. Coordinate all device programming and addressing with the Owner.

1.9 SOFTWARE SERVICE AGREEMENT

A. Comply with UL 864.

B. Technical Support: Beginning with Substantial Completion, provide software support for two years.

C. Upgrade Service: Update software to latest version at Project completion. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system. Upgrade shall include new or revised licenses for use of software.

1. Provide 30 days' notice to Owner to allow scheduling and access to system and to allow Owner to upgrade computer equipment if necessary.

1.10 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Lamps for Remote Indicating Lamp Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
2. Lamps for Strobe Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
3. Smoke Detectors, Fire Detectors: Quantity equal to 10 percent of amount of each type installed, but no fewer than 1 unit of each type.
4. Detector Bases: Quantity equal to 2 percent of amount of each type installed, but no fewer than 1 unit of each type.
5. Keys and Tools: One extra set for access to locked and tamperproofed components.
6. Audible and Visual Notification Appliances: One of each type installed.
7. Fuses: Two of each type installed in the system.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Manufacturer shall be Honeywell XLS120. The control panel shall be connected to the existing Honeywell Enterprise Buildings Integrator (EBI) network that serves the campus.

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:

1. Manual stations.
2. Heat detectors.
3. Smoke detectors.
4. Duct smoke detectors.
5. Verified automatic alarm operation of smoke detectors.
6. Automatic sprinkler system water flow.
7. Heat detectors in elevator shaft and pit.
8. Fire-extinguishing system operation.
9. Pre-action system operation
10. Fire standpipe system.

B. Fire-alarm signal shall initiate the following actions:

1. Continuously operate alarm notification appliances.
2. Identify alarm at fire-alarm control unit and remote annunciators.
3. Transmit an alarm signal to the remote alarm receiving station.
4. Release fire and smoke doors held open by magnetic door holders.
5. Switch heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
6. Close smoke dampers in air ducts of designated air-conditioning duct systems.
7. Recall elevators to primary or alternate recall floors.
8. Activate emergency shutoffs for gas and fuel supplies.
9. Record events in the system memory.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:

1. Valve supervisory switch.
2. Low-air-pressure switch of a dry-pipe sprinkler system.
3. Elevator shunt-trip supervision.

D. System trouble signal initiation shall be by one or more of the following devices and actions:

1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
3. Loss of primary power at fire-alarm control unit.
4. Ground or a single break in fire-alarm control unit internal circuits.
5. Abnormal ac voltage at fire-alarm control unit.
6. Break in standby battery circuitry.
7. Failure of battery charging.
8. Abnormal position of any switch at fire-alarm control unit or annunciator.
9. Low-air-pressure switch operation on a dry-pipe or preaction sprinkler system.

E. System Trouble and Supervisory Signal Actions: Initiate notification appliance and annunciate at fire-alarm control unit and remote annunciators. Transmit a trouble or supervisory signal to the remote alarm receiving station.

2.3 FIRE-ALARM CONTROL UNIT

A. General Requirements for Fire-Alarm Control Unit:

1. Field-programmable, microprocessor-based, modular, power-limited design with electronic modules, complying with UL 864 and listed and labeled by an NRTL.

    a. System software and programs shall be held in flash electrically erasable programmable read-only memory (EEPROM), retaining the information through failure of primary and secondary power supplies.
    b. Include a real-time clock for time annotation of events on the event recorder.

2. Addressable initiation devices that communicate device identity and status.

    a. Smoke sensors shall additionally communicate sensitivity setting and allow for adjustment of sensitivity at fire-alarm control unit.
    b. Temperature sensors shall additionally test for and communicate the sensitivity range of the device.

3. Addressable control circuits for operation of mechanical equipment.

B. Alphanumeric Display and System Controls: Arranged for interface between human operator at fire-alarm control unit and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.

1. Annunciator and Display: Liquid-crystal type, 2 line(s) of 40 characters, minimum.
2. Keypad: Arranged to permit entry and execution of programming, display, and control commands and to indicate control commands to be entered into the system for control of smoke-detector sensitivity and other parameters.

C. Circuits:

1. Initiating Device, Notification Appliance, and Signaling Line Circuits: NFPA 72, Class A.

    a. Notification Appliance Circuits: Style Z.
    b. Signaling Line Circuits: Style 6.
    c. Pathway Survivability Level 1.
    d. Install no more than 50 addressable devices on each signaling line circuit.

2. Serial Interfaces: Two RS-232 ports for printers.

D. Smoke-Alarm Verification:

1. Initiate audible and visible indication of an "alarm-verification" signal at fire-alarm control unit.
2. Activate an NRTL-listed and -approved "alarm-verification" sequence at fire-alarm control unit and detector.
3. Sound general alarm if the alarm is verified.
4. Cancel fire-alarm control unit indication and system reset if the alarm is not verified.

E. Elevator Recall:

1. Smoke detectors at the following locations shall initiate automatic elevator recall.

    a. Elevator lobby detectors except the lobby detector on the designated floor.
    b. Smoke detector in elevator machine room.
    c. Smoke detectors in elevator hoistway.

2. Elevator lobby detectors located on the designated recall floors shall be programmed to move the cars to the alternate recall floor.

3. Water-flow alarm connected to sprinkler in an elevator shaft and elevator machine room shall shut down elevators associated with the location without time delay.

    a. Water-flow switch associated with the sprinkler in the elevator pit may have a delay to allow elevators to move to the designated floor.

F. Door Controls: Door hold-open devices that are controlled by smoke detectors at doors in smoke barrier walls shall be connected to fire-alarm system.

G. Remote Smoke-Detector Sensitivity Adjustment: Controls shall select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and change those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory, and print out the final adjusted values on system printer.

H. Transmission to Remote Alarm Receiving Station: Automatically transmit alarm, supervisory, and trouble signals to a remote alarm station.

I. Primary Power: 24-V dc obtained from 120-V ac service and a power-supply module. Initiating devices, notification appliances, signaling lines, trouble signals, supervisory and digital alarm communicator transmitters shall be powered by 24-V dc source.

1. Alarm current draw of entire fire-alarm system shall not exceed 80 percent of the power-supply module rating.

J. Secondary Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.

1. Batteries: Sealed lead calcium.

K. Instructions: Computer printout or typewritten instruction card mounted behind a plastic or glass cover in a stainless-steel or aluminum frame. Include interpretation and describe appropriate response for displays and signals. Briefly describe the functional operation of the system under normal, alarm, and trouble conditions.

2.4 MANUAL FIRE-ALARM BOXES

A. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38. Boxes shall be finished in red with molded, raised-letter operating instructions in contrasting color; shall show visible indication of operation; and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.

1. Single-action mechanism, type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to fire-alarm control unit.
2. Station Reset: Key- or wrench-operated switch.
3. Indoor Protective Shield: Factory-fabricated clear plastic enclosure hinged at the top to permit lifting for access to initiate an alarm. Lifting the cover actuates an integral battery-powered audible horn intended to discourage false-alarm operation.

2.5 SYSTEM SMOKE DETECTORS

A. General Requirements for System Smoke Detectors:

1. Comply with UL 268; operating at 24-V dc, nominal.
2. Detectors shall be two-wire type.
3. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.
4. Base Mounting: Detector 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.
5. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
6. Integral Visual-Indicating Light: LED type indicating detector has operated and power-on status.
7. Remote Control: Unless otherwise indicated, detectors shall be analog-addressable type, individually monitored at fire-alarm control unit for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by fire-alarm control unit.

    a. Rate-of-rise temperature characteristic shall be selectable at fire-alarm control unit for 15 or 20 deg F per minute.
    b. Fixed-temperature sensing shall be independent of rate-of-rise sensing and shall be settable at fire-alarm control unit to operate at 135 or 155 deg F.
    c. Provide multiple levels of detection sensitivity for each sensor.

B. Photoelectric Smoke Detectors:

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).

C. Duct Smoke Detectors: Photoelectric type complying with UL 268A.

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).

3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector. Must be UL listed to function with installed fire alarm system.
4. Watertight and Corrosive Resistant Enclosure (for use in each DOAS unit exhaust compartment): NEMA 4X, NRTL listed for use with the supplied detector and equal to performance of Air Products & Controls, model No. RT-3000-P (plus required tube assembly). Must be UL listed to function with installed fire alarm system.
5. Each sensor shall have multiple levels of detection sensitivity.
6. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.
7. Relay Fan Shutdown: Rated to interrupt fan motor-control circuit.

2.6 HEAT DETECTORS

A. General Requirements for Heat Detectors: Comply with UL 521.

B. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F or a rate of rise that exceeds 15 deg F per minute unless otherwise indicated.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

C. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature of 190 deg F.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

2.7 NOTIFICATION APPLIANCES

A. General Requirements for Notification Appliances: Connected to notification appliance signal circuits, zoned as indicated, equipped for mounting as indicated and with screw terminals for system connections.

1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated and with screw terminals for system connections.

B. Horns: Electric-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Comply with UL 464. Horns shall produce a sound-pressure level of 90 dBA, measured 10 feet from the horn, using the coded signal prescribed in UL 464 test protocol.

C. Visible Notification Appliances: Xenon strobe lights comply with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch-high letters on the lens.

1. Rated Light Output:

   a. 15/30/75/110 cd, selectable in the field.

2. Mounting: Wall mounted unless otherwise indicated.
3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.
4. Flashing shall be in a temporal pattern, synchronized with other units.
5. Strobe Leads: Factory connected to screw terminals.
6. Mounting Faceplate: Factory finished, [red] [white].

2.8 MAGNETIC DOOR HOLDERS

A. Description: Units are equipped for wall or floor mounting as indicated and are complete with matching doorplate.

1. Electromagnet: Requires no more than 3 W to develop 25-lbf holding force.
2. Wall-Mounted Units: Flush mounted unless otherwise indicated.
3. Rating: 24-V ac or dc.
4. Rating: 120-V ac.

B. Material and Finish: Match door hardware.

2.9 REMOTE ANNUNCIATOR

A. Description: Annunciator functions shall match those of fire-alarm control unit for alarm, supervisory, and trouble indications. Manual switching functions shall match those of fire-alarm control unit, including acknowledging, silencing, resetting, and testing.

1. Mounting: Flush cabinet, NEMA 250, Type 1.

B. Display Type and Functional Performance: Alphanumeric display and LED indicating lights shall match those of fire-alarm control unit. Provide controls to acknowledge, silence, reset, and test functions for alarm, supervisory, and trouble signals.

2.10 ADDRESSABLE INTERFACE DEVICE

A. Description: Microelectronic monitor module, NRTL listed for use in providing a system address for alarm-initiating devices for wired applications with normally open contacts.

B. Integral Relay: Capable of providing a direct signal to elevator controller to initiate elevator recall to circuit-breaker shunt trip for power shutdown.

2.11 DIGITAL ALARM COMMUNICATOR TRANSMITTER

A. Digital alarm communicator transmitter shall be acceptable to the remote central station and shall comply with UL 632 and be listed and labeled by an NRTL.

B. Functional Performance: Unit shall receive an alarm, supervisory, or trouble signal from fire-alarm control unit and automatically capture two telephone line(s) and dial a preset number for a remote central station. When contact is made with central station(s), signals shall be transmitted. If service on either line is interrupted for longer than 45 seconds, transmitter shall initiate a local trouble signal and transmit the signal indicating loss of telephone line to the remote alarm receiving station over the remaining line. Transmitter shall automatically report telephone service restoration to the central station. If service is lost on both telephone lines, transmitter shall initiate the local trouble signal.

C. Local functions and display at the digital alarm communicator transmitter shall include the following:

1. Verification that both telephone lines are available.
2. Programming device.
3. LED display.
4. Manual test report function and manual transmission clear indication.
5. Communications failure with the central station or fire-alarm control unit.

D. Digital data transmission shall include the following:

1. Address of the alarm-initiating device.
2. Address of the supervisory signal.
3. Address of the trouble-initiating device.
4. Loss of ac supply or loss of power.
5. Low battery.
6. Abnormal test signal.
7. Communication bus failure.

E. Secondary Power: Integral rechargeable battery and automatic charger.

F. Self-Test: Conducted automatically every 24 hours with report transmitted to central station.

PART 3 - EXECUTION

3.1 EQUIPMENT INSTALLATION

A. Comply with NFPA 72 for installation of fire-alarm equipment.

B. Install wall-mounted equipment, with tops of cabinets not more than 72 inches above the finished floor.

1. Comply with requirements for seismic-restraint devices specified in Section 26 05 48 "Vibration and Seismic Controls for Electrical Systems."

C. Smoke- or Heat-Detector Spacing:

1. Comply with NFPA 72, "Smoke-Sensing Fire Detectors" Section in the "Initiating Devices" Chapter, for smoke-detector spacing.

2. Comply with NFPA 72, "Heat-Sensing Fire Detectors" Section in the "Initiating Devices" Chapter, for heat-detector spacing.
3. Smooth ceiling spacing shall not exceed 30 feet.
4. Spacing of detectors for irregular areas, for irregular ceiling construction, and for high ceiling areas shall be determined according to Appendix A or Appendix B in NFPA 72.
5. HVAC: Locate detectors not closer than 3 feet from air-supply diffuser or return-air opening.
6. Lighting Fixtures: Locate detectors not closer than 12 inches from any part of a lighting fixture.

D. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend the full width of duct.

E. Heat Detectors in Elevator Shafts: Coordinate temperature rating and location with sprinkler rating and location.

F. Remote Status and Alarm Indicators: Install near each smoke detector and each sprinkler water-flow switch and valve-tamper switch that is not readily visible from normal viewing position.

G. Audible Alarm-Indicating Devices: Install not less than 6 inches below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille.

H. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inches below the ceiling.

I. Device Location-Indicating Lights: Locate in public space near the device they monitor.

J. Fire-Alarm Control Unit: Surface mounted, with tops of cabinets not more than 72 inches above the finished floor.

K. Annunciator: Install with top of panel not more than 72 inches above the finished floor.

3.2 CONNECTIONS

A. For fire-protection systems related to doors in fire-rated walls and partitions and to doors in smoke partitions, comply with requirements in Division 08 Connect hardware and devices to fire-alarm system.

1. Verify that hardware and devices are NRTL listed for use with fire-alarm system in this Section before making connections.

B. Make addressable connections with a supervised interface device to the following devices and systems. Install the interface device less than 3 feet from the device controlled. Make an addressable confirmation connection, when such feedback is available, at the device or system being controlled. **Review the Division 21 fire protection delegated design specifications and approved submittal for all quantities and locations of related devices that require alarm/supervisory/trouble fire alarm device/wiring/programming provisions for both existing to remain system components and the new system components**.

1. Alarm-initiating connection to smoke-control system (smoke management) at firefighter smoke-control system panel.
2. Alarm-initiating connection to stairwell and elevator-shaft pressurization systems.
3. Alarm-initiating connection to sprinkler system water flow switches
4. Smoke dampers in air ducts of designated air-conditioning duct systems.
5. Alarm-initiating connection to elevator recall system and components.
6. Alarm-initiating connection to activate emergency shutoffs for gas and fuel supplies.
7. Supervisory connections at each sprinkler system valve supervisory switches.
8. Supervisory connections at low-air-pressure switch of each dry-pipe sprinkler system.
9. Supervisory connections at elevator shunt trip breaker.
10. Supervisory connections at fire-pump power failure including a dead-phase or phase-reversal condition.
11. Supervisory connections at fire-pump engine control panel.

3.3 IDENTIFICATION

A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 26 05 53 "Identification for Electrical Systems."

B. Install framed instructions in a location visible from fire-alarm control unit.

3.4 GROUNDING

A. Ground fire-alarm control unit and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to fire-alarm control unit.

3.5 FIELD QUALITY CONTROL

A. Field tests shall be witnessed by Owner’s representative.

B. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

C. Tests and Inspections:

1. Visual Inspection: Conduct visual inspection prior to testing.

    a. Inspection shall be based on completed Record Drawings and system documentation that is required by NFPA 72 in its "Completion Documents, Preparation" Table in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter.
    b. Comply with "Visual Inspection Frequencies" Table in the "Inspection" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.

2. System Testing: Comply with "Test Methods" Table in the "Testing" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
3. Test audible appliances for the public operating mode according to manufacturer's written instructions. Perform the test using a portable sound-level meter complying with Type 2 requirements in ANSI S1.4.
4. Test visible appliances for the public operating mode according to manufacturer's written instructions.
5. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.

D. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.

E. Fire-alarm system will be considered defective if it does not pass tests and inspections.

F. Prepare test and inspection reports.

3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system.

END OF SECTION

VALVE INDICATOR AT THE SPRINKLER LINE TO THE BUILDING LOCATION OF MAIN SHUT-OFF AT BUILDING TO B E CONFIRMED BY CONTRACTOR

SPRINKLER RISER AT CORNER OF THE BUILDING (8" POSSIBLY)

DOMESTIC WATER ENTRANCE LOCATION

VALVE AT ORIGINAL INTERSECTION WITH LINE FROM NORTH STONE THROUGH CENTER BUILDING

APPROXIMATE EXISTING UNDERGROUND UTILITY, TYP.

APPROX. EXISTING WATER CONNECTION

RECENTLY INSTALLED 8" WATER SERVICE, CONTRACTOR TO CONFIRM

APPROX. LOCATION OF 6" ABANDONED WATER PIPE, RE-ENERGIZE FOR FIRE AND DOMESTIC SERVICE TO SERVE CENTRAL BUILDING, CONTRACTOR RESPONSIBLE FOR TESTING OF ABANDONED PIPE IN GENERAL CONFORMANCE WITH GREATER AUGUSTA UTILITY DISTRICT STANDARDS

EXTEND NEW 6" D.I. PIPE TO ABANDONED PIPE AND INSTALL 6" GATE VALVE. COORDINATE LOCATION WITH PLUMBING DRAWINGS

NEW LINE TO FEED CENTER BUILDING

APPROXIMATE EXISTING 6" WATER PIPE AND INDICATOR VALVE, TYP.

APPROXIMATE EXISTING TRANSFORMER, TYP.

INSTALL 6" GATE VALVE ON ABANDONED LINE FROM STONE BUILDING, TYP. 2 PLACES

APPROX. LOCATION ABANDONED WATER PIPE, CONTRACTOR TO INSPECT PIPE AND RE-ENERGIZE FOR FIRE AND DOMESTIC SERVICE TO SERVE CENTRAL BUILDING, CONTRACTOR RESPONSIBLE FOR TESTING OF ABANDONED PIPE IN GENERAL CONFORMANCE WITH GREATER AUGUSTA UTILITY DISTRICT STANDARDS

INDEPENDENCE DR

"NORTH STONE" BUILDING

"CENTRAL" BUILDING

"TYSON" BUILDING

"ELKINS" BUILDING

BUILDING "PAVILLION"

CONC VAULT

CONC SW

DOOR SILL ELEV = 183.8'

SMH 1408

SMH 1248 RIM=183.66'

DMH #2-2 RIM=AT GRADE

SMH 1410 RIM=173.86'

SMH 1409 RIM=173.90'

CB #2-4

STAIRS

EMH 1321

EXISTING INDICATOR POST

GRID

GENERAL NOTES

1. RECORD OWNER OF PROPERTY IS STATE OF MAINE BY DEED RECORDED AT THE KENNEBEC COUNTY REGISTRY OF DEEDS.
2. THE PROPERTY IS LOCATED ON THE CITY OF AUGUSTA ASSESSORS TAX MAP 10 BEING DEPICTED AS LOT 8.
3. EXISTING CONDITIONS, INCLUDING TOPOGRAPHY AND UNDERGROUND UTILITIES IS BASED UPON SURVEY INFORMATION BY OTHERS PROVIDED BY THE STATE OF MAINE. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
6. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GPS OBSERVATIONS.
7. SITE DEVELOPMENT AND EARTHWORK CONSTRUCTION WILL CONFORM TO THE EROSION PREVENTION PROVISIONS OUTLINED IN THE "MAINE EROSION AND SEDIMENTATION CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" AND "MAINE EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES" BY MDEP BUREAU OF LAND AND WATER QUALITY DATED 2014 OR LATEST REVISION.
8. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. THE DEVELOPER, OR AN AUTHORIZED AGENT, MUST BE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.
9. ALL EXISTING CATCH BASINS, MANHOLES, CONNECTIONS, CONDUIT AND PIPING SHALL BE CLEANED AND LEFT IN SATISFACTORY OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
10. ALL LAWN AREAS, WALKWAYS, AND DRIVEWAYS OUTSIDE THE WORK AREA, DAMAGED BY THE CONTRACTOR, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE.
11. EXISTING PAVEMENT SHALL BE SAW CUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED.
12. EXISTING DRAINAGE AND SEWER STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED IN THE DRAWINGS OR APPROVED BY THE ENGINEER.
13. THE CONTRACTOR IS REQUIRED TO PROVIDE A SECURE PROJECT WORK AREA. ALL PIPE TRENCH EXCAVATIONS SHALL BE BACKFILLED AND "CLOSED" DURING CONTRACTOR NON-WORKING HOURS INCLUDING NIGHTS, HOLIDAYS AND WEEKENDS. THE CONTRACTOR MAY REQUEST IN WRITING TO THE ENGINEER AND OWNER TO SECURE OPEN EXCAVATION IN LIEU OF BACKFILLED AND "CLOSED." NOT ALLOWING A SECURE OPEN EXCAVATION SHALL NOT BE A BASIS FOR CLAIMS AGAINST THE OWNER.
14. CONTRACTOR SHALL COMPLETE WORK SPECIFIED ON EACH PLAN AND SHALL COORDINATE WORK WITH ENTIRE PROJECT PLAN SET.
15. EXISTING PAVEMENT DISTURBED FOR UTILITY WORK SHALL BE RESTORED TO EXISTING CONDITIONS.
16. EXISTING UTILITY TYPE, LOCATIONS AND DEPTHS HAVE NOT BEEN INVESTIGATED BY SEBAGO TECHNICS AND SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. EXISTING UTILITY TYPES MAY INCLUDE THE MAIN FIBER OPTIC AND THREE PHASE POWER DISTRIBUTION LINES FOR THE CAMPUS.

UTILITY NOTES

1. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
2. PROTECT ALL EXISTING UTILITIES UNLESS NOTED OTHERWISE.
3. ALL GRAVITY PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR MUST REQUEST ENGINEER'S APPROVAL TO USE A GROUND LASER.
4. WATER PIPE AND FITTINGS SHALL CONFORM TO GREATER AUGUSTA UTILITY DISTRICT WATER PIPING SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/ANSI C-111/A21.11 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/ANSI C104/A21.4 WITH LINING TWICE THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING. INSTALL THRUST BLOCKS AT ALL WATER SERVICE BENDS.
5. INSPECTION AND TESTING OF EXISTING WATER PIPE SHALL CONFORM TO GREATER AUGUSTA UTILITY DISTRICT SPECIFICATIONS.
10. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE GREATER AUGUSTA UTILITY DISTRICT.
11. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES.
12. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
13. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING UTILITY DEPTHS TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. BRACE EXISTING UTILITIES AS REQUIRED.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	DECK/STEPS/ OVERHANG	
	EDGE PAVEMENT	
	PAVEMENT SAWCUT	
	EDGE CONCRETE	
	PAVEMENT PAINT	
	EDGE GRAVEL	
	CURB LINE	
o	BOLLARD	
o—o	SIGN	
120 118	CONTOURS	
× 120.00	SPOT GRADE	
W	WATER	W
	WATER GATE VALVE	
	WATER SHUT OFF	
	HYDRANT	
W	WATER MANHOLE	
	CATCH BASIN	
OHU	OVERHEAD UTILITY	
UGU	UNDERGROUND UTILITY	
ET	TRANSFORMER PAD	
E	ELECTRICAL MANHOLE	
	LIGHT POLE	
	UTILITY POLE	
	GUY WIRE	
S	SANITARY SEWER	
FM	FORCE MAIN	
S	SANITARY MANHOLE	

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

REV	BY	DATE
A	CAB	10/12/2021
B	CAB	10/22/2021

ISSUED FOR CONSTRUCTION

THIS PLAN SHALL NOT BE REUSED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, REUSE OR OTHER USE, SHALL LEAVE THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

CRAIG BURGESS, PE 12638

10/22/2021

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

WATER SERVICE PLAN - CENTRAL BUILDING

OF:

CENTRAL BUILDING IMPROVEMENTS

CENTRAL BUILDING, AMHI CAMPUS
AUGUSTA, MAINE 04333

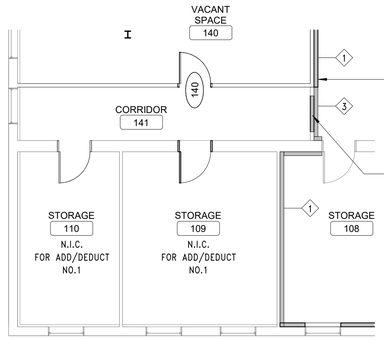
FOR:

ALLIED ENGINEERING
160 VERANDA STREET
PORTLAND, MAINE 04103

DESIGNED	CAB
DRAWN	CAB
CHECKED	CAB
DATE	10/12/2021
SCALE	1" = 20'
PROJECT	21837

SHEET 1 OF 1

21837S dwg, TAB-SITE



F1 ADD DEDUCT NO. 1 PLAN

REFERENCED FROM:A1.10 SCALE: 1/8" = 1'-0"

NOTES – FIRST FLOOR PLAN

1. REFER TO A9.00 INTERIOR FINISH LEGEND AND SCHEDULE FOR FLOORING TRANSITION DETAILS

DEDUCTIVE ALTERNATE NO. 1:
ALL WORK ASSOCIATED WITH ELIMINATING STORAGE ROOMS 109 AND 110 AS WELL AS THE CORRIDOR 141 FROM THE PROJECT SCOPE. ALL WALLS AND DOORS SHOWN TO BE REMOVED AND/OR REPLACED ARE TO REMAIN AS IN. ALL WORK RELATED TO PROVIDING ANY AND ALL WALL FURRING AND CLOSED CELL FOAM INSTALLATIONS WITHIN AND AROUND THESE SPACES IS TO BE REMOVED FROM THE SCOPE OF WORK. THIS DEDUCT WILL REQUIRE THE WALL BETWEEN STORAGE 111 AND VACANT SPACE 140 IS TO BE EXTENDED TO STORAGE 108 CLOSING OFF CORRIDOR 141. AS THIS WOULD THEN BECOME DEAD/INACCESSIBLE SPACE, NEW DOOR 140 WILL NEED TO BE PROVIDED BETWEEN CORRIDOR 141 AND VACANT SPACE 140. ALL ASSOCIATED WORK SCOPES NOTED WITHIN THE MECHANICAL AND ELECTRICAL DRAWINGS FOR THESE SPACES SHALL BE REMOVED FROM THE PROJECT AS WELL.

LIMIT OF WORK
STORAGE 118
STORAGE 120
A5 A1.11
LIMIT OF WORK
STORAGE 116
STORAGE 121
FUTURE TOILET ROOM.
SEE MECH DWGS FOR
FURTHER INFORMATION.
N.I.C.
LIMIT OF WORK
CORRIDOR 117
STORAGE 125 N.I.C.
CORRIDOR 124
STORAGE 126 N.I.C.
3
3
3
3
ENTRY MAT
3'-0"
4'-0"
5'-7 3/16"
LIMIT OF WORK
CORRIDOR 115
ENTRY MAT
4'-0"
8'-0"
FUTURE TOILET ROOM.
SEE MECH DWGS FOR
FURTHER INFORMATION.
N.I.C.
VACANT
SPACE
140
LIMIT OF WORK
STORAGE 111
CORRIDOR 130
STORAGE 114
A5 A1.12
CORRIDOR 141
STAIR 135
ELEV 103
VESTIBULE 104
ENTRY MAT
10'-0"
4'-0"
STORAGE 110
STORAGE 109
STORAGE 108
STORAGE 107
MECHANICAL 106
CORRIDOR 102
ENTRY MAT
3'-0"
4'-0"
LOADING 101
LOADING VESTIBULE 105
UP
BASE BID
LIMIT OF WORK
LIMIT OF WORK
F1 A1.10
LIMIT OF ADD DECUCT NO.1
ADD SELF LEVELING CONCRETE
FLOOR RESERFACER OVER MECH 106.
BASIS OF DESIGN: HYDROLIC CEMENT
UNDER LAYMENT ARDEX K15
1
A5 A1.13
E5 A3.03

A5 FIRST FLOOR PLAN

REFERENCED FROM:A3.03 SCALE: 1/8" = 1'-0"

PROJECT NORTH
TRUE NORTH

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com
Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021		ADDENDUM #1

Date: -
Drawn By: CWS
Checked By: CWS
Project Mgr: CWS
Project No: 21015
Cad File:
Graphic Scale: 0" 1"

OVERALL FIRST FLOOR PLAN

AMHI STONE BUILDING MUSEUM STORAGE
AUGUSTA, ME

A1.10

ISSUED FOR BID ~ 10/19/21 ~ NOT FOR CONSTRUCTION

DEMOLITION NOTES:

FLOOR PLAN REMOVALS

1 REMOVE GWB WALL ASSEMBLY, COMPLETE.

2 REMOVE PORTION OF MASONRY WALL ASSEMBLY, FULL HEIGHT, TO THE EXTENTS INDICATED ON FLOOR PLAN.

3 REMOVE DOOR AND DOOR FRAME ASSEMBLY, COMPLETE.

4 REMOVE WINDOW AND WINDOW FRAME ASSEMBLY, COMPLETE.

5 REMOVE PLUMBING FIXTURE. CAP PIPING WITHIN WALL/FLOOR ASSEMBLY. REFERENCE PLUMBING DOCUMENTS FOR MORE INFORMATION.

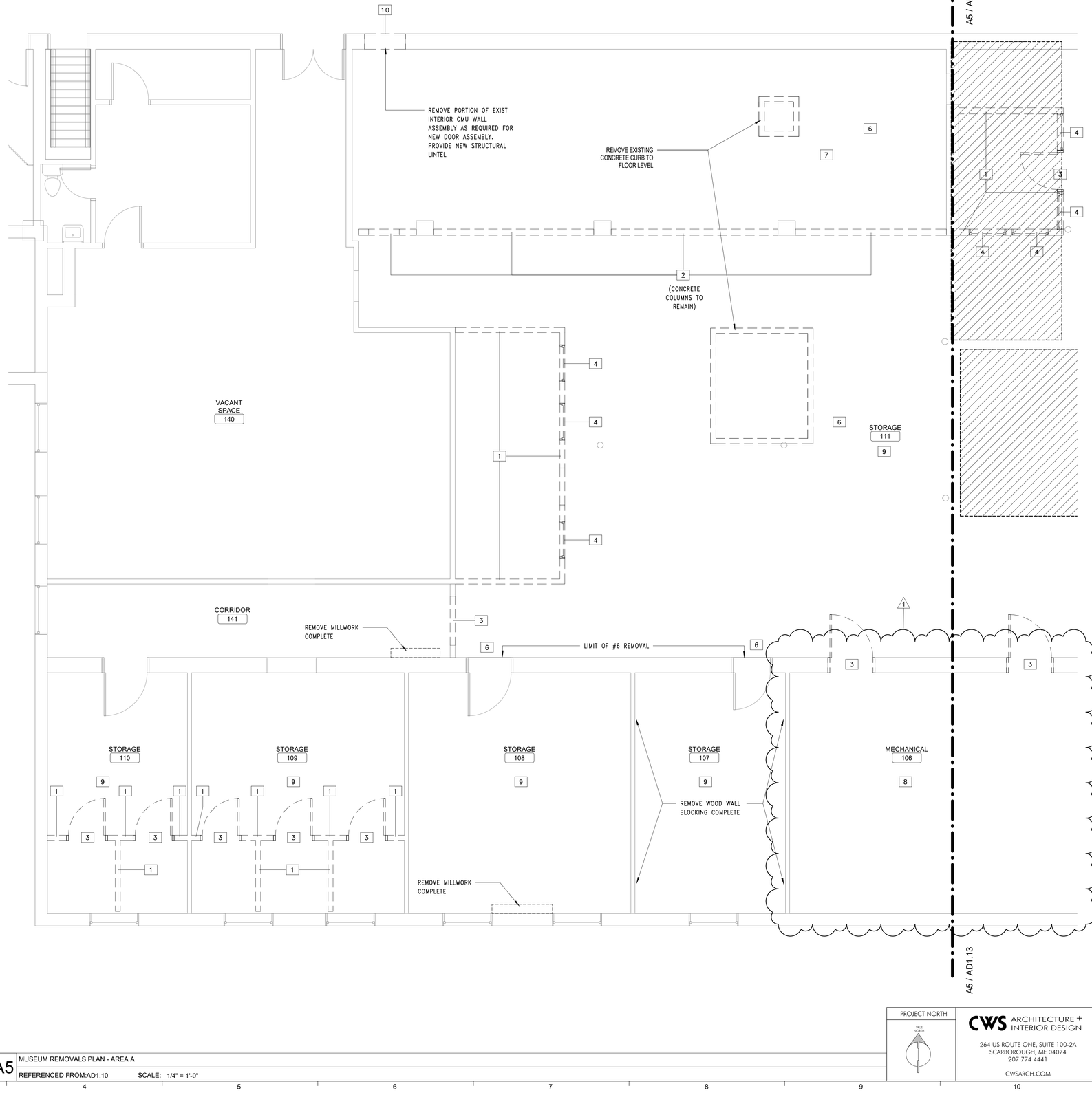
6 REMOVE FLOOR FINISHES AND WALL BASE TO EXTENTS INDICATED ON PLAN. PREPARE CONCRETE SLAB FOR NEW FLOORING SYSTEM PER FLOOR FINISH MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE SANDING AND/OR SAND BLASTING AS RECOMMENDED BY FLOOR FINISH MANUFACTURER.
- REFERENCE ROOM FINISH SCHEDULE & FLOOR FINISH PLAN FOR MORE INFORMATION.
- PROVIDE LEVELING COMPOUND AND/OR PATCHING MATERIAL AS REQUIRED.

CEILING REMOVALS

7 REMOVE EXISTING GWB CEILING SUSPENSION GRID

8 REMOVE EXISTING SUSPENDED WOOD FRAMED CEILING SYSTEM AND INSULATION, COMPLETE WITHIN ENTIRE SPACE. INCLUDE REMOVALS OF INSULATED PANELS.

9 REMOVE EXISTING CEILING GRID



A5 MUSEUM REMOVALS PLAN - AREA A

REFERENCED FROM:AD1.10 SCALE: 1/4" = 1'-0"

PROJECT NORTH

TRUE NORTH

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com
Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021		ADDENDUM #1

Date: -
Drawn By: CWS
Checked By: CWS
Project Mgr: CWS
Project No: 21015
Cad File:
Graphic Scale: 0" 1"

ENLARGED REMOVALS PLAN - SOUTH

AMHI STONE BUILDING MUSEUM STORAGE

AUGUSTA, ME

AD1.12

ISSUED FOR BID ~ 10/19/21 ~ NOT FOR CONSTRUCTION

DEMOLITION NOTES:

FLOOR PLAN REMOVALS

1 REMOVE GWB WALL ASSEMBLY, COMPLETE.

2 REMOVE PORTION OF MASONRY WALL ASSEMBLY, FULL HEIGHT, TO THE EXTENTS INDICATED ON FLOOR PLAN.

3 REMOVE DOOR AND DOOR FRAME ASSEMBLY, COMPLETE.

4 REMOVE WINDOW AND WINDOW FRAME ASSEMBLY, COMPLETE.

5 REMOVE PLUMBING FIXTURE. CAP PIPING WITHIN WALL/FLOOR ASSEMBLY. REFERENCE PLUMBING DOCUMENTS FOR MORE INFORMATION.

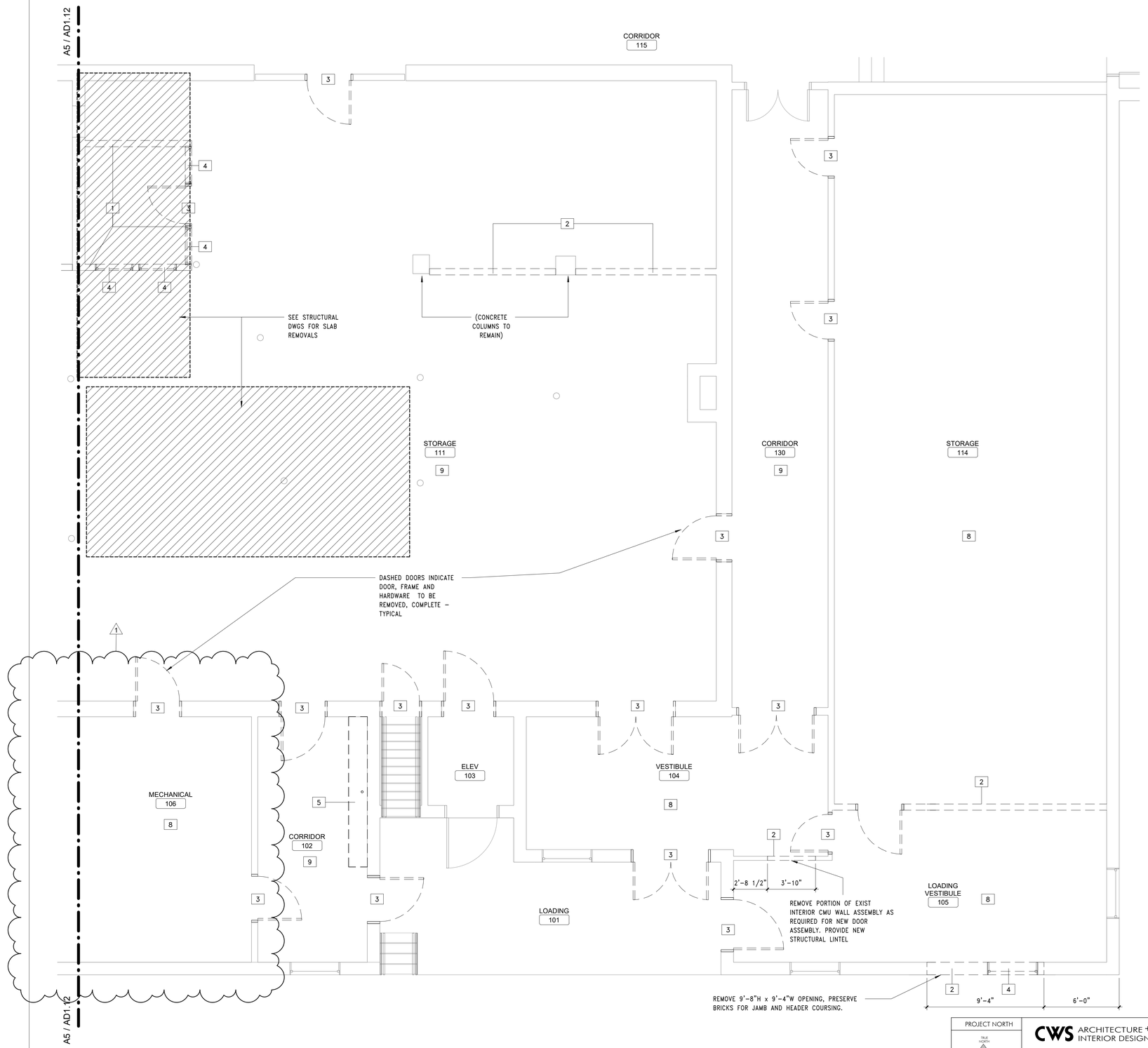
6 REMOVE FLOOR FINISHES AND WALL BASE TO EXTENTS INDICATED ON PLAN. PREPARE CONCRETE SLAB FOR NEW FLOORING SYSTEM PER FLOOR FINISH MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE SANDING AND/OR SAND BLASTING AS RECOMMENDED BY FLOOR FINISH MANUFACTURER.
- REFERENCE ROOM FINISH SCHEDULE & FLOOR FINISH PLAN FOR MORE INFORMATION.
- PROVIDE LEVELING COMPOUND AND/OR PATCHING MATERIAL AS REQUIRED.

CEILING REMOVALS

7 REMOVE EXISTING GWB CEILING SUSPENSION GRID

8 REMOVE EXISTING SUSPENDED WOOD FRAMED CEILING SYSTEM AND INSULATION, COMPLETE WITHIN ENTIRE SPACE. INCLUDE REMOVALS OF INSULATED PANELS.

9 REMOVE EXISTING CEILING GRID



A5 MUSEUM REMOVALS PLAN - AREA B

REFERENCED FROM:AD1.10 SCALE: 1/4" = 1'-0"

PROJECT NORTH

TRUE NORTH

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com
Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021		ADDENDUM #1

Date: -
Drawn By: CWS
Checked By: CWS
Project Mgr: CWS
Project No: 21015
Cad File:
Graphic Scale: 0" 1"

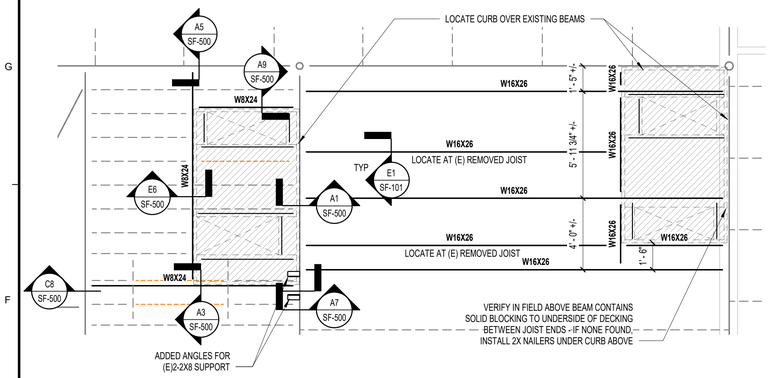
ENLARGED REMOVALS PLAN - SOUTH

AMHI STONE BUILDING MUSEUM STORAGE

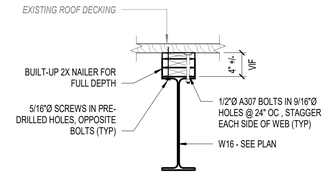
AUGUSTA, ME

ISSUED FOR BID ~ 10/19/21 ~ NOT FOR CONSTRUCTION

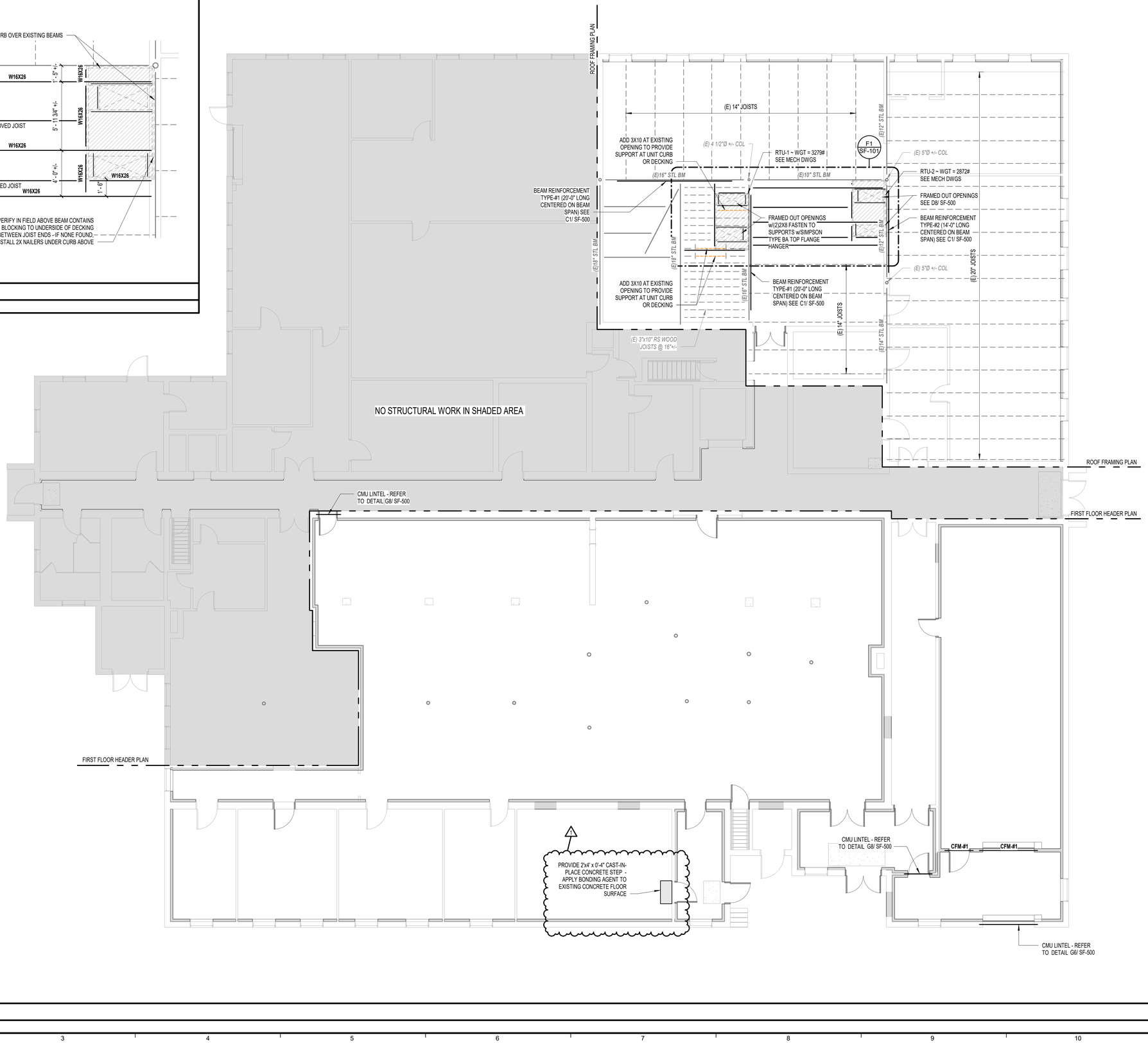
AD1.13

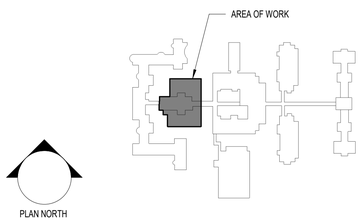


F1	ENLARGED PLAN VIEW AT RTU FRAMING
1/4" = 1'-0"	



E1	AT PROPOSED W16 BEAMS
1" = 1'-0"	





A1	STRUCTURAL ~ ROOF FRAMING PLAN
1/8" = 1'-0"	

160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com
Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021		ADDENDUM#1

Date: -
Drawn By: PED
Checked By: JPC
Project Mgr: WPF
Project No: 21050
Cad File: 21050S R21.rvt
Graphic Scale: 0" 1"

STRUCTURAL - ROOF FRAMING PLAN

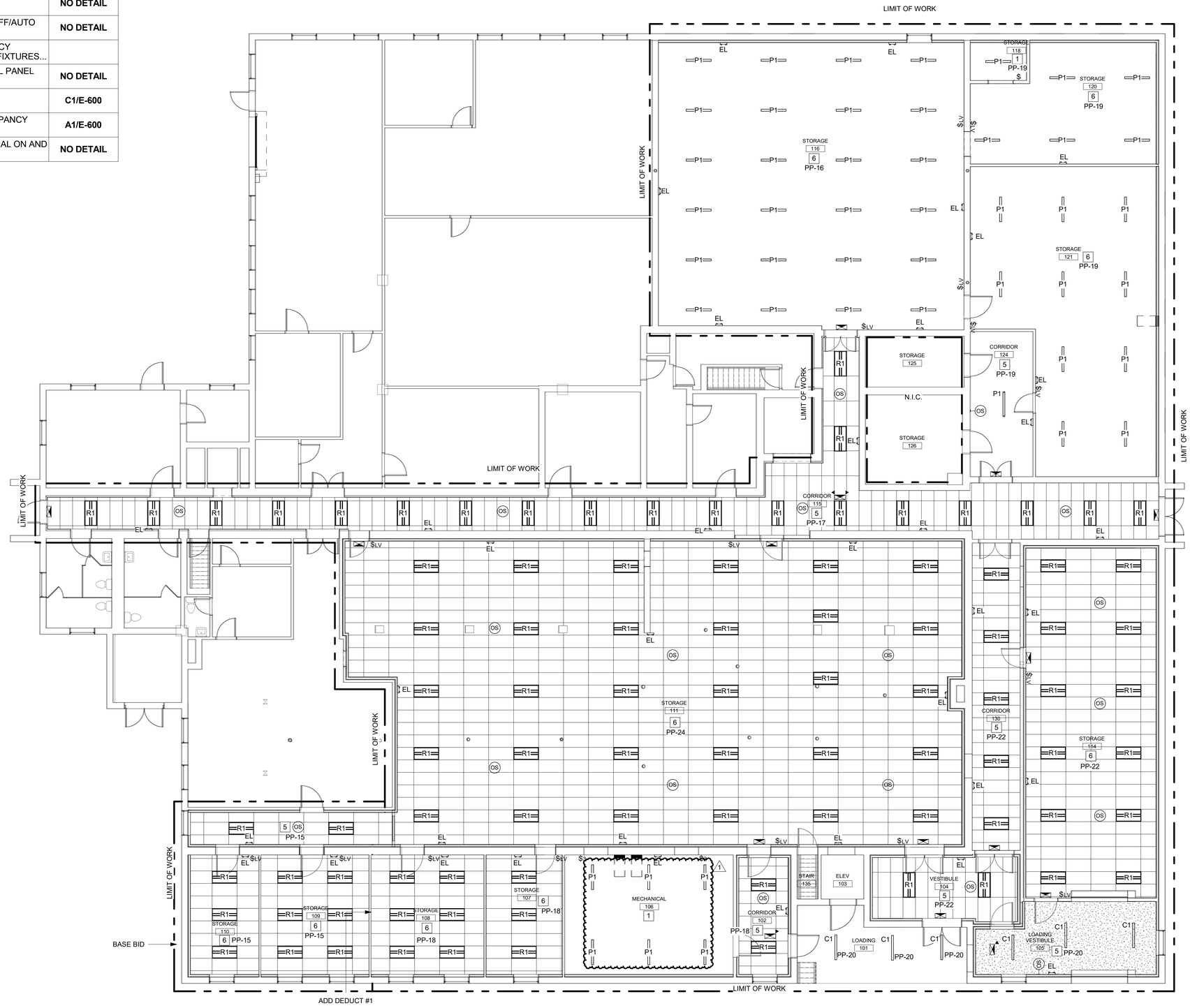
CENTER BUILDING - RENOVATION FOR TEMPORARY STORAGE AMHI FACILITY
AUGUSTA, ME

ISSUED FOR BID ~ 09/27/21 ~ NOT FOR CONSTRUCTION

SF-101

LIGHTING CONTROL NOTES SCHEDULE

TAG/ NOTE	DESCRIPTION OF LIGHTING CONTROL DEVICES AND OPERATION	DETAIL NUMBER
1	WALL SWITCH - MANUAL ON/MANUAL OFF	**NO DETAIL**
2	WALL SWITCH WITH OCCUPANCY SENSOR - MANUAL ON AND OFF/AUTO OFF	**NO DETAIL**
3	WALL SWITCH - MANUAL ON AND OFF; AUTO OFF VIA OCCUPANCY SENSORS; DIMMING VIA DAYLIGHT HARVESTING SENSOR FOR FIXTURES...	
4	LIGHTING CONTROLLED BY LCP - REFER TO LIGHTING CONTROL PANEL SCHEDULE	**NO DETAIL**
5	AUTO ON/AUTO OFF VIA OCCUPANCY SENSOR(S)	**C1/E-600**
6	WALL SWITCH(ES) - MANUAL ON AND OFF; AUTO OFF VIA OCCUPANCY SENSOR(S)	**A1/E-600**
7	WALL SWITCH WITH DIMMER AND OCCUPANCY SENSOR - MANUAL ON AND OFF/MANUAL DIMMING/AUTO OFF	**NO DETAIL**



160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com

Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021	BG/RT	ADDENDUM NO.1

Date: -
Drawn By: PMC
Checked By: BTG
Project Mgr: WPF
Project No: 21050
Cad File: 21050_R21.rvt
Graphic Scale: 1" 0"

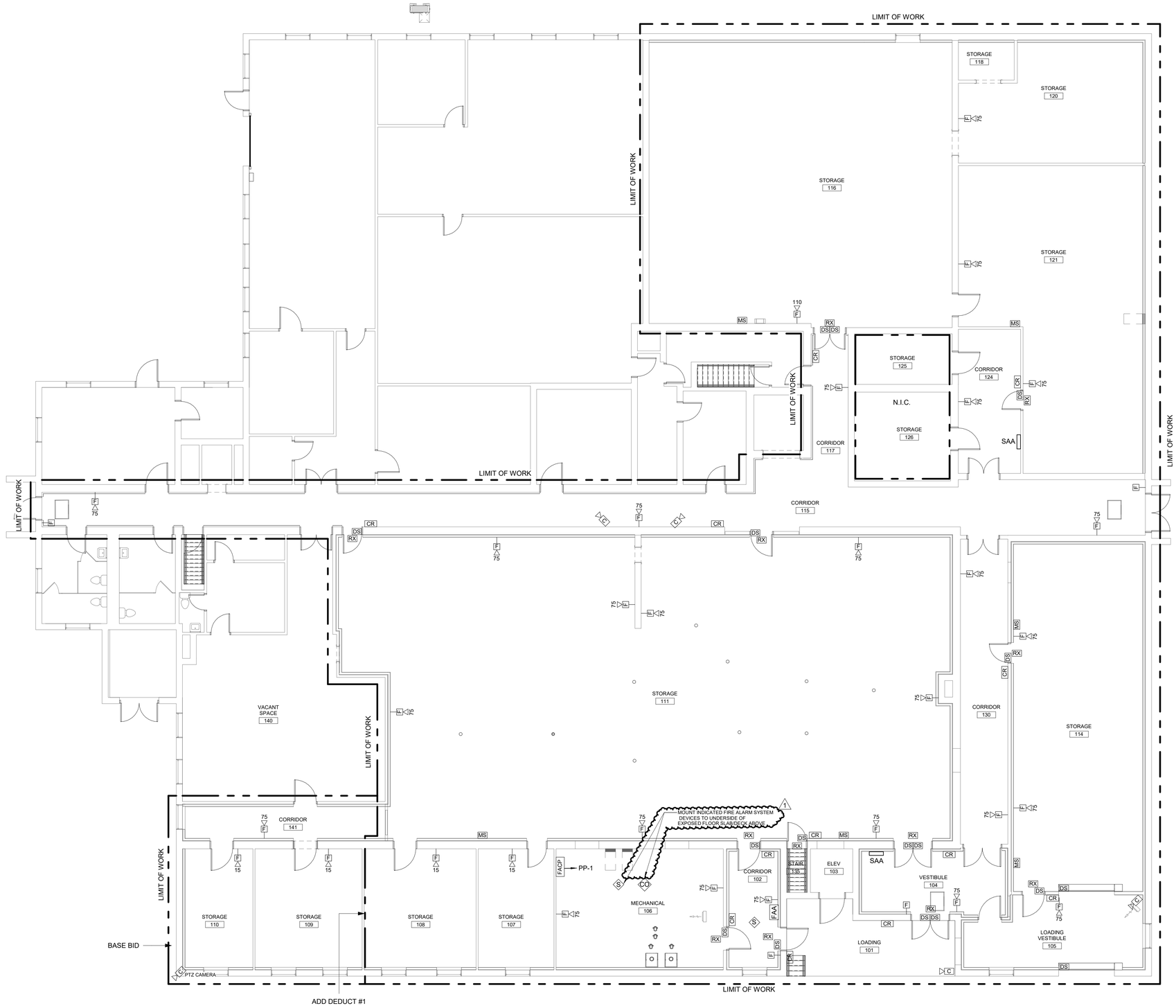
FIRST FLOOR LIGHTING PLAN

CENTER BUILDING - RENOVATION FOR TEMPORARY STORAGE AMHI FACITLITY
AUGUSTA, ME

EL-110

ISSUED FOR BID ~ 09/27/21 ~ NOT FOR CONSTRUCTION

A1 | FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



160 Veranda Street
Portland, Maine 04103
P: 207.221.2260
F: 207.221.2266
Web:www.allied-eng.com
Allied Engineering
Structural Mechanical Electrical Plumbing

REVISIONS

No.	DATE	BY	DESCRIPTION
1	10/22/2021	BG/RT	ADDENDUM NO.1

Date: -
Drawn By: PMC
Checked By: BTG
Project Mgr: WPF
Project No: 21050
Cad File: 21050_R21.rvt
Graphic Scale: 0" 1"

FIRST FLOOR SYSTEMS PLAN

CENTER BUILDING - RENOVATION FOR TEMPORARY STORAGE AMHI FACITLITY
AUGUSTA, ME

EY-110

ISSUED FOR BID ~ 09/27/21 ~ NOT FOR CONSTRUCTION

A1 | FIRST FLOOR SYSTEMS PLAN
1/8" = 1'-0"

BIM 360://21050 AMHI Center Building Museum Storage/21050_MEP_R21.rvt