

ADDENDUM NO. 5 TO CONTRACT DOCUMENTS, SPECIFICATIONS AND PLANS FOR IMPROVEMENTS TO THE ST. JOSEPH ROSECRANS MEMORIAL AIRPORT ST. JOSEPH, MISSOURI MODOT PROJECT NO. 22-012A-1

To All Bidders: You are requested to make all changes and/or additions contained in this addendum to the Bidding Documents. Failure to acknowledge this Addendum in Proposal shall result in rejection of bid. Bidders are informed that the above referenced Questions with Corresponding Answers, Contract Documents, Specifications, and Plans are modified as follows as of December 7, 2022.

CONTRACT DOCUMENTS/SPECIFICATIONS/PLANS

Plans:

1. Plans

Sheet CD-101 Site Utility Demolition Plan

Revision: Removed Phase 2 Demolition from CD-101.

2. Plans

Sheet A-101, A-102, A-202, A-301, A-315, A-711, A-712

Revision: Removed glass half wall along outside patio.

Specifications:

3. Specifications

Revision: Added Division 28 20 00 Video Surveillance

Questions:

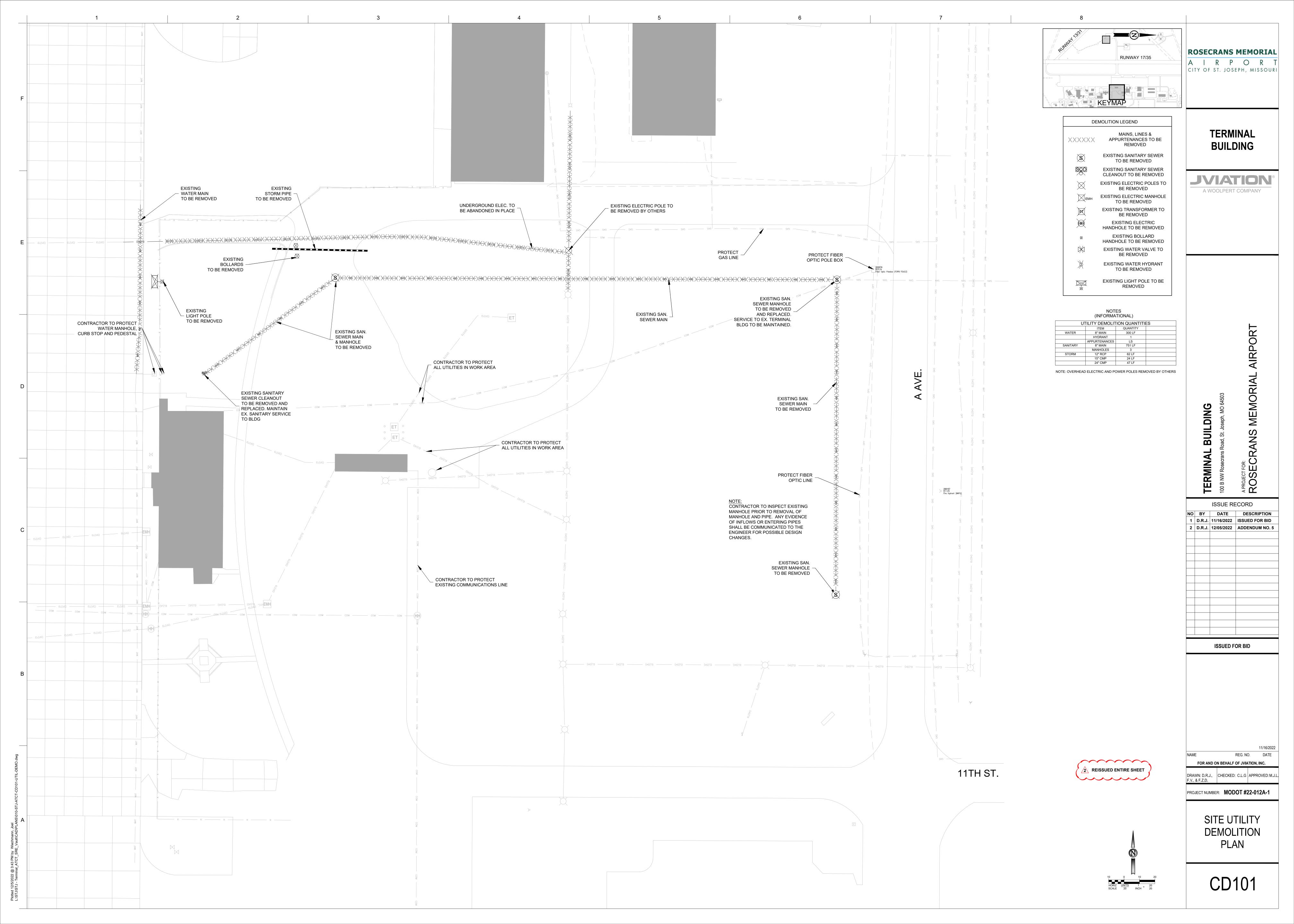


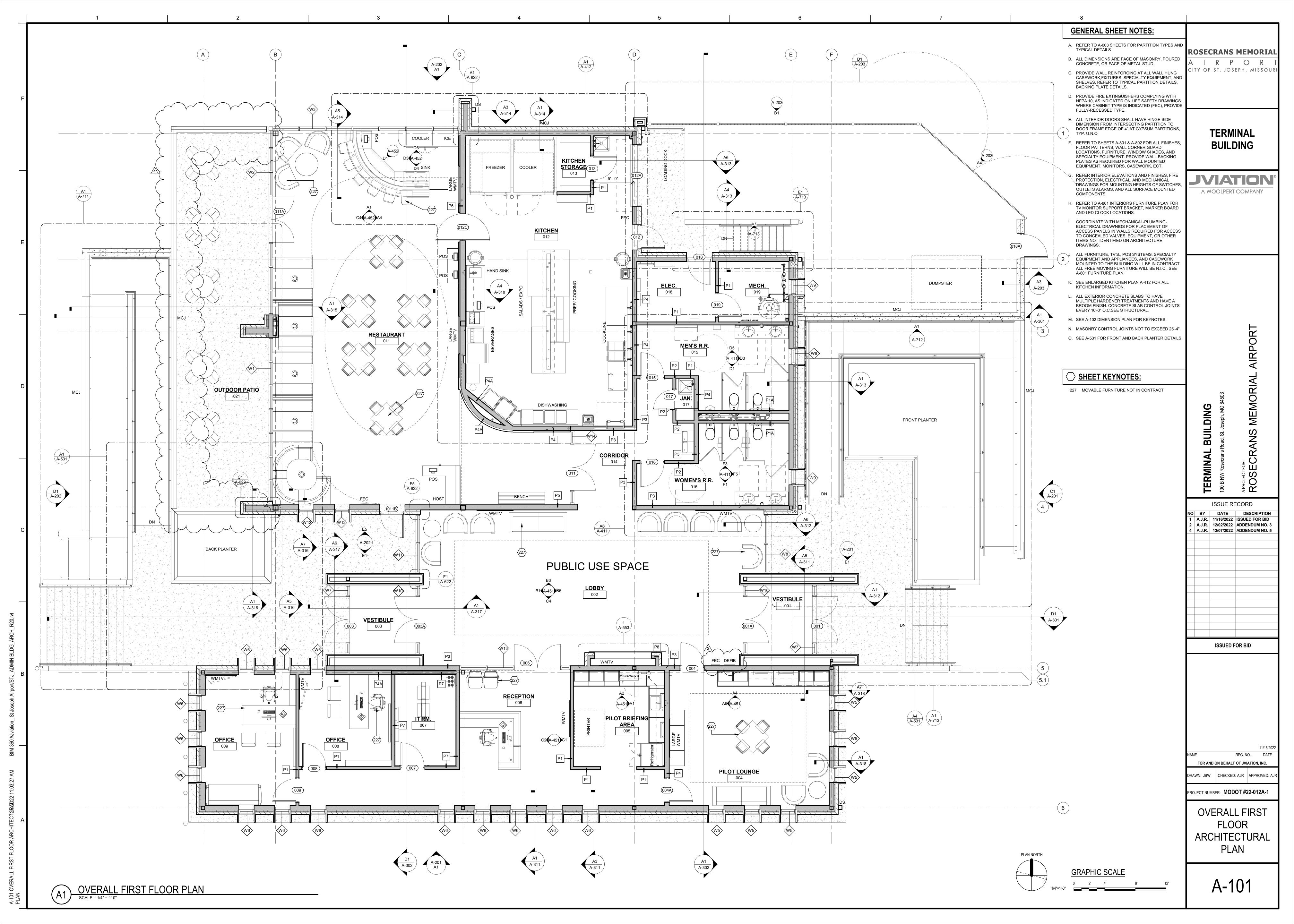
- **4.** With the tempered laminated glass half wall along the outside patio being set into a reglet in the stone, could moisture accumulation at the base of the glass eventually degrade the PVB inner layer causing an appearance problem?
 - a) The half glass partition along the patio wall has been removed entirely. This can be seen in revised plans A-101, A-102, A-202, A-301, A-315, A-711, and A-712
- 5. On the plan sheet CD101 there is a note to remove three existing vault / manholes in one area and one more just to the north that house communications and airfield lighting. Sheet E300 (Inlay-3) has a note to install conduits and fiber cabling between the same three existing manholes.

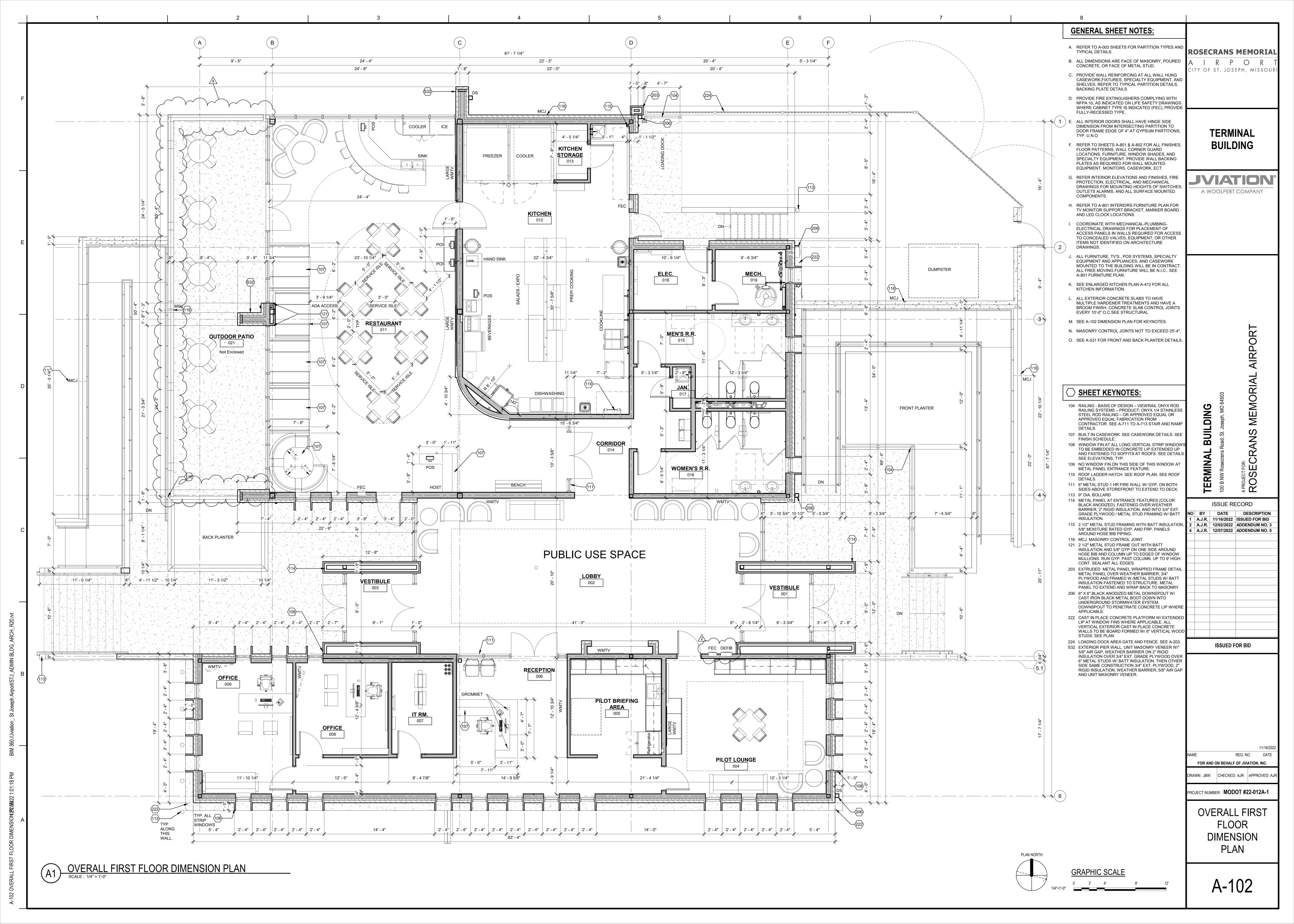
 Do these three vaults stay in place, remove, or get replaced with new vaults? One of the electrical vaults appears to be modern, the other three appear to be much older or of the composite type.
 - a) These manholes are not to be removed. A revised version of sheet CD-101 is included in this addendum.
- **6.** Is there a specification or manufacturer for the equipment screen wall on the roof?
 - a) The B.O.D. or approved equal for the equipment screen wall on the roof is the Palmshield Asia Economic Horizontal Louver; powder coated black.
- 7. Is there any information or drawings for the existing Well Field that is to be removed?
 - a) Please see attached supplemental as-built Well Field Drawing information.
- 8. Is there a contact for American Panel Corporation that provided the shop drawings in the documents?
 - a) We do not have a specific American Panel Corporation contact for the project. Please contact them via their website.
- 9. Will temporary power and water be available? Will the owner bear the cost?
 - a) In Addendum 3 it was addressed there will be no temporary power available at the vault. There will be no temporary water at the vault either.
 - b) For the Terminal Building work, the contractor can use a hose spicket in the area for small amounts of water that they need. For large amounts of water as for dirt work, a contractor will need to provide their own water or get a water meter from Missouri American Water for a fire hydrant in the area.

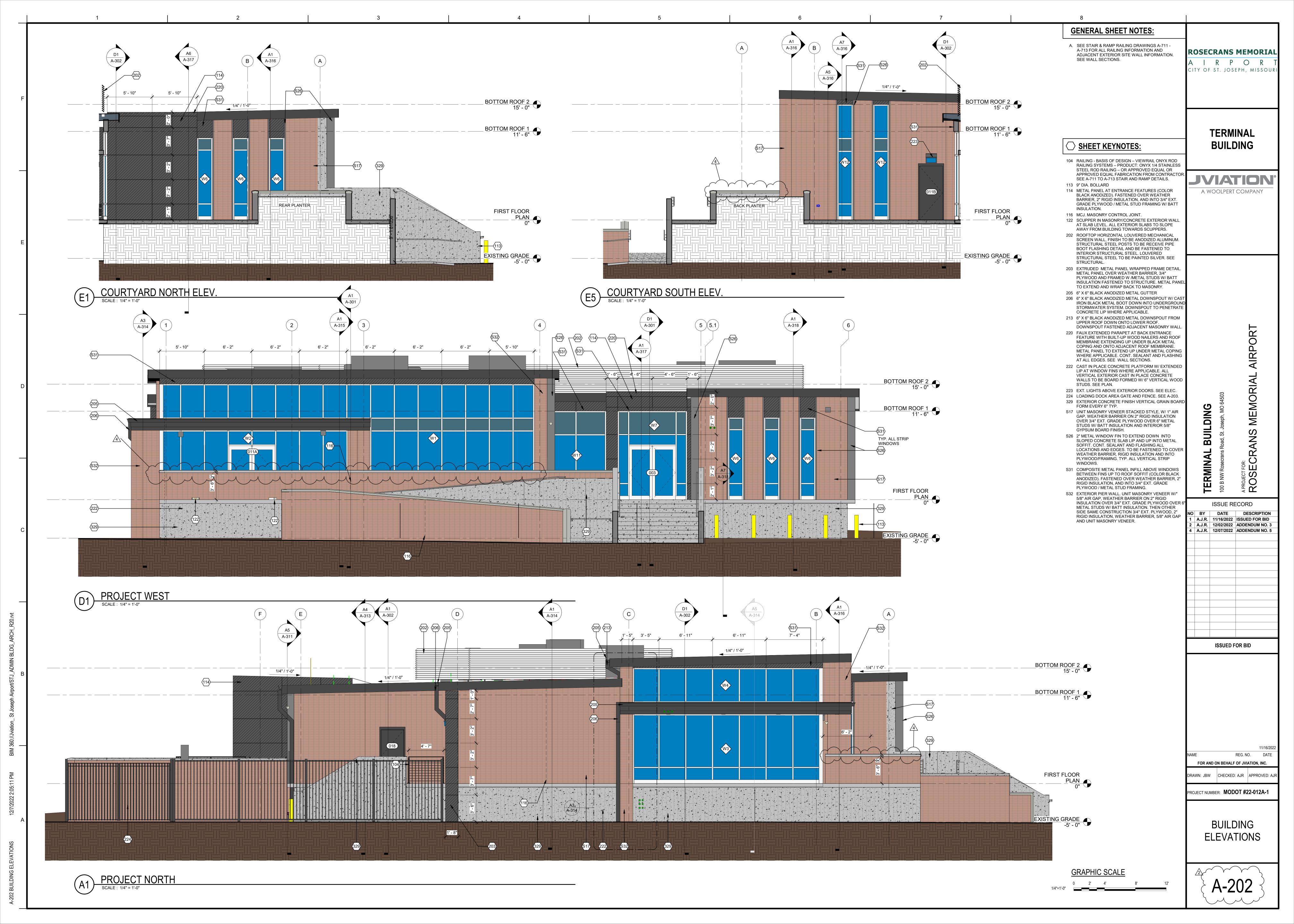


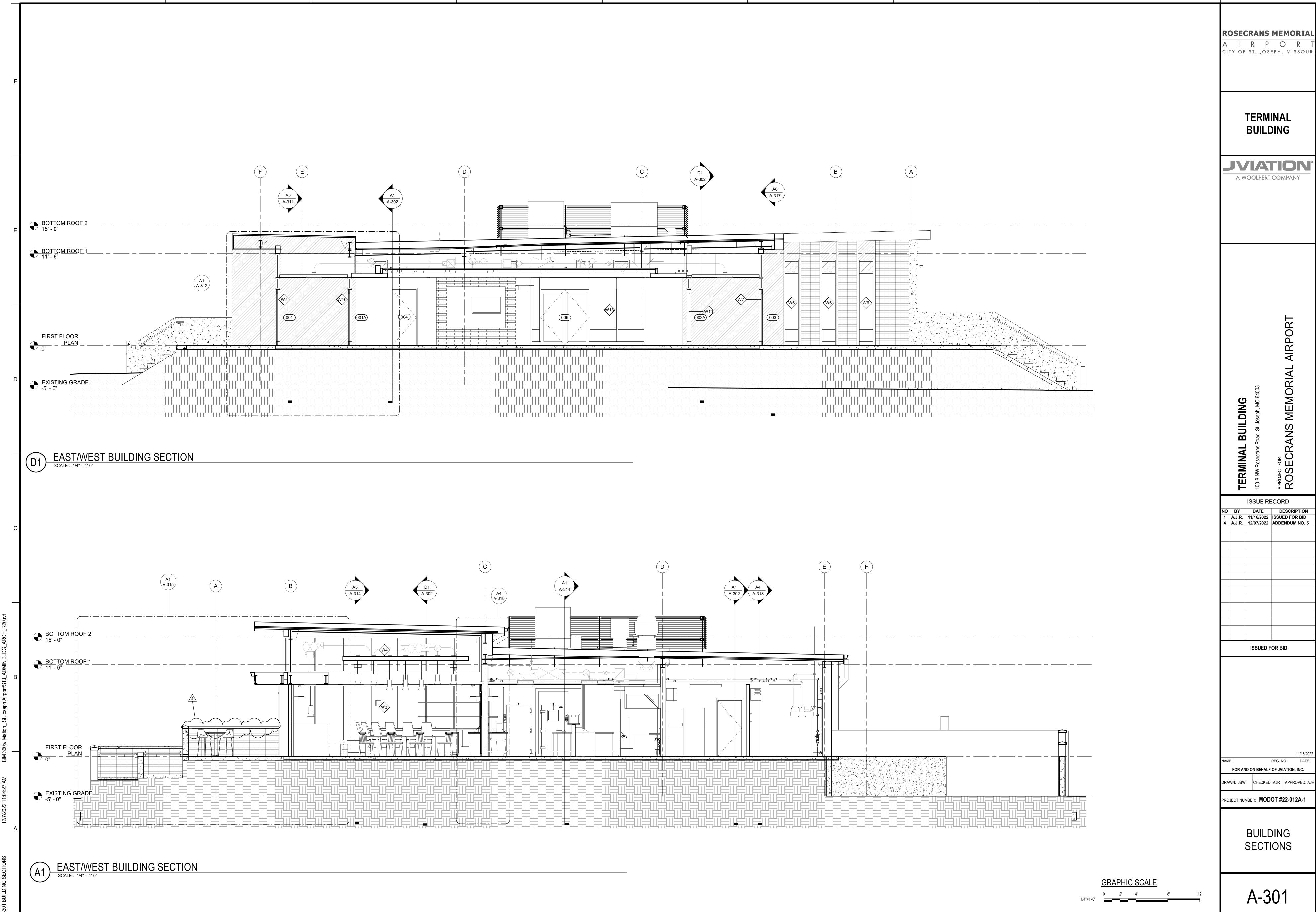
- c) For small loads; temporary use on an as needed basis, 120v power can be pulled from the existing building(s) with extension cords. Larger loads will be contractor responsibility.
- 10. The audio diagram on T-503 does call out a JBL part number for the mixer/amp, but there's no model for the speakers. The short description only calls out ceiling speakers, but the diagram and the systems plan sheet show wall-mounted speakers, 2 of which are apparently outdoors? Please provide model numbers for the speakers and media player; same for the surveillance camera system. If you could let us know that status of these 2 systems, it would be appreciated.
 - a) The B.O.D. or approved equal for the speakers at the patio and wall mounted above cloud are Fourjay Industries, Inc-AXCA537B; ceiling speakers in lay-in ceiling & Fourjay Industries, Inc-AXCR68W (with T570 transformer kit). For the surveillance camera system please reference the added Specification Division 28 20 00 Video Surveillance
- 11. On page E-350 of the plans and section L-130 of the specification, there is a request to provide an Airport Lighting Control Monitoring System. Can you please confirm whether the project is requesting an L-890 or an L-821 (Contactor Control Panel)?
 - a) It is an L-890. The requirements for the lighting control system are in the L-130 specification in the contract docs (starts on page 1208 of the PDF).









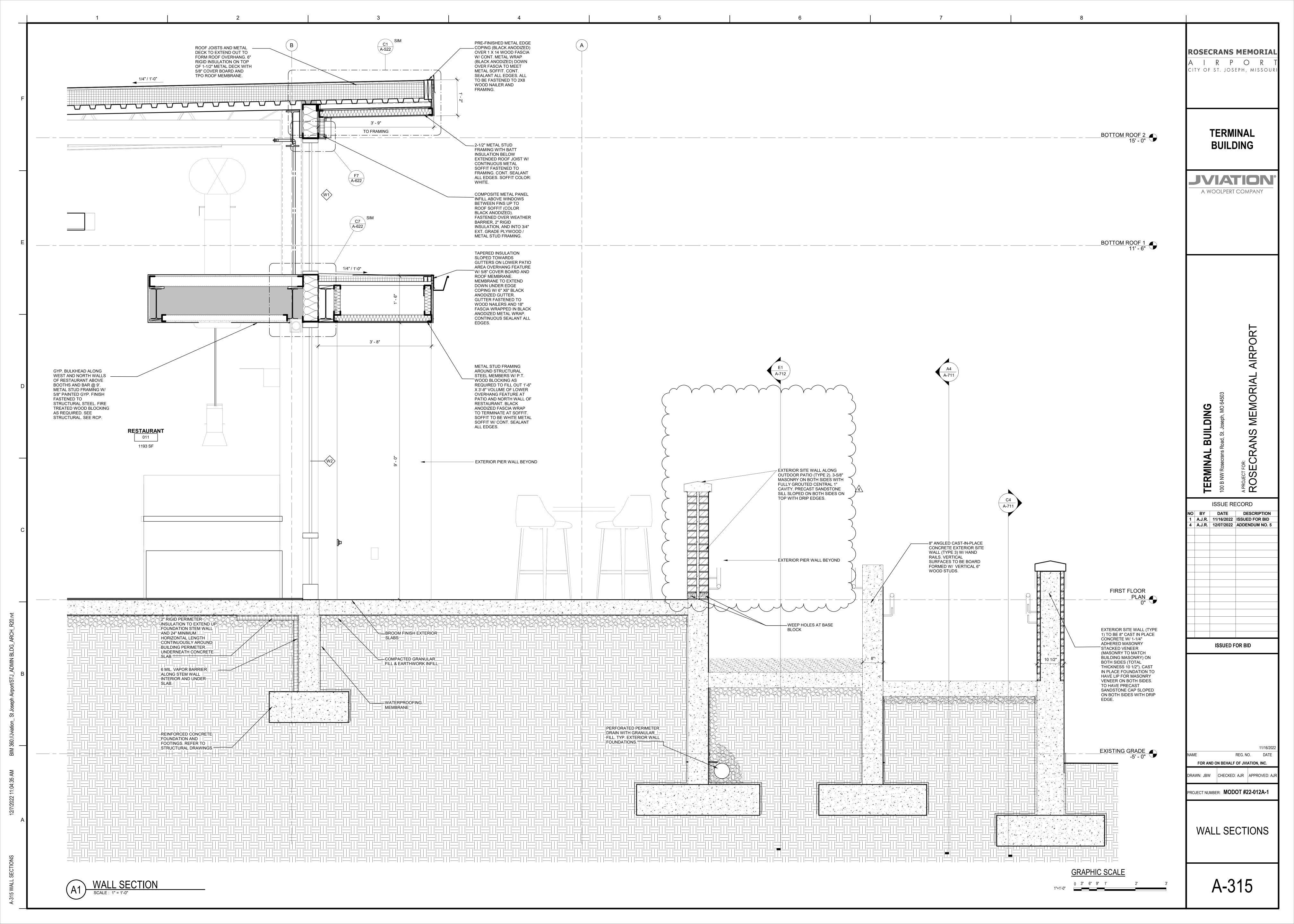


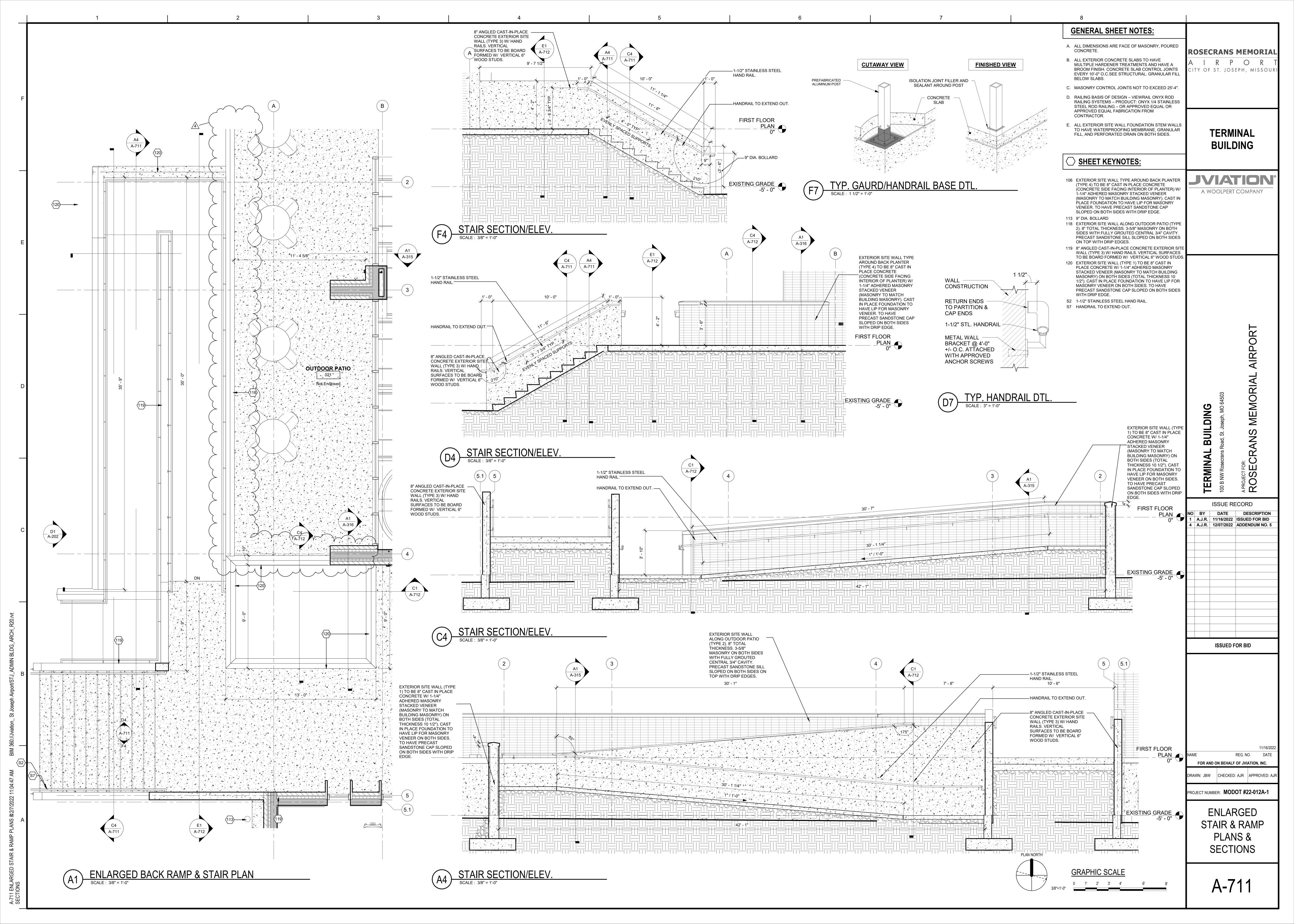
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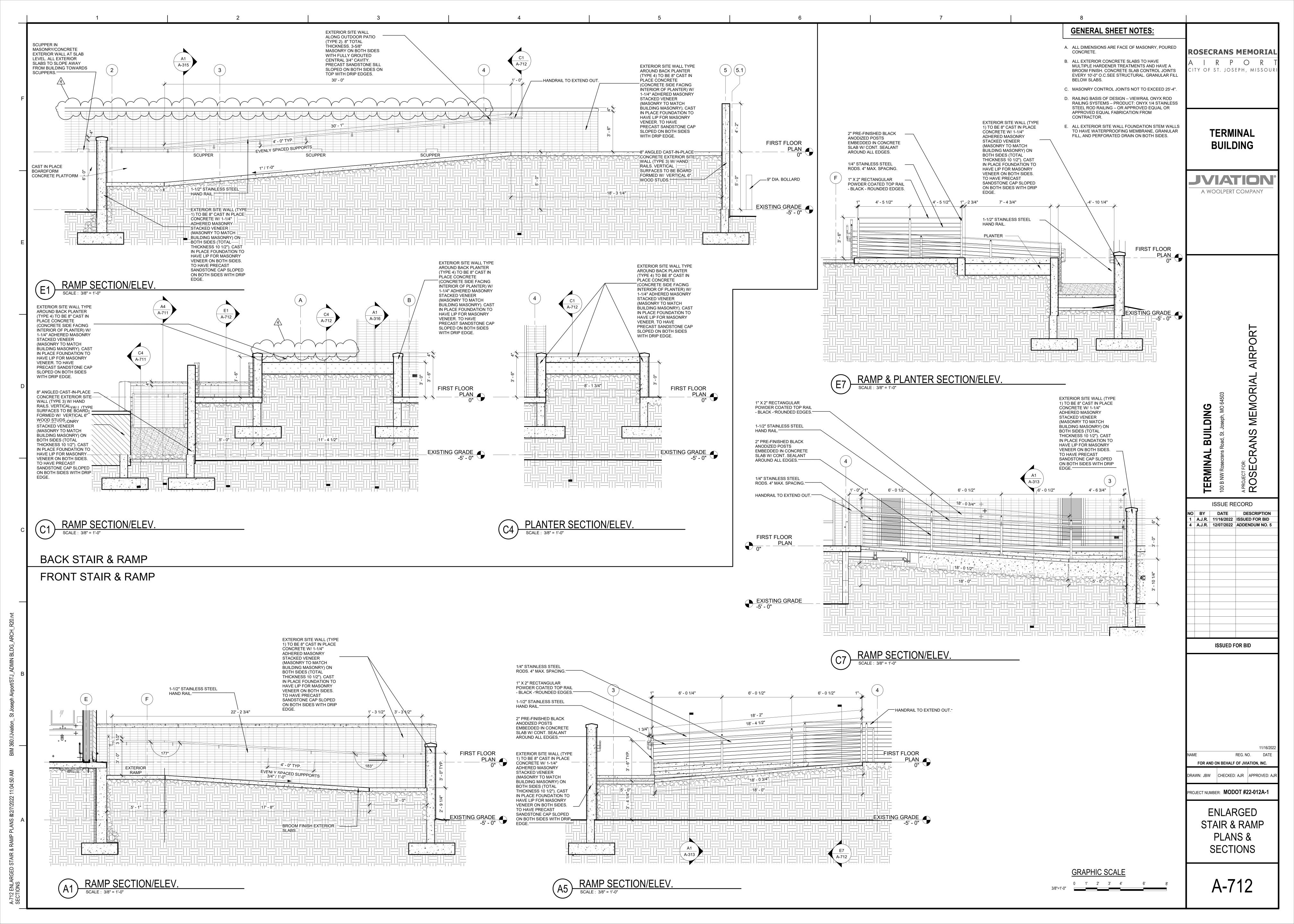
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 11/16/2022
 ISSUED FOR BID

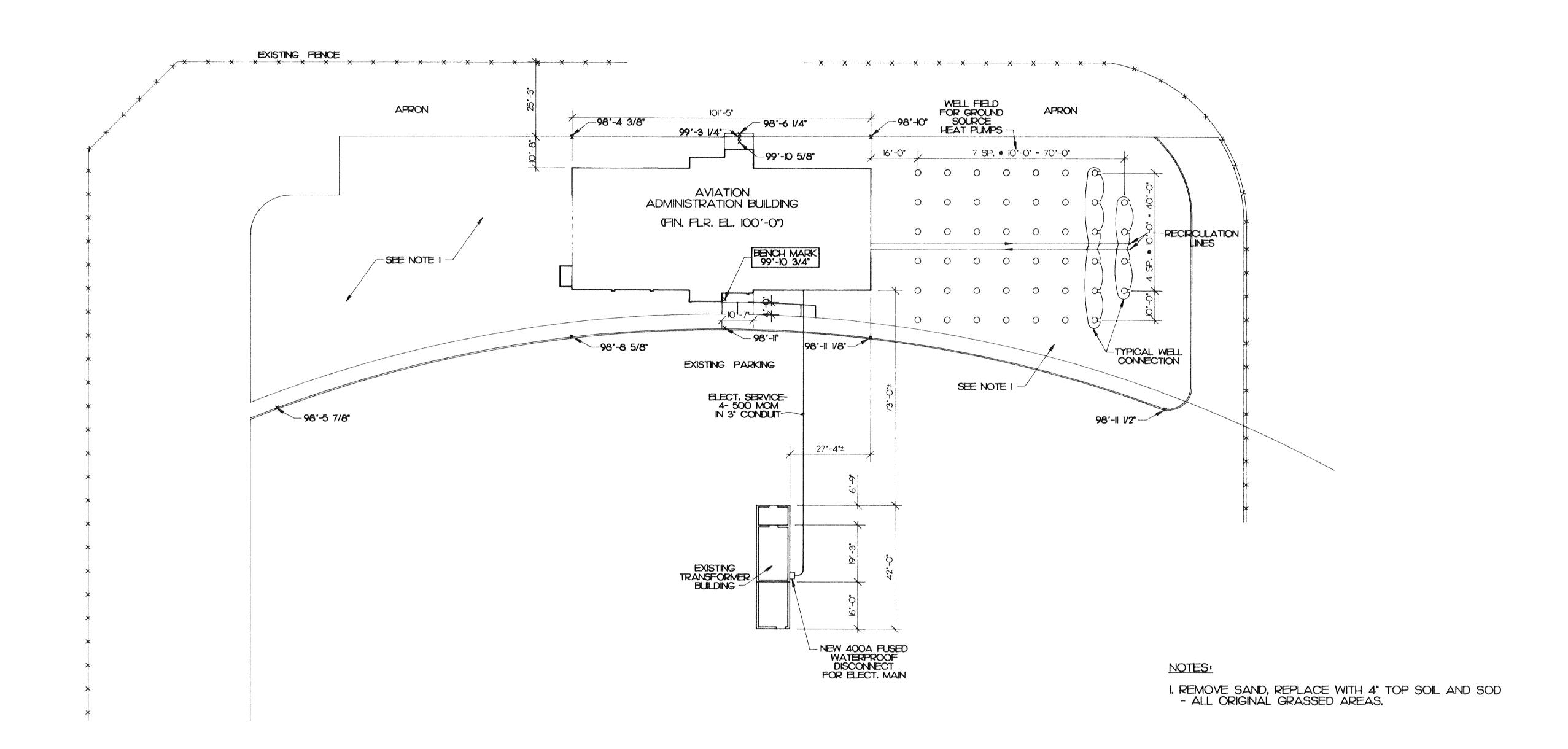
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 A.J.R.
 12/07/2022
 ADDENDUM NO. 5

PROJECT NUMBER: MODOT #22-012A-1











SUPPLEMENTAL DRAWINGS FROM AS-BUILTS

FLOOD RENOVATION FOR AVIATION ADMINISTRATION BLDG ROSECRANS MEMORIAL AIRPORT CITY of ST. JOSEPH, MO.

WILLIAM A
BRUNNLH
NUMBER
E 9/4F E-9/A

Project No. BY GTS

BY 14/WAB 8-31-93 REVISIONS: Sheet No. ME-I

CX - 1030

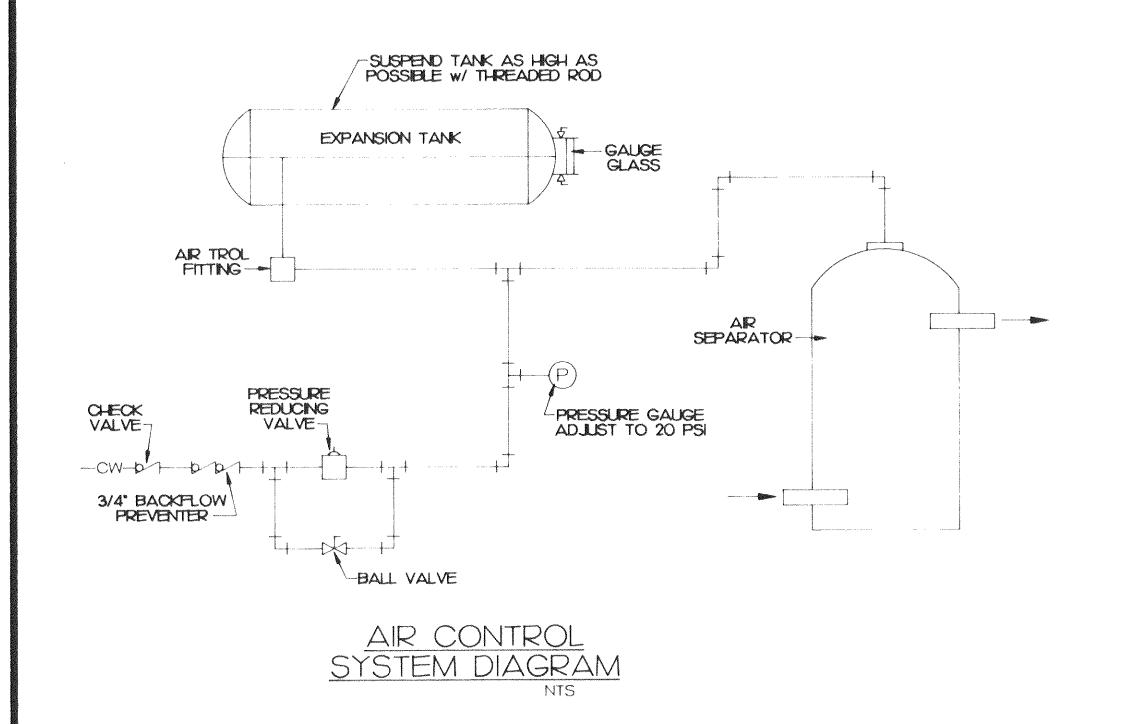
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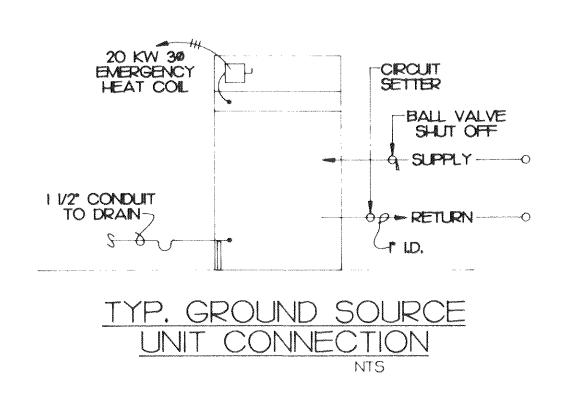
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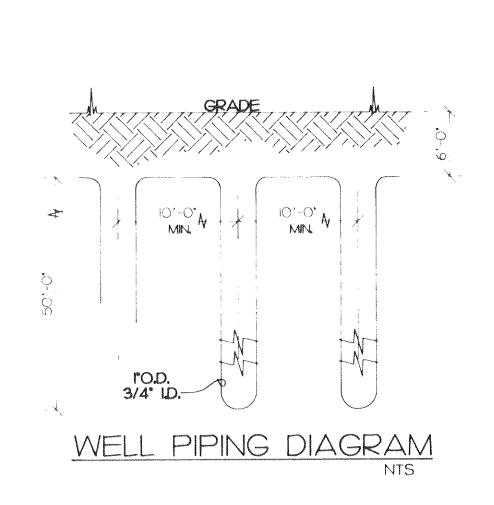
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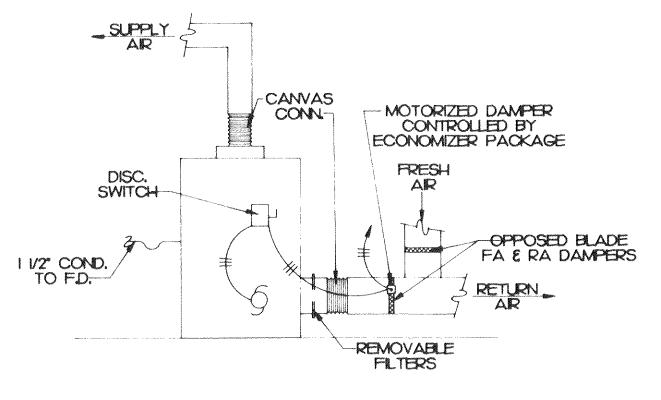
Corby

HVAC EQUIPMENT SCHEDULE											
UNIT NO.	QTY.	MANUFACTURER	MODEL NO.	COOLING BTUH CFM ESP		HEATING INPUT OUTPUT		ELECTRICAL VOLTS PHASE HZ		L HZ	REMARKS
		COMMAND AIR	SWP 610 EA	62,000 2,000	1 1/2	_	78,000	208	30		w/ 20 kw EMERG, ELEC, STAND-BY
2	683445000	COMMAND AIR	SWP 610 EA	62,000 2,000	1 1/2	Sirbo	78,000	208	30	60	w/ 20 kw EMERG. ELEC. STAND-BY
3		COMMAND AIR	SWP 610 EA	62,000 2,000	1 1/2	==-	78,000	208	30	60	w/ 20 kw EMERG. ELEC. STAND-BY

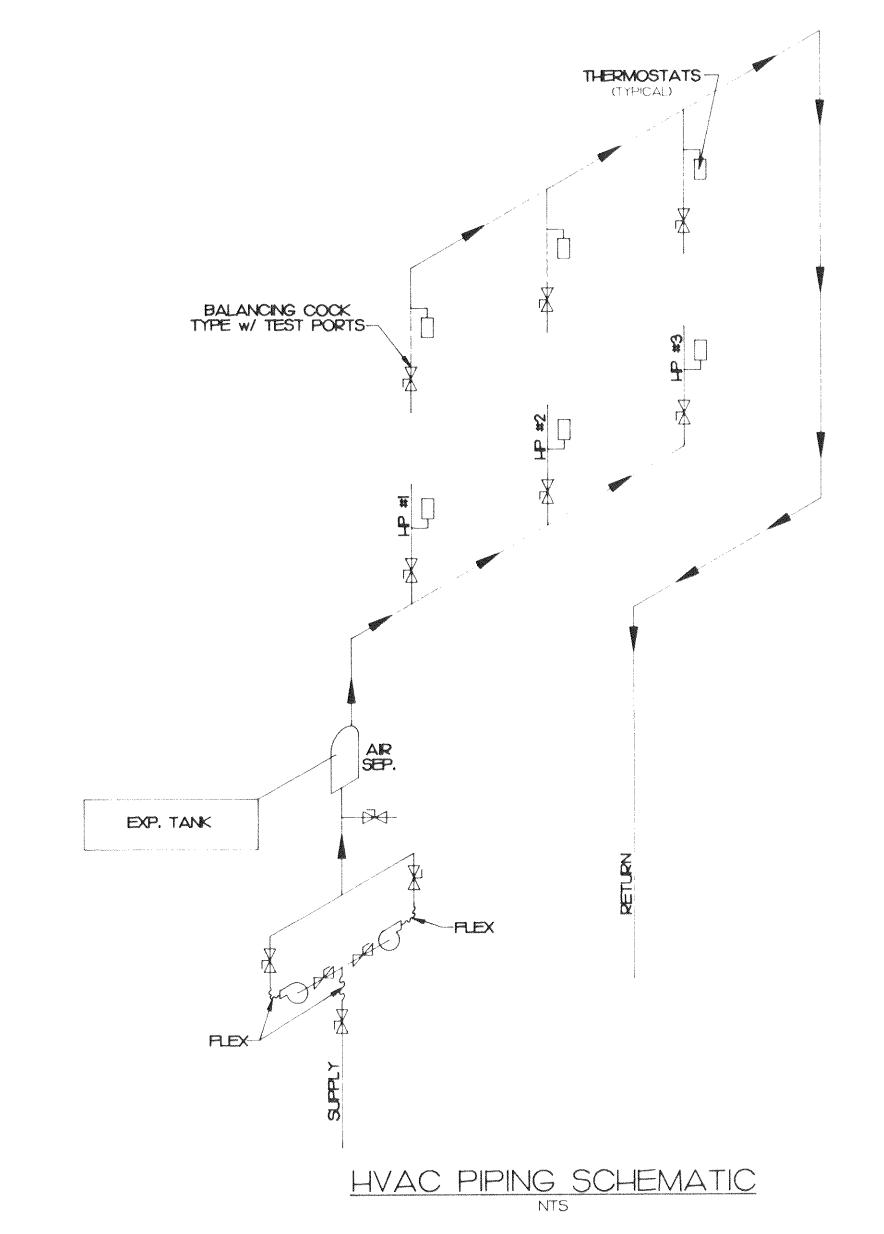




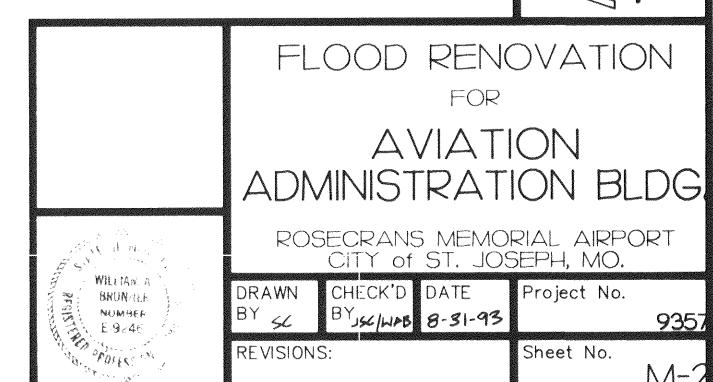




TYP. UNIT CONNECTION



SUPPLEMENTAL DRAWINGS FROM AS-BUILTS



CX - 1030

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y Streets (816) 364St. Joseph, Missouri 64501

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Video surveillance system requirements.
- B. Video recording and viewing equipment.
- C. Cameras.
- D. Accessories.

1.2 RELATED REQUIREMENTS

- A. Section 078400 Firestopping.
- B. Section 260526 Grounding and Bonding for Electrical Systems.
- C. Section 260529 Hangers and Supports for Electrical Systems.
- D. Section 260533.13 Conduit for Electrical Systems.
- E. Section 260553 Identification for Electrical Systems: Identification products and requirements.
- F. Section 271000 Structured Cabling: Data cables for IP video surveillance system network connections.

1.3 REFERENCE STANDARDS

- A. 47 CFR 15 Radio Frequency Devices current edition.
- B. IEEE C2 National Electrical Safety Code(R) (NESC(R)) 2023.
- C. NECA 1 Standard for Good Workmanship in Electrical Construction 2015.
- D. NECA 303 Standard for Installing and Maintaining Closed-Circuit Television (CCTV) Systems 2019.
- E. NFPA 70 National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

- 1. Coordinate the placement of cameras with structural members, ductwork, piping, equipment, luminaires, diffusers, fire suppression system components, and other potential conflicts installed under other sections or by others.
- 2. Coordinate the work with other installers to provide power for cameras and equipment at required locations.
- 3. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

B. Preinstallation Meetings:

1. Conduct meeting with facility representative to review camera and equipment locations and camera field of view objectives.

1.5 SUBMITTALS

- A. See Section 013000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each system component. Include ratings, configurations, standard wiring diagrams, dimensions, finishes, service condition requirements, and installed features.
- C. Project Record Documents: Record actual locations of system components and installed wiring arrangements and routing.
- D. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
 - 1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.
- E. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Owner's name and registered with manufacturer.

1.6 QUALITY ASSURANCE

- A. Comply with the following:
 - 1. NFPA 70.
 - 2. Applicable TIA/EIA standards.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience with video surveillance systems of similar size, type, and complexity and providing contract maintenance service as a regular part of their

business; authorized manufacturer's representative.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions and NECA 303.
- B. Store products in manufacturer's unopened packaging, keep dry and protect from damage until ready for installation.

1.8 FIELD CONDITIONS

A. Maintain field conditions within manufacturer's required service conditions during and after installation.

1.9 WARRANTY

- A. See Section 017800 Closeout Submittals, for additional warranty requirements.
- B. Provide minimum one year manufacturer warranty covering repair or replacement due to defective materials or workmanship.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Video Recording and Viewing Equipment Basis of Design: VIVOTEK.
- B. Video Recording and Viewing Equipment Other Acceptable Manufacturers:
 - 1. Bosch Security Systems: www.boschsecurity.us/#sle.
 - 2. Honeywell International, Inc: www.honeywellvideo.com/#sle.
 - 3. Pelco, a brand of Schneider Electric: www.pelco.com/#sle.
- C. Cameras Basis of Design: Axis Communications as indicated under product descriptions below; www.axis.com/#sle.
- D. Cameras Other Acceptable Manufacturers:
 - 1. Bosch Security Systems: www.boschsecurity.us/#sle.
 - 2. Honeywell International, Inc: www.honeywellvideo.com/#sle.
 - 3. VIVOTEK: www.vivotek.com/#sle.
 - 4. Hanwha: www.hanwha.com.

- E. Substitutions: See Section 016000 Product Requirements.
- F. Products other than basis of design are subject to compliance with specified requirements and prior approval of Engineer. By using products other than basis of design, Contractor accepts responsibility for costs associated with any necessary modifications to related work, including any design fees.
- G. Source Limitations: Where possible, furnish system components and accessories produced by a single manufacturer and obtained from a single supplier.

2.2 VIDEO SURVEILLANCE SYSTEM

- A. Provide new video surveillance system consisting of all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. System Description: IP system with connection to network (IP) cameras.
 - 1. Video Storage Capacity: Suitable for storing video from all cameras for 30 days.
- C. Cameras Required:
 - 1. See article "CAMERAS" below for product descriptions.
- D. Video Recording and Viewing Equipment Required:
 - 1. See article "VIDEO RECORDING AND VIEWING EQUIPMENT" below for product descriptions.
- E. Provide products listed, classified, and labeled as suitable for the purpose intended.
- F. Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Limits: Comply with FCC requirements of 47 CFR 15, for Class B, consumer application.

2.3 VIDEO RECORDING AND VIEWING EQUIPMENT

- A. Provide video recording and viewing equipment compatible with cameras to be connected.
- B. Network Video Recorders (NVRs):
 - 1. Supports connection of network (IP) cameras.
 - 2. Supports continuous and event-based recording.
 - 3. Network Video Recorder:
 - a. Basis of Design: Vivotek NVR.
 - b. Capacity: 16 channels.

- c. Recording and Viewing Performance: 480 fps at 1920x1080 resolution.
- d. Storage Capacity: As required.
- e. Removable Media: USB.
- f. Network: Single 1 Gigabit Ethernet.
- g. Features:
 - 1) Supports PTZ camera control.
 - 2) Supports remote access via desktop and mobile device.

C. Software:

1. Unless otherwise indicated, provide all software and licenses required for fully operational system.

2.4 CAMERAS

- A. Provide cameras and associated accessories suitable for operation under the service conditions at the installed location. Provide additional components (e.g. enclosures, heaters, blowers, etc.) as required.
- B. Where not factory-installed, provide additional components (e.g. lenses, mounting accessories, etc.) as necessary for complete installation.
- C. Network (IP) Cameras:
 - 1. Signal-to-Noise Ratio: Not less than 50 dB.
 - 2. Provide the following standard features:
 - a. Automatic electronic shutter.
 - b. Automatic gain control.
 - c. Automatic white balance.
 - d. Web-based interface for remote viewing and setup.
 - e. Password protected security access.
 - 3. Network (IP) Fixed Dome Camera Basis of Design: Axis Communications P32 Series; Model P3245-LV (IR illumination, Vandal-resistant); www.axis.com/#sle.
 - a. Maximum Video Resolution: 1920 x 1080.
 - b. Maximum Frame Rate: 50/60 fps at 50/60 Hz.

- c. Image Sensor Size: 1/2.8 inch.
- d. Minimum Illumination/Light Sensitivity (Color): 0.1 lux.
- e. Lens: 3.4-8.9 mm, F1.8; horizontal field of view of 100-36 degrees; varifocal, P-Iris, remote focus and zoom.
- f. Features: Zipstream, forensic capture wide dynamic range, Lightfinder, local storage, Power over Ethernet (PoE), day and night functionality, built-in IR illumination, image rotation (0, 90, 180, or 270 degrees), IP52/IK10 casing.
- 4. Network (IP) Fixed Dome 360 Degree Multisensor Camera Basis of Design: Axis Communications Model P3719-PLE (Outdoor, IR illumination, Vandal-resistant); www.axis.com/#sle.
 - a. Maximum Video Resolution: 2560 x 1440.
 - b. Maximum Frame Rate: 25/30 fps at 50/60 Hz.
 - c. Image Sensor Size: 4 x 1/2.5 inch.
 - d. Minimum Illumination/Light Sensitivity (Color): 0.2 lux.
 - e. Lens: 4 x 3-6 mm, F1.8-2.6; horizontal field of view of 101-49 degrees; varifocal, fixed iris.
 - f. Features: Zipstream, wide dynamic range, local storage, Power over Ethernet (PoE), day and night functionality, built-in IR illumination (four, individually controllable), image rotation (0, 90, 180, or 270 degrees), IP66/IP67/NEMA 4X/IK09 casing, individual adjustment and capture mode for each lens.
- 5. Network (IP) Fixed Dome 180 Degree Multisensor Camera Basis of Design: Axis Communications Model P3807-PVE (Outdoor, Vandal-resistant); www.axis.com/#sle.
 - a. Maximum Video Resolution: 4320 x 1920.
 - b. Maximum Frame Rate: 25/30 fps at 50/60 Hz.
 - c. Image Sensor Size: 4 x 1/2.9 inch.
 - d. Minimum Illumination/Light Sensitivity (Color): 0.17 lux.
 - e. Lens: 4 x 3.2 mm, F2.0; horizontal field of view of 180 degrees; fixed focal, fixed iris.
 - f. Features: Zipstream, forensic capture wide dynamic range, Lightfinder, local storage, Power over Ethernet (PoE), day and night functionality, IP66/IP67/NEMA 4X/IK10 casing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that ratings and configurations of system components are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive system components.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to system where applicable.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.2 INSTALLATION

- A. Install video surveillance system in accordance with NECA 1 (general workmanship) and NECA 303.
- B. Install products in accordance with manufacturer's instructions.
- C. Provide required support and attachment in accordance with Section 260529.
- D. Wiring Method: Unless otherwise indicated, use cables (not in conduit).
 - 1. Use suitable listed cables in wet locations, including underground raceways.
 - 2. Use suitable listed cables for vertical riser applications.
 - 3. Use listed plenum rated cables in spaces used for environmental air.
 - 4. Conceal all cables unless specifically indicated to be exposed.
 - 5. Route exposed cables parallel or perpendicular to building structural members and surfaces.
 - 6. Include service loop cable lengths to allow relocation of cameras within 30 ft (9.0 m) of installed location.
- E. Provide grounding and bonding in accordance with Section 260526.
- F. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.
- G. Identify system wiring and components in accordance with Section 260553.

3.3 FIELD QUALITY CONTROL

- A. See Section 014000 Quality Requirements, for additional requirements.
- B. Prepare and start system in accordance with manufacturer's instructions.
- C. Adjust cameras to provide desired field of view and produce suitable images under all service lighting conditions.
- D. Program system parameters according to requirements of Owner.
- E. Test for proper interface with other systems.
- F. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.

3.4 CLEANING

A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

3.5 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of system to Owner, and correct deficiencies or make adjustments as directed.
- B. Training: Train Owner's personnel on operation, adjustment, and maintenance of system.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
 - 2. Provide minimum of four hours of training.
 - 3. Location: At project site.

3.6 PROTECTION

A. Protect installed system components from subsequent construction operations.

END OF SECTION