



215 West 40th Street, 15th Floor
New York, New York 10018

646.435.0660 Office

ksq.design

BID ADDENDUM #7

Nanuet Union Free School District
103 Church Street
Nanuet, NY 10954

Nanuet Bond Projects Phase 4

Date: May 1st, 2024

NOTICE TO CONTRACTORS

This Addendum issued prior to receipt of Bid shall and does hereby become a part of the Construction Documents for the above project.

All principal Contractors shall be responsible for seeing that their Subcontractors are properly apprised of the contents of this Addendum.

All information contained in this Addendum shall supersede and shall take precedence over any conflicting information in the original Bidding Documents dated **June 6, 2023**, and all previous addenda.

All Contractors shall acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

CLARIFICATIONS:

1. Who is responsible to provide the Variable Frequency Drives, the Mechanical or Electrical Contractor?

Response: What specific mechanical equipment is this referring to? Rooftop exhaust fans scheduled at Miller ES and the HS that are served by VFDs are specified in Division 26.

CHANGES TO SPECIFICATIONS:

1. 14 42 00 – WHEELCHAIR LIFTS
 - Added Battery backup section 2.12.
2. 23 38 13 – KITCHEN VENTILATION HOODS
 - The Reference to Carbon Dioxide system has been removed from section 233813, Part 2.1.C.1.h.

REVISIONS TO DRAWINGS:

ARCHITECTURAL

1. Sheet HS-G100: FIRST FLOOR ENLARGED KITCHEN RCP DEMO ALTERNATE 2
 - A. Area of work and alteration shown.

2. **Sheet HS-A401.1: FIRST FLOOR ENLARGED PLAN – WEST (ADMIN) WING – ALT 1**
 - A. ADA accessible counter height provided, revised finish legend, addition of details A15, E15, and K15.
3. **Sheet BM-G021: CODE COMPLIANCE**
 - A. Revised occupant load and plumbing fixture calculations on sheet.
4. **Sheet BM-A401: ENLARGED 1ST & 2ND FLOOR RESTROOMS**
 - A. Added ADA accessible electric door opener push plate at door.

ABATEMENT

None

STRUCTURAL

None

MECHANICAL

1. **Sheet HS-M302: ENLARGED VIEWS**
 - A. Added fire damper to 52"x10" return air duct.

ELECTRICAL

1. **Sheet BM-E001: ELECTRICAL SYMBOLS, LEGENDS AND ABBREVIATIONS**
 - A. Added detail A7
2. **Sheet BM-E101: FIRST FLOOR ELECTRICAL PLANS**
 - A. Added door operator and push plate. Updated light fixture schedule and electrical plans.
3. **Sheet BM-E103: ELECTRICAL ROOF PLAN**
 - A. Updated roof plan as noted
4. **Sheet BM-E300: LOWER LEVEL AND PARTIAL FIRST FLOOR FIRE ALARM - WEST**
 - A. Updated Fire Alarm Plan at "5/6 Grades Gymnasium".
5. **Sheet BM-E301: PARTIAL FIRST FLOOR FIRE ALARM - EAST**
 - A. Removed strobe from stairwell, added pull station.
6. **Sheet BM-E302: PARTIAL FIRST FLOOR FIRE ALARM – SOUTH WEST**
 - A. Updated fire alarm removals at "7/8 Grades Gymnasium"
7. **Sheet BM-E303: PARTIAL SECOND FLOOR FIRE ALARM - EAST**
 - A. Updated Fire Alarm Plan at five "7th Grade Classroom".
8. **Sheet ME-E101: OVERALL ELECTRICAL PLAN**
 - A. Updated keynote #5
9. **Sheet ME-E102: OVERALL ELECTRICAL PLAN**
 - A. Modified Roof Electrical Plan – Alternate 3
10. **Sheet ME-E302: FIRE ALARM PLAN AREA C**
 - A. Updated keynote #2 and two smoke detectors noted on the basement plan.
11. **Sheet ME-E501: DETAILS AND DIAGRAMS**
 - A. Updated "Single Line Diagram – Existing"
12. **Sheet ME-E601: PANEL SCHEDULES**
 - A. Updated panel schedules as noted.



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PLUMBING

None

SHEETS

GENERAL	CIVIL	STRUCT	ARCH	MECH	ELEC	PLUMB	ABATEMENT
			HS-G100	HS-M302	BM-E001		
			HS-A401.1		BM-E101		
			BM-G021		BM-E103		
			BM-A401		BM-E300		
					BM-E301		
					BM-E302		
					BM-E303		
					ME-E101		
					ME-E102		
					ME-E302		
					ME-E501		
					ME-E601		

END OF BID ADDENDUM No. 7

SECTION 14 42 00 – WHEELCHAIR LIFTS

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. The Work of this Section consists of the provision of all plant, labor, materials, equipment, testing and services necessary to complete the work of wheelchair lifts as shown on the schedules, keynotes, drawings, as specified herein, and as may be required by conditions and authorities having jurisdiction, including, but not limited to, the following:
 - 1. Commercial Unenclosed Vertical Platform Lift.
- B. Related Sections:
 - 1. Division 03 – Cast-in-place concrete existing floor/repair
 - 2. Division 04 – Unit Masonry
 - 3. Division 6 - Rough Carpentry
 - 4. Division 9 - Gypsum Board Assemblies.
 - 5. Division 9 - Resilient Flooring: Floor finish in cab.
 - 6. Division 9 - Paints
 - 7. Division 16 Sections for electrical service for elevators to and including disconnect and fused switches at machine room.
 - 8. Division 16 Sections for standby power source, transfer switch, and connection from auxiliary contacts in transfer switch to controller.
 - 9. Division 16 Section "Voice and Data Communication Cabling" for telephone service to elevators.

1.3 REFERENCES

- A. ASME A18.1 - American Society of Mechanical Engineers - Safety Standard for Platform and Stairway Chair Lifts.
- B. ASME A17.1 - Safety Code for Elevators and Escalators.
- C. ASME A17.5 - Elevator and Escalator Electrical Equipment.
- D. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.
- E. ADAAG - U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities".
- F. NFPA 70 - National Electric Code.

1.4 REQUIREMENTS OF REGULATORY AGENCIES

- A. Fabrication and installation work in compliance with applicable jurisdictional authorities.
- B. Provide wheelchair lifts in compliance with:
 - 1. ASME A18.1 - Safety Standard for Platform Lifts and Stairway Chairlifts.
 - 2. ASME A17.1 - Safety Code for Elevators and Escalators.
 - 3. ASME A17.5 - Elevator and Escalator Electrical Equipment.
 - 4. NFPA 70 - National Electric Code.
- C. Seismic Design: In accordance with 2 seismic risk zone in accordance with CT State Building code.
- D. File shop drawings and submissions with local authorities as the information is made available. Company pre-inspection and jurisdictional authority inspections and permits are to be made on timely basis as required.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations including preparation, storage and handling requirements.
 - 2. Include complete description of performance and operating characteristics.
 - 3. Show maximum and average power demands.
- C. Shop Drawings: Survey of existing conditions is required. Provide a complete layout of lift equipment detailing dimensions and clearances as required, erection and anchorage requirements.
 - 1. Include wiring diagrams for power, control and signal systems.
- D. Selection Samples: For each finish product specified requiring selection of color or finish, two complete sets of color charts representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: for each finished product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product color and pattern.
- F. Minutes of preinstallation conference.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm with minimum 10 years experience in manufacturing of wheelchair lifts, with evidence of experience with similar installations of type specified.
- B. Source Limitations: Obtain wheelchair lifts through one source from a single manufacturer.
 - 1. Provide major lift components, controllers, signal fixtures, door operators, car frames, cabs, and entrances, manufactured by a single manufacturer.
- C. Installer Qualifications:
 - 1. Execute work of this section only by a company that has adequate product liability insurance and that can demonstrate to Owner's satisfaction that, within previous five years, it has

successfully completed at least three projects similar in scope and type to work required on this Project.

2. Skilled tradesmen shall be employees of the installing contractor approved by the manufacturer, with demonstrated ability to perform the work on a timely basis.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store components off the ground in a dry covered area, protected from adverse weather conditions.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install systems under environmental conditions outside manufacturer's absolute limits.
- B. Do not use wheelchair lifts for hoisting materials or personnel during construction period.

1.9 WARRANTY

- A. Manufacturer shall warrant the wheelchair lift materials and workmanship for one year following Substantial Completion.
- B. Extended Warranty: provide an extended manufacturer's warranty for the entire warranty period covering the wheelchair lift materials and workmanship for the following additional extended period beyond the initial one year warranty:
 1. Four additional years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Product portable wheelchair lift: Subject to compliance with requirements, provide Ascension Virtuoso 5460P Model Series Vertical Portable Wheelchair Lift or comparable product by one of the following:
 1. Ascension
 2. Or approved equal
- B. Requests for substitutions will be considered in accordance with provisions of Section 016000.

2.2 PORTABLE WHEELCHAIR LIFT

- A. Capacity: 750 lbs (340 kg) rated capacity.

- B. Weight of lift: 1025 pounds maximum [465 kg].
- C. Vertical speed: seven (7) fpm (feet per minute) [2.1 m/min (meters per minute)].
- D. Vertical travel: 12" to 60" [305 mm to 1524 mm], infinitely adjustable.
- E. Standard platform gate configuration: the upper landing platform gate shall be left-hinged when facing the lift from the upper landing; the lower landing platform gate shall be right-hinged when facing the lift from the lower landing. Contact Ascension for custom platform gate configurations.

2.3 DIMENSIONS

- A. Platform size: 36" x 54" with 43" high sidewalls and platform gates.
- B. Space requirements (operational, storage, and transport): 44" high (in the down position), 66" long, 48" wide.
- C. No part of the lift shall stand over 44" high when the platform is on the ground except when equipped with optional stage guard).

2.4 MATERIALS

- A. The platform frame, base frame, and lifting device shall be constructed from ASTM A 36, AISI 1018, or AISI 1020 Steel.
- B. The windows shall be fabricated from 1/4" thick high impact strength clear thermoplastic.
- C. The safety skirt shall be constructed from rigid plastic.

2.5 FINISH

- A. All metal components shall be thoroughly cleaned to remove any foreign substance. Exposed metal surfaces shall be finished with an oven-baked powder coating.
- B. Standard color is black; contact Ascension for custom color selection.

2.6 DRIVE CONFIGURATION

- A. Drive shall be direct-acting hydraulic.
- B. Both sides of lift platform shall be supported evenly by means of synchronized hydraulic cylinders.
- C. Hydraulic power unit shall be mounted on vibration-isolating supports designed to minimize vibration transmission and reduce frame-borne noise.

2.7 ELECTRICAL REQUIREMENTS

- A. Electric power requirements shall be compatible with 120VAC, 60 hertz, single phase, 15 amp service (option: international electrical configurations available).
- B. The lift shall be supplied with a three prong grounded electrical cord (20' in length).
- C. The lift shall contain a Ground Fault Circuit Interrupter (GFCI).

- D. Motor shall be 1/2 hp, 115V AC single phase (international configurations available).
- E. Control circuits shall be 12 VDC.
- F. Electrical components shall be UL listed and CSA registered.
- G. Electrical system shall be certified to ASME A17.5 by an independent testing laboratory.

2.8 SAFETY DEVICES

The lift shall be constructed to meet the applicable requirements of ADAAG, ASME A17.1-1996 or older (PART XX, SECTION 2000), ASME A18.1, and ANSI A117.1 as they would apply to a portable lifting device. The lift shall include the following safety features for protection of the passenger and general public.

- A. Grounded electrical system.
- B. 12 VDC operating controls.
- C. Constant pressure operating switches.
- D. Emergency stop button at passenger control station.
- E. Electro-mechanical interlock to prevent accidental opening of lower landing platform gate.
- F. Gate switches to prevent platform movement if either platform gate is open.
- G. Lift platform stop height switch.
- H. Safety skirt that completely encloses and protects the area under the lift platform.
- I. 43" [1092 mm] high sidewalls and platform gates.
- J. Unobstructed view through transparent sidewalls and platform gates.
- K. Grab bar extending full length of inside wall.
- L. Slip resistant surfaces on platform floor and dock plate.
- M. Structural safety factors as specified in ASME A18.1.
- N. Self-closing platform gates.

2.9 PORTABILITY

- A. Casters shall be easily attached to the platform for portability and stored in the base frame when not in use. Casters shall be 3½" [89 mm] in diameter and fabricated from hard rubber. The casters shall be capable of being installed without tools. When the casters are installed, the lift shall roll easily over any hard, smooth, level surface. The lift shall be capable of being moved by fork lift or truck.

2.10 OPERATING CHARACTERISTICS

- A. Lift shall include three (3) constant pressure "UP/DOWN" switches, located outside of the platform at both ends and inside the platform.

B. The passenger control station shall be provided with a separate "PUSH TO STOP" emergency button. The emergency stop button shall prevent any operation of the lift when actuated.

C. The platform stop height shall be adjustable without the use of tools.

D. Opening the upper landing platform gate shall deploy a dock plate that rests on the upper landing surface. The dock plate shall provide a smooth transition between the platform and the upper landing. Closing the upper landing platform gate shall retract the dock plate.

E. The lower landing platform gate shall be provided with a mechanical interlock that prevents the platform gate from being opened whenever the platform is more than 2" [50 mm] above the full down position.

2.11 COMPRESSION CAPABILITY

A. The lift shall be capable of being compressed to 33" wide to facilitate relocation through a 36" wide doorway. An additional tool kit from Ascension is recommended to facilitate compression of the lift.

2.12 BATTERY BACKUP

A. OPERATION

1. For use with Ascension Virtuoso and Protégé model chair lifts.
2. Provides standby power for a minimum of 5 full lifting cycles carrying lift's rated load.
3. For indoor use only.

B. PHYSICAL CHARACTERISTICS

1. Material: Steel enclosure with plastic trim.
2. Finish: Powder coated, BLACK.
3. Weight: 112 LBS.

C. SPECIFICATIONS:

1. Input: 120VAC, 20A, Hardwired.
2. Output: 120VAC, 20A, Hardwired.
3. Battery: Sealed lead acid.

D. Backup unit shall be wired to main disconnect switch (by others) so that switch disconnects both input and output power from the backup unit.

E. Unit supplied with hardwiring kit. Unit ships with cord, plug and output receptacles which are removed when hardwired in field.

F. Backup unit shall be installed such that unit's internal fan will be able to dissipate heat generated by the unit. If to be installed in confined space, Ascension recommends no less than 20 square inches open vent area.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Set up lift for operation as described in manufacturer's operating manual.
- B. If desired, lift may be anchored to floor surface using the 9/16" mounting holes provided in the base of the lift.

3.2 MAINTENANCE

- A. Maintenance of the lift shall consist of regular cleaning as deemed necessary by the using facility. General inspection, maintenance, and lubrication shall be specified in the manufacturer's service manual.

END OF SECTION 14 42 00

1.1 SECTION INCLUDES

- A. Grease Laden Exhaust Hoods
- B. Kitchen Hood Demand Control Ventilation System

1.2 REFERENCES

- A. NFPA 70 - National Electrical Code; National Fire Protection Association; 1996.
- B. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations; National Fire Protection Association; 1994.
- C. UL (EAUED) - Electrical Appliance and Utilization Equipment Directory; Underwriters Laboratories Inc.; current edition.

1.3 SUBMITTALS

- A. Submit the following for approval:
 - 1. Product Data Sheets including the following data if applicable:
 - a. Electrical Ratings
 - b. Dimensions
 - c. Weights
 - d. Loads
 - e. Required Clearances
 - f. Field Connections
 - 2. Shop Drawings:
 - a. Indicate hoods, exhaust, and supply equipment being controlled by the system.
 - b. Indicate locations of sensors, system controller, VFDs and other components.
 - c. Provide wiring diagrams for power, signal, and control wiring.
 - d. Provide a description of Sequence of Operation
 - 3. Installation Instructions
 - a. Indicate Installation Procedures and Scopes of Work
 - 4. Reference Information:
 - a. Hood Operation and Maintenance Manual.

1.4 QUALITY ASSURANCE

- A. All electrical components, devices, and accessories shall be listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Control System shall be tested and certified to conform to the following standards.
 - 1. UL2017 – Standard for General-Purpose Signaling Devices and Systems.
 - 2. UL710– Standard for Exhaust Hoods for Commercial Cooking Equipment.
 - 3. FCC Class B Standard CFR47 Part 15.109 on Radiated Emissions.
 - 4. FCC Class B Standard CFR47 Part 15.109 on Conducted Emissions.
 - 5. CSA C22.2 No. 205-M1983 – Signal Equipment.
 - 6. CE Class B Directive 98/34/EEC: Technical Standards & Regulations Directive
 - 7. CE Class B Directive 2004/108/EC: Electromagnetic Compatibility with Amending Directives 92/31/EEC, 93/68/EEC and 91/263/EEC
 - 8. CE Standard EN 61000-6-3: 2007 – Emissions
 - 9. CE Standard EN 61000-3-2: 2006 – Harmonic Current Emissions
 - 10. CE Standard EN 61000-3-3: 1995 +A1:2001, +A2:2005 – Voltage Fluctuations and Flicker
 - 11. CE Standard EN 61000-6-1: 2007 Electrostatic Discharge
 - 12. CE Standard EN 61000-6-1: 2007 Radiated Immunity
 - 13. CE Standard EN 61000-6-1: 2007 Electrical Fast Transients.
 - 14. CE Standard EN 61000-6-1: 2007 Surge.
 - 15. CE Standard EN 61000-6-1: 2007 Conducted Immunity.
 - 16. CE Standard EN 61000-6-1: 2007 Voltage Dips and Short Interruptions.

1.5 REGULATORY REQUIREMENTS

- A. Products Requiring Electrical Connection: Listed and classified by UL (EAUED) as suitable for the purpose specified and indicated.

2.1 GREASE LADEN EXHAUST HOODS (H-1A/H-1B)

- A. Wall or island style as scheduled on the drawings, kitchen exhaust hoods designed for removal of grease laden heat and fumes.
- B. Construction:
 - 1. Kitchen Ventilation hood(s) shall be of the Type I, exhaust only wall canopy or island style suitable for all types of cooking applications. The hood(s) shall be U.L. 710 Listed without a fire damper for 700°F rated cooking appliances.
 - 2. The hood(s) exterior shall be constructed of a minimum of 18 gauge 430 series stainless steel. The hood(s) shall be constructed using the standing seam method for optimum strength and with a Performance Enhancing Lip (PEL) to improve capture efficiency by turning air back into the hood.
 - 3. All seams, joints and penetrations of the hood enclosure shall be welded and/or liquid tight. Lighter material gauges, alternate material types and finishes are not acceptable. All unexposed interior surfaces shall be constructed of a minimum 18 gauge corrosion resistant steel including, but not limited to ducts, plenum, and brackets.
 - 4. The hood(s) shall include a filter housing constructed of the same material as the hood. The high efficiency stainless steel filters shall be U.L. 1046 Classified and NSF Certified, in sufficient number and sizes to ensure optimum performance. Filters shall direct the exhaust airflow through individual cyclone chambers, utilizing centrifugal impingement grease extraction technology. The filter housing shall terminate in a pitched, full length grease trough which shall drain into a removable grease container. These filters shall have a grease removal efficiency of 69% at 8 microns (51% from 3-10 microns).
 - 5. Vapor proof, U.L. Listed LED light fixtures shall be pre-wired to a junction box located at the top of the hood for field connection. Wiring shall conform to the requirements of the NFPA 70 7. Hoods shall be built in accordance with the NFPA 96, IMC, UMC, and bear the NSF Seal of Approval. The hood manufacturer shall provide, on request, the necessary data that confirms compliance with the code authorities listed above.
- C. Options:
 - 1. Fire Suppression System (Provide for all kitchen hoods scheduled):
 - a. Field piping installed chemical fire suppression system for the protection of the kitchen ventilation system and cooking appliances. Fire system cabinet shall be included as part of ALL kitchen hoods. The system shall be capable of automatic detection and actuation and remote manual actuation. Piping shall be installed above the hood and shall be concealed from view. No exposed piping shall be allowed except for appliance drops. System shall be

complete with agent tank, nitrogen cartridge, regulated release mechanism and regulated actuator assembly.

- b. The hood(s) shall contain a factory engineered and pre-piped, UL Listed, Wet Chemical, ANSUL R-102 restaurant fire suppression system.
 - c. The system piping shall be installed in the hood at the time of construction above the hood, and shall be concealed from view. No exposed piping is acceptable, with the exception of appliance drops. The system shall be capable of automatic detection and actuation and remote manual actuation. The system shall have the fire suppression capabilities to protect the duct(s), plenum(s), filter area(s) and cooking equipment.
 - d. The system shall include schedule 40 black iron pipe, detectors, and chrome appliance drops.
 - e. The system shall include all parts to complete the system as well as field installation and certification. A 1-1/4" Mechanical gas valve (for high school hoods H-1A/H-1B) shall be furnished for gas line shut-off application.
 - f. The system shall also include the release assembly, agent cylinder, agent, detectors, fusible links, liquid tight fittings, remote manual pull station, and schedule 40 black iron pipe with chrome sleeving for exposed areas.
 - g. A certified local Ansul distributor shall be selected by the factory for final system hook-up.
 - h. Ansul based system shall meet the requirements of NFPA 96.
 - i. Detectors: The detectors shall be the fusible link style designed to separate at a specific temperature.
 - j. Manual pull station for remote mounting.
 - k. Furnish emergency solenoid gas shutoff valve for installation where shown on drawings.
 - l. Provide services of Ansul representative for final system hook-up and certification.
- 2. Light Fixtures: UL listed, vapor-proof LED light fixtures shall be prewired, with connections accessible at the top of the hood for field connection to power. Wiring shall conform to the requirements of the National Electric Code.
 - 3. Electrical Control Panel: Face mounted canopy light control switch and fan control switch with pilot light to control hood lights and exhaust fan.
 - 4. Enclosure panels: Formed of 18 gauge, type 304 stainless steel with #4 finish to enclose the area between the top of the hood and ceiling.
- D. Variable Volume Kitchen Control Package (FOR HIGH SCHOOL HOODS H-1A/H-1B):

1. The Variable Volume Kitchen Control system shall be a U.L. Listed outlet center. The standard package shall consist of a utility control cabinet constructed of a minimum 18 gauge 400 series stainless steel, a user interface keypad, and temperature sensors.
 - a. Temperature sensors shall be made of stainless steel and shall be installed in a U.L. approved coupling.
 - b. The hood cabinet shall be UL Listed to Standard 891. The pre-engineered control center shall include, but not be limited to, fan motor starters, light and fan switches, fire relay which controls the exhaust fan, quarter turn latch, color coded wiring with wiring diagram, grounding terminal blocks, and distribution terminal control strip for control wiring connection. All electrical components shall be UL listed or Classified where applicable and wired in compliance with the National Electrical Code.
 - c. The control center shall be utility cabinet mounted with the switches face mounted on the utility cabinet, with overall dimensions for the control cabinet being 36 in. x 24 in. x 12 in.
2. The utility control cabinet shall house a NEMA-1 stainless steel box which includes terminal blocks for field connections and a Programmable Logic Controller (PLC). The PLC shall be capable of controlling multiple exhaust and supply fans via Variable Frequency Drive (VFD) and/or analog signals.
3. The utility control cabinet shall house the VFD connected to the hood's exhaust fan. The VFD shall be provided by the hood and variable volume kitchen control package manufacturer:
 - a. Variable Frequency Controllers: Enclosed controllers suitable for operating the indicated loads, in conformance with requirements of NEMA ICS 7. Select unspecified features and options in accordance with NEMA ICS 3.1.
 - 1) Employ microprocessor-based inverter logic isolated from power circuits.
 - 2) Employ pulse-width-modulated inverter system.
 - 3) Shall have internal 5% impedance reactors to reduce the harmonics to the power line and to add protection from AC line transients. The 5% impedance may be from dual (positive and negative DC bus) reactors, or 5% AC line reactors. VFD's with only one DC reactor shall add an AC line reactor.
 - 4) Design for ability to operate controller with motor disconnected from output.
 - 5) Design to attempt five automatic restarts following fault condition before locking out and requiring manual restart.
 - 6) Design for user selectable restart after power outage or interruption.

- b. AC transient protection system consisting of 4-120 joule rated MOV's (phase-to-phase and phase-to-ground), capacitor clamp, and 5% equivalent impedance internal reactors.
- c. Enclosures: NEMA 250, Type 1, for indoor locations, suitable for equipment application in places restricted to persons employed on the premises.
- d. Rated Input Voltage: 208 volts, three phase, 48-63 Hertz, +30%/-35%.
- e. Motor Nameplate Voltage: 200 volts, three phase, 60 Hertz.
- f. Displacement Power Factor: Between 1.0 and 0.95, lagging, over entire range of operating speed and load. g. Operating Ambient: 0 degrees C to 40 degrees C.
- g. Current Limit Adjustment: 60 to 110 percent of rated.
- h. Acceleration Rate Adjustment: minimum range 0.5 to 30 seconds.
- i. Deceleration Rate Adjustment: minimum range 1 to 30 seconds.
- j. Input Signal: two analog inputs, user selectable 0 to 10 VDC, 4 to 20 mA DC.
- k. Output Signal: analog output signal proportional to motor speed, user selectable 0 to 10 VDC, 4 to 20 mA DC.
- l. Suitable for variable torque loads.
- m. Regenerative braking feature to permit direction of of regenerative energy from the motor back into the AC line.
- n. DC injection brake feature, user selectable.
- o. Suitable for operating on a circuit capable of delivering 100,000 AIC fault current.
- p. Emergency Stop Interface: Input to receive dry contact closure to signal drive stop on alarm condition.
- q. Include undervoltage protection/release, input phase loss protection, motor overcurrent protection, and ground fault protection.
- r. Control Power Source: integral 24VDC, 250ma on-board source.
- s. Output relays: Three output relays with programmable function, Form C, 250VAC/2Arms, programmable to respond to drive faults, drive current output level low, and drive current output level high. Programmable to read Form C relay output as proof of flow, signaling condition via keypad warning, relay output, and/or serial communications bus. Outputs shall include programmable time delays that shall allow acceleration from zero speed, without signaling a false underload condition.
- t. Digital inputs: Six digital inputs, user programmable

- u. Frequency rejection: Three independent programmable bands, user selectable width and mid-points, to prevent drive output of rejected frequencies. w. PID Setpoint Controllers: Provide two (2) PID setpoint controllers to allow pressure and flow signals to be connected, closed loop controlled from the microprocessor.
 - v. Filters: Provide DV/DT filtering on drive output as recommended by drive manufacturer, motor manufacturer, or cooling tower manufacturer.
 - w. Filters: Provide EMI/RFI filtering in compliance with standard EN 61800-3 for the First Environment, restricted level with up to 100' of motor cables.
 - x. Disconnecting Means: Include integral non-fused disconnect switch on the line side of each VFD.
4. The user interface shall be a keypad provided in accordance with the following specifications.
- a. Keypad:
 - 1) The user interface shall be a membrane keypad with a graphic overlay and LCD display. The standard interface shall include hood (fan) operation, hood light, gas reset, and auto tempering buttons depending on the configuration.
 - 2) System notifications (including but not limited to hood operation, current alarms, and fan 100% override time left) shall be displayed in the middle of the screen. A red alarm light shall flash on the keypad upon a system alarm.
5. System Operation:
- a. The sequence of operation shall utilize resistive type temperature sensors that are mounted in the capture tank of the hood to monitor exhaust air temperatures. Fluctuation of exhaust temperature caused by cooking load shall be sensed by the temperature sensor and conveyed to the controller. The controller shall fully modulate the speed of the fan via the analog signal, from maximum speed down to a minimum speed to be determined by building test and balance. The system shall be capable of serving as an IMC compliant auto start-up control to automatically start the fans during cooking operations. Analog signal(s) shall allow modulation of the fans based on the exhaust air temperature sensed by the temperature sensors. It must have a fully modulating turndown of up to 50% of maximum speed. Upon pressing the Fan 100% button, exhaust fan speeds shall go to maximum speed for 10 minutes (adjustable), or until the Fan 100% button is pressed again, which shall return the system to full temperature control.
 - b. In a fire condition, the control panel shall be capable of forcing the exhaust to maximum speed, shutdown of supply air from associated rooftop units, and shutdown of lights regardless of current fan speeds via integration with a fire system.

- c. Standard Variable Volume Controls shall be provided with a digital remote enable, fire system interface, and shunt trip breaker control.
- d. The follow options shall be furnished:
 - 1) Building Management System Interface
 - (a) BACnet
 - (b) Gas Reset
 - (c) High Temperature Alarm

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify ventilation outlets, service connections, and supports are correct and in required location.
- B. Verify that electric power is available and of the correct characteristics.

3.2 INSTALLATION

- A. Install items in accordance with manufacturers' instructions.
- B. Insulate to prevent electrolysis between dissimilar metals.
- C. Weld and grind joints in steel work tight, without open seams, where necessary due to limitations of sheet sizes or installation requirements.
- D. Sequence installation and erection to ensure correct mechanical and electrical utility connections are achieved.
- E. Cut, fit, and patch where necessary. Provide cutting and patching of items of this section required for installation or services of equipment.
- F. Cut and drill components for service outlets, fixtures, and fittings.
- G. Use anchoring devices appropriate for equipment and expected usage.
- H. Provide sealant to achieve clean joint with adjacent building finishes and between abutting components.
- I. A Factory-Authorized Service Representative shall perform startup service including:
 - 1. Inspection of installed components. Verification of correct installation and operation.
 - 2. Programming of system parameters for proper detection of cooking conditions.
 - 3. Programming of system parameters for proper operation of control input/output points.

4. Programming of VFD parameters for proper control communication with control system.
5. Programming of VFD motor operational set points (maximum speed and allowable motor current).
6. Verification of Hood control system functionality.
7. Results shall be captured in a written report.

3.3 ADJUSTING

- A. Test and Balance Contractor shall adjust hood balancing baffles and VFDs to achieve maximum design airflow at maximum speed.

3.4 CLEANING

- A. Remove masking or protective covering from stainless steel and other finished surfaces.
- B. Wash and clean equipment.
- C. Polish glass, plastic, hardware, accessories, fixtures, and fittings.

3.5 DEMONSTRATION AND INSTRUCTIONS

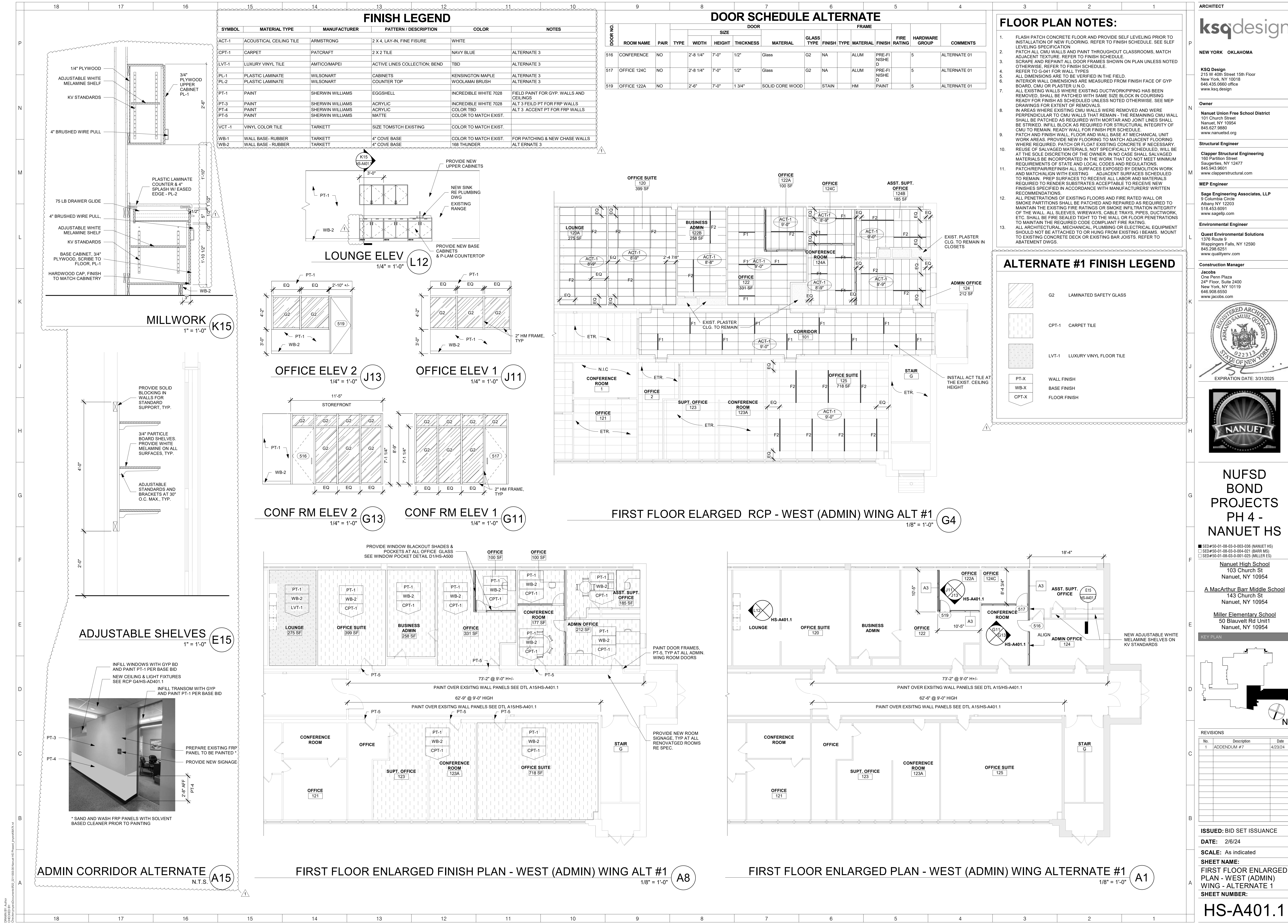
- A. A Factory-Authorized Service Representative shall train Owner's maintenance personnel to adjust, operate, and maintain Packaged Kitchen Hood Ventilation Control Systems.

3.6 PROTECTION OF FINISHED WORK

- A. Remove protective coverings from prefinished work.

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ARCHITECT

ksqdesign

NEW YORK OKLAHOMA

KSQ Design
215 W 40th Street 15th Floor
New York, NY 10018
646.435.0660 office
www.ksqdesign.com

Owner

Nanuet Union Free School District
101 Church Street
Nanuet, NY 10954
845.627.9880
www.nanuetud.org

Structural Engineer

Clapper Structural Engineering
160 Partition Street
Saugerties, NY 12477
845.943.9801
www.clapperstructural.com

MEP Engineer

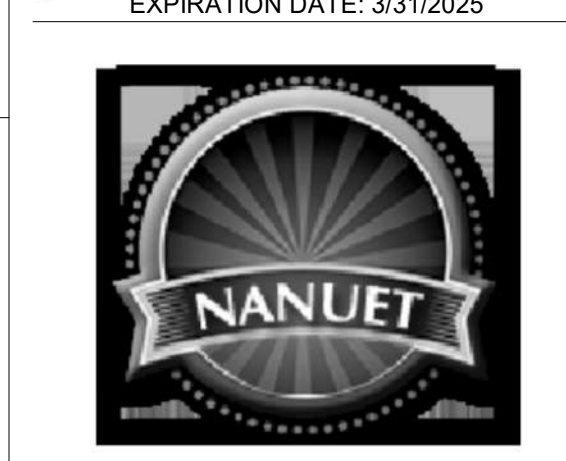
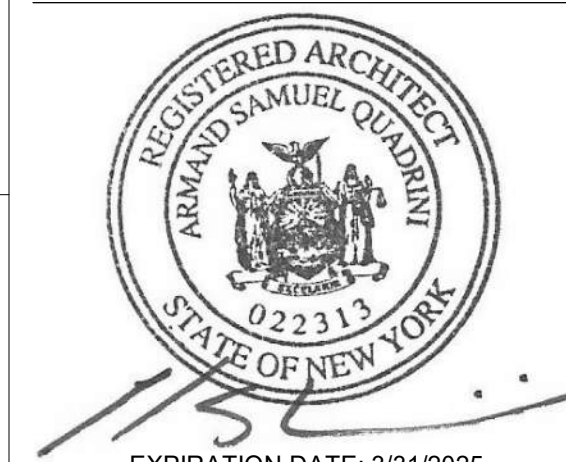
Sage Engineering Associates, LLP
9 Columbia Circle
Albany, NY 12203
518.453.6091
www.sageellp.com

Environmental Engineer

Quest Environmental Solutions
1376 Route 9
Wappingers Falls, NY 12590
845.296.6261
www.qualityenv.com

Construction Manager

Jacobs
One Penn Plaza
24th Floor, Suite 2400
New York, NY 10119
646.806.6560
www.jacobs.com



**NUFSD
BOND
PROJECTS
PH 4 -
NANUET HS**

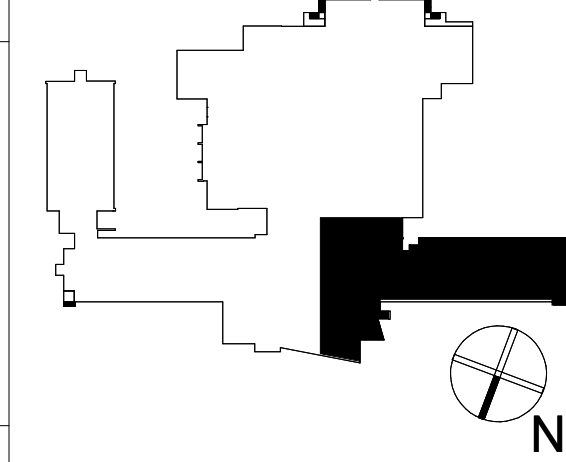
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SED#50-01-08-03-0-004-021 (BARR MS)
SED#50-01-08-03-0-001-025 (MILLER ES)

Nanuet High School
103 Church St
Nanuet, NY 10954

A MacArthur Barr Middle School
143 Church St
Nanuet, NY 10954

Miller Elementary School
50 Blauvelt Rd Unit 1
Nanuet, NY 10954

KEY PLAN



REVISIONS

No.	Description	Date
1	ADDENDUM #7	4/23/24

ISSUED: BID SET ISSUANCE

DATE: 2/6/24

SCALE: As indicated

SHEET NAME:

FIRST FLOOR ENLARGED

PLAN - WEST (ADMIN)

WING - ALTERNATE 1

SHEET NUMBER:

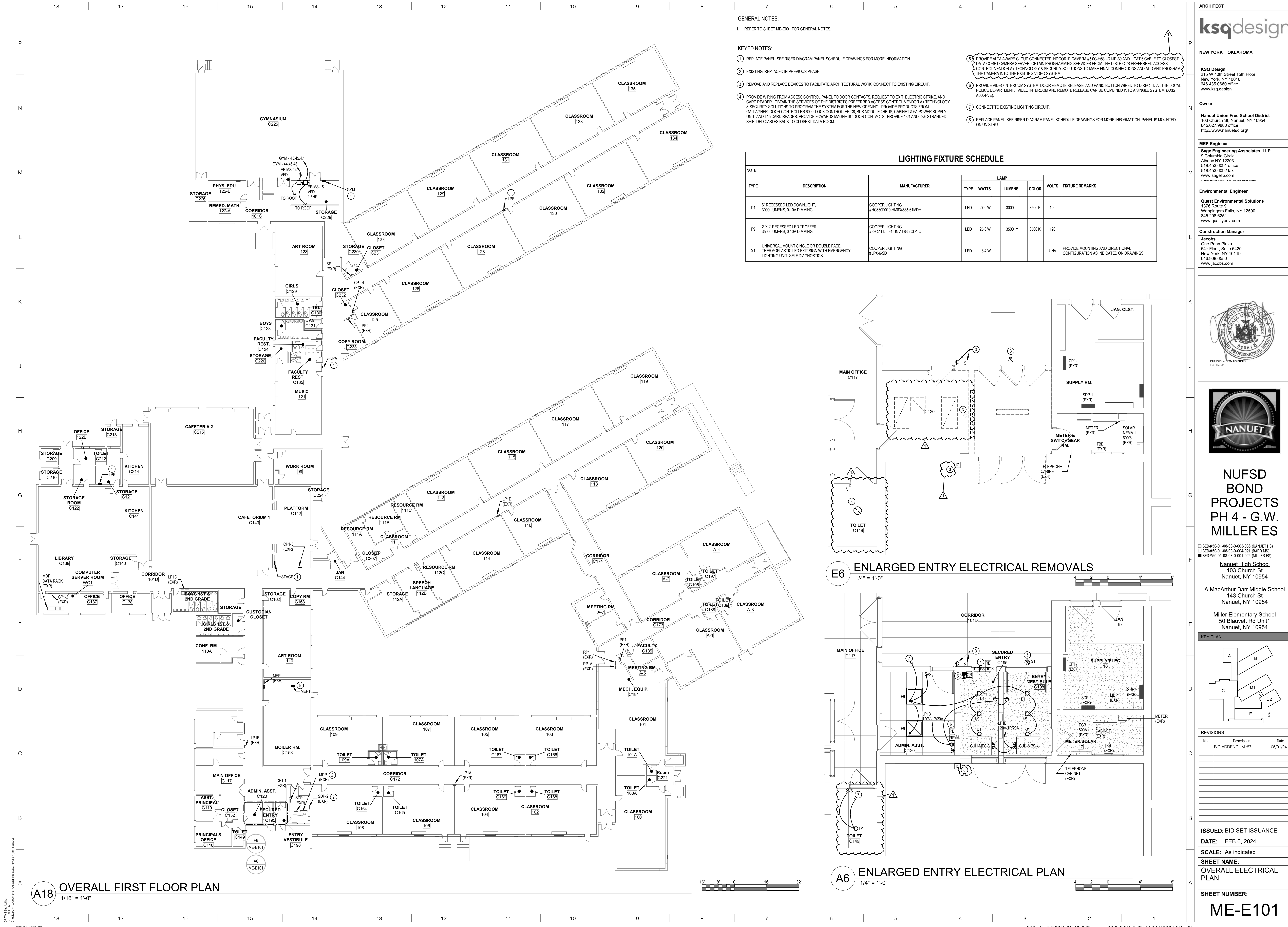
HS-A401.1

ISSUE FOR BID SET



Drawn by: [redacted]
Checked by: [redacted]
Date: 04/29/2024 5:45:38 PM

	18	17	16	15	14	13	12	11	10
	ABBREVIATIONS: (SOME MAY NOT BE USED)								
P	A AMP	DSP GARBAGE DISPOSAL	HH HAND HOLE	NEC NATIONAL ELECTRIC CODE	SF SQUARE FOOT				
	AC ABOVE COUNTER	DW DISHWASHER	HOA HAND-OFF-AUTO SWMTH	NL NIGHT LIGHT	SFL SUB-FEED LUGS				
	ACC AIR COOLED CONDENSING UNIT	DWG DRAWING	HP HORSEPOWER	NO NC NORMALLY OPEN/NORMALLY CLOSED	SH SHIELDED				
	ACP ACCESS CONTROL PANEL	EC ELECTRICAL CONTRACTOR	HVAC HEATING, VENTILATION AND/OR AIR CONDITIONING	OEM ORIGINAL EQUIPMENT MANUFACTURER	SM SINGLE MODE FIBER OPTIC CABLE				
	AFCI ARC FAULT CIRCUIT INTERRUPTER	ECB ENCLOSED CIRCUIT BREAKER	IG ISOLATED GROUND	OLS OVERLOAD UNITS	SPD SURGE PROTECTION DEVICE				
	AFF ABOVE FINISHED FLOOR	EM EMERGENCY	IN INCHES	P POLE	SR SURFACE RACEWAY				
	AFG ABOVE FINISHED GRADE	ELT ELECTRICAL METALLIC TUBING	INT INTERNAL	PC PHOTOCCELL	SWGR SWITCHGEAR				
	AHU AIR HANDLING UNIT	ELU EMERGENCY LIGHTING UNIT	IT INFORMATION TECHNOLOGIES	PE PHOTO EYE	TBB TELEPHONE BACKBOARD				
	AWG AMERICAN WIRE GAGE	ES ELECTRIC STRIKE	JB JUNCTION BOX	PH PHASE	TSP TWISTED SHIELDED PAIR				
	BFG BELOW FINISHED GRADE	EXR EXISTING TO REMAIN	K KILO	PV POST INDICATING VALVE	TW TWISTED				
	BLDG BUILDING	FA FIRE ALARM	KVA KILO-VOLT AMPERE	POE POWER OVER ETHERNET	TYP TYPICAL				
	BTU BRITISH THERMAL UNITS	FAP FIRE ALARM ANNUNCIATOR PANEL	KW KILOWATT	PR PAIR	UG UNDERGROUND				
	C CONDUIT	FAC FIRE ALARM CONTROL PANEL	LBS POUNDS	PVC POLYVINYL CHLORIDE	UGE UNDERGROUND ELECTRIC				
N	CAT CATEGORY	FTC FIBER OPTIC CABLE CROSS CONNECT CABINET	LV LOW VOLTAGE	RAF RETURN AIR FAN	UGT UNDERGROUND TELECOMMUNICATION				
	CB CIRCUIT BREAKER	FLA FULL LOAD AMPS	MAX MAXIMUM	RECEPT RECEPTACLE	UH UNIT HEATER				
	CFM CUBIC FEET PER MINUTE	FLR FLOOR	MC METAL CLAD CABLE	RVC REMOTE VOICE COMMAND CENTER	UN UNLESS OTHERWISE NOTED				
	CKT CIRCUIT	FT FEET	MCB MAIN CIRCUIT BREAKER	REL RELOCATE	UPS UNINTERRUPTIBLE POWER SUPPLY				
	COMM COMMUNICATION	FTL FEED-THRU LUGS	MDP MAIN DISTRIBUTION PANEL	REM REMOVE	UTP UNSHIELDED TWISTED PAIR				
	CONT. CONTINUED	FVNR FULL VOLTAGE NON-REVERSING	MHI MOUNTING HEIGHT	REP REPLACE	V VOLT				
	CT CURRENT TRANSFORMER	G GROUND	MN MINIMUM	RGS RIGID GALVANIZED STEEL	W WATT				
	CU COPPER	GC GENERAL CONTRACTOR	MLO MAIN LUGS ONLY	RPM REVOLUTIONS PER MINUTE	WH WATER HEATER				
	CUH CABINET UNIT HEATER	GFI GROUND FAULT CIRCUIT INTERRUPTER	MM MULTIMODE FIBER OPTIC CABLE	SAF SUPPLY AIR FAN	WI WITH				
	CVT CONTROL VOLTAGE TRANSFORMER	GPM GALLONS PER MINUTE	MS MOTOR STARTER	SCH SCHEDULE	WP WEATHERPROOF				
	DDC DIRECT DIGITAL CONTROL	H HEIGHT	MTG MOUNTING	SER SERVICE ENTRANCE RATED	XFMR TRANSFORMER				
	DLC DESIGN LIGHTS CONSORTIUM	HC HANDICAP ACCESSIBLE							
M	SYMBOLS LEGEND:								
					FACP FIRE ALARM CONTROL PANEL				
					FAAP REMOTE ANNUNCIATOR PANEL				
					F PULL STATION				
					H-OR-CEILING MOUNTED OR CEILING MOUNTED SMOKE DETECTOR. PHOTOELECTRIC UON				
					CO SMOKE DETECTOR WITH CARBON MONOXIDE BASE				
					H HEAT DETECTOR. RATE OF RISE. FIXED TEMPERATURE 135° F				
					C CARBON MONOXIDE DETECTOR				
					PS PHOTOELECTRIC DUCT SMOKE DETECTOR DUCT SMOKE				
					RI REMOTE INDICATOR AND TEST STATION				
					FIS FIRE SMOKE DAMPER				
					F BELL STROBE				
					H-X-CEILING MOUNTED STROBE ONLY NOTIFICATION APPLIANCE. 15 CANDELA UNLESS NOTED OTHERWISE				
					X-INDICATES CANDELA RATING STROBE UON				
					X-CEILING MOUNTED STROBE ONLY NOTIFICATION APPLIANCE. 110 CANDELA UNLESS NOTED OTHERWISE				
					X-INDICATES CANDELA RATING STROBE UON				
					F-X-WALL MOUNTED FIRE ALARM HORN ONLY				
					F-X-WALL MOUNTED FIRE ALARM COMBINATION HORN/STROBE. 15 CANDELA UNLESS NOTED OTHERWISE X-INDICATES CANDELA RATING STROBE UON				
					F-X-WALL MOUNTED FIRE ALARM COMBINATION SPEAKER/STROBE. 15 CANDELA UNLESS NOTED OTHERWISE X-INDICATES CANDELA RATING STROBE UON				
					X-CEILING MOUNTED FIRE ALARM COMBINATION SPEAKER/STROBE. 15 CANDELA UNLESS NOTED OTHERWISE X-INDICATES CANDELA RATING STROBE UON				
					F-X-WALL MOUNTED FIRE ALARM SPEAKER ONLY				
					S CEILING MOUNTED FIRE ALARM SPEAKER				
					DH DOOR HOLD OPEN DEVICE				
					T DESIGNATION INDICATES FLOOR MOUNTED				
					FM FIRE ALARM CONTROL MODULE				
					MM FIRE ALARM MONITOR MODULE				
					PS SPRINKLER PRESSURE SWITCH				
					FS SPRINKLER FLOW SWITCH				
					TS SPRINKLER TAMPER SWITCH				
					R FIRE ALARM RELAY				
					S CEILING MOUNTED OCCUPANCY SENSOR. DUAL TECHNOLOGY ULTRASONIC/PIR UNLESS NOTED OTHERWISE				
					X-INDICATES MICROPHONOUS				
					PC-INDICATED OCCUPANCY SENSOR WITH PHOTOCCELL				
					PP LIGHTING POWER PACK				
					RC ROOM CONTROL WITH 0-10V DIMMING				
					H-OR-CEILING OR WALL MOUNTED LED EXIT SIGN. PROVIDE DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS				
					H-OR-CEILING OR WALL MOUNTED EMERGENCY LIGHTING UNIT				
					H-OR-CEILING OR WALL MOUNTED COMBINATION EXIT SIGN / EMERGENCY LIGHTING UNIT				
					H WALL MOUNTED LIGHT. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					H WALL MOUNTED SCOSCE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L LINEAR WALL MOUNTED. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L LIGHT FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L BALLAST DIRECTION INDICATED FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L LINEAR VARIABLE LENGTH OR EXISTING FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L LINEAR PENDANT FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L DIRECTIONAL UPLIGHT OR WALLWASH FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					L LINEAR STRIP FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					R RECESSED DOWNLIGHT. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					R SURFACE DOWNLIGHT. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					R PENDANT MOUNTED FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					R ROOFTOP MOUNTED FLOODLIGHT MOUNTED FIXTURE. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					R SPOTLIGHT. SEE LIGHT FIXTURE SCHEDULE FOR TYPE				
					H-OR-ADDED TO A FIXTURE INDICATES EMERGENCY OR GENERATOR POWERED CIRCUIT				
					X-INDICATES LIFE SAFETY CIRCUIT				
					NL-INDICATES NIGHT LIGHT				
					ACP ACCESS CONTROL PANEL				
					CR CARD READER				
					DC DOOR CONTACTS				
					ES ELECTRIC STRIKE				
					DO DOOR OPERATOR POWER CONNECTION				
					PA DOOR OPERATOR PUSH PAD ACTUATOR				
					SA DOOR OPERATOR SWIPE ACTUATOR				
					HC HANDICAP DOOR OPERATOR PUSH PAD ACTUATOR				
					SC SECURITY CAMERA				
					H-OR-CAMERA JUNCTION BOX				
					CL CLOCK				
					RE REQUEST TO EXIT				
					RS REMOTE DOOR RELEASE SLAVE				
					M RS REMOTE DOOR RELEASE MASTER STATION				
					PB PANIC BUTTON - DIALS LOCAL POLICE				
					IC INTERCOM				
					REX REQUEST TO EXIT				
					PB PANIC BUTTON-DIALS LOCAL POLICE				
A	18	17	16	15	14	13	12	11	



GENERAL NOTES:

1. REFER TO SHEET ME-E001 FOR GENERAL NOTES.

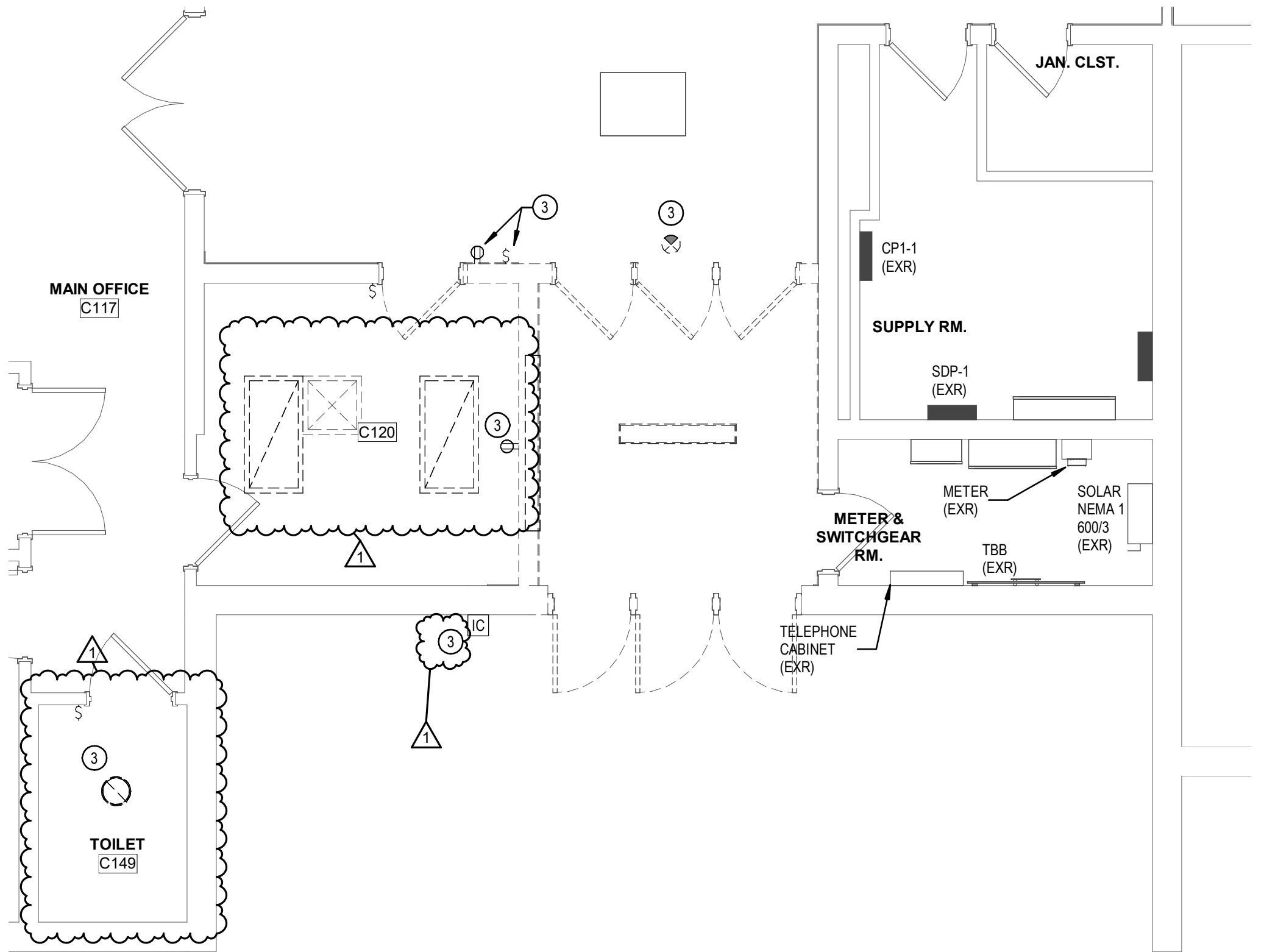
KEYED NOTES:

1. REPLACE PANEL. SEE RISER DIAGRAM PANEL SCHEDULE DRAWINGS FOR MORE INFORMATION.
2. EXISTING, REPLACED IN PREVIOUS PHASE.
3. REMOVE AND REPLACE DEVICES TO FACILITATE ARCHITECTURAL WORK. CONNECT TO EXISTING CIRCUIT.
4. PROVIDE WIRING FROM ACCESS CONTROL PANEL TO DOOR CONTACTS, REQUEST TO EXIT, ELECTRIC STRIKE, AND CARD READER. OBTAIN THE SERVICES OF THE DISTRICT'S PREFERRED ACCESS CONTROL VENDOR A+ TECHNOLOGY & SECURITY SOLUTIONS TO PROGRAM THE SYSTEM FOR THE NEW OPENING. PROVIDE PRODUCTS FROM GALLAGHER: DOOR CONTROLLER 6000, LOCK CONTROLLER C8, BUS MODULE 4#BUS, CABINET & 6A POWER SUPPLY UNIT, AND T15 CARD READER. PROVIDE EDWARDS MAGNETIC DOOR CONTACTS. PROVIDE 184 AND 226 STRANDED SHIELDED CABLES BACK TO CLOSEST DATA ROOM.

5. PROVIDE ALTA AWARE CLOUD CONNECTED INDOOR P CAMERA HS0C-HSL01-R-30 AND 1 CAT 6 CABLE TO CLOSEST DATA CLOSET CAMERA SERVER. OBTAIN PROGRAMMING SERVICES FROM THE DISTRICT'S PREFERRED ACCESS & SECURITY SOLUTIONS TO MAKE FINAL CONNECTIONS AND ADD AND PROGRAM THE CAMERA INTO THE EXISTING VIDEO SYSTEM.
6. PROVIDE VIDEO INTERCOM SYSTEM, DOOR REMOTE RELEASE, AND PANIC BUTTON WIRED TO DIRECT DIAL THE LOCAL POLICE DEPARTMENT. VIDEO INTERCOM AND REMOTE RELEASE CAN BE COMBINED INTO A SINGLE SYSTEM. (AXIS AB004-VE).
7. CONNECT TO EXISTING LIGHTING CIRCUIT.
8. REPLACE PANEL. SEE RISER DIAGRAM PANEL SCHEDULE DRAWINGS FOR MORE INFORMATION. PANEL IS MOUNTED ON UNISTRUT.

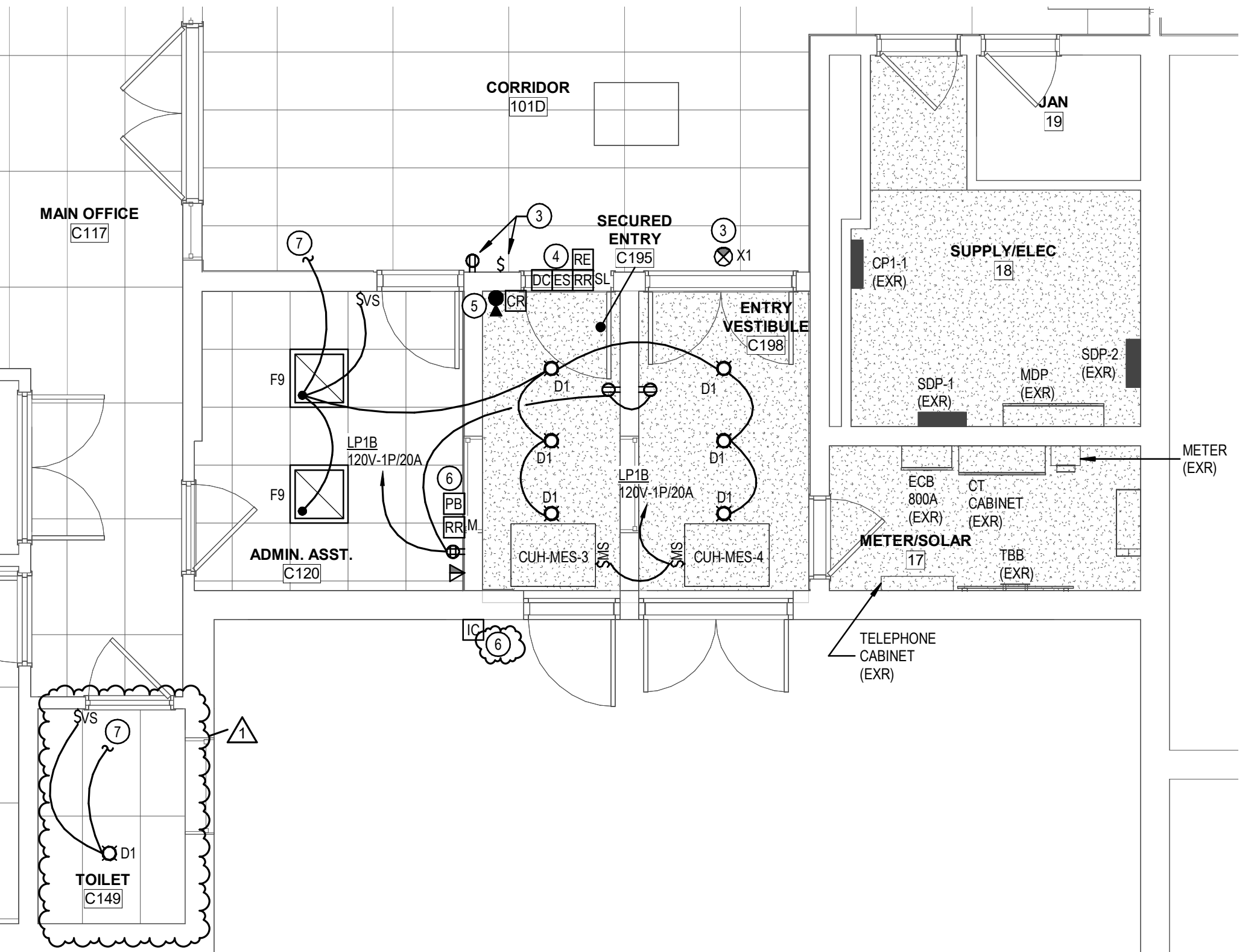
LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	LAMP				VOLTS	FIXTURE REMARKS
			TYPE	WATTS	LUMENS	COLOR		
D1	6" RECESSED LED DOWNLIGHT, 3000 LUMENS, 0-10V DIMMING	COOPER LIGHTING #H0630D010-HM34835-61MDH	LED	27.0 W	3000 lm	3500 K	120	
F9	2' X 2' RECESSED LED TROFFER, 3600 LUMENS, 0-10V DIMMING	COOPER LIGHTING #22CZ-LD5-34-UNV-L835-CD1-U	LED	25.0 W	3500 lm	3500 K	120	
X1	UNIVERSAL MOUNT SINGLE OR DOUBLE FACE THERMOPLASTIC LED EXIT SIGN WITH EMERGENCY LIGHTING UNIT, SELF-DIAGNOSTICS	COOPER LIGHTING #RLPX-6-SD	LED	3.4 W			UNV	PROVIDE MOUNTING AND DIRECTIONAL CONFIGURATION AS INDICATED ON DRAWINGS



E6 ENLARGED ENTRY ELECTRICAL REMOVALS

1/4" = 1'-0"



A6 ENLARGED ENTRY ELECTRICAL PLAN

1/4" = 1'-0"

A18 OVERALL FIRST FLOOR PLAN

1/16" = 1'-0"

ARCHITECT

ksqdesign

NEW YORK OKLAHOMA

KSQ Design
215 W 40th Street 15th Floor
New York, NY 10018
646.435.0660 office
www.ksqdesign.com

Owner

Nanuet Union Free School District
103 Church St, Nanuet, NY 10954
845.627.9880 office
http://www.nanuetusd.org/

MEP Engineer

Sage Engineering Associates, LLP
9 Columbia Circle
Albany NY 12203
518.453.6092 fax
www.sageelp.com

Environmental Engineer

Quest Environmental Solutions
1376 Route 9
Wappingers Falls, NY 12590
845.298.6251
www.qualityenv.com

Construction Manager

Jacobs
One Penn Plaza
54th Floor, Suite 5420
New York, NY 10119
646.908.6550
www.jacobs.com



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MILLER ES

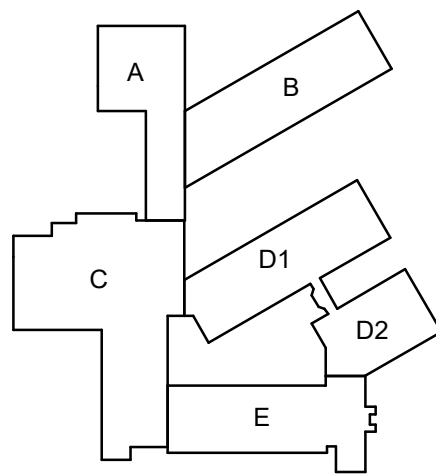
SED#50-01-08-03-0-003-036 (NANUET HS)
SED#50-01-08-03-0-004-021 (BARR MS)
SED#50-01-08-03-0-001-025 (MILLER ES)

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Nanuet, NY 10954

KEY PLAN



REVISIONS

No.	Description	Date
1	BID ADDENDUM #7	05/01/24

ISSUED: BID SET ISSUANCE

DATE: FEB 6, 2024

SCALE: As indicated

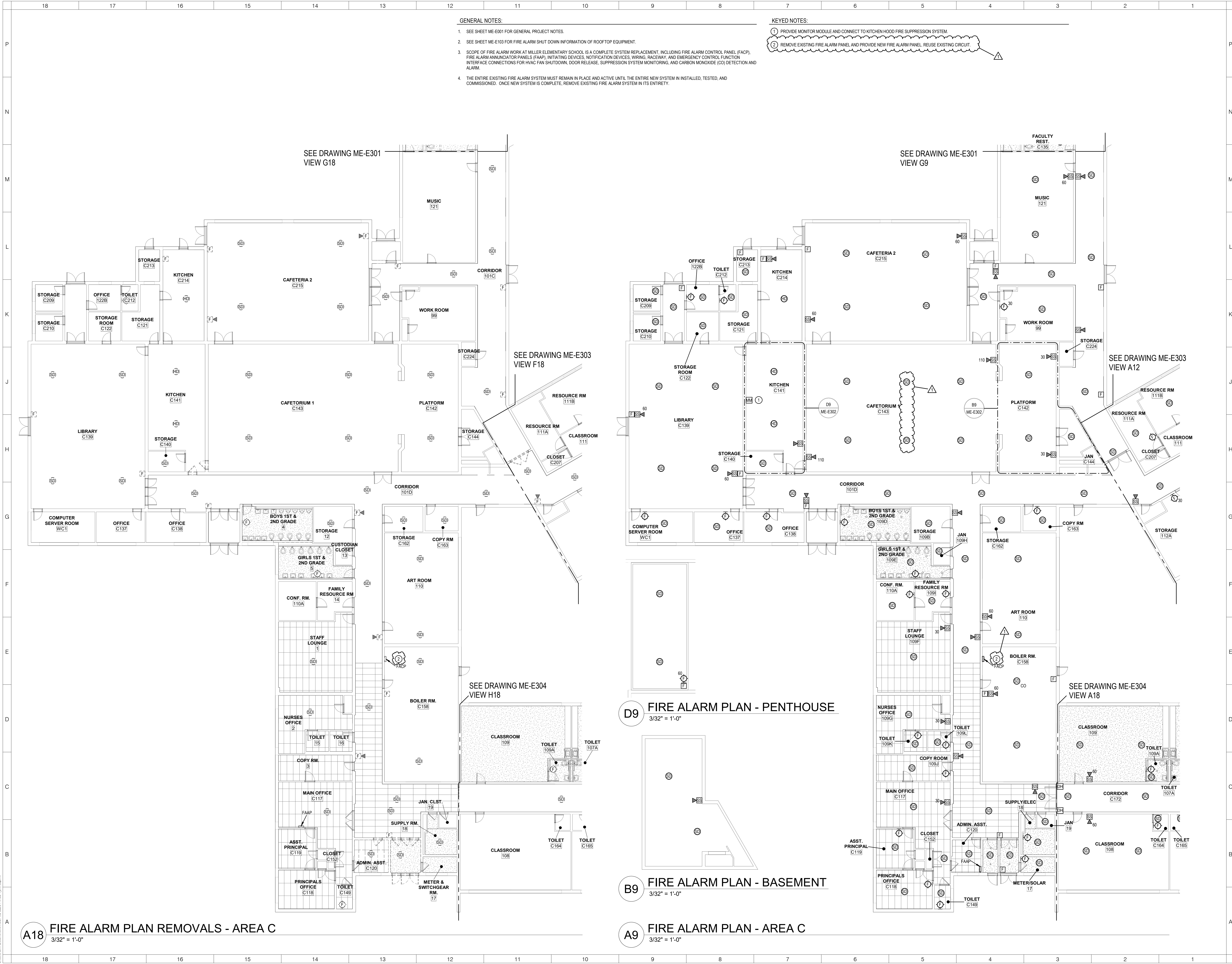
SHEET NAME:
OVERALL ELECTRICAL
PLAN

SHEET NUMBER:

ME-E101

ISSUE FOR BID SET

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Drawing by: jacob
Checked by: jacob



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D

C

B

A

NAME

AREA

LOCATION

VOLTAGE

RATING

MCB

POLES

MOUNTING

SECTION

REPLACE YN

MANUFACTURER

NOTES

CP1-1

C

SUPPLY/ELEC 18

208Y/120

100 A

100 A

42

SURFACE

1 OF 1

SQUARE D

CP1-2

C

COMPUTER SERVER ROOM WC1

208Y/120

80 A

80 A

42

SURFACE

1 OF 1

SQUARE D

CP1-3

C

PLATFORM C142

208Y/120

100 A

100 A

42

SURFACE

1 OF 1

SQUARE D

CP1-4

B

CLOSET C232

208Y/120

100 A

100 A

42

SURFACE

1 OF 1

SQUARE D

F

C

PENTHOUSE

208Y/120

60 A

MLO

12

SURFACE

1 OF 1

SQUARE D

GYM

A

STORAGE C229

208Y/120

100 A

MLO

54

SURFACE

1 OF 1

Yes

WESTINGHOUSE

LP1A

E

CORRIDOR C172

208Y/120

225 A

MLO

42

RECESSED

1 OF 1

SQUARE D

LP1B

C

CORRIDOR 101D

208Y/120

200 A

MLO

42

RECESSED

1 OF 1

SQUARE D

LP1C

C

CORRIDOR 101D

208Y/120

225 A

MLO

84

RECESSED

2 SECTIONS

SIEMENS

LP1D

D1

CORRIDOR 101D

208Y/120

225 A

MLO

42

RECESSED

1 OF 1

SQUARE D

LPA

A

CORRIDOR 101C

208Y/120

200 A

MLO

42

RECESSED

1 OF 1

Yes

FRANK-ADAMS

PANEL IS 9.5 X .32 TRIM IS 20.5 X .41

LPB

B

CORRIDOR 101C

208Y/120

200 A

MLO

42

RECESSED

1 OF 1

Yes

FRANK-ADAMS

PANEL IS 9.5 X .32 TRIM IS 20.5 X .41

LPK

C

STORAGE C121

208Y/120

200 A

MLO

42

SURFACE

1 OF 1

Yes

FRANK-ADAMS

MEP

C

BOILER RM. C158

208Y/120

200 A

MLO

42

SURFACE

1 OF 1

SQUARE D

MEP1

C

BOILER RM. C158

208Y/120

100 A

MLO

24

SURFACE

1 OF 1

Yes

SIEMENS

PP1

D2

MEETING RM. A-5

208Y/120

400 A

150 A

48

SURFACE

1 OF 1

EATON

PANEL HAS AN EATON PD02

PP2

B

COPY ROOM C233

208Y/120

225 A

150 A

42

SURFACE

1 OF 1

EATON

RP1

D2

CORRIDOR C173

208Y/120

125 A

200 A

38

RECESSED

1 OF 2

GE

RP1A

D2

CORRIDOR C173

208Y/120

225 A

100 A

42

RECESSED

2 SECTIONS

GE

SDP-1

C

SUPPLY/ELEC 18

208Y/120

400 A

300 A

30

SURFACE

1 OF 1

EATON

SDP-2

C

SUPPLY/ELEC 18

208Y/120

225 A

225 A

54

SURFACE

1 OF 1

EATON

SE

B

CLOSET C231

208Y/120

50 A

MLO

12

SURFACE

1 OF 1

GE

STAGE

C

PLATFORM C142

208Y/120

225 A

MLO

42

SURFACE

1 OF 1

Yes

SIEMENS

TYPE

PHASE AND NEUTRAL

GROUND

3P, 1N, 1G

DESCRIPTION

90-100

3

8

1 1/4"

-

200

30

6

2"

-

225

40

4

2 1/2"

-

KEYED NOTES:

①

CIRCUIT MOVED TO THIS PANEL IN PREVIOUS PHASE

②

RECESSED PANEL TO BE REPLACED

③

PANEL TO BE REPLACED

CP1-4

208Y/120V

100A

MCB

CP1-3

208Y/120V

100A

MCB

CP1-2

208Y/120V

80A

MCB

CP1-1

208Y/120V

100A

MCB

MEP

208Y/120V

200A

MEP1

208Y/120V

100A

SDP-1

208Y/120V

400A

300A

MCB

SDP-2

208Y/120V

225A

225A

MCB

LP1D

208Y/120V

200A

SECT 2

208Y/120V

225A

SECT 1

208Y/120V

225A

LP1B

208Y/120V

200A

LP1A

208Y/120V

225A

LPB

208Y/120V

200A

LPA

208Y/120V

200A

LPK

208Y/120V

200A

STAGE

208Y/120V

225A

GYM

208Y/120V

100A

90-100

100A

SPARE

100A

SPARE

100A

SPARE

200A

MDP

208Y/120V, 3P, 4W, 800A, MIN AIC RATING:10,000

800A ECB (SERVICE RATED)

UTILITY 800A CT CABINET

400 AMP SELF-CONTAINED UTILITY METER

TO UTILITY TRANSFORMER

SOLAR DISC

SOLAR PANELS

PP2

208Y/120V

225A

150A

MCB

RP1A

208Y/120V

225A

100A

MCB

RP1

208Y/120V

125A

200A

MCB

F (PENT HOUSE)

208Y/120V

50A

SE

208Y/120V

60A

A4

SINGLE LINE DIAGRAM-EXISTING

NTS

NOTES:

1.

REFER TO FLOOR PLAN FOR QUANTITIES AND LOCATIONS OF DEVICES AND EQUIPMENT.

2.

PROVIDE MANUFACTURER'S RECOMMENDED WIRING TYPE AND QUANTITY.

3.

WIRING AS PER MANUFACTURER'S STANDARD PRACTICES.

A4

FIRE ALARM RISER DIAGRAM

NTS

ISSUED: BID SET ISSUANCE

DATE: FEB 6, 2024

SCALE: As indicated

SHEET NAME: DETAILS AND DIAGRAMS

SHEET NUMBER:

ME-E501

REVISIONS

No.

Description

Date

1

BID ADDENDUM #7

05/01/24

KEY PLAN

A

B

C

D1

D2

E

NUFSD BOND PROJECTS PH 4 - G.W. MILLER ES

SED#50-01-08-03-0-003-036 (NANUET HS)

SED#50-01-08-03-0-004-021 (BARR MS)

SED#50-01-08-03-0-001-025 (MILLER ES)

Nanuet High School

403 Church St

Nanuet, NY 10954

A MacArthur Barr Middle School

143 Church St

Nanuet, NY 10954

Miller Elementary School

50 Blauvelt Rd Unit1

Nanuet, NY 10954

ARCHITECT

ksqdesign

NEW YORK OKLAHOMA

KSQ Design

215 W 40th Street 15th Floor

New York, NY 10018

646.435.0660 office

www.ksq.design

Owner

Nanuet Union Free School District

103 Church St, Nanuet, NY 10954

845.627.9860 office

http://www.nanuetusd.org/

MEP Engineer

Sage Engineering Associates, LLP

9 Columbia Circle

Albany NY 12203

518.453.6091 office

518.453.6092 fax

www.sageelp.com

WEISS CERTIFICATE AUTHORIZATION NUMBER 051066

Environmental Engineer

Quest Environmental Solutions

1376 Route 9

Wappingers Falls, NY 12590

845.298.6251

www.qualityenv.com

Construction Manager

Jacobs

One Penn Plaza

54th Floor, Suite 5420

New York, NY 10119

646.908.6550

www.jacobs.com

STATE OF NEW YORK

SEAL

050613

PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 10/1/2023

NANUET

ISSUE FOR BID SET

4/30/2024 1:32:38 PM

PROJECT NUMBER: 2111003.00

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- KEYED NOTES:
- ① PROVIDE CONTROL MODULES FOR PRIMARY RECALL, SECONDARY RECALL, AND FIREFIGHTER HAT ILLUMINATED SYMBOL



BM-E300

ISSUE FOR BID SET

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

P

N

M

L

K

J

H

G

F

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D

C

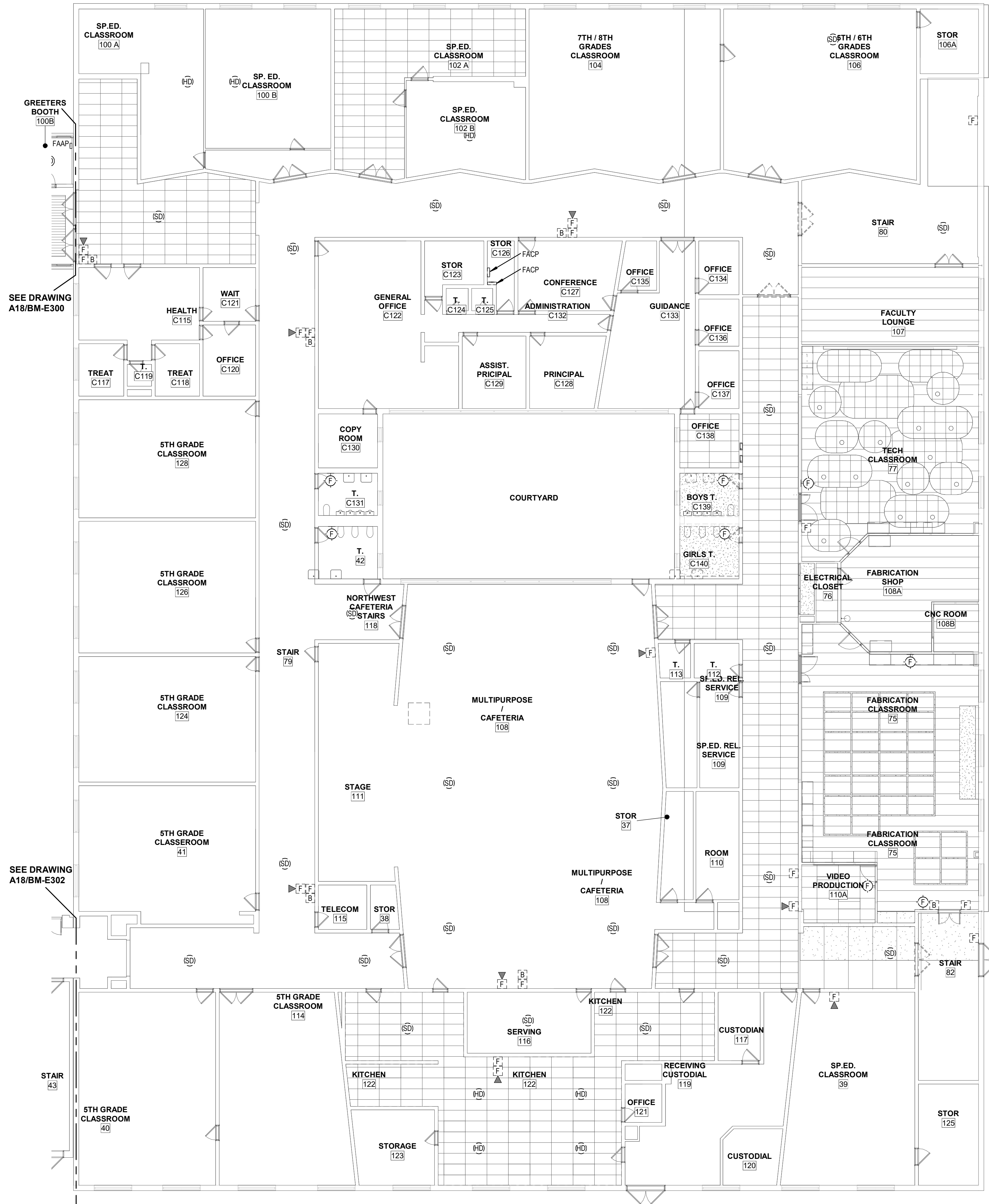
B

A

4/29/2024 5:45:58 PM

- GENERAL NOTES:
- SEE SHEET BM-E001 FOR GENERAL PROJECT NOTES.
 - SEE SHEET BM-E103 FOR FIRE ALARM SHUT DOWN INFORMATION OF ROOFTOP EQUIPMENT.
 - SCOPE OF FIRE ALARM WORK AT BAR MIDDLE SCHOOL IS A COMPLETE SYSTEM REPLACEMENT, INCLUDING FIRE ALARM CONTROL PANEL (FACP), FIRE ALARM ANNUNCIATOR PANELS (FAAP), INITIATING DEVICES, NOTIFICATION DEVICES, WIRING, RACEWAY, AND EMERGENCY CONTROL FUNCTION INTERFACE CONNECTIONS FOR HVAC FAN SHUTDOWN, ELEVATOR RECALL, DOOR RELEASE, SUPPRESSION SYSTEM MONITORING, AND CARBON MONOXIDE (CO) DETECTION AND ALARM.
 - THE ENTIRE EXISTING FIRE ALARM SYSTEM MUST REMAIN IN PLACE AND ACTIVE UNTIL THE ENTIRE NEW SYSTEM IS INSTALLED, TESTED, AND COMMISSIONED. ONCE NEW SYSTEM IS COMPLETE, REMOVE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY.

- KEYED NOTES:
- ① PROVIDE MONITOR MODULE AND CONNECT TO KITCHEN HOOD FIRE SUPPRESSION SYSTEM.





GENERAL NOTES:

1. SEE SHEET BM-E001 FOR GENERAL PROJECT NOTES.
2. SEE SHEET BM-E103 FOR FIRE ALARM SHUT DOWN INFORMATION OF ROOFTOP EQUIPMENT.
3. SCOPE OF FIRE ALARM WORK AT BAR MIDDLE SCHOOL IS A COMPLETE SYSTEM REPLACEMENT, INCLUDING FIRE ALARM CONTROL PANEL (FACP), FIRE ALARM ANNUNCIATOR PANELS (FAP), INITIATING DEVICES, NOTIFICATION DEVICES, WIRING, RACEWAY, AND EMERGENCY CONTROL FUNCTION INTERFACE CONNECTOR FOR HVAC FAN SHUTDOWN, ELEVATOR RECALL, DOOR RELEASE, SUPPRESSION SYSTEM MONITORING, AND CARBON MONITORING (CO) DETECTION AND ALARM.
4. THE ENTIRE EXISTING FIRE ALARM SYSTEM MUST REMAIN IN PLACE AND ACTIVE UNTIL THE ENTIRE NEW SYSTEM IS INSTALLED, TESTED, AND COMMISSIONED. ONCE NEW SYSTEM IS COMPLETE, REMOVE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY.

KEYED NOTES:

- (1) PROVIDE CONTROL MODULES FOR PRIMARY RECALL, SECONDARY RECALL, AND FIREFIGHTER HAT ILLUMINATED SYMBOL.

ARCHITECT

ksqdesign

NEW YORK OKLAHOMA

KSQ Design
215 W 40th Street 15th Floor
New York, NY 10018
646.435.0660 office
www.ksq.design

Owner

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103 Church St, Nanuet, NY 10954
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MEP Engineer

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9 Columbia Circle
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NUFSD
BOND
PROJECTS
PH4

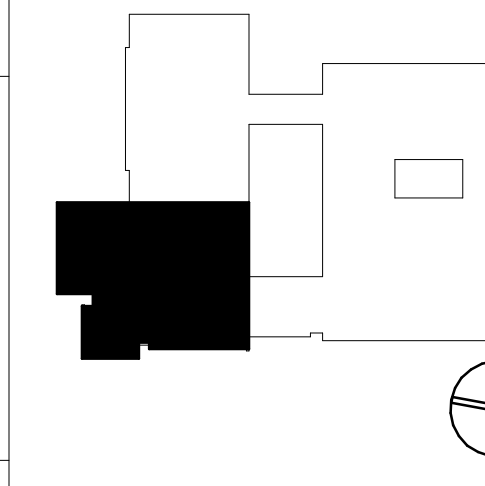
☐ SED#50-01-08-03-0-003-036 (NANUET HS)
☒ SED#50-01-08-03-0-004-021 (BARR MS)
☐ SED#50-01-08-03-0-001-025 (MILLER FS)

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Nanuet, NY 10954

KEY PLAN



REVISIONS

[illegible]

ISSUED: BID SET ISSUANCE

DATE: FEB 6, 2024

SCALE: As indicated

SHEET NAME:
PARTIAL FIRST FLOOR
FIRE ALARM - SOUTH
WEST

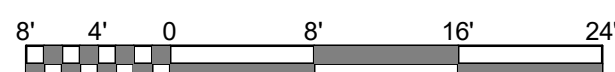
SHEET NUMBER:

BM-E302

SSUE FOR BID SET



A18 OVERALL SECOND FLOOR FIRE ALARM PLAN REMOVAL - EAST
3/32" = 1'-0"



1. SEE SHEET BM-E001 FOR GENERAL PROJECT NOTES.
2. SEE SHEET BM-E103 FOR FIRE ALARM SHUT DOWN INFORMATION OF ROOFTOP EQUIPMENT.
3. SCOPE OF FIRE ALARM WORK AT BAR MIDDLE SCHOOL, IS A COMPLETE SYSTEM REPLACEMENT, INCLUDING FIRE ALARM CONTROL PANEL (FACP); FIRE ALARM ANNUNCIATOR PANEL (FAP); INITIATING DEVICES, NOTIFICATION DEVICES, WIRING, RACEWAY, AND EMERGENCY CONTROL FUNCTION INTERFACE PANELS FOR HOIST AND SHUTDOWN, ELEVATOR RECALL, DOOR RELEASE, SUPPRESSION SYSTEM MONITORING, AND CARBON MONITORING (CO) DETECTION AND ALARM.
4. THE ENTIRE EXISTING FIRE ALARM SYSTEM MUST REMAIN IN PLACE AND ACTIVE UNTIL THE ENTIRE NEW SYSTEM IS INSTALLED, TESTED, AND COMMISSIONED. ONCE NEW SYSTEM IS COMPLETE, REMOVE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY.

BM-E303

SSUE FOR BID SET