



BID ADDENDUM NO. 02

PROJECT: Pine Bush Central School District
2019 Capital Improvement Project – Phase II

SED PROJECT NO: Pine Bush Senior High School - SED No: 44-04-01-06-0-007-027
Circleville Elementary School - SED No: 44-04-01-06-0-009-016
Pakanasink Elementary School - SED No: 44-04-01-06-0-012-015
Circleville Middle School - SED No: 44-04-01-06-0-014-015
Review #20-0686-0689

DATE: March 29, 2021

CPL PROJECT NO: 14533.05

Include this Addendum as part of the Contract Documents. It supplements portions of the original Specifications and Drawings, the extent of which shall remain, except as revised herein:

SCOPE OF WORK CLARIFICATIONS:

A. All Contracts:

- a. Each Contractor shall provide all openings, fill-ins, cutting and patching needed at existing construction to accommodate their work for that discipline unless noted/shown otherwise. Areas of disturbance shall be reconstructed and prepared by each Contractor to receive new finishes by General Construction Contractor. Cutting, trenching, backfilling, and patching is the responsibility of each Contractor.

B. Electrical Contract:

- a. Provide removal (including salvaging) and reinstallation of existing lighting fixtures, fire alarm smoke detectors, PA speakers, projectors and wireless access points per Detail 1/PBHS-A602, Detail 1/PBHS-A603, Detail 2/PBHS-A605, Details 1, 2 & 3/PBHS-A607, Detail 1/CVMS-A601, Detail 2/CVMS-A602, Detail 1/CVMS-A603, Details 4, 5, 7 & 8/PAK-A601 and Details 1, 2, 3, 4, 5 & 6/PAK-A602.
 - i. The salvaged lighting fixtures are the same quantity and location as those that are being removed per the details/plans above.
 - ii. Provide removal (including salvage) and re-install of (40) fire alarm smoke detectors, (35) PA Speakers, (30) Projectors and (30) wireless access points.

C. General Construction Contract:

- a. At all window replacement locations for all the schools, the steel lintels shall be scraped, primed and painted.
 - i. Include this scope of work as part of the Bid Alternates affiliated with window replacement work.
- b. Provide new roller shades at all window replacements, see specification section “12 2413 Roller Window Shades” for more information.
 - i. Include this scope of work as part of the Bid Alternates affiliated with window replacement work.
- c. Remove, salvage and reinstall existing window unit air conditioners as applicable to all window replacements at all locations. For any classroom windows that do not currently



have air conditioning units, provide spare insulated panel for Owner's attic stock for future use.

- i. Include this scope of work as part of the Bid Alternates affiliated with window replacement work.
- d. Existing wall tile at existing shower rooms at all locations can remain and be tiled over. Remove existing wall tile as necessary to accommodate new work.
- e. All Lockers Rooms for all the buildings: remove existing tile flooring and bedding in its entirety down to existing concrete slab to accommodate new work. Provide new bedding and floor tile with correct pitch to floor drains.

CHANGES TO THE PROJECT MANUAL:

1.1 Section 00 0110 Table of Contents

- A. Add 07 4210 Preformed Aluminum Soffit Panels to table of contents.

1.2 Section 00 3350 Statement of Special Inspections and Tests

- A. Replace with attached specification section.

1.3 Section 02 8214 Lead Safe Work Practices

- A. Revise title "Section 02 83 14" on page 2 to read as follows: "Section 02 82 14."

1.4 Section 07 4210 Preformed Aluminum Soffit Panels

- A. Add attached specification section.

1.5 Section 10 1400 Signage

- A. Add attached specification section.

1.6 Section 22 4213.13 Commercial Water Closets & Urinals

- A. Revise paragraph 2.1.A to read as follows: "Water Closets: Wall mounted, bottom outlet, top spud."

1.7 Section 22 0529 Hangers and Supports for Plumbing Piping and Equipment

- A. Revise header of specification section to read: "220529."

1.8 Section 26 0000 General Provisions for Electrical Work

- A. Replace with Section 260000 General Provisions for Electrical Work attached to this addendum. Specification updates the temporary power section and the requirements within.

CHANGES TO THE DRAWINGS

2.1 Drawing GEN-H901:

- A. Louver Schedule
 - a. Revise size of CVMS-L-4 louver to 88X96.

CIRCLEVILLE ELEMENTARY SCHOOL:

2.2 Drawing CES-HM101:

- A. Key Note A1: Only provide abatement to accommodate new work shown on the contract drawings.



2.3 Drawing CES-A103:

A. Key Notes – Demolition Plan:

- a. Note 24: Replace “DETAIL XX/AXXX.” with “DETAIL 3/A401.”

B. Detail 2/A103:

- a. Remove existing stage lighting to accommodate new work. Re-install salvaged lighting on new ceiling system.

2.4 Drawing CES-A601:

- A. Detail 1/A601: Reinstall salvaged stage lighting and curtain system on new ceiling based on new plan layout.

2.5 Drawing CES-A900:

A. Door Schedule:

- a. See Specification Section “087100 Door Hardware” for hardware set numbers.

2.6 Drawing CES-A901:

- A. Provide bullet resistant glazing at window types W11 & W12.

2.7 Drawings CES-E001, CES-E002, CES-E200 and CES-E201:

- A. Replace with drawings attached to this addendum.

2.8 Drawing CES-E202:

A. Detail 3/E202:

- a. Remove the 2x2 Fixture A/EM from the drawing completely.

2.9 Drawing CES-E900:

A. Luminaire Schedule:

- a. Mark B/EM, Description: Revise “2x2 Recessed LED flat panel with emergency battery ballast” to read as follows: “1x4 surface mount LED Wraparound with emergency battery ballast.”

CIRCLEVILLE MIDDLE SCHOOL:

2.10 Drawing CVMS-A101:

A. Key Notes – Demolition Plan:

- a. Provide Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”
- b. Remove Key Note 22 from scope. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.
- c. Revise Key Note 29 to read as follows: “Existing wood flooring in tech space to be sanded and prepared for new work.”
- i. This work is base bid and not part of a bid alternate.
- ii. Bid Alternate CVMS-GC-03 does not exist.

2.11 Drawing CVMS-A102:

A. Key Notes – Demolition Plan:



- a. Provide Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”
- b. Remove Key Note 22 from scope. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.

2.12 Drawing CVMS-A105:

A. Detail 2/A105:

- a. Remove existing ceiling tile & grid and/or plaster ceiling as applicable to accommodate new structural work in rooms: Toilet 87, Office 88, Vestibule 89, Electrical 90, Toilet 86, Shower 84, Stor. 82 and Vestibule 83.

2.13 Drawing CVMS-A106:

A. Detail 1/A106:

- a. Remove existing ceiling tile & grid and/or plaster ceiling as applicable to accommodate new structural work in rooms: Vestibule 79, Toilet 78, Drying 77, Shower 76, Office 73 (including adjacent bathroom), Vestibule 72.

2.14 Drawing CVMS-A201

A. Key Notes – Reconstruction Plan:

- a. Remove “Bid Alternate CVMS-GC-03” from Key Note 2.
 - i. This work is base bid and not part of a bid alternate.
 - ii. Bid Alternate CVMS-GC-03 does not exist.

2.15 Drawings CVMS-A301 and CVMS-A302:

A. Details 2/A301 and 1/A302:

- a. Revise “Replace missing PVC soffit slots, see photos on A302 (typ).” note to read as follows: “Remove existing soffit in its entirety and replace with new vented aluminum soffit panels fastened to existing structure per manufacturer’s written instructions, see specification section 07 4210 Preformed Aluminum Soffit Panels. See typical photos on Detail 3/A302.”

2.16 Drawings CVMS-A501, A502, A701 and A702:

A. Hexagon Key notes shown reference Detail 4/CVMS-A701 “Typical Fixtures & Accessory Legend.”

2.17 Drawing CVMS-A602:

A. Detail 1/A602:

- a. Provide new 2x4 ceiling tile & grid in rooms: Toilet 87, Office 88, Vestibule 89, Electrical 90, Stor. 82, Vestibule 83, Vestibule 79, Office 73 (including adjacent bathroom) and Vestibule 72.
- b. Provide new hard lid moisture resistant ceiling in the following rooms: Shower 84, Toilet 78 and Shower 76.

2.18 Drawing CVMS-A900:

A. Door Schedule:

- a. See Specification Section “087100 Door Hardware” for hardware set numbers.

2.19 Drawing CVMS-I201:



- A. Detail 1/I201:
 - a. Window tags on this drawing do not apply. See architectural drawings for window scope.

2.20 Drawing CVMS-E001, CVMS-E002, CVMS-E103, CVMS-E201 and CVMS-E202:

- A. Replace with drawings attached to this addendum.

2.21 Drawings CVMS-H103 and CVMS-H104:

- A. Key Notes:
 - a. Revise Key Note 2 to read as follows: “Remove existing relief air louver and duct. Window replacement work by GC will cover exterior patch with infill panel within window frame.”

2.22 Drawing CVMS-H200:

- B. Detail 1/H200:
 - a. Revise size of CVMS-L-4 louver to 88/96.

2.23 Drawing CVMS-H201:

- A. Replace with drawing attached to this addendum.

PAKANASINK ELEMENTARY SCHOOL:

2.24 Drawing PAK-HM101

- A. Detail 1:
 - a. Remove abatement/demolition scope for door that leads to Corridor 5A within Lobby 1. Door is to remain.

2.25 Drawing PAK-A101:

- A. Key Notes – Demolition Plan:
 - a. Provide Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”
 - b. Remove Key Note 22 from scope. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.
- B. Detail 1/A101:
 - a. Add Key Note 5 to the following spaces:
 - i. Toilet 101A and Toilet 103A (including adjacent Toilet Corridor).
 - ii. Toilet 114A and Toilet 116A (including adjacent Toilet Corridor).
 - iii. Toilet 106A and Toilet 108A (including adjacent Toilet Corridor).
 - iv. Toilet 105A and Toilet 107A (including adjacent Toilet Corridor).
 - b. Remove Key Note 22 from this Detail. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.

2.26 Drawing PAK-A102:

- A. Key Notes – Demolition Plan:
 - a. Provide Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”



- b. Remove Key Note 22 from scope. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.
- B. Detail 1/A102:
 - a. Add Key Note 5 to the following spaces:
 - i. Toilet 151A and Toilet 153A (including adjacent Toilet Corridor).
 - ii. Toilet 152A and Toilet 154A (including adjacent Toilet Corridor).
 - iii. Toilet 159A and Toilet 161A (including adjacent Toilet Corridor).
 - iv. Toilet 160A and Toilet 162A (including adjacent Toilet Corridor).
 - v. Toilet 156A and Toilet 158A (including adjacent Toilet Corridor).
 - vi. Toilet 155A and Toilet 157A (including adjacent Toilet Corridor).
 - b. Remove Key Note 22 from this Detail. Penetrations for Mechanical Work are the responsibility of Mechanical Contractor.

2.27 Drawing PAK-A103

A. Key Notes – Demolition Plan:

- a. Revise Key Note 4 to read as follows: “Remove existing tile flooring and bedding in its entirety down to existing concrete slab to accommodate new work.”

B. Detail 1/A103:

- a. Provide Key Note 4 in Boys Locker 102A and Girls Locker 109A.

2.28 Drawing PAK-A104

A. Detail 3/A104:

- a. Provide Key Note 2 at existing doors in rooms Men 141 and Women 143.

B. Detail 2/A104:

- a. Provide Key Note 3 at existing wet wall that the existing plumbing fixture but up against for rooms Boys 137 and Girls 136.

2.29 Drawing PAK-A301

A. Detail 3/A301:

- a. Remove note: “Existing overhead doors to remain (typ. of 3).” Those three doors are being replaced.

2.30 Drawing PAK-A900:

A. Door Schedule and Detail 1/A900:

- a. Doors 1-002, 2-002 and 3-002:
 - i. Revise size to 9’-0” wide x 8’-0” high (Door Type E).
 - ii. New doors shall be coiling door with associated hood.
 - iii. Detail 4B/A900 shows tracks that would not apply to these doors. The new steel channel shall be provided.

2.31 Drawings PAK-A501, A502 and A701:

- A. Hexagon Key notes shown reference Detail 5/PAK-A701 “Typical Fixtures & Accessory Legend.”

2.32 Drawing PAK-H200

A. Key Notes:

- a. Provide number 5 at existing text below key note 4. Replace the word “prove” with “provide.” Work affiliated with Key Note 5 is part of bid alternate PAK-MC-01.

B. Detail 1/H200:



- a. New RTU shown outside of Storage 125 shall be labeled “PAK-RTU-2.”

2.33 Drawing PAK-H201:

- A. Replace with drawing attached to this addendum.

2.34 Drawing PAK-P200

- A. Detail 5/P200:
 - a. Remove new urinal UR-A (key note 2) from scope of work for room Men 141.
 - b. Remove new water closet WC-A (key note 1) from scope of work for room Women 143.

2.35 Drawing PAK-E101

- A. Key Notes:
 - a. Key note 4 is part of Bid Alternate PAK-EC-01 lump sum.

2.36 Drawing PAK-E200:

- A. Replace with drawing attached to this addendum.

2.37 Drawing PAK-E201

- A. Replace with drawing attached to this addendum.
- B. Key Notes:
 - a. Clarification: Key notes 3, 4, 5 & 6 are all part of Bid Alternate PAK-EC-01 lump sum.

PINE BUSH HIGH SCHOOL:

2.38 Drawing PBHS-HM102:

- A. Remove Drawing from Drawing Set.

2.39 Drawing PBHS-HM104:

- A. Remove window abatement work on all windows facing Courtyard C.
- B. All Abatement work on this sheet is part of Bid Alternate HS-GC-01.

2.40 Drawing PBHS-HM105:

- A. Remove window abatement work on all windows facing Courtyard C and other Courtyard. Only window abatement work would be for windows shown as demolished on architectural drawings.

2.41 Drawing PBHS-HM106

- A. Remove Drawing from Drawing Set.

2.42 Drawing PBHS-S201:

- A. Partial Exist. Roof Framing Plan (Area 1 & Area 2):
 - a. Remove existing ceiling tile & grid, light fixtures and equipment to accommodate new structural work. Provide new ceiling tile and grid, light fixtures and reinstall salvaged equipment in new ceiling layout.

2.43 Drawing PBHS-A102:



A. Remove Drawing from Drawing Set.

2.44 Drawing PBHS-A104:

A. Key Notes – Demolition Plan:

- a. Revise Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”

2.45 Drawing PBHS-A106:

A. Key Notes – Demolition Plan:

- a. Revise Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”

2.46 Drawing PBHS-A107:

A. Detail 3/A107:

- a. Revise Photo references to “3a/A107” and “3b/A107.”

2.47 Drawing PBHS-A108:

A. Key Notes – Demolition Plan:

- a. Revise Key Note 28 to read as follows: “PLUMBING CONTRACTOR TO SAWCUT FLOOR TO EXTENTS SHOWN.”

2.48 Drawing PBHS-A110:

A. Key Notes – Demolition Plan:

- a. Revise Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”

B. Detail 1/A110:

- a. Remove Demo Key Note 4 from I/O Room 019 and Metal Shop 012.
- b. Add Demo Key Note 5 to Corridor C-004 (includes area to the left of the Corridor C-004 room tag. See PBHS-A602 for extent of demolition needed to accommodate new ceiling work).
- c. Add Demo Key Note 5 to I/O Room 019, Fin. Room 013A and Storage 013B.
- d. Add Demo Key Note 5 to Weight Room 013 (only for the future Robotics 013, see A602 & A603).

2.49 Drawing PBHS-A111:

A. Key Notes – Demolition Plan:

- a. Add Key Note 5 to read as follows: “Remove existing ceiling tiles and grid in their entirety to accommodate new work.”

B. Detail 1/A111:

- a. Remove Demo Key Note 4 from Metal Shop 012.
- b. Add Key Note 5 to Corridor C-004, Science 015, Prep 016 and Science 014.
- c. Add Demo Key Note 5 to Weight Room 013 (only for the future Robotics 013, see A602 & A603).
- d. Remove Demo Key Note 6 from Science 014.

2.50 Drawing PBHS-A112:

A. Detail 1/A112:

- a. Remove Demolition Key Note 4 from Corridor C-110.



- 2.51 Drawing PBHS-A113:**
A. Detail 1/A113:
a. Add Demolition Key Note 2 to Corridor C-110.
- 2.52 Drawing PBHS-A304:**
A. Remove drawing from drawing set.
- 2.53 Drawings PBHS-A501, A502, A701 and A703:**
A. Hexagon Key notes shown reference Detail 1/PBHS-A801 “Typical Fixtures & Accessory Legend.”
- 2.54 Drawing PBHS-A106A:**
A. Detail 1/A601A:
a. Add Key Note 2 to Pool 005. Existing exposed structure to be painted.
- 2.55 Drawing PBHS-A702:**
A. Key Notes – Reconstruction Plan:
a. Remove Key Notes 8 and 12.
b. Revise Key Note 11 to read as follows: “New Acoustical Cloud Ceiling, see PBHS-A602 for more information. Install new cloud ceiling panels to existing exposed structure above per manufacturer’s written instructions.”
c. Revise Key Note 13 to read as follows: “Provide new epoxy flooring paint over existing exposed concrete flooring. Patch and prepare existing concrete flooring as necessary to provide smooth flat surface and per manufacturer’s written instructions to accommodate new work.”
B. Detail 1/A702:
a. Remove Key Notes 8 and 12.
C. Detail 7/A702 is Base Bid work.
- 2.56 Drawing PBHS-A801 (Drawing after PBHS-A704):**
A. Provide Drawing Number “PBHS-A801” to title block and sheet title “Pine Bush High School New Work – Details” to title block.
- 2.57 Drawing H103:**
A. Key Notes:
a. Revise Key Note 6 to read as follows: “Remove existing unit ventilator in its entirety. Provide a weather tight sealed blank off panel at the outdoor air grille with rigid insulation. Patch interior wall with to match existing.”
- 2.58 Drawing PBHS-H202:**
A. Provide General Note 2 to read as follows: “All exposed interior ductwork shall be painted to match existing ceiling color.”
- 2.59 Drawing PBHS-H203:**
A. Replace with drawing attached to this addendum.



2.60 Drawings PBHS-P100 and PBHS-P200:

A. Replace with drawings attached to this addendum.

2.61 Drawings PBHS-E200, PBHS-E201, PBHS-E202, PBHS-E203 and PBHS-E204:

B. Replace with drawings attached to this addendum.

2.62 Drawings PBHS-P100 and PBHS-P200:

A. Replace with drawings attached to this addendum.

PREVIOUSLY ISSUED ADDENDA

A. Bid Addendum No. 01 – March 23, 2021

END OF BID ADDENDUM NO. 02

SECTION 00 3350 STATEMENT OF SPECIAL INSPECTIONS AND TESTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Attached is NYS Education Department Statement of Special Inspections and Tests.
1. The document is provided for the Contractor's reference.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 00 3350

 <p>NYS EDUCATION DEPARTMENT Office of Facilities Planning 89 Washington Avenue, Room 1060 EBA Albany, NY 12234</p>	<p>STATEMENT OF SPECIAL INSPECTIONS AND TESTS As required by the Building Code of NYS (BCNYS)</p>
<p>BCNYS § 1704.1.1 requires the project Design Professional to complete the Statement of Special Inspections and Tests. Completion of the Statement of Special Inspections & Tests and submission to the Office of Facilities Planning with the Construction Permit Application is a condition for issuance of the Building Permit.</p>	
School District Pine Bush Central School District	Building Circleville Elementary School
Project Title 2019 Capital Improvement Project	
SED Project # 44-04-01-06-0-009-016	Project Address 2000 NY-302, Circleville, NY 10919
Architect/Engineer CPL	
Name of Person Completing this Statement Larry D Werts	Phone 585 454 -7600
	Date 10/12/2020
Comments	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
A. Steel Construction						
1. Material verification of high-strength bolts, nuts and washers.		X	Applicable ASTM material specifications. AISC 360, Section A3.3	1704.3	<input checked="" type="checkbox"/>	
2. Inspection of high-strength bolting.	X	X	AISC 360, Section M2.5	1704.3, 1704.3.3	<input type="checkbox"/>	
3. Material verification of structural steel.			ASTM A 6 or A 568	1704.3, 1708.4	<input type="checkbox"/>	
4. Material verification of weld filler materials.			AISC 360, Section A3.5	1704.3	<input type="checkbox"/>	
5. Inspection of welding:				1704.3	<input checked="" type="checkbox"/>	
a. Structural steel	X	X	AWS D1.1, D1.3	1704.3, 1704.3.1	<input checked="" type="checkbox"/>	
b. Reinforcing steel	X	X	AWS D1.4; ACI 318: 3.5.2	1704.3	<input type="checkbox"/>	
6. Inspection of steel frame joint details.		X		1704.3, 1704.3.2	<input type="checkbox"/>	
B. Concrete Construction						
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		X	ACI 318: 3.5, 7.1-7.7	1704.4, 1913.4	<input type="checkbox"/>	
2. Inspection of reinforcing steel welding.			AWS D1.4; ACI 318: 3.5.2	1704.4	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY	
3. Inspection of bolts to be installed in concrete prior to and during placement.	X			1704.4	<input type="checkbox"/>		
4. Verify use of required design mix.		X	ACI 318: Ch. 4, 5.2-5.4	1704.4, 1904.2.2, 1913.2, 1913.3	<input type="checkbox"/>		
5. Sampling fresh concrete: slump, air content, temperature, strength test specimens.	X		ASTM C 172, C 31; ACI 318: 5.6, 5.8	1704.4, 1913.10	<input type="checkbox"/>		
6. Inspection of placement for proper application techniques.	X		ACI, 318: 5.9, 5.10	1704.4, 1913.6, 1913.7, 1913.8	<input type="checkbox"/>		
7. Inspection for maintenance of specified curing temperature and techniques.		X	ACI, 318: 5.11 - 5.13	1704.4, 1913.9	<input type="checkbox"/>		
8. Inspection of prestressed concrete.	X		ACI 318: 18.18.4, 18.20	1704.4	<input type="checkbox"/>		
9. Erection of precast concrete members.		X	ACI 318: Ch. 16	1704.4	<input type="checkbox"/>		
10. Verification of in-situ concrete strength prior to stressing of tendons and prior to removal of shores and forms from beams and slabs.		X	ACI 318: 6.2	1704.4	<input type="checkbox"/>		
11. Inspection of formwork		X	ACI 318: 6.1.1		<input type="checkbox"/>		
C. Masonry Construction							
L1 = Level 1 Inspection required for nonessential facilities.			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	
L2 = Level 2 Inspection required for essential facilities. In general, schools are not considered essential facilities unless they are a designated emergency shelter			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD		BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
1. Verify to ensure compliance:							
a. Proportions of site prepared mortar and grout.		L1 & L2		2.6A	1704.5	<input type="checkbox"/>	
b. Placement of masonry units and construction of mortar joints.		L1 & L2		3.3B	1704.5	<input type="checkbox"/>	
c. Location and placement of reinforcement, connectors, tendons, anchorages.		L1		3.4, 3.6A	1704.5	<input type="checkbox"/>	
		L2	Sec. 1.13	3.4, 3.6A	1704.5	<input type="checkbox"/>	
d. Prestressing technique. Grout space prior to grouting.		L1		3.6B	1704.5	<input type="checkbox"/>	
	L2			3.2D	1704.5	<input type="checkbox"/>	
e. Grade and size of prestressing tendons and anchorages. Placement of grout.		L1		2.4B, 2.4H	1704.5	<input type="checkbox"/>	
	L2			3.5	1704.5	<input type="checkbox"/>	
f. Grout specs prior to grouting.	L2			3.6 C	1704.5	<input type="checkbox"/>	
2. Inspection program shall verify:							
a. Size and location of structural elements.		L1 & L2		3.3G	1704.5	<input type="checkbox"/>	
b. Type, size, and location of anchors.	L2	L1	Sec. 1.2.2(e), 2.1.4, 3.1.6		1704.5	<input type="checkbox"/>	
c. Specified size, grade, and type of reinforcement.		L1 & L2	Sec. 1.13	2.4, 3.4	1704.5	<input type="checkbox"/>	
d. Welding of reinforcing bars.	L1 & L2		2.1.7.10.2, 3.3.3.4(b)		1704.5	<input type="checkbox"/>	
e. Cold/hot weather protection of masonry construction.		L1 & L2		1.8C, 1.8D	1704.5, 2104.3, 2104.4	<input type="checkbox"/>	
f. Prestressing force measurement and application.	L2	L1		3.6B	1704.5	<input type="checkbox"/>	
3. Verification prior to grouting.		L1	1.13	3.2D, 3.4, 2.6B, 3.3B	1704.5	<input type="checkbox"/>	
	L2			1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
4. Grout placement.	L1			3.5, 3.6C	1704.5	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
5. Preparation of grout specimens, mortar specimens, and/or prisms.	L1 & L2		1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
6. Compliance with documents and submittals.		L1 & L2	1.5	1704.5	<input type="checkbox"/>	
D. Wood Construction						
1. Fabrication process of prefabricated wood structural elements and assemblies.				1704.6, 1704.2	<input type="checkbox"/>	
2. High-load diaphragms designed in accordance with Table 2306.3.2				1704.6.1, 1704.1	<input type="checkbox"/>	
E. Soils				1704.7	<input type="checkbox"/>	
F. Pile Foundations				1704.8	<input type="checkbox"/>	
G. Pier Foundations				1704.9	<input type="checkbox"/>	
H. Sprayed Fire-Resistant Materials						
1. Structural member surface conditions.				1704.10.1	<input type="checkbox"/>	
2. Application.				1704.10.2	<input type="checkbox"/>	
3. Thickness.			ASTM E 605	1704.10.3	<input type="checkbox"/>	
4. Density.			ASTM E 605	1704.10.4	<input type="checkbox"/>	
5. Bond strength.			ASTM E 736	1704.10.5	<input type="checkbox"/>	
I. Mastic and Intumescent Fire-Resistant Coatings				1704.11	<input type="checkbox"/>	
J. Exterior Insulation and Finish Systems (EIFS)				1704.12	<input type="checkbox"/>	
K. Special Cases				1704.13	<input type="checkbox"/>	
L. Smoke Control				1704.14	<input type="checkbox"/>	
M. Special Inspections for Seismic Resistance						
1. Structural steel.	X		AISC 341	1707.2	<input type="checkbox"/>	
2. Structural wood.	X			1707.3	<input type="checkbox"/>	
3. Cold-formed steel framing.		X		1707.4	<input type="checkbox"/>	
4. Pier Foundations.		X		1707.5	<input type="checkbox"/>	
5. Storage racks and access floors.		X		1707.6	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
6. Architectural components.		X		1707.7	<input type="checkbox"/>	
7. Mechanical and electrical components.		X		1707.8	<input type="checkbox"/>	
8. Designated seismic system verifications				1707.9	<input type="checkbox"/>	
9. Seismic isolation system.		X		1707.10	<input type="checkbox"/>	
N. Structural Testing for Seismic Resistance						
1. Testing and verification of masonry materials and assemblies prior to construction.				1708.1	<input type="checkbox"/>	
2. Testing for seismic resistance.				1708.2	<input type="checkbox"/>	
3. Reinforcing and prestressing steel.			ACI 318	1708.3	<input type="checkbox"/>	
4. Structural steel.			AISC 341, AWS D1.1	1708.4	<input type="checkbox"/>	
5. Seismic qualification of mechanical and electrical equipment.				1708.5	<input type="checkbox"/>	
6. Seismically isolated structures.			Section 17.8 of ASCE 7	1708.6	<input type="checkbox"/>	
O. Structural Observations						
1. Seismic resistance.				1709.2	<input type="checkbox"/>	
2. Wind requirements.				1709.3	<input type="checkbox"/>	
P. Test Safe Load				1712	<input type="checkbox"/>	
Q. In-Situ Load Tests				1713	<input type="checkbox"/>	
R. Preconstruction Load Tests				1714	<input type="checkbox"/>	
S. Other (list)					<input type="checkbox"/>	

 <p>NYS EDUCATION DEPARTMENT Office of Facilities Planning 89 Washington Avenue, Room 1060 EBA Albany, NY 12234</p>	<p>STATEMENT OF SPECIAL INSPECTIONS AND TESTS As required by the Building Code of NYS (BCNYS)</p>	
<p>BCNYS § 1704.1.1 requires the project Design Professional to complete the Statement of Special Inspections and Tests. Completion of the Statement of Special Inspections & Tests and submission to the Office of Facilities Planning with the Construction Permit Application is a condition for issuance of the Building Permit.</p>		
School District Pine Bush Central School District	Building Circleville Middle School	
Project Title 2019 Capital Improvement Project - Phase II		
SED Project # 44-04-01-06-0-014-015	Project Address 1951 NY-302, Circleville, NY 10919	
Architect/Engineer CPL		
Name of Person Completing this Statement Larry D Werts	Phone 585 454-7600	Date 10/12/2020
Comments		

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
A. Steel Construction						
1. Material verification of high-strength bolts, nuts and washers.		X	Applicable ASTM material specifications. AISC 360, Section A3.3	1704.3	<input checked="" type="checkbox"/>	
2. Inspection of high-strength bolting.	X	X	AISC 360, Section M2.5	1704.3, 1704.3.3	<input checked="" type="checkbox"/>	
3. Material verification of structural steel.			ASTM A 6 or A 568	1704.3, 1708.4	<input type="checkbox"/>	
4. Material verification of weld filler materials.			AISC 360, Section A3.5	1704.3	<input checked="" type="checkbox"/>	
5. Inspection of welding:				1704.3	<input checked="" type="checkbox"/>	
a. Structural steel	X	X	AWS D1.1, D1.3	1704.3, 1704.3.1	<input checked="" type="checkbox"/>	
b. Reinforcing steel	X	X	AWS D1.4; ACI 318: 3.5.2	1704.3	<input type="checkbox"/>	
6. Inspection of steel frame joint details.		X		1704.3, 1704.3.2	<input type="checkbox"/>	
B. Concrete Construction						
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		X	ACI 318: 3.5, 7.1-7.7	1704.4, 1913.4	<input type="checkbox"/>	
2. Inspection of reinforcing steel welding.			AWS D1.4; ACI 318: 3.5.2	1704.4	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY	
3. Inspection of bolts to be installed in concrete prior to and during placement.	X			1704.4	<input checked="" type="checkbox"/>		
4. Verify use of required design mix.		X	ACI 318: Ch. 4, 5.2-5.4	1704.4, 1904.2.2, 1913.2, 1913.3	<input checked="" type="checkbox"/>		
5. Sampling fresh concrete: slump, air content, temperature, strength test specimens.	X		ASTM C 172, C 31; ACI 318: 5.6, 5.8	1704.4, 1913.10	<input checked="" type="checkbox"/>		
6. Inspection of placement for proper application techniques.	X		ACI, 318: 5.9, 5.10	1704.4, 1913.6, 1913.7, 1913.8	<input type="checkbox"/>		
7. Inspection for maintenance of specified curing temperature and techniques.		X	ACI, 318: 5.11 - 5.13	1704.4, 1913.9	<input type="checkbox"/>		
8. Inspection of prestressed concrete.	X		ACI 318: 18.18.4, 18.20	1704.4	<input type="checkbox"/>		
9. Erection of precast concrete members.		X	ACI 318: Ch. 16	1704.4	<input type="checkbox"/>		
10. Verification of in-situ concrete strength prior to stressing of tendons and prior to removal of shores and forms from beams and slabs.		X	ACI 318: 6.2	1704.4	<input type="checkbox"/>		
11. Inspection of formwork		X	ACI 318: 6.1.1		<input type="checkbox"/>		
C. Masonry Construction							
L1 = Level 1 Inspection required for nonessential facilities.			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	
L2 = Level 2 Inspection required for essential facilities. In general, schools are not considered essential facilities unless they are a designated emergency shelter			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD		BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
1. Verify to ensure compliance:							
a. Proportions of site prepared mortar and grout.		L1 & L2		2.6A	1704.5	<input type="checkbox"/>	
b. Placement of masonry units and construction of mortar joints.		L1 & L2		3.3B	1704.5	<input type="checkbox"/>	
c. Location and placement of reinforcement, connectors, tendons, anchorages.		L1		3.4, 3.6A	1704.5	<input type="checkbox"/>	
		L2	Sec. 1.13	3.4, 3.6A	1704.5	<input type="checkbox"/>	
d. Prestressing technique. Grout space prior to grouting.		L1		3.6B	1704.5	<input type="checkbox"/>	
	L2			3.2D	1704.5	<input type="checkbox"/>	
e. Grade and size of prestressing tendons and anchorages. Placement of grout.		L1		2.4B, 2.4H	1704.5	<input type="checkbox"/>	
	L2			3.5	1704.5	<input type="checkbox"/>	
f. Grout specs prior to grouting.	L2			3.6 C	1704.5	<input type="checkbox"/>	
2. Inspection program shall verify:							
a. Size and location of structural elements.		L1 & L2		3.3G	1704.5	<input type="checkbox"/>	
b. Type, size, and location of anchors.	L2	L1	Sec. 1.2.2(e), 2.1.4, 3.1.6		1704.5	<input type="checkbox"/>	
c. Specified size, grade, and type of reinforcement.		L1 & L2	Sec. 1.13	2.4, 3.4	1704.5	<input type="checkbox"/>	
d. Welding of reinforcing bars.	L1 & L2		2.1.7.10.2, 3.3.3.4(b)		1704.5	<input type="checkbox"/>	
e. Cold/hot weather protection of masonry construction.		L1 & L2		1.8C, 1.8D	1704.5, 2104.3, 2104.4	<input type="checkbox"/>	
f. Prestressing force measurement and application.	L2	L1		3.6B	1704.5	<input type="checkbox"/>	
3. Verification prior to grouting.		L1	1.13	3.2D, 3.4, 2.6B, 3.3B	1704.5	<input type="checkbox"/>	
	L2			1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
4. Grout placement.	L1			3.5, 3.6C	1704.5	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
5. Preparation of grout specimens, mortar specimens, and/or prisms.	L1 & L2		1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
6. Compliance with documents and submittals.		L1 & L2	1.5	1704.5	<input type="checkbox"/>	
D. Wood Construction						
1. Fabrication process of prefabricated wood structural elements and assemblies.				1704.6, 1704.2	<input type="checkbox"/>	
2. High-load diaphragms designed in accordance with Table 2306.3.2				1704.6.1, 1704.1	<input type="checkbox"/>	
E. Soils				1704.7	<input type="checkbox"/>	
F. Pile Foundations				1704.8	<input type="checkbox"/>	
G. Pier Foundations				1704.9	<input type="checkbox"/>	
H. Sprayed Fire-Resistant Materials						
1. Structural member surface conditions.				1704.10.1	<input type="checkbox"/>	
2. Application.				1704.10.2	<input type="checkbox"/>	
3. Thickness.			ASTM E 605	1704.10.3	<input type="checkbox"/>	
4. Density.			ASTM E 605	1704.10.4	<input type="checkbox"/>	
5. Bond strength.			ASTM E 736	1704.10.5	<input type="checkbox"/>	
I. Mastic and Intumescent Fire-Resistant Coatings				1704.11	<input type="checkbox"/>	
J. Exterior Insulation and Finish Systems (EIFS)				1704.12	<input type="checkbox"/>	
K. Special Cases				1704.13	<input type="checkbox"/>	
L. Smoke Control				1704.14	<input type="checkbox"/>	
M. Special Inspections for Seismic Resistance						
1. Structural steel.	X		AISC 341	1707.2	<input type="checkbox"/>	
2. Structural wood.	X			1707.3	<input type="checkbox"/>	
3. Cold-formed steel framing.		X		1707.4	<input type="checkbox"/>	
4. Pier Foundations.		X		1707.5	<input type="checkbox"/>	
5. Storage racks and access floors.		X		1707.6	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
6. Architectural components.		X		1707.7	<input type="checkbox"/>	
7. Mechanical and electrical components.		X		1707.8	<input type="checkbox"/>	
8. Designated seismic system verifications				1707.9	<input type="checkbox"/>	
9. Seismic isolation system.		X		1707.10	<input type="checkbox"/>	
N. Structural Testing for Seismic Resistance						
1. Testing and verification of masonry materials and assemblies prior to construction.				1708.1	<input type="checkbox"/>	
2. Testing for seismic resistance.				1708.2	<input type="checkbox"/>	
3. Reinforcing and prestressing steel.			ACI 318	1708.3	<input type="checkbox"/>	
4. Structural steel.			AISC 341, AWS D1.1	1708.4	<input type="checkbox"/>	
5. Seismic qualification of mechanical and electrical equipment.				1708.5	<input type="checkbox"/>	
6. Seismically isolated structures.			Section 17.8 of ASCE 7	1708.6	<input type="checkbox"/>	
O. Structural Observations						
1. Seismic resistance.				1709.2	<input type="checkbox"/>	
2. Wind requirements.				1709.3	<input type="checkbox"/>	
P. Test Safe Load				1712	<input type="checkbox"/>	
Q. In-Situ Load Tests				1713	<input type="checkbox"/>	
R. Preconstruction Load Tests				1714	<input type="checkbox"/>	
S. Other (list)					<input type="checkbox"/>	

 <p>NYS EDUCATION DEPARTMENT Office of Facilities Planning 89 Washington Avenue, Room 1060 EBA Albany, NY 12234</p>	<p>STATEMENT OF SPECIAL INSPECTIONS AND TESTS As required by the Building Code of NYS (BCNYS)</p>
<p>BCNYS § 1704.1.1 requires the project Design Professional to complete the Statement of Special Inspections and Tests. Completion of the Statement of Special Inspections & Tests and submission to the Office of Facilities Planning with the Construction Permit Application is a condition for issuance of the Building Permit.</p>	
School District Pine Bush Central School District	Building Pakanasink Elementary School
Project Title 2019 Capital Improvement Project	
SED Project # 44-04-01-06-0-012-015	Project Address 1953 NY-302, Circleville, NY 10919
Architect/Engineer CPL	
Name of Person Completing this Statement Larry D Werts	Phone 585 454-6700
	Date 10/12/2020
Comments	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
A. Steel Construction						
1. Material verification of high-strength bolts, nuts and washers.		X	Applicable ASTM material specifications. AISC 360, Section A3.3	1704.3	<input checked="" type="checkbox"/>	
2. Inspection of high-strength bolting.	X	X	AISC 360, Section M2.5	1704.3, 1704.3.3	<input checked="" type="checkbox"/>	
3. Material verification of structural steel.			ASTM A 6 or A 568	1704.3, 1708.4	<input checked="" type="checkbox"/>	
4. Material verification of weld filler materials.			AISC 360, Section A3.5	1704.3	<input checked="" type="checkbox"/>	
5. Inspection of welding:				1704.3	<input checked="" type="checkbox"/>	
a. Structural steel	X	X	AWS D1.1, D1.3	1704.3, 1704.3.1	<input checked="" type="checkbox"/>	
b. Reinforcing steel	X	X	AWS D1.4; ACI 318: 3.5.2	1704.3	<input type="checkbox"/>	
6. Inspection of steel frame joint details.		X		1704.3, 1704.3.2	<input type="checkbox"/>	
B. Concrete Construction						
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		X	ACI 318: 3.5, 7.1-7.7	1704.4, 1913.4	<input type="checkbox"/>	
2. Inspection of reinforcing steel welding.			AWS D1.4; ACI 318: 3.5.2	1704.4	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
3. Inspection of bolts to be installed in concrete prior to and during placement.	X			1704.4	<input checked="" type="checkbox"/>	
4. Verify use of required design mix.		X	ACI 318: Ch. 4, 5.2-5.4	1704.4, 1904.2.2, 1913.2, 1913.3	<input type="checkbox"/>	
5. Sampling fresh concrete: slump, air content, temperature, strength test specimens.	X		ASTM C 172, C 31; ACI 318: 5.6, 5.8	1704.4, 1913.10	<input checked="" type="checkbox"/>	
6. Inspection of placement for proper application techniques.	X		ACI, 318: 5.9, 5.10	1704.4, 1913.6, 1913.7, 1913.8	<input type="checkbox"/>	
7. Inspection for maintenance of specified curing temperature and techniques.		X	ACI, 318: 5.11 - 5.13	1704.4, 1913.9	<input type="checkbox"/>	
8. Inspection of prestressed concrete.	X		ACI 318: 18.18.4, 18.20	1704.4	<input type="checkbox"/>	
9. Erection of precast concrete members.		X	ACI 318: Ch. 16	1704.4	<input type="checkbox"/>	
10. Verification of in-situ concrete strength prior to stressing of tendons and prior to removal of shores and forms from beams and slabs.		X	ACI 318: 6.2	1704.4	<input type="checkbox"/>	
11. Inspection of formwork		X	ACI 318: 6.1.1		<input type="checkbox"/>	
C. Masonry Construction						
L1 = Level 1 Inspection required for nonessential facilities.			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35	<input checked="" type="checkbox"/>	
L2 = Level 2 Inspection required for essential facilities. In general, schools are not considered essential facilities unless they are a designated emergency shelter			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD		BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
1. Verify to ensure compliance:							
a. Proportions of site prepared mortar and grout.		L1 & L2		2.6A	1704.5	<input type="checkbox"/>	
b. Placement of masonry units and construction of mortar joints.		L1 & L2		3.3B	1704.5	<input checked="" type="checkbox"/>	
c. Location and placement of reinforcement, connectors, tendons, anchorages.		L1		3.4, 3.6A	1704.5	<input checked="" type="checkbox"/>	
		L2	Sec. 1.13	3.4, 3.6A	1704.5	<input type="checkbox"/>	
d. Prestressing technique. Grout space prior to grouting.		L1		3.6B	1704.5	<input type="checkbox"/>	
	L2			3.2D	1704.5	<input type="checkbox"/>	
e. Grade and size of prestressing tendons and anchorages. Placement of grout.		L1		2.4B, 2.4H	1704.5	<input type="checkbox"/>	
	L2			3.5	1704.5	<input type="checkbox"/>	
f. Grout specs prior to grouting.	L2			3.6 C	1704.5	<input type="checkbox"/>	
2. Inspection program shall verify:							
a. Size and location of structural elements.		L1 & L2		3.3G	1704.5	<input checked="" type="checkbox"/>	
b. Type, size, and location of anchors.	L2	L1	Sec. 1.2.2(e), 2.1.4, 3.1.6		1704.5	<input type="checkbox"/>	
c. Specified size, grade, and type of reinforcement.		L1 & L2	Sec. 1.13	2.4, 3.4	1704.5	<input type="checkbox"/>	
d. Welding of reinforcing bars.	L1 & L2		2.1.7.10.2, 3.3.3.4(b)		1704.5	<input type="checkbox"/>	
e. Cold/hot weather protection of masonry construction.		L1 & L2		1.8C, 1.8D	1704.5, 2104.3, 2104.4	<input type="checkbox"/>	
f. Prestressing force measurement and application.	L2	L1		3.6B	1704.5	<input type="checkbox"/>	
3. Verification prior to grouting.		L1	1.13	3.2D, 3.4, 2.6B, 3.3B	1704.5	<input type="checkbox"/>	
	L2			1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
4. Grout placement.	L1			3.5, 3.6C	1704.5	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
5. Preparation of grout specimens, mortar specimens, and/or prisms.	L1 & L2		1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
6. Compliance with documents and submittals.		L1 & L2	1.5	1704.5	<input type="checkbox"/>	
D. Wood Construction						
1. Fabrication process of prefabricated wood structural elements and assemblies.				1704.6, 1704.2	<input type="checkbox"/>	
2. High-load diaphragms designed in accordance with Table 2306.3.2				1704.6.1, 1704.1	<input type="checkbox"/>	
E. Soils				1704.7	<input checked="" type="checkbox"/>	
F. Pile Foundations				1704.8	<input type="checkbox"/>	
G. Pier Foundations				1704.9	<input type="checkbox"/>	
H. Sprayed Fire-Resistant Materials						
1. Structural member surface conditions.				1704.10.1	<input type="checkbox"/>	
2. Application.				1704.10.2	<input type="checkbox"/>	
3. Thickness.			ASTM E 605	1704.10.3	<input type="checkbox"/>	
4. Density.			ASTM E 605	1704.10.4	<input type="checkbox"/>	
5. Bond strength.			ASTM E 736	1704.10.5	<input type="checkbox"/>	
I. Mastic and Intumescent Fire-Resistant Coatings				1704.11	<input type="checkbox"/>	
J. Exterior Insulation and Finish Systems (EIFS)				1704.12	<input type="checkbox"/>	
K. Special Cases				1704.13	<input type="checkbox"/>	
L. Smoke Control				1704.14	<input type="checkbox"/>	
M. Special Inspections for Seismic Resistance						
1. Structural steel.	X		AISC 341	1707.2	<input type="checkbox"/>	
2. Structural wood.	X			1707.3	<input type="checkbox"/>	
3. Cold-formed steel framing.		X		1707.4	<input type="checkbox"/>	
4. Pier Foundations.		X		1707.5	<input type="checkbox"/>	
5. Storage racks and access floors.		X		1707.6	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
6. Architectural components.		X		1707.7	<input type="checkbox"/>	
7. Mechanical and electrical components.		X		1707.8	<input type="checkbox"/>	
8. Designated seismic system verifications				1707.9	<input type="checkbox"/>	
9. Seismic isolation system.		X		1707.10	<input type="checkbox"/>	
N. Structural Testing for Seismic Resistance						
1. Testing and verification of masonry materials and assemblies prior to construction.				1708.1	<input type="checkbox"/>	
2. Testing for seismic resistance.				1708.2	<input type="checkbox"/>	
3. Reinforcing and prestressing steel.			ACI 318	1708.3	<input type="checkbox"/>	
4. Structural steel.			AISC 341, AWS D1.1	1708.4	<input type="checkbox"/>	
5. Seismic qualification of mechanical and electrical equipment.				1708.5	<input type="checkbox"/>	
6. Seismically isolated structures.			Section 17.8 of ASCE 7	1708.6	<input type="checkbox"/>	
O. Structural Observations						
1. Seismic resistance.				1709.2	<input type="checkbox"/>	
2. Wind requirements.				1709.3	<input type="checkbox"/>	
P. Test Safe Load				1712	<input type="checkbox"/>	
Q. In-Situ Load Tests				1713	<input type="checkbox"/>	
R. Preconstruction Load Tests				1714	<input type="checkbox"/>	
S. Other (list)					<input type="checkbox"/>	

 <p>NYS EDUCATION DEPARTMENT Office of Facilities Planning 89 Washington Avenue, Room 1060 EBA Albany, NY 12234</p>	<p>STATEMENT OF SPECIAL INSPECTIONS AND TESTS As required by the Building Code of NYS (BCNYS)</p>	
BCNYS § 1704.1.1 requires the project Design Professional to complete the Statement of Special Inspections and Tests. Completion of the Statement of Special Inspections & Tests and submission to the Office of Facilities Planning with the Construction Permit Application is a condition for issuance of the Building Permit.		
School District Pine Bush Central School District	Building Pine Bush High School	
Project Title 2019 Capital Improvement Project - Phase II		
SED Project # 44-04-01-06-0-007-027	Project Address 118 NY-302, Pine Bush, NY 12566	
Architect/Engineer CPL		
Name of Person Completing this Statement Larry Werts	Phone 585 454-7600	Date 10/12/2020
Comments		

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
A. Steel Construction						
1. Material verification of high-strength bolts, nuts and washers.		X	Applicable ASTM material specifications. AISC 360, Section A3.3	1704.3	<input checked="" type="checkbox"/>	
2. Inspection of high-strength bolting.	X	X	AISC 360, Section M2.5	1704.3, 1704.3.3	<input checked="" type="checkbox"/>	
3. Material verification of structural steel.			ASTM A 6 or A 568	1704.3, 1708.4	<input checked="" type="checkbox"/>	
4. Material verification of weld filler materials.			AISC 360, Section A3.5	1704.3	<input checked="" type="checkbox"/>	
5. Inspection of welding:				1704.3	<input checked="" type="checkbox"/>	
a. Structural steel	X	X	AWS D1.1, D1.3	1704.3, 1704.3.1	<input checked="" type="checkbox"/>	
b. Reinforcing steel	X	X	AWS D1.4; ACI 318: 3.5.2	1704.3	<input type="checkbox"/>	
6. Inspection of steel frame joint details.		X		1704.3, 1704.3.2	<input type="checkbox"/>	
B. Concrete Construction						
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		X	ACI 318: 3.5, 7.1-7.7	1704.4, 1913.4	<input checked="" type="checkbox"/>	
2. Inspection of reinforcing steel welding.			AWS D1.4; ACI 318: 3.5.2	1704.4	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY	
3. Inspection of bolts to be installed in concrete prior to and during placement.	X			1704.4	<input checked="" type="checkbox"/>		
4. Verify use of required design mix.		X	ACI 318: Ch. 4, 5.2-5.4	1704.4, 1904.2.2, 1913.2, 1913.3	<input checked="" type="checkbox"/>		
5. Sampling fresh concrete: slump, air content, temperature, strength test specimens.	X		ASTM C 172, C 31; ACI 318: 5.6, 5.8	1704.4, 1913.10	<input checked="" type="checkbox"/>		
6. Inspection of placement for proper application techniques.	X		ACI, 318: 5.9, 5.10	1704.4, 1913.6, 1913.7, 1913.8	<input type="checkbox"/>		
7. Inspection for maintenance of specified curing temperature and techniques.		X	ACI, 318: 5.11 - 5.13	1704.4, 1913.9	<input type="checkbox"/>		
8. Inspection of prestressed concrete.	X		ACI 318: 18.18.4, 18.20	1704.4	<input type="checkbox"/>		
9. Erection of precast concrete members.		X	ACI 318: Ch. 16	1704.4	<input type="checkbox"/>		
10. Verification of in-situ concrete strength prior to stressing of tendons and prior to removal of shores and forms from beams and slabs.		X	ACI 318: 6.2	1704.4	<input type="checkbox"/>		
11. Inspection of formwork		X	ACI 318: 6.1.1		<input type="checkbox"/>		
C. Masonry Construction							
L1 = Level 1 Inspection required for nonessential facilities.			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	
L2 = Level 2 Inspection required for essential facilities. In general, schools are not considered essential facilities unless they are a designated emergency shelter			ACI 530/ ASCE 5/TMS 402, Ch. 35	ACI 530.1/ ASCE 6/TMS 602, Ch. 35		<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
1. Verify to ensure compliance:						
a. Proportions of site prepared mortar and grout.		L1 & L2		2.6A	1704.5	<input type="checkbox"/>
b. Placement of masonry units and construction of mortar joints.		L1 & L2		3.3B	1704.5	<input type="checkbox"/>
c. Location and placement of reinforcement, connectors, tendons, anchorages.		L1		3.4, 3.6A	1704.5	<input type="checkbox"/>
		L2	Sec. 1.13	3.4, 3.6A	1704.5	<input type="checkbox"/>
d. Prestressing technique. Grout space prior to grouting.		L1		3.6B	1704.5	<input type="checkbox"/>
	L2			3.2D	1704.5	<input type="checkbox"/>
e. Grade and size of prestressing tendons and anchorages. Placement of grout.		L1		2.4B, 2.4H	1704.5	<input type="checkbox"/>
	L2			3.5	1704.5	<input type="checkbox"/>
f. Grout specs prior to grouting.	L2			3.6 C	1704.5	<input type="checkbox"/>
2. Inspection program shall verify:						
a. Size and location of structural elements.		L1 & L2		3.3G	1704.5	<input type="checkbox"/>
b. Type, size, and location of anchors.	L2	L1	Sec. 1.2.2(e), 2.1.4, 3.1.6		1704.5	<input type="checkbox"/>
c. Specified size, grade, and type of reinforcement.		L1 & L2	Sec. 1.13	2.4, 3.4	1704.5	<input type="checkbox"/>
d. Welding of reinforcing bars.	L1 & L2		2.1.7.10.2, 3.3.3.4(b)		1704.5	<input type="checkbox"/>
e. Cold/hot weather protection of masonry construction.		L1 & L2		1.8C, 1.8D	1704.5, 2104.3, 2104.4	<input type="checkbox"/>
f. Prestressing force measurement and application.	L2	L1		3.6B	1704.5	<input type="checkbox"/>
3. Verification prior to grouting.		L1	1.13	3.2D, 3.4, 2.6B, 3.3B	1704.5	<input type="checkbox"/>
	L2			1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>
4. Grout placement.	L1			3.5, 3.6C	1704.5	<input type="checkbox"/>

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
5. Preparation of grout specimens, mortar specimens, and/or prisms.	L1 & L2		1.4	1704.5, 2105.2.2, 2105.3	<input type="checkbox"/>	
6. Compliance with documents and submittals.		L1 & L2	1.5	1704.5	<input type="checkbox"/>	
D. Wood Construction						
1. Fabrication process of prefabricated wood structural elements and assemblies.				1704.6, 1704.2	<input type="checkbox"/>	
2. High-load diaphragms designed in accordance with Table 2306.3.2				1704.6.1, 1704.1	<input type="checkbox"/>	
E. Soils				1704.7	<input type="checkbox"/>	
F. Pile Foundations				1704.8	<input type="checkbox"/>	
G. Pier Foundations				1704.9	<input type="checkbox"/>	
H. Sprayed Fire-Resistant Materials						
1. Structural member surface conditions.				1704.10.1	<input type="checkbox"/>	
2. Application.				1704.10.2	<input type="checkbox"/>	
3. Thickness.			ASTM E 605	1704.10.3	<input type="checkbox"/>	
4. Density.			ASTM E 605	1704.10.4	<input type="checkbox"/>	
5. Bond strength.			ASTM E 736	1704.10.5	<input type="checkbox"/>	
I. Mastic and Intumescent Fire-Resistant Coatings				1704.11	<input type="checkbox"/>	
J. Exterior Insulation and Finish Systems (EIFS)				1704.12	<input type="checkbox"/>	
K. Special Cases				1704.13	<input type="checkbox"/>	
L. Smoke Control				1704.14	<input type="checkbox"/>	
M. Special Inspections for Seismic Resistance						
1. Structural steel.	X		AISC 341	1707.2	<input type="checkbox"/>	
2. Structural wood.	X			1707.3	<input type="checkbox"/>	
3. Cold-formed steel framing.		X		1707.4	<input type="checkbox"/>	
4. Pier Foundations.		X		1707.5	<input type="checkbox"/>	
5. Storage racks and access floors.		X		1707.6	<input type="checkbox"/>	

INSPECTION AND TESTING (Continuous & Periodic is as Defined by the BCNYS)	CONTINUOUS	PERIODIC	REFERENCE STANDARD	BCNYS REFERENCE	CHECK IF REQUIRED	IDENTIFY SPEC SECTION AND PROVIDE CLARIFYING NOTES IF NECESSARY
6. Architectural components.		X		1707.7	<input type="checkbox"/>	
7. Mechanical and electrical components.		X		1707.8	<input type="checkbox"/>	
8. Designated seismic system verifications				1707.9	<input type="checkbox"/>	
9. Seismic isolation system.		X		1707.10	<input type="checkbox"/>	
N. Structural Testing for Seismic Resistance						
1. Testing and verification of masonry materials and assemblies prior to construction.				1708.1	<input type="checkbox"/>	
2. Testing for seismic resistance.				1708.2	<input type="checkbox"/>	
3. Reinforcing and prestressing steel.			ACI 318	1708.3	<input type="checkbox"/>	
4. Structural steel.			AISC 341, AWS D1.1	1708.4	<input type="checkbox"/>	
5. Seismic qualification of mechanical and electrical equipment.				1708.5	<input type="checkbox"/>	
6. Seismically isolated structures.			Section 17.8 of ASCE 7	1708.6	<input type="checkbox"/>	
O. Structural Observations						
1. Seismic resistance.				1709.2	<input type="checkbox"/>	
2. Wind requirements.				1709.3	<input type="checkbox"/>	
P. Test Safe Load				1712	<input type="checkbox"/>	
Q. In-Situ Load Tests				1713	<input type="checkbox"/>	
R. Preconstruction Load Tests				1714	<input type="checkbox"/>	
S. Other (list)					<input type="checkbox"/>	

**SECTION 07410
PREFORMED ALUMINUM SOFFIT PANELS**

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. This section covers the pre-finished, pre-fabricated Factory Manufactured Aluminum Soffit System. All metal trim, accessories, fasteners, insulation and sealants indicated on the drawings are part of this section.

1.2 QUALITY ASSURANCE

- A. Manufacturer and erector shall demonstrate experience of a minimum of five (5) years in this type of project.

1.3 SUBSTITUTIONS

- A. The material, products and equipment specified in this section establish a standard for required function, dimension, appearance and quality to be met by any proposed substitution.

1.4 SYSTEM DESCRIPTION

- A. Material to comply with:
 - 1. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

1.5 SOFFIT SYSTEM PERFORMANCE TESTING

- A. Soffit System shall be designed to meet Standard Building Code wind load requirements.
- B. Soffit System shall be designed to meet applicable Local Building Code and the Soffit System shall have been tested by the Manufacturer per ASTM E-330 and have the applicable Load Tables published from this Air Bag testing for negative loads.

1.6 WARRANTIES

- A. Finish warranty: Manufacturer's standard form in which manufacturer agrees to repair finish or replace standing seam metal roof panels that show evidence of deterioration of factory-applied finish within specified warranty period.
 - 1. Exposed Panels Finish - deterioration includes the following:
 - a. Color fading more than 5 hunter units when tested according to ASTM D 2244
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214
 - c. Cracking, checking, peeling or failure of a paint to adhere to a bare metal.
 - 2. Warranty Period: 20 Years from the date of substantial completion

1.7 SUBMITTALS

- A. Furnish detailed drawings showing profile and gauge of exterior sheets, location and type of fasteners, location, gauges, shape and method of attachment of all trim locations and types of sealants, and any other details as may be required for a weather-tight installation.

- B. Provide finish samples of all colors specified.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver components, sheets, metal soffit panels and other manufactured items so as not to be damaged or deformed. Package metal soffit panels for protection during transportation and handling.
- B. Unload, store and erect metal soffit panels in a manner to prevent bending, warping, twisting and surface damage.
- C. Stack metal soffit panels on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal soffit panels to ensure dryness. Do not store metal soffit panels in contact with other materials that might cause staining, denting or other surface damage.
- D. Protect strippable protective coating on any metal coated product from exposure to sunlight and high humidity, except to the extent necessary for material installation.

1.8 PROJECT CONDITIONS

- A. Weather Limitations: proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed.
- B. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication

PART 2 - PRODUCTS

2.1 PANEL DESIGN

- A. Soffit panels shall be 12" wide by 3/8" deep and manufacturer shall be able to provide all three options of panel surface: Full Vent, Half Vent or Solid Soffit in the specified color (s).

2.2 MANUFACTURERS

- A. Vented Soffit Systems
 1. Petersen Aluminum Corporation
 2. IMETCO
 3. ATAS Aluminum

2.3 MATERIALS AND FINISHES

- A. Materials: ASTM B-209 quality aluminum, 3105-H14 Alloy and Temper material. Aluminum shall be tension leveled (temper passed and stretcher leveled) with camber of a maximum of 1/4" in 20 feet, manufactured in the USA, and shall be .032" thick aluminum, US standard grade.
 1. Color shall be PAC-CLAD Kynar 500 Stone White
 2. Panel Surface shall be: Full Vent Half Vent Solid
- B. Finishes: Finish shall be Kynar 500 or Hylar 5000 Fluorocarbon coating with a top side film thickness of 0.70 to 0.90 mil over 0.25 to 0.31 mil prime coat to provide a total dry film thickness of 0.95 to 1.25 mil. Finish shall conform to tests for adhesion, flexibility and longevity as specified by Kynar 500 or Hylar 5000 finish supplier.
- C. Field protection must be provided by the Contractor at the job site so material is not exposed to weather and moisture.

- D. If any strippable film coating is applied to any pre-finished panels or materials for protection during shipping, strippable film shall be removed prior to installation.
- E. Forming: use continuous and rolling method. No end laps on panels. No "portable rollforming" machines will be permitted on this project; no installer-owned or installer-rented machines shall be permitted. It is the intent of the Architect to provide Factory-Manufactured soffit systems only for this project.
- F. Trim: Trim shall be fabricated of the same material and finish to match the profiled sheeting and press broken in lengths of 10 - 12 feet. Trim shall be formed only by the manufacturer or their approved dealer. Trim to be erected in overlapped condition. Use lap strips only as indicated on drawings. Miter conditions shall be factory welded material to match the sheeting.
- G. Fasteners: Fasteners shall be 400 series stainless steel, dished washers stainless steel with bonded neoprene.
- H. Zees: Where required by design of primary structural framing system, zees shall be used to span between beams and/or other joists. Thermally responsive base and top clips shall be fastened to the zees on 12" centers.
- I. Insulation: See Section 07210: Building Insulation.

2.4 SEALANTS

- A. Provide two-part polysulfide class B non-sag type for vertical and horizontal joints or
- B. One part polysulfide not containing pitch or phenolic extenders or
- C. Exterior grade silicone sealant recommended by roofing manufacturer or
- D. One part non-sag, gun grade exterior type polyurethane recommended by the roofing manufacturer.

2.5 FABRICATION

- A. Comply with dimensions, profile limitations, gauges and fabrication details shown and if not shown, provide manufacturer's standard product fabrication.
- B. Fabricate components of the system in factory, ready for field assembly.
- C. Fabricate components and assemble units to comply with fire performance requirements specified.
- D. Apply specified finishes in conformance with manufacturer's standard, and according to manufacturer's instructions.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine alignment of structural steel and related supports, primary and secondary roof framing, solid roof sheathing, prior to installation.
- B. For the record, 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 FASTENERS

- A. Secure units to supports
- B. Place fasteners as indicated in manufacturer's standards.

3.3 INSTALLATION

- A. Panels shall be installed plumb and true in a proper alignment and in relation to the structural framing. The erector must have at least five years successful experience with similar applications.
- B. Install soffit panels, fasteners, trim and related sealants in accordance with approved shop drawings and as may be required for a weather-tight , complete and architecturally pleasing installation.
- C. Remove all strippable coating and provide a dry-wipe down cleaning of the panels as they are erected.
- D. Panels attached to any TREATED LUMBER MUST HAVE AN APPROPRIATE VAPOR BARRIER INSTALLED OVER THE TREATED LUMBER PRIOR TO INSTALLING ANY SOFFIT PANELS OR RELATED FLASHINGS. DO NOT ALLOW ANY METAL PRODUCTS TO COME INTO DIRECT CONTACT WITH TREATED LUMBER

3.4 DAMAGED MATERIAL

- A. Upon determination of responsibility, repair or replace damaged metal panels and trim to the satisfaction of the Architect and Owner.

END OF SECTION 074210

SECTION 10 1400 - SIGNAGE

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. This Section includes the following:
 - 1. Panel signs.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for signs.
 - 1. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 - 2. Provide message list, typestyles, graphic elements and layout for each sign.
- C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors available for the following:
 - 1. Aluminum.
- D. Samples for Verification: For each of the following products and for the full range of color, texture, and sign material indicated, of sizes indicated:
 - 1. Aluminum: For each form, finish, and color, on 6-inch- (150-mm-) long sections of extrusions and squares of sheet at least 4 by 4 inches (100 by 100 mm).
- E. Sign Schedule: Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and fabricator.
- B. Warranty: Special warranty specified in this Section.

1.5 CLOSEOUT SUBMITTALS

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

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products and/or an employer of workers trained and approved by manufacturer
- B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- C. Source Limitations for Signs: Obtain each sign type indicated from one source from a single manufacturer.
- D. Regulatory Requirements: Comply with applicable provisions in [ADA-ABA Accessibility Guidelines] [and] [ICC/ANSI A117.1].

1.7 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit installation of signs in exterior locations to be performed according to manufacturers' written instructions and warranty requirements.
- B. Field Measurements: Verify recess openings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.8 COORDINATION

- A. Coordinate placement of anchorage devices with templates for installing signs.

1.9 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of metal finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image colors.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum Castings: ASTM B 26/B 26M, of alloy and temper recommended by sign manufacturer for casting process used and for use and finish indicated.

- B. Aluminum Sheet and Plate: ASTM B 209 (ASTM B 209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with at least the strength and durability properties of Alloy 5005-H32.
- C. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with at least the strength and durability properties of Alloy 6063-T5.

2.2 PANEL SIGNS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. ACE Sign Systems, Inc.
 - 2. Advance Corporation; Braille-Tac Division.
 - 3. Allen Industries Architectural Signage
 - 4. Allenite Signs; Allen Marking Products, Inc.
 - 5. APCO Graphics, Inc.
 - 6. ASI-Modulex, Inc.
 - 7. Best Sign Systems Inc.
 - 8. Bunting Graphics, Inc.
 - 9. Fossil Industries, Inc.
 - 10. Gemini Incorporated.
 - 11. Grimco, Inc.
 - 12. Innerface Sign Systems, Inc.
 - 13. InPro Corporation
 - 14. Matthews International Corporation; Bronze Division.
 - 15. Mills Manufacturing Company.
 - 16. Mohawk Sign Systems.
 - 17. Nelson-Harkins Industries.
 - 18. Seton Identification Products.
 - 19. Signature Signs, Incorporated.
 - 20. Supersine Company (The)
- B. Exterior Panel Signs: Provide smooth sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner, complying with the following requirements:
 - 1. Aluminum Sheet: 0.080 inch thick.
 - 2. Edge Condition: Square cut
 - 3. Corner Condition: Square
 - 4. Mounting: Framed
 - a. Wall mounted.
 - b. Manufacturer's standard non-corroding anchors for substrates encountered.
 - 5. Color: As selected by Architect from manufacturer's full range
- C. Brackets: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum to suit panel sign construction and mounting conditions indicated. Factory paint brackets in color matching background color of panel sign.

D. Panel Sign Frames:

1. Extruded-Aluminum Frames: Mitered

- a. Color: As selected by Architect from manufacturer's full range
- b. Depth: Manufacturer's recommended depth for 0.080 inch thick sign
- c. Profile: Square
- d. Corner Condition: Square
- e. Mounting:
 - 1) Wall mounted with concealed anchors
 - 2) Manufacturer's standard non-corroding anchors for substrates encountered.

E. Panel Sign Schedule:

1. Sign Type: Exterior Building Sign

- a. Sign Size: As indicated
- b. Character Size: As indicated
- c. Text/Message: As indicated

2.3 ACCESSORIES

- A. Anchors and Inserts: Provide nonferrous-metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

2.4 FABRICATION

- A. General: Provide manufacturer's standard signs of configurations indicated.

1. Welded Connections: Comply with AWS standards for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discoloration of exposed side. Clean exposed welded surfaces of welding flux and dress exposed and contact surfaces.
2. Mill joints to tight, hairline fit. Form joints exposed to weather to exclude water penetration.
3. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
4. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

2.5 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.6 ALUMINUM FINISHES

- A. Clear Anodic Finish: Manufacturer's standard Class 1 clear anodic coating, 0.018 mm or thicker, over a satin (directionally textured) mechanical finish, complying with AAMA 611.
- B. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Apply baked enamel complying with paint manufacturer's written instructions for cleaning, conversion coating, and painting.
 - 1. Organic Coating: Thermosetting, modified-acrylic enamel primer/topcoat system complying with AAMA 2603 except with a minimum dry film thickness of 1.5 mils medium gloss.

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 work.
- B. Verify that items, including anchor inserts are sized and located to accommodate signs.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Locate signs and accessories where indicated, using mounting methods of types described and complying with manufacturer's written instructions.
 - 1. Install signs level, plumb, and at heights indicated, with sign surfaces free of distortion and other defects in appearance.
 - 2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches (75 mm) of sign without encountering protruding objects or standing within swing of door.

- B. Wall-Mounted Signs: Comply with sign manufacturer's written instructions except where more stringent requirements apply.
 - 1. Shim Plate Mounting: Provide 1/8-inch- (3-mm-) thick, concealed aluminum shim plates with predrilled and countersunk holes, at locations indicated, and where other mounting methods are not practicable. Attach plate with fasteners and anchors suitable for secure attachment to substrate. Attach panel signs to plate using method specified above.
 - 2. Mechanical Fasteners: Use non-removable mechanical fasteners placed through predrilled holes. Attach signs with fasteners and anchors suitable for secure attachment to substrate as recommended in writing by sign manufacturer.

- C. Bracket-Mounted Signs: Provide manufacturer's standard brackets, fittings, and hardware for mounting signs that project at right angles from walls and ceilings. Attach brackets and fittings securely to walls and ceilings with concealed fasteners and anchoring devices to comply with manufacturer's written instructions.

3.3 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

END OF SECTION 10 1400

SECTION 260000 – GENERAL PROVISIONS FOR ELECTRICAL WORK

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. The work included in this Contract is shown on the drawings and described in these specifications. It consists of furnishing all labor, material, services, supervision and connection of all systems shown and/or specified including the requirements of:

- | | | | | |
|----|----------|----|---|-----------------------------------|
| 1. | DIVISION | 0 | - | BIDDING AND CONTRACT REQUIREMENTS |
| 2. | DIVISION | 1 | - | GENERAL REQUIREMENTS |
| 3. | DIVISION | 26 | - | ELECTRICAL |
| 4. | DIVISION | 27 | - | COMMUNICATIONS |
| 5. | DIVISION | 28 | - | ELECTRONIC SAFETY AND SECURITY |

B. Contractor is responsible to review and understand all drawings and all work of all trades to ensure a complete and thorough project.

C. Provide all labor, tools, materials, equipment, coordination, and plans necessary for installation and proper operation of the electrical systems.

D. Contract drawings and specifications are complementary and must be so used to ascertain all requirements of the work.

1.2 DEFINITIONS

A. Provide, furnish, install, and furnish and install shall have the same meaning. That is, the Contractor shall purchase, transport to the site and install all required components of the work unless specifically stated otherwise in the contract documents.

B. Wiring pertains to raceway, fittings, conductors, terminations, hangers, supports, etc. as required to form a complete system.

1.3 DRAWINGS AND SPECIFICATIONS

A. The plans are diagrammatic and indicate only the sizes and general arrangement of conduit, devices, and equipment; exact locations of all elements shall be determined as work progresses, in cooperation with the work of other trades. It is not intended to show every item of work or minor piece of equipment, but every item shall be furnished and installed without additional remuneration as necessary to complete the system in accordance with the best practice of the trade.

B. As previously stated, the exact locations of electrical devices and equipment is diagrammatic. The owner may request for any devices or equipment to be installed at different locations than what is indicated on the drawings in a specific area or room. It is the responsibility of the Electrical Contractor to coordinate the locations of devices in all areas prior to installation.

1.4 APPLICABLE STANDARDS

A. All equipment shall bear the UL label.

B. The latest edition of the following minimum standards shall apply wherever applicable:

- | | | |
|----|------|--|
| 1. | ASA | American Standards Association |
| 2. | ASTM | American Society for Testing Materials |

3. ETL Electrical Testing Laboratories, Inc.
4. IEEE Institute of Electrical and Electronic Engineers
5. IPCEA Insulated Power Cable for Engineers Association
6. OSHA Occupational Safety and Health Act
7. NEC National Electric Code
8. NEMA National Electrical Manufacturers Association
9. NESC National Electrical Safety Code
10. NFPA National Fire Protection Association
11. UL Underwriters Laboratories, Inc.
12. Power company standards and regulations.
13. Local and state codes.

- C. In the event there are conflicts between specifications and standards, standards shall govern unless specifications are in excess of standards.

1.5 PERMITS AND INSPECTIONS

- A. Permits: The Contractor shall apply for and pay the cost for any local permits necessary for the work of this contract.
- B. Inspections: The Contractor shall be responsible for obtaining inspection of and the certificate by a 3rd party inspection agency for the entire electrical system. Turn over certificate of inspection to the architect.
- C. The undertaking of periodic inspections by the Owner or Engineer shall not be construed as supervision of actual construction. The Owner or Engineer is not responsible for providing a safe place of work for the Contractor, Contractor's employees, suppliers or subcontractors for access, visits, use, work, travel or occupancy by any person.

1.6 CODES AND REGULATIONS

- A. Comply with all applicable rules and regulations of the municipal laws and ordinances and latest revisions thereof. All work shall be done in full conformity with the requirements of all authorities having jurisdiction. Modifications required by the above authorities will be made without additional charges to the Owner. Where alterations to and/or deviations from the Contract Documents are required by the authorities, report the requirements to the Engineer and secure approval before work is started.
- B. Furnish and file with the proper authorities, all drawings required by them in connection with the work. Obtain all permits, licenses, and inspections and pay all legal and proper fees and charges in this connection.
- C. Should any work shown or specified be of lighter or smaller material than Code requires, same shall be executed in strict accordance with the regulations.
- D. Heavier or larger size material than Code requires shall be furnished and installed, if required by the Plans and Specifications.
- E. This Contractor shall have the electrical work inspected from time to time by authorized inspectors and shall pay all expense incurred by same. At the completion of the work, the Contractor shall furnish a Certificate of Approval, in triplicate, indicating full approval of the work furnished and installed in this Contract from the local authority having jurisdiction.
- F. Equipment and components parts thereof shall bear manufacturer's name-plate, giving manufacturer's name, size, type and model number or serial number, electrical characteristic to

facilitate maintenance and replacements. Name plates of distributors or contractors are not acceptable.

- G. Engineer will have privilege of stopping any work or use of any material that in his opinion is not being properly installed and each Contractor shall remove all materials delivered, or work erected, which does not comply with Contract Drawings and Specifications, and replace with proper materials, or correct such work as directed by the Engineer, at no additional cost to Owner.
- H. If equipment or materials are installed before proper approvals have been obtained, each Contractor shall be liable for their removal and replacement including work of other trades affected by such work, at no additional cost to Owner, if such items do not meet intent of the Drawings and Specifications.

1.7 RECORD DRAWINGS

- A. The Electrical Contractor shall keep an accurate location record of all underground and concealed piping, and of all changes from the original design. He is required to furnish this information to the Engineer prior to his application for final payment.
 - 1. Submit prior to final acceptance inspection, one complete marked-up set of reproducible engineering design drawings.
 - a. Fully illustrate all revisions made by all crafts in course of work.
 - b. Include all field changes, adjustments, variances, substitutions and deletions, including all Change Orders.
 - c. Exact location of raceways, equipment and devices.
 - d. Exact size and location of underground and under floor raceways, grounding conductors and duct banks.
 - 2. These drawings shall be for record purposes for Owner's use and are not considered shop drawings.
- B. At completion of the project, all changes and deviations from the Contract Documents shall be recorded by the Contractor.
- C. Four (4) corrected sets of all operating and maintenance instructions and complete parts lists bound in hard covers shall be furnished to the Owner.

1.8 CLEANING CONDUIT AND EQUIPMENT

- A. Conduit and electrical equipment shall be thoroughly cleaned of dirt, cuttings, and other foreign substances.

1.9 VIBRATION ISOLATION

- A. Vibration isolators shall prevent, as far as practicable, transmission of vibration, noise or hum to any part of building.
- B. Wiring and other electrical connections to equipment mounted on vibration isolators; made flexible with minimum 180 degree loop of "greenfield" in order to avoid restraining equipment and short circuiting vibration isolator.

1.10 BALANCED LOAD

- A. It is intended that design and features of the work as indicated will provide balanced load on the feeders and main service. Contractor shall provide material and installation to provide this balance load insofar as possible.

- B. Contractor shall take current and voltage measurements at all panels of at least 1/2 hour. Reconnections of loads shall be made when deemed necessary by the Engineers.

1.11 JOB CONDITIONS

- A. Examine site related work and surfaces before starting work of any Section. Failure to do so shall in no way relieve the Contractor of the responsibility to properly install the new work.
 - 1. Report to the Engineer, in writing, conditions, which will prevent proper provision of this work ten (10) days prior to bid date, in time for an addendum to be issued .
 - 2. Beginning work of any Section without reporting unsuitable conditions to the Engineer constitutes acceptance of conditions by the Contractor.
 - 3. Perform any required removal, repair or replacement of this work caused by unsuitable conditions at no additional cost to Owner.
 - 4. The Contractor is responsible for performing routine maintenance and cleaning of any existing equipment where he is making connections to new work and to the building where his work adds debris.
- B. Connections to existing work:
 - 1. Install new work and connect to existing work with minimum interference to existing facilities.
 - 2. Provide temporary shutdowns of existing services only with written consent of Owner at no additional charges and at time not to interfere with normal operation of existing facilities.
 - 3. Maintain continuous operation of existing facilities as required with necessary temporary connections between new and existing work.
 - 4. Do not interrupt alarm and emergency systems.
 - 5. Connect new work to existing work in neat and acceptable manner.
 - 6. Restore existing disturbed work to original condition including maintenance of wiring and continuity as required. Replace damaged or rusted conduit to which new equipment is being installed and connected.
- C. Removal and relocation of existing work.
 - 1. Disconnect, remove or relocate electrical material, equipment and other work noted and required by removal or changes in existing construction.
 - 2. Provide new material and equipment required for relocated equipment.
 - 3. Disconnect load and line end of conductors feeding existing equipment.
 - 4. Remove conductors from existing raceways to be rewired.
 - 5. Remove conductors and cap outlets on raceways to be abandoned.
 - 6. Dispose of removed raceways and wire.
 - 7. Dispose of removed electrical equipment as directed by Owner. The Owner shall provide a list of equipment of the Contractor of equipment to be delivered to the Owner.

1.12 SPECIAL TOOLS AND LOOSE ITEMS

- A. Furnish to Owner at completion of work:
 - 1. One set of any special tools required to operate, adjust, dismantle or repair equipment furnished under any section of this Division.
 - 2. "Special Tools": Those not normally found in possession of maintenance personnel.
 - 3. Keys
 - 4. Redundant components and spare parts.
- B. Deliver items to Owner and obtain receipt prior to approval of final payment.

1.13 REVIEW OF CONSTRUCTION

- A. Work may be reviewed at any time by representative of the Engineer.
- B. Advise Architect and Engineer that work is ready for review at following times:
 - 1. Prior to backfilling buried work.
 - 2. Prior to concealment of work in walls and above ceilings.
 - 3. When all requirements of contract have been completed.
- C. Neither backfill nor conceal work without Engineer's consent.

1.14 SHOP DRAWING SUBMITTALS

- A. Submit required shop drawings, samples and product information in accordance with Division 1, requirements and as required in the various sections of these specifications.
- B. Submittals shall show evidence of checking by the Contractor for accuracy. Product information (catalog sheets) shall indicate complete catalog number, color, accessories, etc., as well as, name of manufacturer and local distributor or manufacturer's representative.
- C. Submit for review detailed coordination drawings 3/8" or larger scale plans for all major electrical equipment and any areas of conflicts by drafting location of equipment, lighting fixtures, cable trays and conduits larger than 1-1/2" trade size. Contractor shall refer to Division 1 for preparing coordination drawings.
- D. Incomplete submittals will be rejected.
- E. Additionally, the Contractor will submit data on the following:
 - 1. All electrical equipment including all panelboards and switching devices (disconnects, switches, occupancy sensors, etc.).
 - 2. Fire stop seals used for wall penetrations.
 - 3. Any proposed variation in specified wiring plans and circuitry.
 - 4. All special items and panels, made or constructed specifically for this project, including wiring diagrams, component layout and component data or materials list.
 - 5. All settings of installed equipment, such as overcurrent protection, overload settings, temperature settings, time settings, etc. This includes equipment provided by other contractors or subcontractors and connected and tested by this Contractor.
- F. All submittals of NON-SPECIFIED equipment and components will be reviewed. It is the submitting Contractor's responsibility to prove compliance and not the Architect/Engineer to prove non-compliance. The submitting Contractor will be charged the prevailing wage of the reviewing Engineer for all submittals requiring over one (1) hour to review that were not originally specified.

1.15 OPERATING INSTRUCTIONS

- A. It shall be the Contractor's responsibility to ensure that the Owner's representative is given adequate instruction on the operation of all equipment prior to final payment.

1.16 TEMPORARY POWER

- A. The following equipment shall maintain full power without shutdown at each building within this project. If shutdown of any equipment is required, the district is to be provided with 48 hours of notice prior to shutdown to accommodate. The equipment is as follows:
 - 1. Fire alarm systems
 - 2. Emergency/temporary lighting

3. Main office power
 4. Security Systems
 5. Main data network closet
 6. Kitchen equipment, including but not limited to, refrigeration, freezers, cooking devices.
 7. Any boilers, air conditioning, hot water pumps etc, to maintain district staff.
- B. The Contractor shall provide all temporary power to all trades for all construction locations of this contract. This will include but not be limited to temporary lighting and power outlets. The contractor is to provide temporary power necessary to accommodate all trades job trailers.
- C. At Circleville Elementary School, the contractor may use the existing building generator to provide temporary power to the building during any and all electrical shutdowns. The contractor must provide all fuel necessary to accommodate this temporary power. Once work is complete the contractor must hire a manufacturers representative to provide a complete maintenance program to ensure generator is functioning properly. Contractor to leave generator with a full fuel tank. Contractor to provide records of maintenance from manufacturer and bare costs of any replacement parts/pieces.
- D. At Pakanasink Elementary school, the contractor is to provide a portable generator to provide temporary power to the building during any and all electrical shutdowns.
- E. At Circleville Middle School, the contractor may use the existing building generator to provide temporary power to the building during any and all electrical shutdowns. The contractor must provide all fuel necessary to accommodate this temporary power. Once work is complete the contractor must hire a manufacturers representative to provide a complete maintenance program to ensure generator is functioning properly. Contractor to leave generator with a full fuel tank. Contractor to provide records of maintenance from manufacturer and bare costs of any replacement parts/pieces.
- F. At Circleville Middle School, the contractor must maintain all power to the kitchen equipment and adjacent spaces necessary to provide power to maintain the summer food program at this building. Any possible shutdown must happen outside of the summer food program hours.
- G. Provide a comprehensive, phased work plan at each building to minimize long periods of electrical shutdown. This phased plan must be presented to the district and been given sign off prior to any work being started. Before start of work on any phase, the district is to be given 48 hours notice.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials and equipment shall be new and as specified or of equal or better quality.
- B. Basic hardware and miscellaneous items shall meet existing trade standards of quality and shall carry UL or FM listings where applicable.
- C. All equipment supplied shall be the standard equipment of the manufacturer.
- D. Multiple items such as panelboards, wiring devices, switches, breakers, raceways, etc., shall be from the same manufacturer.
- E. Drawings and specifications are based on specific manufacturer's equipment. Therefore, the Contractor shall assume all responsibility, cost and coordination involved in making any necessary revisions to apply another manufacturer's equipment, even though it may be approved as an "equal" item by the Engineer.

PART 3 - EXECUTION

3.1 COORDINATION OF WORK

- A. All work shall be executed in accordance with recognized standards of workmanship. All work shall be installed in a neat and orderly manner.
- B. The Contractor shall exchange information with other Contractors and the Owner in order to insure orderly progress of the work.
- C. The Contractor must contact the Owner's representative and schedule all work ten (10) days prior to start.
- D. The Contractor shall check for possible interference before installing any items. If any work is installed, and later develops interference with other features of the design, the Contractor will be responsible to make such changes to eliminate the interference.

3.2 CEILING REMOVAL

- A. Existing ceilings which must be removed for the installation of new work or demolition of existing conditions shall be done by the Contractor. No ceiling shall be removed without prior approval of the Owner. Ceilings which must be removed shall be restored to their original condition as soon as practical and prior to final payment.
- B. The removed tile of lay-in type ceilings shall be stored either in the ceiling space or at a designated space in the building. No tiles shall be stored in the occupied space.
- C. The Contractor shall take all necessary precautions to prevent damage to the existing ceilings. All damaged ceilings shall be replaced with new ceiling construction to match the existing and to the Owner's satisfaction.

3.3 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

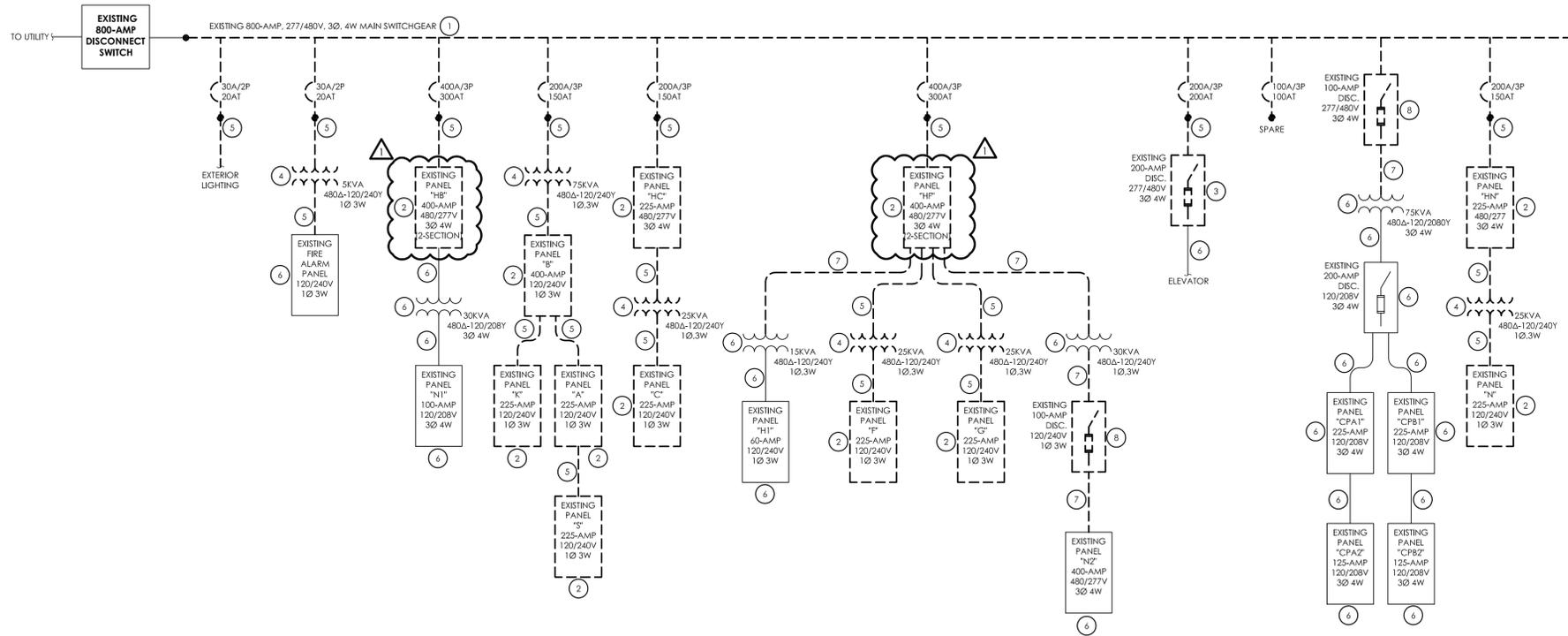
- A. Comply with NECA 1.
- B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- E. Right of Way: Give to piping systems installed at a required slope.

3.4 FIRESTOPPING

- A. Apply firestopping to penetrations of fire-rated floor and wall assemblies for electrical installations to restore original fire-resistance rating of assembly. Firestopping materials and installation requirements are specified in Division 7 Section "Through-Penetration Firestop Systems."

END OF SECTION 260000

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1
E001
DEMOLITION ONE LINE DIAGRAM
NOT TO SCALE

GENERAL NOTES:

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE ADVANCE NOTICE TO OWNER PRIOR TO ANY ELECTRICAL SERVICE SHUT-DOWN(S).
- B. ANY EQUIPMENT, AS WELL AS ITS ASSOCIATED FEEDERS, CIRCUITING AND CONDUITS LABELED (E) SHALL REMAIN UNLESS OTHERWISE NOTED.
- C. EXISTING AS-BUILT INFORMATION SHOWN ON DRAWINGS HAS BEEN TAKEN FROM EXISTING DOCUMENTS AND FIELD OBSERVATION. NOT ALL EXISTING RACEWAYS, DEVICES, JUNCTION BOXES, ETC. MAY BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING EQUIPMENT AND EXACT CONDUIT ROUTING TO NEW AUTOMATIC TRANSFER SWITCH DURING CONSTRUCTION.
- D. CONTRACTOR SHALL PROVIDE AN UPDATED PANELBOARD SCHEDULE FOR ANY PANELBOARDS AFFECTED DURING CONSTRUCTION.
- E. REFER TO DRAWINGS CES-E100 AND CES-E101 FOR LOCATIONS OF ALL EXISTING AND DEMO EQUIPMENT.
- F. FOR EXISTING FEEDERS SHOWN BEING REMOVED IN THEIR ENTIRETY BACK TO SOURCE: THE ELECTRICAL CONTRACTOR HAS THE OPTION TO RE-USE A FEEDER PORTION IF LOCATION, SIZE AND CONDITION OF THAT FEEDER PERMITS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF POSSIBLE FEEDER RE-USE. UPON APPROVAL FROM ENGINEER, CONTRACTOR SHALL INSTALL ASSOCIATED JUNCTION/SPICE BOX SIZED PER NEC AND SPLICES TO ACCOMMODATE EXTENSION OF EXISTING FEEDER WITH SIZE SHOWN OF NEW ON ONE-LINE DIAGRAM.

KEY NOTES:

- 1 DISCONNECT AND REMOVE MAIN SWITCHGEAR IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING PANELBOARD. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- 2 DISCONNECT AND REMOVE EXISTING PANELBOARD IN ITS ENTIRETY. PULL BACK ALL BRANCH CIRCUITRY CONDUIT AND WIRING AS NECESSARY TO REMOVE EXISTING PANELBOARD. LABEL ALL BRANCH CIRCUITRY ACCORDINGLY FOR RECONNECTION.
- 3 DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING DISCONNECT SWITCH. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- 4 DISCONNECT AND REMOVE EXISTING TRANSFORMER IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING TRANSFORMER. ALL MOUNTING EQUIPMENT TO REMAIN. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- 5 DISCONNECT AND REMOVE EXISTING FEEDER WIRING. CONDUIT TO REMAIN. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- 6 EXISTING PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, FEEDERS AND CONDUIT TO REMAIN.
- 7 DISCONNECT AND REMOVE EXISTING FEEDER CONDUIT AND WIRING BACK TO SOURCE.
- 8 DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH IN ITS ENTIRETY. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE.



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1	03/29/21	JBT	BID ADDENDUM 02

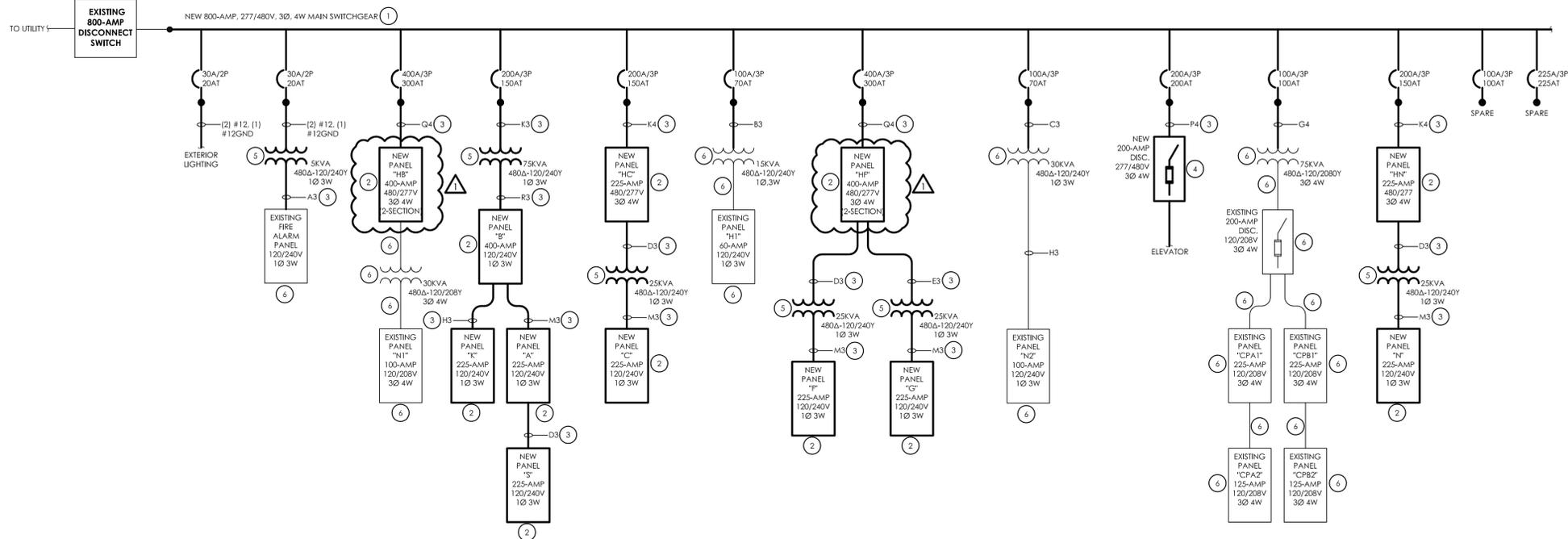
**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-00-007-027
CIRCLEVILLE MIDDLE SCHOOL - SED #: 44-04-01-06-00-014-015
CIRCLEVILLE ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-009-016
PAKANASKIN ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-012-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE AS NOTED		
SHEET TITLE		
ELECTRICAL ONE-LINE DIAGRAM DEMOLITION		

PROJECT NUMBER
14533.05

**CES
E001**
DRAWING NUMBER



1
E002
NEW WORK ONE LINE DIAGRAM
NOT TO SCALE

GENERAL NOTES:

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE ADVANCE NOTICE TO OWNER PRIOR TO ANY ELECTRICAL SERVICE SHUT-DOWN(S).
- B. ANY EQUIPMENT, AS WELL AS ITS ASSOCIATED FEEDERS, CIRCUITING AND CONDUITS LABELED (E) SHALL REMAIN UNLESS OTHERWISE NOTED.
- C. EXISTING AS-BUILT INFORMATION SHOWN ON DRAWINGS HAS BEEN TAKEN FROM EXISTING DOCUMENTS AND FIELD OBSERVATION. NOT ALL EXISTING RACEWAYS, DEVICES, JUNCTION BOXES, ETC. MAY BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING EQUIPMENT AND EXACT CONDUIT ROUTING TO NEW AUTOMATIC TRANSFER SWITCH DURING CONSTRUCTION.
- D. CONTRACTOR SHALL PROVIDE AN UPDATED PANELBOARD SCHEDULE FOR ANY PANELBOARDS AFFECTED DURING CONSTRUCTION.
- E. REFER TO DRAWINGS CES-E200 AND CES-E201 FOR LOCATIONS OF ALL EXISTING AND NEW EQUIPMENT.
- F. ALL NEW CIRCUIT BREAKERS SHALL BE UL LISTED/LABELED AND SHALL MATCH INTERRUPTING RATING OF EXISTING PANEL.
- G. FOR EXISTING FEEDERS SHOWN BEING REMOVED IN THEIR ENTIRETY BACK TO SOURCE: THE ELECTRICAL CONTRACTOR HAS THE OPTION TO RE-USE A FEEDER PORTION IF LOCATION, SIZE AND CONDITION OF THAT FEEDER PERMITS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF POSSIBLE FEEDER RE-USE. UPON APPROVAL FROM ENGINEER, CONTRACTOR SHALL INSTALL ASSOCIATED JUNCTION/SPLICE BOX SIZED PER NEC AND SPLICES TO ACCOMMODATE EXTENSION OF EXISTING FEEDER WITH SIZE SHOWN OF NEW ON ONE-LINE DIAGRAM.

KEY NOTES:

- 1 PROVIDE NEW MAIN SWITCHGEAR AS NOTED. PANEL TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW PANEL. LABEL ALL NEW CIRCUIT BREAKERS AS PREVIOUSLY NOTED.
- 2 PROVIDE NEW PANELBOARD AS NOTED. PANEL TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW PANEL. RE-CONNECT ALL EXISTING BRANCH CIRCUITRY TO NEW PANEL. LABEL ALL NEW CIRCUIT BREAKERS AS PREVIOUSLY NOTED.
- 3 PROVIDE FEEDER WIRING SIZED AS NOTED. RE-USE EXISTING CONDUIT.
- 4 PROVIDE NEW DISCONNECT SWITCH AS NOTED. DISCONNECT SWITCH TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW DISCONNECT SWITCH.
- 5 PROVIDE NEW TRANSFORMER AS NOTED. TRANSFORMER TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. UTILIZE EXISTING MOUNTING HARDWARE. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW TRANSFORMER.
- 6 EXISTING PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, FEEDERS AND CONDUIT TO REMAIN.

CIRCUIT LEGEND	
30, 4W	
CKT. ID.	WIRE AND CONDUIT
K3	3#12, 1#18G, 3/4"C
A4	4#12, 1#18G, 3/4"C
B3	3#10, 1#10G, 3/4"C
B4	4#10, 1#10G, 3/4"C
C3	3#8, 1#10G, 1"C
C4	4#8, 1#10G, 1"C
D3	3#6, 1#10G, 1"C
D4	4#6, 1#10G, 1"C
E3	3#4, 1#10G, 1 1/4"C
E4	4#4, 1#10G, 1 1/4"C
F3	3#4, 1#8G, 1 1/4"C
F4	4#4, 1#8G, 1 1/4"C
G3	3#3, 1#8G, 1 1/4"C
G4	4#3, 1#8G, 1 1/4"C
H3	3#2, 1#6G, 1 1/2"C
H4	4#2, 1#6G, 1 1/2"C
J4	4#1, 1#6G, 1 1/2"C
K3	3#1/2, 1#6G, 2"C
K4	4#1/2, 1#6G, 2"C
L4	4#2/3, 1#6G, 2"C
M3	3#3/5, 1#4G, 2"C
M4	4#3/5, 1#4G, 2 1/2"C
N4	4#4/5, 1#4G, 2 1/2"C
Q4	4-500KCM, 1#4G, 2 1/2"C
R3	3-500KCM, 1#6G, 3"C
R4	4-500KCM, 1#6G, 3 1/2"C
S4	2 ea. 4-4#0, 1#4G, 2 1/2"C
T4	2 ea. 4-350KCM, 1#10G, 3 1/2"C
U4	2 ea. 4-300KCM, 1#10G, 4"C
V4	3 ea. 4-300KCM, 1#10G, 3"C
W4	3 ea. 4-300KCM, 1#20G, 4"C
X4	4 ea. 4-300KCM, 1#30G, 3 1/2"C
Y4	3 ea. 4-300KCM, 1#40G, 4"C
Z4	4 ea. 4-300KCM, 1-250KCM, 4"C
ZZ4	7 ea. 4-300KCM, 1#10G, 4"C

LEGEND:

DEMO	-----
EXISTING	-----
NEW	-----

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1	03/29/21	BID ADDENDUM 02

**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

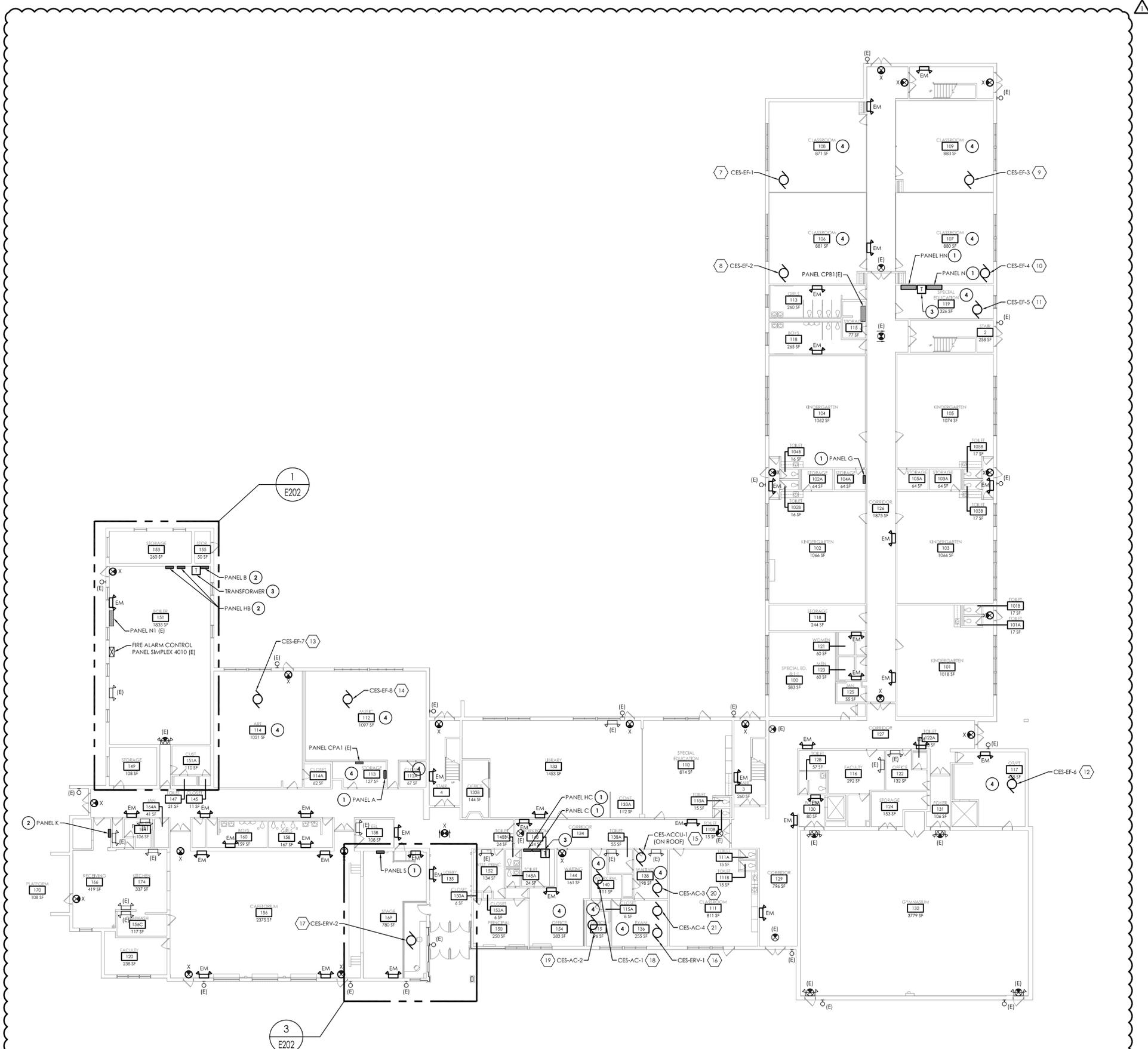
PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-00-007
CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-00-14015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-00-00916
PAKANASKIN ELEMENTARY SCHOOL - SED # : 44-04-01-06-00-12015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE AS NOTED		
SHEET TITLE		
ELECTRICAL ONE-LINE DIAGRAM NEW WORK		

PROJECT NUMBER
14533.05

**CES
E002**
DRAWING NUMBER

Drawing Name: S:\Projects\Pine Bush_CSD\2019 Bond Ref\ND Design\06_CAD\AutoCAD_ELEC\Phase-2\CES E200.dwg Date last accessed: 3/29/2021 11:19 AM Date last plotted: 3/29/2021 1:30 PM Plotted By: Jeffrey Teeter



1 FIRST FLOOR ELECTRICAL KEY PLAN
 SCALE: 1/16" = 1'-0"

GENERAL NOTES:
 A. AT EACH SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING CES-E900.

- KEY NOTES:**
- 1 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. MODIFY EXISTING OPENING TO ACCOMMODATE NEW PANEL AS REQUIRED. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CES-E001 AND PANEL REPLACEMENT SCHEDULE ON CES-E900 SCHEDULE FOR FURTHER INFORMATION.
 - 2 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CES-E001 AND PANEL REPLACEMENT SCHEDULE ON CES-E900 FOR FURTHER INFORMATION.
 - 3 PROVIDE NEW TRANSFORMER AT LOCATION SHOWN. REFER TO DRAWING CES-E001 FOR FURTHER INFORMATION.
 - 4 ONCE NEW CEILING IS IN PLACE, REINSTALL ALL LIGHTING AND CEILING MOUNTED DEVICES BACK IN SIMILAR LOCATIONS. CONNECT TO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CONDUIT/WIRING AS NECESSARY TO ACCOMMODATE POSSIBLE NEW LOCATIONS.



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 PHASE 2**

PINE BUSH HIGH SCHOOL - SED # 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED # 44-04-01-06-001-04015
 CIRCLEVILLE ELEMENTARY SCHOOL - SED # 44-04-01-06-009-016
 PAKANASKIN ELEMENTARY SCHOOL - SED # 44-04-01-06-001-2015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/16" = 1'-0"		
SHEET TITLE		
FIRST FLOOR ELECTRICAL NEW WORK PLAN		

PROJECT NUMBER
 14533.05

**CES
 E200**

DRAWING NUMBER

GENERAL NOTES:

A. AT EACH (X) SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING CES-E900.

- KEY NOTES:**
- 1 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. MODIFY EXISTING OPENING TO ACCOMMODATE NEW PANEL AS REQUIRED. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CES-E001 AND PANEL REPLACEMENT ON CES-E900 SCHEDULE FOR FURTHER INFORMATION.
 - 2 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CES-E001 AND PANEL REPLACEMENT SCHEDULE ON CES-E900 FOR FURTHER INFORMATION.
 - 3 PROVIDE NEW TRANSFORMER AT LOCATION SHOWN. REFER TO DRAWING CES-E001 FOR FURTHER INFORMATION.



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**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-04015
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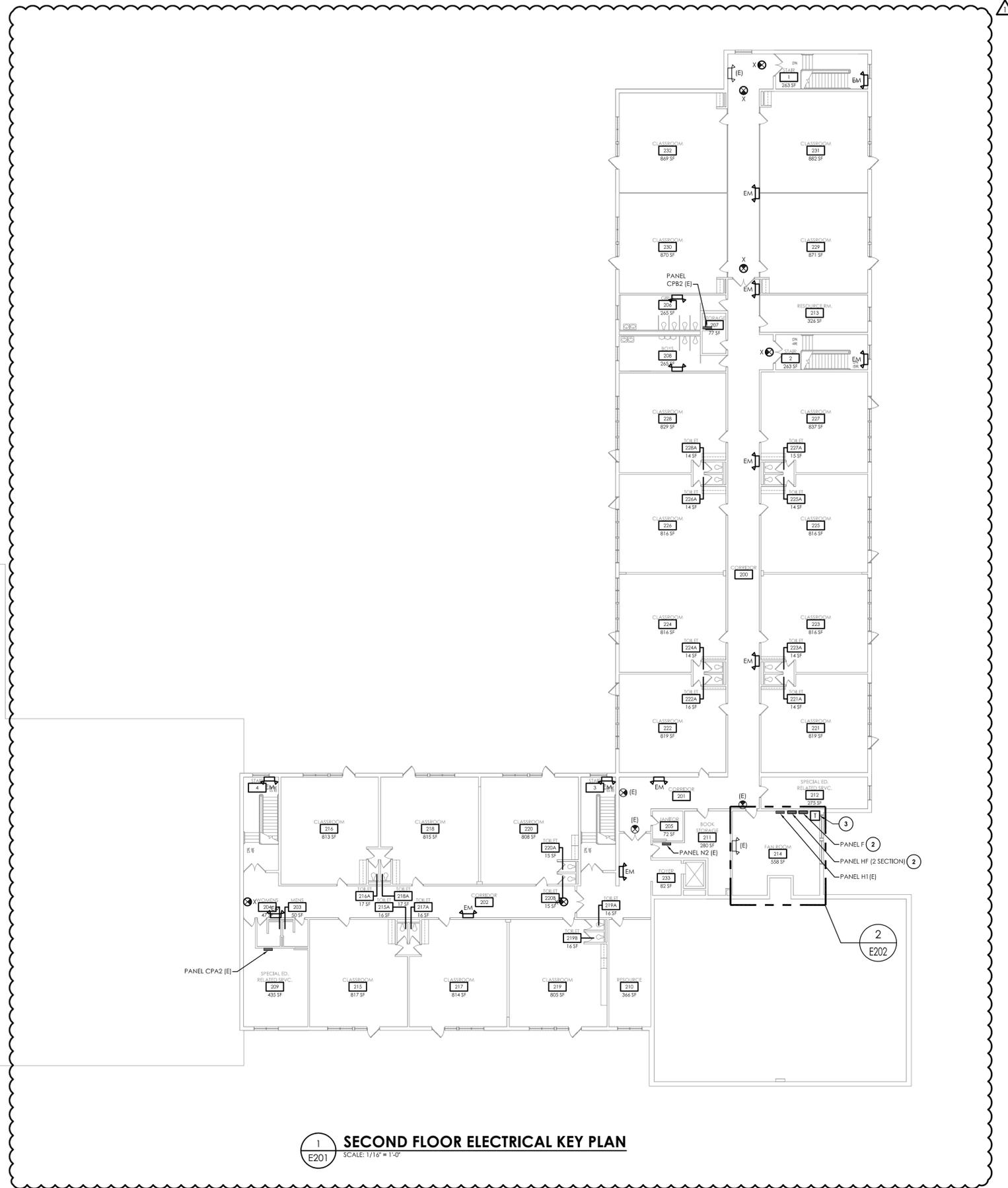
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03/08/2021	MAY	JBT

SCALE 1/16" = 1'-0"

SHEET TITLE
SECOND FLOOR
ELECTRICAL NEW WORK
PLAN

PROJECT NUMBER
14533.05

**CES
E201**
DRAWING NUMBER



1 SECOND FLOOR ELECTRICAL KEY PLAN
E201 SCALE: 1/16" = 1'-0"



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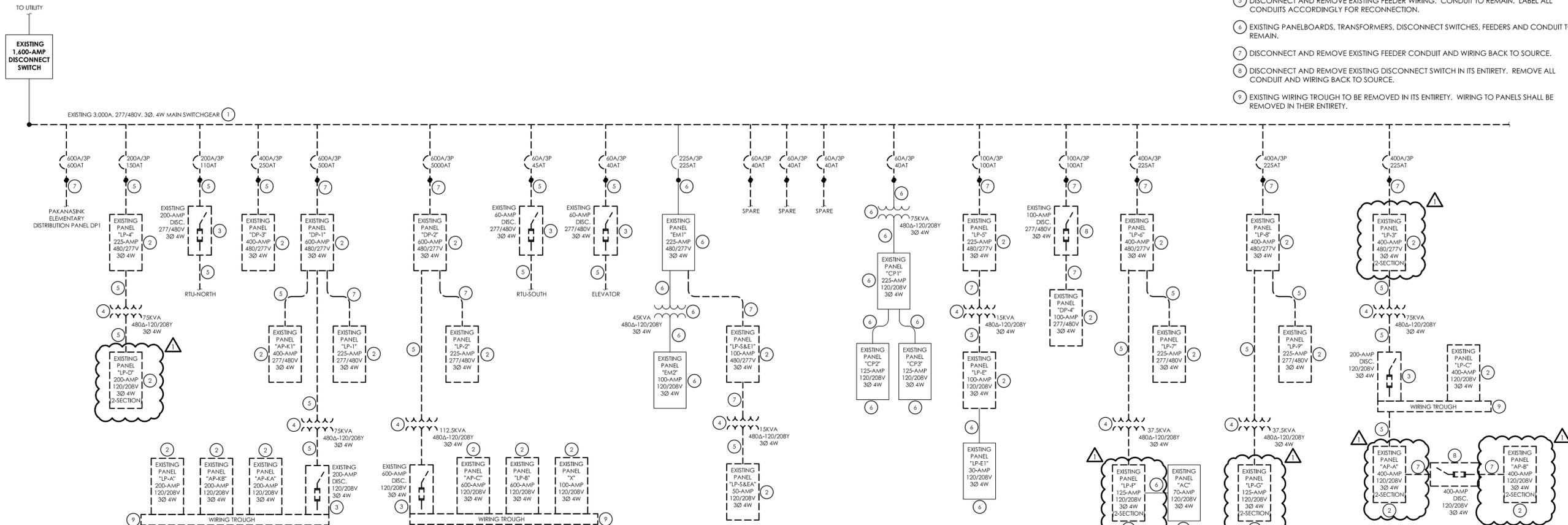
REVISIONS NO.	DATE	BY	DESCRIPTION
1	03/29/21	JBT	BID ADDENDUM 02

GENERAL NOTES:

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE ADVANCE NOTICE TO OWNER PRIOR TO ANY ELECTRICAL SERVICE SHUT-DOWN(S).
- B. ANY EQUIPMENT, AS WELL AS ITS ASSOCIATED FEEDERS, CIRCUITING AND CONDUITS LABELED (E) SHALL REMAIN UNLESS OTHERWISE NOTED.
- C. EXISTING AS-BUILT INFORMATION SHOWN ON DRAWINGS HAS BEEN TAKEN FROM EXISTING DOCUMENTS AND FIELD OBSERVATION. NOT ALL EXISTING RACEWAYS, DEVICES, JUNCTION BOXES, ETC. MAY BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING EQUIPMENT AND EXACT CONDUIT ROUTING TO NEW AUTOMATIC TRANSFER SWITCH DURING CONSTRUCTION.
- D. CONTRACTOR SHALL PROVIDE AN UPDATED PANELBOARD SCHEDULE FOR ANY PANELBOARDS AFFECTED DURING CONSTRUCTION.
- E. REFER TO DRAWINGS CVMS-E100, CVMS-E101, AND CVMS-E102 FOR LOCATIONS OF ALL EXISTING AND DEMO EQUIPMENT.
- F. FOR EXISTING FEEDERS SHOWN BEING REMOVED IN THEIR ENTIRETY BACK TO SOURCE: THE ELECTRICAL CONTRACTOR HAS THE OPTION TO RE-USE A FEEDER PORTION IF LOCATION, SIZE AND CONDITION OF THAT FEEDER PERMITS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF POSSIBLE FEEDER RE-USE. UPON APPROVAL FROM ENGINEER, CONTRACTOR SHALL INSTALL ASSOCIATED JUNCTION/SPICE BOX SIZED PER NEC AND SPLICES TO ACCOMMODATE EXTENSION OF EXISTING FEEDER WITH SIZE SHOWN OF NEW ON ONE-LINE DIAGRAM.

KEY NOTES:

- ① DISCONNECT AND REMOVE MAIN SWITCHGEAR IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING PANELBOARD. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- ② DISCONNECT AND REMOVE EXISTING PANELBOARD IN ITS ENTIRETY. PULL BACK ALL BRANCH CIRCUITRY CONDUIT AND WIRING AS NECESSARY TO REMOVE EXISTING PANELBOARD. LABEL ALL BRANCH CIRCUITRY ACCORDINGLY FOR RECONNECTION.
- ③ DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING DISCONNECT SWITCH. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- ④ DISCONNECT AND REMOVE EXISTING TRANSFORMER IN ITS ENTIRETY. FEEDER CONDUITS TO REMAIN. PULL BACK CONDUITS AS NECESSARY TO REMOVE EXISTING TRANSFORMER. ALL MOUNTING EQUIPMENT TO REMAIN. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- ⑤ DISCONNECT AND REMOVE EXISTING FEEDER WIRING. CONDUIT TO REMAIN. LABEL ALL CONDUITS ACCORDINGLY FOR RECONNECTION.
- ⑥ EXISTING PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, FEEDERS AND CONDUIT TO REMAIN.
- ⑦ DISCONNECT AND REMOVE EXISTING FEEDER CONDUIT AND WIRING BACK TO SOURCE.
- ⑧ DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH IN ITS ENTIRETY. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE.
- ⑨ EXISTING WIRING TROUGH TO BE REMOVED IN ITS ENTIRETY. WIRING TO PANELS SHALL BE REMOVED IN THEIR ENTIRETY.



1 DEMOLITION ONE LINE DIAGRAM
E001 NOT TO SCALE

**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

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CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-04-015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-000-016
PAKANASINK ELEMENTARY SCHOOL - SED # : 44-04-01-06-001-02-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE	AS NOTED	
SHEET TITLE		
ELECTRICAL ONE-LINE DIAGRAM DEMOLITION		

PROJECT NUMBER
14533.05

**CVMS
E001**
DRAWING NUMBER



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**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

PINE BUSH HIGH SCHOOL - SED # 44-04-01-06-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED # 44-04-01-06-001-04-015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # 44-04-01-06-009-016
PAKANASINK ELEMENTARY SCHOOL - SED # 44-04-01-06-001-24-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT

SCALE AS NOTED

SHEET TITLE
ELECTRICAL ONE-LINE
DIAGRAM
NEW WORK

PROJECT NUMBER
14533.05

**CVMS
E002**
DRAWING NUMBER

LEGEND:



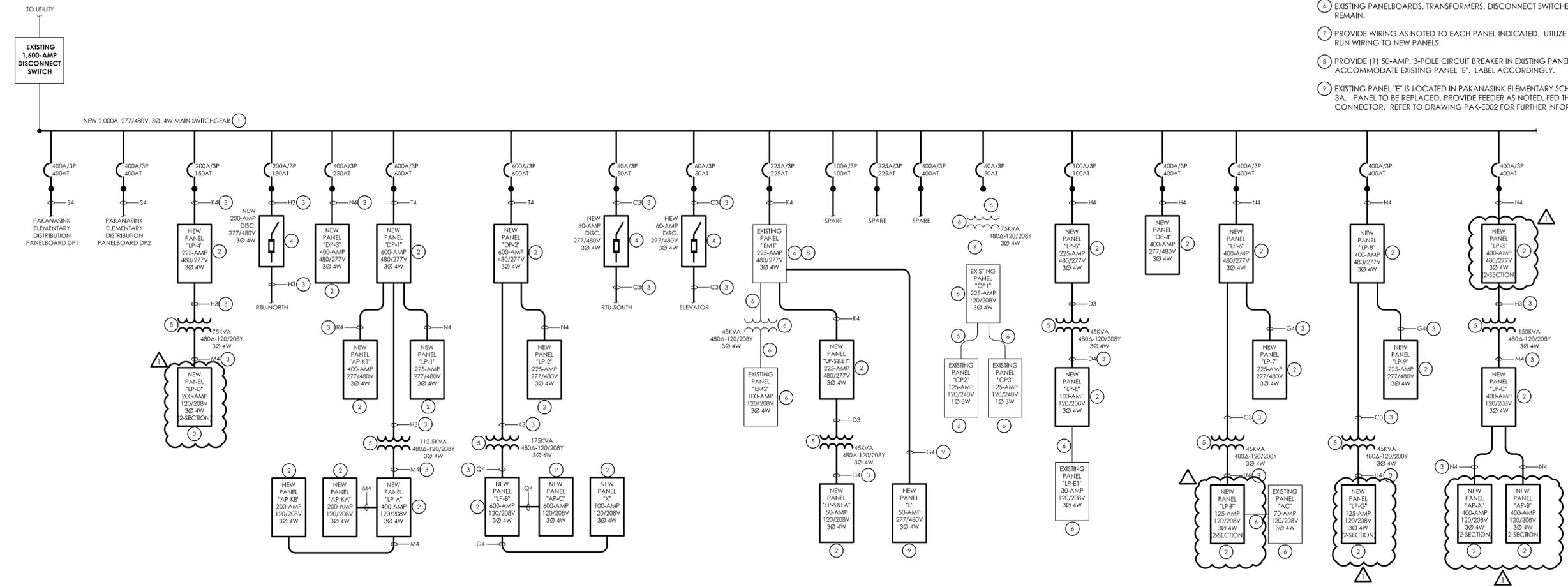
CIRCUIT LEGEND	
CKT. I.D.	WIRE AND CONDUIT
A3	3#12 1#120, 3#4C
A4	4#12 1#120, 3#4C
B3	3#10 1#100, 3#4C
B4	4#10 1#100, 3#4C
C3	3#8 1#100, 1#C
C4	4#8 1#100, 1#C
D3	3#6 1#100, 1#C
D4	4#6 1#100, 1#C
E3	3#4 1#100, 1#4C
E4	4#4 1#100, 1#4C
F3	3#4 1#80, 1#4C
F4	4#4 1#80, 1#4C
G3	3#3 1#80, 1#4C
G4	4#3 1#80, 1#4C
H3	3#2 1#60, 1#2C
H4	4#2 1#60, 1#2C
JF	4#1 1#60, 1#2C
K3	3#1/0 1#60, 2#C
K4	4#1/0 1#60, 2#C
L4	4#0/0 1#60, 2#C
M3	3#3/0 1#60, 2#C
M4	4#3/0 1#60, 2#2C
N4	4#4/0 1#60, 2#2C
P4	4#500CM 1#60, 2#2C
Q4	4#500CM 1#60, 3#C
R3	3#500CM 1#60, 3#C
R4	4#500CM 1#60, 3#2C
S4	2 #00 (4-500CM, 1#100, 3#1/2C)
T4	2 #00 (4-500CM, 1#100, 3#1/2C)
U4	2 #00 (4-500CM, 1#100, 4#C)
V4	3 #00 (4-500CM, 1#100, 3#C)
W4	3 #00 (4-500CM, 1#200, 4#C)
X4	4 #00 (4-500CM, 1#300, 3#1/2C)
Y4	5 #00 (4-500CM, 1#400, 4#C)
Z4	6 #00 (4-500CM, 1#500CM, 4#C)
244	7 #00 (4-500CM, 1#100, 4#C)

GENERAL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE ADVANCE NOTICE TO OWNER PRIOR TO ANY ELECTRICAL SERVICE SHUT-DOWN(S).
- ANY EQUIPMENT, AS WELL AS ITS ASSOCIATED FEEDERS, CIRCUITING AND CONDUITS LABELED (E) SHALL REMAIN UNLESS OTHERWISE NOTED.
- EXISTING AS-BUILT INFORMATION SHOWN ON DRAWINGS HAS BEEN TAKEN FROM EXISTING DOCUMENTS AND FIELD OBSERVATION. NOT ALL EXISTING RACEWAYS, DEVICES, JUNCTION BOXES, ETC. MAY BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING EQUIPMENT AND EXACT CONDUIT ROUTING TO NEW EQUIPMENT.
- CONTRACTOR SHALL PROVIDE AN UPDATED PANELBOARD SCHEDULE FOR ANY PANELBOARDS AFFECTED DURING CONSTRUCTION.
- REFER TO DRAWINGS CVMS-E200, CVMS-E201, AND CVMS-E202 FOR LOCATIONS OF ALL EXISTING AND NEW EQUIPMENT.
- ALL NEW CIRCUIT BREAKERS SHALL BE UL LISTED/LABELED AND SHALL MATCH INTERRUPTING RATING OF EXISTING PANEL.
- FOR EXISTING FEEDERS SHOWN BEING REMOVED IN THEIR ENTIRETY BACK TO SOURCE: THE ELECTRICAL CONTRACTOR HAS THE OPTION TO RE-USE A FEEDER PORTION IF LOCATION, SIZE AND CONDITION OF THAT FEEDER PERMITS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF POSSIBLE FEEDER RE-USE. UPON APPROVAL FROM ENGINEER, CONTRACTOR SHALL INSTALL ASSOCIATED JUNCTION/SPLICE BOX SIZED PER NEC AND SPLICES TO ACCOMMODATE EXTENSION OF EXISTING FEEDER WITH SIZE SHOWN OF NEW ON ONE-LINE DIAGRAM.

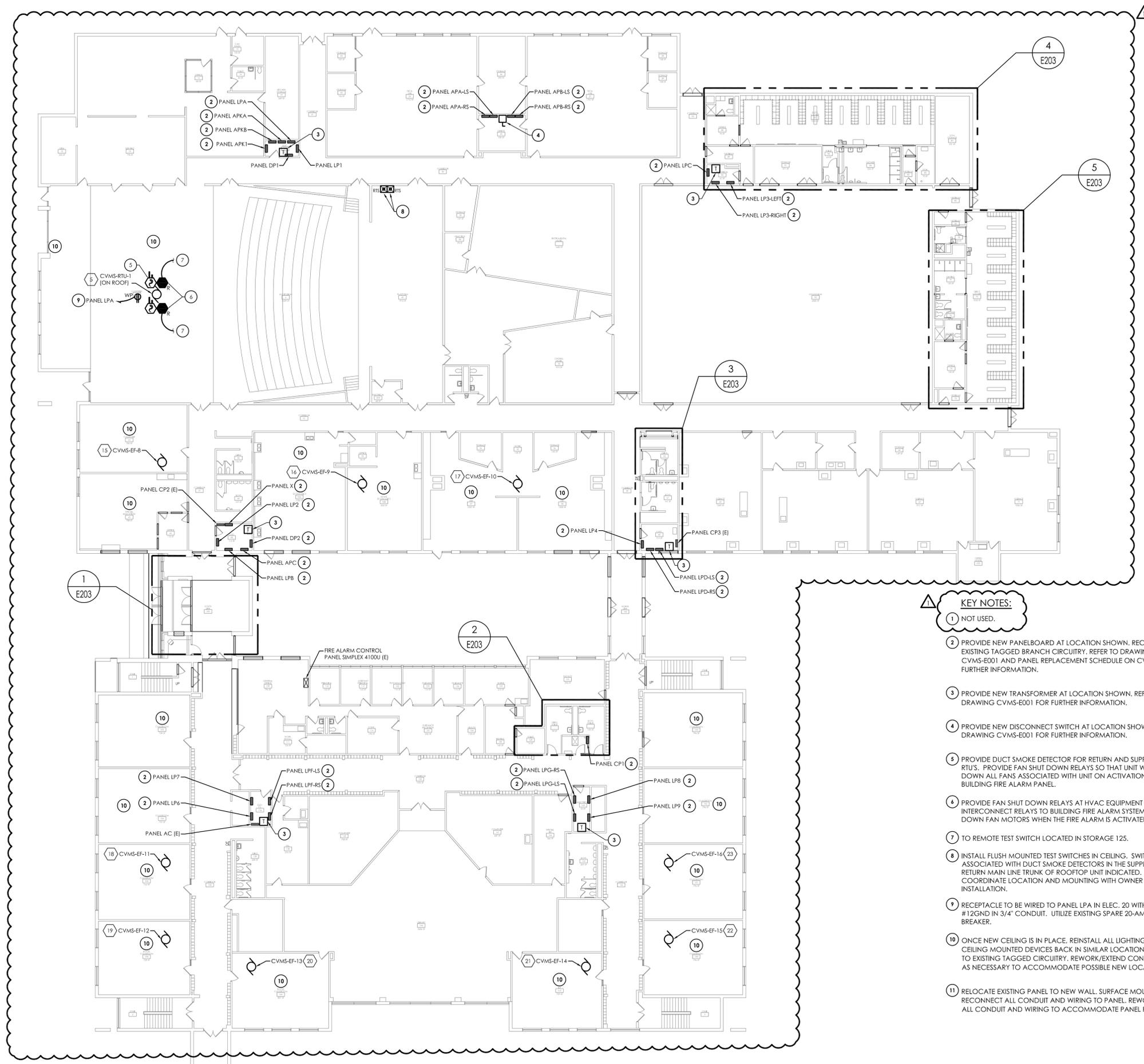
KEY NOTES:

- PROVIDE NEW MAIN SWITCHGEAR AS NOTED. PANEL TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW PANEL. LABEL ALL NEW CIRCUIT BREAKERS AS PREVIOUSLY NOTED.
- PROVIDE NEW PANELBOARD AS NOTED. PANEL TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW PANEL. RE-CONNECT ALL EXISTING BRANCH CIRCUITRY TO NEW PANEL. LABEL ALL NEW CIRCUIT BREAKERS AS PREVIOUSLY NOTED.
- PROVIDE FEEDER WIRING SIZED AS NOTED. RE-USE EXISTING CONDUIT.
- PROVIDE NEW DISCONNECT SWITCH AS NOTED. DISCONNECT SWITCH TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. UTILIZE EXISTING MOUNTING HARDWARE. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW DISCONNECT SWITCH.
- PROVIDE NEW TRANSFORMER AS NOTED. TRANSFORMER TO BE PLACED IN LOCATION OF PREVIOUSLY REMOVED. UTILIZE EXISTING MOUNTING HARDWARE. RE-CONNECT ALL EXISTING FEEDER CONDUITS TO NEW TRANSFORMER.
- EXISTING PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, FEEDERS AND CONDUIT TO REMAIN.
- PROVIDE WIRING AS NOTED TO EACH PANEL INDICATED. UTILIZE EXISTING WIRING TROUGH TO RUN WIRING TO NEW PANELS.
- PROVIDE (1) 50-AMP, 3-POLE CIRCUIT BREAKER IN EXISTING PANEL, SPACES 26.28.30, TO ACCOMMODATE EXISTING PANEL "E". LABEL ACCORDINGLY.
- EXISTING PANEL "E" IS LOCATED IN PAKANASINK ELEMENTARY SCHOOL, SECOND FLOOR, JANITOR 3A. PANEL TO BE REPLACED. PROVIDE FEEDER AS NOTED, FED THRU SECOND FLOOR CONNECTOR. REFER TO DRAWING PAK-E002 FOR FURTHER INFORMATION.



1 NEW WORK ONE LINE DIAGRAM
NOT TO SCALE

Drawing Name: S:\Projects\Pine Bush CSD\2019 Bond Ref\AutoCAD\ELEC\21\Phase-2\CVMS E201.dwg Date last accessed: 3/29/2021 11:38 AM Date last plotted: 3/29/2021 1:31 PM Plotted By: Jeffrey Teeter



1 E201 **FIRST FLOOR ELECTRICAL NEW WORK PLAN**
SCALE: 1/16" = 1'-0"

- GENERAL NOTES:**
- A. PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
 - B. INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
 - C. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
 - D. FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
 - E. ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
 - F. ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5'-0" SPACING.
 - G. THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED "BREAKER ON" LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
 - H. INITIATION DEVICES SHOWN SHALL NOT BE LOCATED IN A DIRECT AIRFLOW PATH OR CLOSER THAN 3' OF AN AIR SUPPLY DIFFUSER OR RETURN AIR GRILLE.
 - I. FIRE ALARM CABLING RUN EXPOSED IN UNFINISHED AREAS SHALL BE INSTALLED IN EMT CONDUIT AND PAINTED TO MATCH EXISTING WALL/CEILING FINISH. HORIZONTAL RUNS THROUGH WALLS AND VERTICAL RUNS THROUGH FLOORS SHALL BE SLEEVED IN EMT CONDUIT AND FIRE CAULKED. ALL FIRE ALARM CABLING RUN EXPOSED IN FINISHED SPACES SHALL BE INSTALLED IN 500 SERIES STEEL WIREMOLD, IVORY IN COLOR.
 - J. MOUNT SMOKE DETECTORS WITHIN 5 FEET OF DOORS THAT CLOSE ON A FIRE ALARM ACTIVATION. REFER TO NFPA 72 FOR THE MINIMUM DISTANCE A SMOKE DETECTOR CAN BE FROM DOOR.
 - K. FOR PUBLIC MODE, WALL MOUNTED VISUALS OR AUDIBLE/VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. REFER TO NFPA 72 FOR CEILING MOUNTED VISUALS. REFER TO NFPA FOR SPACING OF STROBES. WHERE CEILING HEIGHTS ALLOW, WALL MOUNTED AUDIBLE ONLY APPLIANCES SHALL HAVE THEIR TOPS ABOVE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90".
 - L. THE OPERABLE PART OF PULL STATIONS SHALL BE MOUNTED MORE THAN 3-1/2 FEET BUT LESS THAN 4-1/2 FEET ABOVE THE FLOOR. REFER TO NFPA FOR SPACING OF DEVICES.
 - M. REFER TO MANUFACTURER INSTALLATION GUIDELINES FOR DUCT SMOKE DETECTOR INSTALLATION.
 - N. ADDRESSABLE DEVICES SHOULD ONLY BE INSTALLED IN AREAS WHERE AMBIENT TEMPERATURE IS BETWEEN 32" AND 100" F.
 - O. AT EACH (X) SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING CVMS-E900.
 - P. EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO. 914-241-0057.

KEY NOTES:

- 1 NOT USED.
- 2 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CVMS-E001 AND PANEL REPLACEMENT SCHEDULE ON CVMS-E900 FOR FURTHER INFORMATION.
- 3 PROVIDE NEW TRANSFORMER AT LOCATION SHOWN. REFER TO DRAWING CVMS-E001 FOR FURTHER INFORMATION.
- 4 PROVIDE NEW DISCONNECT SWITCH AT LOCATION SHOWN. REFER TO DRAWING CVMS-E001 FOR FURTHER INFORMATION.
- 5 PROVIDE DUCT SMOKE DETECTOR FOR RETURN AND SUPPLY LINES OF RTU'S. PROVIDE FAN SHUT DOWN RELAYS SO THAT UNIT WILL SHUT DOWN ALL FANS ASSOCIATED WITH UNIT ON ACTIVATION OF THE BUILDING FIRE ALARM PANEL.
- 6 PROVIDE FAN SHUT DOWN RELAYS AT HVAC EQUIPMENT CONTROLS. INTERCONNECT RELAYS TO BUILDING FIRE ALARM SYSTEM TO SHUT DOWN FAN MOTORS WHEN THE FIRE ALARM IS ACTIVATED.
- 7 TO REMOTE TEST SWITCH LOCATED IN STORAGE 125.
- 8 INSTALL FLUSH MOUNTED TEST SWITCHES IN CEILING. SWITCHES ARE ASSOCIATED WITH DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURN MAIN LINE TRUNK OF ROOFTOP UNIT INDICATED. COORDINATE LOCATION AND MOUNTING WITH OWNER PRIOR TO INSTALLATION.
- 9 RECEPTACLE TO BE WIRED TO PANEL LPA IN ELEC. 20 WITH (2) #12, (1) #12GND IN 3/4" CONDUIT. UTILIZE EXISTING SPARE 20-AMP CIRCUIT BREAKER.
- 10 ONCE NEW CEILING IS IN PLACE, REINSTALL ALL LIGHTING AND CEILING MOUNTED DEVICES BACK IN SIMILAR LOCATIONS. CONNECT TO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CONDUIT/WIRING AS NECESSARY TO ACCOMMODATE POSSIBLE NEW LOCATIONS.
- 11 RELOCATE EXISTING PANEL TO NEW WALL. SURFACE MOUNT. RECONNECT ALL CONDUIT AND WIRING TO PANEL. REWORK/EXTEND ALL CONDUIT AND WIRING TO ACCOMMODATE PANEL RELOCATION.

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REVISIONS NO.	DATE	BY	DESCRIPTION

PINE BUSH CSD
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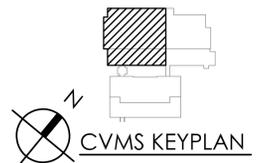
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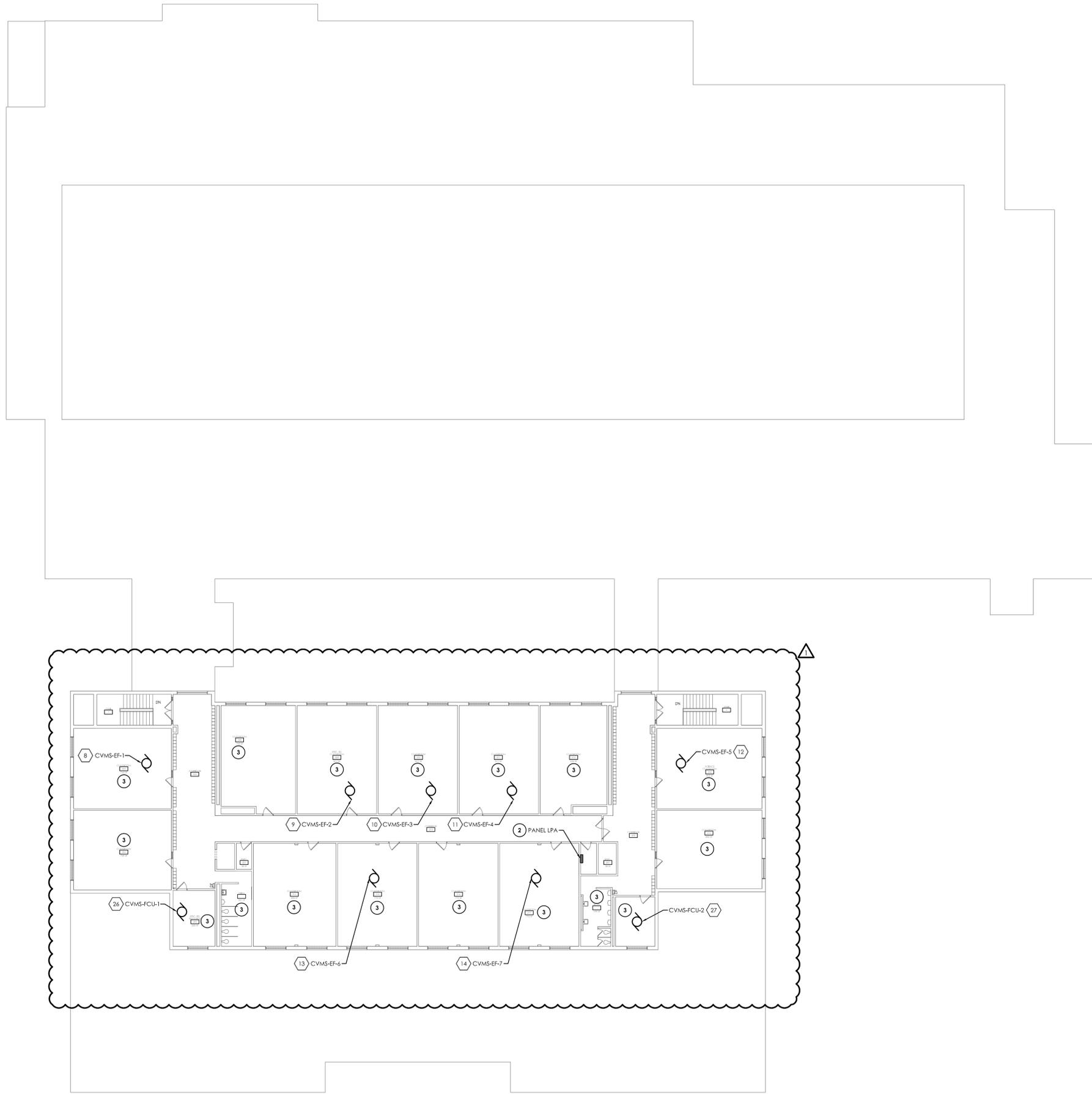
SCALE: 1/16" = 1'-0"

SHEET TITLE
FIRST FLOOR ELECTRICAL KEY PLAN

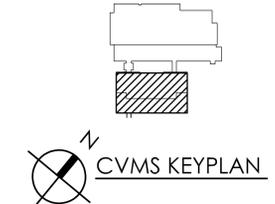
PROJECT NUMBER
14533.05

CVMS
E201
DRAWING NUMBER





1
E202
SCALE: 1/16" = 1'-0"
SECOND FLOOR ELECTRICAL KEY PLAN



GENERAL NOTES:

A. AT EACH SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING CVMS-E900.

KEY NOTES:

- 1 NOT USED.
- 2 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING CVMS-E001 AND PANEL REPLACEMENT SCHEDULE ON CVMS-E900 FOR FURTHER INFORMATION.
- 3 REPLACE EXISTING CEILING MOUNTED DEVICES ONCE NEW CEILING IS INSTALLED. PLACE ALL DEVICES AT OR NEAR PREVIOUS LOCATIONS. RE-CONNECT TO EXISTING TAGGED WIRING.
- 4 ONCE NEW CEILING IS IN PLACE, REINSTALL ALL LIGHTING AND CEILING MOUNTED DEVICES BACK IN SIMILAR LOCATIONS. CONNECT TO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CONDUIT/WIRING AS NECESSARY TO ACCOMMODATE POSSIBLE NEW LOCATIONS.

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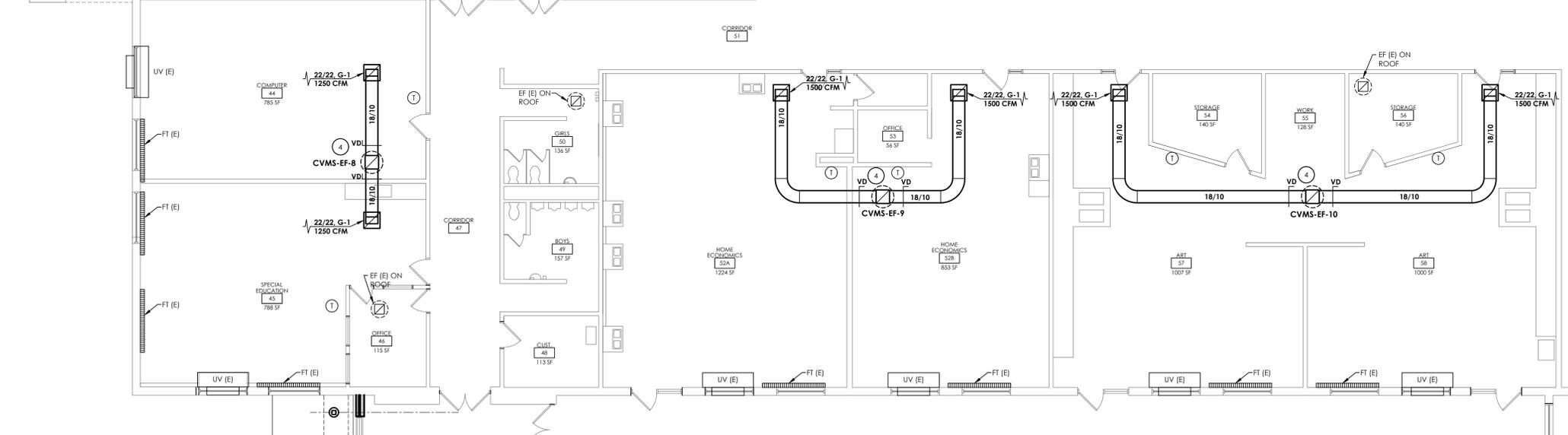
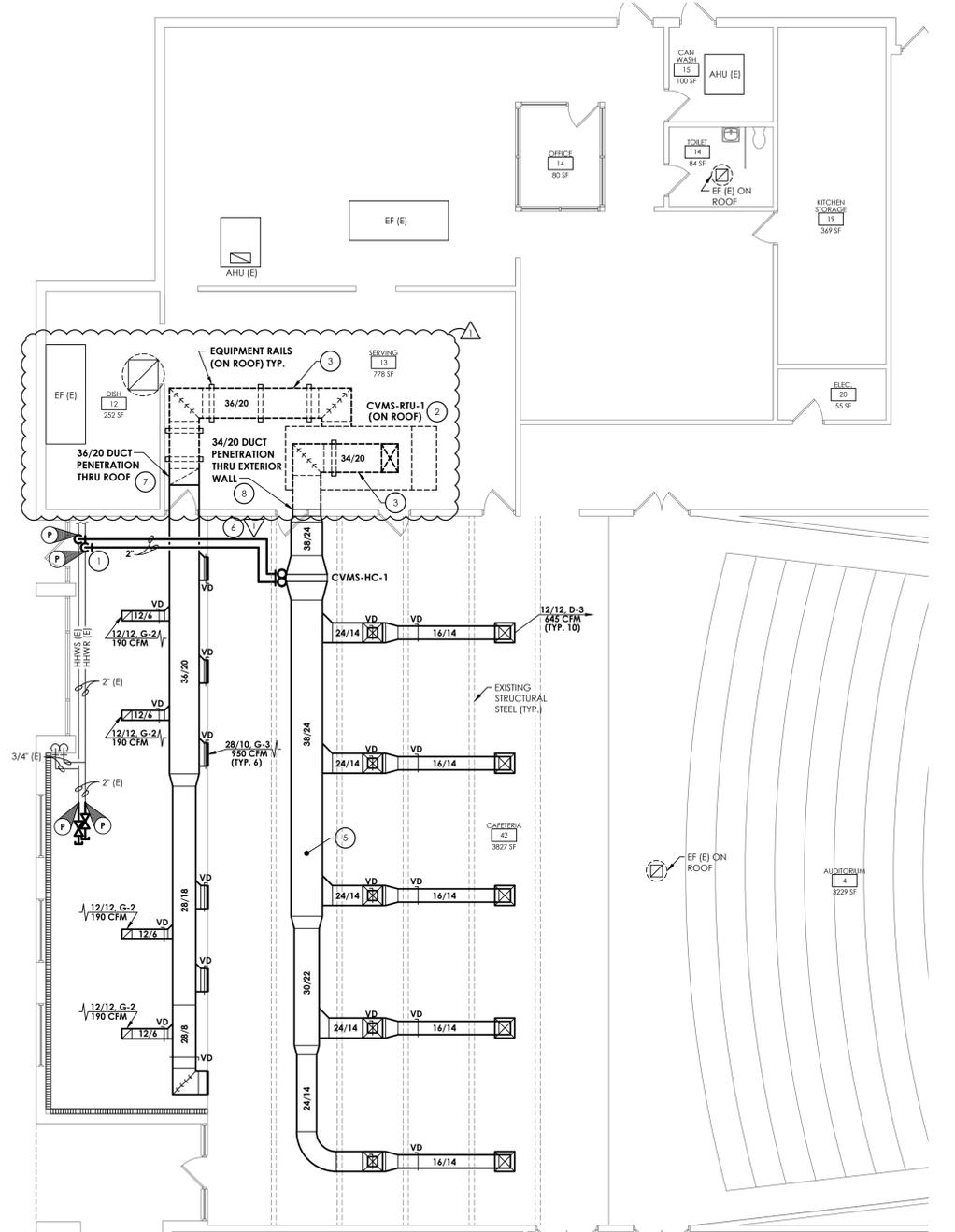
**PINE BUSH CSD
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DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/16" = 1'-0"		
SHEET TITLE		
SECOND FLOOR ELECTRICAL KEY PLAN		

PROJECT NUMBER
14533.05

**CVMS
E202**
DRAWING NUMBER



1
H201 **FIRST FLOOR HVAC NEW WORK PLAN**
SCALE: 1/8" = 1'-0"

- GENERAL NOTES:**
- ALL EXPOSED INTERIOR DUCTWORK IN CAFETERIA 42 SHALL BE INTERNALLY LINED.
 - ALL EXPOSED INTERIOR DUCTWORK SHALL BE PAINTED TO MATCH EXISTING CEILING COLOR.
- KEY NOTES:**
- CONNECT NEW HW COIL TO EXISTING PIPING.
 - CVMS-RTU-1 MOUNTED ON ROOF. RETURN AIR PLENUM PENETRATES THRU ROOF TO CAFETERIA CEILING BETWEEN EXISTING STEEL STRUCTURE. PROVIDE ROOF CURB. MAINTAIN EXISTING ROOF WARRANTY.
 - PROVIDE EXTERIOR DUCT INSULATION AND DUCT SUPPORTS. SEE H801 FOR DETAILS.
 - MOUNT NEW EF ON ROOF. PROVIDE ROOF CURB. MAINTAIN EXISTING ROOF WARRANTY.
 - MOUNT SUPPLY DUCTWORK AS HIGH AS POSSIBLE. TIGHT TO CROSS-BRACING.
 - CONNECT NEW CVMS-RTU-1 TEMPERATURE SENSOR TO EXISTING BMS.
 - EXTERIOR RETURN DUCT IS ON DUCT SUPPORT RAILS ON ROOF LEVEL. DUCT PENETRATES THE BUILDING EXTERIOR ROOF THRU CURB.
 - EXTERIOR SUPPLY DUCT IS ON TOP OF CVMS-RTU-1 AND PENETRATES CAFETERIA EXTERIOR WALL AT AN ELEVATION JUST BELOW THE EXISTING STEEL STRUCTURE OF UPPER ROOF.

CIRCLEVILLE MIDDLE SCHOOL OA CALCULATIONS

ROOM NAME	TOTAL OCCUPANCY							SPACE			RTU	RTU	EF
	CFM/ft²	FOR	TOTAL	O.A. PER PERSON	O.A. PER SQ. FT.	FIXTURE COUNT	Vbz (CFM)	Ez (CFM)	Voz (CFM)	AIR (CFM)	AIR (CFM)	AIR (CFM)	AIR (CFM)
SPEC ED RESOURCE - 203	0.9	1	223	5	0.06		18	0.8	23	50	200	150	50
RESOURCE - 223	1.1	1	185	5	0.06		16	0.8	20	50	200	150	50
SECURITY - 100A	3.2	1	63	5	0.06		9	0.8	11	50	200	150	
CAFETERIA - 42	1.7	383	3827	7.5	0.18		3561	0.8	4452	6460	6460	6460	
TOILET - 128	0.0	0	76			1	0	0.8	0				100
GIRLS TOILET - 128A	0.0	0	99			2	0	0.8	0				150
BOYS TOILET - 128B	0.0	0	100			2	0	0.8	0				150
EVS - 128C	0.0	0	64			1	0	0.8	0				100
BOYS - 61	0.0	0	161			4	0	0.8	0				300
GIRLS - 62	0.0	0	144			2	0	0.8	0				150
OFFICE - 88	1.6	1	94	5	0.06		11	0.8	13	38	150		
TOILET - 87	0.0	0	51			2	0	0.8	0				150
BOYS LOCKER - 85	1.6	0	1013				0	0.8	0		1575		
TOILET - 86	0.0	0	63			4	0	0.8	0				300
SHOWER - 84	0.3	0	234			4	0	0.8	0		75		300
OFFICE - 73	1.1	1	135	5	0.06		13	0.8	16	38	150		
TOILET - 74	0.0	0	49			2	0	0.8	0				150
GIRLS LOCKER - 75	1.5	0	1025				0	0.8	0		1575		
SHOWER - 76	0.0	0	80			2	0	0.8	0				150
DRYING - 77	0.6	0	135			3	0	0.8	0		75		300
TOILET - 78	0.0	0	69			2	0	0.8	0				150
REMARKS:													



REVISIONS	NO.	DATE	BY	DESCRIPTION
	1	03/26/2021	ZBH	BID-ADDENDUM-02

**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-0015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-000-016
PAKANASKIN ELEMENTARY SCHOOL - SED # : 44-04-01-06-001-015

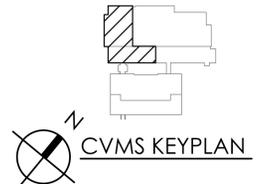
DATE	DRAWN	CHECKED
03/08/2021	ZBH	JJM

SCALE 1/8" = 1'-0"

SHEET TITLE
**FIRST FLOOR
HVAC NEW WORK
PLAN**

PROJECT NUMBER
14533.05

**CVMS
H201**
DRAWING NUMBER

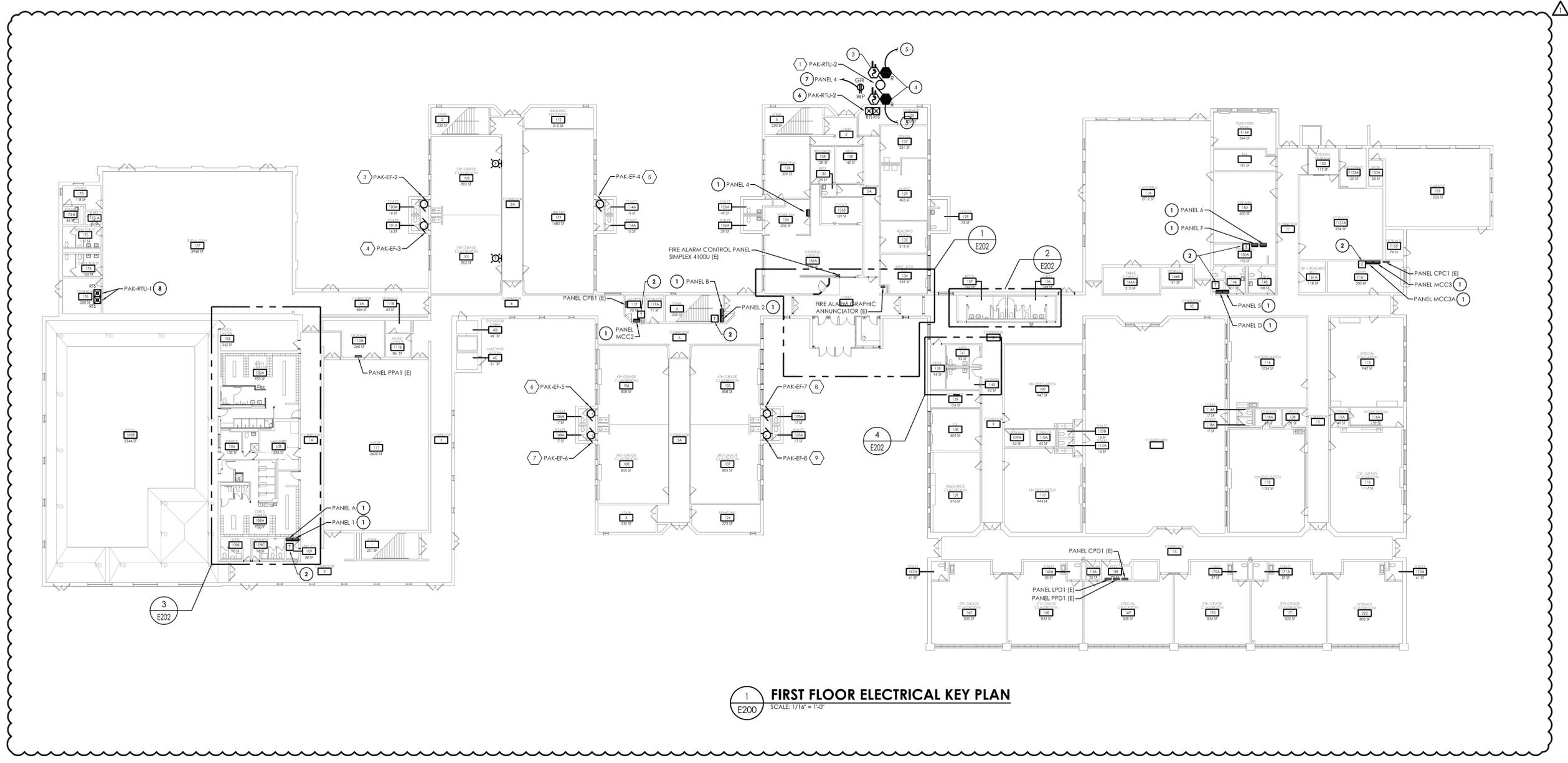


KEY NOTES:

- 1 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. MODIFY EXISTING OPENING TO ACCOMMODATE NEW PANEL AS REQUIRED. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING PAK-E002 AND PANEL REPLACEMENT SCHEDULE ON PAK-E900 SCHEDULE FOR FURTHER INFORMATION.
- 2 PROVIDE NEW TRANSFORMER AT LOCATION SHOWN. REFER TO DRAWING PAK-E002 FOR FURTHER INFORMATION.
- 3 PROVIDE DUCT SMOKE DETECTOR FOR RETURN AND SUPPLY LINES OF RTUS. PROVIDE FAN SHUT DOWN RELAYS SO THAT UNIT WILL SHUT DOWN ALL FANS ASSOCIATED WITH UNIT ON ACTIVATION OF THE BUILDING FIRE ALARM PANEL.
- 4 PROVIDE FAN SHUT DOWN RELAYS AT HVAC EQUIPMENT CONTROLS. INTERCONNECT RELAYS TO BUILDING FIRE ALARM SYSTEM TO SHUT DOWN FAN MOTORS WHEN THE FIRE ALARM IS ACTIVATED.
- 5 TO REMOTE TEST SWITCH LOCATED IN STORAGE 125.
- 6 INSTALL FLUSH MOUNTED TEST SWITCHES IN CEILING. SWITCHES ARE ASSOCIATED WITH DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURN MAIN LINE TRUNK OF ROOFTOP UNIT INDICATED. COORDINATE LOCATION AND MOUNTING WITH OWNER PRIOR TO INSTALLATION.
- 7 RECEPTACLE TO BE WIRED TO PANEL 4 IN WORK ROOM 134 WITH (2) #12, (1) #12 GND IN 3/4" CONDUIT. UTILIZE EXISTING SPARE 20-AMP CIRCUIT BREAKER.
- 8 ALTERNATE PAK-EC-01: INSTALL FLUSH MOUNTED TEST SWITCHES IN CEILING. SWITCHES ARE ASSOCIATED WITH DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURN MAIN LINE TRUNK OF ROOFTOP UNIT INDICATED. COORDINATE LOCATION AND MOUNTING WITH OWNER PRIOR TO INSTALLATION.

GENERAL NOTES:

- PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
 - INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
 - DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
 - FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
 - ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
 - ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5-0" SPACING.
 - THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED "BREAKER ON" LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
 - INITIATION DEVICES SHOWN SHALL NOT BE LOCATED IN A DIRECT AIRFLOW PATH OR CLOSER THAN 3' OF AN AIR SUPPLY DIFFUSER OR RETURN AIR GRILLE.
- FIRE ALARM CABLING RUN EXPOSED IN UNFINISHED AREAS SHALL BE INSTALLED IN EMT CONDUIT AND PAINTED TO MATCH EXISTING WALL/CEILING FINISH. HORIZONTAL RUNS THROUGH WALLS AND VERTICAL RUNS THROUGH FLOORS SHALL BE SLEEVED IN EMT CONDUIT AND FIRE CAULKED. ALL FIRE ALARM CABLING RUN EXPOSED IN FINISHED SPACES SHALL BE INSTALLED IN 500 SERIES STEEL WIREMOLD, IVORY IN COLOR.
 - MOUNT SMOKE DETECTORS WITHIN 5 FEET OF DOORS THAT CLOSE ON A FIRE ALARM ACTIVATION. REFER TO NFPA 72 FOR THE MINIMUM DISTANCE A SMOKE DETECTOR CAN BE FROM DOOR.
 - FOR PUBLIC MODE, WALL MOUNTED VISUALS OR AUDIBLE/VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. REFER TO NFPA 72 FOR CEILING MOUNTED VISUALS. REFER TO NFPA FOR SPACING OF STROBES, WHERE CEILING HEIGHTS ALLOW. WALL MOUNTED AUDIBLE ONLY APPLIANCES SHALL HAVE THEIR TOPS ABOVE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90".
 - THE OPERABLE PART OF PULL STATIONS SHALL BE MOUNTED MORE THAN 3-1/2 FEET BUT LESS THAN 4-1/2 FEET ABOVE THE FLOOR. REFER TO NFPA FOR SPACING OF DEVICES.
 - REFER TO MANUFACTURER INSTALLATION GUIDELINES FOR DUCT SMOKE DETECTOR INSTALLATION.
 - ADDRESSABLE DEVICES SHOULD ONLY BE INSTALLED IN AREAS WHERE AMBIENT TEMPERATURE IS BETWEEN 32" AND 100" F.
 - AT EACH (X) SYMBOL INDICATES. REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING PAK-E900.
 - EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO, 914-241-0057.



1 FIRST FLOOR ELECTRICAL KEY PLAN
 SCALE: 1/16" = 1'-0"



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REVISIONS NO.	DATE	BY	DESCRIPTION
1	03/29/21	JBT	BID ADDENDUM 02

**PINE BUSH CSD
 2019 CAPITAL IMPROVEMENT PROJECT
 PHASE 2**

PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-00-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED #: 44-04-01-06-00-140-015
 CIRCLEVILLE ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-009-016
 PAKANASKIN ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-120-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE: 1/8" = 1'-0"		
SHEET TITLE		
FIRST FLOOR ELECTRICAL KEY PLAN		

PROJECT NUMBER
14533.05

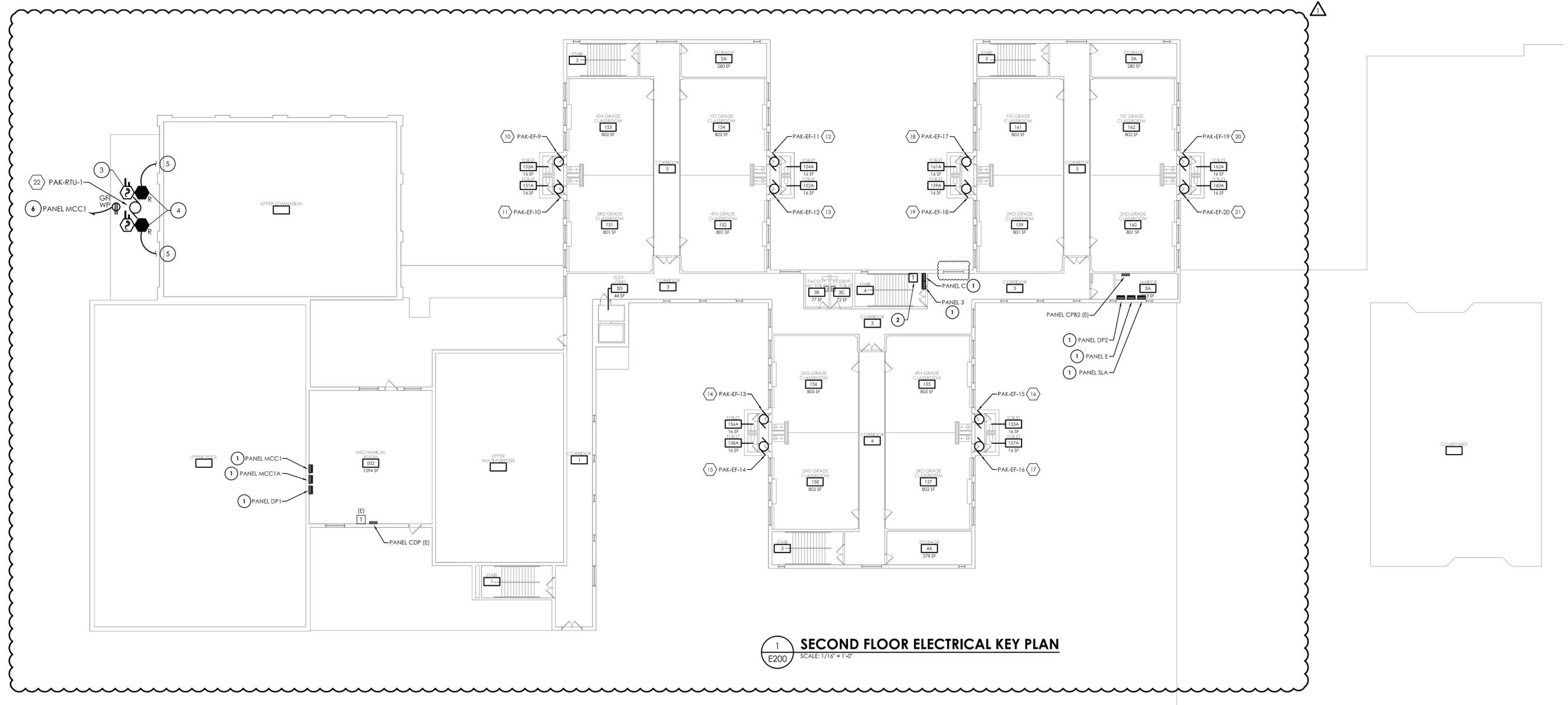
PAK E200
 DRAWING NUMBER

KEY NOTES:

- 1 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. MODIFY EXISTING OPENING TO ACCOMMODATE NEW PANEL AS REQUIRED. RECONNECT ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING PAK-E002 AND PANEL REPLACEMENT SCHEDULE ON PAK-E900 SCHEDULE FOR FURTHER INFORMATION.
- 2 PROVIDE NEW TRANSFORMER AT LOCATION SHOWN. REFER TO DRAWING PAK-E002 FOR FURTHER INFORMATION.
- 3 ALTERNATE PAK-EC-01: PROVIDE DUCT SMOKE DETECTOR FOR RETURN AND SUPPLY LINES OF RTU'S. PROVIDE FAN SHUT DOWN RELAYS SO THAT UNIT WILL SHUT DOWN ALL FANS ASSOCIATED WITH UNIT ON ACTIVATION OF THE BUILDING FIRE ALARM PANEL.
- 4 ALTERNATE PAK-EC-01: PROVIDE FAN SHUT DOWN RELAYS AT HVAC EQUIPMENT CONTROLS. INTERCONNECT RELAYS TO BUILDING FIRE ALARM SYSTEM TO SHUT DOWN FAN MOTORS WHEN THE FIRE ALARM IS ACTIVATED.
- 5 ALTERNATE PAK-EC-01: TO REMOTE TEST SWITCH LOCATED IN STORAGE 176, FLOOR BELOW.
- 6 ALTERNATE PAK-EC-01: RECEPTACLE TO BE WIRED TO PANEL MCC1 IN MECHANICAL ROOM 002 WITH (2) #12, (1) #12GND IN 3/4" CONDUIT. UTILIZE EXISTING SPARE 20-AMP CIRCUIT BREAKER.

GENERAL NOTES:

- A. PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
- B. INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
- C. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
- D. FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
- E. ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
- F. ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5'-0" SPACING.
- G. THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED 'BREAKER ON' LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
- H. INITIATION DEVICES SHOWN SHALL NOT BE LOCATED IN A DIRECT AIRFLOW PATH OR CLOSER THAN 3' OF AN AIR SUPPLY DIFFUSER OR RETURN AIR GRILLE.
- I. FIRE ALARM CABLING RUN EXPOSED IN UNFINISHED AREAS SHALL BE INSTALLED IN EMT CONDUIT AND PAINTED TO MATCH EXISTING WALL/CEILING FINISH. HORIZONTAL RUNS THROUGH WALLS AND VERTICAL RUNS THROUGH FLOORS SHALL BE SLEEVED IN EMT CONDUIT AND FIRE CAULKED. ALL FIRE ALARM CABLING RUN EXPOSED IN FINISHED SPACES SHALL BE INSTALLED IN 500 SERIES STEEL WIREMOLD, IVORY IN COLOR.
- J. MOUNT SMOKE DETECTORS WITHIN 5 FEET OF DOORS THAT CLOSE ON A FIRE ALARM ACTIVATION. REFER TO NFPA 72 FOR THE MINIMUM DISTANCE A SMOKE DETECTOR CAN BE FROM DOOR.
- K. FOR PUBLIC MODE, WALL MOUNTED VISUALS OR AUDIBLE/VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. REFER TO NFPA 72 FOR CEILING MOUNTED VISUALS. REFER TO NFPA FOR SPACING OF STROBES, WHERE CEILING HEIGHTS ALLOW. WALL MOUNTED AUDIBLE ONLY APPLIANCES SHALL HAVE THEIR TOPS ABOVE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90".
- L. THE OPERABLE PART OF PULL STATIONS SHALL BE MOUNTED MORE THAN 3-1/2 FEET BUT LESS THAN 4-1/2 FEET ABOVE THE FLOOR. REFER TO NFPA FOR SPACING OF DEVICES.
- M. REFER TO MANUFACTURER INSTALLATION GUIDELINES FOR DUCT SMOKE DETECTOR INSTALLATION.
- N. ADDRESSABLE DEVICES SHOULD ONLY BE INSTALLED IN AREAS WHERE AMBIENT TEMPERATURE IS BETWEEN 32" AND 100" F.
- O. AT EACH (X) SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING PAK-E900.
- P. EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO, 914-241-0057.



1 SECOND FLOOR ELECTRICAL KEY PLAN
 E200 SCALE: 1/16" = 1'-0"

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REVISIONS NO.	DATE	BY	DESCRIPTION
1	03/29/21	JBT	BID ADDENDUM 02

PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2

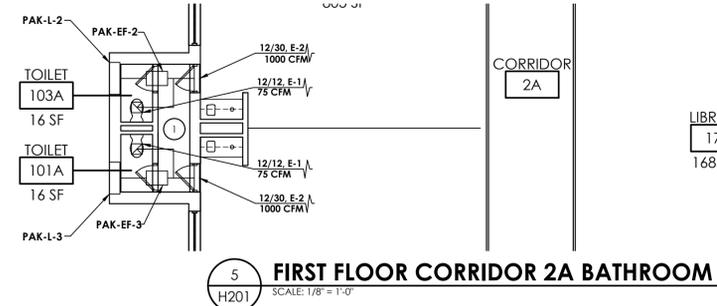
PINE BUSH HIGH SCHOOL - SED # 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED # 44-04-01-06-001-04015
 CIRCLEVILLE ELEMENTARY SCHOOL - SED # 44-04-01-06-009-016
 PAKANASKIN ELEMENTARY SCHOOL - SED # 44-04-01-06-001-2015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/8" = 1'-0"		
SHEET TITLE		
SECOND FLOOR ELECTRICAL KEY PLAN		

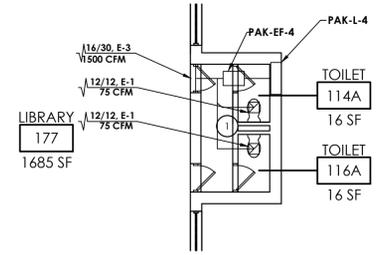
PROJECT NUMBER
 14533.05

PAK E201
 DRAWING NUMBER

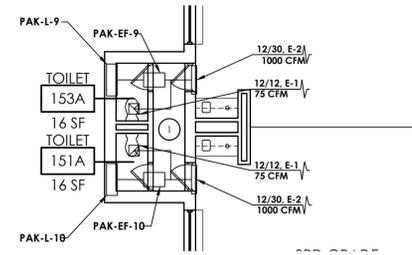
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 Date last accessed: 3/26/2021 8:40 AM
 Date last plotted: 3/26/2021 8:40 AM
 Plotted By: Nick Hens



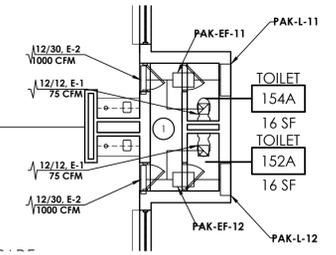
5 FIRST FLOOR CORRIDOR 2A BATHROOM
 H201 SCALE: 1/8" = 1'-0"



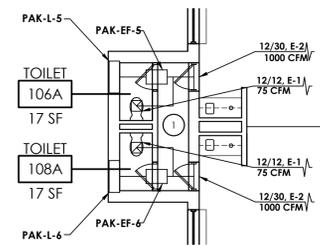
3 SECOND FLOOR CORRIDOR 5 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



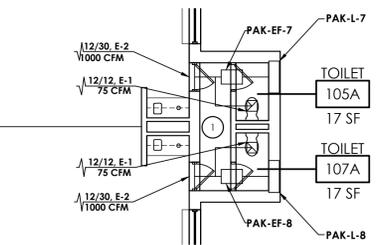
3 SECOND FLOOR CORRIDOR 5 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



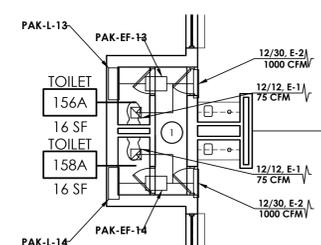
3 SECOND FLOOR CORRIDOR 5 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



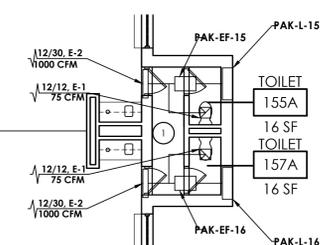
4 FIRST FLOOR CORRIDOR 3A BATHROOM
 H201 SCALE: 1/8" = 1'-0"



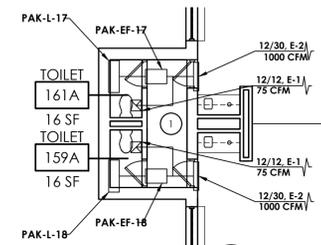
2 SECOND FLOOR CORRIDOR 4 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



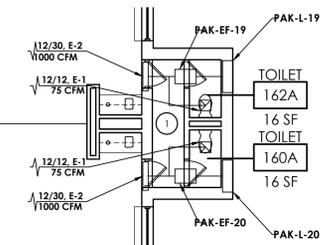
2 SECOND FLOOR CORRIDOR 4 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



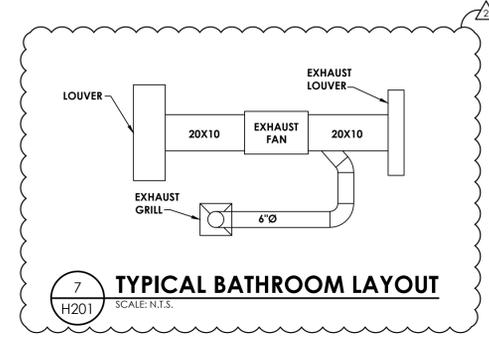
2 SECOND FLOOR CORRIDOR 4 BATHROOM
 H201 SCALE: 1/8" = 1'-0"



1 SECOND FLOOR CORRIDOR 5 BATHROOM
 H201 SCALE: 1/8" = 1'-0"

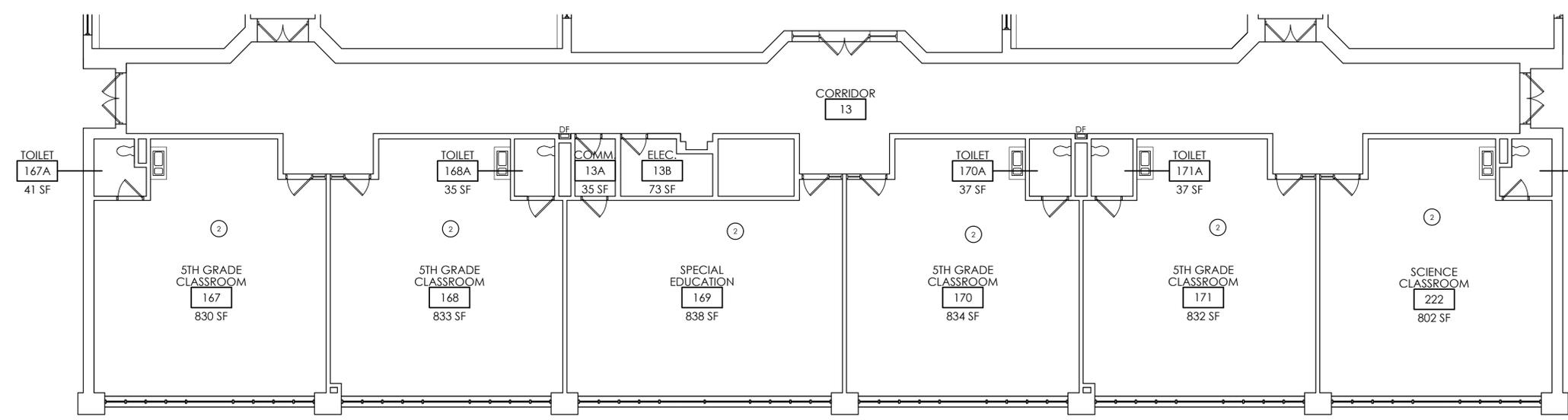


1 SECOND FLOOR CORRIDOR 5 BATHROOM
 H201 SCALE: 1/8" = 1'-0"

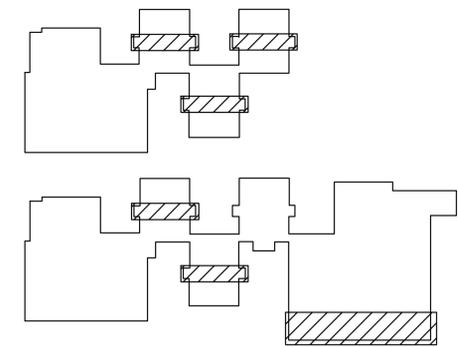


7 TYPICAL BATHROOM LAYOUT
 H201 SCALE: N.T.S.

- KEY NOTES:**
- 1 PROVIDE NEW EXHAUST FAN AND EXHAUST GRILLS. DUCT ABOVE CEILING. PROVIDE WALL PENETRATION AND LOUVER.
 - 2 REWORK EXISTING CONTROLS TO ADJUST START UP TIMES AND TEMPERATURES.



6 FIRST FLOOR CLASSROOM CONTROLS
 H201 SCALE: 1/8" = 1'-0"



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REVISION NO.	DATE	BY	DESCRIPTION
2	3/26/2021	NRH	BID ADDENDUM #2

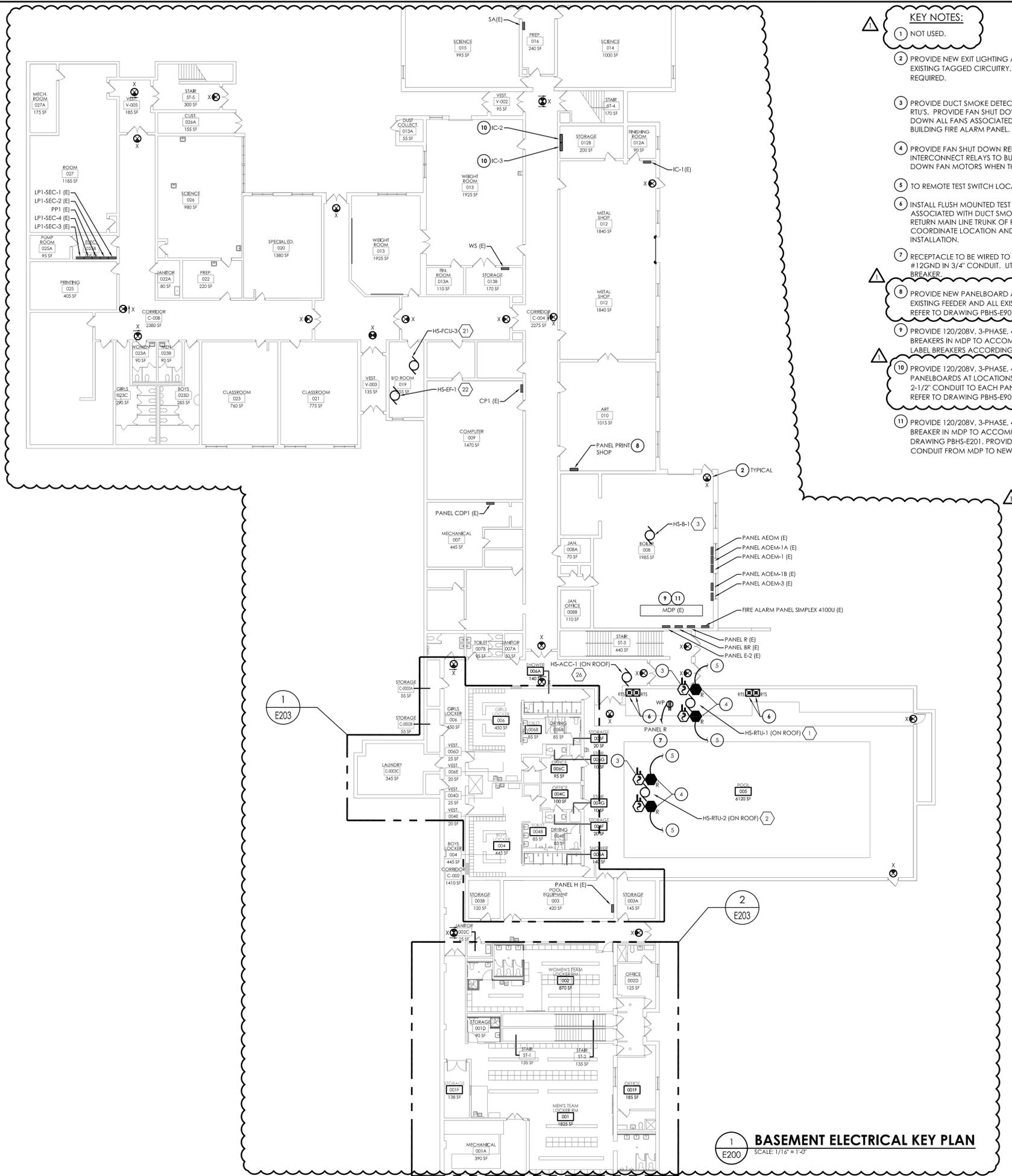
**PINE BUSH CSD
 2019 CAPITAL IMPROVEMENT PROJECT
 PHASE 2**

PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED #: 44-04-01-06-001-001
 CIRCLEVILLE ELEMENTARY SCHOOL - SED #: 44-04-01-06-000-016
 PAKANASKIN ELEMENTARY SCHOOL - SED #: 44-04-01-06-001-012

DATE	DRAWN	CHECKED
03/08/2021	NRH	JJM

SCALE: 1/4" = 1'-0"
 SHEET TITLE: FIRST FLOOR HVAC NEW WORK PLAN

PROJECT NUMBER: 14533.05
PAK H201
 DRAWING NUMBER



1 E200 **BASEMENT ELECTRICAL KEY PLAN**
SCALE: 1/16" = 1'-0"

KEY NOTES:

- 1 NOT USED.
- 2 PROVIDE NEW EXIT LIGHTING AT LOCATIONS SHOWN. TIE INTO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CIRCUITRY AS REQUIRED.
- 3 PROVIDE DUCT SMOKE DETECTOR FOR RETURN AND SUPPLY LINES OF RTU'S. PROVIDE FAN SHUT DOWN RELAYS SO THAT UNIT WILL SHUT DOWN ALL FANS ASSOCIATED WITH UNIT ON ACTIVATION OF THE BUILDING FIRE ALARM PANEL.
- 4 PROVIDE FAN SHUT DOWN RELAYS AT HVAC EQUIPMENT CONTROLS. INTERCONNECT RELAYS TO BUILDING FIRE ALARM SYSTEM TO SHUT DOWN FAN MOTORS WHEN THE FIRE ALARM IS ACTIVATED.
- 5 TO REMOTE TEST SWITCH LOCATED IN STORAGE 125.
- 6 INSTALL FLUSH MOUNTED TEST SWITCHES IN CEILING. SWITCHES ARE ASSOCIATED WITH DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURN MAIN LINE TRUNK OF ROOFTOP UNIT INDICATED. COORDINATE LOCATION AND MOUNTING WITH OWNER PRIOR TO INSTALLATION.
- 7 RECEPTACLE TO BE WIRED TO PANEL R IN BOILER 008 WITH (2) #12, (1) #12GND IN 3/4" CONDUIT. UTILIZE EXISTING SPARE 20-AMP CIRCUIT BREAKER.
- 8 PROVIDE NEW PANELBOARD AT LOCATION SHOWN. RECONNECT EXISTING FEEDER AND ALL EXISTING TAGGED BRANCH CIRCUITRY. REFER TO DRAWING PBHS-E901 FOR FURTHER INFORMATION.
- 9 PROVIDE 120/208V, 3-PHASE, 4-WIRE, 225-AMP, 3-POLE CIRCUIT BREAKERS IN MDP TO ACCOMMODATE NEW PANELS IC-2 AND IC-3. LABEL BREAKERS ACCORDINGLY.
- 10 PROVIDE 120/208V, 3-PHASE, 4-WIRE, 225-AMP, 42 CIRCUIT PANELBOARDS AT LOCATIONS SHOWN. PROVIDE (4) #4/0, (1) #4 IN 2-1/2" CONDUIT TO EACH PANELBOARD FROM MDP LOCATION. REFER TO DRAWING PBHS-E901 FOR FURTHER INFORMATION.
- 11 PROVIDE 120/208V, 3-PHASE, 4-WIRE, 400-AMP, 3-POLE CIRCUIT BREAKER IN MDP TO ACCOMMODATE NEW PANEL GC. SHOWN ON DRAWING PBHS-E201. PROVIDE (4) #500 MCM, (1) #3 GND IN 4" CONDUIT FROM MDP TO NEW PANEL GC.

GENERAL NOTES:

- A. PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
- B. INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
- C. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
- D. FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
- E. ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
- F. ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5'-0" SPACING.
- G. THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED "BREAKER ON" LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
- H. INITIATION DEVICES SHOWN SHALL NOT BE LOCATED IN A DIRECT AIRFLOW PATH OR CLOSER THAN 3' OF AN AIR SUPPLY DIFFUSER OR RETURN AIR GRILLE.
- I. FIRE ALARM CABLING RUN EXPOSED IN UNFINISHED AREAS SHALL BE INSTALLED IN EMT CONDUIT AND PAINTED TO MATCH EXISTING WALL/CEILING FINISH. HORIZONTAL RUNS THROUGH WALLS AND VERTICAL RUNS THROUGH FLOORS SHALL BE SLEEVED IN EMT CONDUIT AND FIRE CAULKED. ALL FIRE ALARM CABLING RUN EXPOSED IN FINISHED SPACES SHALL BE INSTALLED IN 500 SERIES STEEL WIREMOLD. IVORY IN COLOR.
- J. MOUNT SMOKE DETECTORS WITHIN 5 FEET OF DOORS THAT CLOSE ON A FIRE ALARM ACTIVATION. REFER TO NFPA 72 FOR THE MINIMUM DISTANCE A SMOKE DETECTOR CAN BE FROM DOOR.
- K. FOR PUBLIC MODE, WALL MOUNTED VISUALS OR AUDIBLE/VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. REFER TO NFPA 72 FOR CEILING MOUNTED VISUALS. REFER TO NFPA FOR SPACING OF STROBES. WHERE CEILING HEIGHTS ALLOW, WALL MOUNTED AUDIBLE ONLY APPLIANCES SHALL HAVE THEIR TOPS ABOVE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90".
- L. THE OPERABLE PART OF PULL STATIONS SHALL BE MOUNTED MORE THAN 3-1/2 FEET BUT LESS THAN 4-1/2 FEET ABOVE THE FLOOR. REFER TO NFPA FOR SPACING OF DEVICES.
- M. REFER TO MANUFACTURER INSTALLATION GUIDELINES FOR DUCT SMOKE DETECTOR INSTALLATION.
- N. ADDRESSABLE DEVICES SHOULD ONLY BE INSTALLED IN AREAS WHERE AMBIENT TEMPERATURE IS BETWEEN 32" AND 100" F.
- O. AT EACH (X) SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING PBHS-E900.
- P. EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO. 914-241-0057.



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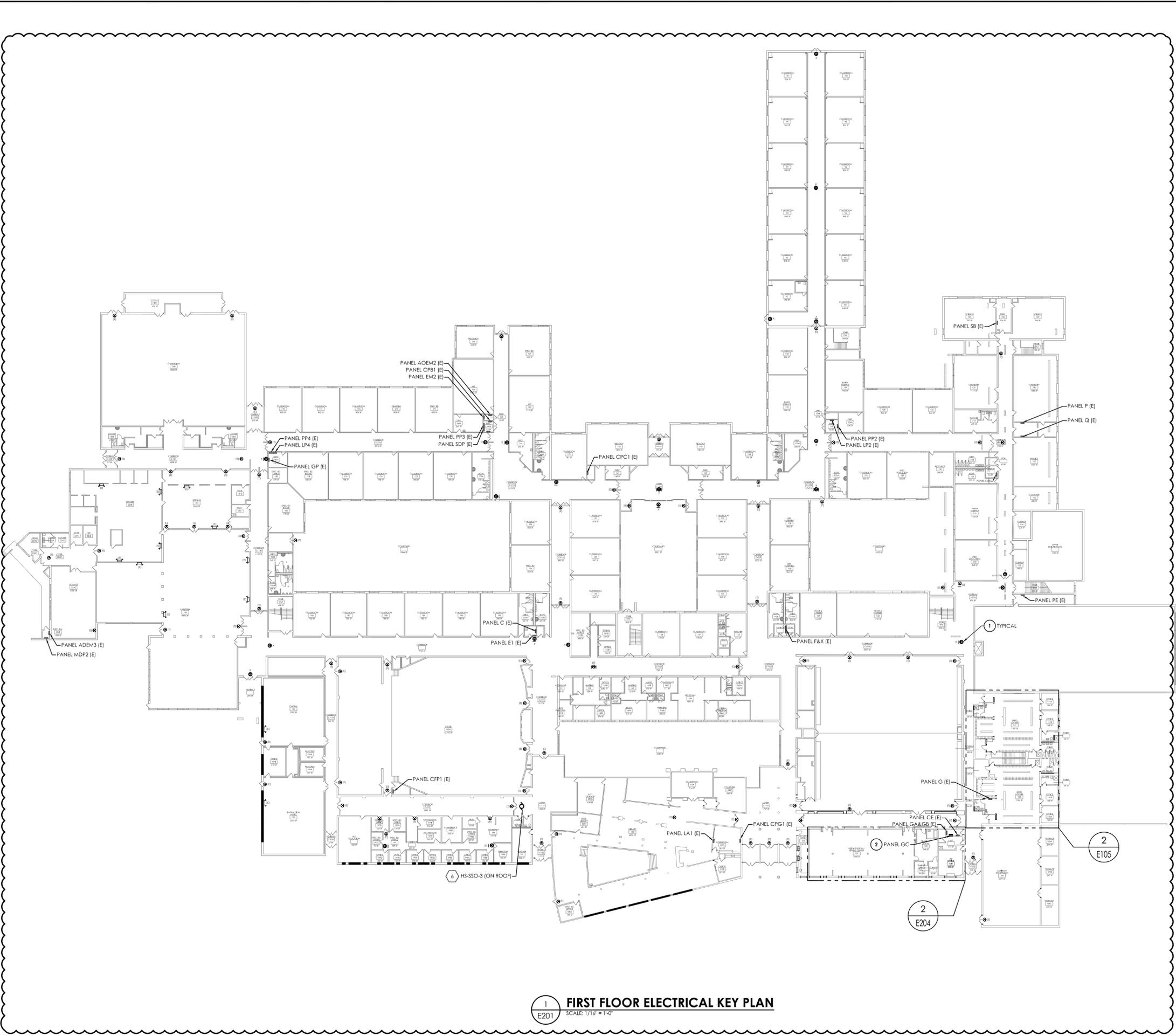
PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2
PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-04015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-009-016
PAKANASKIN ELEMENTARY SCHOOL - SED # : 44-04-01-06-001-2015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT

SCALE 1/16" = 1'-0"
SHEET TITLE
BASEMENT ELECTRICAL KEY PLAN

PROJECT NUMBER
14533.05
PBHS E200
DRAWING NUMBER

Drawing Name: S:\Projects\Pine Bush_CSD\2019 Bond Ref\AutoCAD\ELEC\21\Phase-2\PBHS E201.dwg Date last accessed: 2/18/2021 3:51 PM Date last plotted: 3/29/2021 1:37 PM Plotted By: Jeffrey Teeter



GENERAL NOTES:

A. AT EACH  SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING PBHS-E900.

KEY NOTES:

1 PROVIDE NEW EXIT LIGHTING AT LOCATIONS SHOWN. TIE INTO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CIRCUITRY AS REQUIRED.

2 PROVIDE 120/208V, 3-PHASE, 4-WIRE, 400-AMP, 42 CIRCUIT PANELBOARD AT LOCATION SHOWN. REFER TO DRAWING PBHS-E200 AND PBHS-E900 FOR FURTHER INFORMATION.



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**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-04015
CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-009-016
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DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/16" = 1'-0"		
SHEET TITLE		
FIRST FLOOR ELECTRICAL KEY PLAN		

PROJECT NUMBER
14533.05

**PBHS
E201**
DRAWING NUMBER

1 **FIRST FLOOR ELECTRICAL KEY PLAN**
E201 SCALE: 1/16" = 1'-0"

GENERAL NOTES:
 A. AT EACH (X) SYMBOL INDICATES, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON DRAWING PBHS-E900.

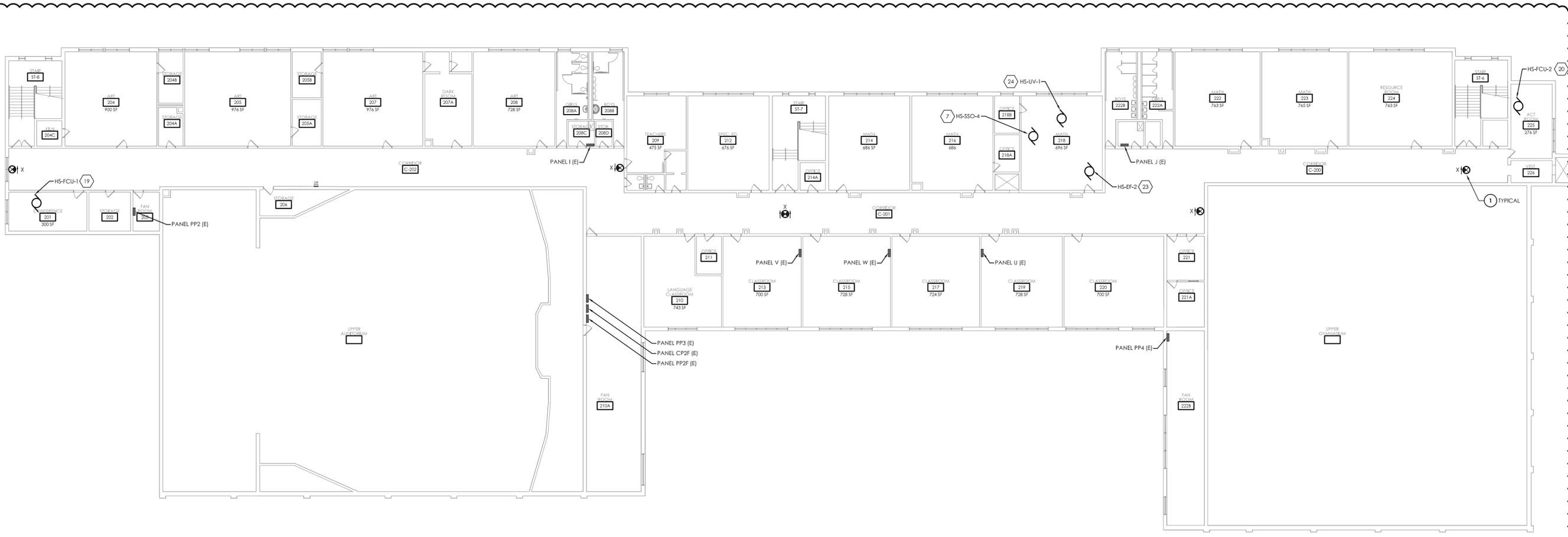
KEY NOTES:
 1 PROVIDE NEW EXIT LIGHTING AT LOCATIONS SHOWN. TIE INTO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CIRCUITRY AS REQUIRED.



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1 SECOND FLOOR ELECTRICAL NEW WORK PLAN
 E202 SCALE: 1/16" = 1'-0"

**PINE BUSH CSD
 2019 CAPITAL IMPROVEMENT PROJECT
 PHASE 2**

PINE BUSH HIGH SCHOOL - SED # 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED # 44-04-01-06-001-04015
 CIRCLEVILLE ELEMENTARY SCHOOL - SED # 44-04-01-06-009-016
 PAKANASKIN ELEMENTARY SCHOOL - SED # 44-04-01-06-001-2015

DATE	DRAWN	CHECKED
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SCALE: 1/16" = 1'-0"

SHEET TITLE
**SECOND FLOOR
 ELECTRICAL NEW WORK
 PLAN**

PROJECT NUMBER
14533.05

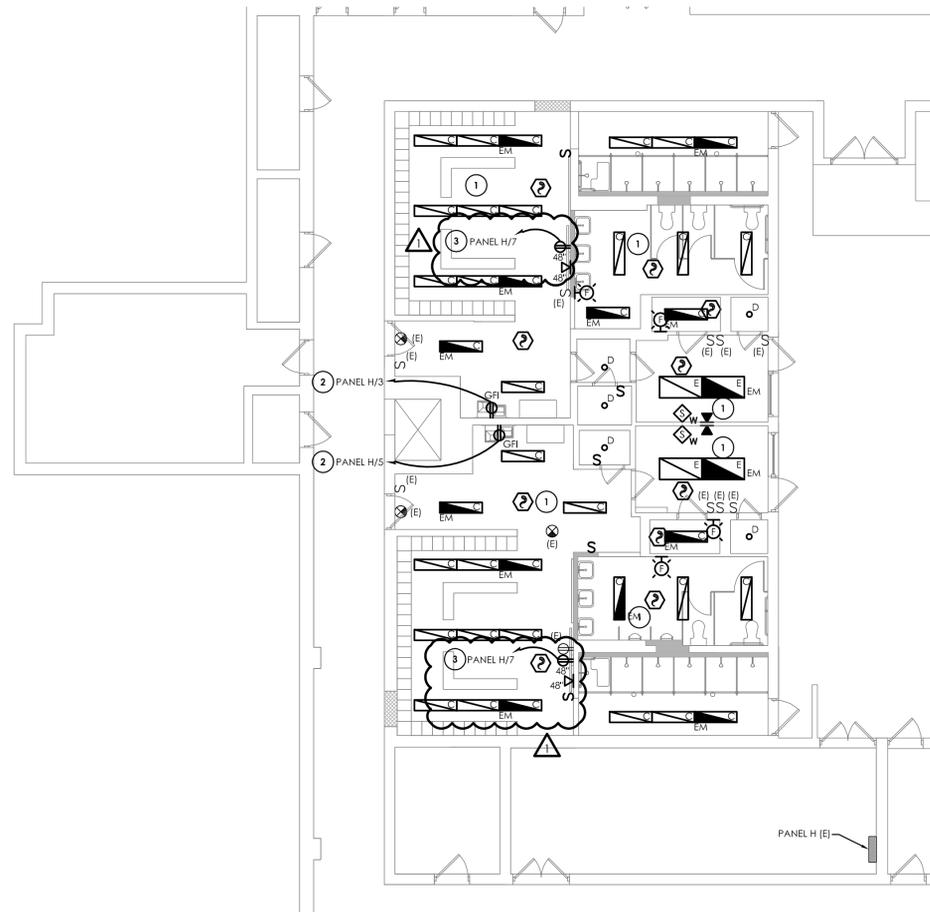
**PBHS
 E202**
 DRAWING NUMBER

KEY NOTES:

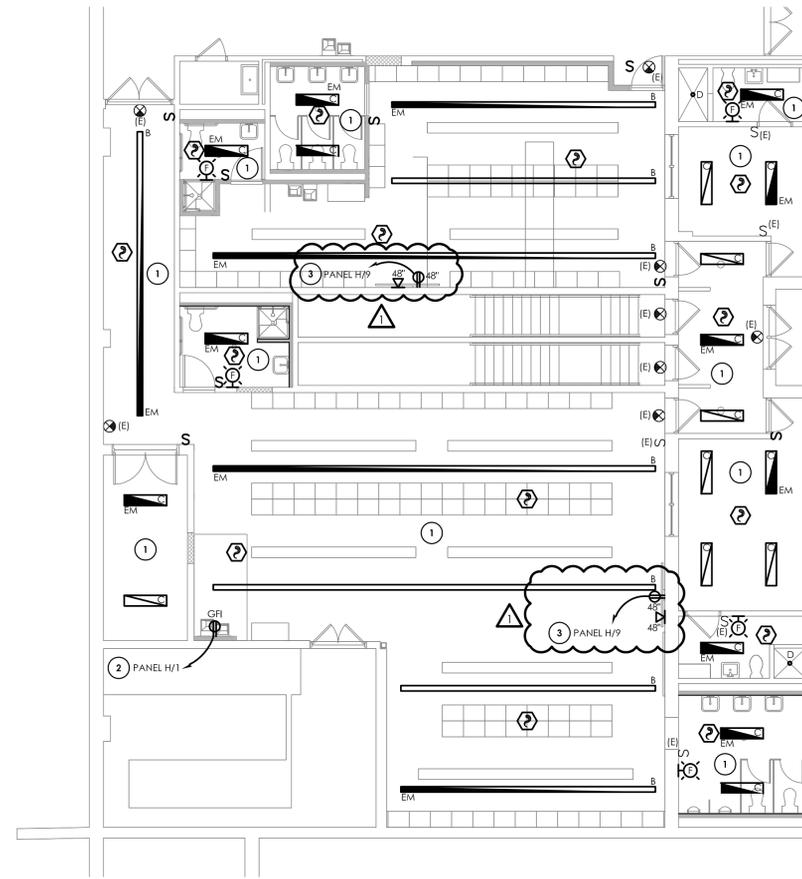
- 1 CONNECT NEW LIGHT FIXTURES TO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CIRCUITRY AS NECESSARY TO ACCOMMODATE NEW LOCATIONS.
- 2 PROVIDE (2) #12, (1) #12 GND IN 3/4" CONDUIT FROM PANEL H TO NEW DRINKING FOUNTAIN RECEPTACLE INDICATED. UTILIZE EXISTING SPARE BREAKERS INDICATED.
- 3 PROVIDE (2) #12, (1) #12 GND IN 3/4" CONDUIT FROM PANEL H TO NEW RECEPTACLE INDICATED. UTILIZE EXISTING SPARE BREAKERS INDICATED.

GENERAL NOTES:

- A. FIXTURE TYPE MARK IS INDICATED ADJACENT TO NEW LIGHT FIXTURES. REFER TO LUMINAIRE SCHEDULE ON SHEET PBHS-E900 FOR FIXTURE DESCRIPTIONS, NOTES, AND SPECIFICATIONS.
- B. PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
- C. ALL FIXTURES INDICATED WITH "EM" DESIGNATION SHALL HAVE EMERGENCY BATTERY BACKUP.
- D. INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
- E. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
- F. FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
- G. ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
- H. ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5'-0" SPACING.
- I. THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED "BREAKER ON" LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
- J. INITIATION DEVICES SHOWN SHALL NOT BE LOCATED IN A DIRECT AIRFLOW PATH OR CLOSER THAN 3' OF AN AIR SUPPLY DIFFUSER OR RETURN AIR GRILLE.
- K. FIRE ALARM CABLING RUN EXPOSED IN UNFINISHED AREAS SHALL BE INSTALLED IN EMT CONDUIT AND PAINTED TO MATCH EXISTING WALL/CEILING FINISH. HORIZONTAL RUNS THROUGH WALLS AND VERTICAL RUNS THROUGH FLOORS SHALL BE SLEEVED IN EMT CONDUIT AND FIRE CAULKED. ALL FIRE ALARM CABLING RUN EXPOSED IN FINISHED SPACES SHALL BE INSTALLED IN 500 SERIES STEEL WIREMOLD, IVORY IN COLOR.
- L. MOUNT SMOKE DETECTORS WITHIN 5 FEET OF DOORS THAT CLOSE ON A FIRE ALARM ACTIVATION. REFER TO NFPA 72 FOR THE MINIMUM DISTANCE A SMOKE DETECTOR CAN BE FROM DOOR.
- M. FOR PUBLIC MODE, WALL MOUNTED VISUALS OR AUDIBLE/VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE FINISHED FLOOR. REFER TO NFPA 72 FOR CEILING MOUNTED VISUALS. REFER TO NFPA FOR SPACING OF STROBES. WHERE CEILING HEIGHTS ALLOW, WALL MOUNTED AUDIBLE ONLY APPLIANCES SHALL HAVE THEIR TOPS ABOVE FINISHED FLOOR AT HEIGHTS OF NOT LESS THAN 90".
- N. THE OPERABLE PART OF PULL STATIONS SHALL BE MOUNTED MORE THAN 3-1/2 FEET BUT LESS THAN 4-1/2 FEET ABOVE THE FLOOR. REFER TO NFPA FOR SPACING OF DEVICES.
- O. REFER TO MANUFACTURER INSTALLATION GUIDELINES FOR DUCT SMOKE DETECTOR INSTALLATION.
- P. ADDRESSABLE DEVICES SHOULD ONLY BE INSTALLED IN AREAS WHERE AMBIENT TEMPERATURE IS BETWEEN 32° AND 100°F.
- Q. EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO, 914-241-0057.



1 **BASEMENT ELECTRICAL NEW WORK PLAN**
E203 SCALE: 1/8" = 1'-0"



2 **BASEMENT ELECTRICAL NEW WORK PLAN**
E203 SCALE: 1/8" = 1'-0"



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**PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2**

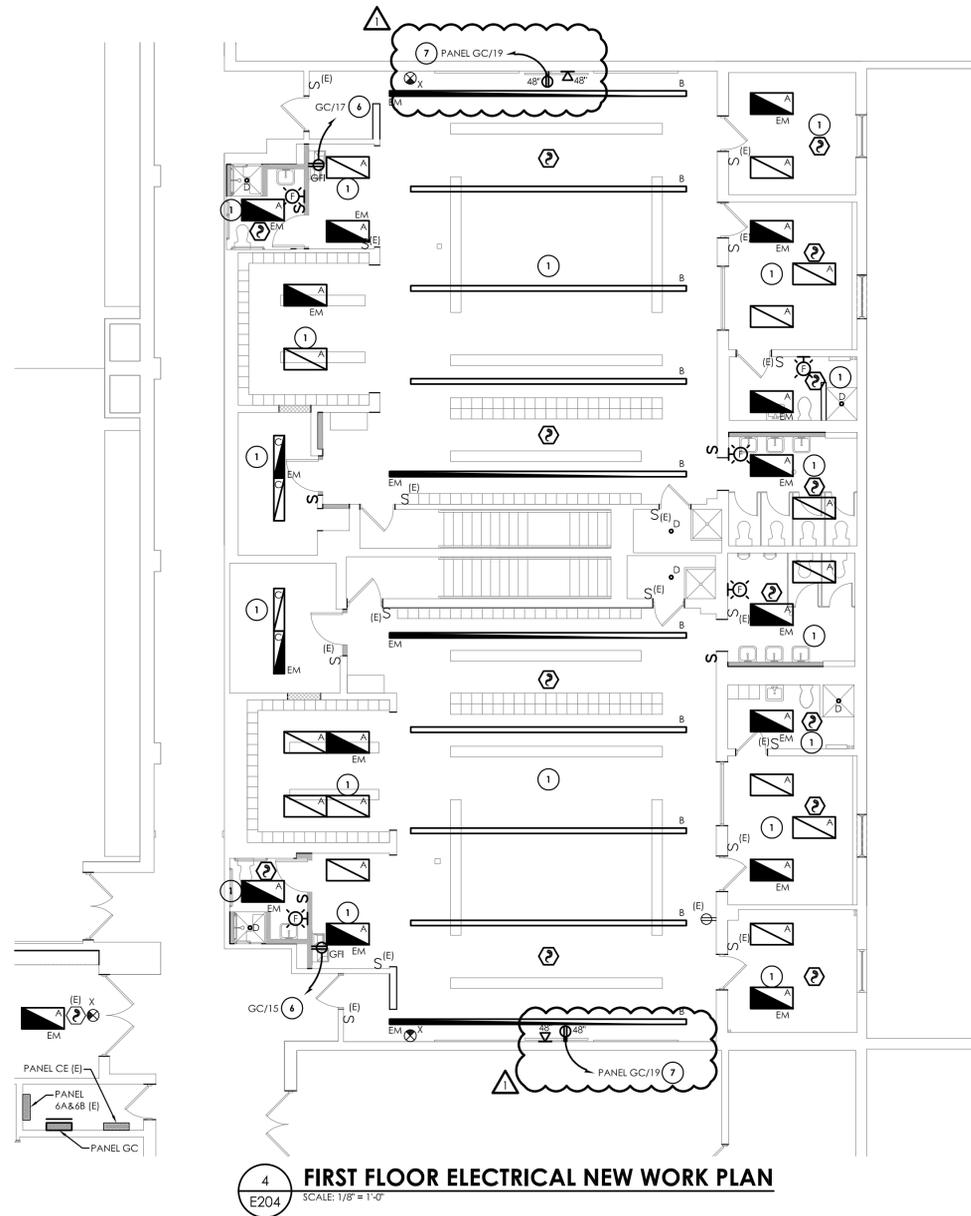
PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-00-007-007
CIRCLEVILLE MIDDLE SCHOOL - SED #: 44-04-01-06-00-140-015
CIRCLEVILLE ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-009-016
PAKANSINK ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-120-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/16" = 1'-0"		
SHEET TITLE		
BASEMENT ELECTRICAL NEW WORK PLAN		

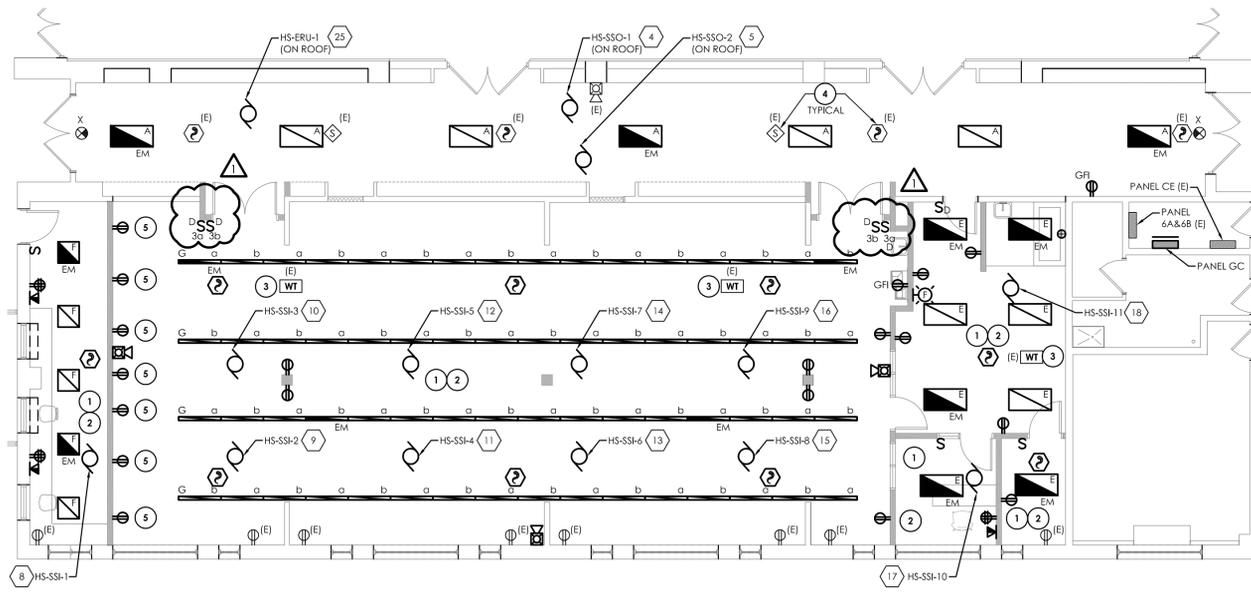
PROJECT NUMBER
14533.05

**PBHS
E203**

DRAWING NUMBER



4
E204 SCALE: 1/8" = 1'-0"



3
E204 SCALE: 1/8" = 1'-0"

KEY NOTES:

- 1 CONNECT NEW LIGHT FIXTURES TO EXISTING TAGGED CIRCUITRY. REWORK/EXTEND CIRCUITRY AS NECESSARY TO ACCOMMODATE NEW LOCATIONS.
- 2 ALL NEW RECEPTACLES TO BE WIRED TO EXISTING CIRCUITRY TAG FOR RE-USE, UNLESS NOTED OTHERWISE. REWORK/EXTEND EXISTING CIRCUITRY AS NECESSARY TO ACCOMMODATE NEW LOCATIONS.
- 3 EXISTING WIRELESS TRANSMITTERS TO BE INSTALLED AT LOCATIONS SHOWN. CONNECT TO EXISTING TAGGED WIRING. REWORK/EXTEND WIRING AS NECESSARY TO ACCOMMODATE NEW LOCATIONS.
- 4 EXISTING CEILING MOUNTED DEVICES TO BE REINSTALLED IN LOCATIONS SHOWN. CONNECT TO EXISTING TAGGED WIRING.
- 5 EACH RECEPTACLE TO BE ON ITS OWN INDIVIDUAL CIRCUIT. CONNECT TO EXISTING WIRING WITHIN SPACE.
- 6 PROVIDE (2) #12, (1) #12 GND IN 3/4" CONDUIT FROM PANEL GC TO NEW DRINKING FOUNTAINS. WIRE TO CIRCUIT BREAKERS INDICATED IN PANEL.
- 7 PROVIDE (2) #12, (1) #12 GND IN 3/4" CONDUIT FROM PANEL GC TO NEW RECEPTACLE INDICATED. UTILIZE EXISTING SPARE BREAKERS INDICATED.

GENERAL NOTES:

- A. FIXTURE TYPE MARK IS INDICATED ADJACENT TO NEW LIGHT FIXTURES. REFER TO LUMINAIRE SCHEDULE ON SHEET PBHS-E900 FOR FIXTURE DESCRIPTIONS, NOTES, AND SPECIFICATIONS.
- B. PROVIDE ANY ADDITIONAL POWER SUPPLIES OR OTHER MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL LIGHTING SYSTEM TO MEET INTENT OF LIGHTING SEQUENCE OF OPERATION AS SHOWN.
- C. ALL FIXTURES INDICATED WITH "EM" DESIGNATION SHALL HAVE EMERGENCY BATTERY BACKUP.
- D. INFORMATION ON DRAWING WAS OBTAINED THROUGH FIELD OBSERVATION AND AS-BUILT DOCUMENTATION. AREAS WITHOUT NEW FIRE ALARM DEVICES ARE NOT PART OF PROJECT SCOPE AND HAVE BEEN FIELD VERIFIED AND DETERMINED TO MEET NEW YORK STATE SED REQUIREMENTS MANUAL PLANNING STANDARDS 2014 VERSION.
- E. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF FIRE ALARM WORK REQUIRED TO COMPLETE THE PROJECT.
- F. FINAL TESTING OF FIRE ALARM SYSTEM SHALL COMPLY WITH ALL NFPA 72 REQUIREMENTS. ANY ALTERED CIRCUIT(S) SHALL HAVE ALL ASSOCIATED LOOP DEVICES TESTED IN THEIR ENTIRETY AND 10% OF NEIGHBORING ZONE/LOOP DEVICES ARE ALSO TO BE TESTED.
- G. ALL NEW FAN SHUTDOWN RELAYS SHALL BE PROGRAMMED TO DE-ENERGIZE ASSOCIATED HVAC UNIT FAN UPON ACTIVATION OF FIRE ALARM SYSTEM.
- H. ALL SYSTEMS CABLING SHALL BE RUN IN FREE-AIR AND SUPPORTED ABOVE CEILINGS VIA J-HOOKS. J-HOOKS NOT TO EXCEED 5'-0" SPACING.
- I. THE CONTRACTOR SHALL PROVIDE NEW NOTIFICATION APPLIANCE (NAC) PANEL ON EACH FLOOR TO ACCOMMODATE NEW NOTIFICATION DEVICES. PANELS SHALL BE LOCATED IN ACCESSIBLE CLOSET SPACE ON ASSOCIATED FLOOR. COORDINATE EXACT PANEL LOCATION WITH OWNER PRIOR TO INSTALLATION. SERVE NEW NAC PANEL FROM NEAREST AVAILABLE 120VAC PANELBOARD SOURCE WITH (2) #12, #12 G IN 1/2" EMT CONDUIT. CIRCUIT LENGTHS EXCEEDING 100' SHALL BE WITH #10 AWG. PROVIDE 20/1 CIRCUIT BREAKER IN AVAILABLE PANEL SPACE AND ASSOCIATED "BREAKER ON" LOCK. NEW CIRCUIT BREAKER SHALL BE U.L. LISTED AND MATCH EXISTING PANEL INTERRUPTING RATING.
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- R. EXISTING FIRE ALARM SYSTEM VENDOR OPEN SYSTEMS METRO. 914-241-0057.

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PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2

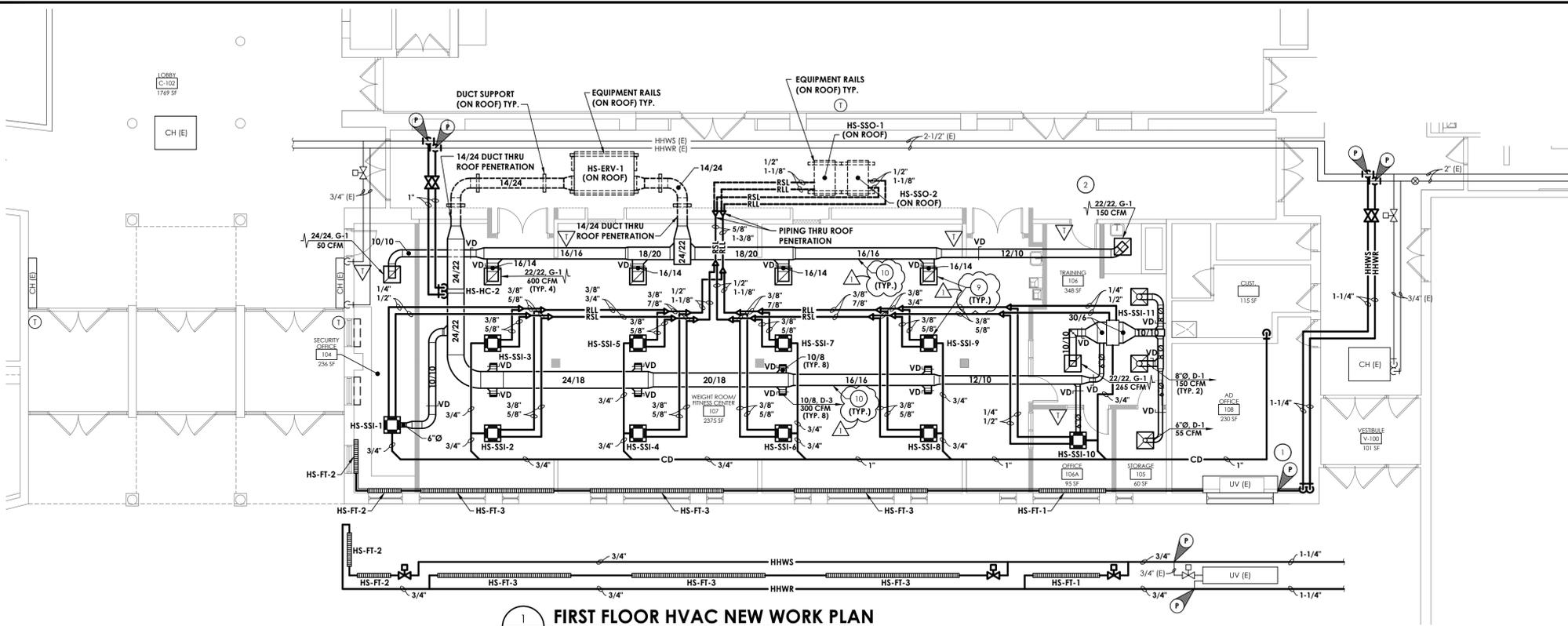
PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-00-007-007
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PAKANASKIN ELEMENTARY SCHOOL - SED #: 44-04-01-06-00-012-015

DATE	DRAWN	CHECKED
03/08/2021	MAY	JBT
SCALE 1/16" = 1'-0"		
SHEET TITLE		
FIRST FLOOR ELECTRICAL NEW WORK PLAN		

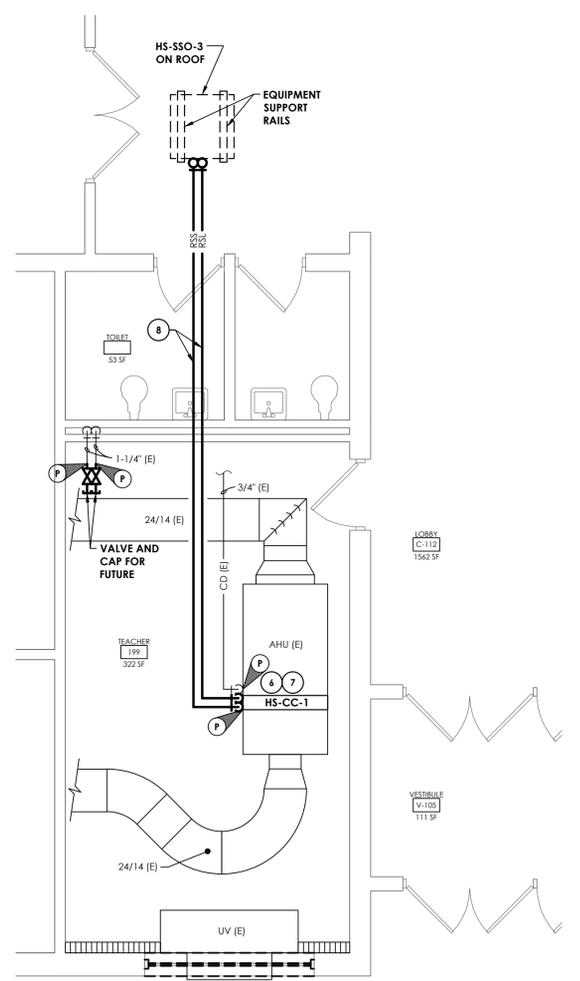
PROJECT NUMBER
14533.05

PBHS
E204
DRAWING NUMBER

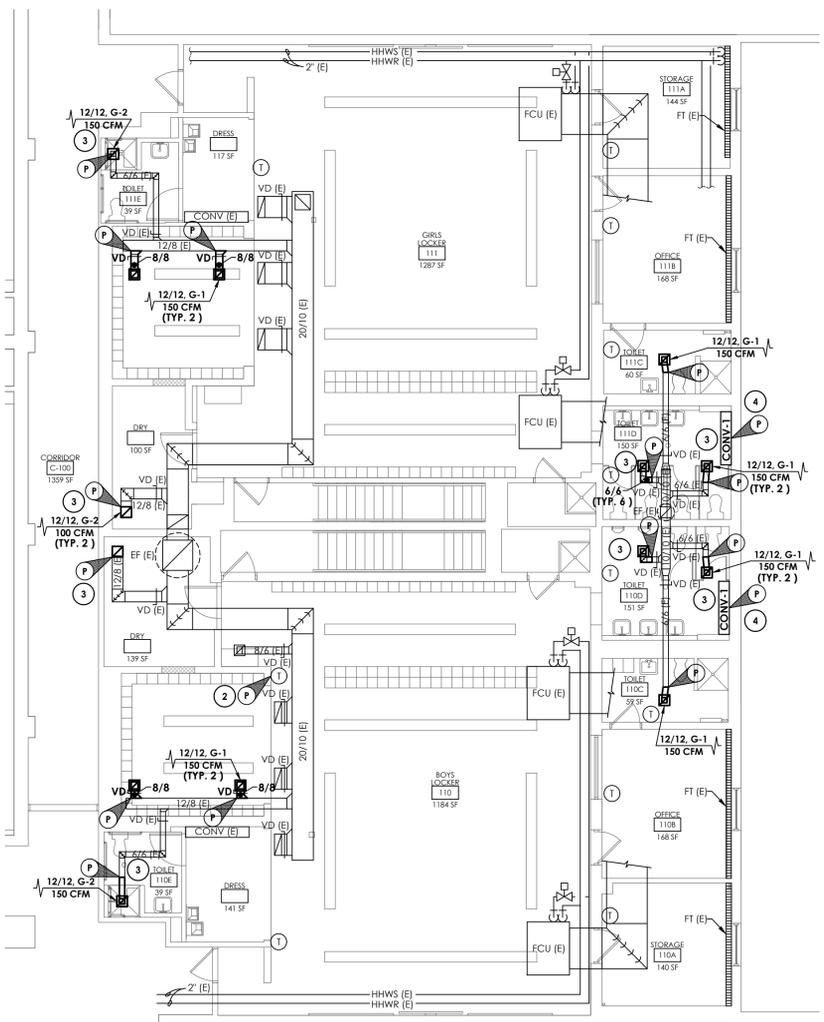
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 Date last accessed: 3/26/2021 1:17 PM
 Date last plotted: 3/26/2021 1:25 PM
 Plotted By: Zach Hockford



1 FIRST FLOOR HVAC NEW WORK PLAN
 SCALE: 1/8" = 1'-0"



2 FIRST FLOOR HVAC NEW WORK PLAN
 SCALE: 1/4" = 1'-0"



3 FIRST FLOOR HVAC NEW WORK PLAN
 SCALE: 1/8" = 1'-0"

- GENERAL NOTES:**
- ALL EXPOSED INTERIOR DUCTWORK IN WEIGHT ROOM 107 SHALL BE INTERNALLY LINED.
 - LEAVE EXISTING LOCKER ROOM EXHAUST RGDS FLOW RATE UNCHANGED. BALANCE NEW RGDS TO CFM SHOWN ON PLAN. IF TOTAL CFM REQUIREMENT INCREASES, RE-SHEAVE EXHAUST FAN(S) FOR THE REQUIRED ADDITIONAL AIR FLOW.
 - ALL EXPOSED INTERIOR DUCTWORK SHALL BE PAINTED TO MATCH CEILING COLOR.
 - ALL EXPOSED CONDENSATE PIPING SHALL BE PAINTED TO MATCH CEILING COLOR. ENSURE THAT PIPING LABELS REMAIN UNPAINTED AND CLEAR TO READ.

- KEY NOTES:**
- CONNECT EXISTING UV PIPING AND CONTROL VALVE TO NEW PIPING.
 - REINSTALL SALVAGED THERMOSTAT.
 - PROVIDE NEW EXHAUST GRILLES.
 - RE-INSTALL EXISTING CONVERTERS IN NEW LOCATION. RECONNECT CONTROLS.
 - MOUNT ERV AS HIGH AS POSSIBLE. MAINTAIN REQUIRED SERVICE CLEARANCES.
 - CONNECT TO EXISTING CONDENSATE PIPING.
 - INSTALL NEW DX COIL INTO EXISTING AHU. MODIFY UNIT AS NECESSARY TO FACILITATE INSTALLATION. FIELD VERIFY EXISTING AHU DIMENSIONS FOR DX COIL INSTALLATION COORDINATION.
 - SIZE RSL/RSS PIPING PER MANUFACTURER'S RECOMMENDATIONS.
 - SUSPEND SPLIT SYSTEM INDOOR CASSETTES AND RGDS IN WEIGHT ROOM 107 AT 12' ABOVE FINISHED FLOOR. FLUSH WITH THE LIGHTING.
 - SUSPEND DUCTWORK IN WEIGHT ROOM 107 ABOVE THE LIGHTS, SPLIT SYSTEM INDOOR CASSETTES, AND RGDS.

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**PINE BUSH CSD
 2019 CAPITAL IMPROVEMENT PROJECT
 PHASE 2**

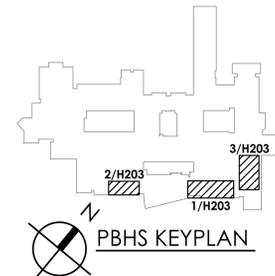
PINE BUSH HIGH SCHOOL - SED # : 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED # : 44-04-01-06-001-001
 CIRCLEVILLE ELEMENTARY SCHOOL - SED # : 44-04-01-06-000-016
 PAKANASKIN ELEMENTARY SCHOOL - SED # : 44-04-01-06-001-015

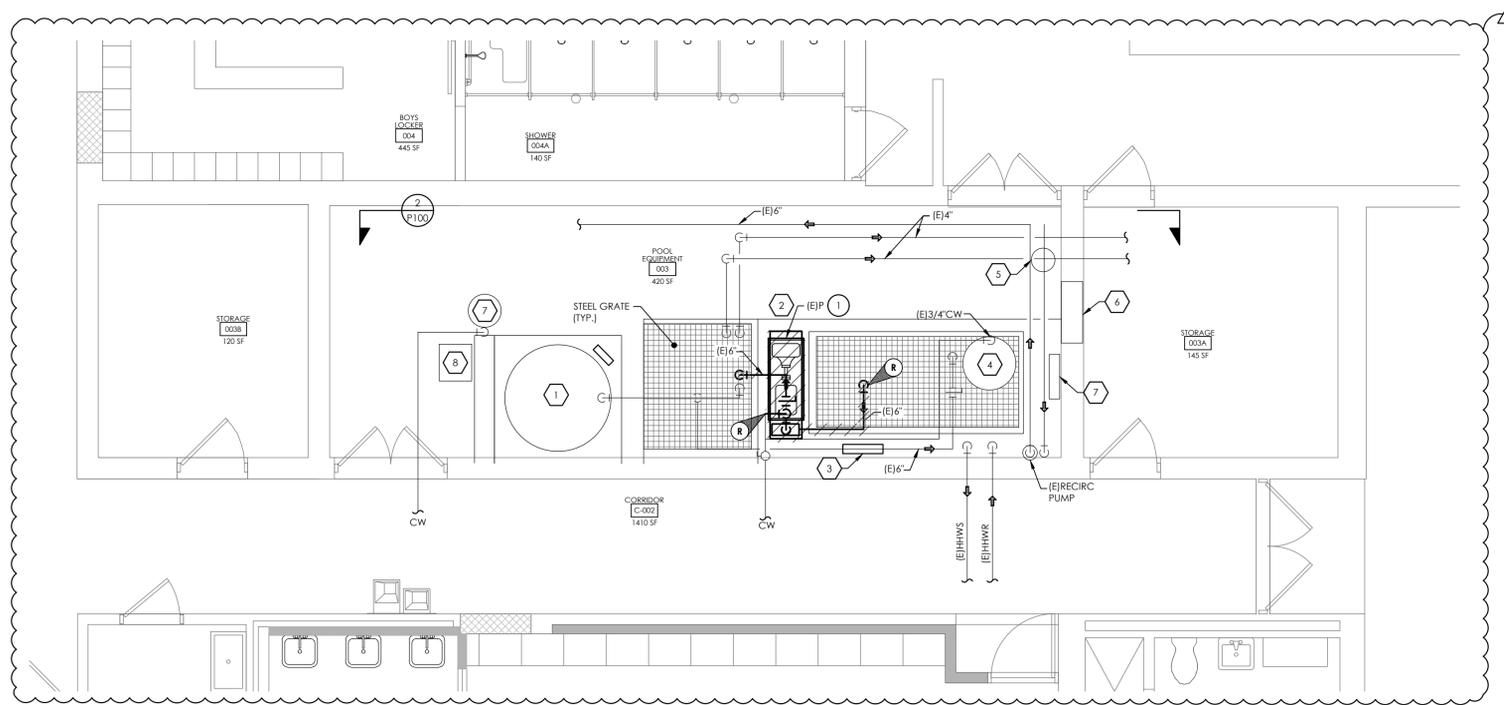
DATE	DRAWN	CHECKED
03/08/2021	ZBH	JJM
SCALE AS NOTED		
SHEET TITLE		
FIRST FLOOR HVAC NEW WORK PLAN		

PROJECT NUMBER
14533.05

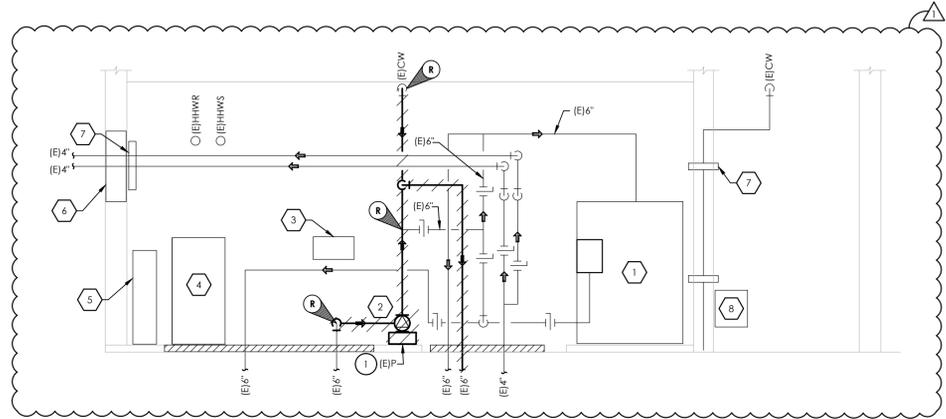
**PBHS
H203**

DRAWING NUMBER





1 BASEMENT POOL AREA PLUMBING DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"



2 POOL EQUIPMENT SECTION
 SCALE: NOT TO SCALE

- EXISTING POOL EQUIPMENT:**
- 1 (E) NEPTUNE MODEL 665RFLL-SLA-6P80-R
 FILTER AREA (SQ. FT.) 23.8
 MAX FLOW RATE (GPM) 357
 MAX WORKING PRESSURE 50 PSI
 - 2 CENTURY MODEL PL1A807A01C
 (E) 10 HP, 1760 RPM
 - 3 (E) CHEMTROL CONTROL SYSTEM
 - 4 (E) ACE ROTO-MOLD 160 GAL. STORAGE TANK
 - 5 (E) LIQUID CARBON DIOXIDE
 - 6 (E) EXHAUST FAN
 - 7 (E) ELECTRIC PANEL
 - 8 (E) SAFETY SHOWER & EYEWASH
 - 9 (E) MOP SINK

- KEY NOTES:**
- 1 REMOVE EXISTING POOL PUMP AND PAD.
 PREPARE PIPING FOR NEW PUMP SET
 CONNECTION. COORDINATE POOL SHUTDOWN
 WITH OWNER.

CPLteam.com
 ARCHITECTURE • ENGINEERING • PLANNING

50 FRONT STREET, SUITE 202
 NEWBURGH, NEW YORK 12550
 TEL (800) 274-9000
 FAX (845) 567-9614

REVISIONS	NO.	DATE	BY	DESCRIPTION
	1	03/29/2021	ZBH	JJM BID-ADDENDUM-02

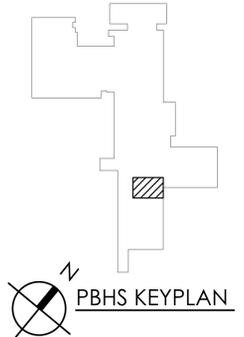
PINE BUSH CSD
2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2

PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-007-007
 CIRCLEVILLE MIDDLE SCHOOL - SED #: 44-04-01-06-001-015
 CIRCLEVILLE ELEMENTARY SCHOOL - SED #: 44-04-01-06-009-016
 PAKANASINK ELEMENTARY SCHOOL - SED #: 44-04-01-06-012-015

DATE	DRAWN	CHECKED
03/08/2021	ZBH	JJM

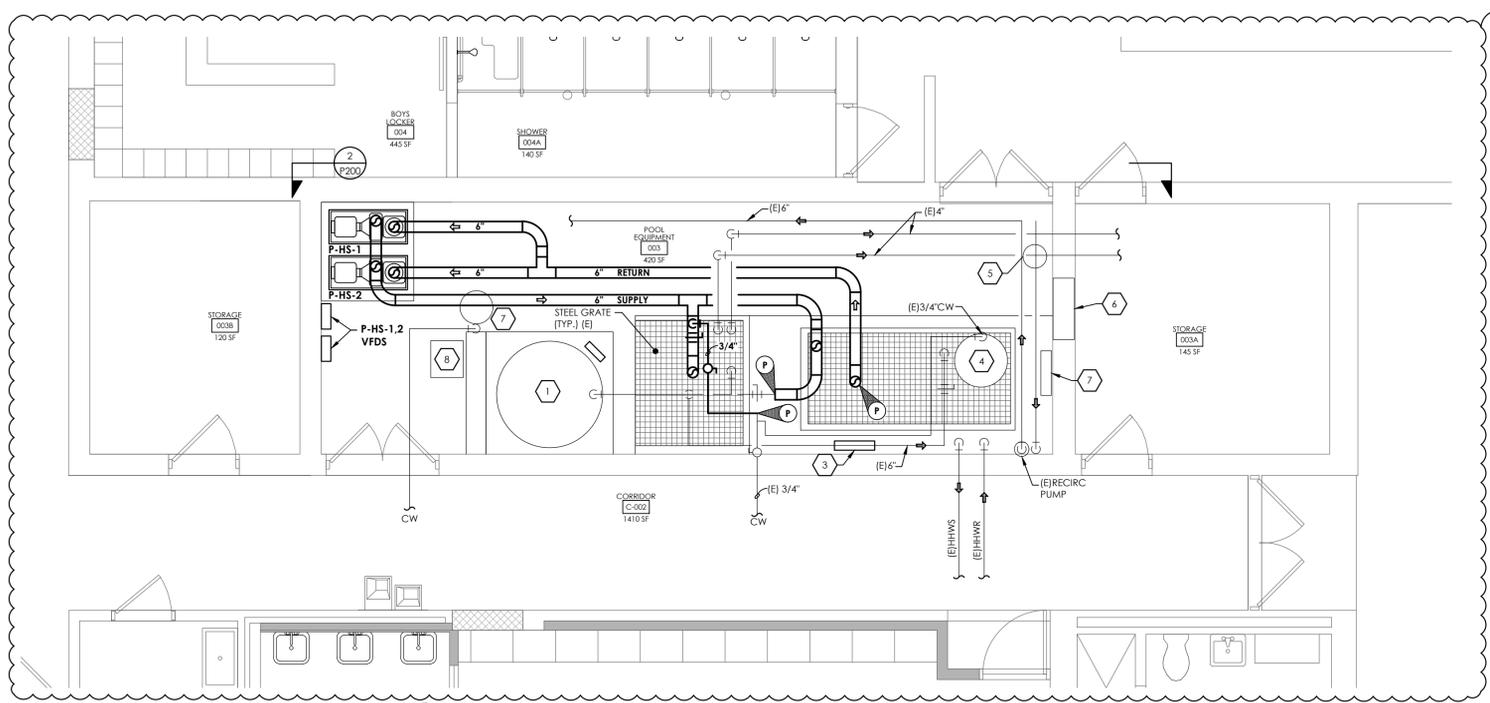
SCALE: 1/4" = 1'-0"

SHEET TITLE
**BASEMENT POOL AREA
 PLUMBING DEMOLITION
 PLAN**

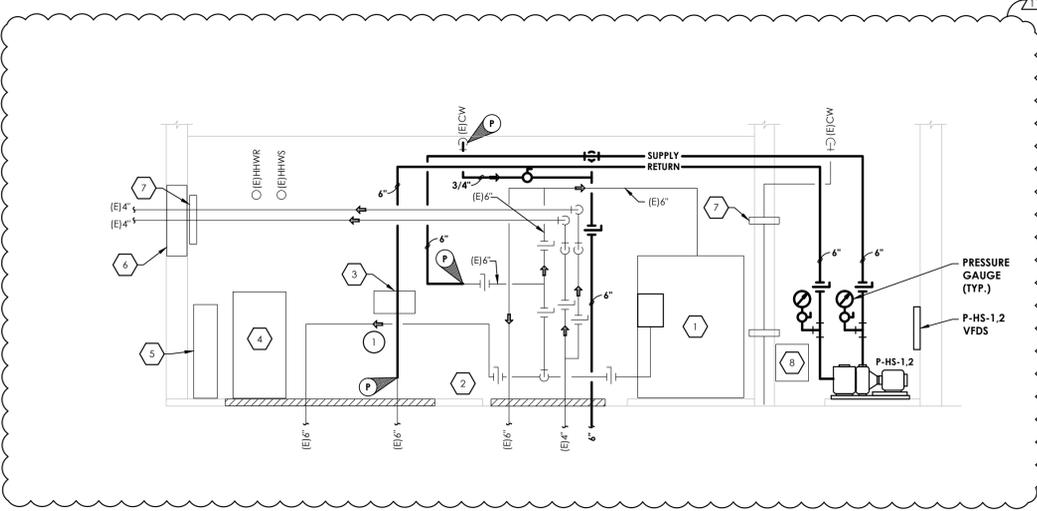


PROJECT NUMBER
14533.05

PBHS
P100
 DRAWING NUMBER



1 BASEMENT POOL AREA PLUMBING NEW WORK PLAN
SCALE: 1/4" = 1'-0"



2 POOL EQUIPMENT SECTION
SCALE: NOT TO SCALE

PUMP SCHEDULE									
MARK	LOCATION	SERVICE	GPM	HD (FT.)	ELECTRICAL DATA			TYPICAL UNIT MFG & MODEL NO.	REMARKS:
					HP	VOLTS	PH		
P-HS-1	POOL EQUIPMENT	POOL	370	75	10	208	3	MARLOW 45PC10EC	ALL
P-HS-2	POOL EQUIPMENT	POOL	370	75	10	208	3	MARLOW 45PC10EC	ALL

REMARKS:
 1. EPOXY COATED.
 2. INTEGRAL STRAINER.
 3. FACTORY WIRED DISCONNECT.

- EXISTING POOL EQUIPMENT:**
- 1 (E) NEPTUNE MODEL 665RFFL-SLA-6P80-R FILTER AREA (SQ. FT.) 23.8
MAX FLOW RATE (GPM) 357
MAX WORKING PRESSURE 50 PSI
 - 2 CENTURY MODEL PL1A807A01C MOTOR (E) 10 HP, 1760 RPM, MARLOW 45PC10ED PUMP.
 - 3 (E) CHEMTROL CONTROL SYSTEM
 - 4 (E) ACE ROTO-MOLD 160 GAL. STORAGE TANK
 - 5 (E) LIQUID CARBON DIOXIDE
 - 6 (E) EXHAUST FAN
 - 7 (E) ELECTRIC PANEL
 - 8 (E) SAFETY SHOWER & EYEWASH
 - 9 (E) MOP SINK

- KEY NOTES:**
- 1 INSTALL NEW INLINE PUMPS. CONNECT TO EXISTING SUPPLY AND RETURN PIPES.

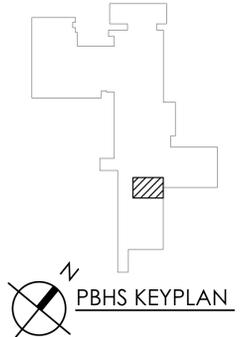


REVISIONS NO.	DATE	BY	DESCRIPTION
1	03/29/2021	ZBH	JJM BID-ADDENDUM-02

2019 CAPITAL IMPROVEMENT PROJECT
PHASE 2
 PINE BUSH CSD
 PINE BUSH HIGH SCHOOL - SED #: 44-04-01-06-007-007
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DATE	DRAWN	CHECKED
03/08/2021	ZBH	JJM

SCALE: 1/4" = 1'-0"
 SHEET TITLE: BASEMENT POOL AREA PLUMBING NEW WORK PLAN



PROJECT NUMBER	14533.05
PBHS	P200
DRAWING NUMBER	