ADDENDUM NO. 2

Date: April 7, 2017

Project: Hall Elementary School

Portland Public Schools/City of Portland

Portland, Maine

This addendum is issued prior to receipt of the bids and does hereby become a part of the contract documents, and in case of conflict, it shall supersede original project manual and drawings.

Each bidder shall be responsible for issuing information contained herein to sub-contractors and suppliers to ensure that their proposal covers all work required by the contract documents including this addendum.

NOTE:

The AGC Maine Offices will be closed at NOON on Wednesday, April 12. They will be open normal business hours on Thursday, April 13.

GENERAL

- 1. All material testing specified within the contract documents will be paid by the owner. Coordination of all testing activities, scheduling and support for the testing agent will be conducted by the General Contractor through a designated owner representative.
- 2. All demolition of the existing building (two phases) will be the responsibility of the General Contractor. This includes all associated mechanical and electrical make safe and work associated with partial removal of the back classroom wing.
- 3. Please refer to specification section 26.B.4 for the requirements for pollution liability insurance.
- Manually operated doors shades are specified in Specification Section 122413-Roller Window Shades.
- 5. The windows in rooms B09 and D23 are type A.
- 6. Sunshades indicated on curtainwalls are intended to be supplied by the curtainwall manufacturer and installed as part of that system. Sunshades that are indicated over classroom hopper windows will be wall mounted. The curtainwall sunshades are intended to mount to the horizontal framing members. No additional vertical members are desired.
- 7. For LEED Credit MRc5: Materials are required to be manufactured within 500 miles.
- 8. The canopy over the main entrance is to have standing seam metal roofing. Refer to detail 4/AE502. Basis of design product is to be UNA-CLAD UC-3 roofing panels, 22 ga, manufacturers standard Kynar finish with color selected from the full range including metallic.
- 9. The finishes for window shades vary between conditions. Motorized shades are recessed within gypsum board pockets. Roller shades are to be a finished headbox.
- 10. AWI Certification is not required for millworkers. Millworkers must meet the standards for AWI however as specified.
- 11. There are no BL3 or BL6 in the project.
- 12. The stamped concrete walks within the playground will not receive a color. The intent is not to use a traditional stamp but a small number of owner supplied materials to imprint within the concrete such as leaves, small objects or possibly a man hole cover.

- 13. Inverter in main electrical room is intended for exterior building mounted fixtures F17 and W1. See Lighting Fixture Schedule Note 6.
- 14. Quiet room dimming switches may be low voltage or line voltage.
- 15. Devices such as occupancy sensors not associated with a specific control scheme are intended to be locally controlled.
- 16. Library, Gym and Cafeteria lighting control systems are intended to be standalone, but may be connected to the networked system in the future.
- 17. Filed-Sub-Bidders shall include the cost for videotaping the training and demonstrations of the systems that they provide.
- 18. Temporary power, lighting and communications shall be provided by the Electrical Filed-Sub-Bidder.
- 19. Electrical Filed-Sub-Bidder shall provide Alternate 1 LEED Documentation as required by the Specifications.
- 20. Electrical Filed-Sub-Bidder shall provide Light Pole Bases in Specification 265613.
- 21. Electrical Filed-Sub Bidder shall provide Transformer Pad shown on Drawing C-508. Provide Submittal.
- 22. Electrical Filed-Sub-Bidder shall coordinate with Utilities and provide permanent and temporary electric and communications services.
- 23. Electrical Filed-Sub-Bidder shall coordinate with Utilities and remove existing electric and communications services.
- 24. Electrical Filed-Sub-Bidder shall coordinate with Utility and provide beacon, wiring and conduit indicated in keynote 18 on drawing CU103.
- 25. Electrical Filed-Sub-Bidder shall provide Lighting Control Cabinet shown on CU103, Keynote 12.
- 26. Earthwork indicated in Specification 260543, paragraph 3.4 shall be by Sitework Filed-Sub-Bidder.
- 27. As a condition of approval by the City of Portland, **PROVIDE** a construction management plan for each Phase of the Project. This plan shall provide specifics on contractor parking and anticipated trucks/deliveries generated on a daily basis. For Phase I work, provide anticipated plan for maintaining existing pedestrian pathways, parking and school bus circulation, and access to all other facilities indicated to be used by the School and general public during Phase I.
- 28. **REVIEW** the attached municipal/environmental permits. Abide by all conditions referenced in the permits:
 - a. City of Portland Conditional Use and Level III Site Plan Approvals
 - b. Maine Department of Environmental Protection Site Location of Development and Natural Resources Protection Act permit Approvals
 - c. Army Corps of Engineers General Permit
- 29. The sitework contractor is responsible for all temporary and permanent erosion and sediment control on the project. Temporary Erosion control is indicated on drawings CD101 to CD103, CG101 to CG102, and C-501 to C-502. It is also specified in Specification Section 31100, "Site Clearing."
- 30. Concrete pads for dugout benches indicated on sheet CS102 are not in the contract.
- 31. All work indicated on the L sheets are to be the responsibility of the Sitework contractor.
- 32. General contractor shall provide all required temporary construction fence.
- 33. All sitework indicated on the contract drawings shall be paid as a lump sum. Soil materials required for the project, including initial lift of granular borrow placed in fill areas (per the Geotechnical Report) shall be considered incidental to the project.
- 34. Sitework contractor is responsible for all excavation and refill required for the installation and removal of temporary classroom foundation
- 35. No escalation clauses will be considered for any materials on the project.

SPECIFICATIONS

SECTION 055000 "METAL FABRICATIONS"

1. Sitework contractor shall be responsible for providing all exterior bollards (locations indicated on sheet CS101).

SECTION 230800 "COMMISSIOING OF HVAC"

- 1. **DELETE** Paragraph 3.4.B "HVAC&R Instrumentation and Control System Testing" and **REPLACE** with the following:
 - "B. HVAC&R Instrumentation and Control System Testing: Field testing plans and testing requirements are specified in Section 230923 "Direct Digital Control (DDC) System for HVAC"."

SECTION 262726 "WIRING DEVICES"

1. Paragraph 3.3.B indicates to identify each receptacle with panelboard identification and circuit number and to use hot, stamped, **or** engraved machine printing with black-filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

SECTION 263213.14 "DIESEL ENGINE GENERATORS"

- 1. Paragraph 2.2.E **CHANGE** "Tier 4" to "Tier 3".
- 2. Paragraph 2.5.E.2 –**REVISE** to read "Fuel-Tank Capacity: Minimum 133 percent of total fuel required for 24-hour operation plus fuel for periodic maintenance operations between fuel refills."

SECTION 271313 "COMMUNICATIONS COPPER BACKBONE CABLING"

- 1. **REVISE** Paragraph 2.3 to Read:
- "2.3 HIGH-COUNT CATEGORY 5e TWISTED PAIR CABLE
 - a. Description: 25-pair, balanced-twisted pair cable, certified to meet transmission characteristics of **Category 5e cable** at frequencies up to 100 MHz.
 - b. <u>Manufacturers:</u> Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

 i. Hitachi Cable America Inc.
 - 1. Mohawk; a division of Belden Networking, Inc.
 - c. Standard: Comply with ICEA S-90-661, NEMA WC 63.1, and TIA-568-C.2 for Category 5e cables.
 - d. Conductors: 100-ohm, 24 AWG solid copper
 - i. Lead Content: Less than 300 parts per million.
 - e. Shielding/Screening: Unshielded balanced twisted pairs (UTP).
 - B. Cable Rating: Plenum.
 - C. Jacket: Gray thermoplastic."

SECTION 271513 "COMMUNICATIONS COPPER HORIZONTAL CABLING"

- 1. Paragraph 2.3.E indicates UTP cable.
- 2. Paragraph 2.4.I.1 **REVISE** to Read "Male; eight position; color-coded modular telecommunications connector designed for termination of a single four-pair, 100-ohm, **unshielded** twisted pair cable."
- 3. Paragraph 2.4.J.1 **REVISE** to Read "Female; eight position; modular; fixed telecommunications connector designed for termination of a single four-pair, 100-ohm, **unshielded** twisted pair cable.

SECTION 275116 "PUBLIC ADDRESS SYSTEM"

 DELETE Specification section 275116 "PUBLIC ADDRESS SYSTEM" in its entirety. ADD Specification section 275116 "PUBLIC ADDRESS SYSTEM FOR GYMNASIUM AND CAFETERIA" in its entirety.

SECTION 281300 "ACCESS CONTROL SOFTWARE AND DATABASE MANAGEMENT"

- 1. Paragraph 2.1.A **REVISE** to Read:
 - "A. <u>Products:</u> Subject to compliance with requirements, provide software and products **compatible** with Lenel United Technologies. Access Control System shall be compatible with existing Lenel United Technologies systems of other Portland Schools."

SECTION 281300 "ACCESS CONTROL HARDWARE DEVICES"

- 1. Paragraph 2.3.A **REVISE** to Read:
 - "A. <u>Products:</u> Subject to compliance with requirements, provide products **compatible** with Lenel United Technologies. Access Control System shall be compatible with existing Lenel United Technologies systems of other Portland Schools."

SECTION 329300 "PLANTS"

- 1. Section 329300, "Plants"
 - a. **DELETE** sub-paragraph 2.1.A.2 (Mineral Mulch: Size Range) and replace with "Size: ¾ inch."

DRAWINGS

Drawing C-001

- 1. Snow removal responsibilities are as follows:
 - a. Phase I Areas: from notice to proceed until project completion. Onsite areas outside of Phase I (e.g. Phase II areas) are the responsibility of the City of Portland until the start of Phase II
 - b. Phase II Areas: from beginning on Phase II work until project completion.
 - c. Riggs Street and Lomond Street: from notice to proceed until final acceptance of the Streets by the City of Portland (+/- 60 days after as built survey of the road is submitted to the City for their Review/Approval).
- 2. Sitework contractor is responsible for engaging a PLS to perform necessary tasks listed in the Street Acceptance Note.

Drawing CD102

2. Existing underground oil tank to be removed is an 8,000 gallon fiberglass tank (keynote 70). The building demolition contractor shall be responsible for carrying the cost for the work required for removal of the tank and all necessary reporting/site assessments.

Drawing CS101

DELETE sheet in its entirety and REPLACE with attached sheet CS101. Sheet has been revised to
reflect revised location of Phase 1 building demolition and to indicate temporary stone dust
walk necessary to maintain Phase 1 pedestrian access to the existing school from Pinecrest
Road.

Drawing CS102

- 1. **DELETE** vertical curb and **PROVIDE** sloped curbing along the parking bay on the west side of the parking lot. See attached clarification sketch AD-C1.
- REVISE sidewalk along south side of proposed building near service area as indicated on the attached clarification sketch AD-C1. The sidewalk has been relocated due to the revised utility pole location.

Drawing CL101

1. **REVISE** paved sidewalk running from the end of Godfrey Street to the crosswalk at the north end of the entrance drive (southern side of the parking lot) to be 10' wide.

Drawing CU101

3. **DELETE** sheet in its entirety and **REPLACE** with attached sheet CU101. Sheet has been revised to reflect revised location of utility pole, transformer and generator pad at service area, sewer lines to SMH 1, SHM5 and SMH6, and revisions to the Phase 1 Sanitary/Storm Drain Structure Schedule for SMH1 and SMH5.

Drawing C-510

- 1. Detail 1: **REVISE** Grassed Underdrained Soil Filter Detail as indicated on attached clarification sketch AD-C2.
- 2. Detail 2: Conceptual submission for the use of arch-style chambers in lieu of modular box storage chambers does not meet the dimensional requirements indicated on the detail and is therefore not an acceptable substitution (overall footprint is approximately 14.4% larger than what is indicated on the detail).

Drawing LS101

1. **PROVIDE** conservation seed mix in grassed underdrained soil filters (Locations of soil filters are indicated on drawing CS102).

Drawing LS102

1. **PROVIDE** conservation seed mix in grassed underdrained soil filter (Locations of soil filter is indicated on drawing CS103).

Drawing L-502

- 1. Detail 6: **REVISE** detail plan at main entrance and CB5 as indicated on attached clarification sketch AD-L1.
- 2. Detail 8: **REVISE** bench section detail to add trench drain as indicated on attached clarification sketch AD-L2.

Drawing SD101

- 1. 1/SD101: CHANGE "PHASE 1B" to "PHASE 1C" in title.
- 2. 1/SD101: CHANGE "PHASE 1 LIMIT OF WORK" to "PHASE 1C LIMIT OF WORK".
- 3. 1/SD101: CHANGE extent of PHASE 1C work. See attached sheet.

Drawing SD103

- 1. **ADD** keynote 14: "SAWCUT AND REMOVE EXISTING 2'-0"± WIDE x 1'-0"± DEEP REINFORCED CONCRETE FOOTING.".
- 2. 1/SD103: **CHANGE** extent of removals. See attached sheet.

Drawing SD105

- 1. 1/SD105: CHANGE "PHASE 1B" to "PHASE 1C" in title.
- 2. 1/SD105: CHANGE "PHASE 1 LIMIT OF WORK" to "PHASE 1C LIMIT OF WORK".
- 3. 1/SD105: **CHANGE** extent of PHASE 1C work. See attached sheet.

Drawing SD107

1. 1/SD107: **CHANGE** extent of removals. See attached sheet.

Drawing SD109

- 1. 1/SD109: CHANGE "PHASE 1B" to "PHASE 1C" in title.
- 1/SD109: CHANGE "PHASE 1 LIMIT OF WORK" to "PHASE 1C LIMIT OF WORK".
- 3. 1/SD109: **CHANGE** extent of 1C work. See attached sheet.

Sheet SD111

1. 1/SD111: **CHANGE** extent of removals. See attached sheet.

Drawing ST201

- 1. **CHANGE** existing keynotes. See attached sheet.
- 2. **CHANGE** keynotes. See attached sheet.
- 3. **ADD** "DRAWING NOTE: PROVIDE 5'-0" WIDE x 8'-0" LONG REINFORCED CONCRETE WALK AT EXTERIOR DOOR. SEE DETAIL 6/C-503 (SIMILAR). PROVIDE 4'-6" MINIMUM STRUCTURAL FILL BELOW CONCRETE WALK. DOWEL TO FOUNDATION WALL WITH #5 DOWELS, 1'-6" LONG, AT 1'-6" ON-CENTER."
- 4. 1/ST201: **CHANGE** location of elevation. See attached sheet.
- 5. 2/ST201: **ADD** detail. See attached sheet.

Drawing SB101

1. 1/SB101: ADD keynote 19 to foundation wall near column D/31.

Drawing SF105

1. Keynote 7: CHANGE "SEE DETAIL 7/SF503." to "SEE DETAIL 7/SF503 AND 4/SF501.".

Drawing SF501

- 1. 4/SF501: **CHANGE** "6x4x3/8" to "8x4x1/2".
- 2. 4/SF501: **ADD** reference to sheet SF105.

Drawing AD101

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AD101. Limits of demolition of the existing school have been updated.

Drawing AD201

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AD201. Limits of demolition of the existing school have been updated.

Drawing AT101

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AD101. Limits of demolition of the existing school have been updated.

Drawing AE003

- 1. Wall type 1F will require a UL rated block.
- 2. Door A20 is also Curtainwall C7.

Drawing AE101

- 1. The unmarked section of curtainwall adjacent to door A01 and forming the corner of C15 is to be Curtainwall 13.
- 2. Change the notation for BL7 in Room A23 to BL2.

Drawing AE102

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AE102. Modifications to the fish tank surround have been included.

Drawing AE201

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AE201. Updated sheet shows adjustments to mechanical louvers.

Drawing AE203

1. The "A" windows in rooms C12, C15, D23 and D26 are to receive sunshades.

Drawing AE401

1. Detail 9 and 11 show ½" plywood backer boards for the attachment of the acoustic wall panels as well as the laminate panels. This backer is needed on all four walls, full height.

Drawing AE404

1. General: The interior elevations showing acoustical wall panels (AWP-1) on all four walls are correct.

Drawing AE420

- 1. Room A13 is to receive 1 type G Changing station. No other changing stations are required.
- 2. Delete the folding shower seat and grab bars from shower stalls. Integral units have been specified in the plumbing specifications.
- 3. The toilet paper dispensers will be owner supplied and contractor installed. Provide blocking for these units.
- 4. Waste receptacles will be owner furnished and installed (free standing).
- 5. Mirrors shown in rooms A26, A27, D19 and D20 are to be continuous wall to wall mirrors with stainless steel j-channel trim top and bottom, fully adhered to the wall.

Drawing AE501

1. Detail 1A and 1B: ¼" Polyisocyanurate polyiso cover board is not an acceptable substitution to the ½" board specified.

Drawing AE504

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AE504. Updated sheet adds a fish tank support detail.

Drawing AE520

1. Details 1-2: No spray fireproofing is required on any structural deck or framing.

Drawing AE601

- 1. Doors A20, C01A, C17A and D11 are to be 60 minute fire rated as indicated. These doors are intended to be Fire Rated Aluminum provided by Technical Glass Products or equal. The specification for these doors will be included in addendum #3.
- 2. Door C01A is to be door type D
- 3. Door C17A is to be door type D
- 4. Door A20 is to be door type D
- 5. Curtainwall type C7 is to be fire rated (door A20).
- 6. All aluminum entrance doors are to be 2-1/4" thick thermally broken doors.

Drawing AE620

- 1. Curtainwall C20 is to be 1 hour rated curtainwall.
- 2. Curtainwall C20: Details indicated on this enlarged window elevation are incorrect. The correct details are 1, 12 and 13/AE622.

Drawing AE640

- 1. Room B03: The finish schedule is correct, there are AWP-2 on the East and South walls.
- 2. Room B18: There are acoustical wall panels in this room similar to details 12 and 15 on AE742.
- 3. Room CO5: Refer to detail 18/AE744 for the North Wall elevation. Acoustical wall panels are similar to Detail 10/AE744.
- 4. Room C17-There are no acoustical wall panels on the North wall.
- 5. Room B09: There are two acoustical wall panels on the East wall.
- 6. Room C07: There are two acoustical wall panels on the North wall.
- 7. Room C13: The finish schedule is correct indicating acoustic wall panels on the South and West walls. These are to be similar to details 14 and 15 on AE744.
- 8. Room C19: The finish schedule is correct indicating acoustical wall panels on the North and East walls. These are to be similar to detail 1 and 4 on AE744.
- 9. Room C22: The finish schedule is correct indicating acoustical wall panels on the North and West walls. These are to be similar to details 11 and 12 on AE744.
- 10. Room D07: The finish schedule is correct indicating acoustical wall panels on the East and South walls. These are to be similar to details 7 and 8 on AE745.
- 11. Room D17: The finish schedule is correct indicating acoustical wall panels on the north and West walls. These are to be similar to details 3 and 4 on AE746.
- 12. Room D24: The finish schedule is correct indicating acoustical wall panels on the South and West walls. These are to be similar to details 10 and 11 on AE746.
- 13. Room D27: The finish schedule is correct indicating acoustical wall panels on the South and West walls. These are to be similar to details 14 and 15 on AE746.
- 14. Room D30: The finish schedule is correct indicating acoustical wall panels on the North and East walls. These are to be similar to details 1 and 4 on AE747.
- 15. Room D33: The finish schedule is correct indicating acoustical wall panels on the North and West walls. These are to be similar to details 5 and 6 on AE747.
- 16. The ceilings in the following rooms are to be revised to SAT-1: S02, S03, A06, A07, A08, A16A, A17, A18, A19, A20, A21, A24, A25, A31, A31A, A32, A39, B01, B12, B14, B19A, C01, C03, C06, C15, C17, C17A, D12, D28 and D34.
- 17. The ceilings in the following rooms are to be revised to SAT-2: A03, A05, A16, A23, A38, B02A. B03A, B10A and B14, B15A, B16A, B17A, B19, C03A, C11A, C13A, C14A, C18A, C19A, C22A, C23, C24, C28, D02, D09, D10, D19A, D20A, D35, D36, D40.
- 18. Room A21A: The ceiling in this room is to be gypsum board.
- 19. The ramp adjacent to the stage is to receive SAT-2.

Drawing AE661

1. Provide a 6" acrylic raised number sign on the interior of entry doors that are indicated to receive a cast letter on the exterior of the building.

Drawings AE710

2. **DELETE** sheet in its entirety and **REPLACE** with attached sheet AE710. Updated sheet shows locations of gypsum wrapped structure for fire proofing.

Drawing AE740

- 1. Detail 12: There are three acoustical wall panels.
- 2. Detail 16: There are two acoustical wall panels.

Drawing AE741

- 1. Detail 2: Delete the reference to acoustical wall panel.
- 2. Detail 10: Provide two acoustical wall panels (awp-2) on this wall.

Drawing AE742

- 1. Detail 2: There are a total of 8 acoustical wall panels indicated.
- 2. Detail 3: There are a total of 7 acoustical wall panels indicated.
- 3. Detail 4: There are two acoustical wall panels indicated.
- 4. Detail 8: There are three acoustical wall panels indicated.
- 5. Detail 9: The acoustical wall panels in this room are to be AWP-2.
- 6. Detail 12: There are two acoustical wall panels indicated.

Drawing AE743

1. Detail 6: There are two acoustical wall panels indicated.

Sheet AE751

1. 17/AE751: **ADD** cold-formed framing and sheathing to support fish tank. See revised detail 17/AE751.

Drawing MH104

1. Mechanical Room D21: Provide 500-lbs of sheet metal, 200-sqft of duct insulation, hangers, and accessories in addition to what is shown on the drawings to make final duct connections to AHU-8, the outside louver, and the roof-mounted gravity exhaust ventilators.

Drawing MH101

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet MH101. Ductwork revisions have been made throughout.

Drawing MH102

- 1. **REVISE** sheet in accordance with attached sketch AD-M1. Ductwork revisions.
- 2. ADD section detail to sheet in accordance with attached sketch AD-M2

Drawing MH103

1. **REVISE** sheet in accordance with attached sketch AD-M3. Ductwork revisions.

Drawing MH104

1. **REVISE** sheet and **ADD** section detail in accordance with attached sketch AD-M4. Ductwork revisions.

Drawing M-402

- 1. CHANGE title of Detail 2 to read "AHU 1 SECTION".
- 2. CHANGE title of Detail 3 to read "AHU 2 SECTION".
- 3. CHANGE title of Detail 4 to read "AHU 3 SECTION".
- 4. CHANGE title of Detail 5 to read "AHU 4 SECTION".
- 5. CHANGE title of Detail 6 to read "AHU 5 SECTION".
- 6. **CHANGE** title of Detail 7 to read "AHU 6 SECTION".

Drawing M-601

1. **DELETE** sheet in its entirety and **REPLACE** with attached sheet M-601. Schedule revisions have been made throughout.

Drawing M-602 DIFFUSER / REGISTER SCHEDULE

- 1. **ADD** the following notes to the notes section at the bottom of the schedule:
 - 13. ½-INCH SPACING, 1/8-INCH BARS, 0° DEFLECTION
 - 14. ½-INCH SPACING, 1/8-INCH BARS, 15° DEFLECTION. INSTALL WITH 15° ANGLE TOWARD CEILING
 - 15. PROVIDE CONCEALED MOUNTING BRACKET AND 1-INCH BORDER WIDTH"
- 2. **ADD** the following diffusers and grilles to the schedule:
 - S-11 Linear Bar Grill

Face Size = 48" x 4"

Neck Size= 48" x 4"

Max Pressure Drop = 0.1-inWC

Max Noise Criteria = 25

CFM Range = 400- to 600-cfm

Basis of Design = Price LBP 15B

Notes = 13, 15

S-12 Linear Bar Grill

Face Size = 48" x 6"
Neck Size= 48" x 6"
Max Pressure Drop = 0.1-inWC
Max Noise Criteria = 25
CFM Range = 601- to 800-cfm
Basis of Design = Price LBP 16B
Notes = 14, 15

R-9 Louvered return grille

Face Size = 14" x 10"

Neck Size= 14" x 10"

Max Pressure Drop = 0.1-inWC

Max Noise Criteria = 25

CFM Range = 250- to 400-cfm

Basis of Design = Price 530

Notes = 2, 3, 4, 5, 7, 8

Drawing M-703 – Detail 3 "KITCHEN HEATING & VENTILATION CONTROL DIAGRAM"

1. **CHANGE** the Second paragraph of the SEQUENCE OF OPERATION to read:

"OCCUPIED MODE:

DURING THE OCCUPIED MODE THE GENERAL EXHAUST FAN EF-3 SHALL RUN CONTINUOUSLY WHENEVER EF-1 IS OFF, AND ITS ASSOCIATED ISOLATION DAMPER SHALL REMAIN OPEN. IF EF-1 IS RUNNING THEN EF-3 SHALL REMAIN OFF AND ITS ASSOCIATED ISOLATION DAMPER SHALL REMAIN CLOSED. THE CABINET UNIT HEATER FANS SHALL CYCLE TO MAINTAIN THE KITCHEN SET POINT, 68°F (ADJUSTABLE)."

2. **CHANGE** the Fifth paragraph of the SEQUENCE OF OPERATION to read:

"FF-2

THE DISHWASHER HOOD EXHAUST FAN, EF-2, SHALL BE STARTED AND STOPPED BY A LOCAL MANUAL SWITCH LOCATED ON OR NEAR THE KITCHEN HOOD (COORDINATE WITH HOOD EQUIPMENT PROVIDER)."

Drawing E001

- Symbol for POE clock: ADD the note "PROVIDE PYRAMID POE 17-INCH ANALOG CLOCK OR EQUIVALENT."
- 2. Electrical Abbreviations List: ADD abbreviation "NIC = Not In Contract."

Drawing EP102

2. **Add** two double duplex, tamper resistant receptacles in southwest corner of Maker Space for telecommunications Cabinet. Feed one receptacle from circuit BPL-29 and the other from circuit BPL-31.

Drawing EP103

1. MECH C10, **CHANGE** wire size tag for AHU-7 from "12" to "13".

Drawing EP104

- 1. Detail 2, CHANGE wire size tag for AHU-6 from "12" to "13".
- 2. Detail 2, CHANGE wire size tag for AHU-5 from "12" to "14".
- 3. Detail 2, CHANGE wire size tag for AHU-3 from "12" to "14".
- 4. Detail 2, CHANGE wire size tag for AHU-1 from "12" to "13".
- 5. MECH D21, CHANGE wire size tag for AHU-8 from "11" to "12".

Drawing EP105

1. **REPLACE** wire size tag for ACCU-1 from "12" to "11".

Drawing EP601

- 1. PANELBOARD SCHEDULE MH1:
 - 1. Circuit 7,9,11 REPLACE Circuit Description "EF-1 (8HP)" WITH "EF-1 (1 ½ HP)".
 - 2. Circuit 13,15,17 REPLACE Circuit Description "EF-2 (1HP)" WITH "EF-2 (1/3 HP)".
 - 3. Circuit 8,10,12 **REPLACE** Circuit Description "P-3/P-4 (5HP)" WITH "P-3/P-4 (7.5HP)". **REPLACE** Trip "20A" with "25A"
- 2. PANELBOARD SCHEDULE MH2:
 - 1. Circuit 1,3,5 for AHU-8 REPLACE Trip "60A" with "40A".
 - 2. Circuit 7,9,11 for AHU-5 REPLACE Trip "40A" with "20A".
 - 3. Circuit 13,15,17 for AHU-7 REPLACE Trip "35A" with "30A".
 - 4. Circuit 19,21,23 for AHU-3 REPLACE Trip "35A" with "15A".
 - 5. Circuit 31,33,35 for ACCU-2 REPLACE Trip "25A" with "35A".
 - 6. Circuit 2,4,6 for AHU-6 REPLACE Trip "20A" with "25A".
 - 7. Circuit 8,10,12 for AHU-4 **REPLACE** Trip "30A" with "40A".
 - 8. Circuit 14,16,18 for AHU-1 **REPLACE** Trip "35A" with "30A".
 - 9. Circuit 32,34,36 for ACCU-1 **REPLACE** Trip "40A" with "60A".

Drawing EP602

3. Panelboard Schedule BPL: **Add** 20-amp, 1-pole circuit breakers and description "Quad Receptacle for Cabinet in Southwest Corner Room B10" for circuits 29 and 31.

Drawing EL101

- 1. ADD an interior photocell in Cafeteria A38.
- 2. **ADD** a low voltage switch on stage A35 for control of Gym A30 lighting.
- 3. **ADD** an exterior mounted photocell for control of exterior site lighting and control of exterior building mounted lighting.
- 4. **ADD** a light switch for Storage Room A32A.

Drawing EL102

1. Detail 2: CHANGE Hubbell LX system to Hubbell NX system. Provide network connection.

Drawing EL103

1. **ADD** an occupancy sensor in S02.

Drawing EL104

1. **ADD** an occupancy sensor in S02.

Drawing EL701

- 1. Detail 2: CHANGE Hubbell LX system to Hubbell NX system. Provide network connection.
- 2. Detail 4: Provide a bypass control device for each corridor, stairwell etc. to be controlled.
- 3. Detail 5: Three low voltage switches are required in Cafeteria A38.
- 4. Detail 5: CHANGE Hubbell LX system to Hubbell NX system. Provide network connection.
- 5. Detail 6: CHANGE Hubbell LX system to Hubbell NX system. Provide network connection.
- 6. Detail 6: Building Mounted Lighting zone shall control F17 and W1 fixtures.
- 7. Detail 6: Exterior Pole Mounted Site zone shall control pole mounted site fixtures S2, S3 and S4.
- 8. Detail 6: Stair Control zone shall control fixtures associated with stairwells. Stairwells shall be separate zones.
- 9. Detail 6: Corridor Control zone shall control fixtures in respective corridors. Corridors shall be separate zones.
- 10. Detail 6: Lobby Control zone shall control fixtures C8 and B8 in Lobby.

Drawing ET102

4. ADD Floor mounted telecommunications cabinet at southwest corner of Maker Space B10. Cabinet shall serve telecommunications outlets in rooms B10, B08, B08A, B07, B06, B05, B09, B04, B03, B02, B18, B17, B16 and B15 and cameras in Corr B14, and Entry B01. Provide two (2) 4-inch conduits from cabinet to above ceiling. Provide 2x12 Cable tray above ceiling from cabinet to tray in Corridor B14. Provide three 4-inch conduits under slab from Tech Rm A24 to cabinet in Room B10. Provide 25-pair copper and fiber optic backbone cables in under slab conduits from Room A24 to cabinet in Room B10.

Drawing ET501

- 3. **Detail 3: ADD** Room B10 and ADD floor mounted telecommunications cabinet in Room B10. In the cabinet, provide fiber patch panel, 24-pair copper patch panel, data patch panels, video patch panel, video switch and space for data switches. Provide "IDF 3 Copper" patch panel in Tech RM A24 Cabinet. Provide three 4-inch conduits under slab from Tech Rm A24 to Room B10. Provide 25-pair copper and fiber optic backbone cables in under slab conduits from Room A24 to Room B10. Provide Cat 6 cables in pathways from cabinet in Room B10 to data, phone, clock, and AP outlets in rooms B10, B08, B08A, B07, B06, B05, B09, B04, B03, B02, B18, B17, B16 and B15 and cameras in Corr B14, and Entry B01. Provide Telecommunications Grounding Bus Bar (TGB) on Cabinet. Connect to other TGBs shown on Detail 2/EP501.
- 4. Detail 3: **ADD** "(NIC)" to Data Switches in Tech Room A24.

Drawing ET502

1. **Keynote 1: REVISE** to read:

"PROVIDE THE LENEL UNITED TECHNOLOGIES ONGUARD ENTERPRISE SYSTEM OR EQUIVALENT. ACCESS CONTROL SYSTEM SHALL BE COMPATIBLE WITH EXISTING LENEL UNITED TECHNOLOGIES SYSTEMS USED IN OTHER PORTLAND SCHOOLS.

2. **Keynote 2: REVISE** to read:

"PROVIDE CONTROL MODULES COMPATIBLE WITH ACCESS CONTROL SYSTEM."

3. **Keynote 3: REVISE** to read:

"INTEGRATE VIDEO MANAGEMENT SYSTEM WITH ACCESS CONTROL SYSTEM."

END OF ADDENDUM No. 2