THE SCHOOL DISTRICT OF PHILADELPHIA
Office of Capital Programs
440 North Broad Street, 3rd Floor – Suite 371
Philadelphia, PA 19130

TELEPHONE: (215) 400-4730

Addendum No. 002

Subject: **2020 Classroom Modernizations**
SDP Contract Numbers: B-007 C of 19/20 & B-009 C of 19/20

Location: **George Sharswood School**
2300 S. 2nd St, Philadelphia PA 19148

This Addendum, dated February 27, 2020, shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents.

1. SECTION 01 1100 ENVIRONMENTAL COORDINATION

A. 01 1135 ASBESTOS ABATEMENT SPECIFICATION

DELETE ASBESTOS ABATEMENT SPECIFICATION, Print Date 1/22/20, AND

REPLACE WITH ATTACHED ASBESTOS ABATEMENT SPECIFICATION, Print Date 2/27/20

B. ADD THE ATTACHED ASBESTOS INSPECTION REPORT, Print Date 2/27/20

2. CLARIFICATIONS & CORRECTIONS TO DRAWINGS & SPECS:

A. SPECIFICATIONS

SPECIFICATION 262416 – PANELBOARDS

1. ADD specification in its entirety.

SPECIFICATION 275313 – WIRELESS CLOCK SYSTEM

1. REVISE 2.2.H. to read "H. Basis of Design: Sapling Inc. SMA ~~2000~~ **3000** Series Master Clock (V8.1), Wireless Clock System. [Addendum No. 1]."

B. DRAWINGS

COVER SHEETS

DRAWING CS.1 – COVER SHEET

1. ADD deed address to read “200 WOLF STREET, PHILADELPHIA, PA 19148-3345.”

DRAWING CS.2 – GENERAL INFORMATION

1. REVISE Gypsum Wall Board Location Schedule to read at Cementitious Backer Unit “AT WALLS SCHEDULED TO RECEIVE CERAMIC TILE.”

ARCHITECTURAL DRAWINGS

DRAWING A6.1 – ROOM FINISH SCHEDULE

1. CLARIFICATION Room Finish Schedule column “COLOR SCHEME” pertaining to all classrooms - classrooms color schemes are assigned by existing accent paint colors (and not by grade level) since school was recently painted.
2. REVISED Color Scheme Schedule – Color Scheme A, item no. 5 to read as: “5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 51947 BASIL GREEN”
3. ADD Color Scheme Schedule – Color Scheme A, item no. 7 to read as: “7. VINYL BASE: JOHNSONITE, NO. 469 MYSTIFY”.
4. REVISED Color Scheme Schedule – Color Scheme B to read as: “COLOR SCHEME B, CLASSROOMS-BLUE & YELLOW”.
    a. REVISED item no. 4 to read as: “4. VINYL COMPOSITION TILE, ACCENT '1': ARMSTRONG, NO. 51927 FIELD GRAY”
    b. REVISED item no. 5 to read as: “5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 57509 LEMON LICK”
    c. ADD item no. 7 to read as: “7. VINYL BASE: JOHNSONITE, NO. 469 MYSTIFY”.
5. REVISED Color Scheme Schedule – Color Scheme C to read as: “COLOR SCHEME C, CLASSROOMS-BLUE & YELLOW”.
    a. REVISED item no. 3 to read as: “3. VINYL COMPOSITION TILE, FIELD: ARMSTRONG, NO. 51860 SOFT COOL GRAY”
    b. REVISED item no. 4 to read as: “4. VINYL COMPOSITION TILE, ACCENT '1': ARMSTRONG, NO. 57517 BODACIOUS BLUE”
    c. REVISED item no. 5 to read as: “5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 59230 VICTORIA BLUE”
    d. ADD item no. 7 to read as: “7. VINYL BASE: JOHNSONITE, NO. 262 DRIZZLE”.
6. REVISED Color Scheme Schedule – General Notes Item No. 7 to read as: “NOT USED”.

INTERIOR DRAWINGS

DRAWING I4.1 – LARGE SCALE LAYOUTS - PRE-K & KINDERGARTEN

1. REVISED detail 5/I4.1 KINDERGARTEN – ROOM 105 – Revise 704 & 706 to 703. Align Smart Board with right edge of Visual Display board.

DRAWING I4.3 – LARGE SCALE LAYOUTS - THIRD GRADE & SPECIAL EDUCATION

1. REVISED detail 5/I4.3 SPECIAL EDUCATION – ROOM 108 – Revised elevation indicator plan right to detail U/I4.5 “EXISTING BUILT-IN DISPLAY WALL - ROOM 223 & DISPLAY WALL - ROOM 108”.

DRAWING I4.5 – INTERIOR ELEVATIONS (CONT.) & CASEWORK DETAILS

1. REVISED detail U/I4.5 to read as follows: “EXISTING BUILT-IN DISPLAY WALL - ROOM 223 & DISPLAY WALL - ROOM 108”.

ELECTRICAL DRAWINGS

ED1.1 - ELECTRICAL FIRST FLOOR DEMOLITION PLAN

1. ADD general note “ELECTRICAL CONTRACTOR RO PROVIDE ALLOWANCE FOR REMOVAL OF 50’-0” OF SURFACE MOUNTED RACEWAY/CONDUIT AND CONDUCTORS IN EACH CLASSROOM.”

ED1.2 - ELECTRICAL SECOND FLOOR DEMOLITION PLAN

1. ADD general note “ELECTRICAL CONTRACTOR RO PROVIDE ALLOWANCE FOR REMOVAL OF 50’-0” OF SURFACE MOUNTED RACEWAY/CONDUIT AND CONDUCTORS IN EACH CLASSROOM.”

E2.1 - ELECTRICAL FIRST FLOOR POWER AND TECHNOLOGY PLAN

1. ADD General Sheet Note #6 to read “ELECTRICAL CONTRACTOR TO RUN ALL NEW SURFACE MOUNTED CONDUITS AND RACEWAYS IN CORNERS OF EACH CLASSROOM TO AVOID CONFLICT WITH DISPLAY BOARDS AND OTHER CLASSROOM FURNISHINGS.”
2. REVISE power and data layout as indicated on the drawings.
3. CLARIFY where panel is called to be semi-recessed, contractor shall cut the glazed block wall to accommodate the panels. A surface mounted panelboard will cause a 6” intrusion into the path of egress, which is not permitted.

E2.2 - ELECTRICAL SECOND FLOOR POWER AND TECHNOLOGY PLAN

1. ADD General Sheet Note #6 to read “ELECTRICAL CONTRACTOR TO RUN ALL NEW SURFACE MOUNTED CONDUITS AND RACEWAYS IN CORNERS OF EACH CLASSROOM TO AVOID CONFLICT WITH DISPLAY BOARDS AND OTHER CLASSROOM FURNISHINGS.”
2. REVISE power and data layout as indicated on the drawings.

DRAWING E6.1 - ELECTRICAL PANEL SCHEDULES

1. REVISE panel schedules as indicated on drawing.

4. BIDDER QUESTIONS SUBMITTED TO DATE & RESPONSES ARE AS FOLLOWS:

1. On the website, each school has an EC and GC bid. Who will be responsible for the HVAC and Plumbing work that is included?

   Answer: There is no HVAC work in the project. Plumbing will be the responsibility of the GC.

2. Specifications call for Sapling Master 2000 Clock. Sapling 3000 is normally the school district standard. Manufacturer comment "a 3000 can set up bell schedules where a 2000 cannot. Philly schools does not have intercom systems, so they have no way of ringing bells without the 3000." Should the specs be revised to install a 3000?

   Answer: Specification 275313 has been revised in this addendum. Refer to specification addendum section, above.

3. The specifications do not contain a specification for the electrical panels. Can you provide?

   Answer: The specification has been added as part of this addendum.

4. Panel drawn calls for semi-recessed panel. The existing backbox will not accept a 42 circuit panel and meet code for bending requirements. Can we blank off existing backbox and install surface panel? (Please do not tell us to cut and remove backbox, it's in glazed block).

   Answer: A surface mounted panelboard will cause a 6" intrusion into the Path of Egress which is not permitted. The Contractor must cut the glazed block wall to accommodate the panels.

5. Drawing D1.1, Demolition Note 9A states "*existing unit ventilator and/or radiator, radiator cover and all associated piping and components to be removed (as applicable) and refinished with electrostatic paint and reinstalled as scheduled. Clean unit ventilator and/or radiator and all associated components prior to reinstallation of cover*." Is this the responsibility of the GC?

   Answer Part 1: Drawing D1.1, Demolition Note 9A should read "*existing unit ventilator cover and/or radiator cover to be removed (as applicable) and refinished with electrostatic paint and reinstalled as scheduled. Clean unit ventilator and/or radiator and all associated components prior to reinstallation of cover*."

   Answer Part 2: Yes, the refinishing and reinstallation of the unit ventilator cover is the responsibility of the GC.

6. The contract drawings don't show any details regarding the scope of work. The notes on the drawings lead us to believe that the intent is to Paint the Ventilator Grilles and Radiator covers. Please clarify?

   Answer: See Question #6, above. Also refer to Specification 105115 Electrostatic Painting for refinishing requirements for metal surfaces.

7. The contract drawings don't show any window film. Please clarify?

   Answer: Per Specification 101115, Section 2.2.B.2, location to be at Samuel L. Gompers Elementary per drawings only.

8. Drawings don't show S.S. Corner Guard locations. Please Clarify?

   Answer: Per Specification 102600, Section 2.3.A.7, we have indicated corner guards to be received at three schools; John B. Kelly Elementary per drawings, Overbrook Educational Center per drawings, and Fox Chase Elementary per drawings.

9. Can Site Visits be arranged for these Schools after classes are done in order to see rooms not seen @ site visit on 2/11? If so please provide contact info.

   Answer: An additional site visit can be scheduled with the Construction Manager. Contact George Leone via email: gleone@philasd.org

10. Reference Supplementary Conditions Par. 16 Photographs , Are photos necessary for this type of project ? Please consider deleting from scope of work.(Save $)

    Answer: No; however, digital photographs on CD's or flash drives will be acceptable: and prints and negatives not required.

11. Is asbestos part of this scope of work?

    Answer: Yes. Refer to Specification Section 01 1100 Environmental Coordination, 01 1135-Asbestos Abatement and Lead Based Paint Stabilization Specifications

12. Is asbestos the responsibility of the contractor awarded the project?

    Answer: Asbestos is the responsibility of the GC that is awarded the project.

13. Is electrical part of this scope of work?

    Answer: The electrical part of the scope is the responsibility of the Electrical Contractor.

14. Is electrical the responsibility of the contractor awarded the project?

    Answer: The electrical is the responsibility of the Electrical Contractor that is awarded the electrical contract.

ATTACHMENTS

SPECIFICATIONS
SPECIFICATION 262416 PANELBOARDS

DRAWINGS
DRAWING A6.1 ROOM FINISH SCHEDULE

DRAWING I4.1 LARGE SCALE LAYOUTS – KINDERGARTEN
DRAWING I4.3 LARGE SCALE LAYOUTS - THIRD GRADE & SPECIAL EDUCATION
DRAWING I4.5 LARGE SCALE LAYOUTS - INTERIOR ELEVATIONS (CONT.) & CASEWORK DETAILS

DRAWING E2.1 ELECTRICAL FIRST FLOOR POWER AND TECHNOLOGY PLAN
DRAWING E2.2 ELECTRICAL SECOND FLOOR POWER AND TECHNOLOGY PLAN
DRAWING E6.1 ELECTRICAL PANEL SCHEDULES

ASBESTOS ABATEMENT SPECIFICATION, Print Date 2/27/20

ASBESTOS INSPECTION REPORT, print Date 2/2/20

END OF ADDENDUM #002

SECTION 262416 – PANELBOARDS [Addendum No. 1]

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Lighting and appliance branch-circuit panelboards.

1.3 DEFINITIONS

A. ATS: Acceptance testing specification.

B. GFCI: Ground-fault circuit interrupter.

C. GFEP: Ground-fault equipment protection.

D. MCCB: Molded-case circuit breaker.

E. VPR: Voltage protection rating.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of panelboard.

1. Include materials, switching and overcurrent protective devices, SPDs, accessories, and components indicated.
2. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

B. Shop Drawings: For each panelboard and related equipment.

1. Include dimensioned plans, elevations, sections, and details.
2. Show tabulations of installed devices with nameplates, conductor termination sizes, equipment features, and ratings.
3. Detail enclosure types including mounting and anchorage, environmental protection, knockouts, corner treatments, covers and doors, gaskets, hinges, and locks.
4. Detail bus configuration, current, and voltage ratings.
5. Short-circuit current rating of panelboards and overcurrent protective devices.
6. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
7. Include wiring diagrams for power, signal, and control wiring.

8. Key interlock scheme drawing and sequence of operations.
9. Include time-current coordination curves for each type and rating of overcurrent protective device included in panelboards. Submit on translucent log-log graft paper; include selectable ranges for each type of overcurrent protective device. Include an Internet link for electronic access to downloadable PDF of the coordination curves.

C. Contractor shall submit a “specifications compliance statement” for each manufactured piece of equipment. Contractor/Supplier shall add “redlined” line-by-line notations to a PDF of the Specifications Section indicating the product or actions required “complies”. Contractor/Supplier shall itemize all deviations from the specified requirement on a line-by-line basis. List of exceptions to product specification shall include proposed materials, methods and cost difference where substitutions are allowed. If product does not comply with the specification the Contractor/Supplier shall state what modifications and actions are being implemented to ensure the product shall comply per the substitution section of the contract documents.

1.5 STATEMENT OF COMPLIANCE

A. Contractor shall submit a “specifications compliance statement” for each manufactured piece of equipment. Contractor/Supplier shall add “redlined” notations to a PDF of the Specifications Section indicating the product or actions required “complies”. If product does not comply the Contractor/Supplier shall state what modifications and actions are being implemented to ensure the product shall comply per the substitution section of the contract documents.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data: For testing agency.

B. Panelboard Schedules: For installation in panelboards. Submit final versions after load balancing.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in other section for "Operation and Maintenance Data," include the following:

1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
2. Time-current curves, including selectable ranges for each type of overcurrent protective device that allows adjustments.

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications: ISO 9001 or 9002 certified.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Remove loose packing and flammable materials from inside panelboards; install temporary electric heating (250 W per panelboard) to prevent condensation.

B. Handle and prepare panelboards for installation according to NECA 407.

1.10 FIELD CONDITIONS

A. Environmental Limitations:

1. Do not deliver or install panelboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above panelboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:

    a. Ambient Temperature: Not exceeding 23 deg F (minus 5 deg C) to plus 104 deg F (plus 40 deg C).
    b. Altitude: Not exceeding 6600 feet (2000 m).

B. Service Conditions: NEMA PB 1, usual service conditions, as follows:

1. Ambient temperatures within limits specified.
2. Altitude not exceeding 6600 feet (2000 m).

C. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electric service according to requirements indicated:

1. Notify Construction Manager no fewer than two days in advance of proposed interruption of electric service.
2. Do not proceed with interruption of electric service without Construction Manager's written permission.
3. Comply with NFPA 70E.

1.11 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace panelboards that fail in materials or workmanship within specified warranty period.

1. Panelboard Warranty Period: 18 months from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PANELBOARDS COMMON REQUIREMENTS

A. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in other section for "Seismic Controls for Electrical Systems."

B. Product Selection for Restricted Space: Drawings indicate maximum dimensions for panelboards including clearances between panelboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.

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

D. Comply with NEMA PB 1.

E. Comply with NFPA 70.

F. Enclosures: Flush and Surface-mounted, dead-front cabinets.

1. Rated for environmental conditions at installed location.

    a. Indoor Dry and Clean Locations: NEMA 250, Type 1.
    b. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5.

2. Height: 84 inches (2.13 m) maximum.
3. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover. Trims shall cover all live parts and shall have no exposed hardware.
4. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
5. Finishes:

    a. Panels and Trim: Steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
    b. Back Boxes: Same finish as panels and trim.

G. Incoming Mains:

1. Location: Top and Bottom.
2. Main Breaker: Main lug interiors up to 400 amperes shall be field convertible to main breaker.

H. Phase, Neutral, and Ground Buses:

1. Material: Hard-drawn copper, 98 percent conductivity.

    a. Plating shall run entire length of bus.
    b. Bus shall be fully rated the entire length.

2. Interiors shall be factory assembled into a unit. Replacing switching and protective devices shall not disturb adjacent units or require removing the main bus connectors.
3. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
4. Full-Sized Neutral: Equipped with full-capacity bonding strap for service entrance applications. Mount electrically isolated from enclosure. Do not mount neutral bus in gutter.

I. Conductor Connectors: Suitable for use with conductor material and sizes.

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Terminations shall allow use of 75 deg C rated conductors without derating.
3. Size: Lugs suitable for indicated conductor sizes, with additional gutter space, if required, for larger conductors.
4. Main and Neutral Lugs: Mechanical type, with a lug on the neutral bar for each pole in the panelboard.
5. Ground Lugs and Bus-Configured Terminators: Mechanical type, with a lug on the bar for each pole in the panelboard.
6. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
7. Subfeed (Double) Lugs: Mechanical type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.
8. Gutter-Tap Lugs: Mechanical type suitable for use with conductor material and with matching insulating covers. Locate at same end of bus as incoming lugs or main device.

J. Future Devices: Panelboards or load centers shall have mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices.

1. Percentage of Future Space Capacity: 20 percent.

K. Panelboard Short-Circuit Current Rating: Match existing condition Ratings (Field coordinate).

L. Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals. Assembly listed by an NRTL for 100 percent interrupting capacity. However, if the short-circuit & coordination study requires higher AIC rating, then the contractor shall provide higher rated panels without any additional cost to the owners. It is highly recommended that short-circuit & coordination study be prepared prior to ordering the panels.

1. Panelboards and overcurrent protective devices rated 240 V or less shall have short-circuit ratings as shown on Drawings, but not less than 10,000 A rms symmetrical.
2. Panelboards and overcurrent protective devices rated above 240 V and less than 600 V shall have short-circuit ratings as shown on Drawings, but not less than 14,000 A rms symmetrical.

2.2 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Panelboards shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

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

2.3 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton.
2. East coast Panelboard Inc.
3. Square D; by Schneider Electric.

B. Panelboards: NEMA PB 1, lighting and appliance branch-circuit type.

C. Mains: Circuit breaker or lugs only.

D. Branch Overcurrent Protective Devices: Bolt-on circuit breakers, replaceable without disturbing adjacent units.

E. Doors: Door-in-door construction with concealed hinges; secured with multipoint latch with tumbler lock; keyed alike. Outer door shall permit full access to the panel interior. Inner door shall permit access to breaker operating handles and labeling, but current carrying terminals and bus shall remain concealed.

2.4 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton.
2. East coast Panelboard Inc.
3. Square D; by Schneider Electric.

B. MCCB: Comply with UL 489, with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers:

    a. Inverse time-current element for low-level overloads.
    b. Instantaneous magnetic trip element for short circuits.
    c. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
2. GFCI Circuit Breakers: Single- and double-pole configurations with Class A ground-fault protection (6-mA trip).
3. Subfeed Circuit Breakers: Vertically mounted.
4. MCCB Features and Accessories:

    a. Standard frame sizes, trip ratings, and number of poles.
    b. Breaker handle indicates tripped status.
    c. UL listed for reverse connection without restrictive line or load ratings.
    d. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor materials.
    e. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads.
    f. Communication Capability: Circuit-breaker-mounted communication module with functions and features compatible with power monitoring and control system specified in other section for "Electrical Power Monitoring and Control."
    g. Shunt Trip: 120-V trip coil energized from separate circuit, set to trip at 55 percent of rated voltage.
    h. Undervoltage Trip: Set to operate at 35 to 75 percent of rated voltage without intentional time delay.
    i. Auxiliary Contacts: One, SPDT switch with "a" and "b" contacts; "a" contacts mimic circuit-breaker contacts and "b" contacts operate in reverse of circuit-breaker contacts.
    j. Alarm Switch: Single-pole, normally open contact that actuates only when circuit breaker trips.

k. Multipole units enclosed in a single housing with a single handle or factory assembled to operate as a single unit.
l. Handle Padlocking Device: Fixed attachment, for locking circuit-breaker handle in on or off position.
m. Handle Clamp: Loose attachment, for holding circuit-breaker handle in on position.

2.5 IDENTIFICATION

A. Panelboard Label: Manufacturer's name and trademark, voltage, amperage, number of phases, and number of poles shall be located on the interior of the panelboard door.

B. Breaker Labels: Faceplate shall list current rating, UL and IEC certification standards, and AIC rating.

C. Circuit Directory: Computer-generated circuit directory mounted inside panelboard door with transparent plastic protective cover.

1. Circuit directory shall identify specific purpose with detail sufficient to distinguish it from all other circuits.

2.6 ACCESSORY COMPONENTS AND FEATURES

A. Accessory Set: Include tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify actual conditions with field measurements prior to ordering panelboards to verify that equipment fits in allocated space in, and comply with, minimum required clearances specified in NFPA 70.

B. Receive, inspect, handle, and store panelboards according to NECA 407.

C. Examine panelboards before installation. Reject panelboards that are damaged, rusted, or have been subjected to water saturation.

D. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the Work.

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

3.2 INSTALLATION

A. Coordinate layout and installation of panelboards and components with other construction that penetrates walls or is supported by them, including electrical and other types of equipment, raceways, piping, encumbrances to workspace clearance requirements, and adjacent

surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

B. Comply with NECA 1.

C. Install panelboards and accessories according to NECA 407.

D. Equipment Mounting:
   1. Attach panelboard to the vertical finished or structural surface behind the panelboard.
   2. Comply with requirements for seismic control devices specified in other section for "Seismic Controls for Electrical Systems."

E. Comply with mounting and anchoring requirements specified in other section for "Seismic Controls for Electrical Systems."

F. Mount top of trim 90 inches (2286 mm) above finished floor unless otherwise indicated.

G. Mount panelboard cabinet plumb and rigid without distortion of box.

H. Mount recessed panelboards with fronts uniformly flush with wall finish and mating with back box.

I. Mount surface-mounted panelboards to steel slotted supports 5/8 inch (16 mm) in depth. Orient steel slotted supports vertically.

J. Install overcurrent protective devices and controllers not already factory installed.

   1. Set field-adjustable, circuit-breaker trip ranges.
   2. Tighten bolted connections and circuit breaker connections using calibrated torque wrench or torque screwdriver per manufacturer's written instructions.

K. Install filler plates in unused spaces.

L. Arrange conductors in gutters into groups and bundle and wrap with wire ties after completing load balancing.

3.3 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; install warning signs complying with requirements in other section for "Identification for Electrical Systems."

B. Create a directory to indicate installed circuit loads after balancing panelboard loads; incorporate Owner's final room designations. Obtain approval before installing. Handwritten directories are not acceptable. Install directory inside panelboard door.

C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in other section for "Identification for Electrical Systems."

D. Device Nameplates: Label each branch circuit device in power panelboards with a nameplate complying with requirements for identification specified in other section for "Identification for Electrical Systems."

E. Install warning signs complying with requirements in other section for "Identification for Electrical Systems" identifying source of remote circuit.

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

B. Perform tests and inspections.

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

C. Acceptance Testing Preparation:

1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

D. Tests and Inspections:

1. Perform each visual and mechanical inspection and electrical test for low-voltage air circuit breakers stated in NETA ATS, Paragraph 7.6 Circuit Breakers. Perform optional tests. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
3. Perform the following infrared scan tests and inspections and prepare reports:

a. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each panelboard. Remove front panels so joints and connections are accessible to portable scanner.
b. Instruments and Equipment:

1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.

E. Panelboards will be considered defective if they do not pass tests and inspections.

F. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results, with comparisons of the two scans. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.

B. Set field-adjustable circuit-breaker trip ranges as specified in other section for "Coordination Studies."

C. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes. Prior to making circuit changes to achieve load balancing, inform Architect of effect on phase color coding.

1. Measure loads during period of normal facility operations.
2. Perform circuit changes to achieve load balancing outside normal facility operation schedule or at times directed by the Architect. Avoid disrupting services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
3. After changing circuits to achieve load balancing, recheck loads during normal facility operations. Record load readings before and after changing circuits to achieve load balancing.
4. Tolerance: Maximum difference between phase loads, within a panelboard, shall not exceed 20 percent.

3.6 PROTECTION

A. Temporary Heating: Prior to energizing panelboards, apply temporary heat to maintain temperature according to manufacturer's written instructions.

END OF SECTION 262416

ROOM FINISH SCHEDULE

NUMBER	NAME	COLOR SCHEME	FLOOR	BASE	WALLS			CEILING FINISH	REMARKS
					WALL FINISH	WAINSCOT FINISH	WAINSCOT HEIGHT		
FIRST FLOOR									
101	KINDERGARTEN CLASSROOM	B	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
102	SPECIAL EDUCATION (AS K-2) CLASSROOM	A	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
103	1ST GRADE CLASSROOM	B	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
105	KINDERGARTEN CLASSROOM	A	VCT	WD1	PNT/ETR			PNT/ETR	R51, R53
105A	STORAGE	A	VCT	WD1	PNT/ETR			PNT/ETR	R51, R53
105B	TOILET	G	PT	CT	EPX3	CT	+/-7'-4"	PNT/ETR	R52
106	KINDERGARTEN CLASSROOM	A	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
106A	STORAGE	A	SLR	WD1	PNT/ETR			PNT/ETR	R51
107	1ST GRADE CLASSROOM	C	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
107A	STORAGE	C	SLR	WD1	PNT/ETR			PNT/ETR	R51
108	SPECIAL EDUCATION (LSS K-2) CLASSROOM	B	SLR	WD1/WD2	PNT/ETR			PNT/ETR	R51, R53
108A	STORAGE	B	SLR	WD1	PNT/ETR			PNT/ETR	R51
108B	TOILET	G	PT	CT	EPX3	CT	+/-7'-4"	PNT/ETR	R52
109	PRE-K CLASSROOM	A	SLR	WD1	PNT/ETR			PNT/ETR	R51, R53
109A	STORAGE	A	SLR	WD1	PNT/ETR			PNT/ETR	R51
109B	TOILET	G	PT	CT	EPX3	CT	+/-7'-4"	PNT/ETR	R52
114	PRE-K CLASSROOM	A	VCT	WD1	PNT/ETR			PNT/ETR	R51, R53
114A	TOILET	G	PT	CT	EPX3	CT	+/-7'-4"	PNT/ETR	R52
114B	STORAGE	A	VCT	WD1	PNT/ETR			PNT/ETR	R51
SECOND FLOOR									
217	3RD GRADE CLASSROOM	C	VCT	WD1	PNT/ETR			ACT	R51, R53
219	3RD GRADE CLASSROOM	B	SLR	WD1	PNT/ETR			PNT/ETR	R51, R53
219A	STORAGE	B	SLR	WD1	PNT/ETR			PNT/ETR	R51
223	3RD GRADE CLASSROOM	A	VCT	WD1	PNT/ETR			PNT/ACT	R51, R53, R77
223A	STORAGE	A	VCT	WD1	PNT/ETR			PNT/ETR	R51
225	2ND GRADE CLASSROOM	B	SLR	WD1	PNT/ETR			PNT/ETR	R51, R53
228	2ND GRADE CLASSROOM	B	SLR	WD1	PNT/ETR			PNT/ETR	R51, R53
228A	STORAGE	B	SLR	WD1	PNT/ETR			PNT/ETR	R51, R53

COLOR SCHEME SCHEDULE

COLOR SCHEME A
CLASSROOMS:GREEN
1. WALL PAINT: MAB PAINTS, NO. TUSCAN WHITE
2. ACCENT PAINT: SHERWIN WILLIAMS, NO. SW9031 PRIMAVERA
3. VINYL COMPOSITION TILE, FIELD: ARMSTRONG, NO. 51803 PEARL WHITE
4. VINYL COMPOSITION TILE, ACCENT '1': ARMSTRONG, NO. 51866 LITTLE GREEN APPLE
5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 51947 BASIL GREEN
6. VERTICAL CASEWORK WOOD FINISH: **COLOR TO BE SELECTED BY OWNER.**
7. VINYL BASE: JOHNSONITE, NO. 469 MYSTIFY
SEE ENLARGED FLOOR PLANS FOR FLOOR PATTERNS AND ACCENT WALL COLOR LOCATIONS.

COLOR SCHEME B
CLASSROOMS:BLUE & YELLOW
1. WALL PAINT: MAB PAINTS, NO. TUSCAN WHITE
2. ACCENT PAINT: SHERWIN WILLIAMS, NO. SW6802 JACARANDA
3. VINYL COMPOSITION TILE, FIELD: ARMSTRONG, NO. 51803 PEARL WHITE
4. VINYL COMPOSITION TILE, ACCENT '1': ARMSTRONG, NO. 51927 FIELD GRAY
5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 57509 LEMON LICK
6. VERTICAL CASEWORK WOOD FINISH: **COLOR TO BE SELECTED BY OWNER.**
7. VINYL BASE: JOHNSONITE, NO. 469 MYSTIFY
SEE ENLARGED FLOOR PLANS FOR FLOOR PATTERNS AND ACCENT WALL COLOR LOCATIONS.

COLOR SCHEME C
CLASSROOMS:BLUE & YELLOW
1. WALL PAINT: MAB PAINTS, NO. TUSCAN WHITE
2. ACCENT PAINT: SHERWIN WILLIAMS, NO. SW6903 CHEERFUL
3. VINYL COMPOSITION TILE, FIELD: ARMSTRONG, NO. 51860 SOFT COOL GRAY
4. VINYL COMPOSITION TILE, ACCENT '1': ARMSTRONG, NO. 57517 BODACIOUS BLUE
5. VINYL COMPOSITION TILE, ACCENT '2': ARMSTRONG, NO. 59230 VICTORIA BLUE
6. VERTICAL CASEWORK WOOD FINISH: **COLOR TO BE SELECTED BY OWNER.**
7. VINYL BASE: JOHNSONITE, NO. 262 DRIZZLE
SEE ENLARGED FLOOR PLANS FOR FLOOR PATTERNS AND ACCENT WALL COLOR LOCATIONS.

COLOR SCHEME G
BATHROOMS
1. WALL PAINT: SHERWIN WILLIAMS, NO. SW7029 AGREEABLE GRAY
2. PORCELAIN FLOOR TILE: DALTILE, EVER PORCELIAN, COLOR: EV03 ARCTIC UNPOLISHED
3. CERAMIC WALL TILE, FIELD: DALTILE, SEMI-GLOSS GLAZED TILE, 0182 SUEDE GRAY
4. CERAMIC WALL TILE, ACCENT '1': DALTILE, SEMI-GLOSS GLAZED TILE, Q151 TOTALLY TANGERINE
5. CERAMIC WALL TILE, ACCENT '2': DALTILE, SEMI-GLOSS GLAZED TILE, Q097 ORANGE BURST
6. GROUT COLOR FOR WALLS: MAPEI, COLOR: 00 WHITE
7. GROUT COLOR FOR FLOORS: MAPEI, COLOR: 27 SILVER
SEE ENLARGED PLANS FOR ACCENT WAINSCOT COLOR LOCATIONS.

GENERAL NOTES:
THE FOLLOWING MATERIALS ARE TO BE APPLIED AT ALL LOCATIONS WHERE SPECIFIED UNLESS OTHERWISE NOTED:
1. TACK BOARDS: CLARIDGE FABRICORK, KL498 WINTHROPE
2. ROLLER WINDOW SHADES : MERMET, GREENSCREEN REVIVE, 5% OPEN, COLOR: 0.22 STONE
3. SOLID SURFACE COUNTERTOP & SIDE/BACK SPLASH: CORIAN, COLOR: DEEP CAVIAR
4. CEILING PAINT: SHERWIN WILLIAMS, NO. SW7006 EXTRA WHITE
5. PREVIOUSLY PAINTED WOOD COMPONENTS: DOORS, TRIM, BASE, CHAIR RAIL, CROWN MOULDING, VISUAL DISPLAY TRIM, WINDOW SILLS.: SHERWIN WILLIAMS, NO. SW7068 GRIZZLE GRAY
6. PREVIOUSLY STAINED WOOD COMPONENTS: WOOD DOORS, WOOD TRIM, WOOD BASE, VISUAL DISPLAY BOARD TRIM, ETC.: **COLOR TO MATCH EXISTING AND FIELD VERIFIED BY ARCHITECT/OWNER.**
7. NOT USED.
8. PREVIOUSLY PAINTED METAL TIERED COAT HOOKS & PREVIOUSLY PAINTED STUDENT CUBBIES SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.

NOTES:
A. IF ROOM IS NOT INDICATED TO RECEIVE A FLOOR PATTERN, FIELD COLOR VCT SHALL BE USED.
B. VCT ORIENTATION SHALL BE MATCHED TO EXISTING ADJACENT ROOM.
C. ARCHITECT REQUIRES AN ON-SITE MOCK-UP FOR EACH PAINT COLOR. PROVIDE A MINIMUM 8'x10' AREA, A DOOR FRAME. CONTRACTOR MUST RECEIVE ARCHITECT'S APPROVAL BEFORE ORDERING.
D. VERTICAL AND HORIZONTAL PLANES OF SOFFIT AND BULKHEAD SHALL BE PAINTED TO MATCH THE ADJACENT WALL COLOR, UNLESS OTHERWISE NOTED.
E. COORDINATE ROOM FINISH SCHEDULE AND COLOR SCHEME SCHEDULE WITH DEMO/ALTERATION NOTES.
F. ALL EXPOSED MECHANICAL, PLUMBING, & HVAC COMPONENTS SHALL BE PAINTED THE ADJACENT WALL COLOR. ITEMS INCLUDING BUT NOT LIMITED TO: PIPING, CONDUIT, VENTS, LOUVERS, GRILLES, RADIATORS, RADIATOR COVERS, ELECTRICAL PANELS, METAL ACCESS PANELS, METAL LOCKERS SHALL BE PAINTED ADJACENT WALL COLOR.

ROOM FINISH SCHEDULE LEGEND

FLOOR FINISH
- PT PORCELAIN TILE
- VCT VINYL COMPOSITION TILE
- SLR SEALER ON WOOD FLOOR

FLOOR REMARKS
- R1-R25: NOT USED

BASE FINISH
- CT CERAMIC TILE
- WD1 PAINT ON WOOD BASE, EXISTING
- WD2 PAINT ON WOOD BASE, NEW WOOD

BASE REMARKS
- R26-R50: NOT USED

WALL FINISH
- CT CERAMIC TILE
- EPX EPOXY PAINT
- PNT PAINT

WALL REMARKS
- R51: FOR WALLS RECEIVING NEW WORK, WALL SHALL BE PAINTED FULL EXTENTS FROM TRIM TO TRIM AND TO UNDERSIDE OF EXISTING CROWN MOULDING.
- R52: SEE INTERIOR ELEVATIONS FOR VARYING WALL MATERIALS.
- R53: PROVIDE ACCENT WALL.
- R54-R75: NOT USED

CEILING FINISH
- ACT ACOUSTICAL CEILING TILE
- PNT PAINTED GYPSUM WALLBOARD/PLASTER

CEILING REMARKS
- R76: NOT USED
- R77: SEE REFLECTED CEILING PLANS FOR VARYING CEILING MATERIALS AND HEIGHTS.
- R78-R100: NOT USED

GENERAL NOTES
1. REFER TO SPECIFICATIONS FOR DETAILED DESCRIPTION OF FINISH SYSTEM/TYPES.
2. REFER TO WALL TYPES FOR MASONRY LOCATIONS AND DETAILS.
3. GYPSUM WALLBOARD BULKHEADS AND SOFFITS SHALL BE PAINTED.
4. ALL HOLLOW METAL DOOR AND FRAMES, INTERIOR AND EXTERIOR, SHALL BE PAINTED.
5. ALL INTERIOR FERROUS METAL SHALL BE PAINTED INCLUDING LINTELS, RAILINGS, GRILLES AND LOUVERS. (DOES NOT INCLUDE FACTORY OR PRE-FINISHED ITEMS)
6. SEE I7 DRAWINGS FOR MATERIAL TRANSITIONS & FLOOR PATTERN PLANS.
7. ETR = EXISTING TO REMAIN
8. EXIST = EXISTING

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100% DESIGN SUBMISSION 1/22/2020

NO.	DATE	REVISION
10		
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1	2/20/2020	ADDENDUM # 1

SCHOOL & LOCATION
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DEED ADDRESS: 200 WOLF ST, PHILADELPHIA, PA 19148-3345

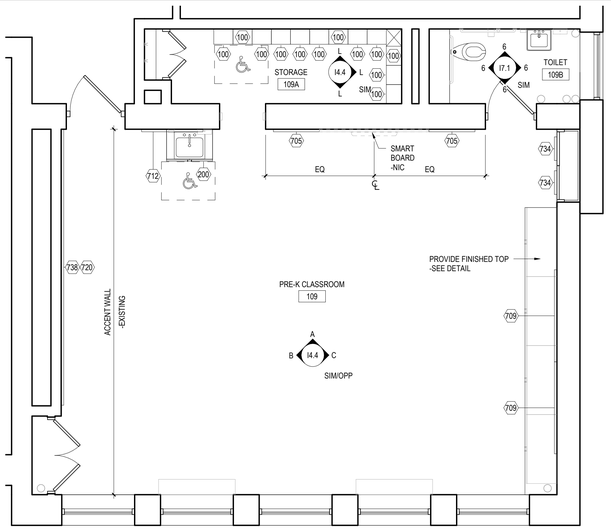
PROJECT TITLE
CLASSROOM MODERNIZATION

DRAWING TITLE
ROOM FINISH SCHEDULE

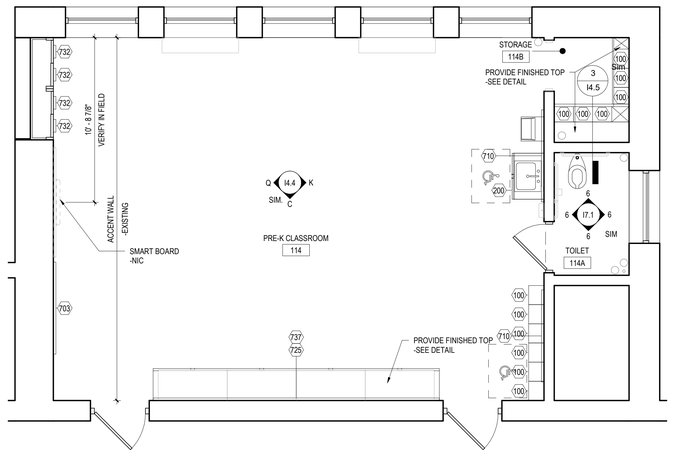
LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-007C OF 2019 / 20
B-009C OF 2019 / 20

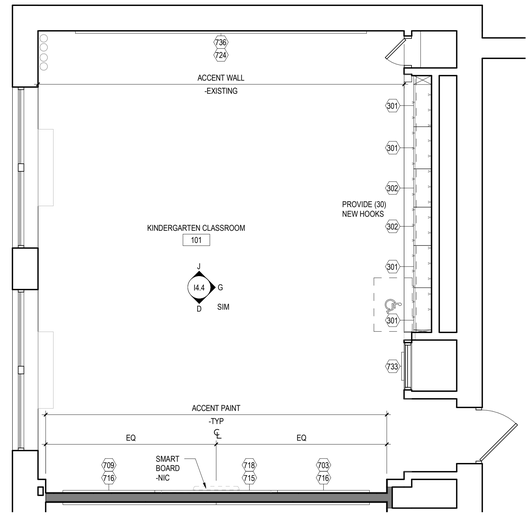
DRAWING NO.
A6.1



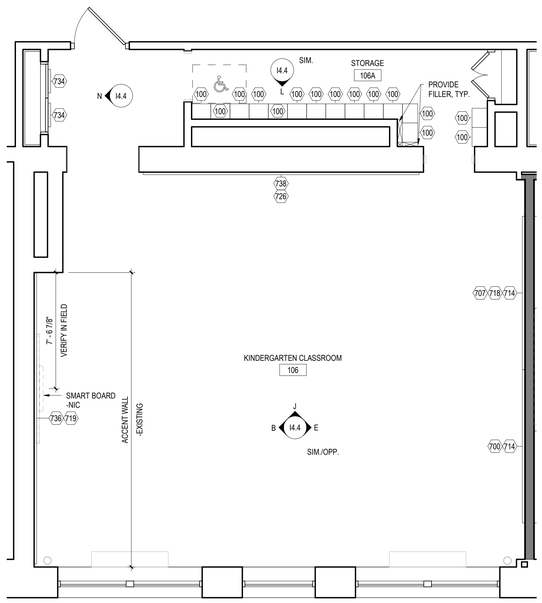
1 I4.1 PRE-KINDERGARTEN - ROOM 109
1/4" = 1'-0"



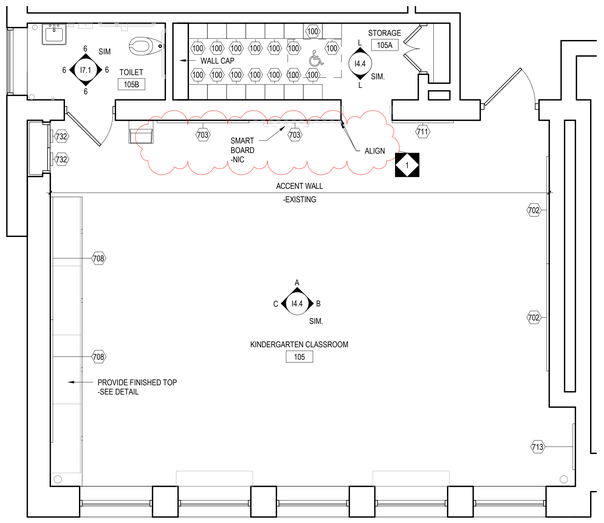
2 I4.1 PRE-KINDERGARTEN - ROOM 114
1/4" = 1'-0"



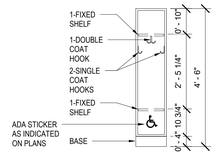
3 I4.1 KINDERGARTEN - ROOM 101
1/4" = 1'-0"



4 I4.1 KINDERGARTEN - ROOM 106
1/4" = 1'-0"



5 I4.1 KINDERGARTEN - ROOM 105
1/4" = 1'-0"



6 I4.1 SINGLE STUDENT LOCKER ELEVATION - TYPICAL
1/2" = 1'-0"

I4.1 - GENERAL CASEWORK AND EQUIPMENT SCHEDULE

NO	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS
100	OPEN STUDENT WARDROBE W/(1) DOUBLE HOOK & (2) SINGLE HOOKS EACH. MODIFIED TO INCLUDE (2) FIXED SHELVES. SEE CUBBIE DETAIL.	SEE SPECIFICATIONS	--	15"W x 12"D x 54"H
200	2-DOOR SINK BASE CABINET	SEE SPECIFICATIONS	--	36"W x 24"D x 26"H
301	OPEN WALL CABINET	SEE SPECIFICATIONS	--	33"W x 14"D x 30"H
302	OPEN WALL CABINET	SEE SPECIFICATIONS	--	30"W x 14"D x 30"H
700	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 4'-0"H
702	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	7'-0"W x 4'-0"H
703	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 4'-0"H
705	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	3'-0"W x 4'-0"H
707	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 4'-0"H
708	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	8'-0"W x 4'-0"H
709	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 4'-0"H
710	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 2'-0"H
711	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	4'-0"W x 4'-0"H
712	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	4'-0"W x 2'-0"H
713	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	3'-0"W x 4'-0"H
714	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 1'-0"H
715	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	8'-0"W x 1'-0"H
716	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 1'-0"H
718	TACK STRIP	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	WIDTH TO FIT x 2"H
719	FRAMELESS MARKERBOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	19'-0"W (VIF) x 4'-0"H (VIF)
720	FRAMELESS MARKERBOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 4'-0"H (VIF)
724	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	19'-0"W (VIF) x 4'-0"H (VIF)
725	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	19'-0"W (VIF) x 4'-0"H (VIF)
726	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 4'-0"H (VIF)
732	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	1'-0"W (VIF) x 3'-9"H (VIF)
733	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	1'-10"W (VIF) x 3'-4"H (VIF)
734	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	1'-7"W (VIF) x 3'-9"H (VIF)
736	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	19'-0"W (VIF) x 1'-0"H (VIF)
737	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	19'-0"W (VIF) x 1'-0"H (VIF)
738	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 1'-0"H (VIF)

PRE-K & KINDERGARTEN MOUNTING HEIGHT SCHEDULE

MARKER BOARD	2'-0" AFF TO BOTTOM EDGE
TACK BOARD	2'-0" AFF TO BOTTOM EDGE
BASE CABINETS	2'-2" AFF TO TOP OF COUNTERTOP
WALL CABINETS	SEE TYPICAL SECTION DETAIL
SMART-BOARD	CENTERED ON THE WALL

NOTE: WHERE NEW MARKER BOARD OR TACK BOARD IS BEING MOUNTED NEXT TO OR ON THE SAME WALL AS AN EXISTING TACK BOARD OR MARKER BOARD MATCH EXISTING HEIGHT.

GENERAL NOTES TO APPLY TO ALL I4 DRAWINGS

1. MOUNTING HEIGHT SCHEDULE IS APPLICABLE TO MOST ROOMS. IN INSTANCE WHERE NOTE/DETAILS ON DRAWINGS DO NOT COINCIDE WITH THE SCHEDULE. THE DRAWINGS TAKE PRECEDENCE.
2. ALL BASE CABINETS SHALL RECEIVE A CONTINUOUS 1-1/8" THICK SIMULATED STONE COUNTERTOP WITH A 4"H BACKSPLASH UNLESS NOTED OTHERWISE. THE DEPTH OF THE COUNTERTOP SHALL EXTEND 3/4" PAST THE DEPTH OF THE BASE CABINET.
3. COUNTERTOPS THAT RETURN INTO A WALL(S) SHALL RECEIVE BACKSPLASH THAT WRAPS CORNER ALONG WALL(S).
4. WHERE COLUMNS, WINDOWS OR OTHER BUILDING COMPONENTS CONFLICT WITH CASEWORK DIMENSIONAL REQUIREMENTS. FIELD VERIFY DIMENSIONS AND PROVIDE CUSTOM UNIT TO ALLOW PROPER FITTING.
5. ALL EXPOSED ENDS OF CASEWORK SHALL RECEIVE FINISHED END PANELS.
6. COLOR FOR INTERIOR OF OPEN CABINETS SHALL MATCH EXTERIOR COLOR.
7. ALL VISUAL DISPLAY AREAS (MARKER BOARDS AND/OR TACK BOARDS) 10'-0"W OR LONGER SHALL RECEIVE 2"H MAP RAIL THAT SPANS FROM VERTICAL EDGE TO VERTICAL EDGE.
8. PROVIDE WOOD BLOCKING IN METAL STUD WALLS, PER MANUFACTURER'S RECOMMENDATIONS, TO RECEIVE THE SMART BOARD WALL BRACKET.
9. IN ROOMS RECEIVING RESILIENT BASE, ADHERE TO ALL WALLS, BASE CABINET TOE KICKS, AND EXPOSED END PANELS. REFER TO SPECIFICATIONS FOR LOCATION OF 4" AND 6" BASE.
10. SEE REFLECTED CEILING PLANS FOR LOCATION OF WINDOW TREATMENTS.
11. STAINLESS STEEL SINKS, FAUCETS, AND BUBBLERS SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR.
12. TELEPHONE UNITS AND SYSTEMS ARE NOT IN CONTRACT.
13. COORDINATE ALL LARGE SCALE PLANS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
14. NIC = NOT IN CONTRACT
15. WHEN DESCRIPTION AND MODEL NUMBER IN CASEWORK AND EQUIPMENT SCHEDULE CONFLICT, THE DESCRIPTION TAKES PRECEDENCE.
16. OPP = OPPOSITE HAND.
17. **COORDINATE ALL CASEWORK LAYOUTS AND VISUAL DISPLAY LAYOUTS WITH INTERIOR ELEVATIONS. IN INSTANCE WHERE FLOOR PLAN/ELEVATIONS DO NOT COINCIDE, FLOOR PLAN LAYOUT TAKES PRECEDENCE.**
18. **VISUAL DISPLAY BOARD LAYOUT AND DIMENSIONS VARY - VERIFY IN FIELD ALL DIMENSIONS AND LAYOUTS PRIOR TO FABRICATION OR INSTALLATION.**
19. OWNER PROVIDED, CONTRACTOR INSTALLED VISUAL DISPLAY BOARDS SHALL ALL BE VERIFIED IN FIELD, PRIOR TO FABRICATION & INSTALLATION.

THE SCHOOL DISTRICT OF PHILADELPHIA

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100% DESIGN SUBMISSION
1/22/2020

NO.	DATE	REVISION
10		
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1	2/20/2020	ADDENDUM # 1

SCHOOL & LOCATION
GEORGE SHARSWOOD ELEMENTARY SCHOOL

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DEED ADDRESS: 200 WOLF ST, PHILADELPHIA, PA 19148-3345

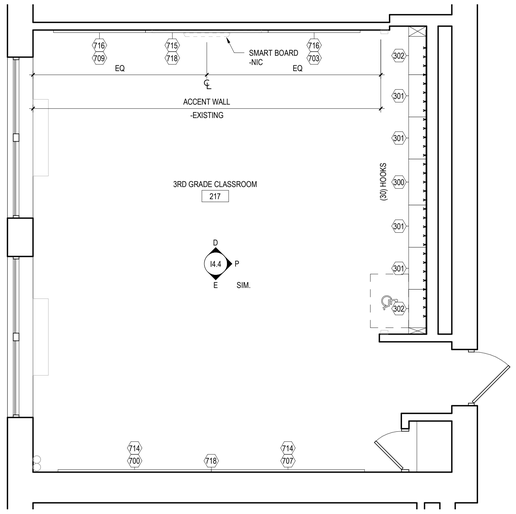
PROJECT TITLE
CLASSROOM MODERNIZATION

DRAWING TITLE
LARGE SCALE LAYOUTS - PRE-K & KINDERGARTEN

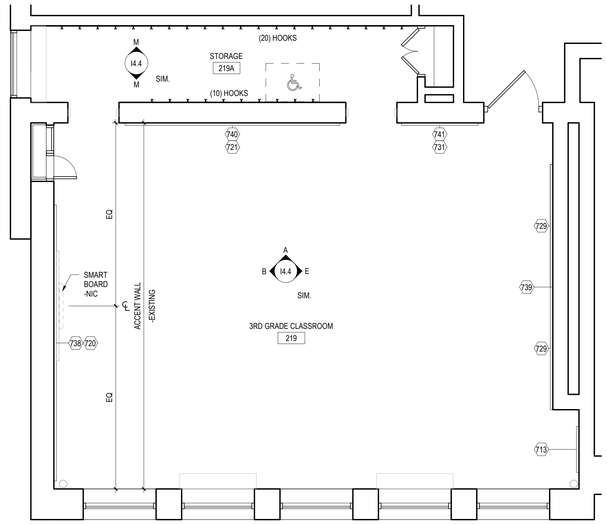
LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-007C OF 2019 / 20
B-009C OF 2019 / 20

DRAWING NO.
I4.1



1 THIRD GRADE - ROOM 217
I4.3 1/4" = 1'-0"



2 THIRD GRADE - ROOM 219
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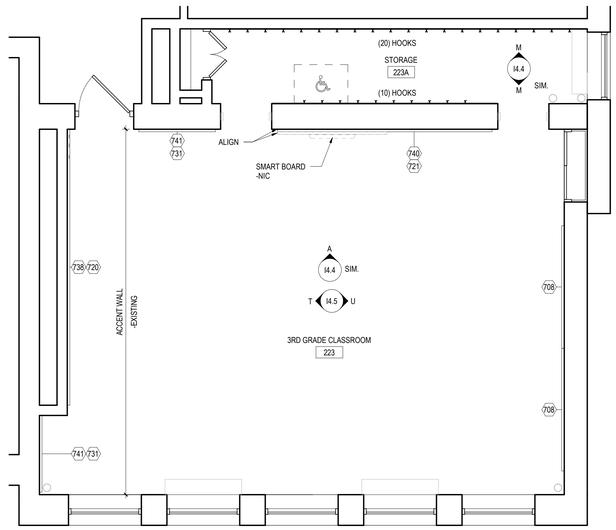
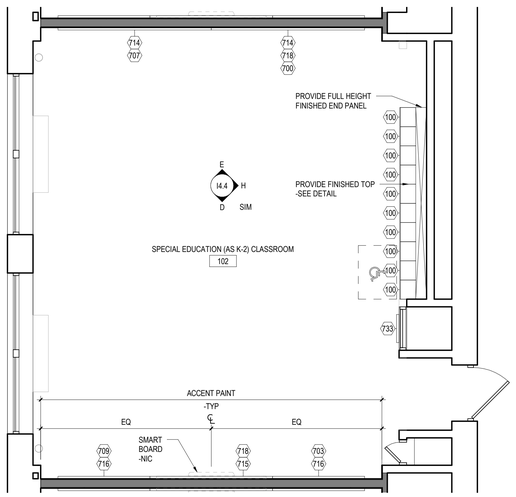
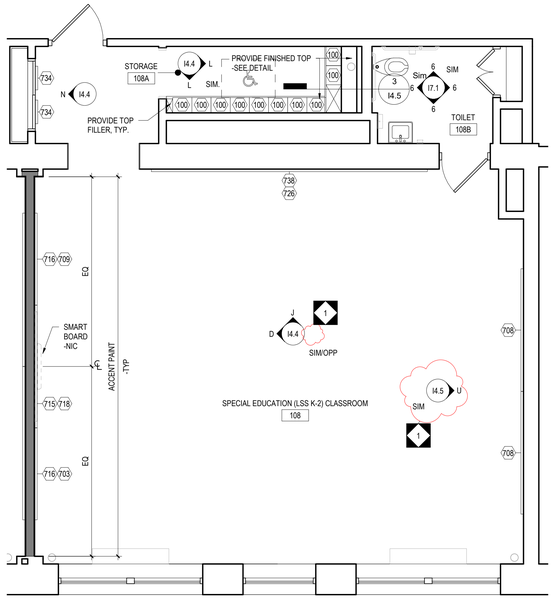


3 THIRD GRADE - ROOM 223
I4.3 1/4" = 1'-0"



4 SPECIAL EDUCATION - ROOM 102
I4.3 1/4" = 1'-0"



5 SPECIAL EDUCATION - ROOM 108
I4.3 1/4" = 1'-0"

GRADE 1-3 MOUNTING HEIGHT SCHEDULE

MARKER BOARD	2'-6" AFF TO BOTTOM EDGE
TACK BOARD	2'-6" AFF TO BOTTOM EDGE
BASE CABINETS	2'-6" AFF TO TOP OF COUNTERTOP
WALL CABINETS	SEE TYPICAL SECTION DETAIL
SMART-BOARD	CENTERED ON THE WALL
NOTE: WHERE NEW MARKER BOARD OR TACK BOARD IS BEING MOUNTED NEXT TO OR ON THE SAME WALL AS AN EXISTING TACK BOARD OR MARKER BOARD MATCH EXISTING HEIGHT.	

I4.3 - GENERAL CASEWORK AND EQUIPMENT SCHEDULE

NO	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS
100	OPEN STUDENT WARDROBE W/(1) DOUBLE HOOK & (2) SINGLE HOOKS EACH. MODIFIED TO INCLUDE (2) FIXED SHELVES. SEE CUBBIE DETAIL.	SEE SPECIFICATIONS	--	15"W x 12"D x 54"H
300	OPEN WALL CABINET	SEE SPECIFICATIONS	--	36"W x 14"D x 30"H
301	OPEN WALL CABINET	SEE SPECIFICATIONS	--	33"W x 14"D x 30"H
302	OPEN WALL CABINET	SEE SPECIFICATIONS	--	30"W x 14"D x 30"H
700	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 4'-0"H
703	MARKERBOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 4'-0"H
707	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 4'-0"H
708	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	8'-0"W x 4'-0"H
709	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 4'-0"H
713	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	3'-0"W x 4'-0"H
714	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	10'-0"W x 1'-0"H
715	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	8'-0"W x 1'-0"H
716	TACK BOARD W/ALUMINUM FRAME	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	6'-0"W x 1'-0"H
718	TACK STRIP	OWNER SUPPLIED, GC INSTALLED	SEE SPECIFICATIONS	WIDTH TO FIT x 2"H
720	FRAMELESS MARKERBOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 4'-0"H (VIF)
721	FRAMELESS MARKERBOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	14'-0"W (VIF) x 4'-0"H (VIF)
726	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 4'-0"H (VIF)
729	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	8'-0"W (VIF) x 4'-0"H (VIF)
731	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	5'-0"W (VIF) x 4'-0"H (VIF)
733	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	1'-10"W (VIF) x 3'-4"H (VIF)
734	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	1'-7"W (VIF) x 3'-9"H (VIF)
738	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	18'-0"W (VIF) x 1'-0"H (VIF)
739	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	16'-0"W (VIF) x 1'-0"H (VIF)
740	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	14'-0"W (VIF) x 1'-0"H (VIF)
741	FRAMELESS TACK BOARD INFILL	SEE SPECIFICATIONS	SEE SPECIFICATIONS	5'-0"W (VIF) x 1'-0"H (VIF)

THE SCHOOL DISTRICT OF PHILADELPHIA

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100% DESIGN SUBMISSION
1/22/2020

NO.	DATE	REVISION
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1	2/20/2020	ADDENDUM # 1

SCHOOL & LOCATION
GEORGE SHARSWOOD ELEMENTARY SCHOOL

MAILING ADDRESS: 2300 S 2ND STREET, PHILADELPHIA, PA 19148
DEED ADDRESS: 200 WOLF ST, PHILADELPHIA, PA 19148-3345

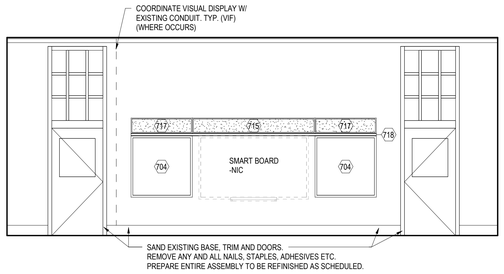
PROJECT TITLE
CLASSROOM MODERNIZATION

DRAWING TITLE
LARGE SCALE LAYOUTS - THIRD GRADE & SPECIAL EDUCATION

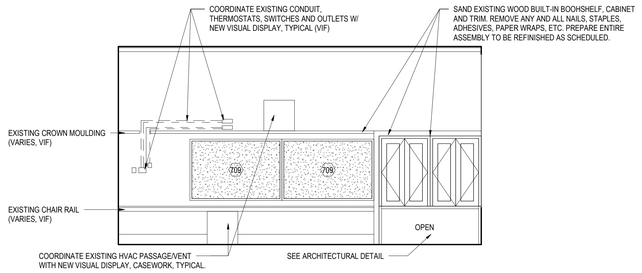
LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-007C OF 2019 / 20
B-009C OF 2019 / 20

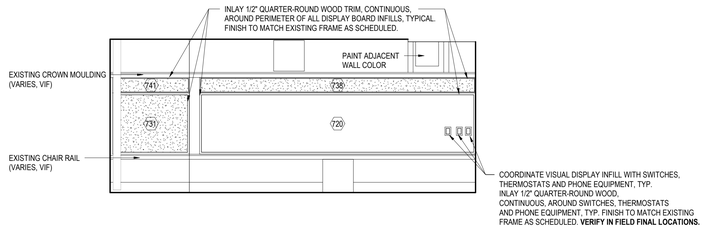
DRAWING NO.
I4.3



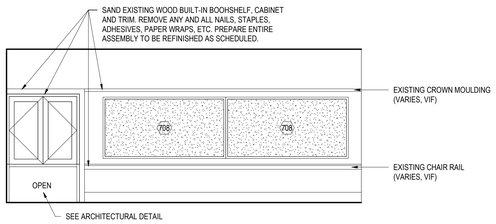
R 14.5 TEACHING WALL - ROOM 228
1/4" = 1'-0"



S 14.5 EXISTING BUILT-IN DISPLAY WALL - ROOM 228
1/4" = 1'-0"



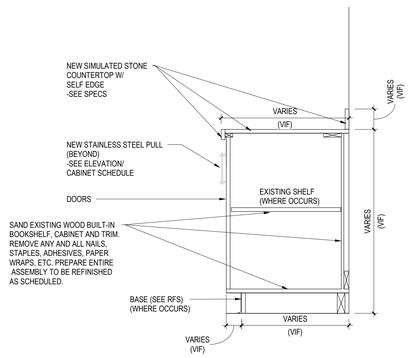
T 14.5 SECONDARY TEACHING WALL - ROOM 223
1/4" = 1'-0"



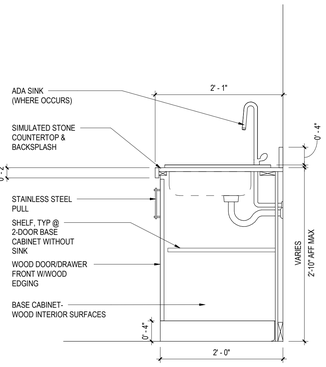
U 14.5 EXISTING BUILT-IN DISPLAY WALL - ROOM 223 & DISPLAY WALL - ROOM 108
1/4" = 1'-0"

PRE-K & KINDERGARTEN MOUNTING HEIGHT SCHEDULE	
MARKER BOARD	2'-0" AFF TO BOTTOM EDGE
TACK BOARD	2'-0" AFF TO BOTTOM EDGE
BASE CABINETS	2'-2" AFF TO TOP OF COUNTERTOP
WALL CABINETS	SEE TYPICAL SECTION DETAIL
SMART-BOARD	CENTERED ON THE WALL
NOTE: WHERE NEW MARKER BOARD OR TACK BOARD IS BEING MOUNTED NEXT TO OR ON THE SAME WALL AS AN EXISTING TACK BOARD OR MARKER BOARD MATCH EXISTING HEIGHT.	

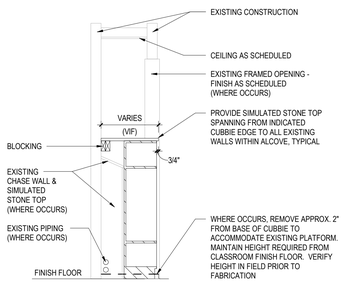
GRADE 1-3 MOUNTING HEIGHT SCHEDULE	
MARKER BOARD	2'-6" AFF TO BOTTOM EDGE
TACK BOARD	2'-6" AFF TO BOTTOM EDGE
BASE CABINETS	2'-6" AFF TO TOP OF COUNTERTOP
WALL CABINETS	SEE TYPICAL SECTION DETAIL
SMART-BOARD	CENTERED ON THE WALL
NOTE: WHERE NEW MARKER BOARD OR TACK BOARD IS BEING MOUNTED NEXT TO OR ON THE SAME WALL AS AN EXISTING TACK BOARD OR MARKER BOARD MATCH EXISTING HEIGHT.	



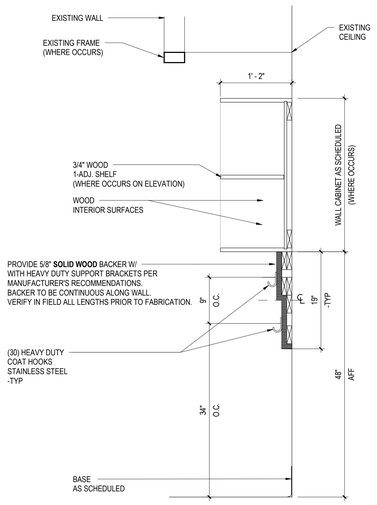
1 14.5 EXISTING WOOD 2-DOOR BASE CABINET DETAIL
1" = 1'-0"



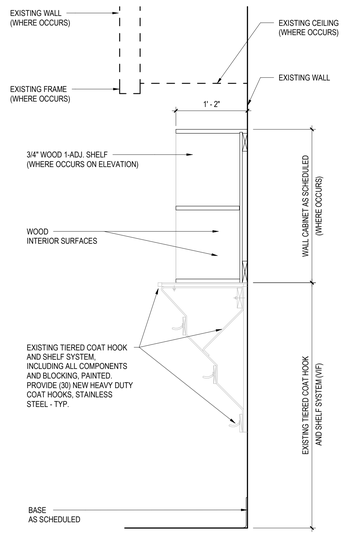
2 14.5 NEW WOOD ADA SINK BASE DETAIL
1" = 1'-0"



3 14.5 ALCOVE CUBBIE SECTION DETAIL - TYPICAL
1/2" = 1'-0"



4 14.5 NEW WOOD WALL CABINET & COAT HOOK DETAIL
1" = 1'-0"



5 14.5 WOOD WALL CABINET & EXISTING 3-TIER SHELF DETAIL
1" = 1'-0"

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100% DESIGN SUBMISSION
1/22/2020

NO.	DATE	REVISION
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1	2/20/2020	ADDENDUM # 1

SCHOOL & LOCATION
GEORGE SHARSWOOD ELEMENTARY SCHOOL

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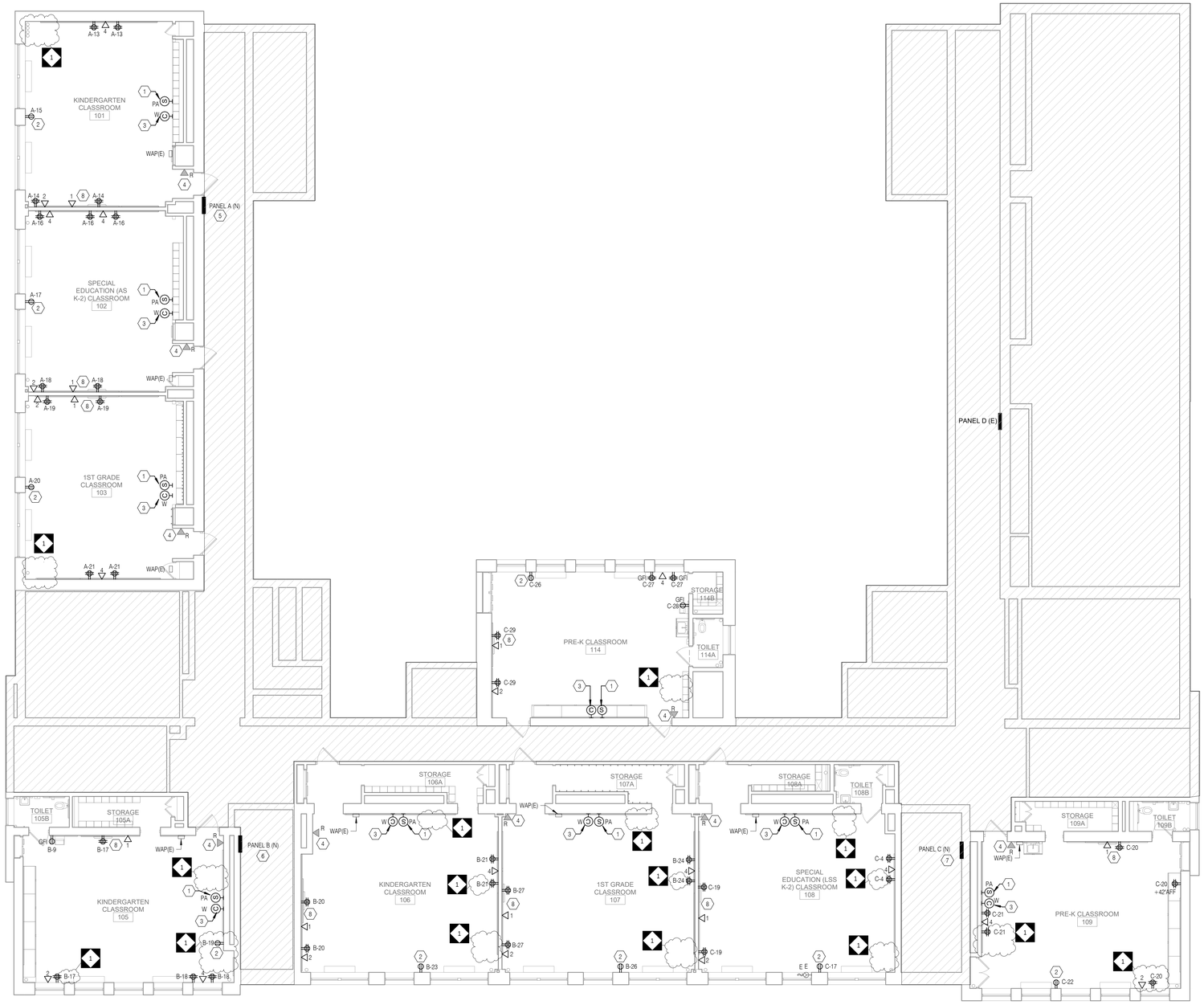
PROJECT TITLE
CLASSROOM MODERNIZATION

DRAWING TITLE
INTERIOR ELEVATIONS (CONT.) & CASEWORK DETAILS

LOCATION NO.	FILE NO.
DRAWN BY	CHECKED BY

B-007C OF 2019 / 20
B-009C OF 2019 / 20

DRAWING NO.
14.5



1 E2.1 ELECTRICAL FIRST FLOOR POWER PLAN
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO DRAWING E0.1 FOR ELECTRICAL GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS, ELEVATION & DETAILS FOR EXACT LOCATION OF ELECTRICAL DEVICES.
3. ALL RECEPTACLES, TELE/DATA OUTLETS WITH ASSOCIATED WIRING, CONDUIT, RACEWAYS, ETC SHALL BE SURFACE MOUNTED ON EXISTING WALLS AND FLUSH MOUNTED ON NEW WALLS. REFER TO ARCHITECTUAL DRAWINGS FOR WALL TYPES.
4. ALL THE RECEPTACLES AND DATA OUTLETS WITHIN THE SCOPE OF WORK AREAS THAT ARE EXISTING TO REMAIN SHALL BE PROVIDED WITH NEW DEVICES. NEW DEVICE COLOR SHALL BE WHITE.
5. ALL NEW 15- AND 20-AMPERE, 125-AND 250-VOLT NONLOCKING TYPE RECEPTACLES SHALL BE TAMPER RESISTANT AS PER NEC 406.12.
6. ELECTRICAL CONTRACTOR TO RUN ALL NEW SURFACE MOUNTED CONDUITS AND RACEWAYS IN CORNERS OF EACH CLASSROOM TO AVOID CONFLICT WITH DISPLAY BOARDS AND OTHER CLASSROOM FURNISHINGS.

KEYED SHEET NOTES

1. NEW LOCATION OF PA SPEAKER. COORDINATE IN FIELD FOR EXACT LOCATION AND IF REQUIRE EXTEND WIRING/CONDUIT TO NEW PA SPEAKER LOCATION.
2. PROVIDE NEW TAMPER RESISTANT DEDICATED DUPLEX RECEPTACLE FOR LAPTOP CART CHARGING STATION.
3. PROVIDE NEW BATTERY OPERATED WIRELESS CLOCK. COORDINATE WITH ARCHITECT FOR EXACT MOUNTING HEIGHT.
4. CONTRACTOR TO FIELD TEST FUNCTIONALITY OF EXISTING TELEPHONE OUTLETS AND REPLACE AS REQUIRED. NEW TO MATCH EXISTING IN KIND MAKE AND TYPE.
5. NEW PANELBOARD 'A'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
6. NEW PANELBOARD 'B'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
7. NEW PANELBOARD 'C'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
8. CONTRACTOR TO COORDINATE IN FIELD FOR EXACT LOCATION OF RECEPTACLE AND DATA OUTLET SERVING THE INTERACTIVE SMARTBOARD TO AVOID CONFLICT WITH BASE PLATE. REFER O ARCHITECTURAL DRAWING A5.1 DETAIL #1 AND #2 FOR EXACT LOCATION AND MOUNTING HEIGHT.

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REGISTERED
CONRADO D. DELA CRUZ
ENGINEER
No. PE089048

CONRAD DELA CRUZ
STATE AND LICENSE NO: PE089048

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100% DESIGN SUBMISSION
1/22/2020

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1	02/20/2020	ADDENDUM #1

SCHOOL & LOCATION
GEORGE SHARSWOOD ELEMENTARY SCHOOL

2300 S 2ND STREET, PHILADELPHIA, PA 19148

PROJECT TITLE
CLASSROOM MODERNIZATION

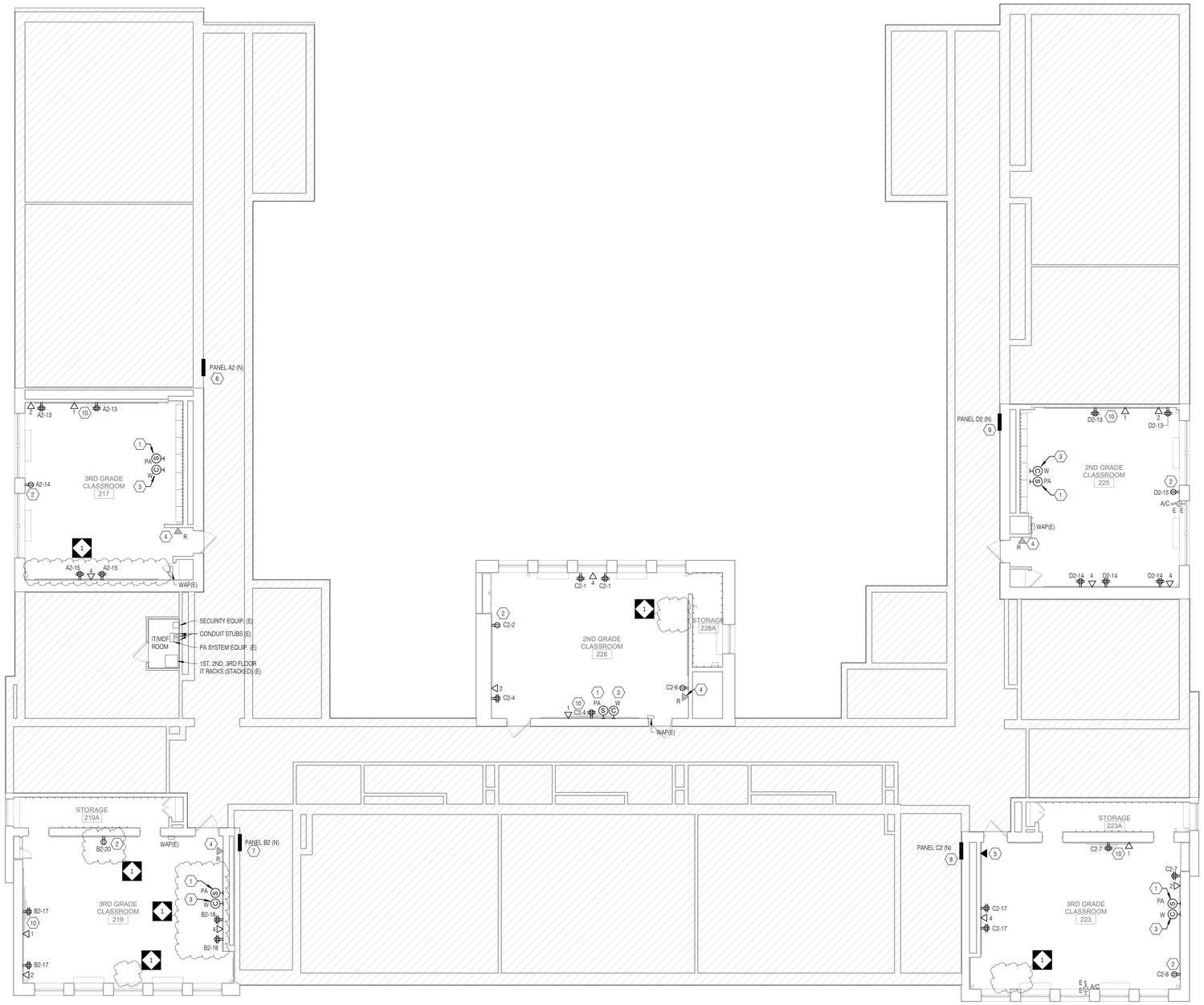
DRAWING TITLE
ELECTRICAL FIRST FLOOR POWER AND TECHNOLOGY PLAN

LOCATION NO.	FILE NO.
DRAWN BY: NRS	CHECKED BY: DAT

B-039C OF 2018 / 19
B-040C OF 2018 / 19

DRAWING NO.
E2.1

SHEET OF 19



1 E2.2 ELECTRICAL SECOND FLOOR POWER PLAN
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO DRAWING E0.1 FOR ELECTRICAL GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS, ELEVATION & DETAILS FOR EXACT LOCATION OF ELECTRICAL DEVICES.
3. ALL RECEPTACLES, TELE/DATA OUTLETS WITH ASSOCIATED WIRING, CONDUIT, RACEWAYS, ETC SHALL BE SURFACE MOUNTED ON EXISTING WALLS AND FLUSH MOUNTED ON NEW WALLS. REFER TO ARCHITECTUAL DRAWINGS FOR WALL TYPES.
4. ALL THE RECEPTACLES AND DATA OUTLETS WITHIN THE SCOPE OF WORK AREAS THAT ARE EXISTING TO REMAIN SHALL BE PROVIDED WITH NEW DEVICES. NEW DEVICE COLOR SHALL BE WHITE.
5. ALL NEW 15- AND 20-AMPERE, 125-AND 250-VOLT NONLOCKING TYPE RECEPTACLES SHALL BE TAMPER RESISTANT, AS PER NEC 406-12.
6. ELECTRICAL CONTRACTOR TO RUN ALL NEW SURFACE MOUNTED CONDUITS AND RACEWAYS IN CORNERS OF EACH CLASSROOM TO AVOID CONFLICT WITH DISPLAY BOARDS AND OTHER CLASSROOM FURNISHINGS.

KEYED SHEET NOTES

1. NEW LOCATION OF PA SPEAKER. COORDINATE IN FIELD FOR EXACT LOCATION AND IF REQUIRE EXTEND WIRING/CONDUIT TO NEW PA SPEAKER LOCATION.
2. PROVIDE NEW TAMPER RESISTANT DEDICATED DUPLEX RECEPTACLE FOR LAPTOP CART CHARGING STATION.
3. PROVIDE NEW BATTERY OPERATED WIRELESS CLOCK. COORDINATE WITH ARCHITECT FOR EXACT MOUNTING HEIGHT.
4. CONTRACTOR TO FIELD TEST FUNCTIONALITY OF EXISTING TELEPHONE OUTLETS AND REPLACE AS REQUIRED. NEW TO MATCH EXISTING IN KIND MAKE AND TYPE.
5. CONTRACTOR TO PROVIDE NEW TELEPHONE OUTLET. SDP TO PROVIDE NEW WALL MOUNTED TELEPHONE.
6. NEW PANELBOARD 'A2'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
7. NEW PANELBOARD 'B2'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
8. NEW PANELBOARD 'C2'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
9. NEW PANELBOARD 'D2'. CONTRACTOR TO UTILIZE, INTERCEPT AND EXTEND ALL ACTIVE FEEDER AND BRANCH CIRCUIT WIRING/CONDUIT OF SAME SIZE VIA NEW JUNCTION BOX OR PULL BOX AND CONNECT IT TO THE NEW PANELBOARD.
10. CONTRACTOR TO COORDINATE IN FIELD FOR EXACT LOCATION OF RECEPTACLE AND DATA OUTLET SERVING THE INTERACTIVE SMARTBOARD TO AVOID CONFLICT WITH BASE PLATE. REFER O ARCHITECTURAL DRAWING A5.1 DETAIL #1 AND #2 FOR EXACT LOCATION AND MOUNTING HEIGHT.

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1	02/20/2020	ADDENDUM #1

SCHOOL & LOCATION
GEORGE SHARSWOOD ELEMENTARY SCHOOL

2300 S 2ND STREET, PHILADELPHIA, PA 19148

PROJECT TITLE
CLASSROOM MODERNIZATION

DRAWING TITLE
ELECTRICAL SECOND FLOOR POWER AND TECHNOLOGY PLAN

LOCATION NO.	FILE NO.
DRAWN BY: NRS	CHECKED BY: DAT

B-039C OF 2018 / 19
B-040C OF 2018 / 19

DRAWING NO.
E2.2

PANELBOARD: C (N)

LOCATION: 1ST FLOOR CORRIDOR C
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
PRINC TOILET RM (E)	20 A	1	1	0.6	0.6			2	1	20 A	MAIN OFF (E)
PRINC OFFICE (E)	20 A	1	3			0.6	0.7	4	1	20 A	**REC CLASSROOM 108**
RM 118 LGTS (E)	20 A	1	5	0.4	0.0			6	1	20 A	**SPARE**
HALLWAY LGTS (E)	20 A	1	7			0.6	0.6	8	1	20 A	MAIN OFF. REC (E)
EXISTING LOAD	20 A	1	9	0.4	0.8			10	1	20 A	MAIN OFF COPIER (E)
EXISTING LOAD	20 A	1	11			0.6	0.6	12	1	20 A	EXISTING LOAD
A/C RM 108 (E)	20 A	2	13	1.2	1.2			14	2	20 A	EXISTING LOAD
			15			1.2	1.2	16			
REC LAPTOP CHARGING...	20 A	1	17	0.2	0.5			18	1	20 A	**LTGS CLASSROOM 114**
REC CLASSROOM 108	20 A	1	19			0.7	1.1	20	1	20 A	**REC CLASSROOM 109**
REC CLASSROOM 109	20 A	1	21	0.7	0.2			22	1	20 A	**REC LAPTOP CHARGING...**
SPARE	20 A	1	23			0.0	0.5	24	1	20 A	**LTGS CLASSROOM 108**
LGTS CLASSROOM 109	20 A	1	25	0.5	0.2			26	1	20 A	**REC LAPTOP CHARGING...**
REC CLASSROOM 114	20 A	1	27			0.7	0.2	28	1	20 A	**GFI REC WATER COOLER...**
REC CLASSROOM 114	20 A	1	29	0.7	0.0			30	1	20 A	**SPARE**
		TOTAL LOAD:		9 kVA		11 kVA					
		TOTAL AMPS:		78 A		88 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	1499 VA	125.00%	1874 VA		
				CONNECTED LOAD:	21699 VA
				ESTIMATED DEMAND:	22074 VA
				CONNECTED CURRENT:	90 A
				EST. DEMAND CURRENT:	92 A

NOTES:

PANELBOARD: B (N)

LOCATION: 1ST FLOOR CORRIDOR B
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
TEACHERS RM REC (E)	20 A	1	1	0.6	0.6			2	1	20 A	NURSES OFFICE REC (E)
TEACHERS RM LGTS (E)	20 A	1	3			0.6	0.6	4	1	20 A	NURSES OFFICE LGTS(E)
LGTS CLASSROOM 105	20 A	1	5	0.5	0.6			6	1	20 A	HALLWAY LGTS (E)
LGTS CLASSROOM 106	20 A	1	7			0.5	0.5	8	1	20 A	**LGTS CLASSROOM 107**
GFI REC WATER COOLER...	20 A	1	9	0.2	1.2			10	2	20 A	A/C NURSES OFFICE (E)
EXISTING LOAD	20 A	1	11			0.6	1.2	12			
EXISTING LOAD	20 A	1	13	0.6	0.6			14	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	15			0.6	0.6	16	1	20 A	EXISTING LOAD
REC CLASSROOM 105	20 A	1	17	0.7	0.7			18	1	20 A	**REC CLASSROOM 105**
REC LAPTOP CHARGING...	20 A	1	19			0.2	0.7	20	1	20 A	**REC CLASSROOM 106**
REC CLASSROOM 106	20 A	1	21	0.7	0.0			22	1	20 A	**SPARE**
REC LAPTOP CHARGING...	20 A	1	23			0.2	0.7	24	1	20 A	**REC CLASSROOM 107**
SPARE	20 A	1	25	0.0	0.2			26	1	20 A	**REC LAPTOP CHARGING...**
REC CLASSROOM 107	20 A	1	27			0.7	0.0	28	1	20 A	SPARE
SPARE	20 A	1	29	0.0	0.0			30	1	20 A	SPARE
		TOTAL LOAD:		7 kVA		8 kVA					
		TOTAL AMPS:		60 A		64 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	1469 VA	125.00%	1836 VA		
				CONNECTED LOAD:	14909 VA
				ESTIMATED DEMAND:	15276 VA
				CONNECTED CURRENT:	62 A
				EST. DEMAND CURRENT:	64 A

NOTES:

PANELBOARD: A (N)

LOCATION: 1ST FLOOR CORRIDOR A
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
STORE RM REC (E)	20 A	1	1	0.6	0.6			2	1	20 A	LIBRARY REC (E)
LGTS CLASSROOM 101	20 A	1	3			0.4	0.4	4	1	20 A	**LGTS CLASSROOM 102**
HALL LIGHTS (E)	20 A	1	5	0.6	0.4			6	1	20 A	**LGTS CLASSROOM 103**
EXISTING LOAD	20 A	1	7			0.6	0.6	8	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	9	0.6	0.6			10	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	11			0.6	0.6	12	1	20 A	EXISTING LOAD
REC CLASSROOM 101	20 A	1	13	0.7	0.7			14	1	20 A	**REC CLASSROOM 101**
REC LAPTOP CHARGING...	20 A	1	15			0.2	1.1	16	1	20 A	**REC CLASSROOM 102**
REC LAPTOP CHARGING...	20 A	1	17	0.2	0.7			18	1	20 A	**REC CLASSROOM 102**
REC CLASSROOM 103	20 A	1	19			0.7	0.2	20	1	20 A	**REC LAPTOP CHARGING...**
REC CLASSROOM 103	20 A	1	21	0.7	0.0			22	1	20 A	SPARE
SPARE	20 A	1	23			0.0	0.0	24	1	20 A	SPARE
		TOTAL LOAD:		8 kVA		6 kVA					
		TOTAL AMPS:		64 A		54 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	1102 VA	125.00%	1377 VA		
				CONNECTED LOAD:	15922 VA
				ESTIMATED DEMAND:	16197 VA
				CONNECTED CURRENT:	66 A
				EST. DEMAND CURRENT:	67 A

NOTES:

PANELBOARD: C2 (N)

LOCATION: 2ND FLOOR CORRIDOR C
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
REC CLASSROOM 228	20 A	1	1	0.7	0.2			2	1	20 A	**REC LAPTOP CHARGING...**
RM 222 LGTS (E)	20 A	1	3			0.6	0.7	4	1	20 A	**REC CLASSROOM 228**
RM 224 LGTS (E)	20 A	1	5	0.6	0.2			6	1	20 A	**REC CLASSROOM 228**
REC CLASSROOM 223	20 A	1	7			0.7	0.2	8	1	20 A	**REC LAPTOP CHARGING...**
STAGE LGTS (E)	20 A	1	9	0.6	0.6			10	1	20 A	EXISTING LOAD
DEDICATED DATA RM (E)	20 A	1	11			0.6	0.6	12	1	20 A	EXISTING LOAD
DEDICATED DATA RM (E)	20 A	1	13	0.6	1.2			14	2	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	15			0.6	1.2	16			
REC CLASSROOM 223	20 A	1	17	0.7	0.5			18	1	20 A	**LGTS CLASSROOM 223**
LGTS CLASSROOM 228	20 A	1	19			0.5	0.0	20	1	20 A	SPARE
SPARE	20 A	1	21	0.0	0.0			22	1	20 A	SPARE
SPARE	20 A	1	23			0.0	0.0	24	1	20 A	SPARE
		TOTAL LOAD:		6 kVA		7 kVA					
		TOTAL AMPS:		49 A		57 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	918 VA	125.00%	1148 VA		
				CONNECTED LOAD:	14538 VA
				ESTIMATED DEMAND:	14768 VA
				CONNECTED CURRENT:	61 A
				EST. DEMAND CURRENT:	62 A

NOTES:

PANELBOARD: B2 (N)

LOCATION: 2ND FLOOR CORRIDOR B
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
STAFF REST RM LGTS (E)	20 A	1	1	0.6	0.6			2	1	20 A	STAFF RM LGTS (E)
LGTS CLASSROOM 219	20 A	1	3			0.5	0.6	4	1	20 A	AUDITORIUM LGTS (E)
HALL LGTS (E)	20 A	1	5	0.4	0.4			6	1	20 A	AUDITORIUM LGTS (E)
A/C (E)	20 A	2	7			1.2	0.6	8	1	20 A	DED. EQUIP. LOUNGE (E)
			9	1.2	0.6			10	1	20 A	DED. EQUIP. LOUNGE (E)
EXISTING LOAD	20 A	1	11			0.6	0.6	12	2	20 A	EXISTING LOAD
EXISTING LOAD	30 A	2	13	1.8	1.2			14			
			15			1.8	0.6	16	1	20 A	EXISTING LOAD
REC CLASSROOM 219	20 A	1	17	0.7	0.7			18	1	20 A	**REC CLASSROOM 219**
SPARE	20 A	1	19			0.0	0.2	20	1	20 A	**REC CLASSROOM 219**
SPARE	20 A	1	21	0.0	0.0			22	1	20 A	SPARE
SPARE	20 A	1	23			0.0	0.0	24	1	20 A	SPARE
		TOTAL LOAD:		9 kVA		7 kVA					
		TOTAL AMPS:		74 A		60 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	459 VA	125.00%	574 VA		
				CONNECTED LOAD:	19079 VA
				ESTIMATED DEMAND:	19194 VA
				CONNECTED CURRENT:	79 A
				EST. DEMAND CURRENT:	80 A

NOTES:

PANELBOARD: A2 (N)

LOCATION: 2ND FLOOR CORRIDOR A
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
LGTS CLASSROOM 217	20 A	1	1	0.4	0.6			2	1	20 A	LIBRARY LGTS (E)
LIBRARY OFF. LGTS (E)	20 A	1	3			0.6	0.6	4	1	20 A	CABLE TV (E)
STORE RM LGTS (E)	20 A	1	5	0.6	0.6			6	1	20 A	LIBRARY LGS (E)
HALLWAY LGTS (E)	20 A	1	7			0.6	0.6	8	1	20 A	REC IMC OFF (E)
A/C RIGHT SIDE (E)	20 A	2	9	1.2	2.4			10	2	40 A	A/C LEFT SIDE (E)
			11			1.2	2.4	12			
REC CLASSROOM 217	20 A	1	13	0.7	0.2			14	1	20 A	**REC LAPTOP CHARGING...**
REC CLASSROOM 217	20 A	1	15			0.7	0.0	16	1	20 A	SPARE
SPARE	20 A	1	17	0.0	0.0			18	1	20 A	SPARE
BUSSED SPACE	--	--	19			0.0	0.0	20	--	--	BUSSED SPACE
BUSSED SPACE	--	--	21	0.0	0.0			22	--	--	BUSSED SPACE
BUSSED SPACE	--	--	23			0.0	0.0	24	--	--	BUSSED SPACE
		TOTAL LOAD:		8 kVA		7 kVA					
		TOTAL AMPS:		66 A		56 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	367 VA	125.00%	459 VA		
				CONNECTED LOAD:	19387 VA
				ESTIMATED DEMAND:	19479 VA
				CONNECTED CURRENT:	81 A
				EST. DEMAND CURRENT:	81 A

NOTES:

PANELBOARD: D2 (N)

LOCATION: 2ND FLOOR CORRIDOR D
MOUNTING: Semi Recessed Type 1
MAIN DEVICE: 200 A MLO
BUS AMPS:
VOLTAGE: 240/120 V. 1 ø 3 W.
A.I.C. RATING: 10K
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	PHASE A kVA		PHASE B kVA		CKT	POLES	BKR	LOAD DESCRIPTION
RM 227 REC (E)	20 A	1	1	0.6	0.4			2	1	20 A	**LGTS CLASSROOM 225**
RM 227 LGTS (E)	20 A	1	3			0.6	1.2	4	2	20 A	EXISTING LOAD
RM 226 LGTS (E)	20 A	1	5	0.6	1.2			6			
EXISTING LOAD	20 A	1	7			0.0	1.2	8	2	20 A	EXISTING LOAD
A/C RM 226 (E)	20 A	2	9	1.2	1.2			10			
			11			1.2	0.6	12	1	20 A	EXISTING LOAD
REC CLASSROOM 225	20 A	1	13	0.7	1.1			14	1	20 A	**REC CLASSROOM 225**
REC LAPTOP CHARGER...	20 A	1	15			0.2	0.0	16	1	20 A	SPARE
SPARE	20 A	1	17	0.0	0.0			18	1	20 A	SPARE
		TOTAL LOAD:		8 kVA		5 kVA					
		TOTAL AMPS:		63 A		42 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	367 VA	125.00%	459 VA		
				CONNECTED LOAD:	16147 VA
				ESTIMATED DEMAND:	16239 VA
				CONNECTED CURRENT:	67 A
				EST. DEMAND CURRENT:	68 A

NOTES:

PANEL BOARD SCHEDULE NOTES

1. TURN ALL SPARE CIRCUIT BREAKERS TO 'OFF' POSITION AT COMPLETION OF WORK.
2. PROVIDE TYPED SCHEDULE FOR PANEL BOARDS UTILIZED AT COMPLETION OF PROJECT INDICATING ACTUAL AS-BUILT CONDITIONS.
3. NEW CIRCUIT BREAKER (IF PROVIDED) MUST BE COMPATIBLE WITH EXISTING PANELBOARD (UL LISTED, MANUFACTURED BY THE PANELBOARD MANUFACTURER AND WHICH HAVE AN AIC RATING TO MATCH THE EXISTING PANEL RATING).
4. ALL SPARE CIRCUIT BREAKERS NUMBER MADE AVAILABLE AFTER DEMOLITION ARE BASED ON THE EXISTING DOCUMENTS AND MAY BE INACCURATE. THE ACTUAL CIRCUIT NUMBERS MAY BE DIFFERENT AND SHALL BE VERIFIED IN FIELD DURING CONSTRUCTION.
5. PROVIDE ARC FLASH WARNING LABELS FOR ALL NEW PANEL BOARDS.

KEY PANELS		
"C"	"B"	"A"
"C2"	"B2"	"A2"
-	-	"D2"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
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SEAL:

COMMONWEALTH OF PENNSYLVANIA — REGISTERED — CONRADO D. DELA CRUZ — ENGINEER — No. PE089048

CONRAD DELA CRUZ
STATE AND LICENSE NO: PE089048

ARCHITECT

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MEP ENGINEERS

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Baltimore, MD 21201
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Email: deepak.at@setty.com
Attn: Deepak Ajimane

100% DESIGN SUBMISSION
1/22/2020

NO.	DATE	REVISION
10		
9		
8		
7		
6		
5		
4		
3		
2		
1	02/20/2020	ADDENDUM #1

SCHOOL & LOCATION

GEORGE SHARSWOOD ELEMENTARY SCHOOL

2300 S 2ND STREET, PHILADELPHIA, PA 19148

PROJECT TITLE

CLASSROOM MODERNIZATION

DRAWING TITLE

ELECTRICAL PANEL SCHEDULES

LOCATION NO.	FILE NO.
DRAWN BY: NRS	CHECKED BY: DAT

B-039C OF 2018 / 19
B-040C OF 2018 / 19

DRAWING NO.

E6.1

SHEET 18 OF 19

Westchester Environmental, LLC
1248 Wrights Lane; West Chester, PA 19380
610-431-7545, fax: 610-431-7543

SPECIFICATIONS

FOR

REMOVAL OF ASBESTOS CONTAINING MATERIALS

CLASSROOM MODERNISATION

CAPITAL PROJECTS

GEORGE SHARSWOOD ELEMENTARY SCHOOL

2300 S 2ND ST;
PHILADELPHIA, PA 19148

PRERARED FOR:

SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF ENVIRONMENTAL MANAGEMENT
440 N BROAD STREET
PHILADELPHIA, PA 19130

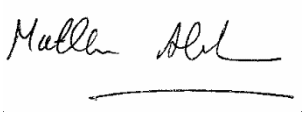
WORK SITE:

CLASS ROOMS 1ST & 2ND FLOOR
GEORGE SHARSWOOD ELEMENTARY SCHOOL
2300 S 2ND ST;
PHILADELPHIA; PENNSYLVANIA 19148

PREPARED BY:

WESTCHESTER ENVIRONMENTAL LLC
1248 WRIGHTS LANE
WEST CHESTER, PA 19380

DECEMBER 2019



Matthew Abraham
Certified Pennsylvania Asbestos Project Designer
Cert#010199

Westchester Environmental, LLC
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610-431-7545, fax: 610-431-7543

Print date:
02/27/20

Asbestos Abatement Specification for George Sharswood Elementary School
2300 S 2nd Street; Philadelphia. PA 19148

TABLE OF CONTENTS

REMOVAL SPECIFICATIONS FOR THE ABATEMENT OF ASBESTOS CONTAINING MATERIALS

PART 1 – GENERAL

1. INTRODUCTION

The removal specifications details the procedures that need to be followed for the removal of assumed asbestos containing chalk board glue dots in the classrooms of Cayuga Elementary School of the School District of Philadelphia, Pennsylvania.

2. STIPULATIONS

The procedures specified herein are guidelines for minimum performance. The Contractor is responsible for his own methods of operations and conformance to regulatory codes, rules and guidelines. The Contractor is *required to obtain all permits- licenses and approvals to perform the work,* including any rights to use patented systems.

3. SCOPE OF WORK

A. The scope of work for this project covers the supplying of all labor, tools, material, equipment, services and appurtenances to accomplish the work specified and indicated on the contract drawing. The work shall be performed to the complete satisfaction of the **Owner (School District of Philadelphia)** in accordance with the current City of Philadelphia, EPA and OSHA regulations, State Labor and Industry regulations and any other applicable State, Local and Government regulations.

B. Contractor shall submit an Action Plan which describes specifically how abatement work is to be completed for each abatement phase. At a minimum the work Plan shall address work area preparation, work practices, decon location, estimated completion dates, respiratory protection and disposal; approval of the Action Plan must be obtained through the Owner prior to the start of work. Procedures outlined in the Action Plan must be followed throughout the abatement phase. Any changes in Action Plan must obtain prior approval from the Owner.

C. The work under this project includes but is not limited to the following:

George Sharswood Elementary School: For quantities and locations, Refer to Table in Appendix 1.

4. CONTROL OF WORK

A. All work which does not conform to the requirements of the contract, plans and specifications will be considered unacceptable.

B. Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be corrected immediately and replaced in an acceptable manner.

D. If the Owner finds the materials furnished, work performed or the finished product not within reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or material shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

E. The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the plans, contract and specifications. The term shall not be construed as waiving the Owner's right to insist on strict compliance with the requirements of the contract, plans and specifications during the Contractor's prosecution of the work, when in the Owner's opinion and judgment such compliance is essential to provide an acceptable finished work.

5. QUALITY ASSURANCE

A. Consultant:

1) The Owner shall contract for a Quality Assurance Consultant Project Monitor hereafter referred to as 'Consulting Firm" which specializes in performing air sampling, project monitoring and inspections on asbestos abatement projects. The testing laboratory shall as a minimum be accredited by the City of Philadelphia Air Management Services; NIOSH

PAT Program (Proficiency Analytical Testing) for PCM asbestos air analysis and NVLAP for asbestos bulk analysis.

2) The Consulting Firm will be responsible for certifying the project was completed in accordance with all federal, state, and City asbestos standards and regulations.

3) The Consulting Firm shall review the Contractors Action Plan which describes specifically how work is to be completed for each abatement phase. Approval of the Action Plan must be obtained through the Owner prior to the start of work.

B. Contractor Experience:

1) The Asbestos Abatement Contractor shall have a minimum of three (3) years' experience in the asbestos abatement business. He shall have successfully completed three (3) projects of similar or larger size and dollar value to this project and shall not have defaulted on an asbestos abatement project within the last three (3) years. The Contractor shall be certified by the City of Philadelphia & Pennsylvania Department of Labor and Industry and employ asbestos workers certified to work in the Commonwealth of Pennsylvania.

C. Worker Certification:

1) The Contractor shall furnish proof that his employees have had instruction on the dangers of asbestos exposure on respirator use, decontamination and current OSHA and EPA regulations.

2) Documentation of workers medical exams, consist of x-rays and pulmonary function shall be submitted and as may be required by current OSHA and EPA regulations and any applicable State and Local Government regulations.

3) There must be on site at all times, an EPA Certified Asbestos Abatement Supervisor. The Asbestos Abatement Supervisor shall have successfully completed a 5-day EPA Certified Practices and Procedures Course as per 40 CFR. Part 763, Subpart E. Appendix C-EPA Model Accreditation Plan (must provide a copy of certificate from EPA approved course). All asbestos workers shall have successfully completed a 4-day EPA Certified Practices and Procedures Course as per 40 CFR, Part 763. Subpart E. Appendix C-EPA Model Accreditation Plan. The Contractor must provide copies of certificates from Pennsylvania Department of Labor and Industry for all workers, and supervisors as required by regulation.

4) When required by the Pennsylvania Department of Labor and Industry (PDL&I) the Contractor, Abatement Supervisor and Abatement Workers shall be licensed by PDL&I. Each worker/supervisor shall have a current photo identification issued by PDL&I available on request by the Owner when required.

5) The Philadelphia Federation of Teacher's (PFT) Environmental Consultant shall have the option to conduct side by side final clearance air samples within 24 hours of notice of work area completion with the API. Samples will be collected, analyzed, and addressed, in accordance with all applicable, Federal, State, and local regulations.
   a. For Major Projects, samples shall be collected and analyzed via TEM. Result shall be evaluated in accordance with the ACR and AHERA.
   b. Acceptable airborne fiber concentrations for individual "outside the work area" air samples shall be < 0.010 f/cc for PCM and < 0.010 s/cc for TEM.

6) All work and disposal shall be performed in compliance with all applicable Federal, State, and local regulations including, but not limited to:
   a. 29 CFR 1926.1101 (OSHA);
   b. 29 CFR 1926.501 (OSHA);
   c. 40 CFR Part 61 (NESHAP);
   d. 40 CFR Part 763 (AHERA);
   e. 40 CFR 761 **(**PCB Regulations);
   f**.** Resource Conservation and Recovery Act (RCRA);
   g. 40 CFR 300-399, EPA Comprehensive Environmental Response Compensation & Liability Act
   h.40 CFR 745, EPA Toxic Substances Control Act; LBP Poisoning Prevention
   i. EPA Renovation, Repair, and Painting (RRP) rule under the Toxic Substances Control Act
   j. 49 CFR 171-180, DOT Hazardous Material Regulations
   k. 42 CFR Part 84 & 30 CFR Part 11 (NIOSH/DHHS respirator standards);
   l. the Asbestos Control Regulation (Philadelphia Department of Public Health);
   m. Act 194 & Act 161 (Pennsylvania Department of Labor and Industry);
   n. Section F-315.8 (R) of the Philadelphia Fire Prevention Code;
   o. NADCA ACR 2006 (HVAC System cleaning standards);
   p. this Specification.

6. POSTING OF REGULATIONS

A. The Contractor will have at all times in his possession at his office one (1)

copy and in view at the job site one (1) copy of the Asbestos Control Regulations of the City of Philadelphia, current OSHA Regulations 29 CFR 1926.1101 _ Asbestos and current Environmental Protection Agency 40 CFR Part 61. Subpart M: National Emission Standard for Hazardous Air Pollutants as related to asbestos stripping, emissions, notification work practices and disposal of asbestos waste.

7. ASBESTOS ABATEMENT CONTRACTOR'S (AAC) RESPONSIBILITIES

1. The Contractor is required to notify the building occupants and the following agencies in writing ten (10) days prior to starting work for notification and instructions concerning proper disposal of asbestos waste material.

    1) United States Environmental Protection Agency - Region III
    Asbestos - NESHAP Coordinator (3AT33)
    841 Chestnut Building
    Philadelphia. PA 19106

    2) Pennsylvania Department of Environmental Protection
    Bureau of Air Quality Control
    Regional Manager

    3) Pennsylvania Department of Labor and Industry
    Asbestos Occupation Accreditations & Certification
    Bureau of Occupational and Industrial Safety
    Room 155E Labor and Industry Building
    Seventh & Forster Streets
    Harrisburg. Pennsylvania 17120

    4) City of Philadelphia, appropriate notification must also be made. Obtain permits as required by local regulations.

    5) EPA - DEP approved asbestos landfill proposed to be used by the Contractor for RACM. Submit completed WSR for RACM at projects end (see 3.07. F).

2. The AAC is responsible for visiting the site and verifying quantities of asbestos containing materials, locations of utilities, and waste out routes prior to submitting a bid.

a. No work shall be performed if the AAC believes the work to be performed is a change and/or addition to the work scope outlined in these construction documents without first obtaining a Notice to Proceed (NTP) from the Owner.

b. The Owner shall not be responsible for compensating the AAC for work performed that is considered a change and/or addition to the construction documents without the issuance of a NTP and/or a written work directive.

3. The AAC will provide a schedule for the work to be completed.

4. The AAC shall provide all labor, tools, materials and scaffold necessary to complete the project safely, in a timely fashion, and in accordance with the specification and all applicable regulations.

5. The AAC shall be responsible for pre-cleaning & the removal of all furniture and educational materials (labeled with the Room Numbers or Areas in which they originated from prior to relocation) in all scheduled abatement work areas listed. This is to be done in coordination with the Owner to establish temporary storage locations for movable items removed from the abatement work areas

6. The Owner shall be responsible to remove all computers, monitors, printers, all other computer related components and/or items deemed too valuable or sensitive to be handled by the AAC.

7. Returning items back to the work area rooms shall be the responsibility of the AAC.

8. The AAC shall supply, at their own expense, all construction materials, supplies, and all electrical, water, and waste connections, tie-ins, or extensions. Temporary service lines shall be installed to prevent tripping, slipping or falling. The AAC must utilize a licensed electrician to provide a separate temporary electric panel, receptacles, and lights, all with ground fault interruption and current-overload protection. All temporary electrical set-ups shall be in accordance with OSHA regulation and NEMA standards.

9. The temporary electrical panel and the building's electrical supply source shall be enclosed, concealing all potential contact points in order to avoid electrocution hazard and potential arcing to nearby or passing conductor materials.

10. Installation of the temporary electric panel shall occur within the ten (10) day waiting period prior to the start of this asbestos abatement project, after submission of the Asbestos Abatement Notification to the EPA, DEP, and Philadelphia Air Management Services.

11. All water connections utilized throughout the performance of this asbestos abatement project shall be disconnected at the source before leaving the site AFTER ALL shifts, and all hoses shall be drained to prevent unexpected water leaks after the AAC and API are offsite.

12. When temporary service lines are no longer required, they shall be removed by the AACs licensed electrician.

13. Any parts of the permanent service lines, grounds and buildings, disturbed or damaged by the installation and/or removal of the temporary service lines, shall be restored to their original condition by the AAC as approved by the Owner.

14. The AAC shall maintain current copies of certifications for workers on-site, and shall keep copies of all pertinent specifications and regulations on-site. The API retains the right to prohibit work by employees without current certifications.

15. The AAC shall maintain a detailed sign-in/sign-out log, which must be filled out by every person entering the work area. All entries shall be complete and legible.

16. The AAC shall be responsible for security of the work site, fire/smoke detection, and maintenance of existing utility systems as it relates to the performance of this project.

17. The AAC shall provide fire protection in accordance with all State and Local codes. This includes, but is not limited to:
a. Providing a written fire prevention and emergency action plan.
b. Providing multi-purpose ABC rated fire extinguishers, insuring that on-site personnel are aware of the location and proper use of all fire extinguishers and other safety equipment.
c. Performing a fire watch of the overall work area.
d. Designating a safety coordinator to implement the above actions. The AACs safety coordinator shall be responsible for:

1. Fire/life safety entries shall be entered into the AACs log daily and shall be submitted with the AAC's final report.
2. Daily entries shall include names, dates, duration, problems & corrective actions taken by the fire watch - must be signed by the safety coordinator.

18. The AAC shall submit to the API the number of AFDs projected to obtain a negative pressure differential sufficient to provide a minimum of four (4) air changes of the work area per hour for all Major Projects along with the calculations used to determine this. The AAC shall install a manometer to confirm the differential, which should read minimum of -0.02 inches of water column.
a. Manometer(s) shall be installed by the AAC around the work area before the start of the performance of asbestos abatement activities until the receipt of acceptable clearance air sample results to record and verify adequate negative pressure differential is maintained throughout the project.

19. Assure protection of AFD exhaust ducts from damage during asbestos abatement activities.

20. The AAC Supervisor and API shall perform a visual inspection of the entire floor immediately below all active abatement work areas at the end of each 8 hour shift to verify that no water leaks, fallen material, or any other type of damage has occurred.

a. If water leaks, fallen material, or any other type of damage has occurred:

1. all asbestos abatement work shall be halted;

2. the API shall immediately notify the Project Manager and Owner for direction and input;

3. the source of the leak or damage shall be determined;

4. the containment breech issue shall be rectified before any asbestos abatement work will be permitted to continue.

21. As required by the Asbestos Control Regulation, the AAC shall provide a minimum 18" square transparent viewing window consisting of shatterproof material greater than or equal to 1/8" in thickness located at a height appropriate for accessible viewing and in such a manner as to maximize visibility of the abatement work area.

8. AIR TESTING AND MONITORING

A. Air sampling of the work areas and surrounding environment will be conducted during the performance of this contract by the Consulting Firm so as to ensure abatement procedures are in compliance with all codes, regulations, ordinances and this specification.

B. The Contractor shall fully cooperate with the Consulting Firm and all others responsible for testing and inspecting the work.

C. Air testing and analyses shall be in accordance with City of Philadelphia Asbestos Control Regulations, current EPA and requirements of Section 29 CFR 1926.1101 of the current OSHA Regulations, as a minimum. Analysis shall be performed by Phase Contrast Microscopy per NIOSH 7400 Method and/or Transmission Electron Microscopy (TEM) per EPA Level I analytical procedures.

D. Air tests taken prior to start of work (background) and at completion (pre-clearance) will be analyzed by PCM-Phase Contrast Microscopy. Final (clearance) testing shall be by TEM-Transmission Electron Microscopy.

E. The Consulting Firm shall give verbal notification to the Owner of the results of each test within twenty-four (24) hours of the time the samples were delivered to the laboratory. The Consulting Firm shall confirm the results in writing within three (3) days thereafter.

F. Prompt reports are necessary so that, if required, modifications to work

methods and/or practices may be implemented as soon as possible.

G. Representatives of the Consulting Firm shall have access to the work area at all times. The Contractor shall provide facilities for such access in order that the Consulting Firm may properly perform its function.

H. Sampling equipment and personnel will be provided by the Consulting Firm.

I. Air sampling shall be performed in each work area prior to commencement of the work at that location. The highest fiber count reading during pre-clearance cleanup monitoring shall be lower than the background readings established by pre-job monitoring or 0.01 f/cc, whichever is lower.

SCHEDULE NOTES:

1. Consecutive daily air samples will be collected during abatement to yield a minimum of eight (8) hours of sampling time for each active work area.

2. Exterior work area(s) samples shall be collected daily at decon clean room entrance, load out exit, discharge of HEPA exhaust units, and area(s) adjacent to work area(s) that are occupied or will be re-occupied.

3. Aggressive air sampling must be conducted when work area is prepared as a negative pressure enclosure.

K. Work area clearance testing shall be completed before work site protective barriers are removed.

L. The Contractor is responsible for performing the thirty (30) minute excursion air sampling per OSHA regulations.

M. The Contractor is responsible for performing 8 hour TWA personal air samples in the employees breathing zone per OSHA regulations.

9. AIR FILTERING - (FOR GUIDELINE PURPOSES ONLY)

A. An approved negative pressure machine may be used in the active work area using HEPA equipped air movement units.

B. Air may be drawn from clean areas through the decontamination and active work areas. HEPA filtered and exhausted through air movement units to the containment exterior. Replace filters in accordance with manufacturer's instructions and to meet the needs of this specification.

C. Air movement should be sufficient quantity to ensure a minimum of four (4) air changes per hour.

Example: Active work area = 50' x 50' x 20' H = 50,000 cu. ft.

For four air changes per hour = 4 AC/HR x 50,000 CF/AC = 200,000 cu.ft./hr.

In cubic feet per minute = 200,000 CF/HR: 60 min. 1 hr. = 3,333 cu. ft/minute

This active work area would require a combination of air movement/HEPA units, i.e. 2,500 CFM and 1,500 CFM

D. The exhaust system must be sufficient to maintain a minimum pressure differential of -0.02 inches of water relative to unsealed, adjacent area.

E. The exhaust system(s) will run twenty-four (24) hours/day until final clearance is obtained and will be maintained in accordance with ANSI Z9.2 and the manufacturer's directions.

F. To ensure continuous operation, the Contractor shall have a spare negative exhaust unit available.

G. Other approved air filtering methods may be utilized at the Contractor's discretion, with the stipulation that designated regulatory agencies provide documented approval to the Owner. It shall be the responsibility of the Contractor to submit all documentation required to the appropriate regulatory agency for their review and approval.

10. PLACEMENT OF WARNING SIGNS AND LABELS

A. The Contractor shall furnish and place warning signs at all approaches to asbestos control areas containing concentrations of airborne asbestos fibers. Locate warning signs at such a distance that personnel may read the warning sign and take the necessary protective action required before entering the area. Warning signs shall be in place for the duration of the work. The Contractor shall furnish and attach caution labels to all disposal

containers holding asbestos materials, scrap waste_ debris and other products contaminated with asbestos.

B. Warning Signs: Provide warning signs conforming to 29 CFR 1926.1101 with the following legend:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

C. Caution Labels: Attach label to the outside of all disposal bags and containers which hold asbestos contaminated materials and are to be removed from the site. Caution labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible and shall display the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

D. Identification Labels: Attach label to the outside of all disposal bags and containers which hold asbestos contaminated materials and are to be transported off facility site. Identification labels shall display the following legend:

Waste Generator Name:_____ Fill Out_____
Generator Location:_____ Fill Out_____

E. Transportation marking shall conform to 49 CFR 171 and 172 and shall be provided on all containers with more than one pound of friable asbestos. Transportation marking shall display the following legend:

R Q HAZARDOUS SUBSTANCE
SOLID, NOS
ORM-E, NA 9188
(ASBESTOS)

END OF SECTION

PART 2 - PRODUCTS

1. EQUIPMENT AND MATERIALS

A. The list of required materials will include, but is not necessarily limited to the following:

1) Respirators: Provide respiratory protection in accordance with OSHA Regulation 29 CFR 1926.1101 and appendices ANSI 288.2-1980. Respiratory protection regardless of negative exposure assessments. There shall be NO EXCEPTION to this requirement. As minimum protection, negative pressure air purifying respirators shall be worn. Contractor shall select the appropriate respirator based on an initial exposure assessment or exposure monitoring results. No employee or visitor shall enter any area without this protection until clearance has been obtained. Employees or visitors shall wear a respirator. Respirators shall be NIOSH approved. Ensure proper filters are worn using a HEPA as a minimum.

2) Protective Clothing:

a) Disposable Clothing - such as "Tyvek" by DuPont. Clothing shall consist of coverall head cover and foot cover. Gloves will be worn for hand cover as needed.

3) Wetting Agents - The asbestos material will be sprayed with water containing an additive to enhance penetration. The additive or wetting agent will be polyoxyethylene at a concentration of one (1) ounce per five (5) gallons of water or as otherwise specified by manufacturer. A fine spray of this solution must be applied to prevent fiber disturbance preceding the removal of the asbestos material. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the current OSHA standards referenced in these specifications. DRY REMOVAL WILL NOT BE ALLOWED EXCEPT WITH WRITTEN APPROVAL FROM EPA or BECAUSE OF FREEZING WORK AREA TEMPERATURES.

4) Polyethylene sheeting: Six (6) mils. for protection of floors, walls, doors, windows, fixed equipment, HVAC supply and return openings, and critical barriers.

5) Clear Polyethylene bags (with warning labels) six (6) mils

minimum for disposal. All asbestos that is removed shall be double bagged.

6) Tape: High quality vinyl or fabric duct tape. Paper masking tape will not be permitted.

7) Negative Pressure Filtration Equipment: Air movement and filtering equipment equipped with HEPA filters rated at 99.97% removal down to 0.3 microns, and of sufficient capacity to provide a minimum of four (4) air changes per hour for each active work area.

8) Airless Spray Equipment: Electric airless spray equipment for saturating and mist fiber control. Low pressure (500 psi) equipment must be available on-site and utilized as required.

9) Vacuum: HEPA rated for surface cleaning and house-keeping. Hand operated and power tools such as, but not limited to, saws, corers, abrasive wheels and drills should be provided with local exhaust ventilation systems with HEPA filters.

10) Hand Tools: Brooms, plastic shovels, scrapers, brushes, etc., in sufficient quantity to ensure the appropriate level of housekeeping.

11) Water Filtration System: Shower and contaminated water filtration system.

12) GFI Equipment: All electrical connections in the work area must be through "ground fault" protected outlets/circuits.

13) Penetrating Encapsulant: Penetrating encapsulants to be used on this project are International Cellulose Corporation SK-13 Asbestos Encapsulant, International Protective Coatings Corporation Serpiflex Shield, Fiberlock Technology ABC Asbestos Binding Compound Concentrate, and others listed as acceptable in the Environmental Protection Agency - Battelle Laboratory Encapsulant Study. or approved equal.

14) Bridging Encapsulant: Bridging encapsulants to be used on this project are American Coatings Corporation Cable Coating 2B, Decadex Laboratories Firecheck, Fiberlock Technology ABC Asbestos Binding Compound Concentrate, or approved equal.

B. The Contractor will have at all times in his possession at the job site

Material Safety Data Sheets (MSDS) for wetting agents, encapsulants, solvents, strippers, and an other potentially hazardous materials.

2 PERSONNEL PROTECTIONS

A. Personnel protection is required for laborers, mechanics, supervision and visitors at the work site during the set-up and abatement operations.

B. Each worker shall be supplied with a minimum of two (2) complete protective work clothes and respirator filter changes per day for the complete duration of the project. Hard hats should be available as appropriate which meet ANSI Z-89.1 standards. Safety toe footwear is to be worn underneath the disposable shoe covers and must meet the requirements and specifications in ANSI Z-41.1. Eye wear and face protection must meet the standards and specifications of ANSI 287.1.

C. In addition to sets of protective work clothes for workers, the Contractor shall have on hand two (2) additional sets of disposable work clothes, per day and respirators for personnel who are authorized to inspect the work site. Hard hats should be available as appropriate which meet ANSI Z-41.1. Eye wear and face protection must meet the standards and specifications of ANSI Z-87.1.

D. Respirators approved for asbestos use and protective work clothes will be worn by laborers and mechanics as a minimum during set-up operations (plastic draping, light-fixture dropping or removal, etc.).

E. Appropriate respirators will be worn by all personnel in the active work area.

F. Upon leaving the active work area, filters will be discarded, cartridges removed and respirators cleaned in disinfectant solution and clean water rinse.

G. Clean respirators will be stored in plastic bags when not in use.

H. Respirators will be inspected daily for broken, missing, or deteriorated parts.

END OF SECTION

PART 3 - EXECUTION

1 AREA PREPARATION

A. Movable furniture blinds and equipment will be removed from area of work by the Using Agency.

B. Heating and ventilating system servicing the areas of work must be shut down prior to starting any work. Notify the Institution prior to starting any work in order that they may arrange to have the heating and ventilating system shut down.

C. The Contractor shall isolate the work area for the duration of the work by installing critical barriers completely sealing off all openings in the work area, including, but not limited to, heating, ventilation ducts, doorways, corridors, windows, roof ventilator openings, and wall vents, with plastic sheeting taped securely in place with six (6) mils plastic sheeting.

D. The Contractor shall build decontamination chamber(s) if required to be connected to each active work area for entrance to or exit from the active work area. When required a separate material load out unit shall be constructed.

E. The Contractor shall cover all fixtures, fixed demountable partitions, lighting, fixed items and equipment in the work area with plastic sheeting taped securely in place.

F. Duct tape, staples, wood strips and other methods will be used appropriately to attach vertical plastic barriers to walls and to floors. All edges of plastic material shall overlap the adjoining sheet a minimum of twelve inches. All joints (vertical and horizontal) to be continuously sealed with duct tape.

G. Upon completion of area isolation, the Contractor shall remove, where practical, all detachable electrical heating and ventilation equipment, Wipe and vacuum, clean and remove from active work area.

3.02 METHOD OF REMOVAL

A. Remove and dispose of all asbestos-containing materials (ACM) in accordance with the methods and procedures outlined in the City of Philadelphia Asbestos Control regulations, United States Department of Labor, Occupational Safety and Health Administration (OSHA) Asbestos

Regulations, Codes of Federal Regulations Title 29. Part 1926. Section 1926.1101.

B. Dry removal will not be allowed.

C. Work of this section shall be performed in the following manner:

1) Eliminate air flow into containment area by isolating all supply and return air ducts from mechanical system. Turn off electrical power.

2) Install six (6) mil polyethylene critical barriers over all doors, wall openings, ceiling openings, electrical outlets, etc. Secure with duct tape on all sides.

3) Connect required number of negative air units in the work area.

4) All air from negative air units shall be exhausted outside the building.

5) Isolation barriers separating occupied areas and work areas shall be framed and covered with 1/2 inch plywood and two (2) layers of six (6) mil polyethylene.

6) Duct HEPA filter unit through door. Locate unit to prevent dead air pockets.

7) Install triple air curtain, six (6) mil polyethylene (typical), over door opening into decontamination unit or load out unit.

3.03 HOUSEKEEPING

A. Throughout the work period, the Contractor shall maintain the building and site in a standard of cleanliness as specified throughout these specifications.

B. Contaminated disposable clothing, respirator filters and other debris will be bagged_ properly labeled and sealed at the end of each work day.

C. All asbestos generated by removal, encapsulation or repair will be bagged, properly labeled, and sealed at the end of each work day.

D. Respirators will be thoroughly cleaned at the end of each work day and stored for the next day's use.

E. Retain all stored items in an orderly arrangement allowing maximum access, not impeding traffic, and providing the required protection of materials.

F. Do not allow the accumulation of scrap, debris, waste material, and other items not required for completion of this work.

G. At least weekly, and more often if necessary, completely remove all scrap, debris and waste material from the job site.

H. Unless otherwise noted or directed, materials resulting from demolition operations shall be the property of the Contractor, shall not be used in the work and shall be promptly removed from the site.

I. Daily and more often if necessary, inspect the work areas and adjoining spaces, and pick up all scrap, debris and waste material. Remove all such items to the place designated for their storage.

J. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection and protection of the ecology.

K. Maintain the site in a neat and orderly condition at all times.

L. Compressed air is not to be used for cleaning purposes.

3.04 FINAL DECONTAMINATION OF WORK AREA

A. Following careful double bagging of all removed asbestos material by the Contractor, he shall label bags as required.

B. Bags shall be wiped with clean damp cloths prior to transportation to approved disposal site.

C. With critical barriers in place, the negative pressure system operating, the Contract shall carry out the first cleaning. Use each surface of a cleaning cloth one time and then dispose of as contaminated waste.

D. Continue this cleaning until there is no visible debris from removed material or residue on plastic sheeting.

E. Pressure washing techniques of any kind are strictly prohibited.

F. Pre-Encapsulation Inspection of substrate is performed by Consulting

Firm to ensure removal and cleaning of the substrate is adequate. The Contractor may accompany this inspection. If during the inspection, the Substrate or plastic sheeting isn't cleaned to the satisfaction of the Consulting Firm; additional recleaning will be required to meet the satisfaction of the Consulting Firm.

G. Encapsulate substrate and all remaining plastic sheeting within the work area. A colored encapsulant may be used on non-finished surfaces.

H. NOTE: Final barriers are not to be removed until work is completed.

I. With critical barriers in place, negative pressure system operating, and immovable objects covered with plastic sheeting, perform a second cleaning as was done in the first cleaning. Wet mop any hard floor surfaces. HEPA vacuum carpeted area surfaces. Hard surfaced flooring such as concrete, terrazzo, VAT and ceramic tile, shall be wet mopped, allowed to dry, and damp mopped a second time with clean mop heads. All mop heads and cleaning cloths are to be discarded in the same manner as asbestos waste.

J. All surfaces are to be left visually clean.

K. Perform visual inspection of work area.

L. If pre-clearance criteria are met, proceed with air testing for final clearance by PCM or Transmission Electron Microscopy (TEM).

M. If pre-clearance criteria are not met, repeat final cleaning until acceptable levels have been achieved before proceeding with final clearance testing by TEM. Costs associated with additional cleaning and testing shall be borne by the Contractor.

N. After air testing clearance criteria has been met, critical barriers and negative air pressure system can be removed.

3.05 DISPOSAL OF ASBESTOS WASTE

A. All RACM and miscellaneous ACM debris will be transported to the predesignated disposal site in accordance with the guidelines of the U.S. Environmental Protection Agency Title 40 Part 61 Subpart M and all local agencies' regulations. Ensure all waste bags/leak tight container have facilities name address, and contact person as required by NESHAP. Drums are to be used to transport bagged ACM's as required by regulation(s).

B. EPA NESHAP Category I &II nonfriable ACM may be disposed of as C&D waste as allowed by regulation. If nonfriable materials become friable they must then be disposed of as regulated ACM waste in an approved landfill.

C. Workers loading/unloading the asbestos materials and machinery operators will wear respirators and disposable work clothing when handling material at the project and disposal site. Asbestos warning signs shall be posted on vehicle as required by regulation.

D. The bags may be dumped from the drums into the burial site. If drums are used to transport the ACM bags, the bags may be dumped from the drums into the burial site. The drums may be reused. However, if a bag is broken or damaged, the entire drum should be buried.

E. The landfill area used for dumping shall be certified to receive and buy materials contaminated by asbestos.

F. Obtain completed Waste Shipment Record (WSR) for all RACM. WSR must also indicate amount of waste in cubic yards. Submit signed WSR with final report/Project Close-out.

3.06 INSPECTIONS

A. All work procedures detailed in this specification will be strictly adhered to and meet or exceed all current City of Philadelphia, EPA, OSHA, DEP and PDL&I regulations.

B. All work shall meet with the approval of the Owner. Work which does not meet with the approval shall be determined to be unsatisfactory.

END OF SECTION

APPENDIX 1

TABLE OF LOCATIONS AND QUANTITIES OF ASBESTOS CONTAINING MATERIALS CLASSROOM MODERNISATION PROJECT GEORGE SHARSWOOD ELEMENTARY SCHOOL

TABLE – Page 1 George Sharswood Elementary School – List of Asbestos Containing Materials Classroom Modernization IN SCOPE Work						
Location	**Description**	**Type (Code 1)**	**Amount**		**Condition (Code 2)**	**Action (Code 3)**
			Square	**Linear**		
Class Room 102	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 102	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 102	Chalkboard Glue dots	NF1	100		ND	REM
Class Room 103	Pipe Fitting Insulation	NF1	18 Nos.		ND	REM
Class Room 103	Pipe Insulation 2-6 inch	NF1		60	ND	REM
Class Room 103	Chalkboard Glue dots	NF1	220		ND	REM
Class Room 105	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 105	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 105	Floor Tile VAT 9" x 9"	NF1	264		ND	REM
Class Room 105B	Floor Tile VAT 9" x 9"	NF1	80		ND	REM
Class Room 105	Chalkboard Glue dots	NF1	300		ND	REM
Class Room 106	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 106	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 106	Chalkboard Glue dots	NF1	460		ND	REM
Class Room 107	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 107	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 107	Chalkboard Glue dots	NF1	310		ND	REM
Class Room 108	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 108	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 108	Chalkboard Glue dots	NF1	315		ND	REM
Room 109 Head Start Program	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Room 109 Head Start Program	Pipe Insulation 2-6 inch	NF1		78	ND	REM
Room 109 Head Start Program	Chalkboard Glue dots	NF1	138		ND	REM
Class Room 114	Black floor tile, bottom layer 12x12	NF1	875		ND	REM

TABLE – Page 2 George Sharswood Elementary School – List of Asbestos Containing Materials Classroom Modernization IN SCOPE Work						
Class Room 114	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 114	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 114,storage closet	Black floor tile, bottom layer, 9x9	NF1	35		ND	REM
Class Room 114	Chalkboard Glue dots	NF1	90		ND	REM
Class Room 217	9X9 floor tile, bottom	NF1	672		ND	REM
Class Room 217	Pipe Insulation 2-6 inch	NF1		22	ND	REM
Class Room 217	Sink undercoat mastic	NF1	12		ND	REM
Class Room 217	Chalkboard Glue dots	NF1	141		ND	REM
Class Room 219	Pipe Fitting Insulation	NF1	20 Nos.		ND	REM
Class Room 219	Pipe Insulation 2-6 inch	NF1		80	ND	REM
Class Room 219, coat closet	Pipe Fitting Insulation	NF1	8 Nos.		ND	REM
Class Room 219, coat closet	Pipe Insulation 2-6 inch	NF1		19	ND	REM
Class Room 219	Chalkboard Glue dots	NF1	325		ND	REM
Class Room 223	Pipe Insulation 2-6 inch	NF1		20	ND	REM
Class Room 223 coat closet	Pipe Fitting Insulation	NF1	8 Nos.		ND	REM
Class Room 223 coat closet	Pipe Insulation 2-6 inch	NF1		19	ND	REM
Class Room 223	Chalkboard Glue dots	NF1	108		ND	REM
Class Room 225	Pipe Fitting Insulation	NF1	14 Nos.		ND	REM
Class Room 225	Pipe Insulation 2-6 inch	NF1		60	ND	REM
Class Room 225	Chalkboard Glue dots	NF1	40		ND	REM
Class Room 228	Pipe Fitting Insulation	NF1	20 Nos.		ND	REM
Class Room 228	Pipe Insulation 2-6 inch	NF1		70	ND	REM
Class Room 228, storage closet	Pipe Fitting Insulation	NF1	8 Nos.		ND	REM
Class Room 228, storage closet	Pipe Insulation 2-6 inch	NF1		30	ND	REM
Class Room 228	Chalkboard Glue dots	NF1	90		ND	REM

City of Philadelphia - Department of Public Health
Public Health Services - Air Management Services
Asbestos Control Unit - 321 University Av., 19104

Asbestos Inspection Report
School District of Philadelphia projects ONLY

Office Use Only

Date Received L&I:	Date Received AMS:
Date Inspected:	Inspector #

1. Name of Building: George Sharswood Elementary School — Phone #: 215-952-6212

2. Name of Building Owner: School District of Philadelphia
440 North Broad Street, Philadelphia, PA 19130 — Phone #: 215-400-4750

3. Name of Licensed Investigator: Philip A Conteh — License #: AIC-0586 — Phone #: 610-431-7545

4. Name of Certified Lab: EMSL Analytical, Inc. — License #: 137 — Phone #: 856-858-4800

5. Scope of Work: (include all locations) Classroom Modernization Project (102, 103, 105, 105B, 106, 107, 108, 109, 114, 217,219,223, 225, & 228)

A review of the SDP Design Drawings was performed ☒ **Yes (List Information Below)** ☐ **No -Schedule a meeting with OEMS**

Reviewed 100% Drawings.

Asbestos Containing Material Present? ☒ Yes (List Below) ☐ No

6. List Asbestos Containing Material (ACM) located in the planned renovation/demolition area(s). Damaged ACM must be listed and then repaired or removed prior to renovation. You (Investigator) must label all ACM that may be left in the work area. Page 1 of 1

Location	Description	Type (Code 1)	Amount Square	Amount Linear	Condition (Code 2)	Action (Code 3)
See attached spreadsheet						

Code 1
FRI - Friable
NF1 - Non-Friable, Cat. 1
NF2 - Non-Friable, Cat. 2

Code 2
DD - Deteriorated or Delaminated
ND - Non-Damaged

Code 3
REM - Removal necessary prior to Demo/Reno
NRN - No removal necessary, label ACM
REP - Repair & Label ACM, removal not necessary

I hereby certify that the foregoing statements are true and the information contained in this report is true. This certification is made subject to the penalties set forth in 18 PA. C.S. S4904 relating to unsworn falsification to authorities. Furthermore I certify that the inspection, sampling, and labeling requirements of section X of the Asbestos Control Regulation (ACR) have been met. The building owner has been notified of the ACR requirements and given a copy of this report. If the inspection has revealed ACM which will be disturbed by the proposed work or if it has revealed ACM in bad condition, the building owner has been notified to remove or repair the ACM in accordance with the ACR prior to renovation or demolition activity.

Signature of Licensed Asbestos Investigator:	Date: 01/21/2020	Signature of Building Owner:	Date:

7. List all locations inspected that do **NOT** have asbestos containing material present:

Location	Location	Location	Location
NA			

8. List all homogeneous materials present in this school:

ASBESTOS CONTAINING MATERIALS	ASBESTOS CONTAINING MATERIALS	NON-ASBESTOS MATERIALS
Pipe Fitting Insulation 2-6”		Partition Room Dividers
Chalkboard Glue Dots (Assumed)		Ceiling Tile 1’x1’
9”x9” Floor Tile – various colors		Ceiling Tile 2’x4’
12”x12” Floor Tile – various colors (Assumed)		Plaster walls
Sink Undercoat Mastic		Plaster Ceiling Wood Floor
		Concrete Floor
		Concrete Plaster
		Brick Walls

9. Caution labels affixed to all ACM ? ☐ Yes ☒ No

All contractors’ employees involved in the demolition or renovation activity must receive a copy or have access to this Asbestos Inspection Report.

Signature _____ Date 01/21/2020

George Sharswood Elementary ,2300 South 2nd Street, Philadelphia, PA 19148			School District of Philadelphia								
			Asbestos Investigation Report								
Project name: Class Room Modernization			Date : 1/21/20								
Prepared By: **Philip Conteh**			Red= Confirmed (Contact OEMS prior to the disturbance of any of the following materials and report damage)								
Certification No. AIC-0586			Yellow= Assumed (Contact OEMS for assessment and sampling prior to the disturbance of these materials and report damage)								
			Green= Non Asbestos Containing/Non Suspect Material (These materials have been sampled and Laboratory Analysis has indicated NO Asbestos present or NO ASBESTOS DETECTED or these materials are not typically known to contain Asbestos)								
Item	***Floor***	***On Site Room Name***	***Material Description***	***Type***	***Confirmed/Assumed/ NAD/***	***Amount of Material***	***SF LF EA***	***t of Damage***	***Condition code***	***Comments/Description/Notes***	***Response Action (RA)***
	2	Classroom 225	Chalkboard Glue Dots		Assumed	40	SF	0	ND	updated by WCE-01/21/20	Remove
1	2	Classroom 225	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	2	Classroom 225	Pipe Insulation 2-6 inch		Confirmed	60	LF	0	ND		Remove
	2	Classroom 223	Chalkboard Glue Dots		Assumed	108	SF	0	ND	updated by WCE-01/21/20	Remove
1	2	Classroom 223	Pipe Insulation 2-6 inch		Confirmed	20	LF	0	ND		Remove
1	2	Classroom 228	Pipe Fitting Insulation		Confirmed	20	EA				Remove
1	2	Classroom 228	Pipe Insulation 2-6 inch		Confirmed	70	LF				Remove
1	2	Classroom 228 Storage Closet	Pipe Insulation 2-6 inch		Confirmed	30	LF				Remove
1	2	Classroom 228	Chalkboard Glue Dots		Assumed	90	SF	0	ND	updated by WCE-01/21/20	Remove
1	2	Classroom 219	Chalkboard Glue Dots		Assumed	325	SF	0	ND	updated by WCE-01/21/20	Remove
1	2	Classroom 219	Pipe Fitting Insulation		Confirmed	20	EA	0	ND		Remove
1	2	Classroom 219	Pipe Insulation 2-6 inch		Confirmed	80	LF	0	ND		Remove
1	2	Classroom 219 Coat Closet	Pipe Fitting Insulation		Confirmed	8	EA				Remove
1	2	Classroom 219 Coat Closet	Pipe Insulation 2-6 inch		Confirmed	19	LF				Remove
1	2	Classroom 217	Chalkboard Glue Dots		Assumed	141	SF	0	ND	updated by WCE-01/21/20	Remove
1	2	Classroom 217	Pipe Insulation 2-6 inch		Confirmed	22	LF	0	ND		Remove
1	2	Classroom 217	Sink Undercoat Mastic		Confirmed	12	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 102	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Classroom 102	Chalkboard Glue Dots		Assumed	100	SF	0	ND		Remove
1	1	Classroom 102	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Classroom 103	Pipe Insulation 2-6 inch		Confirmed	60	LF	0	ND		Remove
1	1	Classroom 103	Chalkboard Glue Dots		Assumed	220	SF	0	ND		Remove
1	1	Classroom 105	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Classroom 105	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Classroom 105	Floor Tile VAT 9" x 9"		Confirmed	918	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 105	Chalkboard Glue Dots		Assumed	300	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 106	Chalkboard Glue Dots		Assumed	460	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 106	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Classroom 106	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Classroom 107	Chalkboard Glue Dots		Assumed	310	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 107	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Classroom 107	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Room 114 Head Start Program	Chalkboard Glue Dots		Assumed	90	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Room 114 Head Start Program	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove

1	1	Room 114 Head Start Program	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Room 114 Head Start Program	Floor Tile VAT 9" x 9"		Confirmed	438	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Room 114 Storage Closet	Floor Tile VAT 9" x 9"		Confirmed	17	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 108	Chalkboard Glue Dots		Assumed	315	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Classroom 108	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Classroom 108	Pipe Insulation 2-6 inch		Confirmed	70	LF	0	ND		Remove
1	1	Room 109 Head Start Program	Chalkboard Glue Dots		Assumed	138	SF	0	ND	updated by WCE-01/21/20	Remove
1	1	Room 109 Head Start Program	Pipe Fitting Insulation		Confirmed	14	EA	0	ND		Remove
1	1	Room 109 Head Start Program	Pipe Insulation 2-6 inch		Confirmed	78	LF	0	ND		Remove

George Sharswood Elementary School

2300 South 2nd Street, Philadelphia, PA 19148

Project name: Class Room Modernization

Prepared By: **Philip Conteh**

Certification No. AIC-0586

School District of Philadelphia

Room by Room Location Log Report

Red= Confirmed (Contact OEMS prior to the disturbance of any of the following materials and report damage)

Yellow= Assumed (Contact OEMS for assessment and sampling prior to the disturbance of these materials and report damage)

Green= Non Asbestos Containing/Non Suspect Material (These materials have been sampled and Laboratory Analysis has indicated NO Asbestos present or NO ASBESTOS DETECTED or these materials are not typically known to contain Asbestos)

Element		On Site Room Name	Material Description	Type code	Confirmed/Assumed/NAD/Non Suspect ACM	Amount of Material	SF LF EA	Amunt of damage	Condition Code	Action code	Comments/Description/Notes	
1	3	Classroom 341	Partition Room Dividers	NF1	BE: Non	377	SF	0		REM		
1	3	Classroom 340	Partition Room Dividers	NF1	BE: Non	754	SF	0		REM		
1	3	Classroom 339	Partition Room Dividers	NF1	BE: Non	377	SF	0		REM		
1	3	Custodial Closet next to Boy's Restroom	Sheetrock Wall	NF1	BE: Non	33	SF	0		REM		
1	3	Classroom 337	Sink Undercoat Mastic	NF1	Assumed	21	SF	0		REM		
1	3	Restroom and Stairwell next to Classroom	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	3	Classroom 336	Sheetrock Wall	NF1	BE: Non	390	SF	0	ND	REM		
1	3	Classroom 342-A	Sheetrock Wall	NF1	BE: Non	325	SF	0	ND	REM		
1	3	Room 342-B Speech-Language Office	Sheetrock Wall	NF1	BE: Non	325	SF	0	ND	REM		
1	3	Classroom 335	Sheetrock Wall	NF1	BE: Non	780	SF	0	ND	REM		
1	3	Classroom 334	Sheetrock Wall	NF1	BE: Non	390	SF	0	ND	REM		
1	3	Girl's Restroom Pipe Chase	Sheetrock Wall	NF1	BE: Non	200	SF	0	ND	REM		
1	3	Custodial Closet next to Girl's Restroom	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	3	Classroom 331	Partition Room Dividers	NF1	BE: Non	364	SF	0	ND	REM		
1	3	Classroom 330	Partition Room Dividers	NF1	BE: Non	728	SF	0	ND	REM		
1	3	Classroom 329	Partition Room Dividers	NF1	BE: Non	350	SF	0	ND	REM		
1	3	near Classroom 336	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	2	Storage Room next to Classroom 227	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	2	Storage Room next to Classroom 227	Pipe Insulation 2-6 inch	Fri	Confirmed	28	LF	0	ND	REM		
1	2	Classroom 227	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	2	Classroom 227	Pipe Insulation 2-6 inch	Fri	Confirmed	50	LF	0	ND	REM		
1	2	Classroom 227	Partition Room Dividers	NF1	BE: Non	351	SF	0	ND	REM		
1	2	Classroom 227	Sheetrock Wall	NF1	BE: Non	83	SF	0	ND	REM		
1	2	Classroom 227 Restroom	Sheetrock Wall	NF1	BE: Non	160	SF	0	ND	REM		
1	2	Classroom 226	Pipe Fitting Insulation	Fri	Confirmed	9	EA	0	ND	REM		
1	2	Classroom 226	Pipe Insulation 2-6 inch	Fri	Confirmed	40	LF	0	ND	REM		
1	2	Classroom 226	Partition Room Dividers	NF1	BE: Non	312	SF	0	ND	REM		
1	2	Classroom 226	Sheetrock Wall	NF1	BE: Non	340	SF	0	ND	REM		
1	2	Classroom 226 Restroom	Sheetrock Wall	NF1	BE: Non	160	SF	0	ND	REM		
1	2	Classroom 225	Chalkboard Glue Dots	NF1	Assumed	40	SF	0	ND	REM	updated WCE-01/21/20	
1	2	Classroom 225	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	2	Classroom 225	Pipe Insulation 2-6 inch	Fri	Confirmed	60	LF	0	ND	REM		
1	2	Classroom 225	Sheetrock Wall	NF1	BE: Non	180	SF	0	ND	REM		
1	2	Classroom 224	Pipe Fitting Insulation	Fri	Confirmed	12	EA	0	ND	REM		
1	2	Classroom 224	Pipe Insulation 2-6 inch	Fri	Confirmed	35	LF	0	ND	REM		
1	2	Classroom 224	Sheetrock Wall	NF1	BE: Non	135	SF	0	ND	REM		
1	2	Classroom 224 Restroom	Sheetrock Wall	NF1	BE: Non	290	SF	0	ND	REM		
1	2	Pipe Chase in Classroom 224 Restroom	X	NF1	X	X	X	0	ND	REM	Pipe Chase Not Inspected.	
1	2	Hallway from Classrooms 224 to 227	Pipe Fitting Insulation	Fri	Confirmed	24	EA	0	ND	REM		
1	2	Hallway from Classrooms 224 to 227	Pipe Insulation 2-6 inch	Fri	Confirmed	88	LF	0	ND	REM		
1	2	Office	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	2	Counselor's Office and Stairwell next to	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	2	Counselor's Office next to Classroom 223A	Floor Tile VAT 12" x 12"	NF1	Assumed	120	SF	0	ND	REM		
1	2	Counselor's Office next to Classroom 223A	Floor Tile VAT 12" x 12"	NF1	Assumed	120	SF	0	ND	REM		
1	2	Counselor's Office Restroom	Sheetrock Wall	NF1	BE: Non	78	SF	0	ND	REM		
1	2	Office Restroom	X	NF1	X	X	X	0	ND	REM	Pipe Chase Not Inspected.	

1	2	Counselor's Office Computer Server Room	Sheetrock Wall	NF1	BE: Non	78	SF	0	ND	REM		
1	2	Counselor's Office Computer Server Room	Floor Tile VAT 12" x 12"	NF1	Assumed	10	SF	0	ND	REM		
1	2	Counselor's Office Computer Server Room	Floor Tile VAT 12" x 12"	NF1	Assumed	11	SF	0	ND	REM		
1	2	Counselor's Office Middle Storage Closet	Sheetrock Wall	NF1	BE: Non	180	SF	0	ND	REM		
1	2	Counselor's Office Middle Storage Closet	Floor Tile VAT 12" x 12"	NF1	Assumed	25	SF	0	ND	REM		
1	2	Counselor's Office Middle Storage Closet	Floor Tile VAT 12" x 12"	NF1	Assumed	25	SF	0	ND	REM		
	2	Classroom 223	Chalkboard Glue Dots	NF1	Assumed	108	SF	0	ND	REM	updated WCE-01/21/20	
1	2	Classroom 223	Pipe Insulation 2-6 inch	Fri	Confirmed	20	LF	0	ND	REM		
1	2	Classroom 223	Floor Tile VAT 12" x 12"	NF1	Assumed	768	SF	0	ND	REM		
1	2	Classroom 223 Coat Closet	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	2	Classroom 223 Coat Closet	Pipe Insulation 2-6 inch	Fri	Confirmed	19	LF	0	ND	REM		
1	2	Stairwell next to Classroom 223	Pipe Fitting Insulation	Fri	Confirmed	9	EA	0	ND	REM		
1	2	Stairwell next to Classroom 223	Pipe Insulation 2-6 inch	Fri	Confirmed	28	LF	0	ND	REM		
1	2	Auditorium Stage	Pipe Fitting Insulation	Fri	Confirmed	7	EA	0	ND	REM		
1	2	Auditorium Stage	Pipe Insulation 2-6 inch	Fri	Confirmed	25	LF	0	ND	REM		
1	2	Auditorium Stage	Floor Tile VAT 12" x 12"	NF1	Assumed	300	SF	0	ND	REM		
1	2	Auditorium	Pipe Fitting Insulation	Fri	Confirmed	35	EA	0	ND	REM		
1	2	Auditorium	Pipe Insulation 2-6 inch	Fri	Confirmed	182	LF	0	ND	REM		
1	2	Classroom 228	Pipe Fitting Insulation	Fri	Confirmed	20	EA	0	ND	REM		
1	2	Classroom 228	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	2	Classroom 228 Storage Closet	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	2	Classroom 228 Storage Closet	Pipe Insulation 2-6 inch	Fri	Confirmed	30	LF	0	ND	REM		
1	2	Stairwell next to Classroom 219	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	2	Stairwell next to Classroom 219	Pipe Insulation 2-6 inch	Fri	Confirmed	32	LF	0	ND	REM		
1	2	Classroom 228	Chalkboard Glue Dots	NF1	Assumed	90	SF	0	ND	REM	updated - updated WCE-01/21/20	
1	2	Classroom 219	Chalkboard Glue Dots	NF1	Assumed	325	SF	0	ND	REM	updated - updated WCE-01/21/20	
1	2	Classroom 219	Pipe Fitting Insulation	Fri	Confirmed	20	EA	0	ND	REM		
1	2	Classroom 219	Pipe Insulation 2-6 inch	Fri	Confirmed	80	LF	0	ND	REM		
1	2	Classroom 219 Coat Closet	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	2	Classroom 219 Coat Closet	Pipe Insulation 2-6 inch	Fri	Confirmed	19	LF	0	ND	REM		
1	2	Restroom	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	2	Faculty Lounge	Pipe Fitting Insulation	Fri	Confirmed	12	EA	0	ND	REM		
1	2	Faculty Lounge	Pipe Insulation 2-6 inch	Fri	Confirmed	50	LF	0	ND	REM		
1	2	Faculty Lounge	Sheetrock Wall	NF1	BE: Non	210	SF	0	ND	REM		
1	2	Faculty Lounge	Floor Tile VAT 12" x 12"	NF1	Assumed	250	SF	0	ND	REM		
1	2	Faculty Lounge	Floor Tile VAT 12" x 12"	NF1	Assumed	374	SF	0	ND	REM		
	2	Faculty Lounge Computer Server Room	Sheetrock Wall	NF1	BE: Non	192	SF	0	ND	REM		
	2	Faculty Lounge Computer Server Room	Floor Tile VAT 12" x 12"	NF1	Assumed	24	SF	0	ND	REM		
1	2	Classroom 217	Chalkboard Glue Dots	NF1	Assumed	141	SF	0	ND	REM	updated WCE-01/21/20	
1	2	Classroom 217	Pipe Insulation 2-6 inch	Fri	Confirmed	22	LF	0	ND	REM		
1	2	Classroom 217	Sheetrock Wall	NF1	BE: Non	242	SF	0	ND	REM		
1	2	Classroom 217	Sink Undercoat Mastic	NF1	confirmed	12	SF	0	ND	REM	updated updated WCE-01/21/20	
1	2	Classroom 217	Floor Tile VAT 12" x 12"	NF1	Assumed	336	SF	0	ND	REM		
1	2	Classroom 217	Floor Tile VAT 12" x 12"	NF1	Assumed	336	SF	0	ND	REM		
1	2	IMC/Library	Pipe Fitting Insulation	Fri	Confirmed	26	EA	0	ND	REM		
1	2	IMC/Library	Pipe Insulation 2-6 inch	Fri	Confirmed	94	LF	0	ND	REM		
1	2	Stairs across from Stairwell near	Pipe Fitting Insulation	Fri	Confirmed	32	EA	0	ND	REM		
1	2	Stairs across from Stairwell near	Pipe Insulation 2-6 inch	Fri	Confirmed	162	LF	0	ND	REM		
1	2	Stairs across from Stairwell near	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	2	IMC/Library	Pipe Insulation 2-6 inch	Fri	Confirmed	40	LF	0	ND	REM		
1	2	IMC/Library	Pipe Insulation 2-6 inch	Fri	Confirmed	10	LF	0	ND	REM		
1	1	Storage Room next to Classroom 101	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	1	Storage Room next to Classroom 101	Pipe Insulation 2-6 inch	Fri	Confirmed	30	LF	0	ND	REM		
1	1	Classroom 101	Pipe Fitting Insulation	Fri	Confirmed	13	EA	0	ND	REM		
1	1	Classroom 101	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 101	Partition Room Dividers	NF2	BE: Non	351	SF	0	ND	REM		
1	1	Classroom 102	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Classroom 102	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 102	Partition Room Dividers	NF2	BE: Non	702	SF	0	ND	REM		
1	1	Classroom 102	Chalkboard Glue Dots	NF1	Assumed	100	SF	0	ND	REM	Westchester Environmental-01/21/20	
1	1	Classroom 103	Pipe Fitting Insulation	Fri	Confirmed	18	EA	0	ND	REM		
1	1	Classroom 103	Pipe Insulation 2-6 inch	Fri	Confirmed	60	LF	0	ND	REM		
1	1	Classroom 103	Partition Room Dividers	NF2	BE: Non	364	SF	0	ND	REM		
1	1	Classroom 103	Chalkboard Glue Dots	NF1	Assumed	100	SF	0	ND	REM	Westchester Environmental-01/21/20	
1	1	Nurse's Office	Pipe Fitting Insulation	Fri	Confirmed	13	EA	0	ND	REM		
1	1	Nurse's Office	Pipe Insulation 2-6 inch	Fri	Confirmed	40	LF	0	ND	REM		
1	1	101	Pipe Fitting Insulation	Fri	Confirmed	24	EA	0	ND	REM		
1	1	101	Pipe Insulation 2-6 inch	Fri	Confirmed	84	LF	0	ND	REM		
1	1	Custodial Closet near Men's Restroom	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	1	Classroom 105	Pipe Fitting Insulation	Fri	Confirmed	4	EA	0	ND	REM		
1	1	Classroom 105	Sheetrock Wall	NF1	BE: Non	122	SF	0	ND	REM		
1	1	Classroom 105	Floor Tile VAT 12" x 12"	NF1	Assumed	325	SF	0	ND	REM		
1	1	Lounge	Sheetrock Wall	NF1	BE: Non	110	SF	0	ND	REM		

1	1		Chalkboard Glue Dots	NF1	Assumed	300	SF	0	ND	REM	WCE-01/21/20	
1	1	Classroom 105	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Classroom 105	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 105	Floor Tile VAT 9" x 9"	NF1	Confirmed	264	SF	0	ND	REM		
1	1	Classroom 105 Coat Closet	Floor Tile VAT 9" x 9"	NF1	Confirmed	80	SF	0	ND	REM		
1	1	Stairwell next to Classroom 105	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	1	Stairwell next to Classroom 105	Pipe Insulation 2-6 inch	Fri	Confirmed	30	LF	0	ND	REM		
1	1	Classroom 106	Chalkboard Glue Dots	NF1	Assumed	460	SF	0	ND	REM	updated WCE-01/21/20	
1	1	Classroom 106	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Classroom 106	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 106	Partition Room Dividers	NF2	BE: Non Suspect ACM	358	SF	0	ND	REM		
1	1	Classroom 107	Chalkboard Glue Dots	NF1	Assumed	310	SF	0	ND	REM	updated WCE-01/21/20	
1	1	Classroom 107	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Classroom 107	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 107	Partition Room Dividers	NF2	BE: Non	715	SF	0	ND	REM		
1	1	Room 114 Head Start Program	Chalkboard Glue Dots	NF1	Assumed	90	SF	0	ND	REM	updated WCE-01/21/20	
1	1	Room 114 Head Start Program	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Room 114 Head Start Program	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Room 114 Head Start Program	Floor Tile VAT 12" x 12"	NF1	Assumed	437	SF	0	ND	REM		
1	1	Room 114 Head Start Program	Floor Tile VAT 12" x 12"	NF1	Assumed	438	SF	0	ND	REM		
1	1	Room 114 Storage Closet	Floor Tile VAT 12" x 12"	NF1	Assumed	17	SF	0	ND	REM		
1	1	Room 114 Storage Closet	Floor Tile VAT 12" x 12"	NF1	Assumed	18	SF	0	ND	REM		
1	1	Classroom 108	Chalkboard Glue Dots	NF1	Assumed	315	SF	0	ND	REM	updated WCE-01/21/20	
1	1	Classroom 108	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	1	Classroom 108	Pipe Insulation 2-6 inch	Fri	Confirmed	70	LF	0	ND	REM		
1	1	Classroom 108	Partition Room Dividers	NF2	BE: Non	358	SF	0	ND	REM		
1	1	Office	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	1	Office	Pipe Insulation 2-6 inch	Fri	Confirmed	30	LF	0	ND	REM		
1	1	Chalkboard Glue Dots	Chalkboard Glue Dots	NF1	Assumed	315	SF	0	ND	REM	WCE-01/21/20	
1	1	Room 109 Head Start Program	Pipe Fitting Insulation	Fri	Confirmed	16	EA	0	ND	REM		
1	1	Room 109 Head Start Program	Pipe Insulation 2-6 inch	Fri	Confirmed	56	LF	0	ND	REM		
1	1	Room 109 Restroom	Sheetrock Wall	NF1	BE: Non	45	SF	0	ND	REM		
1	1	Room 109 Storage Room	Sheetrock Wall	NF1	BE: Non	65	SF	0	ND	REM		
1	1	Principal's Office	Floor Tile VAT 12" x 12"	NF1	Assumed	272	SF	0	ND	REM		
1	1	Principal's Office	Floor Tile VAT 12" x 12"	NF1	Assumed	68	SF	0	ND	REM		
1	1	Main Office	Pipe Fitting Insulation	Fri	Confirmed	20	EA	0	ND	REM		
1	1	Main Office	Pipe Insulation 2-6 inch	Fri	Confirmed	54	LF	0	ND	REM		
1	1	Main Office	Sheetrock Wall	NF1	BE: Non	326	SF	0	ND	REM		
1	1	Custodial Closet next to Main Office	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	1	Gymnasium	Pipe Fitting Insulation	Fri	Confirmed	37	EA	0	ND	REM		
1	1	Gymnasium	Pipe Insulation 2-6 inch	Fri	Confirmed	194	LF	0	ND	REM		
1	1	Gymnasium	Pipe Fitting Insulation	Fri	Confirmed	24	EA	0	ND	REM		
1	1	Gymnasium	Pipe Insulation 2-6 inch	Fri	Confirmed	92	LF	0	ND	REM		
1	1	Office to Classroom 105	Pipe Fitting Insulation	Fri	Confirmed	29	EA	0	ND	REM		
1	1	Office to Classroom 105	Pipe Insulation 2-6 inch	Fri	Confirmed	126	LF	0	ND	REM		
1	1	Office to Classroom 105	Sheetrock Wall	NF1	BE: Non	33	SF	0	ND	REM		
1	BS	Room B-10 After School Program	Pipe Fitting Insulation	Fri	Confirmed	18	EA	0	ND	REM		
1	BS	Room B-10 After School Program	Pipe Insulation 2-6 inch	Fri	Confirmed	100	LF	0	ND	REM		
1	BS	Room B-10 After School Program	Sheetrock Wall	NF1	BE: Non	332	SF	0	ND	REM		
1	BS	Room B-10 After School Program	Floor Tile VAT 12" x 12"	NF1	Assumed	255	SF	0	ND	REM		
1	BS	Room B-10 After School Program	Floor Tile VAT 12" x 12"	NF1	Assumed	256	SF	0	ND	REM		
1	BS	Room B-10 Storage Closet	Pipe Fitting Insulation	Fri	Confirmed	6	EA	0	ND	REM		
1	BS	Room B-10 Storage Closet	Pipe Insulation 2-6 inch	Fri	Confirmed	15	LF	0	ND	REM		
1	BS	Room B-10 Storage Closet	Sheetrock Wall	NF1	BE: Non	78	SF	0	ND	REM		
1	BS	10	Sheetrock Wall	NF1	BE: Non	102	SF	0	ND	REM		
1	BS	10	Floor Tile VAT 12" x 12"	NF1	Assumed	20	SF	0	ND	REM		
1	BS	10	Floor Tile VAT 12" x 12"	NF1	Assumed	20	SF	0	ND	REM		
1	BS	Classroom B-9	Pipe Fitting Insulation	Fri	Confirmed	17	EA	0	ND	REM		
1	BS	Classroom B-9	Pipe Insulation 2-6 inch	Fri	Confirmed	80	LF	0	ND	REM		
1	BS	Classroom B-9	Sheetrock Wall	NF1	BE: Non	300	SF	0	ND	REM		
1	BS	Classroom B-9	Floor Tile VAT 12" x 12"	NF1	Assumed	378	SF	0	ND	REM		
1	BS	Classroom B-9	Floor Tile VAT 12" x 12"	NF1	Assumed	378	SF	0	ND	REM		
1	BS	9 and B-10	Pipe Fitting Insulation	Fri	Confirmed	62	EA	0	ND	REM		
1	BS	9 and B-10	Pipe Insulation 2-6 inch	Fri	Confirmed	182	LF	0	ND	REM		
1	BS	9 and B-10	Pipe Insulation > 6 inch	Fri	Assumed	35	LF	0	ND	REM		
1	BS	Building Engineer's Storage Area	Pipe Fitting Insulation	Fri	Confirmed	84	EA	0	ND	REM		
1	BS	Building Engineer's Storage Area	Pipe Insulation 2-6 inch	Fri	Confirmed	150	LF	0	ND	REM		
1	BS	Building Engineer's Storage Area	Pipe Insulation > 6 inch	Fri	Assumed	50	LF	0	ND	REM		
1	BS	Building Engineer's Storage Area	Sheetrock Wall	NF1	BE: Non	347	SF	0	ND	REM		
1	BS	Building Engineer's Office	Pipe Fitting Insulation	Fri	Confirmed	2	EA	0	ND	REM		
1	BS	Building Engineer's Office	Pipe Insulation 2-6 inch	Fri	Confirmed	20	LF	0	ND	REM		
1	BS	Building Engineer's Office	Sheetrock Wall	NF1	BE: Non	347	SF	0	ND	REM		

1	BS	Storage Area and Boy's Cafeteria	Pipe Fitting Insulation	Fri	Confirmed	14	EA	0	ND	REM		
1	BS	Storage Area and Boy's Cafeteria	Pipe Insulation 2-6 inch	Fri	Confirmed	50	LF	0	ND	REM		
1	BS	Storage Area and Boy's Cafeteria	Pipe Insulation > 6 inch	Fri	Assumed	34	LF	0	ND	REM		
1	BS	10	Pipe Fitting Insulation	Fri	Confirmed	26	EA	0	ND	REM	No Access/Not Inspected	
1	BS	10	Pipe Insulation 2-6 inch	Fri	Confirmed	40	LF	0	ND	REM	No Access/Not Inspected	
1	BS	Fan Room No. 1 near Room B-9	Pipe Fitting Insulation	Fri	Confirmed	49	EA	0	ND	REM		
1	BS	Fan Room No. 1 near Room B-9	Pipe Insulation 2-6 inch	Fri	Confirmed	73	LF	0	ND	REM		
1	BS	Fan Room No. 1 near Room B-9	Pipe Insulation > 6 inch	Fri	Assumed	16	LF	0	ND	REM		
1	BS	Fan Room No. 1 near Room B-9	Vibration Damper Cloth	NF2	Assumed	12	SF	0	ND	REM		
1	BS	Boy's Restroom and Fan Room No. 1	Pipe Fitting Insulation	Fri	Confirmed	25	EA	0	ND	REM		
1	BS	Boy's Restroom and Fan Room No. 1	Pipe Insulation 2-6 inch	Fri	Confirmed	52	LF	0	ND	REM		
1	BS	Boy's Restroom and Fan Room No. 1	Pipe Insulation > 6 inch	Fri	Assumed	10	LF	0	ND	REM		
1	BS	Kindergarden Lunchroom	Pipe Fitting Insulation	Fri	Confirmed	39	EA	0	ND	REM		
1	BS	Kindergarden Lunchroom	Pipe Insulation 2-6 inch	Fri	Confirmed	72	LF	0	ND	REM		
1	BS	Head Start Storage Room	Pipe Fitting Insulation	Fri	Confirmed	35	EA	0	ND	REM		
1	BS	Head Start Storage Room	Pipe Insulation 2-6 inch	Fri	Confirmed	90	LF	0	ND	REM		
1	BS	Head Start Storage Room	Pipe Insulation > 6 inch	Fri	Assumed	13	LF	0	ND	REM		
1	BS	Head Start Storage Room	Vibration Damper Cloth	NF2	Assumed	12	SF	0	ND	REM		
1	BS	Storage Closet next to Art Room	Pipe Fitting Insulation	Fri	Confirmed	23	EA	0	ND	REM	No Access; Not Inspected.	
1	BS	Storage Closet next to Art Room	Pipe Insulation 2-6 inch	Fri	Confirmed	48	LF	0	ND	REM	No Access; Not Inspected.	
1	BS	Art Room	Pipe Fitting Insulation	Fri	Confirmed	49	EA	0	ND	REM		
1	BS	Art Room	Pipe Insulation 2-6 inch	Fri	Confirmed	264	LF	0	ND	REM		
1	BS	Art Room	Sink Undercoat Mastic	NF1	Assumed	7	SF	0	ND	REM		
1	BS	Art Room	Floor Tile VAT 12" x 12"	NF1	Assumed	658	SF	0	ND	REM		
1	BS	Art Room	Floor Tile VAT 12" x 12"	NF1	Assumed	658	SF	0	ND	REM		
1	BS	Room No. 3	Pipe Fitting Insulation	Fri	Confirmed	27	EA	0	ND	REM		
1	BS	Room No. 3	Pipe Insulation 2-6 inch	Fri	Confirmed	65	LF	0	ND	REM		
1	BS	Room No. 3	Pipe Insulation > 6 inch	Fri	Assumed	9	LF	0	ND	REM		
1	BS	Room No. 3	Transite Stalls	NF2	Assumed	87	SF	0	ND	REM		
1	BS	Room next to Art Room	Pipe Fitting Insulation	Fri	Confirmed	64	EA	0	ND	REM		
1	BS	Room next to Art Room	Pipe Insulation 2-6 inch	Fri	Confirmed	420	LF	0	ND	REM		
1	BS	Room next to Art Room	Pipe Insulation > 6 inch	Fri	Assumed	30	LF	0	ND	REM		
1	BS	Kindergarden Lunchroom	Pipe Fitting Insulation	Fri	Confirmed	21	EA	0	ND	REM		
1	BS	Kindergarden Lunchroom	Pipe Insulation 2-6 inch	Fri	Confirmed	110	LF	0	ND	REM		
1	BS	Kindergarden Lunchroom	Pipe Insulation > 6 inch	Fri	Assumed	83	LF	0	ND	REM		
1	BS	Stairwell next to Kindergarden Lunchroom	Pipe Fitting Insulation	Fri	Confirmed	8	EA	0	ND	REM		
1	BS	Stairwell next to Kindergarden Lunchroom	Pipe Insulation 2-6 inch	Fri	Confirmed	30	LF	0	ND	REM		
1	BS	Girl's Cafeteria	Pipe Fitting Insulation	Fri	Confirmed	29	EA	0	ND	REM		
1	BS	Girl's Cafeteria	Pipe Insulation 2-6 inch	Fri	Confirmed	170	LF	0	ND	REM		
1	BS	Girl's Cafeteria	Pipe Insulation > 6 inch	Fri	Assumed	50	LF	0	ND	REM		
1	BS	Girl's Cafeteria	Floor Tile VAT 12" x 12"	NF1	Assumed	602	SF	0	ND	REM		
1	BS	Girl's Cafeteria	Floor Tile VAT 12" x 12"	NF1	Assumed	602	SF	0	ND	REM		
1	BS	Kitchen	Floor Tile VAT 12" x 12"	NF1	Assumed	105	SF	0	ND	REM		
1	BS	Kitchen	Floor Tile VAT 12" x 12"	NF1	Assumed	105	SF	0	ND	REM		
1	BS	and Girl's Cafeterias	Pipe Fitting Insulation	Fri	Confirmed	5	EA	0	ND	REM		
1	BS	and Girl's Cafeterias	Pipe Insulation 2-6 inch	Fri	Confirmed	20	LF	0	ND	REM		
1	BS	and Girl's Cafeterias	Pipe Insulation > 6 inch	Fri	Assumed	10	LF	0	ND	REM		
1	BS	and Girl's Cafeterias	Floor Tile VAT 12" x 12"	NF1	Assumed	25	SF	0	ND	REM		
1	BS	and Girl's Cafeterias	Floor Tile VAT 12" x 12"	NF1	Assumed	25	SF	0	ND	REM		
1	BS	Boy's Cafeteria	Pipe Fitting Insulation	Fri	Confirmed	41	EA	0	ND	REM		
1	BS	Boy's Cafeteria	Pipe Insulation 2-6 inch	Fri	Confirmed	150	LF	0	ND	REM		
1	BS	Boy's Cafeteria	Pipe Insulation > 6 inch	Fri	Assumed	45	LF	0	ND	REM		
1	BS	Boy's Cafeteria	Floor Tile VAT 12" x 12"	NF1	Assumed	602	SF	0	ND	REM		
1	BS	Boy's Cafeteria	Floor Tile VAT 12" x 12"	NF1	Assumed	602	SF	0	ND	REM		
1	BS	Maintenance Staff Office and Breakroom	Pipe Fitting Insulation	Fri	Confirmed	13	EA	0	ND	REM		
1	BS	Maintenance Staff Office and Breakroom	Pipe Insulation 2-6 inch	Fri	Confirmed	65	LF	0	ND	REM		
1	BS	Work Area for Fan Room No. 2	Pipe Fitting Insulation	Fri	Confirmed	38	EA	0	ND	REM		
1	BS	Work Area for Fan Room No. 2	Pipe Insulation 2-6 inch	Fri	Confirmed	110	LF	0	ND	REM		
1	BS	Work Area for Fan Room No. 2	Pipe Insulation > 6 inch	Fri	Assumed	18	LF	0	ND	REM		
1	BS	Fan Room No. 2	Pipe Fitting Insulation	Fri	Confirmed	3	EA	0	ND	REM		
1	BS	Fan Room No. 2	Pipe Insulation 2-6 inch	Fri	Confirmed	10	LF	0	ND	REM		
1	BS	Room	Emergency Generator Insulation	NF2	Assumed	18	LF	0	ND	REM		
1	2	Classroom 228	Chalkboard Glue Dots	NF1	Assumed	90	SF	0	ND	REM	UPDATED updated WCE-01/21/20	