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. 2

Subject: Science Leadership Academy at Beeber – ADA Bathroom Upgrades
SDP Contract Nos. B-007 C, B-008 C, B-009 C and B-010 C of 2018/19

Location: Science Leadership Academy at Beeber
5925 Malvern Ave
Philadelphia, Pennsylvania 19131

This Addendum, dated 10/29/2020, 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.

AN ADDITIONAL SITE VISIT IS SCHEDULED FOR 2:00 PM, MONDAY, NOVEMBER 2, 2020

The following items, clarifications and/or revisions are to be included in the Contract Documents:

GENERAL

1. Provide plaster wall repair for 100% of all walls and ceilings for all bathrooms, offices, locker rooms and nurse's office in the project. Repairs include a finish skim coat in all locations. See newly issued Specification Section 090290.

BIDDER'S QUESTIONS

MM1. NEW FIRE ALARM DEVICES ARE SHOWN IN PLAN, BUT NO FIRE ALARM SPECS PROVIDED. PLEASE PROVIDE FIRE ALARM SPECS. PLEASE CONFIRM WHO THE EXISTING FIRE ALARM VENDOR IS. PLEASE CONFIRM IF A HORN SYSTEM OR SPEAKER SYSTEM SHOULD BE PROVIDED.

Response: The existing fire alarm system consists of an EDWARDS EST- 2 fire alarm panel. Specification section 283111 for the new fire alarm system is provided in this addendum.

2. PER THE SINGLE LINE ON E-700, TRANSFORMER T-1 IS FED FROM A 250A-3P BREAKER WITHIN THE MAIN SWITCHBOARD. CONVERSELY, THERE IS NEW 250A, 240V-1PH DISCONNECT SHOWN NEXT TO THE TRANSFORMER ON E404, WHICH IS NOT SHOWN IN PLAN. PLEASE CLARIFY DESIGN. SHOULD WE PROVIDE A NEW BREAKER WITHIN THE SWITCHBOARD? IS THE LOCAL DISCONNECT REQUIRED?

Response: Provide 250amp, 4-pole circuit breaker in the main switchboard and extend 4#250kcmil to transformer t-1. See updated drawing E-404 and updated single line diagram E-700, both included in this Addendum.

3. THE PRIMARY FEED TO T-1 ON E700 DOES NOT APPEAR TO BE CORRECT. WE BELIEVE T-1 SHOULD BE IDENTIFIED AS A PHASE CHANGER, AND THAT THE PRIMARY FEED SHOULD BE 240V 2PH 4W, WHICH WOULD CHANGE THE FEEDER TO 4#250KCMIL. IF THIS IS CORRECT, DOES THE CONDUIT SIZE CHANGE FOR THE PRIMARY FEEDER? WILL A PHASE CHANGER SPEC OR BASIS OF DESIGN BE PROVIDED?

Response: Transformer T-1 shall be a phase changer transformer from 240 volt, 2-phase, 4 wire to 208 volt, 3-phase, 4 -wire. The conduit size shall be 3". The basis of design specification for the phase changer transformer shall be a 240 volt, 2 phase 4 wire primary, 208 volt, 3 phase, 4 wire secondary, 45kVA transformer as manufactured by GE/Olsun Electronics or approved equal.

4. PANELBOARD SPEC SECTION 2.1C. CALLS FOR ALUMINUM PHASE, GROUND, AND NEUTRAL BUSSES, BUT SECTION 2.1D CALLS FOR COPPER CONDUCTOR CONNECTORS. PLEASE CLARIFY DISCREPANCY.

Response: Provide copper phase, ground and neutral busses.

5. THE PANELBOARD SPEC ONLY LISTS INFORMATION FOR A DISTRIBUTION PANEL TYPE (2.2D), WHICH CALLS FOR MAIN LUGS ONLY. HOWEVER, THE PP1 PANEL SCHEDULE ON E700 CALLS FOR PANEL PP1 TO BE MCB TYPE. PLEASE CLARIFY WHETHER TO PROVIDE MLO OR MCB PANEL. ADDITIONALLY, SHOULD PANEL PP1 BE A DISTRIBUTION TYPE PANEL PER THE SPECS, OR A LIGHTING AND BRANCH CIRCUIT APPLIANCE TYPE PANEL?

Response: Provide panel with main circuit breaker. panel pp1 shall be a lighting and branch circuit appliance type panel.

6. NO SPEC IS PROVIDED FOR THE NON-FUSED DISCONNECT SWITCHES SHOWN ON THE DRAWINGS. PLEASE PROVIDE.

Response: See added specification section 262816 Enclosed for switches and circuit breakers.

7. THERE ARE DISCREPANCIES ON WHETHER TO PROVIDE COMBO MOTOR STARTERS WITH CIRCUIT BREAKERS OR DISCONNECTS. KEYNOTES CALL FOR MOTOR STARTER WITH DISCONNECT SWITCH. THE SYMBOLS LIST DESCRIBES IT AS A COMBO MOTOR STARTER WITH CIRCUIT BREAKER (NO SUBSCRIPTS F OR NF ARE USED ON THE PLANS TO INDICATE DISCONNECT SWITCH). UNDER SPEC SECTION 262913-2.1F(3)(a) CALLS FOR CIRCUIT BREAKER TYPE. PLEASE CLARIFY WHAT TYPE OF COMBO MOTOR STARTER TO PROVIDE. IF DISCONNECT, PLEASE INDICATE WHETHER TO PROVIDE FUSED OR NON-FUSED. (THIS IS QUESTION #7)

Response: Motor starters, disconnects and combo motor starters are not supplied by the EC and have been removed from revised drawings E104, 401 and 402 each included with this Addendum. Disconnect and motor starters are provided by MC and installed by EC, see mechanical drawings and schedules.

8. PLEASE PROVIDE NEMA STARTER SIZES FOR ALL COMBO MOTOR STARTERS.

Response: See answer to question 7 above, no combo motor starters are to be provided by the EC. No NEMA starter sizes are required.

9. PLEASE INDICATE WHAT PANEL EF-8 IS CIRCUITED TO, AND INDICATE CIRCUIT BREAKER SIZE. IF A COMBO STARTER/DISCONNECT SWITCH SHOULD BE SPECIFIED PER ANSWER TO #7 ABOVE, PLEASE INDICATE DISCONNECT SIZE AND WHETHER TO PROVIDE FUSED OR NON-FUSED.

Response: EF-8 shall be circuited to the lighting circuit in that area which uses an existing breaker. No new breaker size is required. See answer to question 7 above. Revised E401 issued with this addendum has removed the reference to combo motor starters.

10. Drawing ED100, Demo Note H: “Replace wiring found to be non-functional”. How do we bid this note? How many circuits and quantity of wire are “non-functional”?

Response: Delete Note H on ED100.

11. Drawing M-501: “All motor starters by mechanical contractor”. Drawing E104, Keynote#1, “Provide disconnect switch with motor starter”

a) Who supplies motor starters for exhaust fans? Who installs?
b) Can you provide a sketch on how to mount a starter/disconnect to a roof mount mushroom exhaust fan? c) Can you provide Electrical drawings showing all motor starters and control cabinets to be installed and wired by electrical contractor? This is required by L&I for permits

Response: See answer to Question 7 above.

12. Drawing E404 shows a 250A disconnect switch on the primary side of the transformer, Drawing E700, single line does not show this switch. Should we install a 400A disconnect (250A is not made) switch on the T-1 primary?

Response: Provide 250a, 4-pole circuit breaker in the main switchboard and extend 4#250KCMIL to Transformer T-1. See updated drawing E-404 and updated single line diagram E-700

13. Can you provide a manufacturer and specification for new fire alarm devices?

Response: The Fire Alarm System is Manufactured by EDWARDS EST-2. All New Fire Alarm Devices shall be compatible with this system.

14. Can you show the location of the MDF room for termination of data outlets?

Response: MDF room is located next to the Nurses office on second floor.

15. Not Used

16. Drawing E700, single line: Can you provide a specification and basis of design for the 45KVA transformer? I contacted Eaton and Federal Pacific and neither manufacture a transformer at 45KVA with a 240V, single phase primary and a 120/208V secondary. They do make a motor generator system but it is very expensive and inefficient. Is it possible to tap the service at two phase in lieu of single phase? We would need a new single line with wire sizes to do this work.

Response: The transformer shall be a phase changing transformer from 240-volt, 2-phase to 208-volt, 3 phase. motor generator system shall not be required. There are spaces in the existing switchboard for adding a 4-pole circuit breaker for the two-phase connection to the phase changing transformer.

17. On, AD-100 it says GC to verify ceiling-mounted MEP work and remove all existing MEP fixtures. Is GC to remove MEP fixtures on the ceiling?

Response: Mechanical, Plumbing and Electrical demolition, penetrations and patching is by the MP, PC and EC respectively, except that patching of interior surfaces that will remain exposed to view in the finished Work shall be by the GC.

18. Are the Shower & Bath enclosures (spec section 102116) part of the General Construction contract or the Plumbing Contract?

Response: The Shower & Bath enclosures are furnished and installed by the GC. Related plumbing fixtures, drainage items, piping and connections are by PC. GC and PC to coordinate installation sequence.

19. There is no specification for section 102119 as listed in Specifications Table of Contents, is there to be a specification?

Response: The section was included, but the footer was incorrect. A section with revised footer is included in this addendum.

20. Openings #33, 34, 37, 38, 42 show door type B on schedule which is pair with a half leaf, the floor plans show single door swing? Which is it single swing or pair?

Response: It is a single swing door, see revised door schedule.

21. Should Opening #40 be a 3'-0" wide door? Schedule says 5'-0" single swing door is that correct? See below for floor plan the walk space between says 3'-6" and that appears larger than the door opening.

Response: It is a single swing, 3'-0" door, see revised door schedule.

22. Please clarify if excavation in the basement must be performed by hand or if motorized excavation equipment is permitted.
If excavation equipment is permitted, please provide an access, egress and protection plan for the transportation of excavation equipment; fill, stone and concrete to the basement. Please also define maximum weight limits for such material and equipment. An engineer should determine and provide this information so bidders can develop means and methods that will not impact the structural integrity of existing slabs; and adequately protect existing floor finishes. We cannot develop means and methods without first knowing what the approved access plan is and what equipment is permitted.

Response: It is anticipated that the route for moving material and equipment in and out of the basement level will be via an exterior stair well on the east or west side of the building. Both wells lead to double doors into the building, although the double door is wider than the width of the stairway. The new corridor ramp/stair area can be accessed from this location by moving through corridors and the locker rooms, all of which have slab-on-grade floors and stairs. Assuming proper protection is provided, it is conceivable that small wheeled or tracked equipment could be moved to the work area. Conveying material in and out of the building will likely be limited to motorized wheelbarrows. The Contractor is required to provide a construction site logistics plan that should outline all proposed routes and the protection thereof. The Contractor shall provide any engineering required to determine the capacity of the existing structure to support proposed construction equipment.

23. Please define the extent and boundaries of required underpinning as detailed on 8/A601. Floor plans do not depict the extent and location of underpinning

Response: The anticipated extent of underpinning is indicated revised drawing AD-100 which is included in this addendum. Please note that detail 8/A601 shows the general condition. The depth of underpinning will vary over the length of the underpinning area.

24. Detail 8/A601 does not indicate existing footings to be removed or encountered at underpinning. Are there existing footings?

Response: Although existing drawings are not conclusive, NORR does not anticipate footings in this location.

25. Please consider extending the bid due date and offering another site visit. Demolition, excavation and concrete contractors are requesting an additional site visit.

Response: Site visit will be held Wednesday, October 30, 2020 at 2:00 p.m. Bid date to be extended to Tuesday, November 10. 2020.

26. Are bidders required to use the SDP's pre-approved list of Paint & Plaster contractors to perform the plaster repairs?

Response: Yes.

27. Please identify on the RCP areas and square footages of required plaster patch. This information is typically provided on SDP projects requiring this work but has not been provided for this project.

Response: All existing plaster ceilings and walls to remain indicated on RCPs are to be scraped, plaster-patched, skim coated, and painted; see revised notations on revised plans, RCPs and new specification section 090290 – Plaster Patching and Repair all included in this Addendum.

28. Please clarify that MEP trades will be responsible for performing their own cutting, penetrations and patching as required for their own work. General Contractors will be unable to accurately determine the extent of cutting and patching required for the work of other primes.

Response: MEP Trades are responsible for their own cutting, penetrations and patching, except that patching of interior surfaces exposed to view in the finished work shall be performed by the GC.

29. Will there be epoxy flooring on the treads and risers of both sets of new stairs in the "Existing Corridor B"? (A900)

Response: Yes.

30. Will there be epoxy flooring on the 2 sets in the boy's locker room as well as the 2 sets of stairs in the girl's locker room?

Response: Yes.

31. Please clarify that all exterior site work in areas shown on A003, including but not limited to: demolition, excavation, utilities and restoration – is the responsibility of the plumbing prime contractor

Response: Yes - see revised annotation on sheet A-003 attached to this addendum.

31. The notes on the enlarged plans direct reconnection of the new lighting fixtures to existing circuits. Since there is no emergency generator, will battery packs be required for some of the fixtures?

Response: Yes, some fixtures will be required to have battery packs. The emergency fixtures are identified on the revised drawings attached to this addendum..

32. On Drawing, E404, there is a 250A 240V single phase disconnect switch shown. Can the line and load side feeders and equipment be identified?

Response: Provide 250A, 4-Pole circuit breaker in the main switchboard and extend 4#250KCMIL to Transformer T-1. See updated drawing E-404 and updated single line diagram E-700 attached to this addendum.

33. On Drawing, E400, only two (2) of the fire alarm devices are identified as new. Is this correct?

Response: All fire alarm devices are new unless otherwise noted as stated in general power note H. Drawings are revised to remove the "(N)" from the two devices.

34. On Drawing, E400, there are devices shown in the directors' offices. Are these new?

Response: Yes. All devices are new.

35. On Drawing, E400, are we responsible for the tele data wiring, jacks and faceplates or just stub ups?

Response: E.C is responsible for tele/data wiring, jacks and faceplates.

36. On Drawing E400, there are no lighting controls shown in the locker rooms. Is this correct?

Response: All lighting controls for the locker rooms are integral to the light fixtures.

37. If the answer to question 5 is yes, can the tele data room location be shown on the floor plans since its2location was not provided at the walk through?

Response: The MDF room is located next to the nurses' office on the second floor.

38. Which Prime is responsible for cutting the holes for the new fire/smoke dampers?

Response: MEP Trades are responsible for their own cutting, penetrations and patching, except that patching of exposed finished surfaces shall be performed by the GC. Cutting holes for new fire/smoke dampers is the responsibility of the MC.

39. On Drawing E401, detail 5, is the fire alarm speaker/strobe existing to remain or new?

Response: Fire Alarm Devices are new.

40. On Drawing E700, is the 250/2 CB In the existing switchboard new or existing to remain?

Response: Provide 250A, 4-POLE circuit breaker in the main switchboard and extend 4#250KCMIL to Transformer T-1. See updated drawing E-404 and updated single line diagram E-700

41. Can the question period be extended?

Response: See answer to Question #25.

42. Please provide elevations of the basement showing the lockers.

Response: No elevations will be issued. Information on lockers is shown on plans, details and specifications. For purpose of surface area take-offs for perimeter walls, ceiling height is 8'-6".

43. Due to the nature of this project being a part of the Philadelphia school district. Are background checks required to be onsite?

Response: **Yes, see Attachments To The General Conditions for requirements issued with the original Bid Documents.**

44. What are the anticipated working hours of this project?

Response**:** Work hours are from 7:00 a.m. to 3:00 p.m**.**

45. Sewage pump EP-3 & EP-4 are not found on the plans, however they are shown on the panel schedule. Please advise

Response: Pumps are shown in the enlarged locker room plan on E400 and on P402 attached to this addendum..

46. Panel PP1 shows circuits 2,4 & 6 for the DBWP-1 as 20amp circuits. Print E404 shows the same circuit as 50amps. Please advise.

Response: See updated drawing E404 and E700 with updated information attached to this addendum.

47. Who is the current fire alarm vendor within the building?

See Response to Question No 1

48. Please provide the anticipated duration of each phase?

Response: As part of the required construction schedule, the GC with coordinated input from MC, EC and PC shall establish the length of each phase within the overall schedule. Section 011000 Summary of Work and Section 011300 Time of Completion, Milestones, Phasing or Sequencing indicate basic intent and requirements for phasing.

49. Please provide a Joint Sealant Specification Section.

Response: See attached Specification 079200 “Joint Sealants”.

50. Detail D5 on AD130 – States ‘GC to confirm condition at threshold. Will exist terrazzo floor require grinding for a flush new condition or new threshold. Should this be included in GC’s bid?

Response: Referenced note from AD-130 is deleted.

51. Doors 03, 04, 12, 16, 17, 18, and 221 on the door schedule do not have a size listed. Please provide sizes of existing doors to be refinished.

Response: Doors to be re-finished are 3’-0”x7’-0”.

52. Please confirm there are no new ceilings, gypsum board or acoustical ceiling panels, to be installed.

Response: Please refer to F1/A420 (reissued) for new ACT ceilings and E1/A400 (reissued) for GWB ceilings attached to this addendum.

53. Please provide Structural Drawings to indicate where spec section 051400 items such as roof rafter framing and floor joist framing are required?

Response: Details for work are under Section 05400 - cold formed metal framing and is shown on A601.

54. Due to the participation goals, can the due date be extended to allow time for MWBE companies to accurately bid this project?

Response: See answer to question #25.

ATTACHMENTS

Drawings:

T001 – COVER SHEET
A003 – SITE PLAN
AD100 – DEMOLITION PLANS – BASEMENT
AD110 – DEMOLITION PLANS – FIRST FLOOR
AD120 – DEMOLITION PLANS – SECOND FLOOR
AD130 – DEMOLITION PLANS – THIRD FLOOR
A100 – NEW PLANS – BASEMENT
A110 – NEW PLANS – FIRST FLOOR
A120 – NEW PLANS – SECOND FLOOR
A130 – NEW PLANS – THIRD FLOOR
A400 – REFLECTED CEILING PLANS – BASEMENT
A410 – REFLECTED CEILING PLANS – FIRST FLOOR
A420 – REFLECTED CEILING PLANS – SECOND FLOOR
A430 – REFLECTED CEILING PLANS - THIRD FLOOR
A601 – INTERIOR SECTIONS AND DETAILS
A800 – DOOR SCHEDULE AND INTERIOR PARTITION TYPES
A801 – FINISH SCHEDULE AND TRANSITION DETAILS
A900- FINISH PLANS – BASEMENT
M501 – SCHEDULES AND DETAILS
ED100 – BASEMENT DEMOLITION PLAN
ED101 – FIRST FLOOR DEMOLITION PLAN
ED102 – SECOND FLOOR DEMOLITION PLAN
ED103 – THIRD FLOOR DEMOLITION PLAN
E102 – SECOND FLOOR NEW WORK PLAN
E400 – BASEMENT ENLARGED PLANS
E401 – FIRST FLOOR ENLARGED PLANS
E402 – SECOND FLOOR ENLARGED PLANS
E403 – THIRD FLOOR ENLARGED PLANS
E404 – ENLARGED MECHANICAL ROOM PLANS
E700 – ELECTRICAL SCHEDULES AND DIAGRAMS
P600 - SCHEDULES

Specifications:

Section 079200 fl – Joint Sealants
Revisions: New section added

Section: 090290 fl – Plaster Patching and Repair
Revisions: New section added

Section: 102119 fl – Solid Plastic Shower Compartments

Section: 262816 – Enclosed switches and circuit breakers.

Section: 283111 – Digital, Addressable Fire-Alarm System

End of Addendum 1

THE SCHOOL DISTRICT OF PHILADELPHIA

SCIENCE LEADERSHIP ACADEMY AT BEEBER

5925 MALVERN AVE, PHILADELPHIA, PA 19131

ADA BATHROOM UPGRADES

General Construction:	B-007 C OF 2018/19
Mechanical:	B-008 C OF 2018/19
Plumbing:	B-009 C OF 2018/19
Electrical:	B-010 C OF 2018/19

ADDENDUM NO.2 **2020.10.27**

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com
Contacts:
Ognian Pavlov
Tel: 215.525.4849
Fax: 215.525.4852
Ognian.Pavlov@norr.com

CODE DATA

PROJECT NAME	
ADA Bathroom Upgrades at Science Leadership Academy at Beeber	
PROJECT ADDRESS	
Street:	5925 Malvern Ave
City, State, Zip Code:	Philadelphia, PA 19131
County:	Philadelphia
WORK INVOLVED	

Alteration Level 2 interior upgrades of multiple restrooms to provide better ventilation, lighting levels, enhance plumbing fixtures' operational efficiency and meet current ADA code requirements for public schools.

APPLICABLE CODES

Building Code
ICC International Building Code (IBC), 2018
ICC International Existing Building Code (IEBC), 2018
Barrier Free Code
ICC A117.1, 2009 - Appendix E-Supplemental Accessibility Requirements
ICC International Building CODE (IBC), 2015 - Chapter 11 Accessibility
Fire Code
2018 International Fire code
Mechanical Code
ICC 2018 International Mechanical Code
Plumbing Code
Philadelphia Plumbing CODE, 2004
Electrical Code
NFPA 70: National Electrical Code (NEC), 2017
OCCUPANCY CLASSIFICATION
No change in occupancy
ACCESSIBILITY

1109.2.2 Where the combined total water closet compartments and urinals provided in a toilet room or bathing room is six or more, at least one ambulatory-accessible water compartment shall be provided in addition to the wheel-chair accessible compartment.

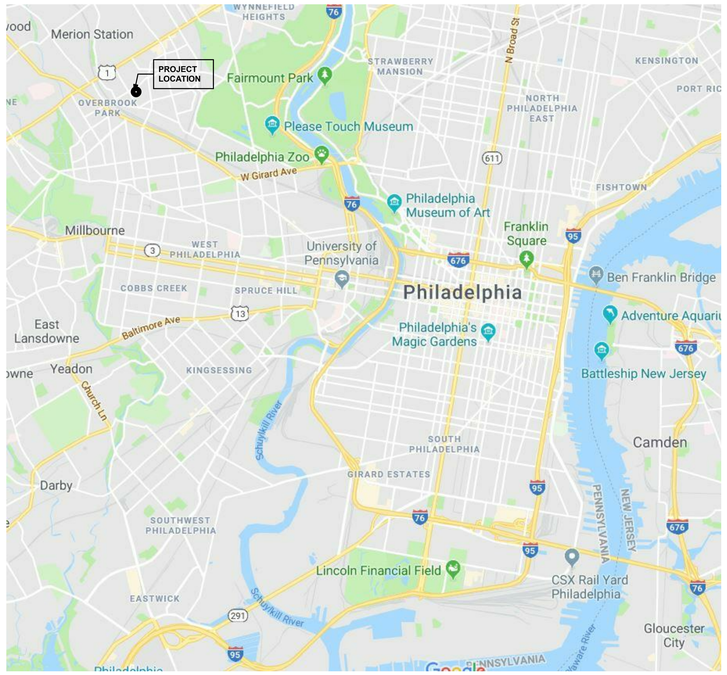
PLUMBING AND TOILET ROOM FIXTURES

Minimum Number of Fixtures

Use Group	Total Population	Male WCs	Female WCs	Male LAVs	Female LAVs	Drinking Fountains	Service Sinks
Educational - E	1553	1 for EA 40 boys	1 for EA 35 girls	1 for EA 50 boys	1 for EA 50 girls	N/A	N/A
CODE Requirements						N/A	N/A
						N/A	N/A
						N/A	N/A
						N/A	N/A
Required Fixtures:		10WC 10UR	23	16	16	N/A	N/A
						N/A	N/A
Provided Fixtures:		14WC 13UR	27	16	16	N/A	N/A
Number of occupants of each sex:	Shall be distributed equally between the sexes based on the percentage of each sex anticipated in the occupant load. The occupant load shall be comprised of 50% of each sex, unless statistical data approved by the code official indicate a different distribution of the sexes. (403.3)						

LOCATION MAP

N.T.S.



DRAWING INDEX

		2020.05.22 ISSUED FOR PERMIT	2020.09.25 ISSUED FOR BID	2020.10.27 ADDENDUM NO.2				
GENERAL								
T001	COVER SHEET	X	X	X				
ARCHITECTURAL								
A001	GENERAL REQUIREMENTS & ABBREVIATIONS	X	X					
A002	ACCESSIBILITY & MOUNTING LOCATION STANDARDS	X	X					
A003	SITE PLAN	X	X	X				
A004	BASEMENT REFERENCE & EMERGENCY EGRESS PLAN	X	X					
A005	FIRST FLOOR REFERENCE PLAN	X	X					
A006	SECOND FLOOR REFERENCE PLAN	X	X					
A007	THIRD FLOOR REFERENCE PLAN	X	X					
AD100	DEMOLITION PLANS - BASEMENT	X	X	X				
AD110	DEMOLITION PLANS - FIRST FLOOR	X	X	X				
AD120	DEMOLITION PLANS - SECOND FLOOR	X	X	X				
AD130	DEMOLITION PLANS - THIRD FLOOR	X	X	X				
A100	NEW PLANS - BASEMENT	X	X	X				
A110	NEW PLANS - FIRST FLOOR	X	X	X				
A120	NEW PLANS - SECOND FLOOR	X	X	X				
A130	NEW PLANS - THIRD FLOOR	X	X	X				
A200	INTERIOR ELEVATIONS - BASEMENT	X	X					
A210	INTERIOR ELEVATIONS - FIRST FLOOR	X	X					
A211	INTERIOR ELEVATIONS - FIRST FLOOR	X	X					
A220	INTERIOR ELEVATIONS - SECOND FLOOR	X	X					
A230	INTERIOR ELEVATIONS - THIRD FLOOR	X	X					
A400	REFLECTED CEILING PLANS - BASEMENT	X	X	X				
A410	REFLECTED CEILING PLANS - FIRST FLOOR	X	X	X				
A420	REFLECTED CEILING PLANS - SECOND FLOOR	X	X	X				
A430	REFLECTED CEILING PLANS - THIRD FLOOR	X	X	X				
A601	INTERIOR SECTIONS AND DETAILS	X	X	X				
A800	DOOR SCHEDULE & INTERIOR PARTITION TYPES	X	X	X				
A801	FINISH SCHEDULE AND TRANSITION DETAILS	X	X	X				
A900	FINISH PLANS - BASEMENT	X	X	X				
A910	FINISH PLANS - FIRST FLOOR	X	X					
A920	FINISH PLANS - SECOND FLOOR	X	X					
A930	FINISH PLANS - THIRD FLOOR	X	X					
MECHANICAL								
M001	COVER SHEET	X	X					
M100	MECHANICAL BASEMENT PLAN	X	X					
M101	MECHANICAL FIRST FLOOR PLAN	X	X					
M102	MECHANICAL SECOND FLOOR PLAN	X	X					
M103	MECHANICAL THIRD FLOOR PLAN	X	X					
M104	MECHANICAL PENTHOUSE FLOOR PLAN		X					
M105	MECHANICAL ROOF PLAN		X					
M400	BASEMENT ENLARGED PLANS	X	X					
M401	FIRST FLOOR ENLARGED PLANS	X	X					
M402	SECOND FLOOR ENLARGED PLANS	X	X					
M403	THIRD FLOOR ENLARGED PLANS	X	X					
M501	SCHEDULES AND DETAILS	X	X	X				

		2020.05.22 ISSUED FOR PERMIT	2020.09.25 ISSUED FOR BID	2020.10.27 ADDENDUM NO.2				
ELECTRICAL								
E001	ELECTRICAL COVER SHEET	X	X					
E104	ROOF NEW WORK PLAN	X	X					
ED100	BASEMENT DEMOLITION PLAN	X	X	X				
ED101	FIRST FLOOR DEMOLITION PLAN	X	X	X				
ED102	SECOND FLOOR DEMOLITION PLAN	X	X	X				
ED103	THIRD FLOOR DEMOLITION PLAN	X	X	X				
E100	BASEMENT NEW WORK PLAN	X	X					
E101	FIRST FLOOR NEW WORK PLAN	X	X					
E102	SECOND FLOOR NEW WORK PLAN	X	X	X				
E103	THIRD FLOOR NEW WORK PLAN	X	X					
E400	BASEMENT ENLARGED PLANS	X	X	X				
E401	FIRST FLOOR ENLARGED PLANS	X	X	X				
E402	SECOND FLOOR ENLARGED PLANS	X	X	X				
E403	THIRD FLOOR ENLARGED PLANS	X	X	X				
E404	ENLARGED MECHANICAL ROOM PLANS	X	X	X				
E700	ELECTRICAL SCHEDULES AND DIAGRAMS	X	X	X				
PLUMBING								
P001	PLUMBING COVER SHEET	X	X					
PD100	BASEMENT FLOOR PLAN - DEMOLITION	X	X					
PD101	FIRST FLOOR PLAN - DEMOLITION	X	X					
PD102	SECOND FLOOR PLAN - DEMOLITION	X	X					
PD103	THIRD FLOOR PLAN - DEMOLITION	X	X					
P100	BASMENT FLOOR PLAN	X	X					
P101	FIRST FLOOR PLAN	X	X					
P102	SECOND FLOOR PLAN	X	X					
P103	THIRD FLOOR PLAN	X	X					
P401	ENLARGED BASEMENT FLOOR PLANS	X	X					
P402	ENLARGED BASEMENT FLOOR PLANS	X	X					
P403	ENLARGED FIRST FLOOR PLANS	X	X					
P404	ENLARGED SECOND AND THIRD FLOOR PLANS	X	X					
P500	DETAILS	X	X					
P501	DETAILS	X	X					
P600	SCHEDULES	X	X	X				
P701	SANITARY AND VENT RISER DIAGRAMS	X	X					
P702	DOMESTIC WATER RISER DIAGRAMS	X	X					

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

COVER SHEET

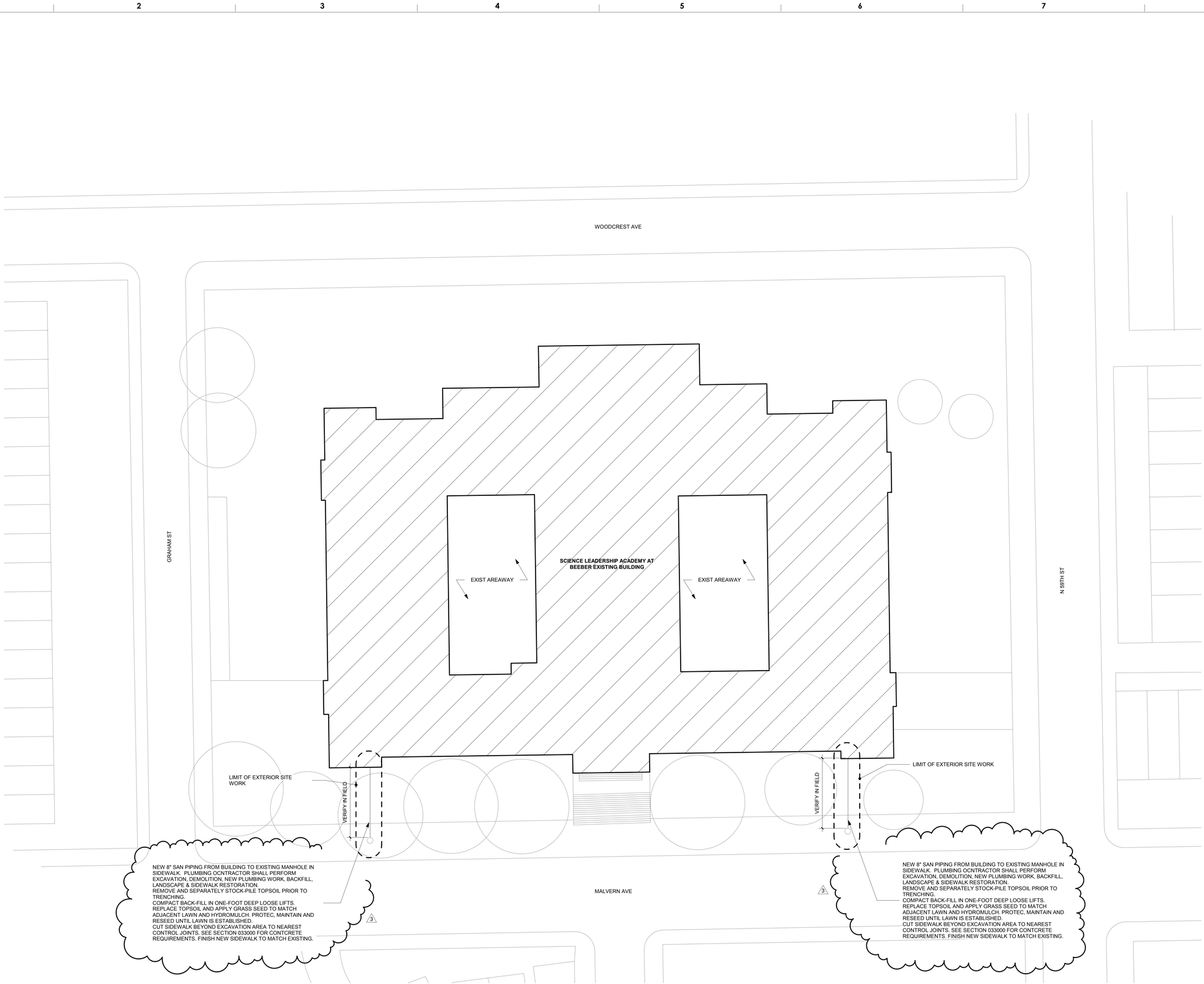
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

DRAWING NO.
T001

SHEET 1 OF 78

10/27/2020 12:00:12 PM



SITE PLAN INFORMATION IS A GRAPHIC REPRESENTATION AND AN APPROXIMATION OF ACTUAL SITE CONDITIONS. G.C. TO FIELD VERIFY ALL DISTANCES AND EXISTING INVERT HEIGHTS, MANHOLE LOCATIONS PRIOR TO THE START OF CONSTRUCTION

0' 5' 15' 35'

F1 SITE PLAN
1" = 20'-0"

10/27/2020 11:40:00 AM

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
JOHN CONRAD KOHLHAS #015

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

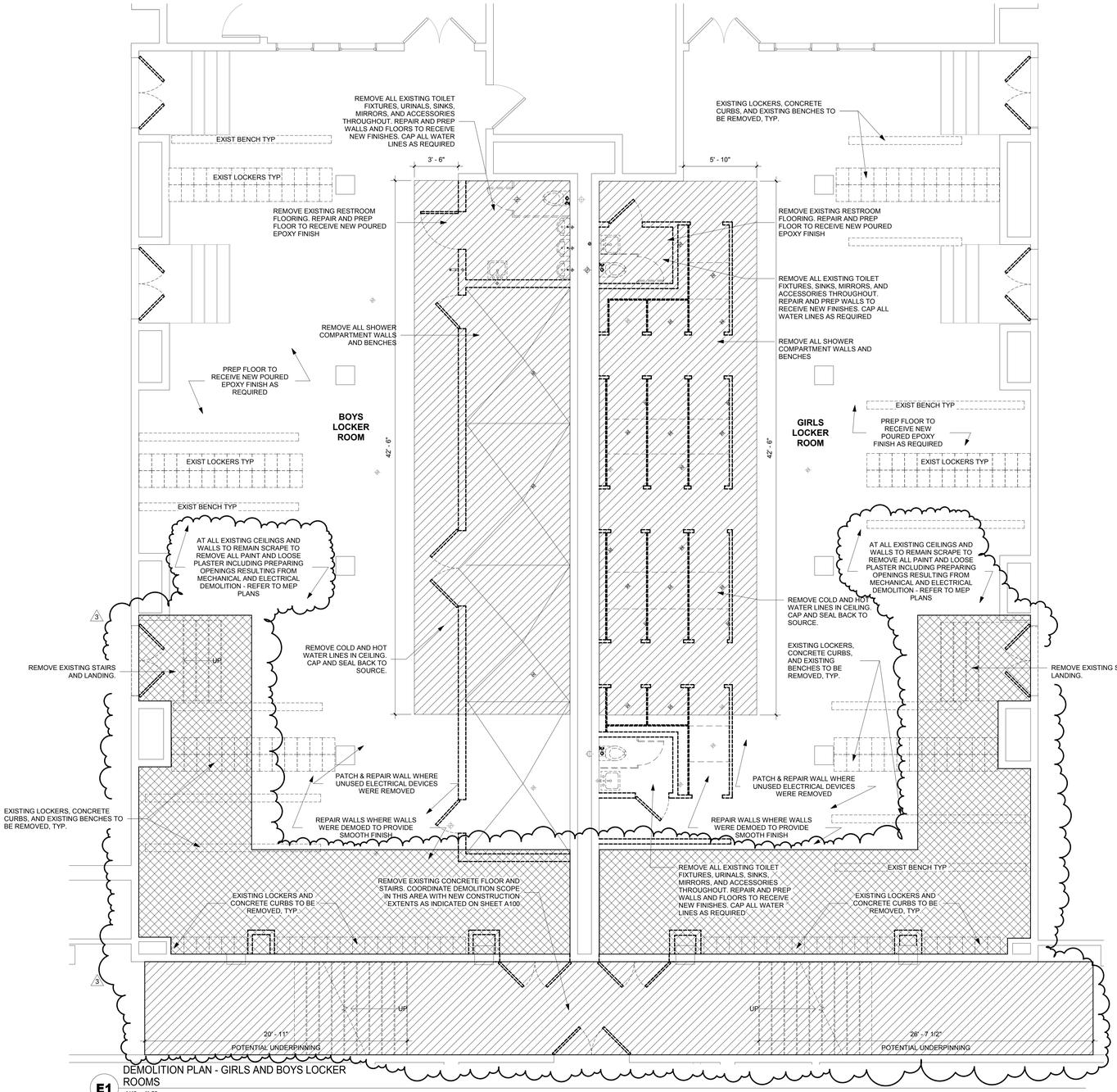
SITE PLAN

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

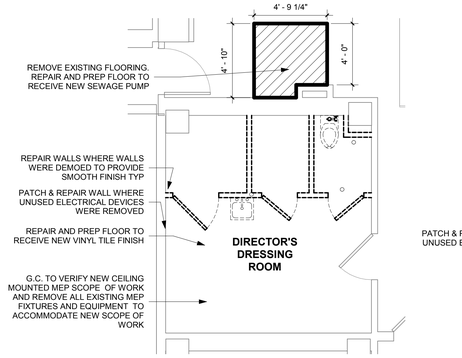
DRAWING NO.
A003

SHEET 4 OF 78



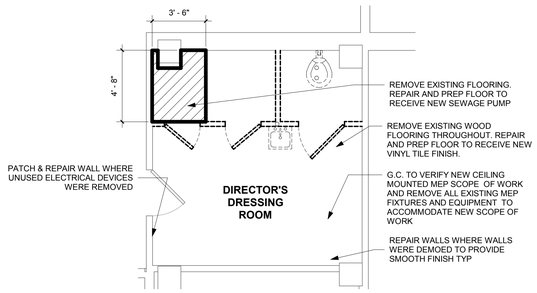
DEMOLITION PLAN - GIRLS AND BOYS LOCKER ROOMS

E1 1/4" = 1'-0"



DEMOLITION PLAN - DIRECTOR'S DRESSING ROOM (WEST)

F2 1/4" = 1'-0"



DEMOLITION PLAN - DIRECTOR'S DRESSING ROOM (EAST)

F4 1/4" = 1'-0"

DEMOLITION PLAN GENERAL NOTES

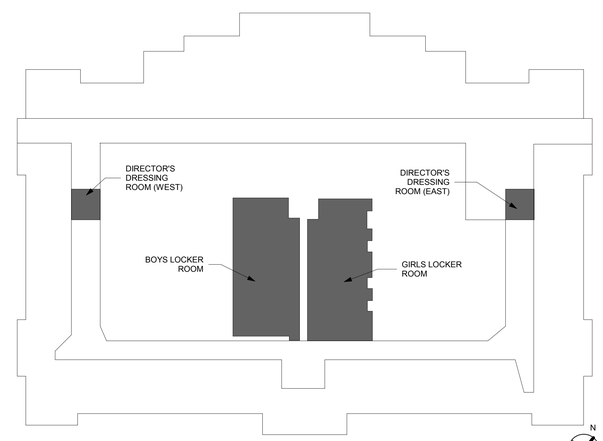
1. AT COMPLETION OF DEMOLITION WORK, THE CONSTRUCTION AREA(S) SHALL BE LEFT IN "BROOM CLEAN" CONDITION. ALL DEBRIS AND MISCELLANEOUS MATERIALS SHALL BE REMOVED AND JOB SITE KEPT CLEAN ON A DAILY BASIS.
2. WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
3. REMOVE TO SOURCE ALL PIPES, VENTS, APPLIACNES, OR DRAINS NOT BEING RE-USED AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
4. FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND/OR REPAIRINF ANY DAMAGED CAUSED BY HIM/HER OR HIS/HER SUBCONTRACTORS TO EXISTING-TO-REMAIN CONSTRUCTION. REFINISH TO MATCH ADJACENT FINISH. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
6. ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED IN THE FIELD. ARCHITECT TO BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
7. CONTRACTOR TO REMOVE ALL TOOLS, EQUIPMENT, AND DEBRIS FROM SITE UPON COMPLETION OF DEMOLITION WORK. REMOVE ANY TEMPORARY PROTECTION.
8. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH NEW WORK DRAWINGS
9. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH HVAC, PLUMBING, ELECTRICAL DEMOLITION AND NEW WORK DRAWINGS. CAP ALL UTILITIES IDENTIFIED TO REMAIN IN PLACE.
10. G.C. IS TO NOTIFY ARCHITECT OF ANY AND ALL DESCREPENCIES BETWEEN FIELD CONDITIONS AND SCOPE OF DEMOLITION.
11. EMBEDDED MATERIALS TO BE CUT FLUSH WITH EXISTING WALLS AND FLOOR SLABS.
12. CONTRACTOR IS RESPONSIBLE FOR DESIGN, CONSTRUCTION , AND SUBSEQUENT REMOVAL OF ALL TEMPORARY SHORING REQUIRED.
13. WHERE AN ITEM OR PIECE OF EQUIPMENT IS CALLED OUT TO BE REMOVED, REMOVAL SHALL INCLUDE ALL APPURTENANCES, ANCHORS, BRACETS AND OTHER PIECES FOR A COMPLETE REMOVAL.
14. ALL EXISTING FINISHES, WHERE NEW FINISHES ARE BEING INSTALLED, NEED TO BE REMOVED DOWN TO SUBSTRATE AND FLASH PATCHED TO PROVIDE A SMOOTH EVEN SURFACE FOR NEW INSTALLATION. SEE A900 FOR NEW FINISHES.

FLOOR PLAN LEGEND

- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING PARTITION TO BE REMOVED
- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

ROOM AREA

- XX / AREA — ROOM TAG
- AREA OF FLOOR DEMOLITION. COORDINATE WITH PLUMBING DRAWINGS
- AREA OF CEILING DEMOLITION TO ACCOMMODATE NEW ENCLOSED ADA RAMP. REFER TO SHEET A-100 RAMP ENCLOSURE EXTENTS



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT — COMMONWEALTH OF PENNSYLVANIA — JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

DEMOLITION PLANS - BASEMENT

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

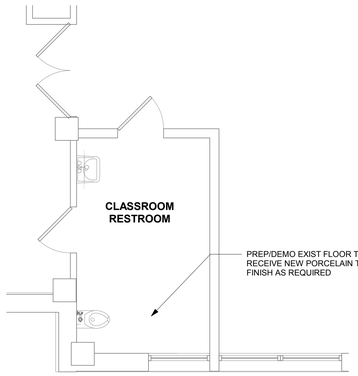
B-007/008/009/010C OF 2018-2019

DRAWING NO.

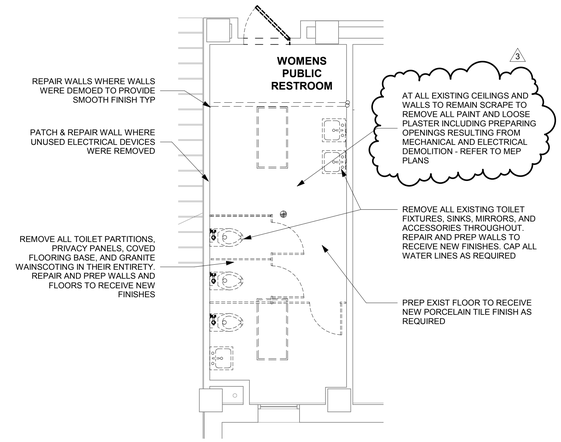
AD100

SHEET 29 OF 78

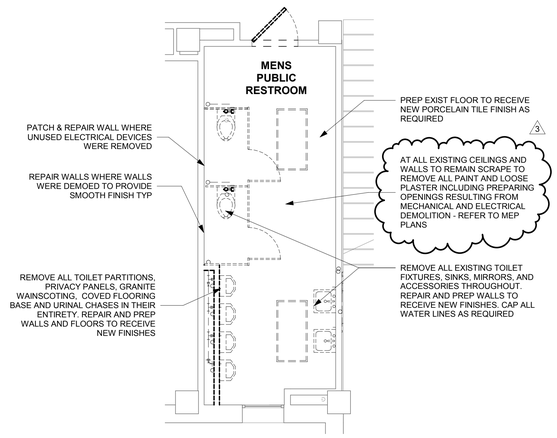
10/27/2020 11:40:29 AM



B1 DEMOLITION PLAN - CLASSROOM RESTROOM
1/4" = 1'-0"



B3 DEMOLITION PLAN - WOMENS PUBLIC RESTROOM
1/4" = 1'-0"



B5 DEMOLITION PLAN -MENS PUBLIC RESTROOM
1/4" = 1'-0"

DEMOLITION PLAN GENERAL NOTES

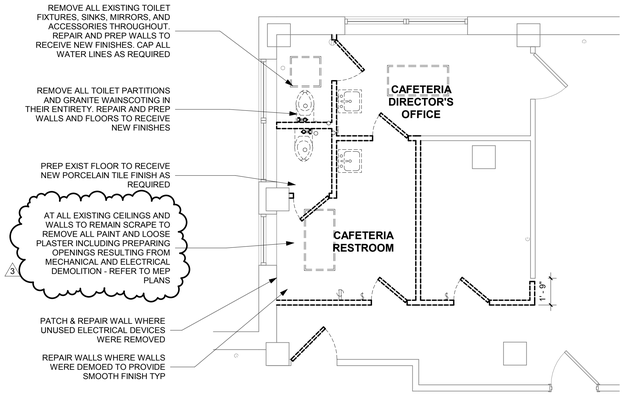
1. AT COMPLETION OF DEMOLITION WORK, THE CONSTRUCTION AREA(S) SHALL BE LEFT IN "BROOM CLEAN" CONDITION. ALL DEBRIS AND MISCELLANEOUS MATERIALS SHALL BE REMOVED AND JOB SITE KEPT CLEAN ON A DAILY BASIS.
2. WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
3. REMOVE TO SOURCE ALL PIPES, VENTS, APPLIACNES, OR DRAINS NOT BEING RE-USED AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
4. FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND/OR REPAIRINF ANY DAMAGED CAUSED BY HIM/HER OR HIS/HER SUBCONTRACTORS TO EXISTING-TO-REMAIN CONSTRUCTION. REFINISH TO MATCH ADJACENT FINISH. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
6. ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED IN THE FIELD. ARCHITECT TO BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
7. CONTRACTOR TO REMOVE ALL TOOLS, EQUIPMENT, AND DEBRIS FROM SITE UPON COMPLETION OF DEMOLITION WORK. REMOVE ANY TEMPORARY PROTECTION.
8. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH NEW WORK DRAWINGS
9. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH HVAC, PLUMBING, ELECTRICAL DEMOLITION AND NEW WORK DRAWINGS. CAP ALL UTILITIES IDENTIFIED TO REMAIN IN PLACE.
10. G.C. IS TO NOTIFY ARCHITECT OF ANY AND ALL DESCREPENCIES BETWEEN FIELD CONDITIONS AND SCOPE OF DEMOLITION.
11. EMBEDDED MATERIALS TO BE CUT FLUSH WITH EXISTING WALLS AND FLOOR SLABS.
12. CONTRACTOR IS RESPONSIBLE FOR DESIGN, CONSTRUCTION , AND SUBSEQUENT REMOVAL OF ALL TEMPORARY SHORING REQUIRED.
13. WHERE AN ITEM OR PIECE OF EQUIPMENT IS CALLED OUT TO BE REMOVED, REMOVAL SHALL INCLUDE ALL APPURTENANCES, ANCHORS, BRACETS AND OTHER PIECES FOR A COMPLETE REMOVAL.
14. ALL EXISTING FINISHES, WHERE NEW FINISHES ARE BEING INSTALLED, NEED TO BE REMOVED DOWN TO SUBSTRATE AND FLASH PATCHED TO PROVIDE A SMOOTH EVEN SURFACE FOR NEW INSTALLATION. SEE A900 FOR NEW FINISHES.

FLOOR PLAN LEGEND

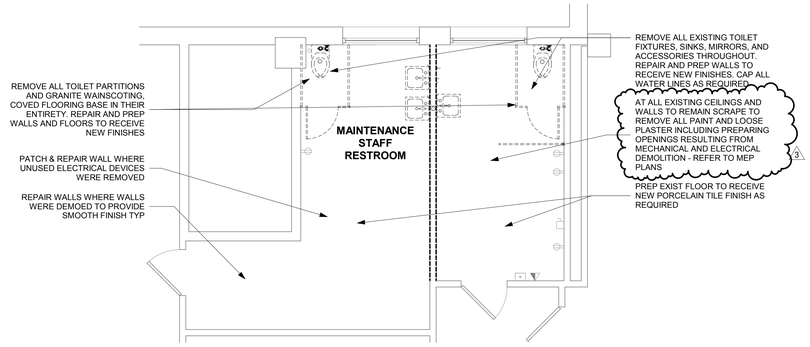
- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING PARTITION TO BE REMOVED
- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- NEW PARTITION TAG, SEE PARTITION TYPES (XXXX)
- NEW DOOR & DOOR TAG WITH DOOR NUMBER (XXXX)

ROOM AREA

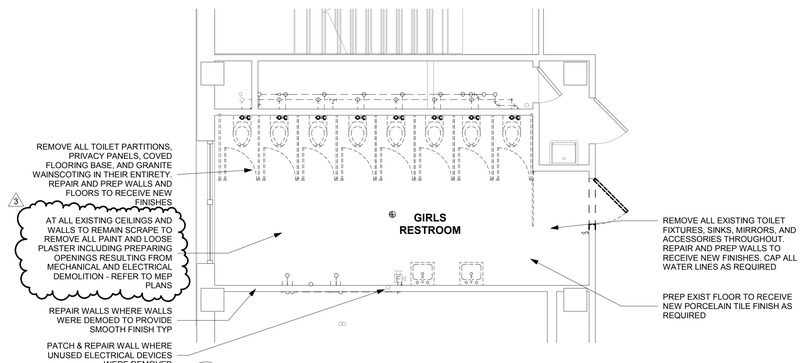
- XX / AREA — ROOM TAG
- AREA OF FLOOR DEMOLITION. COORDINATE WITH PLUMBING DRAWINGS
- AREA OF CEILING DEMOLITION TO ACCOMMODATE NEW ENCLOSED ADA RAMP. REFER TO SHEET A-100 RAMP ENCLOSURE EXTENTS



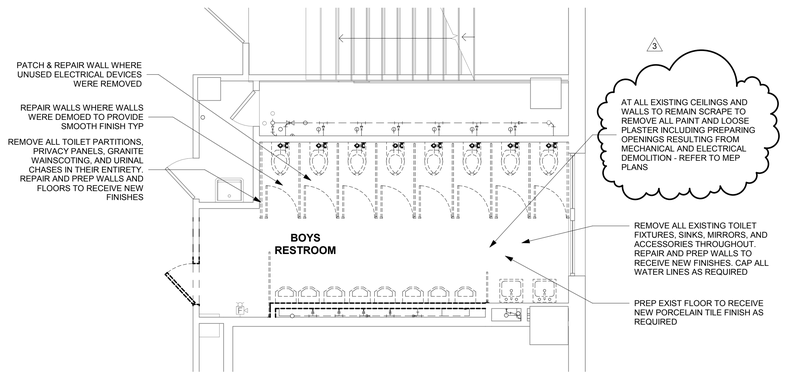
D2 DEMOLITION PLAN - CAFETERIA LOCKER RESTROOM
1/4" = 1'-0"



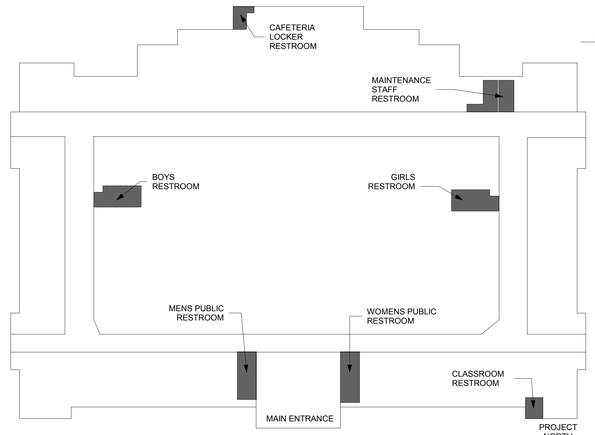
D5 DEMOLITION PLAN - MAINTENANCE STAFF RESTROOM
1/4" = 1'-0"



F2 DEMOLITION PLAN - GIRLS RESTROOM
1/4" = 1'-0"



F5 DEMOLITION PLAN - BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

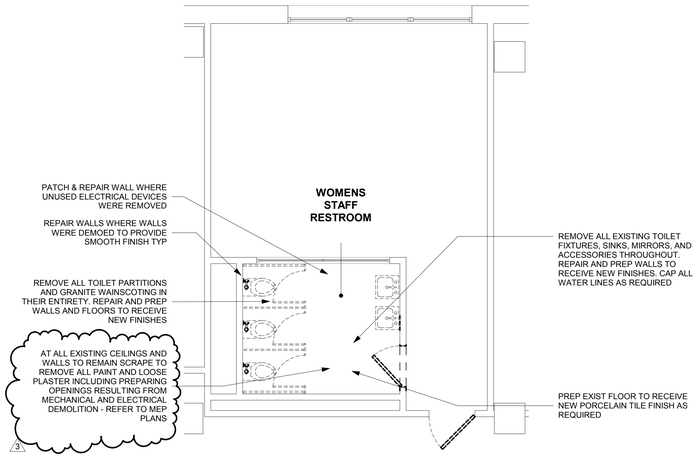
DEMOLITION PLANS - FIRST FLOOR

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

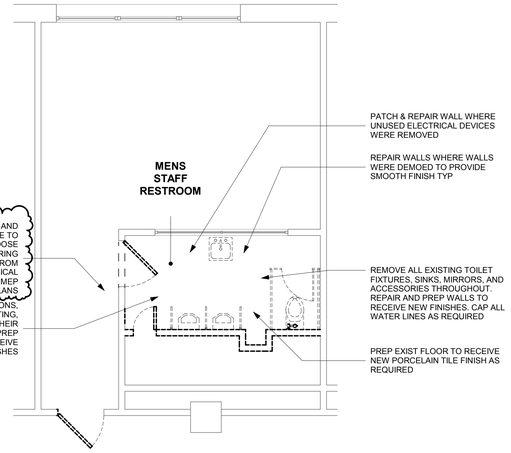
DRAWING NO.
AD110

SHEET 30 OF 78

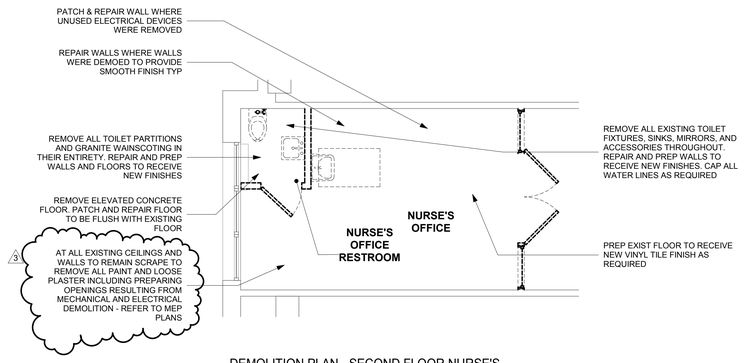
10/27/2020 11:40:40 AM



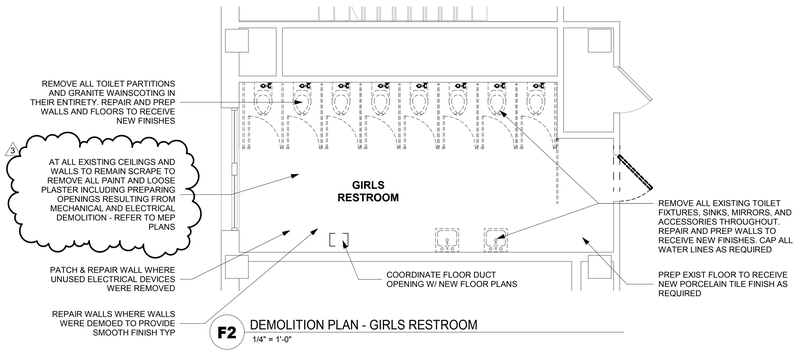
D3 DEMOLITION PLAN - WOMENS STAFF RESTROOM
1/4" = 1'-0"



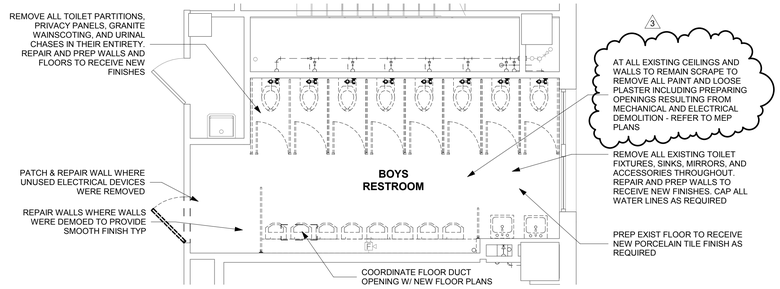
D5 DEMOLITION PLAN - MENS STAFF RESTROOM
1/4" = 1'-0"



F1 DEMOLITION PLAN - SECOND FLOOR NURSE'S OFFICE RESTROOM
1/4" = 1'-0"



F2 DEMOLITION PLAN - GIRLS RESTROOM
1/4" = 1'-0"



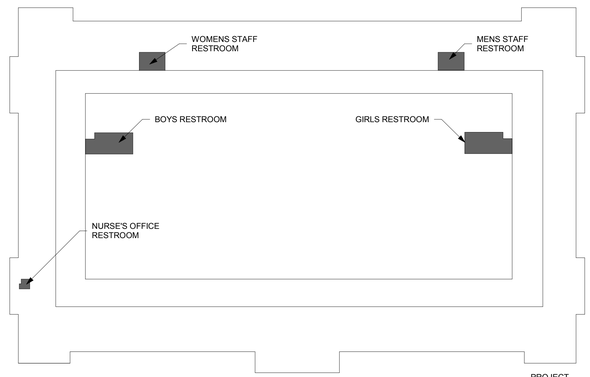
F4 DEMOLITION PLAN - BOYS RESTROOM
1/4" = 1'-0"

DEMOLITION PLAN GENERAL NOTES

1. AT COMPLETION OF DEMOLITION WORK, THE CONSTRUCTION AREA(S) SHALL BE LEFT IN "BROOM CLEAN" CONDITION. ALL DEBRIS AND MISCELLANEOUS MATERIALS SHALL BE REMOVED AND JOB SITE KEPT CLEAN ON A DAILY BASIS.
2. WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
3. REMOVE TO SOURCE ALL PIPES, VENTS, APPLIACNES, OR DRAINS NOT BEING RE-USED AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
4. FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND/OR REPAIRINF ANY DAMAGED CAUSED BY HIM/HER OR HISHER SUBCONTRACTORS TO EXISTING-TO-REMAIN CONSTRUCTION. REFINISH TO MATCH ADJACENT FINISH. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
6. ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED IN THE FIELD. ARCHITECT TO BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
7. CONTRACTOR TO REMOVE ALL TOOLS, EQUIPMENT, AND DEBRIS FROM SITE UPON COMPLETION OF DEMOLITION WORK. REMOVE ANY TEMPORARY PROTECTION.
8. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH NEW WORK DRAWINGS
9. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH HVAC, PLUMBING, ELECTRICAL DEMOLITION AND NEW WORK DRAWINGS. CAP ALL UTILITIES IDENTIFIED TO REMAIN IN PLACE.
10. G.C. IS TO NOTIFY ARCHITECT OF ANY AND ALL DESCREPENCIES BETWEEN FIELD CONDITIONS AND SCOPE OF DEMOLITION.
11. EMBEDDED MATERIALS TO BE CUT FLUSH WITH EXISTING WALLS AND FLOOR SLABS.
12. CONTRACTOR IS RESPONSIBLE FOR DESIGN, CONSTRUCTION , AND SUBSEQUENT REMOVAL OF ALL TEMPORARY SHORING REQUIRED.
13. WHERE AN ITEM OR PIECE OF EQUIPMENT IS CALLED OUT TO BE REMOVED, REMOVAL SHALL INCLUDE ALL APPURTENANCES, ANCHORS, BRACETS AND OTHER PIECES FOR A COMPLETE REMOVAL.
14. ALL EXISTING FINISHES, WHERE NEW FINISHES ARE BEING INSTALLED, NEED TO BE REMOVED DOWN TO SUBSTRATE AND FLASH PATCHED TO PROVIDE A SMOOTH EVEN SURFACE FOR NEW INSTALLATION. SEE A900 FOR NEW FINISHES.

FLOOR PLAN LEGEND

- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING PARTITION TO BE REMOVED
- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER
- **ROOM AREA** XX / AREA — ROOM TAG
- AREA OF FLOOR DEMOLITION. COORDINATE WITH PLUMBING DRAWINGS
- AREA OF CEILING DEMOLITION TO ACCOMMODATE NEW ENCLOSED ADA RAMP. REFER TO SHEET A-100 RAMP ENCLOSURE EXTENTS



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT — COMMONWEALTH OF PENNSYLVANIA — JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
DEMOLITION PLANS - SECOND FLOOR

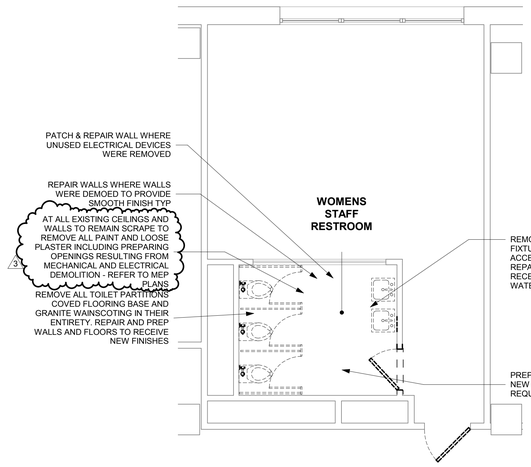
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

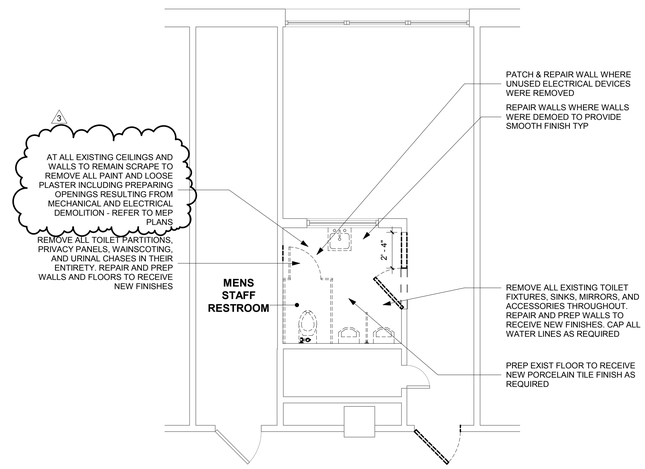
DRAWING NO.
AD120

SHEET 31 OF 78

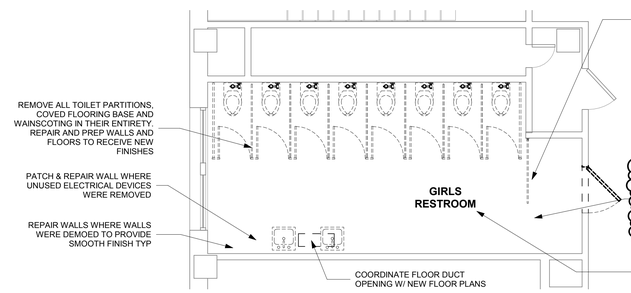
10/27/2020 11:40:48 AM



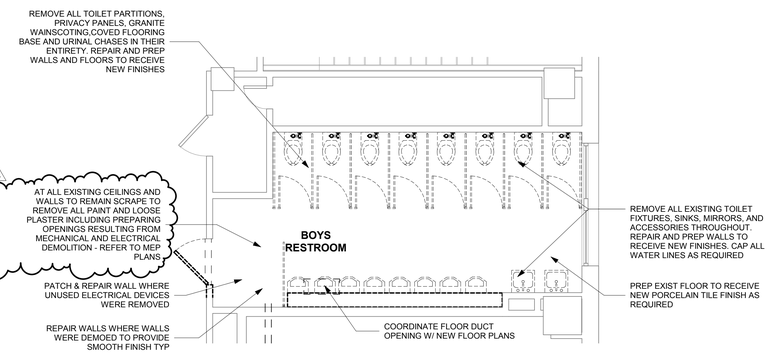
D3 DEMOLITION PLAN - WOMENS STAFF RESTROOM
1/4" = 1'-0"



D5 DEMOLITION PLAN - MENS STAFF RESTROOM
1/4" = 1'-0"



F2 DEMOLITION PLAN - GIRLS RESTROOM
1/4" = 1'-0"



F4 DEMOLITION PLAN - BOYS RESTROOM
1/4" = 1'-0"

DEMOLITION PLAN GENERAL NOTES

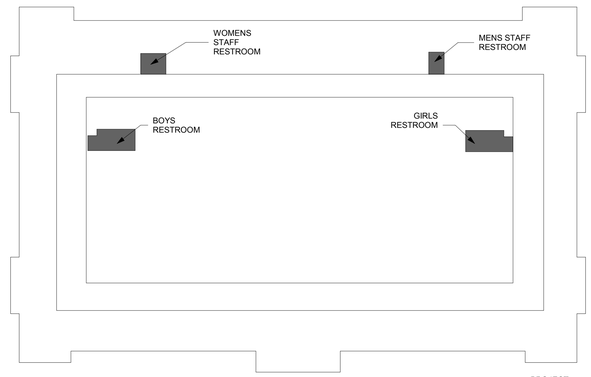
1. AT COMPLETION OF DEMOLITION WORK, THE CONSTRUCTION AREA(S) SHALL BE LEFT IN "BROOM CLEAN" CONDITION. ALL DEBRIS AND MISCELLANEOUS MATERIALS SHALL BE REMOVED AND JOB SITE KEPT CLEAN ON A DAILY BASIS.
2. WHERE PARTITIONS ARE TO BE REMOVED, REMOVE ALL OUTLETS, SWITCHES, WIRES, THERMOSTATS, ETC. TO PANELS AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
3. REMOVE TO SOURCE ALL PIPES, VENTS, APPLIACNES, OR DRAINS NOT BEING RE-USED AND TERMINATE IN COMPLIANCE WITH APPLICABLE BUILDING CODES.
4. FURNISH ALL LABOR AND MATERIALS/EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION AND REMOVAL OF ALL ITEMS AS INDICATED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND/OR REPAIRINF ANY DAMAGED CAUSED BY HIM/HER OR HIS/HER SUBCONTRACTORS TO EXISTING-TO-REMAIN CONSTRUCTION. REFINISH TO MATCH ADJACENT FINISH. REPAIR AS REQUIRED TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS.
6. ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED IN THE FIELD. ARCHITECT TO BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES.
7. CONTRACTOR TO REMOVE ALL TOOLS, EQUIPMENT, AND DEBRIS FROM SITE UPON COMPLETION OF DEMOLITION WORK. REMOVE ANY TEMPORARY PROTECTION.
8. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH NEW WORK DRAWINGS
9. VERIFY AND COORDINATE ENTIRE SCOPE OF DEMO WITH HVAC, PLUMBING, ELECTRICAL DEMOLITION AND NEW WORK DRAWINGS. CAP ALL UTILITIES IDENTIFIED TO REMAIN IN PLACE.
10. G.C. IS TO NOTIFY ARCHITECT OF ANY AND ALL DESCREPENCIES BETWEEN FIELD CONDITIONS AND SCOPE OF DEMOLITION.
11. EMBEDDED MATERIALS TO BE CUT FLUSH WITH EXISTING WALLS AND FLOOR SLABS.
12. CONTRACTOR IS RESPONSIBLE FOR DESIGN, CONSTRUCTION , AND SUBSEQUENT REMOVAL OF ALL TEMPORARY SHORING REQUIRED.
13. WHERE AN ITEM OR PIECE OF EQUIPMENT IS CALLED OUT TO BE REMOVED, REMOVAL SHALL INCLUDE ALL APPURTENANCES, ANCHORS, BRACETS AND OTHER PIECES FOR A COMPLETE REMOVAL.
14. ALL EXISTING FINISHES, WHERE NEW FINISHES ARE BEING INSTALLED, NEED TO BE REMOVED DOWN TO SUBSTRATE AND FLASH PATCHED TO PROVIDE A SMOOTH EVEN SURFACE FOR NEW INSTALLATION. SEE A900 FOR NEW FINISHES.

FLOOR PLAN LEGEND

- EXISTING DOOR AND FRAME TO BE REMOVED
- EXISTING PARTITION TO BE REMOVED
- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

ROOM AREA

- XX / AREA — ROOM TAG
- AREA OF FLOOR DEMOLITION. COORDINATE WITH PLUMBING DRAWINGS
- AREA OF CEILING DEMOLITION TO ACCOMMODATE NEW ENCLOSED ADA RAMP. REFER TO SHEET A-100 RAMP ENCLOSURE EXTENTS



KEY PLAN

PROJECT NORTH

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
DEMOLITION PLANS - THIRD FLOOR

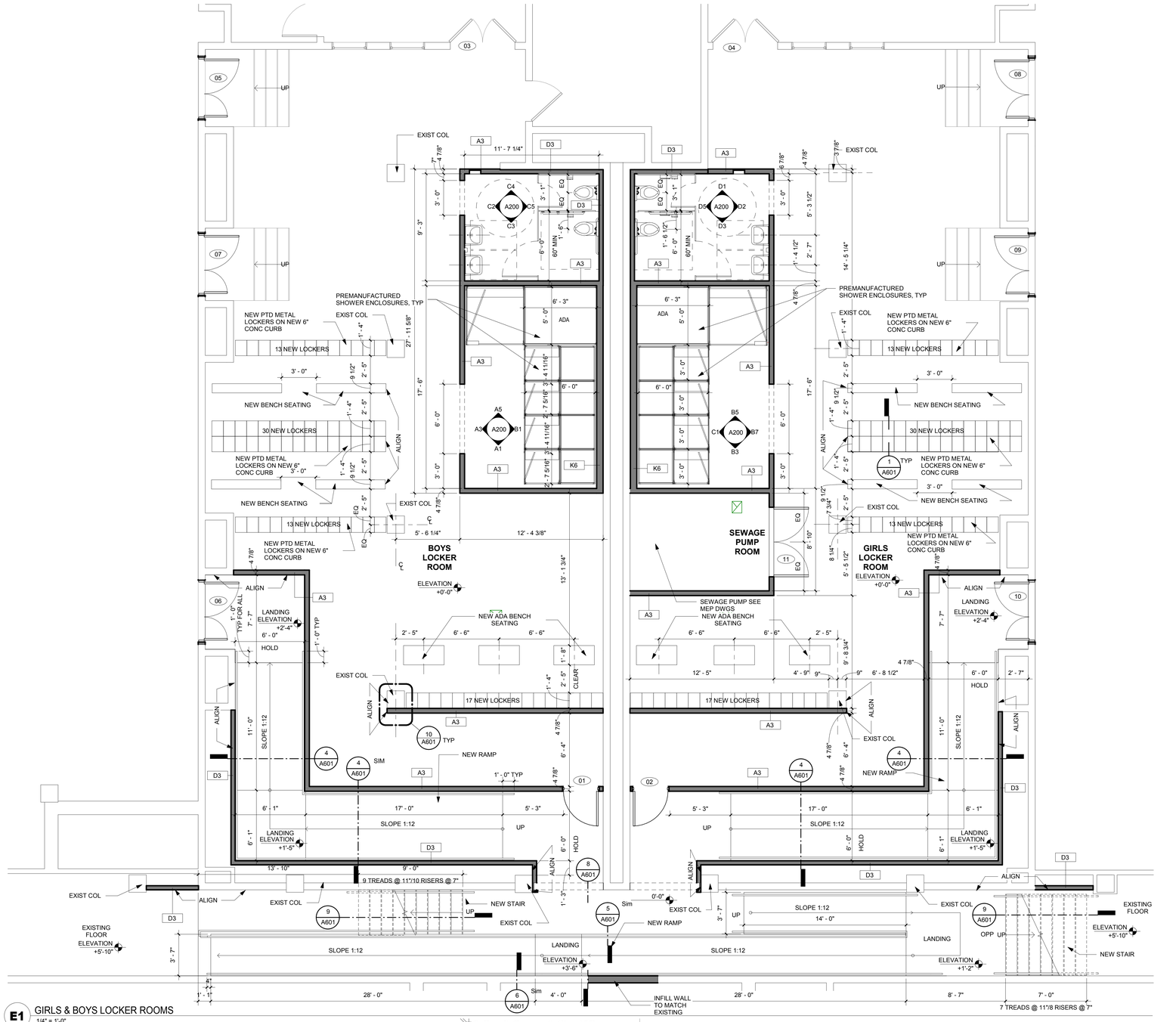
DRAWING SCALE: AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY: OP	CHECKED BY: JK

B-007/008/009/010C OF 2018-2019

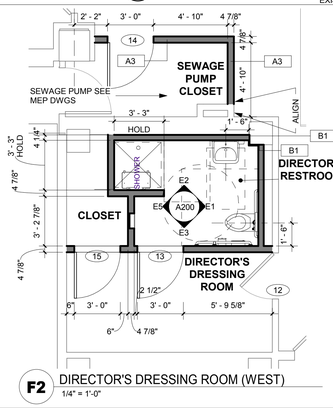
DRAWING NO.
AD130

SHEET 32 OF 78

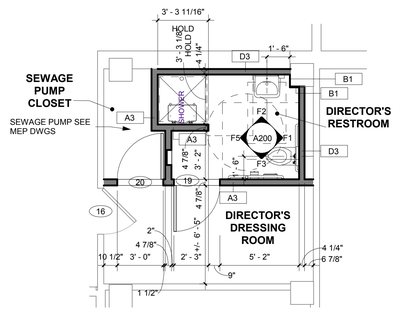
10/27/2020 11:40:55 AM



E1 GIRLS & BOYS LOCKER ROOMS
1/4" = 1'-0"



F2 DIRECTOR'S DRESSING ROOM (WEST)
1/4" = 1'-0"



F4 DIRECTOR'S DRESSING ROOM (EAST)
1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON PARTITION PLAN. IN CASE OF CONFLICT NOTIFY ARCHITECT IMMEDIATELY. PARTITION PLAN BY ARCHITECT TAKES PRECEDENCE OVER ALL OTHER PLANS.
2. DIMENSIONS NOTED "CLEAR" OR "CLR" OR "HOLD" MUST BE ACCURATELY MAINTAINED, SHALL ALLOW FOR THICKNESS OF ALL WALL FINISHES U.O.N., AND SHALL NOT VARY MORE THAN + 1/8" WITHOUT WRITTEN INSTRUCTION FROM ARCHITECT.
3. ALL PARTITIONS ARE DIMENSIONED FROM FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD U.O.N.
4. ALL FLOOR SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. ANY PENETRATIONS AT RATED PARTITIONS TO BE PER APPLICABLE UL ASSEMBLY.
5. U.O.N., DOORS ARE CENTERED OR HINGE SIDE IS TO BE LOCATED 4" FROM CORNER AS INDICATED. DOORS MUST HAVE 1'-6" CLEAR ON STRIKE/PULL SIDE AND 12" CLEAR ON STRIKE/PUSH SIDE OF DOOR. VERIFY AND ADVISE ARCHITECTS OF EXCEPTIONS PRIOR TO CLOSING OUT PARTITIONS.
6. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHERE REQUIRED.
7. REFER TO A000-SERIES SHEETS FOR ADDITIONAL NOTES, LEGENDS, SYMBOLS, ABBREVIATIONS, AND SCHEDULES.
8. ALL MILLWORK & WALL-HUNG FURNITURE TO BE FASTENED TO THE PARTITION. PROVIDE BLOCKING FOR ALL MILLWORK & WALL-HUNG FURNITURE NOT SUPPORTED BY THE SLAB OR ABOVE 4'-0" HEIGHT. ALL CONCEALED WOOD BLOCKING TO BE FIRE TREATED, AS REQUIRED BY APPLICABLE CODES.
9. REFER TO A900-SERIES SHEETS FOR EPOXY FLOOR DRAINAGE SLOPE
10. AT ALL EXISTING WALLS TO REMAIN, PATCH EXISTING PLASTER AND SKIM-COAT TO MATCH A LEVEL-4 FINISH READY TO PAINT

FLOOR PLAN LEGEND

- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

ROOM NAME

- # — ROOM TAG

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

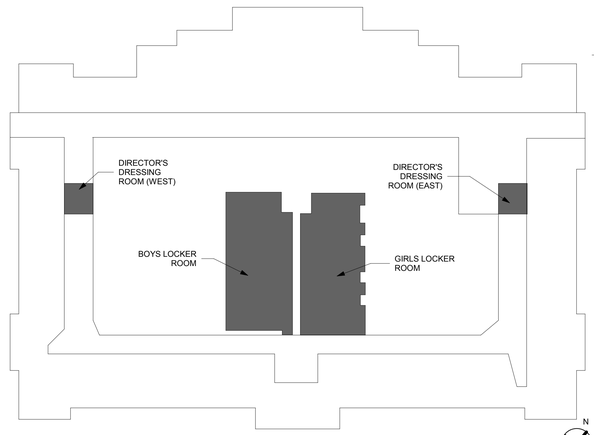
An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2



KEY PLAN

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
NEW PLANS - BASEMENT

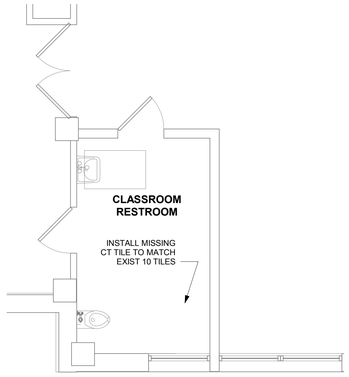
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

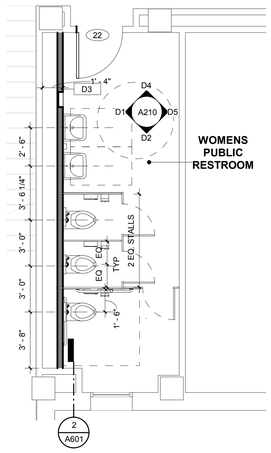
DRAWING NO.
A100

SHEET 9 OF 78

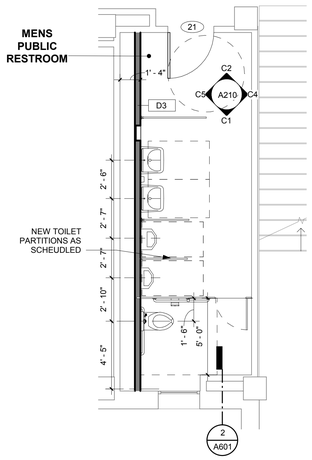
10/27/2020 11:40:03 AM



B2 FIRST FLOOR CLASSROOM RESTROOM
1/4" = 1'-0"



B3 FIRST FLOOR WOMENS PUBLIC RESTROOM
1/4" = 1'-0"



B5 FIRST FLOOR MENS PUBLIC RESTROOM
1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

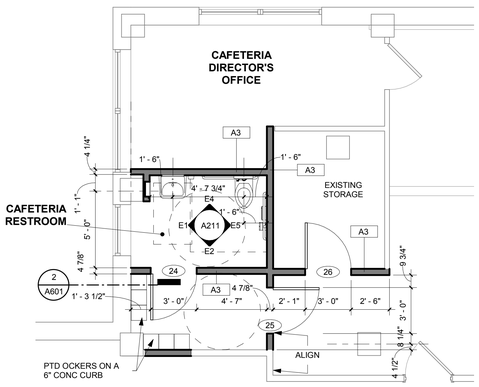
1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON PARTITION PLAN; IN CASE OF CONFLICT NOTIFY ARCHITECT IMMEDIATELY. PARTITION PLAN BY ARCHITECT TAKES PRECEDENCE OVER ALL OTHER PLANS.
2. DIMENSIONS NOTED "CLEAR" OR "CLR" OR "HOLD" MUST BE ACCURATELY MAINTAINED, SHALL ALLOW FOR THICKNESS OF ALL WALL FINISHES U.O.N., AND SHALL NOT VARY MORE THAN + 1/8" WITHOUT WRITTEN INSTRUCTION FROM ARCHITECT.
3. ALL PARTITIONS ARE DIMENSIONED FROM FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD U.O.N.
4. ALL FLOOR SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. ANY PENETRATIONS AT RATED PARTITIONS TO BE PER APPLICABLE UL ASSEMBLY.
5. U.O.N., DOORS ARE CENTERED OR HINGE SIDE IS TO BE LOCATED 4" FROM CORNER AS INDICATED. DOORS MUST HAVE 1'-6" CLEAR ON STRIKE/PULL SIDE AND 12" CLEAR ON STRIKE/PUSH SIDE OF DOOR. VERIFY AND ADVISE ARCHITECTS OF EXCEPTIONS PRIOR TO CLOSING OUT PARTITIONS.
6. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHERE REQUIRED.
7. REFER TO A000-SERIES SHEETS FOR ADDITIONAL NOTES, LEGENDS, SYMBOLS, ABBREVIATIONS, AND SCHEDULES.
8. ALL MILLWORK & WALL-HUNG FURNITURE TO BE FASTENED TO THE PARTITION. PROVIDE BLOCKING FOR ALL MILLWORK & WALL-HUNG FURNITURE NOT SUPPORTED BY THE SLAB OR ABOVE 4'-0" HEIGHT. ALL CONCEALED WOOD BLOCKING TO BE FIRE TREATED, AS REQUIRED BY APPLICABLE CODES.
9. REFER TO A900-SERIES SHEETS FOR EPOXY FLOOR DRAINAGE SLOPE
10. AT ALL EXISTING WALLS TO REMAIN, PATCH EXISTING PLASTER AND SKIM-COAT TO MATCH A LEVEL-4 FINISH READY TO PAINT

3

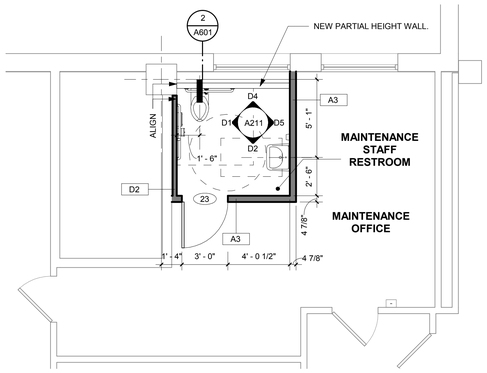
FLOOR PLAN LEGEND

- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

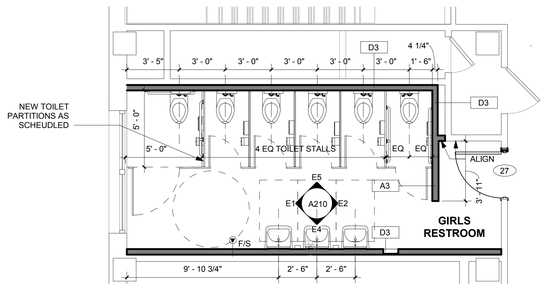
ROOM NAME
— ROOM TAG



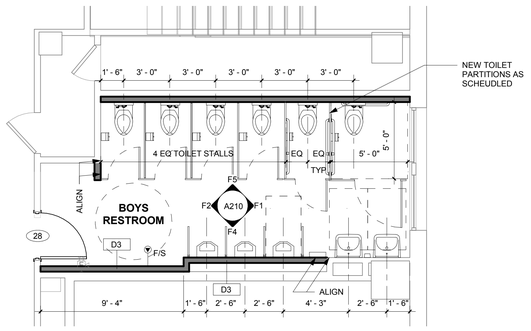
D3 FIRST FLOOR CAFETERIA LOCKER RESTROOM
1/4" = 1'-0"



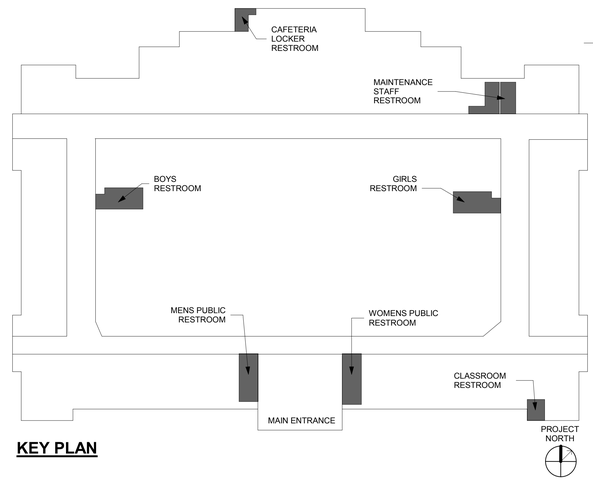
D5 FIRST FLOOR MAINTENANCE STAFF RESTROOM
1/4" = 1'-0"



F3 FIRST FLOOR GIRLS RESTROOM
1/4" = 1'-0"



F5 FIRST FLOOR BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
NEW PLANS - FIRST FLOOR

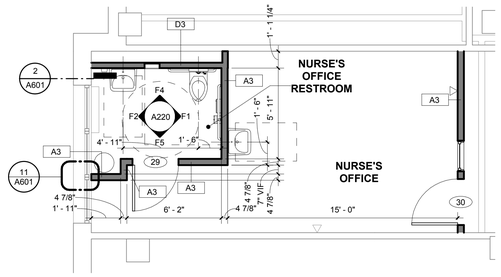
DRAWING SCALE: AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY: OP	CHECKED BY: JK

B-007/008/009/010C OF 2018-2019

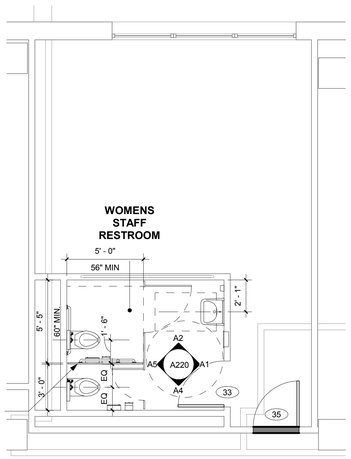
DRAWING NO.
A110

SHEET 10 OF 78

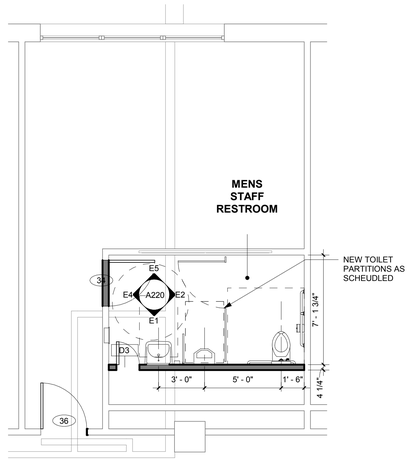
10/27/2020 11:40:09 AM



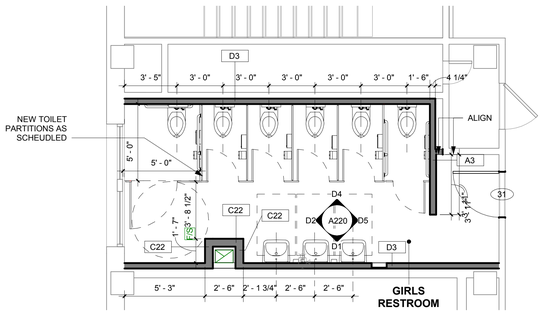
B3 SECOND FLOOR NURSE'S OFFICE RESTROOM
1/4" = 1'-0"



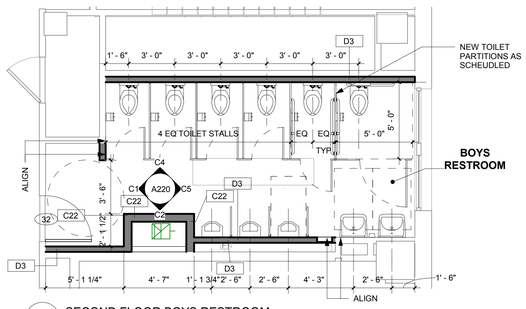
D3 SECOND FLOOR WOMENS STAFF RESTROOM
1/4" = 1'-0"



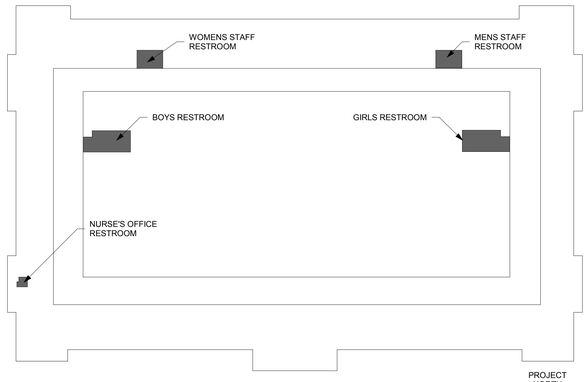
D5 SECOND FLOOR MENS STAFF RESTROOM
1/4" = 1'-0"



F3 SECOND FLOOR GIRLS RESTROOM
1/4" = 1'-0"



F5 SECOND FLOOR BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

PROJECT NORTH

FLOOR PLAN GENERAL NOTES

1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON PARTITION PLAN; IN CASE OF CONFLICT NOTIFY ARCHITECT IMMEDIATELY. PARTITION PLAN BY ARCHITECT TAKES PRECEDENCE OVER ALL OTHER PLANS.
2. DIMENSIONS NOTED "CLEAR" OR "CLR" OR "HOLD" MUST BE ACCURATELY MAINTAINED, SHALL ALLOW FOR THICKNESS OF ALL WALL FINISHES U.O.N., AND SHALL NOT VARY MORE THAN + 1/8" WITHOUT WRITTEN INSTRUCTION FROM ARCHITECT.
3. ALL PARTITIONS ARE DIMENSIONED FROM FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD U.O.N.
4. ALL FLOOR SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. ANY PENETRATIONS AT RATED PARTITIONS TO BE PER APPLICABLE UL ASSEMBLY.
5. U.O.N., DOORS ARE CENTERED OR HINGE SIDE IS TO BE LOCATED 4" FROM CORNER AS INDICATED. DOORS MUST HAVE 1' -6" CLEAR ON STRIKE/PULL SIDE AND 12" CLEAR ON STRIKE/PUSH SIDE OF DOOR. VERIFY AND ADVISE ARCHITECTS OF EXCEPTIONS PRIOR TO CLOSING OUT PARTITIONS.
6. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHERE REQUIRED.
7. REFER TO A000-SERIES SHEETS FOR ADDITIONAL NOTES, LEGENDS, SYMBOLS, ABBREVIATIONS, AND SCHEDULES.
8. ALL MILLWORK & WALL-HUNG FURNITURE TO BE FASTENED TO THE PARTITION. PROVIDE BLOCKING FOR ALL MILLWORK & WALL-HUNG FURNITURE NOT SUPPORTED BY THE SLAB OR ABOVE 4' -0" HEIGHT. ALL CONCEALED WOOD BLOCKING TO BE FIRE TREATED, AS REQUIRED BY APPLICABLE CODES.
9. REFER TO A900-SERIES SHEETS FOR EPOXY FLOOR DRAINAGE SLOPE
10. AT ALL EXISTING WALLS TO REMAIN, PATCH EXISTING PLASTER AND SKIM-COAT TO MATCH A LEVEL-4 FINISH READY TO PAINT

3

FLOOR PLAN LEGEND

- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

ROOM NAME
#
ROOM TAG

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | **(215) 400 - 4731 (fax)**
www.philasd.org

SEAL:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

NEW PLANS - SECOND FLOOR

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF **2018-2019**

DRAWING NO.
A120

SHEET 11 OF 78

10/27/2020 11:40:14 AM

FLOOR PLAN GENERAL NOTES

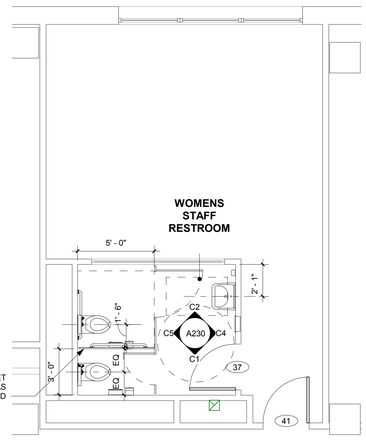
1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON PARTITION PLAN; IN CASE OF CONFLICT NOTIFY ARCHITECT IMMEDIATELY. PARTITION PLAN BY ARCHITECT TAKES PRECEDENCE OVER ALL OTHER PLANS.
2. DIMENSIONS NOTED "CLEAR" OR "CLR" OR "HOLD" MUST BE ACCURATELY MAINTAINED, SHALL ALLOW FOR THICKNESS OF ALL WALL FINISHES U.O.N., AND SHALL NOT VARY MORE THAN + 1/8" WITHOUT WRITTEN INSTRUCTION FROM ARCHITECT.
3. ALL PARTITIONS ARE DIMENSIONED FROM FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD U.O.N.
4. ALL FLOOR SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. ANY PENETRATIONS AT RATED PARTITIONS TO BE PER APPLICABLE UL ASSEMBLY.
5. U.O.N., DOORS ARE CENTERED OR HINGE SIDE IS TO BE LOCATED 4" FROM CORNER AS INDICATED. DOORS MUST HAVE 1'-6" CLEAR ON STRIKE/PULL SIDE AND 12" CLEAR ON STRIKE/PUSH SIDE OF DOOR. VERIFY AND ADVISE ARCHITECTS OF EXCEPTIONS PRIOR TO CLOSING OUT PARTITIONS.
6. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHERE REQUIRED.
7. REFER TO A000-SERIES SHEETS FOR ADDITIONAL NOTES, LEGENDS, SYMBOLS, ABBREVIATIONS, AND SCHEDULES.
8. ALL MILLWORK & WALL-HUNG FURNITURE TO BE FASTENED TO THE PARTITION. PROVIDE BLOCKING FOR ALL MILLWORK & WALL-HUNG FURNITURE NOT SUPPORTED BY THE SLAB OR ABOVE 4'-0" HEIGHT. ALL CONCEALED WOOD BLOCKING TO BE FIRE TREATED, AS REQUIRED BY APPLICABLE CODES.
9. REFER TO A900-SERIES SHEETS FOR EPOXY FLOOR DRAINAGE SLOPE
10. AT ALL EXISTING WALLS TO REMAIN, PATCH EXISTING PLASTER AND SKIM-COAT TO MATCH A LEVEL-4 FINISH READY TO PAINT

3

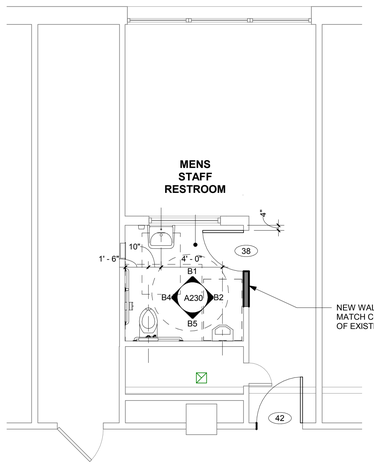
FLOOR PLAN LEGEND

- EXISTING PARTITION TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW PARTITION, SEE PARTITION TAGS AND TYPES
- XXXX — NEW PARTITION TAG, SEE PARTITION TYPES
- XXXX — NEW DOOR & DOOR TAG WITH DOOR NUMBER

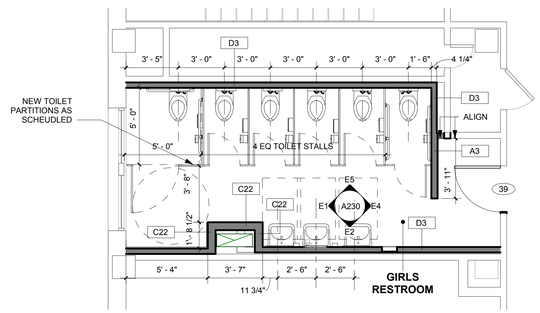
ROOM NAME
#
ROOM TAG



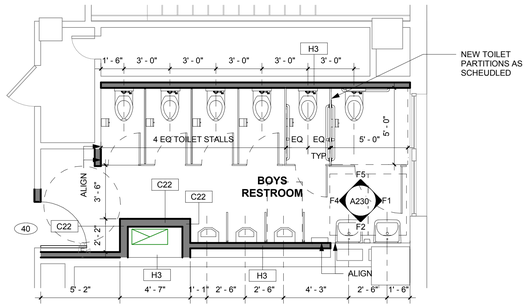
D3 THIRD FLOOR WOMENS STAFF RESTROOM
1/4" = 1'-0"



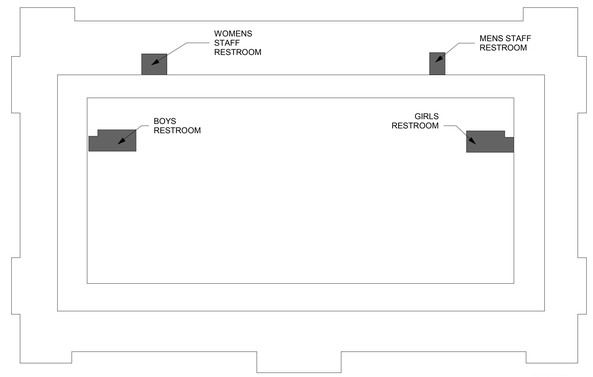
D5 THIRD FLOOR MENS STAFF RESTROOM
1/4" = 1'-0"



F3 THIRD FLOOR GIRLS RESTROOM
1/4" = 1'-0"



F5 THIRD FLOOR BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

PROJECT NORTH

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

NEW PLANS - THIRD FLOOR

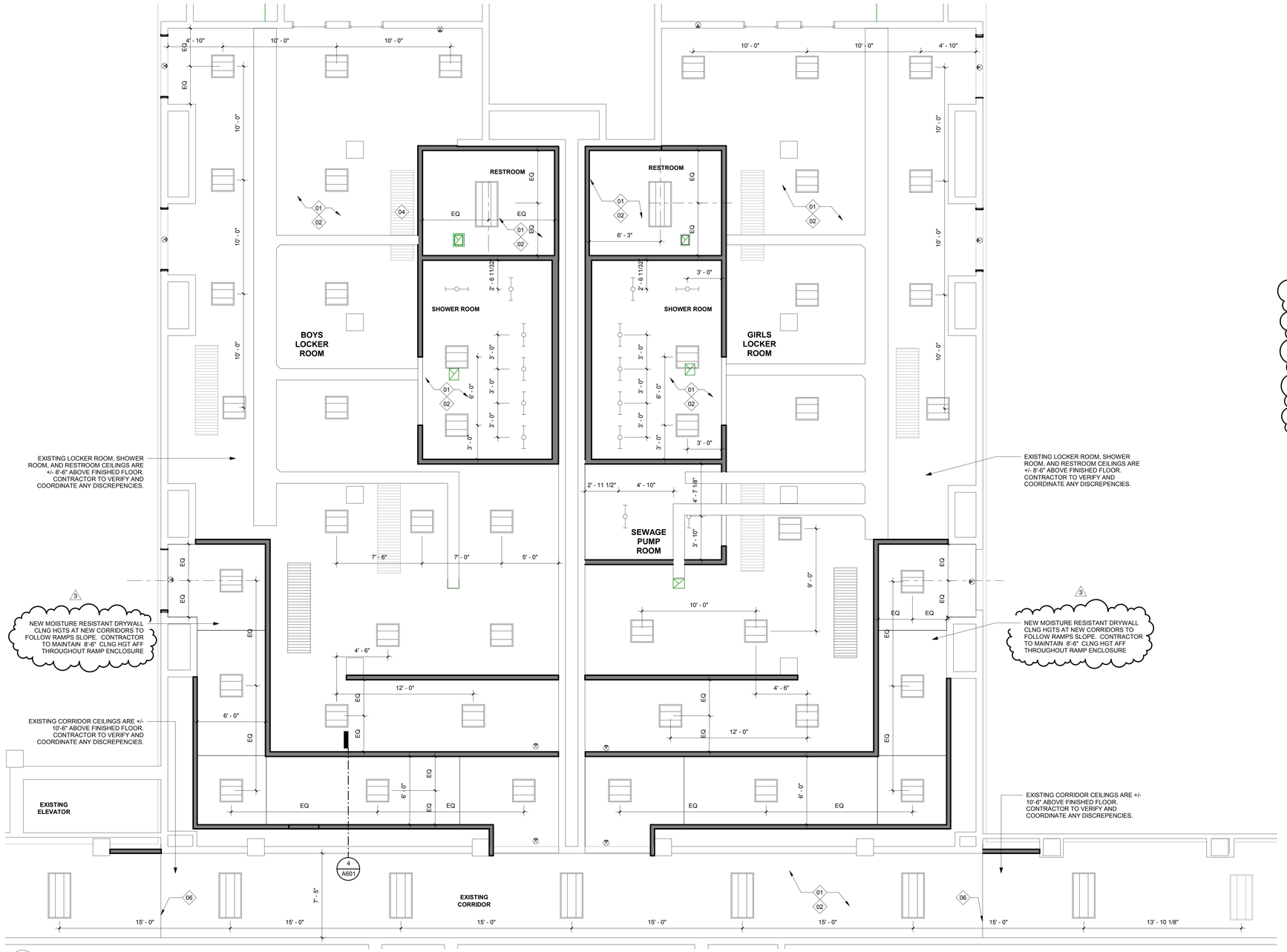
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

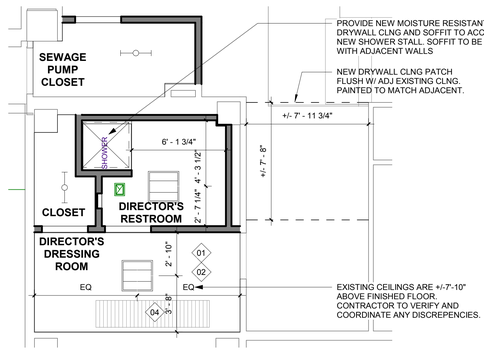
DRAWING NO.
A130

SHEET 12 OF 78

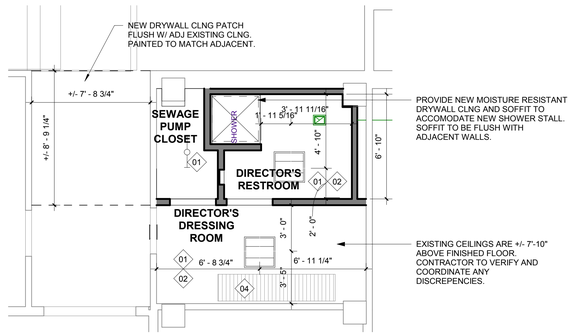
10/27/2020 11:40:18 AM



E1 NEW - GIRLS AND BOYS LOCKER ROOMS
1/4" = 1'-0"



F2 NEW REFLECTED CEILING PLAN - DIRECTOR'S DRESSING ROOM (WEST)
1/4" = 1'-0"



F4 NEW REFLECTED CEILING PLAN - DIRECTOR'S DRESSING ROOM (EAST)
1/4" = 1'-0"

REFLECTED CEILING PLAN GENERAL NOTES

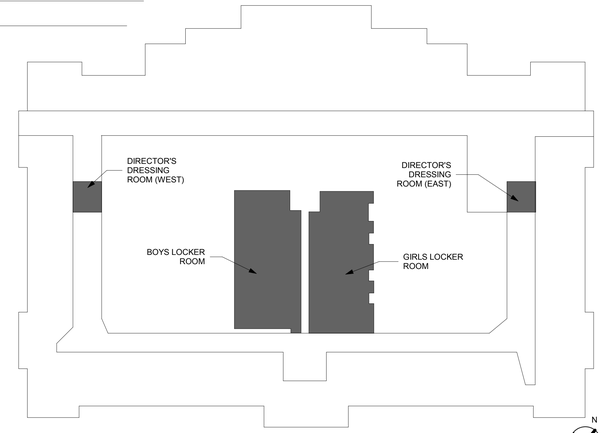
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL CEILING SYSTEMS AND CONSTRUCTION AS DESIGNATED ON THE REFLECTED CEILING PLANS OF THESE DRAWINGS AND NOTES.
2. COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO ENSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEMS, ETC. NECESSARY TO MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON ARCHITECTS DRAWINGS.
3. FASCIAS OR ANY BREAK IN THE CEILING HEIGHTS CREATED BY THE INSTALLATION AND/OR ALTERATION OF HEATING, VENTING, AIR CONDITIONING, MECHANICAL DUCTS, PIPING, OR OTHER EQUIPMENT SHALL BE FORMED OF GYPSUM WALLBOARD ON FURRING CHANNELS.
4. FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM, FIXTURE LAMPS, AND SEISMIC BRACING AS REQUIRED.
5. LIGHT FIXTURES SHALL BE LOCATED IN THE SAME LOCATIONS AS THOSE BEING REPLACED, IF APPLICABLE, OR PER THE DIMENSIONED LOCATIONS SHOWN ON THE REFLECTED CEILING PLANS.
6. ALL SOFFITS AND CEILING HEIGHTS ARE DIMENSIONED FROM TOP OF FINISHED FLOOR TO BOTTOM OF FINISHED GYP. BOARD OR CEILING TILE, AND SHALL ALLOW FOR THICKNESS OF ALL FLOOR FINISHES.
7. CEILINGS IN CLOSETS AND STORAGE AREAS SHALL BE OF THE SAME HEIGHTS AND CONSTRUCTION AS THAT OF ADJOINING SPACES, U.O.N.
8. NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATIONS WITH MAIN RUNNERS, DUCTS, STRUCTURES, HVAC, AND/OR EXISTING CONDUIT, PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN ARCHITECT'S CEILING GRID AND ACTUAL FIELD CONDITION ARE TO BE CLARIFIED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. INSTALL LIGHT FIXTURES WITH PROTECTIVE FILM OR SIM. COVER OVER LOUVER, LENS, BAFFLE, ETC., TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.
10. ARCHITECTURAL DRAWINGS DETERMINE LOCATION OF ALL FIXTURES AND TAKE PRECEDENCE OVER ALL OTHERS, U.O.N.

REFLECTED CEILING PLAN LEGEND

ALL MAIN CEILINGS ARE EXISTING TO REMAIN.

SHEET NOTES - REFLECTED CEILING PLANS

TAG	DESCRIPTION
01	REFER TO ENGINEERING DRAWINGS FOR COMPLETE MEP SCOPE OF WORK (INCLUDING LIGHT FIXTURES, STROBES, EXIT SIGNS, DUCTWORK, ETC.) AT ALL LOCATIONS WITHIN THE SCOPE OF WORK.
02	EXISTING CEILINGS TO REMAIN. SCRAPE AND REMOVE ALL LOOSE PAINT AND PLASTER. PATCH CEILINGS INCLUDING PATCHING AT ALL OPENINGS RESULTING FROM MEP DEMOLITION AND NEW PENETRATIONS (REFER TO MEP DRAWINGS). PROVIDE SKIM COAT OF PLASTER TO MATCH LEVEL 4 FINISH READY FOR PAINTING. PREPARE ALL EXISTING PIPING, DUCTWORK AND CEILING MOUNTED RADIATORS TO REMAIN. PAINT CEILINGS, DUCTWORK, PIPING AND EXISTING RADIATORS
03	CONTRACTOR TO VERIFY EXISTING CEILING HEIGHT. BRING ANY DISCREPENCIES TO THE ATTENTION OF THE DESIGN PROFESSIONALS TO COORDINATE SCOPE OF WORK.
04	EXISTING CEILING-HUNG RADIATOR. CONTRACTOR TO FIELD COORDINATE NEW LIGHTS AND DUCT CHASE LOCATIONS WITH RADIATOR LOCATION
05	NEW EXHAUST GRILLE LOCATION SEE MECHANICAL DRAWINGS
06	PAINT CEILING TO THIS POINT
07	RELOCATED EXISTING CEILING MOUNTED RADIATOR



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
REFLECTED CEILING PLANS - BASEMENT

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

DRAWING NO.
A400

SHEET 18 OF 78

10/27/2020 11:40:19 AM

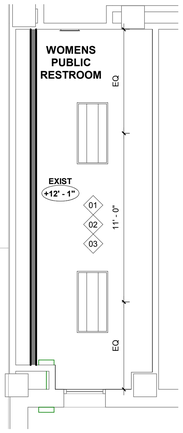
01	SHEET NOTES - REFLECTED CEILING PLANS
TAG	DESCRIPTION
01	REFER TO ENGINEERING DRAWINGS FOR COMPLETE MEP SCOPE OF WORK (INCLUDING LIGHT FIXTURES, STROBES, EXIT SIGNS, DUCTWORK, ETC.) AT ALL LOCATIONS WITHIN THE SCOPE OF WORK.
02	EXISTING CEILINGS TO REMAIN. SCRAPE AND REMOVE ALL LOOSE PAINT AND PLASTER. PATCH CEILINGS INCLUDING PATCHING AT ALL OPENINGS RESULTING FROM MEP DEMOLITION AND NEW PENETRATIONS (REFER TO MEP DRAWINGS). PROVIDE SKIM COAT OF PLASTER TO MATCH LEVEL 4 FINISH READY FOR PAINTING. PREPARE ALL EXISTING PIPING, DUCTWORK AND CEILING MOUNTED RADIATORS TO REMAIN. PAINT CEILINGS, DUCTWORK, PIPING AND EXISTING RADIATORS
03	CONTRACTOR TO VERIFY EXISTING CEILING HEIGHT. BRING ANY DISCREPENCIES TO THE ATTENTION OF THE DESIGN PROFESSIONALS TO COORDINATE SCOPE OF WORK.
04	EXISTING CEILING-HUNG RADIATOR. CONTRACTOR TO FIELD COORDINATE NEW LIGHTS AND DUCT CHASE LOCATIONS WITH RADIATOR LOCATION
05	NEW EXHAUST GRILLE LOCATION SEE MECHANICAL DRAWINGS
06	PAINT CEILING TO THIS POINT
07	RELOCATED EXISTING CEILING MOUNTED RADIATOR

REFLECTED CEILING PLAN GENERAL NOTES

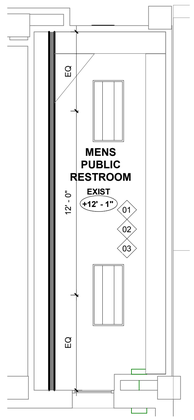
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL CEILING SYSTEMS AND CONSTRUCTION AS DESIGNATED ON THE REFLECTED CEILING PLANS OF THESE DRAWINGS AND NOTES.
2. COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO ENSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEMS, ETC. NECESSARY TO MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON ARCHITECT'S DRAWINGS.
3. FASCIAS OR ANY BREAK IN THE CEILING HEIGHTS CREATED BY THE INSTALLATION AND/OR ALTERATION OF HEATING, VENTING, AIR CONDITIONING, MECHANICAL DUCTS, PIPING, OR OTHER EQUIPMENT SHALL BE FORMED OF GYPSUM WALLBOARD ON FURRING CHANNELS.
4. FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM, FIXTURE LAMPS, AND SEISMIC BRACING AS REQUIRED.
5. LIGHT FIXTURES SHALL BE LOCATED IN THE SAME LOCATIONS AS THOSE BEING REPLACED, IF APPLICABLE, OR PER THE DIMENSIONED LOCATIONS SHOWN ON THE REFLECTED CEILING PLANS.
6. ALL SOFFITS AND CEILING HEIGHTS ARE DIMENSIONED FROM TOP OF FINISHED FLOOR TO BOTTOM OF FINISHED GYP. BOARD OR CEILING TILE, AND SHALL ALLOW FOR THICKNESS OF ALL FLOOR FINISHES.
7. CEILINGS IN CLOSETS AND STORAGE AREAS SHALL BE OF THE SAME HEIGHTS AND CONSTRUCTION AS THAT OF ADJOINING SPACES, U.O.N.
8. NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATIONS WITH MAIN RUNNERS, DUCTS, STRUCTURES, HVAC, AND/OR EXISTING CONDUIT, PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN ARCHITECT'S CEILING GRID AND ACTUAL FIELD CONDITION ARE TO BE CLARIFIED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. INSTALL LIGHT FIXTURES WITH PROTECTIVE FILM OR SIM. COVER OVER LOUVER, LENS, BAFFLE, ETC., TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.
10. ARCHITECTURAL DRAWINGS DETERMINE LOCATION OF ALL FIXTURES AND TAKE PRECEDENCE OVER ALL OTHERS, U.O.N.

REFLECTED CEILING PLAN LEGEND

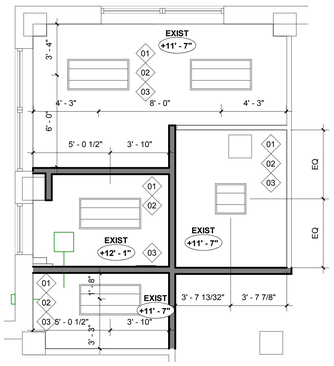
ALL MAIN CEILINGS ARE EXISTING TO REMAIN.



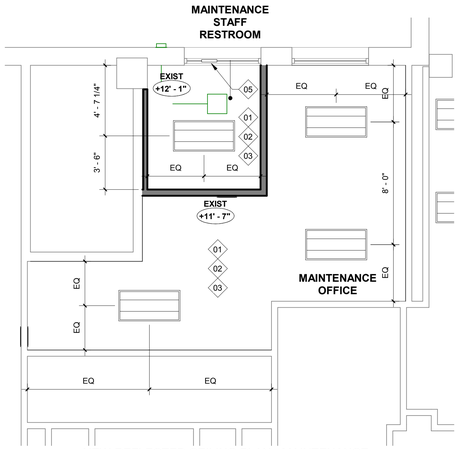
D2 NEW REFLECTED CEILING PLAN - WOMENS PUBLIC
1/4" = 1'-0"



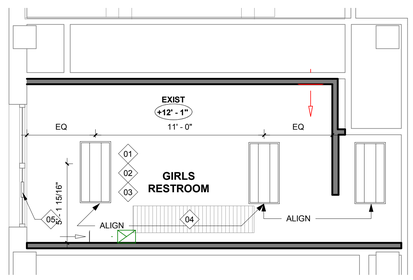
D3 NEW REFLECTED CEILING PLAN - MENS PUBLIC RESTROOM
1/4" = 1'-0"



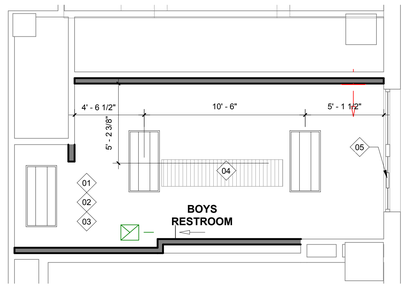
D5 NEW REFLECTED CEILING PLAN - CAFETERIA RESTROOM
1/4" = 1'-0"



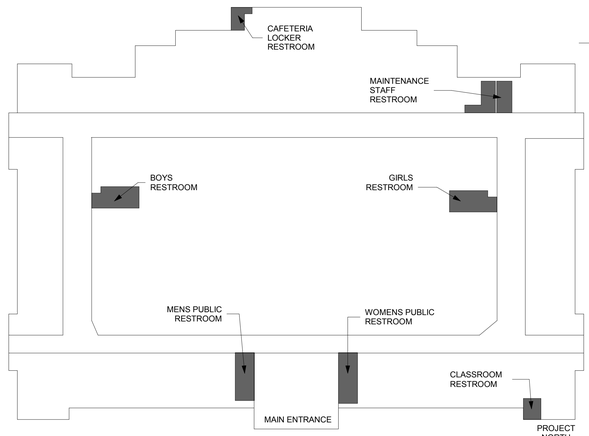
F1 NEW REFLECTED CEILING PLAN - MAINTENANCE RESTROOM
1/4" = 1'-0"



F2 NEW REFLECTED CEILING PLAN - GIRLS RESTROOM
1/4" = 1'-0"



F4 NEW REFLECTED CEILING PLAN - BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

REFLECTED CEILING PLANS - FIRST FLOOR

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

DRAWING NO.
A410

SHEET 19 OF 78

10/27/2020 11:40:21 AM

SHEET NOTES - REFLECTED CEILING PLANS

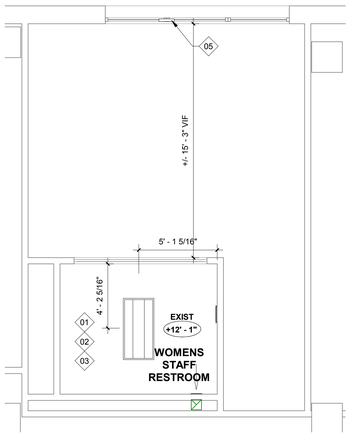
TAG	DESCRIPTION
01	REFER TO ENGINEERING DRAWINGS FOR COMPLETE MEP SCOPE OF WORK (INCLUDING LIGHT FIXTURES, STROBES, EXIT SIGNS, DUCTWORK, ETC.) AT ALL LOCATIONS WITHIN THE SCOPE OF WORK.
02	EXISTING CEILINGS TO REMAIN. SCRAPE AND REMOVE ALL LOOSE PAINT AND PLASTER. PATCH CEILINGS INCLUDING PATCHING AT ALL OPENINGS RESULTING FROM MEP DEMOLITION AND NEW PENETRATIONS (REFER TO MEP DRAWINGS). PROVIDE SKIM COAT OF PLASTER TO MATCH LEVEL 4 FINISH READY FOR PAINTING. PREPARE ALL EXISTING PIPING, DUCTWORK AND CEILING MOUNTED RADIATORS TO REMAIN. PAINT CEILINGS, DUCTWORK, PIPING AND EXISTING RADIATORS
03	CONTRACTOR TO VERIFY EXISTING CEILING HEIGHT. BRING ANY DISCREPENCIES TO THE ATTENTION OF THE DESIGN PROFESSIONALS TO COORDINATE SCOPE OF WORK.
04	EXISTING CEILING-HUNG RADIATOR. CONTRACTOR TO FIELD COORDINATE NEW LIGHTS AND DUCT CHASE LOCATIONS WITH RADIATOR LOCATION
05	NEW EXHAUST GRILLE LOCATION SEE MECHANICAL DRAWINGS
06	PAINT CEILING TO THIS POINT
07	RELOCATED EXISTING CEILING MOUNTED RADIATOR

REFLECTED CEILING PLAN GENERAL NOTES

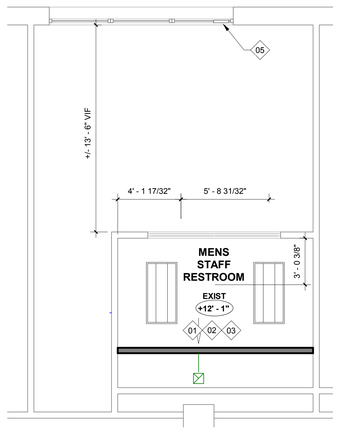
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL CEILING SYSTEMS AND CONSTRUCTION AS DESIGNATED ON THE REFLECTED CEILING PLANS OF THESE DRAWINGS AND NOTES.
2. COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO ENSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEMS, ETC. NECESSARY TO MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON ARCHITECTS DRAWINGS.
3. FASCIAS OR ANY BREAK IN THE CEILING HEIGHTS CREATED BY THE INSTALLATION AND/OR ALTERATION OF HEATING, VENTING, AIR CONDITIONING, MECHANICAL DUCTS, PIPING, OR OTHER EQUIPMENT SHALL BE FORMED OF GYPSUM WALLBOARD ON FURRING CHANNELS.
4. FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM, FIXTURE LAMPS, AND SEISMIC BRACING AS REQUIRED.
5. LIGHT FIXTURES SHALL BE LOCATED IN THE SAME LOCATIONS AS THOSE BEING REPLACED, IF APPLICABLE, OR PER THE DIMENSIONED LOCATIONS SHOWN ON THE REFLECTED CEILING PLANS.
6. ALL SOFFITS AND CEILING HEIGHTS ARE DIMENSIONED FROM TOP OF FINISHED FLOOR TO BOTTOM OF FINISHED GYP. BOARD OR CEILING TILE, AND SHALL ALLOW FOR THICKNESS OF ALL FLOOR FINISHES.
7. CEILINGS IN CLOSETS AND STORAGE AREAS SHALL BE OF THE SAME HEIGHTS AND CONSTRUCTION AS THAT OF ADJOINING SPACES, U.O.N.
8. NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATIONS WITH MAIN RUNNERS, DUCTS, STRUCTURES, HVAC, AND/OR EXISTING CONDUIT, PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN ARCHITECTS CEILING GRID AND ACTUAL FIELD CONDITION ARE TO BE CLARIFIED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. INSTALL LIGHT FIXTURES WITH PROTECTIVE FILM OR SIM. COVER OVER LOUVER, LENS, BAFFLE, ETC., TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.
10. ARCHITECTURAL DRAWINGS DETERMINE LOCATION OF ALL FIXTURES AND TAKE PRECEDENCE OVER ALL OTHERS, U.O.N.

REFLECTED CEILING PLAN LEGEND

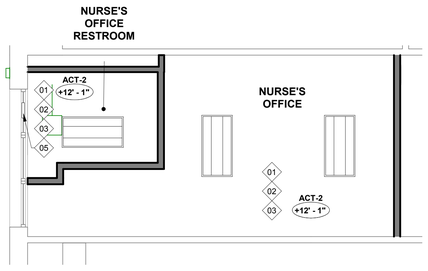
ALL MAIN CEILINGS ARE EXISTING TO REMAIN.



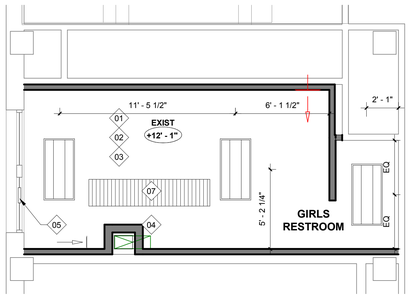
D3 NEW REFLECTED CEILING PLAN - WOMENS STAFF RESTROOM
1/4" = 1'-0"



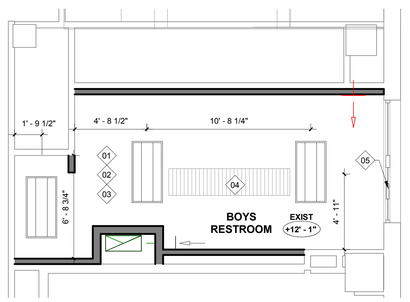
D5 NEW REFLECTED CEILING PLAN - MENS STAFF RETROOM
1/4" = 1'-0"



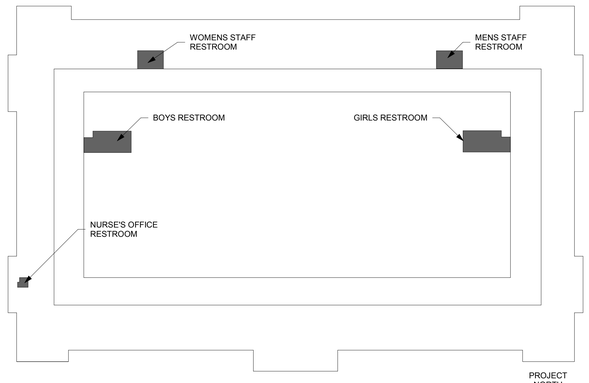
F1 NEW REFLECTED CEILING PLAN - NURSE'S RESTROOM
1/4" = 1'-0"



F2 NEW REFLECTED CEILING PLAN - GIRLS RESTROOM
1/4" = 1'-0"



F4 NEW REFLECTED CEILING PLAN - BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

PROJECT NORTH

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEESER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
REFLECTED CEILING PLANS - SECOND FLOOR

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

DRAWING NO.
A420

SHEET 20 OF 78

10/27/2020 11:40:22 AM

SHEET NOTES - REFLECTED CEILING PLANS

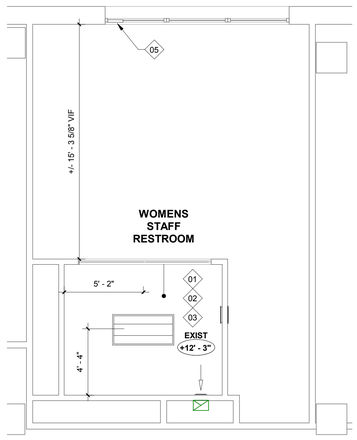
TAG	DESCRIPTION
01	REFER TO ENGINEERING DRAWINGS FOR COMPLETE MEP SCOPE OF WORK (INCLUDING LIGHT FIXTURES, STROBES, EXIT SIGNS, DUCTWORK, ETC.) AT ALL LOCATIONS WITHIN THE SCOPE OF WORK.
02	EXISTING CEILINGS TO REMAIN. SCRAPE AND REMOVE ALL LOOSE PAINT AND PLASTER. PATCH CEILINGS INCLUDING PATCHING AT ALL OPENINGS RESULTING FROM MEP DEMOLITION AND NEW PENETRATIONS (REFER TO MEP DRAWINGS). PROVIDE SKIM COAT OF PLASTER TO MATCH LEVEL 4 FINISH READY FOR PAINTING. PREPARE ALL EXISTING PIPING, DUCTWORK AND CEILING MOUNTED RADIATORS TO REMAIN. PAINT CEILINGS, DUCTWORK, PIPING AND EXISTING RADIATORS
03	CONTRACTOR TO VERIFY EXISTING CEILING HEIGHT. BRING ANY DISCREPENCIES TO THE ATTENTION OF THE DESIGN PROFESSIONALS TO COORDINATE SCOPE OF WORK.
04	EXISTING CEILING-HUNG RADIATOR. CONTRACTOR TO FIELD COORDINATE NEW LIGHTS AND DUCT CHASE LOCATIONS WITH RADIATOR LOCATION
05	NEW EXHAUST GRILLE LOCATION SEE MECHANICAL DRAWINGS
06	PAINT CEILING TO THIS POINT
07	RELOCATED EXISTING CEILING MOUNTED RADIATOR

REFLECTED CEILING PLAN GENERAL NOTES

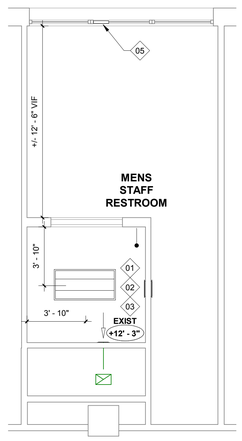
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL CEILING SYSTEMS AND CONSTRUCTION AS DESIGNATED ON THE REFLECTED CEILING PLANS OF THESE DRAWINGS AND NOTES.
2. COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO ENSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEMS, ETC. NECESSARY TO MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON ARCHITECT'S DRAWINGS.
3. FASCIAS OR ANY BREAK IN THE CEILING HEIGHTS CREATED BY THE INSTALLATION AND/OR ALTERATION OF HEATING, VENTING, AIR CONDITIONING, MECHANICAL DUCTS, PIPING, OR OTHER EQUIPMENT SHALL BE FORMED OF GYPSUM WALLBOARD ON FURRING CHANNELS.
4. FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM, FIXTURE LAMPS, AND SEISMIC BRACING AS REQUIRED.
5. LIGHT FIXTURES SHALL BE LOCATED IN THE SAME LOCATIONS AS THOSE BEING REPLACED, IF APPLICABLE, OR PER THE DIMENSIONED LOCATIONS SHOWN ON THE REFLECTED CEILING PLANS.
6. ALL SOFFITS AND CEILING HEIGHTS ARE DIMENSIONED FROM TOP OF FINISHED FLOOR TO BOTTOM OF FINISHED GYP. BOARD OR CEILING TILE, AND SHALL ALLOW FOR THICKNESS OF ALL FLOOR FINISHES.
7. CEILINGS IN CLOSETS AND STORAGE AREAS SHALL BE OF THE SAME HEIGHTS AND CONSTRUCTION AS THAT OF ADJOINING SPACES, U.O.N.
8. NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATIONS WITH MAIN RUNNERS, DUCTS, STRUCTURES, HVAC, AND/OR EXISTING CONDUIT, PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN ARCHITECT'S CEILING GRID AND ACTUAL FIELD CONDITION ARE TO BE CLARIFIED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. INSTALL LIGHT FIXTURES WITH PROTECTIVE FILM OR SIM. COVER OVER LOUVER, LENS, BAFFLE, ETC., TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.
10. ARCHITECTURAL DRAWINGS DETERMINE LOCATION OF ALL FIXTURES AND TAKE PRECEDENCE OVER ALL OTHERS, U.O.N.

REFLECTED CEILING PLAN LEGEND

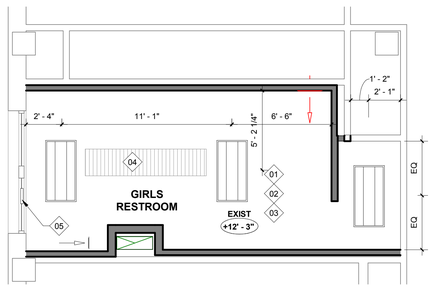
ALL MAIN CEILINGS ARE EXISTING TO REMAIN.



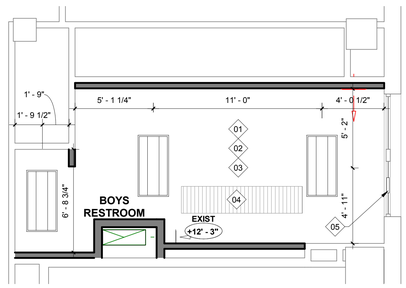
D3 NEW REFLECTED CEILING PLAN - WOMENS STAFF RESTROOM
1/4" = 1'-0"



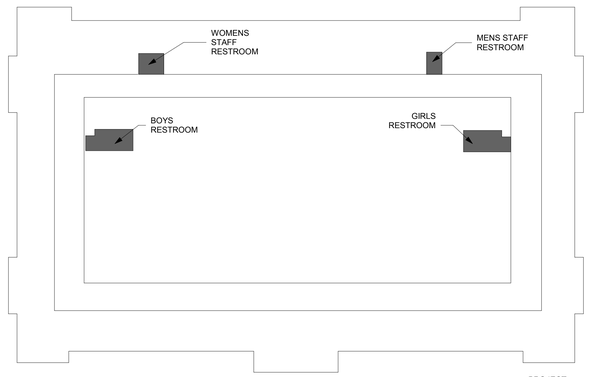
D5 NEW REFLECTED CEILING PLAN - MENS STAFF RESTROOM
1/4" = 1'-0"



F2 NEW REFLECTED CEILING PLAN - GIRLS RESTROOM
1/4" = 1'-0"



F4 NEW REFLECTED CEILING PLAN - BOYS RESTROOM
1/4" = 1'-0"



KEY PLAN

PROJECT NORTH

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
JOHN CONRAD KOHLHAS

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

REFLECTED CEILING PLANS - THIRD FLOOR

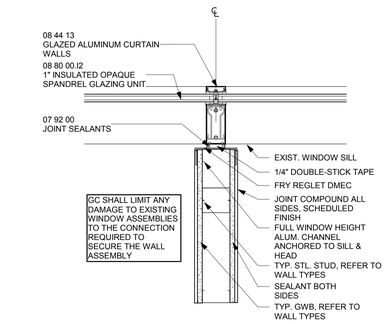
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK

B-007/008/009/010C OF 2018-2019

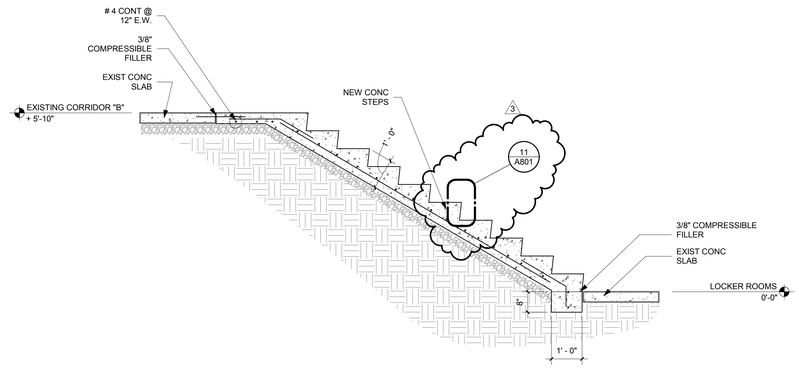
DRAWING NO.
A430

SHEET 21 OF 78

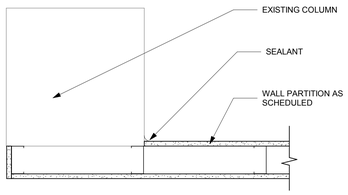
10/27/2020 11:40:23 AM



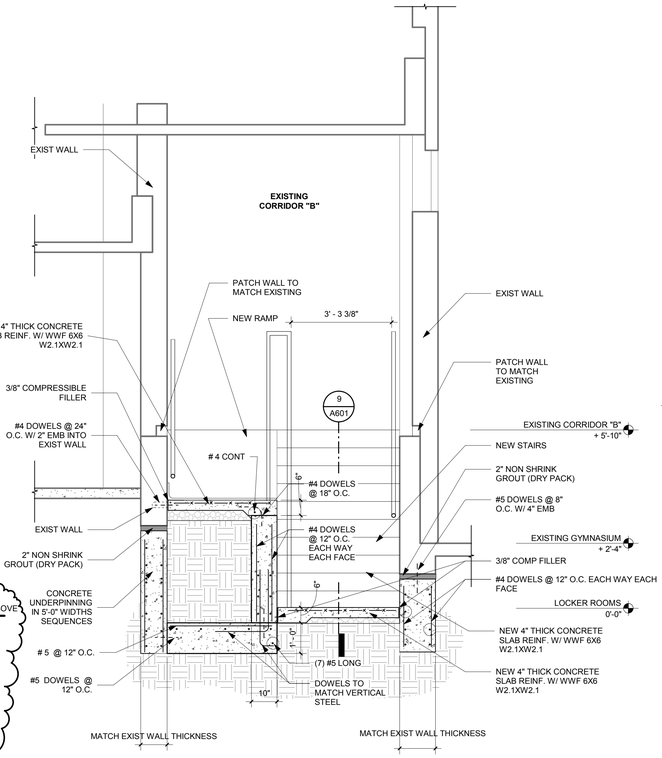
11 TYPICAL PLAN DTL @ MULLION
1 1/2" = 1'-0"



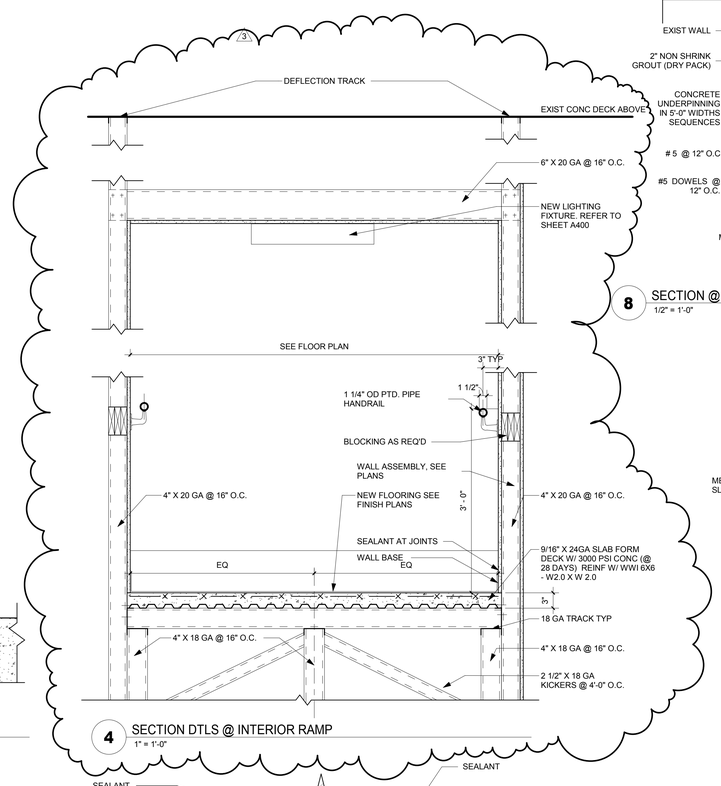
9 SECTION @ EXISTING CORRIDOR - B NEW STAIRS
1/2" = 1'-0"



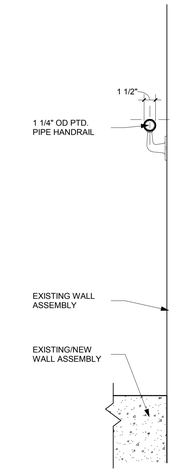
10 PLAN DETAIL @ EXIST COLUMN
1 1/2" = 1'-0"



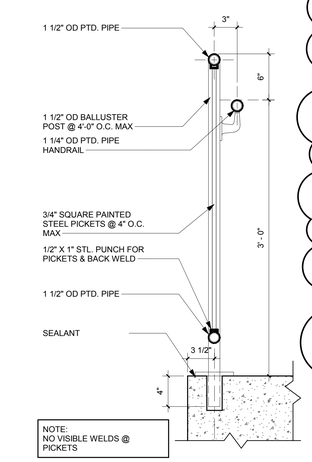
8 SECTION @ EXISTING CORRIDOR - B NEW RAMP
1/2" = 1'-0"



4 SECTION DTLS @ INTERIOR RAMP
1" = 1'-0"

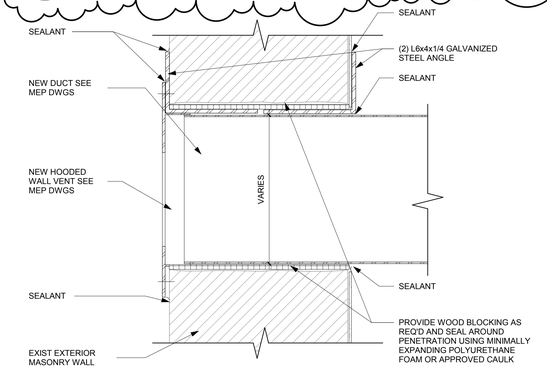


6 TYPICAL SECTION DTLS @ HANDRAIL
1 1/2" = 1'-0"

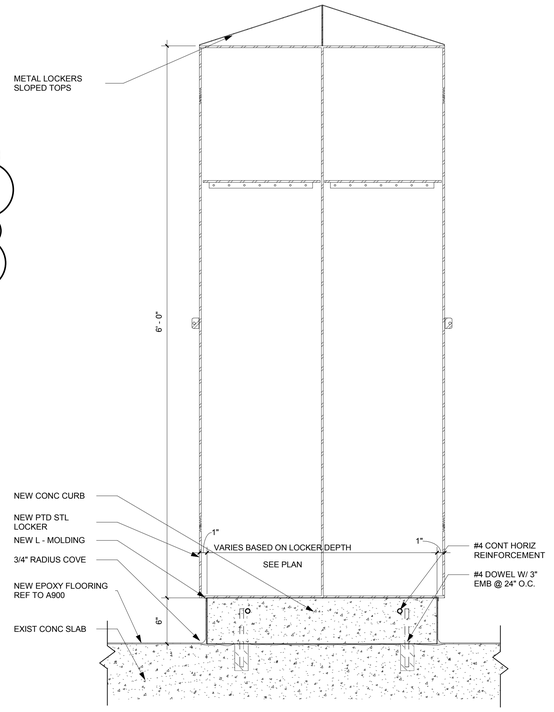


5 TYPICAL SECTION DTLS @ HANDRAIL
1 1/2" = 1'-0"

7 PRE-FABRICATED SHOWER UNIT BASE
3" = 1'-0"



2 TYPICAL SECTION DTL @ EXTERIOR WALL PENETRATION
3" = 1'-0"



GC NOTE: ROUGHEN EXISTING FLOOR SURFACE PRIOR TO CURB POUR

1 TYPICAL SECTION DTL @ LOCKERS
1 1/2" = 1'-0"

10/27/2020 11:40:24 AM

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
INTERIOR SECTIONS AND DETAILS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C	OF 2018-2019

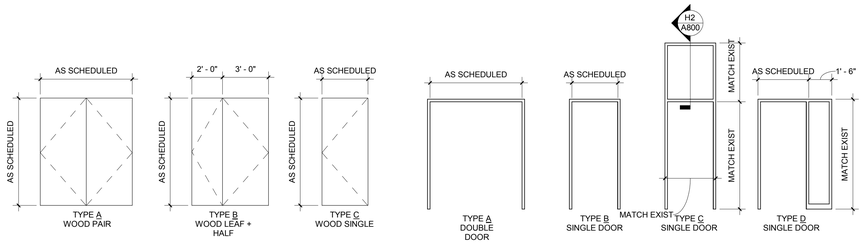
DRAWING NO.
A601

SHEET 22 OF 78

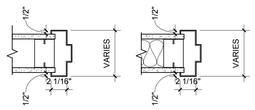
DOOR SCHEDULE

DOOR NUM	DOOR TYPE	FRAME TYPE	HARDWARE SET	WIDTH	HEIGHT	THICKNESS	DOOR MATERIAL	FRAME MATERIAL	FIRE RATING	COMMENTS
LOCKER ROOMS										
01	C	B	07	3'-0"	7'-0"	1 3/4"	WD	HM	-	EMERGENCY EGRESS DOOR
02	C	B	07	3'-0"	7'-0"	1 3/4"	WD	HM	-	EMERGENCY EGRESS DOOR
03	-	-	07	-	-	-	-	-	-	EMERGENCY EGRESS DOOR. REPLACE EXISTING HARDWARE
04	-	-	07	-	-	-	-	-	-	EMERGENCY EGRESS DOOR. REPLACE EXISTING HARDWARE
BASEMENT.										
05	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
06	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
07	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
08	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
09	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
10	B	A	01	5'-0"	7'-0"	1 3/4"	WD	HM	-	
11	A	A	02	6'-0"	7'-0"	1 3/4"	WD	HM	-	
12	-	-	08	-	-	-	-	-	-	REFINISH EXISTING DOOR, FRAME, AND TRIM. REPLACE EXISTING HARDWARE
13	C	B	02	3'-0"	7'-0"	1 3/4"	WD	HM	-	
14	C	B	03	3'-0"	7'-0"	1 3/4"	WD	HM	-	
15	C	B	02	3'-0"	7'-0"	1 3/4"	WD	HM	-	
16	-	-	08	-	-	-	-	-	-	REFINISH EXISTING DOOR LEAF, FRAME, PROVIDE NEW HARDWARE
17	-	-	-	-	-	-	-	-	-	REVERSE EXISTING DOOR SWING. REFER TO SHEET A004
18	-	-	-	-	-	-	-	-	-	REVERSE EXISTING DOOR SWING. REFER TO SHEET A004
19	C	B	02	3'-0"	7'-0"	1 3/4"	WD	HM	-	
20	C	B	03	3'-0"	7'-0"	1 3/4"	WD	HM	-	
FIRST FLOOR										
21	C	B	09	3'-0"	7'-0"	1 3/4"	WD	HM	-	
22	C	B	09	3'-0"	7'-0"	1 3/4"	WD	HM	-	
23	C	B	02	3'-0"	7'-0"	1 3/4"	WD	HM	-	
24	C	B	02	3'-0"	7'-0"	1 3/4"	WD	HM	-	
25	C	B	04	3'-0"	7'-0"	1 3/4"	WD	HM	-	
26	C	B	03	3'-0"	7'-0"	1 3/4"	WD	HM	-	
27	C	C	05	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING TRIM TO MATCH EXISTING HALLWAY AND NEW BATHROOM WALL PAINT
28	C	C	05	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING TRIM TO MATCH EXISTING HALLWAY AND NEW BATHROOM WALL PAINT
221	-	-	-	-	-	-	-	-	-	REFINISH EXISTING DOOR, FRAME, AND TRIM. REPALCE EXISTING HARDWARE
SECOND FLOOR										
29	C	B	06	3'-0"	7'-0"	1 3/4"	WD	HM	-	
30	C	D	08	3'-0"	6'-0"	1 3/4"	WD	HM	-	
31	C	C	05	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING TRIM TO MATCH EXISTING HALLWAY AND NEW BATHROOM WALL PAINT
32	C	C	05	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING TRIM TO MATCH EXISTING HALLWAY AND NEW BATHROOM WALL PAINT
33	C	C	05	3'-0"	7'-0"	1 3/4"	WD	HM	-	
34	C	C		3'-0"	7'-0"	1 3/4"	WD	HM	-	
35	C	C	08	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING HALLWAY SIDE TRIM TO MATCH EXISTING HALLWAY WALL PAINT
36	C	C	08	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING HALLWAY SIDE TRIM TO MATCH EXISTING HALLWAY WALL PAINT
THIRD FLOOR										
37	C	C	05	3'-0"	7'-0"	1 3/4"	WD	HM	-	
38	C	C	05	3'-0"	7'-0"	1 3/4"	WD	HM	-	
39	C	C	05	3'-0"	7'-0"	1 3/4"	WD	HM	-	
40	C	C	05	3'-0"	7'-0"	1 3/4"	WD	HM	-	
41	C	C	08	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING HALLWAY SIDE TRIM TO MATCH EXISTING HALLWAY WALL PAINT
42	C	C	08	TRUE 3'-0"	TRUE 7'-0"	1 3/4"	WD	HM	-	REFINISH EXISTING HALLWAY SIDE TRIM TO MATCH EXISTING HALLWAY WALL PAINT

Grand total: 43



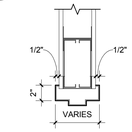
DOOR TYPE LEGEND
1/4" = 1'-0"



JAMB DETAIL JAMB DETAIL 1-HR

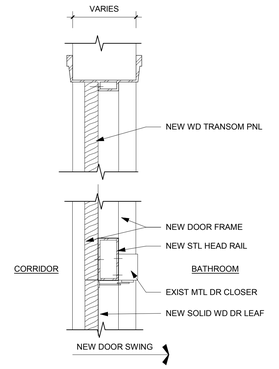
J1 JAMB DETAILS
1 1/2" = 1'-0"

FRAME TYPE LEGEND
1/4" = 1'-0"



HOLLOW METAL FRAME HEAD DETAIL AT STUD PARTITIONS

H1 HEAD DETAIL
1 1/2" = 1'-0"



H2 HEAD DETAIL
1 1/2" = 1'-0"

HARDWARE — **QUANTITY** — **COMMENTS**

HARDWARE SET #1 (LEAF + HALF DOOR)

1.	HINGES	6
2.	STORE ROOM/SERVICE LOCK SET	1
3.	DOOR CLOSER	1
4.	DEAD BOLT	1
5.	DOOR STOP	1
6.	KICK PLATES	2
7.	TRESHOLD	1

HARDWARE SET #2 (SINGLE DOOR)

1.	HINGES	3
2.	PRIVACY LOCK SET	1
3.	DOOR CLOSER	1
4.	DOOR STOP	1
5.	TRESHOLD	1

HARDWARE SET #3 (SINGLE DOOR)

1.	HINGES	3
2.	STOREROOM/SERVICE LOCK SET	1
4.	DOOR STOP	1
5.	ARMOR PLATES	2

HARDWARE SET #4 (SINGLE DOOR)

1.	HINGES	3
2.	PASSAGE SET	1
3.	ARMOR PLATES	2

HARDWARE SET #5 (SINGLE DOOR)

1.	HINGES	3
2.	PUSH PLATE	1
3.	PULL HANDLE	1
4.	DOOR CLOSER	1
5.	KICK PLATES	2
6.	TRESHOLD	1

HARDWARE SET #6 (SINGLE DOOR)

1.	HINGES	3
2.	PRIVACY LOCK SET	1
3.	DOOR CLOSER	1
4.	DOOR STOP	1
5.	TRESHOLD	

HARDWARE SET #7 (SINGLE DOOR)

1.	HINGES (BALL BEARING)	3
2.	EXIT DEVICE (EXIT ONLY)	1
3.	DOOR CLOSER	1
4.	DOOR STOP	1
5.	(2) KICK PLATES	
6.	TRESHOLD	1

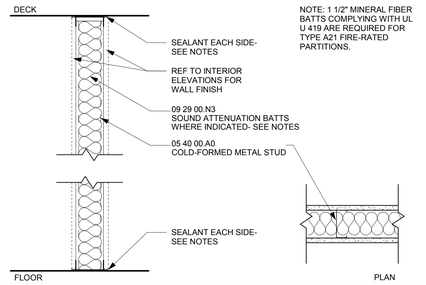
HARDWARE SET #8 (SINGLE DOOR)

1.	HINGES	3
2.	OFFICE LOCK SET	1
3.	DOOR CLOSER	1
4.	DOOR STOP	1
5.	KICK PLATES	1
6.	TRESHOLD	1

HARDWARE SET #9 (SINGLE DOOR)

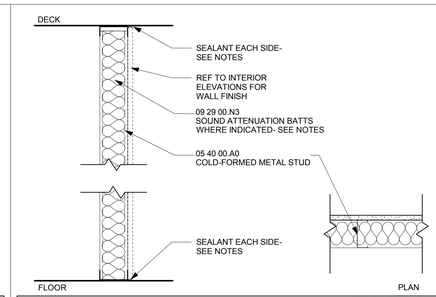
1.	HINGES	3
2.	STOREROOM/SERVICE LOCK SET	1
3.	DOOR CLOSER	1
4.	DOOR STOP	1
5.	KICK PLATES	2

HARDWARE NOTES:
1. HARDWARE SETS LISTED BELOW ARE PROVIDED TO SHOW FUNCTION OF DOOR. GC TO SUBMIT ALL PROPOSED HARDWARE FOR ARCHITECT REVIEW AND APPROVAL.



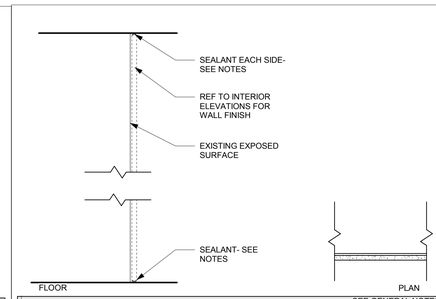
STUD SIZE	TOTAL THICKNESS	0 HR	1 HR	2 HR	3 HR	STC W/ SAB (A)	UL DESIGN NO.	SEE GENERAL NOTES FOR LETTER SUFFIXES. PARTITION NOTES:
2 1/2"	3 3/4"	A2	A21A	--	--	42	U 419	--
3 5/8"	4 7/8"	A3	A31	--	--	48-50	U 419	--
6"	7 1/4"	A6	A61	--	--	48-50	U 419	--

A STUDS TO UNDERSIDE OF STRUCTURE W/ ONE LAYER OF GWB EA SIDE TO UNDERSIDE OF STRUCTURE



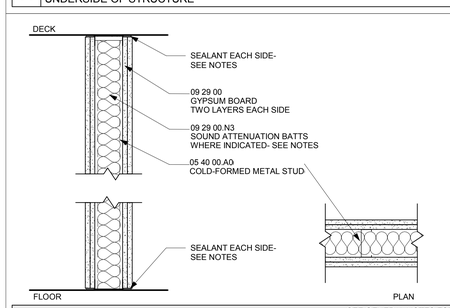
STUD SIZE	TOTAL THICKNESS	0 HR	1 HR	2 HR	3 HR	STC W/ SAB (A)	UL DESIGN NO.	SEE GENERAL NOTES FOR LETTER SUFFIXES. PARTITION NOTES:
1 5/8"	2 1/4"	D1	--	--	--	--	--	--
2 1/2"	3 1/8"	D2	--	--	--	--	--	--
3 5/8"	4 1/4"	D3	--	--	--	--	--	--

D STUDS TO UNDERSIDE OF STRUCTURE W/ ONE LAYER OF GWB ONE SIDE ONLY.



STUD SIZE	TOTAL THICKNESS	0 HR	1 HR	2 HR	3 HR	STC W/ SAB (A)	UL DESIGN NO.	SEE GENERAL NOTES FOR LETTER SUFFIXES. PARTITION NOTES:
-	5/8"	B1	--	--	--	--	--	--

B ONE LAYER OF GWB GLUED TO EXISTING EXPOSED CONCRETE SURFACE



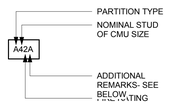
STUD SIZE	TOTAL THICKNESS	0 HR	1 HR	2 HR	3 HR	STC W/ SAB (A)	UL DESIGN NO.	SEE GENERAL NOTES FOR LETTER SUFFIXES. PARTITION NOTES:
2 1/2"	5"	C2	C21	C22	--	48	U 419	--
3 5/8"	6 1/8"	C3	C31	C32	--	55	U 419	--
6"	8 1/2"	C6	C61	C62	--	55	U 419	--

C STUDS TO UNDERSIDE OF STRUCTURE W/ TWO LAYERS OF GWB EA SIDE TO UNDERSIDE OF STRUCTURE

PARTITION GENERAL NOTES

1. NOT EVERY PARTITION TYPE LISTED ON THIS SHEET IS USED IN THIS PROJECT.
2. USE TYPE-X GWB FOR ALL FIRE-RESISTANCE RATED PARTITIONS.
3. GWB AT PARTITIONS IS 5/8" UNLESS NOTED OTHERWISE.
4. USE ACOUSTICAL JOINT SEALANT COMPLYING WITH ASTM C 834 AND ASTM E 90 AT NON-RATED PARTITIONS. USE UL-APPROVED FIRESTOP SEALANT AT FIRE-RESISTANCE RATED PARTITIONS. COMPLY WITH LEED REQUIREMENTS AS APPLICABLE.
5. WHERE INDICATED, USE 1 1/2" SOUND ATTENUATION BATTS @ 2 1/2" STUD SIZE & 3" SOUND ATTENUATION BATTS @ 3 5/8" STUD SIZE & LARGER. SOUND ATTENUATION BATTS ARE TO COMPLY WITH ASTM C 665 TYPE 1. AT FIRE-RESISTANCE-RATED PARTITIONS, COMPLY WITH MINERAL-FIBER REQUIREMENTS OF UL ASSEMBLY INDICATED.
6. STUD SPACING SHALL BE 16" O.C. UNLESS NOTED OTHERWISE.
7. STUD SHAPE AND GAUGE ARE TO COMPLY WITH STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) PUBLISHED LIMITING HEIGHTS. FOR TYPICAL INTERIOR PARTITIONS, LESS THAN 14'-0" IN HEIGHT WITH FULL-HEIGHT GWB ON BOTH SIDES, 25 GA. DRYWALL STUDS @ 16" O.C. MAY BE USED.
8. DEFLECTION TOP TRACK TO BE USED AT ALL PARTITION CONNECTIONS TO DECK UNLESS NOTED OTHERWISE. TRACK SHALL ACCOMMODATE AT LEAST 1" OF DEFLECTION AT DECK TYPICAL. ALLOW FOR L/360 LIVE LOAD DEFLECTION AT FLOOR STRUCTURE AND L/180 LIVE LOAD DEFLECTION AT ROOF STRUCTURE.
9. BASIS OF DESIGN FOR SHAFT WALL FRAMING IS USG J-SHAPED, C-H SHAPED, AND E-SHAPED STUDS. REFER TO USG PUBLICATION SA926 FOR ALLOWABLE SPANS. DESIGN DEFLECTION SHALL BE L/240 @ 5 PSF UNLESS NOTED OTHERWISE. AT ELEVATOR SHAFTS AND MECHANICAL SHAFTS, COORDINATE DESIGN AIR PRESSURE WITH ELEVATOR MANUFACTURER AND/OR MECHANICAL ENGINEER (DESIGN DEFLECTION SHALL BE L/240).
10. PROVIDE CONTROL JOINTS IN ALL DRYWALL PARTITIONS ACCORDING TO ASTM C 840. FINAL LOCATIONS OF CONTROL JOINTS ARE TO BE SUBMITTED AND APPROVED BY ARCHITECT.
11. FIRE-RESISTANCE RATED PARTITIONS SHALL BE TESTED IN ACCORDANCE WITH ASTM E 119 OR UL 263 PER CODE.
12. PENETRATIONS THROUGH FIRE-RESISTANCE RATED AND SMOKE BARRIER PARTITIONS MUST BE FIRESTOPPED, TESTED AND APPROVED IN ACCORDANCE WITH ASTM E 814 OR UL 1479. ASTM E 119 OR UL 263. PENETRATIONS THROUGH SMOKE BARRIER PARTITIONS MUST BE TESTED AND APPROVED IN ACCORDANCE WITH REQUIREMENTS OF UL 1479 FOR AIR LEAKAGE. FIRE RESISTIVE JOINT SYSTEMS IN SMOKE BARRIER PARTITIONS MUST BE TESTED AND APPROVED IN ACCORDANCE WITH REQUIREMENTS OF UL 2019 FOR AIR LEAKAGE.
13. DOORS LOCATED IN SMOKE BARRIER PARTITIONS MUST BE RATED FOR 20 MINUTES AND TESTED ACCORDING TO NFPA 252 OR UL 10C. DOOR ASSEMBLIES MUST BE TESTED FOR SMOKE AND DRAFT CONTROL ACCORDING TO UL 1784 AND NFPA 105.
14. DUCTS AND AIR TRANSFER OPENINGS IN FIRE-RESISTANCE RATED PARTITIONS MUST BE EQUIPPED WITH LISTED FIRE DAMPERS RATED ACCORDING TO THE PARTITION RATING. DUCTS AND AIR TRANSFER OPENINGS IN SMOKE BARRIER PARTITIONS MUST BE EQUIPPED WITH LISTED COMBINATION FIRE/SMOKE DAMPERS.
15. ANY PARTITIONS OR SIDES OF PARTITIONS SCHEDULED TO RECEIVE WALL TILE OR BASE TILE SHALL BE CONSTRUCTED WITH MOISTURE RESISTANT GLASS-MAT GYPSUM BOARD COMPLYING WITH ASTM C 1178/C 1178M, OR CEMENT BACKER UNITS COMPLYING WITH ANSI A118.9 AND ASTM C 1288 OR 1325.
16. ABUSE-RESISTANT GYPSUM BOARD SHALL COMPLY WITH ASTM C 1629/C 1629M.

PARTITION SYMBOLS LEGEND



ADDITIONAL REMARKS:

A. PROVIDE SOUND ATTENUATION BATTS- SIZE ACCORDING TO GENERAL NOTES.
B. GWB MAY STOP 6" ABOVE FINISHED CEILING.
C. PROVIDE ABUSE-RESISTANT GYPSUM BOARD.
D. PROVIDE MOISTURE-RESISTANT GYPSUM BOARD.
S. SMOKE BARRIER PARTITION WITH PROTECTED OPENINGS AND PENETRATIONS. SEE NOTES.

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

DRAWINGS TITLE
DOOR SCHEDULE & INTERIOR PARTITION TYPES

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

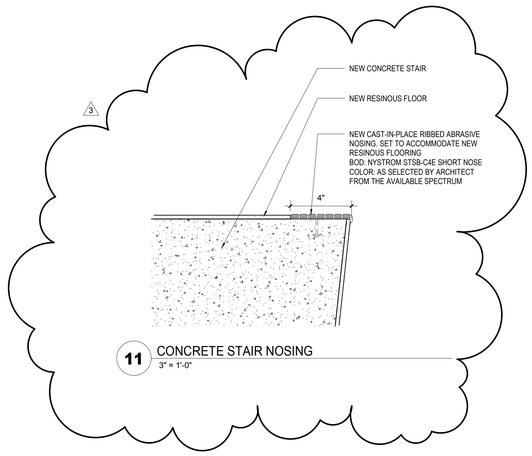
DRAWING NO.
A800

SHEET 23 OF 78

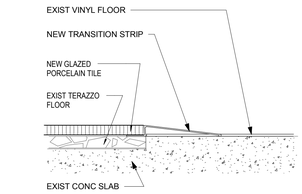
10/27/2020 11:40:25 AM

FINISH SCHEDULE

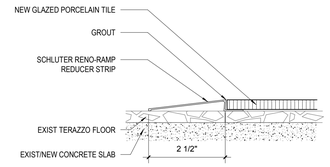
FINISH TYPE	FINISH TAG	TITLE	MANUFACTURER	STYLE	COLOR	MATERIAL SIZE	COMMENTS
BASE							
BASE	EPY-1	EPOXY RESIN BASE	STONHARD	STONSHIELD HRI	FLAGSTONE		
BASE	TWB-1	TILE WALL BASE	DALTILE	VOLUME 1.0	INTENSIFY PEBBLE VL72		
BASE	VWB-1	VINYL WALL BASE					
FLOORING							
FLOORING	EPY-1	EPOXY RESIN FLOOR	STONHARD	STONSHIELD HRI	FLAGSTONE		
FLOORING	PFT-1	PORCELAIN FLOOR TILE	DALTILE	VOLUME 1.0	INTENSIFY PEBBLE VL72	12" X 12"	
FLOORING	SS-1	SOLID SURFACE THRESHOLD	CORIAN	SOLID SURFACE	SILVER GRAY		REFER TO SHEET A002 FOR COMPLIANT DIMENSIONS
FLOORING	VCT-1	VINYL COMPOSITION TILE					
WALLS							
WALLS	PT-1	CEILING PAINT	SHERWIN WILLIAMS	FLAT	PURE WHITE SW7005		
WALLS	PT-2	WALL PAINT	SHERWIN WILLIAMS	EGGSHELL	PURE WHITE SW7005		
WALLS	PT-3	WALL PAINT	SHERWIN WILLIAMS	DYNAMIC BLUE	SW6958		
WALLS	WT-1	WALL TILE	DALTILE	CLASSIC - COLOR WHEEL COLLECTION	ARCTIC WHITE 0190	3" X 6"	GROUT: LATICRETE #88 SILVER SHADOW, 1/8" GROUT JOINT SHLUTER SCHIENE TRIM @ ALL EXPOSED EDGES
WALLS	WT-2	WALL TILE	DALTILE	CLASSIC - COLOR WHEEL COLLECTION	ELECTRIC BLUE 1194	3" X 6"	GROUT: LATICRETE #88 SILVER SHADOW, 1/8" GROUT JOINT SHLUTER SCHIENE TRIM @ ALL EXPOSED EDGES
WALLS	WT-3	WALL TILE	DALTILE	CLASSIC - COLOR WHEEL COLLECTION	ORANGE BURST 1097	3" X 6"	GROUT: LATICRETE #88 SILVER SHADOW, 1/8" GROUT JOINT SHLUTER SCHIENE TRIM @ ALL EXPOSED EDGES
WALLS	WT-4	WALL TILE	DALTILE	CLASSIC - COLOR WHEEL COLLECTION	SUEDE GRAY 0182	3" X 6"	GROUT: LATICRETE #88 SILVER SHADOW, 1/8" GROUT JOINT SHLUTER SCHIENE TRIM @ ALL EXPOSED EDGES



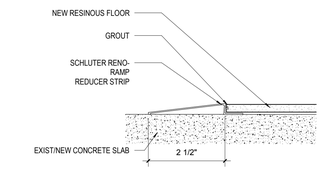
11 CONCRETE STAIR NOSING
3" = 1'-0"



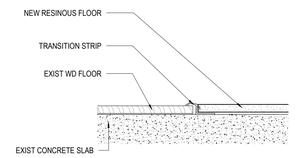
8 TRANSITION - TILE TO VINYL
6" = 1'-0"



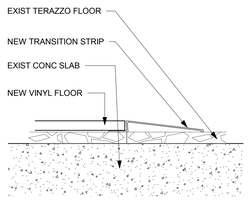
4 TRANSITION - TILE TO TERAZZO
6" = 1'-0"



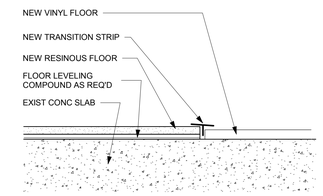
7 TRANSITION - EPOXY TO CONCRETE
6" = 1'-0"



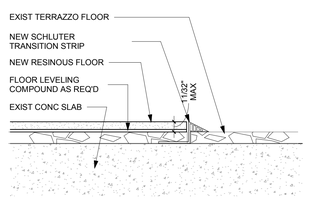
3 TRANSITION - EPOXY TO WOOD
6" = 1'-0"



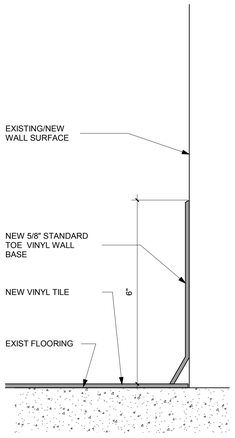
10 TRANSITION - EPOXY TO VINYL
6" = 1'-0"



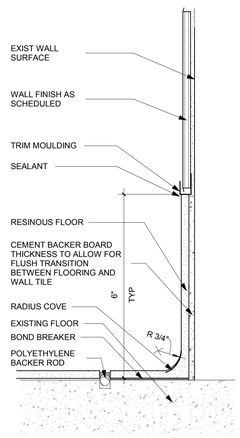
6 TRANSITION - EPOXY TO VINYL
6" = 1'-0"



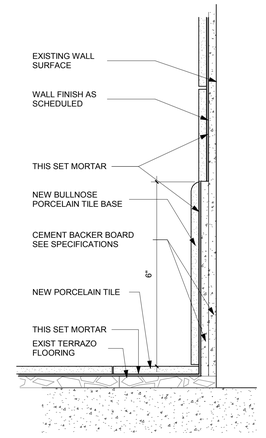
2 TRANSITION - EPOXY TO TERRAZZO
6" = 1'-0"



9 TYPICAL WALL BASE DTL
6" = 1'-0"



5 TYPICAL WALL BASE DTL
6" = 1'-0"



1 TYPICAL WALL BASE DTL
6" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

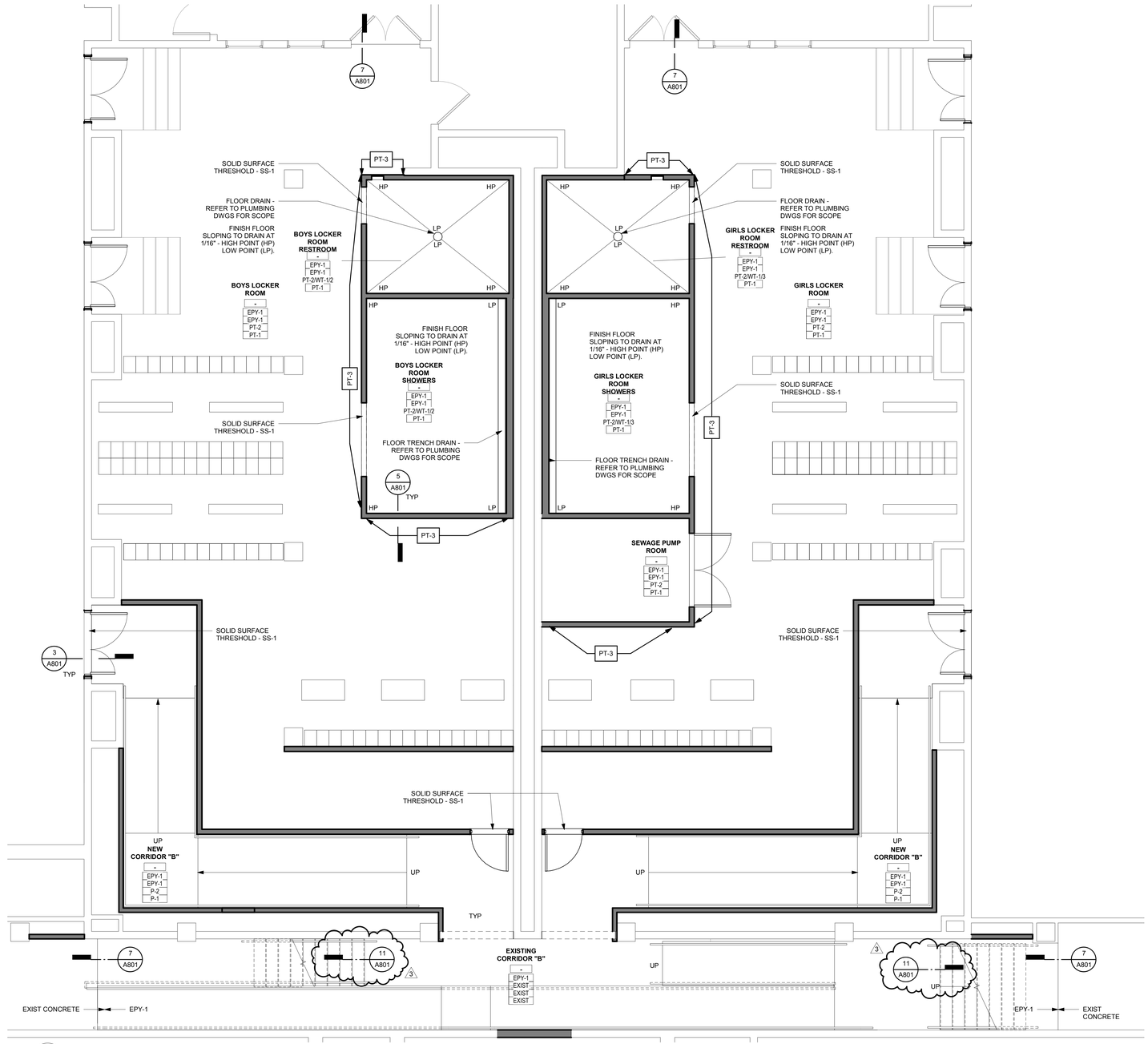
FINISH SCHEDULE AND TRANSITION DETAILS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

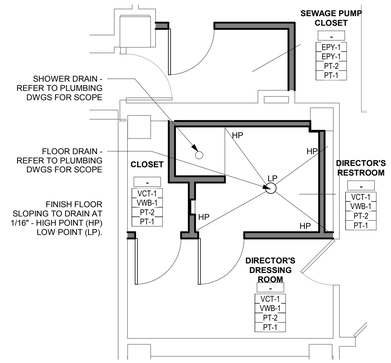
DRAWING NO.
A801

SHEET 24 OF 78

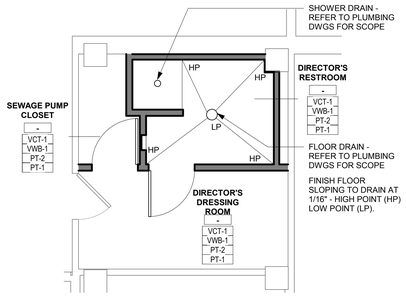
10/27/2020 11:40:26 AM



E1 FINISH PLAN - GIRLS AND BOYS LOCKER ROOMS
1/4" = 1'-0"



F2 FINISH PLAN - DIRECTOR'S DRESSING ROOM (WEST)
1/4" = 1'-0"



F4 FINISH PLAN - DIRECTOR'S DRESSING ROOM (EAST)
1/4" = 1'-0"

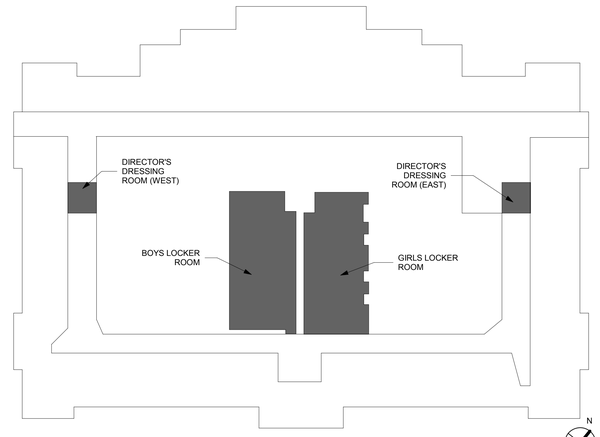
FINISH PLAN LEGEND

ROOM
#
FLOOR
BASE
WALLS
CEILING

ROOM FINISH TAG- REFER TO FINISH SCHEDULE FOR MORE INFORMATION

FINISH PLAN GENERAL NOTES

1. GYPSUM WALLBOARD FINISH LEVEL TO BE LEVEL-3, U.O.N.
2. ALL DOOR FRAMES TO BE PAINTED P-4, SEMI-GLOSS FINISH.
3. ALL OUTLET COVERS PLATES TO BE STAINLESS STEEL FINISH.
4. WALLS SHALL INCLUDE SURFACES FROM FLOOR TO CEILING, INCLUDING PILASTERS, FASCIAS, JAMBS, BUCKS, REVEALS, RETURNS AND ALL OTHER VERTICAL SURFACES NOT INCLUDED IN THE CEILING.
5. PAINT COLORS SHALL BE SPECIFIED BY THE DESIGNER AND THE GENERAL CONTRACTOR SHALL SUBMIT THREE (3) SAMPLES (12" X 12") FOR REVIEW BY THE DESIGNER. AN ALTERNATE SUBMITTAL MAY BE FIELD APPLIED TO ONE WALL FOR THE DESIGNER TO EXAMINE UPON FIELD INSPECTION.
6. ALL WALLS AND CEILINGS SHALL BE PROPERLY PREPARED, SPACKLED, SANDED, ETC., TO PROVIDE A SMOOTH FINISH AND A SURFACE READY FOR PRIME PAINT.
7. THE PAINT CONTRACTOR SHALL REMOVE ALL ELECTRICAL SWITCH PLATES AND OUTLET PLATES, SURFACE HARDWARE, ETC., PRIOR TO PAINTING, PROTECTING AND REPLACING WHEN THE PAINTING HAS BEEN COMPLETED. PAINT CONTRACTOR SHALL REMOVE PAINT WHERE IT HAS SPILLED, SPLASHED OR SPLATTERED ON SURFACES, INCLUDING BUT NOT LIMITED TO LIGHT FIXTURES, DIFFUSERS, REGISTERS AND SLAB FITTINGS, ETC.
8. THE CONTRACTOR SHALL USE A LATEX BASE PAINT IN COLORS AND FINISHES AS SELECTED BY THE DESIGNER. CONTRACTOR SHALL PROPERLY PREPARE ALL SURFACES TO RECEIVE ONE(1) PRIME COAT AND TWO (2) FINISH COATS OF PAINT IN THE COLORS AS SELECTED BY THE DESIGNER.
9. THE CONTRACTOR SHALL INSTALL WALL TILE AS PER THE MANUFACTURERS' INSTALLATION INSTRUCTIONS, WHERE DESIGNATED. ALL WORKMANSHIP WHICH IS NOT FIRST QUALITY AS JUDGED BY THE DESIGNER WILL NOT BE ACCEPTED.
10. ALL EXISTING LOOSE PAINT SHALL BE REMOVED AND SPACKLED OR PLASTER PATCHED EVEN SURFACE.
11. THE CONTRACTOR SHALL EXAMINE ALL AREAS OF CONSTRUCTION AFTER COMPLETION OF WORK BY ALL TRADES (INCLUDING TELEPHONE INSTALLATION, FLOORING ETC.) AND INDICATE ALL NECESSARY TOUCH UP PAINTING AND/OR PATCHING.
12. ANY SURFACE WHICH DOES NOT HAVE A SPECIFIED FINISH NOTED OR ARE NOTED TO REMAIN UNFINISHED, SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER AND FINISHED AS DIRECTED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL VOC (VOLATILE ORGANIC COMPOUND) REGULATIONS FOR PRIMERS, PAINTS, SOLVENTS AND ADHESIVES.
14. THE GENERAL CONTRACTOR SHALL FLASH PATCH ALL CRACKS, HOLES OR OTHER IMPERFECTIONS (PROJECTIONS SHALL BE REMOVED AND PATCHED) TO PROVIDE A CONTINUOUS SMOOTH FLOOR SURFACE. SUBFLOOR SHALL BE FLAT AND LEVEL, WITH VARIATIONS NOT EXCEEDING 1/4" IN 10'-0" AND 1/16" IN 12". SUBFLOOR UNDER CERAMIC TILE IS TO CONFORM TO ANSI AND TCNA HANDBOOK REQUIREMENTS.
15. THE CONTRACTOR SHALL NOTIFY THE DESIGNER AFTER THE FLOOR PATCHING IS DONE AND RECEIVE APPROVAL PRIOR TO INSTALLATION OF FINISHED FLOORING.
16. ALL NEW FLOORING SHALL BE INSTALLED BY THE FLOORING CONTRACTOR AND SHALL BE AS SPECIFIED ON THESE CONSTRUCTION DOCUMENTS.
17. ALL WORKMANSHIP SHALL BE OF THE BEST QUALITY AND WHEN THE WORK IS COMPLETE, IT SHALL BE FREE FROM BUCKLES, BUBBLES, OPEN JOINTS OR OTHER IMPERFECTIONS. SEAMS SHALL BE KEPT IN ACCURATE ALIGNMENT ALONG BOTH COORDINATES. TILE HAVING CHIPPED OR ROUND CORNERS WILL BE REJECTED AND IF LAID, WILL BE REMOVED AND REPLACED WITH AN ACCEPTABLE INSTALLATION.
18. SPACES BEING SURFACED SHALL BE CLOSED TO TRAFFIC AND OTHER WORK DURING THE LAYING OF THE FLOORING.
19. UPON COMPLETION, ALL WORK SHALL BE CLEANED BY THE CONTRACTOR, REMOVING ALL SPOTS OF ADHESIVE, SURFACE STAINS AN ALL SCRAPS. CARTONS AND CONTAINERS SHALL BE REMOVED FROM THE BUILDING.
20. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRANSITION STRIPS AT ALL VCT, CERAMIC TILE AND EPOXY FLOORING TRANSITIONS. IF TRANSITION OCCURS AT A DOOR LOCATION, THE TRANSITION SHALL BE CENTERED ON THE DOOR. THE COLOR IS TO MATCH ADJACENT FLOORING BASE TRIM. THE CONTRACTOR IS TO VERIFY, WITH THE DESIGNER, OTHER FLOOR FINISH TRANSITIONS NOT NOTED.
21. ALL GWB AT CEILINGS, INCLUDING ALL SURFACES OF COVES, SOFFITS, ETC, SHALL BE PAINTED CEILING WHITE. ALL SURFACES WHERE COVE LIGHTING IS MOUNTED AND GWB IS LIT SHALL BE PAINTED, EVEN IF NOT EXPOSED DIRECTLY TO VIEW.



KEY PLAN

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

JOHN C. KOHLHAS
PA LICN# RA010015-B

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE
ADA BATHROOM UPGRADES

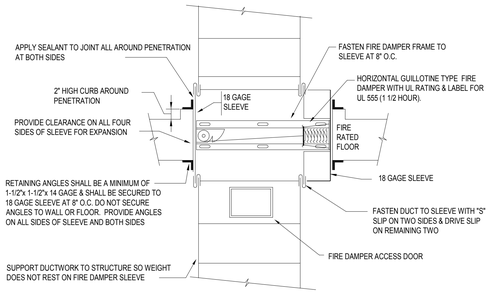
DRAWINGS TITLE
FINISH PLANS - BASEMENT

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. OP	CHECKED BY. JK
B-007/008/009/010C OF 2018-2019	

DRAWING NO.
A900

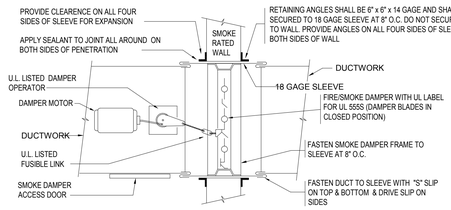
SHEET 25 OF 78

10/27/2020 11:40:27 AM



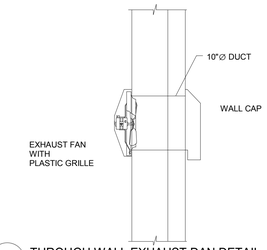
NOTE: THE DAMPER MANUFACTURER'S INSTALLATION DETAILS AND INSTRUCTIONS AS TESTED AND APPROVED BY U.L. MUST BE USED IN LIEU OF THIS WHERE APPLICABLE.

1 FIRE DAMPER DETAIL
SCALE: NONE

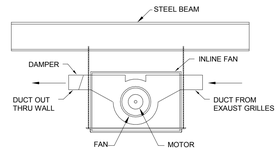


NOTE:
THE FIRE/SMOKE DAMPER MANUFACTURER'S INSTALLATION DETAILS AND INSTRUCTIONS AS TESTED AND APPROVED BY U.L. MUST BE USED IN LIEU OF THE ABOVE DETAILS WHERE APPLICABLE

3 FIRE/SMOKE DEAMPER DETAIL
SCALE: NONE

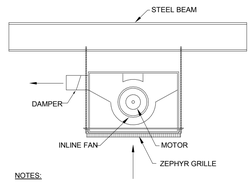


5 THROUGH WALL EXHAUST DAN DETAIL
SCALE: NONE



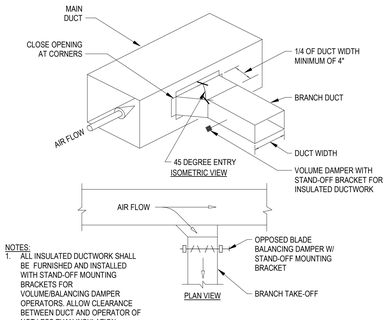
NOTES:
* PROVIDE SUPPORT AND VIBRATION ISOLATORS AS REQUIRED.
* PROVIDE FLEXIBLE CONNECTIONS AT DUCT CONNETIONS.
* FOR EXACT REQUIREMENTS REFER TO EXHAUST FAN SCHEDULE AND FLOOR PLAN.

6 INLINE FAN DETAIL
SCALE: NONE



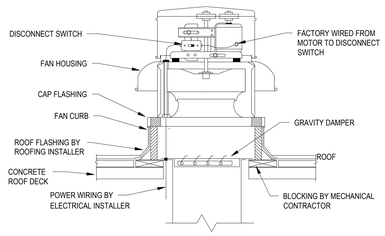
NOTES:
* PROVIDE SUPPORT AND VIBRATION ISOLATORS AS REQUIRED.
* FOR EXACT REQUIREMENTS REFER TO EXHAUST FAN SCHEDULE AND FLOOR PLAN.

7 CEILING EXHAUST FAN DETAIL
SCALE: NONE



NOTES:
1. ALL INSULATED DUCTWORK SHALL BE FURNISHED AND INSTALLED WITH STAND-OFF MOUNTING BRACKETS FOR VOLUME/BALANCING DAMPER OPERATORS. ALLOW CLEARANCE BETWEEN DUCT AND OPERATOR OF NOT LESS THAN INSULATION THICKNESS

2 BRANCH DUCT TAKEOFF DETAIL
SCALE: NONE



MECHANICAL WORK SHALL INCLUDE ALL WORK ASSOCIATED WITH NEW PENETRATION, CURBS AND ROOF PATCHING ASSOCIATED WITH NEW ROOF-TOP EQUIPMENT. MARK LOCATIONS OF ALL PENETRATIONS ON EXTERIOR AND INTERIOR AND REVIEW EXISTING CONDITIONS WITH ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO PROCEEDING. CAREFULLY CUT ROOFING AND INSULATION TO EXPOSE AREA OF EXISTING STRUCTURE NO LARGER THAN 1'-0" GREATER IN ANY DIMENSION THAN NEW FAN CURB. CUT STRUCTURAL OPENINGS USING CUTTING NOR HAMMERING TOOLS. AFTER PLACEMENT OF EQUIPMENT CURBS, USING AN APPROVED ROOFING SUBCONTRACTOR AND SO AS NOT TO AFFECT ROOFING WARRANTEE, REPLACE INSULATION IN KIND TIGHT TO CURB, PROVIDE MEMBRANE TO MATCH EXISTING USING A MINIMUM OF 6" OVERLAP WITH EXISTING MEMBRANE AND EXTENDING ROOFING UP A MINIMUM OF 6" AGAINST CURB AS BASE FLASHING. PROVIDE MEMBRANE COUNTERFLASHING FROM CURB REGLET DOWN TO ROOFING LEVEL AND EXTEND 6" OUTWARD FROM CURB IN ALL DIRECTIONS. USE ROOFING MANUFACTURERS APPROVED INSULATION FASTENERS AND MASTICS.

4 ROOFTOP CENTIFUGAL EXHAUST FAN DETAIL
SCALE: NONE

EXHAUST FAN SCHEDULE (EF)

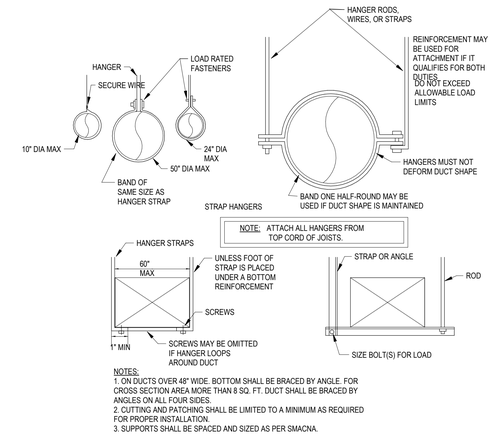
TAG	TYPE	SERVICE	CFM	RPM	E.S.P.	DRIVE TYPE	ELECTRICAL DATA HP/WATTS	ELECTRICAL DATA VOLTS/PH/HZ	MFR & MODEL	NOTES
EF-1	INLINE	BASEMENT DIRECTORS OFFICE EAST	100	1116	0.6	DIRECT	50 WATTS	120/1/60	COOK GN-168	1-4
EF-2	INLINE	BASEMENT DIRECTORS OFFICE WEST	100	1116	0.6	DIRECT	50 WATTS	120/1/60	COOK GN-168	1-4
EF-3	INLINE	1ST FLOOR PUBLIC MENS RESTROOM	210	1075	0.25	DIRECT	163 WATTS	120/1/60	BROAN 508	1-4
EF-4	INLINE	1ST FLOOR PUBLIC WOMENS RESTROOM	210	1075	0.25	DIRECT	163 WATTS	120/1/60	BROAN 508	1-4
EF-5	ROOF DOWNBLAST	GIRLS GANG BATHROOM STACK	1260	1161	0.6	DIRECT	1/2 HP	120/1/60	COOK 135C15D	1-4
EF-6	ROOF DOWNBLAST	BOYS GANG BATHROOM STACK	1890	1487	0.6	DIRECT	1/2 HP	120/1/60	COOK 135C15D	1-4
EF-7	INLINE	1ST FLOOR MAINTENANCE RESTROOM	100	1116	0.3	DIRECT	15 WATTS	120/1/60	BROAN AE110	1-4
EF-8	INLINE	1ST FLOOR KITCHEN RESTROOM	100	1116	0.3	DIRECT	15 WATTS	120/1/60	BROAN AE110	1-4
EF-9	INLINE	2ND FLOOR NURSES RESTROOM	100	1116	0.3	DIRECT	15 WATTS	120/1/60	BROAN AE110	1-4
EF-10	INLINE	LOCKER ROOMS/SHOWERS (PENTHOUSE)	1550	1066	1.25	BELT	.75 HP	120/1/60	COOK 195SQI-HP	1-4
EF-11	INLINE	LOCKER ROOMS/SHOWERS (PENTHOUSE)	1550	1066	1.25	BELT	.75 HP	120/1/60	COOK 195SQI-HP	1-4
EF-12	ROOF DOWNBLAST	MENS STAFF BATHROOM STACK	280	1516	0.6	DIRECT	1/8 HP	120/1/60	COOK 90C15DH	1-4
EF-13	ROOF DOWNBLAST	MENS STAFF BATHROOM STACK	280	1516	0.6	DIRECT	1/8 HP	120/1/60	COOK 90C15DH	1-4

NOTES:
1. PROVIDE FAN MOUNTED BACKDRAFT DAMPER.
2. TOGGLE STYLE DISCONNECT PROVIDED BY EQUIPMENT MANUFACTURER OR MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR..
3. PROVIDE UNIT MOUNTED SPEED CONTROLLER FOR BALANCING.
4. INTERLOCK FAN OPERATION WITH SPACE LIGHTING CONTROLS.

DIFFUSER AND REGISTER SCHEDULE

TAG	CFM	TYPE	FACE SIZE (IN.)	CONN. SIZE (IN.)	MAX. SP (IN/WG)	MANUFACTURER & MODEL	NOTES
EG-1	135	RECTANGULAR	10 X 8	10 X 8	0.06	PRICE 80	1 - 3
TG-1	N/A	RECTANGULAR	SEE PLANS	SEE PLANS	0.06	PRICE 80	1 - 3

NOTES:
1. HARD DUCT SIZE TO MATCH NECK SIZE.
2. PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED. PROVIDE FIELD FABRICATED PLENUMS WHERE FACTORY PLENUMS WILL NOT FIT DUE TO FIELD CONDITIONS.
3. PROVIDE PLASTER FRAMES FOR ALL AIR DEVICES MOUNTED IN PLASTER CEILINGS. SEE ARCHITECTURAL REFLECTED CEILING PLAN.



NOTES:
1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ. FT., DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.
2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. SUPPORTS SHALL BE SPACED AND SIZED AS PER SMACNA.

8 DUCT HANGER SUPPORT DETAIL
SCALE: NONE

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

SCHEDULES AND DETAILS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. JO	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.

M501

SHEET 44 OF 78

10/27/2020 12:05:37 PM

GENERAL DEMOLITION NOTES

A. COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.

B. REMOVE EXPOSED OR ACCESSIBLE WIRING, TO EQUIPMENT OR OUTLETS TO BE REMOVED, UNLESS OTHERWISE INDICATED. LABEL AND TERMINATE WIRING TO REMAIN.

C. WHERE EXISTING OUTLETS ARE TO REMAIN AND ARE CUT OFF BY THE REMODELING THEY SHALL RE-CONNECTED TO CIRCUITS AS REQUIRED BY JOB CONDITIONS.

D. LEGALLY DISPOSE OF EQUIPMENT WHERE EXISTING EQUIPMENT IS INDICATED TO BE REMOVED. OFFER EQUIPMENT TO OWNER AND DISPOSE OF EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN. PROVIDE DOCUMENTATION INDICATING LEGAL DISPOSAL OR RECYCLING OF MATERIALS REMOVED. RECYCLE FLUORESCENT AND HID LAMPS, PROVIDE DOCUMENTATION.

E. WIRING INDICATED TO BE REMOVED OR SERVING EQUIPMENT TO BE REMOVED SHALL BE REMOVED BACK TO THE SOURCE OR TO THE NEXT JUCNTION POINT IF THE WIRING SERVES OTHER OUTLETS THAT WILL REMAIN. CONDUIT OVER UNDISTURBED CEILINGS SHALL REMAIN AND BE LABELED ABANDONED ON EACH END WITH END POINTS INDICATED.

F. RECONNECT EXISTING CIRCUITRY WHICH ORIGINATES OR PASSES THROUGH THE RENOVATED AREAS BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS.

G. COORDINATE WORK CONCERNING EXISTING EQUIPMENT AND SERVICES IN THE BUILDING. COORDINATE REQUIRED POWER INTERRUPTIONS AND PERFORM AT TIME CONVENIENT TO OWNER. INCLUDE COSTS FOR REQUIRED PREMIUM TIME.

3

ELECTRICAL KEYNOTES	
1	UNLESS OTHERWISE NOTED REMOVE ALL ELECTRICAL DEVICES, LIGHT FIXTURES AND LIGHTING CONTROL DEVICES IN THIS AREA. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION UNDER NEW WORK.

(E) PANEL

(E) PANEL

1 BASEMENT DEMOLITION PLAN
1/8" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

BASEMENT DEMOLITION PLAN

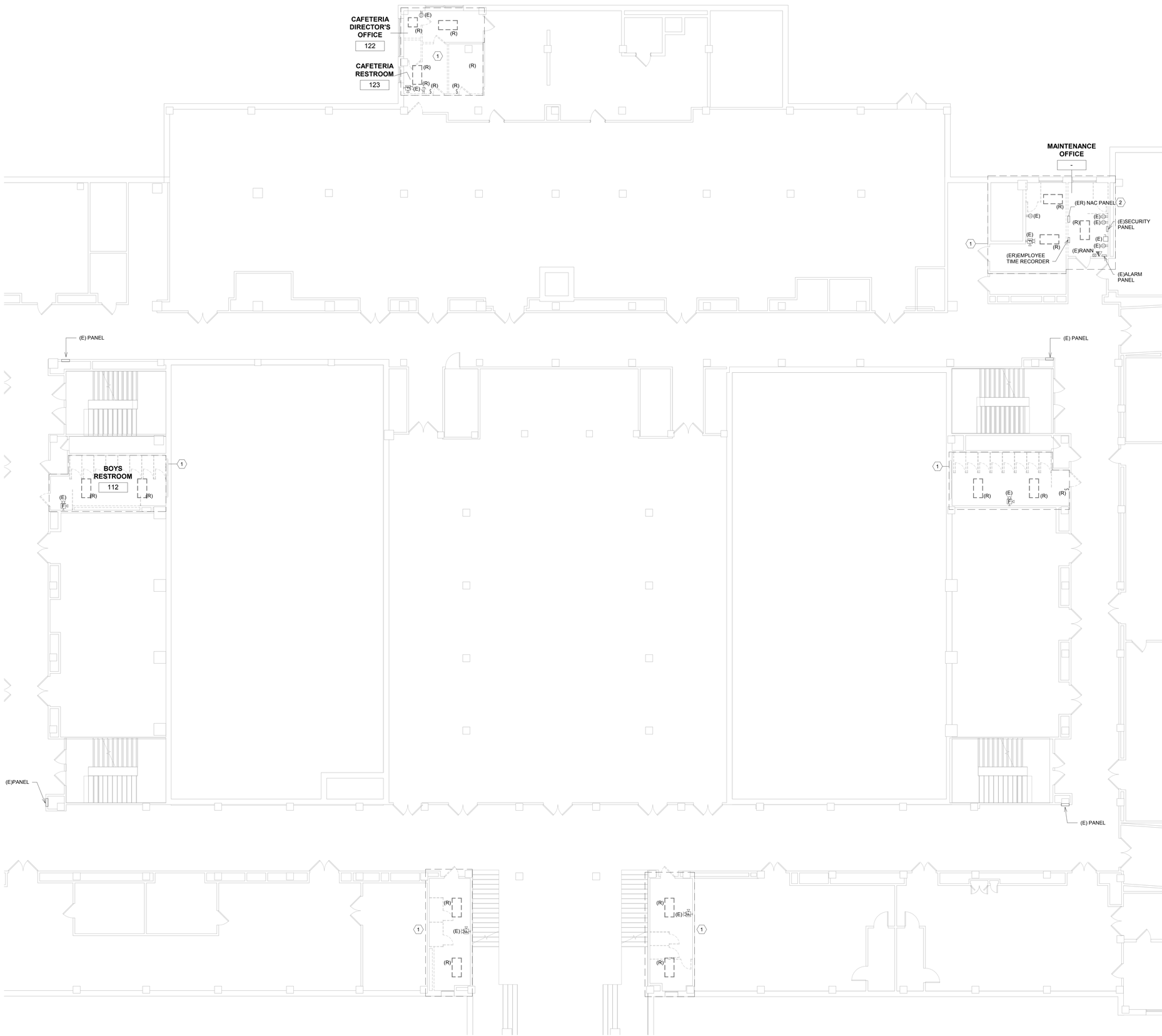
DRAWING SCALE: AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY: AD	CHECKED BY: MS
B-007/008/009/010C OF 2018-2019	

DRAWING NO.

ED100

SHEET 46 OF 78

10/27/2020 2:47:08 PM



1 FIRST FLOOR DEMOLITION PLAN
1/8" = 1'-0"

GENERAL DEMOLITION NOTES

A. COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.

B. REMOVE EXPOSED OR ACCESSIBLE WIRING, TO EQUIPMENT OR OUTLETS TO BE REMOVED, UNLESS OTHERWISE INDICATED. LABEL AND TERMINATE WIRING TO REMAIN.

C. WHERE EXISTING OUTLETS ARE TO REMAIN AND ARE CUT OFF BY THE REMODELING THEY SHALL RE-CONNECTED TO CIRCUITS AS REQUIRED BY JOB CONDITIONS.

D. LEGALLY DISPOSE OF EQUIPMENT WHERE EXISTING EQUIPMENT IS INDICATED TO BE REMOVED. OFFER EQUIPMENT TO OWNER AND DISPOSE OF EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN. PROVIDE DOCUMENTATION INDICATING LEGAL DISPOSAL OR RECYCLING OF MATERIALS REMOVED. RECYCLE FLUORESCENT AND HID LAMPS, PROVIDE DOCUMENTATION.

E. WIRING INDICATED TO BE REMOVED OR SERVING EQUIPMENT TO BE REMOVED SHALL BE REMOVED BACK TO THE SOURCE OR TO THE NEXT JUCNTION POINT IF THE WIRING SERVES OTHER OUTLETS THAT WILL REMAIN. CONDUIT OVER UNDISTURBED CEILINGS SHALL REMAIN AND BE LABELED ABANDONED ON EACH END WITH END POINTS INDICATED.

F. RECONNECT EXISTING CIRCUITRY WHICH ORIGINATES OR PASSES THROUGH THE RENOVATED AREAS BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS.

G. COORDINATE WORK CONCERNING EXISTING EQUIPMENT AND SERVICES IN THE BUILDING. COORDINATE REQUIRED POWER INTERRUPTIONS AND PERFORM AT TIME CONVENIENT TO OWNER. INCLUDE COSTS FOR REQUIRED PREMIUM TIME.

3

ELECTRICAL KEYNOTES

1	UNLESS OTHERWISE NOTED REMOVE ALL ELECTRICAL DEVICES, LIGHT FIXTURES AND LIGHTING CONTROL DEVICES IN THIS AREA. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION UNDER NEW WORK.
2	ELECTRICAL CONTRACTOR SHALL COMISSION A FIRE ALARM CONTRACTOR TO REPROGRAM AND RECIRTIFY THE FIRE ALARM SYSTEM.

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

FIRST FLOOR DEMOLITION PLAN

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS
B-007/008/009/010C	**OF 2018-2019**

DRAWING NO.

ED101

SHEET 47 OF 78

10/27/2020 2:47:08 PM

GENERAL DEMOLITION NOTES

A. COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.

B. REMOVE EXPOSED OR ACCESSIBLE WIRING, TO EQUIPMENT OR OUTLETS TO BE REMOVED, UNLESS OTHERWISE INDICATED. LABEL AND TERMINATE WIRING TO REMAIN.

C. WHERE EXISTING OUTLETS ARE TO REMAIN AND ARE CUT OFF BY THE REMODELING THEY SHALL RE-CONNECTED TO CIRCUITS AS REQUIRED BY JOB CONDITIONS.

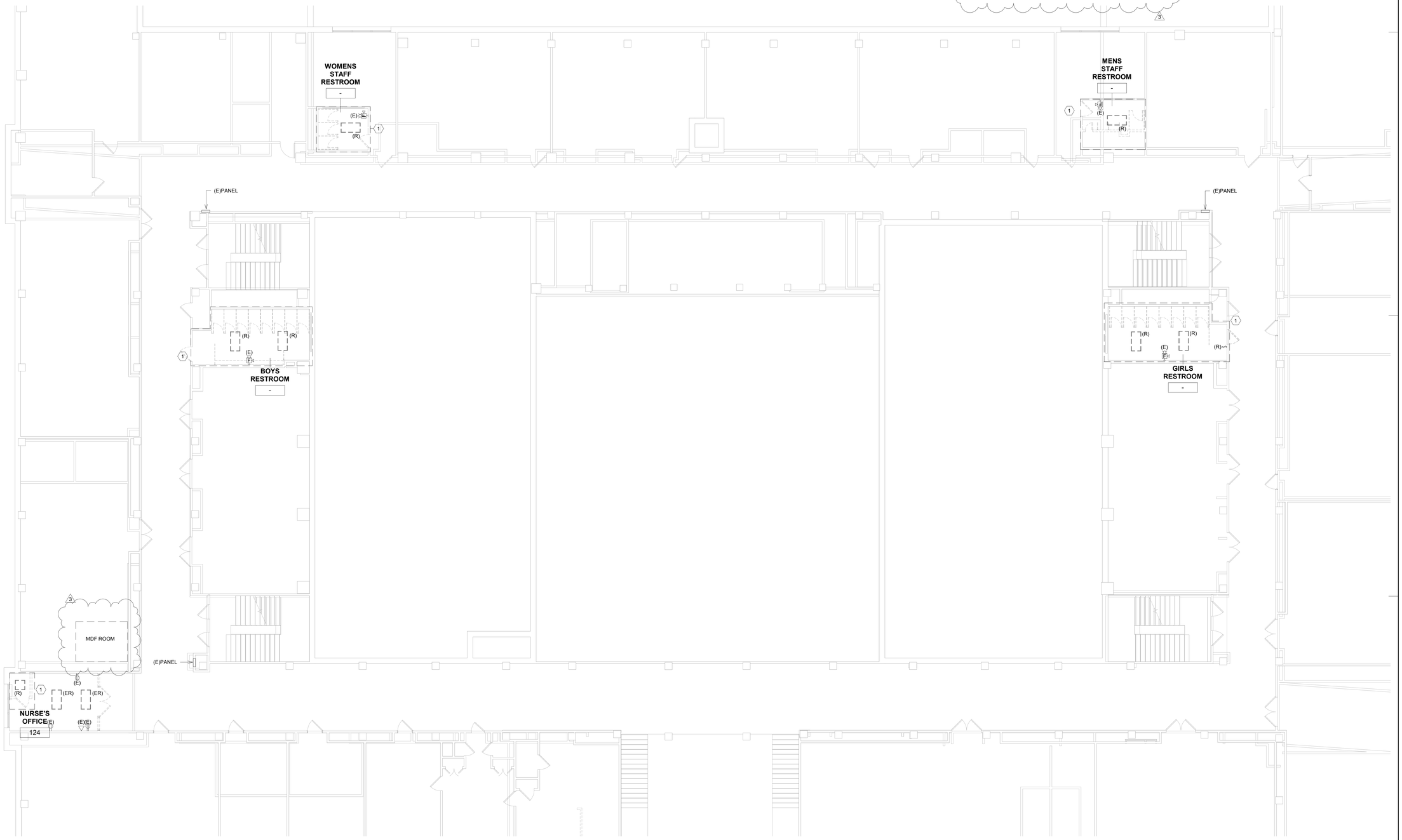
D. LEGALLY DISPOSE OF EQUIPMENT WHERE EXISTING EQUIPMENT IS INDICATED TO BE REMOVED. OFFER EQUIPMENT TO OWNER AND DISPOSE OF EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN. PROVIDE DOCUMENTATION INDICATING LEGAL DISPOSAL OR RECYCLING OF MATERIALS REMOVED. RECYCLE FLUORESCENT AND HID LAMPS, PROVIDE DOCUMENTATION.

E. WIRING INDICATED TO BE REMOVED OR SERVING EQUIPMENT TO BE REMOVED SHALL BE REMOVED BACK TO THE SOURCE OR TO THE NEXT JUCNTION POINT IF THE WIRING SERVES OTHER OUTLETS THAT WILL REMAIN. CONDUIT OVER UNDISTURBED CEILINGS SHALL REMAIN AND BE LABELED ABANDONED ON EACH END WITH END POINTS INDICATED.

F. RECONNECT EXISTING CIRCUITRY WHICH ORIGINATES OR PASSES THROUGH THE RENOVATED AREAS BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS.

G. COORDINATE WORK CONCERNING EXISTING EQUIPMENT AND SERVICES IN THE BUILDING. COORDINATE REQUIRED POWER INTERRUPTIONS AND PERFORM AT TIME CONVENIENT TO OWNER. INCLUDE COSTS FOR REQUIRED PREMIUM TIME.

ELECTRICAL KEYNOTES	
1	UNLESS OTHERWISE NOTED REMOVE ALL ELECTRICAL DEVICES, LIGHT FIXTURES AND LIGHTING CONTROL DEVICES IN THIS AREA. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION UNDER NEW WORK.



1 SECOND FLOOR DEMOLITION PLAN
1/8" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
MICHAEL SIDLO
ENGINEER
33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

SECOND FLOOR DEMOLITION PLAN

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.

ED102

SHEET 48 OF 78

10/27/2020 2:47:08 PM

GENERAL DEMOLITION NOTES

A. COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES TO REMAIN DE-ENERGIZE CIRCUITS AND MAKE THEM SAFE AS REQUIRED. RECONNECT CIRCUITS THAT ARE TO REMAIN AND ARE DISRUPTED DURING DEMOLITION.

B. REMOVE EXPOSED OR ACCESSIBLE WIRING, TO EQUIPMENT OR OUTLETS TO BE REMOVED, UNLESS OTHERWISE INDICATED. LABEL AND TERMINATE WIRING TO REMAIN.

C. WHERE EXISTING OUTLETS ARE TO REMAIN AND ARE CUT OFF BY THE REMODELING THEY SHALL RE-CONNECTED TO CIRCUITS AS REQUIRED BY JOB CONDITIONS.

D. LEGALLY DISPOSE OF EQUIPMENT WHERE EXISTING EQUIPMENT IS INDICATED TO BE REMOVED. OFFER EQUIPMENT TO OWNER AND DISPOSE OF EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN. PROVIDE DOCUMENTATION INDICATING LEGAL DISPOSAL OR RECYCLING OF MATERIALS REMOVED. RECYCLE FLUORESCENT AND HID LAMPS, PROVIDE DOCUMENTATION.

E. WIRING INDICATED TO BE REMOVED OR SERVING EQUIPMENT TO BE REMOVED SHALL BE REMOVED BACK TO THE SOURCE OR TO THE NEXT JUCNTION POINT IF THE WIRING SERVES OTHER OUTLETS THAT WILL REMAIN. CONDUIT OVER UNDISTURBED CEILINGS SHALL REMAIN AND BE LABELED ABANDONED ON EACH END WITH END POINTS INDICATED.

F. RECONNECT EXISTING CIRCUITRY WHICH ORIGINATES OR PASSES THROUGH THE RENOVATED AREAS BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS.

G. COORDINATE WORK CONCERNING EXISTING EQUIPMENT AND SERVICES IN THE BUILDING. COORDINATE REQUIRED POWER INTERRUPTIONS AND PERFORM AT TIME CONVENIENT TO OWNER. INCLUDE COSTS FOR REQUIRED PREMIUM TIME.

3

ELECTRICAL KEYNOTES	
1	UNLESS OTHERWISE NOTED REMOVE ALL ELECTRICAL DEVICES, LIGHT FIXTURES AND LIGHTING CONTROL DEVICES IN THIS AREA. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION UNDER NEW WORK.

1 THIRD FLOOR DEMOLITION PLAN
1/8" = 1'-0"

10/27/2020 2:47:08 PM

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

Michael Sidlo

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

THIRD FLOOR DEMOLTION PLAN

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS
B-007/008/009/010C OF 2018-2019	

DRAWING NO.

ED103

SHEET 49 OF 78

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

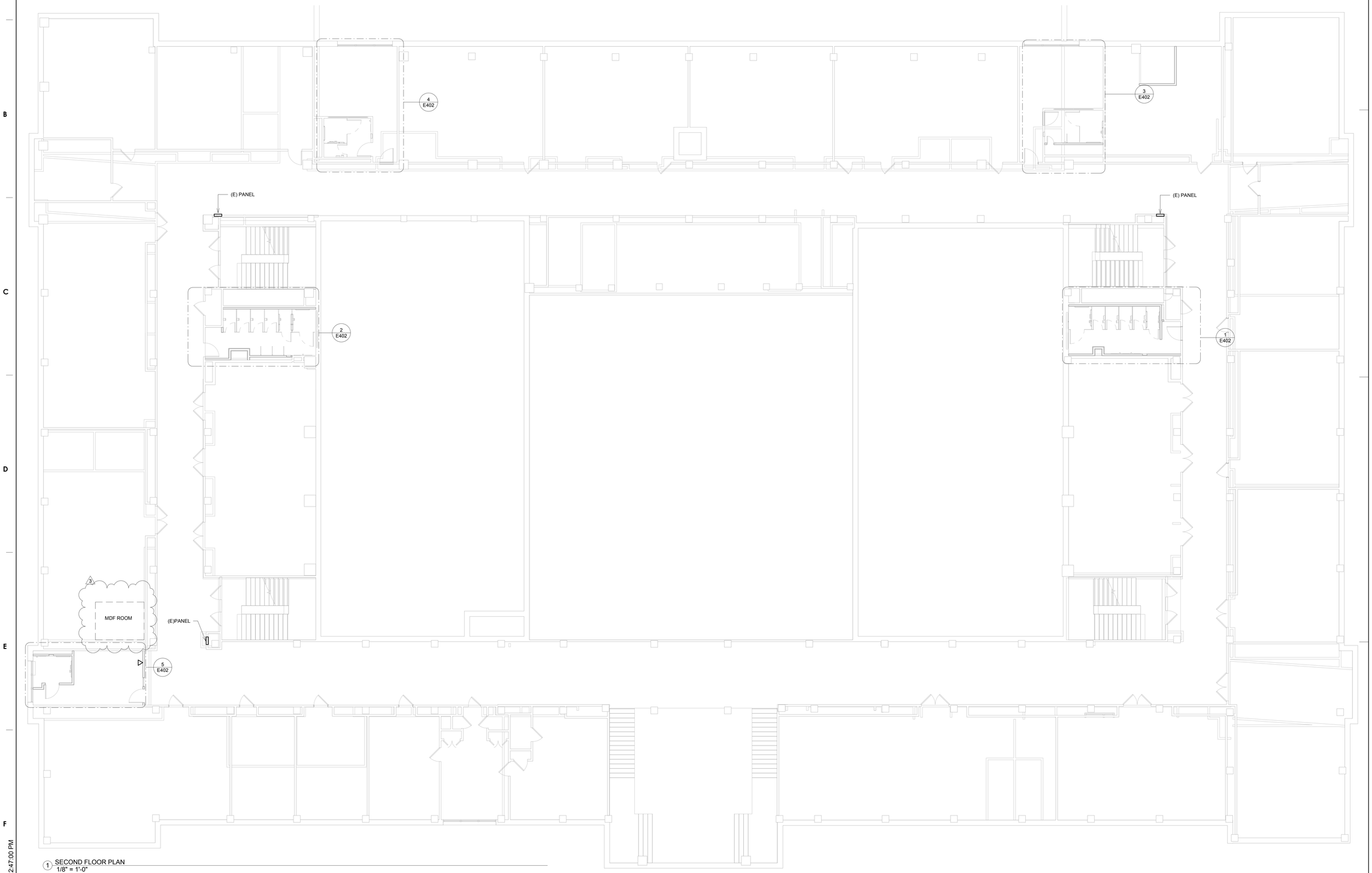
B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

F. REFER TO ENLARGED PLANS ON E400 SERIES DRAWINGS FOR ADDITIONAL INFORMATION.



1 SECOND FLOOR PLAN
1/8" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

SECOND FLOOR NEW WORK PLAN

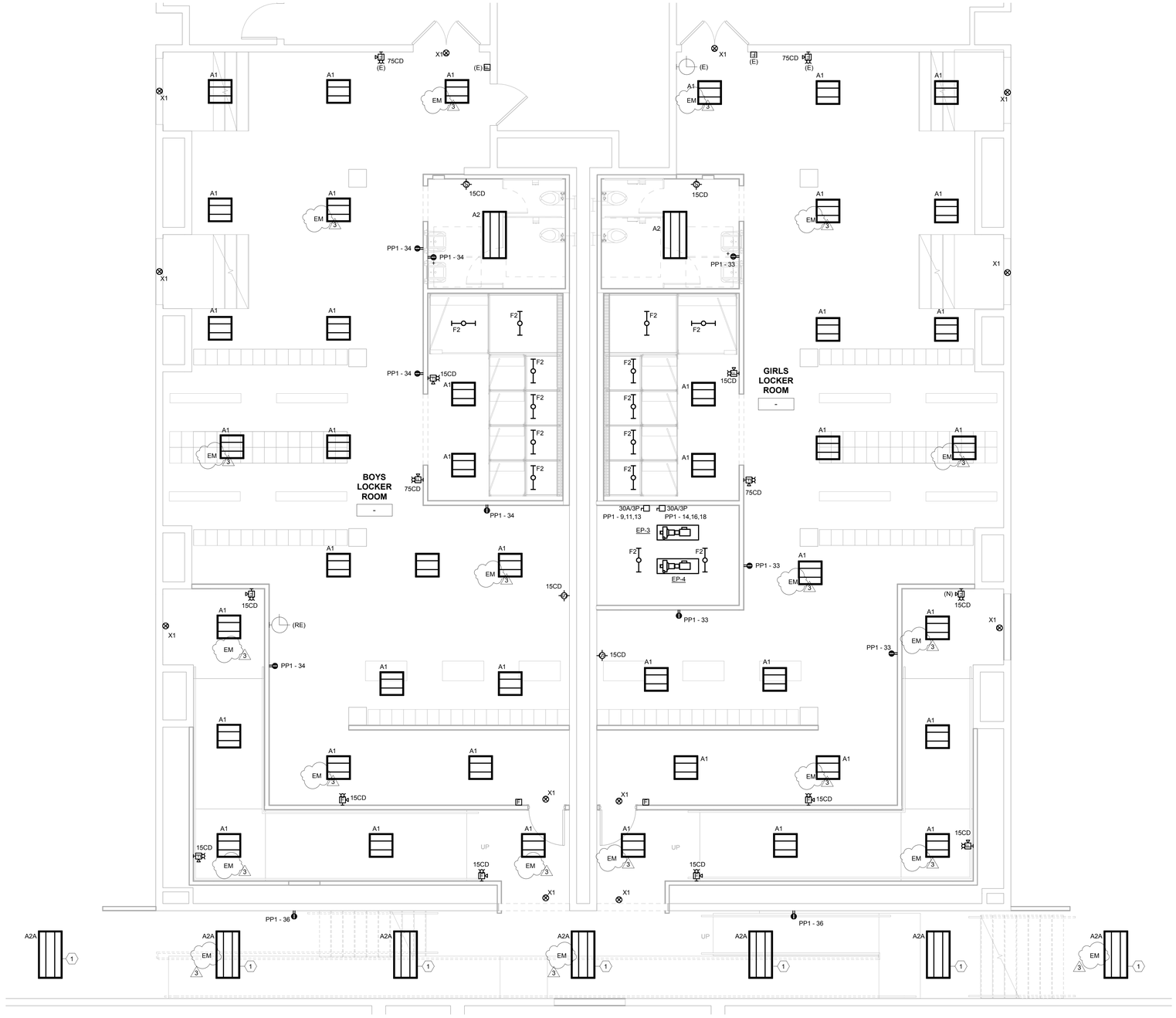
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS
B-007/008/009/010C OF 2018-2019	

DRAWING NO.

E102

SHEET 52 OF 78

10/27/2020 2:47:00 PM



1 BASEMENT - LOCKER ROOMS
1/4" = 1'-0"

2 BASEMENT - EAST DIRECTORS ROOM
1/4" = 1'-0"

3 BASEMENT - WEST DIRECTORS ROOM
1/4" = 1'-0"

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

F. UNLESS OTHERWISE NOTED, ALL NEW LIGHT FIXTURES SHALL BE CIRCUITED TO EXISTING CIRCUIT.

G. UNLESS OTHERWISE NOTED LIGHTING CONTROLS ARE INTEGRAL TO THE LIGHT FIXTURE. PROVIDE WALL AND CEILING MOUNTED LIGHTING CONTROLS WHERE INDICATED..

H. UNLESS OTHERWISE NOTED ALL ELECTRICAL EQUIPMENT, DEVICES, LIGHT FIXTURES, LIGHTING CONTROLS, FIRE ALARM AND TELECOMMUNICATION DEVICES ARE NEW.

ELECTRICAL KEYNOTES	
1	PROVIDE NEW LIGHT FIXTURES IN HALLWAY. CONNECT TO EXISTING CIRCUIT AND CONTROLS.

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
MICHAEL SIDLO
ENGINEER
33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: 180343-00

ADDENDUM NO 2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

BASEMENT ENLARGED PLANS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.
E400

SHEET 55 OF 78

10/27/2020 2:47:02 PM

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

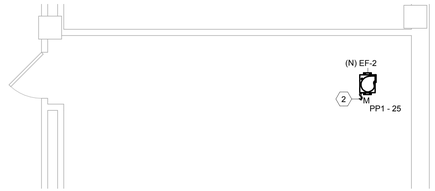
E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

F. UNLESS OTHERWISE NOTED, ALL NEW LIGHT FIXTURES SHALL BE CIRCUITED TO EXISTING CIRCUIT. PROVIDE NEW LIGHTING CONTROLS AS SHOWN.

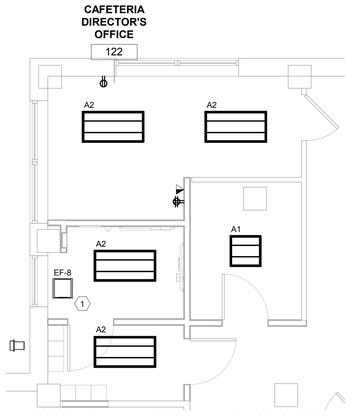
ELECTRICAL KEYNOTES

1	CIRCUIT EXHAUST FAN TO LIGHTING CIRCUIT. EXHAUST FAN SHALL BE CONTROLLED VIA OCCUPANCY SENSOR CONTROL FOR LIGHTING.
2	DISCONNECT SWITCH AND STARTER INTEGRAL TO EXHAUST FAN UNIT. COORDINATE FINAL REQUIREMENTS WITH MECHANICAL CONTRACTOR.

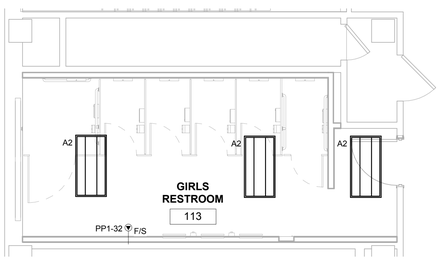
8 FIRST FLOOR PLAN - WEST SERVICE SPACE
1/4" = 1'-0"



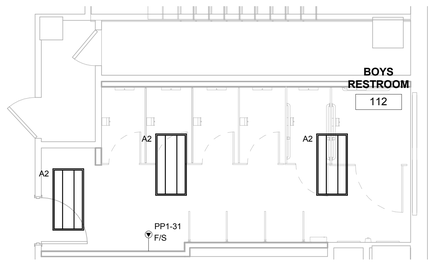
7 FIRST FLOOR PLAN -EAST SERVICE SPACE
1/4" = 1'-0"



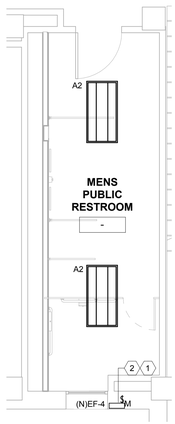
6 FIRST FLOOR PLAN - CAFETERIA LOCKER/OFFICE RESTROOM
1/4" = 1'-0"



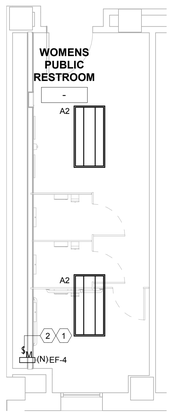
1 FIRST FLOOR - GIRL'S RESTROOM
1/4" = 1'-0"



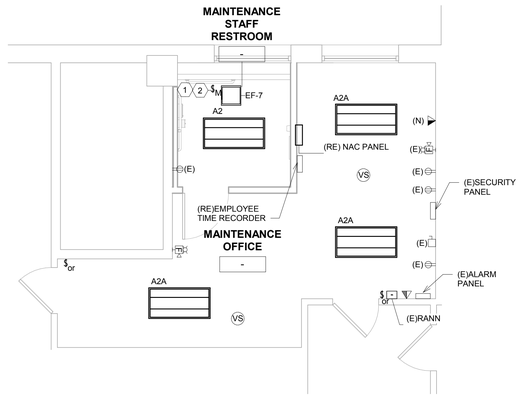
2 FIRST FLOOR - BOY'S RESTROOM
1/4" = 1'-0"



3 FIRST FLOOR - MEN'S PUBLIC RESTROOM
1/4" = 1'-0"



4 FIRST FLOOR - WOMEN'S PUBLIC RESTROOM
1/4" = 1'-0"



5 FIRST FLOOR - MAINTENANCE RESTROOMS
1/4" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: 180343-00

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

FIRST FLOOR ENLARGED PLANS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.

E401

SHEET 56 OF 78

10/27/2020 2:47:04 PM

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

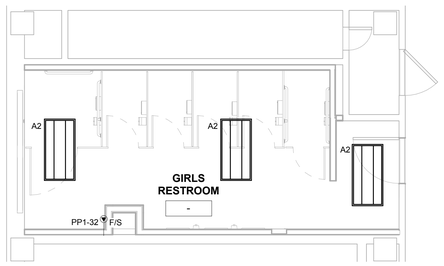
D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

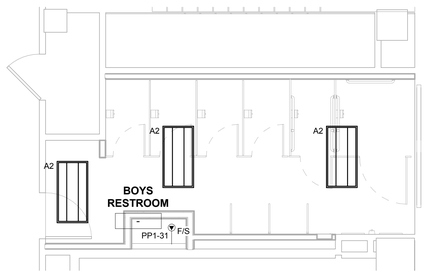
F. UNLESS OTHERWISE NOTED, ALL NEW LIGHT FIXTURES SHALL BE CIRCUITED TO EXISTING CIRCUIT. PROVIDE NEW LIGHTING CONTROLS AS SHOWN.

ELECTRICAL KEYNOTES

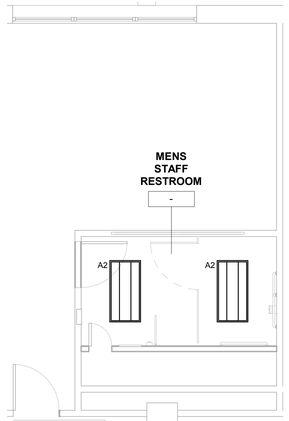
1	CIRCUIT EXHAUST FAN TO LIGHTING CIRCUIT. EXHAUST FAN SHALL BE CONTROLLED VIA OCCUPANCY SENSOR CONTROL FOR LIGHTING.
2	DISCONNECT SWITCH AND STARTER INTEGRAL TO EXHAUST FAN UNIT. COORDINATE FINAL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
3	EXTEND NEAREST EXISTING CIRCUIT TO FEED NEW RECEPTACLE.



1 SECOND FLOOR - GIRL'S RESTROOM
1/4" = 1'-0"

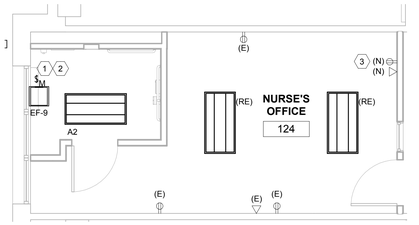


2 SECOND FLOOR PLAN - BOY'S RESTROOM
1/4" = 1'-0"



3 SECOND FLOOR - MEN'S STAFF RESTROOM
1/4" = 1'-0"

4 SECOND FLOOR - WOMEN'S STAFF RESTROOM
1/4" = 1'-0"



5 SECOND FLOOR - NURSE'S RESTROOM
1/4" = 1'-0"

10/27/2020 2:47:06 PM

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
MICHAEL SIDLO
ENGINEER
33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

SECOND FLOOR ENLARGED PLANS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.

E402

SHEET 57 OF 78

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

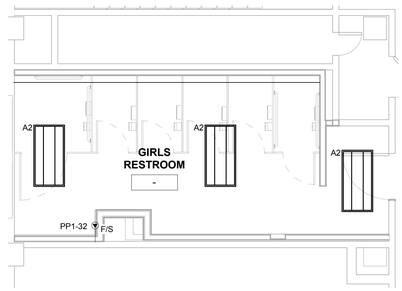
B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

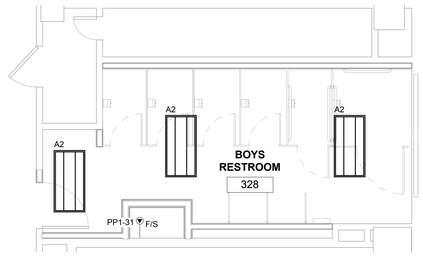
D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

F. UNLESS OTHERWISE NOTED, ALL NEW LIGHT FIXTURES SHALL BE CIRCUITED TO EXISTING CIRCUIT. PROVIDE NEW LIGHTING CONTROLS AS SHOWN.

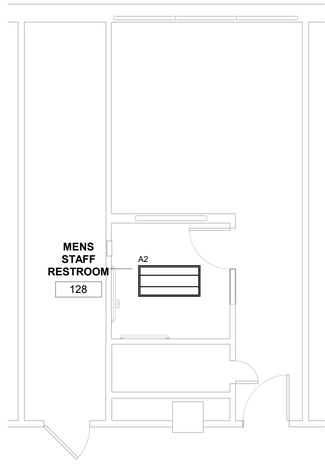


1 THIRD FLOOR - GIRL'S RESTROOM
1/4" = 1'-0"



2 THIRD FLOOR - BOY'S RESTROOM
1/4" = 1'-0"

3 THIRD FLOOR - WOMEN'S STAFF RESTROOM
1/4" = 1'-0"



4 THIRD FLOOR - MEN'S STAFF RESTROOM
1/4" = 1'-0"

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MICHAEL SIDLO
ENGINEER
33443-E

Michael Sidlo

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

THIRD FLOOR ENLARGED PLANS

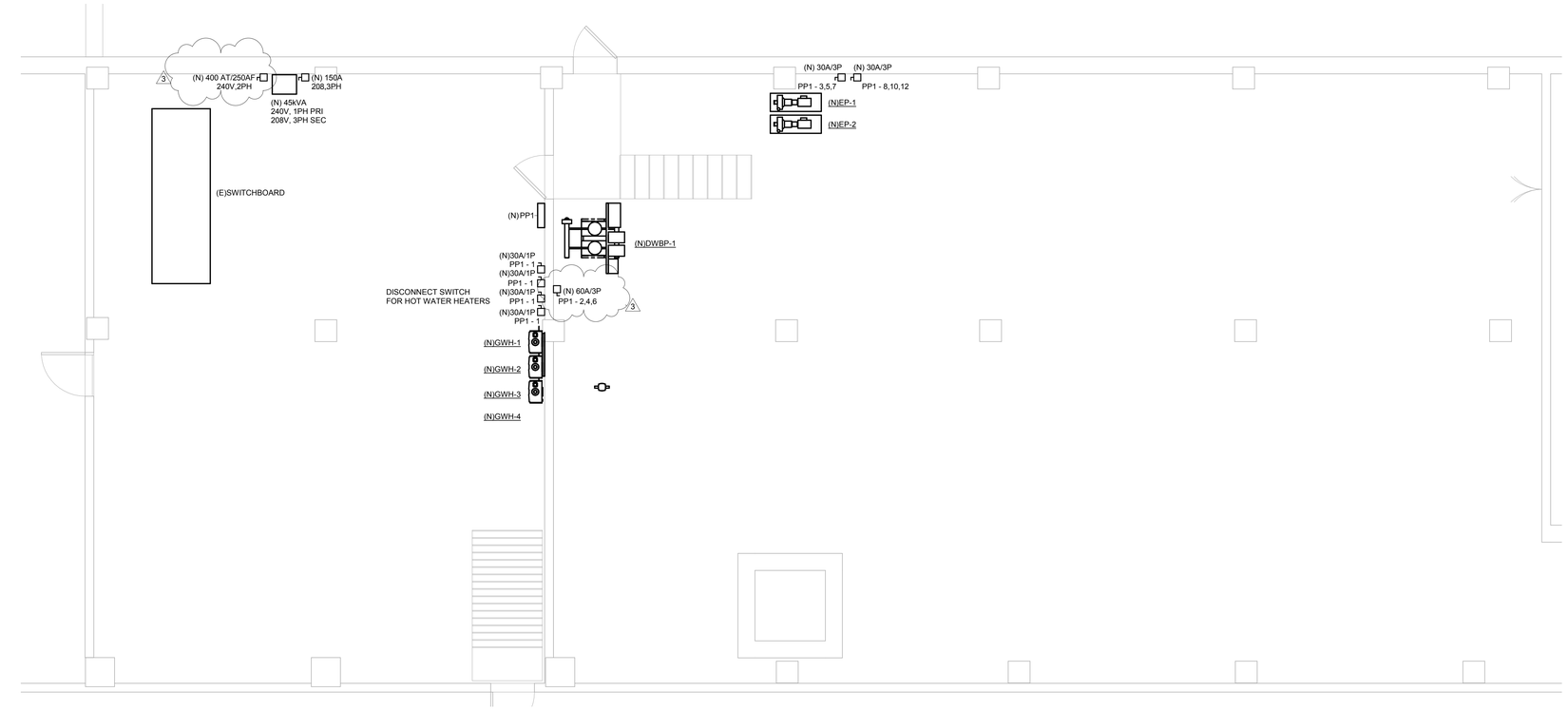
DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS
B-007/008/009/010C	**OF 2018-2019**

DRAWING NO.

E403

SHEET 58 OF 78

10/27/2020 2:47:06 PM



1 BASEMENT PLAN - ELECTRICAL/MECHANICAL ROOM
1/4" = 1'-0"

GENERAL POWER NOTES

A. FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, REFER TO DRAWING E001.

B. CONTRACTOR SHALL PROVIDE COMPLETE AND ACCURATE CIRCUIT DIRECTORIES FOR ALL NEW AND EXISTING PANELS AFTER NEW WORK IS COMPLETED.

C. FIRE ALARM SHALL BE OPERATIONAL AND MAINTAINED DURING ALL ASPECTS OF DEMOLITION AND NEW CONSTRUCTION.

D. MAINTAIN THE CONTINUITY OF ALL EXISTING TO REMAIN OUTSIDE THE SCOPE OF WORK AREA.

E. ALL ELECTRICAL OUTLETS AND JUNCTION BOXES SHALL BE STAGGERED WITHIN THE WALL TO AVOID SOUND TRANSMISSION.

F. UNLESS OTHERWISE NOTED, ALL NEW LIGHT FIXTURES SHALL BE CIRCUITED TO EXISTING CIRCUIT. PROVIDE NEW LIGHTING CONTROLS AS SHOWN.

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF CAPITAL PROGRAMS
440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015
(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR
An Ingenium International Company
One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

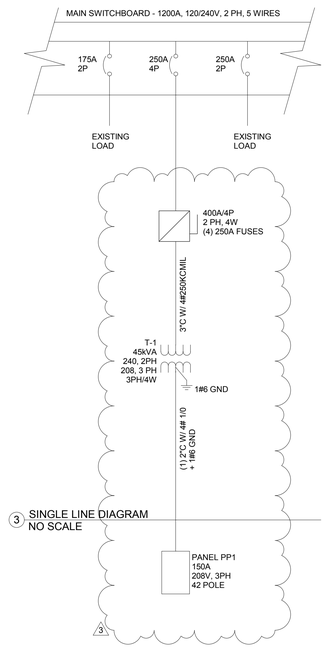
ENLARGED MECHANICAL ROOM PLANS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS
B-007/008/009/010C OF 2018-2019	

DRAWING NO.
E404

SHEET 59 OF 78

10/27/2020 2:47:07 PM



LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER/CATALOG NO.	ALTERNATE MFR	ELECTRICAL		MOUNTING			LAMP(S)	REMARKS
	FIXTURE			MAX. WATTAGE	VOLTS	SURFACE	RECESS	LAY-IN	QUANTITY/WATTS/TYPE	
A1	2'X2' LED ARCHITECTURAL TROFFER, ROLLED STEEL CONSTRUCTION WITH ACRYLIC LENS	COLUMBIA LIGHTING LCAT22_39MLSM_EDU_ NXS PROVIDE WITH INTEGRAL OCCUPANCY SENSOR	-	29	120	•			3420 LUMENS, 80CRI, 3500K, 29 WATTS	LIGHT FIXTURES INDICATED WITH 'EM' - PROVIDE ELL14 BATTERY PACK
A1A	2'X2' LED ARCHITECTURAL TROFFER, ROLLED STEEL CONSTRUCTION WITH ACRYLIC LENS	COLUMBIA LIGHTING LCAT22_39MLSM_EDU_ NXS	-	29	120	•			3420 LUMENS, 80CRI, 3500K, 29 WATTS	-
A2	2'X4' LED ARCHITECTURAL TROFFER, ROLLED STEEL CONSTRUCTION WITH ACRYLIC LENS	COLUMBIA LIGHTING LCAT24_39MLSM_EDU_NXS PROVIDE WITH INTEGRAL OCCUPANCY SENSOR	-	39	120	•			4941 LUMENS, 80CRI, 3500K, 39 WATTS	LIGHT FIXTURES INDICATED WITH 'EM' - PROVIDE ELL14 BATTERY PACK
A2A	2'X4' LED ARCHITECTURAL TROFFER, ROLLED STEEL CONSTRUCTION WITH ACRYLIC LENS	COLUMBIA LIGHTING LCAT24_39MLSM_EDU_NXS	-	39	120	•			4941 LUMENS, 80CRI, 3500K, 39 WATTS	-
F2	2'-0" LED LINEAR WRAP AROUND. DAMP LOCATION RATED. WITH INTEGRAL OCCUPANCY SENSOR	COLUMBIA LIGHTING RLW-2-35-MW-FA-W-ED-U-ELL14-NXDS PROVIDE WITH INTEGRAL OCCUPANCY SENSOR	-	16	120	•			4941 LUMENS, 80CRI, 3500K, 39 WATTS	-
X1	LED EXIT SIGN WET LOCATION LISTED.	HE WILLIAMS EXIT/WET/CP-SF/DF-R-WHT-EM-WG-D	-	3.3	120		•		LED, 3.3	-

3

LIGHTING FIXTURE NOTES:

1. PROVIDE ALL HARDWARE REQUIRED FOR MOUNTING OF FIXTURE IN SPECIFIED CEILING TYPE. COORDINATE CEILING TYPE WITH ARCHITECTURAL PLANS AND DETAILS.
2. MANUFACTURERS CATALOG NUMBERS ARE PROVIDED AS A BASIS OF DESIGN & LEVEL OF QUALITY REQUIRED. ALTERNATE MANUFACTURER'S EQUIPMENT MUST MEET OR EXCEED THIS LEVEL OF QUALITY & PHYSICAL CHARACTERISTICS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ANY COORDINATION REQUIRED TO INSTALL ALTERNATE MANUFACTURER'S EQUIPMENT. ACCEPTABLE ALTERNATES MANUFACTURERS ARE: HUBBEL, COLUMBIA, & LIGHTOLIER.
3. PRIOR TO SUBMISSION OF FIXTURE CUTS AND/OR PURCHASE, THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE CONDITIONS OF INSTALLATION TO DETERMINE THAT NO CONFLICTS WILL EXIST FOR THE APPROPRIATE INSTALLATION OF THE FIXTURE.

OCCUPANCY SENSOR SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER/CATALOG NO.	MOUNTING	VOLTAGE	TIME DELAY	REMARKS
OS	DUAL-TECHNOLOGY, WALL MOUNTED OCCUPANCY SENSOR	WATTSTOPPER DW-200	WALL	24V	30 MIN.	SENSOR SHALL BE PROGRAMMED TO OCCUPANCY (AUTO-ON) MODE.
VS	DUAL-TECHNOLOGY, WALL MOUNTED VACANCY SENSOR	WATTSTOPPER DW-200	WALL	24V	30 MIN.	SENSOR SHALL BE PROGRAMMED TO VACANCY (MANUAL-ON) MODE.
VS M	DUAL-TECHNOLOGY, WALL MOUNTED VACANCY SENSOR, MULTI-WAY	WATTSTOPPER PW-203	WALL	24V	30 MIN.	SENSOR SHALL BE PROGRAMMED TO VACANCY (MANUAL-ON) MODE.
OS	DUAL-TECHNOLOGY, CEILING MOUNTED OCCUPANCY SENSOR	WATTSTOPPER DT-300	CEILING	24V	30 MIN.	SENSOR SHALL BE PROGRAMMED TO OCCUPANCY (AUTO-ON) MODE.

Branch Panel: PP1

Location: ELECTRICAL ROOM **Volts:** 120/208 Wye **A.I.C. Rating:** 10000 **Neutral Rating:**
Supply From: **Phases:** 3 **Mains Type:** MCB **Feed Thru...**
Mounting: Surface **Wires:** 4 **Mains...** 225 A **I.G. Bus:**
Enclosure: Type 1 **MCB Rating:** 150 A

CKT	Circuit Description	Rating	Pole	Wire Size	A		B		C		Wire Size	Pole	Rating	Circuit Description	CKT
1	WATER HEATERS	20 A	1	1-#12, 1-#12, 1-#12	0	5103...					3-#4, 1-#4, 1-#10	3	60 A	DUPLEX PUMPS DWBP-1	2
3	PUMP EP-1	20 A	3	3-#12, 1-#12, 1-#12			1381...	5103...							4
5									1381...	5.1					6
7					1.4	1381...									8
9	SEWAGE PUMP EP-3	25 A	3	3-#10, 1-#10, 1-#10			2101...	1381...			3-#12, 1-#12, 1-#12	3	20 A	PUMP EP-2	10
11									2101...	1.4					12
13					2.1	2101...					3-#10, 1-#10, 1-#10	3	25 A	SEWAGE PUMP EP-4	14
15	SWEAGE PUMP SP-3	20 A	3	3-#12, 1-#12, 1-#12			300 VA	2101...							16
17									300 VA	2.1					18
19					0.3	300 VA					3-#12, 1-#12, 1-#12	3	20 A	SEWAGE PUMP SP-4	20
21	PENTHOUSE EXHAUST FAN...	20 A	1	1-#12, 1-#12,...			0 VA	300 VA							22
23	EF-3 WEST SERVICE SPACE	20 A	1	1-#12, 1-#12,...					100 VA	0.3					24
25	EF-3 EAST SERVICE SPACE	20 A	1	1-#12, 1-#12,...	0.1	540 VA					1-#12, 1-#12,...	1	20 A	EAST DIRECTOR'S OFFICE	26
27	ROOF EXHAUST FAN...	20 A	1	1-#12, 1-#12,...			1500...	720 VA			1-#12, 1-#12,...	1	20 A	WEST DIRECTOR'S OFFICE	28
29	ROOF EXHAUST FAN EF-5	20 A	1	1-#12, 1-#12,...					1200...	1.2	1-#12, 1-#12,...	1	20 A	ROOF EXHAUST FAN EF-6	30
31	F/S DAMPER BOY'S 1ST,2ND...	20 A	1	1-#12, 1-#12,...	0.3	300 VA					1-#12, 1-#12,...	1	20 A	F/S DAMPER GIRL'S...	32
33	GIRLS' LOCKER ROOM...	20 A	1	1-#12, 1-#12,...			720 VA	900 VA			1-#12, 1-#12,...	1	20 A	BOY'S LOCKER ROOM...	34
35	SPARE	20 A	1	--					0 VA	0.4	1-#12, 1-#12,...	1	20 A	LOCKER ROOM CORRIDOR...	36
37	SPARE	20 A	1	--	0	0 VA					--	1	20 A	SPARE	38
39	SPARE	20 A	1	--			0 VA	0 VA			--	1	20 A	SPARE	40
41	SPARE	20 A	1	--					0 VA	0	--	1	20 A	SPARE	42
	Total Load:				13.91 kVA		16.5 kVA		15.5 kVA						

3

Panel Totals	
Total Conn. Load:	45.94 kVA
Total Conn. Current:	128 A

Notes:

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

PROJECT NUMBER: **180343-00**

ADDENDUM NO 2

2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO 2

SCHOOL LOCATION

SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWING TITLE

ELECTRICAL SCHEDULES AND DIAGRAMS

DRAWING SCALE AS NOTED	
LOCATION NO.	FILE NO.
DRAWN BY. AD	CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.

E700

SHEET 60 OF 78

10/27/2020 2:47:07 PM

TRAP PRIMER SCHEDULE

TAG	TP1
MANUFACTURER	PPP INC.
TYPE	TRAP PRIMER
MODEL #	P2
NOTES AND ACCESSORIES	1 - 9

NOTES/ACCESSORIES:
1. P.D.I. AND/OR A.S.S.E. APPROVED
2. PRESSURE DROP ACTIVATED (P2) SERVES MAXIMUM 1-2 FLOOR DRAINS WITH DISTRIBUTION UNIT
3. 1/2" NPT INLET AND OUTLET
4. INSTALL TRAP PRIMER AT ALL DRAINS REQUIRED BY CODE, VERIFY WITH LOCAL OFFICIALS
5. MUST BE INSTALLED LEVEL
6. MUST BE INSTALLED WITH ACCESS FOR PERIODIC INSPECTION
7. DO NOT SUBJECT TRAP PRIMER TO ROUGH-IN TEST
8. PROVIDE ACCESS PANEL WHERE CONCEALED, COORDINATE MANUFACTURERED BY P.P.P. INC., COORDINATE SIZES IN THE FIELD
9. PROVIDE DISTRIBUTION UNIT WHERE FLOOR DRAINS CAN BE COMBINED

PIPE LABEL SCHEDULE - COLORS

SERVICE TYPE	LABEL TEXT	BACKGROUND COLOR	LETTER COLOR
DOMESTIC COLD WATER COMMON AREAS	COLD WATER	GREEN	WHITE
DOMESTIC HOT WATER COMMON AREAS	HOT WATER	GREEN	WHITE
DOMESTIC HOT WATER RETURN COMMON AREAS	HOT WATER RETURN	GREEN	WHITE
GAS (INTERIOR EXPOSED STEEL PIPING ONLY)	GAS	YELLOW	BLACK
SANITARY (INTERIOR EXPOSED PIPING ONLY)	SANITARY	ORANGE	BLACK
VENT (INTERIOR EXPOSED PIPING ONLY)	VENT	TEAL	WHITE

PIPE LABEL SCHEDULE - SIZES

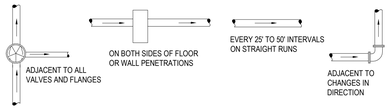
OUTSIDE PIPE DIAMETER INCLUDING COVERING		MINIMUM LENGTH OF LABEL FIELD COLOR		MINIMUM HEIGHT OF LETTERS	
.50"-1.25"	19-32 MM	8"	203 MM	.50"	13 MM
1.5"-2"	38-51 MM	8"	203 MM	.75"	19 MM
2.5"-6"	64-152 MM	12"	305 MM	1.25"	32 MM
8"-10"	203-254 MM	24"	610 MM	2.5"	64 MM
OVER 10"	OVER 254 MM	32"	813 MM	3.5"	89 MM

MATERIAL VENDORS (OR SIMILAR)

VINYL LABELING TAPE: CAN-DO NATIONAL TAPE, PO BOX 40366, NASHVILLE, TN 37204, 800-788-5572

TRANSFER RIBBON: : GRAPHIC PROFDUCTS, PO BOX 4030, BEAVERTON, OR 97076-4030, 800-788-5572

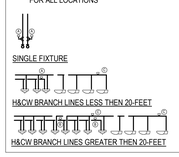
NOTES:
- TO INDICATE DIRECTION OF FLOW BY LABELING WITH ARROWS AT ONE OR BOTH ENDS.
- TO BE VISABLE FROM THE POINT OF NORMAL APPROACH
- NEAR VALVES, FLANGES AND CHANGES IN PIPE DIRECTION.
- BOTH SIDES OF CEILING, WALL OR FLOOR PENETRATIONS.
- AT ANY LINE ENTRY OR REENTRY POINT.
- ON STRAIGHT PIPE RUNS.
- EVERY 25 FEET IS TYPICAL.



WATER HAMMER ARRESTOR

J.R. SMITH MODEL #	SYMBOL	FIXTURE UNIT RATING
5005	A	1-11
5010	B	12-32
5020	C	33-60
5030	D	61-113
5040	E	114-154
5050	F	155-330

NOTES:
1. PROVIDE AT ALL QUICK CLOSING VALVES.
2. APPROVED EQUALS - SIUX CHIEF, PRECISION PLUMBING PRODUCTS & WATTS WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION.
3. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW IF POSSIBLE. SIZE THE UNITS PER THE TABLES SHOWN ABOVE. SINGLE FIXTURES OR APPLIANCES - LOCATE (WHA) JUST BEFORE THE FIXTURE VALVE.
4. BATTERIES OF FIXTURES - LENGTH OF BATTERY 20-FEET OF LESS. LOCATED HYDROTROL BETWEEN THE LAST AND NEXT TO LAST FIXTURES.
5. FOR BATTERY OF FIXTURES HAVING A BRANCH LINE OVER 20-FEET IN LENGHT TWO HYDROTROLS SHALL BE INSTALLED. THE TWO HYDROTROLS SELCTED SHALL HAVE A COMBINED FIXTURE UNIT RATING EQUAL TO OR GREATER THAN THE TOTAL FIXTURE UNIT DEMAND OF THE ENTIRE BRANCH LINE. LOCATED ONE BETWEEN THE LAST AND NEXT TO LAST FIXTURES ON THE BRANCH LINE. THE OTHER HYDROTROL SHALL BE LOCATED AT THE BRANCH MID POINT SO THAT THERE ARE EQUAL LENGHT OF PIPE ON EACH SIDE.
6. ON HOT WATER BRANCH LINES OVER 20-FEET IN LENGHT WHERE PLUMBING FIXTURES ARE INSTALLED ON A PORTION OF THE LINE THE SECOND HYDROTROL SHALL BE LOCATED AT A POINT HALF THE DISTANCE OF THE PLUMBING FIXTURES INSTALLED.
7. PROVIDE ACCESS PANELS, COORDINATE WITH THE G.C FOR ALL LOCATIONS



PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	WASTE	VENT	C.W.	H.W.	FLOW	REMARKS
WC1	WATER CLOSET WALL HUNG AMERICAN STANDARD MODEL #2634.101.020, BACK SPUD, WHITE	4"	2"	1"	*	1.6 GPF	FLUSH VALVE-SLOAN ROYAL 940 CONCEALED MANUAL HYDRAULIC FLUSHOMETER, SEAT BEMIS 1955C, HEAVY DUTY TYPE CARRIER MIFAB MODEL #MC-10-HDX FURNISH AND INSTALLED BY P.C. INSTALL RIM HEIGHT 16-1/2"
WC1A	WATER CLOSET WALL HUNG AMERICAN STANDARD MODEL #3351.160, BACK SPUD, MOUNT AT ADA HEIGHT, WHITE	4"	2"	1"	*	1.6 GPF	FLUSH VALVE-SLOAN ROYAL 940 CONCEALED MANUAL HYDRAULIC FLUSHOMETER, SEAT BEMIS 1955C, HEAVY DUTY TYPE CARRIER MIFAB MODEL #MC-10-HDX FURNISH AND INSTALLED BY P.C. INSTALL RIM HEIGHT 16-1/2"
WC2A	WATER CLOSET FLOOR MOUNTED AMERICAN STANDARD MODEL #2864.016.020, TOP SPUD, MOUNT AT ADA HEIGHT, WHITE	4"	2"	1"	*	1.6 GPF	FLUSH VALVE-SLOAN ROYAL 113 EXPOSED MANUAL FLUSHOMETER, SEAT BEMIS 1955C
UR1	URINAL WALL HUNG AMERICAN STANDARD MODEL 6515.001, BACK SPUD, WHITE	2"	2"	3/4"	*	0.125 GPF	FLUSH VALVE-SLOAN ROYAL 995 CONCEALED MANUAL HYDRAULIC FLUSHOMETER, HEAVY DUTY TYPE CARRIER MIFAB MODEL #MC-31 FURNISH AND INSTALLED BY P.C. INSTALL RIM HEIGHT 16-1/2"
LAV1	LAVATORY WALL HUNG AMERICAN STANDARD MODEL # 0955.001EC, WHITE	2"	2"	1/2"	1/2"	0.35 GPM	FAUCET-CHICAGO FAUCET METERING 333-665E39PSHABCCP WITH AERATOR, MCGUIRE 1 1/2" CHROME P-TRAP WITH CLEAN OUT, MCGUIRE STOP & RISER 2165CC, PROVIDE WITH MANUFACTURERS WALL HANGER.
MS1	SERVICE SINK WALL HUNG, FIAT SF-1-W	2"	2"	3/4"	3/4"	2.2 GPM	FAUCET-CHICAGO FAUCET 1100-L5VBCP WITH ATMOSPHERIC VACUUM BREAKER AND AERATOR, INTEGRAL P-TRAP WITH CLEAN OUT, MCGUIRE STOP & RISER 2165CC, PROVIDE WITH MANUFACTURERS WALL HANGER.
SH1	SHOWER	2"	2"	1/2"	1/2"	1.5 GPM	FAUCET-CHICAGO FAUCET SH-PB1-03-000 PRESSURE BALANCING SHOWER VALVE WITH SHOWER HEAD.
SH2	SHOWER	2"	2"	1/2"	1/2"	1.5 GPM	FAUCET-CHICAGO FAUCET SH-PB1-13-014 PRESSURE BALANCING SHOWER VALVE WITH SHOWER HEAD, DIVERTER VALVE, HAND SPRAY WITH 59" S.S HOSE, 36" WALL MOUNTED ADA GRAB BAR WITH HAND SPRAY HOLDER.
SH3	SHOWER BASE AMERICAN STANDARD 38"X38" ADA ALCOVE ACRYLIC SHOWER BASE A8009D-FCO	2"	2"	1/2"	1/2"	1.5 GPM	FAUCET-CHICAGO FAUCET SH-PB1-03-000 PRESSURE BALANCING SHOWER VALVE WITH SHOWER HEAD.
FD1	FLOOR DRAIN STAINLESS STEEL STRAINER, MIFAB MODEL #F1000-S-5-6-7-21	4"	*	*	*		PROVIDE TRAP PRIMER, DEEP SEAL TRAP, 8"x8" STRAINER FURNISHED AND INSTALLED BY P.C.
FCO	FLOOR CLEAN OUT STAINLESS STEEL COVER, GENERAL USE	SEE PLANS	*	*	*	*	FURNISHED AND INSTALLED BY P.C.
HB1	WALL HYDRANT, WATTS HY-440 NARROW WALL.	*	*	1/2"	*	*	PROVIDE WITH VACUUM BREAKER. FURNISH AND INSTALLED BY THE P.C.
TD-1	TRENCH DRAIN, MIFAB T275 4.75" WIDE, 2.75" DEEP TRENCH DRAIN BODY AND GRATE	3"	*	*	*	*	PROVIDE NO-HUB DRAIN CONNECTION, PERFORATED STAINLESS STEEL GRATE.

BACKFLOW PREVENTER SCHEDULE

FIXTURE	BACKFLOW PREVENTION DEVICE
INCOMING DOMESTIC WATER SERVICE (SEE NOTE #3)	EXISTING TO REMAIN
WATER CLOSET	FLUSH VALVE FURNISHED WITH AN INTEGRAL VACUUM BREAKER
URINAL	FLUSH VALVE FURNISHED WITH AN INTEGRAL VACUUM BREAKER
HAND WASHING SINKS / LAVATORIES	AIR GAP
SERVICE / MOP SINKS	FAUCET FURNISHED WITH AN INTEGRAL VACUUM BREAKER AND WATTS SERIES 7
TRAP PRIMER	FURNISHED WITH INTEGRAL BACKFLOW PREVENTER AND VACUUM BREAKER PORT.

1. CONTRACTOR SHALL FURNISH AND INSTALL BACKFLOW PREVENTION DEVICES AT THE EQUIPMENT LISTED ABOVE.
2. DEVICES LISTED ARE MANUFACTURED BY WATTS REGULATOR COMPANY. CONTRACTOR MAY SUBMIT AN EQUAL FROM ANOTHER MANUFACTURER FOR REVIEW.
3. CONTRACTOR TO VERIFY REQUIREMENTS WITH LOCAL AUTHORITIES HAVING JURISDICTION.

WATER HEATER SCHEDULE

TAG	GWH-1	GWH-2	GWH-3
MANUFACTURER	RINNAI	RINNAI	RINNAI
MODEL #	RUC90I	RUC90I	RUC90I
TYPE	TANKLESS	TANKLESS	TANKLESS
MIN GAS PRESSURE	4" W.C.	4" W.C.	4" W.C.
MBH INPUT	15-199 MBH	15-199 MBH	15-199 MBH
VOLTAGE/PHASE	120/1	120/1	120/1
AMPS	146 WATT, 4 AMPS	146 WATT, 4 AMPS	146 WATT, 4 AMPS
FLUE SIZE	4"	4"	4"
GPM RECOVER @ 95° F RISE LWT 140 DEGREES	4 GALLONS	4 GALLONS	4 GALLONS

1. AUTOMATIC CONTROLS W/ ENERGY CUTOFF
2. DRAIN VALVE.
3. PROVIDE WITH CONDENSATE NEUTRALIZATION TANK.
4. PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR
5. CONTROL POWER REQUIREMENTS ARE 120 VOLT / SINGLE PHASE
6. P.C. TO PROVIDE AND INSTALL INCLUDING ALL NECESSARY VALVES , ECT.
7. 5 YEAR WARRANTY

EXPANSION TANK SCHEDULE

TAG	ET1
SERVICING	LOCKER ROOM SYSTEM
MANUFACTURER	AMTROL
MODEL #	ST-60-V
TYPE	IN-LINE
SIZE (VOLUME/ACCEPT)	25.0/11.4

CONSTANT PRESSURE TANK

TAG	BT1
SERVICING	DOMESTIC WATER BOOSTER PUMP
MANUFACTURER	BELL AND GOSSETT
MODEL #	PTA-210-V
TYPE	DIAPHRAGM
SIZE (VOLUME/ACCEPT)	90/34.3

PUMP SCHEDULE

TAG	SERVICE	LOCATION	FLUID TYPE	FLUID TEMP (°F)	GPM	HEAD (FT)	IMPELLER SIZE (IN)	NPSH (FT)	ELECTRICAL DATA BHP	MHP	RPM	VOLT-Ø-Hz	MODEL NO.	MANUFACTURER & SERIES	NOTES
EP-1	SEWAGE PUMP	SUMP RM	END SUCTION SELF PRIMING	85	30	40	4.97	6.59	1.75	3	3450	208-3-60	82D3-B	GORMAN-RUPP SERIES 80	1 - 4, 7
EP-2	SEWAGE PUMP	SUMP RM	END SUCTION SELF PRIMING	85	30	40	4.97	6.59	1.75	3	3450	208-3-60	82D3-B	GORMAN-RUPP SERIES 80	1 - 4, 7
EP-3	SEWAGE PUMP	SUMP RM	END SUCTION SELF PRIMING	85	70	40	6.88	4.38	3.1	5	3450	208-3-60	83B3-B	GORMAN-RUPP SERIES 80	1 - 5, 7
EP-4	SEWAGE PUMP	SUMP RM	END SUCTION SELF PRIMING	85	70	40	6.88	4.38	3.1	5	3450	208-3-60	83B3-B	GORMAN-RUPP SERIES 80	1 - 5, 7
SP-1	SEWAGE PUMP	DIRECTORS OFFICE	SUBMERSIBLE	85	20	20	-	-	-	0.5	3450	120-1-60	1102/LE51	LIBERTY 1102/LE51	1 - 4, 6, 7
SP-2	SEWAGE PUMP	DIRECTORS OFFICE	SUBMERSIBLE	85	20	20	-	-	-	0.5	3450	120-1-60	1102/LE51	LIBERTY 1102/LE51	1 - 4, 6, 7
HWRP-1	HOT WATER RECIC	MECH RM	INLINE CIRCULATING	125	4	10	7.12	6.59	-	0.125	3250	208-3-60	IL009	TACO 00 SERIES	1 - 3

NOTES:
1. CONTRACTOR TO PROVIDE 6" HOUSEKEEPING PAD.
2. PUMP TO BE INSTALLED LEVEL.
3. PROVIDE ALL MOUNTING MATERIALS.
4. MECHANICAL CONTRACTOR TO PROVIDE WITH FUSIBLE COMBINATION MOTOR STARTERS WITH START/STOP CONTROL.
5. PROVIDE WITH 36X48 FIBERGLASS BASIN WITH BOLT ON LID. INLET INVERT FOR BASIN TO BE - 1'-8", FIELD VERIFY PRIOR TO ORDERING.
6. PROVIDE WITH 30X36 POLY BASIN WITH BOLT ON LID. INLET INVERT FOR BASIN TO BE - 1'-8", FIELD VERIFY PRIOR TO ORDERING.
7. PROVIDE COMPLETE WITH AUDIBLE ALARMS, FLOAT PACKAGE, GUIDE RAILS, CONTROL PANEL WITH CIRCUIT BREAKER DISCONNECT, STARTERS, ETC.

MIXING VALVE SCHEDULE

TAG	MV1
MANUFACTURER	POWERS
TYPE	TEMPER VALVE
MODEL #	E480 SET @105 DEGRESS
SIZE	3/8"
NOTES AND ACCESSORIES	LOCATE UNDER ALL PUBLIC LAVATORY

DOMESTIC WATER BOOSTER PUMP SCHEDULE

TAG	LOCATION	DESCRIPTION	BASIS OF DESIGN MANUFACTURER & MODEL No.	CAPACITY SPLIT	FLOW (GPM)	PRESSURE (PSI)	RMP	EFF%	ELECTRICAL HP	VAC/ PH	FLA	EP	LOCAL DISCONNECT TYPE	BY	STARTER TYPE	BY	NOTES:
DWBP-1	WATER SERVICE (BOILER RM)	DOMESTIC WATER BOOSTER PUMP (DUPLEX)	SYNCROFLO 135-IH-35-PW	65/65	88/88	BOOST 35	3600	68%	2@3HP	208/3	--	NO	IN-LINE	ELECTRICAL	MAGNETIC	ELECTRICAL	1

1. PROVIDE PACKAGE PUMP SYSTEM COMPLETE WITH STAINLESS STEEL HEADERS, PRESSURE GAUGES, BALL ISOLATION VALVES, INVERTER RATED MOTORS, VARIABLE SPEED DRIVES FOR MOTORS, UL-508A NEMA 1 VENTILATED CONTROL PANELWITH CIRCUIT BREAKER DISCONNECT, PLC CONTROLLER AND DISPLAY SCREEN.

THE SCHOOL DISTRICT OF PHILADELPHIA

OFFICE OF CAPITAL PROGRAMS

440 NORTH BROAD STREET
PHILADELPHIA, PA 19130 - 4015

(215) 400 - 4730 | (215) 400 - 4731 (fax)
www.philasd.org

SEAL:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL MICHAEL SIDLO ENGINEER 33443-E

10/27/2020

MICHAEL SIDLO
PA LICN# 33443-E

PROJECT TEAM

NORR

An Ingenium International Company

One Penn Center
1617 JFK Boulevard, Suite 1600
Philadelphia, PA 19103 U.S.A.
norr.com

MASTER LOCATORS INC.
675 CONCORD ROAD, GLENN MILLS, PA
19342 TEL. 800.495.4248

PROJECT NUMBER: **180343-00**

ADDENDUM NO.2
2020.10.27

REV	DATE	DESCRIPTION
1	2020.05.22	ISSUED FOR PERMIT
2	2020.09.25	ISSUED FOR BID
3	2020.10.27	ADDENDUM NO.2

SCHOOL LOCATION
SCIENCE LEADERSHIP ACADEMY AT BEEBER
5925 MALVERN AVE
PHILADELPHIA, PA 19131

PROJECT TITLE

ADA BATHROOM UPGRADES

DRAWINGS TITLE

SCHEDULES

DRAWING SCALE
AS NOTED

LOCATION NO. | FILE NO.

DRAWN BY. JO | CHECKED BY. MS

B-007/008/009/010C OF 2018-2019

DRAWING NO.
P600

SHEET 76 OF 78

10/27/2020 11:49:36 AM

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENT

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. Silicone joint sealants.
2. Urethane joint sealants.
3. Latex joint sealants.
4. Acoustical joint sealants.

B. Related Sections:

1. Section 092900 "Gypsum Board" for sealing perimeter joints.
2. Section 093000 "Tiling" for sealing tile joints.
3. Section 095123 "Acoustical Tile Ceilings" for sealing edge moldings at perimeters with acoustical sealant.

1.3 PRECONSTRUCTION TESTING

1.4 ACTION SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

B. Manufacturers Full Line Color Chart for each sealant required.

C. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

1.5 INFORMATIONAL SUBMITTALS

A. Warranties: Sample of special warranties.

1.6 QUALITY ASSURANCE

A. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

B. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.

1.7 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F (5 deg C).
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.8 WARRANTY

A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: 5 years from date of Substantial Completion.

B. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:

1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
2. Disintegration of joint substrates from natural causes exceeding design specifications.
3. Mechanical damage caused by individuals, tools, or other outside agents.
4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

B. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

A. Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 100/50, for Use NT.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

a. Dow Corning Corporation; 790
b. GE Advanced Materials - Silicones; SilPruf LM SCS2700.
c. May National Associates, Inc. Bondaflex Sil 728 NS.
d. Pecora Corporation; 301 NS 890FTS.
e. Sika Corporation, Construction Products Division; SikaSil-C990.
f. Tremco Incorporated; Spectrem 1

2.3 URETHANE JOINT SEALANTS

A. Single-Component, Nonsag, Urethane Joint Sealant: ASTM C 920, Type S, Grade NS, Class 100/50, for Use NT.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

a. Sika Corporation, Construction Products Division; Sikaflex - 15LM.
b. Tremco Incorporated; Vulkem 921

2.4 LATEX JOINT SEALANTS

A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

    a. BASF Building Systems; Sonolac.
    b. Bostik, Inc.; Chem-Calk 600.
    c. May National Associates, Inc.; Bondaflex 600/Bondaflex Sil-A 700
    d. Pecora Corporation; AC-20+.
    e. Schnee-Morehead, Inc.; SM 8200.
    f. Tremco Incorporated; Tremflex 834.

2.5 ACOUSTICAL JOINT SEALANTS

A. Acoustical Joint Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

    a. Pecora Corporation; AC-20 FTR.
    b. USG Corporation; SHEETROCK Acoustical Sealant.

2.6 JOINT SEALANT BACKING

A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin)/ Type O (open-cell material)/Type B (bicellular material with a surface skin) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.7 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

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

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:

    a. Concrete.
    b. Masonry.
    c. Unglazed surfaces of ceramic tile.

3. Remove laitance and form-release agents from concrete.
4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:

    a. Metal.
    b. Glass.
    c. Glazed surfaces of ceramic tile.

B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of sealant backings.
2. Do not stretch, twist, puncture, or tear sealant backings.
3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

1. Place sealants so they directly contact and fully wet joint substrates.
2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.

a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

F. Installation of Preformed Silicone-Sealant System: Comply with the following requirements:

1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
2. Apply silicone sealant to each side of joint to produce a bead of size complying with preformed silicone-sealant system manufacturer's written instructions and covering a bonding area of not less than 3/8 inch (10 mm). Hold edge of sealant bead 1/4 inch (6 mm) inside masking tape.
3. Within 10 minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
4. Complete installation of sealant system in horizontal joints before installing in vertical joints. Lap vertical joints over horizontal joints. At ends of joints, cut silicone extrusion with a razor knife.

G. Acoustical Sealant Installation: At sound-rated assemblies and elsewhere as indicated, seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations.

3.4 FIELD QUALITY CONTROL

A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Test completed and cured sealant joints as follows:

a. Perform 5 tests for the first 20 feet (6 m) of joint length for each kind of sealant and joint substrate.

2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.

a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.

3. Inspect tested joints and report on the following:

a. Whether sealants filled joint cavities and are free of voids.
b. Whether sealant dimensions and configurations comply with specified requirements.
c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each

kind of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.

4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

B. Evaluation of Field-Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.7 JOINT-SEALANT SCHEDULE

A. Joint-Sealant Application: Interior joints in horizontal traffic surfaces.

1. Joint Locations:

    a. Isolation joints in cast-in-place concrete slabs.
    b. Control and expansion joints in tile flooring.
    c. Control and expansion joints in resinous flooring.
    d. Other joints as indicated.
2. Urethane Joint Sealant: Single component, nonsag, traffic grade
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

B. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Locations:

    a. Control and expansion joints on exposed interior surfaces of exterior walls.
    b. Perimeter joints of exterior openings.
    c. Tile control and expansion joints.
    d. Vertical joints on exposed surfaces of existing concrete or tiled walls and partitions.
    e. Perimeter joints between interior wall surfaces and frames of interior doors, windows and elevator entrances.
    f. Other joints as indicated.

2. Joint Sealant: Latex.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

C. Joint-Sealant Application: Mildew-resistant interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Sealant Location:

    a. Joints between plumbing fixtures and adjoining walls, floors, and counters.
    b. Tile control and expansion joints where indicated.
    c. Joints between shower enclosures and adjacent construction.
    d. Other joints as indicated.

2. Joint Sealant: Mildew resistant, single component, nonsag, neutral curing, Silicone.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

D. Joint-Sealant Application: Interior acoustical joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Location:

    a. Acoustical joints where indicated.
    b. Other joints as indicated.

2. Joint Sealant: Acoustical.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range.

END OF SECTION

SECTION 09 0290 – PLASTER PATCHING AND REPAIR

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal lath and gypsum plastering for patching and repair of existing plaster finishes, including skim coat over existing plaster surfaces.

B. Scope and extent of plaster patching and repair

1. Skim coat all plaster surfaces within the area of new construction that are to remain exposed to view.
2. Repair and prep for skim coat all cracked, spalled, bubbled or otherwise deteriorated or where removal of loose paint leaves surface irregularity that will telegraph through skim coat and/or paint.
3. Repair and re-plaster surfaces that are damaged during demolition or construction operations.
4. Provide plaster finish on masonry or concrete surfaces exposed by demolition or construction and will be exposed in the completed Work.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 QUALITY ASSURANCE

A. Single Source Responsibility: Obtain gypsum lath and gypsum plaster from a single manufacturer.

B. Finish Level: 5

C. Field Constructed Mockup: Before starting plaster work, prepare a sample application for each type of finish and application required to demonstrate aesthetic effects of application and qualities of materials and execution.

1. Locate mockups on site in location directed by Architect.
2. Erect 4 foot by 4 foot by full thickness mockup in presence of Architect using materials, including lath, indicated for final work.
3. Demonstrate the proposed range of aesthetic effects including texture and workmanship to be expected in completed work.
4. Demonstrate that adhesion to existing surface will be achieved where skim coat over plaster is indicated.
5. Obtain Architect's acceptance of mockups before start of plaster work.
6. Retain and maintain mockups during construction in undisturbed condition as a standard for judging completed plaster work.

1.4 PRODUCT HANDLING

A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer.

B. Store materials inside, under cover, and in manner to keep them dry, protected from weather, direct sunlight, surface contamination, aging, corrosion, and damage from construction traffic and other causes. Neatly stack gypsum lath flat to prevent deformation.

C. Protect metal lath, corner beads and trim from being bent or damaged.

1.5 PROJECT CONDITIONS

A. Environmental Requirements, General: Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during, and after application of plaster.

B. Ventilation: GC to provide temporary mechanical equipment that will assure proper temperature, humidity and ventilation is optimal for plaster curing. Adherence to project schedule and phasing plan will required.

1. Ventilate building spaces as required to remove water in excess of that required for hydration of plaster. Begin ventilation immediately after plaster is applied and continue until it sets and cures.

C. Protect adjacent work from soiling, spattering, moisture deterioration and other harmful effects.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

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

1. Gypsum Plaster Materials:
   a. United States Gypsum Co.
   b. Gold Bond Building Products Div. National Gypsum Co.

2. Expanded Metal Lath:
   a. Alabama Metal Industries Corp. (AMICO)
   b. Gold Bond Building Products Div., National Gypsum Co
   c. United States Gypsum Co.
   d. Western Metal Lath Co.

3. Accessories:
   a. Fry Reglet Corp.
   b. Gold Bond Building Products Div., National Gypsum Co.
   c. Keene Corp.
   d. MM Systems Corp.
   e. United States Gypsum Co.

2.2 EXPANDED-METAL LATH

A. Expanded-Metal Lath: Fabricate from zinc coated (galvanized) steel sheet, ASTM C 847.

1. Configuration: Flat
2. Weight: 3.4 lbs. Per sq. yd

B. Lath Attachment Devices: Devices of material and type required by referenced standards and recommended by lath manufacturer for secure attachment of lath to substrate and of lath to lath.

2.3 ACCESSORIES

A. General: Comply with material provisions of ASTM C 841; coordinate depth of accessories with thicknesses and number of plaster coats required.

B. Metal Corner Beads: Fabricated from zinc coated (galvanized) steel.

1. Type: Small nose with expanded flanges, unless otherwise indicated.

C. Strip Reinforcement: Smooth edge strips of expanded metal lath fabricated from zinc coated (galvanized) steel sheet.

1. Cornerite: Strips prebent lengthwise in center for internal plaster angles not otherwise reinforced by metal lath lapped or carried around.
2. Stripite: Flat strips for reinforcing joints in gypsum lath, nonmetallic bases, and between dissimilar plaster bases.

D. Control Joints: Prefabricated, of material and type indicated below:

1. Material: Zinc-coated (galvanized) steel.Smallnose cornerbead with perforated flanges; use on curved corners.
2. One-Piece Type: Folded pair of nonperforated screeds in M-shaped configuration, with expanded or perforated flanges.
3. Provide removable protective tape on plaster face of control joints.

2.4 PLASTER MATERIALS

A. Base Coat Plasters: Gypsum neat plaster, ASTM C28.

B. Finish Coat Plasters: Gypsum Keene's cement, ASTM C 61.

C. Finishing Hydrated Limes: ASTM C 206, Type S, normal double hydrated lime for finishing purposes.

D. Aggregates for Base Coat Plasters: ASTM C 35, sand aggregate.

E. Aggregates for Finish Coat Plaster with Floated Finish: ASTM C 35; graded per ASTM C 842, sand aggregate.

F. Products: Subject to compliance with requirements, provide one of the following:

1. Gypsum Neat Plasters:

a. Red Top Gypsum Plaster; United States Gypsum Co.
b. Red Top Two Purpose Plaster; United States Gypsum Co.
c. Two Way Hardwall Plaster; Gold Bond Building Products Div., National Gypsum Co.

2. Gypsum Keene's Cement:

a. Red Top Keene's Cement; United States Gypsum Co.

3. Finishing Hydrated Limes, Type S:

a. Ivory Finish Lime; United States Gypsum Co.

2.5 MISCELLANEOUS MATERIALS

A. Water for Mixing and Finishing Plaster: Drinkable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.

B. Bonding Agent for Gypsum Plaster: ASTM C 631

2.6 GYPSUM PLASTER MIXES AND COMPOSITIONS

A. Plaster Base Coat Compositions: Comply with ASTM C 842 and manufacturer's directions for gypsum plaster base coat proportions that correspond to application methods and plaster bases indicated below:

1. Three Coat Work Over Metal Lath: Base coats as follows:

a. Scratch Coat: Gypsum neat plaster with job mixed sand.
b. Brown Coat: Gypsum neat plaster with job mixed sand.

B. Finish Coats: Proportion materials in parts by dry weight for finish coats to comply with the following requirements:

1. Troweled Finish to Match Existing Smooth Finish: Finish coat of Gypsum Keene's Cement; proportion 2 parts plaster to 1 part lime

2.7 MIXING

A. Mechanically mix cementitious and aggregate materials for plasters to comply with applicable referenced application standard and with recommendations of plaster manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

A. Prepare all plaster surfaces (walls and ceilings) that will remain exposed to view in the finished work as follows:
   1. Use hand scraping tools to remove all loose paint and plaster from all existing plaster surfaces that remain exposed for paint finish.
   2. Power wash or clean all surfaces to receive skim coat to enhance adhesion.
   3. Where removal of loose plaster results in exposure of lath/substrate or loose material is more than ¾ of the total depth of existing plaster, cut out and area at least 4" larger in all directions to substrate or existing lath, if in good condition. Remove existing lath if rusted, damaged or disconnected from substrate.

3.2 INSTALLATION, GENERAL

A. Interior Lathing Installation Standard: Install lathing materials indicated for gypsum plaster to comply with ASTM C 841.

B. Isolation: Where lathing abuts building structure horizontally and where partition/wall work abuts overhead structure, isolate the work from structural movement sufficiently to prevent transfer of loading into the work from the building structure. Install slip or cushion type joints to absorb deflections but maintain lateralsupport.

C. Install expanded metal lath where plaster base coats are required. Provide appropriate type, configuration, and weight of metal lath selected from materials indicated that comply with referenced lathing installation standards.

3.3 INSTALLING ACCESSORIES

A. General: Comply with referenced lathing and furring installation standards for provision and location of plaster accessories of type indicated. Miter or cope accessories at corners; install with tight joints and in alignment. Attach accessories securely to plaster bases to hold accessories in place and alignment during plastering.

B. Cornerbeads: Install at external corners.

C. Control Joints: Install at locations indicated or, if not indicated, at spacings and locations required by referenced standard, recommended by plaster manufacturer, and approved by Architect..

3.4 PLASTER APPLICATION

A. General: Prepare monolithic surfaces for bonded base coats and use bonding compound or agent to comply with requirements of referenced plaster application standards for conditioning of monolithic surfaces.

B. Tolerances: Do not deviate more than 1/8 inch in 10 feet from a true plane in finished plaster surfaces, as measured by a 10 foot straightedge placed at any location on surface.

C. Sequence plaster application with the installation and protection of other work so that neither will be damaged by the installation of theother.

D. Apply thicknesses and number of coats of plaster as indicated or as required by referenced standards.

E. Power wash or clean as required for full to adhesion existing plaster surfaces to receive skim coat plaster.

F. Interior Gypsum Plaster Application Standard: Apply gypsum plaster materials, composition, mixes, and finishes indicated to comply with ASTM C 842.

G. Number of Coats: Apply gypsum plaster, of composition indicated, to comply with the following requirements.

1. Use two coat work where existing plaster base is intact.
2. Use three coat work over metal lath for areas where no intact plaster base remains.

H. Bonding: Apply bonding agent to existing plaster surfaces prior to application of base or finish coats.

I. Finish Coats:

1. Troweled finishes for gypsum finish coat plasters, to match existing plaster finish textures.

3.5 CUTTING AND PATCHING

A. Cut, patch, point up, and repair plaster as necessary to accommodate other work and to restore cracks, dents, and imperfections. Repair or replace work to eliminate blisters, buckles, excessive crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to the substrate has failed.

B. Sand smooth troweled finishes lightly to remove trowel marks and arrises

3.6 CLEANING AND PROTECTION

A. Remove temporary protection and enclosure of other work. Promptly remove plaster from door frames, windows, and other surfaces that are not to be plastered. Repair floors, walls, and other surfaces that have been stained, marred, or otherwise damaged during the plastering work. When plastering work is completed, remove unused materials, containers, and equipment and clean floors of plaster debris.

B. Provide final protection and maintain conditions, in a manner suitable to Installer that ensure plaster work's being without damage or deterioration at time of Substantial Completion.

END OF SECTION 09 0290

SECTION 102119 - SOLID PLASTIC SHOWER AND DRESSING COMPARTMENTS (ADD1)

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Solid plastic shower and dressing compartments.

B. Related Sections:
1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

A. ASTM International (ASTM)
1. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
2. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

B. National Fire Protection Association (NFPA) 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.

1.3 SUBMITTALS

A. Submittals for Review:
1. Shop Drawings: Include dimensioned layout, elevations, trim, closures, and accessories.
2. Product Data: Manufacturer's descriptive data for panels, hardware, and accessories.
3. Samples: 2 x 3 inch samples showing available colors.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 5 years experience in manufacture of solid plastic shower and dressing compartments with products in satisfactory use under similar service conditions.

B. Installer Qualifications: Minimum 5 years experience in work of this Section.

1.5 WARRANTIES

A. Provide manufacturer’s 25 year warranty against breakage, corrosion, and delamination under normal conditions.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following] [available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. ASI Global Partitions
2. Scranton Products
3. General Partitions Mfg Corp
4. Metpar Corp
5. Bobrick Washroom Equipment, Inc.

B. Basis-of-Design Product: Scranton Products
A. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

A. Doors, Panels and Pilasters:
   1. High density polyethylene (HDPE), fabricated from polymer resins compounded under high pressure, forming single thickness panel.
   2. Waterproof and nonabsorbent, with self-lubricating surface, resistant to marks by pens, pencils, markers, and other writing instruments.
   3. 1 inch thick with radiused edges.
   4. Fire hazard classification: Class A flame spread/smoke developed rating, tested to ASTM E84.
   5. Color: To be selected by Architect from manufacturer's full color range.

B. Aluminum Extrusions: ASTM B221, 6463-T5 alloy and temper.

C. Shower Curtains: Vinyl, 42 inches wide x 72 inches high, hung with aluminum curtain hooks with self-lubricating Delrin slides.

2.3 COMPONENTS

A. Panels: 76 inches high, mounted to pilasters with continuous brackets and to panels with continuous extruded aluminum brackets or continuous extruded aluminum shower corner brackets.

B. Pilasters: Refer to Architectural Drawings.

C. Headrail: Refer to Architectural Drawings

D. Headrail Brackets: 20 gage stainless steel, secured using stainless steel tamper-resistant Torx head screws.

E. Brackets: 76 inches long, extruded aluminum, clear anodized finish, attached using stainless steel tamper-resistant Torx head screws.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install compartments in accordance with manufacturer's instructions and approved Shop Drawings.

B. Install rigid, straight, plumb, and level.

C. Not Acceptable: Evidence of cutting, drilling, or patching.

END OF SECTION

SECTION 262816 – ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following individually mounted, enclosed switches and circuit breakers:

1. Fusible switches.
2. Nonfusible switches.
3. Molded-case circuit breakers.
4. Enclosures.

1.3 DEFINITIONS

A. GD: General duty.

B. GFCI: Ground-fault circuit interrupter.

C. HD: Heavy duty.

D. RMS: Root mean square.

E. SPDT: Single pole, double throw.

1.4 SUBMITTALS

A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

1. Enclosure types and details for types other than NEMA 250, Type 1.
2. Current and voltage ratings.
3. Short-circuit current rating.
4. UL listing for series rating of installed devices.
5. Features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.

B. Shop Drawings: Diagram power, signal, and control wiring.

C. Manufacturer Seismic Qualification Certification: Submit certification that enclosed switches and circuit breakers, accessories, and components will withstand seismic forces defined in Division 26 Section "Electrical Supports and Seismic Restraints." Include the following:

1. Basis of Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.

a. 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."

D. Qualification Data: For testing agency.

E. Field quality-control test reports including the following:

1. Test procedures used.
2. Test results that comply with requirements.
3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.

F. Manufacturer's field service report.

G. Operation and Maintenance Data: For enclosed switches and circuit breakers to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 1 Section "Closeout Procedures," include the following:

1. Manufacturer's written instructions for testing and adjusting enclosed switches and circuit breakers.
2. Time-current curves, including selectable ranges for each type of circuit breaker.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

1. Testing Agency's Field Supervisor: Person currently certified by the InterNational Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with NFPA 70.

D. Product Selection for Restricted Space: Drawings indicate maximum dimensions for enclosed switches and circuit breakers, including clearances between enclosures, and adjacent surfaces and other items. Comply with indicated maximum dimensions.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Rate equipment for continuous operation under the following conditions, unless otherwise indicated:

1. Ambient Temperature: Not less than minus 22 deg F and not exceeding 104 deg F.
2. Altitude: Not exceeding 6600 feet.

1.7 COORDINATION

A. Coordinate layout and installation of switches, circuit breakers, and components with other construction, including conduit, piping, equipment, and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

1.8 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Spares: For the following:

a. Control-Power Fuses: 3
b. Fuses for Fusible Switches: 3
c. Fuses for Fused Power Circuit Devices: 3

2. Spare Indicating Lights: Six of each type installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 FUSIBLE AND NONFUSIBLE SWITCHES

A. Available Manufacturers:

1. Eaton Corporation; Cutler-Hammer Products.
2. General Electric Co.; Electrical Distribution & Control Division.
3. Siemens Energy & Automation, Inc.
4. Square D/Group Schneider.

B. Fusible Switch, 600A and Smaller: NEMA KS 1, Type GD, with clips or bolt pads to accommodate specified fuses, lockable handle with capability to accept two padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded, and bonded; and labeled for copper and aluminum neutral conductors.
3. Auxiliary Contact Kit: Auxiliary set of contacts arranged to open before switch blades open.

2.3 MOLDED-CASE CIRCUIT BREAKERS AND SWITCHES

A. Manufacturers:

1. Eaton Corporation; Cutler-Hammer Products.
2. General Electric Co.; Electrical Distribution & Control Division.
3. Moeller Electric Corporation.
4. Siemens Energy & Automation, Inc.

5. Square D/Group Schneider.

B. Molded-Case Circuit Breaker: NEMA AB 1, with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
3. Electronic Trip-Unit Circuit Breakers: RMS sensing; field-replaceable rating plug; with the following field-adjustable settings:

a. Instantaneous trip.
b. Long- and short-time pickup levels.
c. Long- and short-time time adjustments.
d. Ground-fault pickup level, time delay, and I^2t response.

4. Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller and let-through ratings less than NEMA FU 1, RK-5.
5. Integrally Fused Circuit Breakers: Thermal-magnetic trip element with integral limiter-style fuse listed for use with circuit breaker and trip activation on fuse opening or on opening of fuse compartment door.
6. GFCI Circuit Breakers: Single- and two-pole configurations with 30-mA trip sensitivity.

C. Molded-Case Circuit-Breaker Features and Accessories:

1. Standard frame sizes, trip ratings, and number of poles.
2. Lugs: Mechanical style with compression lug kits suitable for number, size, trip ratings, and conductor material.
3. Application Listing: Type SWD for switching fluorescent lighting loads; Type HACR for heating, air-conditioning, and refrigerating equipment.

2.4 ENCLOSURES

A. NEMA AB 1 and NEMA KS 1 to meet environmental conditions of installed location.

1. Outdoor Locations: NEMA 250, Type 3R.
2. Other Wet or Damp Indoor Locations: NEMA 250, Type 3R

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine elements and surfaces to receive enclosed switches and circuit breakers for compliance with installation tolerances and other conditions affecting performance.

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

3.2 INSTALLATION

A. Comply with applicable portions of NECA 1, NEMA PB 1.1, and NEMA PB 2.1 for installation of enclosed switches and circuit breakers.

B. Mount individual wall-mounting switches and circuit breakers with tops at uniform height, unless otherwise indicated. Anchor floor-mounting switches to concrete base.

C. Comply with mounting and anchoring requirements specified in Division 26 Section "Electrical Supports and Seismic Restraints."

D. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.

3.3 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs as specified in Division 26 Section "Electrical Identification."

B. Enclosure Nameplates: Label each enclosure with engraved metal or laminated-plastic nameplate as specified in Division 26 Section "Electrical Identification."

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust field-assembled components and equipment installation, including connections, and to assist in field testing.

B. Prepare for acceptance testing as follows:

1. Inspect mechanical and electrical connections.
2. Verify switch and relay type and labeling verification.
3. Verify rating of installed fuses.
4. Inspect proper installation of type, size, quantity, and arrangement of mounting or anchorage devices complying with manufacturer's certification.

C. Testing Agency: Engage a qualified testing and inspecting agency to perform the following field tests and inspections and prepare test reports:

D. Perform the following field tests and inspections and prepare test reports:

1. Test mounting and anchorage devices according to requirements in Division 26 Section "Electrical Supports and Seismic Restraints."
2. Perform each electrical test and visual and mechanical inspection stated in NETA ATS, Section 7.5 for switches and Section 7.6 for molded-case circuit breakers. Certify compliance with test parameters.
3. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
4. Infrared Scanning:

    a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each enclosed switch and circuit breaker. Open or remove doors or panels so connections are accessible to portable scanner.
    b. Follow-Up Infrared Scanning: Perform an additional follow-up infrared scan of each unit 11 months after date of Substantial Completion.
    c. Instruments, Equipment and Reports:

1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
2) Prepare a certified report that identifies enclosed switches and circuit breakers included and describes scanning results. Include notation of deficiencies detected, remedial action taken and observations after remedial action.

3.5 ADJUSTING

A. Set field-adjustable switches and circuit-breaker trip ranges.

3.6 CLEANING

A. On completion of installation, vacuum dirt and debris from interiors; do not use compressed air to assist in cleaning.

B. Inspect exposed surfaces and repair damaged finishes.

END OF SECTION 262816

SECTION 283111 - DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This section summarizes the requirements for a digital addressable fire alarm audio (voice/tone) and visual notification system.

B. Section Includes:

1. Manual fire-alarm boxes.
2. System smoke detectors.
3. Heat detectors.
4. Notification appliances.
5. Device guards.

1.3 DEFINITIONS

A. EMT: Electrical Metallic Tubing.

B. FACP: Fire Alarm Control Panel.

C. NICET: National Institute for Certification in Engineering Technologies.

D. PC: Personal computer.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product, including furnished options and accessories.

1. Include construction details, material descriptions, dimensions, profiles, and finishes.
2. Include rated capacities, operating characteristics, and electrical characteristics.

B. Shop Drawings: For fire-alarm system.

1. Comply with recommendations and requirements in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
2. Include plans, elevations, sections, details, and attachments to other work.
3. Include details of equipment assemblies. Indicate dimensions, weights, loads, and required clearances, method of field assembly, components, and locations. Indicate conductor sizes, indicate termination locations and requirements, and distinguish between factory and field wiring.
4. Detail assembly and support requirements.
5. Include voltage drop calculations for notification-appliance circuits.

6. Include battery-size calculations.
7. Include input/output matrix.
8. Include statement from manufacturer that all equipment and components have been tested as a system and meet all requirements in this Specification and in NFPA 72.
9. Include performance parameters and installation details for each detector.
10. Verify that each duct detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
11. Include plans, sections, and elevations of heating, ventilating, and air-conditioning ducts, drawn to scale; coordinate location of duct smoke detectors and access to them.

    a. Show critical dimensions that relate to placement and support of sampling tubes, detector housing, and remote status and alarm indicators.
    b. Show field wiring and equipment required for HVAC unit shutdown on alarm and override by firefighters' control system.
    c. Locate detectors according to manufacturer's written recommendations.

12. Include floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits and point-to-point wiring diagrams.

C. General Submittal Requirements:

1. Submittals shall be approved by authorities having jurisdiction prior to submitting them to Architect.
2. Shop Drawings shall be prepared by persons with the following qualifications:

    a. Trained and certified by manufacturer in fire-alarm system design.
    b. NICET-certified, fire-alarm technician; Level IV minimum.
    c. Licensed or certified by authorities having jurisdiction.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in section “Supplementary Conditions”, include the following and deliver copies to authorities having jurisdiction:

    a. Comply with the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
    b. Provide "Fire Alarm and Emergency Communications System Record of Completion Documents" according to the "Completion Documents" Article in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
    c. Complete wiring diagrams showing connections between all devices and equipment. Each conductor shall be numbered at every junction point with indication of origination and termination points.
    d. Riser diagram.
    e. Device addresses.
    f. Record copy of site-specific software.
    g. Provide "Inspection and Testing Form" according to the "Inspection, Testing and Maintenance" chapter in NFPA 72, and include the following:

        1) Equipment tested.
        2) Frequency of testing of installed components.
        3) Frequency of inspection of installed components.

4) Requirements and recommendations related to results of maintenance.
5) Manufacturer's user training manuals.

h. Manufacturer's required maintenance related to system warranty requirements.
i. Abbreviated operating instructions for mounting at fire-alarm control unit and each annunciator unit.

2. FIRE ALARM SYSTEM RECORD OF COMPLETION form shall be completed and signed, as required by NFPA 72.

3. FIRE ALARM SYSTEM INSPECTION AND TESTING form shall be completed, as required by NFPA 72. This form shall be completed, and accepted by L & I, with no exception noted.

B. Software and Firmware Operational Documentation:

1. Software operating and upgrade manuals.
2. Program Software Backup: On magnetic media or compact disk, complete with data files.
3. Device address list.
4. Printout of software application and graphic screens.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

B. Provide signature device programming/service tool to allow programming of signature devices without using PC and use for retrieving information from signature device history log and trouble codes. Also provide necessary accessories including cable to connect the tool and AC power adapter.

C. Provide memory stick with copy of complete points list.

1.7 QUALITY ASSURANCE

Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.

A. NFPA Certification: Obtain certification according to NFPA 72 by a UL-listed alarm company.

B. Source Limitations for Fire alarm Systems and Components: Obtain fire alarm system from a single source from a single manufacturer.

1.8 PROJECT CONDITIONS

A. Perform a full test of the existing system prior to starting work. Document any equipment or components not functioning as designed.

B. Interruption of Existing Fire-Alarm Service: Do not interrupt fire-alarm service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary guard service according to requirements indicated:

1. Notify Owner no fewer than seven days in advance of proposed interruption of fire-alarm service.
2. Do not proceed with interruption of fire-alarm service without Owner's written permission.

C. Use of Devices during Construction: Protect devices during construction unless devices are placed in service to protect the facility during construction.

D. Do not remove existing fire alarm system until new system has been installed, tested, approved and under operation.

1.9 WARRANTY AND MAINTENANCE

A. Warranty: Contractor shall warrant the complete fire alarm system installation against defective materials or faulty workmanship for a period of THREE (3) YEARS from the date of acceptance.

B. Maintenance and Re-certification Service: Contractor shall also provide THREE (3) YEARS of factory-authorized maintenance and re-certification service from the date of acceptance, including any required maintenance or repairs, hardware and software updates, annual testing and re-certifications.

C. Required Response:
1. Emergency Calls: Contractor shall provide factory-authorized service within FOUR (4) HOURS after notification by the District’s Maintenance Department of system trouble or failure.
2. Non-Emergency Calls: Contractor shall provide factory-authorized service within EIGHT (8) HOURS after notification by the District’s Maintenance Department of system trouble or failure.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Edwards Systems Technology, Inc.
2. NOTIFIER; a GE-Honeywell Company.
3. Siemens Building Technologies, Inc.; a Cerberus Division
4. Simplex Grinnell LP; a Tyco International Company.
5. Or Equal.

B. Noncoded, UL-certified addressable system, with multiplexed signal transmission and horn/strobe evacuation.

C. All components provided shall be listed for use with the selected system.

D. 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.

E. All notification and initiation devices shall be “intelligent type” devices with integral microprocessors capable of self-diagnostics, history log, standalone operation and fast, stable communication. System and devices shall not be provided with the capability of the automatic

device mapping (self-mapping) feature. All devices shall be fully capable of being field programmable, by means of a hand held programming device.

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:

1. Manual stations.
2. Heat detectors.
3. Smoke detectors.
4. Duct smoke detectors.

B. Fire-alarm signal shall initiate the following actions:

1. Continuously operate alarm notification appliances.
2. Identify alarm and specific initiating device at fire-alarm control unit and remote annunciators.
3. Transmit an alarm signal to the remote alarm receiving station.
4. Unlock electric door locks in designated egress paths.
5. Release fire and smoke doors held open by magnetic door holders.
6. Switch heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
7. Close smoke dampers in air ducts of designated air-conditioning duct systems.
8. Recall elevators to primary or alternate recall floors.
9. Record events in the system memory.
10. Record events by the system printer.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:

1. Valve supervisory switch.
2. Independent fire-detection and -suppression systems.
3. User disabling of zones or individual devices.
4. Loss of communication with any panel on the network.

D. System trouble signal initiation shall be by one or more of the following devices and actions:

1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
3. Loss of communication with any addressable sensor, input module, relay, control module, remote annunciator, printer interface, or Ethernet module.
4. Loss of primary power at fire-alarm control unit.
5. Ground or a single break in internal circuits of fire-alarm control unit.
6. Abnormal ac voltage at fire-alarm control unit.
7. Break in standby battery circuitry.
8. Failure of battery charging.
9. Abnormal position of any switch at fire-alarm control unit or annunciator.

E. System Supervisory Signal Actions:

1. Initiate notification appliances.
2. Identify specific device initiating the event at fire-alarm control unit and remote annunciators.
3. Record the event on system printer.

4. After a time delay of 200 seconds, transmit a trouble or supervisory signal to the remote alarm receiving station.

2.3 MANUAL FIRE-ALARM BOXES

A. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38. Boxes shall be finished in red with molded, raised-letter operating instructions in contrasting color; shall show visible indication of operation; and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.

1. Single-action mechanism, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to fire-alarm control unit.
2. Station Reset: Key operated switch.
3. Indoor Protective Shield: Factory-fabricated, clear plastic enclosure hinged at the top to permit lifting for access to initiate an alarm. Lifting the cover actuates an integral battery-powered audible horn intended to discourage false-alarm operation.
4. The sign shall be mounted immediately adjacent to the manual pull station. The sign shall read “INCASE OF FIRE: SOUND ALARM AND CALL THE FIRE DEPARTMENT”.

2.4 SYSTEM SMOKE DETECTORS

A. General Requirements for System Smoke Detectors:

1. Comply with UL 268; operating at 24-V dc, nominal.
2. Detectors shall be two-wire type.
3. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.
4. Base Mounting: Detector and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
5. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
6. Integral Visual-Indicating Light: LED type, indicating detector has operated and power-on status.
7. Remote Control: Unless otherwise indicated, detectors shall be digital-addressable type, individually monitored at fire-alarm control unit for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by fire-alarm control unit.

    a. Rate-of-rise temperature characteristic of combination smoke- and heat-detection units shall be selectable at fire-alarm control unit for 15 or 20 deg F per minute.
    b. Fixed-temperature sensing characteristic of combination smoke- and heat-detection units shall be independent of rate-of-rise sensing and shall be settable at fire-alarm control unit to operate at 135 or 155 deg F .
    c. Multiple levels of detection sensitivity for each sensor.

B. Photoelectric Smoke Detectors:

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

    a. Primary status.
    b. Device type.

c. Present average value.
d. Present sensitivity selected.
e. Sensor range (normal, dirty, etc.).

C. Duct Smoke Detectors: Photoelectric type complying with UL 268A.

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

a. Primary status.
b. Device type.
c. Present average value.
d. Present sensitivity selected.
e. Sensor range (normal, dirty, etc.).

3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector for smoke detection in HVAC system ducts.
4. Each sensor shall have multiple levels of detection sensitivity.
5. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.
6. Relay Fan Shutdown: Fully programmable relay rated to interrupt fan motor-control circuit.

2.5 HEAT DETECTORS

A. General Requirements for Heat Detectors: Comply with UL 521.

1. Temperature sensors shall test for and communicate the sensitivity range of the device.

B. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F or a rate of rise that exceeds 15 deg F per minute unless otherwise indicated.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

C. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature of 190 deg F .

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

D. Conventional Fixed High-Temperature Heat Detector: Provide explosion proof / moisture proof heat detectors. Detectors shall be rated at 194°F fixed temperature. The detector shall be rated for Class 1, Group C &, D, Class 2, Groups E, F, & G atmospheres.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.

E. Conventional Rate-of-Rise Heat Detector; 281B-PL: Provide explosion proof / moisture proof heat detectors at the locations shown on the drawings. Detectors shall be rated at 15°F per

minute rate-of-rise and 135°F fixed temperature. The detector shall be rated for Class 1, Group C &, D, Class 2, Groups E, F, & G atmospheres.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.

2.6 NOTIFICATION APPLIANCES

A. General Requirements for Notification Appliances: Connected to notification-appliance signal circuits, zoned as indicated, equipped for mounting as indicated, and with screw terminals for system connections.

1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated, and with screw terminals for system connections.

B. Visible Notification Appliances: Xenon strobe lights complying with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch-high letters on the lens.

1. Rated Light Output:

a. 15/30/75/110 cd, selectable in the field.

2. Mounting: Wall mounted unless otherwise indicated.
3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.
4. Flashing shall be in a temporal pattern, synchronized with other units.
5. Strobe Leads: Factory connected to screw terminals.
6. Mounting Faceplate: Factory finished, red.

C. Integral Relay: Capable of providing a direct signal to elevator controller to initiate elevator recall.

1. Allow the control panel to switch the relay contacts on command.
2. Have a minimum of two normally open and two normally closed contacts available for field wiring.

D. Voice/Tone Notification Appliances:

1. Comply with UL 1480.
2. Speakers for Voice Notification: Locate speakers for voice notification to provide the intelligibility requirements of the "Notification Appliances" and "Emergency Communications Systems" chapters in NFPA 72.
3. High-Range Units: Rated 2 to 15 W.
4. Mounting: surface mounted and bidirectional.
5. Matching Transformers: Tap range matched to acoustical environment of speaker location.

2.7 MAGNETIC DOOR HOLDERS

A. Description: Units are equipped for wall or floor mounting as indicated and are complete with matching doorplate.

1. Electromagnets: Require no more than 3 W to develop 25-lbf (111-N) holding force.
2. Wall-Mounted Units: Flush mounted unless otherwise indicated.
3. Rating: 24-V ac or dc.
4. Rating: 120-V ac.

B. Material and Finish: Match door hardware.

2.8 DEVICE GUARDS

A. Description: Welded wire mesh of size and shape for the manual station, smoke detector, gong, or other device requiring protection.

1. Factory fabricated and furnished by device manufacturer.
2. Finish: Paint of color to match the protected device.

2.9 FIRE ALARM SYSTEM WIRE:

A. Provide FPL 300-volt #18 copper conductors twisted shielded pairs for power limited initiating circuits and 600 volt minimum #14 copper conductors for signaling circuits. All wiring shall be installed in metal conduit. All wires and cables used for fire alarm circuits shall comply NEC article 760 ”Fire Alarm Systems”.

2.10 LOCKS AND KEYS

A. All locks and keys for fire alarm panel and power booster panels shall be keyed alike and keyed to the master key system of the School District of Philadelphia. Locks and pulls for doors of cabinets shall be Corbin #15767. The master key shall be #CAT 60.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions for compliance with requirements for ventilation, temperature, humidity, and other conditions affecting performance of the Work.

1. Verify that manufacturer's written instructions for environmental conditions have been permanently established in spaces where equipment and wiring are installed, before installation begins.

B. Examine roughing-in for electrical connections to verify actual locations of connections before installation.

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

3.2 EQUIPMENT INSTALLATION

A. Comply with NFPA 72, NFPA 101, and requirements of authorities having jurisdiction for installation and testing of fire-alarm equipment. Install all electrical wiring to comply with requirements in NFPA 70 including, but not limited to, Article 760, "Fire Alarm Systems."

1. Devices placed in service before all other trades have completed cleanup shall be replaced.
2. Devices installed but not yet placed in service shall be protected from construction dust, debris, dirt, moisture, and damage according to manufacturer's written storage instructions.

B. Install wall-mounted equipment, with tops of cabinets not more than 78 inches above the finished floor.

C. Manual Fire-Alarm Boxes:

1. Install manual fire-alarm box in the normal path of egress within 60 inches of the exit doorway.
2. Mount manual fire-alarm box on a background of a contrasting color.
3. The operable part of manual fire-alarm box shall be between 42 inches and 48 inches above floor level. All devices shall be mounted at the same height unless otherwise indicated.

D. Smoke- or Heat-Detector Spacing:

1. Comply with the "Smoke-Sensing Fire Detectors" section in the "Initiating Devices" chapter in NFPA 72, for smoke-detector spacing.
2. Comply with the "Heat-Sensing Fire Detectors" section in the "Initiating Devices" chapter in NFPA 72, for heat-detector spacing.
3. Smooth ceiling spacing shall not exceed 30 feet .
4. Spacing of detectors for irregular areas, for irregular ceiling construction, and for high ceiling areas shall be determined according to Annex A or Annex B in NFPA 72.
5. HVAC: Locate detectors not closer than 60 inches from air-supply diffuser or return-air opening.
6. Lighting Fixtures: Locate detectors not closer than 12 inches from any part of a lighting fixture and not directly above pendant mounted or indirect lighting.

E. Install a cover on each smoke detector that is not placed in service during construction. Cover shall remain in place except during system testing. Remove cover prior to system turnover.

F. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend the full width of duct. Tubes more than 36 inches long shall be supported at both ends.

1. Do not install smoke detector in duct smoke-detector housing during construction. Install detector only during system testing and prior to system turnover.

G. Elevator Shafts: Coordinate temperature rating and location with sprinkler rating and location. Do not install smoke detectors in sprinklered elevator shafts.

H. Remote Status and Alarm Indicators: Install in a visible location near each smoke detector, sprinkler water-flow switch, and valve-tamper switch that is not readily visible from normal viewing position.

I. Audible Alarm-Indicating Devices: Install not less than 6 inches below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille. Install all devices at the same height unless otherwise indicated.

J. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inches below the ceiling. Install all devices at the same height unless otherwise indicated.

K. Device Location-Indicating Lights: Locate in public space near the device they monitor.

L. The installing Electrical Contractor shall be responsible for the removal of ENTIRE existing fire alarm system components and controls on the demolition drawing shown or not, upon approval of the Authority Having Jurisdiction and the Consulting Engineer. The End-User reserves the right to retain any existing fire alarm system components, upon their request. All existing fire alarm system components requiring special handling for disposal (due to radioactivity) shall be the responsibility of the installing contractor. Written proof of proper disposal by the installing contractor shall be required prior to release of outstanding retainage.

M. HVAC Control System: If existing duct detectors (which are to be removed) are wired to HVAC control system then, the contractor shall hire a HVAC control subcontractor to disconnect these duct detectors from the HVAC control system and reconnect new fire alarm system control to HVAC control system. The contractor shall provide all interfacing modules as required for connection of the new fire alarm system to the existing HVAC control system.

N. Fire Alarm Control Panel and remote power booster panels shall be located in rooms with constant temperature like storage rooms. Boiler room and mechanical rooms are not the ideal locations for fire alarm control panel and power booster panels.

O. All remote test switches for duct detectors shall be installed at accessible height for usage by fire alarm technician or mechanic for testing and maintenance.

P. After initiation of general alarm, the “alarm silence button” shall turn off the audible notification alarm devices only, and the visual notification alarm devices shall remain active. All visual notification devices shall continue to alarm indefinitely until the field condition causing the alarm is cleared and the system has been reset at the FACP.

Q. Antenna for Radio Alarm Transmitter: Mount to building structure where indicated. Use mounting arrangement and substrate connection that resists 100-mph (160-km/h) wind load with a gust factor of 1.3 without damage.

R. The fire alarm system shall be capable of system reset after the field alarm condition has been cleared and all initiation devices have been reset.

S. Existing Kitchen Fire Extinguishing System (Ansul System): The contractor shall hire an approved fire protection sub-contractor to provide the appropriate electrical devices to allow connection of the Fire Alarm System to the existing Kitchen Ansul System. The fire protection sub-contractor shall also inspect the fire suppression system and provide an inspection report with information of additional required repairs to the School District.

T. Elevator Controller: The contractor shall hire a licensed elevator subcontractor for fire alarm system connection to the existing elevator controller for elevator recall function.

3.3 PATHWAYS

A. Pathways shall be installed in EMT or RMC.

B. Provide a complete new raceway system for the new fire alarm system and installed all fire alarm wiring in metal conduit. Provide galvanized rigid steel conduit for all riser conduits and, all conduits located in boiler room and all wet and damp areas.

C. Paint all junction boxes with red color paint and label as “FIRE ALARM”.

D. Dedicated pathways shall for provided for fire alarm system wiring, shared pathways are not allowed.

E. Provide rigid steel conduit and weatherproof junction boxes for all riser conduit and all conduit in basement, crawl spaces, boiler rooms, mechanical rooms, fan room and any other spaces deemed to be wet/damp locations by the Architect.

F. All penetration of floor slabs and firewalls shall be sleeved (1” conduit minimum) fire stopped in accordance with all local fire codes.

3.4 CONNECTIONS

A. Make addressable connections with a supervised interface device to the following devices and systems. Install the interface device less than 36 inches from the device controlled. Make an addressable confirmation connection when such feedback is available at the device or system being controlled.

1. Alarm-initiating connection to smoke-control system (smoke management) at firefighters' smoke-control system panel.
2. Smoke dampers in air ducts of designated HVAC duct systems.
3. Electronically locked doors and access gates.
4. Magnetically held-open doors.
5. Alarm-initiating connection to elevator recall system and components.
6. Supervisory connections at elevator shunt-trip breaker.
7. Alarm-initiating connection to activate emergency shutoffs for gas and fuel supplies.
8. Supervisory connections at valve supervisory switches.
9. Data communication circuits for connection to mass notification system.
10. Supervisory connections at fire-pump power failure including a dead-phase or phase-reversal condition.
11. Supervisory connections at fire-pump engine control panel.
12. Supervisory connections at kitchen exhaust hood fire suppression system.

3.5 IDENTIFICATION

A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

B. Install framed instructions in a location visible from fire-alarm control unit.

3.6 GROUNDING

A. Ground fire-alarm control unit and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to fire-alarm control unit.

B. Ground shielded cables at the control panel location only. Insulate shield at device location.

3.7 FIELD QUALITY CONTROL

A. Field tests shall be witnessed by the Owner.

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

C. Perform the following tests and inspections with the assistance of a factory-authorized service representative:

1. Visual Inspection: Conduct visual inspection prior to testing.

   a. Inspection shall be based on completed record Drawings and system documentation that is required by the "Completion Documents, Preparation" table in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
   b. Comply with the "Visual Inspection Frequencies" table in the "Inspection" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.

2. System Testing: Comply with the "Test Methods" table in the "Testing" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
3. Test audible appliances for the public operating mode according to manufacturer's written instructions. Perform the test using a portable sound-level meter complying with Type 2 requirements in ANSI S1.4.
4. Test audible appliances for the private operating mode according to manufacturer's written instructions.
5. Test visible appliances for the public operating mode according to manufacturer's written instructions.
6. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" section of the "Fundamentals" chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
7. For final certification of the fire alarm system, audible outputs in classrooms shall be tested with doors closed and with all HVAC units and ventilators on where practicable.

D. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.

E. Fire-alarm system will be considered defective if it does not pass tests and inspections.

F. Prepare test and inspection reports.

G. Maintenance Test and Inspection: Perform tests and inspections listed for weekly, monthly, quarterly, and semiannual periods. Use forms developed for initial tests and inspections.

H. Annual Test and Inspection: One year after date of Substantial Completion, test fire-alarm system complying with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections.

3.8 SOFTWARE SERVICE AGREEMENT

A. THE PHILADELPHIA SCHOOL DISTRICT SHALL RETAIN COMPLETE RIGHTS AND OWNERSHIP TO ALL SOFTWARE RUNNING IN THE SYSTEM. The fire alarm equipment vendor shall provide useable hard and soft copies of the software database to the Philadelphia School District at the end of the warranty period. The database provided shall be useable by any authorized and certified distributor of the product line, and shall include all applicable passwords necessary for total and unrestricted use and modification of the database.

3.9 DEMONSTRATION AND TRAINING

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system. Training shall be provided at project site for a period of 4 hours minimum.

B. The School District of Philadelphia requires that all prospective fire alarm manufacturers provide training, on their fire alarm product, to the Philadelphia School District, in order to be deemed acceptable for use. The School District employs a team of Life Safety technicians responsible for the upkeep of all Life Safety Systems within the Philadelphia School District and full system access to all Fire Alarm panels by this team is mandatory on all projects. Training is to include, but not be limited to:

1. Training shall include all basic system operations of panel equipment as well as training of all peripheral equipment associated with the panel equipment. Complete system training from a technical, hands-on perspective for proper install, system operation & troubleshooting techniques will be the only acceptable training.

2. All operating system software, used for programming of the system shall be provided to the school district as two (2) copies on CD-ROM prior to the closing of the project, as well as any programming keys, hasps, hand held programmers etc. used in the programming of the system. Any and all updates, patches, revisions to the operating software, etc. will be provided to the School District within 30 days of release at no additional cost to the School District.

3.10 EXISTING EQUIPMENT OR SYSTEM CONNECTIONS (IF APPLICABLE)

A. HVAC Control System: If existing duct detectors (which are to be removed) are wired to HVAC control system then, the contractor shall hire a HVAC control subcontractor to disconnect these duct detectors from the HVAC control system and reconnect new fire alarm system control to HVAC control system. The contractor shall provide all interfacing modules as required for connection of the new fire alarm system to the existing HVAC control system.

B. Kitchen Ansul System: The contractor shall hire an approved fire protection subcontractor to provide the appropriate electrical devices to allow connection of the Fire Alarm System to the existing Kitchen Ansul System. The fire protection sub-contractor shall also inspect the fire suppression system and provide an inspection report with information of additional required repairs to the School District.

C. Elevator Controller: The contractor shall hire a licensed elevator subcontractor for fire alarm system connection to the existing elevator controller for elevator recall function.

END OF SECTION 283111