The attention of bidders submitting proposals for the subject project noted above is called to the following Addendum to the Contract Forms and Specifications.

The items set forth herein, whether of omission, addition, substitution, or clarification are to be included in and form a part of the proposal submitted.

This Addendum consists of the following information:

Part 1 Division 00, Procurement and Contract Requirements

1) Section 011000 SUMMARY Attachment: Scope of Work for Prime Contractors
    a. ADD “This document takes precedence over any and all discrepancies between it and the Multiple Prime Contractor Coordination Chart.”
    b. G1 – Prime Contractor for General Construction
        i. ADD Roof Perimeter Protection: This Prime Contractor (G1) shall provide & maintain perimeter protection at all roof areas of the new additions. These safety cables must meet all OSHA requirements. The safety cables must be installed with turnbuckles in such a manner as to allow access to the exterior of the building for completion of work by others.
    c. G3 – Prime Contractor for Masonry
        i. The Prime Contractor for Masonry (G3) shall provide cast stone finish as detailed at stairs M & N.
    d. G5 – Prime Contractor for Roofing Work
        i. ADD The Prime Contractor for Mechanical work (M1) shall provide pipe & duct supports, spacing per manufacturer. The Prime Contractor for Roofing (G5) shall provide duct insulation & wrap as shown on 8/A907.
        ii. ADD this Prime Contractor (G5) shall provide the CFMF, insulation and sheathing as shown on 15/A907.
        iii. ADD The Prime Contractor for Roofing (G5) shall provide the 2-piece counterflashing shown on 16/A907 & the thru-wall flashing shown on 5&10/A907 and all roof related Sheet Metal Flashings within their scope of work.
        iv. ADD The Prime Contractor for Plumbing Work shall provide roof drains. The Prime Contractor for Roofing (G5) shall tie roofing into drain as detailed.
        v. REMOVE 6. Roof Perimeter Protection... This work is moved to the G1 contract.
    e. M1 – Prime Contractor for Mechanical Work
        i. ADD The Prime Contractor for Mechanical work (M1) shall provide pipe & duct supports, spacing per manufacturer. The Prime Contractor for Roofing (G5) shall provide duct insulation & wrap as shown on 8/A907.
    f. P1 – Prime Contractor for Plumbing Work

i. ADD The Prime Contractor for Plumbing Work shall provide roof drains. The Prime Contractor for Roofing (G5) shall tie roofing into drain as detailed.

Part 2 Technical Changes, Architectural, Structural and Civil

1) Section 028200 – ASBESTOS ABATEMENT
   a. CHANGE removal & disposal quantities of caulking / sealants at exterior windows from 2,500 lin. ft to 350 lin. ft. See attached document 028200-1.
2) Section 033000 – CAST-IN-PLACE CONCRETE – REMOVE Part 2.9 Items D-10 & D-11. Micro & Macro fibers are not required.
3) Section 087100 – DOOR HARDWARE – REMOVE duplicate spec section. Sections are identical with the only difference being text size.

Part 3 Technical Changes, Mechanical, Electrical and Plumbing

1) Section 262416 PANELBOARDS – ADD the following paragraph:
   2.1.B.1.c – Kitchen Locations: NEMA 4X, Type 304 Stainless Steel.
2) Section 262816 ENCLOSED SWITCHES AD CIRCUIT BREAKERS – ADD the following paragraph:
   2.3.A.3 - *Kitchen Locations including all rooms associated with Ground Floor Central Prep Kitchen, First Floor Servery Kitchen, and Walk-in Coolers and Freezers: NEMA 4X, Type 304 Stainless Steel.*

Part 4 Drawing Changes, Architectural, Civil and Landscape

1) Drawings AA101, AA102 & AA103 Abatement Plans
   a. REMOVE keynote AA5 from windows along the East façade of Area A. See attached drawings
   b. ADD keynote AA5 at (2) locations within courtyard.
   c. REVISE quantities within keynotes.
2) Drawing A805 – Detail A3 (Change) Note (within box) to Read – Provide 1hr Intumescent Paint on All Exposed Steel within Stair A & B.
3) Drawing A903 – Door Schedule
   a. CHANGE doors 101 & 113 to note that existing frame & glazing assembly to remain (historic). Doors shall be replaced as scheduled.
   b. CHANGE door C008a to be a double door (2 leafs) with hardware set 10.2. This change reduces infill required of exterior masonry wall after temporary egress doors shown on LP002 are removed.

Part 6 Drawing Changes, Mechanical, Electrical and Plumbing

1) Drawing P200.A – REVISE drawing to show correct toilet fixture tag. Refer to revised drawing included with addendum.
2) Drawing P201.A – REVISE drawing to show additional cold and hot water vent piping. Refer to revised drawing included with addendum.
3) Drawing P201.C – REVISE drawing to show correct toilet fixture tag. Refer to revised drawing included with addendum.

4) Drawing P201.N – REVISE drawing to clarify pipe drop locations. Refer to revised drawing included with addendum.
5) Drawing P201.S – REVISE drawing to clarify pipe drop locations. Refer to revised drawing included with addendum.
6) Drawing P202.NS – REVISE drawing to clarify pipe drop locations. Refer to revised drawing included with addendum.
7) Drawing P203.NS – REVISE drawing to clarify pipe drop locations. Refer to revised drawing included with addendum.
8) Drawing P701 – ADD floor mounted water closet. Refer to revised drawing included with addendum.

Part 7 Clarifications

1) Addendum 4 – Part 4 Item 12-b - Doors 101 & 113 are on Drawing A903, not Drawing A902.
2) Addendum 4 – Part 11 REMOVE Item 11-d – This clarification is removed due to conflicts with Addendum 1 which states that exterior doors & windows are by Window Contact (G6), concrete equipment pads are by General Construction Contract (G1), and door landing slabs are by Site Contract (L1).
3) There is no evidence that suggests doors on schedule A903 are existing doors or that they are not in contract. These doors shall be provided as scheduled.
4) Refer to General notes on S001 for concrete strength at various locations.
5) There is no colorized concrete on the project.
6) Depth of Gravel base at synthetic turf is as recommended by Field Manufacturer, see spec section 321813.
7) The District has standardized on hardware as specified. See attached Board Resolution.

Part 8 New Issues - List of Included Documents

Board of Education Resolution with Hardware Standardization	8 pages
Specification 028200-1 ASBESTOS ABATEMENT	1 page
Specification 262416 Panelboards	6 pages
Specification 262816 Enclosed Switches and Circuit Breakers	3 pages
Drawing AA100	1 sheet
Drawing AA101	1 sheet
Drawing AA102	1 sheet
Drawing AA103	1 sheet
Drawing P200.A – GROUND FLOOR PLAN – AREA A	1 sheet
Drawing P201.A – FIRST FLOOR PLAN – AREA A	1 sheet
Drawing P201.C – FIRST FLOOR PLAN – AREA C	1 sheet
Drawing P201.N – FIRST FLOOR PLAN – AREA N	1 sheet
Drawing P201. S – FIRST FLOOR PLAN – AREA S	1 sheet
Drawing P202.NS – SECOND FLOOR PLAN – AREA N&S	1 sheet
Drawing P203.NS – THIRD FLOOR PLAN – AREA N&S	1 sheet
Drawing P701 – PLUMBING: SCHEDULES	1 sheet

End of Addendum

BOARD OF EDUCATION
MIDDLETOWN, NEW YORK
FEBRUARY 21, 2002

A meeting of the Board of Education of the Enlarged City School District of Middletown, New York was held Thursday, February 21, 2002, at the Board of Education Office, 223 Wisner Avenue, beginning at 7:30 p.m., Board President Paul K. Johnson presiding.

Present:	Mr. Perrino, Mr. Davoren, Mr. McCormack, Mrs. Blatt, Mrs. Elliott, Mrs. Itzla, Mrs. Markovits, Dr. Johnson – 8.
Absent:	Rev. Best – 1.
Others Present:	Robert H. Sigler, Jr., Superintendent of Schools Timothy Conway, Asst. Superintendent for Business Patricia McLeod, Asst. Superintendent for Curriculum & Instruction Ellen Kaplan, Director for Personnel Services Selena Fischer, Director for Pupil Personnel & Special Services Thomas Scott, Superintendent of Buildings and Grounds

Dr. Johnson opened the meeting at 7:30 p.m. and led the pledge to the flag. He said that the Board had visited Twin Towers Middle School prior to this evening's meeting.

Mr. Sigler commended the staff and students at Middletown High School for the outstanding manner in which they conducted themselves during the recent tuberculosis incident. He said that anyone with concerns regarding this matter should contact the High School health office. Mr. Sigler said that although the possibility that tuberculosis could have been transmitted by the infected student is small, the District is cooperating with the Orange County Health Department in taking precautions. An information center has been established at the High School and the Health Department will present an informational meeting for the public at Twin Towers on February 22. Mr. Sigler also said that tuberculin skin tests will be available for students and staff identified as having come in contact with the infected student and for others who may be concerned about exposure. Dr. Johnson complimented the Superintendent for his expediency in alerting all necessary persons in regard to this situation.

Mrs. Itzla made a motion, seconded by Mrs. Markovits, to approve the minutes of February 7, 2002.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

No written communications were read, no previous questions were pending, and no visitors asked to address the Board.

Board Member Reports:
Mrs. Blatt reported that she attended a Teacher Center meeting this afternoon. She said that the Center is very much involved in the New York State Teacher Center Standards that are addressed when conducting its self-study. Mrs. Blatt said that the Teacher Center is also working with the Office of Curriculum and Instruction in preparation for the March 14 and 15 Superintendent conference days. The Mentor Committee has interviewed the mentors and the interns and is in the process of pairing them up. Mrs. Blatt also commented on the state-of-the-art materials in the Teacher Center Library.

Mr. Perrino said that he and Dr. Johnson attended the annual NJROTC review earlier today. He complimented the students involved with this program and also noted the orderliness of the High School.

Mr. Perrino also said that he attended a meeting chaired by Peter Damiano regarding the lighting at the High School soccer fields. Mr. Perrino said that a Memorial Day soccer team tournament is being scheduled.

Mr. McCormack said that he had communicated with Congressman Benjamin Gilman concerning support for Project Coming Home. This request was forwarded to the U.S. Department of Education. The Department of Education subsequently notified the District that it supports programs like Project Coming Home through its Teacher Quality Enhancement programs. One type of grant awarded under this project, the Teacher Quality Recruitment Grant, has goals consistent with the goals of Project Coming Home. Mr. McCormack will continue to pursue this funding, possibly with the assistance of the District's grant writer.

Mrs. Kaplan said that the Personnel Memorandum should be amended to show a 2-1/2 year probationary appointment for Karen Marcano, ESL Teacher – Monhagen/Twin Towers Middle Schools.

Mrs. Itzla made a motion, seconded by Mr. McCormack, to approve the following resolution:

Personnel Memo Approved

RESOLVED: That the reading of the teaching and administrative personnel list be waived and the retirements, expirations of terms, abolition of positions, preferred eligible list of candidates for appointment, appointments, transfers, leaves of absence and reinstatements from leaves of absence in the TEACHING AND ADMINISTRATIVE SECTION OF THE PERSONNEL MEMORANDUM, as amended, dated February 21, 2002, be approved as recommended by the Superintendent of Schools.

RESOLVED: That the reading of the Non-Certificated staff list be waived and the resignations and appointments in the NON-CERTIFICATED SECTION OF PERSONNEL MEMORANDUM dated February 21, 2002, be approved as recommended by the Superintendent of Schools.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Dr. Johnson asked for a motion to table the request for personnel folders since they are not required at this meeting.

Mr. McCormack made a motion, seconded by Mrs. Markovits, to table the request for personnel folders.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Superintendent's Proposed Budget for 2002-03

Mr. Sigler presented the Superintendent's proposed budget for the 2002-2003 school year. He said that the proposed budget is $85,619,644 million and represented a 4.5% increase, including $842,472 in new or expanded initiatives.

Mr. Conway reviewed significant areas of change in the proposed budget, and provided details on the new or expanded initiatives. He also spoke about the impact of the STAR program, which will offset local tax bills by approximately $5.2 million in Fall 2002. Mr. Conway said that although school tax bills will be impacted by items such as the final New York State budget, taxable values set by local assessors, and New York State-determined equalization rates, all of which are unknown at this point, it is currently anticipated that the school tax levy will increase approximately 5.9%.

Mr. Conway next spoke about the budget review meetings that have been scheduled, noting that the Board will adopt a budget on April 25. Final public comments will be taken on the budget at the April 11 meeting, and the budget vote is scheduled for May 21.

Mrs. Kaplan continued the discussion of the proposed budget by reviewing the 2002-2003 staffing configuration.

Mr. Conway next explained the District's debt service, saying that the District's outstanding debt is currently $41.0 million and that the District's debt limit is $65.4 million. Mr. Conway and Mrs. Fischer concluded the budget presentation by addressing costs associated with BOCES.

Mr. Sigler said that he has received a correspondence from Dawn Kemp, the Community Director for the local Relay for Life, that the American Cancer Society

would like to ask Middletown High School to host its annual Relay for Life on June 7-8. Mr. Sigler said that significant funds are raised for the Cancer Society via this event.

Mr. Sigler also reported that a local parent, Bill Noha, has proposed a program called Kids First which will provide teams of community individuals to work with every school in the District to do whatever is necessary to help raise students' test scores, such as assisting in fundraising, securing celebrities to address school groups, providing materials and learning equipment, reading to students, sponsoring field trips, providing mentoring services, etc. Mr. Sigler said that approximately 19 people are working with Mr. Noha on this initiative.

Board of Registration Approved

Mrs. Elliott made a motion, seconded by Mrs. Markovits, to approve the appointments of Marilyn Andrade and Philomena O'Sullivan as the Board of Registration for the May 21, 2002, vote at the rate of $90.00 each.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Mr. Sigler said that voter registration will be conducted on April 30 at the Board of Education Administrative Office.

Collection of Student Data

Mrs. McLeod presented information on the "Processes and Procedures for Collecting Student Data," which included a number of formal guidelines that the District will use when collecting student data on all standardized tests for grades K-8. These documents will help to identify the profiles of students relative to meeting academic success, and will provide administrators and teachers with information on their students that should lead to adjustments in the areas of curriculum, assessment and instruction. Mrs. McLeod said that this information will help in the development of a District-wide database that will allow us to maintain and access individual information on students throughout their academic experience in the District.

Mrs. Itzla made a motion, seconded by Mrs. Blatt, to approve Special Services Memo #14, copy attached.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Mrs. Itzla made a motion, seconded by Mr. McCormack, to approve the following resolution:

Financial Memo Approved

RESOLVED, that the reading of Financial Memorandum #15 dated February 21, 2002, be waived and that the financial action items be approved as recommended by the Superintendent of Schools.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Mr. Conway reviewed Superintendent-approved budget transfer #6 which was for three transfers.

Mr. Scott updated the Board on the status of capital projects. He said that bids will be received on March 18 for the project involving carpet removal/tile installation; a recommendation will be made to the Board on March 21.

Mr. Scott also said that he has been working with the District's architects/engineers, Clark Patterson, who have been preparing construction documents for the Mechanicstown addition and the site work at Truman Moon and Chorley. Meetings are also being set with staff in these buildings. Clark Patterson plans to submit documents to the State Education Department in May.

Mrs. Elliott made a motion, seconded by Mrs. Markovits, to approve the following resolution:

Whereas, the Enlarged City School District of Middletown administration reviewed and recognized the need to improve security and access to all District facilities, whether leased or owned, while minimizing costs; and

Whereas, historically numerous major suppliers of key locking system locksets and lock cores are providing such equipment, and such procedures are both costly and inefficient; and

Standardization of Products

Whereas, the General Municipal Law of the State of New York, Section 103.5, permits the Enlarged City School District of Middletown to adopt a resolution calling for the standardization of a particular product;

Now, therefore, be it resolved, pursuant to the provisions of Section 103.5 of the General Municipal Law, the Enlarged City School District of Middletown hereby designates:

Access/Locking Systems, Locksets, Cores
Schlage
Administrative Offices
1915 Jamboree Drive
Colorado Springs, CO

for use in all new and replacement construction projects undertaken by the Enlarged City School District of Middletown. A copy of this resolution will be available from the Enlarged City School District of Middletown for interested bidders. Effective date: February 21, 2002.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Mrs. Itzla made a motion, seconded by Mr. McCormack, to approve the following resolution:

Whereas, the Enlarged City School District of Middletown administration reviewed and recognized the need to improve security and access to all District facilities, whether leased or owned, while minimizing costs; and

Whereas, historically numerous major suppliers of door closers and door hardware are providing such equipment, and such procedures are both costly and inefficient; and

Whereas, the General Municipal Law of the State of New York, Section 103.5, permits the Enlarged City School District of Middletown to adopt a resolution calling for the standardization of a particular product;

Now, therefore, be it resolved, pursuant to the provisions of Section 103.5 of the General Municipal Law, the Enlarged City School District of Middletown hereby designates:

Door Closers
LCN Division
Ingersoll-Rand Company
P.O. Box 100
Princeton, IL

for use in all new and replacement construction projects undertaken by the Enlarged City School District of Middletown. A copy of this resolution will be available from the Enlarged City School District of Middletown for interested bidders. Effective date: February 21, 2002.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

Mr. McCormack made a motion, seconded by Mrs. Blatt, to approve the following resolution:

Whereas, the Enlarged City School District of Middletown administration reviewed and recognized the need to improve security and access to all District facilities, whether leased or owned, while minimizing costs; and

Whereas, historically numerous major suppliers of exit devices and door hardware are providing such equipment, and such procedures are both costly and inefficient; and

Whereas, the General Municipal Law of the State of New York, Section 103.5, permits the Enlarged City School District of Middletown to adopt a resolution calling for the standardization of a particular product;

Now, therefore, be it resolved, pursuant to the provisions of Section 103.5 of the General Municipal Law, the Enlarged City School District of Middletown hereby designates:

Exit Devices
Von Duprin
Ingersoll-Rand Company
2720 Tobey Drive
Indianapolis, IN

for use in all new and replacement construction projects undertaken by the Enlarged City School District of Middletown. A copy of this resolution will be available from the Enlarged City School District of Middletown for interested bidders. Effective date: February 21, 2002.

Ayes: Perrino, Davoren, McCormack, Blatt, Elliott, Itzla, Markovits, Johnson – 8. Noes: None. Motion was unanimously approved.

No visitors asked to be heard.

Roundtable:
Dr. Johnson noted the following dates:
The OCSBA/SCSBA Annual Legislative Brunch will be held on March 23.
The Coffee House Concert will be held on March 1.
The Board will conduct the Superintendent's evaluation on February 28.

Dr. Johnson also said that security is a high profile issue at the High School; noted that the Governor is not recommending kindergarten implementation funding in his next budget; informed that the Superintendent's proposed budget is on the District's web site; said that a suggestion was given that the District consider the community campus as a potential new high school site; and reminded that grants are sometimes just seed money.

Mr. Perrino complimented the staff at Twin Towers on their well-maintained building.

Several Board members complimented administration for the successful budget presentation.

Mr. McCormack spoke about an article from "On Board" which addressed budget presentations to outside groups.

Mrs. Markovits extended thanks to Bill Noha for his continued interest in and support of the Middletown School District.

Mr. Davoren questioned the benefit of the collection of student data. Mr. Sigler replied that such data collection points to problems that may need to be addressed. Mrs. McLeod said that a comprehensive district plan must be supported by data, and that data helps the District to make instructional and fiscal adjustments when needed.

At 10:40 p.m., there being no further business, Mr. McCormack made a motion, seconded by Mrs. Blatt, to adjourn the meeting. Motion was unanimously approved.

Respectfully submitted,

Alicia E. Olsen

Alicia E. Olsen
School District Clerk

SECTION 028200 - ASBESTOS REMOVAL

PART 1 GENERAL

1.1 SCOPE OF WORK

A. This asbestos abatement Project will consist of the removal and disposal of asbestos containing materials (ACM) and presumed asbestos containing materials (PACM) at the:

1. Twin Towers Middle School – 233 Wisner Ave., Middletown, New York 10940

B. The work shall include but not be limited to the removal of the following materials:

1. Remove existing carpet, floor tile and underlying mastic. Typ. for 4,100 sq. ft
2. Remove floor tile and underlying mastic. Typ. for 12,000 sq. ft.
3. Remove existing window glazing and associated ACM containing compound. Typ. fpr 550 lin. ft. / 30 sq. ft. of glazing compound
4. Remove and dispose of electrical panels and associated components after the same have been disconnected from their power source by a licensed electrician. Typ. for 3 panels.
5. Remove and dispose of window and all caulking / sealants at exterior of windows. Typ. for 350 lin. ft. /20 sq. ft.

All as indicated on the drawings and as contained within the Renovation Survey for Asbestos Containing Materials attached as Appendix ‘A’ to the end of this section.

C. The Contractor shall be aware of all conditions of the Project and is responsible for verifying quantities and locations of all Work to be performed. Failure to do so shall not relieve the Contractor of its obligation to furnish all labor and materials necessary to perform the Work.

D. All Work shall be performed in strict accordance with the Project Documents and all governing codes, rules, and regulations. Where conflicts occur between the Project Documents and applicable codes, rules, and regulations, the more stringent shall apply.

E. Working hours shall be as required and approved by the Owner. Asbestos abatement activities including, but not limited to, work area preparation, gross removal activities, cleaning activities, waste removal, etc. may need to be performed during ‘off-hours’ (including nights and weekends). In addition, multiple mobilizations may be required to perform the work identified in this project. The Contractor shall coordinate and schedule all Work with the facility and Owner’s representative.

1.2 SPECIAL JOB CONDITIONS

A. All final air clearances associated with this project must be run by TEM, as described in 40 CFR Part 763 Asbestos, Subpart E, 763.90 and as per New York State Education Department Requirements.

1.3 PERMITS AND COMPLIANCE

A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local laws, rules, and regulations pertaining to Work practices, protection of Workers, authorized visitors to the site, persons, and property adjacent to the Work.

SECTION 262416 - PANELBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:
   1. Lighting and appliance branch-circuit Panelboards.
   2. Distribution Panelboards.

B. Related Requirements”
   1. Section 260548 ‘Vibration and Seismic Controls for Electrical Systems’

1.3 SUBMITTALS

A. Product Data: For each type of panelboard, switching and overcurrent protective device. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

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

C. Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
   1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
   2. Time-current curves, including selectable ranges for each type of overcurrent protective device that allows adjustments.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: Member company of NETA or an NRTL.
   1. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.

B. Source Limitations: Obtain panelboards, overcurrent protective devices, components, and accessories from single source from single manufacturer.

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

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. Comply with NEMA PB 1.

F. Comply with NFPA 70.

1.5 DELIVERY, STORAGE, AND HANDLING

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

B. Handle and prepare panelboards for installation according to NEMA PB 1.

1.6 PROJECT CONDITIONS

A. Environmental Limitations:
   1. Do not deliver or install panelboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above panelboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
   2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:
      a. Ambient Temperature: Not exceeding 23 deg F to plus 104 deg F.

B. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electric service according to requirements indicated:
   1. Notify Construction Managerno fewer than 7 days in advance of proposed interruption of electric service.
   2. Do not proceed with interruption of electric service without Owner's written permission.
   3. Comply with NFPA 70E.

1.7 COORDINATION

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

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace transient voltage suppression devices that fail in materials or workmanship within specified warranty period.
   1. Warranty Period: Five years from date of Substantial Completion.

1.9 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Keys: Two spares for each type of panelboard cabinet lock.
   2. Circuit Breakers Including GFCI and Ground Fault Equipment Protection (GFEP) Types: Two spares for each panelboard.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR PANELBOARDS

A. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 26 Section "Vibration and Seismic Controls for Electrical Systems."

B. Enclosures: Surface-mounted cabinets.
   1. Rated for environmental conditions at installed location.
      a. Indoor Dry and Clean Locations: NEMA 250, Type 1.
      b. Outdoor Locations: NEMA 250, Type 3R.
      c. ***Kitchen Locations: NEMA 4X, Type 304 Stainless Steel.***

d. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5.

2. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
3. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
4. Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
5. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
6. Finishes:
   a. Panels and Trim: Steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
   b. Back Boxes: Galvanized steel.
7. Directory Card: Inside panelboard door, mounted in transparent card holder.

C. Phase, Neutral, and Ground Buses:
1. Material: Hard-drawn copper, 98 percent conductivity.
2. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.

D. Conductor Connectors: Suitable for use with conductor material and sizes.
1. Material: Hard-drawn copper, 98 percent conductivity.
2. Main and Neutral Lugs: Mechanical type.
3. Ground Lugs and Bus-Configured Terminators: Mechanical type.
4. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
5. Subfeed (Double) Lugs: Mechanical type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.

E. Future Devices: Mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices.

F. Panelboard Short-Circuit Current Rating: Rated for series-connected system with integral or remote upstream overcurrent protective devices and labeled by an NRTL. Include size and type of allowable upstream and branch devices, listed and labeled for series-connected short-circuit rating by an NRTL.

G. Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals.

2.2 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
2. Siemens Energy & Automation, Inc.
3. Square D; a brand of Schneider Electric.

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

C. Mains: Circuit breaker.

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

E. Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike.

F. Column-Type Panelboards: Narrow gutter extension, with cover, to overhead junction box equipped with ground and neutral terminal buses.

2.3 EXISTING PANELS

A. All new circuit breakers to be provided and installed in existing panels shall be from the same manufacturer as the panel.
B. Circuit breakers shall be listed for use in the intended panel and shall meet or exceed the A.I.C. rating of the panel.

2.4 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
2. Siemens Energy & Automation, Inc.
3. Square D; a brand of Schneider Electric.

2.5 ACCESSORY COMPONENTS AND FEATURES

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

PART 3 - EXECUTION

3.1 EXAMINATION

A. Receive, inspect, handle, and store panelboards according to NEMA PB 1.1.
B. Examine panelboards before installation. Reject panelboards that are damaged or rusted or have been subjected to water saturation.
C. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the Work.
D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install panelboards and accessories according to NEMA PB 1.1.
B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from panelboards.
C. Comply with mounting and anchoring requirements specified in Division 26 Section "Vibration and Seismic Controls for Electrical Systems."
D. Mount top of trim 90 inches above finished floor unless otherwise indicated.
E. Mount panelboard cabinet plumb and rigid without distortion of box.
F. Install overcurrent protective devices and controllers not already factory installed.
1. Set field-adjustable, circuit-breaker trip ranges.
G. Install filler plates in unused spaces.
H. Arrange conductors in gutters into groups and bundle and wrap with wire ties after completing load balancing.
I. Comply with NECA 1.

3.3 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs complying with Division 26 Section "Identification for Electrical Systems."
B. Create a directory to indicate installed circuit loads after balancing panelboard loads; incorporate Owner's final room designations. Obtain approval before installing. Use a computer or typewriter to create directory; handwritten directories are not acceptable.

C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."
D. Device Nameplates: Label each branch circuit device in distribution panelboards with a nameplate complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

3.4 FIELD QUALITY CONTROL
A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
B. Acceptance Testing Preparation:
1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.
C. Tests and Inspections:
1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
3. Perform the following infrared scan tests and inspections and prepare reports:
a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each panelboard. Remove front panels so joints and connections are accessible to portable scanner.
b. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each panelboard 11 months after date of Substantial Completion.
c. Instruments and Equipment:
1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
D. Panelboards will be considered defective if they do not pass tests and inspections.
E. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING
A. Adjust moving parts and operable component to function smoothly, and lubricate as recommended by manufacturer.
B. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes.
1. Measure as directed during period of normal system loading.
2. Perform load-balancing circuit changes outside normal occupancy/working schedule of the facility and at time directed. Avoid disrupting critical 24-hour services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
3. After circuit changes, recheck loads during normal load period. Record all load readings before and after changes and submit test records.
4. Tolerance: Difference exceeding 20 percent between phase loads, within a panelboard, is not acceptable. Rebalance and recheck as necessary to meet this minimum requirement.

3.6 PROTECTION

A. Temporary Heating: Apply temporary heat to maintain temperature according to manufacturer's written instructions.

END OF SECTION 262416

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 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Nonfusible switches.
   2. Enclosures.
   3. Circuit breakers.

1.3 DEFINITIONS

A. NC: Normally closed.
B. NO: Normally open.
C. SPST: Single pole, single throw.
D. 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, accessories, and finishes.
   1. Enclosure types and details for types other than NEMA 250, Type 1.
   2. Current and voltage ratings.
   3. Short-circuit current ratings (interrupting and withstand, as appropriate).
   4. Include evidence of NRTL listing for series rating of installed devices.
B. Shop Drawings: For enclosed switches. Include plans, elevations, sections, details, and attachments to other work.
   1. Wiring Diagrams: For power, signal, and control wiring.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: Member company of NETA or an NRTL.
B. Source Limitations: Obtain enclosed switches, components, and accessories, within same product category, from single source from single manufacturer.
C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
D. Comply with NFPA 70.

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.
B. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by Owner or others unless permitted under the following conditions and then

only after arranging to provide temporary electric service according to requirements indicated:

1. Notify Construction Manager and owner no fewer than seven days in advance of proposed interruption of electric service.
2. Indicate method of providing temporary electric service.
3. Do not proceed with interruption of electric service without Construction Manager and Owner's written permission.
4. Comply with NFPA 70E.

1.7 COORDINATION

A. Coordinate layout and installation of switches, and components with equipment served and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

PART 2 - PRODUCTS

2.1 NONFUSIBLE SWITCHES

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
   1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
   2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
   3. Siemens Energy & Automation, Inc.
   4. Square D; a brand of Schneider Electric.

B. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, lockable handle with capability to accept three 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; labeled for copper and aluminum neutral conductors.
   3. Lugs: Mechanical type, suitable for number, size, and conductor material.

2.2 CIRCUIT BREAKERS

A. Circuit breakers provided for use in existing panelboards shall be listed for use in the intended panelboard and shall meet or exceed the A.I.C. rating of the panelboard.

2.3 ENCLOSURES

A. Enclosed Switches: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.
   1. Indoor, Dry and Clean Locations: NEMA 250, Type 1.
   2. Outdoor Locations: NEMA 250, Type 3R.
   3. ***Kitchen Locations including all rooms associated with Ground Floor Central Prep Kitchen, First Floor Servery Kitchen, and Walk-in Coolers and Freezers: NEMA 4X, Type 304 Stainless Steel.***

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine elements and surfaces to receive enclosed switches for compliance with installation tolerances and other conditions affecting performance of the Work.
B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install individual wall-mounted switches with tops at uniform height unless otherwise indicated.
B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.
C. Comply with NECA 1.

3.3 IDENTIFICATION

A. Comply with requirements in Division 26 Section "Identification for Electrical Systems."
   1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
   2. Label each enclosure with engraved metal or laminated-plastic nameplate.

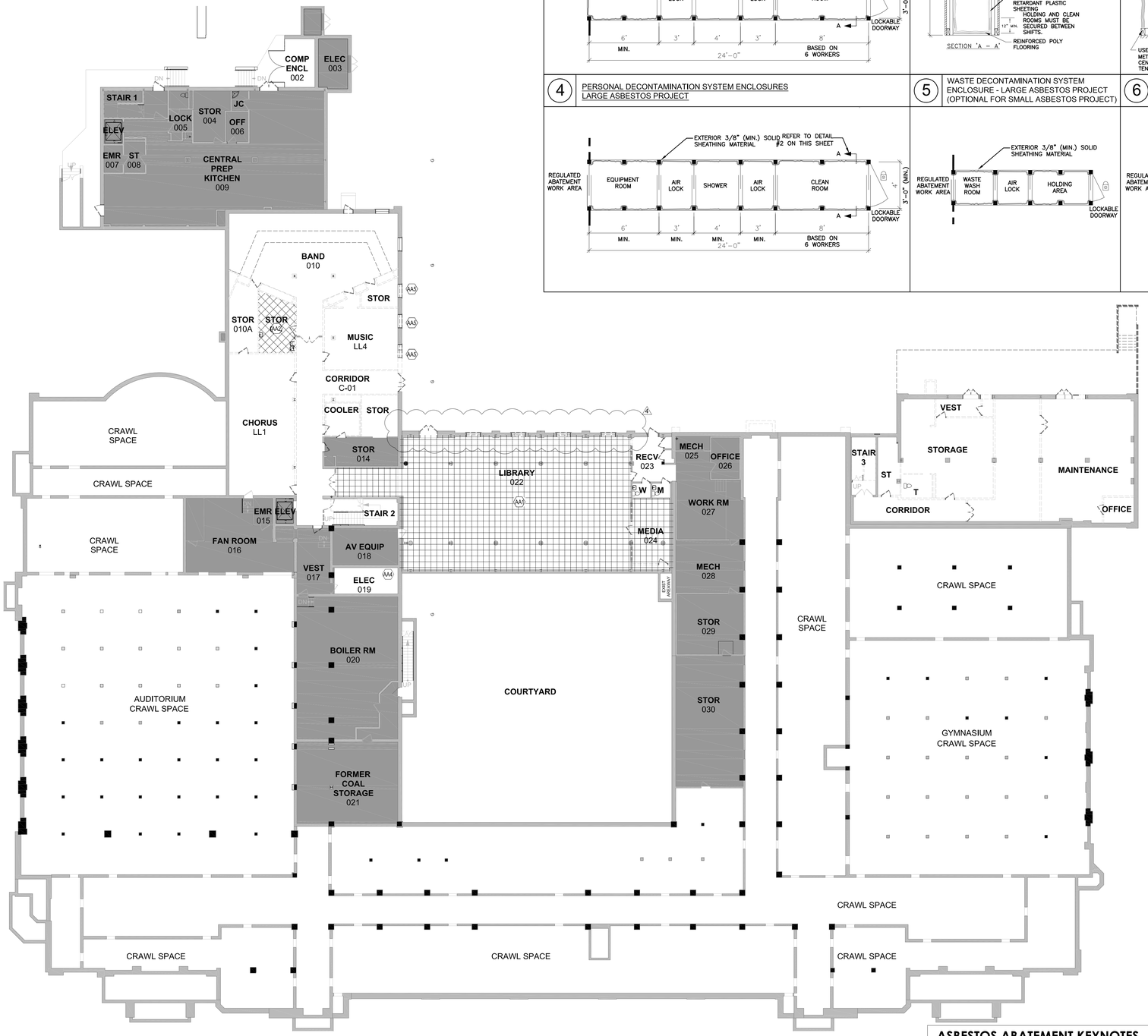
3.4 FIELD QUALITY CONTROL

A. Acceptance Testing Preparation:
   1. Test insulation resistance for each enclosed switch, component, connecting supply, feeder, and control circuit.
   2. Test continuity of each circuit.
B. Tests and Inspections:
   1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
   2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
   3. Test and adjust controls, remote monitoring, and safeties. Replace damaged and malfunctioning controls and equipment.
C. Enclosed switches will be considered defective if they do not pass tests and inspections.
D. Prepare test and inspection reports, including a certified report that identifies enclosed switches and circuit breakers and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

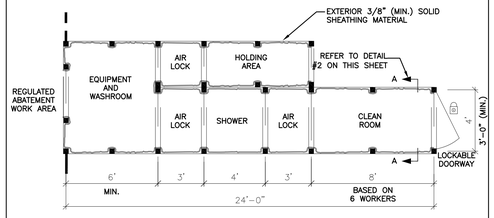
A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.

END OF SECTION 262816

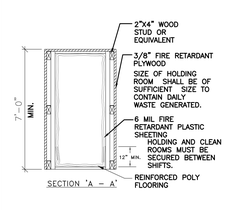


1 GROUND FLOOR ABATEMENT PLAN
1/16" = 1'-0"

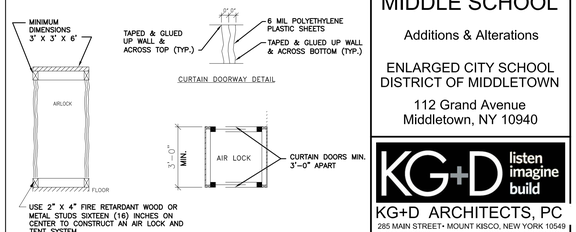
1 PARALLEL PERSONAL AND WASTE DECONTAMINATION SYSTEM ENCLOSURES LARGE ASBESTOS PROJECT



2 PERSONAL DECONTAMINATION ENCLOSURE LARGE SCALE



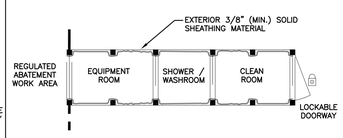
3 CROSS SECTION OF AIRLOCK PLAN OF AIRLOCK
TYPICAL AIR LOCK DETAIL



4 PERSONAL DECONTAMINATION SYSTEM ENCLOSURES LARGE ASBESTOS PROJECT

5 WASTE DECONTAMINATION SYSTEM ENCLOSURE - LARGE ASBESTOS PROJECT (OPTIONAL FOR SMALL ASBESTOS PROJECT)

6 PERSONAL AND WASTE DECONTAMINATION SYSTEM ENCLOSURE FOR A SMALL ASBESTOS PROJECT



ASBESTOS ABATEMENT KEYNOTES

		QTY
(AA)	REMOVE EXISTING CARPET, FLOOR TILE AND UNDERLYING MASTIC AS ACM. SEPARATE FLOOR TILE FROM CARPET. CARPET MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	4,100 SQ. FT. OF CARPET, TILE & MASTIC
(AA2)	REMOVE FLOOR TILE AND UNDERLYING MASTIC AS ACM. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	12,000 SQ. FT. OF TILE & MASTIC
(AA3)	REMOVE EXISTING WINDOW GLAZING AND ASSOCIATED ACM CONTAINING COMPOUND. GLAZING MAY BE DECONTAMINATED OF ASBESTOS CONTAINING MATERIAL AND DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. DISPOSE OF GLAZING COMPOUND AS ASBESTOS CONTAINING MATERIAL.	550 LIN. FT. / 30 SQ. FT. OF GLAZING COMPOUND
(AA4)	REMOVE AND DISPOSE OF ALL ELECTRICAL PANEL & ASSOCIATED COMPONENTS AFTER THE SAME HAS BEEN DISCONNECTED FROM ITS POWER SOURCE BY A LICENSED ELECTRICIAN.	3 PANELS
(AA5)	REMOVE AND DISPOSE OF WINDOW AND ALL CAULKING / SEALANTS AT EXTERIOR OF WINDOWS. CAULKING / SEALANTS SHALL BE REMOVED FROM ALL METAL TRIM, WOOD TRIM, WINDOW FRAMES, BUILDING SUBSTRATES AND THE LIKE. WINDOWS SHALL BE CLEANED / DECONTAMINATED OF ALL ASBESTOS CONTAINING MATERIALS AND MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS	350 LIN. FT. / 20 SQ. FT. OF CAULKING / SEALANTS 4.

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

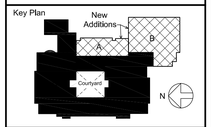
KG+D listen imagine build
KG+D ARCHITECTS, PC
285 MAIN STREET• MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

Adelaide ENVIRONMENTAL HEALTH
1511 Route 22 - Suite C-24
Brewster, New York 10509
p: 845.278.7710 f: 845.278.7750
adelaidellc.com
Environmental Consultants

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
4	2/14/2024	ADDENDUM 5
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

Sheet Title

GROUND FLOOR ABATEMENT PLAN

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	AEHA

Sheet Number

AA100

PERSONAL AND WASTE DECONTAMINATION SYSTEM ENCLOSURES

PERSONAL DECONTAMINATION SYSTEM ENCLOSURES SHALL BE CONSTRUCTED AND FUNCTIONAL PRIOR TO COMMENCING THE REMAINDER OF THE PHASE II A REGULATED ABATEMENT WORK AREA PREPARATION ACTIVITIES. WASTE DECONTAMINATION SYSTEM ENCLOSURES SHALL BE CONSTRUCTED AND FUNCTIONAL AT THE COMPLETION OF PHASE II A PREPARATION ACTIVITIES. AFTER INSTALLATION OF THE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE, ALL ACCESS TO THE REGULATED ABATEMENT WORK AREA SHALL BE VIA THE INSTALLED PERSONAL DECONTAMINATION SYSTEM ENCLOSURE.

PERSONAL DECONTAMINATION SYSTEM ENCLOSURE—LARGE PROJECT.

(1) ENCLOSURE—GENERAL. A PERSONAL DECONTAMINATION SYSTEM ENCLOSURE SHALL BE PROVIDED OUTSIDE THE REGULATED ABATEMENT WORK AREA AND ATTACHED TO ALL LOCATIONS WHERE PERSONNEL SHALL ENTER OR EXIT THE REGULATED ABATEMENT WORK AREA. ONE PERSONAL DECONTAMINATION ENCLOSURE SYSTEM FOR EACH REGULATED ABATEMENT WORK AREA SHALL BE REQUIRED. THIS SYSTEM MAY UTILIZE ADEQUATE EXISTING LIGHTING SOURCES SEPARATE FROM THE DECONTAMINATION SYSTEM ENCLOSURE, OR SHALL BE SUPPLIED WITH A GFCI PROTECTED TEMPORARY LIGHTING SYSTEM. THE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE SHALL BE SIZED TO ACCOMMODATE THE NUMBER OF WORKERS AND EQUIPMENT REQUIRED FOR THE INTENDED PURPOSE. SUCH SYSTEM MAY CONSIST OF EXISTING ATTACHED ROOMS OUTSIDE OF THE REGULATED ABATEMENT WORK AREA, IF THE LAYOUT IS APPROPRIATE, THAT CAN BE PLASTICIZED AND ARE ACCESSIBLE FROM THE REGULATED ABATEMENT WORK AREA. WHEN THIS SITUATION DOES NOT EXIST, PERSONAL DECONTAMINATION ENCLOSURE SYSTEMS MAY BE CONSTRUCTED OF METAL, WOOD OR PLASTIC SUPPORTS COVERED WITH FIRE-RETARDANT PLASTIC SHEETING. A MINIMUM OF ONE LAYER OF SIX MIL FIRE-RETARDANT PLASTIC SHEETING SHALL BE INSTALLED ON THE CEILING, AND WALLS OF THE ENCLOSURE SYSTEM. AT LEAST TWO LAYERS OF SIX MIL FIRE-RETARDANT REINFORCED PLASTIC SHEETING SHALL BE USED FOR FLOORING PROTECTION OF THIS AREA. THIS SYSTEM MUST BE KEPT CLEAN, SANITARY AND CLIMATE CONTROLLED AT ALL TIMES IN CONFORMANCE WITH ALL FEDERAL, STATE AND LOCAL GOVERNMENT REQUIREMENTS. THIS SYSTEM SHALL REMAIN ON-SITE, OPERATIONAL AND BE USED UNTIL COMPLETION OF PHASE II C OF THE ASBESTOS PROJECT.

(2) ROOMS AND CONFIGURATION. THE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE SHALL CONSIST OF A CLEAN ROOM, A SHOWER ROOM AND AN EQUIPMENT ROOM CONNECTED IN SERIES BUT SEPARATED FROM EACH OTHER BY AIRLOCKS. THERE SHALL BE A CURTAINED DOORWAY SEPARATION BETWEEN THE EQUIPMENT ROOM AND THE REGULATED ABATEMENT WORK AREA, AND THERE SHALL BE A LOCKABLE DOOR TO THE OUTSIDE. MINIMUM DIMENSIONS FOR EACH AIRLOCK, SHOWER ROOM AND EQUIPMENT ROOM SHALL BE THREE FEET WIDE BY SIX FEET IN HEIGHT, TO ALLOW FOR ADEQUATE ACCESS TO AND FROM THE REGULATED ABATEMENT WORK AREA.

(3) CURTAINED DOORWAY. AN ASSEMBLY WHICH CONSISTS OF AT LEAST THREE OVERLAPPING SHEETS OF SIX MIL FIRE-RETARDANT PLASTIC OVER AN EXISTING OR TEMPORARILY FRAMED DOORWAY. ONE SHEET SHALL BE SECURED AT THE TOP AND LEFT SIDE, THE SECOND SHEET AT THE TOP AND RIGHT SIDE, AND THE THIRD SHEET AT THE TOP AND LEFT SIDE. ALL SHEETS SHALL HAVE WEIGHTS ATTACHED TO THE BOTTOM TO INSURE THAT THE SHEETS HANG STRAIGHT AND MAINTAIN A SEAL OVER THE DOORWAY WHEN NOT IN USE.

(4) FRAMING. ENCLOSURE SYSTEMS ACCESSIBLE TO THE PUBLIC SHALL BE FULLY FRAMED, HARD-WALL SHEATHED AND UTILIZE A LOCKABLE DOOR FOR SAFETY AND SECURITY.

(5) SHEATHING. A PLYWOOD OR ORIENTED STRAND BOARD (OSB) SHEATHING MATERIAL OF AT LEAST ⅜ -INCH THICKNESS.

(6) PLASTIC SHEETING. ENCLOSURE SYSTEMS CONSTRUCTED AT THE WORK SITE SHALL USE AT LEAST ONE LAYER OF SIX MIL FIRE-RETARDANT PLASTIC SHEETING ON WALLS AND CEILING. AT LEAST TWO LAYERS OF SIX MIL FIRE-RETARDANT REINFORCED PLASTIC SHEETING SHALL BE USED FOR FLOOR PROTECTION OF THIS AREA.

(7) PREFABRICATED OR TRAILER UNITS. A COMPLETELY WATERTIGHT FIBERGLASS OR MARINE PAINTED PREFABRICATED UNIT DOES NOT REQUIRE PLASTICIZING. ROOMS SHALL BE CONFIGURED AS PER NYCRR PART 56-7.5. ALL PREFABRICATED OR TRAILER DECONTAMINATION UNITS SHALL BE KEPT IN GOOD CONDITION, AND SHALL BE COMPLETELY DECONTAMINATED AFTER FINAL CLEANING AND IMMEDIATELY PRIOR TO CLEARANCE AIR SAMPLING. UPON RECEIVING SATISFACTORY CLEARANCE AIR RESULTS, THE PREFABRICATED UNITS SHALL BE SEALED THEN SEPARATED FROM THE REGULATED ABATEMENT WORK AREA AND REMOVED FROM THE SITE.

(8) CLEAN ROOM. THE CLEAN ROOM SHALL BE SIZED TO ACCOMMODATE A FULL WORKSHIFT OF ASBESTOS ABATEMENT CONTRACTOR PERSONNEL, AS WELL AS THE AIR SAMPLING TECHNICIAN AND THE PROJECT MONITOR. THE CLEAN ROOM SHALL BE A MINIMUM OF SIX FEET IN HEIGHT. A MINIMUM OF 32 SQUARE FEET OF FLOOR SPACE SHALL BE PROVIDED FOR EVERY SIX FULL SHIFT ABATEMENT WORKERS, CALCULATED ON THE BASIS OF THE LARGEST WORK SHIFT. IF THE LARGEST WORK SHIFT CONSISTS OF THREE OR LESS FULL SHIFT ABATEMENT WORKERS, THE MINIMUM CLEAN ROOM SIZE REQUIREMENT IS REDUCED TO 24 SQUARE FEET OF FLOOR SPACE. BENCHES, LOCKERS AND HOOKS SHALL BE PROVIDED FOR STREET CLOTHES. SHELVES FOR STORING RESPIRATORS SHALL BE PROVIDED. CLEAN CLOTHING, REPLACEMENT FILTERS FOR RESPIRATORS, TOWELS AND OTHER NECESSARY ITEMS SHALL BE PROVIDED. THE CLEAN ROOM SHALL NOT BE USED FOR STORAGE OF TOOLS, EQUIPMENT OR MATERIALS. IT SHALL NOT BE USED FOR OFFICE SPACE. A LOCKABLE DOOR SHALL BE PROVIDED TO PERMIT ACCESS TO THE CLEAN ROOM FROM OUTSIDE THE REGULATED ABATEMENT WORK AREA OR ENCLOSURE AND SHALL BE USED TO SECURE THE REGULATED ABATEMENT WORK AREA AND DECONTAMINATION ENCLOSURE DURING NON-WORK HOURS.

(9) SHOWER ROOM. THE SHOWER ROOM SHALL CONTAIN ONE SHOWER PER EVERY SIX FULL SHIFT ABATEMENT WORKERS, CALCULATED ON THE BASIS OF THE LARGEST WORK SHIFT. MULTIPLE SHOWERS SHALL BE SIMULTANEOUSLY ACCESSIBLE (INSTALLED IN PARALLEL) TO CERTIFIED PERSONNEL. EACH SHOWERHEAD SHALL BE SUPPLIED WITH HOT AND COLD WATER ADJUSTABLE AT THE TAP. THE SHOWER ENCLOSURE SHALL BE CONSTRUCTED TO ENSURE AGAINST LEAKAGE OF ANY KIND. UNCONTAMINATED SOAP, SHAMPOO AND TOWELS SHALL BE AVAILABLE AT ALL TIMES. SHOWER WATER SHALL BE DRAINED, COLLECTED AND FILTERED THROUGH A SYSTEM WITH AT LEAST 5.0-MICRON PARTICLE SIZE COLLECTION CAPABILITY. SUBMERSIBLE PUMPS SHALL BE INSTALLED, MAINTAINED AND UTILIZED IN ACCORDANCE WITH PERTINENT OSHA REGULATIONS AND MANUFACTURER'S RECOMMENDATIONS. A MULTI-STAGE FILTERING SYSTEM CONTAINING A SERIES OF SEVERAL FILTERS WITH PROGRESSIVELY SMALLER PORE SIZES SHALL BE USED TO AVOID RAPID CLOGGING OF THE FILTERING SYSTEM BY LARGER PARTICLES. FILTERED WASTEWATER SHALL BE DISCHARGED IN ACCORDANCE WITH APPLICABLE CODES. CONTAMINATED FILTERS SHALL BE DISPOSED OF AS ASBESTOS-CONTAMINATED WASTE.

(10) EQUIPMENT ROOM. THE EQUIPMENT ROOM SHALL BE USED FOR THE STORAGE OF DECONTAMINATED EQUIPMENT AND TOOLS. A ONE-DAY SUPPLY OF REPLACEMENT FILTERS FOR HEPA-VACUUMS AND NEGATIVE PRESSURE VENTILATION EQUIPMENT IN SEALED CONTAINERS, EXTRA TOOLS, CONTAINERS OF SURFACTANT AND OTHER MATERIALS AND EQUIPMENT THAT MAY BE REQUIRED DURING THE ABATEMENT PROJECT MAY ALSO BE STORED HERE. A CONTAINER LINED WITH A LABELED, AT LEAST SIX MIL PLASTIC BAG FOR COLLECTION OF CLOTHING SHALL BE LOCATED IN THIS ROOM. CONTAMINATED FOOTWEAR AND WORK CLOTHES SHALL BE STORED IN THIS AREA.

(11) AIRLOCKS. AIRLOCK CONSTRUCTION SHALL CONSIST OF TWO CURTAINED DOORWAYS WITH THREE ALTERNATING SIX MIL FIRE-RETARDANT POLYETHYLENE CURTAINS PER DOORWAY, SEPARATED BY A DISTANCE OF AT LEAST THREE FEET, SUCH THAT ONE PASSES THROUGH ONE DOORWAY INTO THE AIRLOCK, ALLOWING THE DOORWAY SHEETING TO OVERLAP AND CLOSE OFF THE OPENING BEFORE PROCEEDING THROUGH THE NEXT DOORWAY. MINIMUM AIRLOCK SIZE SHALL BE THREE FEET WIDE, BY THREE FEET LONG, BY SIX FEET IN HEIGHT.

PERSONAL DECONTAMINATION SYSTEM ENCLOSURE—SMALL PROJECT.

(1) ENCLOSURE REQUIREMENTS. A PERSONAL DECONTAMINATION SYSTEM ENCLOSURE FOR A SMALL ASBESTOS PROJECT SHALL CONSIST OF, AT A MINIMUM, AN EQUIPMENT ROOM, A SHOWER ROOM AND A CLEAN ROOM SEPARATED FROM EACH OTHER AND FROM THE REGULATED ABATEMENT WORK AREA AND OTHER AREAS BY CURTAINED DOORWAYS AS DEFINED IN SECTION 56-2.1 OF NYCRR PART 56. ALL OTHER PROVISIONS FOR PERSONAL DECONTAMINATION SYSTEM FOR A LARGE ASBESTOS PROJECT SHALL APPLY. EQUIPMENT STORAGE, PERSONAL GROSS DECONTAMINATION AND REMOVAL OF CLOTHING SHALL OCCUR IN THE EQUIPMENT ROOM JUST PRIOR TO ENTERING THE SHOWER. THE FULL PERSONAL DECONTAMINATION SYSTEM ENCLOSURE SPECIFIED FOR LARGE ASBESTOS PROJECTS IS RECOMMENDED.

REMOTE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE.

IF A PERSONAL DECONTAMINATION SYSTEM CANNOT BE ATTACHED TO THE REGULATED ABATEMENT WORK AREA, DUE TO AVAILABLE SPACE RESTRICTIONS OR OTHER BUILDING AND FIRE CODE RESTRICTIONS, A REMOTE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE MAY BE USED FOR LIMITED SPECIAL PROJECTS AS PER SUBPART 56-11 OF NYCRR PART 56, NEGATIVE PRESSURE TENT ENCLOSURE WORK AREAS WITH GLOVEBAG ONLY ABATEMENT, OR IF NON-FRIABLE ACM IS BEING REMOVED IN A MANNER WHICH WILL NOT RENDER THE ACM FRIABLE. IF IT IS FOUND DURING PHASE II B, THAT THE NON-FRIABLE ACM OR ASBESTOS MATERIAL WILL BECOME FRIABLE DURING THE REMOVAL PROCESS, AND IT IS LOGISTICALLY POSSIBLE TO ATTACH THE DECONTAMINATION SYSTEM ENCLOSURE, ABATEMENT WORK MUST STOP IMMEDIATELY WHILE THE REMOTE PERSONAL DECONTAMINATION SYSTEM IS RELOCATED TO BE ATTACHED AND CONTIGUOUS TO THE REGULATED ABATEMENT WORK AREA. THE FOLLOWING REQUIREMENTS APPLY FOR ALL REMOTE PERSONAL DECONTAMINATION SYSTEMS:

(1) PROTECTIVE CLOTHING. WORKERS SHALL DON TWO SETS OF DISPOSABLE PROTECTIVE CLOTHING AND A SUPPLY OF PROTECTIVE CLOTHING SHALL BE KEPT IN THE AIRLOCKS ATTACHED TO THE REGULATED ABATEMENT WORK AREA.

(2) LOCATION. THE REMOTE PERSONAL DECONTAMINATION SYSTEM SHALL BE CONSTRUCTED AS CLOSE TO THE REGULATED ABATEMENT WORK AREA AS PHYSICALLY POSSIBLE. IF THE REMOTE PERSONAL DECONTAMINATION SYSTEM MUST BE LOCATED AT THE EXTERIOR OF THE BUILDING/STRUCTURE DUE TO SPACE OR CODE RESTRICTIONS, IT SHALL BE CONSTRUCTED WITHIN 50 FEET OF THE BUILDING/STRUCTURE EXIT USED FOR ACCESS BY THE ASBESTOS ABATEMENT CONTRACTOR PERSONNEL. THE DECONTAMINATION UNIT SHALL BE CORDONED OFF AT A DISTANCE OF 25 FEET TO SEPARATE IT FROM PUBLIC AREAS.

(3) AIRLOCKS. AT A MINIMUM, TWO EXTRA AIRLOCKS AS DEFINED IN SECTION 56-2.1 OF NYCRR PART 56 SHALL BE CONSTRUCTED AS PER PARAGRAPH (B)(11) OF SECTION 56-7.5. ONE SHALL BE CONSTRUCTED AT THE ENTRANCE TO THE EQUIPMENT ROOM OR EQUIPMENT/WASHROOM. THE OTHER EXTRA AIRLOCK SHALL BE CONSTRUCTED AT THE ENTRANCE TO THE CONTAINMENT OR REGULATED ABATEMENT WORK AREA(S). THESE AIRLOCKS SHALL HAVE LOCKABLE DOORWAYS AT THE ENTRANCE TO THE AIRLOCK FROM UNCONTAMINATED AREAS. THESE AIRLOCKS SHALL BE CORDONED OFF AT A DISTANCE OF 25 FEET AND APPROPRIATELY SIGNED IN ACCORDANCE WITH SECTION 56-7.4(C) OF NYCRR PART 56. AIRLOCKS SHALL NOT BE USED AS A WASTE DECONTAMINATION AREA AND SHALL BE KEPT CLEAN AND FREE OF ASBESTOS CONTAINING MATERIAL.

(4) DESIGNATED PATHWAY. THE WALKWAY FROM THE REGULATED ABATEMENT WORK AREA TO THE PERSONAL DECONTAMINATION SYSTEM OR NEXT REGULATED ABATEMENT WORK AREA SHALL BE CORDONED OFF AND SIGNAGE INSTALLED AS PER SECTION 56-7.4(C) OF NYCRR PART 56, TO DELINEATE IT FROM PUBLIC AREAS WHILE IN USE DURING PHASES II A THROUGH II D.

(5) TRAVEL THROUGH UNCONTAMINATED AREAS. IF AT ANY TIME A WORKER MUST TRAVEL THROUGH AN UNCONTAMINATED AREA TO ACCESS THE PERSONAL DECONTAMINATION AREA, THE WORKER SHALL HEPA-VACUUM AND/OR WET WIPE HIS/HER OUTER PROTECTIVE CLOTHING WHILE IN THE REGULATED ABATEMENT WORK AREA, THEN PROCEED INTO THE AIRLOCK, WHICH SERVES AS A CHANGING AREA, WHERE HE/SHE SHALL REMOVE THE OUTER CLOTHING AND DON A CLEAN SET OF PROTECTIVE CLOTHING. THE WORKER MAY THEN PROCEED TO THE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE ONLY ALONG A DESIGNATED PATHWAY AS DESCRIBED ABOVE. TRAVEL IN ANY OTHER AREA SHALL NOT BE ALLOWED.

(6) REMOVAL. THE REMOTE PERSONAL DECONTAMINATION UNIT SHALL BE REMOVED ONLY AFTER SATISFACTORY CLEARANCE AIR SAMPLING RESULTS HAVE BEEN ACHIEVED.

WASTE DECONTAMINATION SYSTEM ENCLOSURE—LARGE AND SMALL ASBESTOS PROJECTS.

(1) ENCLOSURE—GENERAL. A WASTE DECONTAMINATION SYSTEM ENCLOSURE SHALL BE PROVIDED OUTSIDE THE REGULATED ABATEMENT WORK AREA AND SHALL BE ATTACHED TO THE REGULATED ABATEMENT WORK AREA. ONE WASTE DECONTAMINATION ENCLOSURE FOR EACH REGULATED ABATEMENT WORK AREA SHALL BE REQUIRED. THIS SYSTEM MAY UTILIZE ADEQUATE EXISTING LIGHTING SOURCES SEPARATE FROM THE DECONTAMINATION SYSTEM ENCLOSURE, OR SHALL BE SUPPLIED WITH A GFCI PROTECTED TEMPORARY LIGHTING SYSTEM. THE WASTE DECONTAMINATION SYSTEM ENCLOSURE SHALL BE SIZED TO ACCOMMODATE THE NUMBER OF WORKERS AND EQUIPMENT FOR THE INTENDED PURPOSE. SUCH SYSTEM MAY CONSIST OF EXISTING ATTACHED ROOMS OUTSIDE OF THE REGULATED ABATEMENT WORK AREA, IF THE LAYOUT IS APPROPRIATE, THAT CAN BE PLASTICIZED AND ARE ACCESSIBLE FROM THE REGULATED ABATEMENT WORK AREA. WHEN THIS SITUATION DOES NOT EXIST, ENCLOSURE SYSTEMS MAY BE CONSTRUCTED OF METAL, WOOD OR PLASTIC SUPPORTS COVERED WITH FIRE-RETARDANT PLASTIC SHEETING. A MINIMUM OF ONE LAYER OF SIX MIL FIRE-RETARDANT PLASTIC SHEETING SHALL BE INSTALLED ON THE CEILING, AND WALLS OF THE ENCLOSURE SYSTEM. AT LEAST TWO LAYERS OF SIX MIL FIRE-RETARDANT REINFORCED PLASTIC SHEETING SHALL BE USED FOR FLOORING PROTECTION OF THIS AREA. THIS SYSTEM MUST BE KEPT CLEAN, SANITARY AND CLIMATE CONTROLLED AT ALL TIMES IN CONFORMANCE TO ALL FEDERAL, STATE AND LOCAL GOVERNMENT REQUIREMENTS. THIS SYSTEM SHALL REMAIN AND BE USED UNTIL COMPLETION OF PHASE II C OF THE ASBESTOS PROJECT.

(2) ROOMS AND CONFIGURATION. A WASTE DECONTAMINATION SYSTEM ENCLOSURE SHALL CONSIST OF A WASHROOM AND A HOLDING AREA CONNECTED IN SERIES BUT SEPARATED FROM EACH OTHER BY AN AIRLOCK. THERE SHALL BE A LOCKABLE DOOR TO THE OUTSIDE, AND THERE SHALL BE A CURTAINED DOORWAY BETWEEN THE WASHROOM AND THE REGULATED ABATEMENT WORK AREA.

(3) CURTAINED DOORWAY. AN ASSEMBLY WHICH CONSISTS OF AT LEAST THREE OVERLAPPING SHEETS OF SIX MIL FIRE-RETARDANT PLASTIC OVER AN EXISTING OR TEMPORARILY FRAMED DOORWAY. ONE SHEET SHALL BE SECURED AT THE TOP AND LEFT SIDE, THE SECOND SHEET AT THE TOP AND RIGHT SIDE, AND THE THIRD SHEET AT THE TOP AND LEFT SIDE. ALL SHEETS SHALL HAVE WEIGHTS ATTACHED TO THE BOTTOM TO INSURE THAT THE SHEETS HANG STRAIGHT AND MAINTAIN A SEAL OVER THE DOORWAY WHEN NOT IN USE.

(4) WASHROOM. A ROOM/CHAMBER BETWEEN THE REGULATED ABATEMENT WORK AREA AND THE HOLDING AREA IN THE WASTE DECONTAMINATION SYSTEM ENCLOSURE, WHERE EQUIPMENT AND WASTE CONTAINERS ARE WET CLEANED OR HEPA-VACUUMED. ADEQUATE DRAINAGE AND BAG/CONTAINER WASH WATER SHALL BE PROVIDED WITHIN THE ROOM/CHAMBER, AS WELL AS A SUFFICIENT QUANTITY OF CLEAN WASTE BAGS/CONTAINERS.

(5) EQUIPMENT/WASHROOM ALTERNATIVE. WHERE THERE IS ONLY ONE EXIT FROM THE REGULATED ABATEMENT WORK AREA, THE HOLDING AREA OF THE WASTE DECONTAMINATION SYSTEM ENCLOSURE MAY BRANCH OFF FROM THE EQUIPMENT ROOM OF THE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE. THE EQUIPMENT ROOM WILL ALSO BE USED AS A WASTE WASHROOM.

(6) PLASTIC SHEETING. WASTE DECONTAMINATION SYSTEM ENCLOSURES CONSTRUCTED AT THE WORK SITE SHALL USE AT LEAST ONE LAYER OF SIX MIL FIRE-RETARDANT PLASTIC SHEETING ON WALLS AND CEILING. AT LEAST TWO LAYERS OF SIX MIL FIRE-RETARDANT REINFORCED PLASTIC SHEETING SHALL BE USED FOR FLOORING PROTECTION OF THESE AREAS.

(7) ENCLOSURE SECURITY. THE WASTE DECONTAMINATION SYSTEM ENCLOSURE AND REGULATED ABATEMENT WORK AREA AIRLOCK(S) (WHEN REMOTE DECONTAMINATION SYSTEMS ARE USED) SHALL BE CONSTRUCTED WITH LOCKABLE DOORS TO PREVENT UNAUTHORIZED ENTRY. ENCLOSURE SYSTEMS LOCATED WITHIN 25 FEET OF AN AREA OF PUBLIC ACCESS SHALL BE FULLY FRAMED AND HARD-WALL SHEATHED FOR SAFETY.

(8) DRAINS. THE WASTE WASHROOM SHALL BE EQUIPPED WITH A WASH BIN OF SUFFICIENT SIZE TO PERFORM WASTE CONTAINER WASHING OPERATIONS AND SHALL HAVE A SUBMERSIBLE PUMP INSTALLED TO COLLECT WASTE WATER AND DELIVER IT TO THE SHOWER WASTEWATER FILTRATION SYSTEM WHERE IT SHALL BE FILTERED IN ACCORDANCE WITH PARAGRAPH (B)(9) OF NYCRR PART 56-7.5.

(9) SHOWER/WASHROOM ALTERNATIVE — SMALL ASBESTOS PROJECT. FOR SMALL ASBESTOS PROJECTS WITH ONLY ONE EXIT FROM THE REGULATED ABATEMENT WORK AREA, THE SHOWER ROOM MAY BE USED AS A WASTE WASHROOM. THE CLEAN ROOM SHALL NOT BE USED FOR WASTE STORAGE, BUT SHALL BE USED FOR WASTE TRANSFER TO CARTS, WHICH SHALL BE IMMEDIATELY REMOVED FROM THE ENCLOSURE. WASTE SHALL BE TRANSFERRED ONLY DURING TIMES WHEN THE SHOWERS ARE NOT IN USE.

WASTE DECONTAMINATION SYSTEM ENCLOSURE — WHEN REMOTE PERSONAL IS ALLOWED.

WHEN A REMOTE PERSONAL DECONTAMINATION SYSTEM ENCLOSURE IS ALLOWED AND UTILIZED FOR A REGULATED ABATEMENT WORK AREA, THE FOLLOWING REQUIREMENTS SHALL APPLY:

(1) MINOR SIZE REGULATED ABATEMENT WORK AREA. NO SPECIFIC WASTE DECONTAMINATION SYSTEM ENCLOSURE IS REQUIRED FOR MINOR SIZE REGULATED ABATEMENT WORK AREAS. THE WASTE GENERATED SHALL BE IMMEDIATELY BAGGED/CONTAINERIZED WITHIN THE REGULATED ABATEMENT WORK AREA.

(2) SMALL AND LARGE SIZE REGULATED ABATEMENT WORK AREAS.

(I) WASHROOM. AN ADDITIONAL CHAMBER SHALL BE CONSTRUCTED WITHIN THE REGULATED ABATEMENT WORK AREA, ATTACHED TO THE EXISTING AIRLOCK USED TO ACCESS THE WORK AREA. THE WASHROOM/AIRLOCK COMBINATION SHALL BE UTILIZED AS THE CONTIGUOUS WASTE DECONTAMINATION ENCLOSURE FOR WASTE BAGGING/CONTAINERIZATION AND WASTE TRANSFER ACTIVITIES. THE WASHROOM SHALL BE CONSTRUCTED AND SUPPLIED WITH EQUIPMENT/MATERIALS CONSISTENT WITH WASTE DECONTAMINATION SYSTEM ENCLOSURE WASHROOM REQUIREMENTS FOR CONTIGUOUS PERSONAL AND WASTE DECONTAMINATION SYSTEM ENCLOSURES.

(II) REMOVAL. THE WASHROOM CHAMBER SHALL BE REMOVED ONLY AFTER SATISFACTORY CLEARANCE AIR SAMPLING RESULTS HAVE BEEN ACHIEVED.

TENT PROCEDURES

TENT PROCEDURES SHALL BE CONDUCTED AS FOLLOWS:

(A) TENT PROCEDURES SHALL BE LIMITED TO THE REMOVAL OF LESS THAN 260 LINEAR FEET AND 160 SQUARE FEET OF ACM AND SHALL NOT RESULT IN DISTURBANCE OF ACM DURING TENT ERECTION.

(B) TENT PROCEDURES SHALL BE ACCOMPLISHED IN A CONSTRUCTED OR COMMERCIALLY AVAILABLE FIRE RETARDANT PLASTIC TENT, PLASTICIZING AND SEALING ALL SURFACES NOT BEING ABATED WITHIN THE TENT PERIPHERY FORMING AN ENCLOSURE. THE TENT SHALL BE OF FIRE RETARDANT 6-MIL PLASTIC AT A MINIMUM, WITH SEAMS HEAT-SEALED, OR DOUBLE-FOLDED, STAPLED AND TAPED AIRTIGHT AND THEN TAPED FLUSH WITH THE ADJACENT TENT WALL. THIS IS A SINGLE USE BARRIER THAT SHALL NOT BE REUSED ONCE DISMANTLED OR COLLAPSED.

(C) THERE SHALL BE AN AIRLOCK AT THE ENTRANCE TO THE TENT, UNLESS THERE IS AN ATTACHED WORKER OR WASTE DECONTAMINATION SYSTEM.

(D) ASBESTOS HANDLERS INVOLVED IN THE TENT PROCEDURE SHALL WEAR PERSONAL PROTECTIVE EQUIPMENT PLUS A SECOND DISPOSABLE SUIT. ALL STREET CLOTHES SHALL BE REMOVED AND STORED IN A CLEAN ROOM WITHIN THE WORK SITE. THE PERSONAL PROTECTIVE EQUIPMENT WITH TWO DISPOSABLE SUITS SHALL BE USED FOR INSTALLATION OF THE TENT AND THROUGHOUT THE PROCEDURE IF A DECONTAMINATION UNIT WITH A SHOWER IS NOT CONTIGUOUS TO THE WORK AREA. IF A DECONTAMINATION UNIT (WITH SHOWER AND CLEAN ROOM AT A MINIMUM) IS CONTIGUOUS TO THE WORK AREA, ONLY ONE DISPOSABLE SUIT SHALL BE REQUIRED; IN THIS CASE, PRIOR TO EXITING THE TENT THE WORKER SHALL HEPA VACUUM AND WET CLEAN THE DISPOSABLE SUIT.

(E) THE TENT SHALL BE ATTACHED TO THE SURFACE TO PRODUCE AN AIRTIGHT SEAL EXCEPT FOR AN APPROPRIATE SECTION TO ALLOW FOR MAKE-UP AIR INTO THE TENT.

(F) NEGATIVE PRESSURE VENTILATION EQUIPMENT SHALL BE USED TO CONTINUOUSLY EXHAUST THE ENCLOSED AREA.

(G) REMOVAL OF ACM SHALL BE BY WET METHODS IN ACCORDANCE.

(H) ACM REMOVED SHALL BE PLACED IN A LEAK-TIGHT CONTAINER WITHOUT DROPPING IT.

(I) UPON COMPLETION OF ABATEMENT, AND PRIOR TO TENT COLLAPSE, THE ENCLOSED SURFACES SHALL:

(1) BE WET CLEANED USING RAGS, MOPS OR SPONGES; AND

(2) BE PERMITTED SUFFICIENT TIME TO DRY, PRIOR TO HEPA VACUUMING ALL SUBSTRATES; AND

(3) BE LIGHTLY ENCAPSULATED TO LOCKDOWN RESIDUAL ASBESTOS.

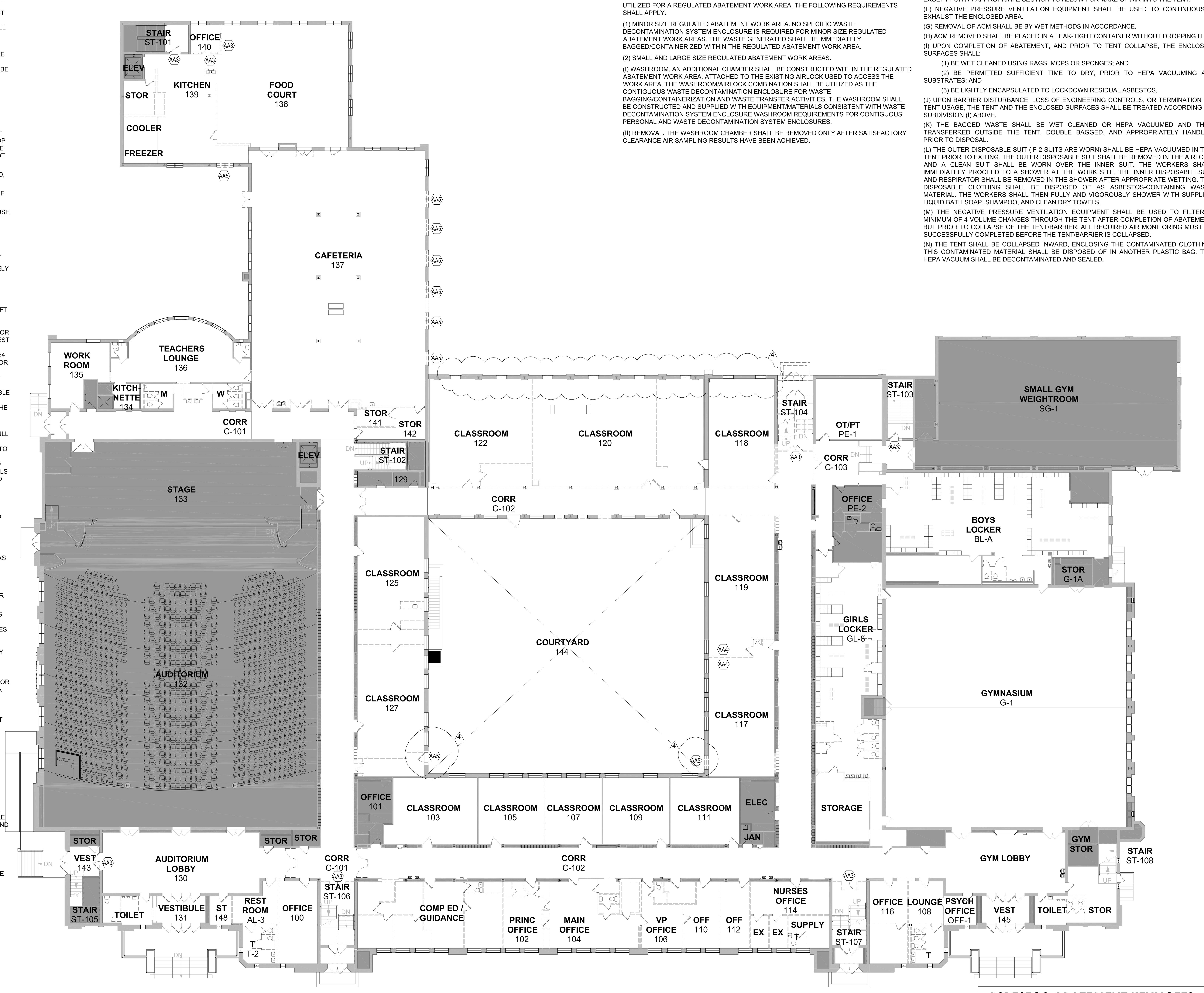
(J) UPON BARRIER DISTURBANCE, LOSS OF ENGINEERING CONTROLS, OR TERMINATION OF TENT USAGE, THE TENT AND THE ENCLOSED SURFACES SHALL BE TREATED ACCORDING TO SUBDIVISION (I) ABOVE.

(K) THE BAGGED WASTE SHALL BE WET CLEANED OR HEPA VACUUMED AND THEN TRANSFERRED OUTSIDE THE TENT, DOUBLE BAGGED, AND APPROPRIATELY HANDLED PRIOR TO DISPOSAL.

(L) THE OUTER DISPOSABLE SUIT (IF 2 SUITS ARE WORN) SHALL BE HEPA VACUUMED IN THE TENT PRIOR TO EXITING. THE OUTER DISPOSABLE SUIT SHALL BE REMOVED IN THE AIRLOCK AND A CLEAN SUIT SHALL BE WORN OVER THE INNER SUIT. THE WORKERS SHALL IMMEDIATELY PROCEED TO A SHOWER AT THE WORK SITE. THE INNER DISPOSABLE SUIT AND RESPIRATOR SHALL BE REMOVED IN THE SHOWER AFTER APPROPRIATE WETTING. THE DISPOSABLE CLOTHING SHALL BE DISPOSED OF AS ASBESTOS-CONTAINING WASTE MATERIAL. THE WORKERS SHALL THEN FULLY AND VIGOROUSLY SHOWER WITH SUPPLIED LIQUID BATH SOAP, SHAMPOO, AND CLEAN DRY TOWELS.

(M) THE NEGATIVE PRESSURE VENTILATION EQUIPMENT SHALL BE USED TO FILTER A MINIMUM OF 4 VOLUME CHANGES THROUGH THE TENT AFTER COMPLETION OF ABATEMENT BUT PRIOR TO COLLAPSE OF THE TENT/BARRIER. ALL REQUIRED AIR MONITORING MUST BE SUCCESSFULLY COMPLETED BEFORE THE TENT/BARRIER IS COLLAPSED.

(N) THE TENT SHALL BE COLLAPSED INWARD, ENCLOSING THE CONTAMINATED CLOTHING. THIS CONTAMINATED MATERIAL SHALL BE DISPOSED OF IN ANOTHER PLASTIC BAG. THE HEPA VACUUM SHALL BE DECONTAMINATED AND SEALED.



1 1st FLOOR ABATEMENT PLAN
1/16" = 1'-0"

ASBESTOS ABATEMENT KEYNOTES

		QTY
AA1	REMOVE EXISTING CARPET, FLOOR TILE AND UNDERLYING MASTIC AS ACM. SEPARATE FLOOR TILE FROM CARPET. CARPET MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	4,100 SQ. FT. OF CARPET, TILE & MASTIC
AA2	REMOVE FLOOR TILE AND UNDERLYING MASTIC AS ACM. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	12,000 SQ. FT. OF TILE & MASTIC
AA3	REMOVE EXISTING WINDOW GLAZING AND ASSOCIATED ACM CONTAINING COMPOUND. GLAZING MAY BE DECONTAMINATED OF ASBESTOS CONTAINING MATERIAL AND DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. DISPOSE OF GLAZING COMPOUND AS ASBESTOS CONTAINING MATERIAL.	550 LIN. FT. / 30 SQ. FT. OF GLAZING COMPOUND
AA4	REMOVE AND DISPOSE OF ALL ELECTRICAL PANEL & ASSOCIATED COMPONENTS AFTER THE SAME HAS BEEN DISCONNECTED FROM ITS POWER SOURCE BY A LICENSED ELECTRICIAN.	3 PANELS
AA5	REMOVE AND DISPOSE OF WINDOW AND ALL CAULKING / SEALANTS AT EXTERIOR OF WINDOWS. CAULKING / SEALANTS SHALL BE REMOVED FROM ALL METAL TRIM, WOOD TRIM, WINDOW FRAMES, BUILDING SUBSTRATES AND THE LIKE. WINDOWS SHALL BE CLEANED / DECONTAMINATED OF ALL ASBESTOS CONTAINING MATERIALS AND MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS	350 LIN. FT. / 20 SQ. FT. OF CAULKING / SEALANTS (4)

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

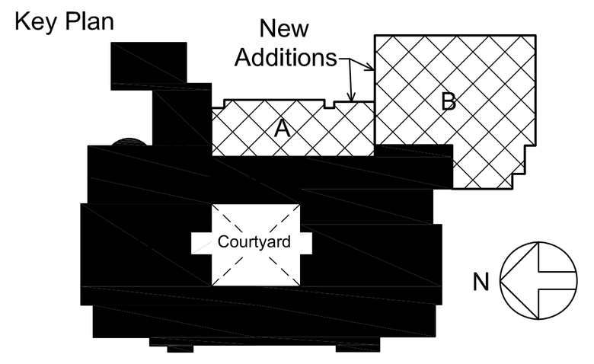
KG+D ARCHITECTS, PC
285 MAIN STREET• MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

Adelaide ENVIRONMENTAL HEALTH
1511 Route 22 - Suite C-24
Brewster, New York 10509
p: 845.278.7710 f: 845.278.7750
adelaidellc.com
Environmental Consultants

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
4	2/14/2024	ADDENDUM 5
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

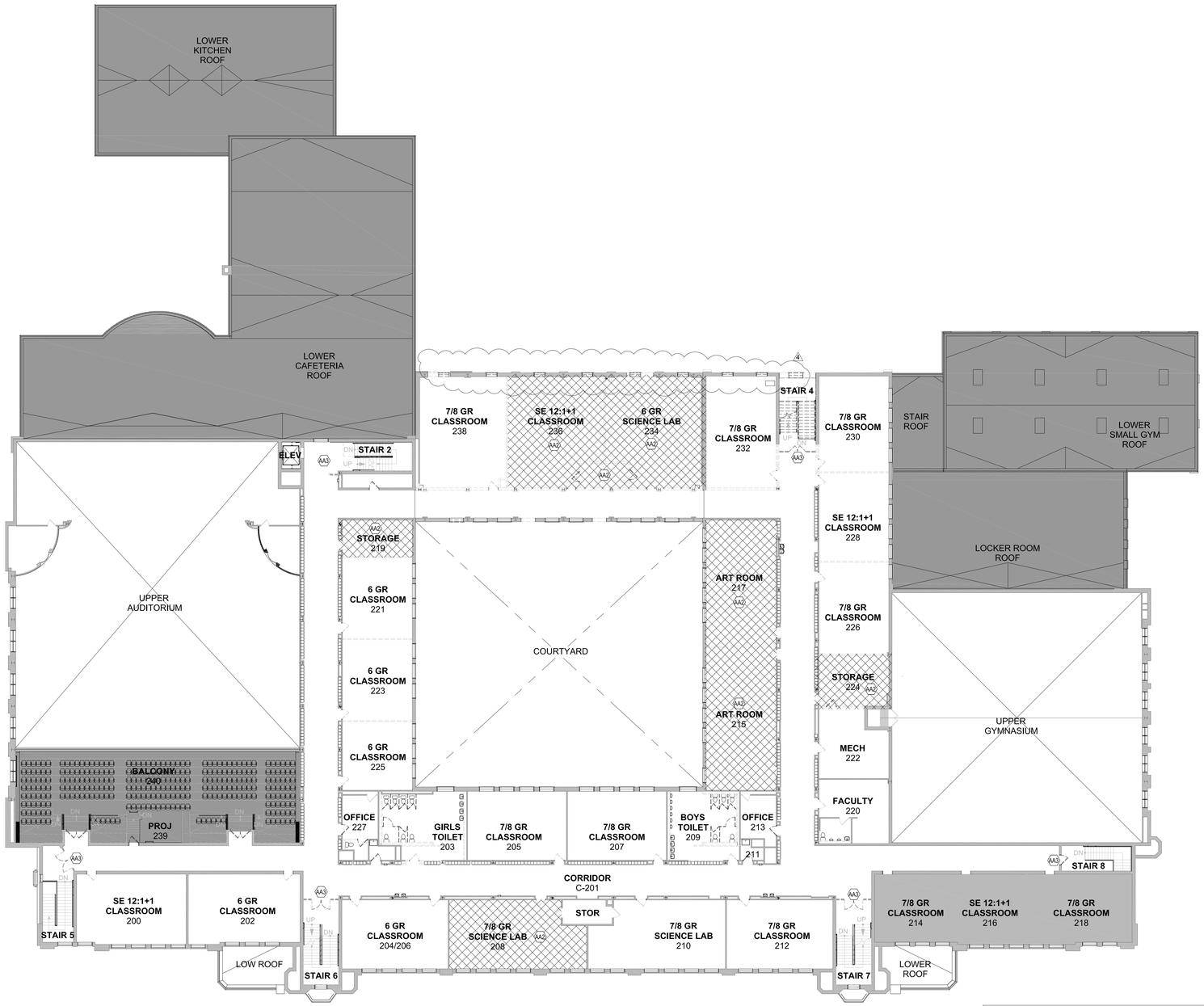
Sheet Title

1st FLOOR ABATEMENT PLAN

Job No.	Date
2021-1087	09/08/2022
Scale: AS NOTED	Drawn / Checked: AEHA

Sheet Number

AA101



1 2nd FLOOR ABATEMENT PLAN
1/16" = 1'-0"

ASBESTOS ABATEMENT KEYNOTES

		QTY
AA1	REMOVE EXISTING CARPET, FLOOR TILE AND UNDERLYING MASTIC AS ACM. SEPARATE FLOOR TILE FROM CARPET. CARPET MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	4,100 SQ. FT. OF CARPET, TILE & MASTIC
AA2	REMOVE FLOOR TILE AND UNDERLYING MASTIC AS ACM. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	12,000 SQ. FT. OF TILE & MASTIC
AA3	REMOVE EXISTING WINDOW GLAZING AND ASSOCIATED ACM CONTAINING COMPOUND. GLAZING MAY BE DECONTAMINATED OF ASBESTOS CONTAINING MATERIAL AND DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. DISPOSE OF GLAZING COMPOUND AS ASBESTOS CONTAINING MATERIAL.	550 LIN. FT. / 30 SQ. FT. OF GLAZING COMPOUND
AA4	REMOVE AND DISPOSE OF ALL ELECTRICAL PANEL & ASSOCIATED COMPONENTS AFTER THE SAME HAS BEEN DISCONNECTED FROM ITS POWER SOURCE BY A LICENSED ELECTRICIAN.	3 PANELS
AA5	REMOVE AND DISPOSE OF WINDOW AND ALL CAULKING / SEALANTS AT EXTERIOR OF WINDOWS. CAULKING / SEALANTS SHALL BE REMOVED FROM ALL METAL TRIM, WOOD TRIM, WINDOW FRAMES, BUILDING SUBSTRATES AND THE LIKE. WINDOWS SHALL BE CLEANED / DECONTAMINATED OF ALL ASBESTOS CONTAINING MATERIALS AND MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS	350 LIN. FT. / 20 SQ. FT. OF CAULKING / SEALANTS

4

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

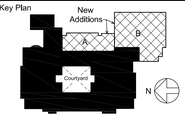
KG+D ARCHITECTS, PC
285 MAIN STREET• MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

Adelaide ENVIRONMENTAL HEALTH
1511 Route 22 - Suite C-24
Brewster, New York 10509
p: 845.278.7710 f: 845.278.7750
adelaidehc.com
Environmental Consultants

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
4	2/14/2024	ADDENDUM 5
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

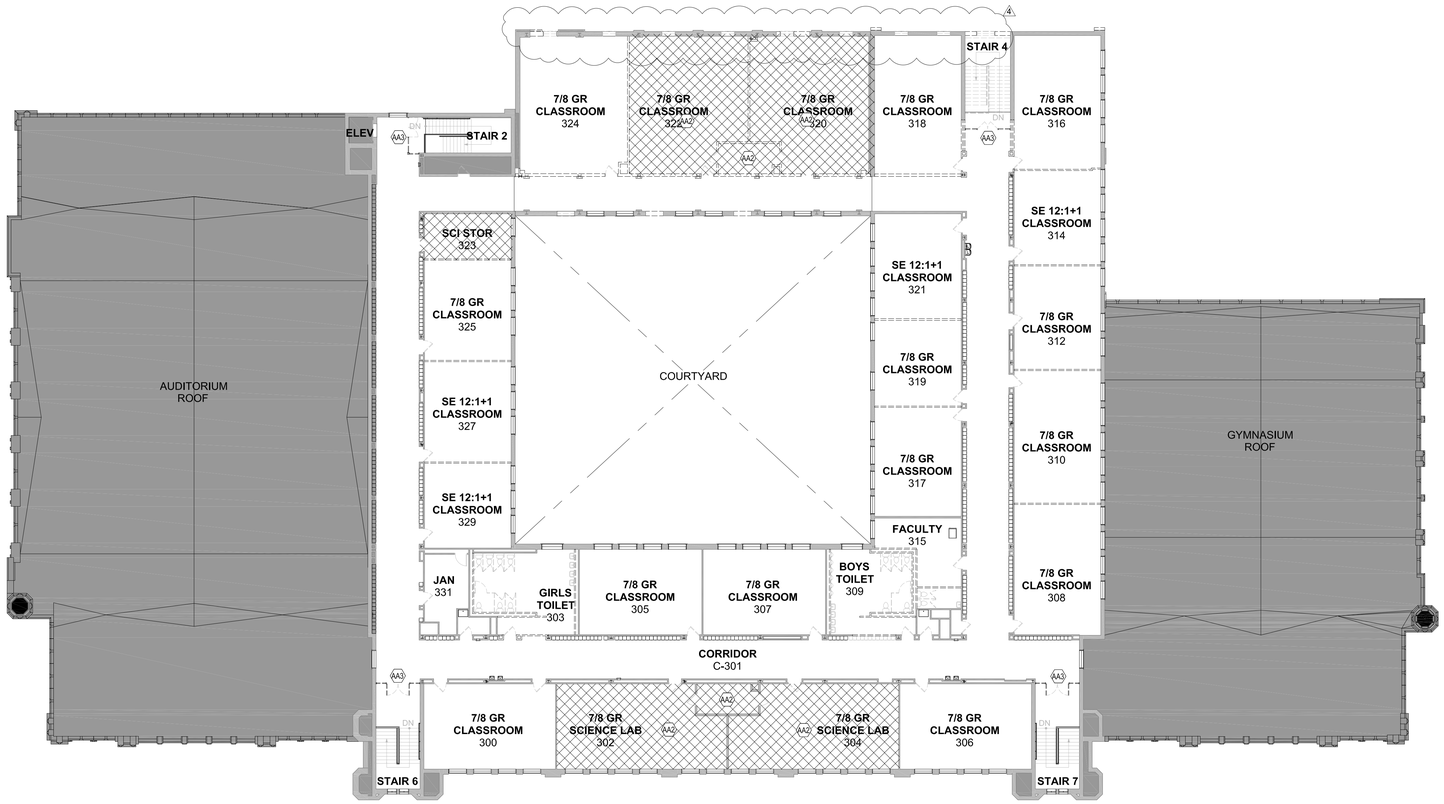
Sheet Title

2nd FLOOR ABATEMENT PLAN

Job No. 2021-1087	Date 09/08/2022
Scale AS NOTED	Drawn / Checked AEHA

Sheet Number

AA102



1 3rd FLOOR ABATEMENT PLAN
1/16" = 1'-0"

ASBESTOS ABATEMENT KEYNOTES

		QTY
AA1	REMOVE EXISTING CARPET, FLOOR TILE AND UNDERLYING MASTIC AS ACM. SEPARATE FLOOR TILE FROM CARPET. CARPET MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	4,100 SQ. FT. OF CARPET, TILE & MASTIC
AA2	REMOVE FLOOR TILE AND UNDERLYING MASTIC AS ACM. TILE AND MASTIC SHALL BE DISPOSED OF AS ASBESTOS CONTAINING MATERIAL. ALL MASTIC SHALL BE REMOVED IN ITS ENTIRETY FROM CONCRETE SUBSTRATE.	12,000 SQ. FT. OF TILE & MASTIC
AA3	REMOVE EXISTING WINDOW GLAZING AND ASSOCIATED ACM CONTAINING COMPOUND. GLAZING MAY BE DECONTAMINATED OF ASBESTOS CONTAINING MATERIAL AND DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS. DISPOSE OF GLAZING COMPOUND AS ASBESTOS CONTAINING MATERIAL.	550 LIN. FT. / 30 SQ. FT. OF GLAZING COMPOUND
AA4	REMOVE AND DISPOSE OF ALL ELECTRICAL PANEL & ASSOCIATED COMPONENTS AFTER THE SAME HAS BEEN DISCONNECTED FROM ITS POWER SOURCE BY A LICENSED ELECTRICIAN.	3 PANELS
AA5	REMOVE AND DISPOSE OF WINDOW AND ALL CAULKING / SEALANTS AT EXTERIOR OF WINDOWS. CAULKING / SEALANTS SHALL BE REMOVED FROM ALL METAL TRIM, WOOD TRIM, WINDOW FRAMES, BUILDING SUBSTRATES AND THE LIKE. WINDOWS SHALL BE CLEANED / DECONTAMINATED OF ALL ASBESTOS CONTAINING MATERIALS AND MAY BE DISPOSED OF AS GENERAL CONSTRUCTION DEBRIS	350 LIN. FT. / 20 SQ. FT. OF CAULKING / SEALANTS

4

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

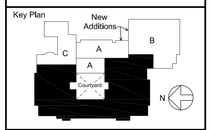
KG+D ARCHITECTS, PC
285 MAIN STREET• MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

Adelaide ENVIRONMENTAL HEALTH
1511 Route 22 - Suite C-24
Brewster, New York 10509
p: 845.278.7710 f: 845.278.7750
adelaideilc.com
Environmental Consultants

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
4	2/14/2024	ADDENDUM 5
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

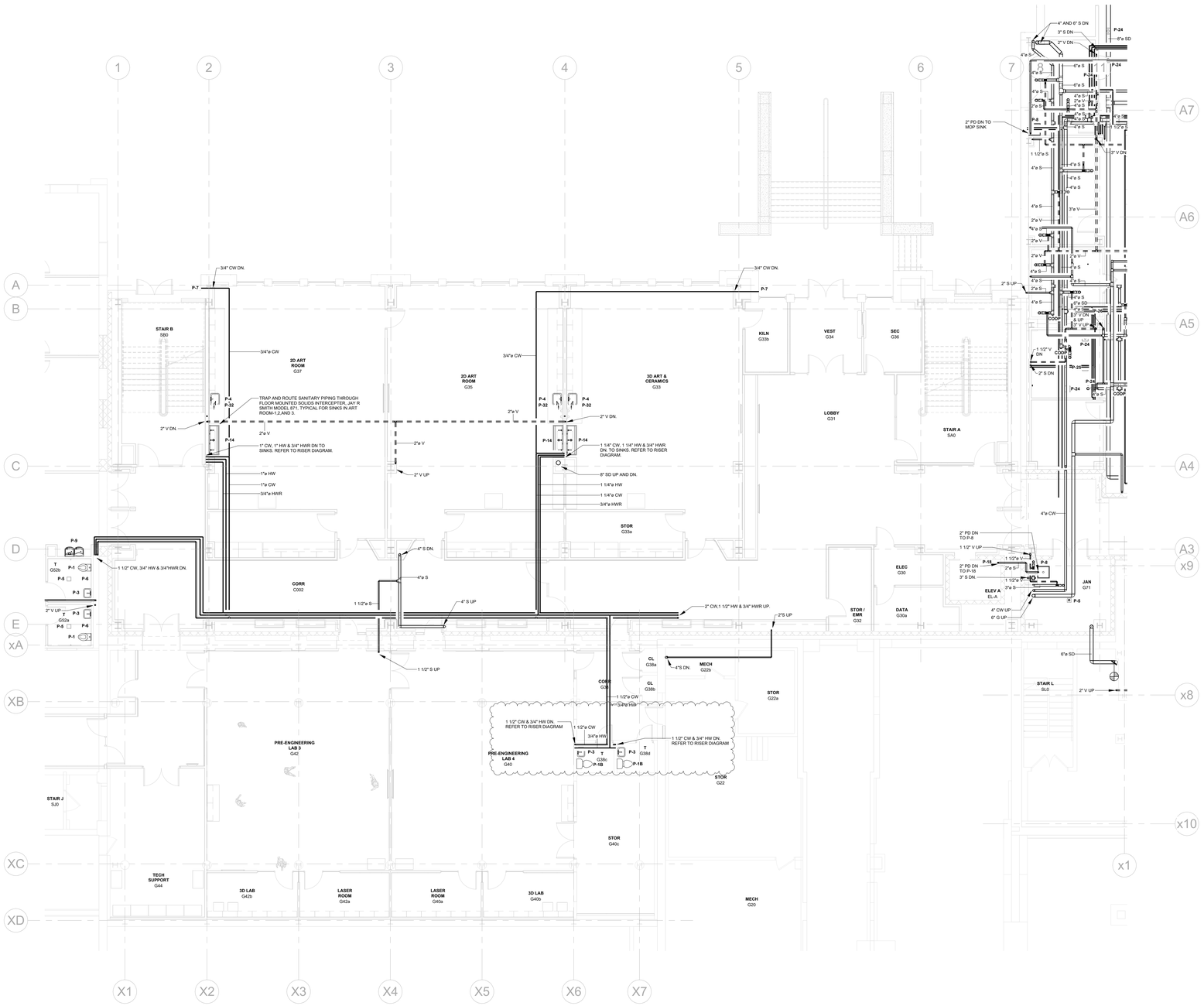
Sheet Title

3rd FLOOR ABATEMENT PLAN

Job No. 2021-1087	Date 09/08/2022
Scale AS NOTED	Drawn / Checked AEHA

Sheet Number

AA103



1 PLUMBING - GROUND FLOOR PLAN - AREA A

1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

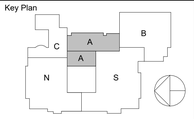
GA22017-A

NY SED PROJECT CONTROL NO.

44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
6	02/16/2024	ADDENDUM #5
5	02/09/2024	ADDENDUM #3
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

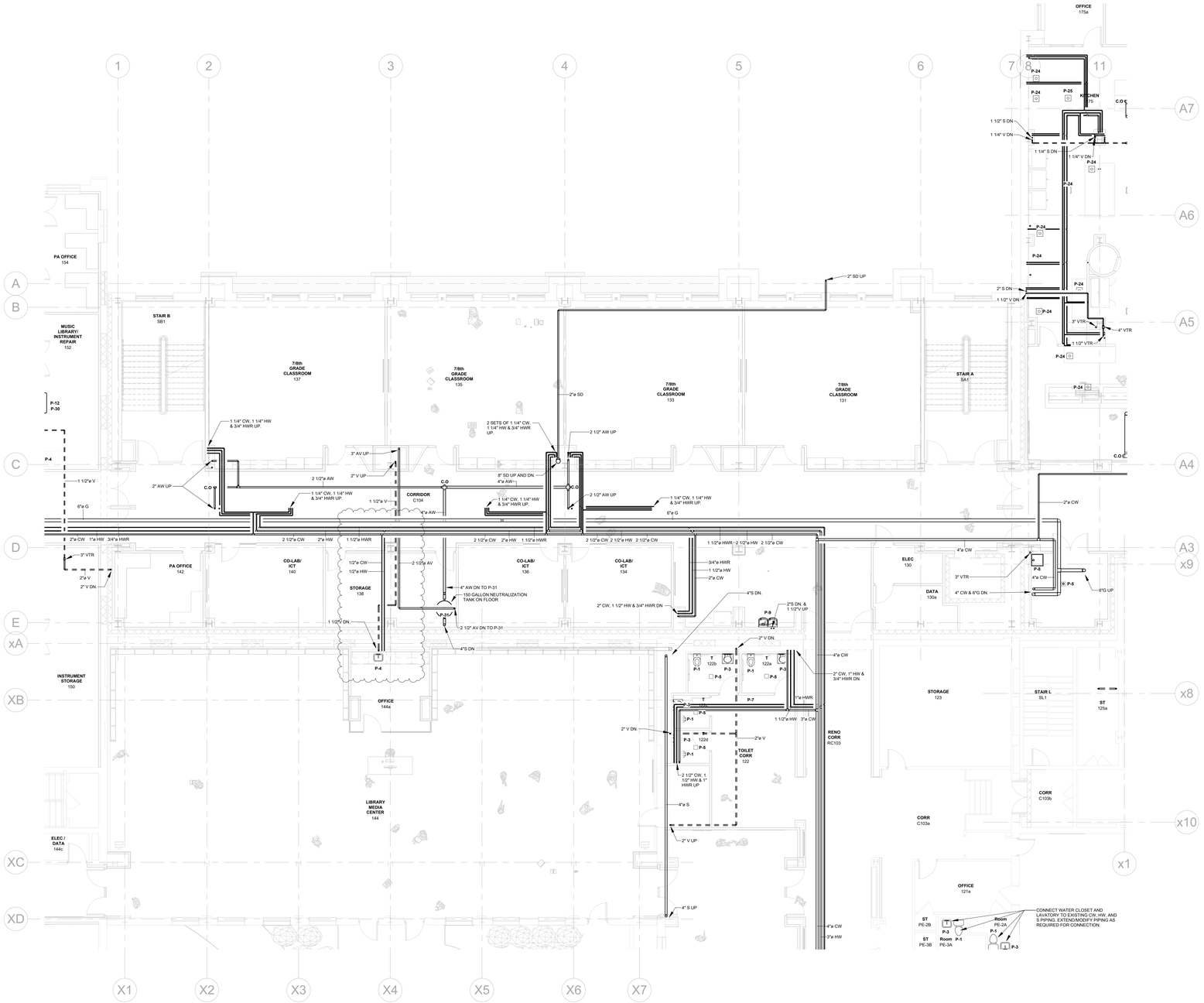
Sheet Title

PLUMBING:
GROUND FLOOR PLAN - AREA A

Job No.	Date
2021-1087	09/08/2022
Scale: AS NOTED	Drawn / Checked: BH/DC SZ

Sheet Number

P200.A



1 PLUMBING - FIRST FLOOR PLAN - AREA A

1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

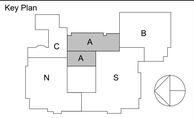
GA22017-A

NY SED PROJECT CONTROL NO.

44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
6	02/16/2024	ADDENDUM #5
5	02/09/2024	ADDENDUM #3
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

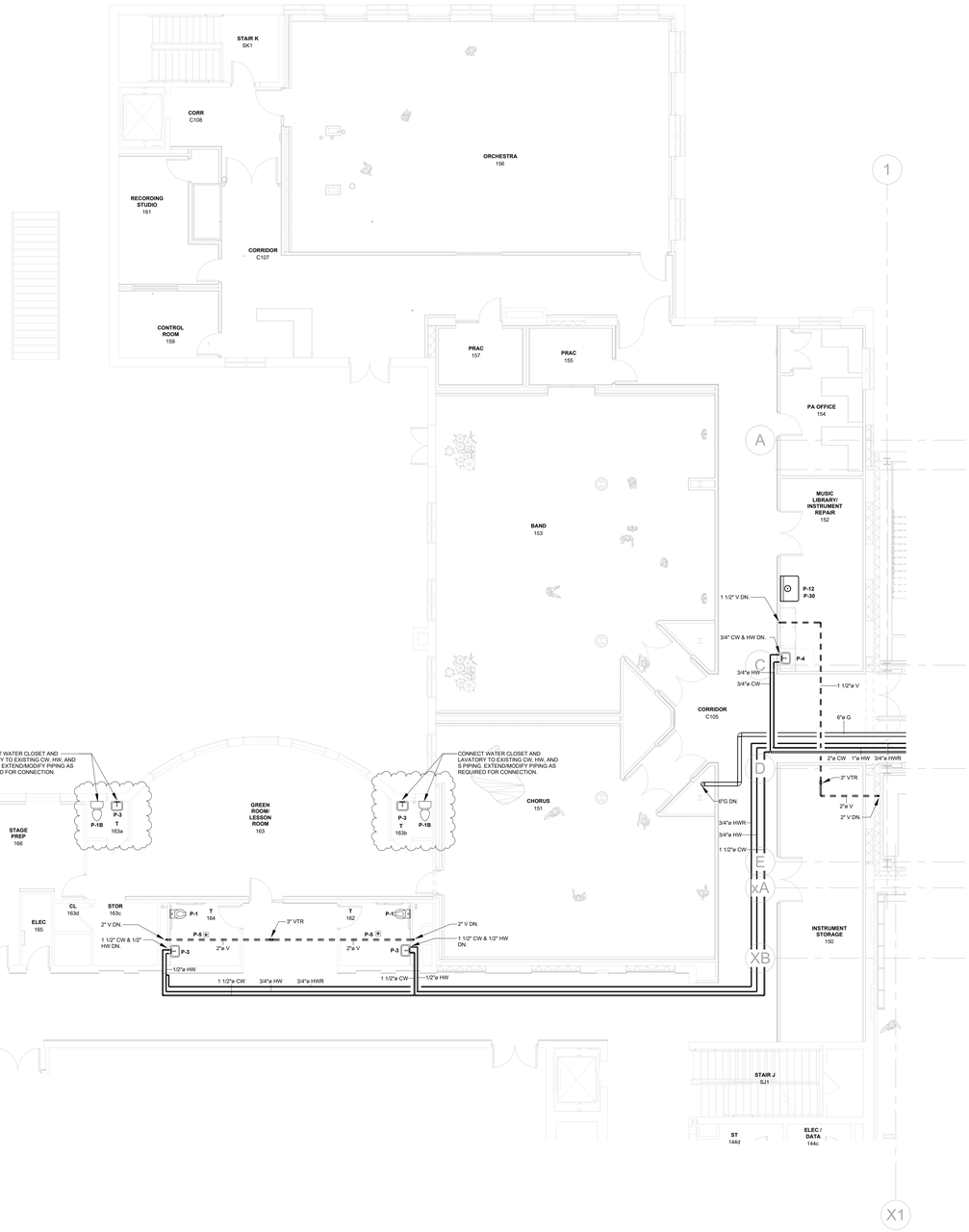
Sheet Title

PLUMBING:
FIRST FLOOR PLAN - AREA A

Job No.	Date
2021-1087	09/08/2022
Scale: AS NOTED	Drawn / Checked: BH/DC SZ

Sheet Number

P201.A



1 PLUMBING - FIRST FLOOR PLAN - AREA C

1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D listen imagine build

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

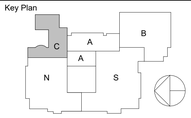
GA22017-A

NY SED PROJECT CONTROL NO.

44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
5	02/16/2024	ADDENDUM #5
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

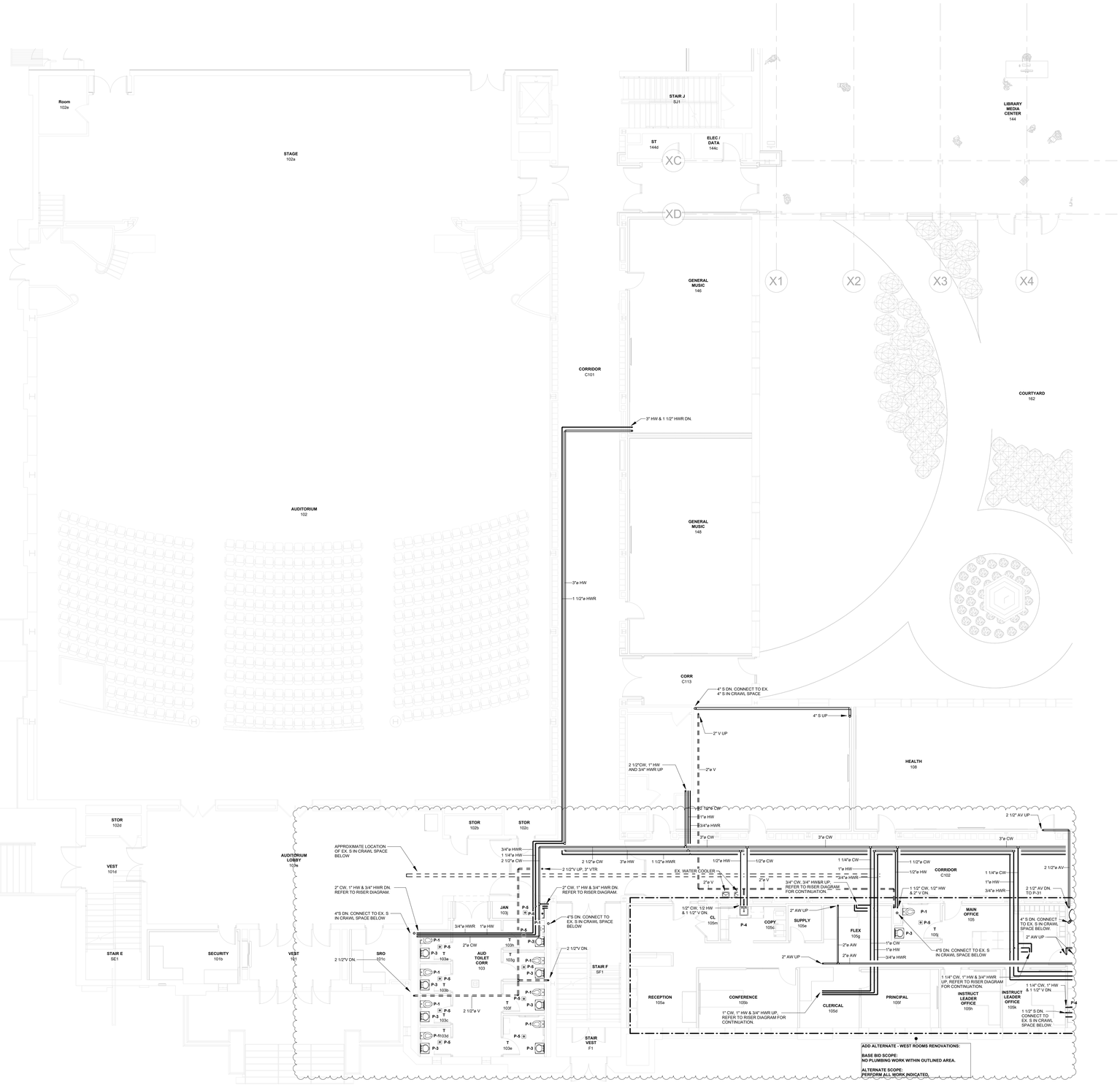
Sheet Title

PLUMBING:
FIRST FLOOR PLAN - AREA C

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	BH/DC SZ

Sheet Number

P201.C



1 PLUMBING - FIRST FLOOR PLAN - AREA N

1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

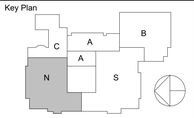
GA22017-A

NY SED PROJECT CONTROL NO.

44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
5	02/16/2024	ADDENDUM #5
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

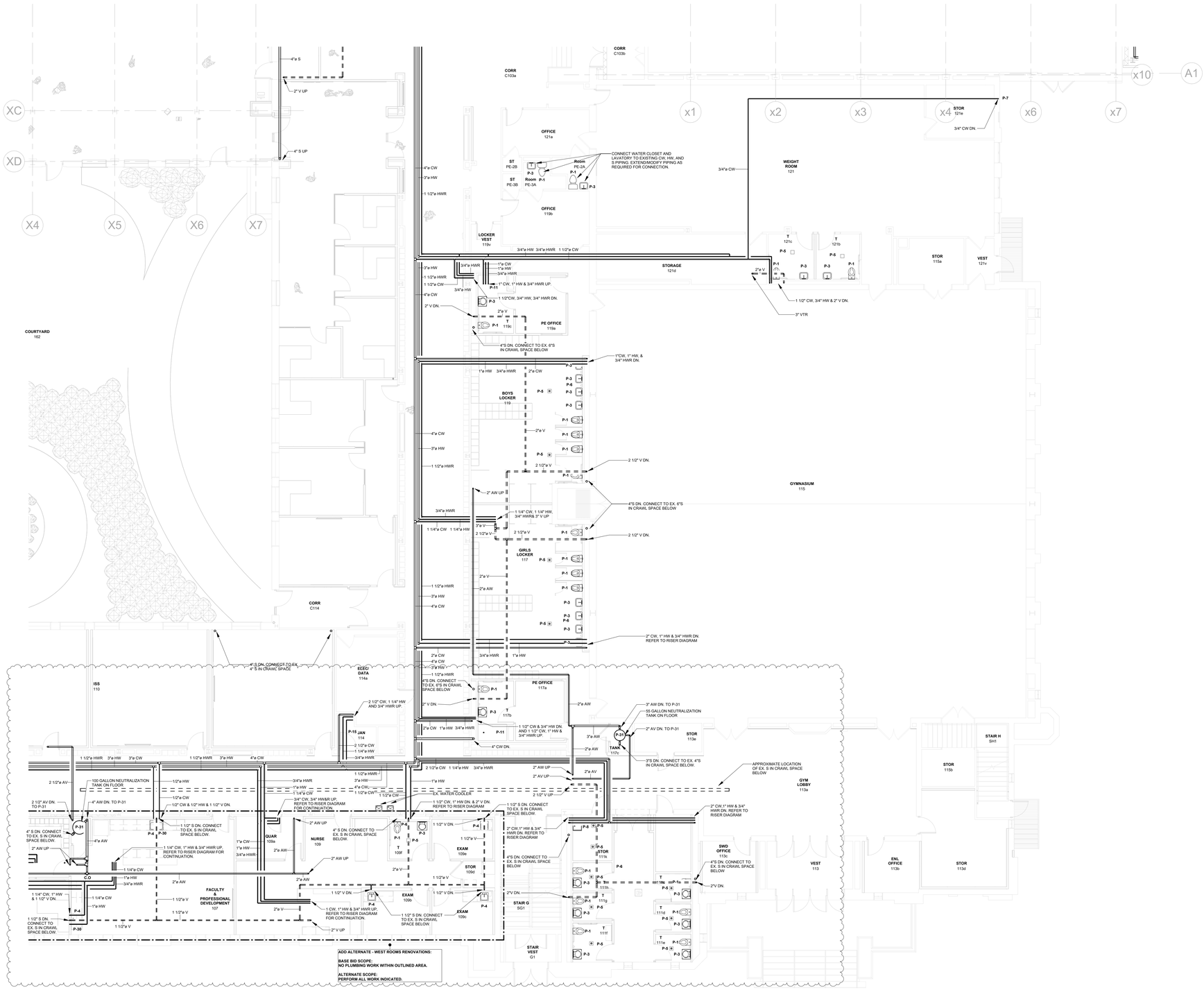
Sheet Title

PLUMBING:
FIRST FLOOR PLAN - AREA N

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	BH/DC SZ

Sheet Number

P201.N



1 PLUMBING - FIRST FLOOR PLAN - AREA S
1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

GA22017-A

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan

Professional Seal

No.	Date	Issue
5	02/16/2024	ADDENDUM #5
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

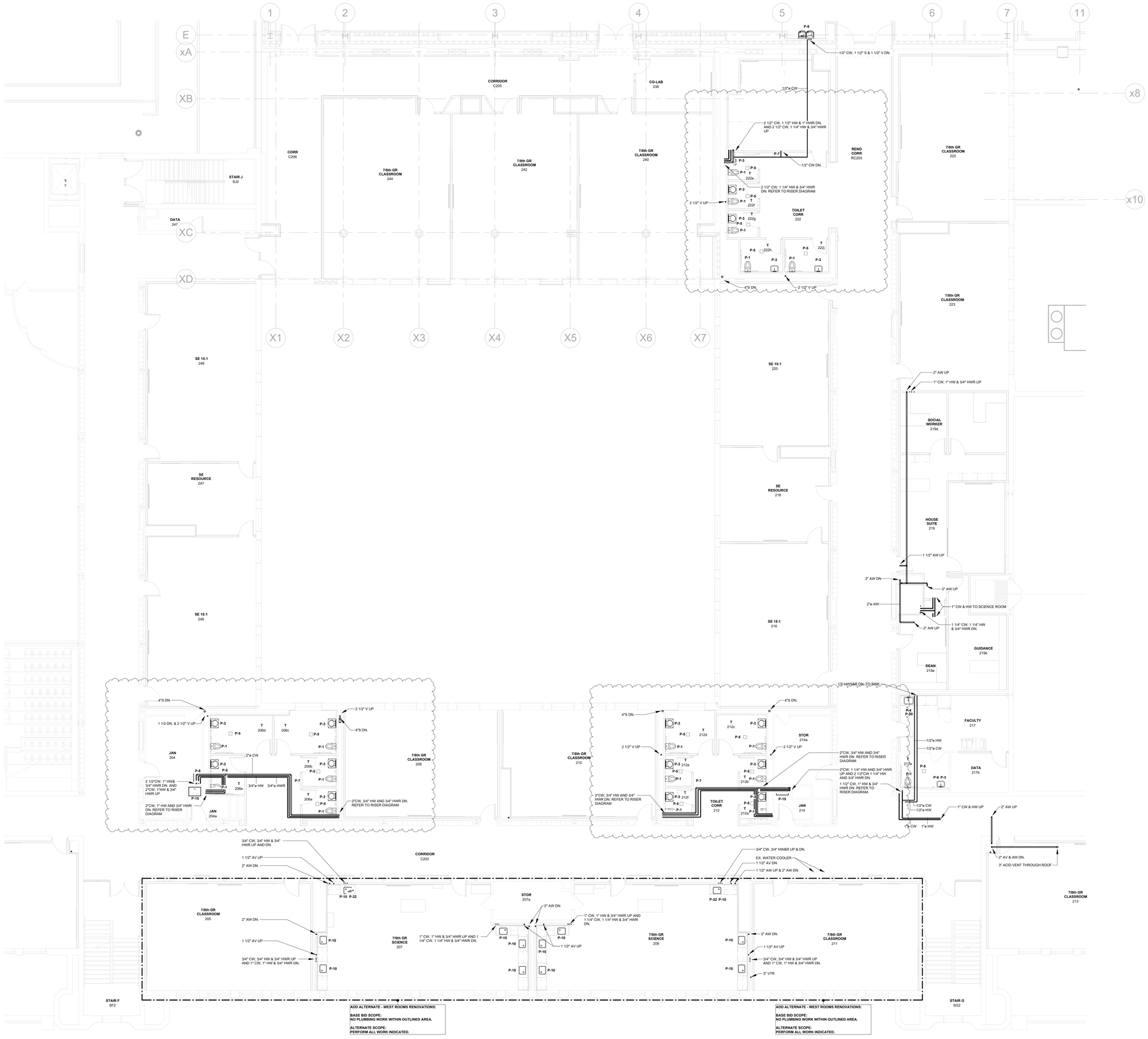
Sheet Title

PLUMBING:
FIRST FLOOR PLAN - AREA S

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	BH/DC SZ

Sheet Number

P201.S



ADD ALTERNATE - WEST ROOMS RENOVATIONS:

BASE BID SCOPE:
NO PLUMBING WORK WITHIN OUTLINED AREA.

ALTERNATE SCOPE:
PERFORM ALL WORK INDICATED.

ADD ALTERNATE - WEST ROOMS RENOVATIONS:

BASE BID SCOPE:
NO PLUMBING WORK WITHIN OUTLINED AREA.

ALTERNATE SCOPE:
PERFORM ALL WORK INDICATED.

1 PLUMBING - SECOND FLOOR PLAN - AREAS N & S
1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

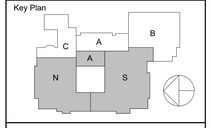
GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

GA22017-A

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
5	02/16/2024	ADDENDUM #5
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

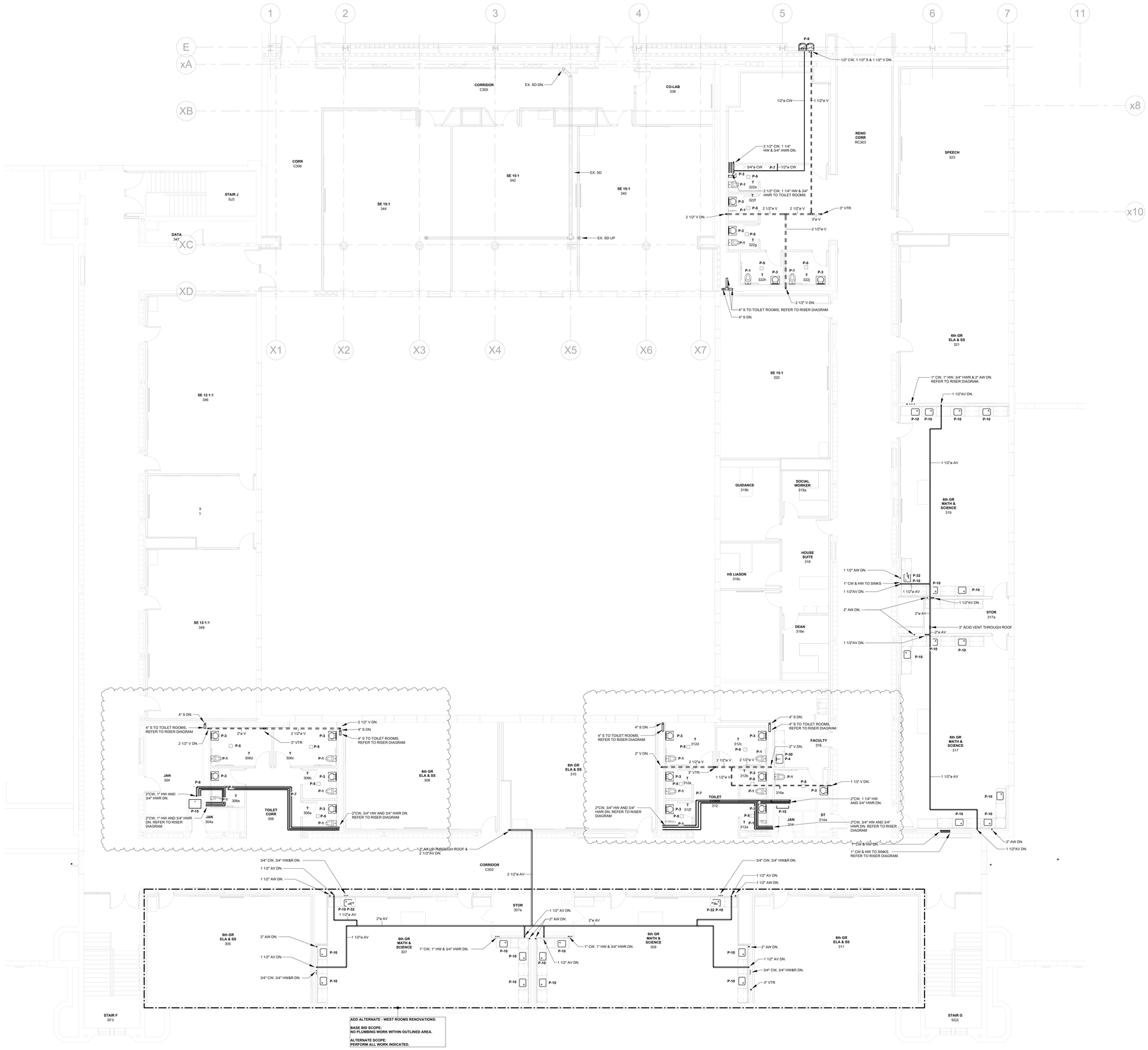
Sheet Title

PLUMBING:
SECOND FLOOR PLAN - AREAS N & S

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	BH/DC SZ

Sheet Number

P202.NS



1 PLUMBING - THIRD FLOOR PLAN - AREAS N & S

1/8" = 1'-0"

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D ARCHITECTS, PC
285 MAIN STREET • MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

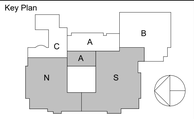
GA22017-A

NY SED PROJECT CONTROL NO.

44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Key Plan



Professional Seal

No.	Date	Issue
6	02/16/2024	ADDENDUM #5
5	02/09/2024	ADDENDUM #3
4	02/02/2024	ADDENDUM #2
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

Sheet Title

PLUMBING:
THIRD FLOOR PLAN - AREAS N & S

Job No.	Date
2021-1087	09/08/2022
Scale	Drawn / Checked
AS NOTED	BH/DC SZ

Sheet Number

P203.NS

PLUMBING PIPING FITTING SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE AND PUMP DISCHARGE PIPING (ABOVE GROUND)	ALL	COPPER	LEAD-FREE SOLDER ASTM B828	ASTM B 16.22
SANITARY, VENT, AND STORM (ABOVE GROUND)	ALL	SERVICE WEIGHT CAST IRON	NO-HUB ASTM C1277 ASTM C564	ASTM A 74
SANITARY, VENT, AND STORM (BELOW GROUND)	ALL	EXTRA-HEAVY CAST IRON	HUB AND SPIGOT ASTM C564	ASTM A 74
GAS PIPING (ABOVE GROUND)	4" AND LESS	MALLEABLE IRON	THREADEDOR WELDED	ASTM B 16.3
GAS PIPING (BELOW GROUND)	ALL	POLYETHYLENE	PE 2708	ASTM D 2513
ACID WASTE AND VENT PIPING	ALL	CHARLOTE CHEMDRAIN CPVC	SOLVENT CEMENT	ASTM F 493
WATER PIPE (BELOW GROUND)	4" AND UP	DUCTILE IRON	MECHANICAL OR PUSH-ON	AWWA C110

NOTES:
1. ALL GAS PIPING SHALL BE IN ACCORDANCE WITH UTILITY COMPANY STANDARDS

PLUMBING PIPING MATERIAL SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE AND PUMP DISCHARGE PIPING (ABOVE GROUND)	ALL	COPPER	TYPE L TUBE	ASTM B 88
SANITARY, VENT, & STORM (ABOVE GROUND)	ALL	CAST IRON	SERVICE WEIGHT	ASTM A 74
SANITARY, VENT, AND STORM (BELOW GROUND)	ALL	CAST IRON	EXTRA-HEAVY WEIGHT	ASTM A 74
GAS PIPING (ABOVE GROUND)	ALL	BLACK STEEL	SCHEDULE 40	ASTM A 53
GAS PIPING (BELOW GROUND)	ALL	POLYETHYLENE	PE 2708	ASTM D 2513
ACID WASTE AND VENT PIPING	ALL	CHARLOTE CHEMDRAIN CPVC	SCHEDULE 40	ASTM D1784
WATER PIPE (BELOW GROUND)	4" AND UP	DUCTILE IRON	MECHANICAL OR PUSH-ON	AWWA C151

NOTES:
1. ALL GAS PIPING SHALL BE IN ACCORDANCE WITH UTILITY COMPANY STANDARDS

PLUMBING EQUIPMENT SCHEDULE

TAG	SYMBOLS PLAN	SYMBOLS ELEVATION	PLUMBING CONNECTIONS SAN./STORM	VENT	COLD	HOT	GAS	MANUFACTURER	CATALOG #	DESCRIPTION
P-1			4"	2"	1"	-	-	AMERICAN STANDARD	2257.101	WALL-MOUNTED, VITREOUS CHINA, ELONGATED BOWL, FLUSHOMETER TOILET WITH CONCEALED TRAPWAY, DIRECT-FED SIPHON JET ACTION, AND 1-1/2" TOP SPUD. FIXTURE COLOR SHALL BE WHITE. PROVIDE COMMERCIAL HEAVY DUTY PLASTIC TOILET SEAT, CHURCH MODEL 2155CT AND FLOOR MOUNTED VERTICAL ADJUSTABLE CLOSET CARRIERS.
								SLOAN	8115-1.28	EXPOSED, BATTERY POWERED, SENSOR OPERATED WATER CLOSET FLUSHOMETER. HIGH EFFICIENCY, 1.28 GALLONS PER FLUSH.
P-1B			4"	2"	1"	-	-	AMERICAN STANDARD	2234.001	FLOOR MOUNTED, VITREOUS CHINA, ELONGATED BOWL, FLUSHOMETER TOILET WITH CONCEALED TRAPWAY, DIRECT-FED SIPHON JET ACTION, AND 1-1/2" TOP SPUD. FIXTURE COLOR SHALL BE WHITE. PROVIDE COMMERCIAL HEAVY DUTY PLASTIC TOILET SEAT, CHURCH MODEL 2155CT.
								SLOAN	8115-1.28	EXPOSED, BATTERY POWERED, SENSOR OPERATED WATER CLOSET FLUSHOMETER. HIGH EFFICIENCY, 1.28 GALLONS PER FLUSH.
P-2			2"	1½"	¾"	-	-	AMERICAN STANDARD	6590.001EC	WALL-MOUNTED, VITREOUS CHINA, ULTRA HIGH EFFICIENCY, LOW CONSUMPTION, WASHDOWN FLUSH ACTION URINAL WITH FLUSHING RIM, EXTENDED SIDES FOR PRIVACY, STRAINER, ELONGATED 14" RIM, EVERCLEAN SURFACE, AND 3/4" TOP SPUD INLET. FIXTURE COLOR SHALL BE WHITE. PROVIDE FLOOR MOUNTED URINAL CARRIER WITH BEARING PLATE. URINAL SHALL BE ADA COMPLIANT. 0.5 GALLONS PER FLUSH.
								SLOAN	8186-0.5	EXPOSED, BATTERY POWERED, SENSOR OPERATED URINAL FLUSHOMETER. LOW CONSUMPTION, 0.5 GALLONS PER FLUSH. FLUSHOMETER SHALL BE ADA COMPLIANT.
P-3			1¼"	1¼"	½"	½"	-	AMERICAN STANDARD	0355.012	WALL-HUNG, VITREOUS CHINA, D-SHAPED BOWL LAVATORY WITH FRONT OVERFLOW, CONCEALED ARM SUPPORTS, FAUCET LEDGE, AND SELF-DRAINING DECK AREA. FIXTURE COLOR SHALL BE WHITE. PROVIDE CONCEALED ARM SUPPORTS, OFFSET LAVATORY GRID STRAINER (MCGUIRE MANUFACTURING PART NUMBER 155WC) AND TRUEBRO MODEL 103 E-Z LAV GUARD.
								ZURN	Z6915-XL	BATTERY POWERED, CHROME PLATED, SENSOR FAUCET WITH THIRTY SECOND TIME OUT FEATURE, 0.5 GPM VANDAL-RESISTANT LAMINAR FLOW, AND THERMOSTATIC MIXING VALVE.
P-4			1½"	1½"	½"	½"	-	ELKAY	LRAD2521	TYPE 304 STAINLESS STEEL, TOP MOUNT, SINGLE BOWL, ADA COMPLIANT SINK. OVERALL DIMENSIONS 25"Lx21-1/4"W BY 6-1/2"DEEP. 3 FAUCET HOLES ON 4" CENTERS, OFF-CENTERED READ DRAIN OPENING LOCATION. EXPOSED SURFACES SHALL HAVE SATIN FINISH. FULLY UNDERCOATED TO DAMPEN SOUND AND PREVENT CONDENSATION. PROVIDE ELKAY LKVR18B STAINLESS STEEL VANDAL-RESISTANT GRIDSTRAINER AND TRUEBRO MODEL 103 E-Z LAV GUARD IN ADA LOCATIONS
								ELKAY	LK800AT08T4	CONCEALED DECK, 8" CENTER, COMMERCIAL FAUCET, SOLID BRASS CONSTRUCTION, 2.2 GPM VANDAL-RESITANT AERATOR WITH 4" BLADE HANDLES.
P-5			3"	1½"	-	-	-	WATTS	FD-100-M	VANDAL-PROOF, EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES, ADJUSTABLE SQUARE HEEL-PROOF NICKEL BRONZE STRAINER, AND 3" NO HUB OUTLET. FLOOR DRAIN SHALL BE COMPLETE WITH 6"x6" STRAINER AND TRAP SEAL.
P-6			-	-	¾"	-	-	WOODFORD	24	CHROME, ANTI-SIPHON, VACUUM BREAKER PROTECTED WALL FAUCET WITH 3/4" MALE HOSE THREAD, POLYCARBONATE WHEEL HANDLE AND LOOSE TEE KEY, AND 3/4" INLET.
P-7			-	-	¾"	-	-	ZURN	Z1320XL	ENCASED, LEAD FREE, NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING WALL HYDRANT FOR FLUSH INSTALLATION WITH 3/4" MALE HOSE CONNECTION, TYPE 304 STAINLESS STEEL HOUSING WITH LOCKING HINGED COVER, OPERATING KEY AND WALL CLAMP.
P-8			3"	1½"	½"	½"	-	FIAT	MSB2424	MOLDED STONE MOP SERVICE BASIN, 24"x24"x10", WITH 3" DRAIN PIPE. FIXTURE SHALL BE COMPLETE WITH: HOSE AND HOSE BRACKET, MOP HANGER, STAINLESS STEEL BUMPER-GUARD, AND STAINLESS STEEL WALL GUARDS.
								FIAT	830-AA	CHROME PLATED SERVICE SINK FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT.
P-9			1½"	1½"	½"	-	-	ELKAY	LVRCTL8WSK	VANDAL RESISTANT BOTTLE FILLING STATION WITH BI-LEVEL FILTERED VANDAL RESISTANT ELECTRIC WATER COOLER. CHILLING CAPACITY OF 8 GALLONS PER HOUR OF 50°F DRINKING WATER AT 90°F AMBIENT. ELECTRICAL: 115V/60Hz , 5.0 FULL LOAD AMPS, 370 WATTS. ADA COMPLIANT, NSF 61 CERTIFIED.
P-10			½"	½"	½"	½"	-	SHELDON	UNICAST	DECK MOUNTED SINGLE HOLE HOT AND COLD WATER MIXING FAUCET WITH VACUUM BREAKER, 6" RIGID GOOSENECK, 4" VANDAL-PROOF WRIST-BLADE HANDLES. FAUCET SHALL BE BLACK POWDER COATED EPOXY.
P-11			2"	1½"	½"	½"	-	BEST BATH	LSS26337W75B.V2	MODULAR SHOWER WITH DURABLE SWIRL GLOSS FINISH, FOLDING TRANSFER SEAT WITH STAINLESS STEEL GRAB BAR, AND FACTORY INSTALLED STAINLESS STEEL GRAB BARS MIXING VALVE, SOAP DISH, AND WING WALL. SHOWER SHALL BE MOLDED FROM FIBERGLASS. COLOR SHALL BE WHITE. UNIT DIMENSIONS: 63"x38-1/2"x78-3/4". UNIT SHALL BE SUPPLIED WITH 2" PVC SOLVENT WELD DRAIN WITH STAINLESS STEEL STRAINER, OATEY SERIES 101PS. UNIT SHALL COMPLY WITH THE FOLLOWING: IAPMO LISTED AND ANSI Z 124.2. SHOWER SHALL BE ADA COMPLIANT.
P-12			1½"	1½"	½"	½"	-	GRIFFIN PRODUCTS	JS-423	TYPE 304 STAINLESS STEEL, FLOOR MOUNT, JUMBO "TUBA" SINK. OVERALL DIMENSIONS 45"Lx33-1/2"W BY 30" DEEP. 2 FAUCET HOLES ON 8" CENTERS, CENTERED DRAIN OPENING LOCATION. KIT SHALL BE COMPLETE WITH BACKSPLASH MOUNTED SWING SPOUT FAUCET AND BASKET STRAINER. FAUCET SHALL HAVE 1.5 GPM FLOW RATE.
P-13			1½"	1½"	½"	-	-	ELKAY	LZWSGRNM8K	FILTERED, IN-WALL BOTTLE FILLING STATION WITH CHILLER AND MOUNTING FRAME. CHILLING CAPACITY OF 8 GALLONS PER HOUR OF 50°F DRINKING WATER AT 90°F AMBIENT. ELECTRICAL: 115V/60Hz., 1.0 FULL LOAD AMPS, 260 WATTS. ADA COMPLIANT, NSF 61 CERTIFIED.
P-14			1½"	1½"	(3) ½"	(3) ½"	-	ELKAY	EWMA6020SACC	TYPE 304 STAINLESS STEEL, WALL MOUNT, MULTIPLE STATION HAND WASH , ADA COMPLIANT SINK KIT. OVERALL DIMENSIONS 60"Lx20"W BY 25-3/4" DEEP. 3 FAUCET HOLES ON 20" CENTERS, CENTERED DRAIN OPENING LOCATION. EXPOSED SURFACES SHALL HAVE BUFFED SATIN FINISH. KIT SHALL BE COMPLETE WITH (3) LKBT22C, WALL MOUNT, CHROME PLATED, BATTERY POWERED, SENSOR OPERATED FAUCETS WITH 1.5 GPM FLOW RATE. PROVIDE ELKAY LKVR18B STAINLESS STEEL VANDAL-RESISTANT GRID STRAINER AND TRUEBRO MODEL 103 E-Z LAV GUARD IN ADA LOCATIONS
P-15			3"	1½"	½"	½"	-	AMERICAN STANDARD	7695.008	ENAMELED CAST IRON SERVICE SINK, SUPPLIED WITH WALL HANGER, RIM GUARD, AND DRILLED BACK FOR FAUCET. DRILLED HOLES SHALL BE ON 8" CENTERS. FIXTURE SHALL BE COMPLETE WITH 7798.030 CAST IRON "P" TRAP STANDARD TO WALL AND STRAINER FOR 3" IRON PIPE.
								AMERICAN STANDARD	8350.243	EXPOSED YOKE WALL-MOUNT UTILITY FAUCET, 3" CAST BRASS SPOUT WITH VACUUM BREAKER, CERAMIC DISC VALVES, INTEGRAL
P-16			REFER TO PLANS	-	-	-	-	JAY R SMITH	1011Y	ROOF DRAIN FOR IRMA ROOF APPLICATIONS. DUCO CAST IRON BODY WITH FLASHING CLAMP; 1/16", 4" HIGH STAINLESS STEEL PERFORATED GRAVEL STOP WITH 3/8" DIAMETER OPENINGS; AND NO-HUB OUTLET. ROOF DRAIN SHALL BE COMPLETE WITH SUMP RECEIVER, UNDERDECK CLAMP, VANDAL-PROOF CAST IRON DOME, AND CAST IRON CLAMPING RINGS. ROOF DRAIN IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-17			REFER TO PLANS	-	-	-	-	JAY R SMITH	1770 ADA	ADA COMPLIANT DOWNSPOUT COVER FOR IRMA ROOF APPLICATIONS. CHROME PLATED DOWNSPOUT WITH BIRD SCREEN. DOWNSPOUT COVER IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-18	-	-	2"	-	-	-	-	STANCOR	SE-50	OIL-MINDER SIMPLEX PUMP AND CONTROL SYSTEM. NEMA 4X CORROSION RESISTANT POLYCARBONATE ENCLOSURE, STAINLESS STEEL SENSOR PROBE, DIRECT PLUG-IN POWER SOURCE, SOLID STATE COMPONENTS, ALARMS, LIGHTS, SILENCE SWITCH, REMOTE MONITORING CIRCUIT FOR OIL, HIGH LIQUID AND HIGH AMPERAGE CONDITIONS, FACTORY ASSEMBLED AND TESTED. 74 GPM @ 37 FT HEAD. - 1/2 HP -120V/1. CONTROL PANEL SHALL HAVE AUXILIARY CONTACTS TO TIE HIGH LIQUID LEVEL ALARM TO BUILDING MANAGEMENT SYSTEM.
P-19			½"	-	3"	3"	2"	AO SMITH	BTH-300A	ASME CONSTRUCTED, POWER DIRECT VENTING, NATURAL GAS HOT WATER HEATER WITH 96% THERMAL EFFICIENCY WITH STORAGE CAPACITY OF 119 GALLONS; AN INPUT RATING OF 300,00 BTUH, A RECOVERY RATING OF 436 GALLONS PER HOUR AT 80°F RISE AND A MAXIMUM HYDROSTATIC WORKING PRESSURE OF 160 PSI. WATER HEATER SHALL HAVE: MODULATING GAS BURNER, NON-SACRIFICIAL, MAINTENANCE FREE POWERED ANODES, SEAMLESS GLASS-LINED STEEL TANK CONSTRUCTION, FOAM INSULATION, AND DOWN-FIRED POWER BURNER. CONTROL SHALL BE AN INTEGRATED SOLID-STATE TEMPERATURE AND IGNITION CONTROL DEVICE WITH INTEGRAL DIAGNOSTICS, GRAPHIC USER INTERFACE, FAULT HISTORY DISPLAY, AND SHALL HAVE DIGITAL TEMPERATURE READOUT. WATER HEATER SHALL BE COMPLETE WITH: ASME RATED T&P RELIEF VALVE, BRASS DRAIN VALVE, CONCENTRIC VENT KIT, AND CONDENSATE NEUTRALIZATION KIT. ELECTRICAL: 120V/1 Ø /60Hz., 5.0 AMPS.
P-20			-	-	-	¾"	-	TACO	003-B4	LOW-LEAD COMPLIANT, NSF 61, BRONZE, SELF-LUBRICATING, HOT WATER RECIRCULATION PUMP. FLOW RANGE: 0-7 GPM. HEAD RANGE:0-4.5 FEET. PUMP MAXIMUM WORKING PRESSURE 125 PSI AND MAXIMUM OPERATING TEMPERATURE 220°F. PROVIDE TACO 563-2 TEMPERATURE AQUASTAT. PROVIDE DISCONNECT SWITCH. ELECTRICAL: 120V/1 Ø/60Hz., 0.43 AMPS, 3250 RPM, AND 1/40 HP.
P-21			-	-	-	¾"	-	AMTROL	ST-12C	DEEP DRAWN EXPANSION TANK WITH TANK VOLUME OF 6.4 GALLONS AND AN ACCEPTANCE VOLUME OF 3.2 GALLONS. TANK SHALL BE ANSI/NSF 61 FOR POTABLE WATER USE AND SHALL BE ASME RATED. MAXIMUM OPERATING TEMPERATURE 200°F AND MAXIMUM WORKING PRESSURE 150PSI
P-22			3"	-	-	-	-	WATTS	RD-270	SCUPPER DRAIN WITH ANGLE GRATE. EPOXY COATED CAST IRON BODY WITH FLASHING CLAMP. ROOF DRAIN SHALL BE COMPLETE WITH VANDAL-PROOF GRATE. ROOF DRAIN IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-23			3"	1½"	-	-	-	WATTS	FD-100-M	VANDAL-PROOF, EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES, ADJUSTABLE SQUARE HEEL-PROOF NICKEL BRONZE STRAINER, AND 3" NO HUB OUTLET. FLOOR DRAIN SHALLBE COMPLETE WITH 6"x6" STRAINER , SEDIMENT BUCKET, AND TRAP SEAL.
P-24			4"	2"	-	-	-	ZURN	Z-1901	SANI-FLOR RECEPTOR, 12" x 12" x 8" DEEP CAST IRON BODY AND SQUARE SLOTTED MEDIUM-DUTY ½ GRATE, WHITE ACID RESISITING PORCELAIN ENAMEL INTERIOR AND TOP, 3" OUTLET.
P-25			4"	2"	½"	-	-	ZURN	Z-1901	SANI-FLOR RECEPTOR, 12" x 12" x 8" DEEP CAST IRON BODY AND SQUARE SLOTTED MEDIUM-DUTY GRATE, WHITE ACID RESISTING PORCELAIN ENAMEL INTERIOR AND TOP, 3" OUTLET, AND TRAP SEAL.
P-26			3"	½"	-	-	-	ZURN	Z-415	FLOOR DRAIN, DURA COATED, 7" ROUND NICKEL BRONZE TYPE "I" STRAINER WITH RAISED FLANGE, 3" OUTLET.
P-27			6"	-	6"	-	-	WATTS	957OSY	LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTER WITH UL/FM OUTSIDE STEM AND YOKE RESILIENT SEATED GATE VALVES. ASSEMBLY SHALL CONSIST OF TWO INDEPENDENT TORSION SPRING CHECK MODULES, A DIFFERENTIAL PRESSURE RELIEF VALVE, AND TWO DRIP TIGHT SHUT-OFF VALVES. SHUT-OFF VALVES, CHECK MODULES, AND RELIEF VALVE SHALL BE CONTAINED WITH A SLEEVE ACCESSIBLE SINGLE HOUSING WITH GROOVE END CONNECTIONS. TYPE 304 STAINLESS STEEL HOUSING AND SLEEVE. EPDM, SILICONE AND BUNA-N ELASTOMERS. NORYL AND STAINLESS STEEL TORSION SPRING CHECKS WITH REVERSIBLE SILICONE OR EPDM CHECK DISCS. BRONZE BODY NICKEL PLATED TEST COCKS. STAINLESS STEEL PINS, FASTENERS, AND SPRINGS. TEMPERATURE RANGE: 33°F TO 140°F. 175 PSI MAXIMUM WORKING PRESSURE. THE DEVICE SHALL BE APPROVED BY THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA.
P-28			-	-	8"	-	-	WATTS	757DCDAOSY	DOUBLE CHECK DETECTOR ASSEMBLY CONSISTING OF TWO INDEPENDENT CHECK MODULES WITHIN A SINGLE HOUSING, SLEEVE ACCESS PORT, FOUR TEST COCKS AND TWO DRIP TIGHT SHUT-OFF VALVES. CHECK MODULES SHALL BE REMOVABLE AND SERVICABLE WITHOUT THE USE OF SPECIAL TOOLS. HOUSING SHALL BE CONSTRUCTED OF 304 SCHEDULE 40 STAINLESS STEEL PIPE WITH GROOVED END CONNECTIONS. CHECK MODULES SHALL HAVE REVERSIBLE ELASTOMER DISCS. THE BYPASS ASSEMBLY SHALL CONSIST OF A METER, A DOUBLE CHECK BACKFLOW ASSEMBLY AND REQUIRE TEST COCKS. TEMPERATURE RANGE: 33°F TO 140°F. MAXIMUM WORKING PRESSURE: 175 PSI. THE DEVICE SHALL BE APPROVED BY THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA. COMPLETE WITH UL/FM OUTSIDE STEM AND YOKE RESILIENT SEATED GATE VALVES.
P-29			6"	-	-	-	-	OATEY	43908	PVC BACKWATER VALVE WITH PVC BODY, PVC FLAPPER AND THREADED COVER. PLUMBING CONTRACTOR TO PROVIDE PVC PIPE EXTENSION FROM DEVICE SUCH THAT THE COVER IS FLUSH WITH FINISHED FLOOR. EXTENSION HEIGHT TO BE VERIFIED BY PLUMBING CONTRACTOR BASED ON FINAL LAYOUT OF PIPING SYSTEM.
P-30			-	-	3/4"	-	-	PENTEK	#10 BB - 3"	FILTER HOUSING AND LEAD, CYST, CHLORINE TASTE, AND ODOR REDUCTION FILTER. LARGE CAPACITY POLYPROPYLENE HOUSING AND CAP SUITABLE FOR HIGH FLOW APPLICATIONS, CERTIFIED BY NSF TO STANDARD 42, AND 10" HOUSING LENGTH WITH ACCEPTANCE OF 4-1/2" DIAMETER FILTER CARTRIDGES. FILTER LEAD REDUCTION CAPACITY OF 8,000 GALLONS, 2.5 GPM MAXIMUM FLOW RATE AND INITIAL PRESSURE DROP OF 7.0 PSI. FILTER IS TO HAVE BEEN TESTED TO NSF 42 AND NSF 53. LEAD REDUCTION SHALL BE BELOW 15 PART PER BILLION. TO BE USED FOR COLD SUPPLIES ONLY.
								KX TECHNOLOGIES	PB1 06-425-200-975	
P-31			REFER TO PLANS	REFER TO PLANS	-	-	-	ZURN	Z9A-NT	HIGH DENSITY POLYETHYLENE, SEAMLESS CONSTRUCTION, ACID NEUTRALIZATION TANK. REFER TO DRAWINGS FOR CAPACITY. TANK SHALL HAVE: INLET, OUTLET AND VENT CONNECTIONS; GASKETED, BOLT-DOWN COVER; STAINLESS STEEL HARDWARE; AND NEOPRENE GASKET. 5 GALLON TANKS SHALL BE COMPLETE WITH 50 POUNDS OF LIMESTONE CHIPS, 15 GALLON TANKS SHALL BE COMPLETE WITH100 POUNDS OF LIMESTONE CHIPS AND 30 GALLON TANKS SHALL BE COMPLETE WITH 200 POUNDS OF LIMESTONE CHIPS.
P-32		-	REFER TO PLANS	REFER TO PLANS	-	-	-	GUARDIAN	G1805	DECK-MOUNT EYEWASH, COMPLYING WITH AMERICAN NATIONAL STANDARD Z358.1, AND CLASSIFIED BY UL. FIXTURE SHALL BE OPERATED BY SWINGING HEAD ASSEMBLY OVER SINK. CHROME-PLATED BRASS SPRAY-HEAD ASSEMBLY WITH TWIN SOFT-FLOW EYEWASH HEADS AND DUST COVERS. EYE WASH SHALL BE PROVIDED WITH INTEGRAL FLOW CONTROL IN THE SPAY-HEAD, CHROME-PLATED BRASS ½" PLUG TYPE VALVE, STRAINER, MOUNTING SHANK AND THERMOSTATIC MIXING VALVE G3600LF.

TWIN TOWERS MIDDLE SCHOOL

Additions & Alterations

ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

112 Grand Avenue
Middletown, NY 10940

KG+D listen imagine build

KG+D ARCHITECTS, PC
285 MAIN STREET• MOUNT KISCO, NEW YORK 10549
P: 914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1272 GerardAssociates.com

GA22017-A

NY SED PROJECT CONTROL NO.
44-10-00-01-0-001-041

CONSTRUCTION DOCUMENTS

Professional Seal

No.	Date	Issue
4	02/16/2023	ADDENDUM #5
3	12/14/2023	ISSUE FOR BID
2	04/14/2023	NYSED ISSUE
1	09/08/2022	SCHEMATIC DESIGN

Sheet Title

PLUMBING:
SCHEDULES

Job No.	Date
2021-1087	09/08/2022
Scale: AS NOTED	Drawn / Checked: BH/DC SZ

Sheet Number

P701