ADDENDUM NO. 1

to

CONTRACT DOCUMENTS

for

ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL AND WILLIAM DAVIES MIDDLE SCHOOL

for the

HAMILTON TOWNSHIP SCHOOL DISTRICT

MAYS LANDING, ATLANTIC COUNTY, NEW JERSEY

Issued: March 5, 2019

FVHD PROJECT #4937B /NJDOE #1940-060-18-1000 **Shaner Memorial Elementary School**, 5801 Third St., Mays Landing, NJ 08330

FVHD PROJECT #4937C /NJDOE #1940-120-18-1000 **William Davies Middle School**, 1876 Dr. Dennis Foremen Dr., Mays Landing, NJ 08330

FRAYTAK VEISZ HOPKINS DUTHIE, P.C.

Architects/Planners

1515 Lower Ferry Road Trenton, New Jersey 08618

John J. Veisz, AIA, CSBA William D. Hopkins III, AIA, LEED AP George R. Duthie, Jr., AIA, PP No. 21Al00866900 No. 21Al01706000 No. 21Al01299200

John J. Veisz (AIA, CSBA)

No. 21Al00866900

GILLAN & HARTMANN, INC.

Consulting Engineers

P.O. Box 345, Valley Forge, PA 19481-0345

M. Steven Gillan, P.E.

No. 24GE4470000

INTENT

This Document supersedes all conflicting and contrary information in said Contract Documents. Said documents are hereby amended in certain particulars as described herein after. Unless specifically noted or specified hereinafter all work shall conform to the applicable provisions of the Contract Documents. Bidders shall acknowledge receiving this document on the Bid Proposal Form.

This Addendum includes fifteen (16) pages and the following:

- 1. Pre-Bid Meeting Sign-In Sheet (2-pages).
- 2. Addendum No. 1 (MEP Portion) as prepared by Gillan and Hartmann, Inc., dated 03/05/2019 (4-pages).
- 3. Revised Bid Proposal Forms:
 - a. J. Shaner ES Contract No.'s.: B3 and B4.
 - b. W. Davies MS Contract No's.: C1, C3 and C5.
- 4. New Specification Sections: 06400, 08211, 08700, 10100.
- 5. Revised Drawings:

Joseph C. Shaner Elementary School, FVHD-4937B:

- a. Árchitectural: G001, A100, A101, A107, A109, A109a, A110, A110a, A111, A111a, A201, A201a, AD1-A01, AD1-A02.
- b. Electrical: AD1-E01 through AD1-E03.

William Davies Middle School, FVHD-4937C:

- a. Architectural: A102.
- 6. New Drawings:

Joseph C. Shaner Elementary School, FVHD-4937B:

a. Architectural: A001a

William Davies Middle School, FVHD-4937C:

a. Architectural: A001a, A102a, A104a, AD1-01.

CLARIFICATION(S)

1. The Hamilton Township School District strives to engage the successful bidders in a Project Labor Agreement (PLA), which is a contract to be executed in connection with large, complex, public works construction projects whereby signatories to the agreement consent to forego strikes, work stoppages or job actions and provide a guaranteed flow of skilled labor. In exchange, a set schedule of wages, work hours and work rules are established for all non-union and union contractors. This agreement shall be written in a manner to accommodate non-traditional union practices so as to welcome diversity to the work site and promote public policy.

REFER TO DRAWINGS

The following Drawings and/or Sketches are attached to this Addendum:

DRAWING NO. TITLE

Joseph C. Shaner Elementary School, FVHD-4937B:

G001 TITLE SHEET AND DRAWING INDEX

A001a PHASING PLAN

A100 SECURITY VESTIBULE

Joseph C. Shaner Elementary School, FVHD-4937B (continued):

A101	SECURITY VESTIBULE
A107	FLOOR PLAN CORRIDOR CARPET REPLACEMENT & TREAD/RISER
	REPLACEMENT
A109	DEMOLITION PLAN & NOTES BASE BID - BLOCK C, BLOCK D1, BLOCK D2
A109a	DEMOLITION PLAN & NOTES ALTERNATE BID - BLOCK C, BLOCK D1
A110	FLOOR PLAN & NOTES BASE BID - BLOCK C, BLOCK D1, BLOCK D2
A110a	FLOOR PLAN & NOTES ALTERNATE BID - BLOCK C, BLOCK D1
A111	REFLECTED CEILING PLAN BASE BID - BLOCK C, BLOCK D1, BLOCK D2
A111a	REFLECTED CEILING PLAN ALTERNATE BID - BLOCK C, BLOCK D1
A201	ELEVATIONS
A201a	ELEVATIONS ALTERNATE BID
AD1-A01	DOOR SCHEDULE
AD1-A02	CASEWORK NOTES
AD1-E01	SINGLE LINE DIAGRAM
AD1-E02	MAIN ELECTRICAL ROOM A121
AD1-E03	PANEL SCHEDULE

William Davies Middle School, FVHD-4937C:

A001a	PHASING PLAN
A102	TOILET AND LOCKER ROOM NEW WORK PLANS
A102a	TOILET ROOM TILE LAYOUT
A104a	LOCKER ROOM ALTERATIONS - ALTERNATE BID
AD1-01	SITE PLAN

The following Drawings to be revised or corrected as follows:

DRAWING NO. CHANGES AND CORRECTIONS

Joseph C. Shaner Elementary School, FVHD-4937B:

Joseph C. Shaher	Liementary School, 1 VIID-4937 B.
G001	Delete drawing G001 in its entirety and substitute with revised drawing G001, attached to this Addendum.
A100	Delete drawing A100 in its entirety and substitute with revised drawing A100, attached to this Addendum.
A101	Delete drawing A101 in its entirety and substitute with revised drawing A101, attached to this Addendum.
A107	Delete drawing A107 in its entirety and substitute with revised drawing A107, attached to this Addendum.
A109	Delete drawing A109 in its entirety and substitute with revised drawing A109, attached to this Addendum.
A109a	Delete drawing A109a in its entirety and substitute with revised drawing A109a, attached to this Addendum.
A110	Delete drawing A110 in its entirety and substitute with revised drawing A110, attached to this Addendum.

The following Drawings to be revised or corrected as follows:

DRAWING NO. CHANGES AND CORRECTIONS

Joseph C. Shaner Elementary School, FVHD-4937B (continued):

A110a	Delete drawing A110a in its entirety and substitute with revised drawing A110a, attached to this Addendum.
A111	Delete drawing A111 in its entirety and substitute with revised drawing A111, attached to this Addendum.
A111a	Delete drawing A111a in its entirety and substitute with revised drawing A111a, attached to this Addendum.
A201	Delete drawing A201 in its entirety and substitute with revised drawing A201, attached to this Addendum.
A201a	Delete drawing A201a in its entirety and substitute with revised drawing A201a, attached to this Addendum.
AD1-A01	Revise referenced drawing as indicated on drawing AD1-A01, attached to this Addendum.
AD1-A02	Revise referenced drawing as indicated on drawing AD1-A02, attached to this Addendum.
E002	Revise drawing as indicated on drawing AD1-E01, attached to this Addendum.
E201	Revise drawing as indicated on drawing AD1-E02, attached to this Addendum.
E600	Revise drawing as indicated on drawing AD1-E03, attached to this Addendum.

The following Drawings are new and added to the project as follows:

DRAWING NO. CHANGES AND CORRECTIONS

Joseph C. Shaner Elementary School, FVHD-4937B:

A001a Add new drawing A001a, as attached to this Addendum.

William Davies Middle School, FVHD-4937C:

A001a	Add new drawing A001a, as attached to this Addendum.
A102a	Add new drawing A102a, as attached to this Addendum.
A104a	Add new drawing A104a, as attached to this Addendum.
AD1-01	Add new drawing AD1-01, as attached to this Addendum.

PROPOSAL FORM

Delete the Bid Proposal Forms B3, B4, C1, C3 and C5 in their entirety and substitute with the enclosed revised Bid Proposal forms.

REFER TO SPECIFICATIONS

INDEX

Under Part - 2 General Construction Work, change the Section Titles to read, as follows:

09250	Gypsum Drywall
09510	Acoustical Ceilings
10675	High Rack Pallet Storage (W. Davies MS)
11000	General Requirements - Casework and Equipment Work
11011	Casework and Equipment

Under Part - 2 General Construction Work, add the following new sections which are attached to this Addendum:

06400	Architectural Woodwork, 6-pages.
08211	Wood Doors, 7-pages.
08700	Finish Hardware, 13-pages
10100	Dry Markerboards, 6-pages.

PART 1 - SECTION 01010 - SUMMARY OF WORK

<u>Page</u> <u>Paragraph</u>

01010-1 1.3, A Delete subparagraph A in its entirety and substitute with the following:

"The Projects consist of FVHD #4937B-Contracts B1 through B4 for the Renovations and Addition to the Joseph C. Chaner Memorial Elementary Schools, and, FVHD #4937B - Contract C1 through C5 for the Renovations and Alterations to the William Davies Middle School for the Hamilton Township School District, Board of Education, Atlantic County, New Jersey."

PART 1 - SECTION 01030 - ALTERNATE BIDS

Page Paragraph

01030-2 1.3, B Delete subparagraph B in its entirety and substitute with the following:

B. Alternate Bid No. D-GC-2: Electrically Operated Bleachers & Wall Padding

State the amount to be <u>added to</u> the base bid to provide and install the electrically operated bleachers in lieu of the manually operated bleachers and provide and install wall padding, as shown on various drawings and as indicated in various specification sections at the William Davies Middle School, FVHD-4937C.

1.3 Add the following new subparagraph:

C. Alternate Bid No. D-GC-3: Additional Twelve (12) Wood Doors & Hardware Replacement

State the amount to be <u>added to</u> the base bid to remove and replace twelve (12) solid core wood doors and associated door hardware at rooms A003 through A014 at the William Davies MS Locker Rooms. The

existing hollow metal door frames shall remain. The work shall include all removals, demolition, frame preparation and painting. Include in the alternate bid the amount of \$1,250.00 for door hardware (per opening) to be selected by the Architect, as shown on various drawings and as indicated in various specification sections at the William Davies Middle School, FVHD-4937C.

01030-3 1.5 Add the following new subparagraph:

C. Alternate Bid No. S-E-3: Emergency Panel - ESHA

State the amount to be <u>added to</u> the base bid to provide and install an emergency panel - ESHA in the Boiler Room. Include all associated feeder conduit(s), wiring, and additional appurtenances back to 125A emergency distribution panel in the main Electric Room, as shown on various drawings and as indicated in various specification sections at the Joseph C. Shaner Memorial Elementary School, FVHD-4937B.

1.6, A Change "Alternate Bid No. D-E-1: Electrically Operated Bleachers", to read "Alternate Bid No. D-E-1: Electrically Operated Bleachers & Wall Padding".

PART 1 - SECTION 01151 - UNIT PRICES

Page Paragraph

01151-1 1.2 Add the following Unit Price:

Additional door hardware replacement (includes removal of the existing door hardware).

\$ **1,250.00** per unit

PART 1 - SECTION 01800 - TIME OF COMPLETION AND LIQUIDATED DAMAGES

Page Paragraph

01800-3 1.2, E.11 Add the following subparagraph after #10:

- 11. Unless indicated otherwise, the following Milestone Numbers (MN) shall apply to all Trades / Contracts for both 4937B Joseph C. Shaner Memorial Elementary School and 4937C William C. Davies Middle School.
- 01800-4 1.2, J.1 Delete subparagraph (a) in its entirety and substitute with the following:
 - "a. 4937B Shaner School: Substantial Completion of Work at Main School Office and Entry Vestibule, New Canopy, Loading Dock, Roof and Flashing Related Work, Replacement of all HVAC Equipment above in Corridors and Related Exterior Wall Modifications, Electrical and Plumbing Work, Existing Sink Base Cabinet Demolition and Plumbing Rough-Ins., Corridor Floor and Stair Finish Replacement, Interior Electrical Panel Work, Exterior Generator placement, Concrete Pad, Fencing, Transfer Switch and Electrical Conductor Work, Fire Alarm Work.

Add the following subparagraph after (a):

- "b. 4937C Davies School: Substantial Completion of Security Window Work at Main School Office and Entry Vestibule, Gang Toilet and Locker Room Renovations, New Gas Piping on Existing Roofs, Gymnasium Renovations including Related General Construction, HVAC, Plumbing and Electrical Work, Roof and Flashing Related Work.
- "c. 4937C Davies School: Replacement of all HVAC Equipment above Corridors and Classroom Ceilings, Replacement of HVAC units in Classrooms B102, 103, 106, 144, 145, 146, 149, 152, 157, 164, 218, 223, 224, 228, 238, 239, 241 and Associated Ceiling Finish, Exterior Wall Modifications, Electrical and Plumbing Work, at a Minimum. (Rooms Facing Exterior Courtyards).

<u>Clarification</u>: It is the intent of the Contract Documents to complete as many Classroom HVAC Unit Removals and Replacements as possible prior to August 28th. Classroom Units not completed by this date will be required to be removed and replaced during second shift, school holidays and weekends. All trades / Contracts are mutually responsible to coordinate the Contract Work Schedule with the HVAC Contractor's equipment replacement schedule.

PART 2 - SECTION 04200 -UNIT MASONRY

<u>Page</u> <u>Paragraph</u>

04200-1 1.2, B Add the following new subparagraph:

9. Bond Beams

04200-14 Add the following new paragraph:

2.11 MASONRY LINTELS

- A. General: Provide one of the following:
 - 1. Masonry Lintels: Prefabricated or built-in-place masonry lintels made from bond beam CMU's matching adjacent CMU's in color, texture, and density classification, with reinforcing bars placed as indicated and filled with coarse grout. Cure precast lintels before handling and installing. Temporarily support built-in-place lintels until cured.

04200-22 Add the following new paragraph:

3.13 LINTELS

- A. Provide masonry lintels where shown and wherever openings of more than 1'-0" are shown without structural steel or other supporting lintels. Provide precast or formed-in-place masonry lintels. Precast lintels shall be scored to simulate adjacent blockwork. Cure precast lintels before handling and installation. Temporarily support formed-in-place lintels.
- B. Provide minimum bearing of 8 inches at each jamb, unless otherwise indicated.

PART 2 - SECTION 05500 - METAL FABRICATIONS

Page Paragraph

- 05500-1 1.2, B Add the following new subparagraphs:
 - 3. Expansion joint covers.
 - 4. Slotted Channel Framing
- 05500-2 1.3 Add the following new subparagraph:
 - D. Furnish joint cover assemblies and accessories manufactured by one firm for each type of joint cover required.
- O5500-2 Add the following new paragraph:

1.5 **SUBMITTALS**

- A. Product Data: Submit manufacturer's specifications, anchor details and installation instructions for products used in miscellaneous metal fabrications, including paint products and grout.
- B. Shop Drawings: Submit shop drawings for fabrication and erection of miscellaneous metal fabrications. Include plans, elevations and details of sections and connections. Show anchorage and accessory items. Provide templates for anchor and bolt installation by others.
 - 1. Expansion joint covers and column covers: Include joint cover and column cover profiles, joints between joint cover sections, corners or intersection details, and installation in adjacent work.
 - a. Layout Drawings: Submit to the Architect Showing full extent of locations of joint and column cover assemblies including intersections, terminations and transitions to different surfaces or substrates.
- C. Where materials or fabrications are indicated to comply with certain requirements for design loadings, include structural computations, material properties and other information needed for structural analysis.
- D. Samples: Submit 2 sets of representative samples of materials and finished products as may be requested by Architect.
- E. Mill test reports: Reports indicating metals to be furnished comply with project requirements.
- 05500-7 2.3 Add the following new subparagraph:
 - C. Expansion Joint Covers and Control Joint Covers:
 - 1. Basis of Design: Provide extruded aluminum expansion and control joint covers as manufactured by Balco Inc., Wichita, Kansas, Tel. # 800.767.0082 / 316.945.9328; www.balcousa.com; or approved equal.

- a. Other acceptable manufacturers:
 - 1) CS Construction Specialties, Muncy, PA, Tel.# 800.233.8493, www.c-sgroup.com.
 - 2) MM Systems, Pendergrass, GA, Tel.# 800.241.3460, www.mmsystemscorp.com.
 - 3) Gordon Interior Specialties Division, Bossier, LA, Tel. # 800.747.8954, www.gordon-inc.com.
 - 4) Or approved equal.
- b. Aluminum Finish: Provide clear anodized finish or as selected by the Architect to suit adjacent construction conditions, finishes and colors.
- 2. Provide type and size where shown on drawings, or as required at all building areas to receive expansion joint and column covers. Where used in rated construction, provide fire rated units.
 - a. Submit to the Architect a complete layout drawing indicating all locations of expansion joint and column covers, type, size and detailed construction conditions.
- 3. Do not proceed with fabrication and/or installation until you receive Architect's approval.
- 4. Provide assemblies including manufacturer's available anchors, hardware and accessories.
- D. Slotted Channel Framing: Cold-formed metal box channels (struts) complying with MFMA-4., as manufactured by Unistrut Corp., Wayne, MI, Tel.# 800.521.7730; or approved equal.
 - 1. Size of Channels: 1-5/8 by 1-5/8 inches (41 by 41 mm).
 - 2. Material: Galvanized steel, ASTM A 653/A 653M, with G90 (Z275) coating; 0.108-inch (2.8-mm) nominal thickness.
 - 3. Material: Cold-rolled steel, ASTM A 1008/A 1008M, commercial steel, Type B, hot-dip galvanized after fabrication.
 - 4. The GC is responsible to provide support for conduit, mechanical piping, etc.
 - 5. The GC is responsible to coordinate with all Contractors.
 - 6. The GC shall provide shop drawings, signed / sealed drawings by a NJ Professional Engineer and address all structural loads (coordinated with other Contractors), seismic requirements, connections, etc.

PART 2 - SECTION 06400 - ARCHITECTURAL WOODWORK

Add new Section 06400, as attached to this Addendum.

PART 2 - SECTION 07600 - FLASHING, SHEET METAL AND ROOF ACCESSORIES

Page Paragraph

07600-1 1.2, A Add the following new subparagraph:

6. Metal Roof Clip System.

07600-7 Add the following new paragraph:

2.10 Metal Roof Clip System

- A. Provide "S-5! Metal Roof Clip System", as manufactured by Metal Roof Innovations, Ltd, Tel. 888.825.3432, www.S-5.com.; or approved equal.
 - 1. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Alpine, Tel. #888-766-4273, www.alpinesnowguards.com
 - b. Berger Building Products, Inc., Feasterville, PA., Tel.# 800.523.8852, www.bergerbuildingproducts.com.
 - c. Sno Gem, McHenry, IL, Tel.# 888.766.4367, www.snogem.com.
 - d. Or approved equal.
 - 2. Provide stainless steel components.
 - 3. Provide clips to suit indicated roofing system.
 - 4. Provide finish paint coating as selected by the Architect to match roofing panels.

PART 2 - SECTION 08110 - HOLLOW METALWORK

<u>Page</u>	<u>Paragrap</u>	<u>oh</u>
08110-1	1.2, A	Add "frames" before the word borrow lite.
08110-3	2.4	Add the following new subparagraphs:

- D. Finish Hardware Preparation: Prepare frames to receive finish hardware in accordance with final Finish Hardware Schedule and templates provided by hardware supplier. Comply with applicable requirements of ANSI A115 series specifications for door and frame preparation for hardware.
- E. Reinforce frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be done at project site.
- F. Locate finish hardware as indicated on final shop drawings or, if not indicated, in accordance with "Recommended Locations for Builder's Hardware", published by Door and Hardware Institute.

- 08110-3 2.5, A Add the following new subparagraphs:
 - 3. Fabricate frames with mitered and welded corners.
- 08110-3 2.5 Add the following new subparagraph:
 - B. Hardware reinforcing shall be as follows:
 - 1. All frames are to be mortised reinforced, drilled and tapped in factory for all template mortise hardware, in accordance with "Approved" Finish Hardware Schedule and templates as provided by the Hardware Supplier. Where surface mounted hardware is to be applied, all frames shall have reinforcing plates.
 - 2. Reinforcement plates shall be as follows:
 - a. Hinge Preps:
 - 1) Masonry: For "F" Series: 7 gauge, minimum.
 - 2) Metal Śtud/Drywall: For "DW" Series: 7 gauge, minimum.
 - b. Strike Preps:
 - 1) Masonry: For "F" Series: 12 gauge, minimum.
 - 2) Metal Stud/Drywall: For "DW" Series: 12 gauge, minimum.
 - c. Closure Reinforcement: All Series 12 gauge, minimum.
 - d. Surface mounted hardware: All Series 12 gauge, minimum.
 - 3. Base anchors for frames to be installed in masonry and drywall wall and partition assemblies, shall be adjustable type, shipped loose and to be 14 gauge, minimum.
 - 4. Jamb Anchors:
 - a. For "F" Series frames in masonry walls provide adjustable wire type anchors (0.156" dia.), or strap type anchors (16 gauge), and "DW" Series frames in metal stud / drywall walls field adjustable compression anchors, provide quantities as follows:
 - 1) Frames up to 7'-6" in height: 3 per jamb.
 - 2) and one (1) adjustable base anchor per jamb.
 - b. At existing masonry wall opening to remain, provide "Butterfly Existing Wall Anchors", 18 gauge galvannealed steel, provide quantities as follows:
 - 1) Frames up to 7'-6" in height: 3 per jamb.
 - 2) and one (1) adjustable base anchor per jamb.
 - 5. Reinforce heads and jambs where indicated on drawings with 10 gauge channel, continuously welded to frame.

PART 2 - SECTION 08211 - WOOD DOORS

Add new Section 08211, as attached to this Addendum.

PART 2 - SECTION 08331 - ROLLING COUNTER FIRE SHUTTER (J.C. SHANER ES)

Page	Paragraph
<u> </u>	

08331-3 2.2 Add the following new subparagraph:

G. Countertop: Integral 14 gauge AISI 300 series stainless steel formed shape; No. 4 finish.

PART 2 - SECTION 08700 - FINISH HARDWARE

Add new Section 08700, as attached to this Addendum.

PART 2 - SECTION 09250 - GYPSUM DRYWALL

<u>Page</u>	<u>Paragraph</u>	1
09250-1	1.2, B	Add the following new subparagraph:
		5. Exterior gypsum core sheathing and accessories.
09250-3	2.1	Add the following new subparagraph:
		 E. Gypsum Core Sheathing: 1. Georgia-Pacific Corp. 2. United States Gypsum Co. (USG) 3. Continental Building Products 4. CertainTeed Gypsum. 5. Or approved equal
09250-4		Add the following new paragraph:

2.7 GYPSUM CORE SHEATHING SYSTEM

A. Manufacturer:

- 1. The following system indicated, is the "Basis of Design", other manufacturer's will be considered, provided they comply with AIA A 201 and Section 00800:
 - a. Basis of Design: "Dens-Glass Gold, Firestop Type X"; Georgia-Pacific Corp.; or approved equal.
 - b. Subject to compliance with requirements of the Contract Documents, manufacturers offering products which may be incorporated in work include the following:
 - 1) "Securock Glas-Mat Sheathing, Firecode Core Type "X"; by United States Gypsum Comp.
 - 2) Exp Sheathing", by National Gypsum.
 - 3) Or approved equal.

- B. Sheathing: Gypsum sheathing, complying with ASTM C1396.
 - 1. Type X, noncombustible gypsum sheathing board core with fiberglass mattes both sides.
 - a. Fire resistance: ASTM E136
 - 1) Flame Spread: 0, as per ASTM E84.
 - 2) Smoke Developed: 0, as per ASTM E84.
 - 2. Edges and ends: Manufacturer's standard.
 - 3. Thickness: 5/8 inch.
 - 4. Size: 4 feet by 9 feet, or 4 feet by 10 feet, as required for coordination with framing.
 - 5. Fasteners: ASTM C 954; self-drilling, self-tapping, bugle head galvanized or cadmium-plated steel screws.
 - 6. Joint tape: Manufacturer's approved types, self-adhering fiberglass mesh compatible with sheathing panels.
 - 7. Ioint Sealant:
 - a. Types approved by manufacturer of sheathing panels, for long term joint protection.
 - 1) Basis of Design: "Elmer's Siliconized Acrylic Lates", Borden, Inc.; or approved equal.
 - 2) Warranty: **Twenty (20) year** manufacturer's standard warranty.
 - 8. Provide miscellaneous materials as produced or recommended by manufacturer of gypsum sheathing products.
 - 9. Warranty: Manufacturer's standard warranty against material defects.
 - a. Warranty period: **Five (5) years**, start at approved date for substantial completion.
- C. Silicone Emulsion Sealant: Product complying with ASTM C834, compatible with sealant tape and gypsum sheathing, recommended by manufacturers of both sheathing and tape for use with glass-fiber sheathing tape and for covering exposed fasteners.
 - 1. Product: Subject to compliance with requirements, provide Elmer's Siliconized Acrylic Latex Caulk; Borden, Inc.; or approved equal.
 - a. Warranty: **Twenty (20) year** manufacturer's standard warranty.

3.8. GYPSUM SHEATHING INSTALLATION

- B. General: Install gypsum sheathing board according to manufacturer's instructions and GA-253 "Application of Gypsum Sheathing."
- C. Install tongue-and-groove gypsum sheathing horizontally with long edges at right angles to studs with V-grooved edge down and tongue edge up. Interlock tongue with groove to bring long edges in contact with edges of adjacent board without forcing. Abut ends of boards over centers of studs and stagger end joints. Fasten gypsum sheathing board to framing with self-drilling, buglehead screws, as follows:
- D. Install square end and edged sheathing vertically with long edges parallel to, and centered over, studs. Install solid blocking where end joints do not bear against framing sills or track. Fasten gypsum sheathing board to perimeter framing and to each stud with self-drilling, bugle-head screws, located a minimum of 3/8 inch (9.5 mm) from ends and edges of board units, as follows:
 - 1. Space fasteners to comply with manufacturer's recommendations.
- E. Sheathing Tape: Apply sheathing tape to joints in sheathing; overlap tape by not less than the tape width at joint intersections.
 - 1. For glass-fiber tape, apply approximately a 3/8-inch (9.5-mm) bead of siliconized emulsion sealant to tapes along joints and embed sealant into tapes along their entire surface with a trowel. In addition, apply sealant with a trowel to each exposed fastener so that fasteners are completely covered.

PART 2 - SECTION 10100 - DRY MARKERBOARDS AND EXHIBITION BOARDS (W. DAVIES MS)

Add new Section 10100, as attached to this Addendum.

PART 2 - SECTION 10500 - METAL LOCKERS (W. DAVIES MS)

Page Paragraph

10500-1 1.1 Add the following new subparagraph:

- B. Related Sections:
 - 1. Section 01030 Alternate Bids.
- 1.2, B Add the following new subparagraph:
 - 4. Locker Room Benches.

2.8 LOCKER ROOM BENCHES

- A. Manufacturer's standard units with laminated hardwood tops approximately 9-1/2" wide by 1-1/4" thick, in lengths as indicated, and all corners rounded and sanded.
 - 1. Apply manufacturer's standard clear coating to bench tops and baked enamel finish to pedestals.
- B. Pedestals: (Extra Heavy Duty) Base shall be bell shaped casting 7-3/4" diameter, threaded for 1-1/2" pipe with provisions for concealed fasteners. Provide 1/2" x 5" lag screw and lead shield for fastening to subfloor. Top flange shall be 1-1/2" pipe flange 4-1/2: in diameter with provisions for 4 wood screws for fastening to bench top. Pedestal column shall be standard 1-1/2" steel pipe threaded on both ends to provide at least 1 inch height adjustment. Overall height of pedestal shall be 16-1/4 inches. Provide baked epoxy finish on pedestal to color as selected by Architect.

PART 2 - SECTION 11030 - ATHLETIC EQUIPMENT AND ACCESSORIES (W. DAVIES MS)

<u>Page</u>	Paragraph	<u>1</u>
11030-1	1.1, B	Add the following new subparagraph:
		3. Wall padding (Alternate Bid D-GC-2).
11030-2	1.2, E	Add the following new subparagraph:
		2. Wall Padding: Materials shall be Class A rating, certified fire-retardant in accordance with the following:
		a. Flame spread: less than 25, ASTM E84.b. Smoke developed: less than 450, ASTM E84.
11030-4	2.1	Add the following new subparagraph:
		F WALL PADDING

E. WALL PADDING

- 1. SAFPAD Model No. 00570-0XXB, Class A rating, certified fire-retardant wall padding with 1" nailing margin to top and bottom for securing panels to the wall; or approved equal.
 - a. Flame spread: less than 25, ASTM E84.
 - b. Smoke developed: less than 450, ASTM E84.
 - c. Meets ASTM F2440 Impact Protection.
- 2. Wall wainscot shall consist of 2'-0" wide panels x 6' high.
 - a. Panels shall be constructed of flame retardant, 2" thick open cell neoprene foam filler with a density of 5.5 lb./sq. ft. and an Indentation Force Deflection (IFD) of 25-45 lbs.

- 1) Interior foam shall be cemented to 7/16" OSB board to minimize warping.
- 2) Entire face of panel, including the 1" nailing margins, shall be upholstered in heavy 14 oz. fire retardant vinyl laminated, high tensile, polyester base fabric material with leather-like embossed finish.
- 3. Colors shall be selected by the Architect from manufacturer's available full range of colors.
- 4. Provide required cutouts for Plumbing, HVAC, and Electrical wall mounted equipment, panels, etc.

END OF ADDENDUM NO. 1



www.fvhdpc.com John J. Veisz, AlA, CSBA, RCI William D. Hopkins III, AlA, LEED AP George R. Duthie, AlA, PP

Trenton. New Jersey 08618 Corporate Office: 1515 Lower Feiry Road fax: 609.883.2694 tel: 609 883,7101

140 Whitaker Avenue, Suite 300 Mont Clare Pennsylvania 19453 tel: 610.933 6289 fax: 610.933 6294 Pennsylvania:

PROJECT NAME:

Davies MS for Hamilton Twp. SD (Atlantic Co.) Alts & Renovations to Joseph Shaner ES and

4937B-C FVHD PROJECT#:

DATE: Thursday 2/21/2019 @ 4:00 PM

PRE-BID MEETING SIGN-IN SHEET

REPRESENTATIVE NAME	COMPANY NAME & ADDRESS	CONTRACT			E-MAIL
	Som C. Honera Co	Hunc	215.355 7000	215855 7858	Kzv.:40,V=knC.Ko 16.6K = Co.N
PAUC	SURETY MECHANICAL	リセッエ	215-651-0531	856-875-1170 DAVE ®	DAVE ® SURETY MECHANICA
BavePowella	Powella Buildus the	25	corstei LoM	629-567-9388 1DE. HINNYA	societis en ments la vett
DENNIS PERMO	TALIAS CA	14046	SSC-794-2010	1318-251-28	856-794-2010 83-754-3187 Marked Alexantracul.
Tot De Kapes	MIT (bust	29	0hb6 892-258	856 7 68	M) S. Caustactorio
MAKE NEWDE	Russalerp	25	20-124-28	808-411-288	WSB-417-7008 RUSSISCHOLATION. CM

SASON & SANCEURAND	dave & P. Harwall Constraction Mer	estimating lice lecturice bmailicon	Sing a Levy Confrogor. Com	bob, dva. 11 & comant. net		
		- Il Innov		10 10		
7-	5	5 + 4	25-			
5000	609 6046-	856 5007 0899	856- 547-	856- 273- 6200	 autonomina (1900)	
340RE ENGLING CONTURES 609- 600 S. EZG HOMBER 12 567- 17MMMM 104 USCHOST 6404	206 Warnell const	Leeway Electric	Le y Casmon	Duall 3/ds. Restoration mt. Laurel, no Ofusy		
SASW ZENWA	LZ. Whenest	Al Coste	Sina ley	BOB FFKWSW		

ADDENDUM NO. 1 (MEP portion) (G&H ADDENDUM NO. 1)

to the

SPECIFICATIONS AND DRAWINGS

for the

ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL **ELEMENTARY SCHOOL & ALTERATIONS** AND RENOVATIONS TO WILLIAM DAVIES MIDDLE SCHOOL

for the

HAMILTON TOWNSHIP SCHOOL DISTRICT

Located at

JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL: 5801 3RD ST., MAYS LANDING, NJ 08330

DAVIES MIDDLE SCHOOL: 1876 DENNIS FORMAN DR., MAYS LANDING, NJ 08330



G&H: 2018-204/205

- 1. MEP Addendum No. 1 dated March 05, 2019, is issued as part of the Contract Documents, dated February 15, 2019, to inform and/or specify changes, which take precedence over information contained in the original Contract Documents. Unless otherwise specifically noted or specified hereinafter, or shown on drawings or schedules accompanying this Addendum, all work required by this Addendum shall conform to the applicable provisions of the Contract Documents. It shall be the responsibility of the Bidder to include in their bid any cost implications of this Addendum. All Bidders are to indicate on the form of proposal submitted by them, acknowledgment of receipt and compliance with the contents of this change to the Contract Documents.
- 2. Any provision in any of the Contract Documents which may be in conflict or be inconsistent with the contents of this Addendum shall be void to the extent of such conflict or inconsistency.

HVAC TRADE 3.

3.1 **CLARIFICATIONS:**

- 3.1.1. Preconstruction water testing indicated on the Removal Drawings are required to include reports for system water flow in gallons per minute and pressure in feet of head.
- 3.1.2. Supply and return piping to the console style heat pumps are shown with one pipe for clarity purposes.
- 3.2 ERRATA IN THE SPECIFICATIONS
 - 3.2.1. None.
- 3.3 ERRATA ON THE DRAWINGS (SHANER ES)
 - 3.3.1. None.
- 3.4 ERRATA ON THE DRAWINGS (DAVIES MS)
 - 3.4.1. None.
- ELECTRICAL TRADE 4.
 - 4.1 ERRATA IN THE SPECIFICATIONS
 - 4.1.1. None.
 - 4.2 ERRATA ON THE DRAWINGS (SHANER ES)
 - 4.2.1. Drawing E002:
 - 4.2.1.1. Add a 480/277V, three-phase, four-wire, 200 amp rated, 10kAIC, 30 pole, main-lugs-only panelboard "ESHA" to be located in the Basement Boiler Room (Basement Boiler Room shown on Detail 2/E003 where "Boiler Room Panel "MDP" is located). Coordinate with the Owner's Representative and existing field conditions for the exact location of the panel. Provide ten 20-amp single pole circuit breakers in "ESHA" and

- spaces in the remaining 20 poles. Refer to Sketch AD1-E01 for additional requirements.
- Add a (4)#1,(1)#6G, 2" Conduit electrical feeder connected to the feed-4.2.1.2. through lugs in Panel "ESH" as required in this Addendum. Extend the feeder to the additional panel "ESHA" described in this Addendum. Extend the feeder through the building from the Main Electric Room and through concealed locations above the Corridor dropped ceilings to the 1950 Electrical Room (1950 Electrical Room is the Room where new panels "B" and "C" are shown on Detail 1/E003), and down through the floor (provide all required floor penetrations and fire rated sealing) into the Basement Level, and extend into the Boiler Room. Provide all required fire sealing to fire rated walls and floors.
- 4.2.1.3. Add a 10kVA rated, 480V primary and 120/240V secondary Mini Power Zone Transformer and Panel Substation "ESHB" (Basis of design is a Square-D catalog number MPZ10S40F or equal from Siemens or General Electric that is 12" Wide and 12" Deep to fit the location indicated on Sketch AD1-E02).

4.2.2. Drawing E003:

- 4.2.2.1. Add the requirement for a 120-volt power supply and branch circuit for the Security Vestibule Exit Doors (Located adjacent to the Main Office; refer to the Architectural Drawings). This 20 amp branch circuit shall extend from Panel "ESHB" as indicated on Sketch AD1-E03.
- Add a requirement for a 20 amp red faced quadraplex receptacle located in 4.2.2.2. the CST Office adjacent to the Data Rack in that Room (CST office is located across from the First Grade Classroom 121) and fed from Panel "ESHB" circuit #2 and fused disconnect as indicated on Sketches AD1-E03 and AD1-E01. Coordinate final receptacle location with the District.
- 4.2.2.3. Add a requirement for a 20 amp red faced quadraplex receptacle located in the Tech Office adjacent to the Data Rack in that Room (Tech Office is the room where Transfer Switch "TS1" is located) and fed from Panel "ESHB" circuit #3 as indicated on Sketch AD1-E03. Coordinate final receptacle location with the District.
- 4.2.2.4. Add a requirement for a 20 amp red faced quadraplex receptacle located in the Basement Heater Room adjacent to the Data Rack in that Room. (Basement Heater Room is shown on Detail 2/E003 at the plan upper left corner) and fed from Panel "ESHB" circuit #4 and fused disconnect as indicated on Sketches AD1-E01 and AD1-E03. Coordinate final receptacle location with the District.
- 4.2.2.5. Add a requirement for a 20 amp branch circuit to the new Main Fire Alarm Control Panel in the Main Electric Room and fed from Panel "ESHB" circuit #5 as indicated on Sketch AD1-E03.

4.2.3. Drawing E600:

- 4.2.3.1. Delete the requirement to feed the Main Fire Alarm Control Panel from ELSH circuit #2.
- 4.2.3.2. Add the requirement for feed-through lugs to the Panel Schedule "ESH" to feed panel "ESHA." Refer to Sketches AD1-E01 and AD1-E03 for additional requirements.

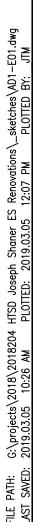
G&H: 2018-204/205

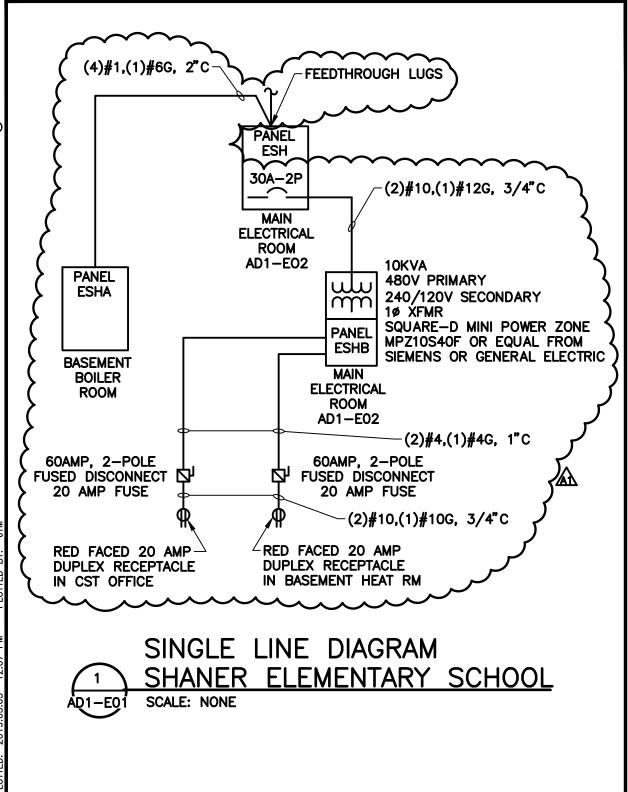
- 4.2.3.3. Add the panel schedule for "ESHB" to this drawing as indicated on Sketch AD1-E03.
- 4.2.3.4. Add a 30 amp, 480V, 2-pole circuit breaker in Panel "ESH" to feed the substation. Refer to Sketch AD1-E01 for additional requirements.
- 4.3 ERRATA ON THE DRAWINGS (DAVIES MS)

4.3.1. None.

END OF ADDENDUM 1

G&H: 2018-204/205





REVISES PLAN 1/E002.



Gillan & Hartmann, Inc.

MECHANICAL AND ELECTRICAL
CONSULTING ENGINEERS
610-935-0101 Fax: 610-935-7520
215-238-9510 609-347-1593 302-654-5959
rww.gillon-hortmonn.com : ghmdi@gillon-hortmonn.com
G&H Project No. 2018-204



Project Name

ALTERATIONS AND
RENOVATIONS TO
JOSEPH C. SHANER
MEMORIAL
ELEMENTARY SCHOOL

HAMILTON TOWNSHIP BOARD OF EDUCATION

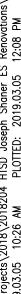
Project Location 5801 3rd ST MAYS LANDING, NJ 08330

Project Number
4937B
Project Date
03.05,2019
Checked By
DRH
Drawn By
JTM
Scale
NONE

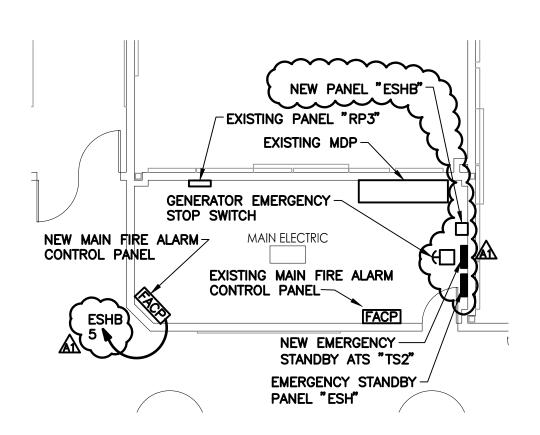
SINGLE LINE DIAGRAM

Revisions

AD1-E01



LAST



PARTIAL FIRST FLOOR PLAN ELECTRICAL **ROOM A121**

1/8" = 1'-0"

REVISES PLAN 1/E201.



Gillan & Hartmann, Inc.

hartmann.com : ghmail@gillan-hartn G&dH Project No. 2018—204



ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL **ELEMENTARY SCHOOL**

HAMILTON TOWNSHIP BOARD OF EDUCATION

5801 3rd ST MAYS LANDING. NJ 08330

4937B

03.05.2019

1/8"= 1'-0"

MAIN ELECTRICAL ROOM A121

Renovations_sketches\AD1-E03.dwg G:\projects\2018\2018204 HTSD Joseph Shaner ES SAVED: FILE PATH:

12:07 PM 2019.03.05

PLOTTED:

BASMENT HEATER ROOM RECEPT CST OFFICE DATA RECEPTACLE 20 amps located adjacent to the new receptacle. Then transition to (2)#10,(1)#10G, in 3/4"C from the fused LOAD SERVED SPARE SPARE SPARE SURFACE 10KAIC MOUNT: AIC: Š 20 WIRE SIZE **# #** GRD MLO **# #** COND **GENERAL PANEL DATA** 208Y/120V, 3PH, 4W 100A 1.0 BKR SIZE PHASE KVA TOTAL KVA 88888 CKT S. 19 9 œ 4 VOLT: PHASE LOAD 1.0 0.0 0.0 BUS: m 1.0 0.0 0.0 3.0 K **ESHB** to a wall mounted 2-pole, 60 amp fused disconnect fused at CKT 8 വ 0 BKR SIZE 88888 KVA 1.0 1.0 2 2 2 WIRE SIZE #12 #12 disconnect, on the load side, and wire to receptacle indicated GRD #12 #12 #12 0 8 8 3/4" 3/4" 3/4" MAIN FIRE ALARM CONTROL PANEL PANEL - SHANER ELEMENTAR) SECURTIY VEST. EXIT DOOR TECH OFFICE DATA RACK LOAD SERVED Provide (2)#4,(1)#4G in 1"C SPARE SPARE LOCATION: WORKROOM VEW NOTES

NOTES

REVISES DRAWING E600.



Gillan & Hartmann, Inc.

MECHANICAL AND ELECTRICAL

CONSULTING ENGINEERS

810-933-0101 FAX: 810-933-7220

213-238-9810 809-347-1893 302-884-5869

www.gillan-hartman.com gimel@pillan-hartmann.com GdH Project No. 2018-204

JOHN J. VEISZ, AIA, CSBA NJ - 21A003666900 | PA - RAD108198

WILLIAM D. HOPKINS III, AIA, LEED AP NJ-21AD1706000 | PA - RA012520X GEORGE R. DUTHIE JR., AIA, PP Willes D. 2/4

Fraytak Veisz Hopkins Duthie P.C.

ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL **ELEMENTARY SCHOOL**

HAMILTON TOWNSHIP BOARD OF EDUCATION

5801 3rd ST MAYS LANDING, NJ 08330

4937B 03.05.2019 DRH JTM NONE PANEL SCHEDULE

Hamilton Township School Distric

1-E03

ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT NO. B3 - ELECTRICAL WORK AT JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL

DPMC Classification: C047

Hamilton Township Board of Education 1876 Dr. Dennis Foreman Drive Mays Landing, NJ 08330

The undersigned, having familiarized himself with drawings, the specifications and other Contror Alterations and Renovations to George Babcock Road, Mays Landing, NJ 08330, togeth the requirements of the drawings and specificat Architects/Planners., hereby proposes to furnis Work and as follows: CONTRACT NO. B3 - ELECTRICAL WORK - Baschool, including applicable Allowances - Sections.			
school, including applicable Allowances - Sect Contract Documents, for the sum of:	ion 01020, in acco	ordance with th	ne requirem
		(\$	
If written amount differs from the numerical figure, only	the written amount wi	ll be accepted as	the correct bio
Alternate Proposal(s) shall be quoted as additions and shall be in accordance with the specification amount differs from the numerical figure, only the	ns for Alternate Bid	Work - Section	n 01030. If
ALTERNATE BIDS - SECTION 01030:	ADDITIONS	DEDUCTION	NO CHAI
Alternate Bid No. S-E-1: Add or Deduct Canopy Light Fixture		(_)
(Written)			
(Written) Alternate Bid No. S-E-2: Add or Deduct Alternate UV Classroom Location		(_)
Alternate Bid No. S-E-2: : Add or Deduct		(_)
Alternate Bid No. S-E-2: : Add or Deduct Alternate UV Classroom Location (Written) Alternate Bid No. S-E-3: Add		(_)
Alternate Bid No. S-E-2: Add or Deduct Alternate UV Classroom Location			_)

3. **UNIT PRICES - SECTION 01151:** Materials in Place

UNIT PRICES - ELECTRICAL WORK: Materials in Place.

Power outlet, (duplex or quadraplex), including outlet boxes and wiring. Receptacles will generally be connected to adjacent receptacle circuits.	\$ per unit
Wall mounted fire alarm strobe device.	\$ per unit
Wall mounted fire alarm speaker / strobe device.	\$ per unit
Welded wire mesh guard for wall mounted fire alarm strobe or horn / strobe device.	\$ per unit
Fire Alarm Pull Device, including outlet box and wiring	\$ per unit
Smoke Detector Device, including outlet box and wiring	\$ per unit
Heat Detector Device, including outlet box and wiring	\$ per unit
Duct Mounted Smoke Detector, including outlet box and wiring	\$ per unit
Carbon Monoxide Detector, including outlet box and wiring	\$ per unit
Temporary removal, support & reinstallation of 2'x4' light fixture including wiring	\$ per unit
Temporary removal, support & reinstallation of 1'x4' light fixture including wiring	\$ per unit
Temporary removal, support & reinstallation of 2'x2' light fixture including wiring	\$ per unit

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:	
•	(Firm Name)

received(initial)
received(initial)
received(initial)
received(initial)
the right is reserved by the Board of Education to accept or s bid may not be withdrawn for a period of sixty (60) days fro
(\$)
_ (Certified Check, Cashier's Check, or Bid Bond) is submitt
ents of the specifications.
nder the laws of the State of,
of , Cour
, and State of
Submitted,
,
if Bidder is a company)
GNATURE
r, if Bidder is a Corporation or LLC)
Name Title of Officer (if the Bidder is a Company)
p Code
/:(Firm Name)
tl s

ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT NO. B4 - COMBINED SINGLE OVERALL CONTRACT AT JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL

DPMC Classifications: C009 with C029, C030, C032, & C047

Hamilton Township Board of Education 1876 Dr. Dennis Foreman Drive Mays Landing, NJ 08330

	s Landing, NJ 08330
l.	The undersigned, having familiarized himself with the local conditions affecting the cost of the work, the drawings, the specifications and other Contract Documents, as in the Invitation to Bidders thereto, for Alterations and Renovations to George L. Hess Educational Complex (FVHD-4937A), 700 Babcock Road, Mays Landing, NJ 08330, together with all work incidental thereto, in accordance with the requirements of the drawings and specifications prepared by Fraytak Veisz Hopkins Duthie, P.C., Architects/Planners., hereby proposes to furnish all labor, materials and equipment required for all Work and as follows:
	<u>CONTRACT NO. B4 - COMBINED SINGLE OVERALL WORK - BASE BID:</u> All Work at the above referenced school, including applicable Allowances - Section 01020, in accordance with the requirements of Contract Documents, for the sum of:
	(\$ If written amount differs from the numerical figure, only the written amount will be accepted as the correct bid.
	THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:	
•	(Firm Name)

ALTERNATE PIDG. GEGTION CASO	4 D D I T C 1 1 2	DEDITORIO:	No sur
ALTERNATE BIDS - SECTION 01030:	<u>ADDITIONS</u>	<u>DEDUCTION</u>	NO CHA
Alternate Bid No. S-GC-1: Add Security Glazing / Fire Rated Security Glazing			
(Written)			
Alternate Bid No. S-GC-2: Add or Deduct		,	
Canopy		()	
(Written)			
Alternate Bid No. S-GC-3: Add or Deduct Alternate UV Classroom Location		()	
(Written)			
Alternate Bid No. S-H-1: Add or Deduct Alternate UV Classroom Location		()	
(Written)			
Alternate Bid No. S-E-1: Add or Deduct Canopy Light Fixture		()	
(Written)			
Alternate Bid No. S-E-2: : Add or Deduct Alternate UV Classroom Location		()	
(Written)			
Alternate Bid No. S-E-3: Emergency Panel - ESH	Α		
(Written)			

UNIT PRICES - GENERAL CONSTRUCTION: Materials in Place. Replacement of existing damaged or deteriorated metal decking \$ per sq. ft. Replacement of existing wet or deteriorated roof insulation board \$_____ per sq. ft. Replacement of existing damaged or deteriorated wood nailers/ blocking or framing, including removal of existing deteriorated wood, furnishing and installing new galvanized anchor bolts, expansion bolts at 4'-0" o.c. or nails through existing construction to remain: 2.90 per board ft. 2x4 for the above work \$ per lin. ft. a. 2x6 for the above work \$ per lin. ft. b. 2x8 for the above work \$ per lin. ft. c. d. 2x10 for the above work \$ per lin. ft. \$ ____ per lin. ft. 2x12 for the above work UNIT PRICES - PLUMBING & DRAINAGE: Materials in Place. 1-1/4" sanitary and vent pipe above ground \$ per lin. ft. 1-1/2" sanitary and vent pipe above ground \$_____ per lin. ft. 2" sanitary and vent pipe above ground \$_____ per lin. ft. 1/2" domestic hot & recirc. water pipe above ground with insulation \$_____ per lin. ft. 3/4" domestic hot & recirc. water pipe above ground with insulation \$_____ per lin. ft. 1" domestic hot & recirc. water pipe above ground with insulation \$_____ per lin. ft. 1/2" domestic cold water pipe above ground with insulation \$_____ per lin. ft. 3/4" domestic cold water pipe above ground with insulation \$_____ per lin. ft. \$ per lin. ft. 1" domestic cold water pipe above ground with insulation 1/2" domestic cold water pipe insulation \$ per lin. ft. \$_____ per lin. ft. 3/4" domestic cold water pipe insulation \$_____ per lin. ft. 1" domestic cold water pipe insulation 1-1/4" domestic cold water pipe insulation \$_____ per lin. ft. 1-1/2" domestic cold water pipe insulation \$_____ per lin. ft. 2" domestic cold water pipe insulation \$_____ per lin. ft. 1/2" domestic hot & recirc. water pipe insulation \$_____ per lin. ft.

3.

UNIT PRICES - SECTION 01151: Materials in place.

Submitted by:

(Firm Name)

UNIT PRICES - PLUMBING & DRAINAGE: Materials in Place - Continued

3/4" domestic hot & recirc. water pipe insulation	\$ per lin. ft.
1" domestic hot & recirc. water pipe insulation	\$ per lin. ft.
1-1/4" domestic hot and recirc. water pipe insulation	\$ per lin. ft.
1-1/2" domestic hot and recirc. water pipe insulation	\$ per lin. ft.
2' domestic hot and recirc. water pipe insulation	\$ per lin. ft.
Ball Valve, under 1"	\$ per unit
Ball Valve, 1"	\$ per unit
Ball Valve, 1-1/2"	\$ per unit
UNIT PRICES - HEATING AND VENTILATING: Materials in Place.	
Galvanized steel ductwork, no liner	\$ per lb.
Galvanized steel ductwork, with liner	\$ per lb.
Rigid duct insulation	\$ per sq. ft.
3/4" heating hot water piping	\$ per lin. ft.
1-1/4" heating hot water piping	\$ per lin. ft.
1-1/2" heating hot water piping	\$ per lin. ft.
2" heating hot water piping	\$ per lin. ft.
3" heating hot water piping	\$ per lin. ft.
3/4" heating hot water piping insulation	\$ per lin. ft.
1-1/4" heating hot water piping insulation	\$ per lin. ft.
1-1/2" heating hot water piping insulation	\$ per lin. ft.
2" heating hot water piping insulation	\$ per lin. ft.
3" heating hot water piping insulation	\$ per lin. ft.
Ball valve (Hydronic), under 1"	\$ per unit
Ball valve (Hydronic), 1"	\$ per unit
Ball valve (Hydronic), 1-1/4"	\$ per unit
Ball valve (Hydronic), 1-1/2"	\$ per unit
Ball valve (Hydronic), 2"	\$ per unit
Butterfly valve (Hydronic), 2-1/2"	\$ per unit

Submitted by:

UNIT PRICES - HEATING AND VENTILATING: Materials in Place - Continued Butterfly valve (Hydronic), 3" \$ per unit Balancing valve, 3/4" \$ per unit Balancing valve, 1" \$ per unit Balancing valve, 1-1/4" \$_____ per unit Balancing valve, 1-1/2" \$_____ per unit 3/4" Two way control valve with actuator \$_____ per unit 1" Two way control valve with actuator \$ per unit \$ per unit 1-1/4" Two way control valve with actuator 1-1/2" Two way control valve with actuator \$ per unit UNIT PRICES - ELECTRICAL WORK: Materials in Place. Power outlet, (duplex or quadraplex), including outlet boxes and wiring. Receptacles will generally be \$ per unit connected to adjacent receptacle circuits. Wall mounted fire alarm strobe device. \$_____ per unit Wall mounted fire alarm speaker / strobe device. \$_____ per unit Welded wire mesh guard for wall mounted fire alarm strobe or horn / strobe device. \$_____ per unit Fire Alarm Pull Device, including outlet box and wiring \$_____ per unit Smoke Detector Device, including outlet box and wiring \$_____ per unit Heat Detector Device, including outlet box and wiring \$_____ per unit Duct Mounted Smoke Detector, including outlet box and wiring \$_____ per unit \$ per unit Carbon Monoxide Detector, including outlet box and wiring Temporary removal, support & reinstallation of 2'x4' \$ per unit light fixture including wiring

Submitted by:_	
	(Firm Name)

Temporary removal, support & reinstallation of 1'x4'

Temporary removal, support & reinstallation of 2'x2'

light fixture including wiring

light fixture including wiring

\$ _____ per unit

\$ _____ per unit

4.	Bidder hereby acknowled		_	•	(1 N	
	Addendum No. 1 , issu			ived		
	Addendum No, issu		rece	ived	(initial)	
	Addendum No. , issi Addendum No. , issi	red	rece	ived ived	(initial) (initial)	
	Addendum No, issi	ieu		iveu	(IIIIIaI)	
5.	In submitting this bid, it is to reject any or all bids, a days from the date set of	nd it is agre	ed that this bid r			
6.	Bid Security in the sum of				(\$)
	in the form of		(Ce	rtified Checl	k, Cashier's Check, or	Bid Bond) is
	submitted herewith in acc					
7.	The undersigned is an inc a par a cor	lividual (tnership (poration ())) under the lav	ws of the Sta	nte of	
	having principal office in					
	of					
			tfully Submitted,			
		respect	, casimeca,			
		Company	y Name, if Bidder is	a company)		
				a company)		
		BIDDER	R'S SIGNATURE			
		(Compan	y Officer, if Bidder i	s a Corporatio	n or LLC)	
	(Seal, if Corporation)	Drintad or	r Typed Name	Title of	Officer (if the Bidder is a	Company
		Fillited Of	турей маше	Title of	Officer (if the bidder is a	сопрану)
		Address				
		ridaress				
		City, Sta	ate, Zip Code			
		Dlama	0			
	Dated	Phone 8	x rax			
		Email A	ddress			
NO ⁻	TE: SEE BIDDERS CHECKL	IST				
	:	Submitted b	oy:		7=-	
					(Firm Name)	

ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT NO. C1 - GENERAL CONSTRUCTION WORK AT WILLIAM DAVIES MIDDLE SCHOOL

DPMC Classification: C009 Prime with C029 Subcontractor

Hamilton Township Board of Education

	b Dr. Dennis Foreman Drive s Landing, NJ 08330						
1.	The undersigned, having familiarized himself with the drawings, the specifications and other Contract for Alterations and Renovations to Joseph C. Sha 5801 Third St., Mays Landing, NJ and William Davie Foreman Drive, Mays Landing, NJ, together with a requirements of the drawings and specifications Architects/Planners., hereby proposes to furnish Work and as follows:	the local condition t Documents, as iner Memorial Eles Middle School all work incident prepared by Fra all labor, materia	ons affecting the cin the Invitation to lementary School (FVHD-4937C), all thereto, in accounts and equipmen	cost of the work, Bidders thereto, (FVHD-4937B), 1876 Dr. Dennis ordance with the ins Duthie, P.C., t required for all			
	CONTRACT NO. C1 -GENERAL CONSTRUCTION Work at the above referenced school, including application with the requirements of Contract Documents, for	CONTRACT NO. C1 -GENERAL CONSTRUCTION WORK - BASE BID: All General Construction Work at the above referenced school, including applicable Allowances - Section 01020, in accordance with the requirements of Contract Documents, for the sum of:					
	If written amount differs from the numerical figure, only the	ne written amount v	(\$ will be accepted as t	he correct			
2.	Alternate Proposal(s) shall be quoted as additions to and shall be in accordance with the specifications amount differs from the numerical figure, only the w	for Alternate Bid	l Work - Section (01030. If written			
	ALTERNATE BIDS - SECTION 01030:	ADDITIONS	DEDUCTION	NO CHANGE			
	Alternate Bid No. D-GC-1: Add Security Glazing / Fire Rated Security Glazing						
	(Written)						
	Alternate Bid No. D-GC-2: Add Electrically Operated Bleachers & Wall Padding						
	(Written)						
	Alternate Bid No. D-GC-3: Add Additional Twelve (12) Wood Doors & Hardware Replacemen	nt					

(Written)

<u>Unit P</u>	PRICES - SECTION 01151: Materials in place.			
Replacement of existing damaged or deteriorated metal decking \$				per sq. ft.
Replacement of existing wet or deteriorated roof insulation board				per sq. ft.
blockin wood,	ement of existing damaged or deteriorated wood nailers/g or framing, including removal of existing deteriorated furnishing and installing new galvanized anchor bolts, ion bolts at 4'-0" o.c. or nails through existing construction ain:	\$	2.90	per board ft.
a.	2x4 for the above work	\$		per lin. ft.
b.	2x6 for the above work	\$		per lin. ft.
С.	2x8 for the above work	\$		per lin. ft.
d.	2x10 for the above work	\$		per lin. ft.
e.	2x12 for the above work	\$		per lin. ft.
	nal door hardware replacement (includes removal of sting door hardware)	\$	1,250.00	per unit

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:	
,	(Firm Name)

3.

4.	Bidder hereby acknowledge	s receipt of the following Ac	ldenda:	
	Addendum No. 1 issued	l received	d(initial)	
	Addendum No, issued	received	d(initial)	
	Addendum No, issued	l received	d(initial)	
	Addendum No, issued	received	d(initial)	
5.	In submitting this bid, it is un to reject any or all bids, and days from the date set of the	it is agreed that this bid may	served by the Board o not be withdrawn fo	f Education to accept or r a period of sixty (60)
6.	Bid Security in the sum of			(\$
	in the form of	(Certific	ed Check, Cashier's C	heck, or Bid Bond) is
	submitted herewith in accor			
		•	•	
7.	The undersigned is an indivi a partne a corpo	dual () ership ()	of the State of	
	a wipc	ration () under the laws (or the state of	
	having principal office in the			, County
	of	, and State of		
		Respectfully Submitted,		
		Respectionly Submitted,		
		(Company Name, if Bidder is a con	ipany)	
		BIDDER'S SIGNATURE		
		(Company Officer, if Bidder is a Co	orporation or LLC)	
	(Seal, if Corporation)	Printed or Typed Name Ti	tle of Officer (if the Ridder)	is a Company)
		17 mea or Typea Name 11	ite of Officer (if the Buder i	s a Company)
		Address		
		Huar Coo		
		City, State, Zip Code		
		eny, siare, zip eoue		
	Dated	Phone & Fax		
	Satoa	Thore co I am		
		Email Address		
NOT	TE OFF DIDDEDG CLIFCIALIST			
NOI	E: SEE BIDDERS CHECKLIST			
		Submitted by:	(Firm N	Jame
			(FIIIII IS	name)

ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT NO. C3 - ELECTRICAL WORK AT WILLIAM DAVIES MIDDLE SCHOOL

DPMC Classification: C047

Hamilton Township Board of Education 1876 Dr. Dennis Foreman Drive Mays Landing, NJ 08330

The undersigned, having familiarized himself with the local conditions affecting the cost of the work, the drawings, the specifications and other Contract Documents, as in the Invitation to Bidders thereto, for Alterations and Renovations to Joseph C. Shaner Memorial Elementary School (FVHD-4937B), 5801 Third St., Mays Landing, NJ and William Davies Middle School, (FVHD-4937C), 1876 Dr. Dennis Foreman Drive, Mays Landing, NJ, together with all work incidental thereto, in accordance with the requirements of the drawings and specifications prepared by Fraytak Veisz Hopkins Duthie, P.C., Architects/Planners., hereby proposes to furnish all labor, materials and equipment required for all Work and as follows:					
CONTRACT NO. C3 - ELECTRICAL WORK - BASE school, including applicable Allowances - Section Contract Documents, for the sum of:	BID: All Electric 01020, in accor	al Work at the ab dance with the r	ove referenced equirements of		
If written amount differs from the numerical figure, only the	written amount will	(\$ be accepted as the	correct bid.		
Alternate Proposal(s) shall be quoted as additions to, and shall be in accordance with the specifications to amount differs from the numerical figure, only the wi	or Alternate Bid	Work - Section 01	1030. If written		
ALTERNATE BIDS - SECTION 01030:	<u>ADDITIONS</u>	<u>DEDUCTION</u>	NO CHANGE		
Alternate Bid No. D-E-1: Add or Deduct Electrically Operated Bleachers & Wall Padding		()			

Submitted by:_____

(Firm Name)

3. UNIT PRICES - ELECTRICAL WORK: Materials in Place. Power outlet, (duplex or quadraplex), including outlet boxes and wiring. Receptacles will generally be connected to adjacent receptacle circuits. Exterior weatherproof duplex power receptacle including up to 100 ft. of (2)#12, (1)#12G, in 3/4" conduit Duct Mounted Smoke Detector, including outlet box and wiring Carbon Monoxide Detector, including outlet box and wiring per unit

Temporary removal, support & reinstallation of 2'x4'

Temporary removal, support & reinstallation of 1'x4'

Temporary removal, support & reinstallation of 2'x2'

light fixture including wiring

light fixture including wiring

light fixture including wiring

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:_	
	(Firm Name)

\$ per unit

\$ per unit

\$ per unit

4.		es receipt of the following Addenda:
	Addendum No. 1, issue	
	Addendum No, issue	d(initial)
	Addendum No, issue	
	Addendum No, issue	d(initial)
5.	In submitting this bid, it is un reject any or all bids, and it is the date set of the opening	nderstood that the right is reserved by the Board of Education to accept or to a agreed that this bid may not be withdrawn for a period of sixty (60) days from thereof.
6.	Bid Security in the sum of_	(\$
	in the form of	(Certified Check, Cashier's Check, or Bid Bond) is
		rdance with the requirements of the specifications.
7.	The undersigned is an indiv a partn a corpo	idual () pership () poration () under the laws of the State of,
		e, County
		, and State of
		Respectfully Submitted,
		•
		(Company Name, if Bidder is a company)
		BIDDER'S SIGNATURE
		(Company Officer, if Bidder is a Corporation or LLC)
	(Seal, if Corporation)	Printed or Typed Name Title of Officer (if the Bidder is a Company)
		Address
		City, State, Zip Code
		Phone & Fax
	Dated	
		Email Address
NO	TE: SEE BIDDERS CHECKLIST	Γ
		Submitted by:
		(Firm Name)

ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT NO. C5 - COMBINED SINGLE OVERALL WORK AT WILLIAM DAVIES MIDDLE SCHOOL

DPMC Classifications: C009 with C029, C030, C032, C047

Hamilton Township Board of Education 1876 Dr. Dennis Foreman Drive Mays Landing, NJ 08330

	The undersigned having familiarized himself with the local conditions affecting the cost of the work
•	The undersigned, having familiarized himself with the local conditions affecting the cost of the work, the drawings, the specifications and other Contract Documents, as in the Invitation to Bidders thereto, for Alterations and Renovations to Joseph C. Shaner Memorial Elementary School (FVHD-4937B), 5801 Third St., Mays Landing, NJ and William Davies Middle School, (FVHD-4937C), 1876 Dr. Dennis Foreman Drive, Mays Landing, NJ, together with all work incidental thereto, in accordance with the requirements of the drawings and specifications prepared by Fraytak Veisz Hopkins Duthie, P.C., Architects/Planners., hereby proposes to furnish all labor, materials and equipment required for all Work and as follows:
	<u>CONTRACT NO. C5 - COMBINED SINGLE OVERALL WORK - BASE BID:</u> All Work at the above referenced school, including applicable Allowances - Section 01020, in accordance with the requirements of Contract Documents, for the sum of:
	(\$ If written amount differs from the numerical figure, only the written amount will be accepted as the correct bid.
	THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:____

(Firm Name)

	ATE BIDS - SECTI	ON 01030:	ADDITIONS	DEDUCTION	NO CHA
Alterna		C-1: Add Security		<u> </u>	
Glazin	g/Fire Rated Seco	urity Glazing			
(Writ	tten)				
Alterna	te Rid No. D-GC	C-2: Add Electricall	v		
Operat	ed Bleachers & V	Nall Padding			
(Writ	tten)				
Ali	n'ill Dece				
(12) Wo	ood Doors & Hard	: Add Additional Tw lware Replacement	/elve		
(Writ	tten)				
`	,				
		: Add or Deduct			
Electric	cally Operated B	leachers & Wall Pa	dding	()	
(Writ	tton)				
(V V I I	uen)				
(V V I I	itteri)				
(**************************************	uen)				
(VVIII	uen)				
(VVIII	uen)				
(VVIII		D OF THIS DAGE W	A C INITENITIONIA LLV I F	ET DI ANIZ	
(**************************************		r of this page w.	as intentionally le	ft blank	
(**************************************		r of this page w	as intentionally le	ft blank	
(**************************************		r of this page w	as intentionally le	ft blank	
(VVIII		R OF THIS PAGE W.	as intentionally le	ft Blank	
(VVIII		R OF THIS PAGE W.	as intentionally le	ft blank	
(VVIII		R OF THIS PAGE W.	as intentionally le	ft blank	

UNIT PRICES - GENERAL CONSTRUCTION: Materials in place. Replacement of existing damaged or deteriorated metal decking \$ per sq. ft. \$______ per sq. ft. Replacement of existing wet or deteriorated roof insulation board Replacement of existing damaged or deteriorated wood nailers/ blocking or framing, including removal of existing deteriorated wood, furnishing and installing new galvanized anchor bolts, expansion bolts at 4'-0" o.c. or nails through existing construction 2.90 per board ft. to remain: 2x4 for the above work \$ _____ per lin. ft. a. 2x6 for the above work \$ per lin. ft. b. 2x8 for the above work \$ per lin. ft. c. d. 2x10 for the above work \$ per lin. ft. \$ ____ per lin. ft. 2x12 for the above work e. Additional door hardware replacement (includes removal of the existing door hardware) \$ **1,250.00** per unit **UNIT PRICES - PLUMBING & DRAINAGE:** Materials in Place. \$ per lin. ft. 1"natural gas pipe above ground 1-1/4" natural gas pipe above ground \$_____ per lin. ft. 1-1/2" natural gas pipe above ground \$_____ per lin. ft. 2"natural gas pipe above ground \$_____ per lin. ft. 2-1/2" natural gas pipe above ground \$_____ per lin. ft. Ball Valve (Natural Gas), under 1" \$_____ per unit Ball Valve, (Natural Gas), 1" \$_____ per unit Ball Valve, (Natural Gas), 1-1/4" \$_____ per unit Ball Valve, (Natural Gas), 1-1/2" \$ per unit 1-1/4" sanitary and vent pipe above ground \$_____ per lin. ft. 1-1/2" sanitary and vent pipe above ground \$_____ per lin. ft. 2" sanitary and vent pipe above ground \$_____ per lin. ft. \$_____ per lin. ft. 1/2" domestic hot & recirc. water pipe above ground with insulation \$_____ per lin. ft. 3/4" domestic hot & recirc. water pipe above ground with insulation

3.

UNIT PRICES - SECTION 01151: Materials in place.

Submitted by:

(Firm Name)

1" domestic hot & recirc. water pipe above ground with insulation	\$ per lin. ft.
1/2" domestic cold water pipe above ground with insulation	\$ per lin. ft.
3/4" domestic cold water pipe above ground with insulation	\$ per lin. ft.
1" domestic cold water pipe above ground with insulation	\$ per lin. ft.
1/2" domestic cold water pipe insulation	\$ per lin. ft.
3/4" domestic cold water pipe insulation	\$ per lin. ft.
1" domestic cold water pipe insulation	\$ per lin. ft.
1-1/4" domestic cold water pipe insulation	\$ per lin. ft.
1-1/2" domestic cold water pipe insulation	\$ per lin. ft.
2" domestic cold water pipe insulation	\$ per lin. ft.
1/2" domestic hot & recirc. water pipe insulation	\$ per lin. ft.
3/4" domestic hot & recirc. water pipe insulation	\$ per lin. ft.
1" domestic hot & recirc. water pipe insulation	\$ per lin. ft.
1-1/4" domestic hot and recirc. water pipe insulation	\$ per lin. ft.
1-1/2" domestic hot and recirc. water pipe insulation	\$ per lin. ft.
2' domestic hot and recirc. water pipe insulation	\$ per lin. ft.
Ball Valve, under 1"	\$ per unit
Ball Valve, 1"	\$ per unit
Ball Valve, 1-1/2"	\$ per unit
UNIT PRICES - HEATING AND VENTILATING: Materials in Place.	
Galvanized steel ductwork, no liner	\$ per lb.
Galvanized steel ductwork, with liner	\$ per lb.
Rigid duct insulation	\$ per sq. ft.
3/4" heat pump loop water piping	\$ per unit
1" heat pump loop water piping	\$ per unit
1-1/4" heat pump loop water piping	\$ per unit
1-1/2" heat pump loop water piping	\$ per unit
2" heat pump loop water piping	\$ per unit
3" heat pump loop water piping	\$ per unit

UNIT PRICES - HEATING AND VENTILATING: Materials in Place. Continued

4" heat pump loop water piping	\$ per unit
6" heat pump loop water piping	\$ per unit
3/4" heat pump loop water piping insulation	\$ per unit
1" heat pump loop water piping insulation	\$ per unit
1-1/4" heat pump loop water piping insulation	\$ per unit
1-1/2" heat pump loop water piping insulation	\$ per unit
2" heat pump loop water piping insulation	\$ per unit
3" heat pump loop water piping insulation	\$ per unit
4" heat pump loop water piping insulation	\$ per unit
6" heat pump loop water piping insulation	\$ per unit
Ball valve (Hydronic), under 1"	\$ per unit
Ball valve (Hydronic), 1"	\$ per unit
Ball valve (Hydronic), 1-1/4""	\$ per unit
Ball valve (Hydronic), 1-1/2"	\$ per unit
Ball valve (Hydronic), 2"	\$ per unit
Butterfly valve (Hydronic), 2-1/2"	\$ per unit
Butterfly valve (Hydronic), 3"	\$ per unit
Butterfly valve (Hydronic), 4"	\$ per unit
Butterfly valve (Hydronic), 6"	\$ per unit
Butterfly valve (Hydronic), 8"	\$ per unit
Balancing valve, 3/4"	\$ per unit
Balancing valve, 1"	\$ per unit
Balancing valve, 1-1/4"	\$ per unit
Balancing valve, 1-1/2"	\$ per unit
3/4" Two way control valve with actuator	\$ per unit
1" Two way control valve with actuator	\$ per unit
1-1/4" Two way control valve with actuator	\$ per unit
1-1/2" Two way control valve with actuator	\$ per unit

Submitted by:		
· -	(Firm Name)	

UNIT PRICES - HEATING AND VENTILATING: Materials in Place. Continued 2" Two way control valve with actuator \$ per unit 2-1/2" Two way control valve with actuator \$ per unit \$_____ per unit 3" Two way control valve with actuator 4" Two way control valve with actuator \$_____ per unit UNIT PRICES - ELECTRICAL WORK: Materials in Place. Power outlet, (duplex or quadraplex), including outlet boxes and wiring. Receptacles will generally be connected to adjacent receptacle circuits. \$ per unit Exterior weatherproof duplex power receptacle including up to 100 ft. of (2)#12, (1)#12G, in 3/4" conduit \$ per unit Duct Mounted Smoke Detector, including outlet box and wiring \$_____ per unit Carbon Monoxide Detector, including outlet box and wiring \$ per unit Temporary removal, support & reinstallation of 2'x4' \$_____ per unit light fixture including wiring Temporary removal, support & reinstallation of 1'x4' light fixture including wiring \$ per unit Temporary removal, support & reinstallation of 2'x2' light fixture including wiring \$_____ per unit

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

Submitted by:	
	(Firm Name)

4.	Bidder hereby acknowled Addendum No1, issu Addendum No, issu Addendum No, issu Addendum No, issu	ed led led	wing Addenda received received received received	(initial) (initial) (initial)		
5.	In submitting this bid, it is to reject any or all bids, ar days from the date set of	nd it is agreed that this				
6.	Bid Security in the sum of				(\$)
	in the form of		(Certified Che	eck, Cashier's Chec	k, or Bid Bond) is	
	submitted herewith in acc	ordance with the requ	irements of th	e specifications.		
7.	The undersigned is an ind a par a cor	ividual () tnership () poration () under th	ne laws of the S	State of		
	having principal office in t	he		of	, County	,
	of					
		Respectfully Submi				
		(Company Name, if Bio	lder is a company)		-
		BIDDER'S SIGNATI	URE			
		(Company Officer, if Bi	dder is a Corpora	tion or LLC)		-
	(Seal, if Corporation)	Printed or Typed Name	e Title	of Officer (if the Bidde	r is a Company)	-
		Address				
		City, State, Zip Cod	e			
	Dated	Phone & Fax				
		Email Address				
NOT	E: SEE BIDDERS CHECKLI	ST				
	Ç	ubmitted by:				
		domitted by.		(Firm Name)		-

SECTION 06400 - ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. Extent of each type of architectural woodwork at J. Shaner ES and W. Davies MS is indicated on drawings and in schedules.
- B. Types of architectural woodwork include the following:
 - 1. Architectural cabinets including:
 - a. Laminate clad cabinets.
 - b. Countertops.
 - 2. Standing and running trim.
- C. Finish carpentry is specified in another Division 6.
- D. Wood doors are specified within Division 8.
- E. Manufactured cabinet and casework of stock design (residential) is specified in Division 11.

1.3 QUALITY ASSURANCE

- A. AWI Quality Standard: Comply with applicable requirements of "Architectural Woodwork Quality Standards" published by the Architectural Woodwork Institute (AWI), except as otherwise indicated.
- B. Special Project Warranty: Provide Manufacturer's / Installer's / Contractor's warrantees against delamination, warping, hardware and support system failure and deterioration of finish.
 - 1. Warranty period shall be for **one** (1) **year** which shall start from approved date of substantial completion of work.

1.4 REFERENCES

A. AWI Quality Marking: Mark each assembled unit of architectural woodwork with manufacturer's identification and grade mark evidencing compliance with indicated AWI quality grade. Locate grade mark on surfaces which will not be exposed after installation. For other items requiring field assembly, a certification of compliance may be substituted for marking of individual pieces.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each product and process specified as work of this section and incorporated into items of architectural woodwork during fabrication, finishing, and installation.

- B. Quality Certification: Submit woodwork Manufacturer's (Fabricator's) certification, stating that fabricated woodwork complies with quality grades and other requirements indicated.
- C. Shop Drawings: Submit shop drawings showing location of each item, dimensioned plans and elevations, large scale details, attachment devices and other components.
- D. Samples: Submit the following samples:
 - 1. Lumber with or for transparent finish; set of 3 pieces 6" x 3/4" x 18", for each species and cut, finished on one side and one edge.
- F. Laminated Plastic: Submit complete line of available patterns and colors for Architect's selection.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Do not deliver woodwork, until painting, wet work, grinding and similar operations which could damage, soil or deteriorate woodwork have been completed in installation areas. If, due to unforeseen circumstances, woodwork must be stored in other than installation areas, store only in areas meeting requirements specified for installation areas.

1.7 PROJECT CONDITIONS

- A. Conditioning: Do not install woodwork until required temperature and relative humidity have been stabilized and will be maintained in installation areas.
- B. Maintain temperature and humidity in installation area, as required, to maintain moisture content of installed woodwork within a 1.0% tolerance of optimum moisture content, from date of installation through remainder of construction period. Require Woodwork Manufacturer to establish optimum moisture content and required temperature and humidity conditions.

1.8 WARRANTY

- A. Special Project Warranty: Provide Manufacturer's / Installer's / Contractor's warrantees against delamination, warping, hardware and support system failure and deterioration of finish.
 - 1. Warranty period shall be for **one** (1) **year** which shall start from approved date of substantial completion of work.

PART 2 - PRODUCTS

2.1 BASIC MATERIALS AND FABRICATION METHODS

A. General: Except as otherwise indicated, comply with the following requirements for architectural woodwork not specifically indicated as prefabricated or prefinished standard products.

- B. Wood Moisture Content: Provide kiln-dried lumber with an average moisture content range of 6% to 11% for interior work. Maintain temperature and relative humidity during fabrication, storage and finishing operations so that moisture content values for woodwork at time of installation do not exceed the following:
 - 1. Interior Wood finish: 5% 10%.
- C. Plastic Laminate: Comply with NEMA LD-3 for type, thickness, color, pattern and finish indicated for each application, or if not indicated as selected by Architect from manufacturer's standard products.

2.2 FABRICATION

A. Quality Standards: For following types of architectural woodwork comply with indicated standards as applicable.

Standing and Running Trim: AWI Section 300
 Casework and Countertops: AWI Section 400
 Miscellaneous Work: AWI Section 700

- B. Design and Construction Features: Comply with details shown for profile and construction of architectural woodwork; and, where not otherwise shown, comply with applicable Quality Standards, with alternate details as approved by Architect.
- C. Pre-Cut Openings: Fabricate architectural woodwork with pre-cut openings, where possible, to receive hardware and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs and, where located in countertops and similar exposures seal edges of cutouts with a water-resistant coating.
- D. Measurements: Before proceeding with fabrication of woodwork required to be fitted to other construction, obtain field measurements and verify dimensions and shop drawing details as required for accurate fit.
 - Where sequence of measuring substrates before fabrication would delay the project, proceed with fabrication (without field measurements) and provide ample borders and edges to allow for subsequent scribing and trimming of woodwork for accurate fit.

2.3 INTERIOR ARCHITECTURAL WOODWORK

- A. Quality Standard: Comply with AWI Section 300.
- B. Standing and Running Trim:
 - 1. Grade: Premium
 - 2. Fabricate standing and running trim including jambs (if any) to dimensions, profiles and details shown. Rout or groove reverse side (backed-out) of trim members to be applied to flat surface, except for members with ends exposed in finish work.
 - 3. Plant assemble miters unless otherwise indicated.

2.4 ARCHITECTURAL CABINETS, LAMINATE CLAD

- A. Quality Standard: Comply with AWI Section 400 and its Division 400B.
- B. Laminate Clad Cabinets: Comply with the following requirements:
 - 1. Grade: Premium.
 - 2. Type of Cabinet Construction: Flush overlay.
 - 3. Laminate Cladding: On exposed surfaces provide high pressure decorative laminate complying with NEMA LD 3 and as follows:

a. Horizontal surfaces: GP-50 (0.050" nominal thickness).
b. Vertical surfaces: GP-50 (0.050" nominal thickness).

- 4. On semi-exposed surfaces provide plastic laminate BK-20 unless otherwise indicated.
- 5. Fabricate exposed edges of casework, including edges of doors and drawers when open, with matching plastic laminate, except as otherwise indicated.
 - a. Provide dust panels of 1/4" plywood or tempered hardboard above compartments and drawers except where located directly below countertops.

2.5 PLASTIC LAMINATE COUNTERTOPS

- A. Quality Standard: Comply with AWI Section 400 and its Division 400C.
- B. General: Except as otherwise indicated, provide separate plastic laminate countertops installed on other casework or other support system as indicated to comply with requirements for casework for plastic laminate finish.
 - 1. Grade: Premium.
 - 2. Horizontal and /or vertical surfaces: GP-50 (0.050" nominal thickness).

2.6 CABINET HARDWARE AND ACCESSORY MATERIALS:

- A. General: Provide cabinet hardware and accessory materials associated with architectural woodwork, except for items which are specified in Division-8 section "Finish Hardware".
- B. Hardware Standard: Comply with ANSI/BHMA A156.9 "American National Standard for Cabinet Hardware".
 - 1. Quality Level: Type 2, institutional, unless otherwise indicated.
 - 2. Invisible Hinges: Wrought Steel.
 - 3. Spring Hinges: Stanley #2060, 3-1/2" x 3-1/2".
 - 4. Casework Pulls: Extruded Aluminum, back mounted, with US 26D Finish, Ives No. 137 or approved equal.
 - 5. Cabinet Catches: H.D. Magnetic.

- 6. Equip each drawer with side-mounted, full-extension, ball-bearing, nylon roller drawer slides with load capacity of 75 lbs. per pair.
- 7. Locks: For all doors and drawers, provide standard pin type or disc-type (5 pins or discs) tumbler locks, keyed alike per room and masterkeyed throughout.
- 8. Shelf Supports: Where shelving is indicated as "adjustable", provide slotted type recessed standards and brackets of type needed to support shelves with uniform load of 40 lbs. per sq. ft. loading. Finish as selected. Knape and Vogt or approved equal.
- 9. Equip base cabinets with concealed hinges Shelby HC122 with catch and Liberty minitouch catch.
- 10. Exposed Hardware Finish: Except where not available, provide exposed hardware with BHMA Code 626 satin chromium late finish (US26D); where not available, provide either satin aluminum or satin stainless steel finish.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Pre-Installation Meeting: Meet at project site prior to delivery of architectural woodwork and review coordination and environmental controls required for proper installation and ambient conditioning in areas to receive work. Include in meeting the Contractor; Architect and other Owner Representatives (if any); installers of architectural woodwork, wet work such as plastering, other finishes, painting, mechanical work and electrical work; and firms or persons responsible for continued operation (whether temporary or permanent) of HVAC system as required to maintain temperature and humidity conditions. Proceed with woodwork installation only when everyone concerned agrees that required ambient conditions can be maintained.
- C. Deliver concrete inserts and similar anchoring devices to be built into substrates, well in advance of time substrates are to be built.
- D. Prior to installation of architectural woodwork, examine shop fabricated work for completion, and complete work as required, including back priming and removal of packing.

3.2 INSTALLATION

- A. Install woodwork plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level (including tops); and with no variations in flushness of adjoining surfaces.
- B. Scribe and cut woodwork to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.
- C. Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns, miter at corners and comply with referenced Quality Standards for joinery.

- D. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where prefinished matching fasteners heads are required, use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork, and matching final finish where transparent finish is indicated.
- E. Countertops: Anchor securely to base units and other support systems as indicated.

3.3 ADJUSTMENT, CLEANING, FINISHING, AND PROTECTION

- A. Repair damaged and defective woodwork where possible to eliminate defects functionally and visually; where not possible to repair replace woodwork. Adjust joinery for uniform appearance.
- B. Clean, lubricate and adjust hardware for proper operation.
- C. Clean woodwork on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or soiled areas.
- D. Complete the finishing work specified as work of this section, to whatever extent not completed at shop or prior to installation of woodwork.
- E. Refer to the Division-9 sections for final finishing of installed architectural woodwork.
- F. Provide final protection and maintain conditions, in a manner acceptable to Fabricator and Installer, which ensures architectural woodwork being without damage or deterioration at time of substantial completion.

END OF SECTION 06400

SECTION 08211 - WOOD DOORS (J.C. SHANER ES)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Related Sections:
 - 1. Section 01800 Time of Completion and Liquidated Damages
 - 2. Section 08110 Hollow Metalwork
 - 3. Section 08700 Finish Hardware
 - 4. Section 08800 Glass and Glazing
 - 5. Section 09250 Gypsum Drywall
 - 6. Section 09900 Field Painting of metal lites

1.2 SUMMARY

- A. Extent and location of flush wood door is indicated on drawings and in the door schedule.
- B. Construction: Five plies with stiles and rails bonded to core, then entire unit abrasive plained before veneering. Assembly of face veneer and crossband to core in accordance with WDMA.
 - 1. Solid core wood doors with solid hardwood edging.
- C. Shop-priming of wood doors is included in this Section.
- D. Factory-finishing of wood doors is included in this Section.
- E. Factory-prefitting to frames and factory-premachining for hardware for wood doors is included in this Section.

1.3 QUALITY ASSURANCE

- A. Construction per WDMA I.S. 1A 11.
- B. Door Construction Field Examination: Upon direction of the Architect, the Contractor may be instructed to destroy a randomly selected wood door or panel by sawing it in half, vertically and horizontally, to verify conformance of the contract requirements. If the door(s) do not meet the specifications, all of the doors delivered for the project will be rejected, and the doors shall be replaced at the Contractor' expense. Further door inspection, to insure conformity to specifications, shall also be at the expense of the Contractor.
 - 1. All such delays as a result of the fabrication and delivery of non-compliant doors which vary from the processed shop drawing submittal will be the responsibility of the Contractor (refer to Section 01800 for Liquidated Damages).

1.4 REFERENCE STANDARDS

A. Comply with the applicable requirements of the following standards unless otherwise indicated.

- 1. Window & Door Manufacturers Association (WDMA)
 - a. I.S. 1A 11 Architectural Wood Flush Doors (WDMA).
 - b. Standard Procedures and Recommendations for Factory Machining Flush Wood Doors for Hardware.
- 2. American National Standards Institute
 - a. ANSI A115. W Series, Wood Door Hardware Standards.
- 3. American Society for Testing and Materials:
 - a. ASTM 2074-00 (Category A Positive Pressure) Fire Tests of Door Assemblies.

1.5 SUBMITTALS

- A. The shop drawing submittal <u>will not</u> be reviewed by the Architect unless a <u>complete shop</u> <u>drawing submittal</u> (technical data, details of core and edge construction, location and extent of hardware blocking, fire ratings, factory finish samples, 8" x 10" minimum for finish and 4" x 5" minimum for construction assembly) are made as one complete submittal, by the Contractor, and will be returned to the Contractor if incomplete.
 - 1. Subsequent delays as a result of an incomplete submittal will be the responsibility of the Contractor (refer to Section 01800 for Liquidated Damages).
- B. Product Data: Door manufacturer's technical data for each type of door, including details of core and edge construction, trim for openings and louvers, and factory-finishing specifications.
 - 1. Include certifications as may be required to show compliance with specifications.
 - 2. The door manufacturer's shop drawing literature which may include language for the substitution of door construction at the option of the manufacturer is not permitted.

 Doors which are switched will be rejected and all costs associated with the manufacturing of the door type(s) specified will be by the Contractor/Manufacturer.
- C. Shop Drawings: Submit shop drawings indicating location and size of each door, elevation of each kind of door, details of construction, location and extent of hardware blocking, fire ratings, requirements for factory finishing and other pertinent data.
 - 1. For factory-premachined doors, indicate dimensions and locations of cutouts for locksets and other cutouts adjacent to light openings.
- D. Samples: Submit samples, 8" x 10" minimum for finish and 4" x 5" minimum for construction assembly, for the following:
 - 1. Doors for Transparent Finish: Flat samples illustrating finish and color of wood grain for each species of veneer and solid hardwood lumber required.
 - 2. Factory-Finished Doors: Each type of factory finish required.
 - 3. Metal Frames for Light Openings: Manufacturers product samples or product cut sheets for light frames and color selector guide for each material and finish required.

- E. Warranties and Certification Markings: Furnish with shop drawings:
 - 1. Door supplier must attest, in writing addressed to Architect, that the order has been placed in conformance with specification requirements in all respects.
 - 2. All doors shall carry a "Lifetime" guarantee, including rehang and finish for all door(s) which do not comply with the manufacturer's warranty.
 - 3. Copy of Warranty shall be given to the Architect and Owner prior to the completion of the project.
 - 4. All doors shall be factory marked, on the top of the door, showing the order number, item number on the order, size of finished door, material, and core construction, for future information should replacement of the door be necessary.
- F. The Wood Door Supplier shall provide a letter indicating all of the following:
 - 1. The wood door supplier has completely reviewed the contract documents (drawings, specifications and addenda) and has worked with the distributor in the preparation and submission of a complete shop drawing submittal to the Architect.
 - 2. The wood door supplier shall attest that the order has been placed in accordance with the contract document drawings, specifications and addenda,
 - 3. The wood doors ordered and delivered to the job site are in conformance with the requirements of the job and per the approved shop drawings.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Protect doors during transit, storage and handling to prevent damage, soiling and deterioration. Comply with requirements of referenced standards and recommendations in WDMA pamphlet "How to Store, Handle, Finish, Install, and Maintain Wood Doors", as well as with manufacturer's instructions.
- B. Protect all doors from damage and moisture under cover. Use wood blocking under horizontally stored doors. At no time will doors be allowed to come in contact with floor or water.
 - 1. The location where the doors are being stored on the job site shall be between 25 55% relative humidity. The Contractor shall forward independent certified testing that confirms compliance.
- C. All doors not finished at factory must be sealed on all surfaces within one (1) week after arrival at jobsite.
- D. Remove all damaged doors from jobsite prior to completion of project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design: Provide "AspiroTM Series I Marshfield-AlgomaTM" wood doors as manufactured by Masonite Architectural, Tel.#877.332.4484, www.masonitearchitectural.com; or approved equal.

- 1. Products specified herein have been selected because of their quality of construction, configuration, design, function, available finishes, components, accessories, dimensions, shape and style.
- 2. Comparable products from other manufacturers will be considered if it can be clearly shown that their products are tested, equal to or will exceed the construction quality requirements, intended performances and all other design attributes listed above and provided that deviations in dimensions and profiles are minor and do not materially detract from the design concept or intended performances as judged solely by the Architect.
 - a. Eggers Industries; Architectural Flush Doors Division, Tel.# 920.722.6444, www.eggersindustries.com.
 - b. VT Industries, Architectural Wood Doors, Tel.# 800.827.1615, www.vtindustries.com/doors.
 - c. Graham Wood Doors, Tel.# 641.423.2444, www.grahamdoors.com.
 - d. Or approved equal.
- 3. The use of one manufacturer's catalog numbers, and the specific requirements set forth in drawings and specifications are not intended to preclude the use of other manufacturer's products or procedures which may be equivalent, but are given for the purpose of establishing a standard of design and quality for materials, construction and workmanship.
- 4. Substitutions: Substitution of products will only be considered when the Contractor/
 Door Supplier have submitted, to the Architect, all appropriate documents and in the time frame as outlined in the requirements indicated in Specification Section 00800.

2.2 MATERIALS AND COMPONENTS

- A. General: Provide wood doors complying with applicable requirements of referenced standards for kinds and types of doors indicated and as specified.
- B. Solid Core Doors for Transparent Finish: Comply with the following requirements:
 - 1. Faces: Veneer leaves shall be Slip Match and veneers assembled in Running Match, Grade 'A', plain sliced red oak for transparent finish; CS-171, Type II.
 - a. At existing buildings, provide veneer faces to match the species of the existing veneer or as directed by the Architect.
 - 2. Construction: Premium Construction Grade, SCLC-5 Bonded (5-ply, with no added urea-formaldehyde glues).

C. Edges

- 1. Vertical stiles of same species to the face veneer, with a minimum of 1/4 inch solid hardwood after trimming.
 - Manufacturers standard construction with hardwood outer.

- D. Core: Structural Composite Lumber Core consisting of an engineered wood product that is made by fusing a network of wood strands together with a water-resistant adhesive to produce a strong, solid and stable product that has true structural properties with excellent screw holding properties and very high split resistance.
 - 1. Core Edge Interface: Vertical and horizontal edges of solid core doors must be securely bonded to the core with waterproof glue containing no added urea formaldehyde resin.

E. Glazing of Wood Doors:

- 1. Glazing shall be by the wood door manufacturer.
- 2. Glass shall be in accordance with requirements of Section 08800.

2.3 LITE FRAMES

A. Metal Lite Frames:

- Standard Metal Vision Frames:
 - a. Basis of Design: Model "LoProTM" as manufactured by Anemostat Door Products, San Antonio, TX; Tel.# 210.662.6300; or approved equal.
 - b. Material: 20 ga. (1mm) Cold Rolled Steel.
 - c. Finish: Grey Primer, Beige or Bronze Baked Enamel.
 - d. Glazing: Should be 1/4" (6mm), safety rated with U.L. and/or W.H.I classification markings. Nominal glazing space of 3/8" (10mm) allows for glazing tape to be used on both sides of the glass.
 - e. Impact Rating: Tested in Compliance with ASTM F-1450-97. Must use 1/4" x 20 thru bolt blank one side.

2.4 GENERAL FABRICATION REQUIREMENTS

- A. Fabricate wood doors to produce doors complying with following requirements:
- B. In sizes indicated for job-site fitting.
- C. Factory-prefit and premachine doors to fit frame opening sizes indicated with the following uniform clearances and bevels:
 - 1. Comply with tolerance requirements of WDMA for prefitting. Comply with final hardware schedules and door frame shop drawings and with hardware templates.
 - 2. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with factory premachining.
 - 3. Pre-fit and pre-machine wood doors at factory. Machining shall be in accordance with necessary templates supplied by the Builders Hardware supplier, in accordance with the approved Finish Hardware Schedule for this project. Each door shall be machined for all necessary mortise hardware (ie, locks, hinges, closers, etc.) but face or thru bolt holes shall be done in the field, if such machining is not called for on templates, or is not normally machined at factory. No field preparation will be allowed.

- 4. Sizing of single doors to be undersized for nominal 1/4 inch, with edges beveled on two edges, as required by the frame manufacturer. Door edges beveled 1/8 inch in 2 inch thickness of door.
- 5. Door clearances are to be 1/8 inch at top and the bottom shall be a maximum of 1/2 inch, or as required by job condition or labeling requirements.
- D. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of doors required.
- E. Factory Finish and Uniform Range of Veneers
 - 1. Prefinish wood doors at factory only.
 - 2. All face veneer shall have uniform range of colors, as specified by Architect, in selection of the range of color of the veneer.
 - 3. Comply with recommendations of WDMA for factory finishing of doors, including final sanding, immediately before application of finishing materials.
 - 4. Provide finish WDMA, #TR-6, transparent water-based stain and ultraviolet (UV) cured water based polyurethane sealer and topcoat material, color as selected by Architect.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install doors using finish hardware in accordance with approved hardware schedule. Protect doors from damage until completion of Project. Install surface applied hardware on metal or wood doors using all thread screws inserted in pilot drilled holes filled with white acrylic glue.
- B. Manufacturer's Instructions: Install wood doors to comply with manufacturer's printed instructions and of referenced WDMA standard and indicated in the printed instructions provided by the manufacturer.
- C. Job-Fit Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors.
 - 1. Machine doors for hardware. Seal cut surfaces after fitting and machining.
- D. Fitting Clearances for Non-Rated Doors: Provide 1/8" at jambs and heads; 1/16" per leaf at meeting stiles for pairs of doors; and 1/8" from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4" clearance from bottom of door to top of threshold.
- E. Fitting Clearances for Doors:
 - 1. Bevel non-rated doors 1/8" in 2" at lock and hinge edges.
 - 2. Prefit Doors: Fit to frames for uniform clearance at each edge.
- G. Factory-Finished Doors: Restore finish before installation, if fitting or machining is required at the job site.

H. Manufacturer of wood doors shall install glass in wood doors.

3.2 ADJUSTING AND PROTECTION

- A. Operation: Rehang or replace doors which do not swing or operate freely.
- B. Finished Doors: Refinish or replace doors damaged during installation.
 - 1. Protect doors, as recommended by door manufacturer, to ensure that wood doors will be without damage or deterioration at time of Substantial Completion.

END OF SECTION 08211

SECTION 08700 - FINISH HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The General Provisions of the Contract, including General and Supplementary Conditions and General Requirements, apply to the work specified in this section

1.2 DESCRIPTION OF WORK

- A. The work in this section includes providing all labor, materials, appliances, and services required to completely furnish and deliver all finish hardware and related work, complete in accordance with the Architect's drawings and specifications, including, but not limited to the following:
 - 1. All finish hardware for aluminum/FRP, hollow metal and wood doors in aluminum and hollow metal frames.
 - 2. All keying and cylinders.
 - 3. Furnish all finish hardware necessary to complete the project, whether particularly mentioned or not, and match in quality and finish the material specified.
 - 4. Electromechanical door hardware, power supplies, back-ups and surge protection.

1.3 WORK NOT INCLUDED

- A. Furnish finish hardware, except for certain noted items, under other sections for the following items:
 - 1. Toilet partitions
 - 2. Windows
 - 3. Washroom accessories
 - 4. Millwork
 - 5. Factory fabricated mechanical or electrical equipment.

1.4 RELATED WORK IN OTHER SECTIONS

- A. Refer to the following sections for these related items:
 - 1. Aluminum/FRP Doors and Frames Section 08410
 - 2. Electrical Work

1.5 QUALITY ASSURANCE

- A. Manufacturer: Obtain each kind of material (latch and locksets, hinges, closers, etc.) from only one manufacturer of the respective item, although several may be indicated as offering products complying with requirements.
- B. Supplier: A recognized supplier, who has been furnishing Builders Hardware, in the project's vicinity, for a period of not less than 3 years, and who is, or employs an experienced Architectural Hardware Consultant who is a recognized member of the Door and Hardware

FVHD4937B / 4937C 2:08700-1 ADDENDUM NO. 1

Institute, available at reasonable times during the course of the work, for consultation about the project's material requirements to the Owner, Architect, and Contractor. All hardware is to be supplied by one dealer.

- C. Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA 80. Provide only material which has been tested and listed by Underwriter's Laboratories, or other approved Testing Laboratories, for the types and sizes of doors required, and complies with requirements of Door and Frame labels.
- D. Where applicable, all hardware shall be in conformance with the State of New Jersey "Barrier-Free" sub code and CABO/ANSI 117.1

1.6 SUBMITTALS

- A. Submittals shall conform to the requirements specified in Part 1.
- B. The hardware dealer shall submit to the Architect and/or Owner, at least six (6) copies of a detailed Hardware Schedule and Catalog Cut Sheets. These schedules shall be complete and describe in detail the finish hardware for all door openings, or occurrences of finish hardware. These schedules are to be checked and approved by the Contractor and Architect. No hardware is to be ordered nor templates issued, prior to the receipt, by the Hardware Dealer, of these approved schedules. Upon approval of the schedules, the Contractor shall supply the Architect with six (6) final copies.
- C. The finish hardware schedules submitted shall include information as indicated below. These schedules are intended for coordination of the work.
- D. Final finish hardware content: Based on materials indicated, organize schedule into "Hardware Sets", indicating complete destinations of every item required for each door or opening. Include the following information:
 - 1. Type, style, function, size and finish of each item.
 - 2. Name and manufacturer of each item including catalog cuts of each item.
 - 3. Fastenings and other pertinent information.
 - 4. Location of Hardware Set, cross-referenced to indications on drawings, both on floor plan and in door and frame schedule.
 - 5. Explanation of all abbreviations, symbols, codes, etc., contained in the schedule.
 - 6. Mounting locations for hardware.
 - 7. Wiring diagrams and electrical data.
 - a. Shop Drawings: Details of electrified access control hardware indicating the following:
 - Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate

FVHD4937B / 4937C 2:08700-2 ADDENDUM NO. 1

between manufacturer-installed and field-installed wiring. Include the following:

- a) Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
- b) Complete (risers, point-to-point) access control system block wiring diagrams.
- 2 Electrical Coordination: Coordinate with related Division 26 Electrical Sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- E. Submittal Sequence: Submit detailed finish hardware scheduled within 30 days of award of contract.

1.7 DELIVERY AND PACKAGING

- A. All items of finish hardware shall be delivered to the project site or applicable fabricators of doors and frames.
- B. Package each item of hardware and each lockset, separately in individual containers, complete with necessary screws, keys, instructions, and installation template for spotting mortising tools. Mark each container with item number corresponding to the number shown on the hardware schedule.
- C. Furnish wrapping for all knobs, handles, and pulls for protection during construction.

1.8 WARRANTY

- A. Guarantee workmanship and material provided against defective manufacture. Repair or replace defective workmanship and material appearing within period of **one** (1) **year** after substantial completion.
- B. Provide **twenty-five (25) year** factory warranty on door closers against defects in material and workmanship from date of occupancy of project.
- C. Provide **five (5) year** factory warranty on exit devices, locksets and overhead stops against defects in material and workmanship from date of occupancy of project.

1.9 **JOB CONDITIONS**

- A. Field Service: Hardware Supplier: Assign a competent representative, acceptable to the Architect to be at the jobsite each time a major shipment of finish hardware is received. Such representative shall assist in "checking in" these shipments and shall secure a receipt covering the contents of each shipment. In addition, such representative shall be available for immediate call to the jobsite when, in the opinion of the Architect, their presence is necessary.
- B. Templates: Following approval of the Hardware Schedule by the Architect, furnish and deliver template information to the fabricators of items to which finish hardware is to be applied in ample time to avoid delays in such work of said fabricators. Provide drawings, schedules and detailed information to other trades as necessary for them to accommodate

FVHD4937B / 4937C 2:08700-3 ADDENDUM NO. 1

and prepare their work to receive the finish hardware.

C. Cooperation and Coordination:

- 1. Cooperate and coordinate work with that of other trades supplying materials or performing work in contact with, connecting to, underlying, or overlaying the work of this Section.
- 2. Provide complete data of requirements for work of this Section to those other trades whose work is affected by or dependent upon the work of this Section.
- 3. Furnish all items to be built into other work in ample time to avoid delaying the progress of such work.
- 4. Examine all drawings covering the work of this Section and refer to all other drawings, including mechanical and electrical drawings, which may affect the work of this Section or require coordination by this trade.
- D. Existing Conditions: Hardware supplier: Verify all existing conditions in the field to ensure compatibility with finish hardware specified in Hardware Sets herein, prior to submission. Any discrepancies between the existing field conditions and finish hardware specified shall be brought to the attention of the Architect immediately. Hardware supplier shall not order any finish hardware until all discrepancies are rectified and the Architect grants written approval.

1.10 GENERAL

- A. The material called for under this section shall provide for all of the hardware required, whether the same is particularly specified or not. If the hardware for any particular location is not described herein, it should be provided and shall be like that specified for similar locations so far as practicable. If no similar locations are specified, such hardware must be of a suitable type approved by the Architect.
- B. Provide screws of proper type and compatible material, with shields, anchors, plugs, toggle nuts, etc., as required for the attachment of all items of hardware herein specified. All exposed screws shall have flat head, Phillips-type heads and shall be finished to match the item of hardware for which it is intended.

1.11 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of door hardware to include in maintenance manuals, include final hardware and keying schedule.

1.12 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Manufacturers: The following listed material is intended to serve as a guide for the

FVHD4937B / 4937C 2:08700-4 ADDENDUM NO. 1

requirements of this project. Hardware manufactured by other than those manufacturers specifically described or listed in this specification will be considered, providing it is equal in every respect. Any request for deviation from this specification as to the manufacturer, type, size, material or finish of any item, or its components, must be submitted to the Architect, in writing, at least ten (10) days from notice to proceed. If no such requests are received and approved in writing, no deviation from this specification will be allowed.

- B. Quality: All hardware shall be uniform in color, and free from any imperfections affecting serviceability, or marring its appearance.
- C. Finishes: As listed in hardware sets and as follows:

Satin Chrome US26D / 626 Satin Stainless Steel US32D / 630 Sprayed Aluminum Lacquer AL / 689

D. Types of Hardware: The numbers listed in the specification are taken from the catalogs of the following manufacturers, with type of hardware required noted. In each case of the specific size change or lock function requirements, this additional information will be so noted in the Hardware Sets.

2.2 BUTT HINGES

- A. Conform to ANSI A156.1, five-knuckle exposed tip design, bearing type as specified with NRP (non-removable pin) feature at exterior and interior reverse bevel doors with locks.
- B. Unless otherwise scheduled, supply one (1) hinge for every 30" of door height.
- C. Size: 4 1/2" x 4 1/2" for doors up to 3'-0" in width, 5" x 4 1/2" for doors over 3'-0" in width. Provide heavy weight hinges (.180) at all high traffic doors where specified. Provide hinges with Phillips flat-head screws unless specified otherwise.
- D. Width of hinges shall be sufficient to clear trim and wall conditions as shown on the drawings.
- E. Manufacturers:
 - Basis of Design: Provide products manufactured by McKinney, or approved equal.
 - 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Hager
 - b. Bommer
 - c. or approved equal
- F. Drill 5/32 inch hole and use No. 12, 1-1/4 inch steel threaded to the head wood screws for hinges on wood doors.

2.3 CONTINUOUS HINGES

- A. Heavy duty continuous hinges as appropriate for the type, inset and thickness of door where specified. Coordinate hinge types with the door supplier.
- B. Manufacturers:

- 1. Basis of Design: Provide products manufactured by **Pemko**, or approved equal.
- 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. McKinney
 - b. Bommer
 - c. or approved equal

2.4 ELECTRIC DOOR HARDWARE CORDS

A. Provide electric transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices. Provide sufficient number of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable.

2.5 LOCKSETS

- A. BHMA Certified to ANSI 156.13 Series 1000 Grade 1.
- B. Manufactured in a single sized case formed from 12 gauge steel minimum with a field-adjustable, beveled armored front .125" minimum thickness.
- C. All functions field reversible without opening the lock body.
- D. Backset: 2 3/4" with a one-piece 3/4" anti-friction stainless steel latchbolt. Deadbolt: 1" throw made of stainless steel with 2 hardened steel roller inserts.
- E. Strikes: Non-handed with a curved lip to protect trim but not project more than 1/8" beyond trim, frame or inactive leaf.
- F. Trim: Bi-directional thru-bolted lever operation, non-handed levers.
- G. Manufacturers:
 - 1. Basis of Design: Provide products manufactured by **Sargent 8200 Series**.
 - 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Corbin Russwin ML2000 series
 - b. or approved equal

2.6 ELECTROMECHANICAL LOCKING DEVICES

- A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below.
 - 1 Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, and request-to-exit signaling. Unless otherwise indicated, provide electrified locksets standard as fail secure.

FVHD4937B / 4937C 2:08700-6 ADDENDUM NO. 1

- 2 Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
 - a. Acceptable Manufacturers:
 - 1) Corbin Russwin Hardware (RU) ML20900 Series.
 - 2) Sargent Manufacturing (SA) 8200 Series.

2.7 EXIT DEVICES

- A. Certified to meet ANSI/BHMA A156.3 Grade 1 requirements.
- B. Provide exit device series and functions as specified in hardware sets.
- C. All exit devices UL listed for panic. Exit devices for labeled doors UL listed as "Fire Exit Hardware".
- D. Extended cycle test: Devices to have been cycle tested in ordinance with ANSI/BHMA 156.3 requirements to 9 million cycles.
- E. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
- F. Electrified Functions: Provide Molex standardized plug in connectors to accommodate up to twelve wires.
- G. Provide cylinder dogging feature for non-rated exit devices.
- H. Provide keyed removable mullions, as specified in the Hardware Groups.
- I. Manufacturers:
 - 1. Basis of Design: Provide products manufactured by **Sargent 80 series**; or approved equal.
 - 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Corbin Russwin ED4000 / ED5000 series
 - b. or approved equal

2.8 ELECTROMECHANICAL CONVENTIONAL EXIT DEVICES

- A. Electrified Conventional Push Rail Devices (Heavy Duty): Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified below. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.
 - 1. Acceptable Manufacturers:

Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series. Sargent Manufacturing (SA) - 80 Series.

Electrified Options: As indicated in hardware sets, provide electrified exit device options including: electric latch retraction (shall be motorized type that fully retracts the touchpad/push bar), electric dogging, outside door trim control, exit alarm, delayed egress, latchbolt monitoring, lock/unlock status monitoring, touchbar monitoring and request-to-exit signaling. Unless otherwise indicated, provide electrified exit devices standard as fail secure.

2.9 DOOR CLOSERS

- A. Closers shall have non-ferrous covers, heavy duty forged steel arms, and separate valves for adjusting backcheck, delayed action, closing and latching cycles and adjustable spring to provide sizes 1 through 6.
- B. Provide non-sized closers, adjustable to meet maximum opening force requirements of ADA.
- C. Provide drop plates, brackets, or adapters for arms as required to suit details.
- D. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors. Where possible install closers on door for optimum aesthetics.
- E. Provide UniTROL hold-open arms where specified in hardware sets.
- F. Where specified, door closers shall have built in door stop and holder effective at one point selected at installation, from 90° 115° in five-degree increments. Door stop shall be cushioned by a shock-absorbing heavy-duty spring action effective at the soffit plate pivot. Closers shall be provided for parallel arm installation using rigid steel main arm and secondary arm lengths proportional to the door width
- G. Provide closers meeting the requirements of UBC 7-2 and UL 10C positive pressure tests.

H. Manufacturers:

- 1. Basis of Design: Provide products manufactured by **Norton 7500** Series; or approved equal.
- 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Yale 4400 Series
 - b. Corbin Russwin DC8000 Series
 - c. or approved equal

2.10 DOOR TRIM AND PROTECTION PLATES

- A. Kick plates 10 inches high, mop plates 6 inches high, both by 2 inches or 1 inch less than door width (LDW) as specified. .050 gauge thick bronze, brass, or stainless steel as specified. Beveled four edges (B4E).
- B. For doors with louvers or narrow bottom rails, kick plate height to be 1 inch less than the dimension shown from the bottom of the door to the bottom of the louver or glass.
- C. Push plates, pull plates, door pulls and miscellaneous door trim as specified in the hardware sets.
- D. Armor plates and door edge plates .050 gauge, size as specified in the hardware sets.

FVHD4937B / 4937C 2:08700-8 ADDENDUM NO. 1

E. Manufacturers:

- 1. Basis of Design: Provide products manufactured by **Rockwood**; or approved equal.
- 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Trimco
 - b. Hiawatha
 - c. or approved equal

2.11 DOOR STOPS AND HOLDERS

A. Conventional Stops:

- 1. Provide wall stops as applicable for each door leaf except where floor stops are specified in hardware sets, or where conditions require the use of an overhead stop.
- 2. Provide convex or concave design as indicated.
- 3. Manufacturers:
 - a. Basis of Design: Provide products manufactured by **Rockwood**; or approved equal.
 - b. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - 1) Trimco
 - 2) Hiawatha
 - 3) or approved equal

2.12 THRESHOLDS AND GASKETING

- A. Provide continuous gasketing on exterior doors and smoke, light, or sound seals on interior doors where indicated or scheduled. Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
- B. Provide threshold units not less than 4" wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit door frames. All threshold units shall comply with the Americans with Disabilities Act (ADA.).

C. Manufacturers:

- 1. Basis of Design: Provide products manufactured by **Pemko**; or approved equal.
- 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. National Guard
 - b. Reese
 - c. or approved equal

2.13 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design

FVHD4937B / 4937C 2:08700-9 ADDENDUM NO. 1

complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

- 1 Acceptable Manufacturers:
 - a. Securitron (SU) DPS Series.
- B. Power Supplies: Provide Nationally Recognized Testing Laboratory Listed 12VDC or 24VDC (field selectable) filtered and regulated power supplies. Include battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
 - 1. Acceptable Manufacturers:
 - a. Corbin Russwin Hardware (RU) 782.
 - b. Securitron (SU) BPS Series.

2.14 SILENCERS

- A. Furnish door silencers at all openings without gasketing. Provide two at each pair of doors and three for each single door.
- B. Manufacturers:
 - 1. Basis of Design: Provide products manufactured by **Rockwood**; or approved equal.
 - 2. Subject to compliance with indicated requirements, manufacturers offering products which may be incorporated in the work include the following:
 - a. Trimco
 - b. Hiawatha
 - c. or approved equal

2.15 KEYS AND KEYING

- A. Cylinders are to be keyed to the existing system, per the instructions of the Architect and/or the Owner.
- B. Furnish:

Five (5) master keys per section

Three (3) keys per cylinder

One (1) extra key for keyed alike locks

- C. Delivery of keys: Deliver all keys by hand, or via registered mail to the owner or their authorized representative.
- D. Prior to ordering locks and cylinders, hold a keying meeting with the Owner's designated agent to determine specific keying requirements. Obtain information on any existing key systems (registry number, keyway, master designations) so new cylinders can be properly integrated. Review the lock functions with the Owner at this time, and advise the architect of any Owner desired changes.

FVHD4937B / 4937C 2:08700-10 ADDENDUM NO. 1

2.16 HARDWARE SUPPLIER'S RESPONSIBILITY

A. The finish hardware listed herein shall in no way be construed as a complete hardware schedule and shall be considered as an indication of the finish hardware requirements desired by the Owner. It shall be the finish hardware supplier's responsibility to examine the drawings and door schedule, and provide all necessary or additional hardware as required, but not specified herein. Such items of finish hardware shall be of the same type, quality, and quantity as that scheduled for similar doors used for similar purposes in other parts of the building. A schedule of fabrication and delivery shall be executed to avoid any delay of the entire project.

2.17 HARDWARE SET NUMBERS

- A. All doors shall be equipped with finish hardware of the types listed and in accordance with the **following** set numbers. The contractor is to refer to the schedule and plans for the total number of each set required. Sets, as listed herein, shall be supplied as complete units and must include all components. No omissions will be accepted.
 - 1. PE Pemko
 - 2. RO Rockwood
 - 3. SA Sargent
 - 4. HS HES
 - 5. RF Rixson
 - 6. NO Norton
 - 7. MK McKinney
 - 8. SU Securitron
 - 9. OT OTHER

HARDWARE SETS

Set: 1.0

Doors: A001

Description: Exterior FRP - Whse

1	Continuous Hinge	CFM-HD1		PE
1	Exit Device (rim, NL, CD)	16 43 8804 862	US32D	SA
2	Cylinders	Match Facility		
1	Door Closer	UNI7500 Series	689	NO
1	Threshold (coord w/ details)	274x292AFGPK FHSL14SS-2		PE
1	Sweep	3452APK		PE
1	Weather Seals	Supplied with door/frame assembly		OT

Set: 2.0

Doors: S101

Description: Vestibule FRP Pair - Remote Release

1 Continuous Hinge	CFM-HD1 Series SER12		PE
1 Continuous Hinge	CFM-HD1 Series		PE
1 Exit Device (rim, NL, EL, CD)	16 43 56 8804 862	US32D	SA
1 Exit Device (rim, NL, CD)	16 43 8810 862	US32D	SA
1 Keyed removable Mullion	L980S		SA
2 Conc Overhead Stops	1-X36	630	RF
4 Cylinders	Match Facility		

2 Door Closer	7500 Series	689	NO
2 Sweep	3452APK		PE
1 Door Wiring Harness	QC Series (jamb to device)		MK
1 Frame Wiring Harness	QC Series (jamb to J-box)		MK
1 Wiring Diagram	Elev & Point-to-Point		
1 Power Supply	AQD6 (coord w/ security)		SU
2 Weather Seals	Supplied with door/frame assembly		OT
1 Remote Release Switch	By Security Vendor		OT
1 DPS & REX Devices	By Security Vendor		OT

Notes:

Operation: Door is normally closed and locked. Signal from remote location retracts latch for momentary access. Monitoring by door position switch. During a loss of power, the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Outside key override.

<u>Set: 3.0</u> Doors: \$102

Description: Vestibule FRP - Remote Release

1 Continuous Hinge1 Exit Device (rim, NL, EL, CD)1 Conc Overhead Stop2 Cylinders	CFM-HD1 Series SER12 16 43 56 8804 862 1-X36 Match Facility	US32D 630	PE SA RF
1 Door Closer1 Sweep1 Door Wiring Harness1 Frame Wiring Harness1 Wiring Diagram	7500 Series 3452APK QC Series (jamb to device) QC Series (jamb to J-box) Elev & Point-to-Point	689	NO PE MK MK
 Power Supply Weather Seals Remote Release Switch DPS & REX Devices 	AQD6 (coord w/ security) Supplied with door/frame assembly By Security Vendor By Security Vendor		SU OT OT OT

Notes:

Operation: Door is normally closed and locked. Signal from remote location retracts latch for momentary access. Monitoring by door position switch. During a loss of power, the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Outside key override.

Set: 4.0

Doors: \$105 Description: Office

1	Continuous Hinge	CFM-HD1 Series		PE
1	Office Lock	8205 LNL	US26D	SA
1	Stop	As Required	630	
1	Door Closer	7500 Series	689	NO
1	Kick Plate	K1050 10" 4BE CSK	US32D	RO
3	Silencer	608		RO

FVHD4937B / 4937C 2:08700-12 ADDENDUM NO. 1

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Mount Hardware units at heights indicated in "recommended locations for Builders Hardware for Standard Steel Doors and Frames", by the Door and Hardware Institute, except as specifically indicated, required to comply with governing regulations, or may be otherwise directed by the Architect.
- B. Install each hardware item in compliance with the manufacturer's instruction and recommendations. Wherever cutting and fitting is required to install finish hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protection with finishing work specified in the Division 9 sections. Do not install surface-mounted items until finishes have been completed on the substrate.
- C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

3.2 ADJUST AND CLEAN

- A. Adjust and check each operating item of finish hardware and each door to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.
- B. Final adjustment: Wherever finish hardware installation is made more than one month prior to acceptance of occupancy of a space or area, return to the work site during the week prior to acceptance or occupancy, and make final check and adjustment of all finish hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of finish hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- C. Instruct Owner's personnel in proper adjustment and maintenance of finish hardware finishes during the final adjustment of finish hardware.
- D. Continued Maintenance Service: Approximately six months after the acceptance of finish hardware in each area, the installer, accompanied by the representative of the lock and latch manufacturer shall return to the project and re-adjust every item of finish hardware to restore proper function of doors and finish hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace finish hardware items that have deteriorated or failed due to faulty design, materials or installation of finish hardware units.

END OF SECTION 08700

FVHD4937B / 4937C 2:08700-13 ADDENDUM NO. 1

SECTION 10100 - DRY MARKERBOARDS AND EXHIBITION BOARDS (W. DAVIES MS)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DESCRIPTION OF WORK

- A. Extent of dry markerboards and exhibition boards Alternate Bid Work is indicated on the drawings.
- B. Type of dry markerboards and exhibition boards specified in this section includes the following:
 - 1. Porcelain enamel steel dry marker boards.
 - 2. Fabricork fabric faced cork exhibition boards.
 - 3. Factory applied trim.
 - 4. Field applied trim.

C. Related Section:

1. Section 01030 - Alternate Bids

1.3 REFERENCES

- A. ASTM E84 Standard Test Method for Surface Burning Characteristics for Building Materials.
- B. ASTM C540 Gloss for ceramic materials.
- C. ASTM C614 for alkali resistance.
- D. ASTM D2244 evaluation of color differences.
- E. ASTM B221 Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wires, Profiles and Tubes.
- F. ASTM C208-72 for cellulosic fiberboard.
- G. ANSI A208.1-79 for particleboard.
- H. ANSI H35.1-82 for aluminum temper and alloy.
- I. HNSI A424-80 for steel for porcelain enameling.
- J. FS LLL-B-810 for tempered hardboard.
- K. PEI-1002 Manual and Performance Specification for Porcelain Enamel Writing Surfaces.

FVHD-4937B / 4937C 2:10100-1 ADDENDUM NO. 1

- L. BYK-Gardner Surface Distortion.
- M. GREENGUARD Indoor Air Quality Certified.
- N. GREENGUARD Children and Schools Indoor Air Quality Certified.

1.4 QUALITY ASSURANCE

- A Manufacturer: Furnish all dry markerboards and exhibition boards by a single manufacturer for the entire project.
- B. Surface Burning Characteristics: Provide exhibition board surfaces which are identical in composition to those with surface burning characteristics indicated below, as determined by testing in compliance with ASTM E84. Use only exhibition boards which are certified to meet the following standards:

Flame Spread: Not more than 25.
 Smoke Developed: Not more than 40.

- C. Uniformity of color, corrosion, temperature, alkali, water, range of gloss test, uniform texture, light reflectance and cleanability are requirements for all groups and have specific ranges for each.
- D. Product Certifications: Provide GREENGUARD Indoor Air Quality Certified and GREENGUARD Children and Schools Indoor Air Quality Certificates for markerboards.
- E. Reflectivity of LCSII ceramicsteel Markerboard writing surfaces shall not exceed the following:
 - 1. Gloss Range / 60° Gloss meter GU (Gloss Units)
 - a. LCSII ceramicsteel for Markerboard 68 -76% (low gloss surface).
 - b. LCSII ceramicsteel for writing surfaces Surface Distortion reduction and the optimum improvement to performance characteristics.
 - 2. Contrast/waviness for Markerboards (light and dark effects) shall be no greater than 15 [Scale 0 30] when tested with BYK Gardner Wave Scan 5+ Measuring device showing visual acuity (contrast sensitivity) to the human eye at distances greater than 3 meters (10′-0″).
 - 3. Resolution (visual acuity) shall be based on 3 lines per degree and be visibly maintained beyond the current standard of 3 meters. [Byk-Gardner Wave Scan 5+ Measuring device].
 - 4. Surface distortion ("orange peel"/surface peaks and valleys) as tested by the BYK-Gardner Wave Scan 5+ Measuring device [Scale 0 60]. Values are established by the difference in the highpoint/low point of the Markerboard test surfaces. P 3 ceramicsteel shall establish the lowest range of distortion from 11.7 16.02.

1.5 **SUBMITTALS**

- A. Samples and colors for each:
 - 1. Face sheet materials
 - 2. Cork materials
 - 3. Vinyl materials
 - 4. Aluminum trim or wood trim types and profiles.
- B. Shop Drawings: Submit shop drawings for each type of drymarker and exhibition board. Include sections of typical trim members and dimensioned elevations. Show anchors, grounds, reinforcement, accessories, layout and installation details.
 - 1. Drawings shall indicate location and actual material lengths of each unit. Room elevations shall indicate joint locations and include dimension from floor and adjacent side walls, cross-sections for trim, backing, face and core materials, fastener spacing and types of units provided.
- C. Product Data: Submit manufacturer's technical data and installation instructions for each material and component part, including data substantiating that materials comply with requirements.
- D. Certification: Submit the manufacturer's certification that materials furnished for the project comply with the specified requirements.
- E. Manufacturer's Product Warranty: Submit manufacturer's product and accessories warranty and certificate of authenticity from manufacturer.
- F. Product use, regular cleaning, stain removal and precautions information in the operation and maintenance instructions.

1.6 SPECIAL PRODUCT WARRANTY

- A. Submit a "Life of Building" warranty, stating that under normal usage and maintenance, and when installed in accordance with manufacturer's instructions and recommendations, porcelain enamel steel markerboard writing surfaces are guaranteed for the Life of the Building. Guarantee covers replacement of defective boards, but does not include cost of removal or reinstallation.
- B. Submit a standard warranty, stating that when installed in accordance with manufacturer's instructions and recommendations, exhibition boards are guaranteed for **one (1) year** against defects in materials and workmanship. Guarantee does not cover normal wear and tear, improper handling, any misuse, or any defects caused by vandalism or subsequent abuse. Guarantee covers replacement of defective material, but does not include cost of removal or reinstallation.
- C. Writing Surface Warranty Period: **Lifetime of the building** commencing on the Date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: "Series 1", as manufactured by Claridge Products and Equipment, Inc., Tel.# 800.434.4610; or approved equal.
 - 1. Finishes and Colors: Shall be selected by the Architect from manufacturer's available full range of finishes and colors including painted aluminum colors.
- B. Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
 - 1. Manufacturers of Porcelain Enamel Dry Markerboards and Exhibition Boards:
 - a. Educational Equipment.
 - b. Platinum Visual Systems
 - c. Or approved equal

2.2 MARKERBOARD MATERIALS

- A. Porcelain Enamel: Provide balanced, high pressure laminated porcelain enamel markerboards of 3-ply construction consisting of facing sheet, core material and backing.
 - 1. Face Sheet: LCS-II Porcelain Enamel grade cold rolled steel for markerboard, as indicated on drawings..
 - a. <u>Coat the exposed face with a 3-coat process</u> consisting of primer, ground coat and color cover coat, and the <u>concealed face with a 2-coat process</u> consisting of primer and ground coat.
 - 1) Bottom Ground Coat 1.5 to 2.2 mils
 - 2) Top Ground Coat 2.0 to 2.8 mils
 - 3) Top Cover (Color) Coat 3.0 to 4.0 mils
 - b. Fuse cover and ground coats to the steel at the manufacturer's firing temperatures, but not less that 1,200 deg.F (649°C).
 - c. LCS-II Porcelain Enamel for markerboard with improved writing and erasing surface (3 colors low gloss and 3 colors high gloss)
 - d. Facing sheet construction:
 - 1) 1.7-2.5 mils enameled ground coat on face minimum thickness.
 - 2) 3.0 4.0 mils enameled cover (color) coat for markerboard.
 - 3) 1.7-2.5 mils enameled minimum ground coat on back of facing.
 - 4) Firing temperatures shall be a minimum of 1200°F for LCSII markerboard.
 - 2. Writing Surface Core: 7/16" Medium Density Fiberboard (MDF) composed of approximately 90% post-industrial waste.
 - a. Units over 12'-0" in length and longer will require H-bar at center.

- 3. Moisture backer shall be factory laminated to core material. A 0.005" thick aluminum backer shall be provided standard on all markerboards.
- 4. Perimeter trim shall be as indicated on the architectural drawings.
- 5. Factory Built Trim: Markerboard tray shall be 2-3/4" with 3/4" radius corners and include box tray.
- 6. Lamination:
 - a. Factory machine type only.
 - b. Specially formulated adhesives.

2.3 EXHIBITION BOARD MATERIALS

- A. Fabricork: #1380 Vinyl fabric on natural cork underlay with Duracore backing.
- B. Thickness: Total laminated thickness of core and covering is ½". All thicknesses are nominal.
- C. Vinyl Fabric: 15 oz/In yd.
- D. Lamination: Factory machine type with specially formulated adhesive.
- E. Metal Trim and Accessories: Factory fabricated frames and trim of not less than 0.062" thick aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight, single length units wherever possible; keep joints to a minimum. Miter corners to a neat, hairline closure. Plastic accessories will not be accepted.

2.4 FABRICATION

- A. Assembly: Provide factory assembled dry markerboard and exhibition board units, except where field assembled units are required.
- B. Make joints only where the total length exceeds the maximum manufactured length. Fabricate with the minimum number of joints, balanced around the center of the board, as acceptable to the Architect.
 - 1. Provide the manufacturer's standard vertical joint system between abutting sections of dry markerboard.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Field Measurements: Take field measurements prior to the preparation of shop drawings and fabrication where possible, to ensure proper fitting of the work. Allow for trimming and fitting wherever taking of field measurements before fabrication might delay work.
- B. Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.

3.2 INSTALLATION

- A. Deliver factory-built dry markerboard and exhibition board units completely assembled in one piece without joints, wherever possible. Where dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to the Architect. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site. Use splines at joints to maintain surface alignment.
- B. Install units in locations and at mounting heights indicated and in accordance with the manufacturer's instructions. Keep perimeter lines straight, plumb and level. Provide all grounds, clips, backing materials, adhesives, brackets, anchors, trim and accessories necessary for a complete installation.
 - 1. Anchor all components securely using tamperproof fasteners, where accessible.
 - 2. Install all dry markerboards and exhibition boards with completely concealed continuous hangers.
- C. Provide factory-trained installers.
- D. Apply manufacturers' adhesive behind each board using roughly ¼ cup @ 16" on center.
- E. Mounting heights from the floor for each room shall be as follows:

Consult with the Architect / Owner before start of installation:

- 1. Fifth and Sixth grades 30"
- 2. Seventh ninth grades 33"
- F. Provide covering for H-moldings to match vinyl-covered boards.
- G. Clean boards using manufacturers' recommended procedures and install cleaning labels for each room.
- H. Provide mitered and wrapped hairline joints for all trims.
- I. Provide fasteners at perimeter trims 16" 24" and 12" 16" on trays.

3.3 ADJUST AND CLEAN

- A. Verify that accessories required for each unit have been properly installed and that operating units function properly.
- B. Clean units in accordance with the manufacturer's instructions. Break-in markerboards only as recommended by the manufacturer.
- C. Repair or replace all damaged units and surfaces to the approval of the Architect at no additional cost to Owner.

END OF SECTION 10100

ADDITION / ALTERATIONS AND RENOVATIONS TO

JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL

5801 3RD ST, MAYS LANDING, NJ 08330

HAMILTON TOWNSHIP BOARD OF EDUCATION

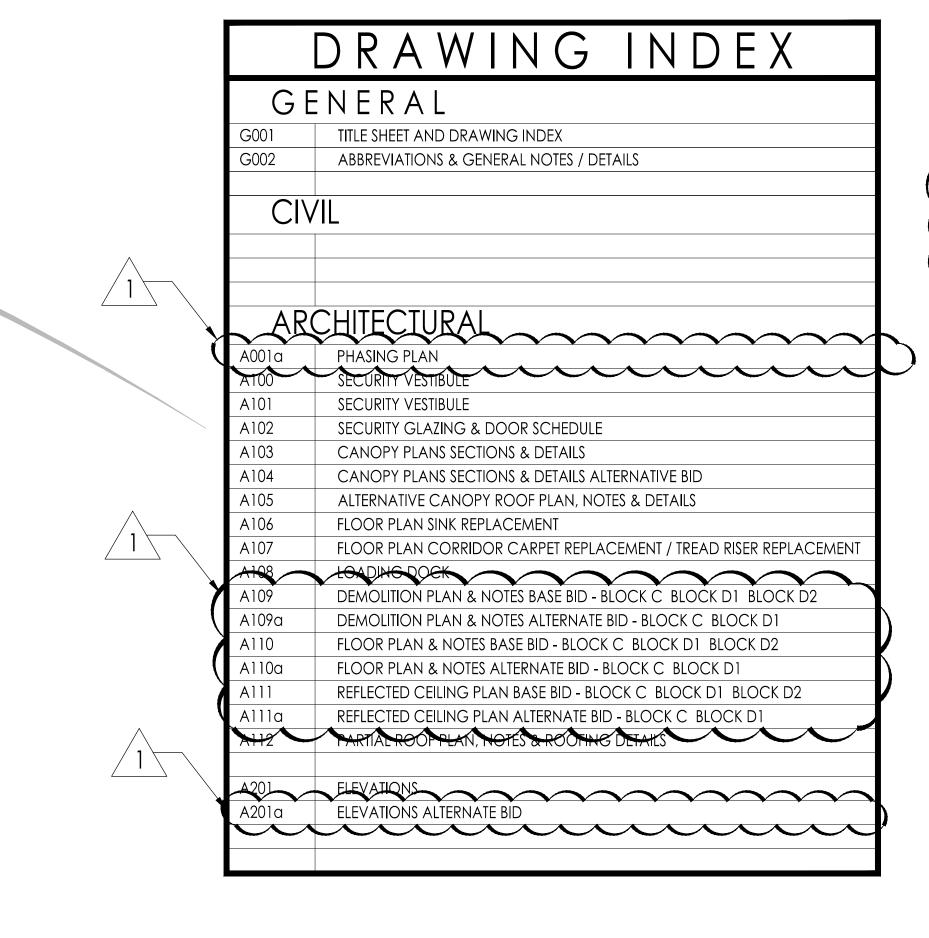
5801 3rd, MAYS LANDING, NJ 08330

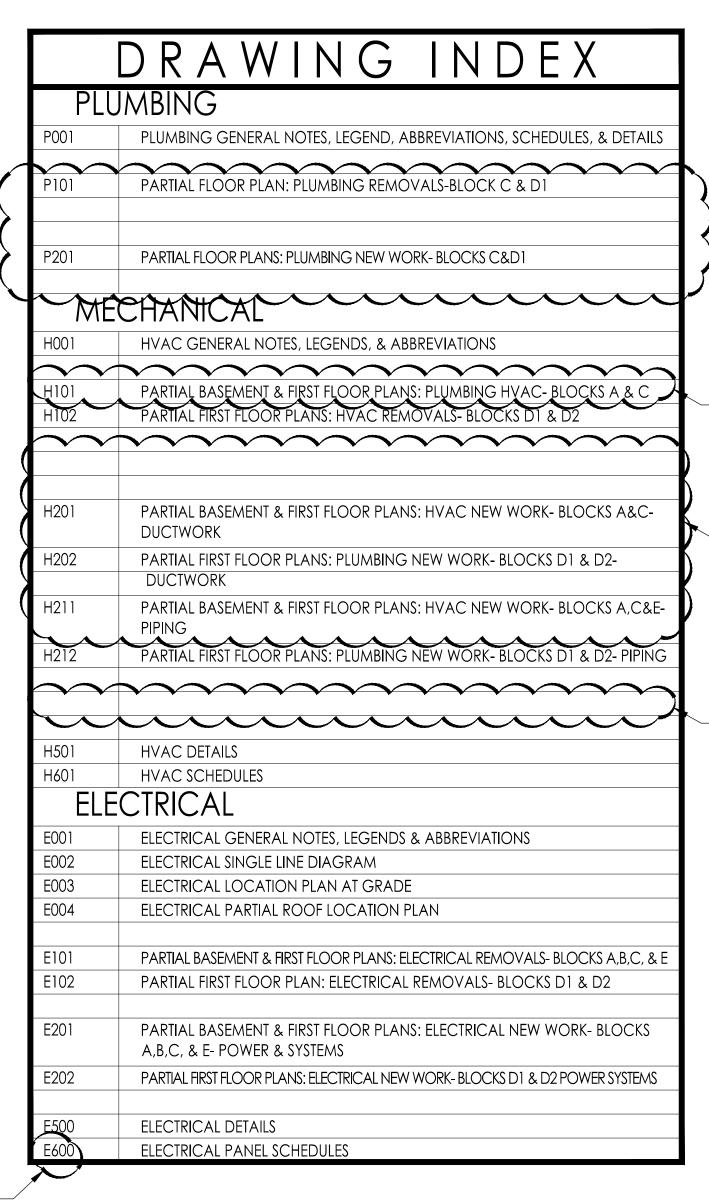


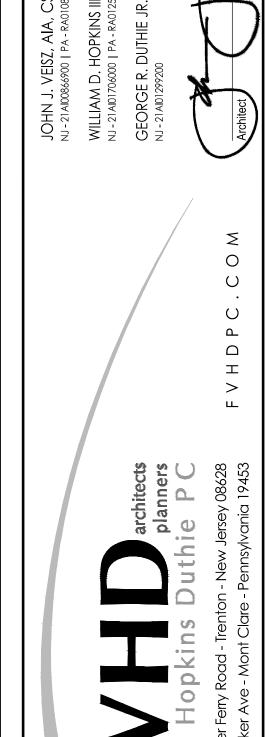
GILLAN & HARTMANN, INC

MEP ENGINEERS | MONT CLARE - PA

Addition / Alterations / Renovations at Joesph C. Shaner Memorial Elementary School FVHD 4937B - NJ DOE No. 1940-060-18-1000







ALTERATIONS AND
RENOVATIONS TO
JOSEPH C. SHANER
MEMORIAL
ELEMENTARY SCHOOL

Project Owner Name

HAMILTON

TOWNSHIP BOARD

OF EDUCATION

Project Location
5801 3rd ST
MAYS LANDING,
NJ 08330

Project Number

4937B

Project Date

02.15.2019

Checked By

JJV

Drawn By

dsb

Scale

TITLE SHEET AND
DRAWING INDEX

AS NOTED

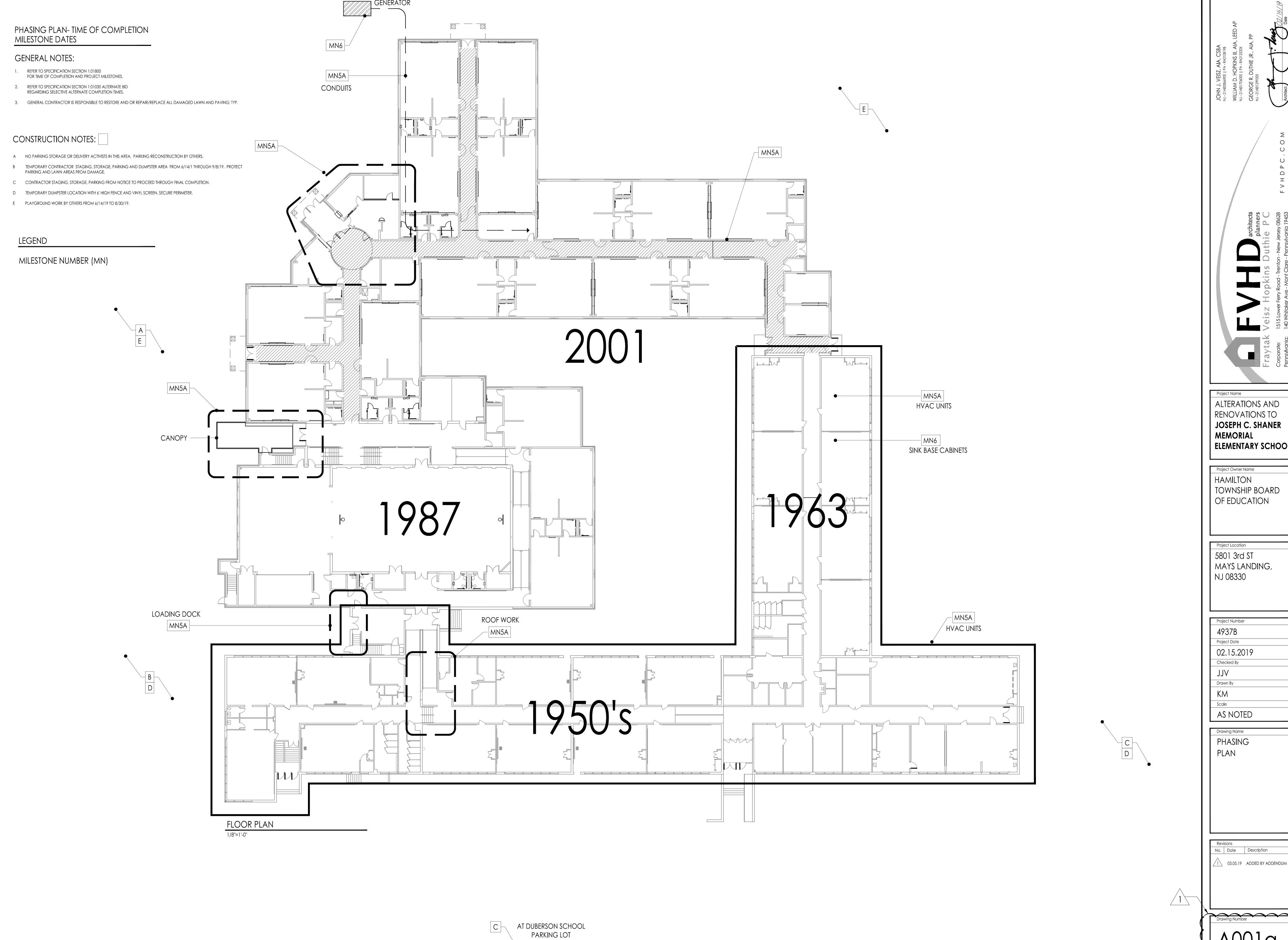
Revisions

No. Date Description

1 03.05.19 ADDENDUM # 1

Drawing Number

G001



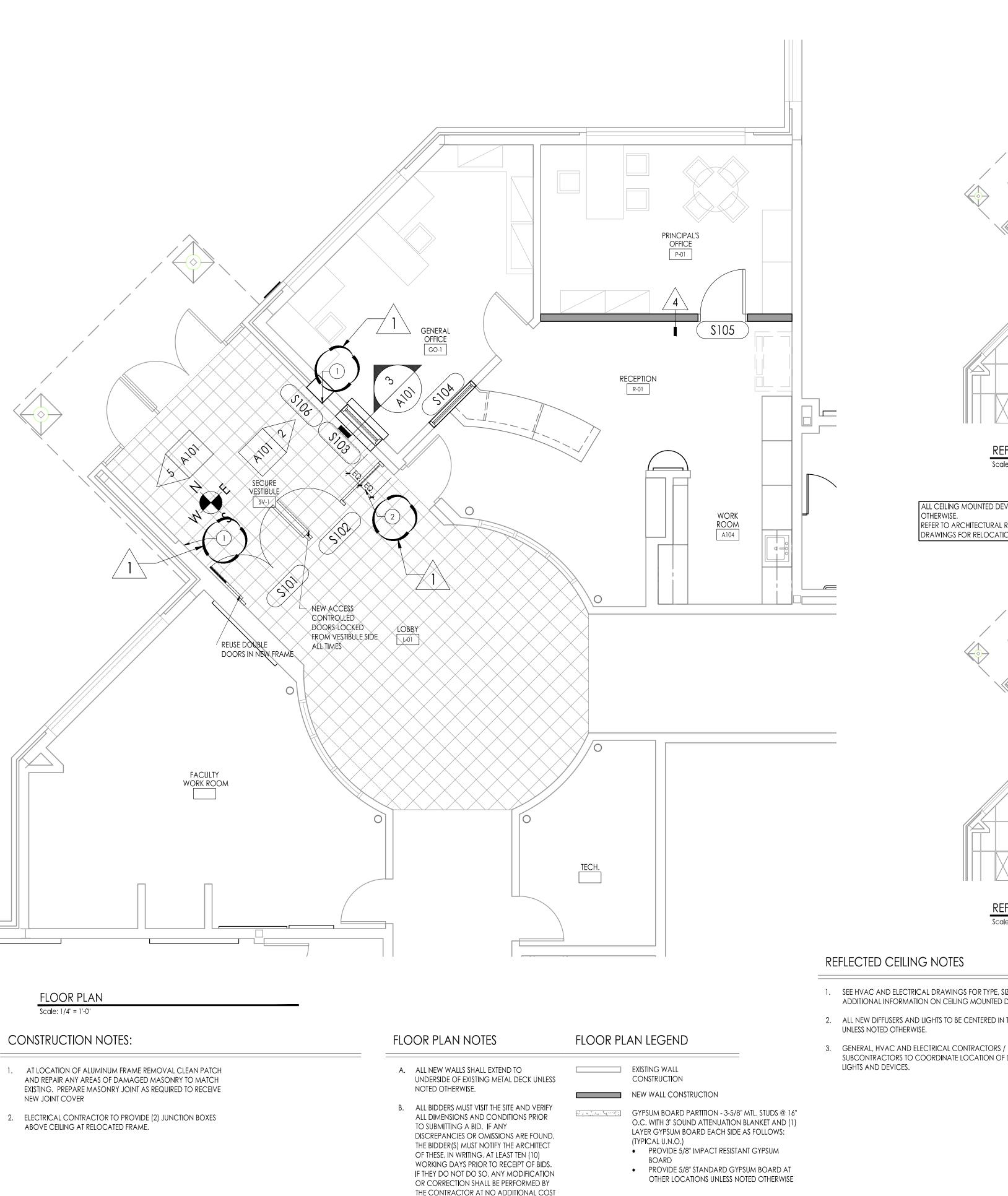
ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER | ELEMENTARY SCHOOL

Project Owner Name TOWNSHIP BOARD
OF EDUCATION

5801 3rd ST MAYS LANDING, NJ 08330

02.15.2019

No. Date Description



REFLECTED CEILING NOTES

1. SEE HVAC AND ELECTRICAL DRAWINGS FOR TYPE, SIZE AND ADDITIONAL INFORMATION ON CEILING MOUNTED DEVICES.

REFLECTED CEILING PLAN - DEMOLITION

ALL CEILING MOUNTED DEVICES TO REMAIN UNLESS NOTED

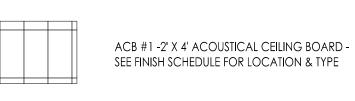
REFER TO ARCHITECTURAL RCP / HVAC / ELECTRICAL / PLUMBING

DRAWINGS FOR RELOCATION AND/OR NEW DEVICE(S) LOCATIONS

REFLECTED CEILING PLAN

- 2. ALL NEW DIFFUSERS AND LIGHTS TO BE CENTERED IN THE PANEL
- UNLESS NOTED OTHERWISE.
- SUBCONTRACTORS TO COORDINATE LOCATION OF DIFFUSERS /

REFLECTED CEILING PLAN LEGEND



EXISTING ACOUSTICAL CEILING BOARD TO REMAIN EXISTING CAMERA

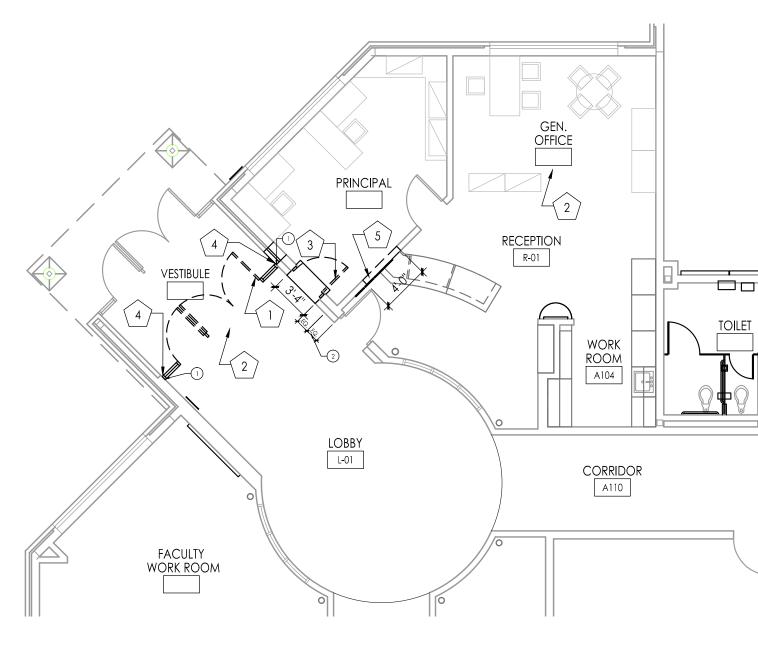
(C) NEW CAMERA EXISTING DETECTOR) NEW DETECTOR EXISTING SPEAKER (SP) NEW SPEAKER EXISTING SPRINKLER S) NEW SPRINKLER EXISTING EXIT SIGN X) NEW EXIT SIGN EXISTING MOTION SENSOR (MS) NEW MOTION SENSOR (WF) NEW WIFI HUB

2'x2' EXISTING CEILING **FIXTURES** EXISTING RECESSED

DOWNLIGHT FIXTURE

DOWNLIGHT FIXTURE RETURN / EXHAUST DIFFUSER

FIXTURES



DEMOLITION PLAN

DEMOLITION CONSTRUCTION NOTES

THE OWNER HAS THE RIGHT OF FIRST REFUSAL FOR ALL EQUIPMENT AND FIXTURES (CABINETS, SHELVING, PLUMBING FIXTURES, ETC.) REMOVED UNDER CONTRACT. IF THE OWNER DOES NOT EXERCISE THIS RIGHT FOR AN INDIVIDUAL PIECE OF EQUIPMENT, THE CONTRACTOR SHALL REMOVE SAID EQUIPMENT FROM THE SITE.

IN ALL LOCATIONS OF RENOVATION / CONSTRUCTION, CONTRACTOR SHALL PROTECT ALL ITEMS (INCLUDING MURALS) FROM CONSTRUCTION DUST AND DEBRIS AS WELL AS DAMAGE. ALL ITEMS DAMAGED BY THE RENOVATION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

IN ALL LOCATIONS OF RENOVATION / CONSTRUCTIONCAREFULLY REMOVE EXISTING PLAQUES / EXHIBITION BOARDS / PICTURES AND TURN OVER TO OWNER. PATCH AND REPAIR ALL DAMAGE FROM REMOVAL TO MATCH EXISTING WALL AND FINISHES & RESTORE TO SMOOTH, FLUSH SURFACE.

WHERE APPLICABLE BRACE AND SHORE UP ANY EXISTING CONSTRUCTION TO REMAIN. REMOVE EXISTING CONSTRUCTION TO LIMITS OF WORK DESCRIBED BY ARCHITECTURAL PLANS & ASSOCIATED HVAC / ELECTRICAL / PLUMBING PLANS. PREPARE FOR POSITIVE CONNECTION OF ALL NEW CONSTRUCTION TO EXISTING CONDITIONS.

- REMOVE EXISTING INDICATED STOREFRONT DOORS & FRAMES, SIDELIGHTS, TRANSOMS, SADDLES & HARDWARE (CLOSERS, STOPS, BUMPERS ETC.) IN THEIR ENTIRETY. CONTRACTORS SHALL TAKE ALL NECESSARY STEPS TO ENSURE BUILDING SECURITY. CONTRACTOR IS TO PROTECT ALL FINISHES ADJACENT TO DEMOLITION WORK. PATCH AND REPAIR ALL DAMAGE CAUSED BY DEMOLITION TO MATCH EXISTING ADJACENT FINISHES, INCLUDING TERRAZZO, BRICK, TILE, BASE, PAINT ETC.
- 2 AT INDICATED AREA, REMOVE AND STORE EXISTING CEILING PANELS, SUSPENSION GRID AND APPLIANCES TO ACCOMMODATE RENOVATION. AFTER RENOVATION IS COMPLETE, MODIFY EXISTING SUSPENSION GRID TO FIT NEW LENGTHS. RE-INSTALL (WITH NEW HANGAR WIRE TO EXISTING STRUCTURE) ALL PANELS, GRID AND APPLIANCES IN DESIGNATED SEE REFLECTED CEILING PLAN AND/OR PLUMBING / HVAC / ELECTRICAL DRAWINGS. REPLACE ALL DAMAGED OR DETERIORATED CEILING PANELS AND SUSPENSION GRID WITH NEW TO MATCH EXISTING. SEE PLUMBING / HVAC / ELECTRICAL DRAWINGS FOR ADDITIONAL WORK REQUIRED. ALL PLUMBING HVAC / ELECTRICAL WORK, INCLUDING DEMOLITION, PATCHING AND REPAIR, BY RESPECTIVE
- (3) REMOVE EXISTING DOOR AND FRAME ASSEMBLY IN IT'S ENTIRETY. EXISTING LINTELS TO REMAIN. INFILL OPENING TO EXTENT SHOWN IN DETAIL AND AS REQUIRED FOR NEW INSTALLATIONS AND
- 4 AT LOCATIONS WHERE NEW DOOR FRAME MEETS EXISTING WALL OR FLOOR, CAREFULLY AND NEATLY REMOVE THE EXISTING WALL BASE AND FLOOR FINISH TO ALLOW FOR POSITIVE CONNECTION OF DOOR FRAME CONSTRUCTION DIRECTLY TO THE EXISTING FLOOR AND WALL SUBSTRATES (TILE / TERRAZZO / CONCRETE / BRICK / CMU / ETC.). CLEAN AND PREPARE EXPOSED EXISTING WALL AND EXISTING FLOOR SLAB TO RECEIVE NEW STOREFRONT FRAMING SYSTEM. AFTER DOOR FRAME CONSTRUCTION IS COMPLETE, PATCH AND REPAIR ALL DAMAGE TO EXISTING CONSTRUCTION CAUSED BY RENOVATION TO MATCH EXISTING ADJACENT FINISH.
- FINISH ALL NEWLY EXPOSED SURFACES TO MATCH EXISTING ADJACENT CONDITIONS. REMOVE EXISTING WALL TO WIDTH INDICATED ON DEMOLITION PLAN AND TO HEIGHT INDICATED ON ELEVATIONS ABOVE EXISTING FLOOR. SEE FLOOR PLAN. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXG. ADJACENT FINISH. INFILL OPENING AS REQUIRED FOR NEW INSTALLATIONS AND CONSTRUCTION.



JOSEPH C. SHANER ELEMENTARY SCHOOL ROOM FINISH SCHEDULE WAINSCOT CEILING WALL FINISH MI HI. WAT. HI WORTH SOME EAST WEN MAIN HT SECURE VESTIBULE ETR / RUB SEE DOOR SCHDL PNT ETR ETR / RUB FINISH SCHEDULE NOTE # 1.3 GENERAL OFFICE PRINCIPAL'S OFFICE

TO THE OWNER.

GENERAL FINISH NOTES

- A. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION ON MATERIALS / MANUFACTURER /
- PERFORMANCE AND WARRANTY INFORMATION. B. WITHIN THE EXISTING BUILDINGS, AT ALL AREAS OF NEW CONSTRUCTION ADJACENT TO EXISTING, NEW CONSTRUCTION SHALL BE FINISHED TO MATCH EXISTING ADJACENT CONSTRUCTION, INCLUDING BRICK, TILE, PLASTER, BASE, ETC. C. AT ALL AREAS OF EXISTING SURFACES BEING PAINTED, THE GENERAL CONSTRUCTION

WORK CONTRACTOR SHALL REMOVE PRIOR TO PAINTING AND RE-INSTALL AFTER PAINTING

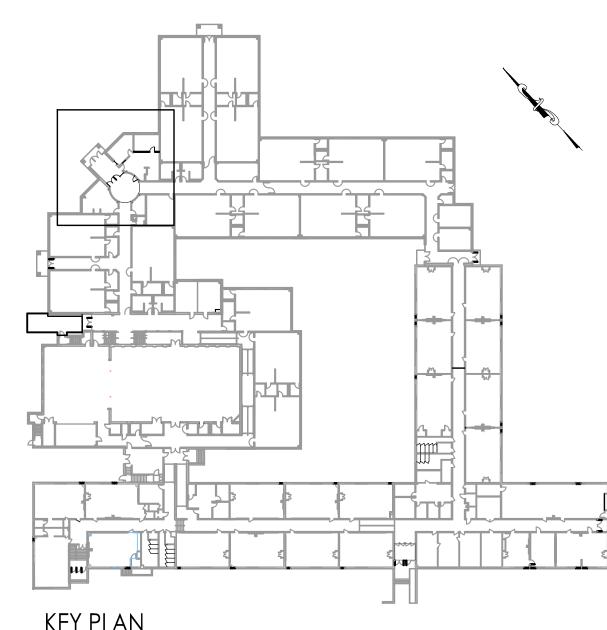
ALL ELECTRICAL DEVICE (SWITCHES, OUTLETS, ETC.) COVER PLATES. D. MATERIALS LISTED ON THE FINISH SCHEDULE REFER TO THE MAJORITY OF WALLS, FLOOR AND CEILING OF ROOMS SCHEDULED, REFER TO PLANS, DETAILS, INTERIOR ELEVATIONS, SECTIONS, CEILING PLANS, AND NOTES FOR THOSE MATERIALS NOT INDICATED ON THE SCHEDULE BUT ARE STILL REQUIRED IN THE ROOM.

ROOM FINISH SCHEDULE NOTES

- 1. REMOVE, MODIFY AND REINSTALL EXISTING ACOUSTIC TILE CEILING AS REQUIRED FOR
- 2. MODIFY EXISTING GYP BD CEILING AS REQUIRED FOR NEW CONSTRUCTION.
- 3. ALL WALL HANGINGS ETC. TO BE REMOVED AND COORDINATED W OWNER FOR REINSTALLATION.

ROOM FINISH ABBREVIATIONS

- ACB -ACOUSTICAL CEILING BOARD CEM -CARPET ENTRY MAT CMU -CONCRETE MASONRY UNIT
- EP -EPOXY PAINTED ETR -EXISTING TO REMAIN
- GYP -GYPSUM BOARD PNT -PAINTED
- RUB -RUBBER BASE
- VCT -VINYL COMPOSITION TILE n/a -NOT APPLICABLE



ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER **MEMORIAL ELEMENTARY SCHOOL**

Project Owner Name HAMILTON TOWNSHIP BOARD OF EDUCATION

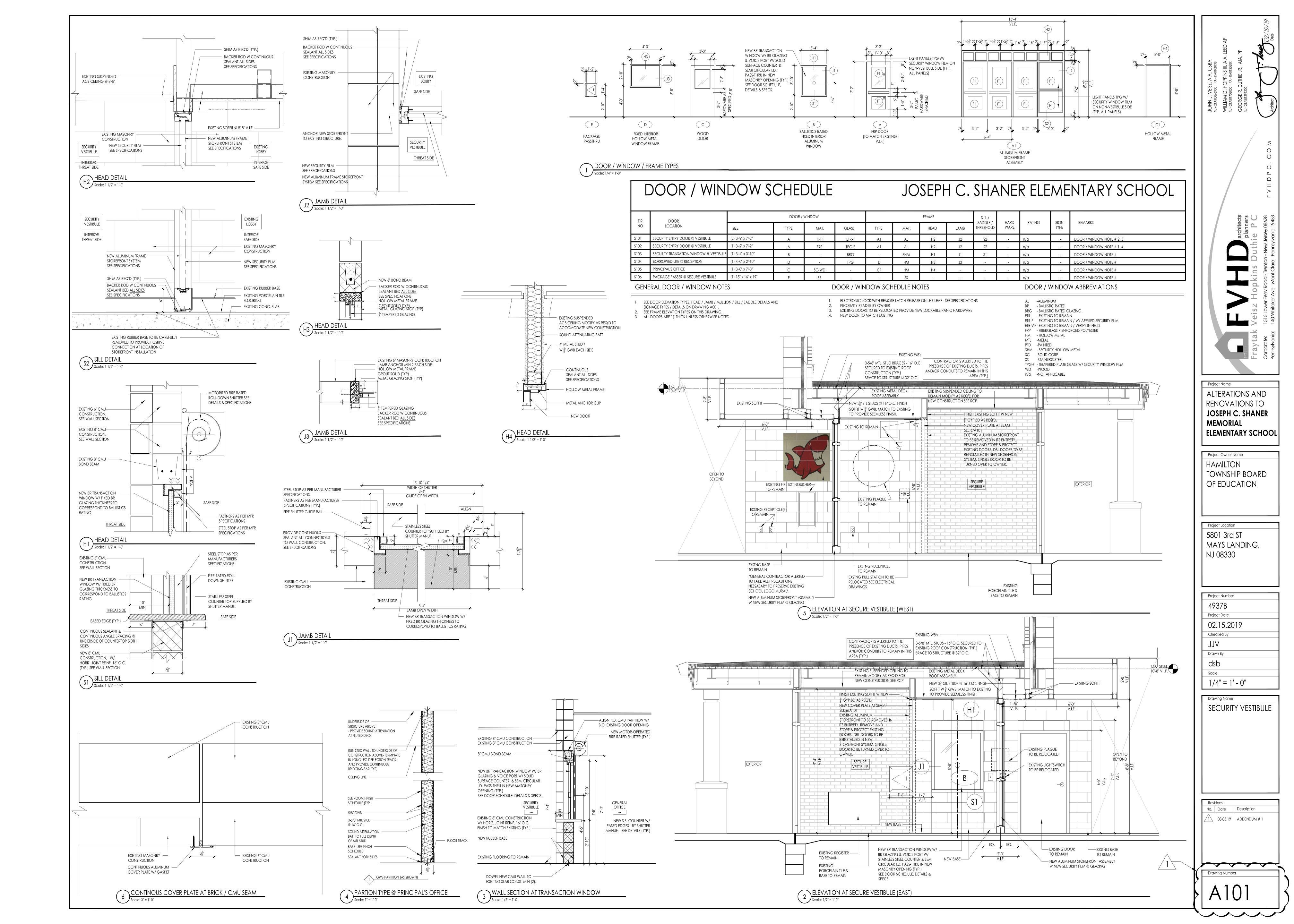
Project Location 5801 3rd ST MAYS LANDING, NJ 08330

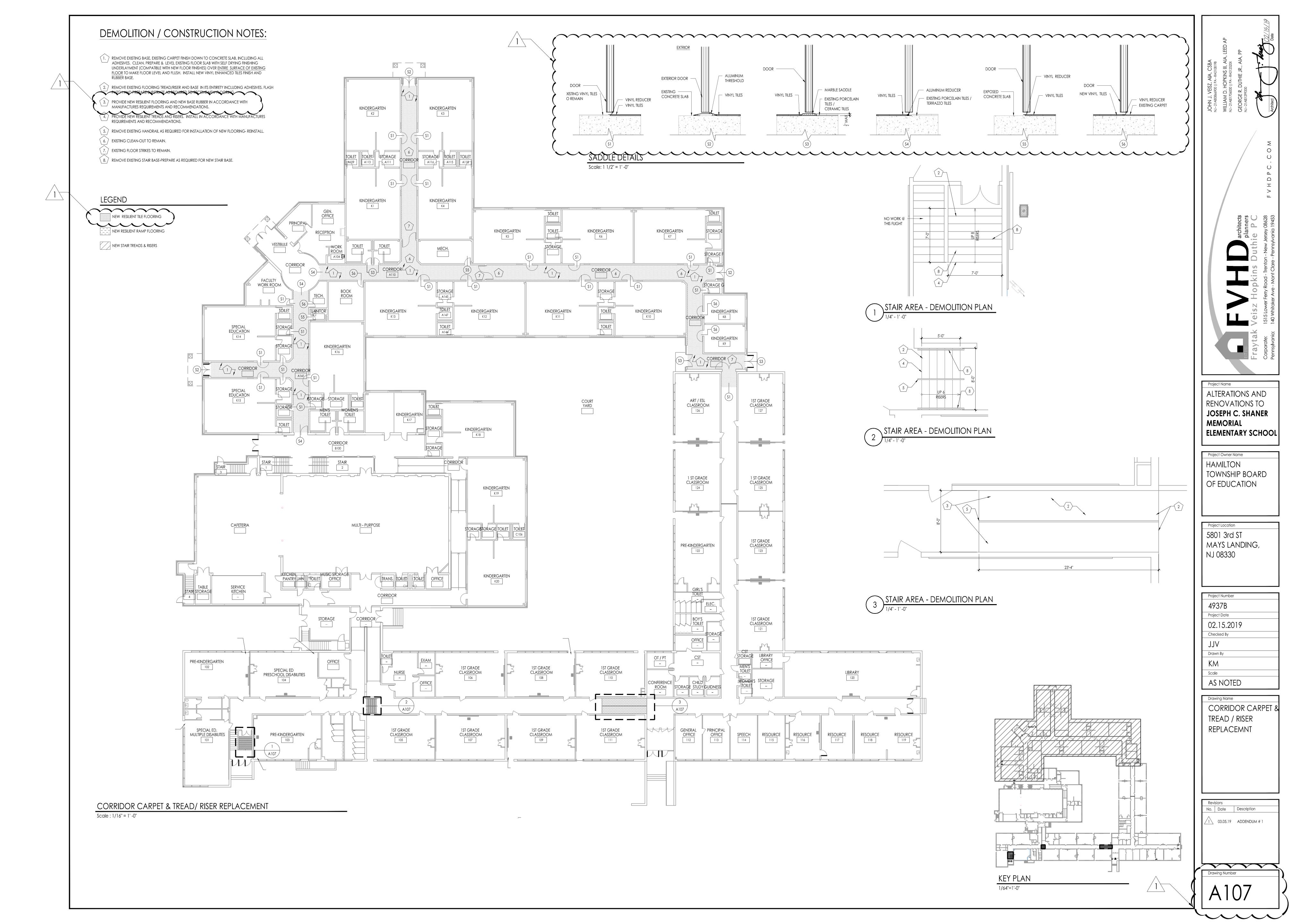
Project Number Project Date 02.15.2019 Checked By Drawn By

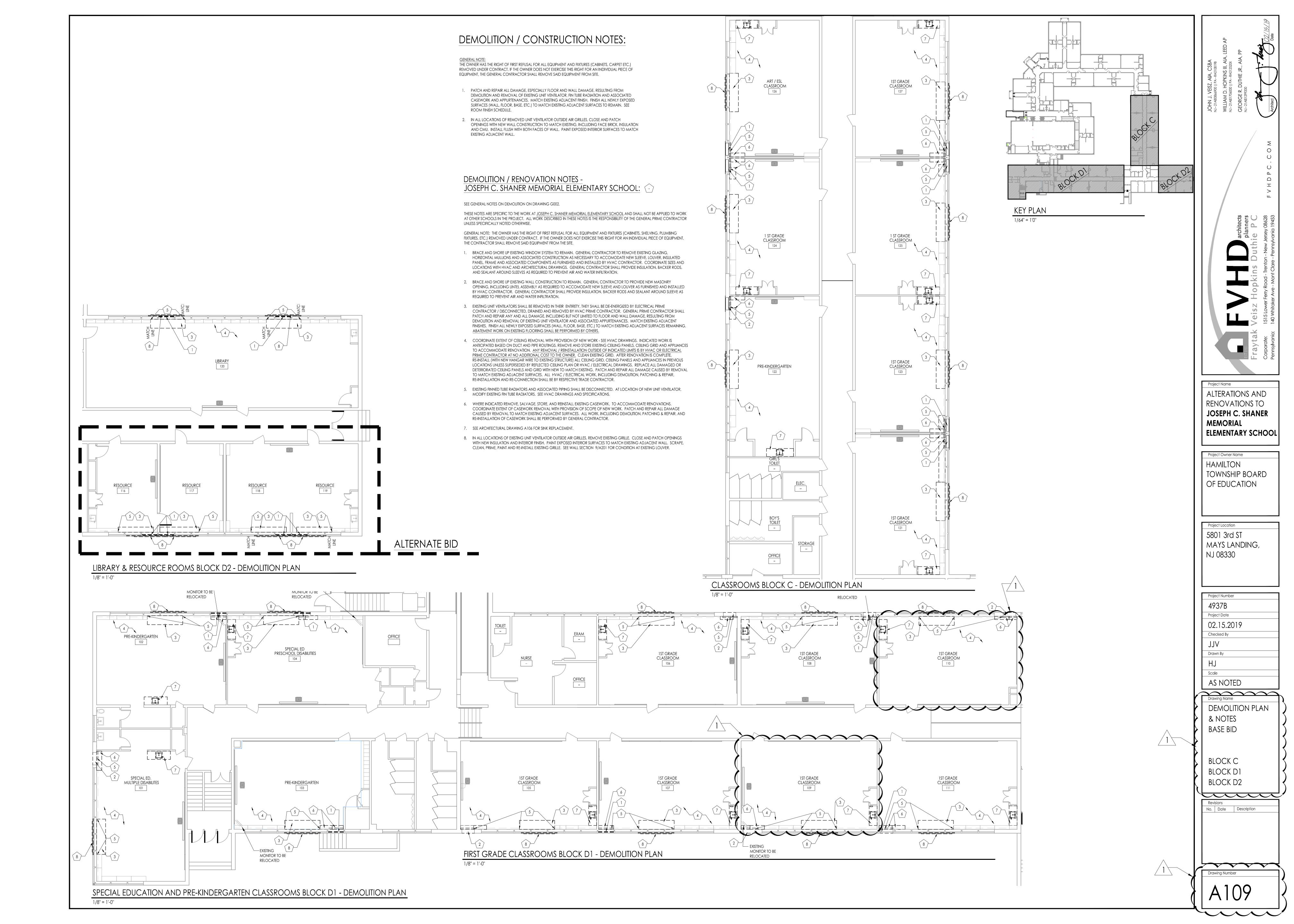
1/4" = 1' - 0"

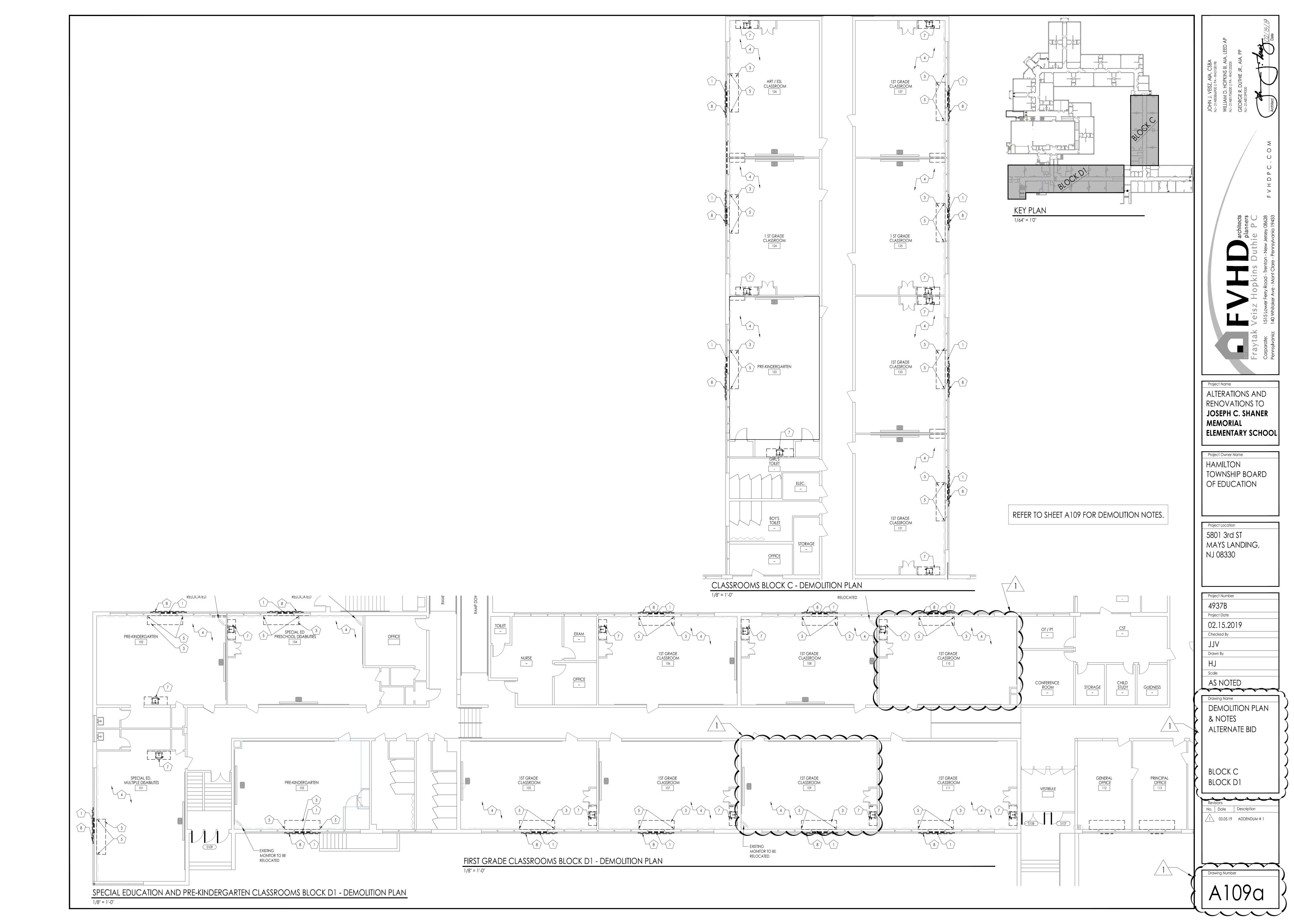
SECURITY VESTIBULE

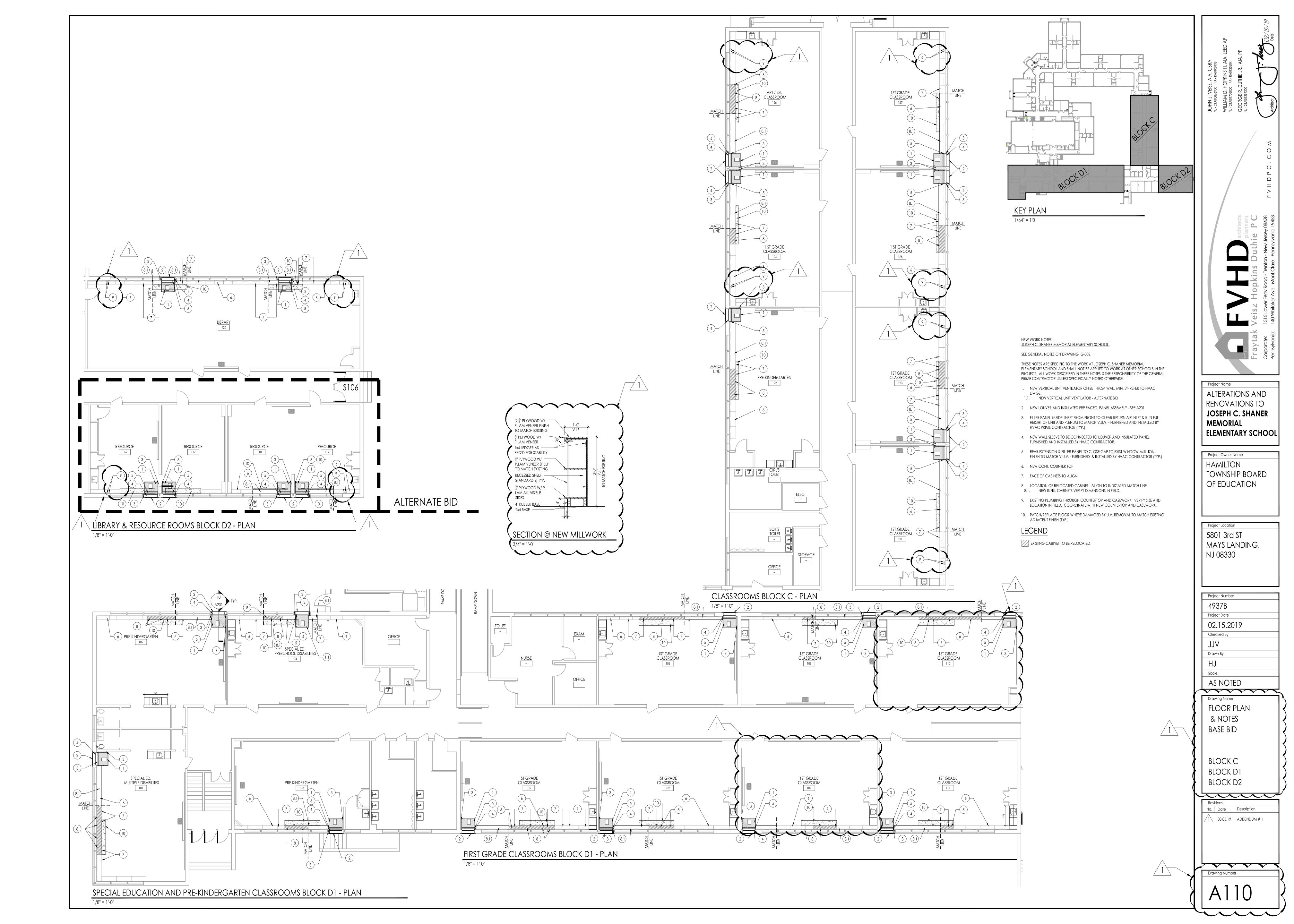
No. Date Description 1\ 03.05.19 ADDENDUM # 1

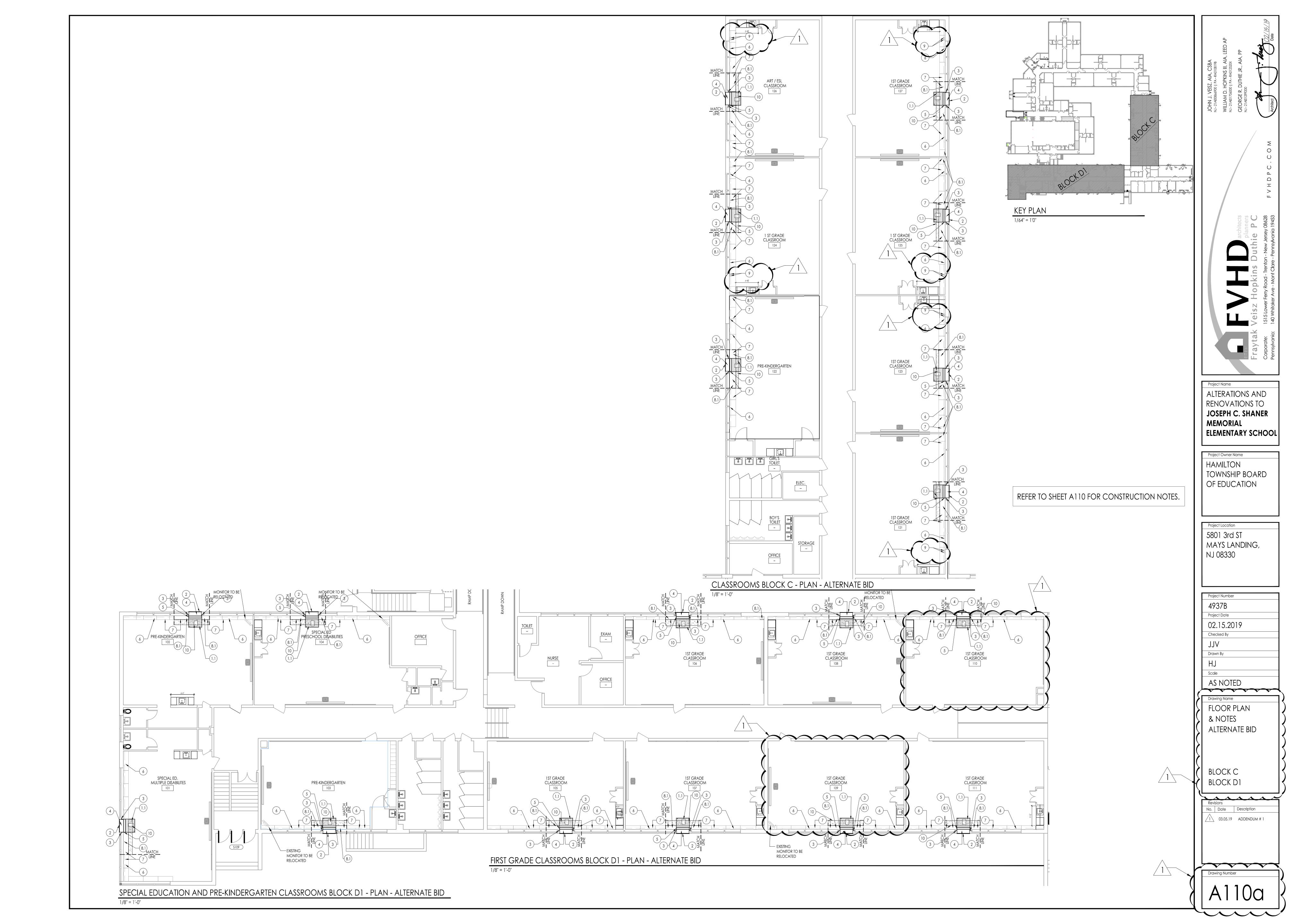


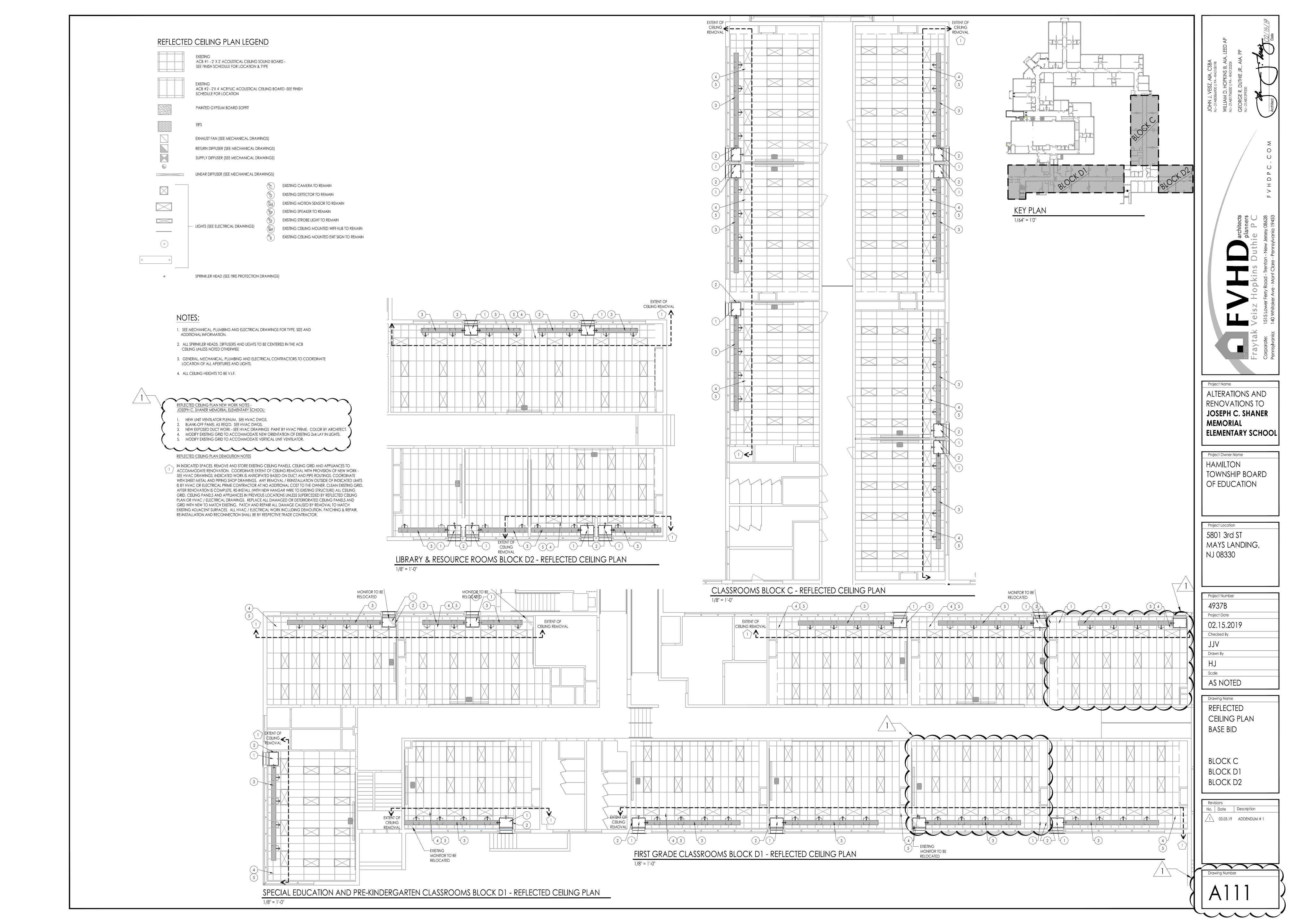


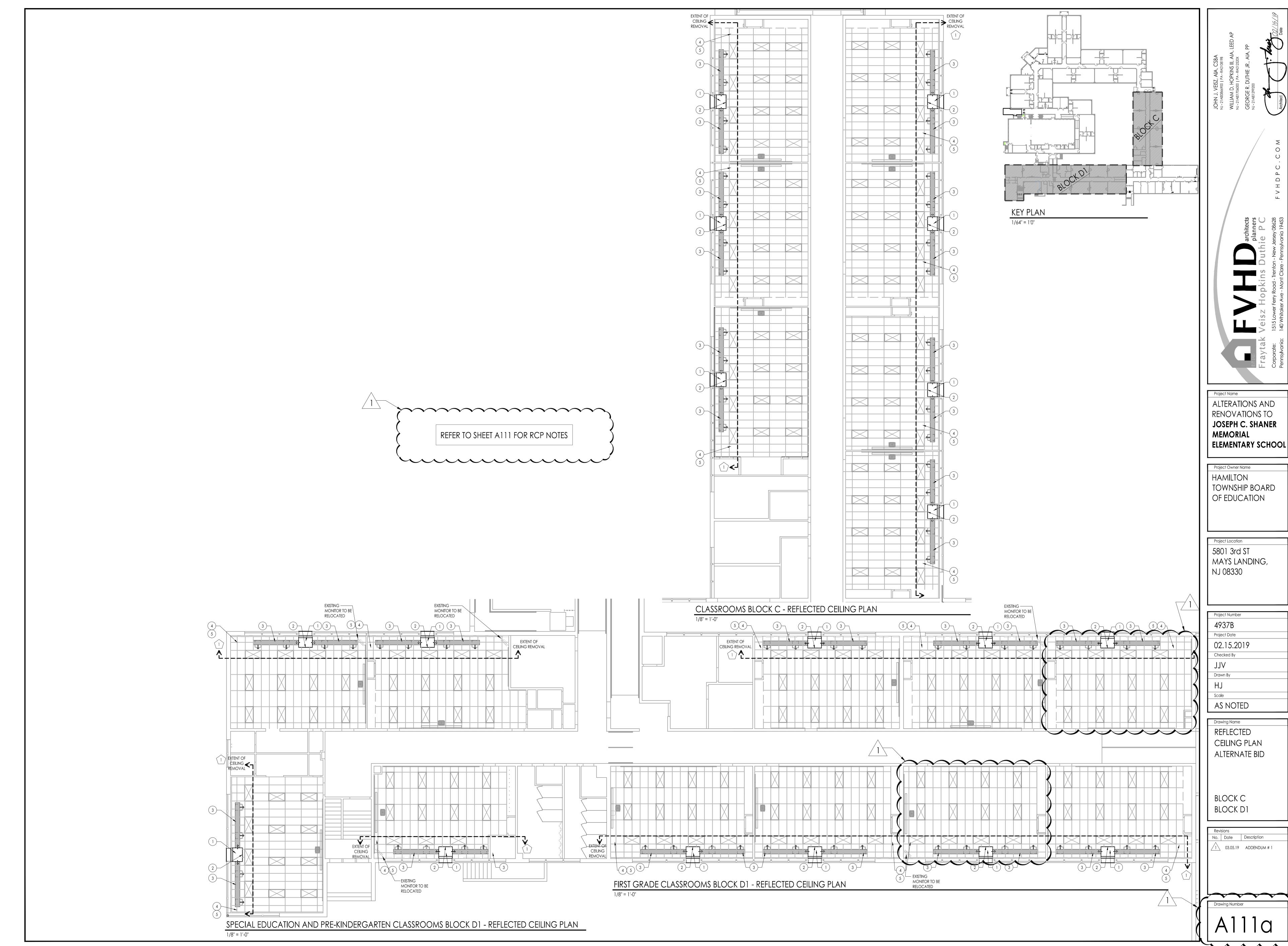


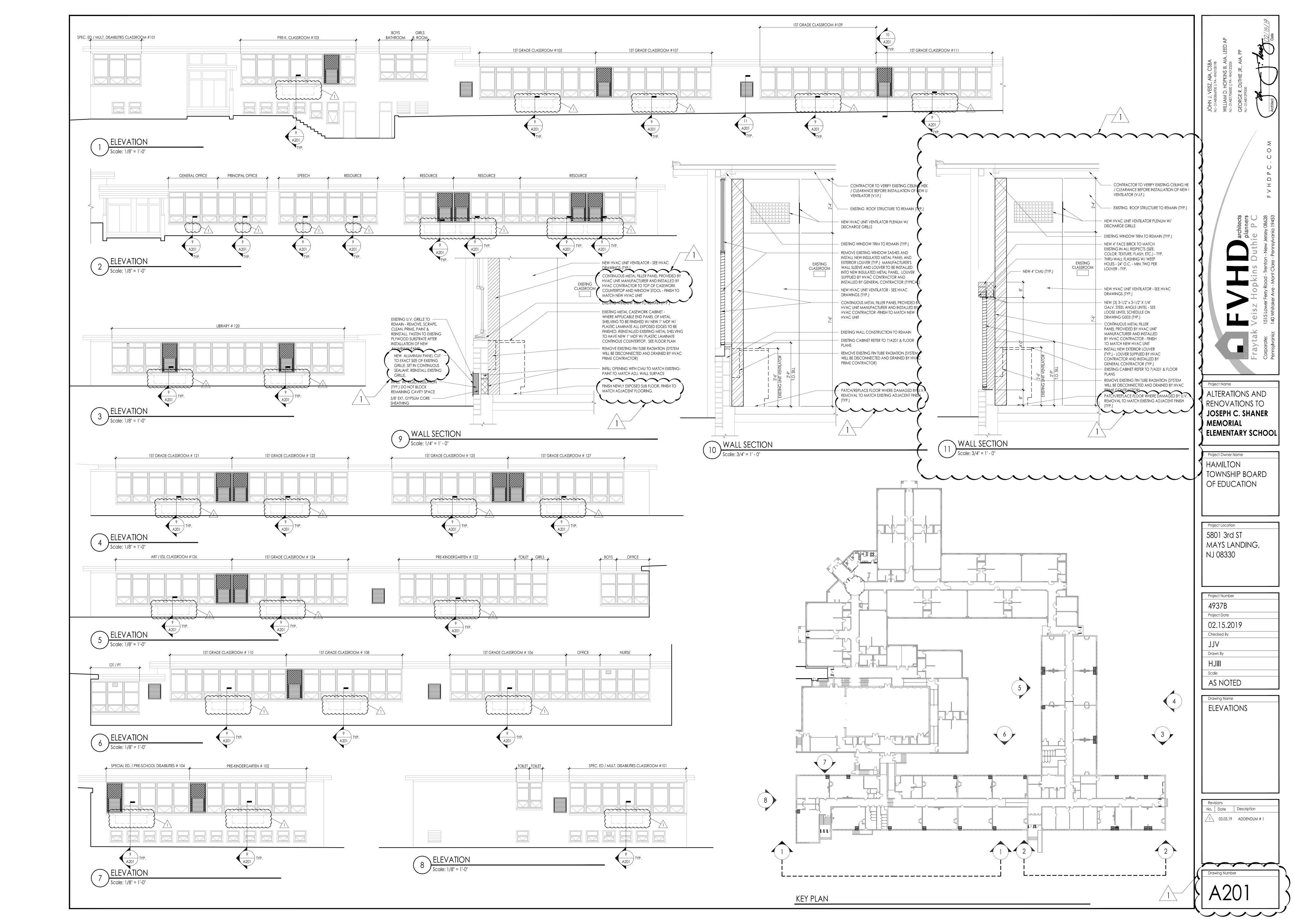


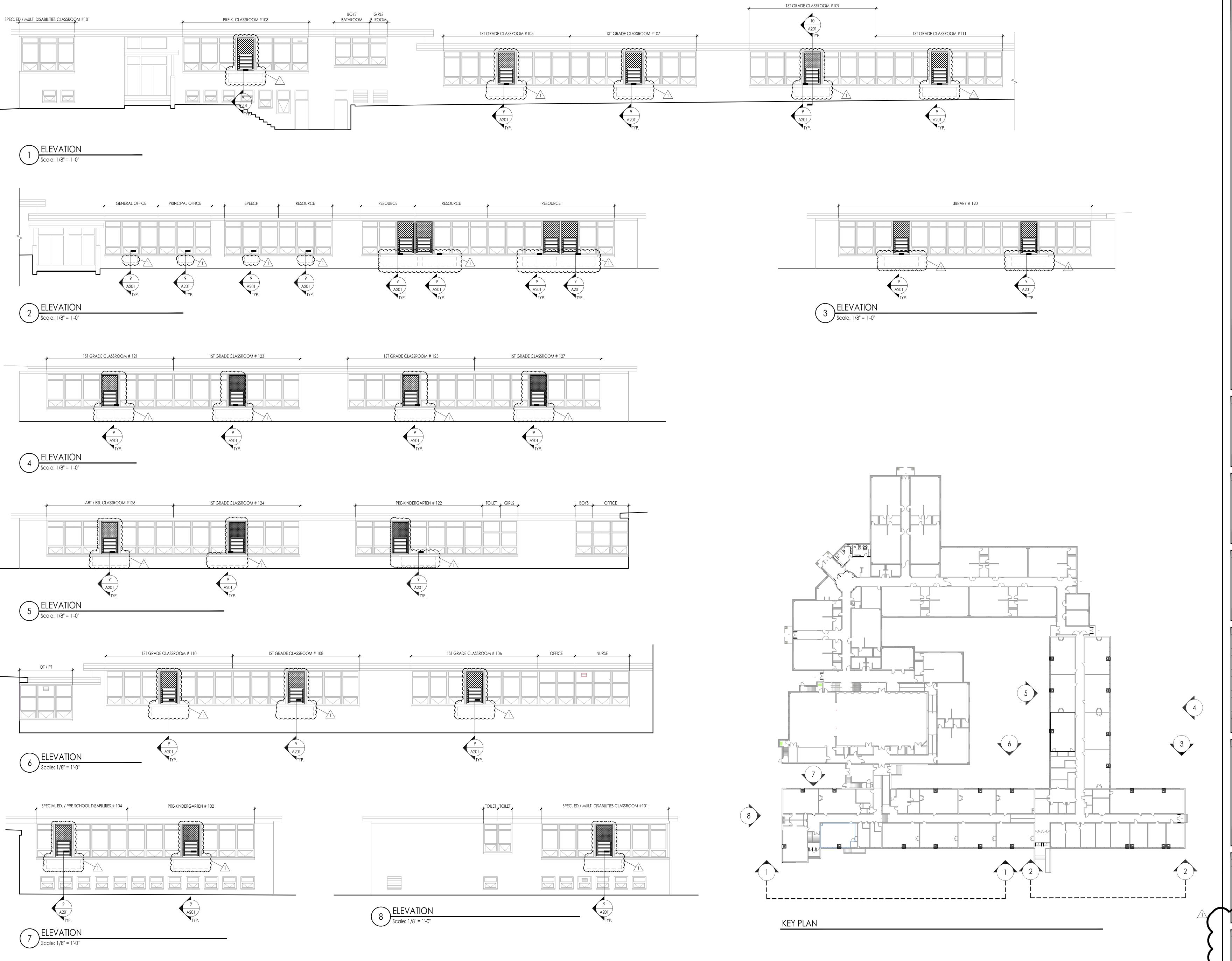












ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL | ELEMENTARY SCHOOL

Project Owner Name HAMILTON TOWNSHIP BOARD OF EDUCATION

Project Location 5801 3rd ST MAYS LANDING, NJ 08330

Project Number 4937B Project Date 02.15.2019 Checked By Drawn By

AS NOTED

ELEVATIONS ALTERNATE BID

No. Date Description 1 03.05.19 ADDENDUM # 1

OOR / WINDOW SCHEDULE JOSEPH C. SHANER

DR	DOOR	DO	DOOR / WINDOW		FRA	FRAME		$\overline{}$
O _N	LOCATION	SIZE	MAT.	GLASS	TYPE	MAT.	REMARKS	
\$101	EXTERIOR ENTRY DOOR @ SECURITY VESTIBULE	V.I.F.	FRP	ETR-F	А	AL	DOOR NOTE # 1,2	
\$102	EXTERIOR ENTRY DOOR @ SECURITY VESTIBULE	V.I.F	FRP	ETR-F	А	AL	DOOR NOTE # 1,2	
\$103	EXTERIOR ENTRY DOOR @ K2/K3 CORRIDOR	V.I.F	FRP	ETR-F	В	AL	DOOR NOTE # 1,2	
\$104	EXTERIOR ENTRY DOOR @ K7-K8 CORRIDOR	V.I.F	FRP	ETR-F	В	AL	DOOR NOTE # 1,2	
\$105	EXTERIOR ENTRY DOOR @ K9/1ST GRADE	V.I.F	FRP	ETR-F	С	AL	DOOR NOTE # 1,2	
\$106	EXTERIOR ENTRY DOOR @ LIBARY/RESOURCE	V.I.F	FRP	ETR-F	E	AL	DOOR NOTE # 1,2	
\$107	EXTERIOR ENTRY DOOR @ ADMIN/1ST GRADE	V.I.F	FRP	ETR-F	F	AL	DOOR NOTE # 1,2	
8108	EXTERIOR ENTRY DOOR @ADMIN/1ST GRADE	V.I.F	FRP	ETR-F	F	AL	DOOR NOTE # 1,2	
\$109	exterior entry door @ special ed/1st grade	V.I.F	FRP	ETR-F	G	AL	DOOR NOTE # 1,2	
\$110	EXTERIOR ENTRY DOOR @ SPECIAL ED/CAFETRIA	V.I.F	FRP	ETR-F	D	AL	DOOR NOTE # 1,2	
FRP	EXTERIOR ENTRY DOOR @ SPECIAL ED13/SPECIAL ED15	V.I.F	FRP	ETR-F	В	AL	DOOR NOTE # 1,2	
								Т



WILLIAM D. HOPKINS III, AIA, LEED AP NJ-21ADI706000 | PA-RA012520X

JOHN J. VEISZ, AIA, CSBA NJ-21AD0866900 | PA-RA0108198 GEORGE R. DUTHIE JR., AIA, PP NJ - 21ADI 299200 Song:

FVHDPC.COM

Project Name

ALTERATIONS AND
RENOVATIONS TO
WILLIAM DAVIES
MIDDLE SCHOOL

Project Owner Name

HAMILTON TOWNSHIP
BOARD OF EDUCATION

1876 DENNIS FORMAN DR MAYS LANDING, NJ 08330

Project Number
4937C
Project Date
03.05.2019
Checked By

Drown By
KM
Scode
NOT TO SCALE

Hamilton Township School District

DOOR SCHEDULE

Revisions
No. Date Description

AD1-A01

GENERAL CASEWORK NOTES:

- 1. CATALOG NUMBERS REFER TO MOST CURRENT CAMPBELL RHEA CASEWORK CATALOG UNLESS OTHERWISE NOTED. FOR REFERENCE ONLY.
- 2. NOT USED
- 3. ALL TOPS SHALL BE PLYWOOD, 1" TOTAL THK. WITH PLASTIC LAMINATE COVERING ON ALL EXPOSED SURFACES (UNLESS NOTED OTHERWISE)
- 4. ALL BACKSPLASHES SHALL BE 3/4" PLYWOOD WITH PLASTIC LAMINATE COVERING ON ALL EXPOSED SURFACES (UNLESS NOTED OTHERWISE).
- ALL FURNITURE AND EQUIPMENT SHOWN DOTTED AND/OR INDICATED AS (N.I.C.) IS NOT IN CONTRACT.
- 6. THE CASEWORK & EQUIPMENT SUB-CONTRACTOR(S) SHALL TURN OVER TO THE PLUMBING AND ELECTRICAL PRIME CONTRACTOR(S) IN A PACKAGE, ALL SINKS, FIXTURES, FAUCETS, TAILPIECES, STRAINERS, ETC., AND ELECTRICAL DEVICES, NIPPLES AND LOCKNUTS, ETC., FOR INSTALLATION AND FINAL CONNECTION.
- 7. THE CASEWORK AND EQUIPMENT SUB-CONTRACTOR SHALL PROVIDE AN ITEMIZED LIST AND A DESIGNATED SITE LOCATION FOR THE TRANSFER OF THE MATERIALS REFERENCED IN NOTE 6 TO THE PLUMBING AND ELECTRICAL PRIME CONTRACTORS. THE LIST SHALL HAVE A DESCRIPTION OF THE ITEMS AND QUANTITY ALONG WITH A SIGN-OFF LINE FOR THE PLUMBING AND ELECTRICAL PRIME CONTRACTORS. A COPY OF THE SIGNED LIST IS TO BE SUBMITTED TO THE ARCHITECT / OWNER PRIOR TO BILLING FOR THIS EQUIPMENT.
- 8. EQUIPMENT SUB-CONTRACTOR SHALL MAKE SINK CUT-OUTS.
- 9. ALL DUPLEX OUTLETS SHALL BE G.F.C.I. UNLESS NOTED OTHERWISE.
- SINK CABINETS SHALL BE INSTALLED BEFORE THE INSTALLATION OF ADJACENT CABINETS.
- 11. ALL CONTRACTORS TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IN WRITTEN FORM OF ANY DISCREPANCIES.
- 12. PROVIDE ALL FILLERS AS REQUIRED. FILLERS AT BASE CABINETS SHALL BE AT FRONT OF CABINET AND COUNTERTOP SHALL BE CONTINUOUS OVER FILLER PANEL. FILLERS AT TALL CABINETS SHALL BE AT FRONT AND TOP OF CABINET. FILLERS AT WALL CASES SHALL BE AT FRONT, TOP AND BOTTOM OF CABINET. FINISH TO MATCH CASEWORK.
- 13. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL CLAY TRAPS ON SINKS IN ART CLASSROOM AND SHALL MAKE FINAL CONNECTIONS TO ALL WASTE/VENTS, WATER LINES ETC. AS REQUIRED TO MAKE SYSTEM FULLY FUNCTIONAL.
- 14. NOT USED
- 15. RUBBER BASE ON ALL CASEWORK BY G.C. (TYPICAL)

SINK NOTE 'x':

CRB-ADA-2022-A-GR JUST STAINLESS STEEL SINK W/BUBBLER COMBINATION, "THE ACADEMIC GROUP A" SERIES, TYPE 304, LEDGE TYPE, FAUCET LEDGE REAR, BUBBLER LEDGE RIGHT, SINGLE COMPARTMENT, SELF-RIM, 18 GAUGE STAINLESS STEEL, 22" x 20" x 6" DEEP, SINK UNDERCOATED W/ SOUND DEADENING MATERIAL. FURNISH COMPLETE WITH JUST FAUCET (#J-1174-KS) CONCEALED HOT & COLD WATER MIXING FAUCET WITH SWIVEL GOOSENECK SPOUT, AERATOR & WRIST BLADE HANDLES. INCLUDE ONE JUST BUBBLER (#JBB5) W/SELF-CLOSING LEVER HANDLE. INCLUDE ONE JUST OFFSET DRAIN ASSEMBLY (#J-ADA-35-FS) W/DRAIN INSULATING KIT (#J-ADA-150), JUST STAINLESS STEEL FLAT STRAINER & 4" LONG STAINLESS STEEL TAILPIECE (#J-35-SSF).

SINK, FAUCET, STRAINER AND TAILPIECE TO BE SUPPLIED BY EQUIPEMENT SUB-CONTRACTOR. THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAPS, VALVES, WASTE LINES, ETC. AS REQUIRED TO MAKE THE SYSTEM FULLY FUNCTIONAL. THE PLUMBING CONTRACTOR SHALL MAKE THE FINAL PLUMBING CONNECTIONS REQUIRED TO MAKE THE SYSTEM FULLY FUNCTIONAL. SEE GENERAL CASEWORK NOTES # 6 & 7.



Project Name

ALTERATIONS AND
RENOVATIONS TO
JOSEPH C. SHANER
MEMORIAL
ELEMENTARY SCHOOL

HAMILTON TOWNSHIP BOARD OF EDUCATION

Project Location
5801 3rd ST
MAYS LANDING,
NJ 08330

Project Number
4937B
Project Date
03.05.2019
Checked By
Drawn By
dsb

NOT TO SCALE

Drawing Name
GENERAL
CASEWORK NOTES

Hamilton Township School District

AD1-A02

ALTERATION AND RENOVATION TO

WILLIAM DAVIES MIDDLE SCHOOL

1876 DENNIS FORMAN DR., MAYS LANDING, NJ 08330

HAMILTON TOWNSHIP BOARD OF EDUCATION

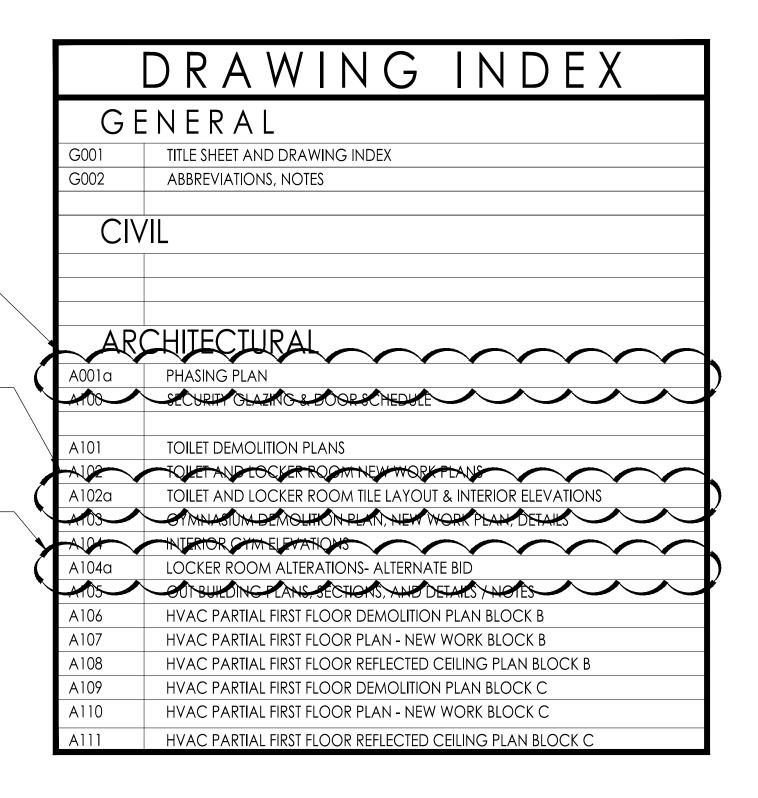
5801 3rd, MAYS LANDING, NJ 08330

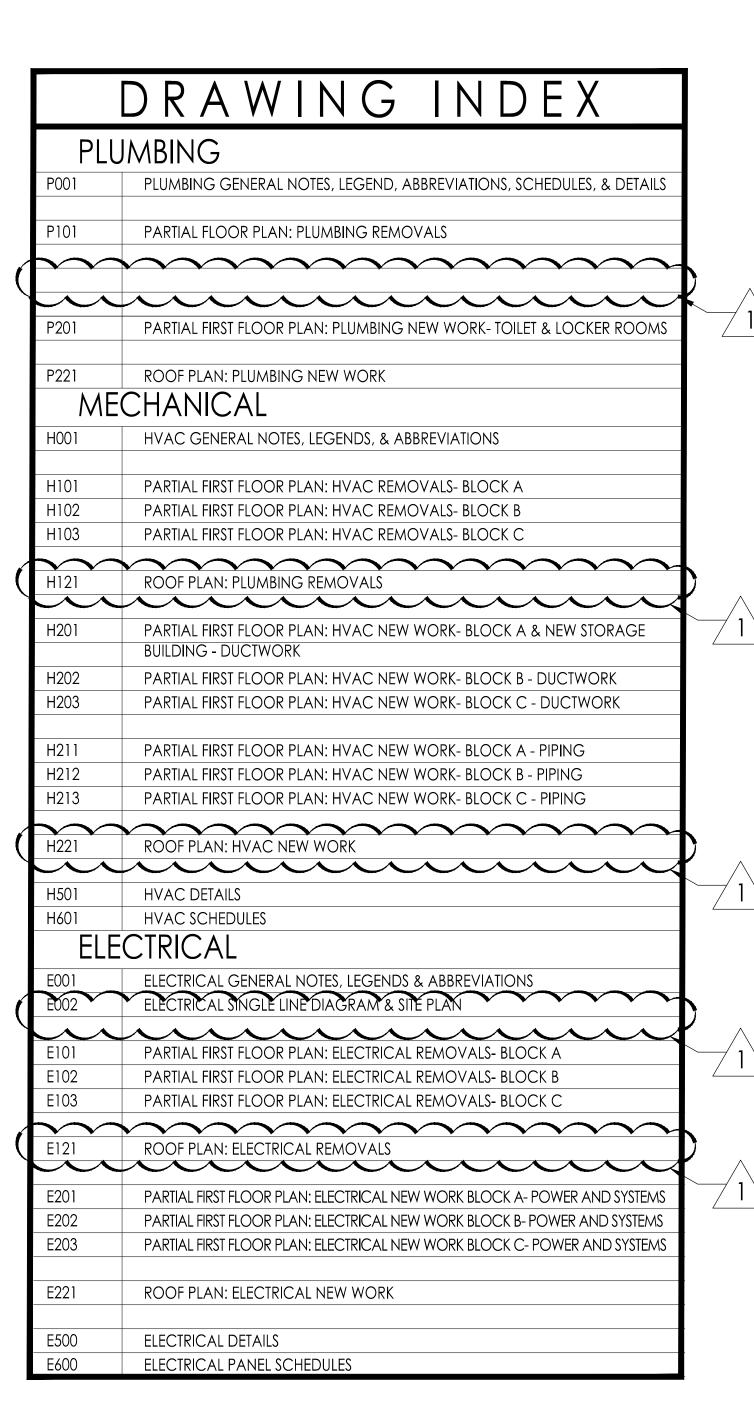


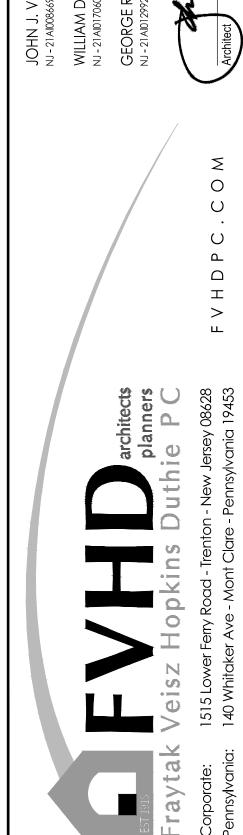
GILLAN & HARTMANN, INC

MEP ENGINEERS | MONT CLARE - PA

Addition / Alterations / Renovations at William Davies Middle School FVHD 4937C - NJ DOE No. 1940-120-18-1000







ALTERATIONS AND RENOVATIONS TO WILLIAM DAVIES MIDDLE SCHOOL

Project Owner Name

HAMILTON

TOWNSHIP BOARD

OF EDUCATION

Project Location

1876 DENNIS
FORMAN DR
MAYS LANDING,
NJ 08330

Project Number

4937C

Project Date

02.15.2019

Checked By

JJV

Drawn By

dsb

Scale

AS NOTED

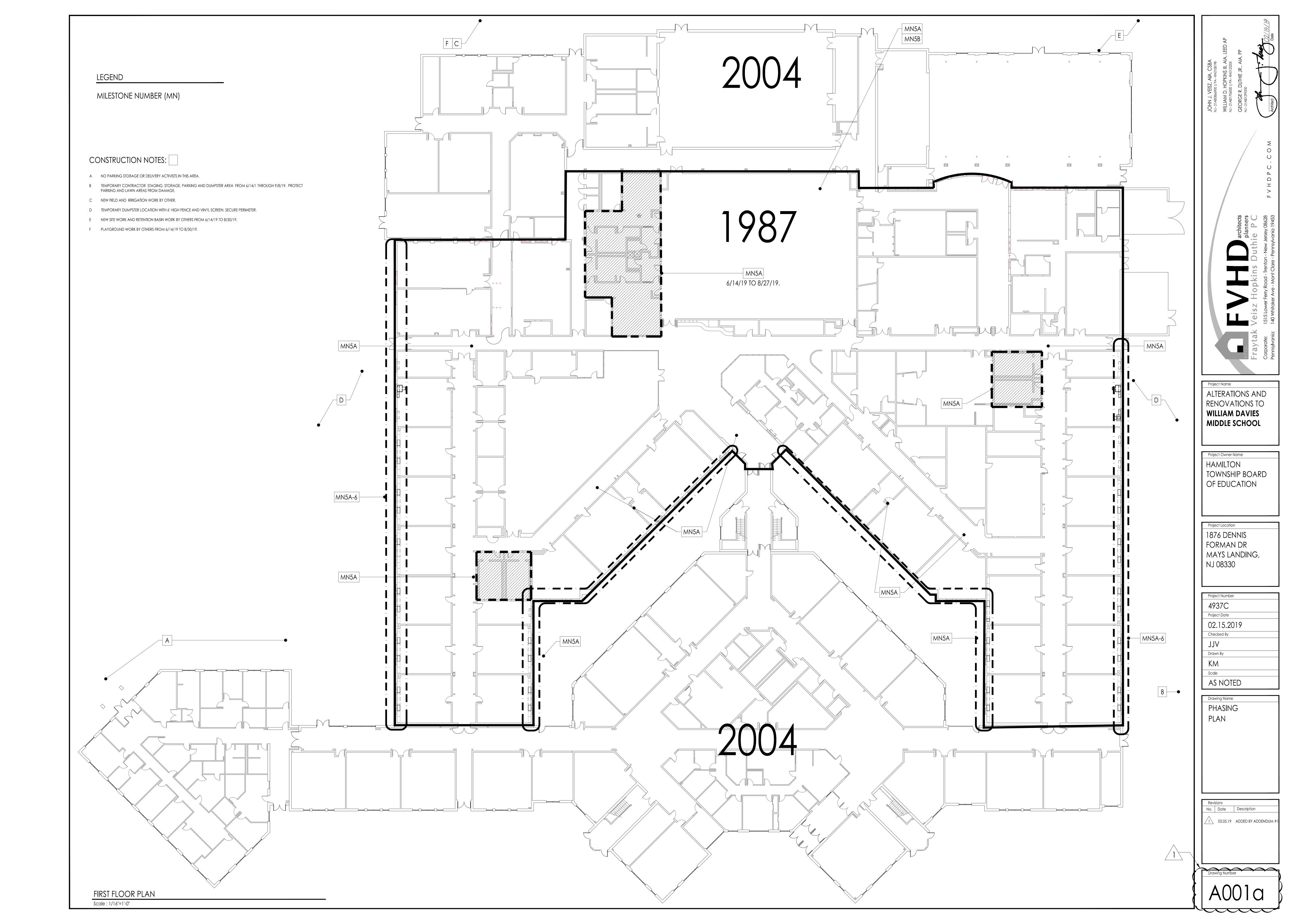
TITLE SHEET AND
DRAWING INDEX

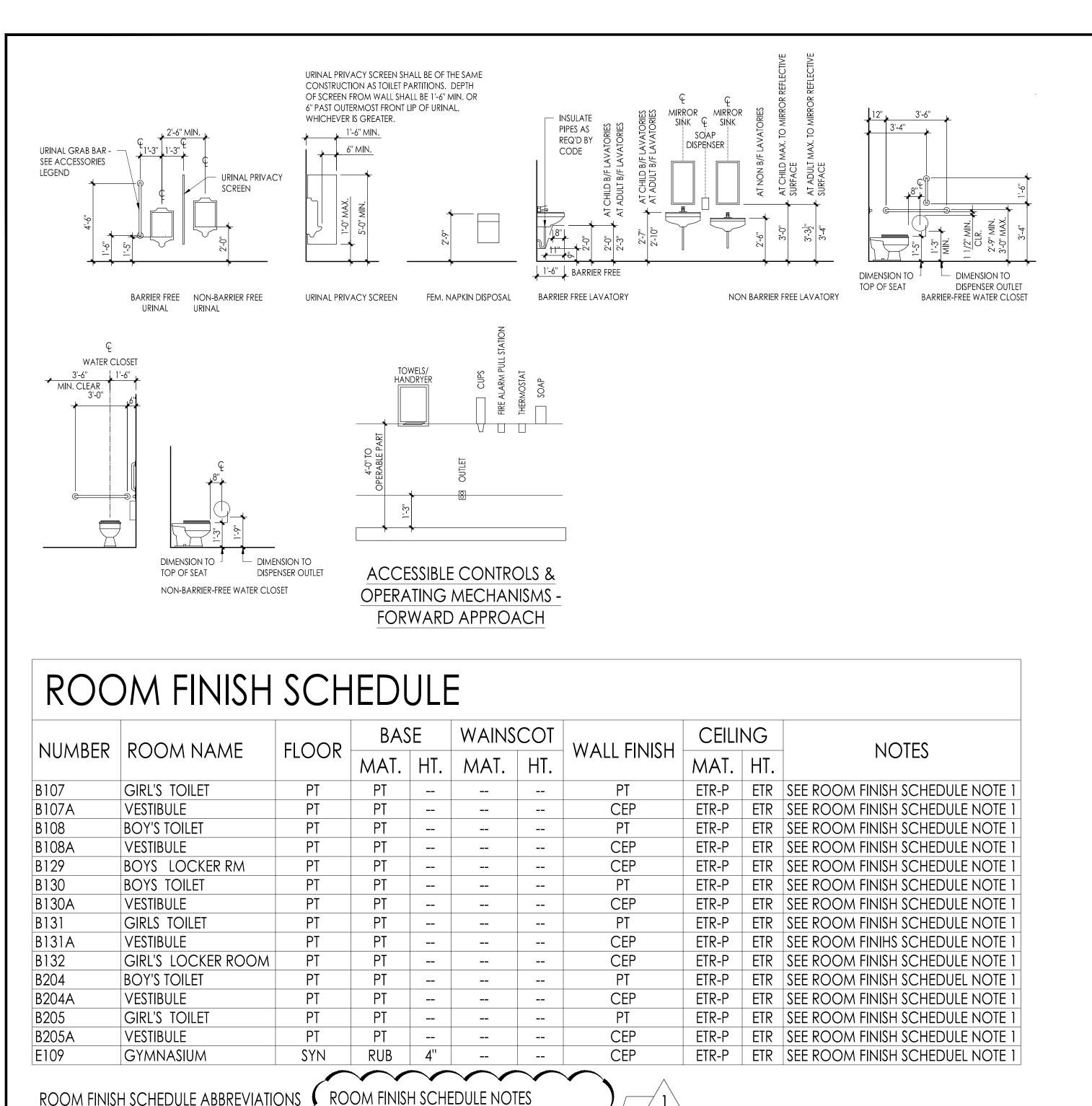
Revisions

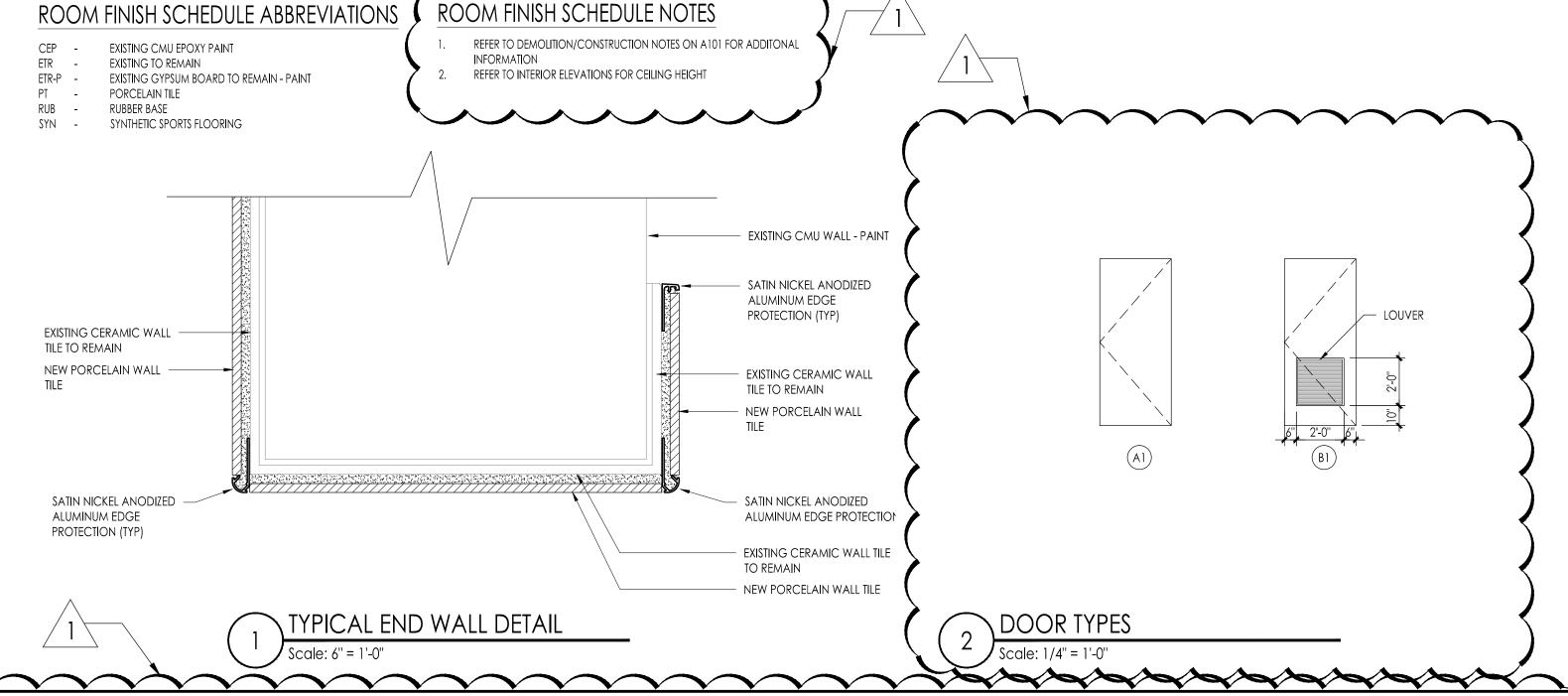
No. Date Description

1 03.05.19 ADDENDUM # 1

Drawing Number







WILLIAM DAVIES MIDDLE SCHOOL DOOR SCHEDULE ALTERNATE BID D-GC-3 DOOR / WINDOW RATING LOCATION GYM TO BOY'S LOKCER RM A005 BOY'S LOCKER ROOM TO VESTIBULE SC-WD SEE TYP DOOR NOTES A006 BOY'S LOCKER ROOM TO TOIL FT SC-WD SEE TYP DOOR NOTES A007 BOY'S LOCKER ROOM TO OFFICE SC-WD NOTE 2 SEE TYP DOOR NOTES A008 GYM TO OFFICE SEE TYP DOOR NOTES A009 GYM TO OFFICE NOTE 2 SEE TYP DOOR NOTES A010 GIRL'S LOCKER ROOM TO OFFICE NOTE 2 SEE TYP DOOR NOTES SC-WD F-HM A011 GIRL'S LOCKER ROOM TO TOILET NOTE 2 SEE TYP DOOR NOTES SC-WD

E-HM

NOTE 2

NOTE 2

SEE TYP DOOR NOTES

SEE TYP DOOR NOTES

SEE TYP DOOR NOTES

SC-WD

SC-WD

DOOR SCHEDULE NOTES - TYPICAL

- PREP DOORS AS REQUIRED FOR INSTALLATION IN EXISTING HOLLOW METAL FRAMES
 REFER TO UNIT PRICE FOR HARDWARE.
 ALL DOORS TO BE SOLID CORE WOOD (SC-WD)
- 4) ETR: EXISTING TO REMAIN
 5) E-HM: EXISTING HOLLOW METAL

A012 GIRL'S LOCKER ROOM TO VESTIBLII F

A013 GIRL'S LOCKER ROOM TO STORAGE

A014 GYM TO GIRL'S LOCKER RM

EXISTING CHALKBOARD EXISTING BENCH EXISTING BENCH EXISTING BENCH NEW LOCKERS-SEE LOCKER SCHEDULE EXISTING BENCH NEW LOCKERS-SEE LOCKER SCHEDULE THIS DRAWING (A013) GIRLS' LOCKER ROOM (A010) (A011) (A006) (A007) BOYS LOCKER RM B129 EXISTING BENCH EXISTING BENCH **NEW LOCKERS-SEE** LOCKER SCHEDULE THIS DRAWING EXISTING BENCH EXISTING BENCH NEW LOCKERS-SEE LOCKER SCHEDULE THIS DRAWING EXISTING BENCH EXISTING BENCH EXISTING BENCH EXISTING BENCH EXISTING CHALKBOARD EXISTING CHALKBOARD



LOCKER SCHEDULE

LOCKER TYPE 'A'
12" W. x 15" D. x 30" H. (2 HIGH)

LOCKER TYPE 'B' (BARRIER FREE)

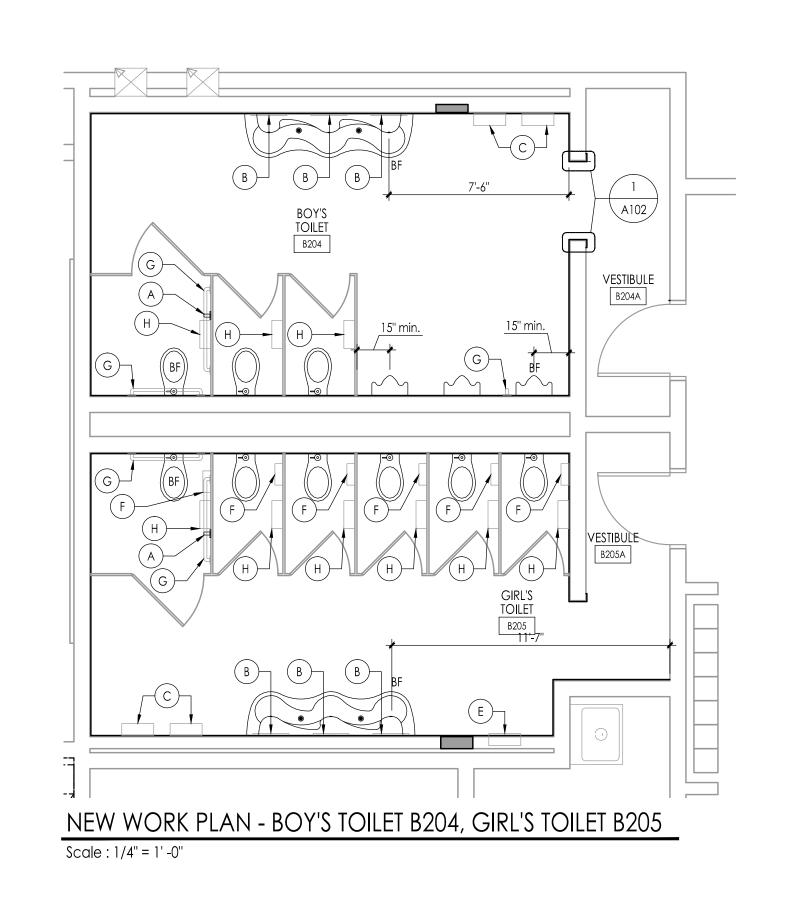
12" W. x 15" D. x 30" H. (2 HIGH)

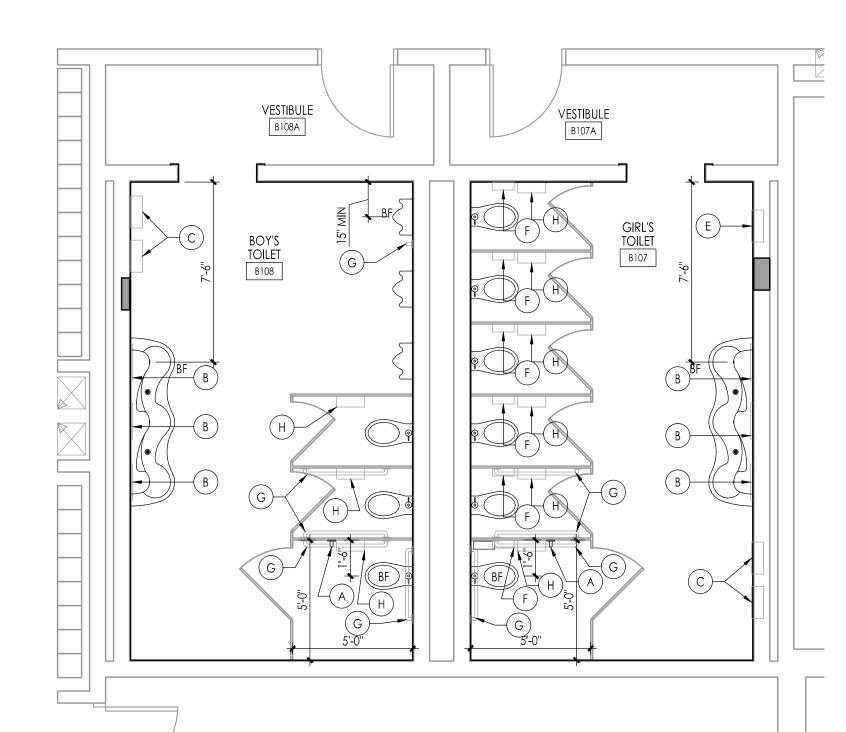
		TOILET ROO	M ACCESSO	RIES	X	
				SIZE		
NO.	CAT. NO.	DESCRIPTION	W	Н	D	- REMARKS
Α	800-001-18"	GRAB BAR	18"			SAFETY-GRIP FINISH, MOUNT VERTICAL
В		MIRROR				RE-USE EXISTING
С		HAND DRYER				RE-USE EXISTING
D		PAPER TOWEL DISPENSER				RE-USE EXISTING
Е		FEMININE NAPKIN DISPENSER				RE-USE EXISTING
F	-	FEMININE NAPKIN DISPOSAL				RE-USE EXISTING
G	-	GRAB BAR				RE-USE EXISTING
Н		TOILET TISSUE DISPENSER				RE-USE EXISTING

NOTES:

1. ALL CATALOG NUMBERS REFER TO BRADLEY WASHROOM ACCESSORIES UNLESS NOTED OTHERWISE.

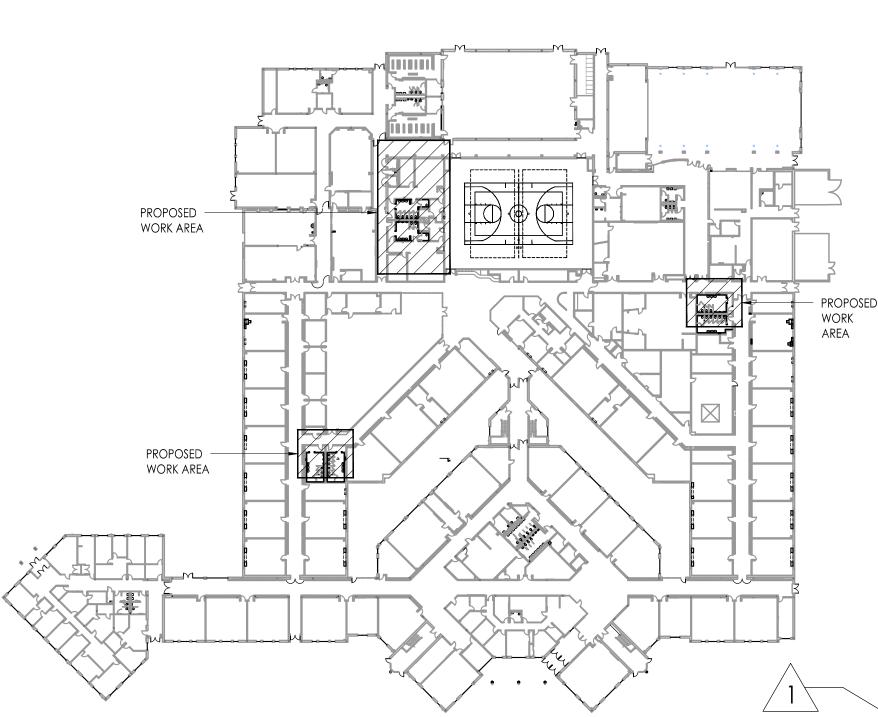
2. REFER TO FIXTURE MOUNTING HEIGHT CHART ON THIS DRAWING





NEW WORK PLAN - GIRL'S TOILET B107, BOY'S TOILET B108

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



BUILDING KEY PLAN

Scale : NOT TO SCALE



architects
planners

uthie P C

- New Jersey 08628

F V H D P C . C O M
Architects

April 19453

F V H D P C . C O M
Architects

April 19453

Project Name

ALTERATIONS AND
RENOVATIONS TO
WILLIAM DAVIES
MIDDLE SCHOOL

Project Owner Name

HAMILTON

TOWNSHIP BOARD

OF EDUCATION

Project Location

1876 DENNIS
FORMAN DR
MAYS LANDING,
NJ 08330

Project Number

4937C

Project Date

02.15.2019

Checked By

JJV

Drawn By

JMK

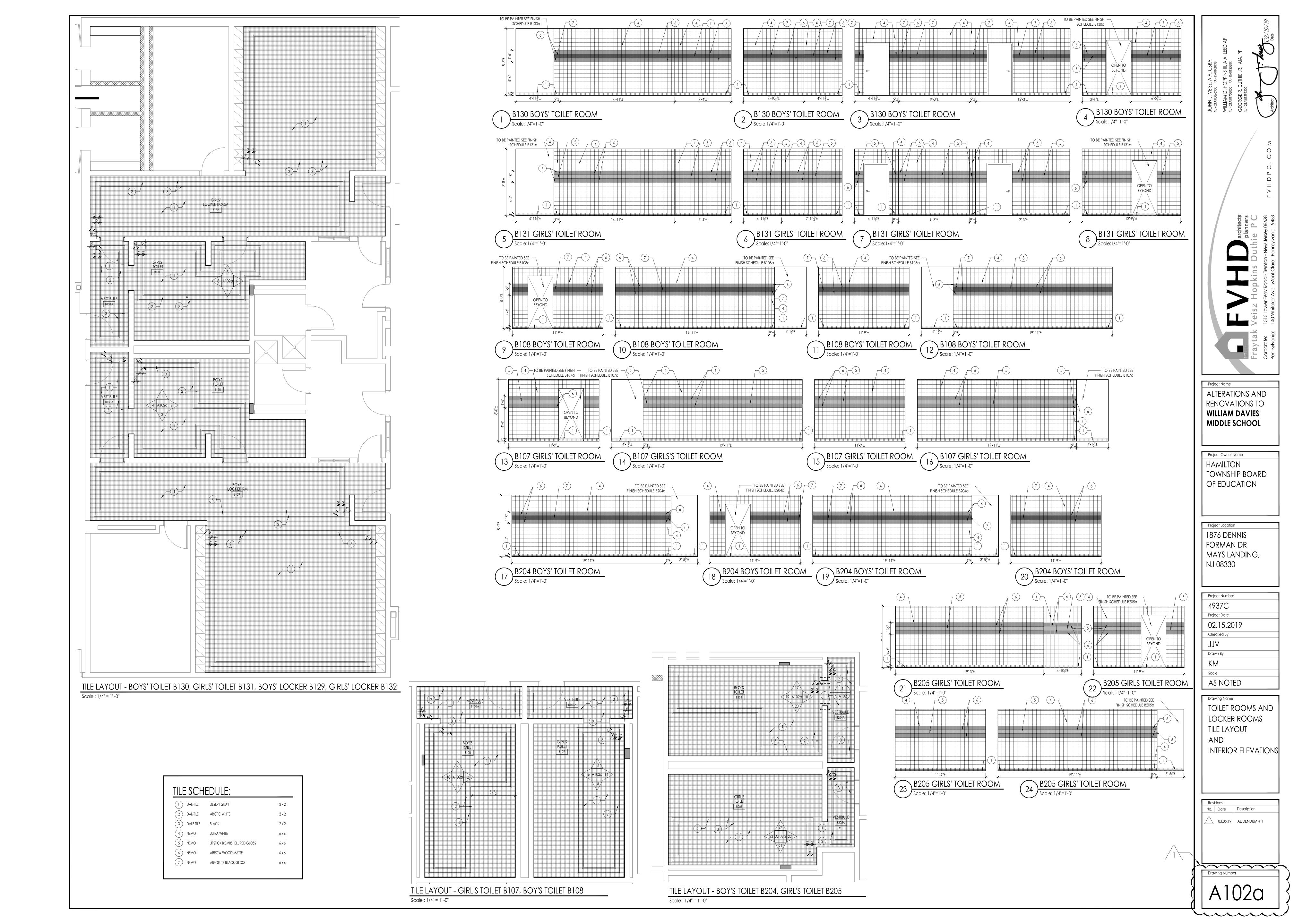
TOILET AND LOCKER
ROOM NEW
WORK PLANS

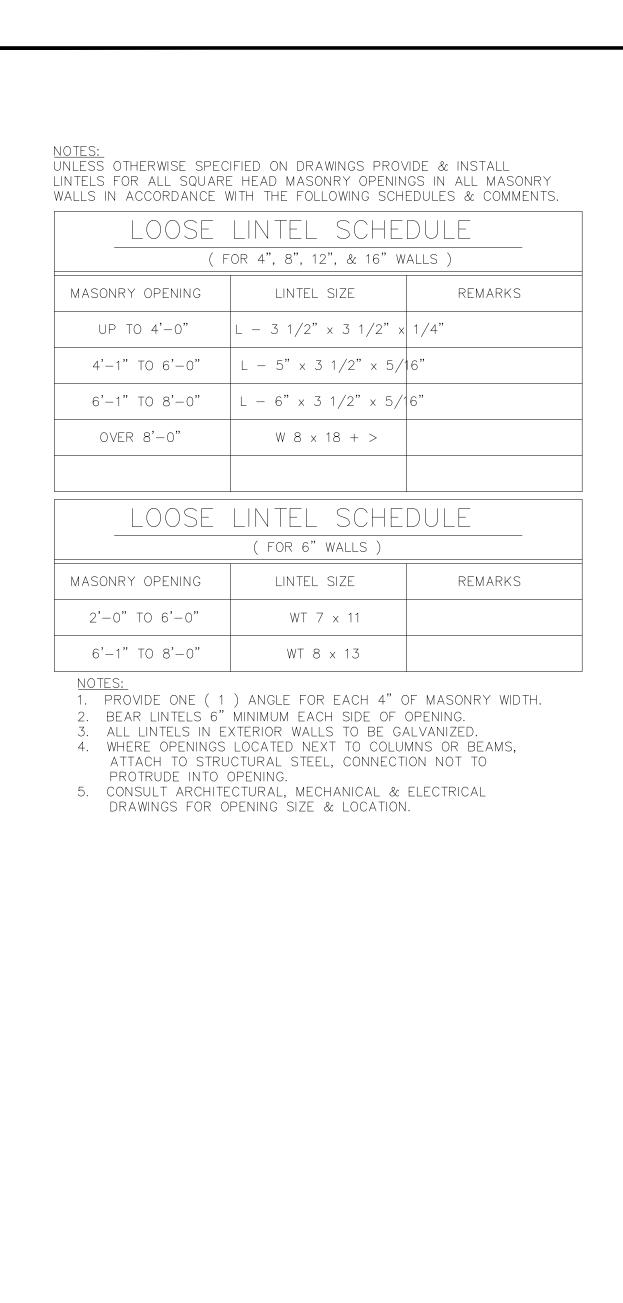
AS NOTED

Revisions
No. Date Description

Drawing Number

A 102





STAINLESS STEEL STRAP-

 $1\frac{5}{8}$ " x $\frac{7}{8}$ " BOLT TO S-5 CLIP

S-5 CLIP $1\frac{1}{2}$ " x $1\frac{1}{2}$ " (TYP)

METAL ROOFING

GAS PIPE SUPPORT DETAIL AT METAL ROOF

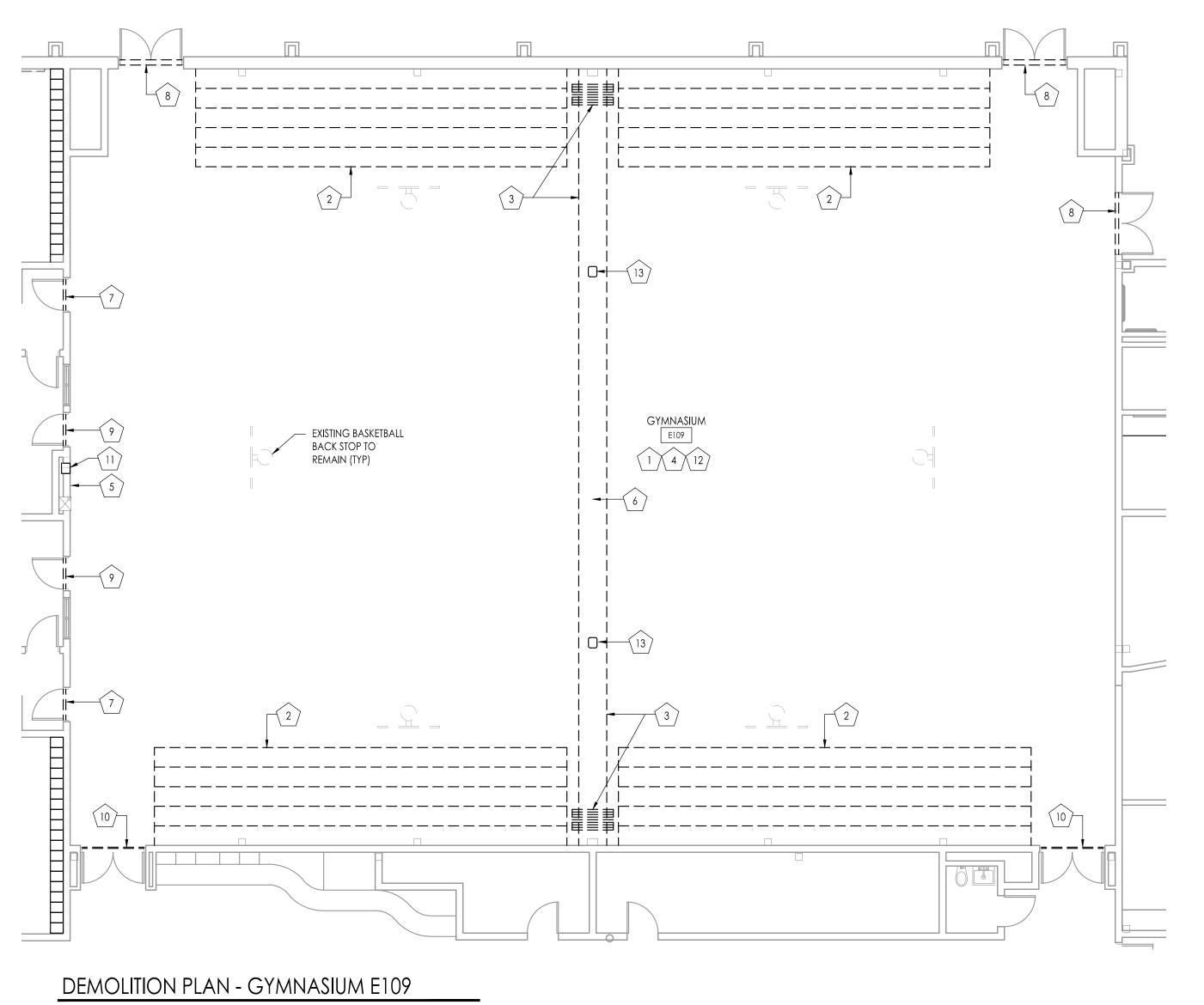
EXISTING STANDING SEAM

INSTALL S-5 CLIPS A MINIMUM

GAS PIPING - SEE MECH. DWGS.

ALUMINUM UNI-STRUT CHANNEL

BOLT TO UNI-STRUT



< OF EXIST. STEEL

CUT VERTICAL LEG OF

SUPPORT ANGLE

" S1 "

FOR SIZE & LOCATION OF OPENINGS SEE ARCHITECTURAL &

STEEL CONTRACTOR SHALL VERIFY ALL OPENINGS AND EXACT

LOCATIONS WITH THE TRADE CONTRACTOR REQUIRING SAID

PROVIDE STEEL FRAMES AS SHOWN AROUND ALL REQUIRED

TYPICAL OPNG. DETAIL @ EXIST'G. ROOF

& UNDER MECH'L CURB

PROVIDE STEEL ANGLES ON ALL SIDES OF OPENINGS UNLESS

OPENINGS PRIOR TO FABRICATION & ERECTION OF STEEL FRAMES.

PROVIDE STEEL ANGLES ON ALL SIDES OF MECH'L CURBS UNLESS BEAM IS SHOWN ON PLAN. ANGLE SIZES TO BE L-6"x6"x3/8".

6. FOR SIZE & LOCATION OF MECH'L UNITS, SEE ARCH'L & MECH'L DWGS.

OF TOP FLG.

MECHANICAL DRAWINGS.

OPENINGS LARGER THAN 8" AT ROOF.

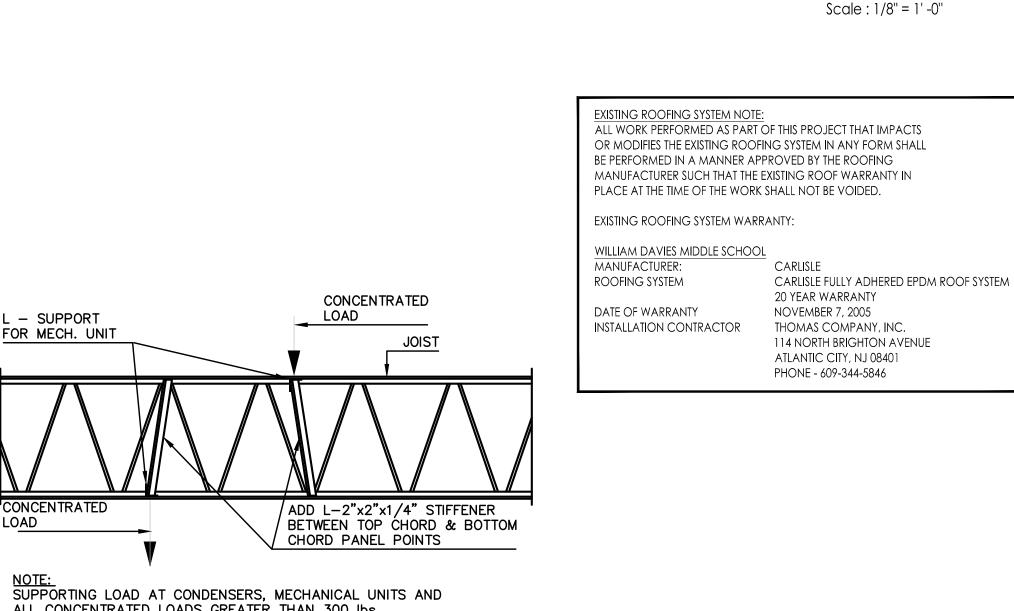
BEAM IS SHOWN ON PLAN. ANGLE SIZES TO BE:

FOR "S1" OR "S2" \leq 6'-6" L-4"x4"x5/16" FOR "S1" OR "S2" > 6'-6" L-6"x6"x3/8"

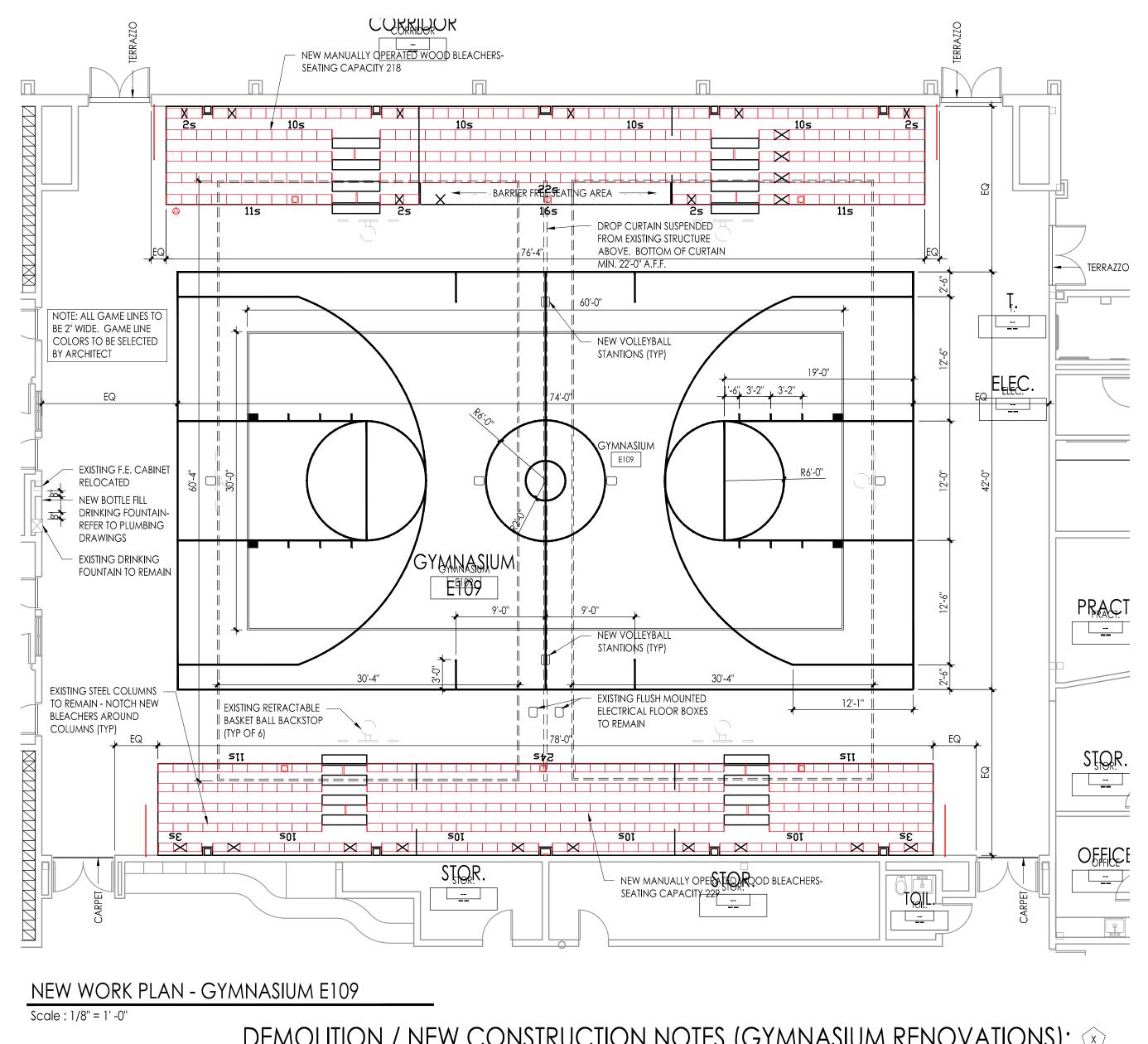
ANGLE TO ALLOW TOP HORIZ.

LEG TO BEAR ON LOWER

SUPPORT



TO REMAIN

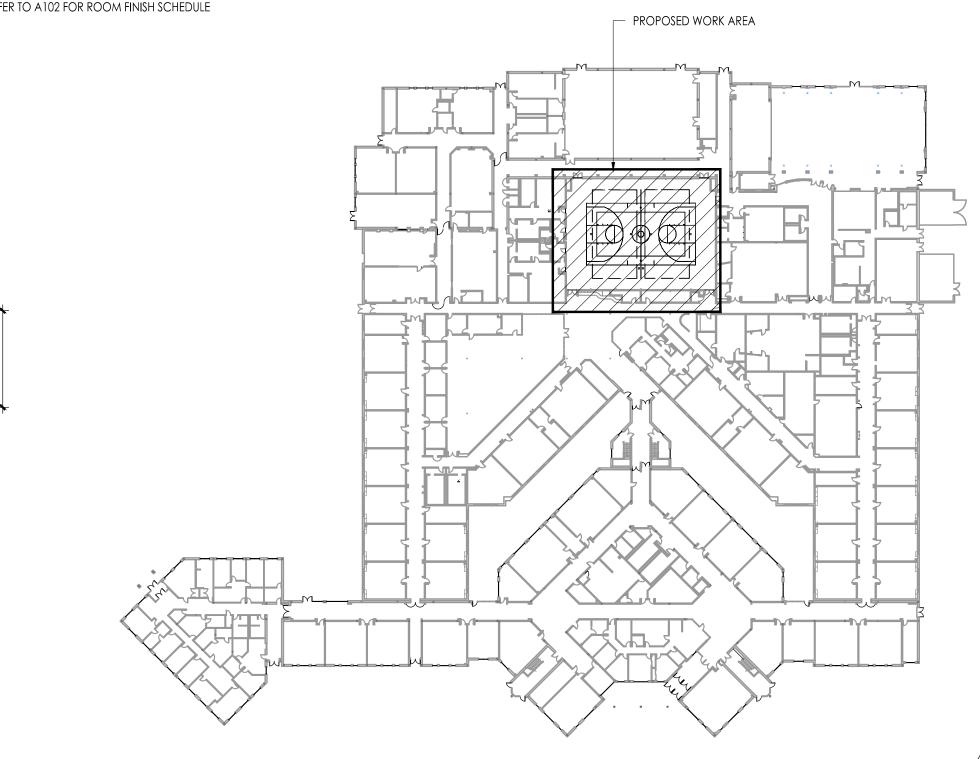


DEMOLITION / NEW CONSTRUCTION NOTES (GYMNASIUM RENOVATIONS): 🖄

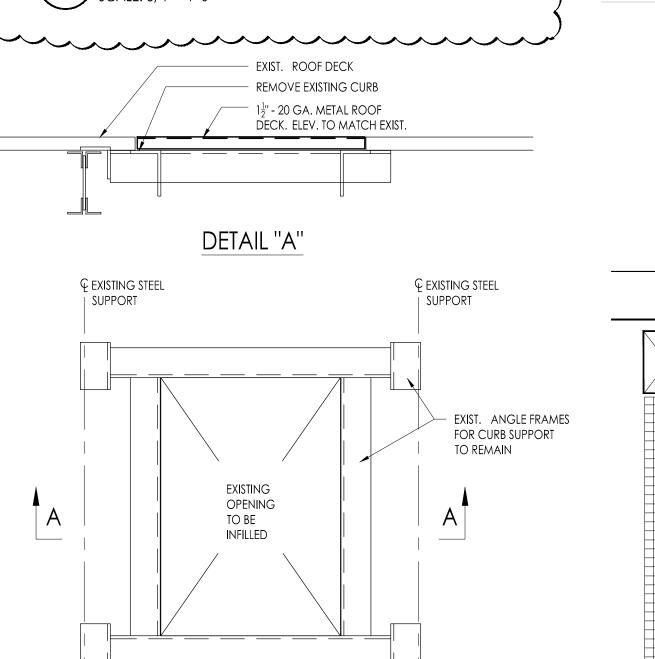
- 1. EXISTING GYM FLOOR AND WALL BASE TO BE REMOVED BY OTHERS. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING EXISTING CONCRETE SLAB TO MANUFACTURERS REQUIREMENTS PER THE SPECIFIED NEW FLOOR FINISH.
- 2. EXISTING MANUALLY OPERATED WOOD BLEACHERS TO BE REMOVED IN THEIR ENTIRETY. PATCH ALL OPENINGS LEFT IN CMU WALL AFTER REMOVAL. INSTALL NEW MANUALLY OPERATED WOOD BLEACHERS. SEE NEW WORK PLAN FOR NEW BLEACHER LAYOUT.
- 3. EXISTING ELECTRICALLY OPERATED FOLDING PARTITION TO BE REMOVED IN IT'S ENTIRETY INCLUDING ALL TRACKS AND SUPPORTING HANGERS. REMOVE EXISTING SOFFIT AND FACIA THAT SURROUNDS Support track in it's entirety. Steel Support Structure to remain, refer to electrical drawings for additional information.
- 4. REMOVE EXISTING RUBBER BASE IN IT'S ENTIRETY. ALL WALLS IN GYMNASIUM TO BE PAINTED FULL HEIGHT BY GENERAL CONTRACTOR. PROVIDE PROTECTION FROM PAINT ON ALL WALL MOUNTED ITEMS PRIOR TO PAINTING. ALL STEEL JOISTS, BRIDGING, BEAMS AND UNDERSIDE OF METAL DECKING TO BE PAINTED BY GENERAL CONTRACTOR. ALL NEW DUCTWORK TO BE PAINTED BY MECHANICAL CONTRACTOR. REFER TO PHOTOGRAPHS ON DRAWING A 104 FOR ADDITIONAL SCOPE OF PAINTING. INSTALL NEW 4" HIGH RUBBER BASE ON ALL WALLS
- 5. NEW IN-WALL WATER BOTTLE FILLING STATION. CUT OPENING IN EXISTING MASONRY TO THE APPROPRIATE WIDTH AND HEIGHT TO ACCOMMODATE FILLING STATION. INSTALL APPROPRIATE SIZE STEEL LINTEL OVER NEW OPENING. INSTALL AT REQUIRED ADA HEIGHT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 6. INSTALL NEW ELECTRICALLY OPERATED DROP CURTAIN CENTERED IN GYMNASIUM. SUPPORT DROP CURTAIN FROM EXISTING STEEL STRUCTURE USED TO SUPPORT REMOVED FOLDING PARTITION. SEE
- ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 7. REMOVE EXISTING MARBLE SADDLE IN IT'S ENTIRETY. INSTALL NEW MARBLE ADA SADDLE TO CONFORM TO ALL BARRIER FREE REQUIREMENTS.
- 8. REMOVE EXISTING ALUMINUM DOOR SADDLE IN IT'S ENTIRETY. INSTALL NEW ALUMINUM ADA SADDLE TO MATCH EXISTING. SADDLE TO CONFORM TO ALL BARRIER FREE REQUIREMENTS.
- 9. REMOVED EXISTING WOOD DOOR SADDLE IN IT'S ENTIRETY. INSTALL NEW ALUMINUM ADA DOOR SADDLE TO CONFORM TO ALL BARRIER FREE REQUIREMENTS.
- 10. REMOVE EXISTING RUBBER THRESHOLD IN IT'S ENTIRETY. IN STALL NEW RUBBER ADA THRESHOLD TO MATCH EXISTING TO CONFORM TO ALL BARRIER FREE REQUIREMENTS. 11. REMOVE EXISTING RECESSED FIRE EXTINGUISHER CABINET. SAWCUT OPENING IN WALL ADJACENT TO NEW WATER BOTTLE FILLER TO ACCOMMODATE REINSTALLATION OF EXISTING FIRE EXTINGUISHER
- CABINET AT SAME HEIGHT AS PREVIOUSLY INSTALLED IN WALL. INSTALL APPROPRIATE SIZE STEEL LINTEL OVER NEW OPENING. 12. REMOVE EXISTING STRUCTURAL CROSS BRIDGING BETWEEN JOISTS THAT ARE IN CONFLICT WITH NEW DUCTWORK TO BE INSTALLED. ADD NEW STRUCTURAL CROSS BRIDGING IN BAYS WHERE EXISTING
- DUCTWORK IS TO BE REMOVED. ALL NEW BRIDGING TO BE 2" x 2" x $\frac{1}{8}$ " SECURED TO TOP AND BOTTOM OF STEEL JOISTS. 13. REMOVE EXISTING VOLLEYBALL STANITIONS IN THEIR ENTIRETY. PATCH EXISTING HOLE WITH NEW CONCRTET FLUSH WITH EXISTING CONCRETE. CORE DRILL NEW HOLE TO INSTALL NEW VOLLEY BALL
- ALL PLUMBING, MECHANICAL OR ELECTRICAL DISCONNECTS SHALL BE MADE BY THE RESPECTIVE TRADES. ALL EQUIPMENT, DEVICES, FIXTURES, ETC. SHALL BE REMOVED FROM THE SITE BY THE RESPECTIVE CONTRACTOR. NOTE: THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DIMINISHED NOR SHALL EXISTING FIRE ALARM DEVICES BE REMOVED DURING CONSTRUCTION. ALL DEVICES ARE
- TO BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.

REFER TO A 101 FOR GENERAL DEMOLITION NOTES

REFER TO A 102 FOR ROOM FINISH SCHEDULE



BUILDING KEY PLAN Scale: NOT TO SCALE

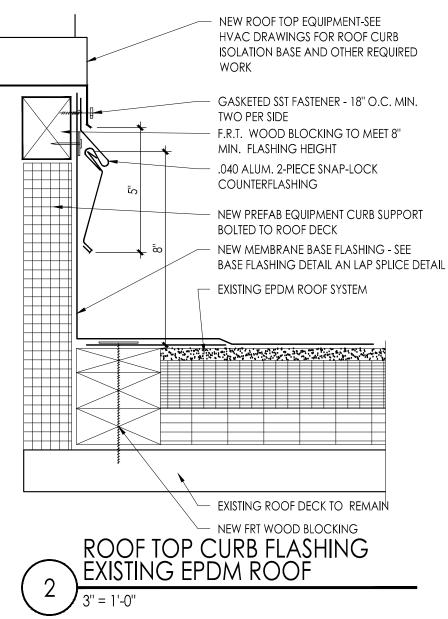


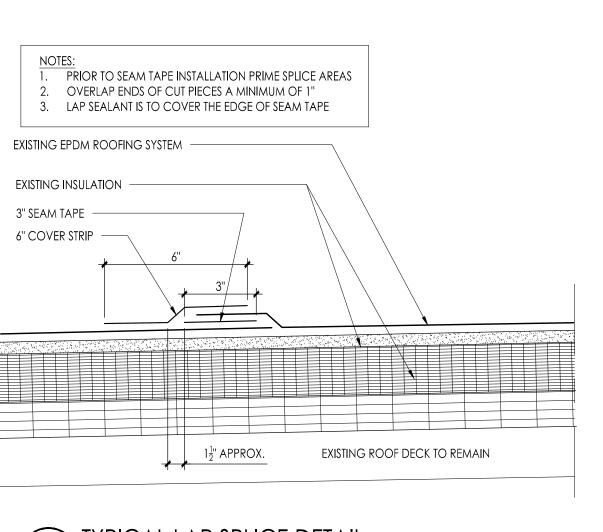


3. IF EXISTING CONDITIONS DIFFER FROM THOSE ON PLAN, CONTACT ARCH. OR ENGINEER. STEEL DECK INFILL DETAIL

CEXISTING STEEL

SUPPORT



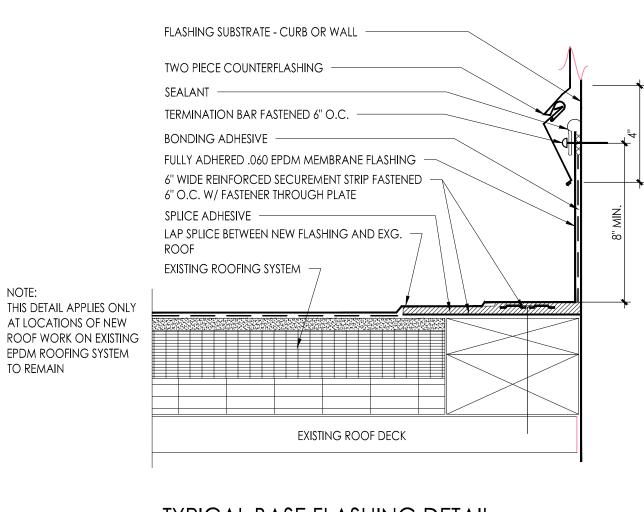


ALL CONCENTRATED LOADS GREATER THAN 300 lbs.

TYPICAL DETAIL OF REINF'D. JOIST

OMIT IF LOAD IS WITHIN 3" OF A PANEL POINT.





ALTERATIONS AND RENOVATIONS TO WILLIAM DAVIES MIDDLE SCHOOL

Project Owner Name TOWNSHIP BOARD OF EDUCATION

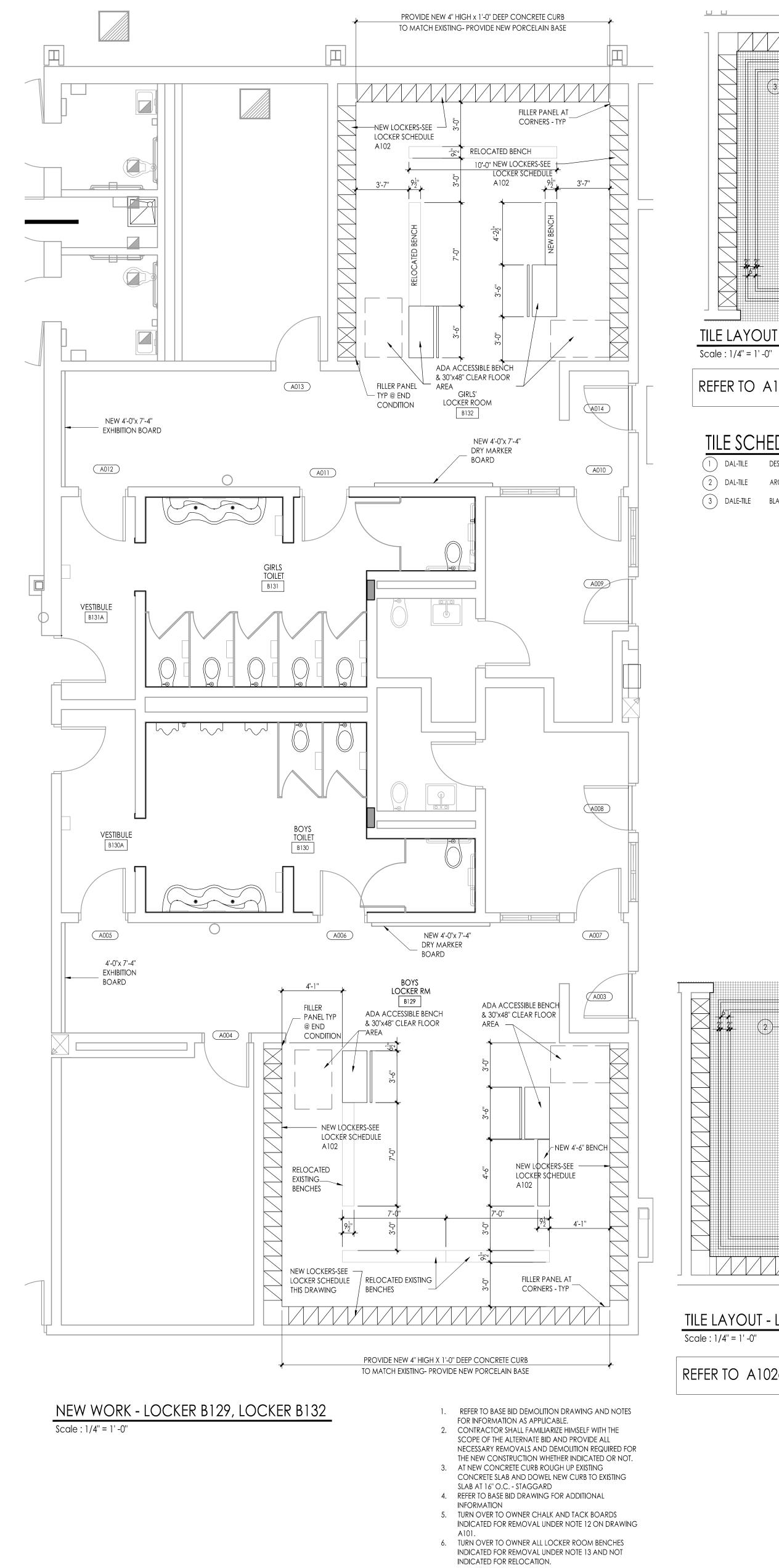
Project Location 1876 DENNIS FORMAN DR MAYS LANDING, NJ 08330

Project Number 4937C Project Date 02.15.2019 Checked By Drawn By Scale

AS NOTED

Drawing Name GYMNASIUM DEMOLITION PLAN, NEW WORK PLAN, **DETAILS**

No. Date Description



LOCKER ROOM B130

TILE LAYOUT - LOCKER B132

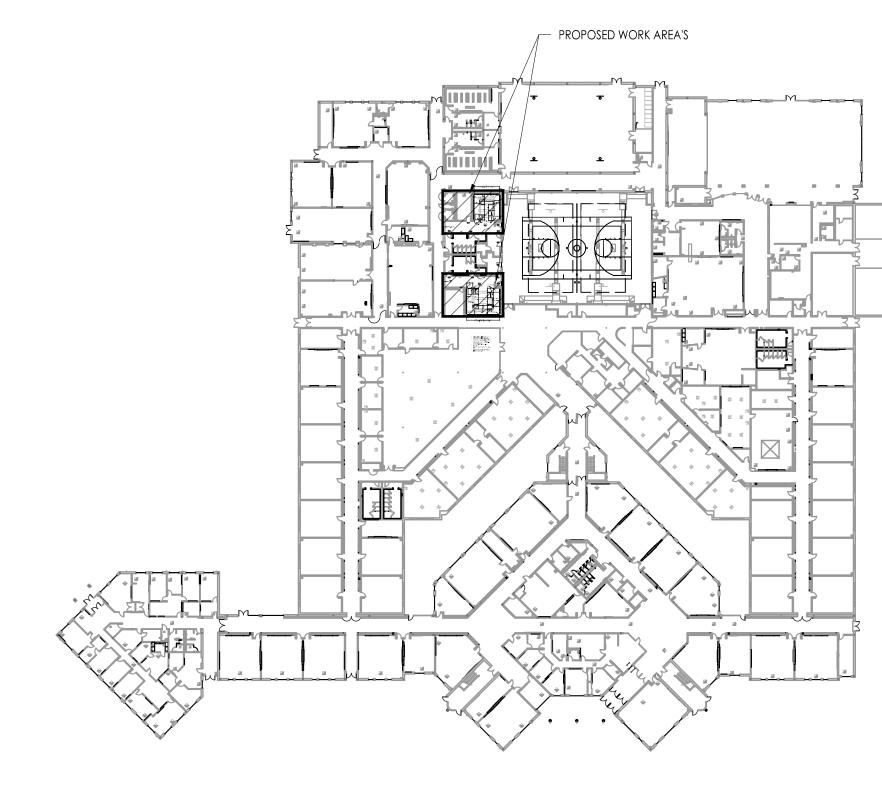
REFER TO A102a FOR CONTINUATION OF TILE LAYOUT.

(1) DAL-TILE DESERT GRAY (2) DAL-TILE ARCTIC WHITE 3 DALE-TILE BLACK 2 x 2

BOYS LOCKER RM

TILE LAYOUT - LOCKER B129

REFER TO A102a FOR CONTINUATION OF TILE LAYOUT.



BUILDING KEY PLAN Scale: NOT TO SCALE

ALTERATIONS AND RENOVATIONS TO WILLIAM DAVIES MIDDLE SCHOOL

Project Owner Name HAMILTON TOWNSHIP BOARD OF EDUCATION

Project Location 1876 DENNIS FORMAN DR MAYS LANDING, NJ 08330

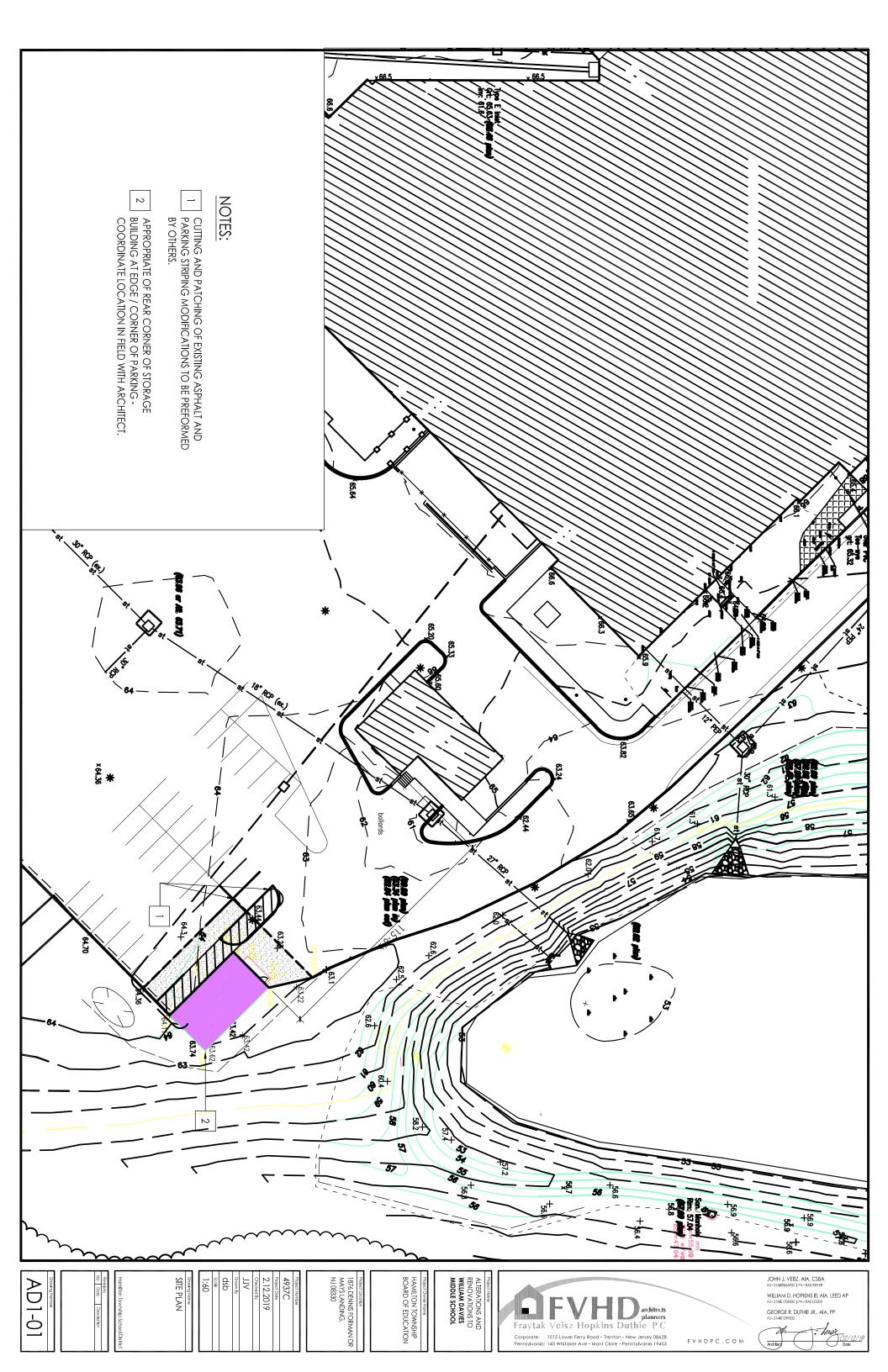
Project Number 4937C Project Date 02.15.2019 Checked By Drawn By RW KM

> Scale AS NOTED Drawing Name

LOCKER ROOM **ALTERATIONS**

-ALTERNATE BID

No. Date Description 1 03.05.19 ADDENDUM # 1



ADDENDUM NO. 1 (MEP portion) (G&H ADDENDUM NO. 1)

to the

SPECIFICATIONS AND DRAWINGS

for the

ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL **ELEMENTARY SCHOOL & ALTERATIONS** AND RENOVATIONS TO WILLIAM DAVIES MIDDLE SCHOOL

for the

HAMILTON TOWNSHIP SCHOOL DISTRICT

Located at

JOSEPH C. SHANER MEMORIAL ELEMENTARY SCHOOL: 5801 3RD ST., MAYS LANDING, NJ 08330

DAVIES MIDDLE SCHOOL: 1876 DENNIS FORMAN DR., MAYS LANDING, NJ 08330



G&H: 2018-204/205

- 1. MEP Addendum No. 1 dated March 05, 2019, is issued as part of the Contract Documents, dated February 15, 2019, to inform and/or specify changes, which take precedence over information contained in the original Contract Documents. Unless otherwise specifically noted or specified hereinafter, or shown on drawings or schedules accompanying this Addendum, all work required by this Addendum shall conform to the applicable provisions of the Contract Documents. It shall be the responsibility of the Bidder to include in their bid any cost implications of this Addendum. All Bidders are to indicate on the form of proposal submitted by them, acknowledgment of receipt and compliance with the contents of this change to the Contract Documents.
- 2. Any provision in any of the Contract Documents which may be in conflict or be inconsistent with the contents of this Addendum shall be void to the extent of such conflict or inconsistency.

HVAC TRADE 3.

3.1 **CLARIFICATIONS:**

- 3.1.1. Preconstruction water testing indicated on the Removal Drawings are required to include reports for system water flow in gallons per minute and pressure in feet of head.
- 3.1.2. Supply and return piping to the console style heat pumps are shown with one pipe for clarity purposes.
- 3.2 ERRATA IN THE SPECIFICATIONS
 - 3.2.1. None.
- 3.3 ERRATA ON THE DRAWINGS (SHANER ES)
 - 3.3.1. None.
- 3.4 ERRATA ON THE DRAWINGS (DAVIES MS)
 - 3.4.1. None.
- ELECTRICAL TRADE 4.
 - 4.1 ERRATA IN THE SPECIFICATIONS
 - 4.1.1. None.
 - 4.2 ERRATA ON THE DRAWINGS (SHANER ES)
 - 4.2.1. Drawing E002:
 - 4.2.1.1. Add a 480/277V, three-phase, four-wire, 200 amp rated, 10kAIC, 30 pole, main-lugs-only panelboard "ESHA" to be located in the Basement Boiler Room (Basement Boiler Room shown on Detail 2/E003 where "Boiler Room Panel "MDP" is located). Coordinate with the Owner's Representative and existing field conditions for the exact location of the panel. Provide ten 20-amp single pole circuit breakers in "ESHA" and

- spaces in the remaining 20 poles. Refer to Sketch AD1-E01 for additional requirements.
- Add a (4)#1,(1)#6G, 2" Conduit electrical feeder connected to the feed-4.2.1.2. through lugs in Panel "ESH" as required in this Addendum. Extend the feeder to the additional panel "ESHA" described in this Addendum. Extend the feeder through the building from the Main Electric Room and through concealed locations above the Corridor dropped ceilings to the 1950 Electrical Room (1950 Electrical Room is the Room where new panels "B" and "C" are shown on Detail 1/E003), and down through the floor (provide all required floor penetrations and fire rated sealing) into the Basement Level, and extend into the Boiler Room. Provide all required fire sealing to fire rated walls and floors.
- 4.2.1.3. Add a 10kVA rated, 480V primary and 120/240V secondary Mini Power Zone Transformer and Panel Substation "ESHB" (Basis of design is a Square-D catalog number MPZ10S40F or equal from Siemens or General Electric that is 12" Wide and 12" Deep to fit the location indicated on Sketch AD1-E02).

4.2.2. Drawing E003:

- 4.2.2.1. Add the requirement for a 120-volt power supply and branch circuit for the Security Vestibule Exit Doors (Located adjacent to the Main Office; refer to the Architectural Drawings). This 20 amp branch circuit shall extend from Panel "ESHB" as indicated on Sketch AD1-E03.
- Add a requirement for a 20 amp red faced quadraplex receptacle located in 4.2.2.2. the CST Office adjacent to the Data Rack in that Room (CST office is located across from the First Grade Classroom 121) and fed from Panel "ESHB" circuit #2 and fused disconnect as indicated on Sketches AD1-E03 and AD1-E01. Coordinate final receptacle location with the District.
- 4.2.2.3. Add a requirement for a 20 amp red faced quadraplex receptacle located in the Tech Office adjacent to the Data Rack in that Room (Tech Office is the room where Transfer Switch "TS1" is located) and fed from Panel "ESHB" circuit #3 as indicated on Sketch AD1-E03. Coordinate final receptacle location with the District.
- 4.2.2.4. Add a requirement for a 20 amp red faced quadraplex receptacle located in the Basement Heater Room adjacent to the Data Rack in that Room. (Basement Heater Room is shown on Detail 2/E003 at the plan upper left corner) and fed from Panel "ESHB" circuit #4 and fused disconnect as indicated on Sketches AD1-E01 and AD1-E03. Coordinate final receptacle location with the District.
- 4.2.2.5. Add a requirement for a 20 amp branch circuit to the new Main Fire Alarm Control Panel in the Main Electric Room and fed from Panel "ESHB" circuit #5 as indicated on Sketch AD1-E03.

4.2.3. Drawing E600:

- 4.2.3.1. Delete the requirement to feed the Main Fire Alarm Control Panel from ELSH circuit #2.
- 4.2.3.2. Add the requirement for feed-through lugs to the Panel Schedule "ESH" to feed panel "ESHA." Refer to Sketches AD1-E01 and AD1-E03 for additional requirements.

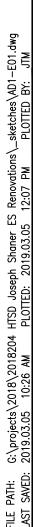
G&H: 2018-204/205

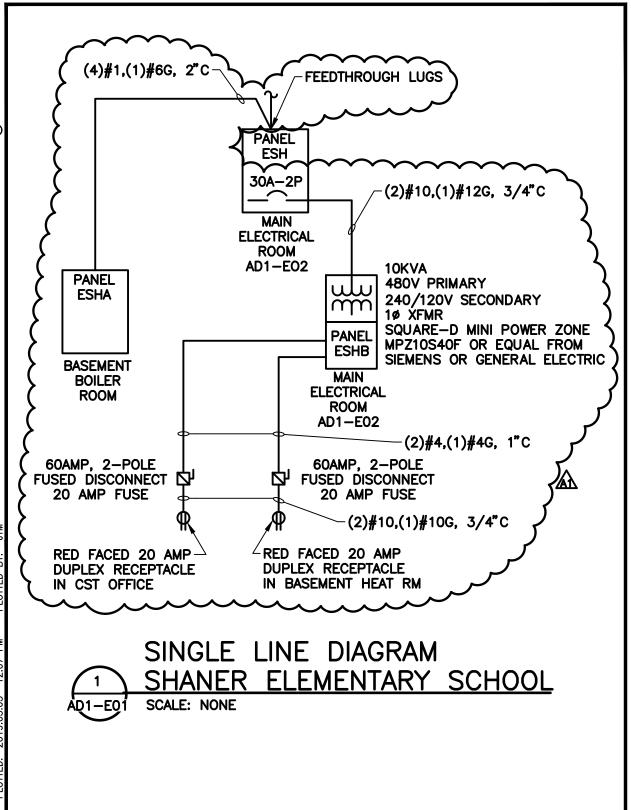
- 4.2.3.3. Add the panel schedule for "ESHB" to this drawing as indicated on Sketch AD1-E03.
- 4.2.3.4. Add a 30 amp, 480V, 2-pole circuit breaker in Panel "ESH" to feed the substation. Refer to Sketch AD1-E01 for additional requirements.
- 4.3 ERRATA ON THE DRAWINGS (DAVIES MS)

4.3.1. None.

END OF ADDENDUM 1

G&H: 2018-204/205



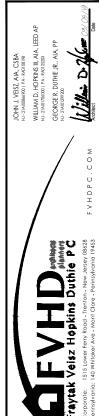


REVISES PLAN 1/E002.



Gillan & Hartmann, Inc.

MECHANICAL AND ELECTRICAL
CONSULTING ENGINEERS
610-935-0101 FAX: 610-935-7520
215-238-9510 609-347-1593 302-654-5959
www.glidon-hartman.com : ghmdl@glidon-hartman.com
G&d Project No. 2018-204



Project Name

ALTERATIONS AND
RENOVATIONS TO
JOSEPH C. SHANER
MEMORIAL
ELEMENTARY SCHOOL

HAMILTON TOWNSHIP BOARD OF EDUCATION

5801 3rd ST MAYS LANDING, NJ 08330

Project Number
4937B
Project Date
03.05,2019
Checked By
DRH
Drawn By
JTM
Scole
NONE

SINGLE LINE DIAGRAM

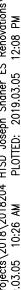
Hamilton Township School District

Revisions

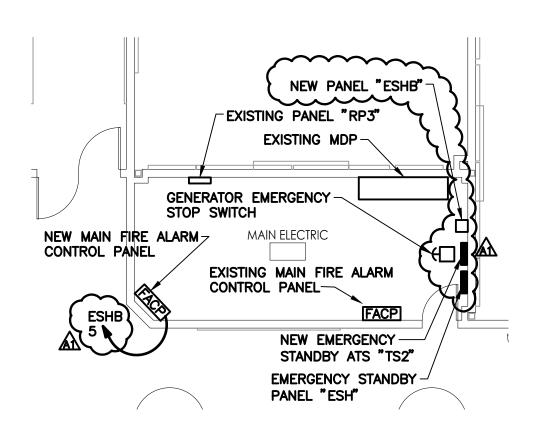
No. Date Description

Al 03.15.19 ADDENDUM 1

AD1-E01



LAST



PARTIAL FIRST FLOOR PLAN ELECTRICAL **ROOM A121** 1/8" = 1'-0"

REVISES PLAN 1/E201.





ALTERATIONS AND RENOVATIONS TO JOSEPH C. SHANER MEMORIAL **ELEMENTARY SCHOOL**

HAMILTON TOWNSHIP BOARD OF EDUCATION

5801 3rd ST MAYS LANDING. NJ 08330

4937B 03.05.2019 1/8"= 1'-0"

MAIN ELECTRICAL ROOM A121

Renovations_sketches\AD1-E03.dwg G:\projects\2018\2018204 HTSD Joseph Shaner ES SAVED: FILE PATH:

12:07 PM 2019.03.05 PLOTTED:

BASMENT HEATER ROOM RECEPT CST OFFICE DATA RECEPTACLE LOAD SERVED SPARE SPARE SPARE SURFACE 10KAIC MOUNT: AIC: Š 2 0 WIRE SIZE **# #** GRD MLO **# #** COND **GENERAL PANEL DATA** 208Y/120V, 3PH, 4W 100A 1.0 BKR SIZE PHASE KVA 88888 CKT S N 19 9 œ 4 VOLT: PHASE LOAD 1.0 0.0 0.0 BUS: m 1.0 0.0 0.0 3.0 K **ESHB** CKT 8 വ 0 BKR SIZE 88888 KVA 1.0 1.0 2 2 2 WIRE SIZE #12 #12 GRD #12 #12 #12 0 8 8 3/4" 3/4" 3/4" MAIN FIRE ALARM CONTROL PANEL PANEL - SHANER ELEMENTAR) SECURTIY VEST. EXIT DOOR TECH OFFICE DATA RACK LOAD SERVED SPARE SPARE LOCATION: WORKROOM VEW NOTES

NOTES

20 amps located adjacent to the new receptacle. Then transition to (2)#10,(1)#10G, in 3/4"C from the fused to a wall mounted 2-pole, 60 amp fused disconnect fused at disconnect, on the load side, and wire to receptacle indicated Provide (2)#4,(1)#4G in 1"C

TOTAL KVA

REVISES DRAWING E600.



Gillan & Hartmann, Inc.

MECHANICAL AND ELECTRICAL

CONSULTING ENGINEERS

810-933-0101 FAX: 810-933-7220

213-238-9810 809-347-1893 302-884-5869

www.gillan-hartman.com gimel@pillan-hartmann.com GdH Project No. 2018-204

JOHN J. VEISZ, AIA, CSBA NJ - 21A003666900 | PA - RAD108198

WILLIAM D. HOPKINS III, AIA, LEED AP NJ-21AD1706000 | PA - RA012520X GEORGE R. DUTHIE JR., AIA, PP Willes D. 2/4

Fraytak Veisz Hopkins Duthie P.C.

ALTERATIONS AND RENOVATIONS TO

JOSEPH C. SHANER

HAMILTON TOWNSHIP BOARD OF EDUCATION

MEMORIAL **ELEMENTARY SCHOOL**

5801 3rd ST

NJ 08330

4937B

DRH

JTM

NONE

03.05.2019

MAYS LANDING,

PANEL SCHEDULE

Hamilton Township School Distric

1-E03