

**ADDENDUM NO. 3**  
**GEORGETOWN ELEMENTARY SCHOOL**  
**CLASSROOM & KITCHEN ADDITIONS**  
Georgetown, Delaware 19947

May 27, 2015

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

**The bid opening date and time remains the same. All bids are due Friday May 29, 2015 at 2:00 PM local time at the Indian River School District Offices, 31 Hoosier Street Selbyville, Delaware 19975.**

**Bidders are advised that the only reliable source of documents for this solicitation is the EDiS ftp site. Bidders that rely on information published on any other websites do so at their own risk.**

Whenever this Addendum modifies a portion of the Project Manual added information is shown in **Bold/Italicized** and deleted information is shown as ~~striketrough~~.

The documents for the above referenced project, Project Manual, dated March 2, 2015 and Drawings, dated April 10, 2015, and subsequently issued addenda are amended as follows:

**CLARIFICATION**

1. On Drawing A104, plan detail callout at opening for cooler door is 3/A502.
2. For spray polyurethane insulating air barrier's transition membranes, provide membranes as required to transition air barrier to exterior sealant joint of storefront and hollow metal systems.
3. Typical closet shelving (detail 6/A701) is provided at closets of both first and second floor classrooms.
4. Electrical Panel LHC is an existing panel and is noted as such next to the name of the panel on Sheet E404. The new work label is showing that what is shown in bold on the panel schedule is new work affecting the existing panelboard.
5. Abbreviation "T.B.E" as used on Architectural drawings stands for Truss Bearing Elevation.
6. Outside of Stair 101, the 1'-0" long portion of wall running plan north-south that abuts Classroom 104 and 207 are 1-hour rated. (Exterior walls at this location running east-west are not rated.)
7. See attached sketch for Temporary Construction Fence plan and detail. Final layout and gate locations shall be coordinated in field by Contractor with Construction Manager.
8. All Contractors shall warrant their materials and workmanship for a period of two years from the date of Substantial Completion.
9. All steel decking, including roof decking on the cold formed metal trusses, shall be provided by the Structural Steel Contractor.
10. The Mechanical Contractor shall provide a complete L.P. gas system, including tanks, as described by 224005-10, 3.16.

**PROJECT MANUAL**

1. Table of Contents

- a. ADD sections 083313 Coiling Counter Doors, 083323 Overhead Coiling Doors, and 097723 Fabric Wrapped Panels.
2. Section 004100 Bid Forms
  - a. REPLACE bid form Contract A-13, Mechanical with NEW bid form attached.
3. Section 011100 Summary of Work
  - a. Contract A-01, Sitework
    - i. ADD the following Technical Specification Section below Division 1 – General Requirements on page 011100-7:
 

“Section 221313                      Facility Sanitary Sewers”
    - ii. ADD the following NEW items after item 35 on page 011100-9:
 

“36.      Chain link fencing and gates, including gates at the dumpster enclosure.”

“37.      Provide concrete dumpster pad and loading dock apron.”

“38.      This Contractor shall include in the base bid two mobilizations for asphalt cement paving work.”

“39.      The Owner will withhold retainage from this Contractor until the project receives final approval from DNREC and the Town of Georgetown.”

“40.      It is the responsibility of this Contractor to establish a healthy stand of grass on all seeded areas prior to project final completion.”

“41.      This Contractor shall hire a private utility locator to identify existing utilities on site prior to construction start, per note on sheet C-001.”

“42.      Install pipe bollards furnished by the Structural Steel & Misc. Metals Contractor.”
  - b. Contract A-02, Concrete
    - i. ADD the following NEW items after item 25 on page 011100-11:
 

“26.      Provide the exterior concrete ramp located outside of Classroom 222 and Vestibule 108, including concrete footings, walls, slab on grade and turndowns.”

“27.      Provide the concrete slab on grade and turndowns beneath the exterior freezer and cooler.”

“28.      Sawcut and demolish concrete footings, foundations and slab on grade along column line 20 as required to install new footings. Provide stone as required to support new slab on grade per sections 13 and 14 on sheet S201.”

“29.      Provide dumpster enclosure footings.”

“30.      Sawcut and demolish concrete slab on grade for plumbing in Boys Locker 319, and raised floor in Classroom 222 as indicated on sheet AD102.”

“31.      Provide concrete slab on grade infills at Dishwash157 and Vestibule 108.”
  - c. Contract A-03 Masonry

- i. ADD the following NEW item after item 22 on page 011100-13:  
  
"23. Provide 2" polyurethane spray foam insulating air barrier."
- d. Contract A-04 Structural Steel & Misc. Metals
  - i. DELETE items 4 and 8 on page 011100-14, and items 21 and 24 on page 011100-15.
  - ii. ADD the following NEW item after item 30 on page 011100-16:  
  
"31. Provide steel plates at the heads and jambs where the classroom addition meets the existing building, as indicated by section 1/A303 and detail 8/A501. This condition occurs at both floors of the classroom addition."
  - iii. ADD the following Technical Specification Section below Section 055213 – Pipe and Tube Railings on page 011100-14:  
  
"Section 107316 Prefabricated Canopy System"
  - iv. DELETE item 20 on page 011100-15 and INSERT revised item:  
  
"20. Furnish pipe bollards to the Sitework Contractor for installation."
- e. Contract A-05 Carpentry & General Work
  - i. ADD the following Technical Specification Sections below Section 081416 – Flush Wood Doors on page 011100-17:  
  
"Section 083313 Coiling Counter Doors"  
"Section 083323 Overhead Coiling Doors"
  - ii. DELETE item 42 on page 011100-19.
  - iii. DELETE item 46 on page 011100-20 and INSERT revised item:  
  
"46. Provide a temporary structural stud partition from the floor to the bottom of the structure, where the kitchen addition meets the existing building in Classroom 222 and Multipurpose Room 132. The partition must be designed by a registered professional engineer, and engineered shop drawings shall be submitted for approval prior to construction. The partition shall be thermally insulated and sealed to ensure no migration of sound, dust, or odors. Provide ½" drywall on the occupant side with a level 4 finish. On the exterior side, provide type X, 5/8" gypsum sheathing clad with building wrap, Tyvek or similar. Provide a double door opening with panic hardware on the occupant side for emergency egress from Multipurpose Room 132. Remove and dispose of the temporary partitions and door when directed by the Construction Manager."
  - iv. ADD the following NEW items after item 50 on page 011100-21:  
  
"51. This Contractor shall include in the base bid an allowance of \$15,000 to provide overhead protection outside of door 127/1, approx. 30' long x 9' wide x 8' tall, and scaffold built on top in order to reach a 22' tall elevation from grade. The scaffold on top of the overhead protection shall be 4' wide with 2' side brackets. The scaffold shall include 2 fully planked levels so that the masons can move the

side brackets as needed to perform their work. Engineering (if required) and rental fees shall be included in the allowance. Any unused portion of the allowance shall be credited back to the Owner via change order."

"52. All temporary shoring as required to complete selective demolition work, including shoring of walls and trusses identified on the Structural Drawings."

"53. Provide light gauge cover plates as indicated on detail 7/A501."

f. Contract A-06 Roofing

i. ADD the following NEW items after item 21 on page 011100-23:

"22. Vented soffit and fascia."

"23. Aluminum cap at the dumpster enclosure, per detail on Sheet C-902."

g. Contract A-07 Glass & Glazing

i. ADD the following NEW item after item 10 on page 011100-24:

"11. Caulk interior perimeter of all aluminum storefronts."

h. Contract A-08 Acoustical Ceilings

i. ADD the following Technical Specification Section below Section 095113 – Acoustical Panel Ceilings on page 011100-25:

"Section 097723 Fabric Wrapped Panels"

ii. ADD the following NEW item after item 7 on page 011100-25:

"8. Provide fabric wrapped panels."

i. Contract A-10 Painting

i. ADD the following Technical Specification Sections below Section 099600 – High Performance Coatings:

"Division 21 Fire Protection"

"Division 22 Plumbing"

ii. ADD the following NEW item after item 14 on page 011100-28:

"15. Paint exposed gas piping."

"16. Paint exposed fire protection piping."

j. Contract A-11 Kitchen Equipment

ADD the following NEW item after item 11 on page 011100-30:

"12. Provide stainless steel closure angle at the sill of the pass-thru window."

k. Contract A-13 Mechanical

- i. ADD the following NEW item after item 33 on page 011100-35:

“34. Install floor troughs furnished by the Kitchen Equipment Contractor. Fill in voids surrounding troughs with grout per detail on sheet K102.”

4. Section 013500 Contractor Employee Background Check
  - a. REPLACE section with specification issued in this addendum.
5. Section 042000 Unit Masonry
  - a. REPLACE paragraph 1.7.D.1 with the following:
    1. If unit other than Watson town is proposed for use, build sample panel of Watson town and of proposed unit, for selection by Architect. Contractor may combine sample panel(s) with mockup(s), for concurrent review.”
  - b. REPLACE paragraph 1.7.D.8 with the following: “8. Selection of brick shall not result in change in contract sum or time.”
  - c. REPLACE paragraph 2.4.B.1.a. with the following
    11. Face Brick type 1:
      12. Continental Brick Company; #455, Modular.
      13. Pine Hall Brick; CVS Red Modular.
      14. Watson town; Sturbridge Smooth Sanded Type 1 Modular.
6. Section 047200 Cast Stone Masonry
  - a. ADD paragraph 2.2.A.4 as follows: “4. Hoyle Stone Products.”
7. Section 055100 Metal Stairs
  - a. REPLACE section with specification issued in this addendum.
8. Section 064023 Interior Architectural Woodwork
  - a. DELETE paragraph 1.5.B.
9. Section 072100 Thermal Insulation
  - a. ADD paragraph 2.4.B.6.d as follows: “d. StoCorp; Sto Emerald Coat.”
10. Section 083313 Coiling Counter Doors
  - a. ADD section issued via this addendum.
11. Section 083323 Overhead Coiling Doors
  - a. ADD section issued via this addendum.
12. Section 096513 Resilient Base and Accessories
  - a. ADD paragraph 1.2.A.2 as follows: “2. Resilient stair accessories.”
  - b. ADD paragraph 2.2 as follows:

## 2.2 RUBBER STAIR ACCESSORIES (RUB)

1. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
  - a. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
2. Basis-of-Design Product: Subject to compliance with requirements, provide Burke Flooring; Endura Rubber Floor Tile and Uni-Step or a comparable product by one of the following:

1. Johnsonite.
  2. Marley Flexco, Inc.
  3. Mondo Rubber International, Inc.
  4. Roppe.
3. Stair Treads: ASTM F 2169.
1. Type: TS (rubber, vulcanized thermoset).
  2. Class: 2 (pattern; round).
  3. Group: 1 (embedded abrasive strips) and 2 (with contrasting color for the visually impaired).
  4. Nosing Style: Square, adjustable to cover angles between 60 and 90 degrees.
  5. Nosing Height: 1-1/2 inches (38 mm).
  6. Thickness: 1/8 inch (3 mm) and tapered to back edge.
  7. Size: Lengths and depths to fit each stair tread in one piece.
  8. Integral Risers: Smooth, flat; in height that fully covers substrate.
4. Landing Tile: Matching treads; produced by same manufacturer as treads and recommended by manufacturer for installation with treads.
5. Locations: Provide rubber stair accessories in areas indicated.
6. Colors and Patterns: As selected by Architect from full range of industry colors.

c. ADD paragraph 3.4.C as follows:

C. Resilient Stair Accessories:

1. Use stair-tread-nose filler to fill nosing substrates that do not conform to tread contours.
2. Tightly adhere to substrates throughout length of each piece.
3. For treads installed as separate, equal-length units, install to produce a flush joint between units.

13. Section 097723 Fabric Wrapped Panels

- a. ADD section issued via this addendum.

14. Section 123200 Institutional Casework

- a. DELETE paragraph 1.5.C.1

15. Section 224000 – Plumbing Fixtures

- a. ADD Paragraph 2.1.F – P-3A to read as follows:

P-3A

1. *Electric Water Cooler (Single Height/Handicapped Surfaced Mounted):*  
*Haws Model HWUACP8, Acorn or approved equal, Barrier Free, single height with mounting frame. Air cooled electric water cooler shall be capable of delivering 8 GPH at 90 degrees F ambient, 80 degrees F inlet water and 50 degrees F outlet drinking water. Top shall be stainless steel; bubbler valve shall be electronically controlled and be activated by touch pads for electrically timed period of flow. Cabinet shall be powder coated*

*on heavy gauge steel, color to be selected by Architect. Unit shall be supplied with plug-in, 3-wire grounding type service and for operation on 120 volt/1 phase/60 HZ. Spout outlet shall be mounted 36-inch maximum above floor. Water cooler and installation shall conform to all requirements of American Disabilities Act Guidelines and ANSI A117.1.*

2. *Refrigerant shall be R-134a or equivalent environmentally friendly refrigerant.*
3. *Provide Carrier as manufactured by Zurn, Josam, Amcon, Smith, Mifab, or approved equal.*

16. Section 265100 – Interior Lighting

- a. ADD paragraph 2.11.N as follows:

N. Fixture Type “K”

1. Description: Recessed LED downlight.
2. Voltage: 277VAC.
3. Mounting: Recessed, dry wall ceiling.
4. Nominal Dimensions: 15-1/16”L x 10-1/2”W x 8-7-8”H, 6-1/4” aperture.
5. Lamps: 3500K LEDs, 6000 lumens minimum.
6. Ballast Types and Features: High-efficiency 0-10V dimming LED driver, with flicker-free dimming to 1%. Driver disconnect shall be factory-installed for each driver.
7. Construction: 16-gauge black painted steel mounting frame with C-channel mounting bars. Galvanized steel junction box with hinged access covers and spring latch.
8. Optics: 60 degree beam angle, designed to maximize lumen output and provide superior glare control.
9. External Finish: Clear Semi-specular
10. Other Features: Provide sloped ceiling adapter for 15 degree slope drywall ceiling. Provide fixture with flange adapter for mounting in drywall ceiling.
11. Ratings: L80 performance at 50,000 hours.
12. Manufacturers:
  - a. Gotham ICO Series
  - b. Prescolite
  - c. Juno

**DRAWINGS**

1. AD102 First Floor Kitchen Demolition Plan and Elevation
  - a. Detail 1:
    - i. ADD demolition of sink near gang toilets in Multi-Purpose Room 132.
    - ii. REVISE extents of ceiling demolition, per attached drawing.
2. C-101 Overall Existing Conditions & Demolition Plan
  - a. ADD- removal of section of fence large enough to install 24’ wide traffic gate proposed on the Temporary Construction Fence.
3. C-201 Site & Utilities Plan
  - a. ADD – Contractor to install 171 lf of DelDOT curb type 1-6 upright Curb adjacent to the fire lane.
  - b. ADD - 256 LF of Yellow Painted Curb.
  - c. ADD – Add 315 lf of a stone trench adjacent to paving area. Trench be 1’ wide by 2’ deep, be lined with non-woven fabric and include clean washed 57 stone.
  - d. Refer to E601 for revised location of electrical equipment.
4. C-301 Utilities Plan

- a. Change pipe SS-6 from a 6" pipe to a 4" pipe.
- b. Change pipe SS-7 from a 6" pipe to a 4" pipe.
- c. Change pipe from SDR 25 to SDR 35 in note D-9.
- d. Refer to E601 for revised location of electrical equipment.
5. S103 Foundation Plan – Kitchen Addition
  - a. REVISE slab at walk-in coolers per attached drawing.
6. S104 Roof Framing Plan – Kitchen Addition
  - a. ADD note at lintels in serving line, per attached drawing.
7. A104 Kitchen Addition First Floor Plan
  - a. Detail 1:
    - i. ADD new E.W.C. near gang toilets in Multi-Purpose Room 132, and REMOVE blank detail callout at northeast of Classroom 222.
    - ii. ADD building section 7/A301, cut east-west in Multi-Purpose 132.
    - iii. ADD wall type '1C', at doors 231/1 and 322C/1.
8. A105 Kitchen Addition Reflected Ceiling Plan
  - a. Detail 1: ADD replacement of ceiling at Girl's Toilet 322C vestibule, Storage 232, Mechanical 233, and REMOVE note concerning bond beam at Serving 156.
9. A107 Multipurpose Room Finish Alternate
  - a. ADD sheet issued via this addendum.
10. A201 Exterior Elevations - Classroom
  - a. Detail 6: REVISE to show stacked bond brick continuing to top of soldier course (soldier course headers stop on each side of stack bond), to match existing first floor brick detailing.
11. A301 Building Sections
  - a. ADD Detail 7, per attached drawing.
12. A302 Wall Sections
  - a. Detail 1: REVISE note at roof from " 3/4" FURRING" to "7/8" GALV. HAT CHANNEL".
13. A303 Wall Sections
  - a. Detail 1: REVISE note at roof from " 3/4" Z-FURRING" to "7/8" GALV. HAT CHANNEL".
14. A304 Wall Sections
  - a. Detail 2: REVISE detail per attached.
  - b. Detail 5: REVISE detail per attached. Note: location of deck edge shall be coordinated in field upon uncovering of existing conditions.
15. A501 Wall Types and Details
  - a. Details 5: REVISE storefront jamb to show treated 2x blocking in lieu of brick returning to CMU, with transition membrane wrapped around blocking, and ADD dimension for storefront setback 3" from face of brick.
  - b. Details 6: REVISE storefront jamb to show treated 2x blocking in lieu of brick returning to CMU, with transition membrane wrapped around blocking, and ADD dimension for storefront setback 3" from face of brick.
  - c. Detail 7: ADD dimension for storefront setback 3" from face of brick.
16. A502 Miscellaneous Details
  - a. Detail 2: REVISE note from " 3/4" FURRING" to "7/8" GALV. HAT CHANNEL".
  - b. Detail 4: REVISE note from " 3/4" FURRING" to "7/8" GALV. HAT CHANNEL".
  - c. Detail 5: REVISE note to read as follows: "FIRE TREATED PLYWOOD OVER 7/8" GALV HAT CHANNEL OVER METAL DECK – SEE STRUCT."
17. A601 Finish Schedule and Legend, Door Schedule, Door and Window Types and Details
  - a. ADD rooms per attached drawing: Vestibule 108, Boys Toilet 231, Storage 232, Mechanical 233, Shower 318A, and Girls Toilet 322C.
  - b. Multipurpose Room 132: REVISE comments per attached drawing.
  - c. Equipment Platform 299: REVISE ceiling finish from "PT" to "-".
18. A602 Door and Window Details
  - a. REVISE Details H6, J6, and J7 per attached.



- b. Detail J2: REVISE storefront jamb to show treated 2x blocking in lieu of brick returning to CMU, with transition membrane wrapped around blocking.
- c. Detail H3: REVISE thru-wall flashing to drop down at lintel.
- 19. PD102 – Plumbing Demolition
  - a. REMOVE existing hand sink per the attached Plumbing Sketch PSK-01.
- 20. P102 – Plumbing New Work
  - a. ADD new electric water cooler P-3A per attached Plumbing Sketch PSK-02.
- 21. P401 – Plumbing Schedules
  - a. REVISE Plumbing Fixture Schedule per attached Plumbing Sketch PSK-03.
- 22. EDL102 – Kitchen Addition Lighting Demolition:
  - a. REPLACE Drawing EDL102 in its entirety with revised Drawing EDL-102. Changes made to this sheet reflect the demo lighting changes based on the latest architectural plans for the existing toilet room ceilings and alternate 4.
- 23. EL102 – Kitchen Addition Lighting New Work:
  - a. REPLACE Drawing EL102 in its entirety with revised Drawing EL-102. Changes made to this sheet reflect the new work lighting changes required based on the latest architectural plans for the existing toilet rooms ceilings and alternate 4.
- 24. EP101 – First and Second Floor Plans Classroom Addition Power New Work:
  - a. REPLACE Drawing EP101 in its entirety with revised Drawing EP-101. Changes made to this sheet are based on the owner directed changes to the technology drop locations and quantities and to provide owner requested speakers in the corridors.
- 25. EP102 – Kitchen Addition Power New Work:
  - a. REPLACE Drawing EP102 in its entirety with revised Drawing EP-102. Changes made to this sheet are based on the owner wanting to replace the existing sink in multi-purpose room 132 with an electric water cooler.
- 26. E301 – Details Electrical:
  - a. REVISE mounting height of typical printer drop from 6" above finished counter to 42" above finished floor. Changes made to this sheet are based on the owner directed changes to the technology drop locations.
- 27. E302 – Details Electrical:
  - a. REPLACE Drawing E302 in its entirety with revised Drawing E302. Changes made to this sheet are based on the owner directed changes to the technology drop locations and quantities.
- 28. E310 – Details Electrical:
  - a. REPLACE Drawing E310 in its entirety with revised Drawing E310. Changes made to this sheet are based on the owner directed changes to the technology drop locations and quantities.
- 29. E404 – Schedules Electrical:
  - a. REVISE circuit pole designations, trip ratings, and circuit descriptions for Panelboard LHC, circuit #36 from "—", "—", "Space" to "1", "20", "EWC ROOM 132". Circuit breaker shall be GFCI circuit breaker for personnel protection (5ma trip threshold). Change made to this panelboard is to provide power to electric water cooler requested by the owner in multi-purpose room 132.
- 30. E601 – Site Plan Electrical New Work:
  - a. REPLACE Drawing E601 in its entirety with revised Drawing E-601. Changes made to this sheet are based on changing the location of the new pad mounted utility transformer based on the owner's direction.

## ATTACHMENTS

Section 004100 Bid Form for Contract A-13 Mechanical  
Section 013500 Contractor Employee Background Check  
Section 055100 Metal Stairs  
Section 083313 Coiling Counter Doors  
Section 083323 Overhead Coiling Doors

Section 097723 Fabric-Wrapped Panels

Drawing - Temporary Construction Fencing Plan, dated 11.07.14

Drawings S103, S104, dated 05.22.2015

Drawings AD102, A105, A107, A301, A304, A601, A602, dated 05.22.2015

Drawings PSK-01, PSK-02, PSK-03, dated 05.21.2015

Drawings EDL 102, EL102, EP101, EP102, E302, E310, E601, dated 05.22.2015

END OF ADDENDUM NO. THREE

Indian River School District  
Referendum 2013  
Georgetown Elementary School Classroom & Kitchen Additions

A-013: Mechanical

BID FORM

For Bids Due: \_\_\_\_\_ To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: ( ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: ( ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

- A. Alternate No. 1: Additional striping of the front parking lot.
1. Base Bid: Removal of striping in the existing northeast parking lot adjacent to the classroom additions according to Sheet C-101 of the contract documents. Striping of 18 parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
  2. Alternate: Remove the remaining existing striping within the existing northeast parking lot adjacent to the classroom additions on sheet C-202 of the contract documents. Additional restriping of the spaces and pavement marking within the existing northeast parking lot as shown on sheet C-202 of the contract documents and not included in the base bid on sheet C-201 of the contract documents.

**Indian River School District**  
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**Georgetown Elementary School Classroom & Kitchen Additions**

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Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

**B. Alternate No. 2: Seal coat front parking lot**

1. Base Bid: Removal of striping in the existing northeast parking lot adjacent to the classroom additions according to Sheet C-101 of the contract documents. Striping of 18 parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating 46,610 sqft of the existing northeast parking lot as shown on sheet C-202 of the contract documents. Additional restriping of the spaces and pavement marking within the existing northeast parking lot as shown on sheet C-202 of the contract documents and not included in the base bid on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

**C. Alternate No. 3: Mill and overlay front parking lot**

1. Base Bid: Removal of striping in the existing northeast parking lot adjacent to the classroom additions according to Sheet C-101 of the contract documents. Striping of 18 parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Sawcut and rotomill 46,610 sqft of the existing northeast parking lot as shown on sheet C-202 of the contract documents. Additional restriping of the spaces and pavement marking within the existing northeast parking lot as shown on sheet C-202 of the contract documents and not included in the base bid on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

**D. Alternate No. 4: Multipurpose Room Finishes**

1. Base Bid: At Multipurpose Room #132, existing finish flooring remain; patch and replace tiles at removed serving lines; and walls repainted, as indicated on Sheet.
2. Alternate: In lieu of base bid, provide new finish flooring and wall finishes as indicated on Sheets A107 and A601.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

**E. Alternate No. 5: Existing Stair Tread/Riser and Landing.**

1. Base Bid: At Stair 127/218, repaint existing stair risers and VCT on treads and landing remains, as indicated on Sheet A103.
2. Alternate: In lieu of base bid, remove VCT at landing and provide rubber tile, and provide new rubber stair tread with integral risers as indicated on Sheet A103 and Section 096513.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

Indian River School District  
Referendum 2013  
Georgetown Elementary School Classroom & Kitchen Additions

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UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

- A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.
1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
  2. Unit of Measurement: **Cubic yard** of soil excavated, based on survey of volume removed.
- Add\_\_\_\_\_(\$\_\_\_\_\_)      Deduct\_\_\_\_\_(\$\_\_\_\_\_)
- B. Unit Price No. 2: Full depth pavement patch.
1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
  2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.
- Add\_\_\_\_\_(\$\_\_\_\_\_)      Deduct\_\_\_\_\_(\$\_\_\_\_\_)
- C. Unit Price No. 3: 2" Mill and overlay.
1. Description: Additional 2" milling of existing pavement by contractor and installation of a 2" overlay above and beyond the base bid as shown on the contract documents.
  2. Unit of Measurement: square foot of area to be milled, based on survey of area removed.
- Add\_\_\_\_\_(\$\_\_\_\_\_)      Deduct\_\_\_\_\_(\$\_\_\_\_\_)
- D. Unit Price No. 4: Seal Coating Pavement area.
1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
  2. Unit of Measurement: Square foot.
- Add\_\_\_\_\_(\$\_\_\_\_\_)      Deduct\_\_\_\_\_(\$\_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

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I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement

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Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u>Subcontractors tax payer ID #</u> <u>or Delaware Business license #</u>	<u>Address (City &amp; State)</u>
1. Mechanical	_____	_____
2. Building Automation System	_____	_____
3. Testing and Balancing	_____	_____



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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-12, Fire Protection have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

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**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S\_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S\_\_\_\_\_ ) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

Attest \_\_\_\_\_

Witness \_\_\_\_\_

By: \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

\_\_\_\_\_  
Title

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CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

\_\_\_\_\_  
(Surety Company)

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION

SECTION 013500 – CONTRACTOR EMPLOYEE BACKGROUND CHECK

1. It is the contractor's responsibility to perform background checks and screen all employees working onsite. The background check must include checking for a previous history of Child Abuse Convictions, Child Molestation Convictions, Felony Convictions, and Drug Convictions within the last 5 years. Any employee with any of these convictions may not enter the job site or school campus. This background check must be completed and screened by the contractor prior to an employee entering the job site. The background check cannot be any older than 1 year prior to the date of the contract between the Contractor and the Owner. The Construction Manager, the Owner's representative and the Owner have the right to request that the screening data be submitted on a case-by-case basis.
2. The contractor is required to provide the Construction Manager written notice verifying background checks were completed and screened by the contractor prior to an employee entering the job site. This notice will contain the individual's name and the last four digits of their social security numbers. Notices must be received no later than two (2) working days before access is required. Notices will be forwarded electronically to the Construction Manager. A sample notice follows this section for your reference.

END OF SECTION

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Date

Project Manager  
EDiS Company  
110 South Poplar Street  
Wilmington, DE 19805

RE: INSERT PROJECT NAME - Certification of Background Checks

Dear \_\_\_\_\_:

This letter is to certify that background checks have been completed in accordance with Section 013500 Contractor Employee Background Check. The following individuals are certified as having met the requirements of the specification:

<u>Name</u>	<u>Last 4 SSN</u>
Mr. John Smith	1234

If you require any additional information you may contact INSERT POINT OF CONTACT, PHONE NUMBER AND EMAIL ADDRESS.

Sincerely,

Company

NAME  
TITLE

## SECTION 055100 - METAL STAIRS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section Includes:

1. Preassembled steel stairs with concrete-filled treads.
2. Steel pipe railings with stainless steel handrail attached to metal stairs.
3. Steel pipe railings attached catwalks.
4. Stainless Steel pipe handrails attached to walls adjacent to metal stairs and to slab at existing ramp.

- B. Related Requirements:

1. Section 033000 "Cast-in-Place Concrete" for concrete fill for stair treads and platforms.
2. Section 055213 "Pipe and Tube Railings" for pipe and tube railings.

## 1.3 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages for metal stairs. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- C. Coordinate locations of hanger rods and struts with other work so that they do not encroach on required stair width and are within the fire-resistance-rated stair enclosure.

## 1.4 ACTION SUBMITTALS

- A. Product Data: For metal pan stairs and the following:
  1. Paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples for Verification: For each type and finish of handrail.

- D. Delegated-Design Submittal: For stairs and railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers certifying that shop primers are compatible with topcoats.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design stairs and railings.
- B. Structural Performance of Stairs: Metal stairs shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Uniform Load: 100 lbf/sq. ft. (4.79 kN/sq. m).
  - 2. Concentrated Load: 300 lbf (1.33 kN) applied on an area of 4 sq. in. (2580 sq. mm).
  - 3. Uniform and concentrated loads need not be assumed to act concurrently.
  - 4. Stair Framing: Capable of withstanding stresses resulting from railing loads in addition to loads specified above.
  - 5. Limit deflection of treads, platforms, and framing members to L/360 or 1/4 inch (6.4 mm), whichever is less.
- C. Structural Performance of Railings: Railings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Handrails and Top Rails of Guards:
    - a. Uniform load of 50 lbf/ft. (0.73 kN/m) applied in any direction.
    - b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
    - c. Uniform and concentrated loads need not be assumed to act concurrently.
  - 2. Infill of Guards:
    - a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
    - b. Infill load and other loads need not be assumed to act concurrently.

- D. Seismic Performance of Stairs: Metal stairs shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1. Component Importance Factor: 1.5.

## 2.2 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For components exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Steel Tubing: ASTM A 500 (cold formed) or ASTM A 513.
- D. Steel Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
1. Provide galvanized finish for exterior installations and where indicated.
- E. Cast Iron: Either gray iron, ASTM A 48/A 48M, or malleable iron, ASTM A 47/A 47M, unless otherwise indicated.
- F. Uncoated, Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, structural steel, **Grade 25 (Grade 170)**, unless another grade is required by design loads; exposed.
- G. Galvanized-Steel Sheet: ASTM A 653/A 653M, **G90 (Z275)** coating, structural steel, **Grade 33 (Grade 230)**, unless another grade is required by design loads.
- H. Stainless Steel Tubing: ASTM A 554, Grade MT 304.
- I. Stainless Steel Pipe: ASTM A 312/A 312M, Grade TP 304.
- J. Stainless Steel Castings: ASTM A 743/A 743M, Grade CF 8 or CF 20.
- K. Stainless Steel Plate and Sheet: ASTM A 240/A 240M or ASTM A 666, Type 304.

## 2.3 FASTENERS

- A. General: Provide zinc-plated fasteners with coating complying with ASTM B 633 or **ASTM F 1941 (ASTM F 1941M)**, Class Fe/Zn 12 for exterior use, and Class Fe/Zn 5 where built into exterior walls. Select fasteners for type, grade, and class required.
- B. Bolts and Nuts: Regular hexagon-head bolts, **ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6)**; with hex nuts, **ASTM A 563 (ASTM A 563M)**; and, where indicated, flat washers.
- C. Anchor Bolts: ASTM F 1554, Grade 36, of dimensions indicated; with nuts, **ASTM A 563 (ASTM A 563M)**; and, where indicated, flat washers.
1. Provide mechanically deposited or hot-dip, zinc-coated anchor bolts for stairs indicated to be hot-dip galvanized.



- D. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488/E 488M, conducted by a qualified independent testing agency.
1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or **ASTM F 1941 (ASTM F 1941M)**, Class Fe/Zn 5, unless otherwise indicated.
  2. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy Group **1 (A1)** stainless-steel bolts, **ASTM F 593 (ASTM F 738M)**, and nuts, **ASTM F 594 (ASTM F 836M)**.
- E. Railing Fasteners: Provide the following:
1. Ungalvanized-Steel Railings: Plated steel fasteners complying with ASTM B 633 or **ASTM F 1941 (ASTM F 1941M)**, Class Fe/Zn 5 for zinc coating.
  2. Stainless-Steel Railings: Type 304 stainless-steel fasteners.
  3. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.
- F. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.
- G. Fasteners for Interconnecting Railing Components:
1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless otherwise indicated.
  2. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method for railings indicated.
  3. Provide tamper-resistant, or square or hex socket flat-head machine screws for exposed fasteners unless otherwise indicated.

## 2.4 MISCELLANEOUS MATERIALS

- A. Shop Primers: Provide primers that comply with Section 099600 "High-Performance Coatings."
- B. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- C. Concrete Materials and Properties: Comply with requirements in Section 033000 "Cast-in-Place Concrete" for normal-weight, air-entrained, ready-mix concrete with a minimum 28-day compressive strength of **3000 psi (20 MPa)** unless otherwise indicated.
- D. Welded Wire Reinforcement: ASTM A 185/A 185M, **6 by 6 inches (152 by 152 mm)**, W1.4 by W1.4, unless otherwise indicated.
- E. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

## 2.5 FABRICATION, GENERAL

- A. Provide complete stair assemblies, including metal framing, hangers, struts, railings, clips, brackets, bearing plates, and other components necessary to support and anchor stairs and platforms on supporting structure.
  - 1. Join components by welding unless otherwise indicated.
  - 2. Use connections that maintain structural value of joined pieces.
- B. Preassembled Stairs: Assemble stairs in shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately **1/32 inch (1 mm)** unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- E. Form exposed work with accurate angles and surfaces and straight edges.
- F. Weld connections to comply with the following:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. Weld exposed corners and seams continuously unless otherwise indicated.
  - 5. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Type 4 welds: good quality, uniform undressed weld with minimal splatter.
- G. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) screws or bolts unless otherwise indicated. Locate joints where least conspicuous.

## 2.6 STEEL-FRAMED STAIRS

- A. NAAMM Stair Standard: Comply with "Recommended Voluntary Minimum Standards for Fixed Metal Stairs" in NAAMM AMP 510, "Metal Stairs Manual," Commercial Class, unless more stringent requirements are indicated.
- B. Stair Framing:
  - 1. Fabricate stringers of steel channels or channels.
    - a. Provide closures for exposed ends of channel stringers.
  - 2. Construct platforms of steel plate or channel headers and miscellaneous framing members as needed to comply with performance requirements.
  - 3. Weld stringers to headers; weld framing members to stringers and headers.
  - 4. Where masonry walls support metal stairs, provide temporary supporting struts designed for erecting steel stair components before installing masonry.

- C. Metal Pan Stairs: Form risers, subtread pans, and subplatforms to configurations shown from steel sheet of thickness needed to comply with performance requirements, but not less than **0.067 inch (1.7 mm)**.
1. Steel Sheet: Galvanized-steel sheet.
  2. Attach risers and subtreads to stringers with brackets made of steel angles or bars. Weld brackets to stringers and attach metal pans to brackets by welding, riveting, or bolting.
  3. Shape metal pans to include nosing integral with riser.
  4. Provide subplatforms of configuration indicated or, if not indicated, the same as subtreads. Weld subplatforms to platform framing.
    - a. Smooth Soffit Construction: Construct subplatforms with flat metal under surfaces to produce smooth soffits.

## 2.7 STAIR RAILINGS

- A. Pipe Railings: Fabricate railings to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of pipe, post spacings, and anchorage, but not less than that needed to withstand indicated loads.
1. Rails and Posts: **1-1/2-inch- (38-mm-)** diameter top and bottom rails and **1-1/2-inch- (38-mm-)** diameter posts.
  2. Stainless Steel Handrails: **1-1/2-inch- (38-mm-)** outside diameter rails.
  3. Picket Infill: **3/4-inch- (19-mm-)** round pickets spaced less than **4 inches (100 mm)** clear.
    - a. Provide pickets at guards in stair. Pickets are not required at catwalk.
  4. Gates: Form gates from steel tube of same size and shape as top rails, with infill to match guards. Provide with cam-type, self-closing or spring hinges for fastening to wall and overlapping stop with rubber bumper to prevent gate from opening in direction opposite egress.
    - a. Provide gate at catwalk.
- B. Welded Connections: Fabricate railings with welded connections. Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
1. Finish welds to comply with NOMMA's "Voluntary Joint Finish Standards"
    - a. Stainless Steel Railings: Type 1 welds: no evidence of a welded joint.
    - b. Steel Railings: Type 2 welds: completely sanded joint, some undercutting and pinholes are okay as shown in NAAMM AMP 521.
- C. Form changes in direction of railings as follows:
1. By radius bends of radius indicated or by inserting prefabricated elbow fittings of radius indicated.
- D. For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- E. Close exposed ends of railing members with prefabricated end fittings.
- F. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Provide single, exposed stainless steel expansion anchor at wall return. Wall return plate finish shall match handrail.

- G. Connect posts to stair framing by direct welding unless otherwise indicated.
- H. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, end closures, flanges, miscellaneous fittings, and anchors for interconnecting components and for attaching to other work. Furnish inserts and other anchorage devices for connecting to concrete or masonry work.
  - 1. For stainless steel railings, provide stainless steel fittings, brackets, fasteners, sleeves, and other metal components.
  - 2. For galvanized railings, provide galvanized fittings, brackets, fasteners, sleeves, and other ferrous-metal components.
  - 3. For nongalvanized railings, provide nongalvanized ferrous-metal fittings, brackets, fasteners, and sleeves, except galvanize anchors embedded in exterior masonry and concrete construction.
  - 4. Provide type of bracket indicated below and that provides 2-1/4-inch (57-mm) clearance from inside face of handrail to finished wall surface.
    - a. Wall-mounted handrails, Basis-of Design: Julius Blum & Co., Inc; Self-aligning bracket #223.
- I. Fillers: Provide fillers made from steel plate, or other suitably crush-resistant material, where needed to transfer wall bracket loads through wall finishes to structural supports. Size fillers to suit wall finish thicknesses and to produce adequate bearing area to prevent bracket rotation and overstressing of substrate.

## 2.8 FINISHES

- A. Finish metal stairs after assembly.
- B. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.
  - 1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
  - 2. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- C. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with requirements indicated below:
  - 1. Railings Indicated to Receive Primers Specified in Section 099600 "High-Performance Coatings": SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
  - 2. Other Railings: SSPC-SP 3, "Power Tool Cleaning."
- D. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.
  - 1. Shop prime uncoated railings with unless primers specified in Section 099600 "High-Performance Coatings" are indicated.
- E. High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.
  - 1. Color: As selected by Architect from manufacturer's full range.

## 2.9 STAINLESS-STEEL FINISHES

- A. Remove tool and die marks and stretch lines, or blend into finish.
- B. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- C. No. 8 Polished Finish to match existing stair handrails.
- D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

## PART 3 - EXECUTION

### 3.1 INSTALLING METAL PAN STAIRS

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing metal stairs to in-place construction. Include threaded fasteners for concrete and masonry inserts, through-bolts, lag bolts, and other connectors.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal stairs. Set units accurately in location, alignment, and elevation, measured from established lines and levels and free of rack.
- C. Install metal stairs by welding stair framing to steel structure or to weld plates cast into concrete unless otherwise indicated.
- D. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.
- E. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- F. Field Welding: Comply with requirements for welding in "Fabrication, General" Article.
- G. Place and finish concrete fill for treads and platforms to comply with Section 033000 "Cast-in-Place Concrete."
  - 1. Install abrasive nosings with anchors fully embedded in concrete. Center nosings on tread width.
- H. Install precast concrete treads with adhesive supplied by manufacturer.

### 3.2 INSTALLING RAILINGS

- A. Adjust railing systems before anchoring to ensure matching alignment at abutting joints. Space posts at spacing indicated or, if not indicated, as required by design loads. Plumb posts in each direction. Secure posts and rail ends to building construction as follows:
  - 1. Anchor posts to steel by welding to steel supporting members.

2. Anchor handrail ends to concrete and masonry with steel round flanges welded to rail ends and anchored with postinstalled anchors and bolts.
- B. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending **2 inches (50 mm)** beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within **6 inches (150 mm)** of post.
- C. Attach handrails to wall with wall brackets. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads. Secure wall brackets to building construction as required to comply with performance requirements:
  1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
  2. For hollow masonry anchorage, use toggle bolts.
- D. For railings set in concrete: Form or core-drill holes not less than **5 inches (125 mm)** deep and **3/4 inch (20 mm)** larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions.
- E. Cover anchorage joint with flange of same metal as post, welded to post after placing anchoring material.

### 3.3 ADJUSTING AND CLEANING

- A. Clean stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.
- B. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Section 099600 "High-Performance Coatings."
- C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780/A 780M.

### 3.4 PROTECTION

- A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

END OF SECTION 055100

## SECTION 083313 - COILING COUNTER DOORS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Counter doors.
- B. Related Requirements:
  - 1. Section 055000 "Metal Fabrications" for miscellaneous steel supports.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type and size of coiling counter door and accessory.
  - 1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
  - 1. Include plans, elevations, sections, and mounting details.
  - 2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
- C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
  - 1. Include similar Samples of accessories involving color selection.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.

## 1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For coiling counter doors to include in maintenance manuals.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS, GENERAL

- A. Source Limitations: Obtain coiling counter doors from single source from single manufacturer.

- 1. Obtain operators and controls from coiling counter door manufacturer.

### 2.2 COUNTER DOOR ASSEMBLY (CS-1)

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide McKeon Rolling Steel Door Company, Inc.; CS3000-PP-SS or a comparable product by one of the following:
  - a. Clopay Building Products.
  - b. Cookson Company.
  - c. Overhead Door Corporation.
  - d. Raynor.
- B. Operation Cycles: Door components and operators capable of operating for not less than 20,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
  - 1. Include tamperproof cycle counter.
- C. Door Curtain Material: Stainless steel.
- D. Door Curtain Slats: Flat profile slats of 1-1/4-inch (32-mm) center-to-center height.
- E. Bottom Bar: Manufacturer's standard continuous channel or tubular shape, fabricated stainless steel and finished to match door.
- F. Curtain Jamb Guides: Stainless steel with exposed finish matching curtain slats.
- G. Hood: Match curtain material and finish.
  - 1. Mounting: As shown on Drawings.
- H. Integral Frame, Hood, and Fascia: Stainless steel.
  - 1. Mounting: As shown on Drawings.
- I. Sill Configuration: Integral metal sill, as shown on Kitchen Equipment Drawings.
- J. Locking Devices: Equip door with slide lock mechanism with hasps on both jambs to allow for locking.
- K. Manual Door Operator: Push-up operation.



L. Door Finish:

1. Stainless-Steel Finish: No. 4 (polished directional satin).

2.3 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate coiling counter-door curtain of interlocking metal slats in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:

1. Stainless-Steel Door Curtain Slats: ASTM A 666, Type 304; sheet thickness of 0.025 inch (0.64 mm); and as required.

- B. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

2.4 HOODS

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.

1. Stainless Steel: 0.025-inch- (0.64-mm-) thick stainless-steel sheet, Type 304, complying with ASTM A 666.

2.5 COUNTERBALANCING MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.

- B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, seamless carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than 0.03 in./ft. (2.5 mm/m) of span under full load.

- C. Counterbalance Spring: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.

1. Fire-Rated Doors: Equip with auxiliary counterbalance spring and prevent tension release from main counterbalance spring when automatic closing device operates.

- D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.

- E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

## 2.6 MANUAL DOOR OPERATORS

- A. General: Equip door with manual door operator by door manufacturer.
- B. Push-up Door Operation: Design counterbalance mechanism so that required lift or pull for door operation does not exceed 25 lbf (111 N).

## 2.7 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM/NOMMA's "Metal Finishes Manual for Architectural and Metal Products (AMP 500-06)" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.8 STAINLESS-STEEL FINISHES

- A. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- B. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
  - 1. Run grain of directional finishes with long dimension of each piece.
  - 2. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
  - 3. Directional Satin Finish: No. 4.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. Install coiling counter doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install coiling counter doors, hoods, controls, and operators at the mounting locations indicated for each door.

### 3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
  - 1. Perform installation and startup checks according to manufacturer's written instructions.
  - 2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

### 3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.

### 3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain coiling counter doors.

END OF SECTION 083313

## SECTION 083323 - OVERHEAD COILING DOORS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Insulated Service doors.
  - 2. Fire-rated service doors.
- B. Related Requirements:
  - 1. Section 055000 "Metal Fabrications" for miscellaneous steel supports.
  - 2. Section 099123 "Interior Painting" for finish painting of factory-primed doors.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory.
  - 1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
  - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.
  - 3. Include description of automatic closing device and testing and resetting instructions.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
  - 1. Include plans, elevations, sections, and mounting details.
  - 2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
  - 4. For exterior components, include details of provisions for assembly expansion and contraction and for excluding and draining moisture to the exterior.
  - 5. Show locations of controls, locking devices, detectors or replaceable fusible links, and other accessories.
  - 6. Include diagrams for power, signal, and control wiring.
- C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
  - 1. Include similar Samples of accessories involving color selection.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For overhead coiling doors to include in maintenance manuals.
- B. Continuing Service Contract: Prior to end of tenth month of specified service period, provide Owner a proposal for continued servicing of doors.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS, GENERAL

- A. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.
  - 1. Obtain operators and controls from overhead coiling door manufacturer.

#### 2.2 DOOR ASSEMBLY (CD-1, CD-2)

- A. Insulated Service Door: Overhead coiling door formed with curtain of interlocking metal slats.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide McKeon Rolling Steel Door Company, Inc; IS3000-18-ADF-G or a comparable product by one of the following:
    - a. Clopay Building Products.
    - b. Cookson Company.
    - c. Overhead Door Corporation.
    - d. Raynor.
- B. Operation Cycles: Door components and operators capable of operating for not less than 100,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
  - 1. Include tamperproof cycle counter.
- C. Door Curtain Material: Galvanized steel.
- D. Door Curtain Slats: Flat profile slats of 3-1/4-inch (83-mm) center-to-center height.
  - 1. Gasket Seal. Manufacturer's standard continuous gaskets between slats.
- E. Bottom Bar: Two angles, each not less than 1-1/2 by 1-1/2 by 1/8 inch (38 by 38 by 3 mm) thick; fabricated from hot-dip galvanized steel and finished to match door.

- F. Curtain Jamb Guides: Galvanized steel with exposed finish matching curtain slats.
- G. Hood: Match curtain material and finish.
  - 1. Mounting: As shown on Drawings.
- H. Locking Devices: Equip door with locking device assembly.
  - 1. Locking Device Assembly: Locking bars, operable from inside and outside with cylinders.
- I. Electric Door Operator:
  - 1. Usage Classification: Medium duty, up to 12 cycles per hour and up to 50 cycles per day.
  - 2. Operator Location: Top of hood.
  - 3. Safety: Listed according to UL 325 by a qualified testing agency for commercial or industrial use.
  - 4. Motor Exposure: Interior.
  - 5. Emergency Manual Operation: Crank type.
  - 6. Obstruction-Detection Device: Automatic electric sensor edge on bottom bar.
    - a. Sensor Edge Bulb Color: Black.
  - 7. Control Station(s): Interior mounted.
- J. Door Finish:
  - 1. Baked-Enamel or Powder-Coated Finish: Color as selected by Architect from manufacturer's full range.
  - 2. Interior Curtain-Slat Facing: Finish as selected by Architect from manufacturer's full range.

## 2.3 MATERIALS, GENERAL

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

## 2.4 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:
  - 1. Steel Door Curtain Slats: Zinc-coated (galvanized), cold-rolled structural steel sheet; complying with ASTM A 653/A 653M, with **G90 (Z275)** zinc coating; nominal sheet thickness (coated) of **0.0478 inch (1.21 mm)**; and as required.
  - 2. Insulation: Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84 or UL 723. Enclose insulation completely within slat faces.
  - 3. Metal Interior Curtain-Slat Facing: Match metal of exterior curtain-slat face, with minimum steel thickness of **0.0359 inch (0.91 mm)**.
- B. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow

curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

1. Door Frame and Integral Jamb Guide: Fabricate of angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading.

## 2.5 HOODS

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.
  1. Galvanized Steel: Nominal **0.028-inch- (0.71-mm-)** thick, hot-dip galvanized steel sheet with **G90 (Z275)** zinc coating, complying with ASTM A 653/A 653M.
  2. Include automatic drop baffle on doors to guard against passage of smoke.

## 2.6 LOCKING DEVICES

- A. Locking Device Assembly: Fabricate with cylinder lock, spring-loaded dead bolt, operating handle, cam plate, and adjustable locking bars to engage through slots in tracks.
  1. Lock Cylinders: Cylinders specified in Section 087100 "Door Hardware" and keyed to building keying system.
  2. Keys: Two for each cylinder.
- B. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

## 2.7 CURTAIN ACCESSORIES

- A. Smoke Seals: Equip each fire-rated door with replaceable smoke-seal perimeter gaskets or brushes for smoke and draft control as required for door listing and labeling by a qualified testing agency.
- B. Astragal for Interior Doors: Equip each door bottom bar with a replaceable, adjustable, continuous, compressible gasket of flexible vinyl, rubber, or neoprene as a cushion bumper.

## 2.8 COUNTERBALANCING MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, seamless carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than **0.03 in./ft. (2.5 mm/m)** of span under full load.

- C. Counterbalance Spring: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.
  - 1. Fire-Rated Doors: Equip with auxiliary counterbalance spring and prevent tension release from main counterbalance spring when automatic closing device operates.
- D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.
- E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

## 2.9 ELECTRIC DOOR OPERATORS

- A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door and operation-cycles requirement specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
  - 1. Comply with NFPA 70.
  - 2. Control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24-V ac or dc.
- B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. Door Operator Location(s): Operator location indicated for each door.
  - 1. Top-of-Hood Mounted: Operator is mounted to the right or left door head plate with the operator on top of the door-hood assembly and connected to the door drive shaft with drive chain and sprockets. Headroom is required for this type of mounting.
- D. Motors: Reversible-type motor with controller (disconnect switch) for motor exposure indicated.
  - 1. Electrical Characteristics:
    - a. Phase: Single phase.
    - b. Volts: 120 V.
    - c. Hertz: 60.
  - 2. Motor Size: Minimum size as indicated. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. (203 mm/s) and not more than 12 in./sec. (305 mm/s), without exceeding nameplate ratings or service factor.
  - 3. Operating Controls, Controllers, Disconnect Switches, Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
  - 4. Coordinate wiring requirements and electrical characteristics of motors and other electrical devices with building electrical system and each location where installed.
- E. Limit Switches: Equip each motorized door with adjustable switches interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.
- F. Obstruction Detection Devices: External entrapment protection consisting of indicated automatic safety sensor capable of protecting full width of door opening. For doors, activation delays closing.



1. Electric Sensor Edge: Automatic safety sensor edge, located within astragal or weather stripping mounted to bottom bar. Contact with sensor activates device. Connect to control circuit using manufacturer's standard take-up reel or self-coiling cable.
  - a. Self-Monitoring Type: Four-wire configured device designed to interface with door operator control circuit to detect damage to or disconnection of sensor edge.
- G. Control Station: Flush-mount key control station in fixed location with controls labeled "Open," "Stop," and "Close."
1. Interior-Mounted Units: Full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
- H. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed **25 lbf (111 N)**.
- I. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
- J. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- K. Audible and Visual Signals: Audible alarm and visual indicator lights in compliance with regulatory requirements for accessibility.

## 2.10 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM/NOMMA's "Metal Finishes Manual for Architectural and Metal Products (AMP 500-06)" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.11 STEEL AND GALVANIZED-STEEL FINISHES

- A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.

- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install overhead coiling doors, hoods, controls, and operators at the mounting locations indicated for each door.
- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.
- D. Smoke-Control Doors: Install according to NFPA 80 and NFPA 105.
- E. Power-Operated Doors: Install according to UL 325.

### 3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
  - 1. Perform installation and startup checks according to manufacturer's written instructions.
  - 2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.
  - 3. Test door closing when activated by detector or alarm-connected fire-release system. Reset door-closing mechanism after successful test.

### 3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide tight fit around entire perimeter.

### 3.5 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 months' full maintenance by skilled employees of coiling-door Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for door operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
  - 1. Perform maintenance, including emergency callback service, during normal working hours.
  - 2. Include 24-hour-per-day, seven-day-per-week, emergency callback service.

3.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 083323

## SECTION 097723 - FABRIC-WRAPPED PANELS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. Section includes
  - 1. Shop-fabricated, fabric-wrapped wall panels.
  - 2. Infusions wall panels.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include fabric facing, panel edge, core material, and mounting indicated.
- B. Shop Drawings: For panel assembly and installation.
  - 1. Include plans, elevations, sections, and mounting devices and details.
  - 2. Include details at cutouts and penetrations for other work.
  - 3. Include direction of fabric weave and pattern matching.
- C. Samples for Initial Selection: For each type of fabric facing.
  - 1. Include Samples of hardware and accessories involving color or finish selection.
- D. Samples for Verification: For the following products:
  - 1. Fabric: ~~12-inch-~~ (300-mm-) square Sample, from dye lot to be used for the Work, and with specified treatments applied. Mark top and face of fabric.
  - 2. Panel Edge: ~~12-inch-~~ (300-mm-) long Sample(s) showing each edge profile, corner, and finish.
  - 3. Core Material: ~~12-inch-~~ (300-mm-) square Sample at corner.
  - 4. Mounting Devices: Full-size Samples.

## 1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of panel to include in maintenance manuals. Include fabric manufacturers' written cleaning and stain-removal instructions.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with fabric and panel manufacturers' written instructions for minimum and maximum temperature and humidity requirements for shipment, storage, and handling.
- B. Deliver materials and panels in unopened bundles and store in a temperature-controlled dry place with adequate air circulation.

## 1.6 FIELD CONDITIONS

- A. Environmental Limitations: Do not install panels until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work at and above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Lighting: Do not install panels until a permanent level of lighting is provided on surfaces to receive the panels.
- C. Air-Quality Limitations: Protect panels from exposure to airborne odors such as tobacco smoke, and install panels under conditions free from odor contamination of ambient air.

## 1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace panels and components that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Fabric sagging, distorting, or releasing from panel edge.
    - b. Warping of core.
  - 2. Warranty Period: One year from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: Panels shall comply with "Surface-Burning Characteristics" or "Fire Growth Contribution" Subparagraph below, or both, as determined by testing identical products by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Surface-Burning Characteristics: Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
    - a. Flame-Spread Index: 25 or less.
    - b. Smoke-Developed Index: 450 or less.
  - 2. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 Method B Protocol or NFPA 286.

## 2.2 FABRIC-WRAPPED WALL PANELS

- A. Fabric-Wrapped Wall Panel (**AP-1, AP-2, AP-3, AP-4**): Manufacturer's standard panel construction consisting of facing material stretched over front face of edge-framed core and bonded or attached to edges and back of frame.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Armstrong World Industries; SoundSoak or a comparable product by one of the following:
    - a. Conwed Designscape; an Owens Corning company.
    - b. Golterman & Sabo.
    - c. Wenger Corporation.
  2. Panel Shape: Flat.
  3. Mounting: Edge mounted with splines secured to substrate.
    - a. Finish Color at Exposed Edges: Match color of facing material.
  4. Mounting: Back mounted with manufacturer's standard Z-clips, secured to substrate.
  5. Core: Glass-fiber board.
    - a. Core-Face Layer: Manufacturer's standard tackable, impact-resistant, high-density board.
  6. Edge Construction: Manufacturer's standard chemically hardened core with no frame.
  7. Edge Profile: Chamfered (beveled).
  8. Facing Material: As indicated on Drawings.
  9. Nominal Thickness: **1 inch (25 mm)**.
  10. Panel Width: As indicated on Drawings.
  11. Panel Height: As indicated on Drawings.

## 2.3 MATERIALS

- A. Core Materials:
1. Tackable, Impact-Resistant, High-Density Board for Face Layer: **1/8-inch- (3.2-mm-)** thick layer of compressed, molded glass-fiber board with a nominal density of **16 to 18 lb/cu. ft. (256 to 288 kg/cu. m)** laminated to face of core.
  2. Impact-Resistant, Copolymer Sheet for Face Layer: **1/16- to 1/8-inch- (1.6- to 3.2-mm-)** thick layer of perforated, noncombustible, copolymer sheet laminated to face of core.
- B. Facing Material: Fabric from same dye lot; color and pattern as selected by Architect from manufacturer's full range.
1. Basis-of-Design Fabric: Armstrong; FR-701.
  2. Color:
    - a. Color 1, AP-1 and AP-2: Yellow/gold color to be selected by Architect.
    - b. Color 2, AP-3 and AP-4: Blue color to be selected by Architect.
  3. Applied Treatments: Stain resistance flame-retardant.
  4. Lining Material: Manufacturer's standard fabric for each use indicated.
- C. Mounting Devices: Concealed on back of panel, recommended by manufacturer to support weight of panel, and as follows:

1. Metal Clips or Bar Hangers: Manufacturer's standard two-part metal "Z" clips, with one part of each clip mechanically attached to back of panel and the other part to substrate, designed to permit unit removal.

## 2.4 WALL PANELS

- A. Basis-of-Design: Provide Armstrong; Infusions Walls “Refined Lagoon (TRL), or approved equal, with aluminum point support mounting hardware.

## 2.5 FABRICATION

- A. Standard Construction: Use manufacturer's standard construction unless otherwise indicated; with facing material applied to face, edges, and back border of dimensionally stable core; and with rigid edges to reinforce panel perimeter against warpage and damage.
- B. Edge Hardening: For glass-fiber board cores, chemically harden core edges and areas of core where mounting devices are attached.
- C. Core-Face Layer: Evenly stretched over core face and edges and securely attached to core; free from puckers, ripples, wrinkles, or sags.
- D. Facing Material: Apply fabric fully covering visible surfaces of panel; with material stretched straight, on the grain, tight, square, and free from puckers, ripples, wrinkles, sags, blisters, seams, adhesive, or other visible distortions or foreign matter.
  1. Square Corners: Tailor corners.
  2. Radius and Other Nonsquare Corners: Attach material so there are no seams or gathering of material.
  3. Fabrics with Directional or Repeating Patterns or Directional Weave: Mark fabric top and attach fabric in same direction so pattern or weave matches in adjacent panels.
- E. Dimensional Tolerances of Finished Panels: Plus or minus 1/16 inch (1.6 mm) for the following:
  1. Thickness.
  2. Edge straightness.
  3. Overall length and width.
  4. Squareness from corner to corner.
  5. Chords, radii, and diameters.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine fabric, fabricated panels, substrates, areas, and conditions for compliance with requirements, installation tolerances, and other conditions affecting panel performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install panels in locations indicated. Unless otherwise indicated, install panels with vertical surfaces and edges plumb, top edges level and in alignment with other panels, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.
- B. Comply with manufacturer's written instructions for installation of panels using type of mounting devices indicated. Mount panels securely to supporting substrate.
- C. Align fabric pattern and grain with adjacent panels.

### 3.3 INSTALLATION TOLERANCES

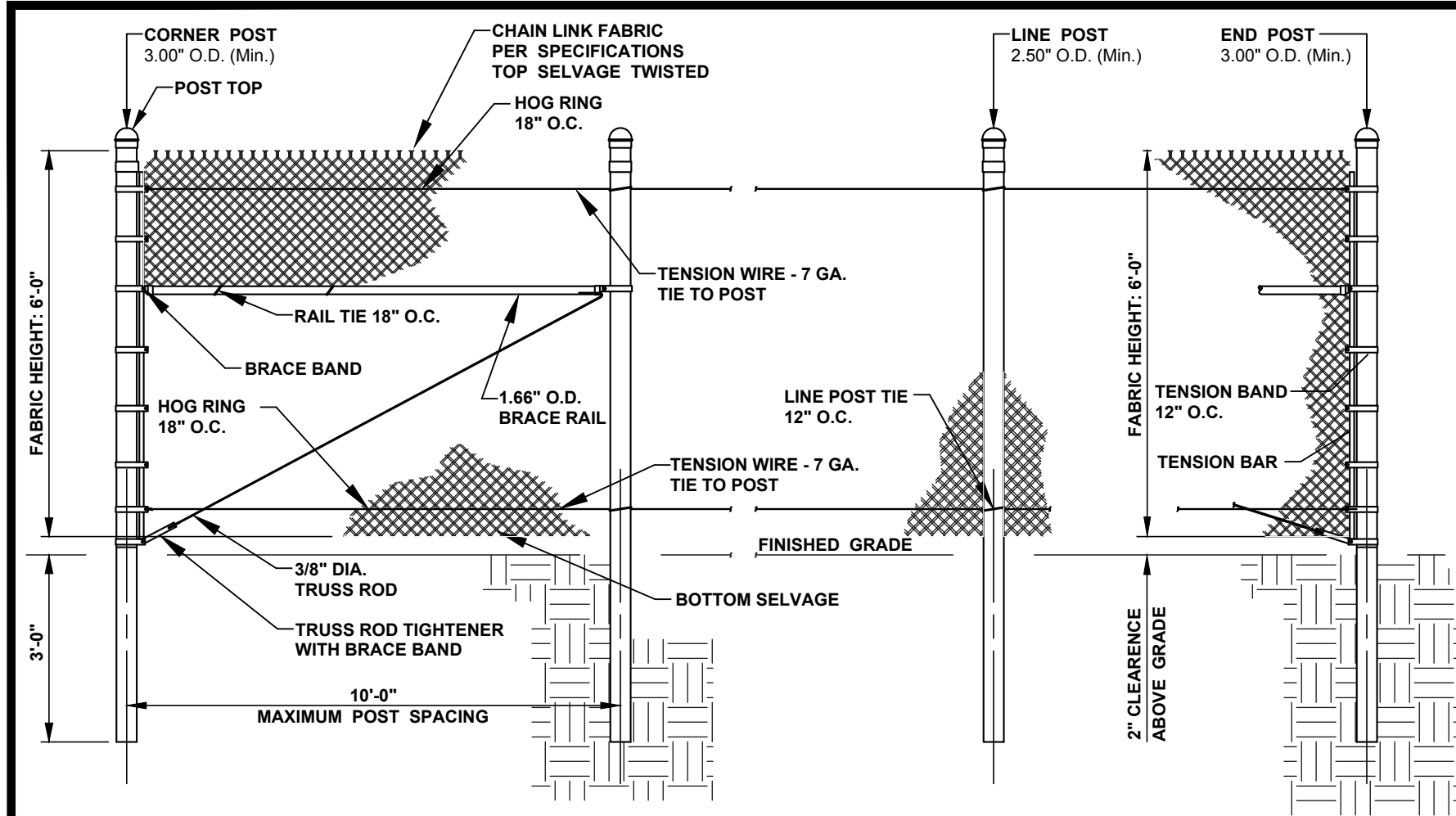
- A. Variation from Plumb and Level: Plus or minus 1/16 inch (1.6 mm) in 48 inches (1200 mm), noncumulative.

### 3.4 CLEANING

- A. Clip loose threads; remove pills and extraneous materials.
- B. Clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

END OF SECTION 097723



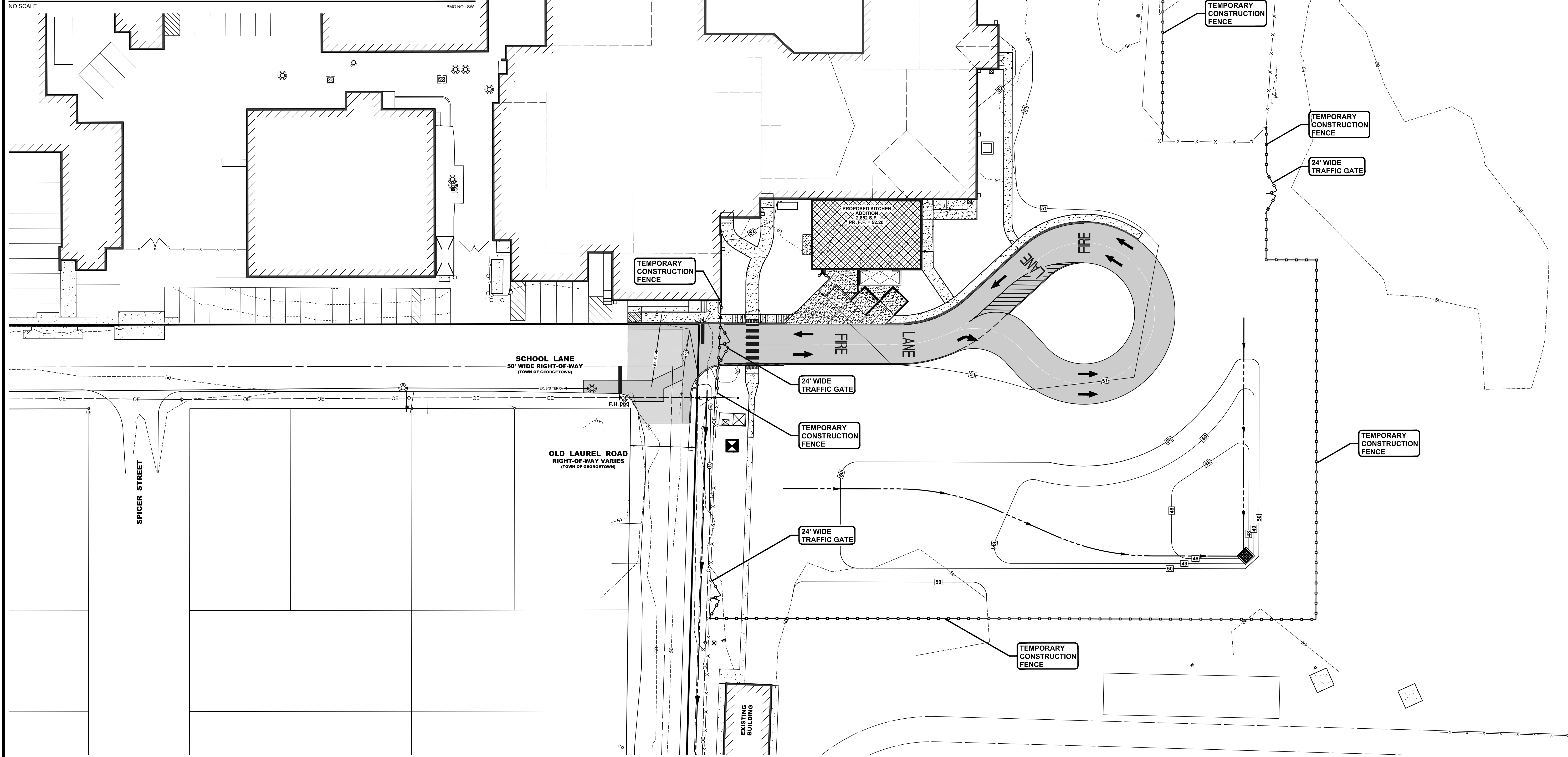


- NOTES :
1. THE CONTRACTOR SHALL PROVIDE, COMPLETE AND IN PLACE, FENCING AND GATES AS SHOWN ON THE CONTRACT DRAWINGS AND REQUIRED BY THE CONTRACT DOCUMENTS.
  2. THE FENCING SHALL BE CHAIN LINK FENCE 6 FEET HIGH, FABRIC TO BE 2" DIAMOND MESH, 9 GAUGE (MIN.) GALVANIZED STEEL. FENCE SHALL BE PROVIDED AND INSTALLED AS SHOWN ON CONSTRUCTION DOCUMENTS. VINYL COATINGS, IF REQUIRED SHALL BE APPLIED TO THE MINIMUM 9 GAUGE STEEL MESH.
  3. ALL POST SHALL BE PLUMB, AND SPACED AT 10' CENTERS MAXIMUM, WITH A TOLERANCE OF MINUS 2". SPACING OF POSTS SHALL BE INSTALLED AT ALL ABRUPT CHANGES IN GRADE, AT CHANGES IN GRADE. ALL POSTS SHALL BE HEAVY WEIGHT GALVANIZED PIPE, SS-40 INDUSTRIAL GRADE FENCE PIPE.
  4. ALL RAILS AND MID-BRACING SHALL BE HEAVY WEIGHT GALVANIZED PIPE, SS-40 INDUSTRIAL GRADE FENCE PIPE.
  5. GATE SHALL BE DOUBLE SWING TYPE, PROVIDED WITH GATE HOLD BACKS, LOCKABLE DOUBLE GATE LATCH, DROP BAR/PLUGGER ROD AND PLUNGER ROD CATCH INSTALLED IN A MINIMUM IF 1 CUBIC FOOT OF CONCRETE. GATES SHALL BE INSTALLED AND BRACED INACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS. ALL GATE POSTS SHALL BE A MINIMUM OF 4" IN DIAMETER OR AS RECOMMEND BY THE MANUFACTURER.

### 6' HIGH TEMPORARY CONSTRUCTION FENCE DETAIL

NO SCALE

BMG NO.: SW



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PROJECT TITLE

**GEORGETOWN  
ELEMENTARY  
SCHOOL /  
CLASSROOM  
ADDITION**

**INDIAN RIVER  
SCHOOL DIST.  
301 WEST MARKET STREET  
TOWN OF GEORGETOWN  
SUSSEX COUNTY, DE**

**TEMPORARY  
CONSTRUCTION  
FENCING PLAN**

ISSUE BLOCK


MARK DATE DESCRIPTION

LAYER STATE CONSTRUCTION FENCE

PROJECT NO.: 2013157.05

DATE: 11/07/14

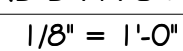
SCALE: 1" = 30'

DRAWN BY: J.N.S. PROJ. MGR.: G.E.J.

SHEET

**FENCING**

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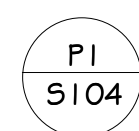
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PROJECT NO:		D8384.00	
DATE:		APRIL 10, 2015	
SCALE:		1/8" = 1'-0"	
DRAWN BY:		AJC	PROJ MGR: CJM

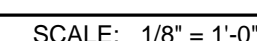
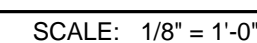
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5/22/2015 11:11:09 AM \\DOVER\VR\IDover\Projects\Current Projects\8394-00-Georgetown\Elementary School\Classroom and Kitchen\Additions\CADD\8394

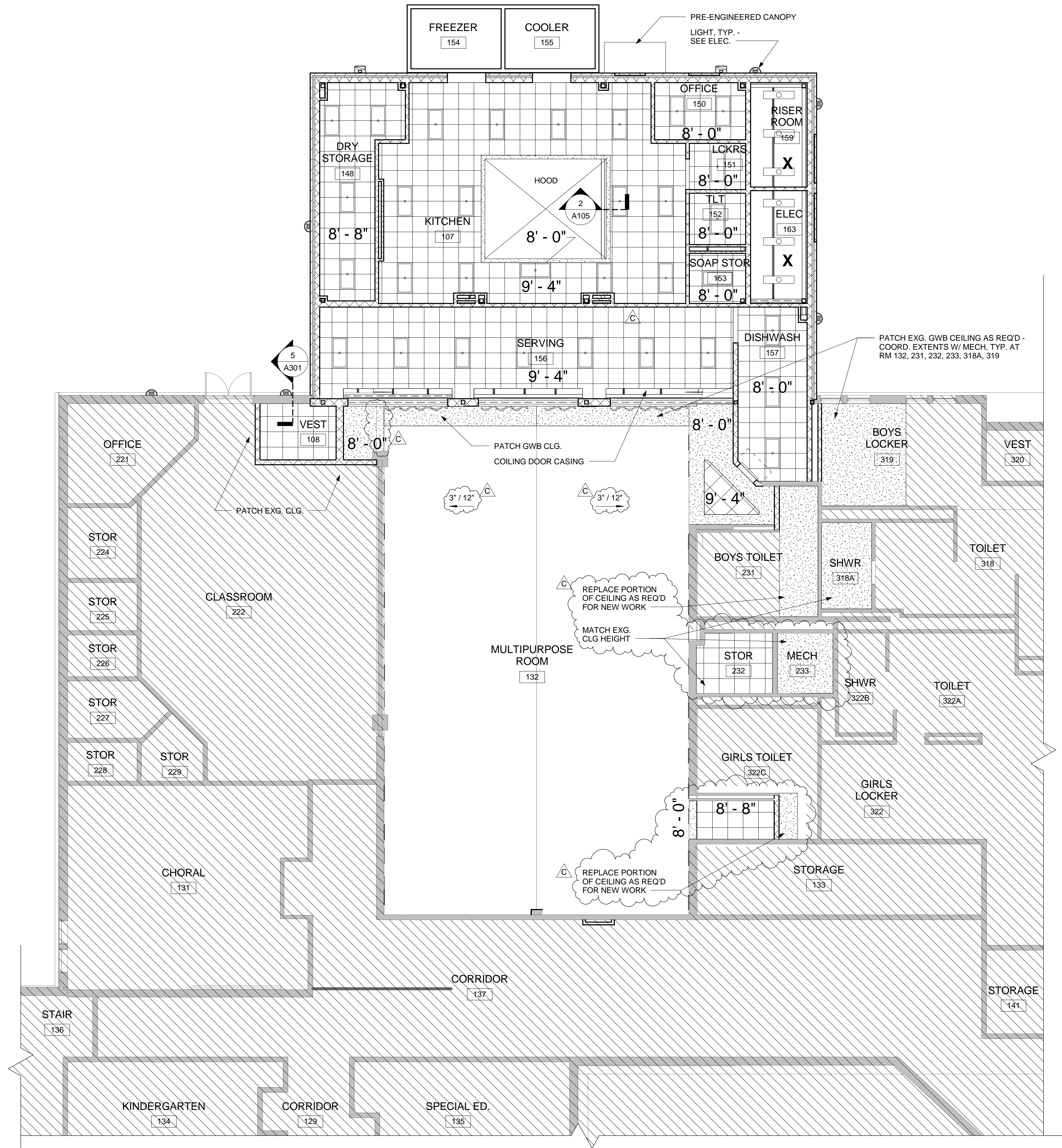

$$1/8^{\circ} = 1'-0''$$

1. FIRST FLOOR REFERENCE ELEVATION: 0'-0".
2. ROOF JOISTS TO BE EQUALLY SPACED EXCEPT AS NOTED.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
4. PROVIDE FRAMING AT ROOF EQUIPMENT CURBS & OPENINGS PER TYPICAL DETAILS.
5. PROVIDE LINTELS ACCORDING TO STRUCTURAL NOTES & TYPICAL DETAILS.
6. COORDINATE SIZE & LOCATION OF ALL ROOF OPENINGS WITH MECHANICAL & ARCHITECTURAL DRAWINGS.
7. REFERENCE NOTES & TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
8. DESIGN JOISTS FOR 15 PSF NET ROOF UPLIFT.
9. TYPICAL ROOF DECK: 1" / 2' 2" GA GALV. TYPE B ROOF DECK U.N.O.
10. PROVIDE SHOP WELDED MASONRY TIES AT ALL STEEL BEAM & COLUMNS @ 16" o.c. PER SPECS.



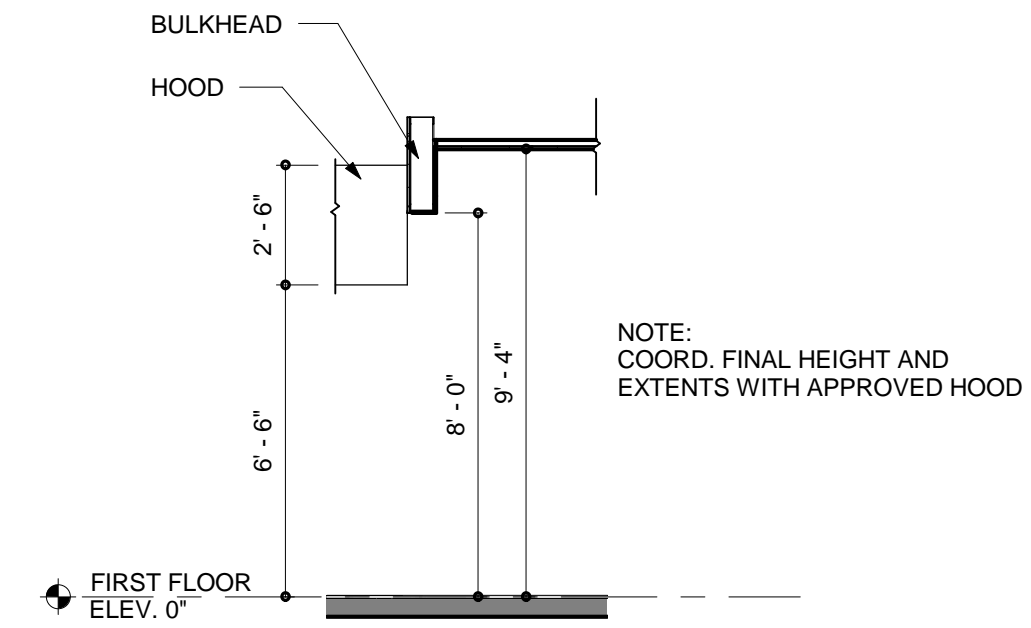


- 1) THE OWNER WILL REMOVE ALL FURNITURE AND EQUIPMENT PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITY
- 2) ALL KNOWN HAZARDOUS MATERIALS WILL BE REMOVED BY THE OWNER PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITY.
- 3) SPECIALTIES SHALL REMOVE ALL KNOWN HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION.
- 3 SEE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL WORK.
- 4 SEE ENLARGED DEMOLITION PLANS FOR ADDITIONAL INFORMATION AND VERIFY ALL EXISTING CONDITIONS.
- 6 EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DEMOLITION OPERATIONS.
- 7 COORDINATE ERECT DEMOLITION REQUIRED WITH NEW WORK.
- 8 CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMMODATE DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
- 9 CEILING DEMOLITION WHERE NOTED INCLUDES ALL ASSOCIATED FASTENERS, WIRE, AND NETTING. ACOUSTICAL TILE ADHERED TO, OR INSTALLED ON METAL SPLINES OVER PLASTER/GWB IS CONSIDERED ONE SYSTEM.
- 10 UNLESS OTHERWISE INDICATED, INFILL, PATCH, AND REPAIR SURFACES
- 11 DEMOLISHED ITEMS TO MATCH ADJACENT UNDAMAGED SURFACES
- 11 ALL WALL OPENINGS CUT INTO EXISTING MASONRY WALLS SHALL BE TOOTHED INTO EXISTING COURSE.



1 KITCHEN ADDITION REFLECTED  
CEILING PLAN

SCALE: 1/8" = 1'-0"



2 HOOD BULKHEAD DETAIL

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

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EDIS COMPANY  
CONSTRUCTION MANAGER  
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(800) 995-3347

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1) INDIAN RIVER SCHOOL DISTRICT  
NO CONTRACTUAL OBLIGATION IS  
ASSUMED BY THE ARCHITECT FOR THE  
BENEFIT OF ANY OTHER PERSON INVOLVED  
IN THE PROJECT.

PROJECT TITLE

GEORGETOWN  
ELEMENTARY  
SCHOOL

301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE

KITCHEN ADDITION  
REFLECTED CEILING  
PLAN

8' 4' 0' 8'  
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

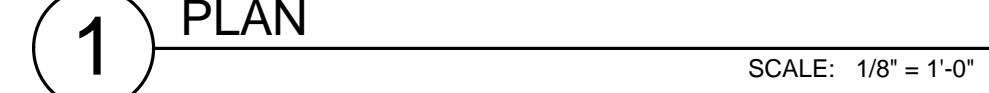
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PROJECT NO: 2013157.05		
DATE: APRIL 10, 2015		
SCALE: As indicated		
DRAWN BY: SER PROJ MGR: JML		

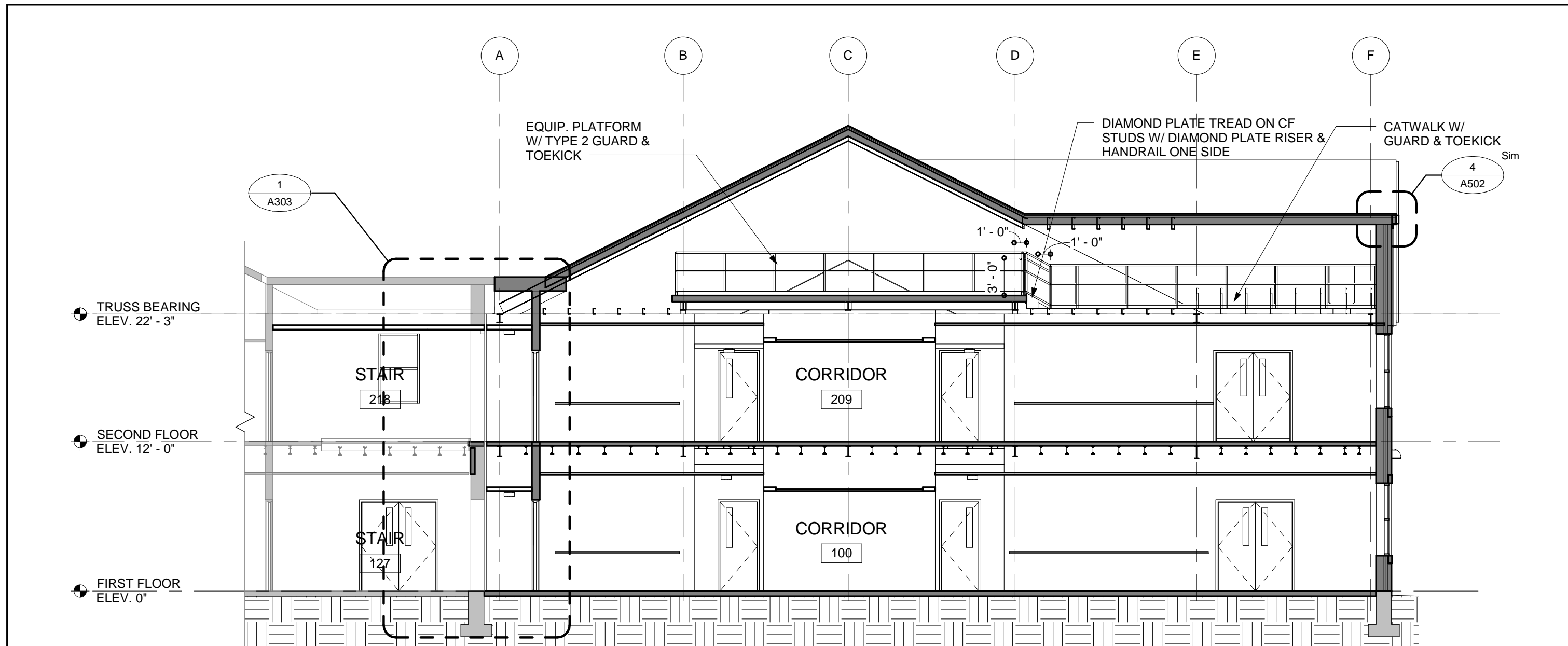
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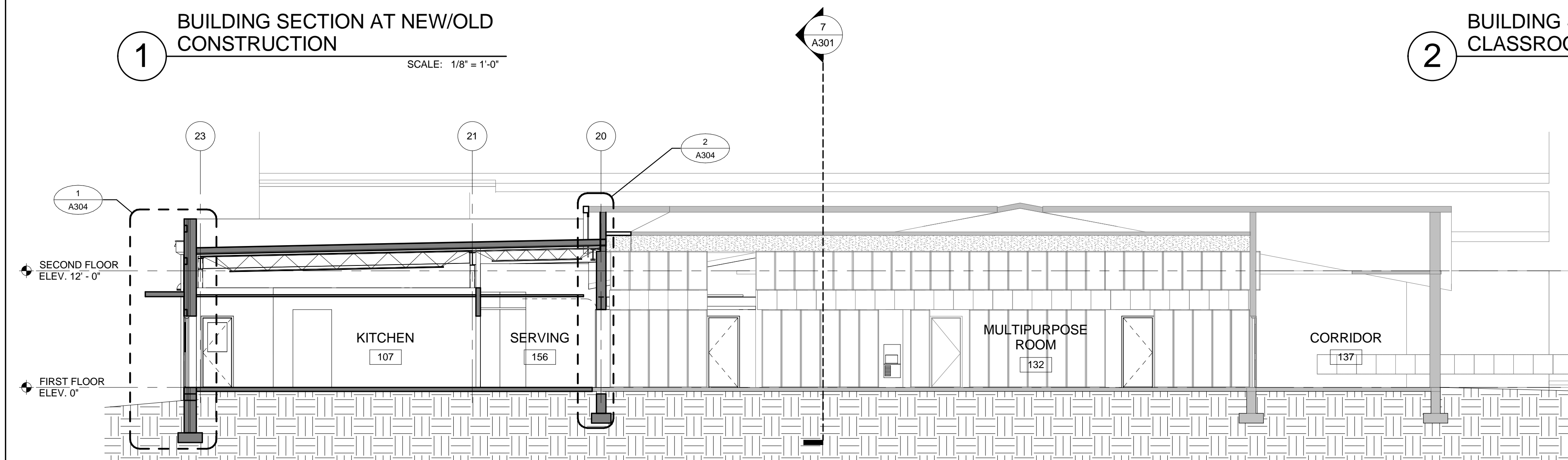
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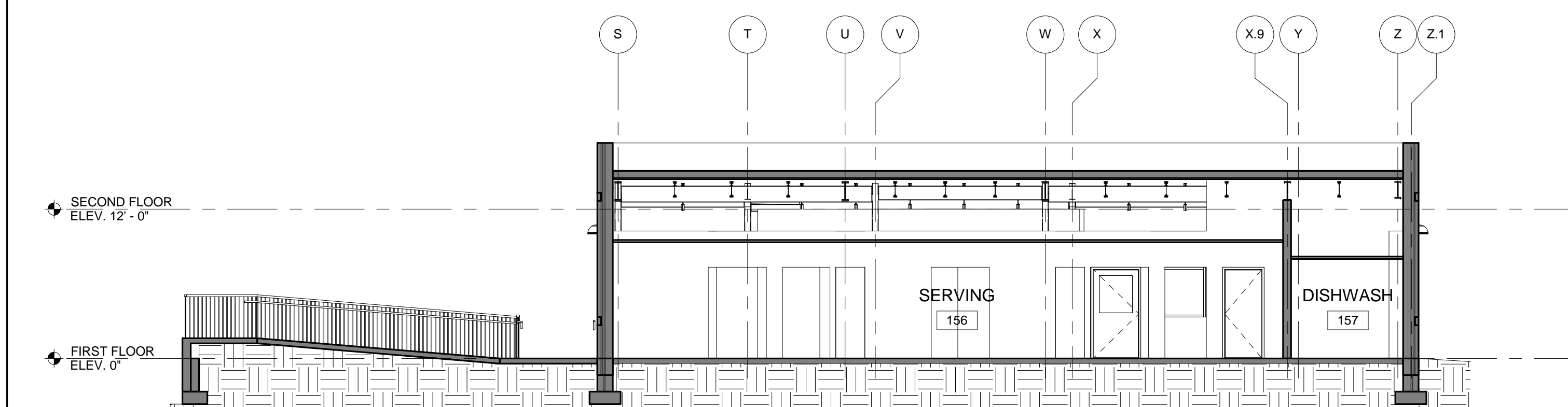




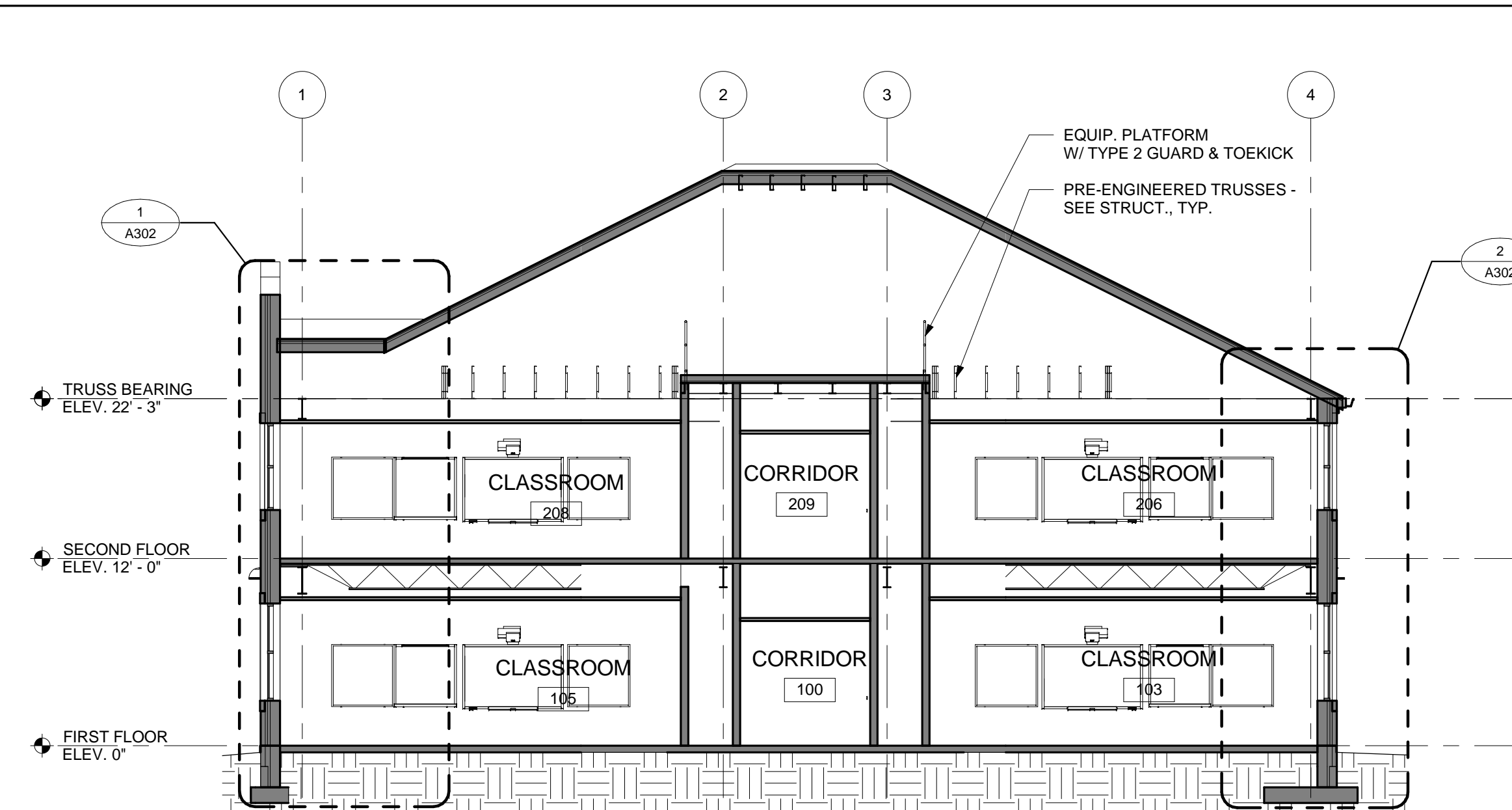
1 BUILDING SECTION AT NEW/OLD CONSTRUCTION  
SCALE: 1/8" = 1'-0"



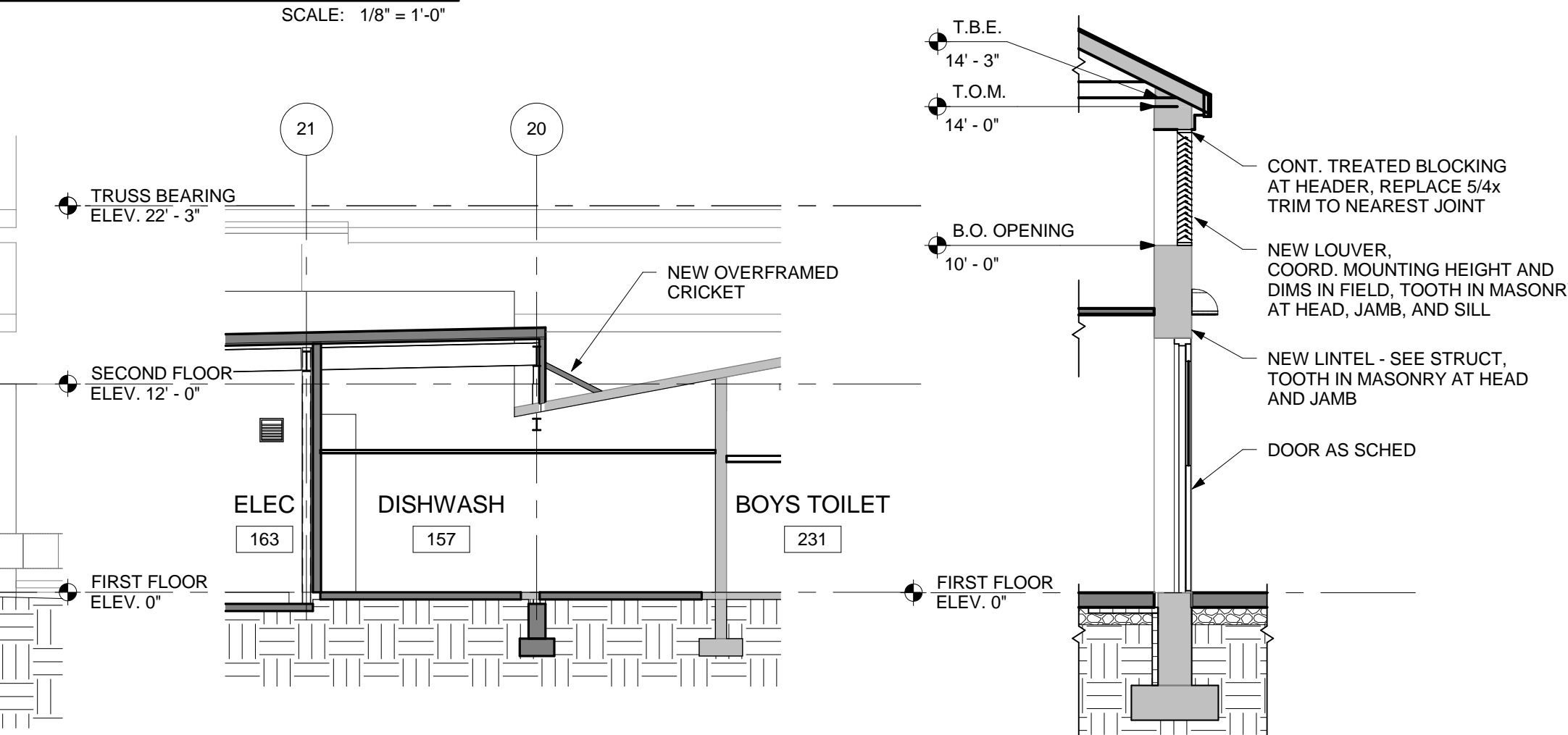
3 BUILDING SECTION AT KITCHEN ADDITION  
SCALE: 1/8" = 1'-0"



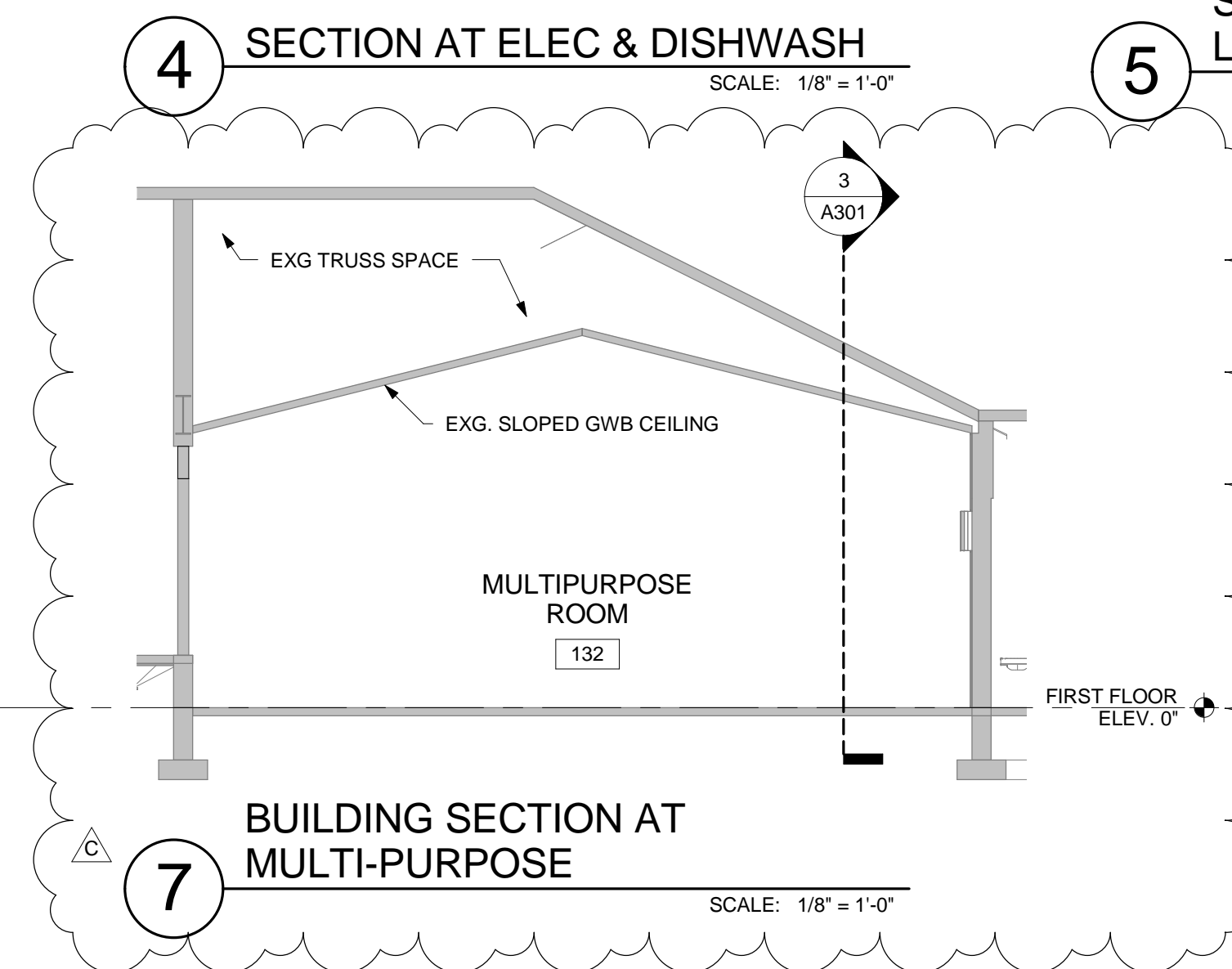
6 SECTION AT SERVING  
SCALE: 1/8" = 1'-0"



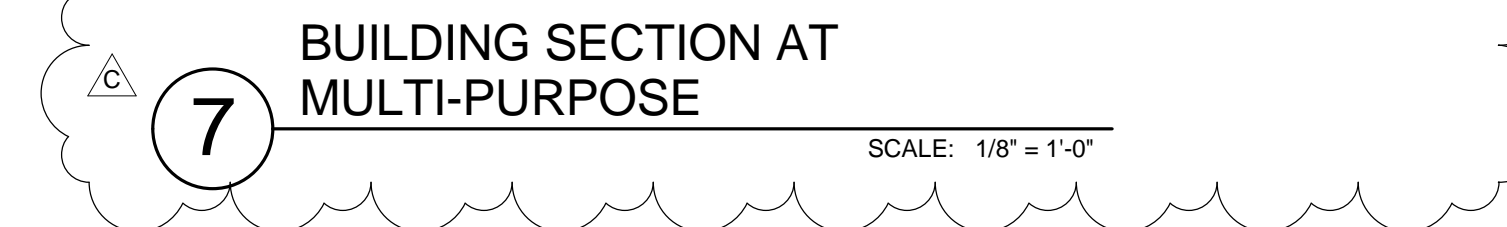
2 BUILDING SECTION AT CLASSROOM ADDITIONS  
SCALE: 1/8" = 1'-0"



5 SECTION AT NEW DOOR AND LOUVER  
SCALE: 1/4" = 1'-0"

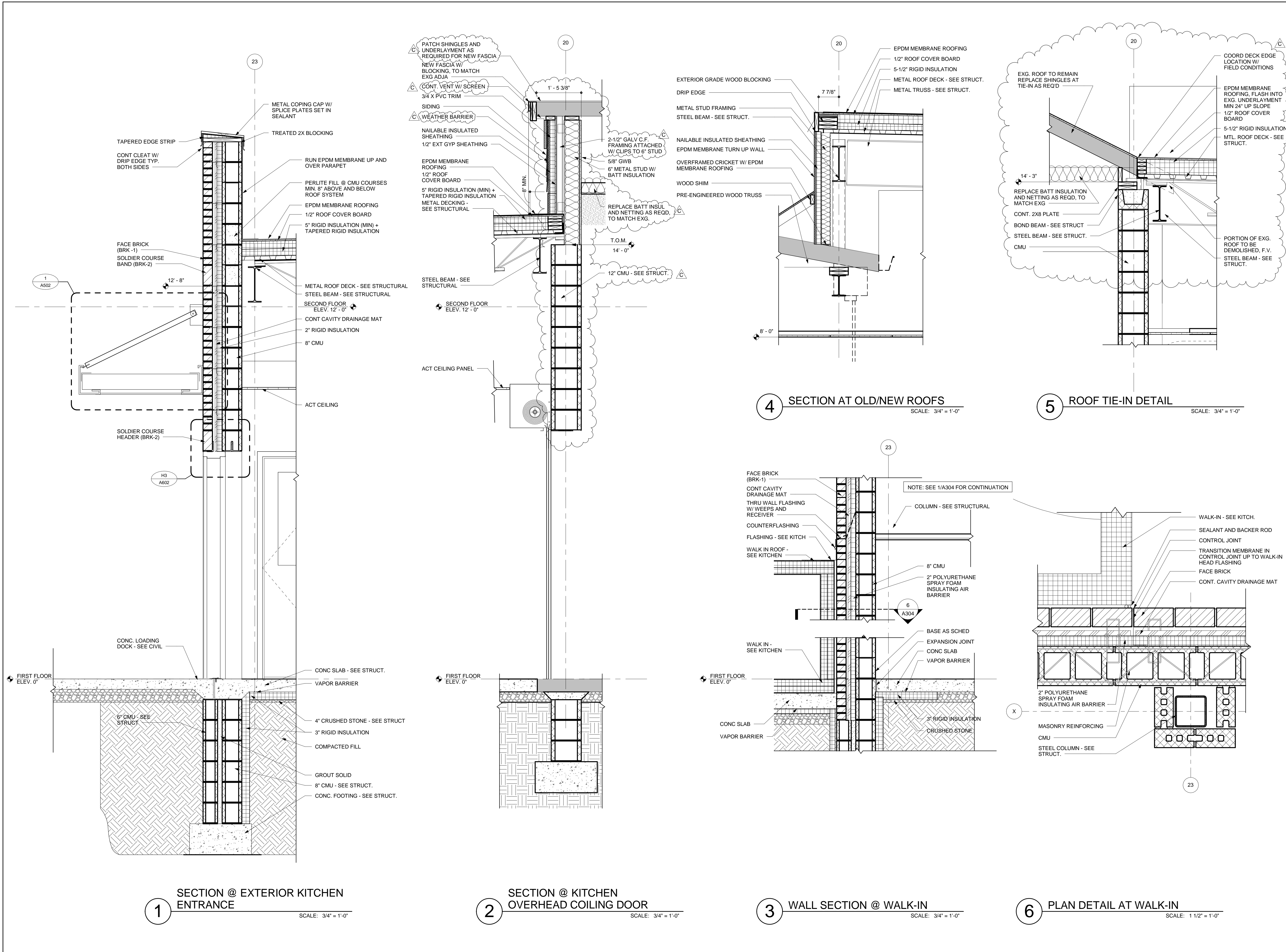


4 SECTION AT ELEC & DISHWASH  
SCALE: 1/8" = 1'-0"



7 BUILDING SECTION AT MULTI-PURPOSE  
SCALE: 1/8" = 1'-0"





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PROJECT TITLE

GEORGETOWN  
ELEMENTARY  
SCHOOL

301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE

WALL SECTIONS -  
KITCHEN

2' 1' 0' 1'

SCALE : 3/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description
C	05/22/2015	ADDENDUM 3
PROJECT NO: 2013157.05		
DATE: APRIL 10, 2015		
SCALE: As indicated		
DRAWN BY: SER PROJ MGR: JML		

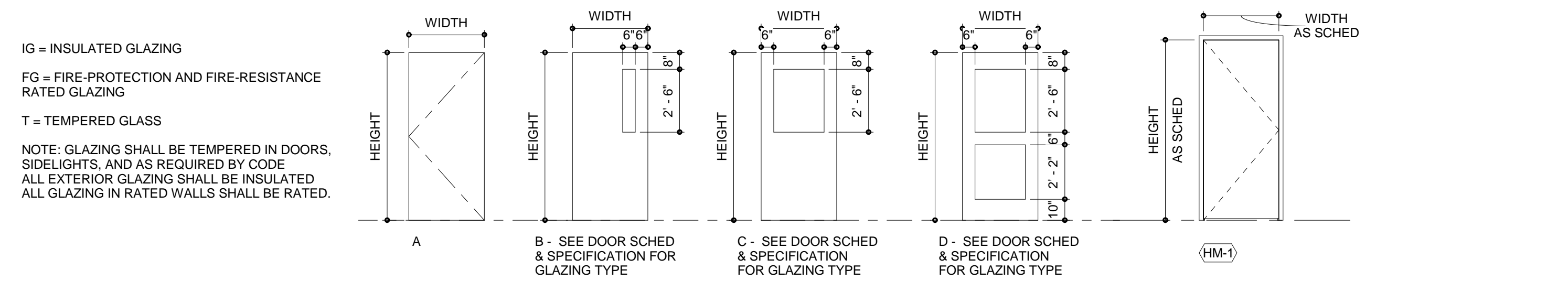
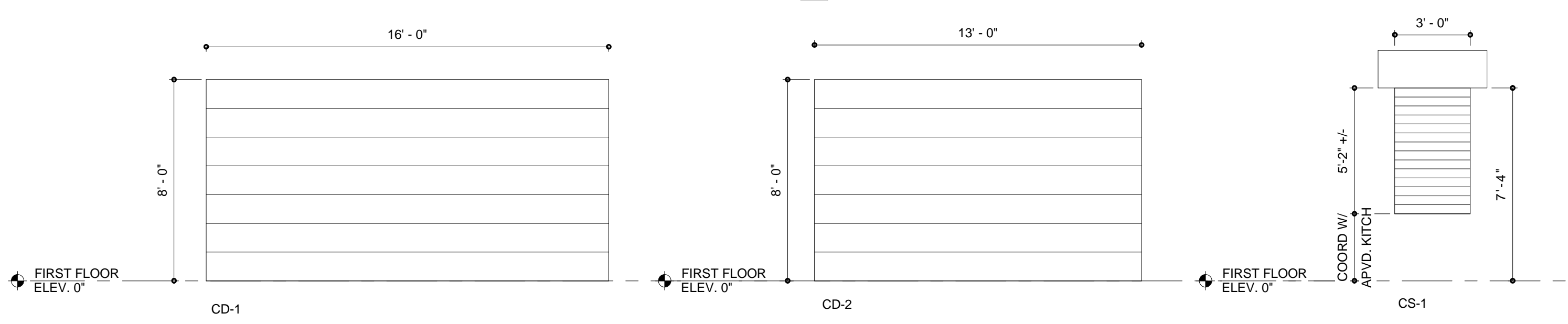
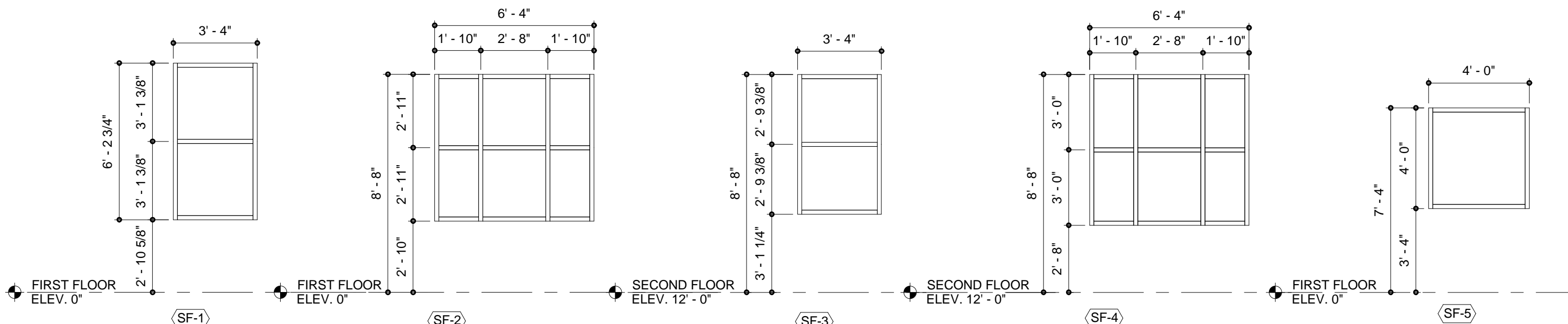
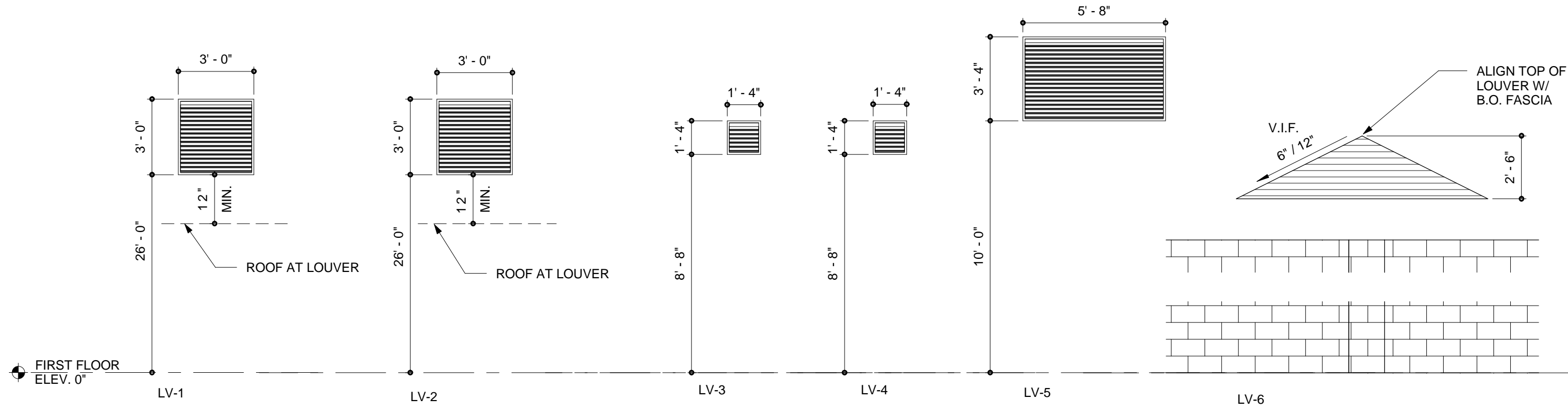
A304

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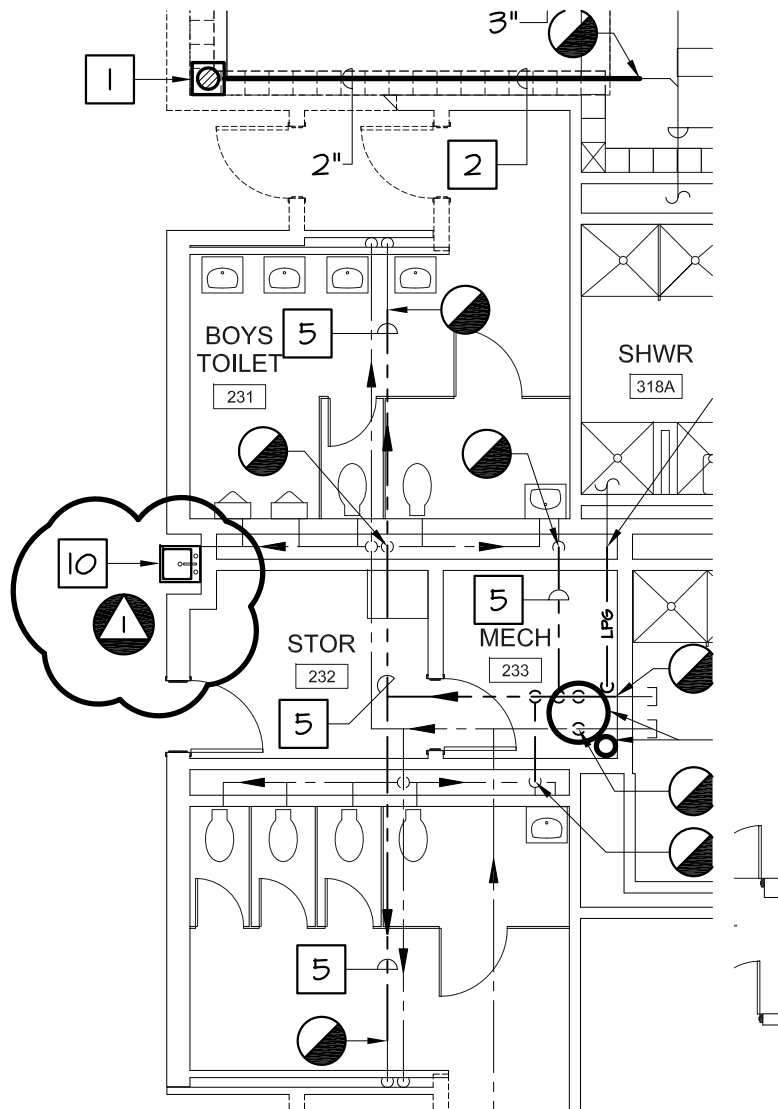
FINISH SCHEDULE LEGEND		
KEY NAME	DESCRIPTION	SPEC. REF
FLOOR		
BRK	BRICK	042000
CPT-1	CARPET	096816
CPT-2	CARPET	096816
EXG	EXG. CONDITION TO REMAIN	
RES	RESINOUS FLOORING	096723
RUB	RUBBER FLOORING / STAIR TREAD & RISER	096500
VCT	VINYL COMPOSITION TILE	096519
BASE		
R	RESILIENT WALL BASE	096513
RES	INTEGRAL RESINOUS COVE BASE	096723
WALL		
-	NOT APPLICABLE	
CMU	CONCRETE MASONRY UNIT	042000
EP	EPOXY PAINT	099600
EXG	EXG. CONDITION TO REMAIN	
GWB	GYPSUM WALL BOARD	092900
PT	PAINT	099123
WS CT	CERAMIC TILE WAINSCOT TO 5' 0" AFF	093000
CEILING		
-	NOT APPLICABLE	
ACT1	2X4 ACOUSTICAL CEILING TILE	095123
ACT2	2X2 ACOUSTICAL CEILING TILE	095123
ACT3	2X4 SCRUBBABLE	095123
GWB	GYPSUM BOARD CEILING	092900
PT	PAINT	099123
ORIENTATION		
-	ON PLANS NORTH WALL IS DOWN, EAST IS LEFT, SOUTH IS UP, WEST IS RIGHT	
FLOOR		
-	NOT APPLICABLE	
GENERAL NOTES		
1	WALLS AND CEILINGS MAY CONTAIN MORE THAN ONE MATERIAL OR FINISH AS INDICATED. COORDINATE WITH CONSTRUCTION TYPE AND FINISH SIMILAR TO ADJACENT MATERIALS	
2	SEE A102 AND A105 REFLECTED CEILING PLANS & CEILING NOTES FOR CEILING HEIGHTS, MATERIAL EXTENTS, LOCATIONS AND HEIGHTS OF BULKHEADS, SOFFITS, ETC.	
3	PLAN WALL TYPES TAKE PRECEDENCE OVER SCHEDULED WALL FINISH. PROVIDE APPROPRIATE WALL FINISH TO CORRESPOND TO WALL TYPES.	
4	MOLD AND MOISTURE RESISTANT GYPSUM BOARD SHALL BE USED AT ALL KITCHEN AREAS, TOILET ROOMS AND CUSTODIAN SERVICE CLOSETS SCHEDULED TO HAVE GYPSUM BOARD FINISHES	
5	WALL AND CEILING FINISHES SHALL INCLUDE ALL PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, MATERIAL CHANGES, OR OTHER ENCLOSURES. REFER TO REFLECTED CEILING PLANS	
6	PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.	
7	PROVIDE SEALANT AT CONCRETE CONTROL JOINTS WHERE NO FINISH FLOOR IS PROVIDED. PROVIDE SEALANT AT FINISHED FLOORS WHERE REQUIRED BY FLOORING FINISHES.	
8	PREP PAINT ALL EXPOSED LINTELS, PLATES, HEADERS, AND STRUCTURE	



FINISH SCHEDULE																
#	ROOM NAME	FLOOR		BASE MAT	WALL				CEILING				COMMENTS			
		NORTH			EAST		SOUTH		WEST		MAT	FIN				
		MAT		MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN			
FIRST FLOOR																
100	CORRIDOR	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
101	STAIR	RUB	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-			
102	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
102A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
103	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
103A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
104	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
104A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
105	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
105A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
106	CORRIDOR	EXG VCT	EXG. R	EXG. CMU/CMU	PT	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG.	-	PATCH VCT, 'R' BASE, WALL FIN, AND CEILING AS REQ'D TO MATCH EXG.		
107	KITCHEN	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
108	VEST	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-	PROVIDE HOLD-DOWN CLIPS WITH CEILING		
120	GIRLS	*EXG CT	CT	EXG. CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG. GWB	PT	PATCH CT AT FLOOR, CMU & GWB/NEW AS REQ'D, TO MATCH EXG.		
122	BOYS	*EXG CT	CT	EXG CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG. GWB	PT	PATCH CT AT FLOOR, CMU & GWB/NEW AS REQ'D, TO MATCH EXG.		
127	STAIR	*VCT	R	EXG CMU	PT	EXG CMU	PT	EXG CMU	PT	EXG CMU	PT	EXG.	-	REPLACE VCT AT BOTTOM LANDING, SEE ALTERNATES		
129	CORRIDOR	EXG VCT	EXG. R	EXG CMU	-	EXG CMU/CMU	PT	EXG CMU	-	EXG CMU	-	EXG.	-	PATCH VCT, 'R' BASE, AND CEILING AS REQ'D TO MATCH EXG.		
132	MULTIPURPOSE ROOM	*VCT	*R	EXG CMU	PT	EXG CMU	PT	EXG CMU	PT	EXG CMU	PT	*GWB	PT	REPLACE VCT & BASE AS REQ'D. PATCH GWB CLG AS REQ'D. REPAIR WALLS AND CEILINGS. ALTERNATE 3: REPLACE VCT AND BASE, AND PROVIDE ACOUSTICAL PANELS		
137	CORRIDOR	EXG VCT	EXG. R	EXG CMU/GWB	PT	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG.	-	PATCH VCT, 'R' BASE, AND CEILING AS REQ'D TO MATCH EXG.		
148	DRY STORAGE	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
150	OFFICE	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
151	LCKRS	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
152	TLT	RES	RES	WSCT/CMU	-EP	WSCT/CMU	-EP	WSCT/CMU	-EP	WSCT/CMU	-EP	ACT-3	-			
153	SOAP STOR	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
154	FREEZER	RES	-	-	-	-	-	-	-	-	-	-	-			
155	COOLER	RES	-	-	-	-	-	-	-	-	-	-	-			
156	SERVING	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
157	DISHWASH	RES	RES	CMU	EP	CMU	EP	CMU	EP	CMU	EP	ACT-3	-			
159	RISER ROOM	CONC	-	CMU	PT	CMU	PT	CMU	PT	CMU	PT	EXPO	PT			
160	IDF	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
161	RISER ROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
163	ELEC	CONC	-	CMU	PT	CMU	PT	CMU	PT	CMU	PT	EXPO	PT			
231	BOYS TOILET	EXG CT	EXG	EXG CMU	EP	EXG CMU	-	EXG CMU	-	EXG CMU	-	GWB	PT			
232	STOR	EXG	-	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG CMU	-	GWB	PT			
233	MECH	EXG	-	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG CMU	-	GWB	PT			
318A	SHWR	EXG EPX	EXG EPX	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG CMU	-	GWB	PT			
319	BOYS LOCKER	EXG EPX	EXG EPX	EXG CMU	PT	EXG CMU	PT	CMU/EXG CMU	PT	EXG CMU	CMU	PT	-	PATCH WALLS, FLOOR, BASE AND GWB CLG AS REQ'D. REPAIR AT WORK AREAS CORNER TO CORNER.		
322C	GIRLS TOILET	EXG	EXG	EXG CMU	-	EXG CMU	-	EXG CMU	EP	EXG CMU	-	GWB	PT			
SECOND FLOOR																
203	CORRIDOR	EXG VCT	EXG. R	EXG CMU/CMU	PT	EXG CMU	-	EXG CMU	-	EXG CMU	-	EXG.	-	PATCH VCT, 'R' BASE, AND CEILING AS REQ'D TO MATCH EXG.		
205	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
205A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
206	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
206A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
207	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
207A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
208	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
208A	CLOSET	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT			
209	CORRIDOR	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-			
209	STAIR	RUB	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-			
212	GIRLS	*EXG. CT	CT	EXG. CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG. GWB	PT	PATCH CT AT DEMO CMU & GWB/NEW AS REQ'D, TO MATCH EXG.		
214	BOYS	*EXG. CT	CT	EXG. CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG CMU	EP	EXG. GWB	PT	PATCH CT AT DEMO CMU & GWB/NEW AS REQ'D, TO MATCH EXG.		
218	STAIR	*VCT	R	EXG. CMU	PT	EXG. CMU	PT	EXG CMU	PT	EXG CMU	PT	GWB/EX G. GWB	PT	REPLACE VCT AT TOP LANDING, SEE ALTERNATES		
220	CORRIDOR	EXG. VCT	EXG. R	EXG. CMU	-	EXG. CMU/CMU	PT	EXG. CMU	-	EXG. CMU	-	EXG.	-	PATCH VCT, 'R' BASE, AND CEILING AS REQ'D TO MATCH EXG.		
261	ELEC	CONC	-	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-			
262	STOR	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-			
299	EQPT. PLATFORM	CONC	-	-	-	-	-	-	-	-	-	EXPO	-			

DOOR SCHEDULE																
MARK	SIZE			DOOR				FRAME						FIRE RATING	HDWE SET	COMMENTS
	WIDTH	HT	THICK	MATL	TYPE	FIN	GLAZ	UNDER CUT	MATL	TYPE	FIN	HEAD	JAMB			
FIRST FLOOR																
100/1	6'-0"	7'-2"	1 3/4"	HM	B	-	FG	0"	HM	HM-1	PT	H1	J1	90 minutes	17.0	FIRE EXIT DEVICE
101/1	6'-0"	7'-2"	1 3/4"	HM	B	-	FG	0"	SCWD	HM-1	PT	H1	J1	45 minutes	16.0	FIRE EXIT DEVICE
101/2	6'-0"	7'-0"	1 3/4"	HM	B	-	IG	0"	HM	HM-1	PT	H3	J3		14.0	EXIT DEVICE
102/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
102/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
103/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
103/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
104/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
104/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
105/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
105/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
107/1	3'-8"	7'-2"	1 3/4"	HM	C	PT	IG	0"	HM	HM-1	PT	H3	J3		15.0	
108/1	6'-0"	7'-2"	1 3/4"	HM	B	PT	IG	0"	HM	HM-1	PT	H3	J3		13.0	EXIT DEVICE
108/2	6'-0"	7'-2"	1 3/4"	HM	B	PT	TEMP	0"	HM	HM-1	PT	H1	J1		11.0	
120/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1		18.0	
122/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1		18.0	
127/1	6'-0"	7'-2"	1 3/4"	HM	B	PT	IG	0"	HM	HM-1	PT	H3	J3		14.0	EXIT DEVICE
132/1	16'-0"	8'-0"	1 1/2"	STL	CD-1	-	-		STL	-	-	H6	J6		1.0	
132/2	13'-0"	8'-0"	1 1/2"	STL	CD-2	-	-		STL	-	-	H6	J6		1.0	
132/3	13'-0"	8'-0"	1 1/2"	STL	CD-2	-	-		STL	-	-	H6	J6		1.0	
148/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1	45 minutes	12.0	
150/1	3'-0"	7'-2"	1 3/4"	HM	C	PT	TEMP	0"	HM	HM-1	PT	H1	J1		6.0	
152/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1		9.0	
153/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1	45 minutes	8.0	
157/1	3'-0"	5'-0"	2"	SST	CS-1	-	-		Stainless Steel	-	-	H7	J7		1.0	
159/1	6'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H3	J3		2.0	
160/1	3'-0"	7'-2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	45 minutes	4.0	
161/1	3'-0"	7'-2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	45 minutes	4.0	
163/1	6'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H3	J3		2.0	
231/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM		PT				18.0	
322C/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM		PT				18.0	
SECOND FLOOR																
205/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
205/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
206/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
206/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
207/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
207/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
208/1	3'-0"	7'-2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H1	J1	Smoke	10.0	
208/2	3'-0"	7'-2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H1	J1		7.0	
209/1	6'-0"	7'-2"	1 3/4"	HM	B	-	FG	0"	SCWD	HM-1	PT	H1	J1	45 minutes	16.0	FIRE EXIT DEVICE
210/1	6'-0"	7'-2"	1 3/4"	HM	B	-	FG	0"	HM	HM-1	PT	H1	J1	90 minutes	17.0	FIRE EXIT DEVICE
212/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1		18.0	
214/1	3'-0"	7'-2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H1	J1		18.0	
261/1	3'-0"	7'-2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1		3.0	
262/1	3'-0"	7'-2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1		5.0	





## DRAWING NOTES:

(APPLY TO THIS DRAWING ONLY)

- 1 REMOVE EXISTING FLOOR DRAIN. REMOVE ASSOCIATED TRAP PRIMING LINE TO POINT INDICATED FOR SANITARY LINE REMOVAL AND TEMPORARILY CAP TRAP PRIMING LINE FOR FUTURE EXTENSION TO NEW FLOOR DRAIN.
- 2 REMOVE EXISTING SANITARY PIPE AND ASSOCIATED FLOOR DRAIN IN ITS ENTIRETY TO POINT INDICATED AND PERMANENTLY CAP.
- 3 REMOVE/ADJUST ALL FIRE PROTECTION PIPING AND SPRINKLER HEADS WITHIN THIS SPACE TO ACCOMMODATE NEW SPACE LAYOUT UNDER NEW WORK.
- 4 REMOVE ELECTRIC WATER COOLER AND TEMPORARILY CAP COLD WATER LINE AND SANITARY FOR FUTURE CONNECTION TO NEW EQUIPMENT UNDER NEW WORK.
- 5 REMOVE DOMESTIC HOT WATER PIPING TO POINTS INDICATED AND TEMPORARILY CAP FOR FUTURE CONNECTION TO NEW WORK.
- 6 REMOVE LP GAS PIPING TO POINT INDICATED. PERMANENTLY CAP EXISTING BRANCH LINE THAT SERVED WATER HEATER.
- 7 REMOVE GAS FIRED WATER HEATER AND ALL ASSOCIATED PIPING, VALVES, SUPPORTS, CONTROLS, ETC. REMOVE FLUE DUCT TO POINT OF CONCEALMENT AND PERMANENTLY CAP ABOVE AND BELOW ROOF.
- 8 REMOVE WATER HEATER EXPANSION TANK AND ALL ASSOCIATED PIPING, VALVE, SUPPORTS AND INSULATION IN ITS ENTIRETY.
- 9 REMOVE DOMESTIC COLD WATER PIPING AND ALL ASSOCIATED VALVES, SUPPORTS AND INSULATION SERVING GAS FIRED WATER HEATER TO POINT OF CONCEALMENT AND PERMANENTLY CAP.
- 10 REMOVE HAND SINK AND TEMPORARILY CAP COLD WATER AND SANITARY PIPING FOR FUTURE CONNECTION TO NEW ELECTRIC WATER COOLER. PERMANENTLY CAP HOT WATER PIPING

32

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PROJECT NAME:

# GEORGETOWN ELEMENTARY SCHOOL - CLASSROOM/KITCHEN ADDITION

DRAWING NUMBER: **PD102**

ISSUE DESCRIPTION: **ADDENDUM #3**

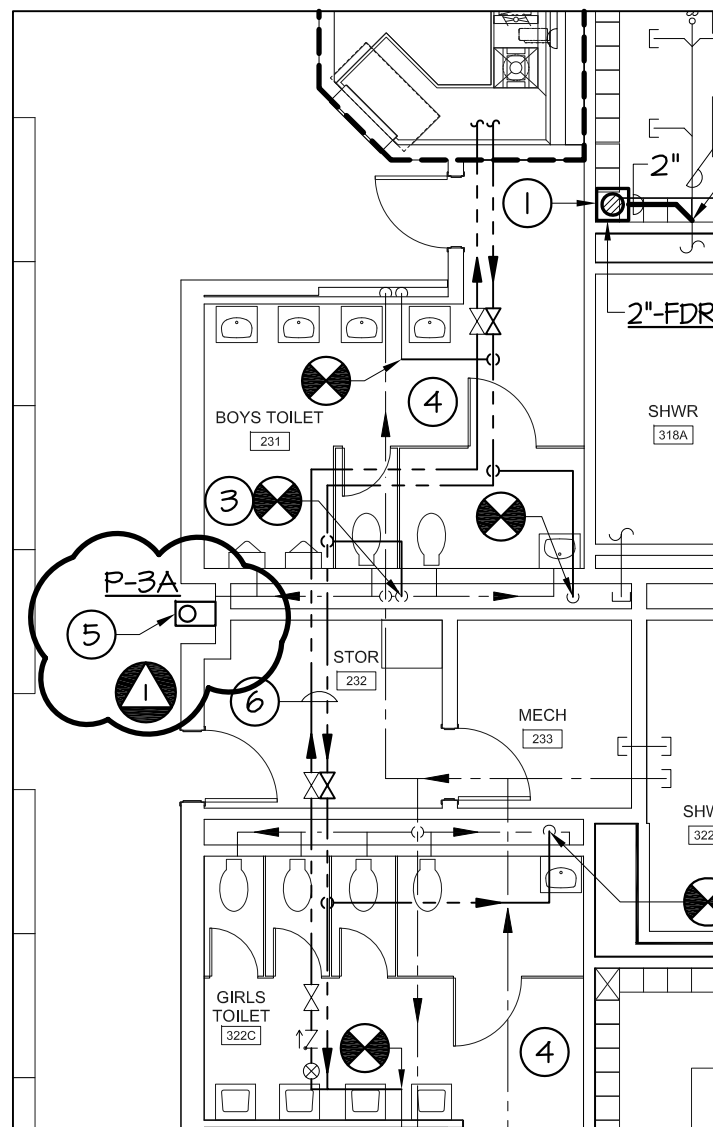
SKETCH NUMBER:

SHEET TITLE:  
**KITCHEN ADDITION  
PLUMBING DEMOLITION**

ISSUE DATE: **05/21/2015**

**PSK-01**

SCALE: **AS NOTED**



## DRAWING NOTES:

(APPLY TO THIS DRAWING ONLY)

- ① INSTALL NEW FLOOR DRAIN WITH NEW SANITARY PIPE TO POINT INDICATED. INSTALL NEW 1" CONDENSATE PIPING AND ASSOCIATED SUPPORTS AND INSULATION FROM RE-LOCATED FAN COIL UNIT (FC-75) TO NEW FLOOR DRAIN. CONNECT EXISTING TRAP PRIMING LINE TO NEW FLOOR DRAIN.
- ② ADJUST/INSTALL REQUIRED FIRE PROTECTION PIPING AND SPRINKLER HEADS TO ACCOMMODATE NEW SQUARE FOOTAGE OF SPACE.
- ③ CONNECT DOMESTIC HOT WATER PIPING TO TOP OF RISER SERVING SERVICE SINK IN STORAGE 232 AND HAND SINK IN MULTIPURPOSE ROOM 132.
- ④ INSTALL NEW THERMOSTATIC MIXING VALVE (PER SPECIFICATIONS AND DETAILS) ON ALL LAVATORY SINKS WITHIN THIS SPACE.
- ⑤ INSTALL NEW SINGLE HEIGHT ELECTRIC COOLER AND CONNECT TO EXISTING COLD WATER AND SANITARY PIPING.
- ⑥ DO NOT ROUTE PIPES DIRECTLY OVER ELECTRICAL/CONTROL PANELS.
- ⑦ CONNECT NEW ELECTRIC WATER COOLER TO EXISTING DOMESTIC COLD WATER, SANITARY AND VENT PIPING.



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PROJECT NAME:

# GEORGETOWN ELEMENTARY SCHOOL - CLASSROOM/KITCHEN ADDITION

DRAWING NUMBER: **PI02**

ISSUE DESCRIPTION: **ADDENDUM #3**

SKETCH NUMBER:

SHEET TITLE:  
**KITCHEN ADDITION  
PLUMBING NEW WORK**

ISSUE DATE: **05/21/2015**

SCALE: **AS NOTED**

**PSK-02**



## PLUMBING FIXTURE SCHEDULE

FIXTURE NO.	TYPE	SAN. (INCHES)	VENT (INCHES)	CW (INCHES)	HW (INCHES)	FLOW RATE	ELEC. CHARACTERISTICS			REMARKS
							VOLTS	PHASE	HZ	
P-1	WATERCLOSET	4"	2"	1-1/4"	---	1.28 GALLONS PER FLUSH	---	---	---	WALL MOUNTED, FLUSH VALVE, TOP SPUD, HANDICAPPED
P-2	LAVATORY	1-1/4"	1-1/4"	1/2"	1/2"	.375 GALLONS PER MINUTE	---	---	---	WALL MOUNTED, METERING FAUCET
P-2A	LAVATORY	1-1/4"	1-1/4"	1/2"	1/2"	.375 GALLONS PER MINUTE	---	---	---	WALL MOUNTED, HANDICAPPED
P-3	ELECTRIC WATER COOLER (DUAL HEIGHT)	(L) 1-1/4"	1-1/2"	3/4"	---	---	120	1	60	DUAL HEIGHT UNIT, RECESSED UNIT, HANDICAPPED
P-3A	ELECTRIC WATER COOLER (SINGLE HEIGHT)	1-1/4"	1-1/4"	3/4"	---	---	120	1	60	SINGLE HEIGHT UNIT, SURFACE MOUNT, HANDICAPPED

### TRAP PRIMING STATION

UNIT #	ELEC. CHARACTERISTICS			REMARKS
	AMPS	VOLTAGE	PHASE	
1	5	120	1	

### KITCHEN PLUMBING EQUIPMENT ROUGH-IN SCHEDULE

NO.	ITEM	WATER		SERVICE SAN (DIRECT)	VENT	GAS		REMARKS
		CW	HW			SIZE	MBH	
7	PREP HAND SINK	1/2"	1/2"	1-1/2"	---	---	---	
8	ICE MAKER	1/2"	---	1/2" & 3/4"	---	---	---	
13	UTILITY RACEWAY	3/4"	3/4"	---	---	---	---	
18	CONVECTION STEAMER	---	---	1-1/2"	---	---	---	
22	FLOOR TROUGH	---	---	3"	---	---	---	
27	HAND SINK	1/2"	1/2"	1-1/2"	1-1/4"	---	---	W/ THERMOSTAT
34a	HOT FOOD COUNTER	---	1/2"	3/4"	---	---	---	
34c	COLD FOOD COUNTER	---	---	1/2"	---	---	---	
38	PRE-RINSE FAUCET	1/2"	1/2"	---	---	---	---	
39	DISPOSER	---	---	2"	---	---	---	
42	DISHMACHINE	1/2"	3/4"	2"	---	---	---	
44	POT SINK	3/4"	3/4"	2"	---	---	---	

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PROJECT NAME:

**GEORGETOWN ELEMENTARY SCHOOL -  
CLASSROOM/KITCHEN ADDITION**

DRAWING NUMBER: **P401**

ISSUE DESCRIPTION: **ADDENDUM #3**

SKETCH NUMBER:

SHEET TITLE:  
**SCHEDULES  
PLUMBING**

ISSUE DATE: **05/21/2015**

SCALE: **AS NOTED**

**PSK-03**

23

22

21

20

### GENERAL NOTES:

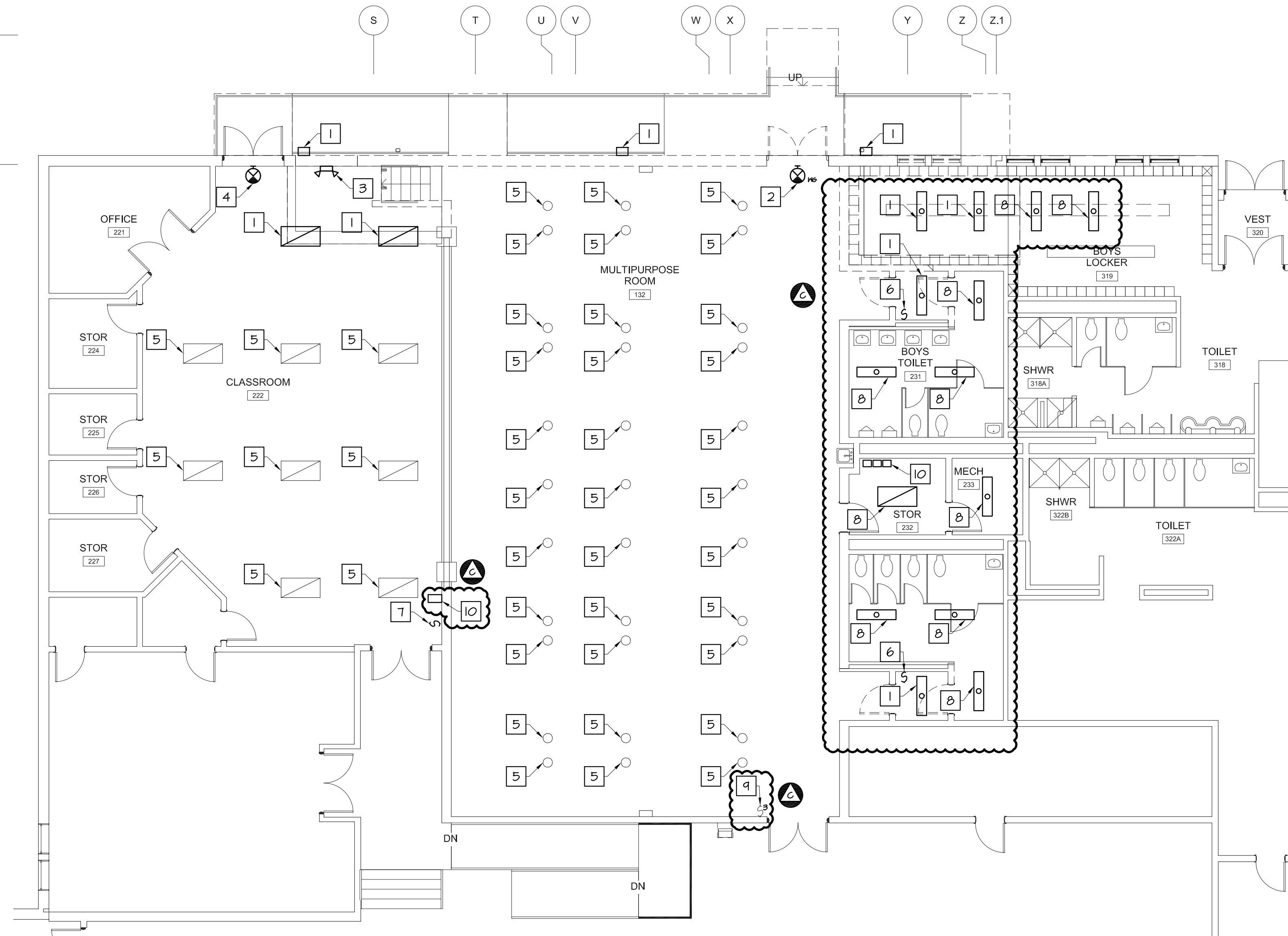
(APPLY TO THIS DRAWINGS)

- ITEMS SHOWN IN BOLD ARE AFFECTED BY DEMOLITION WORK. ITEMS NOT SHOWN IN BOLD ARE EXISTING TO REMAIN.

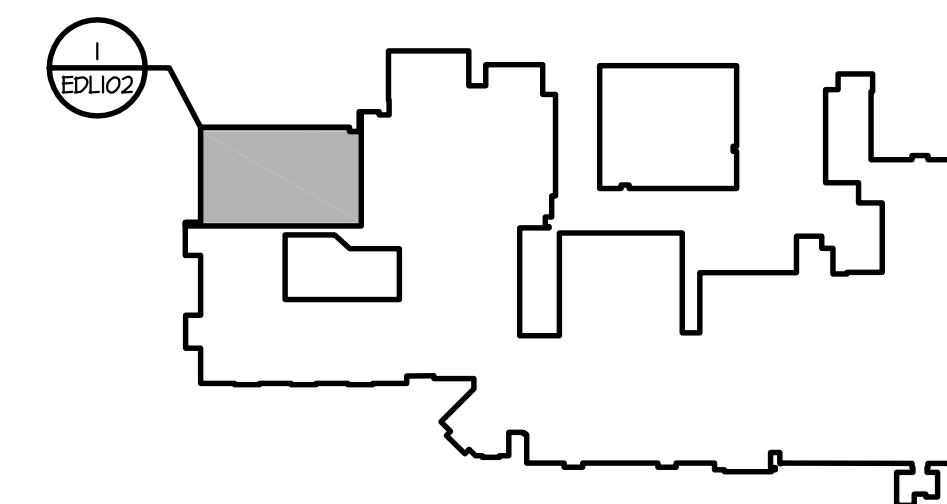
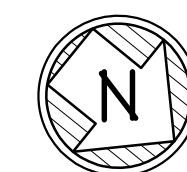
### DRAWING NOTES:

(APPLY TO THIS DRAWING ONLY)

- DISCONNECT AND REMOVE LIGHTING FIXTURE. REMOVE ASSOCIATED WIRES, BOXES, RACEWAYS, AND SUPPORT HARDWARE BACK TO SOURCE. REMARK EXISTING WIRING AND RACEWAYS SUCH THAT OTHER LIGHTING FIXTURES ON THIS CIRCUIT REMAIN OPERATIONAL.
- DISCONNECT AND REMOVE EXIT SIGN. REMOVE ASSOCIATED WIRES, BOXES, RACEWAYS AND SUPPORT HARDWARE BACK TO SOURCE.
- DISCONNECT AND REMOVE EMERGENCY BATTERY UNIT. REMOVE ASSOCIATED WIRES, BOXES, RACEWAYS, ENCLOSURES AND SUPPORT HARDWARE BACK TO SOURCE.
- DISCONNECT AND REMOVE EXIT SIGN. RETAIN ASSOCIATED WIRES, BOXES, RACEWAYS AND SUPPORT HARDWARE FOR NEW EXIT SIGN. SEE NEW WORK SHEET ELI02 FOR ADDITIONAL INFORMATION.
- EXISTING LIGHT FIXTURE TO REMAIN UNDER BASE BID. IF ALTERNATE #4 IS ACCEPTED DISCONNECT AND REMOVE LIGHTING FIXTURE, ASSOCIATED WIRES, BOXES, RACEWAYS, SUPPORT HARDWARE AND CONTROLS BACK TO SOURCE.
- DISCONNECT AND REMOVE EXISTING LIGHT SWITCH AND ASSOCIATED WIRE, BOXES AND RACEWAYS BACK TO SOURCE.
- DISCONNECT AND REMOVE EXISTING LIGHT SWITCH AND ASSOCIATED WIRE. RETAIN BOX, RACEWAY AND SUPPORT HARDWARE FOR NEW SWITCH. SEE NEW WORK SHEET ELI02 FOR ADDITIONAL INFORMATION.
- DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURE AND RACEWAY AS REQUIRED FOR CEILING WORK IN THIS SPACE. PRESERVE FIXTURE FOR REINSTALLATION UNDER NEW WORK. PRESERVE WIRING, AND BOXES FOR RECONNECTION OF FIXTURE UNDER NEW WORK.
- EXISTING SWITCH TO REMAIN UNDER BASE BID. IF ALTERNATE #4 IS ACCEPTED THEN DISCONNECT AND REMOVE EXISTING LIGHT SWITCH AND ASSOCIATED WIRE, BOX, RACEWAY AND SUPPORT HARDWARE BACK TO SOURCE.
- IF ALTERNATE #4 IS ACCEPTED REMOVE DIMMERS, DIMMER CONTROLLER AND ASSOCIATED WIRE, BOXES, RACEWAYS ASSOCIATED WITH LIGHT FIXTURES IN MULTIPURPOSE ROOM 132 BACK TO SOURCE.



### KITCHEN ADDITION - LIGHTING - DEMOLITION



### FIRST FLOOR KEY PLAN

NO SCALE

SCALE: 1/8" = 1'-0"



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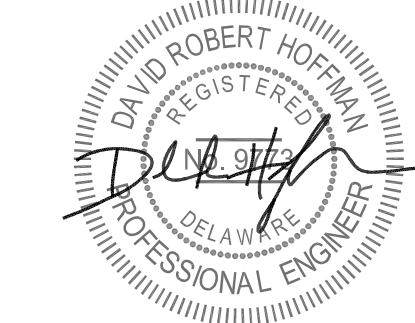
### EDIS COMPANY

CONSTRUCTION MANAGER

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PROJECT TITLE

## GEORGETOWN ELEMENTARY SCHOOL

301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE

## KITCHEN ADDITION LIGHTING DEMOLITION

ISSUE BLOCK

Mark	Date	Revised	Schedule
C	05/22/2015	ADDENDUM 3	

PROJECT NO: 2013157.05

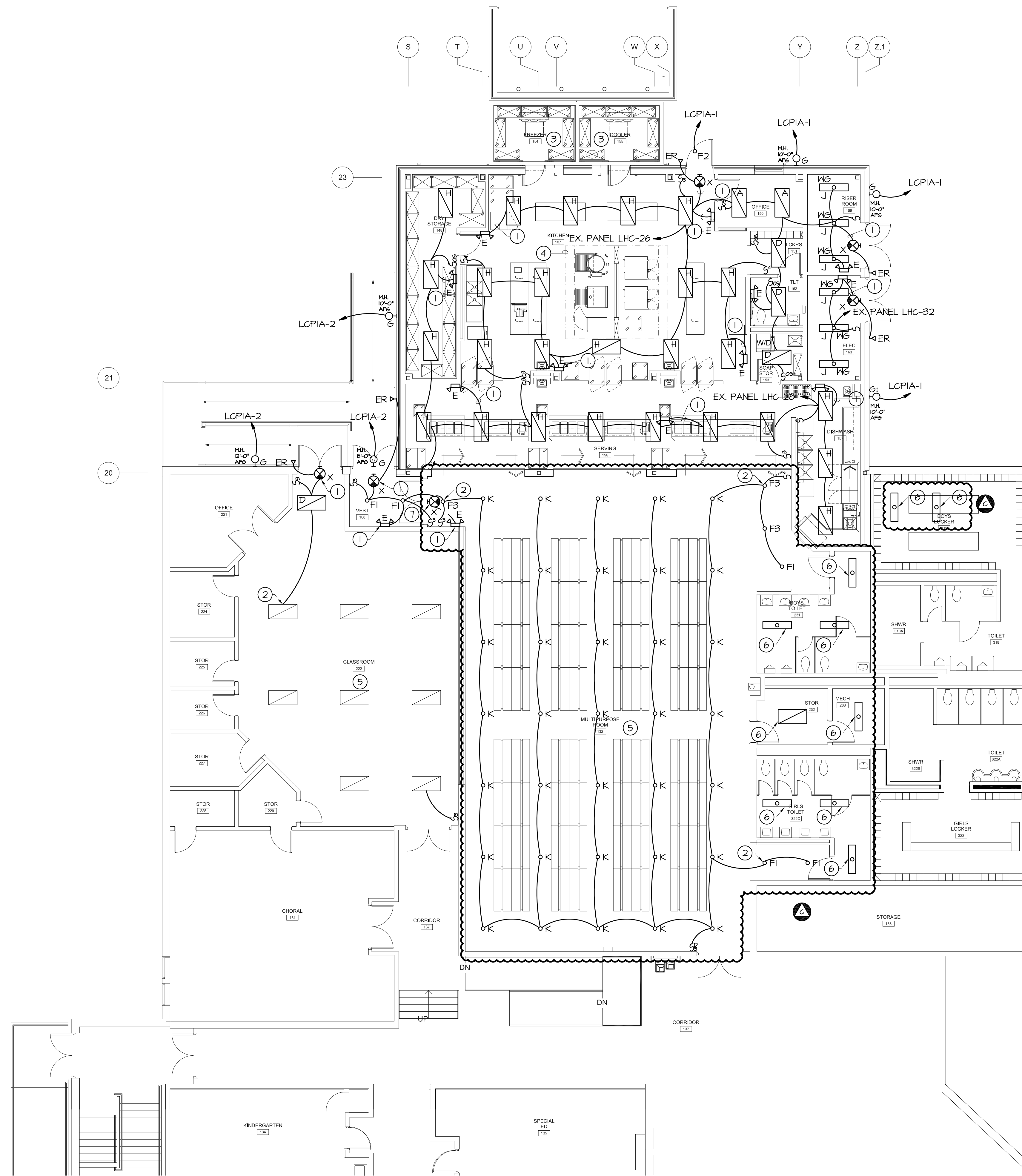
DATE: APRIL 10, 2015

SCALE: AS NOTED

DRAWN BY: TMC PROJ MGR: CDH

## EDL102

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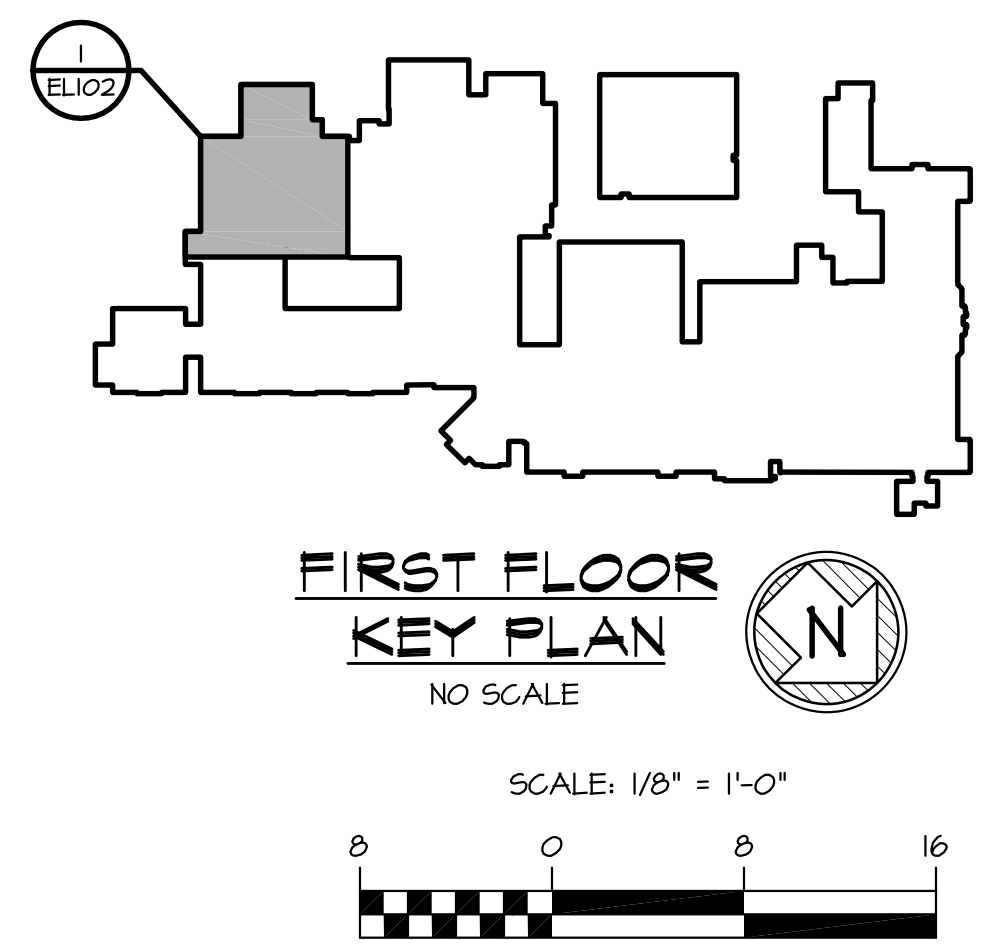


**KITCHEN ADDITION - LIGHTING - NEW WORK**

**GENERAL NOTES:**  
(APPLY TO THIS DRAWINGS)

1. ITEMS SHOWN IN BOLD ARE AFFECTED BY NEW WORK. ITEMS NOT SHOWN IN BOLD ARE EXISTING TO REMAIN.

- DRAWING NOTES:**  
(APPLY TO THIS DRAWING ONLY)
- EXIT SIGN/EMERGENCY LIGHTS TO BE SERVED BY UNSWITCHED LIGHTING BRANCH CIRCUIT SERVING THIS SPACE.
  - CONNECT NEW LIGHTS TO EXISTING LIGHTING BRANCH CIRCUIT WIRING AND EXISTING LIGHTING CONTROLS IF ALTERNATE #4 IS NOT ACCEPTED. REFER TO DEMOLITION PLAN ED102 FOR LOCATION OF EXISTING LIGHTS.
  - WALK-IN UNIT LIGHTING FIXTURE POWER CONNECTION SHOWN ON E202.
  - DASHED LINE REPRESENTS OUTLINE OF KITCHEN VENTILATION HOOD. COORDINATE EXACT LOCATIONS OF LIGHTING FIXTURES ADJACENT TO HOOD.
  - REWORK EXISTING LIGHTING FIXTURE WIRING AS REQUIRED FOR NEW SWITCHING ARRANGEMENT INDICATED ON FLOOR PLANS UNDER BASE BID. IF ALTERNATE #4 IS ACCEPTED THEN EXISTING WIRING IS DEMOLISHED AND NEW FIXTURES "KI" AND ASSOCIATED WIRING AND CONTROL SWITCHES ARE TO BE PROVIDED AS INDICATED.
  - REINSTALL EXISTING LIGHTING FIXTURES AS SHOWN. PROVIDE WIRING AS REQUIRED TO CONNECT FIXTURES AND CONNECT TO EXISTING LIGHTING CONTROL SWITCH ON WALL.



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DAVID ROBERT HOFFMAN  
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PROJECT TITLE  
**GEORGETOWN  
ELEMENTARY  
SCHOOL**  
  
301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE  
**KITCHEN ADDITION  
LIGHTING  
NEW WORK**

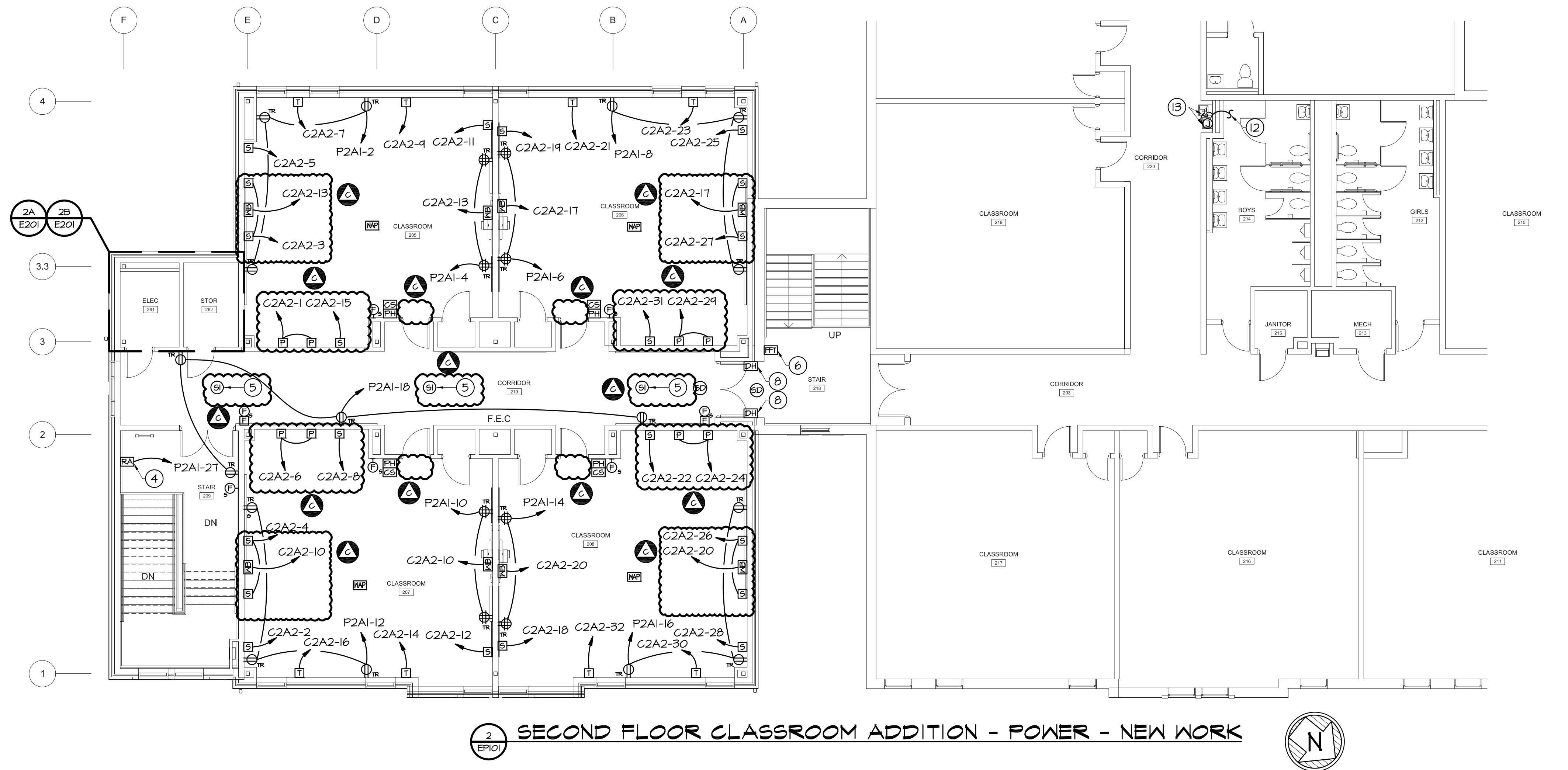
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Mark	Date	Description
C	05/22/2015	ADDENDUM 3

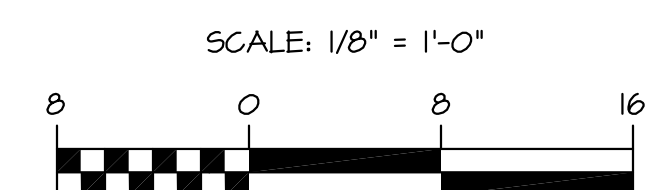
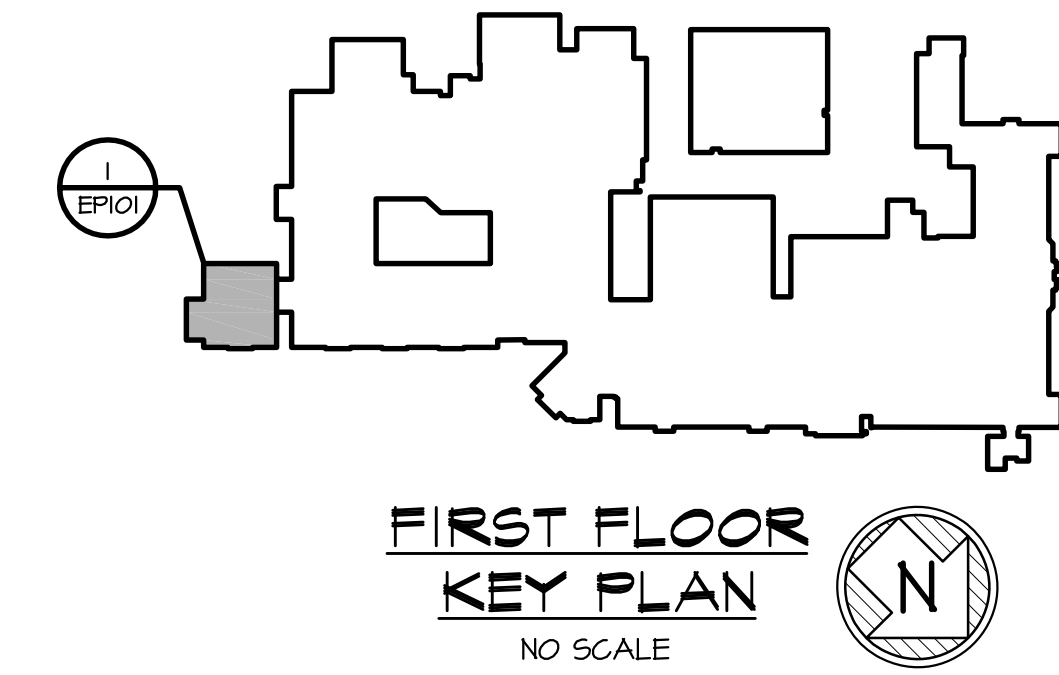
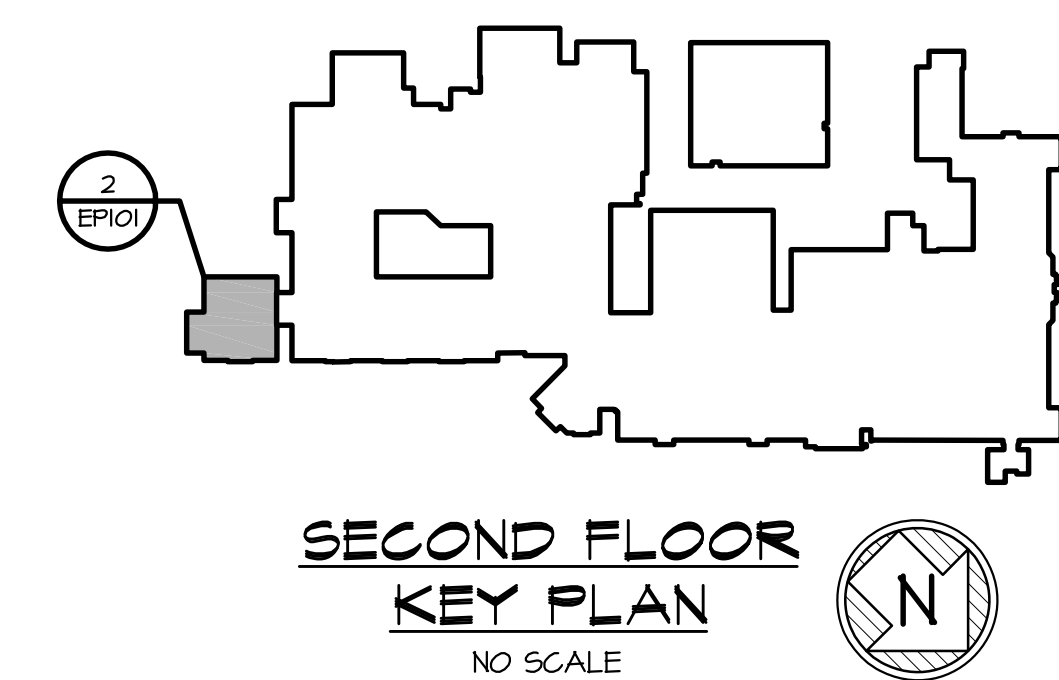
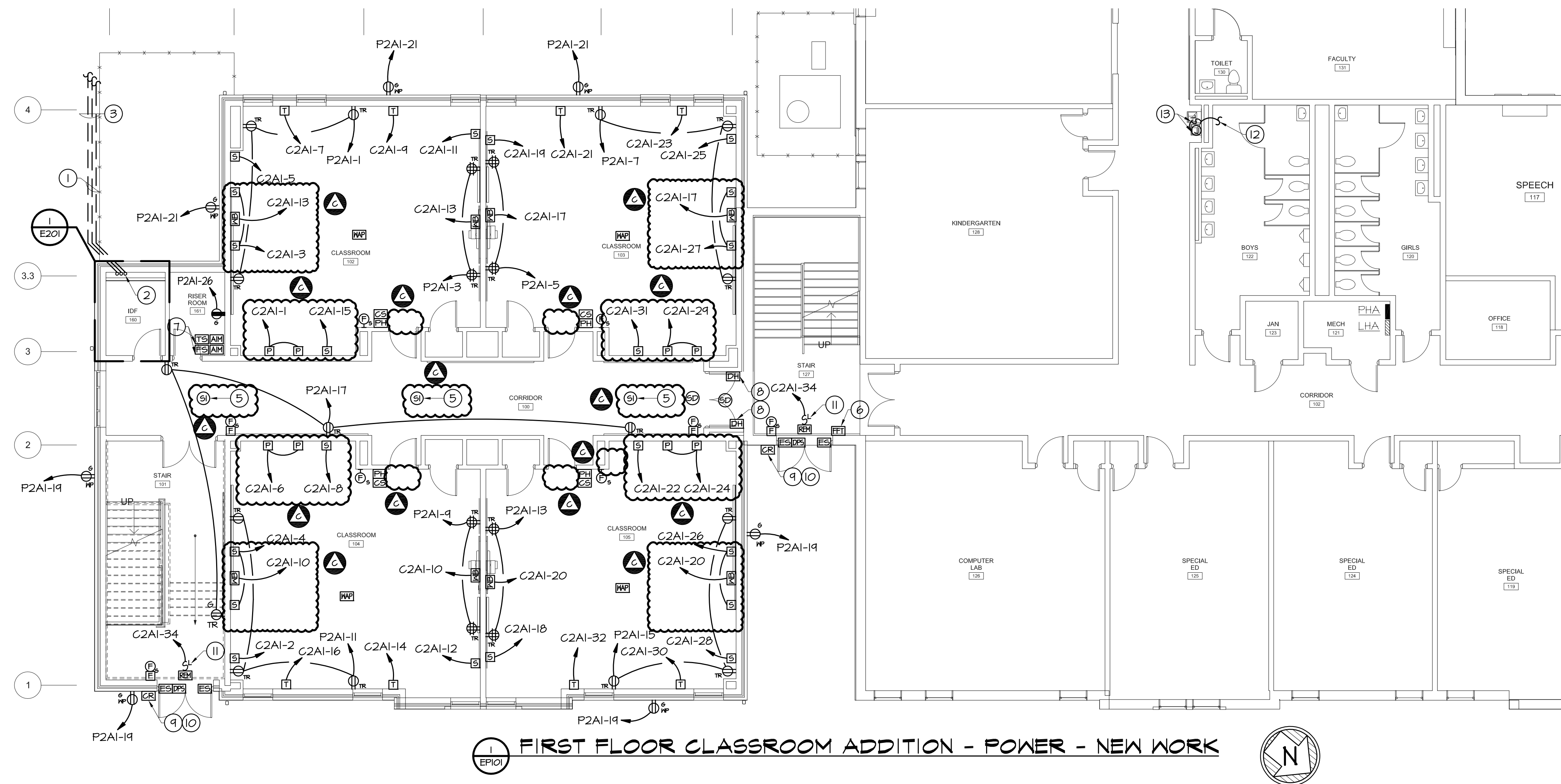
PROJECT NO: 2013157.05  
DATE: APRIL 10, 2015  
SCALE: AS NOTED  
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EL102  
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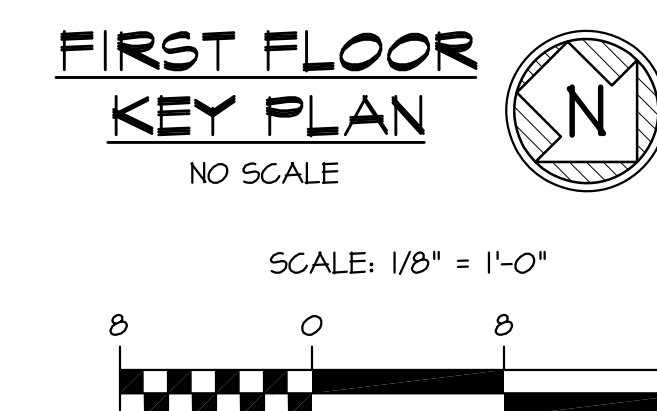


- GENERAL NOTES:**  
(APPLY TO THIS DRAWING ONLY)
- COORDINATE EXACT LOCATION OF TECHNOLOGY BOXES/OUTLETS WITH SCHOOL DISTRICT AND OWNER'S EQUIPMENT PRIOR TO INSTALLATION.
- DRAWING NOTES:**  
(APPLY TO THIS DRAWING ONLY)
- ONE 3" CONDUIT TO PANEL H2AI, ONE 3" CONDUIT TO PANEL L2AI AND ONE SPARE 3" CONDUIT FROM NEW ELECTRICAL ROOM 154 UP TO NEW ELEC. ROOM 261 ON SECOND FLOOR. SEE SINGLE DIAGRAM FOR ADDITIONAL INFORMATION.
  - TURN UP CONDUITS WITHIN CHASE WALL AND EXTEND UP TO SECOND FLOOR.
  - FOR CONTINUATION SEE ELECTRICAL SITE PLAN ON SHEET E601.
  - RESCUE TWO-WAY COMMUNICATIONS SYSTEM TO SERVE AREA OF REFUGE.
  - CEILING MOUNTED SPEAKER TO MATCH EXISTING SPEAKERS IN EXISTING CORRIDORS. BIDDERS SHALL VISIT SITE PRIOR TO BID TO DETERMINE EXACT REQUIREMENTS.
  - REINSTALL EXISTING FIREFIGHTER TELEPHONE OUTLET AS REQUIRED.
  - FLOW AND TAMPER SWITCH SERVING FIRE PROTECTION SYSTEM ZONE VALVE ASSEMBLY. SEE PLUMBING DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS.
  - DOOR HOLD OPEN FURNISHED UNDER DIVISION 08 INSTALLED UNDER DIVISION 28. COORDINATE REQUIREMENTS WITH DOOR HARDWARE INSTALLER.
  - SEE ACCESS CONTROL SYSTEM DOOR SCHEMATIC DETAIL FOR ADDITIONAL INFORMATION.
  - COORDINATE INSTALLATION OF BOXES AND CONDUITS FOR ACCESS CONTROL SYSTEM DEVICES WITH ACCESS CONTROL SYSTEM INSTALLER AND STOREFRONT/DOOR HARDWARE EQUIPMENT INSTALLER.
  - TOGGLE SWITCH MOUNTED CONCEALED ABOVE ACCESSIBLE CEILING FOR ACCESS CONTROL SYSTEM POWER SUPPLY (BY OWNER). REFER TO ACCESS CONTROL SYSTEM DOOR SCHEMATIC DETAIL FOR ADDITIONAL INFORMATION.
  - EXTEND NEW BRANCH CIRCUIT WIRING FROM SWITCH AND SPLICE TO EXISTING BRANCH WIRING LOCATED ABOVE ACCESSIBLE CEILING THAT SERVED EXISTING WATER COOLER. SEE DEMOLITION PLAN ON SHEET EPI01 FOR ADDITIONAL INFORMATION. CONTRACTOR TO REPLACE EXISTING BREAKER SERVING THE ELECTRIC WATER COOLER WITH NEW 20A, 1 POLE, 120V, GFCI BREAKER WITH 5mA TRIP THRESHOLD. BREAKER SHALL BE SAME MANUFACTURER AS PANEL AND HAVE SAME AIC RATING OF EXISTING BREAKERS IN PANEL.
  - PROVIDE POWER CONNECTION TO WATER COOLER. INSTALL WORK SWITCH BEHIND COOLER. COORDINATE LOCATION WITH DIVISION 22 CONTRACTOR.

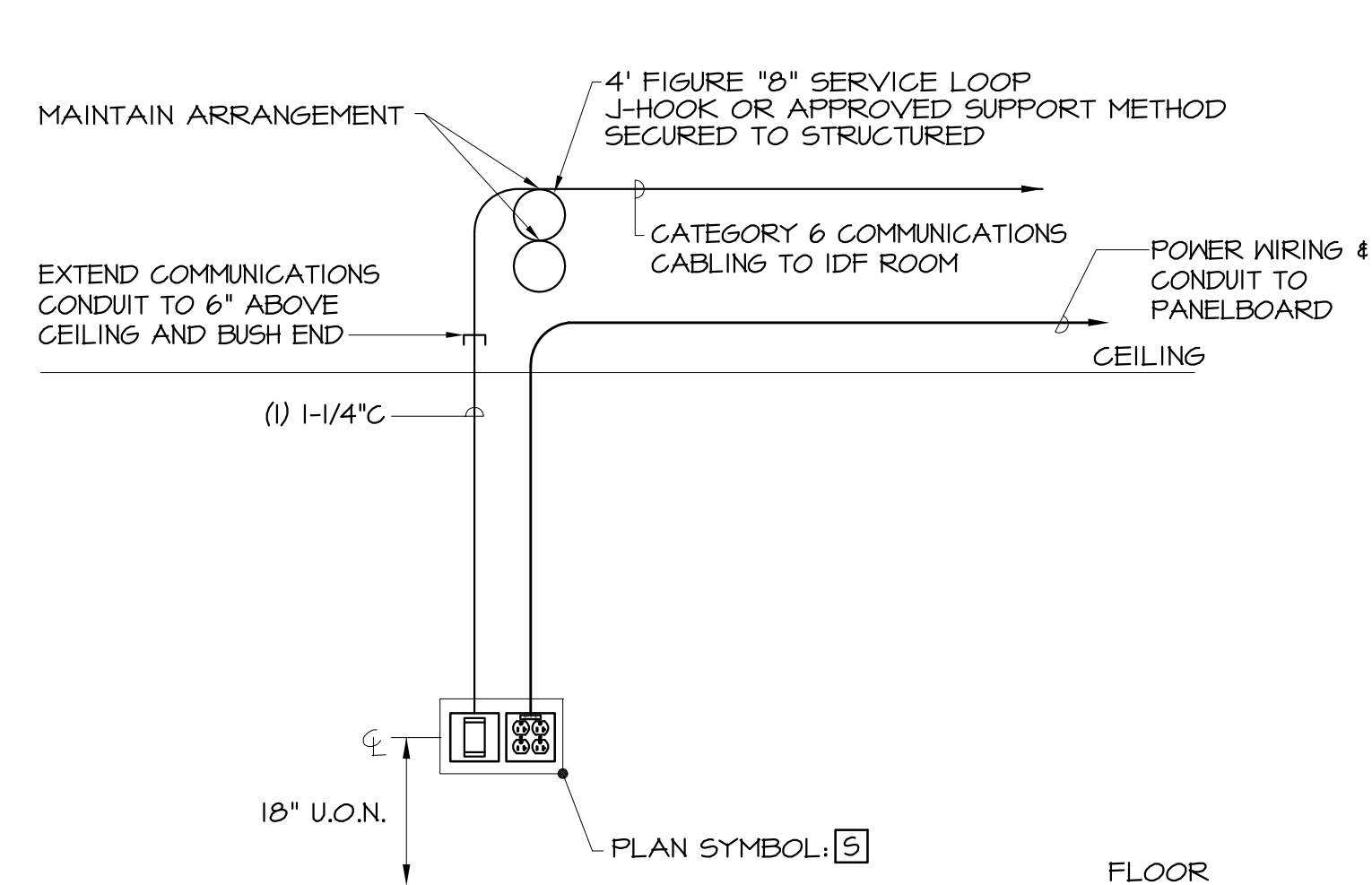


Mark	Date	Revised	Description
C	05/22/2015		ADDENDUM 3

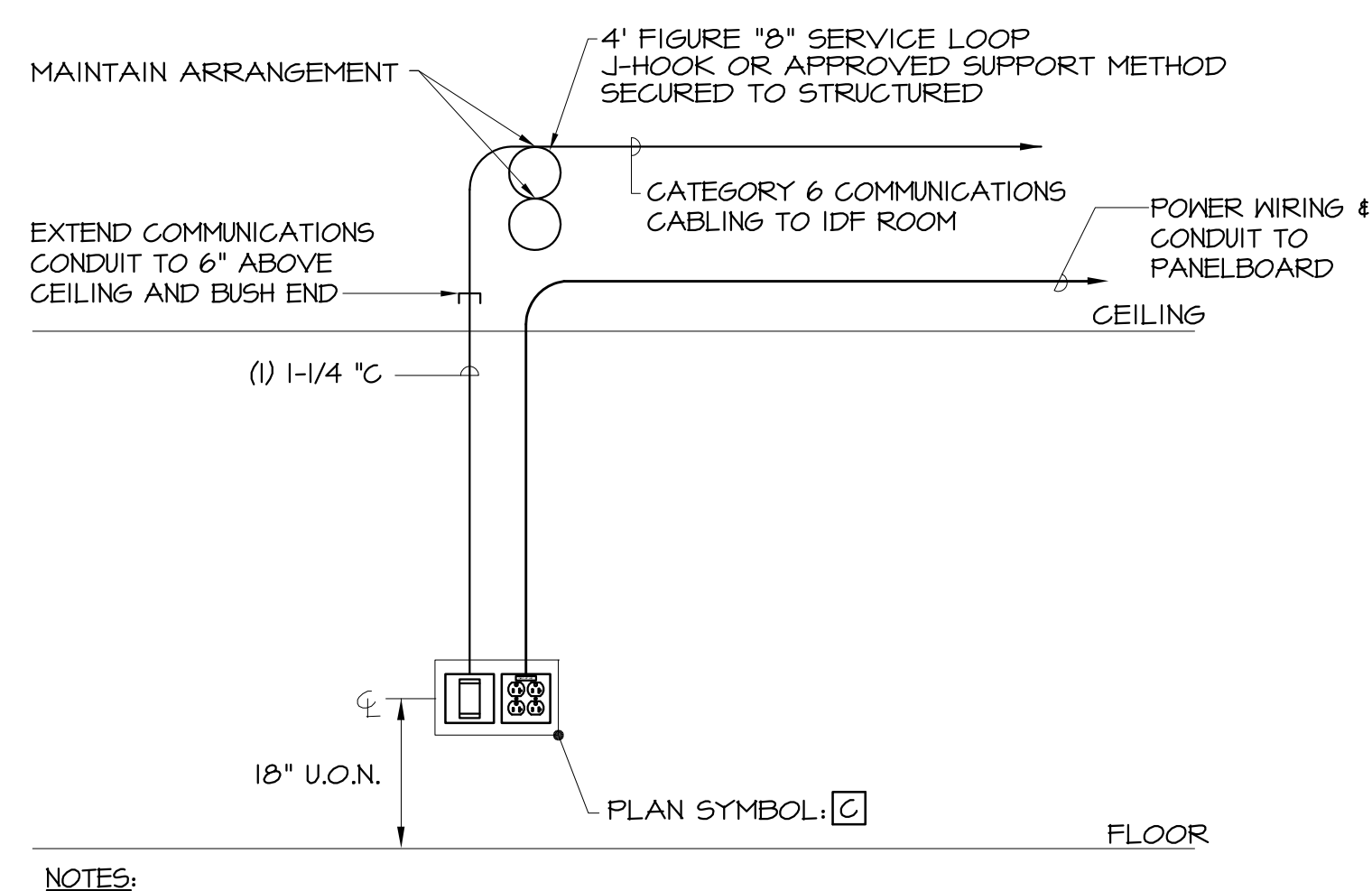




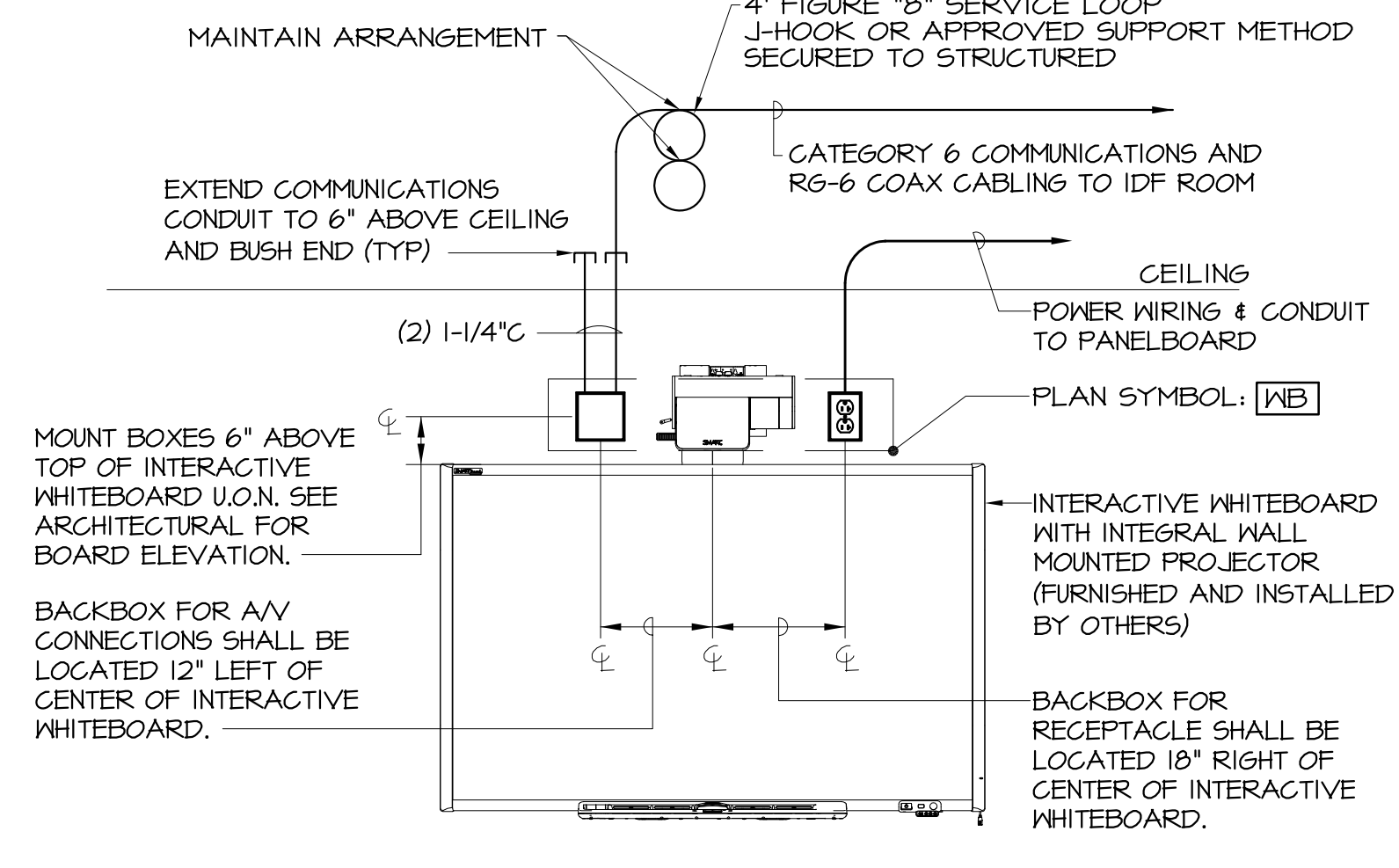
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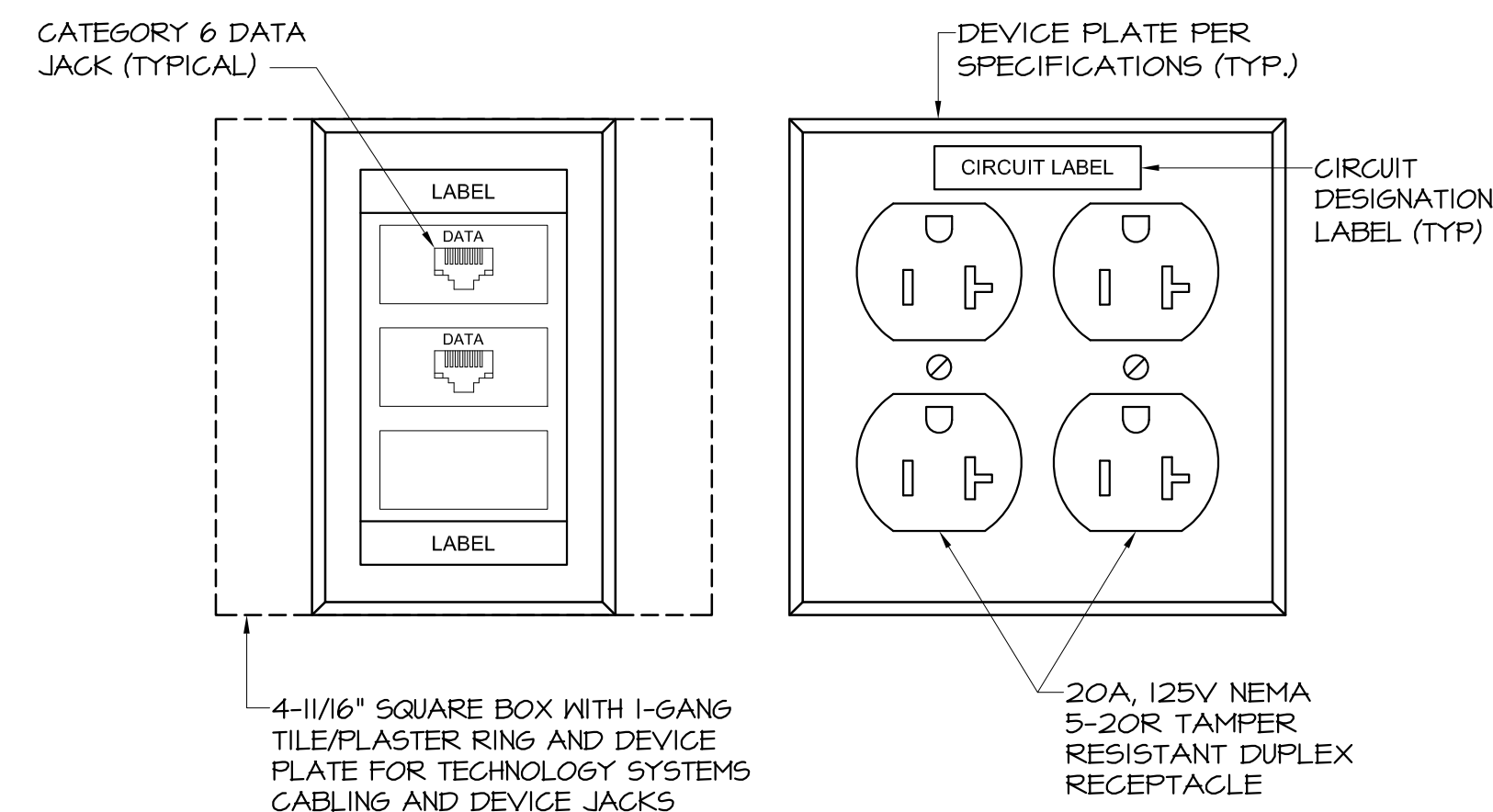
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  2. ALL LOW VOLTAGE DATA, VOICE, AUDIO & VIDEO CABLES, DEVICE JACKS & TERMINATIONS ARE PROVIDED UNDER DIVISION 27.



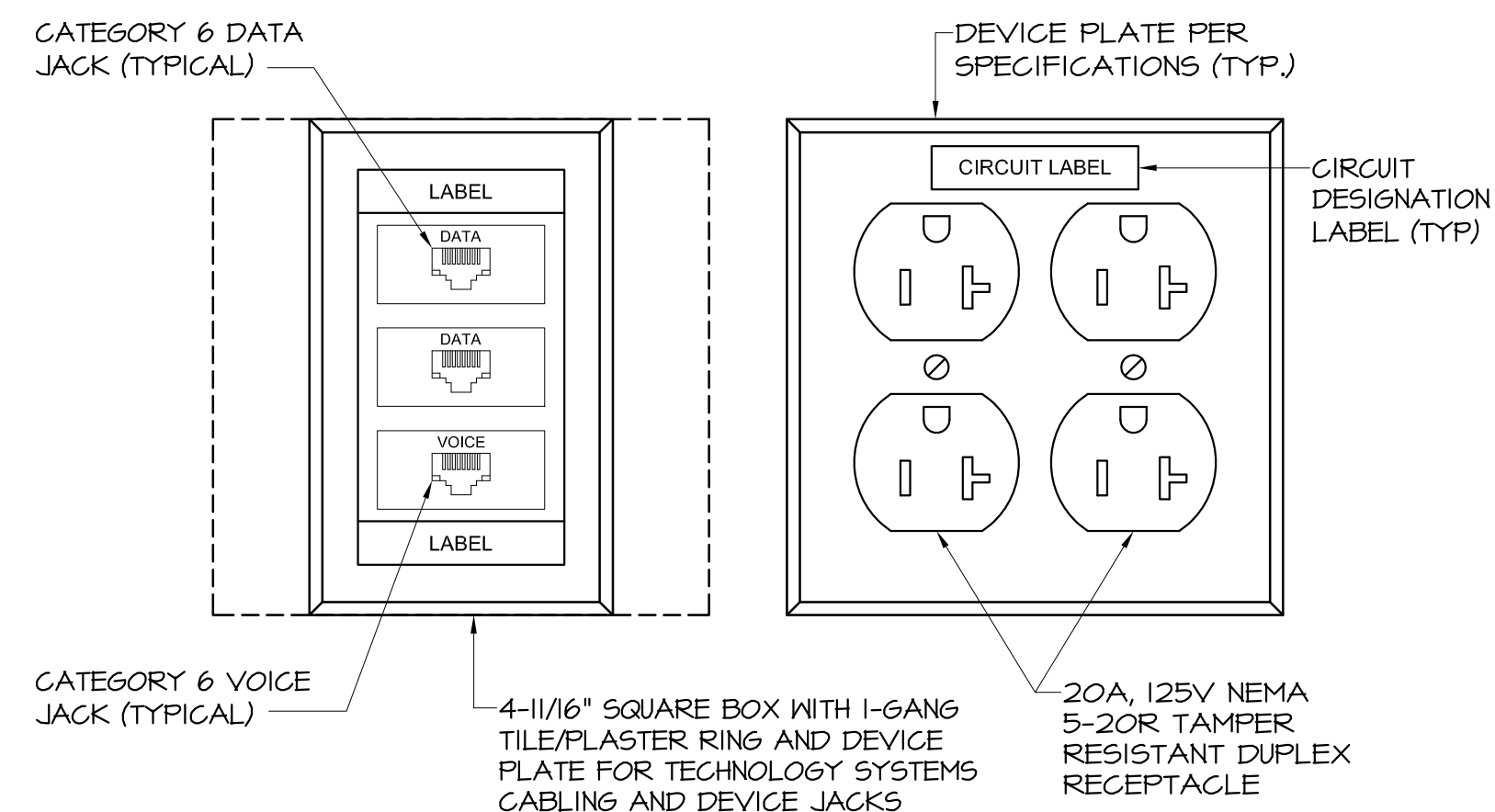
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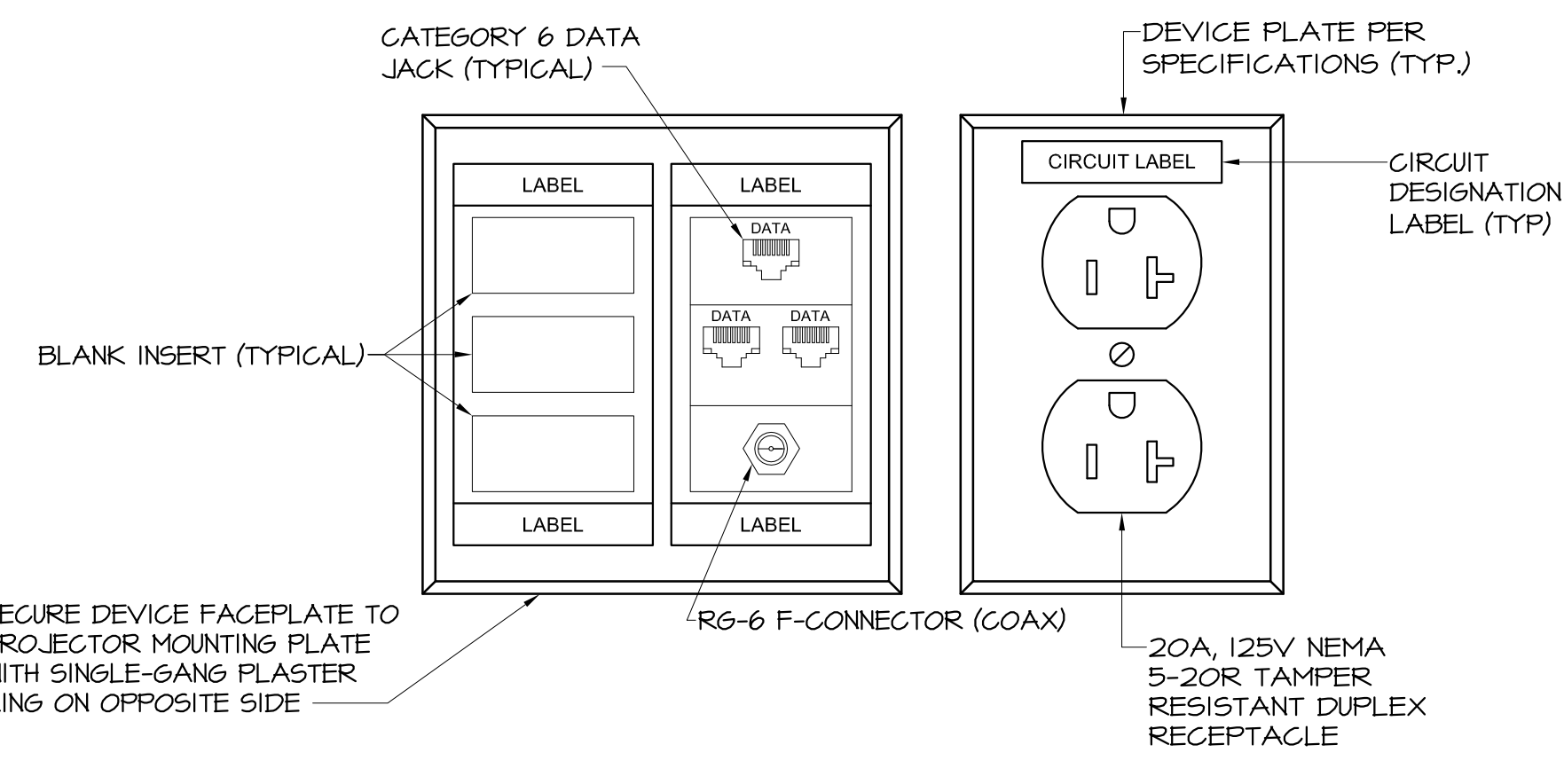
- FLOOR
- NOTES:
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- NOTES:
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PROJECT TITLE
<p>GEORGETOWN ELEMENTARY SCHOOL</p>

301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE
DETAILS ELECTRICAL

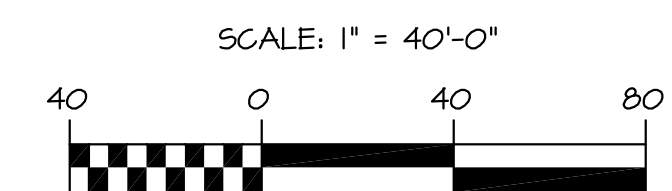
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Revision Schedule	
PROJECT NO:	2013157.05
DATE:	APRIL 10, 2015
SCALE:	AS NOTED
DRAWN BY: TMC	PROJ MGR: CDH

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(APPLY TO THIS DRAWING ONLY)

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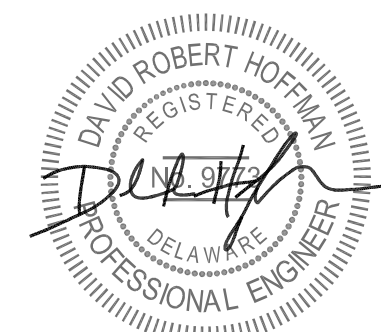
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PROJECT TITLE

GEORGETOWN  
ELEMENTARY  
SCHOOL

301A WEST MARKET STREET  
GEORGETOWN, DE 19947

SHEET TITLE

SITE PLAN  
ELECTRICAL  
NEW WORK

ISSUE BLOCK

C	05/22/2015	ADDENDUM 3
Mark	Date	Description
Revision Schedule		

PROJECT NO:	2013157 05
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PROJECT NO:	E010107100
DATE:	APRIL 10, 2015

DATE:	APRIL 10, 2013
SCALE:	AS NOTED

SCALE:		AS NOTED	
DRAWN BY:	TMC	PROJ MGR:	CDH

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