ADDENDUM NO. 2
to
CONTRACT DOCUMENTS

for
ADDITIONS AND RENOVATIONS
to the
COMMUNITY PARK ELEMENTARY SCHOOL
located at 372 Witherspoon St, Princeton, NJ 08542

for
PRINCETON PUBLIC SCHOOLS
PRINCETON, MERCER COUNTY, NEW JERSEY

Issued: January 23, 2026

FVHD PROJECT NO. 5516C

FRAYTAK VEISZ HOPKINS DUTHIE, P.C.
Architects-Planners
1515 Lower Ferry Road, Trenton, New Jersey 08618
William D. Hopkins III, AIA, LEED AP. No. 21AI01706000

EDWARDS ENGINEERING GROUP / L2A
Civil Consulting Engineers
69 West End Avenue, Somerville, NJ 08876
Beth Kenderdine, P.E., No. GE45532

HARRISON - HAMNETT, PC
Consulting Structural Engineers
40 Knowles St., Pennington, NJ 08534
Donald M. Hamnett, P.E., No. 17976

FRENCH & PARRELLO ASSOCIATES
Consulting Engineers
1800 Route 34, Suite 101, Wall, New Jersey 07719
Amin H. Gomaa, P.E., No. 24GE04842100

INTENT: This Document supersedes all conflicting and contrary information in said Contract Documents. Said documents are hereby amended in certain particulars as described herein after. Unless specifically noted or specified hereinafter all work shall conform to the applicable provisions of the Contract Documents. Bidders shall acknowledge receiving this document and previously issued Addendum No. 1 on the Bid Proposal Form.

BIDS FOR THE PROJECT ARE BEING EXTENDED AND ARE DUE BY TUESDAY, FEBRUARY 10, 2026, 2:00 PM.

This Addendum includes **eleven (11)** pages and the following:

1. Revised Proposal Form

2. New Specification Section
    a. 09250 – Gypsum Drywall (16 pages)

3. Revised Specification Section
    a. 09685 – Carpet Tile (11-pages)
    b. 12495 – Window Roller Shades (19-pages)

4. Revised Drawing(s)
    a. Civil - C-2.0, C-8.0
    b. Architectural - A003, A103, A104, A308, A312, A407, A505, A601, A702, A703

REQUESTS FOR INFORMATION (RFI'S)

1. Question: Specification Section 07111, Bituminous Dampproofing is provided but the drawings and details do not include dampproofing. However, bentonite waterproofing is shown on the details, but no specification is provided. (Please note that bentonite manufacturers typically do not want bentonite used on CMU walls. Please clarify which product should be used and provide the associated specification or updated details depending on which product is to be used.

    Response: See revised Wall Section 25 / A308 and Details 43 and 44 / A312, attached to this Addendum.

2. Question: Please provide existing keying system manufacturer.

    Response: Please see revised specifications 08700 Door Hardware, included in Addendum 1, page 16, paragraph 2.12.A.1.a.

3. Question: Drawing C5.0 shows a Hot Box for the fire water service, but the domestic water line will remain where is. Please confirm American Water will not require the domestic water service and meter to be installed in the hot box.

    Response: The Hot Box is required for the new fire service. The existing domestic water service is metered inside the existing building and will remain.

4. Question: Please confirm if additional radon ventilation system specification will be provided in addition to the notes on A-111.

    Response: See Specification Section 02450.

5. Question: Drawing E3.1 shows locations for the motorized roller shade controls. From experience, the control location needs a clear line of site to all shades in the room and does not always work from one location on a wall. Confirm if a handheld remote would be desired in addition to the wall mounted control.

    Response: See Key Note #28 directing the Contractor to coordinate the equipment locations with the Vendor and shop drawings. Refer to Architectural specifications for system requirements.

6. Question: Please confirm if the Third-Party Inspection agency will be hired directly by the Owner or through the General Contractor?

   Response: See Revisions to Specification Section 01400 in previously issued Addendum 1.

7. Question: AIA 132 (4.2.3) indicates Moving outlets a distance of 10 feet before roughing without additional cost to the Owner indicates as $0.00. Please confirm it is not applicable or please provide $ value if applicable.

   Response: See Specification Section 01020, page 3, paragraph 1.2.A.3.b.

8. Question: Please provide layout and location for temporary partition required on this project, If any required.

   Response: See Drawing A002.

9. Question: Please confirm Maintenance Bond is required for 2 Years as standard project warranty is 1 Year.

   Response: Two (2) years is correct.

10. Question: Please confirm this is not a LEED project.

    Response: This is not a LEED project.

11. Question: Please clarify if the playground equipment that is to be removed is being Reinstalled or hand over to Owner or move to any storage place in school premises. If needs to be re-installed, please provide details about location, footings and other necessary items.

    Response: The existing playground equipment shall be demolished and disposed of off-site in a legal manner.

12. Question: Please give quantity of playground equipment to be removed and footings.

    Response: FVHD does not provide quantities. Visit the project site.

13. Question: On Dwg C-2.0 Demolition plan – top left of drawing calls for Demolish Existing Fence. Please clarify if the entire fence line on left is being demo or portion like other spots on the drawing.

    Response: FVHD does not provide quantities. Visit the project site. Refer to revised sheet C2.0 (attached to this Addendum) with fence demolition scope clarified.

14. Question: On Dwg A-601 from door 235 – 242A and S1-3 indicates "space not found" please clarify.

    Response: See revised drawing A601, attached to this Addendum.

15. Question: On A-601 signage details are found, please provide location of all signage and signage schedule to price out if this is by this contract.

    Response: See revised drawing A601, attached to this Addendum.

16. Question: On A-702 window treatment callouts are not very visible in dark areas on printed drawings, please move designation to a more visible area and reissue this drawing.

    Response: See revised drawings A702 and A703, attached to this Addendum.

17. Question: Please confirm if Mock-Up Panel is an independent structure and please provide location for the Mock-Up Panel to build with multiple trades as indicated on sketch provided at end of Spec 04200.

    Response: Mock-up Panel is an independent structure. Location will be determined in field.

18. Question: Please consider removing Unit Prices along with bid submission as it is hard to fill out at the time of bid as major subs are not finalized until closer to bid time. Winner GC or 3 Low bidders can submit after the bid if required.

    Response: Unit Prices are required with bid proposal.

19. Question: Please clarify if Certification of No Material Change of Circumstances is not required for named subcontractors at the time of bid.

    Response: Certification is required for contractors and subcontractors.

20. Question: Please provide existing roofing system with manufacturer/contractor names to keep roofing warranty in place per spec requirements.

    Response: Requested information is on Drawing A107.

21. Question: Please confirm that C-066 – Roofing needs to be named on the Subcontractor Identification List.

    Question: Please consider removing requirement for DPMC C066 for Roofing (EPDM) to allow more roofing contractors to participate in the public bid.

    Response: DPMC Classification C066 is identified on both the Bid Proposal Form and Section 00100. Roofing subcontractor must be named on the Subcontractor Identification List and must possess DPMC Classification.

22. Question: Specification Section 01400 indicates that all 3rd Party Testing will be done by the owner, however, Note 16/C2.0 indicates soil engineer is by the contractor, the concrete specification indicates testing by the contractor and the steel specification indicates testing is by the owner. Please clarify who is responsible for 3rd Party Testing.

    Response: Third Party Testing is an incomplete term in this context. Special Inspections are by the Owners Testing Inspection Agency and are listed on Drawing A001. The specifics of the Special Inspections are defined in the International Building Code, New Jersey Edition, 2021, Chapter 17. Testing and inspecting requirements other than the Special Inspections are the responsibility of the Contractor and are listed in the affected Specification Section.

23. Question: Drawing G002 indicates permits will be paid for by the owner, however, Paragraph 3.7.1 in the AIA contract indicates the contractor is to pay for permits. Please confirm that the owner will be paying for any and all permits as there is no way to know what that cost would be prior to applying for permits.

    Response: AIA A232, paragraph 2.3.1 indicates: "Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section .7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit."

24. Question: Specification 01010-6, Paragraph 1.5.4.9 & 10 indicates that contractor is to "receive, unload and handle" owner furnished items. What is the extent of owner furnished items that the contractor is responsible to receive, unload and handle? This information is needed to be able provide an accurate price for this service and protection.

    Response: These items are indicated on the drawings. See also revisions to Sections 01020 and 01151 incorporated in this Addendum.

25. Question: Please advise who is responsible for Data/IT, Security, PA/Sound. Is the owner providing these services with their own vendor or is the contractor responsible for the conduit and cabling?

    Response: Refer to Drawing E1.0, Electrical General Notes #84, 85 and 86 for Vendor Information, Low Voltage Symbol List Descriptions and "Important Note". All on the first Electrical sheet.

26. Question: Please confirm temporary electric and water for use in construction can be taken from the existing building service.

    Response: See Specification Section 01505, page 8, paragraphs 1.7 and 1.8.

27. Question: Please confirm there is no any hazardous/contaminated material on site and inside building.

    Response: See revisions to Specification Section 01020, incorporated in this Addendum.

28. Question: Spec 051200-6 (3.3-A-1) discrepancies found in the allowance credit back in word and figure. Please clarify which one is correct.

    Response: See revisions to Specification Section 051200, incorporated in this Addendum.

29. Question: Dwg. C-1.0 (note # 02) calls for engagement of Geotech Engineer. Please confirm who is responsible for hiring and pay. If Geotech engineer to be hired and paid by GC, can be paid from Allowance #01.

    Response: Engagement of Geotechnical Engineer is not within the scope of the Special Inspections and therefore is the responsibility of the General Contractor. Costs related thereto must be included in the Bid and will not be taken from the Allowance.

30. Question: Dwg C-2.0 indicates 2 sheds to be relocated. Please clarify locations and any foundation base requirements, if any.

    Response: The existing sheds are pre-manufactured on typical timber supports on clean stone. Include subgrade compaction and 6″ clean stone for new shed locations. Shed locations to be provided by Owner.

31. Question: Dwg C-8.0 indicates Bench detail with 4″ thick Pavement pad. Please provide the width and length with details.

    Response: Concrete pad for benches shall be 32″x80″. Refer to Detail 15 on revised sheet C8.0, attached to this Addendum.

32. Question: Dwg detail 1/A-003 calls for Exterior Mobile Outdoor white board. Please provide sizes and manufacturer names.

    Response: See revised drawing A003, attached to this Addendum.

33. Question: Please provide width of built-in bench for section marked 5/A-003 as plans do not indicate width on 1/A-003.

    Response: Bench widths are shown on the left side of the plan.

34. Question: Dwg A-103 & A-104 indicate FE-2 on plan legend without any descriptions. Please confirm this is without Fire Extinguisher Cabinet and wall mounted only.

    Response: FE-2 is a fire extinguisher on a bracket – no cabinet.

35. Question: Dwg detail 2/A-103 SGI-131 indicate cross section with XX/A30X, please provide correct C/S number and drawing.

    Response: See revised Drawing A103, attached to this Addendum.

36. Question: Elevation 2/A-201, KN #56 calls for high security lock box, please provide model number and manufacturer names. Also confirm at 1 location only required.

    Response: See revisions to Specification Section 10900, incorporated in this Addendum. FVHD does not provide quantities.

37. Question: Please provide Spec 05400 for Cold-Formed Metal Framing, 09250 for Gypsum Boards, 09300-for Tile and Bentonite Waterproofing per detail 25/A-308.

    Responses:

    05400 does not apply as metal framing for gypsum board is included in Section 09250.
    09300 does not apply to this project.
    See Specification Section 09661 for Resilient Quartz Tile Flooring.
    See new Specification section 09250 (Gypsum Drywall) attached to this Addendum.
    Bentonite - See revised Drawings A308 and A312, attached to this Addendum.

38. Question: Detail 3 on Drawing A201 calls out Pre-Manufactured Aluminum Ramp in the corridor, please provide specifications.

    Response: Ramp has been redesigned – see revised drawing A505, attached to this Addendum.

39. Question: Please provide a specification for the panels in W2.

    Response: See revisions to Specification Section 08410 incorporated in this Addendum.

40. Question: Please provide a specification for the louvers.

    Response: See Key Note 2 on Drawing M4.0 for louver specification.

41. Question: Alternate 2, Serving Line Improvements states to add the amount to the base bid to provide and install the Cafeteria Serving Line Improvements as indicated on various drawings and specifications. Please provide the drawings and specifications for the Alternate work requested.

    Response: See Revised Drawing A407, attached to this Addendum.

REFER TO DRAWINGS

The following Drawing and Sketches are attached to this Addendum:

DRAWING NO.	TITLE
C-2.0	Demolition Plan
C-8.0	Details
A003	Architectural Site Plans and Details
A103	First and Second Floor Plans – Work Areas 'AC' & 'C'
A104	First and Second Floor Plans – Work Areas 'AA', 'AB', 'B1' & 'B2'
A308	Wall Sections and Details
A312	Wall Sections and Details
A407	Enlarged Plans & Interior Elevations - Cafeteria
A505	Stair & Ramp Details
A601	Door & Window Schedules, Types, Notes, & Details
A702	First and Second Floor Finish Plans – Work Area 'AC' & 'C'
A703	First and Second Floor Finish Plans – Work Area 'AA', 'AB' & 'B'

The following Drawings to be revised or corrected as follows:

DRAWING NO.	CHANGES AND CORRECTIONS
C-2.0, C-8.0	Delete the referenced drawing(s) in its/their entirety and substitute with the enclosed revised drawing(s).
A003, A103, A104, A308, A312, A407, A505, A601, A702, A703	Delete the referenced drawing(s) in its/their entirety and substitute with the enclosed revised drawing(s).
A201	At "KEYNOTE FINISH LEGEND", revise entry #2 to read as follows: 4" ARCHITCTURAL CMU (SMOOTH MOULDED) VENEER, STACKED BOND WITH EQUAL PIECES ON BOTH SIDES

REFER TO PROJECT MANUAL

NOTICE TO BIDDERS

In the sixth paragraph, change Sealed bids are due by Tuesday, February 3, 2026, 2:00 PM to read Sealed Bids are due by **Tuesday, February 10, 2026, 2:00 PM**.

REFER TO SPECIFICATIONS

TABLE OF CONTENTS

Under Part - 2 General Construction Work, add the following section:

09250 Gypsum Drywall, 16 pages.

BIDDER'S CHECKLIST

Delete entry reading "Prohibited Russia-Belarus Activities & Iran Investment Activities".

PART 1 – SECTION 01020 – ALLOWANCES

Page	Paragraph	
01020-2	1.2.A.1	Add new sub-paragraphs c, d and e as follows:

c. A sum of **$10,000.00** for abatement of hazardous materials that may be uncovered during the work.

d . A Unit cost allowance for brick delivered and stored at project site, as follows:

1) Modular Face Brick – Running Bond, including special shapes - $**1,000.00 per 1,000**

e. A sum of **$25,000.00** for receiving, unloading, handling and installing Owner furnished items, whether or not indicated on drawings.

PART 1 – SECTION 01151 – UNIT PRICES

Page	Paragraph	
01151-3	1.4	Add new item as follows:

Labor to receive, unload, and handle Owner-provided item from truck and install in location directed by Owner $_____laborer per hour

PART 1 - SECTION 01900 – GUARANTEES AND WARRANTIES

Page	Paragraph	
01900-9	1.2	Delete sub-paragraph CC in its entirety and substitute with the following:

CC. Carpet Tile as specified in Section 09685

1. Twenty (20) year excessive surface wear (loss of more than 10% by weight of face fiber), edge ravel, backing separation, shrinking, stretching and static electricity Warranty from the date of invoice.
2. Twenty (20) year - Antimicrobial Preservative Protection Warranty.
3. Special Project Warranty:
   a. In addition, a written special project warranty, executed by the Contractor and the Installer, agreeing to repair or replace carpet which fails in material or workmanship within a period of two (2) years, which starts at the date of substantial completion, without any cost to the Owner, and agreeing to repair or replace other defects beyond Contractor's / Installer's / Manufacturer's controls, as judged by the Architect, at Owner's expense at prevailing rates.
   b. TacTiles® carpet tile will not be adversely affected by defects in their materials or workmanship for a period of two (2) year from the date of invoice when used to install the appropriate Interface® carpet products.

PART 2 – SECTION 08415 – ALUMINUM STOREFRONT

Section 08415 – Aluminum Storefront footer – change 08410 to read 08415.

Page	Paragraph	
08410-6		Add new paragraph 2.9 as follows:

2.9 I**NSULATING PANELS:**

A. Provide "OMEGA-LITE"; Architectural Windows; Cap Industries, Inc.; or approved equal.

1. Overall Thickness: 1".

2. Exterior Face: 0.032 aluminum Kynar finish, Smooth or pebble-like surface as selected by the Architect from manufacturer's available full range of available types.
   a. Color: As selected by the Architect from manufacturer's available full range of colors.

3. Interior Face: Smooth aluminum primed painted: Off White or Colonial White.

4. Substrates: 5 mm corrugated polyallomer.

5. Core: Polystyrene 2.5 lbs density.

PART 2 – SECTION 09250 – GYPSUM DRYWALL

Add new Section 09250, attached to this Addendum.

PART 2 – SECTION 09685 – CARPET TILE

Delete Section 09685 in its entirety and substitute with the revised Specification Section 09685, attached to this Addendum.

PART 2 – SECTION 10900 – MISCELLANEOUS EQUIPMENT AND FURNISHINGS

Page	Paragraph	
10900-1	1.2.A	Add new sub-paragraph 2 as follows: 2 High-Security Key Box
10900-2	2	Add new paragraph 2.2 as follows: 2.2 HIGH-SECURITY KEY BOX B. Basis of Design: Provide "Knox-Box® - Series 3200", recessed, high-security key box as manufactured by Knox Co.; or approved equal. i. Color: As selected by Architect from manufacturer's standard colors / finishes C. Subject to compliance with requirements, manufacturers offering products and accessories which may be incorporated in the work include the following: i. TRAC-Vault" as manufactured by Supra a United Technologies Co. ii. Or approved equal.

PART 2 – SECTION 12495 – WINDOW ROLLER SHADES

Delete Section 12495 in its entirety and substitute with the revised Specification Section 12495, attached to this Addendum.

PART 3 – SECTION 051200 – STRUCTURAL STEEL FRAMING

Page	Paragraph	
051200-6	3.3.A	Revise subparagraph 1 to read as follows:

1. Upon completion of the project, any of the allowance work not used shall be credited to the Owner against the contract price at the rate of three dollars ($3.00) per pound

END OF ADDENDUM NO. 2

ADDENDUM NO. 2

BID PROPOSAL FORM

SINGLE OVERALL CONTRACT
COMMUNITY PARK ELEMENTARY SCHOOL

DPMC Classifications: C008 or C009 Prime Contractor
with C029, C030, C032, C047 & C066 Subcontractors

To: Princeton Public Schools
Board of Education
25 Valley Road, Princeton, NJ 08540

1. The undersigned, having familiarized themself with the local conditions affecting the cost of the work, the Drawings, the Specifications and other Bid Documents, as in the Advertisement for Bids thereto, for the **Additions and Renovations to Community Park Elementary School (FVHD#5516C)**, 372 Witherspoon Street, Princeton, NJ 08540, together with all work incidental thereto, in accordance with the requirements of the Drawings and Specifications prepared by Fraytak Veisz Hopkins Duthie, P.C., Architects/Planners, Trenton, New Jersey, hereby proposes to furnish all labor, materials and equipment required for all Work and as follows:

   CONTRACT NO. 1 - COMMUNITY PARK ES - BASE BID: All Work at the above referenced school, including applicable Allowances - Section 01020, in accordance with the requirements of Bid Documents. If written amount differs from the numerical figure, only the written amount will be accepted as the correct bid.

   TOTAL BASE BID INCLUDING ALLOWANCE: $_____
   (Numerical)

   _____
   (To be written or typed in-full)

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Submitted by:_____
(Firm Name)

2. **Alternate Proposal(s) - Section 01030** shall be quoted as additions to, deductions from or No Change (NC) to the Base Bid and shall be in accordance with the Specifications for Alternate Bid Work. If written amount differs from the numerical figure, only the written amount will be accepted as the correct bid.

Alternate Bid No. CP-1: Courtyard Improvements ADD $_____
(Numerical)

_____
(To be written or typed in full)

Alternate Bid No. CP-2: Serving Line Improvements ADD $_____
(Numerical)

_____
(To be written or typed in full)

Alternate Bid No. CP-3: Quartz Tile Flooring in Lieu of LVT at Cafeteria/Serving Area ADD $_____
(Numerical)

_____
(To be written or typed in full)

Alternate Bid No. CP-4: Ceiling & Lighting Replacement DEDUCT $_____
(Numerical)

_____
(To be written or typed in full)

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Submitted by:_____
(Firm Name)

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

Bulk rock excavation	$ **300.00** per cu. yd.
Trench or pit rock excavation	$ **400.00** per cu. yd.

UNIT PRICES - GENERAL CONSTRUCTION: Materials in Place.

Excavation (unsuitable soil)	$_____ per cu. yd.
Certified, clean compacted fill	$_____ per cu. yd.
Bituminous Paving (including subbase)	$_____ per sq. yd.
Concrete Walk / Pavement (including subbase)	$_____ per sq. ft.
Test Pits (per Section 02071)	$_____ per unit
Cement Based Self Leveling Underlayment per Section 03452	$_____ per sq. ft.
Replacement of existing damaged or deteriorated metal decking	$_____ per sq. ft.
Replacement of existing wet or deteriorated roof insulation board	$_____ per sq. ft.
Replacement of existing damaged or deteriorated wood nailers/blocking or framing, including removal of existing deteriorated wood, furnishing and installing new galvanized anchor bolts, expansion bolts at 4'-0" o.c. or nails through existing construction to remain:	$ **2.90** per board ft.
a. 2x4 for the above work	$_____ per lin. ft.
b. 2x6 for the above work	$_____ per lin. ft.
c. 2x8 for the above work	$_____ per lin. ft.
d. 2x10 for the above work	$_____ per lin. ft.
e. 2x12 for the above work	$_____ per lin. ft.
Labor to receive, unload, and handle Owner-provided item from truck and install in location directed by Owner	$_____ per laborer per hour

UNIT PRICES - PLUMBING & DRAINAGE & FIRE PROTECTION: Materials in Place.

Plumbing Item / Unit	
3″ cast iron pipe below grade	$_____ per lin. ft.
4″ cast iron pipe below grade	$_____ per lin. ft.
6″ cast iron pipe below grade	$_____ per lin. ft.
2" cast iron above grade	$_____ per lin. ft.
3" cast iron above grade	$_____ per lin. ft.
4" cast iron above grade	$_____ per lin. ft.
2-1/2″ Type 'L' copper tubing	$_____ per lin. ft.
3″ Type 'L' copper tubing	$_____ per lin. ft.

Submitted by:_____
(Firm Name)

2" piping insulation	$_____ per lin. ft.
4" piping insulation	$_____ per lin. ft.
1" black steel schedule 40 pipe	$_____ per lin. ft.
1-1/2" black steel schedule 40 pipe	$_____ per lin. ft.
2" black steel schedule 40 pipe	$_____ per lin. ft.
1" Ball valve	$_____ per unit
1-1/2" Ball valve	$_____ per unit
2" Ball valve	$_____ per unit
3″ Ball valve	$_____ per unit
Thermostatic mixing valve MV-1	$_____ per unit
Floor drain FD-1	$_____ per unit

Fire Protection Item / Unit

Sprinkler head with associated 1″ branch piping (approx. 5′-0″ length)	$_____ per unit

UNIT PRICES - HEATING AND VENTILATING: Materials in Place.

7/8″ Type 'L' Copper with brazed joints (refrigerant piping)	$_____ per lin. ft.
1/2″ Type 'L' Copper with brazed joints (refrigerant piping)	$_____ per lin. ft.
7/8″ Piping insulation (refrigerant piping)	$_____ per lin. ft.
1/2″ Piping insulation (refrigerant piping)	$_____ per lin. ft.
3/4″ Type 'L' Copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.
3/4" Ground source piping insulation	$_____ per lin. ft.
1″ Type 'L' Copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.
1" Ground source piping insulation	$_____ per lin. ft.
1-1/2″ Type 'L' copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.
1-1/2" Ground source piping insulation	$_____ per lin. ft.
2″ Type 'L' Copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.
2" Ground source piping insulation	$_____ per lin. ft.
2-1/2″ Type 'L' Copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.

Submitted by:_____
(Firm Name)

2-1/2" Ground source piping insulation	$_____ per lin. ft.
3″ Type 'L' Copper with brazed joints or Sch 40 Steel pipe, Class 150 w/ Threaded Joints (ground source water piping)	$_____ per lin. ft.
3" Ground source piping insulation	$_____ per lin. ft.
Condensate Pump	$_____ per unit
12" x 8" Volume Damper	$_____ per unit
24″ x 24″ Ceiling Diffuser	$_____ per unit
24″ x 24″ Ceiling Register	$_____ per unit
24″ x 12″ Ceiling Registers	$_____ per unit
24″ x 14″ Supply Grilles	$_____ per unit
46″ x 46″ Return Grilles	$_____ per unit
Unitary Controller	$_____ per unit
Thermostat	$_____ per unit
Ball Valve, under 1″	$_____ per unit
Ball Valve, 1″	$_____ per unit
Ball Valve, 1-1/2″	$_____ per unit
Ball Valve, 2″	$_____ per unit
Ball Valve, 2-1/2″	$_____ per unit
Ball Valve, 3″	$_____ per unit
Balancing Valve, 1″	$_____ per unit
Balancing Valve, 1 ½"	$_____ per unit
Balancing Valve, 2″	$_____ per unit
Balancing Valve, 2 ½″	$_____ per unit
Balancing Valve, 3″	$_____ per unit
Galvanized Steel Ductwork (Rectangular) 20" x 12"	$_____ per lb.
Single-Wall Round Ductwork 12" diameter	$_____ per lb.
Double-Wall Round Ductwork 12" diameter	$_____ per lb.
1-1/2" Mineral-Fiber Board Duct Insulation (Indoors)	$_____ per sq. ft.
2" Mineral-Fiber Blanket Duct wrap Insulation (Indoors)	$_____ per sq. ft.
2" Mineral-Fiber Board Duct Insulation (Outdoors)	$_____ per sq. ft.

Submitted by:_____
(Firm Name)

UNIT PRICES - ELECTRICAL: Materials in Place.

20A-1 Pole branch circuit installation 600V, including MC cable and termination.	$_____ per lin. ft.
20A-1 Pole branch circuit installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
30A-3 Pole branch circuit installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
50A-3 Pole branch circuit installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
60A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
70A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
80A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
90A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
100A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
150A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
200A-3 Pole feeder installation 600V, including EMT conduit, THHN wire and termination.	$_____ per lin. ft.
20A Tamper-resistant receptacle including back box, plate, conduit and wiring to the nearest device(20')	$_____ per unit
20A Tamper-resistant GFCI receptacle including back box, plate, conduit and wiring to the nearest device(20')	$_____ per unit
20A Single pole light switch including back box, plate, conduit and wiring to the nearest device(20')	$_____ per unit
20A Single pole three way light switch including back box, plate, conduit and wiring to the nearest device(20')	$_____ per unit
Fire Alarm smoke/heat detector including wiring, programming and testing.	$_____ per unit
Fire Alarm duct smoke detector including wiring, programming and testing.	$_____ per unit
Fire Alarm Horn/strobe including wiring, programming and testing.	$_____ per unit
Fire Alarm monitor/control module including wiring, programming and testing.	$_____ per unit
Fire Alarm door holder including wiring, programming and testing.	$_____ per unit

Submitted by:_____
(Firm Name)

Fire Alarm Pull station including wiring, programming and testing.	$_____ per unit
Fire Alarm Device Wire mesh device guard.	$_____ per unit
Junction Box and 3/4" Empty conduit with drag line and bushing at each end.	$_____ per lin. ft.
Junction Box and 1" Empty conduit with drag line and bushing at each end.	$_____ per lin. ft.
Junction Box and 2" Empty conduit with drag line and bushing at each end.	$_____ per lin. ft.
(1) Ceiling mounted occupancy sensor as indicated on Contract Drawings.	$_____ per unit
(1) Wall switch occupancy sensor as indicated on Contract Drawings.	$_____ per unit
Combination Voice & Data communication outlet including backbox, wall plate, conduit and Cat6 cable to IDF room.	$_____ per unit

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Submitted by:_____
(Firm Name)

4. Bidder hereby acknowledges receipt of the following Addenda:
   No Addenda Issued ☐
   Addendum No. 1 , issued 01-16-202 received _____(initial)
   Addendum No. ___, issued _____ received _____(initial)
   Addendum No. ___, issued _____ received _____(initial)
   Addendum No. ___, issued _____ received _____(initial)

5. In submitting this bid, it is understood that the right is reserved by the Owner to accept or to reject bids pursuant to N.J.S.A. 18A:18-22 and any bid that is non-responsive or submitted by a Bidder that is not responsible, and it is agreed that this bid may not be withdrawn for a period of sixty (60) days from the date set of the opening thereof.

6. Bid Security in the sum of _____($_____)
   in the form of _____ (Certified Check, Cashier's Check, or Bid Bond) is submitted herewith in accordance with the requirements of the Specifications.

7. The undersigned is an individual ( )
   a partnership ( )
   a corporation ( ) under the laws of the State of _____,
   having principal office in the _____ of _____, County
   of _____, and State of _____.

Respectfully Submitted,

_____
(Company Name, if Bidder is a company)

BIDDER'S SIGNATURE

_____
(Company Officer, if Bidder is a Corporation or LLC)

(Seal, if Corporation)

_____
Printed or Typed Name Title of Officer (if the Bidder is a Company)

_____
Address

_____
City, State, Zip Code

_____
Phone & Fax

_____
Dated

_____
Email Address

NOTE: SEE BIDDERS CHECKLIST

Submitted by: _____
(Firm Name)

SECTION 09250 - GYPSUM DRYWALL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Extent of each type of gypsum drywall construction required is indicated on the Drawings.

B. This Section includes the following types of gypsum board construction:

1. Gypsum drywall including screw-type metal support system
2. Gypsum backing board
3. Impact resistance gypsum wallboard
4. Water-resistant gypsum wallboard
5. Sound Insulation
6. Drywall finishing (joint tape and compound treatment)
7. Vinyl trim and accessories.
8. Resilient wall channels.
9. Exterior gypsum core sheathing and accessories
10. Vapor Retarder.
11. Knee Wall Brace Kit.

C. Related Sections:

1. Section 09900 - Painting

1.3 QUALITY ASSURANCE

A. Manufacturer: Obtain gypsum board products from a single manufacturer, or from manufacturers recommended by the prime manufacturer of gypsum boards.

B. Fire-Resistance Ratings: Where indicated, provide materials and construction which are identical to those of assemblies whose fire resistance rating has been determined per ASTM E 119 by a testing and inspecting organization acceptable to authorities having jurisdiction.

1. Provide fire-resistance-rated assemblies identical to those indicated by reference to GA File No's. in GA-600 "Fire Resistance Design Manual" or to design designations in UL "Fire Resistance Directory" or in listing of other testing and agencies acceptable to Authorities Having Jurisdiction.

C. Single Source Responsibility: Obtain each type of gypsum board and related joint treatment materials from a single manufacturer.

D. Structural Performance Characteristics for drywall shaft system: Provide drywall shaft systems designed and tested by manufacturer to withstand the following lateral design loadings (air

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pressures), applied transiently and cyclically, for maximum heights of partitions required, within the following deflection limits:

1. Lateral Loading: 5 psf.
2. Deflection Limit: 1/240 of partition height.

E. Fireblocking and Draftstopping: Comply with the International Building Code requirements for installation of fireblocking and / or draftstopping, to prevent the fire passage of flame and product of combustion through concealed spaces or openings in gypsum board systems, in the event of fire.

F. Provide self extinguishing vinyl trim accessories which do not support combustion once flame source is removed.

1.4 REFERENCES

A. ANSI/ASTM C 840 Gypsum Board Standard - Comply with applicable requirements for application and finishing of gypsum board, unless otherwise indicated.

B. ASTM C1396/C1396M Gypsum Wallboard (Standard, Type X, Flexible, Ceiling, Foil-Backed, Mold-Resistant)

C. ASTM C1178/C1178M Standard for Glass Mat Water-Resistant Gypsum Backing Panel

D. ASTM C754 Steel Framing Standard - Comply with applicable requirements for installation of steel framing for gypsum board)

E. ASTM C11 Gypsum and Related Building Materials and Systems

F. ASTM C1396/C1396M Impact Resistance Gypsum Wallboard and tested in accordance with ASTM C1629/C1629M

G. ASTM D1784 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPCV) Compounds

H. ASTM C475/C475M Joint Treatment Materials

I. ASTM D3678 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Interior-Profile Extrusions

J. ASTM C1047 Interior Trim

K. Application and Finishing of Gypsum Panel Products: GA-216

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product Specifications and installation instructions for each gypsum drywall component, including other data as may be required to show compliance with these Specifications.

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1. Provide product data for drywall shaft system.

2. Provide product data for impact resistance gypsum wallboard system.

B. Shop drawings: Submit shop drawings for wall metal stud framing for drywall shaft system and structural heavy gauge wall studs supporting other equipment, items, cabinets, etc.

1. Show layout, spacings, sizes, thicknesses, and types of metal framing, fabrication, fastening and anchorage details, including mechanical fasteners.

2. Show reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachments to other units of Work.

3. Indicate manufacturer's design thickness to meet structural performance requirements for each wall mounted item, equipment, cabinet, etc.

C. Samples: For the following products:

1. Trim Accessories: Full-size Sample in 12-inch- (300-mm-) long length for each trim accessory indicated.

1.6 DELIVERY, STORAGE, AND HANDLING

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

B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion and damage from construction traffic and other causes. Neatly stack gypsum boards flat to prevent sagging.

C. Handle gypsum boards to prevent damage to edges, ends, and surfaces. Do not bend or otherwise damage metal corner beads and trim.

1.7 PROJECT CONDITIONS

A. Environmental Conditions, General: Establish and maintain environmental conditions for application and finishing gypsum board to comply with ASTM C 840 and with gypsum board manufacturer's recommendations.

1. Minimum Room Temperatures: When ambient outdoor temperatures are below 55°F maintain continuous, comfortable building working temperature of not less than 55°F for 48 hours prior to application and continuously thereafter until drying is complete.

2. Ventilate building spaces as required to remove water in excess of that required for drying joint treatment material immediately after its application. Avoid drafts during dry, hot weather to prevent materials form drying too rapidly.

3. The gypsum drywall shall be installed only when the exterior walls have been erected, windows installed and the permanent roof is installed and in watertight condition to prevent the growth of mold. The Contractor shall not install gypsum drywall panels that

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are wet, have the indication of mold, including but not limited to: fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

B. Metal Support Systems:

1. Allied Structural Industries
2. Clark-Dietrich Building Systems
3. National Gypsum Company
4. Marino\WARE; a Div. of WARE Industries, Inc.
5. United States Gypsum Co. (USG)
6. Or approved equal.

C. Gypsum Boards and Related Products:

1. CertainTeed Gypsum.
2. Georgia-Pacific Corp.
3. Gold Bond Building Products Div., National Gypsum Co.
4. United States Gypsum Co.
5. Continental Building Products
6. Or approved equal.

D. Gypsum Core Sheathing:

1. Georgia-Pacific Corp.
2. United States Gypsum Co. (USG)
3. Continental Building Products
4. CertainTeed Gypsum.
5. Or approved equal.

E. Impact Resistance Gypsum Wallboard:

1. United States Gypsum Co. (USG)
2. National Gypsum Co.
3. Georgia-Pacific Gypsum, LLC
4. Continental Building Products
5. CertainTeed Gypsum.
6. Or approved equal.

F. Vinyl Trim

1. Trim-Tex,
2. Or approved equal.

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2.2 METAL SUPPORT MATERIALS

A. General: Provide components which comply with ASTM C754 for materials and sizes, unless otherwise indicated.

B. Ceiling Support Materials and Systems

1. General: Size ceiling support components to comply with ASTM C754 unless otherwise indicated.

2. Main Runners: Steel channels with rust inhibitive paint finish, hot or cold-rolled.

3. Hanger Wire: ASTM CA641, soft, Class 1 galvanized.

4. Hanger Anchorage Devices: Devices applicable to the indicated method of structural anchorage for ceiling hangers and whose suitability for use intended has been proven through standard construction practices or by certified test data. Size devices for 3x calculated load supported.

5. Furring Member: ASTM C645; 0.0179" minimum thickness of base metal, hat-shaped.

6. Furring Anchorages: 16 gauge galvanized wire ties, manufacturer's standard wire type clips, bolts, nails or screws as recommended by furring manufacturer and complying with C754.

7. Direct Suspension Systems: Manufacturer's standard zinc coated or painted steel system of furring runners, furring tees, and accessories designed for concealed support of gypsum drywall ceilings, of proper type for use intended.

C. Wall/Partition Support Materials

1. Studs ASTM C645, 25 gauge unless otherwise indicated. 20 gauge minimum at door jambs and wherever structural or other gauge studs are called for, for use with impact resistant type gypsum wallboard, and to comply with applicable published instructions and recommendations of gypsum board manufacturer or, if not available, of "Gypsum Construction Handbook" published by United States Gypsum Company.
   a. Depth of Section: 3-5/8 inch, unless indicated otherwise.
   b. Runners: Match studs; type recommended by stud manufacturer for floor and ceiling support of studs, and for vertical abutment of drywall work at other work.
   c. Provide structural heavy gauge studs and bracing to support loads of wall mounted items, equipment, cabinets, etc. coordinate with other trades for weight requirements and mounting locations.

2. Hemmed Leg Furring Channel Members: ASTM C645, 25 gauge hat-shaped.

3. Fasteners for Stud Members: Provide fasteners of type, material, size, recommended by furring manufacturer for the substrate and application indicated.

D. Metal Furring Support Materials

1. Roll-formed, hat-shaped sections made of 20-ga. Corrosion-resistant steel. Designed for

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screw attachment of gypsum panels. Size 7/8" x 2-9/16"; length 12', and to comply with applicable published instructions and recommendations of gypsum board manufacturer or, if not available, of "Gypsum Construction Handbook" published by United States Gypsum Company; or approved equal.

E. Knee Wall Brace Kit

1. Basis of Design: “SKB” Knee Brace Kit as manufactured by Pittcon Softforms® LLC; or approved equal.

2. The welded steel assembly consists of a 2" x 2" steel tube, 1/8" thick wall and a 3½" x 5" x 1/4" thick steel base plate with four (4) holes of 7/16" diameter. The assembly shall be painted with a flat black primer providing a corrosive resistant surface compatible with plaster, joint compounds and interior finishes.
   a. Manufacturer recommends anchoring the base plate using 3/8" x 3½" masonry fasteners with expanded shields for mounting in concrete floor.

2.3 GYPSUM BOARD

A. General: ASTM C1396, in maximum lengths available to minimize end to end joints.

1. Type: Type X for fire resistance rated assemblies, where indicated.

2. Edges: Tapered.

3. Thickness: 5/8 inch, unless otherwise indicated.

B. Gypsum Backing Board for Multi-Layer Applications: ASTM C1396 and as follows:

1. Type: Regular, unless otherwise indicated.

2. Edges: Manufacturer's standard.

3. Thickness: 5/8 inch where indicated.

C. Impact Resistance / Warer Resistance Gypsum Wallboard: ASTM C1629 level 3 (highest) for hard- and soft-body impact, and tested in accordance with ASTM C473 for moisture and mold resistance and ASTM D3273 for resistance to growth of mold on the surface of interior coatings. Mold Defense per ASTM D3273. Provide Type X; tapered edge, 5/8 inch thick, unless otherwise indicated. (Paintable)

1. Basis of Design: “Mold Tough VHI Firecode Core” High-Impact-Resistant Panels with Moisture and Mold Resistance; United States Gypsum Co.; or approved equal.

2. Where two layers of gypsum wallboard application is indicated, provide impact resistance type gypsum wallboard only for the exposed to view gypsum wallboard layer.

3. Subject to compliance with requirements of the Contract Documents, manufacturers offering products which may be incorporated in work include the following:
   a. “Hi-Impact XP”, by National Gypsum.

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b. “Extreme Impact Resistant Gypsum Drywall, by CertainTeed Gypsum.
c. Or approved equal.

4. Use as a tile substrate is limited to tile installed according to the most current TCNA and ANSI specifications. Please consult with the adhesive and tile manufacturers for their recommendations for maximum size and weight parameters for use with gypsum board.

2.4 GYPSUM BOARD CEILING SUSPENSION SYSTEM

A. Heavy-Duty Drywall Furring Tee's: Provide heavy-duty furring system which comply with ASTM C645 and has G40 minimum protective for hot-dipped galvanized process and .0179 steel thickness before application of protective coating.

1. Structural Classification: Comply with ASTM C635 for heavy-duty system.

2. Provide manufacturer's standard suspension system accessories required for each condition indicated on the contract documents.

B. The following system indicated, is the "Basis of Design", other manufacturer's will be considered for substitution, provided they comply with the Bid Documents and are submitted as per the requirements of AIA A232 and Section 00800:

1. "Perimeter Solutions"; Armstrong World Industries, Inc.; “Drywall Suspension System”; USG Corp.; or approved equal.

2. Main Beam: Double-web steel construction, hot dipped galvanized, 1-1/2" web height with rectangular top bulb, and prefinished 1-1/2" flange; (Item No. HD8906). For fire rated ceilings provide main beam formed to include integral splice for expansion relief. Web is to be formed to receive override cross tee.

3. Primary Furring Cross Tees: Double-web, hot-dipped galvanized steel, 1-1/2" web height with rectangular bulb and hot-dipped 1-1/2" knurled flange.

4. Secondary Framing Cross Tees: Double-web, hot-dipped galvanized steel, 1-1/2" web height with rectangular bulb and hot-dipped 15/16" flange.

5. Wall Moldings: Manufacturer’s standard hot-dipped galvanized steel angles or channels as selected by the Architect.

6. Hanger Wire: Hot dipped galvanized steel, 12 gauge, tested to exceed 500 lbs. pull out force.

7. Accessories: Manufacturer’s standard angle clips, direct ceiling clips, acoustical transition clips and other accessories required to allow for use of complete grid system at indicated transitions for walls and ceilings.

2.5 GYPSUM CORE SHEATHING SYSTEM

A. Manufacturer:

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1. The following system indicated, is the "Basis of Design", other manufacturer's will be considered, provided they comply with AIA A232 and Section 00800:
    a. Basis of Design: "Dens-Glass Gold, Firestop Type X"; Georgia-Pacific Corp.; or approved equal.
    b. Subject to compliance with requirements of the Contract Documents, manufacturers offering products which may be incorporated in Work include the following:
        1) “Securock Glas-Mat Sheathing, Firecode Core Type “X”; by United States Gypsum Comp.
        2) “DensGlass Gold” by Georgia-Pacific.
        3) “DensElement” Barrier System by Georgia-Pacific.
        4) Exp Sheathing, by National Gypsum.
        5) Or approved equal.

B. Sheathing: Gypsum sheathing, complying with ASTM C1396.

1. Type X, noncombustible gypsum sheathing board core with fiberglass mattes both sides.
    a. Fire resistance: ASTM E136
        1) Flame Spread: 0, as per ASTM E84.
        2) Smoke Developed: 0, as per ASTM E84.

2. Edges and ends: Manufacturer’s standard.

3. Thickness: 5/8 inch.

4. Size: 4 feet by 9 feet, or 4 feet by 10 feet, as required for coordination with framing.

5. Fasteners: ASTM C 954; self-drilling, self-tapping, bugle head galvanized or cadmium-plated steel screws.

6. Joint tape: Manufacturer’s approved types, self-adhering fiberglass mesh compatible with sheathing panels.

7. Joint Sealant:
    a. Types approved by manufacturer of sheathing panels, for long term joint protection.
        1) Basis of Design: “Elmer’s Siliconized Acrylic Lates”, Borden, Inc.; or approved equal.
        2) Warranty: **Twenty (20) year** manufacturer’s standard warranty.

8. Provide miscellaneous materials as produced or recommended by manufacturer of gypsum sheathing products.

9. Warranty: Manufacturer’s standard warranty against material defects.
    a. Warranty period: **Five (5) years**, start at approved date for substantial completion.

C. Silicone Emulsion Sealant: Product complying with ASTM C834, compatible with sealant tape and gypsum sheathing, recommended by manufacturers of both sheathing and tape for use with glass-fiber sheathing tape and for covering exposed fasteners.

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1. Product: Subject to compliance with requirements, provide Elmer's Siliconized Acrylic Latex Caulk; Borden, Inc.; or approved equal.
   a. Warranty: **Twenty (20) year** manufacturer's standard warranty.

2.6 VAPOR RETARDER

A. Polyethylene sheet, 8 mil thick, formed by spinning continuous strands of fine, high-density polyethylene interconnected fibers and bonding them together by heat and pressure; incorporating an additive to provide ultralight resistance for up to 120 days; with a water-vapor transmission rate equaling 669 g in 24 hours through 1 sq. m of surface per ASTM E96 procedure B and flame-spread and smoke-developed ratings of 0 and 25, respectively, per ASTM E84.

2.7 TRIM ACCESSORIES

A. General: Provide manufacturer's standard trim accessories of types indicated for drywall Work, formed of galvanized steel unless otherwise indicated, with either knurled and perforated or expanded flanges for nailing or stapling, and beaded for concealment of flanges in joint compound. Provide corner beads, L-type edge trim beads, J-type edge trim beads, special L-kerf type edge trim beads, and one-piece control joint beads.

B. Semi-Finishing Type: Manufacturer's standard trim units which are not to be finished with joint compound (non-beaded), where indicated.

C. Architectural 'L' Bead trim pieces: # AS3310 (arch) and #AS3299 - 'L' bead tear away.

D. Resilient Wall Channels: Manufacturer's standard resilient channel made of 25-gauge corrosion-resistant steel, pre-punched holes at 4" o.c. in the flange facilitate screw attachment to framing. Channel size: 12' x ½" x 2½".

E. Corner Guards: Provide corner guards consisting of a rigid PVC corner guard that installs over any standard plastic or metal corner bead to protect the corner from abrasion, impacts and damage. Corner guards install over 90º finished corners and provides high impact corner protection in 4' / 8' lengths. Install using adhesive caulk. Install at all outside corners of gypsum board partitions. Install after partitions have been painted. Color as selected by Architect from manufacturers standard colors.

   1. Basis of Design: "1-1/2" Corner Guards" as manufactured by Trim-Tex Drywall Products, Lincolnwood, IL, Tel. #800.874.2333 / 847.679.3000; or approved equal.

2.8 JOINT TREATMENT MATERIALS (GYPSUM BOARD APPLICATION)

A. General: Provide materials complying with ASTM C475, ASTM C840, and recommendations of manufacturer of both gypsum board and joint treatment materials for the application indicated.

B. Joint Tape: Manufacturer's recommended types for indicated applications. Use types compatible with joint compounds.

C. Joint Compounds: Provide manufacturer's recommended types for indicated applications.

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1. For interior repair and patching work, provide chemical-hardening-type for bedding and filling, ready-mixed vinyl type or vinyl type powder type for topping.

2.9 MISCELLANEOUS MATERIALS

A. General: Provide auxiliary materials for gypsum drywall construction which comply with referenced standards and the recommendations of the manufacturer of the gypsum board.

B. Gypsum Board Screws: ASTM C954 or ASTM C1002.

C. Acoustical Sealant: Water base type, non-drying, non-bleeding, non-staining type; permanently elastic, as recommended by gypsum board manufacturer.

1. Acoustical Sealant for Exposed and Concealed Joints: Nonsag, paintable, nonstaining, latex sealant, [with a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24), complying with ASTM C 834 that effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E90.

2. Acoustical Sealant for Concealed Joints: Nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant, with a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24), recommended for sealing interior concealed joints to reduce airborne sound transmission.

2.10 SOUND ATTENUATION BLANKETS

A. Products shall be in accordance with ASTM C665-84, Type I semi-rigid unfaced mineral fiber blanket, Class 25 flame spread, thickness as indicated, and/or to achieve a minimum of STC 50 rating for indicated assemblies.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates to which drywall construction attaches or abuts, preset hollow metal frames, cast-in-anchors, and structural framing, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of drywall construction. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION OF METAL SUPPORT SYSTEMS

A. Ceiling Anchorages: Coordinate installation of ceiling suspension system with installation of overhead structural systems to ensure that inserts and other structural anchorage provisions have been installed to receive ceiling anchors in a manner that will develop their full strength and at spacing required to support ceiling.

1. Furnish concrete inserts and other devices indicated, to other trades for installation well in advance of time needed for coordination with other construction.

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3.3 INSTALLATION OF METAL SUPPORT SYSTEMS

A. Do not bridge building expansion and control joints with steel framing or furring members; independently frame both sides of joints with framing or furring members or as indicated.

B. Provide furring and shims as required to install new Work over existing substrates so that new Work will be installed plumb. level and true.

C. Ceiling Support Suspension Systems

1. Secure hangers to structural support by anchorage devices or fasteners.

2. Space main runners 4'-0" o.c. and space hangers 4'-0" o.c. along runners, except as otherwise shown.

3. Level main runners to a tolerance of 1/4" in 12'-0", measured both lengthwise on each runner and transversely between parallel runners.

4. Wire-tie or clip furring members to main runners and to other structural supports as indicated.

5. Direct-hung Metal Support System: Attach perimeter wall track or angle wherever support system meets vertical surfaces. Mechanically join support members to each other and butt-cut to fit into wall track.

6. Space furring member 16" o.c. except as otherwise indicated.

7. Install auxiliary framing at termination of drywall Work, and at openings for light fixtures and similar Work, as required for support of both the drywall construction and other Work indicated for support thereon.

D. Wall-Partition Support Systems:

1. Install supplementary framing, blocking and bracing at terminations in the Work and for support of fixtures, equipment services, heavy trim, furnishings, and similar Work to comply with details indicated or, if not otherwise indicated, to comply with applicable published recommendations of gypsum board manufacturer or, if not available, of "Gypsum Construction Handbook" published by United States Gypsum Company.

2. Isolate non-load bearing steel stud system from transfer of structural loading to system, both horizontally and vertically. Provide slip or cushioned type joints to attain lateral support and avoid axial loading.
   a. Install single deep-leg deflection tracks and anchor to building structure.
   b. Connect drift clips to cold-formed metal framing and anchor to building structure.

3. Install runners tracks at floors, ceilings and structural walls and columns where gypsum drywall stud system abuts other Work, except as otherwise indicated. Ramset to precast plank.

4. Extend partition stud system through acoustical ceilings and elsewhere as indicated to the structural support and substrate above the ceiling.

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5. Frame door openings with vertical studs securely attached by screws at each jamb either directly to frames or to jamb anchor clips on door frame; install runner track sections (for jack studs) at head and secure to jamb studs.

6. Space studs 16 inches o.c. except as otherwise indicated.

7. Extend vertical jamb studs through suspended ceilings and attach to underside of floor or roof structure above.

8. Frame openings other than door openings in same manner as required for door openings; and install framing below sills of openings to match framing required above door heads.

9. Provide runner tracks of same gauge as jamb studs. Space jack studs same as partition studs.

10. Cut studs ½" short of full height to provide perimeter relief.

11. Do not fasten studs to top track to allow independent movement of studs and track.

12. Door jambs:
    a. Install double 20 gauge studs at each jamb for all doors.
    b. Space wall furring members 16 inches o.c. except as otherwise indicated.

3.4 APPLICATION AND FINISHING OF GYPSUM BOARD, GENERAL

A. Pre-Installation Conference: Meet at the project site with the installers of related work and review the coordination and sequencing of Work to ensure that everything to be concealed by gypsum drywall has been accomplished, and that chases, access panels, openings, supplementary framing and blocking and similar provisions have been completed.

B. Install sound attenuation blankets at all partitions prior to gypsum board unless readily installed after board has been installed.

C. Locate exposed end-butt joints as far from center of walls and ceilings as possible, and stagger not less than 24 inches in alternate courses of board.

D. Install ceiling boards across framing in the manner which minimizes the number of end-butt joints, and which avoids end joints in the central area of each ceiling. Stagger end joints at least 24 inches.

E. Install wall/partition boards in manner which minimizes the number of end-butt joints or avoids them entirely where possible.

F. Install exposed gypsum board with face side out. Do not install imperfect, damaged or damp boards. Butt boards together for a light contact at edges and ends with not more than 1/16 inch open space between boards. Do not force into place.

G. Locate either edge or end joints over supports, except in horizontal applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Position boards so that like edges abut, tapered edges against tapered edges and mill-cut or

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field-cut ends against mill-cut or field-cut ends. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.

H. Attach gypsum board to framing and blocking provided for additional support at openings and cutouts.

I. Cover both faces of steel stud partition framing with gypsum board in concealed spaces (above ceilings, etc.)

J. Form control joints and expansion joints at locations indicated (@ 30'-0" o.c. or 900 sf), with space between edges of boards, prepared to receive trim accessories.

K. Isolate perimeter of non-load-bearing drywall partitions at structural abutments. Provide 1/4 inch to ½ inch space and trim edge with "U" bead edge trim. Seal joints with acoustical sealant.

L. Floating Construction: Where feasible, including where recommended by manufacturer, install gypsum board over wood framing, with "floating" internal corner construction.

M. Space fasteners in gypsum boards in accordance with referenced gypsum board application and finishing standard and manufacturer's recommendations.

3.5 METHODS OF GYPSUM BOARD APPLICATION

A. Single-Layer Application: Install gypsum wallboard as follows:

1. On ceilings apply gypsum board prior to wall/partition board application to the greatest extent possible.

2. On partitions/walls apply gypsum board vertically (parallel to framing), unless otherwise indicated, and provide sheet lengths which will minimize end joints.

B. Double-Layer Application: Install gypsum backing board for base layer and exposed gypsum board for face layer as follows:

1. On partitions/ walls apply base layer and face layers in accordance with referenced standards and manufacturers recommendations.

2. Fastening Methods: Apply base layer of gypsum board and face layer to base layer as follows:
   a. Fasten base layers with screws and face layer with adhesive and supplementary fasteners, except where both layers are fastened separately to supports with screws where required for fire rated assemblies.

3.6 INSTALLATION OF DRYWALL TRIM ACCESSORIES

A. General: Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges to comply with manufacturer's recommendations.

B. Install corner beads at external corners.

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C. Install metal edge trim whenever edge of gypsum board would otherwise be exposed or semi-exposed, and except where plastic trim is indicated. Provide type with face flange to receive joint compound. Install "L" type trim where drywall construction is tightly abutted to other construction and install special kerfed type where other work is kerfed to receive long leg of "L" type trim. Install U-type trim where edge is exposed, revealed, gasketed, or sealant-filled (including expansion joints).

1. Install J-type semi-finishing trim where indicated, and where exterior gypsum board edges are not covered by applied moldings.

D. Install metal control joint (beaded type) where indicated or required.

3.7 FINISHING OF DRYWALL

A. General: Apply joint treatment at gypsum board joints (both directions); flanges of corner bead, edge trim, and control joints; penetrations; fastener heads, surface defects and elsewhere as required to prepare work for decoration.

B. Prefill open joints and rounded or beveled edges, if any, using setting-type joint compound.

C. Apply joint tape at joints between gypsum boards, except where trim accessories are indicated.

D. Apply joint compounds in 3 coats (not including prefill of openings in base), and sand between last 2 coats and after last coat.

E. Gypsum Board Finish Levels: Finish panels to levels indicated below, according to ASTM C11, ASTM C 840 and GA-216:

1. **Level 1**: All joints and interior angles shall have tape set in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable. In plenum areas above the ceiling, attics, areas concealed in the building (does not typically meet fire-resistant assembly requirements).

2. **Level 2**: All joints and interior angles shall have tape embedded in joint compound and wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Fastener heads and accessories shall be free of excess joint compound. Tool marks and ridges are acceptable. Joint compound applied over the body of the tape at the time of tape embedment shall be considered a separate coat of joint compound and shall satisfy the condition of this level. In garages, warehouse storage areas, and other similar areas where the final surface appearance is not of concern, Level 2 finish is the recommendation.

3. **Level 5**: All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. A thin skim coat of joint compound trowel applied,

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or a material manufactured especially for this purpose and applied in accordance with manufacturer's recommendations, applied to the entire surface. The surface shall be free of tool marks and ridges. Finish for areas that are to receive gloss, semi-gloss, enamel or non-textured flat paints.

3.8 GYPSUM SHEATHING INSTALLATION

A. General: Install gypsum sheathing board according to manufacturer's instructions and GA-253 "Application of Gypsum Sheathing."

B. Install tongue-and-groove gypsum sheathing horizontally with long edges at right angles to studs with V-grooved edge down and tongue edge up. Interlock tongue with groove to bring long edges in contact with edges of adjacent board without forcing. Abut ends of boards over centers of studs and stagger end joints. Fasten gypsum sheathing board to framing with self-drilling, bugle-head screws, as follows:

C. Install square end and edged sheathing vertically with long edges parallel to, and centered over, studs. Install solid blocking where end joints do not bear against framing sills or track. Fasten gypsum sheathing board to perimeter framing and to each stud with self-drilling, bugle-head screws, located a minimum of 3/8 inch (9.5 mm) from ends and edges of board units, as follows:

1. Space fasteners to comply with manufacturer's recommendations.

D. Sheathing Tape: Apply sheathing tape to joints in sheathing; overlap tape by not less than the tape width at joint intersections.

1. For glass-fiber tape, apply approximately a 3/8-inch (9.5-mm) bead of siliconized emulsion sealant to tapes along joints and embed sealant into tapes along their entire surface with a trowel. In addition, apply sealant with a trowel to each exposed fastener so that fasteners are completely covered.

3.9 IMPACT RESISTANCE GYPSUM WALLBOARD INSTALLATION

A. General: Install fiber reinforced gypsum wallboard according to manufacturer's instructions and GA-216 "Application and Finishing of Gypsum Board."

1. Nails and Screws: Corrosion resistant; ASTM C 840.

2. Adhesives: Manufacturer's approved adhesive types.

3. Accessories: Similar to indicated gypsum wallboard application.

4. Joint Tape, Taping Compound and Finishing Compound: Comply with ASTM C 475.

3.10 VAPOR BARRIER INSTALLATION

A. Installation of Vapor Retarder:

1. General: Install polyethylene vapor retarder on interior side of cold metal framing members of exterior insulated walls members of exterior insulated walls, to comply

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with the following requirements:

a. Extend vapor retarder to extremities of exterior insulated walls and to cover miscellaneous voids in insulated substrate, including those which stuffed with loose thermal insulation.
b. Place vertical joints in vapor retarders over framing by lapping not less than two (2) wall studs. Fasten vapor retarders to framing at top, end, and bottom edges, at perimeter of wall openings, and lap joints; space fasteners at 16 inches on center.
c. Seal all joints in vapor retarder including joints caused by pipes, conduits, electrical boxes and similar items penetrating vapor retarders with cloth or aluminized tape which bonds permanently to vapor retarder.
d. Repair any tears or punctures and seal all joints in vapor retarder immediately before concealment by application of gypsum board or other construction.

3.11 CLEANING AND PROTECTION

A. Remove temporary coverings used to protect other work.

B. Provide final protection and maintain conditions, in a manner suitable to Installer, which ensures gypsum drywall construction being without damage or deterioration at time of Substantial Completion.

END OF SECTION 09250

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SECTION 09685 - CARPET TILE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

B. Related Sections:

1. Section 01455 - Concrete In-situ Relative Humidity and pH Testing.

2. Section 03300 - Concrete Work.

3. Section 03452 - Cement Based Self-Level Underlayment.

4. Section 09650 - Resilient Flooring, for rubber base.

1.2 SUMMARY

A. Extent, location and details of Collection and type of carpet tile is indicated on the drawings.

B. Work of this section includes furnishing and installation of carpet tile, adhesives and accessories.

1.3 DEFINITIONS

A. Commercial Carpet: Carpet intended for use in commercial and public spaces, with construction, fire ratings, static control and appearance appropriate for this use.

1.4 REFERENCES

A. American Association of Textile Chemists and Colorists (AATCC):

1. AATCC 16: Test Method of Colorfastness to Light.

2. ATTCC 134: Test Method for Electrostatic Propensity of Carpets.

3. AATCC 174: Antimicrobial Activity Assessment of Carpets.

B. American Society for Testing and Materials (ASTM):

1. ASTM E 648: Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

2. ASTM E 662: Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.

3. ASTM E 2471: Standard Test Method for Using Seeded-Agar for the Screening Assessment of Antimicrobial Activity In Carpets

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1.5 PERFORMANCE REQUIREMENTS

A. Comply with the following general performance requirements:

1. Radiant Panel: ASTM E-648: Class 1
2. Smoke Density: ASTM E-662 ≤450
3. Static: AATCC - 134, <:3.0 KV
4. Lightfastness: AATCC 16 - E, ≥ 4.0 @ 60 @ AFU's
5. Indoor Air Quality: Green Label Plus #GLP0820

B. Comply with the following special performance requirements:

1. Carpet must be square, 4 hole cross-section.
2. Carpet must be 100% Recycled Content Nylon.
3. Carpet must have permanent anti-static fiber.
4. Carpet must have Soil Protection.
5. Carpet must be 100% Solution Dye.

C. Warranty Performance Requirements:

1. **Twenty (20) year** excessive surface wear (loss of more than 10% by weight of face fiber), edge ravel, backing separation, shrinking, stretching and static electricity Warranty from the date of invoice.

2. **Twenty (20) year** - Antimicrobial Preservative Protection Warranty.

3. **Special Project Warranty:**
   a. In addition, a written special project warranty, executed by the Contractor and the Installer, agreeing to repair or replace carpet which fails in material or workmanship within a period of **two (2) years**, which starts at the date of substantial completion, without any cost to the Owner, and agreeing to repair or replace other defects beyond Contractor's / Installer's / Manufacturer's controls, as judged by the Architect, at Owner's expense at prevailing rates.
   b. TacTiles® carpet tile will not be adversely affected by defects in their materials or workmanship for a period of **two (2) year** from the date of invoice when used to install the appropriate Interface® carpet products.

4. Refer to Section 01900 - Warrantees and Guarantees, which include but not limited to the following requirements:
   a. Excessive wear,
   b. Edge ravel,
   c. Backing separation,
   d. Shrinking,
   e. Stretching,
   f. Cupping,
   g. Doming,
   h. Static electricity,
   i. Antimicrobial effectiveness,
   j. Excessive color loss.

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1.6 SUBMITTALS

A. Manufacturer's Data: Submit manufacturer's product literature and installation instructions for each type of carpeting material and installation accessory required. Include methods of installation for each type of substrate.

1. Submit written data on physical characteristics, durability, resistance to fading and flame resistance characteristics and showing compliance with the contract requirements, including independent laboratory test reports.

2. Include manufacturer's recommended specifications for primer, adhesive and installation instructions.

B. Fiber Requirements: Submit certification from the fiber producer verifying the following:

1. Use of the specified fiber in the submitted carpet product.

2. Must have federally registered Branded trademark.

C. Certificate of Compliance:

1. Submit certified test reports that carpet meets all the performance requirements stated above in paragraph 1.4 (above) Performance requirements. Submit certified test reports that carpet meets all performance criteria.

D. Samples:

1. Submit two carpet samples 6" x 8" of each type, color, and pattern of carpet materials required. Submit two samples, 6" in lengths of edge guard stripping.

2. Any alternates to specified products must be submitted for approval by the Architect after project award.

3. Final Sample Submittal:
   a. Submit two (2) sets of samples for each carpet type.
   b. No carpet shipments are permitted until acceptance of final samples is given by the Architect / Owner.
   c. Samples submitted are assumed to be the manufacturer's best obtainable match to the carpet described under Materials Section.

E. Shop Drawings:

1. For carpeted areas submit shop drawings showing installation of carpeting, seam diagram, pattern direction, necessary installation accessories, and provisions for work of other trades. Show location of different patterns or styles of carpet. Also show locations of any threshold conditions.

2. The Contractor will supply reproducible prints on request, to facilitate shop drawing preparation.

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F. Maintenance Manual:

1. Within sixty (60) days of awarding the Contract, submit two (2) copies of carpet manufacturer's maintenance manual, including his recommendations for the care, cleaning and maintenance programs of each type of carpeting.

G. Recycling, Energy Conservation, and Reclamation Programs:

1. Submit manufacturer's written certifications that all indicated programs are established and in full effect at the time of bidding.

H. Testing of Substrate:

1. Submit test reports of testing the concrete or other floor substrate, indicating compliance with manufacturer's requirements for moisture and alkalinity percentage of contents. Tests shall be performed in accordance with requirements of Section 01455.

I. Warranties:

1. Submit Warranties as described in paragraph 1.5 (above).

J. Closeout Submittals:

1. Maintenance Data: Include maintenance procedures, recommended cleaning and stain removal materials, and recommended cleaning schedule. Include product data and Safety Data Sheets (SDS) for cleaning and stain-removal materials.

2. Installation Instructions: Include detailed installation procedures. Include modular installation procedures, adhesive types, trowel sizes, spread rates, open times, and Safety Data Sheets (SDS) for all modular adhesives.

3. Warranties and Performance Certifications:
   a. Submit written warranties for all products as well as Performance testing results on all items included in Warranty section and Performance section of this specification.

1.7 QUALITY ASSURANCE

A. Single Source Responsibility: Provide products from a single manufacturer.

B. Warranties must be manufacturer's standard and not job specific.

C. All styles must come from the same manufacturer.

D. Carpet must be 100% Recycled Content Nylon

E. Do not install carpet until areas have been fully enclosed and environmental conditions have reached the levels indicated during occupancy.

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F. Maintain ambient temperature and humidity conditions during and after installation of carpet at levels indicated during occupancy.

G. Allow carpet to reach room temperature or minimum temperature recommended by manufacturer before beginning installation.

H. Protect adhesives from freezing. Follow manufacturer's recommendations for minimum temperatures to which adhesives are exposed.

I. IAQ Requirements, Green Label: All products must be CRI Green Label Plus Certified.

J. Carpet must be 100% recyclable.

1.8 QUALIFICATIONS

A. Manufacturer:

1. Company specializing in manufacturing Commercial Carpet with a recommended minimum five (5) years of documented experience and has been in continuous operation and using technology that has been in use for a recommended ten (10) years.

2. The manufacturer must agree to provide on-site supervision during the start up phase of installation without any additional cost to the Owner.
   a. The manufacturer shall provide the Architect / Construction Manager with written documentation of locations within the project that were supervised by the manufacturer.
   b. Manufacturer shall notify the Architect / Construction Manager and the General Construction Work Contractor if installation instructions are not completely followed.

3. The manufacturer must agree to provide a Reclamation Program. Written documentation, indicating that this program is in effect with proof that the mechanics of the program is available at the time of the bid.

B. Installer:

1. Company specializing in installing carpet with a recommended minimum five (5) years of documented experience approved by the manufacturer, and participation in manufacturer's installation programs including responsible carpet removal.
   a. The installation of the carpet must be guaranteed by the manufacturer of the carpet.
   b. Installation must be performed by an installer that is pre-approved in writing by the manufacturer of the carpet.
   c. The agreement between the manufacturer and the installer must specifically address all installation procedures and materials to be used with the specified warranties.

2. Installer shall follow all installation procedures recommended by the manufacturer and use only materials supplied by the manufacturer to assure obtaining required warranties offered by the manufacturer.

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C. Indoor Air Quality Testing:

1. Submit testing reports furnished by an independent testing laboratory with manufacturers' certification attesting that all carpet supplied for this project have been tested and passed the Indoor Air Quality Testing requirements established by the Carpet and Rug Institute (CRI), Green Label Program for VOC's, which do not exceed the established emission levels. Likewise, the adhesives to be used for installation of the carpet have been tested and determined to be in compliance with the CRI Indoor Air Quality Testing Program requirements.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in original factory original wrappings, clearly labeled with identification of manufacturer, brand name, quality or grade, fire hazard classification, and lot number.

B. Store materials in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity; laid flat, blocked off ground to prevent sagging and warping.

C. Comply with instructions and recommendations of manufacturer for special delivery, storage, and handling requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide "On Line Collection" for Color Types 2, 3, 4 and 5 carpet tile, as manufactured by InterfaceFLOR; or approved equal.

1.	Type:	Tufted Textured Loop.
2.	Face Yarn:	100% Recycled Content Nylon
3.	Color System:	100% Solution Dyed.
4.	Yarn Weight:	22.0 ounces per square yard.
5.	Pile Density:	6,146 ounces per cubic yard
6.	Backing Material:	GlasBac™
7.	Pile Thickness:	0.12".
8.	Stitches:	9/in.
9.	Size:	9.845 in. x 39.38 in.
10.	Soil/Stain Protection:	Protekt²®.
11.	Preservative Protection:	Intersept® antimicrobial
12.	Preservative Efficacy:	(AATCC 174 Parts 2&3) 99% Reduction/No Mold 7 Days. (ASTM E-2471) Complete Inhibition.
13.	Smoke Density:	ASTM E-662 ≤450
14.	Static Test:	(AATCC - 134) <3.0 KV
15.	Flooring Radiant Panel:	ASTM E-648 Passes.
16.	Indoor Air Quality:	Green Label Plus #GLP0820.
17.	Environmental Specifications:	
	a. Total Recycled Content	69.26%
	b. Recycled Content (Pre Consumer)	58.14%
	c. Recycled Content (Post Consumer)	11.12%

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d. Other Environmental Claims: Certified Carbon Neutral Floors™
Free of Added Heavy Metals, Formaldehyde, Flurinated Chemicals (PFAS), and Halogenated Flame Retardants.

e. End of Life: Carpet to Carpet Recycling through ReEntry®

18. Lightfastness: (AATCC 16-E) ≥4.0 @ 60 AFU's
19. Static: (AATCC-134) <3.0 KV
21. Traffic Classification: Heavy.
20. Warranty: Manufacturer's standard - **Twenty (20) year** (Educational) from the date of invoice. .

Special Project Warranties: In addition, a written special project warranty, executed by the Contractor and the Installer, agreeing to repair or replace carpet which fails in material or workmanship within a period of **two (2) years**, which starts at the date of substantial completion, without any cost to the Owner, and agreeing to repair or replace other defects beyond Contractor's/ Installer's / Manufacturer's controls, as judged by the Architect, at Owner's expense at prevailing rates.

TacTiles® carpet tile will not be adversely affected by defects in their materials or workmanship for a period of **two (2) years** from the date of invoice when used to install the appropriate Interface® carpet products.

B. Provide "Offline Collection" for Color Type 1 carpet tile, as manufactured by InterfaceFLOR; or approved equal.

1. Type: Tufted Textured Loop.
2. Face Yarn: 100% Recycled Content Nylon
8. Color System: 100% Solution Dyed.
9. Yarn Weight: 19.0 ounces per square yard.
10. Pile Density: 7,355 ounces per cubic yard
11. Backing Material: GlasBac™
12. Pile Thickness: 0.09".
8. Stitches: 8.5/in.
9. Size: 9.845 in. x 39.38 in.
10. Soil/Stain Protection: Protekt²®.
11. Preservative Protection: Intersept® antimicrobial
12. Preservative Efficacy: (AATCC 174 Parts 2&3) 99% Reduction/No Mold 7 Days.
(ASTM E-2471) Complete Inhibition.
13. Smoke Density: ASTM E-662 ≤450
14. Static Test: (AATCC - 134) <3.0 KV
15. Flooring Radiant Panel: ASTM E-648 Passes.
16. Indoor Air Quality: Green Label Plus #GLP0820.
17. Environmental Specifications:
    a. Total Recycled Content 69.26%
    b. Recycled Content (Pre Consumer) 58.36%

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c. Recycled Content (Post Consumer) 10.31%
d. Other Environmental Claims: Certified Carbon Neutral Floors™
Free of Added Heavy Metals, Formaldehyde, Flurinated Chemicals (PFAS), and Halogenated Flame Retardants.
e. End of Life: Carpet to Carpet Recycling through ReEntry®

18. Lightfastness: (AATCC 16-E) ≥4.0 @ 60 AFU's
19. Static: (AATCC-134) <3.0 KV
21. Traffic Classification: Severe.
20. Warranty: Manufacturer's standard - **Twenty (20) year** (Educational) from the date of invoice. .

Special Project Warranties: In addition, a written special project warranty, executed by the Contractor and the Installer, agreeing to repair or replace carpet which fails in material or workmanship within a period of **two (2) years**, which starts at the date of substantial completion, without any cost to the Owner, and agreeing to repair or replace other defects beyond Contractor's/ Installer's / Manufacturer's controls, as judged by the Architect, at Owner's expense at prevailing rates.

TacTiles® carpet tile will not be adversely affected by defects in their materials or workmanship for a period of **two (2) years** from the date of invoice when used to install the appropriate Interface® carpet products.

C. Patterns and Colors: As determined by Architect.

D. Comparable products of other manufacturers will be considered if it can be clearly shown that their products are tested, equal to or will exceed the construction quality requirements, intended performances and all other design attributes listed above and provided that deviations in dimensions and profiles are minor and do not materially detract from the design concept or intended performances as judged solely by the Architect.

1. Approved equal by The Mohawk Industries Group.
2. Approved equal by Bentley.
3. Approved equal by Bigelow.
4. Approved equal by Patcraft.
5. Approved equal by Prince Street.
6. Approved equal by Mannington.
7. Or approved equal.

2.2 ACCESSORIES

A. Floor Primer: Manufacturer's approved floor primer applied to all areas that will receive carpeting.

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B. Carpet Edge Guard, Non-metallic: Extruded or molded heavy-duty vinyl or rubber carpet edge guard of size and profile indicated; minimum 2" wide anchorage flange; colors selected by Architect from standard colors.

C. Installation Adhesive: Water-resistant, non-staining as recommended by carpet manufacturer, which complies with flammability requirements for installed carpet.

D. Miscellaneous Materials: As recommended by manufacturers of carpet, cushions, and other carpeting products; selected by Installer to meet project circumstances and requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine and test substrates for moisture content, high alkalinity, levelness and other conditions under which carpeting is to be installed. Notify contractor in writing of major conditions detrimental to proper completion of the work.

1. Do not proceed until unsatisfactory conditions have been corrected.

2. Commencement of work shall constitute acceptance of conditions. Any necessary remedial work required to correct any unsatisfactory conditions, found after the start of installation, will be provided at no cost to the Owner.

3. Coordinate with installation of floor leveling underlayment where indicated or required.

3.2 PREPARATION

A. Repair minor holes, cracks, depressions, and rough areas using material recommended by carpet or adhesive manufacturer.

B. Clear away debris and scrape up cementitious deposits from surfaces to receive carpeting; vacuum clean immediately before installation. Check concrete surfaces to ensure no dusting through installed carpet; apply sealer where required to prevent dusting.

3.3 GENERAL

A. Install work in strict conformance with manufacturer's printed recommendations and as shown on approved seaming layouts.

B. Substrates shall be free from dust, oils, grease or other foreign matter. Cracks, holes and unevenness shall be filled with latex base floor filler.

C. During winter conditions, building shall be preheated to 72°F for at least 24 hours prior to installation. During summer conditions, air conditioning shall be in operation or other provisions shall be made to obtain temperatures and humidity within limits recommended by the manufacturer.

1. Temperatures shall be kept constant night and day during installation.

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2. Concrete shall have cured for at least sixty (60) days prior to installation.

3.4 CARPET TILE

A. Butt Fitting and Joints: Brush pile back and tip individual tiles into place to avoid catching pile in the joint.

1. Frequently check joints for proper alignment and firm abutment.

2. Avoid excessively tight joints which will cause tile to peak or buckle.

3. Check tightness and establishing gain factor.

4. Cut tile from the back and secure cuts or partial tiles with manufacturer's standard or approved releasable compatible adhesive or double sided tape.

5. Install all carpet tile with pile orientation in the proper direction, as recommended by the manufacturer for each carpet type, follow manufacturer's embossed arrows on the back of tiles as guide for the proper direction.
   a. If carpet product will be installed in parquet pattern only, arrows should point in the same direction every other tile and diagonally.

6. Center floor trench headers directly under a full tile row.

7. Install tile rows adjacent to walls as per manufacturer's recommended instructions.

8. In open perimeter designs, use a fixed reducer an carpet keeper strips to secure the tile area. Use types and sizes recommended by the tile carpet manufacturer.

9. Remove and replace damaged tiles, protect carpet tile until inspection for substantial completion of carpet tile work.

10. Install every tile with releasable adhesive in accordance with manufacturer's instructions and information for using of appropriate tools and methods of applications.

OR/

Install carpet tile using "GlasBac®/GlasBacRE TacTiles® Connectors", as manufactured by InterfaceFLOR; or approved equal. The clear 3" x 3" polyester squares replace adhesives when used to install modular carpet with GlasBac® and GlasBac RE backings; or approved equal, only.

3.5 CLEANING

A. Remove and dispose of debris and unusable scraps. Vacuum carpet using commercial machine with face-beater element. Remove spots and replace carpet where spots cannot be removed. Remove any protruding face yarn using sharp scissors.

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3.6 CALL BACK

A. Prior to expiration of **two (2) year warranty**, perform all necessary corrections and adjustments.

3.7 ADDITIONAL MATERIAL

A. Deliver to Owner as directed not less than five percent (5%) additional carpet tile of each type, pattern and color used.

END OF SECTION 09685

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SECTION 12495 - WINDOW ROLLER SHADES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Roller shades, motorized operation and accessories.
   1. Intelligent encoded electronic drive system.
   2. Motor controls, interfaces, and accessories.

B. Roller shades, manual operation and accessories.

C. Shade fabric.

1.2 RELATED SECTIONS

A. Section 06100 - Rough Carpentry: Wood blocking and grounds for mounting roller shades and accessories.

B. Section 09250 - Gypsum Board Assemblies: Coordination with gypsum board assemblies for installation of shade pockets, closures and related accessories.

C. Section 09510 - Acoustical Ceilings: Coordination with acoustical ceiling systems for installation of shade pockets, closures and related accessories.

D. Division 16 - Electrical: Electric service for motor controls. Electrical and low voltage requirements, internal communication, data transfer, and connection to the Internet and local PoE switches, as required.

1.3 REFERENCES

A. ASTM International (ASTM):
   1. ASTM G21 and E 2180 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.

B. Cradle to Cradle Products Innovation Institute (C2C):
   1. C2C (DIR) - C2C Certified Products Registry.

C. National Fire Protection Association (NFPA):
   1. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
   2. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

D. Underwriters Laboratories (UL):
   1. UL (GGG) - GREENGUARD Gold Certified Products; Current Edition.
   2. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

E. Window Covering Manufacturers Association (WCMA):
   1. ANSI/WCMA A100.1-2022- Safety of Window Covering Products; 2022.

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1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Where motorized shades are to be controlled by control systems provided under other sections, coordinate the work with other Trades to provide compatible products.
   2. Coordinate the work with other Trades to provide rough-in of electrical wiring as required for installation of hardwired motorized shades.

B. Preinstallation Meeting: One week prior to commencing work related to this section. Require attendance of all affected installers.

C. Sequencing:
   1. Do not fabricate shades until field dimensions for each opening have been taken with finished conditions in place. "Hold to" dimensions are not acceptable.
   2. Do not install shades until final surface finishes and painting are complete.

1.5 SUBMITTALS

A. Refer to AIA A232 and Section 00800, for submittal procedures.

B. Information Required: In order to evaluate the shop drawing submittals for integrated lighting control and window shade systems, the Architect requires the following information be submitted after the award of the project.
   1. Note all deviations from these Specifications on a line-by-line basis.

C. Product Data: Manufacturer's catalog pages and data sheets for products specified including materials, finishes, dimensions, profiles, mountings, and accessories.
   1. Preparation instructions and recommendations.
   2. Styles, material descriptions, dimensions of individual components, profiles, features, finishes, accessories, and operating instructions.
   3. Storage and handling requirements and recommendations.
   4. Mounting details and installation methods.
   5. Manufacturer's Instructions: Include storage, handling, protection, examination, preparation and installation.
   6. Project Record Documents: Record actual locations of control system components and show interconnecting wiring.
   7. Motorized Shades: Power requirements. Typical wiring diagrams including integration of EDU controllers with building management system, audiovisual and lighting control systems as applicable.

D. Shop Drawings: Plans, elevations, sections, product details, installation details, operational clearances, wiring diagrams and relationship to adjacent work.

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1. Prepare shop drawings on AutoCad or MicroStation format using base sheets provided electronically by the Architect.
2. Prepare control wiring diagrams based on zones, switching and operational requirements provided by the Architect in electronic format.
3. Include one-line diagrams, wire counts, coverage patterns, and physical dimensions of each item.
4. Provide location plan showing all motor locations, switch locations and control zones as per the performance requirements of the Specifications. All switches, sensors and other control accessories must clearly be shown and called out in a bill of materials.
5. Provide location plan showing all manual shade control locations. Cross-reference furniture plans for optimal positioning of chains.
6. Provide elevation Drawings showing shade band layout. Indicate any necessary seam or batten locations and align with horizontal mullions where possible.

E. Window Treatment Schedule: For all roller shades. Use same room designations as indicated on the Drawings and include opening sizes and key to typical mounting details.

F. Verification Samples: For each finish product specified, one complete set of shade components, unassembled, demonstrating compliance with specified requirements.
1. Shadecloth Sample: Mark face of material to indicate interior faces.
a. Test reports indicating compliance with specified fabric properties.
b. Verification Samples: 6 inches (150 mm) square, representing actual materials, color and pattern.

G. Warranty: Provide manufacturer's warranty documents as specified in this Section.

1.6 QUALITY ASSURANCE

A. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to Authorities Having Jurisdiction.

B. Manufacturer Qualifications: Obtain roller shades system through one source from a single manufacturer with a minimum of ten years experience and minimum of five projects of similar scope and size in manufacturing products comparable to those specified in this section.

C. Installer for Roller Shade System - Qualifications: Installer trained and certified by the manufacturer with a minimum of ten years experience in installing products comparable to those specified in this section.
1. Requirements for Roller Shade Installer/Subcontractor:
a. Roller Shade Hardware, shade fabric, motor, and all related controls shall be furnished and installed as a complete two-way communicating system and assembly.

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b. Roller Shade Installer/Subcontractor shall list all components and systems included in their bid, including but not limited to, the prime manufacturer of the motor control and automated equipment and shall be financially responsible for any change orders and/or back charges required by the BMS, AV, or Lighting Control Systems contractors to interface with the motorized roller shade system.

D. Product Listing Organization Qualifications: Organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to Authorities Having Jurisdiction.

E. Fire-Test-Response Characteristics: Passes NFPA 701 small and large-scale vertical burn. Materials tested shall be identical to products proposed for use.

F. Electrical Components: NFPA Article 100 listed and labeled by either UL or ETL or other testing agency acceptable to Authorities Having Jurisdiction, marked for intended use, and tested as a system. Individual testing of components will not be acceptable in lieu of system testing.

G. Requirements for Electronic Hardware, Controls, and Switches: Roller shade hardware, shade fabric, EDU (Electronic Drive Unit), and all related controls shall be furnished and installed as a complete two-way communicating system and assembly.

H. ShadeCloth Anti-Microbial Characteristics: 'No Growth' per ASTM G 21 results for fungi ATCC9642, ATCC9644 and ATCC9645, and E2180.

I. ShadeCloth Cleanability and Disinfecting: ShadeCloth must meet cleanability and disinfecting requirements via 3rd party testing to comply with BIFMA HCF 8.1-2014 standards using chemical solutions compliant with EPA guidelines for use against COVID-19.

J. Environmental Certification: Submit written certification from the manufacturer, including third party evaluation, recycling characteristics, and perpetual use certification, as specified. Initial submittals, which do not include the Environmental Certification will be rejected. Materials that are simply 'PVC free' without identifying their inputs shall not qualify as meeting the intent of this Specification and shall be rejected.

K. Third Party Evaluation: Provide documentation stating the shade cloth has undergone third party evaluation for all chemical inputs, down to a scale of 100 parts per million, that have been evaluated for human and environmental safety. Identify any and all inputs, which are known to be carcinogenic, mutagenic, teratogenic, reproductively toxic, or endocrine disrupting. Also identify items that are toxic to aquatic systems, contain heavy metals, or organohalogens. The material shall contain no inputs that are known problems to human or environmental health per the above major criteria, except for an input that is required to meet local fire codes.

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L. Recycling Characteristics: Provide documentation that the shade cloth can, and is part of a closed loop of perpetual use and not be required to be down cycled, incinerated or otherwise thrown away. Scrap material can be sent back to the mill for reprocessing and recycling into the same quality yarn and woven into new material, without down cycling. Certify that this process is currently underway and will be utilized for this project.

M. Perpetual Use Certification: Certify that at the end of the useful life of the shade cloth, that the material can be sent back to the manufacturer for recapture as part of a closed loop of perpetual use and that the material can and will be reconstituted into new yarn, for weaving into new shade cloth. Provide information on each shade band indicating that the shade band can be sent back to the manufacturer for this purpose.

N. Turn-Key Single-Source Responsibility for Wiring Motorized Interior Roller Shades: To control the responsibility for performance of motorized roller shade systems, assign the design, engineering, and installation of motorized roller shade systems, motors, controls, and low voltage electrical control wiring specified in this Section to a single manufacturer and their authorized installer/dealer. The Architect will not produce a set of Electrical Drawings for the installation of control wiring for the motors, or motor controllers of the motorized roller shades. Power wiring (line voltage), shall be provided by the Contractor ("GC"), not roller shade installer/dealer (Window Coverings Subcontractor or "WC"), in accordance with the requirements provided by the manufacturer. Coordinate the following with the roller shade installer/dealer:
   1. GC shall provide power panels and circuits of sufficient size to accommodate roller shade manufacturer's requirements, as indicated on the Mechanical and Electrical Drawings.
   2. GC shall coordinate with requirements of WC, before inaccessible areas are constructed.
   3. GC shall run line voltage as dedicated home runs (of sufficient quantity, in sufficient capacity as required) terminating in junction boxes in locations designated by WC.
   4. GC shall provide and run all line voltage (from the terminating points) to the motor controllers. WC shall wire all roller shade motors to the motor controllers, and provide and run low voltage control wiring from motor controllers to switch/ control locations designated by the Architect. All above-ceiling and concealed wiring shall be plenum-rated, or installed in conduit (provided by Electrical Subcontractor), as required by the Electrical Code Having Jurisdiction.
   5. GC shall provide conduit with pull wire in all areas, which might not be accessible to Roller Shade Subcontractor due to building design, equipment location or schedule.
   6. GC shall provide wiring and labor cost difference between power requirements for AC and DC motor options in overall cost comparison of AC and DC motorized shades.

1.7 DELIVERY, STORAGE, AND HANDLING

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A. Deliver in factory-labeled packages, marked with manufacturer and product name, fire-test-response characteristics, and location of installation using same room designations indicated on Drawings and in Window Treatment Schedule.

B. Store and handle products per manufacturer's recommendations.

~~B.~~

1.8 PROJECT CONDITIONS

A. Environmental Limitations: Install roller shades after finish work including painting is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Power and control wiring shall be complete and certified, fully operational with uninterrupted communication on the lines and minimal noise certified by a commissioning agent specified in other sections.
   1. 485, ICON, Lonmark and Dry Contract Network: Noise on the line not to exceed shade manufacturer's limits.

1.9 WARRANTY

A. Roller Shade Hardware and Chain Warranty: Manufacturer's standard non-depreciating, transferrable warranty for interior shading.
   1. Shade Hardware – **Ten (10) years** unless otherwise indicated:
      a. Mecho/5 and Mecho/5x with EcoVeil, ThermoVeil, Chelsea, or Classic Blackout shade fabric; or approved equal: **Twenty-five (25) years**.
      b. ElectroShade with EcoVeil, ThermoVeil, Chelsea, or Classic Blackout shade fabric; or approved equal: **Twenty-five (25) years**.
   2. All Mecho Shadecloth: Manufacturer's standard **twenty-five (25) year** warranty.
   3. Roller Shade Motors, Motor Control Systems, and Accessories: Manufacturer's standard non-depreciating **ten (10) year** warranty for AC motors and controls and **ten (10) year** warranty for DC motors, power panels and controls.
   4. Roller Shade Installation: **Special Warranty – Two (2) year** from date of Substantial Completion, not including scaffolding, lifts or other means to reach inaccessible areas, which are deemed owners responsibility.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer for Window Shade Control System as Basis of Design, performance and warranty: Mecho; or approved equal.

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B. Requests for substitutions will be considered after project award in accordance with provisions of AIA A232 and Section 00800.

2.2 APPLICATIONS/SCOPE

A. Roller Shade Schedule:
1. **Shade Type 1**: Manual operating, chain drive, room darkening opaque single roller shades and related mounting systems and accessories, as indicated on Drawings.
2. **Shade Type 2**: Motor operating sunscreen single roller shades and related motor control systems, mounting systems and accessories, as indicated on Drawings.
   a. **WT2a**- EcoVeil 1350; or approved equal.
   b. **WT2b**- Chelsea 0250; or approved equal.
3. **Shade Type 3**: Motor operating sunscreen roller and room darkening opaque double roller shades and related motor control systems, mounting systems and accessories, as indicated on Drawings.
4. **Shade Type 4**: Manual operating, chain drive, sunscreen single roller shades and related mounting systems and accessories, as indicated on Drawings.
5. **Shade Type 5**: Manual operating, chain drive, sunscreen roller and room darkening opaque double roller shades and related mounting systems and accessories, as indicated on Drawings.
6. **ADA Compliance**: All spaces requiring full ADA compliance to be motorized with an accessible wall switch.
7. **CPSC Compliance**: All manually operated window coverings with accessible cords, chains, continuous loop cords, etc. shall meet all current Federally mandated CPSC (Consumer Products Safety Commission) safety standards at time of manufacturing. Depending on the product type, additional hardware components may be required and added to meet new regulatory compliant anti-ligature requirements.
8. **WCMA Compliance**: Chain tensioning device complying with ANSI/WCMA A100.1-2022 manufacuted on every manual roller shade.

2.3 ROLLER SHADES, MANUAL OPERATION AND ACCESSORIES

A. Shade System; General:
1. Components capable of being removed or adjusted without removing mounted shade brackets, or cassette support channel.
2. Smoothly operation raising or lowering shades.
3. Cradle-to-Cradle certified and listed in C2C (DIR).
4. Environmental Product Declaration (EPD): Published disclosure of product's environmental impacts based on a full Life Cycle Assessment (LCA). Manufacturer must have EPD certification by independent 3rd party evaluation service.

B. Basis of Design: **WT1/WT4/WT5** Mecho/5 System, as manufactured by Mecho; or approved equal.
1. Description: Manually operated fabric window shades.

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a. Shade Type: **WT1/WT4** Single Roller.
b. Shade Type: **WT5** Double Roller.
c. Drop Position: Regular roll.
d. Mounting: **WT-5** Ceiling mounted.
e. Mounting: **WT1/WT4** Wall Mounted.
f. Size: As indicated on Drawings.
g. Fabric: As indicated under Shade Fabric article.

2. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.
   a. Material: Steel, 1/8 inch (3 mm) thick.
   b. Double Roller Brackets: Configured for light-filtering and room-darkening shades in one opening.
      1) Light-Filtering Fabric: Room-side of opening.
      2) Room-Darkening Fabric: Glass-side of opening.
      3) Operating chain pulls for each fabric configured for opposite sides of the window.
3. Roller Tubes:
   a. Material: Extruded aluminum.
   b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
   c. Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge. Shade band to be removable and replaceable without removing roller tube from brackets or inserting spline from the side of the roller tube.
   d. Roller tubes to be capable of being removed and reinstalled without affecting roller shade limit adjustments.
4. Hembars: Designed to maintain bottom of shade straight and flat.
   a. Style: Chelsea 0250; or approved equal - Full wrap fabric covered bottom bar, flat profile with heat sealed closed ends.
   b. Style: EcoVeil 1550; or approved equal - Exposed aluminum bottom bar with matching finials.
      1) Profile: Rectangular.
5. Clutch Operator: Manufacturer's standard material and design integrated with bracket/brake assembly.
   a. Heavy-duty, 1/8″ steel mounting bracket and integrated steel brake, clutch and sprocket assembly rigidly affix the shade support and user control to the building structure fully independent of the roller tube components.
   b. Permanently lubricated maintenance-free brake assembly employs an oil-impregnated steel hub with wrapped spring clutch.
   c. Brake must withstand minimum pull force of 50 pounds (22.7 kg) in the stopped position.

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d. Direct drive clutch requires no interstitial gear stages or plastic parts between the building structure and clutch ensuring reliable operation across the full range of shade sizes.
e. Maximum shade hanging weight of 18 pounds (8.2 kg).

6. Drive Chain: Continuous loop stainless steel beaded ball chain, 100 pound (45 kg) minimum breaking strength. Provide upper and lower limit stops.
   a. Chain Tensioner: Chain tensioning device complying with ANSI/WCMA A100.1-2022.
   b. Limit stops: Bead stops affixed to the chain maintain consistent shadeband alignment at the top and bottom of shade travel across multiple shades, and help prevent shade damage resulting from unmanaged user control.
7. Accessories:
   a. Fascia: Removable extruded aluminum fascia, size as required to conceal shade mounting, attachable to brackets without exposed fasteners.
      1) Finish: TBD from manufacturers standard.
      2) Single Fascia: Accommodate regular roll shades.
      3) Profile: Square.

~~3)~~

2.4 ROLLER SHADES, MOTORIZED OPERATION AND ACCESSORIES

A. Shade System; General:
   1. Motorized Shades: Comply with NFPA 70.
   2. Components capable of being removed or adjusted without removing mounted shade brackets or cassette support channel.
   3. Operates smoothly when raising or lowering shades.
   4. Cradle-to-Cradle certified and listed in C2C (DIR).
   5. Electrical Components: Listed, classified, and labeled as suitable for intended purpose. Test as total system. Individual component testing is acceptable.
      a. Components: FCC compliant where applicable.

B. Basis of Design: ElectroShade with WhisperShade IQ2 EDU, as manufactured by MechoShade Systems LLC; or approved equal. Motor operated fabric window shade system complete with mounting brackets, roller tubes, hembars, hardware and accessories.
   1. Voltage: 24 VDC
   2. Description: **WT2** -Single roller.
   3. Description: **WT3** Double roller.
   4. Drop Position: Regular roll.
   5. Mounting: Wall mounted.
   6. Size: As indicated on Drawings.
   7. Fabric: As indicated under Shade Fabric article.
   8. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.

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a. Material: Provide shade hardware constructed of minimum 1/8-inch (3.18 mm) thick plated steel, or heavier, thicker, as required to support 150 percent of the full weight of each shade. Plastic components without use of steel angle construction do not meet the intent of this specification and shall not be accepted. Styrene based plastics, and /or polyester, or reinforced polyester shall not be accepted.
b. Provide shade hardware system that allows for field adjustment of motor or replacement of any operable hardware component without requiring removal of brackets, regardless of mounting position (inside, or outside mount).
c. Provide shade hardware system that allows for operation of multiple shade bands offset by a maximum of 8-45 degrees from motor axis between shade bands (4-22.5 degrees) on each side of the radial line, by a single shade motor (multi-banded shade, subject to manufacturer's design criteria).
d. All bands within a single motor group shall be aligned within ¼ inch.
e. Double Roller Brackets: Configured for light-filtering and room-darkening shades in one opening.
    1) Light-Filtering Fabric: Room-side of opening.
    2) Room-Darkening Fabric: Glass-side of opening.
f. Multiple Shade Operation: Provide hardware as necessary to operate more than one shade using a single motor.

9. Roller Tubes:
    a. Material: Extruded aluminum.
    b. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
    c. Fabric Attachment: Utilize extruded channel in tube to accept vinyl spline welded to fabric edge. Shade band to be removable and replaceable without removing roller tube from brackets or inserting spline from the side of the roller tube.
10. Hembars: Designed to maintain bottom of shade straight and flat.
    a. Style: Chelsea 0250; or approved equal, Full wrap fabric covered bottom bar, flat profile with heat sealed closed ends.
    b. Style: EcoVeil 1550; or approved equal, Exposed aluminum bottom bar with matching finials.
        1) Profile: Rectangular.
        2) Color: Manufacturer's standard coordinated with shade fabric selected.
11. Accessories:
    a. Fascia: Removable extruded aluminum fascia, size as required to conceal shade mounting, attachable to brackets without exposed fasteners.
        1) Finish: TBD from manufacturers standard offerings.
        2) Profile: Square.

2.5 INTELLIGENT ENCODED ELECTRONIC DRIVE SYSTEM

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A. Electronic Drive Unit (EDU) System General Requirements:
   1. A UL 325 listed solution.
      a. Component certification in lieu of system testing is not acceptable.
   2. Listing Label and Motor Rating: To be visible for inspection without dismounting of shade assembly to remove motor or EDU from shade roller tube.
   3. Size and Configuration: As recommended by manufacturer for type, size, and arrangement of shades.
   4. Conceal EDU inside shade roller tube.
   5. EDU Rated Speed: The same nominal speed for shades in the same room.
   6. Hanging Weight of Shade Band: 80 percent of rated lifting capacity of shade EDU and tube assembly.
   7. Capable of upgrading firmware from anywhere on network without touching the motor.

B. Low Voltage EDU (24 VDC):
   1. Basis of Design: MechoShade Systems LLC; WhisperShade IQ2-DC System; or approved equal. Tubular, asynchronous, integral DC motor. 24 VDC; temperature Class B, thermally-protected, totally enclosed, maintenance-free. Powered by low voltage power supply connection equipped with disconnect plug assembly furnished with EDU.
   2. Audible Noise: 38 dBA measured 3 ft (914 mm) from motor unit, depending on motor torque.
   3. Nominal Speed: 10 to 28 RPM. Configurable. Speed managed such that it does not vary due to load/lift capacity.
   4. Low voltage power supply for powering external accessories connected to either the dry contact or network port.
      a. Products that require accessories to be powered by a plug-in or externally-supplied power supply are not acceptable.
   5. Override Mode: Place motor into Override Mode when local switch commands shade to new position.
      a. Local switch command sources:
         1) Keypad connected to EDU dry contact inputs.
         2) Third-party system connected to EDU dry contact inputs.
         3) Network keypad or other device that serially communicates with EDU and configured to issue override commands as if it were a local switch connected to EDU dry contact inputs.
      b. Entering Override Mode: Monitor and log positioning commands from automation devices. Do not act until exiting Override Mode.
      c. Return from Override Mode: Position shade to last commanded position in log.
      d. Automated Return from Override Mode:
         1) Override Return Timer: When Override Mode is entered by changing shade position with local switch as described above, Enable override return timer to make these changes temporary such that automation

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can regain control of shade after configurable time duration (default of 60 minutes).

2) Pocket temperature sensor integral to EDU to track pocket temperature.

a) When shade is in Override Mode and Heat Gain Sensing is Enabled: Sensor determines when direct sunlight and associated solar heat gain has left the window.

1) When this condition occurs, after the shade has been overridden to cover the window, EDU to return from Override Mode if Override Return Timer has not done so already in order for automation controllers to once again optimize shade position for exposure to daylight.

6. Preventative Maintenance:

a. Internally monitor important operating parameters to ensure motor and its shade assembly are functioning properly.

b. Performance Degradation: Provide visual indication via feedback LED and communicate warnings on repetitive basis through its serial port.

c. Warning Conditions: Logged and queryable. Allow sending of multiple warnings until condition is acknowledged.

d. Stop shade rotation for parameters of critical concern until reset by trained technician after being serviced.

e. Devices capable of receiving warnings include SolarTrac automated solar-evaluation control system.

f. Tracked Parameters to include:

1) Operating life (cycles, hours).
2) Pocket temperature.
3) Internal motor temperature.
4) Vibration.
5) Stall.
6) Power reset.
7) Maintenance Mode.
8) Speed regulation.
9) Position targeting.
10) Movement without command.
11) One Bus availability.

g. Detectable Potential Warning Conditions to Include:

1) Assembly vibration/bearing wear warning.
2) Tube/shade assembly drop.
3) Fabric hung-up/telescoping.
4) Motor mount warning.
5) Lifecycle replacement warning.
6) Brake/limit failure.
7) Network warning.

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8) Motor internal temperature warning.
9) Pocket temperature warning.

C. Modes of Operation:
1. Uniform Mode: Shades move to defined intermediate stop positions in order to maintain aesthetic uniformity.
2. Normal Mode: Shades move to defined intermediate stop positions and any position between defined upper and lower limits.
3. Maintenance Mode: Prevents shade from moving via dry contact or network control commands mode has been cleared/disabled.

D. Control Methods: Local isolated dry contact input and network control.
1. Local Isolated Dry Contact Inputs:
a. Local switch control, third party system integration without separate interface.
b. Moving EDU/shade to upper and lower limits and local switch preset positions.
c. Configuration of upper and lower limits, custom presets, and key modes of operation without a PC or microprocessor-based tools.
d. Configuration under protected sequences to prevent changes by casual user.
e. Switch Personalities: Configuration of dry contact control port over network such that any type of dry contact keypad/third-party interface and actuation methodology (maintained and/or momentary actuation) can be used to operate shade.
f. Dry Contact Control Connection Options to Include:
1) One-button.
2) Two-button.
3) Three-button. Able to support configuring limits, presets, and key operating modes (default).
4) Three-button. No configuration capability to prevent accidental changes in settings.
2. Network Control:
a. Bi-directional network communication to enable commanding operation of large groups of shades over a common backbone.
b. Each EDU:
1) Support eight network addresses capable of being employed for various levels of group control.
2) Dry Contact Ports: Assigned its own local switch address which can be matched by other EDU's within eight network addresses in order to support group control when dry contact commands are received.
a) The EDU receiving dry contact commands may or may not be configured to operate based on commands coming through its own dry contact input port.

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3) To have an independent unique identifier address (UID) enabling EDU to be independently controlled and configured over network via handheld configurator and/or PC controller.

c. Network Communication Card: Integral with tubular EDU assembly.

d. Support configuration of upper and lower limits using either a handheld removable program module/configurator or a local switch.

e. Support configuration of addresses using a handheld removable program module/configurator.

E. Alignment Positions:

1. Repeatable and precisely aligned shade positions and limits.
   a. Support positioning commands from 0 to 100 percent in 1 percent increments.
   b. Customizable Presets: 32.
   c. Include three intermediate dry contact presets
2. Shades on same switch circuit or same network group address with same opening height, to align at each intermediate stopping position when traveling from any position, up or down.
3. Shades of differing heights: Capable of custom, aligned intermediate stop positions when traveling from any position, up or down.
4. Alignment of shade bands mechanically aligned on same EDU: Plus or minus 0.125 inch (3 mm).
5. Alignment of standard shades on adjacent EDU's: Plus or minus 0.25 inch (6 mm) when commanded to same alignment position.

F. Local Switch Presets:

1. Minimum of three customizable preset positions accessible over the local dry contact control inputs and over the network connection.
2. Preset positions: Customizable to any position between and including defined upper and lower limits (initially defaults to 25, 50, and 75 percent of shade travel).
3. Configuration of Custom Preset Positions: A handheld removable program module/configurator or a local switch.

G. Network Presets:

1. Minimum of 32 customizable preset positions (including the three local switch presets) accessible via network commands.
2. Preset positions: Customizable to any position between and including defined upper and lower limits (initially defaults to defined lower limit).
3. Configuration of Custom Preset Positions: A handheld removable program module/configurator or a local switch.

2.6 MOTOR CONTROLS, INTERFACES, AND ACCESSORIES

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A. Unless indicated to be excluded, provide required equipment as necessary for a complete operating system providing the control intent specified. Provide components and connections necessary to interface with other systems as indicated.

B. Digital Network Controls:
   1. Basis of Design: MechoShade Systems LLC; MechoNet; or approved equal. Low-voltage network utilizes standard Category 5/6 UTP cable; maximum of 4,000 feet (1,219 m), 250 nodes.
   2. Reprogram control without requiring wiring modifications.
   3. Ten-year non-volatile power failure memory for system configuration settings.
   4. Network Interface Components:
      a. IQ2 Dual Splitter; or approved equal: Two motor/EDU ports; two switch ports.

C. Low-Voltage Wall Controls; IQ Switch; or approved equal:
   1. Momentary dry contact switch enables manual local control or network control of any individual shade motor or shade group/sub-group on MechoNet network; or approved equal.
   2. Control Functions:
      a. Open: Automatically open controlled shades to fully open position when button is pressed.
      b. Close: Automatically close controlled shades to fully closed position when button is pressed.
      c. Presets: For selection of predetermined shade positions.
      d. Dual Stations: For individual control of two shades/groups.
   3. Finish: White.
   4. Single Station: 5-button (open, close, and three intermediate stop positions).
   5. Double Station: 10-button (open, close, and three intermediate stop positions for each of two shades/groups).

2.7 ROLLER SHADE FABRICATION

A. Field measure finished openings prior to ordering or fabrication.

B. Dimensional Tolerances: Fabricate shades to fit openings within specified tolerances.
   1. Vertical Dimensions: Fill Opening from Head to Sill: 1/2 inch (13 mm) space between bottom bar and window sill.
   2. Horizontal Dimensions: Outside mounting.
      a. Cover window frames, trim, and casings completely.

C. Openings Requiring Continuous Multiple Shade Units with Separate Rollers: Locate roller joints at window mullion centers; butt rollers end-to-end.

2.8 SHADE FABRIC

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A. Basis of Design: Shade fabric as manufactured by MechoShade Systems LLC; or approved equal.
   1. Solar Shadecloths:
      a. Fabric: EcoVeil: 1550 Series; or approved equal. TPO fabric, Cradle to Cradle Certified, non-PVC, 1 X 1, basket-weave pattern at 3 percent open, also 126 inches (3200 mm) wide.
         1) NRC Rating: 0.35.
         2) SAA Rating: 0.38.
         3) Low-Emitting Material Certification: Greenguard Gold certified and listed in UL (GGG).
         4) Health Product Declaration (HPD): Published declaration with full disclosure of known hazards.
         5) Cradle to Cradle Material Health Certificate:
            a) Achievement Level: Bronze.
         6) Environmental Product Declaration (EPD): Published disclosure of product's environmental impacts based on a full Life Cycle Assessment (LCA). Manufacturer must have EPD certification by independent 3rd party evaluation service.
      b. Color: Selected from manufacturer's standard colors.
   2. Blackout Shadecloths:
      a. Fabric: Chelsea: 0250 Series. Opaque; or approved equal. Solid graphite-colored backing. PVC-Free.
         1) Low-Emitting Material Certification: Greenguard Gold certified and listed in UL (GGG).
         2) Health Product Declaration (HPD): Published declaration with full disclosure of known hazards.
         3) Cradle to Cradle Material Health Certificate:
            a) Achievement Level: Silver.
         4) Environmental Product Declaration (EPD): Published disclosure of product's environmental impacts based on a full Life Cycle Assessment (LCA). Manufacturer must have EPD certification by independent 3rd party evaluation service.
      b. Color: Selected from manufacturer's standard colors.
   3. Performance Requirements:
      a. Flammability per NFPA 701: Pass. Large or small scale test.
      b. Fungal Resistance: No growth when tested per ASTM G21.
      c. Cleanability and Disinfecting: ShadeCloth must meet cleanability and disinfecting requirements via 3rd party testing to comply with BIFMA HCF 8.1-2014 standards using chemical solutions compliant with EPA guidelines for use against COVID-19.
   4. Fabrication:
      a. Battens: Manufacturer's standard material, full width of shade, and enclosed in welded shade fabric pocket; locate as indicated on Drawings.

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PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect and Construction Manager of unsatisfactory preparation before proceeding.

C. Start of installation shall be considered acceptance of substrates.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.

C. Coordinate with window installation and placement of concealed blocking to support shades.

3.3 SYSTEM STARTUP

A. Motorized Shade System: Provide services of a manufacturer's authorized representative to perform system startup.

B. Turn-Key Single-Source Responsibility for Motorized Interior Roller Shades: Design, engineering, and installation of motorized roller shade systems, motors, controls, and low voltage electrical control wiring specified is to be performed by a single manufacturer and their authorized installer/dealer.

1. The Architect will not provide a set of Electrical Drawings for installation of control wiring for motors, or motor controllers of motorized roller shades.
2. Contractor (GC) To Provide the Following:
   a. Power Panels and Circuits: Size to accommodate roller shade manufacturer's requirements, as indicated on Mechanical ~~A~~and Electrical Drawings.
   b. Coordinate with requirements of roller shade installer/dealer, before inaccessible areas are constructed.
   c. Line voltage as dedicated home runs, of sufficient quantity, and capacity as required. Terminate in junction boxes at locations designated by roller shade installer/dealer.
   d. Run line voltage from terminating points to motor controllers. Wire roller shade motors to motor controllers.
      1) Above-ceiling and concealed wiring to be plenum-rated, or in conduit, as required by the Electrical Code Having Jurisdiction.
   e. Use conduit with pull wire in areas, not accessible to Roller Shade Subcontractor due to building design, equipment location or schedule.

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f. Verify that wiring conditions, which have been previously installed under other sections or at a previous time, are acceptable for product installation in accordance with manufacturer's instructions.
g. Comply with manufacturer's current product data, including shop drawings, technical bulletins, product catalog installation instructions, and product carton instructions for installation.
h. Protect installed product and finished surfaces from damage during all phases of installation including preparation, testing, and cleanup.
i. Be responsible for all other required electrical work including but not limited to roof penetrations, conduits, fireproofing, etc.
j. Provide conduit with pull wire in all areas, which might not be accessible to Subcontractor due to building design, equipment location or schedule.

3. Window Covering Subcontractor (WC) responsibilities:
   a. Shade Control Subcontractor shall furnish, install and fully program shade controllers, interfaces, splitters, coupler, sensors, switches, etc. mounted on the wall, in the ceiling, in shade pocket, etc. Locations for all visible devices to be coordinated with Architect. The Shade Control Subcontractor shall inspect all material included in this Contract prior to installation. Manufacturer shall be notified of unacceptable material prior to installation.
      1) Above-ceiling and concealed wiring to be plenum-rated, or in conduit, as required by the Electrical Code Having Jurisdiction.

3.4 INSTALLATION

A. Subcontractor Furnish and Install Responsibilities:
1. WC shall supervise the roller shade installation, and setting of intermediate stops of all shades to assure the alignment of the shade bands within a single EDU group, which shall not exceed +/- 0.125 inches (3.175mm), and to assure the alignment between shade groups, which shall not exceed +/- 0.25" inches (6.35mm).
2. WC shall be responsible for field inspection on an area-by- area and floor-by-floor basis during construction to confirm proper mounting conditions per approved shop drawings.
3. Verification of Conditions: Examine the areas to receive the work and the conditions under which the work would be performed and notify Contractor, Construction Manager, Architect and Owner of conditions detrimental to the proper and timely completion of the work. Do not proceed until unsatisfactory conditions have been corrected. Commencement of installation shall constitute acceptance of substrate conditions by the installer.
4. WC shall provide accurate to 0.0625" inch (1.5875mm); field measurements for custom shade fabrication on the Roller Shades manufacturers input forms.
5. WC Installer shall install roller shades level, plumb, square, and true according to manufacturer's written instructions, and as specified here in. Blocking for roller shades furnished and installed under the Contract of the Contractor shall be installed plumb, level, and fitted to window mullion as per ~~interior~~ Architect's Bid

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Documents and in accordance with industry standard tolerances. The horizontal surface of the shade pocket shall not be out-of-level more than 0.625" (15.875mm) over 20 linear feet (6.096 meters)

6. Shades shall be located so the shade band is not closer than 2 inches (50 mm) to the interior face of the glass. Allow proper clearances for window operation hardware.
7. Adjust, align and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.
8. Installer shall set Upper, Lower and up to 3 intermediate stop positions of all motorized shade bands, and assure alignment in accordance with the above requirements.
9. WC shall certify the operation of all motorized shades and turn over each floor for preliminary acceptance.
10. The WC shall participate and cooperate with the electrical, low voltage and commissioning agent to verify and certify the installation is in full conformance with the Specifications and is fully operational. This work to occur during the commissioning stage and is in addition to preliminary acceptance required for each floor.
11. Clean roller shade surfaces after installation, according to manufacturer's written instructions.
12. WC shall train Owner's maintenance personnel to adjust, operate and maintain roller shade systems.
    a. Use operation and maintenance manual as a reference, supplemented with additional training materials, as required.

3.5 PROTECTION AND CLEANING

A. Protect installed products until completion of project.

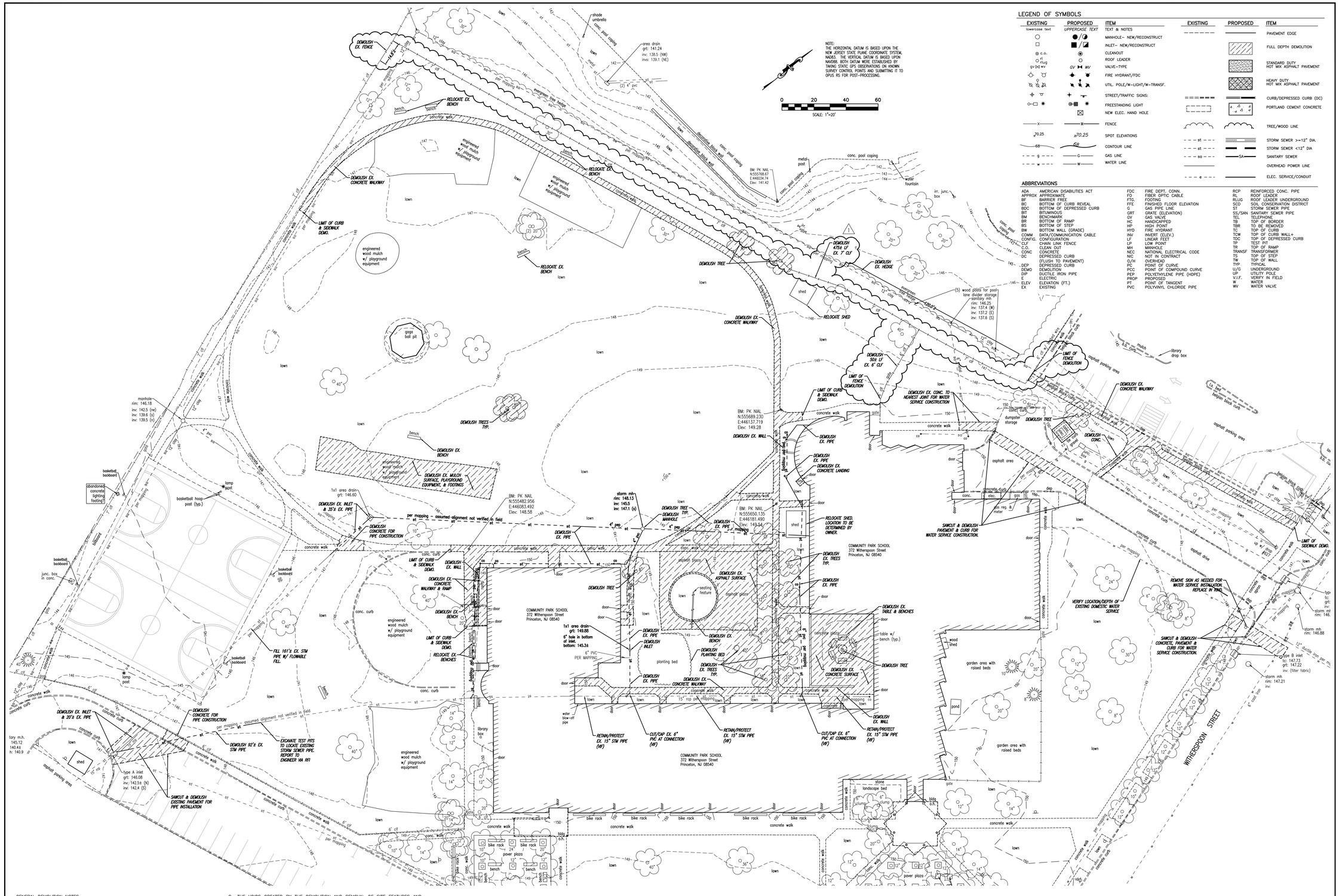
B. Touch-up, repair or replace damaged products before Substantial Completion.
1. Clean soiled shades and exposed components as recommended by manufacturer.
2. Replace shades that cannot be cleaned to "like new" condition.

3.6 MAINTENANCE

A. Provide Owner a proposal for a separate renewable maintenance Contract for service and maintenance of motorized shade system.
1. Include a complete description of preventive maintenance, systematic examination, adjustment, parts and labor, cleaning, and testing, with a detailed schedule.
   a. Contract Duration: One year from date of Substantial Completion.

END OF SECTION 12495

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GENERAL DEMOLITION NOTES:

1. THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE. ENGAGE THE SERVICES OF A PRIVATE UNDERGROUND UTILITY LOCATION AND MARK OUT SERVICE TO MARK THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE SCOPE OF THIS PROJECT. THE NJ ONE CALL SERVICE MAY NOT PERFORM A LOCATION WITH THE SCHOOL SITE, THEREFORE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERTAKE THIS WORK. MAINTAIN THE MARK OUT THROUGHOUT THE ENTIRE PROJECT, UNTIL SUCH TIME AS SURFACES ARE INSTALLED AND NO FURTHER SUBSURFACE PENETRATIONS WILL OCCUR.
2. THE CONTRACTOR MUST VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE SCOPE OF CONSTRUCTION BEFORE COMMENCING WITH ANY WORK. EXCAVATE TEST PITS AT ALL LOCATIONS WHERE EXISTING STORM SEWERS ARE INDICATED AS "APPROXIMATE" OR "VERIFY IN FIELD". REPORT TO THE ENGINEER VA ARCHITECTS, THE DEPTH (ELEVATION), SIZE, AND ALIGNMENT OF ALL UNDERGROUND UTILITIES EXPOSED AS PART OF THE TEST PIT OPERATION.
3. THE REMOVAL OF ALL WASTE ITEMS, INCLUDING, BUT NOT LIMITED TO EXCESS FILL, EMBANKMENT, FENCING, CONCRETE, PAVEMENT, ETC. INCLUDES HAULING TO AND DISPOSAL OF SAME IN A LEGAL MANNER OFF-SITE.
4. ALL ITEMS ACCIDENTALLY DISTURBED OR DAMAGED BY DEMOLITION, SAW CUTTING, EXCAVATION, ETCETERA, THAT ARE TO REMAIN, SHALL BE REPLACED, RESET, OR RECONSTRUCTED AS REQUIRED TO RESTORE STRUCTURAL INTEGRITY AND SUITABLE (LIKE NEW) APPEARANCE AT NO ADDITIONAL COST.
5. ALL MATERIALS AND EQUIPMENT THAT ARE TO BE RE-USED IN NEW CONSTRUCTION SHALL BE STORED IN A SAFE LOCATION AT THE PROJECT WORK SITE. ALL MATERIALS THAT ARE NOTED TO BE RE-USED SHALL BE CAREFULLY DISMANTLED TO AVOID DAMAGE. ALL PARTS SHALL BE IDENTIFIED AND SECURELY BAGGED. ANY DAMAGED OR LOST EQUIPMENT, HARDWARE, PARTS, OR MATERIALS THAT ARE TO BE RE-USED SHALL BE REPLACED WITH NEW MATERIAL OF EQUIVALENT SIZE AND COMPOSITION. DISASSEMBLE AND DISMANTLE EQUIPMENT ONLY AS MUCH AS NEEDED TO SAFELY REMOVE AND RELOCATE SAME WITHOUT DAMAGING OR COMPROMISING ITS INTEGRITY.
6. A SMOOTH UNIFORM EDGE MUST BE PROVIDED ALONG THE LIMIT OF PAVEMENT REMOVAL. THE CONTRACTOR SHALL SAW-CUT THE PAVEMENT ALONG THE LIMIT OF PAVEMENT DEMOLITION.
7. REMOVE ALL OBSTRUCTIONS WITHIN THE LIMIT OF SITE CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, PAVEMENT, CURB & GUTTER, SIDEWALKS, SIGNS, BOLLARDS, FENCES, TREES, CONCRETE SLABS, WALLS, DEBRIS, GRASS & ROOT MASS, AND FOLIAGE.
8. THE VOIDS CREATED BY THE DEMOLITION AND REMOVAL OF SITE FEATURES AND OTHER STRUCTURES SHALL BE BACKFILLED WITH CERTIFIED CLEAN DENSE GRADED AGGREGATE. ALL BACKFILL SHALL BE PLACED IN 8" LIFTS AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY PER ASTM D-1557.
9. PHASE THE DEMOLITION OF HARD SURFACES AND THE STRIPPING OF LAWN AREAS TO MINIMIZE THE EXPOSURE OF SUBGRADE SOILS TO INCLEMENT WEATHER.
10. MAINTAIN PEDESTRIAN WALKWAYS AND EGRESS ROUTES AROUND ALL WORK AREAS UNTIL SUCH TIME AS NEW PAVEMENT SURFACES WILL BE RECONSTRUCTED TO MAINTAIN SITE ACCESSIBILITY.
11. DEMOLISH ALL PAVEMENT SURFACES, SUBBASE STONE, AND SUBGRADE SOIL AS HATCHED TO THE SUBGRADE DEPTH NEEDED FOR THE NEW SITE IMPROVEMENT (I.E. PAVEMENT, STRUCTURE, FOUNDATION). DISPOSE OF ALL WASTE MATERIAL IN A LEGAL MANNER OFF-SITE.
12. PHASE THE DEMOLITION OF STORM DRAINAGE SYSTEM PIPING, IN ORDER TO MAINTAIN PROPER DRAINAGE AT ALL TIMES. PROVIDE DE-WATERING MEASURES AND THE FILTRATION OF PUMPED WATER AS SHOWN ON THE SOIL EROSION & SEDIMENT CONTROL PLAN.
13. DEMOLISH ALL STORM SEWER PIPING, INLETS, AND DRAIN PIPING AS NOTED ON THE PLANS. BACKFILL ALL VOIDS WITH CERTIFIED CLEAN DENSE GRADED AGGREGATE AND COMPACT IN 6" – 8" LIFTS TO 95 PERCENT OF MODIFIED PROCTOR DENSITY PER ASTM D-1557. ALL BACKFILLING AND SOIL COMPACTION SHALL BE OBSERVED AND TESTED BY THE GEOTECHNICAL ENGINEER.
14. INSTALL DE-WATERING MEASURES AREA-BY-AREA, AS EARTHWORK PROGRESSES. SEE SITE MAINTENANCE NOTES AND EARTHWORK SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
15. REFER TO THE SITE UTILITY PLAN FOR THE LOCATION, ALIGNMENT, AND DEPTH OF NEW STORM SEWER SYSTEM PIPING AND INLETS.

Civil Engineering Consultant: EEG 1633D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

BETH E. KENDERDINE, P.E. 12.15.25
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A00706000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21A00129700
JASON J. DUBOWITCH, AIA
NJ - 21A00706000 | PA - RA410456
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21A00031100 | PA - RA410458
Architect
10/10/25
Date
FVHDPC.COM
Corporate: 1515 Lower Ferry Road Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue Mont Clare - Pennsylvania 19453
FVHDPC Fitzgerald Venesz Hopkins Duthie PC
Frayiak Venesz Hopkins Duthie PC

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number
5516C

Project Date
10.10.2025

Checked By
GRD

Drawn By

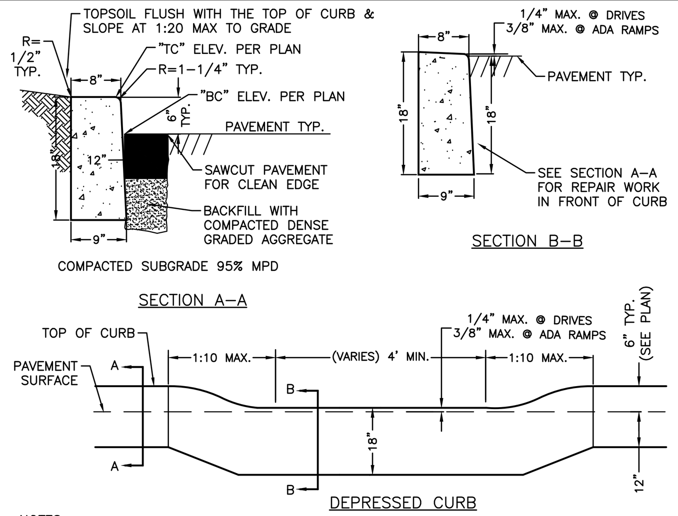
Scale

Drawing Name
DEMOLITION PLAN

Revisions

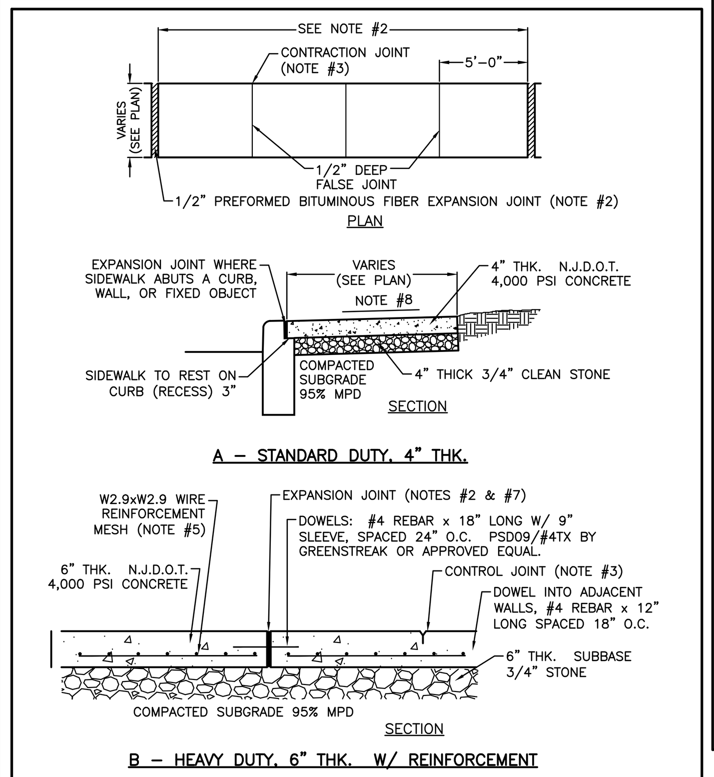
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	12.15.25	NJ DCA RESPONSES
	12.15.25	ISSUED FOR BID
1	1.22.26	ADDENDUM 2

Drawing Number
C-2.0



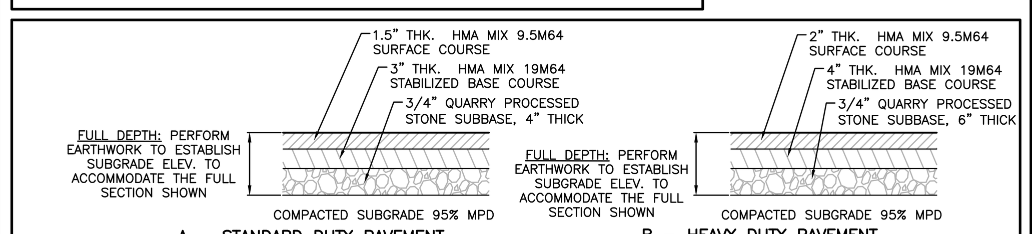
NOTES:
1. CONCRETE TO BE N.J.DOT. 4000 PSI, AIR-ENTRAINED
2. CURB FACE (REVEAL) TO BE 6 INCHES OR PER SPOT ELEVATIONS ON THE GRADING PLAN.
3. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK @ 20 FT. MAX. INTERVAL.
4. ALL DEPRESSED CURBS AT ADA RAMPS MUST BE FLUSH (MAX 3/8" LIP). PAINT CURB @ ADA RAMPS BLUE. (SEE NOTE #5 FOR BASIS OF DESIGN PAINT PRODUCT – COLOR BLUE)
5. PAINT CURB YELLOW TO DESIGNATE NO PARKING ZONES. ALL NEW CURBING THAT IS REPLACING EXISTING CURB THAT WAS PAINTED YELLOW TO DELINEATE "NO PARKING AREAS" MUST ALSO BE PAINTED YELLOW "IN-KIND." BASIS OF DESIGN PRODUCT IS RUSTOLEUM SYSTEM 2300 TRAFFIC MARKING PAINT OR APPROVED EQUAL.

(1) CONCRETE CURB
NOT TO SCALE



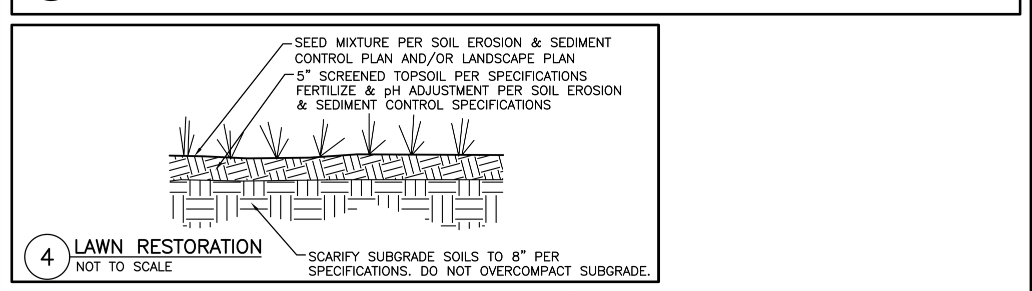
NOTES:
1. PORTLAND CEMENT CONCRETE TO BE NJ DOT, 4,000 PSI, AIR ENTRAINED
2. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK ALONG ALL BUILDING WALLS AND OTHER RIGID SURFACES. THE MAXIMUM SPACING OF EXPANSION JOINTS SHALL BE AS FOLLOWS:
   4" THICK SLAB: 16 FT.
   6" THICK SLAB: 24 FT.
3. CONTROL JOINTS SHALL BE TOOLED TO A DEPTH = 25% OF THE SLAB THICKNESS. CONTROL JOINTS MAY BE SAWCUT WITH AN EARLY ENTRY DRY CUT SAW. SAWCUT LINES SHALL CLEAN AND UNCHIPPED. THE MAXIMUM SPACING SHALL BE AS FOLLOWS:
   4" THICK SLAB: 8 FT.
   6" THICK SLAB: 12 FT.
4. PROVIDE A SLIP RESISTANT FINISH FOR ALL BARRIER FREE ACCESSIBLE ROUTES.
5. STEEL REINFORCEMENT, WHEN SPECIFIED, SHALL BE EPOXY COATED AND PLACED AT THE BOTTOM 1/3 OF SLAB DEPTH.
   6" THICK SLAB: 2 INCHES
6. ALL CONSTRUCTION SHALL BE ON COMPACTED SUBGRADE PER SPECIFICATIONS.
7. ALL JOINTS SHALL BE SEALED WITH EXTERIOR GRADE CONCRETE JOINT SEALER, SUCH AS "CONTRACTORS CONCRETE SEALANT" BY DOW CORNING. SUBSTITUTIONS ARE PERMITTED PROVIDED THAT EQUIVALENCE IS DEMONSTRATED AND COLOR MATCHES ARE COMPARABLE. ALL JOINT SEALANT SHALL BE INSTALLED IN A PROFESSIONAL AND "WORKMANLIKE" MANNER, TRUE TO LINE AND SHALL NOT WAVER NOTICEABLY ALONG JOINTS.
8. MAXIMUM CROSS SLOPE FOR SIDEWALKS IS 2%. SEE GRADING PLAN FOR SLOPES IN PLAZAS AND ALL PAVEMENT AREAS.
9. MAX. RUNNING SLOPE ALONG ANY SIDEWALK OR PLAZA IS 5 PERCENT.
10. CONCRETE SHALL BE DOWELED TO ADJACENT BUILDING FOUNDATION USING #4 GRADE 60 REBARS, MIN. 12" LONG. USE SPEED DOWEL BY GREENSTREAK, OR EQUAL PLACED AT 18" O.C. PROVIDE EXPANSION SLEEVE FOR EACH DOWEL.

(2) CONCRETE PAVEMENT
NOT TO SCALE

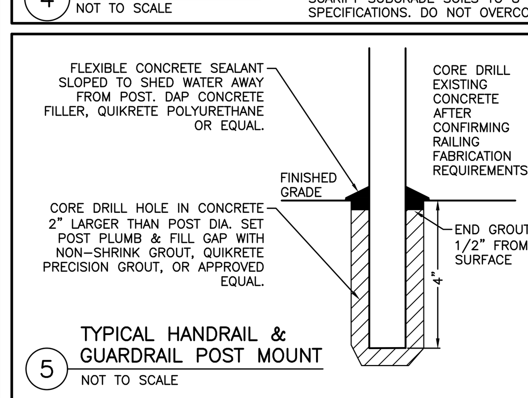


NOTES:
1. ALL BITUMINOUS PAVEMENT SHALL BE HOT MIX ASPHALT, PER NJ DOT SPECIFICATIONS.
2. IN ALL AREAS WHERE FULL DEPTH PAVEMENT & SUBBASE CONSTRUCTION IS PROPOSED, DEMOLISH EXISTING SURFACES AND EXCAVATE TO REQUIRED SUBGRADE ELEVATIONS BASED UPON GRADES SHOWN ON THE GRADING PLAN.
3. DISPOSE OF ALL WASTE MATERIALS AND EXCESS SOILS IN A LEGAL MANNER OFF SITE.
4. PROVIDE A TACK COAT BETWEEN PAVEMENT COURSES.

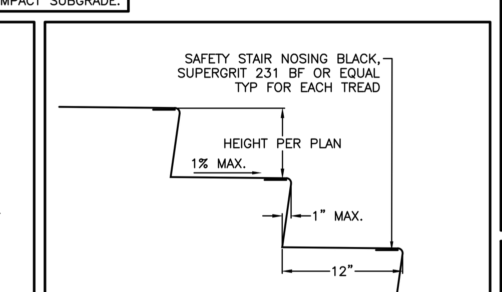
(3) BITUMINOUS PAVEMENT (HOT MIX ASPHALT)
NOT TO SCALE



(4) LAWN RESTORATION
NOT TO SCALE

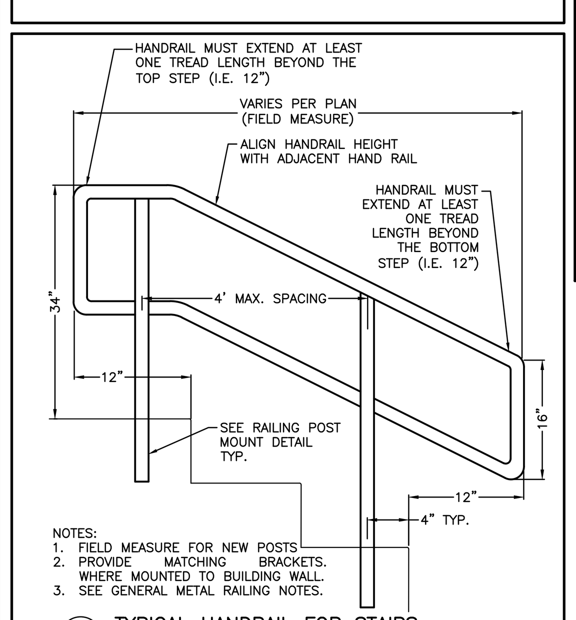


(5) TYPICAL HANDRAIL & GUARDRAIL POST MOUNT
NOT TO SCALE



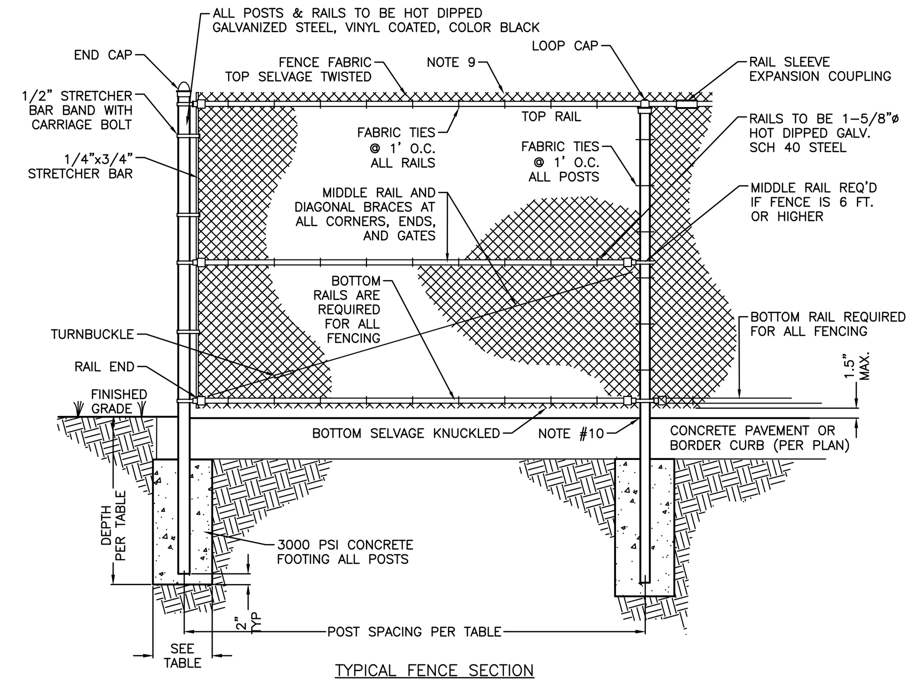
TREAD/RISER NOTES:
1.) THE GREATEST RISER HEIGHT WITHIN A FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".
2.) THE GREATEST TREAD DEPTH WITHIN A SET OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".
3.) MINIMUM TREAD DEPTH = 11"
MINIMUM RISER HEIGHT = 4"
MAXIMUM RISER HEIGHT = 7"
4.) APPLY A UNIFORM COATING OF CLEAR URETHANE TO ALL SURFACES OF THE STAIR NOSING THAT WILL CONTACT THE CONCRETE STAIR. ALLOW TO SET.
5.) MAXIMUM SLOPE OF TREAD = 1% TOWARD NOSE.
MAXIMUM CROSS SLOPE OF STAIRS = 2%

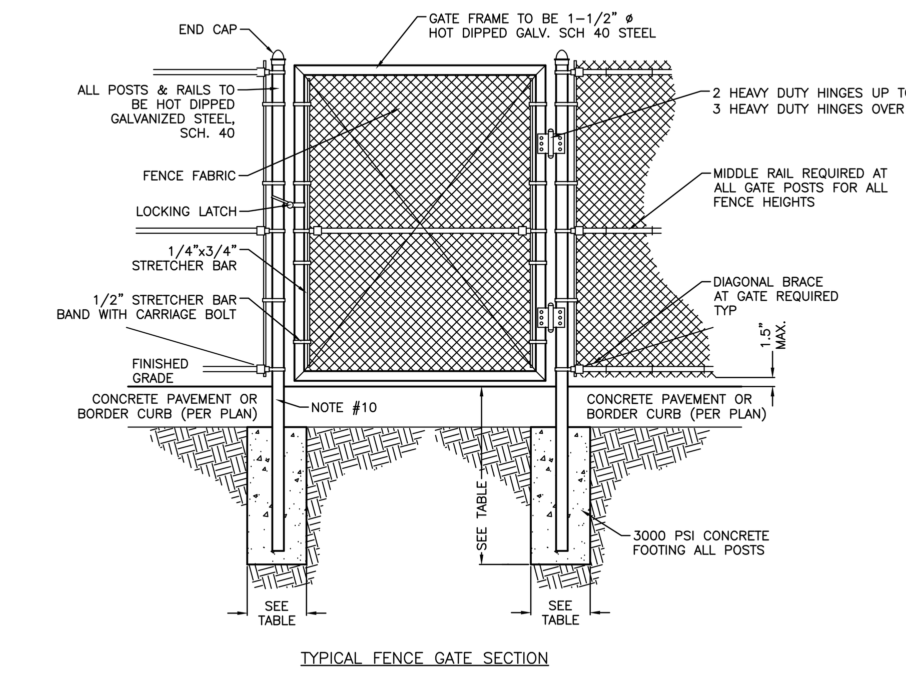
(6) TYPICAL STAIR TREADS & RISERS
NOT TO SCALE



NOTES:
1. FIELD MEASURE FOR NEW POSTS
2. PROVIDE MATCHING BRACKETS. WHERE MOUNTED TO BUILDING WALL.
3. SEE GENERAL METAL RAILING NOTES.

(7) TYPICAL HANDRAIL FOR STAIRS
NOT TO SCALE





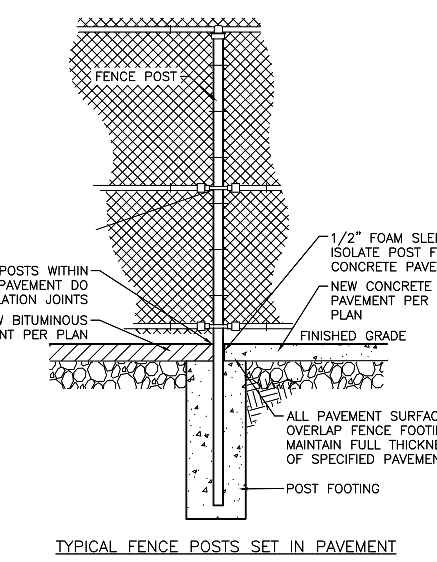
GENERAL NOTES
1. FENCE FABRIC (MESH) TO BLACK, VINYL COATED NO. 9 GALVANIZED STEEL WIRE. FABRIC TO FACE PLAYING FIELD. MESH OPENING SIZE IS 1.75".
2. POST SIZES, STRENGTH, AND SPACING TO BE PER TABLE.
3. ALL FENCE POSTS SHALL BE GALVANIZED STEEL, VINYL COATED, COLOR BLACK. MATERIAL STRENGTH PER TABLE.
4. FENCE OVER 5' HIGH: MIDDLE RAIL IS REQUIRED ON ALL SECTIONS.
5. ALL FENCING & GATES SHALL HAVE BOTTOM RAILS.
6. GATE WIDTHS SHOWN ON THE PLAN ARE CLEAR OPENINGS. ALL GATES SHALL HAVE LOCKING HARDWARE.
7. ALL DOUBLE GATES SHALL HAVE A CANE BOLT STOP WITH MALLEABLE STEEL CENTER STOP (MUSHROOM), BY SIGNET FENCE OR APPROVED EQUAL.
8. THE MAXIMUM GAP BETWEEN THE GROUND AND BOTTOM OF FENCE IS ONE AND ONE HALF (1.5) INCHES.
9. SEE DETAIL #6 FOR SAFETY RAIL CAP TO BE INSTALLED ON 4 FT. HIGH FENCING ALONG THE PERIMETER.
10. PLAN THE LOCATION OF FENCE POSTS TO AVOID UNDERGROUND UTILITIES AND CONDUITS.
11. GATE HEIGHTS SHALL MATCH THE FENCE THEY ADJOIN.

FENCE POST TABLE:

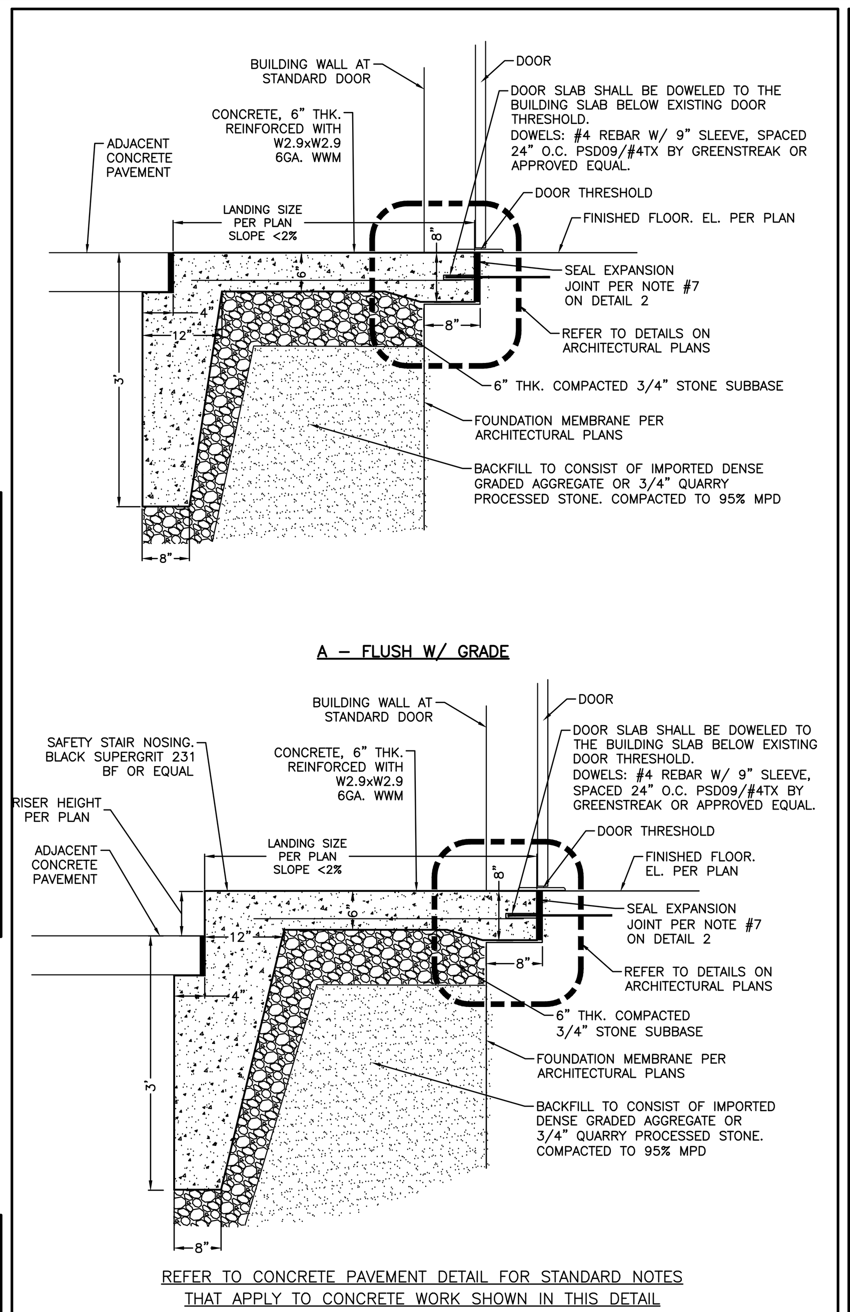
FENCE	STEEL POST MATERIAL	POST SIZE (IN.)	MAX. POST SPACING (FT.)	MIN. POST DEPTH (FT.)	MIN. FOOTING DIAMETER (FT.)
6 FEET	ASTM F1083 (50 KSI)	3	10	4	2.5
8 FEET	ASTM F1083 (50KSI)	3	8	5	3.0

END & CORNER POSTS TO BE ONE SIZE LARGER THAN SHOWN FOR LINE POSTS.

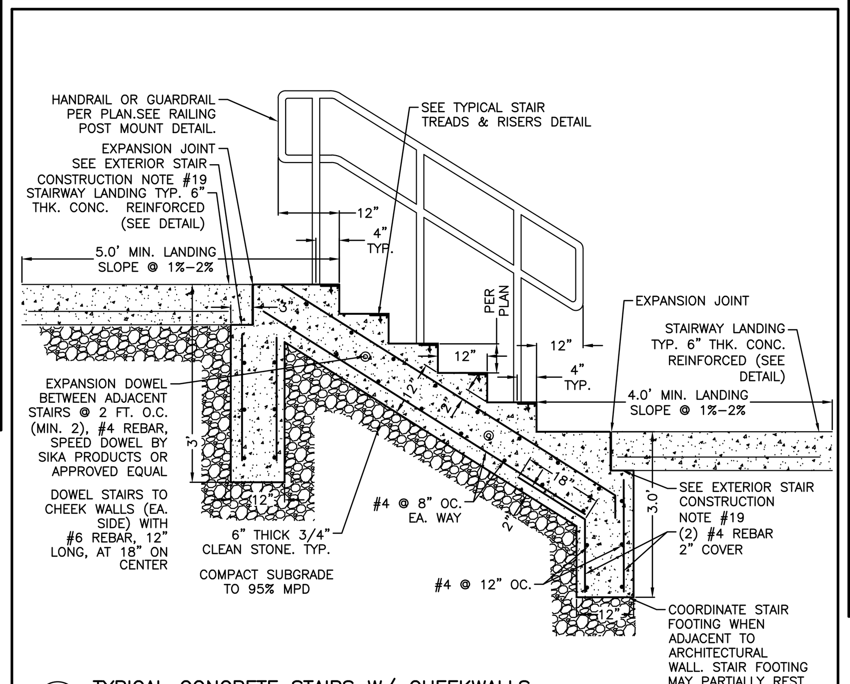
(CW) = FENCE INSTALLED IN CURB WALL SHALL HAVE FOOTING EXTENDED THROUGH THE WALL TO THE DEPTH SHOWN. SEE DETAIL



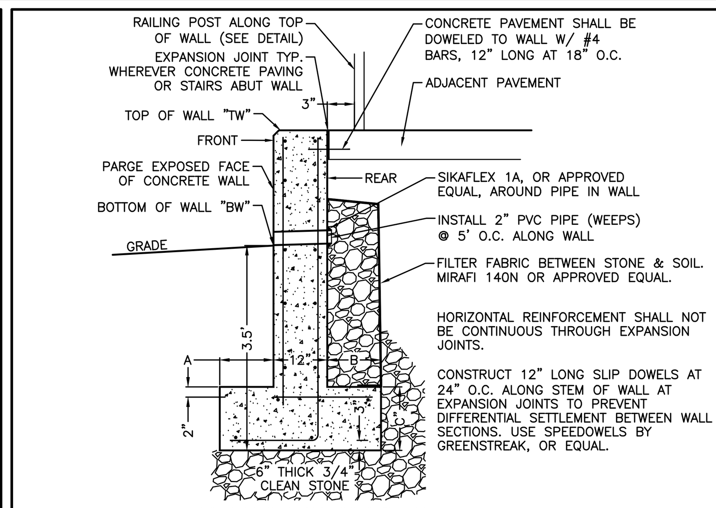
(8) CHAIN LINK FENCE
NOT TO SCALE



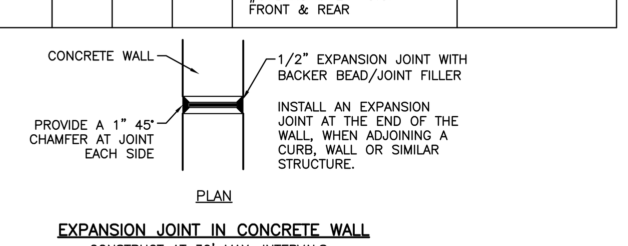
(9) CONCRETE LANDING
NOT TO SCALE



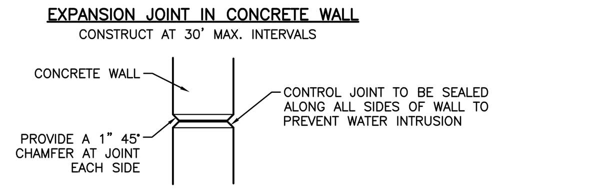
(10) TYPICAL CONCRETE STAIRS W/ CHEEKWALLS
NOT TO SCALE



WALL HEIGHT	DIM "A"	DIM "B"	DIM "C"	STEM REINFORCEMENT	FOOTING REINF.
UP TO 4'-0"	1'-2"	1'-3"	1'-3"	VERTICAL BACK: #6 BARS @ 18" O.C. FRONT: #4 BARS @ 36" O.C. (REQUIRED TO SUPPORT HORIZONTAL BARS) HORIZONTAL #5 BARS @ 24" O.C. FRONT & REAR	TOE: #6 BARS @ 18" O.C. HEEL: #6 BARS @ 18" O.C. HORIZONTAL: #6 BARS @ 16" O.C. (ONE LAYER ONLY)



EXPANSION JOINT IN CONCRETE WALL
CONSTRUCT AT 30' MAX. INTERVALS



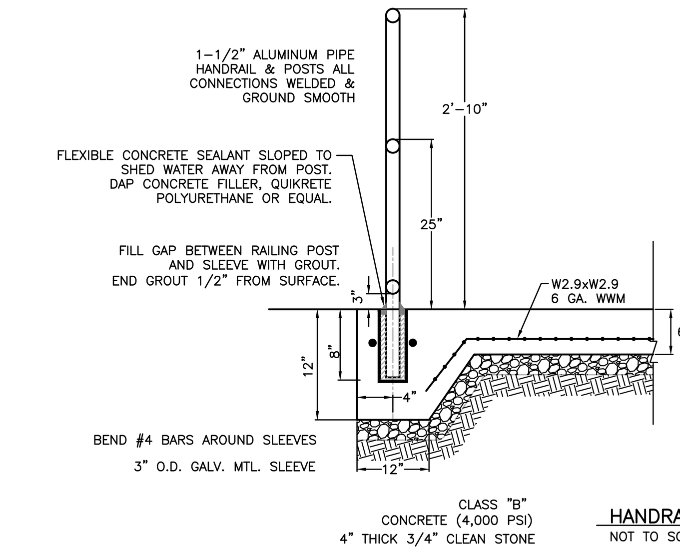
CONTROL JOINT IN CONCRETE WALL
MIDWAY BETWEEN EXPANSION JOINTS

SEAL EXPANSION & CONTROL JOINTS WITH BACKER BEAD & NON-SAG CAULK, POURTHANE, BY WR MEADOWS OR EQUAL. COLOR TO MATCH CONCRETE/MORTAR COLOR.

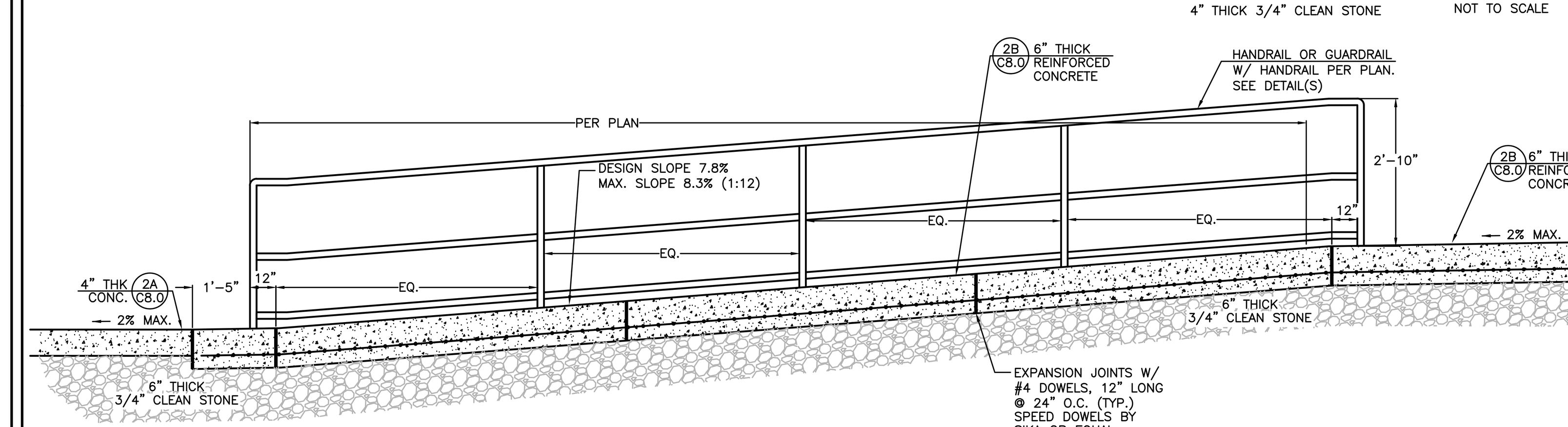
CAST-IN-PLACE CONCRETE NOTES
1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318) LATEST EDITION, AND THE SPECIFICATIONS. ALL CONCRETE WORK SHALL ALSO COMPLY WITH THE LATEST EDITIONS OF THE FOLLOWING ACI PUBLICATIONS: ACI-301, ACI-302, ACI-304, ACI-305, ACI-308, ACI-309, ACI-315, ACI-347, ACI-211.1.
2. MATERIALS SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:
   CEMENT, TYPE 1: C153
   AGGREGATES: C33
   REINFORCEMENT: A615
   ADMIXTURES (EXCEPT AIR): C494
   CURING & HARDENING COMPOUND: C309
   READY MIX CONCRETE: C94
   WELDED WIRE FABRIC: A185
3. THE COMPRESSIVE STRENGTH OF THE CONCRETE FOR EACH PORTION OF THE STRUCTURE SHALL BE AS DESIGNATED BELOW.
   (1) NORMAL WEIGHT CONCRETE
   (2) STRENGTH: 4,000 PSI AT 28 DAYS
   (3) AIR CONTENT: 4.5% TO 7.5%
   (4) SLUMP: 1" TO 3"
   (5) ADMIXTURES: WATER REDUCING AGENT (EUCON WR-75)
   (6) W/C RATIO: 0.45 MAXIMUM BY WEIGHT, MINIMUM 5.5 CEMENT BAGS PER CUBIC YARD.
4. A DESIGN MIX SHALL BE PROPORTIONED IN ACCORDANCE WITH SECTION 5.3 (FIELD EXPERIENCE AND/OR TRIAL MIXTURES) OF ACI-318. DESIGN MIX(ES) SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENCED IN THE STATE OF NEW JERSEY AND SUBMITTED FOR THE ENGINEER'S REVIEW PRIOR TO PLACING ANY CONCRETE.
5. CONCRETE SHALL BE PLACED AS NEARLY AS PRACTICABLE IN ITS FINAL POSITION AND CONSOLIDATED BY RODDING, SPADING OR INTERNAL TYPE OF MECHANICAL VIBRATORS. MECHANICAL VIBRATORS SHALL NOT BE USED TO MOVE CONCRETE LATERALLY.
6. ALL INSERTS, ANCHOR BOLTS, SLEEVES ETC. SHALL BE SET IN PLACE PRIOR TO PLACING CONCRETE.
7. ALL GROUT SHALL BE NON-SHRINK GROUT BY EUCLID CHEMICAL COMPANY OR EQUAL.
8. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL CONFORM TO ASTM A615, GRADE 60.
9. REINFORCING STEEL, INCLUDING HOOKS AND BENDS, SHALL BE DETAILED IN ACCORDANCE WITH ACI 315. ALL REINFORCING STEEL MARKED CONTINUOUS (CONT.) ON THE PLANS AND DETAILS SHALL BE LAPPED 36 BAR DIAMETERS AT SPLICES UNLESS OTHERWISE NOTED.
10. UNLESS OTHERWISE NOTED, MINIMUM 2" CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT PER SECTION 7.7 OF ACI 318.
11. CONCRETE TESTING SHALL BE MADE BY AN INDEPENDENT LABORATORY ENGAGED BY AND PAID FOR BY THE CONTRACTOR. A SET OF FOUR (4) CYLINDERS TEST AT 7 DAYS (2) AND 28 DAYS (2) IN ACCORDANCE WITH ASTM C39 SHALL BE DOCUMENTED FOR EACH DAYS POUR. SUBMIT RESULTS IN A REPORT FORM FOR THE OWNERS REVIEW.
12. SEAL EXPANSION & CONTROL JOINTS WITH BACKER BEAD & NON-SAG CAULK, POURTHANE, BY WR MEADOWS OR EQUAL. COLOR TO MATCH CONCRETE/MORTAR COLOR.
13. EXPANSION JOINTS SHALL BE CONSTRUCTED AT 30' MAX. INTERVALS, WITH CONTROL JOINTS MIDWAY BETWEEN.
14. INSTALL SLIP DOWELS, SPEED DOWEL BY GREENSTREAK PRODUCTS OR APPROVED EQUAL, WHERE NEW CONCRETE PAVEMENT ABUTS WALL.

(11) CONCRETE WALL
NOT TO SCALE

GENERAL METAL RAILING NOTES:
1. INSERT SLEEVES OR CORE DRILL INTO THE CONCRETE TO INSTALL THE NEW RAILINGS.
2. DO NOT FABRICATE RAILINGS UNTIL WALKING SURFACES HAVE BEEN SURVEYED, MEASURED, AND DETERMINED TO BE IN CONFORMANCE WITH THESE PLANS AND APPLICABLE CODES.
3. TYPICAL POSTS & TOP RAILS SHALL BE ALUMINUM STRUCTURAL TUBING. ALUMINUM RAILING COMPONENTS SUCH AS STRUCTURAL TUBE, PIPE, AND BAR SHALL BE IN ACCORDANCE WITH ASTM B221 OR ASTM B429, ALLOY 6061-T6. THE ALUMINUM RAILING SHALL BE BLACK POWDER COATED FINISH UNLESS NOTED OTHERWISE.
4. ALUMINUM RAILING COMPONENTS SUCH AS STRUCTURAL TUBE, PIPE, AND BAR SHALL BE IN ACCORDANCE WITH ASTM B221 OR ASTM B429, ALLOY 6061-T6. THE ALUMINUM RAILING SHALL BE CLEAR ANODIZED COATED FINISH UNLESS NOTED OTHERWISE.
5. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (ALUMINUM) ANSI/AWS D1.2 (CURRENT EDITION). ALL FIXED JOINTS SHALL BE WELDED ALL AROUND AND GROUND SMOOTH.
6. POSTS & BALUSTERS SHALL BE FABRICATED AND INSTALLED PLUMB.
7. SHOP DRAWINGS FOR RAILINGS, DETAILING SPECIFIC SITE GEOMETRY, SHALL BE SUBMITTED.
8. REFER TO CONSTRUCTION NOTES ON DRAWINGS FOR ADDITIONAL REQUIREMENTS.
9. PROVIDE EXPANSION JOINTS EVERY 20 FEET ALONG CONTINUOUS RAILING.
10. TYPICAL POSTS & CROSS RAILS SHALL BE 1.5" DIAMETER ALUMINUM STRUCTURAL TUBING.
11. ALUMINUM RAILING COMPONENTS SUCH AS STRUCTURAL TUBE, PIPE, AND BAR SHALL BE IN ACCORDANCE WITH ASTM B221 OR ASTM B429, ALLOY 6061-T6. THE ALUMINUM RAILING SHALL BE CLEAR ANODIZED FINISH UNLESS NOTED OTHERWISE.
12. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (ALUMINUM) ANSI/AWS D1.2 (CURRENT EDITION). ALL FIXED JOINTS SHALL BE WELDED ALL AROUND AND GROUND SMOOTH.
13. POSTS SHALL BE FABRICATED AND INSTALLED PLUMB.
14 REFER TO CONSTRUCTION NOTES ON DRAWINGS FOR ADDITIONAL REQUIREMENTS.



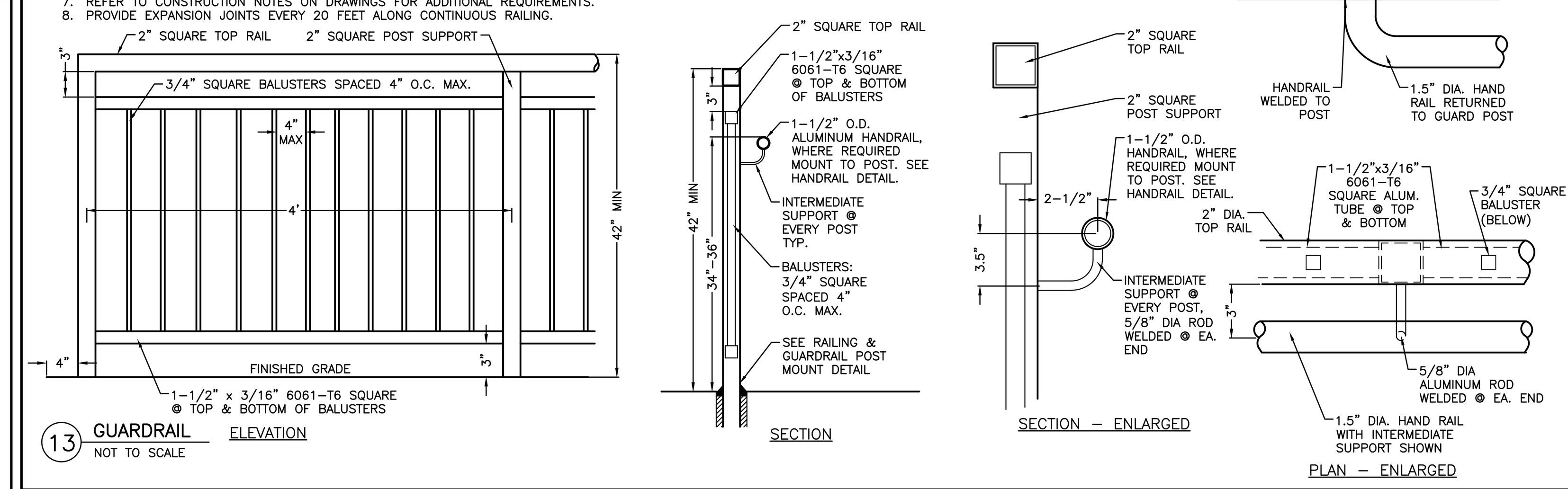
HANDRAIL
NOT TO SCALE



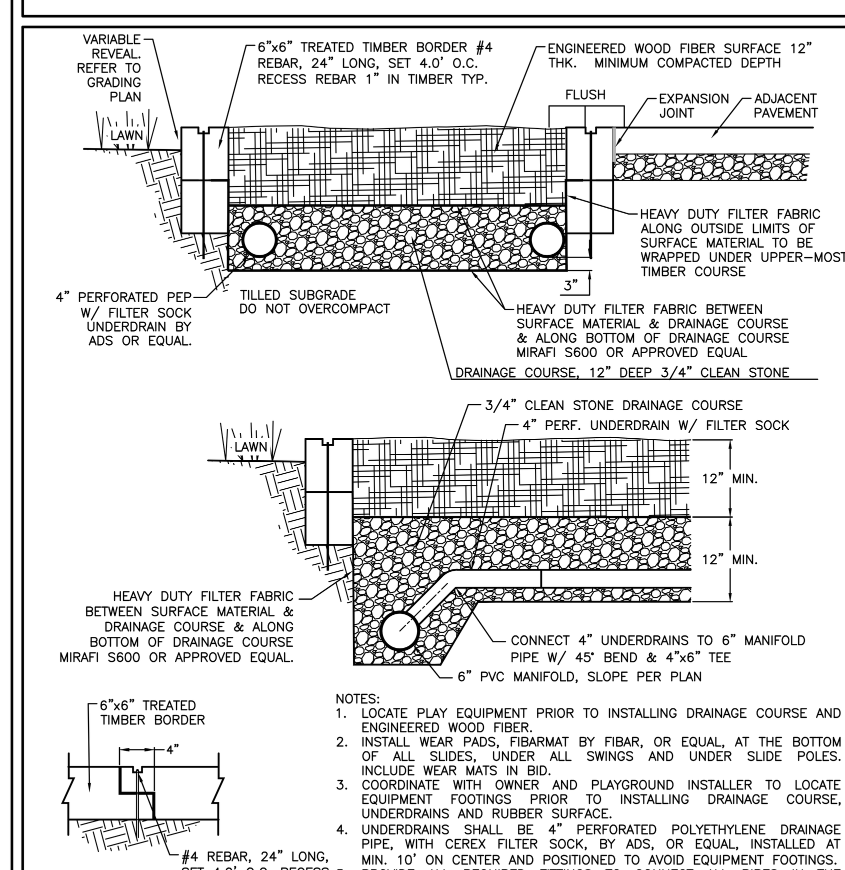
GENERAL EXTERIOR RAMP CONSTRUCTION NOTES:
1. ALL STEEL REINFORCEMENT SHALL BE GRADE 60 EPOXY COATED, ASTM A615.
2. ALL CONSTRUCTION SHALL CONFORM TO ACI-318, LATEST REVISION, 4,000 PSI, AIR ENTRAINED PORTLAND CEMENT CONCRETE.
3. ALL CONCRETE SHALL BE SEALED IMMEDIATELY AFTER FINISHING WITH ASTM C309, TYPE 1, CLASS A COMPLIANT SEALER.
4. ALL EXPANSION AND CONTROL JOINTS SHALL BE SEALED WITH AN EXTERIOR GRADE NON-SAG SEALANT, SikaFlex-2c NS/SL OR EQUAL. SEALANT SHALL BE FLUSH WITH THE SURFACE OR FLUSH WITH THE INTERIOR EDGE OF A CHAMFER AS APPLICABLE.
5. THE MINIMUM COVER FOR ALL REBAR IS TWO (2) INCHES FROM ANY SURFACE AND AS NOTED ON THE PLANS.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
7. FURNISH COMPRESSIVE STRENGTH TESTS TO THE ENGINEER AT 7 DAY AND 28 DAY MILESTONES TO DEMONSTRATE DESIGN COMPRESSIVE STRENGTH HAS BEEN ACHIEVED.
8. INSERT SLEEVES, OR CORE DRILL INTO THE RAMP TO INSTALL THE NEW HANDRAILS.
9. DO NOT FABRICATE HAND RAILS UNTIL THE RAMP HAVE BEEN SURVEYED, MEASURED, AND DETERMINED TO BE IN CONFORMANCE WITH THESE PLANS AND APPLICABLE CODES.
10. SHOP DRAWINGS FOR THE NEW RAMP AND HANDRAILS, DETAILING SPECIFIC SITE GEOMETRY, INCLUDING POST & EXPANSION JOINT LOCATIONS SHALL BE SUBMITTED.
11. RAMPS THAT EXCEED THE ALLOWABLE TOLERANCES NOTED IN THIS DETAIL WILL BE DEMOLISHED AND REPLACED AT THE CONTRACTOR'S EXPENSE. THE OWNER WILL NOT ACCEPT PATCHED AND RETROFITTED STAIRS. ALL CONSTRUCTION SHALL BE NEW AND FINISHED TO WORKMANLIKE STANDARDS.
12. RAMPS SHALL COMPLY WITH ICC A117.1 2017.

(12) RAMP DETAILS
NOT TO SCALE

GENERAL METAL RAILING NOTES:
1. INSERT SLEEVES OR CORE DRILL INTO THE CONCRETE TO INSTALL THE NEW RAILINGS.
2. DO NOT FABRICATE RAILINGS UNTIL WALKING SURFACES HAVE BEEN SURVEYED, MEASURED, AND DETERMINED TO BE IN CONFORMANCE WITH THESE PLANS AND APPLICABLE CODES.
3. TYPICAL POSTS & TOP RAILS SHALL BE ALUMINUM STRUCTURAL TUBING. ALUMINUM RAILING COMPONENTS SUCH AS STRUCTURAL TUBE, PIPE, AND BAR SHALL BE IN ACCORDANCE WITH ASTM B221 OR ASTM B429, ALLOY 6061-T6. THE ALUMINUM RAILING SHALL BE BLACK POWDER COATED FINISH UNLESS NOTED OTHERWISE.
4. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (ALUMINUM) ANSI/AWS D1.2 (CURRENT EDITION). ALL FIXED JOINTS SHALL BE WELDED ALL AROUND AND GROUND SMOOTH.
5. POSTS & BALUSTERS SHALL BE FABRICATED AND INSTALLED PLUMB.
6. SHOP DRAWINGS FOR RAILINGS, DETAILING SPECIFIC SITE GEOMETRY, SHALL BE SUBMITTED.
7. REFER TO CONSTRUCTION NOTES ON DRAWINGS FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE EXPANSION JOINTS EVERY 20 FEET ALONG CONTINUOUS RAILING.

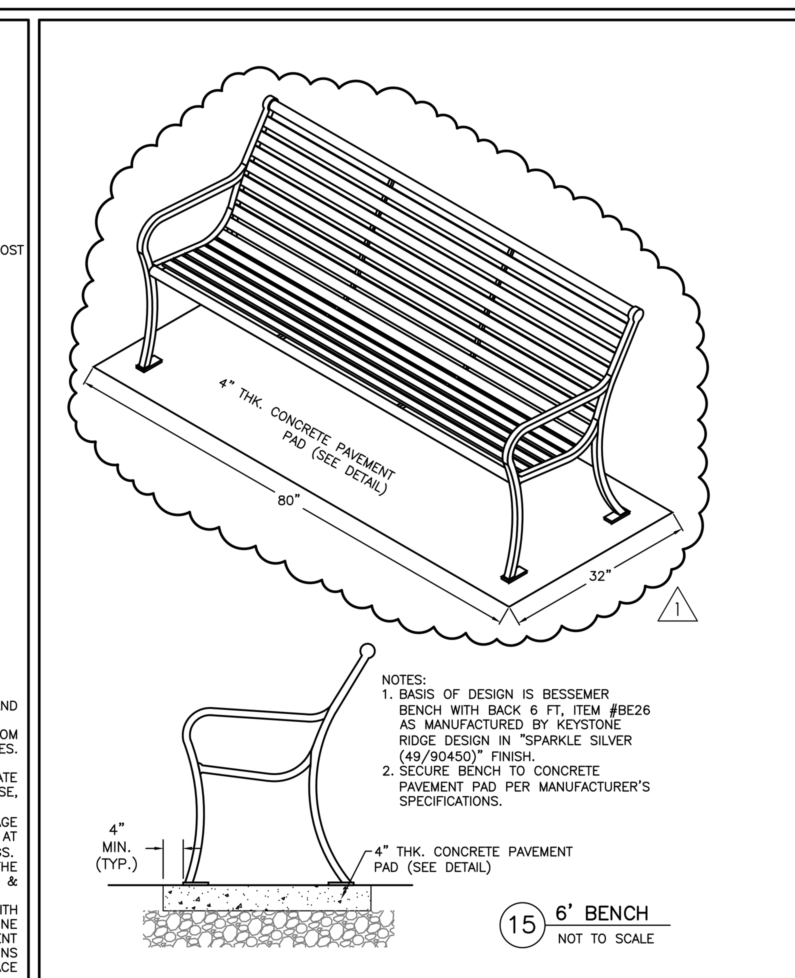


(13) GUARDRAIL
NOT TO SCALE



NOTES:
1. LOCATE PLAY EQUIPMENT PRIOR TO INSTALLING DRAINAGE COURSE AND ENGINEERED WOOD FIBER.
2. INSTALL WEAR PADS, FIBARMAT BY FIBAR, OR EQUAL, AT THE BOTTOM OF ALL SLIDES, UNDER ALL SWINGS AND UNDER SLIDE POLES. INCLUDE WEAR MATS IN BID.
3. COORDINATE WITH OWNER AND PLAYGROUND INSTALLER TO LOCATE EQUIPMENT FOOTINGS PRIOR TO INSTALLING DRAINAGE COURSE, UNDERDRAINS AND RUBBER SURFACE.
4. UNDERDRAINS SHALL BE 4" PERFORATED POLYETHYLENE DRAINAGE PIPE, WITH CEREX FILTER SOCK, BY ADS, OR EQUAL, INSTALLED AT MIN. 10' ON CENTER AND POSITIONED TO AVOID EQUIPMENT FOOTINGS.
5. PROVIDE ALL REQUIRED FITTINGS TO CONNECT ALL PIPES IN THE CONFIGURATION SHOWN ON THE PLANS. INCLUDE ALL COUPLERS & TRANSITION PIECES NEEDED TO MEET THE DESIGN INTENT.
6. THE STONE SURFACE SHALL BE LEFT IN A COMPACTED STATE WITH UNIFORM PLANARITY IN ALL DIRECTIONS. ADJUST THE FINISH STONE LAYER TO PROVIDE FOR A SLOPE NOT GREATER THAN ONE PERCENT ACROSS THE FOOTPRINT OF THE PLAYGROUND EQUIPMENT. ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO THE FINISHED SURFACE ELEVATION.

(14) ENGINEERED WOOD FIBER PLAY SURFACE W/ DRAINAGE COURSE & TIMBER BORDER (W/ UNDERDRAIN)
NOT TO SCALE



NOTES:
1. BASIS OF DESIGN IS BESSEMER BENCH WITH BACK 6 FT, ITEM #BE26 AS MANUFACTURED BY KEYSTONE RIDGE DESIGN IN "SPARKLE SILVER (49/90450)" FINISH.
2. SECURE BENCH TO CONCRETE PAVEMENT PAD PER MANUFACTURER'S SPECIFICATIONS.

(15) 6' BENCH
NOT TO SCALE

EXTERIOR STAIR CONSTRUCTION NOTES:
1. ALL STEEL REINFORCEMENT SHALL BE GRADE 60 ASTM A615, EPOXY COATED, ASTM A775.
2. ALL CONSTRUCTION SHALL CONFORM TO ACI-318, LATEST REVISION, 4,000 PSI, AIR ENTRAINED PORTLAND CEMENT CONCRETE.
3. ALL CONCRETE SHALL BE SEALED IMMEDIATELY AFTER FINISHING WITH ASTM C309, TYPE 1, CLASS A COMPLIANT SEALER.
4. EXPANSION JOINTS MUST BE PROVIDED AT EACH SIDE OF THE STAIRS, ADJOINING THE CHEEK WALLS.
5. ALL EXPANSION AND CONTROL JOINTS SHALL BE SEALED WITH AN EXTERIOR GRADE NON-SAG SEALANT, SikaFlex-2c NS/SL OR EQUAL. SEALANT SHALL BE FLUSH WITH THE SURFACE OR FLUSH WITH THE INTERIOR EDGE OF A CHAMFER AS APPLICABLE.
6. THE MINIMUM COVER FOR ALL REBAR IS TWO (2) INCHES FROM ANY SURFACE AND AS NOTED ON THE PLANS.
7. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. FURNISH COMPRESSIVE STRENGTH TESTS TO THE ENGINEER AT 7 DAY AND 28 DAY MILESTONES TO DEMONSTRATE DESIGN COMPRESSIVE STRENGTH HAS BEEN ACHIEVED.
9. INSERT SLEEVES, OR CORE DRILL INTO THE STAIRS TO INSTALL THE NEW HANDRAILS.
10. SET FORM ELEVATIONS AND DIMENSIONS USING A PROFESSIONAL LAND SURVEYOR. VERIFY THE ELEVATION, SLOPE, CROSS SLOPE, AND DIMENSIONS OF ALL FORMS PRIOR TO POURING CONCRETE.
11. DO NOT FABRICATE HAND RAILS UNTIL THE STAIRS HAVE BEEN SURVEYED, MEASURED, AND DETERMINED TO BE IN CONFORMANCE WITH THESE PLANS AND APPLICABLE CODES.
12. TYPICAL POSTS & CROSS RAILS SHALL BE 1.5" DIAMETER ALUMINUM STRUCTURAL TUBING.
13. ALUMINUM RAILING COMPONENTS SUCH AS STRUCTURAL TUBE, PIPE, AND BAR SHALL BE IN ACCORDANCE WITH ASTM B221 OR ASTM B429, ALLOY 6061-T6. THE ALUMINUM RAILING SHALL BE CLEAR ANODIZED FINISH UNLESS NOTED OTHERWISE.
14. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (ALUMINUM) ANSI/AWS D1.2 (CURRENT EDITION). ALL FIXED JOINTS SHALL BE WELDED ALL AROUND AND GROUND SMOOTH.
15. RAILING POSTS SHALL BE FABRICATED AND INSTALLED PLUMB.
16. SHOP DRAWINGS FOR THE NEW STAIRS AND HANDRAILS, DETAILING SPECIFIC SITE GEOMETRY, INCLUDING POST & EXPANSION JOINT LOCATIONS SHALL BE SUBMITTED.
17. REFER TO CONSTRUCTION NOTES ON DRAWINGS FOR ADDITIONAL REQUIREMENTS.
18. STAIRWAYS THAT EXCEED THE ALLOWABLE TOLERANCES NOTED IN THIS DETAIL WILL BE DEMOLISHED AND REPLACED AT THE CONTRACTOR'S EXPENSE. THE OWNER WILL NOT ACCEPT PATCHED AND RETROFITTED STAIRS. ALL CONSTRUCTION SHALL BE NEW AND FINISHED TO WORKMANLIKE STANDARDS.
19. ADJACENT CONCRETE LANDINGS SHALL REST ON THE STAIR BY AT LEAST 3 INCHES. PROVIDE A SEALED EXPANSION JOINT AT THIS LOCATION

Civil Engineering Consultant: EEG 1633D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

12.15.25
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21AI01706000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI01299200
JASON J. DUBOWITCH, AIA
NJ - 21AI01979800 | PA - RA406009
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435
Architect
10/10/25
Date

FVHD architects planners
Fraytak Veisz Hopkins Duthie P C
Corporate: 1515 Lower Ferry Road
Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name	Addition and Renovations to Community Park Elementary School
Project Owner Name	Princeton Public Schools
Project Location	372 Witherspoon St, Princeton, NJ 08542
Project Number	5516C
Project Date	10.10.2025
Checked By	GRD
Drawn By	
Scale	
Drawing Name	DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
	12.15.25	NJ DCA RESPONSES
	12.15.25	ISSUED FOR BID
1	1.22.26	ADDENDUM 2

Drawing Number
C-8.0

BASE BID

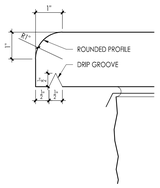
- PAVED SIDEWALKS IN COURTYARD
- PAVED SIDEWALKS IN FLEX COURTYARD
- SECURITY FENCES AND FENCE EGRESS GATES
- LED BOLLARDS ALONG SIDEWALKS
- OVERHEAD CANOPIES AT DOORS

ALT BID #CP-1

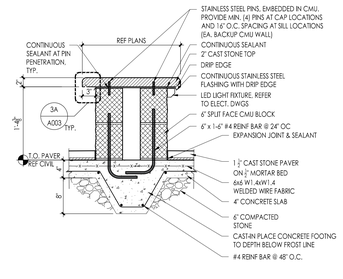
- PLAY PANEL SIDEWALK ALCOVES. SEE 6/A003
- OUTDOOR CLASSROOM AND ADJACENT LANDSCAPING
- GRAVEL PATHWAYS TO OUTDOOR CLASSROOM
- PAVER SECTION OF FLEX COURTYARD
- COURTYARD PAVERS AND BUILT-IN BENCHES ADJACENT TO ART ROOM

NOT IN CONTRACT

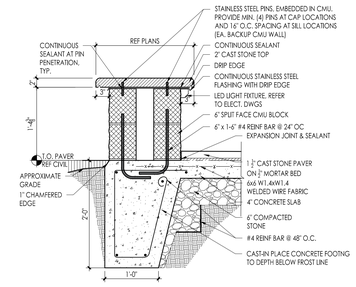
- FREE STANDING OUTDOOR PLAY EQUIPMENT. SEE 6/A003
- SAIL SHADE OVER OUTDOOR CLASSROOM



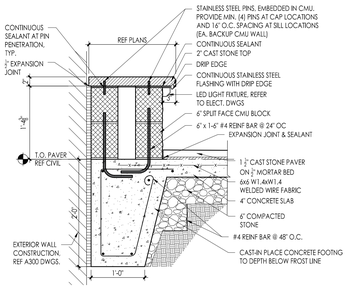
3A TYPICAL BENCH TOP EDGE DETAIL
6" = 1'-0"



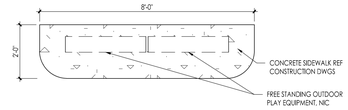
3 TYPICAL CENTER BENCH DETAIL
1" = 1'-0"



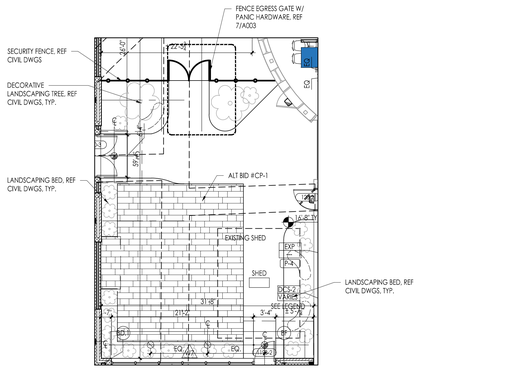
4 TYPICAL BUILT-IN BENCH AT SLAB EDGE
1" = 1'-0"



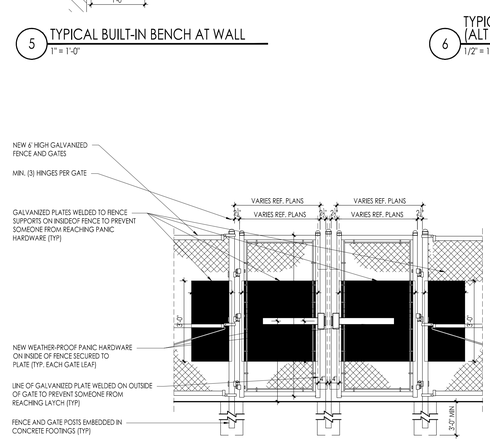
5 TYPICAL BUILT-IN BENCH AT WALL
1" = 1'-0"



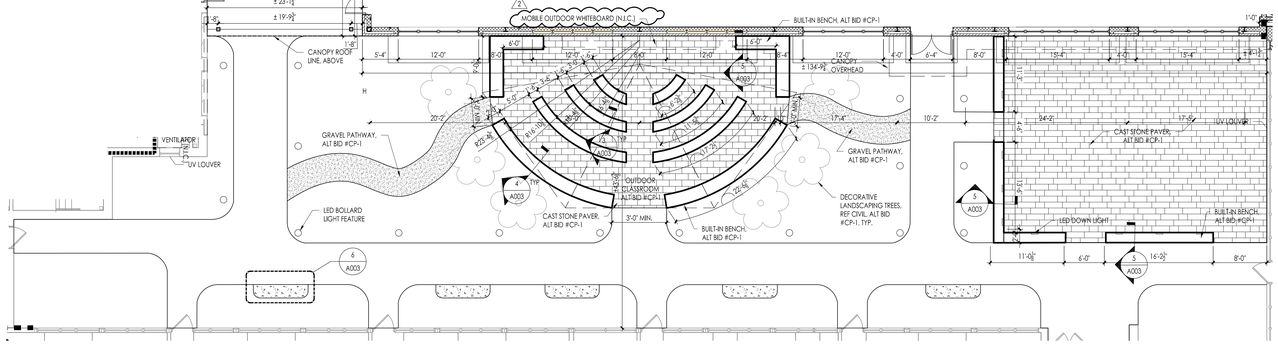
6 TYPICAL SIDEWALK ALCOVE DETAIL (ALT BID #CP-1)
1/2" = 1'-0"



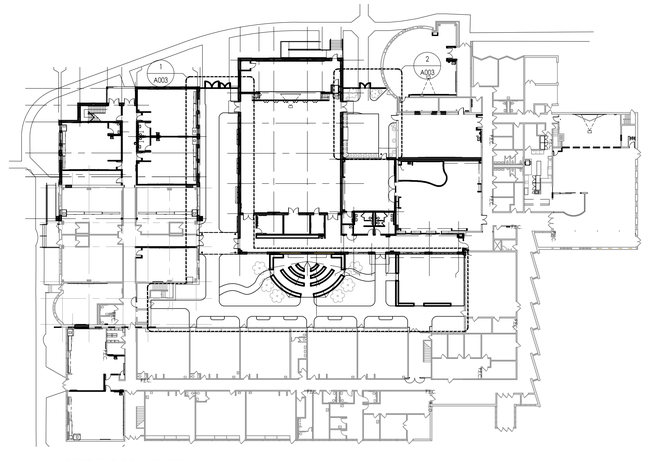
2 ENLARGED FLEX COURTYARD PLAN (ALT BID #CP-1)
1/8" = 1'-0"



7 ENLARGED FLEX COURTYARD PLAN
1/2" = 1'-0"



1 ENLARGED COURTYARD PLAN W/ OUTDOOR CLASSROOM (ALT BID #CP-1)
1/8" = 1'-0"



FIRST FLOOR - KEY PLAN
1/32" = 1'-0"

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07106000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21A07107200 | PA - RA402700
JASON J. LOBOWITCH, AIA
NJ - 21A07117000 | PA - RA414565
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21A00031000 | PA - RA414565
Architect
Date
FVHD Fraytak Veisz Hopkins Duthie P.C.
Corporate: 1515 Lower Ferry Road, Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue, Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

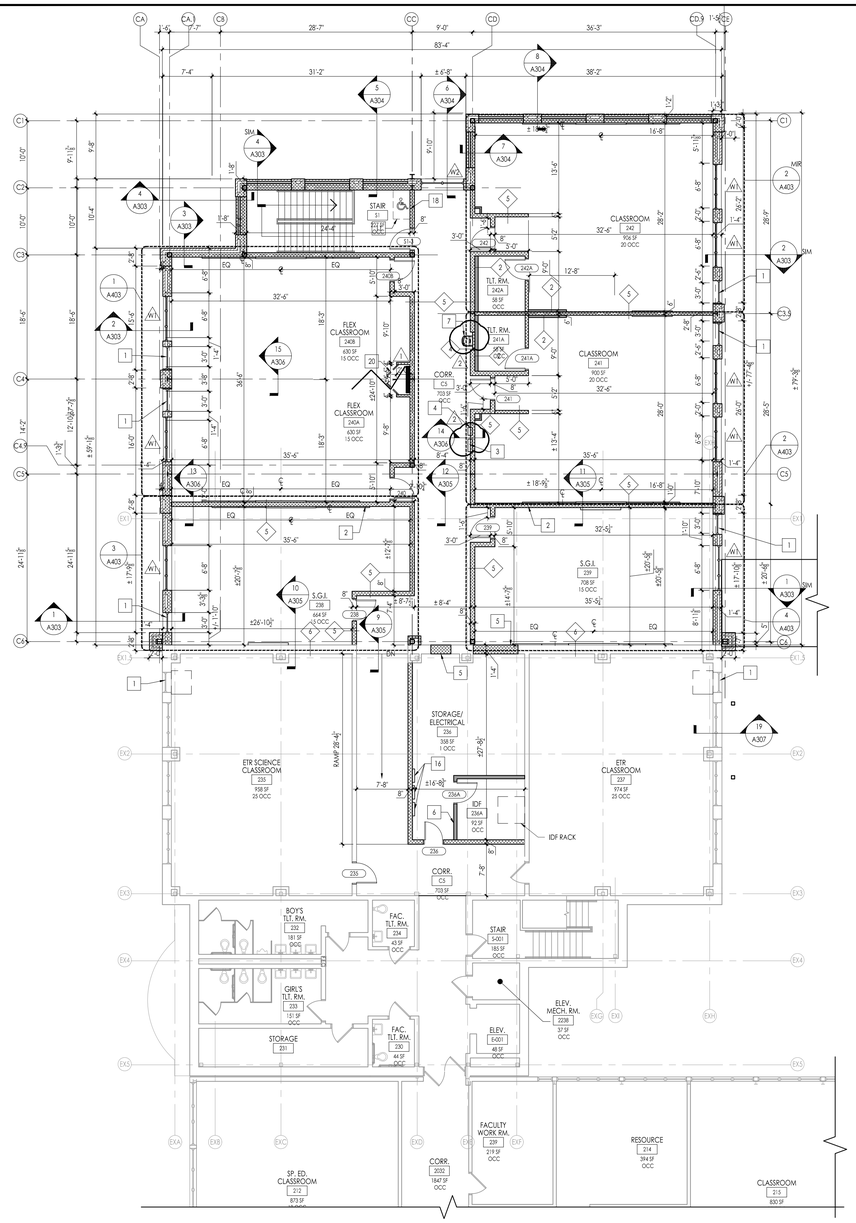
Project Number	5516C
Project Date	09.28.2025
Checked By	GRD
Drawn By	BMP
Scale	AS NOTED

Drawing Name
ARCHITECTURAL SITE PLANS AND DETAILS

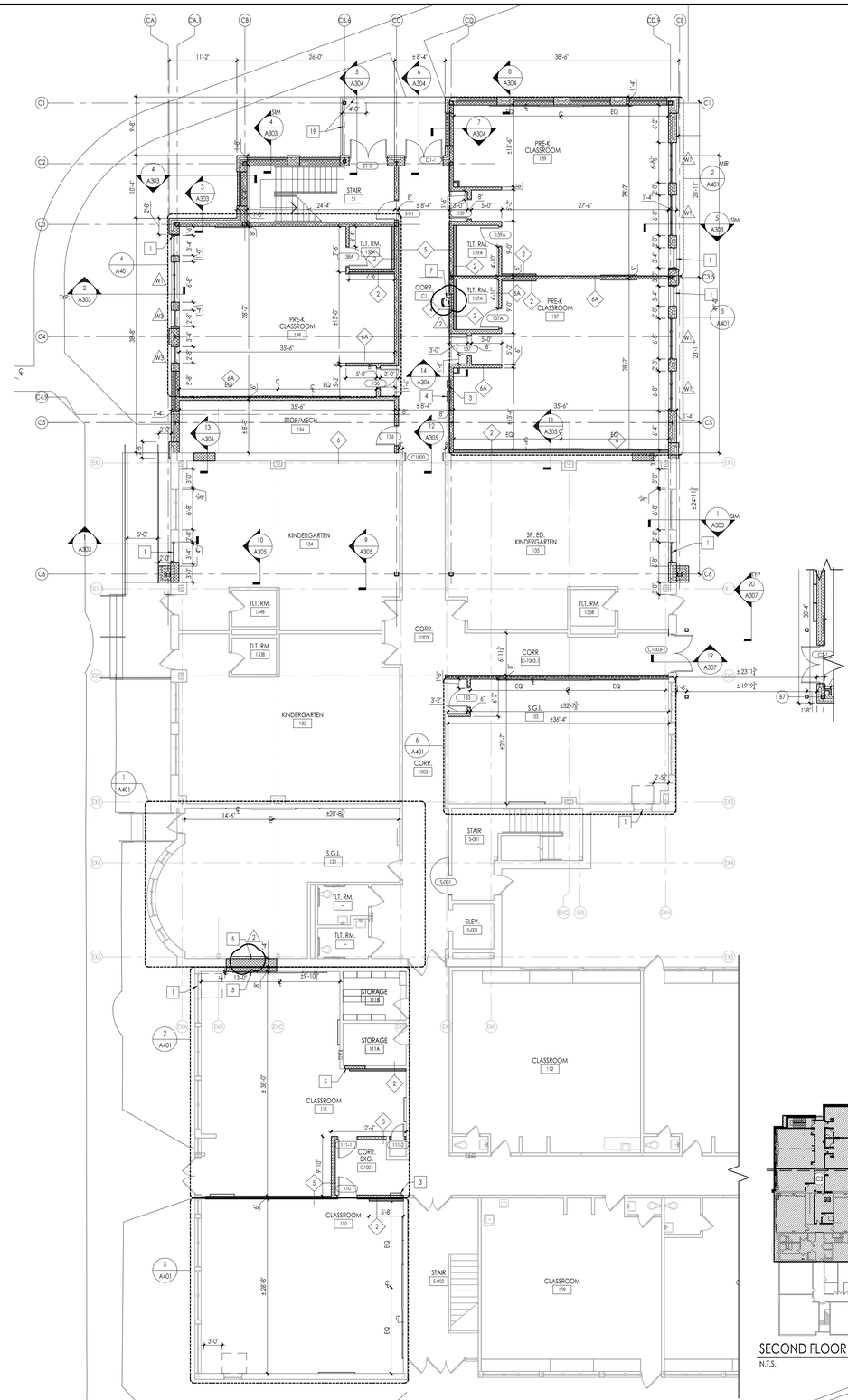
Revisions

No.	Date	Description
	xx.xx.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

Drawing Number
A003



1 AREA OF WORK 'C2' - SECOND FLOOR
1/8" = 1'-0"



2 AREA OF WORK 'C1' + 'AC' - FIRST FLOOR
1/8" = 1'-0"

PLAN LEGEND

- BRICK
- NEW CMU PARTITION
- NEW GYPSUM BOARD PARTITION - MTL. STUDS (SEE FLOOR PLAN OR WALL SECTIONS FOR DEPTH) @ 16" O.C. W/ SOUND ATTENUATION BLANKET AND 5/8" GYPSUM BOARD EACH SIDE (TYP., U.N.O.)
- FE-1 / FE-2: NEW FIRE EXTINGUISHER IN SEMI-RECESSED CABINET (CMU WALL) - SEE DETAIL 7 / G002
- EX FE: EXISTING FIRE EXTINGUISHER TO REMAIN
- NEW / EXISTING 2-HOUR RATED FIRE WALL
- NEW / EXISTING 1-HOUR RATED CORRIDOR FIRE PARTITION

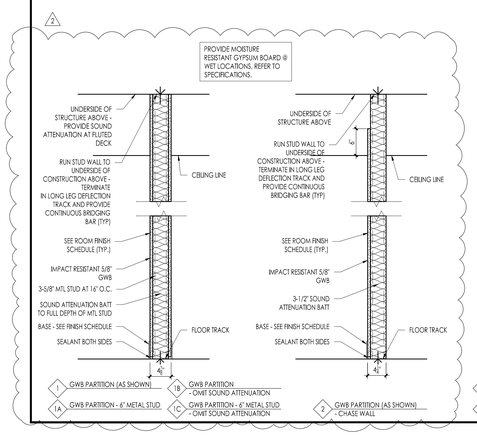
NEW FIRE RATED WALLS SHALL BE CONSTRUCTED OF CONCRETE MASONRY UNITS (CMU) PER UL DES U905 FOR 8" CMU AND THICKER AND PER UL DES U906 FOR 6" CMU. SEE FLOOR PLANS AND WALL SECTIONS FOR LOCATIONS AND ACTUAL CMU THICKNESS.

PLAN NOTES

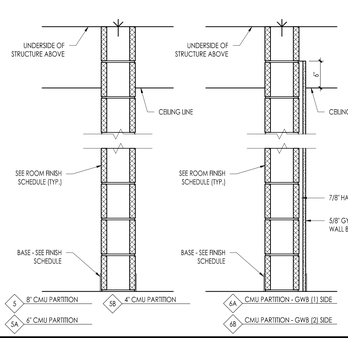
1. SEE 'PROJECT GENERAL NOTES' ON DRAWING G002.
2. ALL NEW WALLS SHALL EXTEND TO UNDERSIDE OF DECK ABOVE UNLESS NOTED OTHERWISE.
3. IN ALL LOCATIONS WHERE NEW STEEL STUD AND GYPSUM BOARD WALL CONSTRUCTION IS INDICATED, PROVIDE CONTROL JOINTS AT SPACING NOT TO EXCEED 24'-0" O.C. FINAL LOCATIONS OF CONTROL JOINTS TO BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL.
4. ALL EXPOSED EXTERIOR STEEL LINTELS SHALL BE PAINTED GALVANIZED STEEL.

FLOOR PLAN & PICTURE KEYNOTES

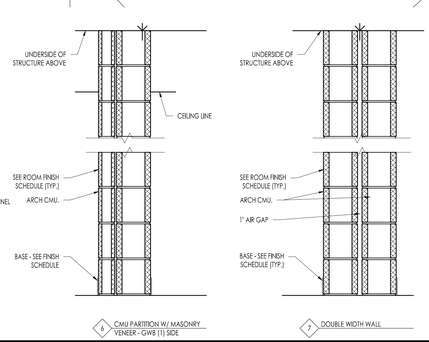
1. NEW/EXISTING MECHANICAL UNIT VENTILATOR LOUVRE. COORDINATE W/ MECHANICAL DRAWINGS.
2. LINE OF EXISTING EXTERIOR WALL BELOW.
3. RECESSED AED CABINET. REFER TO DETAILS ON G003.
4. RECESSED FIRE EXTINGUISHER CABINET. REFER TO DETAILS ON G003.
5. INFILL UNUSED OPENING IN EXISTING WALL WITH CMU BLOCK. SIZE & THICKNESS TO MATCH EXISTING. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. PROVIDE WIRELESS CARD READER. REFER TO DOOR SCHEDULE FOR HARDWARE TYPE & ELECTRICAL DRAWINGS FOR DETAILS.
7. RECESSED BOTTLE FILLING STATION. COORDINATE W/ PLUMBING DRAWINGS.
8. 9' HIGHT GYP. WALL BOARD PARTITION W/ SOLID SURFACE WALL CAP. REFERENCE WALL PARTITION TYPES FOR DETAILS.
9. UNEXCAVATED, SLAB ON GRADE. REFER TO A300 SERIES DRAWINGS FOR DETAILS.
10. CONCRETE STAIRS & RAMP. REFER TO A500 SERIES DRAWINGS FOR DETAILS.
11. AREA OF REFUGE. PROVIDE TWO WAY COMMUNICATION. REFER TO ELEC. DRAWINGS. PROVIDE SIGN TYPE 'S'. REFER TO SIGN TYPES ON A601.
12. RECESSED FIRE HOSE CABINET. REFER TO PLUMBING DRAWINGS FOR DETAILS.
13. COMMEMORATIVE PLAQUE. REFER TO DETAIL 3/A102.
14. SHIPS LADDER. REFER TO 47/A312 AND SPECIFICATIONS.
15. STEEL GUARD RAILING SYSTEM. REFER TO 16/A505.
16. ELECTRICAL/MECHANICAL PANELS. REFER TO ELEC./MECH. DRAWINGS.
17. PROVIDE SIGN TYPE #2 AT BARRIER-FREE TOILET COMPARTMENTS. REFER TO SIGN TYPES ON A601.
18. PROVIDE SIGN TYPE #27 INSIDE OF STAIRWELL AT AREA OF REFUGE LOCATIONS. REFER TO SIGN TYPES ON A601.
19. ALUMINUM GUARD RAILING SYSTEM. REFER TO 5/A304.
20. OPERABLE PARTITION POCKET DOORS BY OPERABLE DOOR MANUFACTURE. REFER TO SPECIFICATIONS



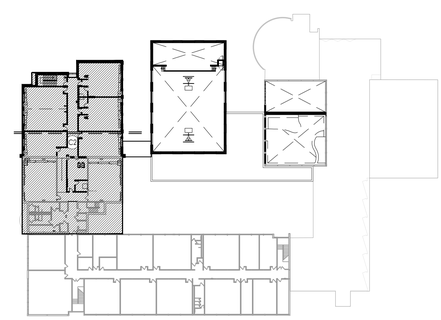
1 GWB PARTITION (AS SHOWN)
1A GWB PARTITION - 6" METAL STUD
1B GWB PARTITION - OMIT SOUND ATTENUATION
1C GWB PARTITION - 6" METAL STUD - OMIT SOUND ATTENUATION
2 GWB PARTITION (AS SHOWN) - CHASE WALL
3 NOT USED
4 NOT USED



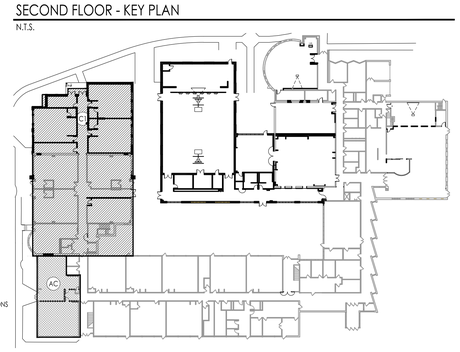
5 8" CMU PARTITION
5A 6" CMU PARTITION
5B 4" CMU PARTITION
6A CMU PARTITION - GWB (1) SIDE
6B CMU PARTITION - GWB (2) SIDE



6 CMU PARTITION W/ MASONRY VENEER - GWB (1) SIDE
7 DOUBLE WIDTH WALL



SECOND FLOOR - KEY PLAN
N.T.S.



FIRST FLOOR - KEY PLAN
N.T.S.

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A01706000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21A01712700
JASON J. LUBOWITCH, AIA
NJ - 21A01717000 | PA - RA426709
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21A02003100 | PA - RA441455
Architect
Date

FVHD Fridays Velez Hopkins Duthie P.C.
Corporate: 1515 Lower Ferry Road, Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue, Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

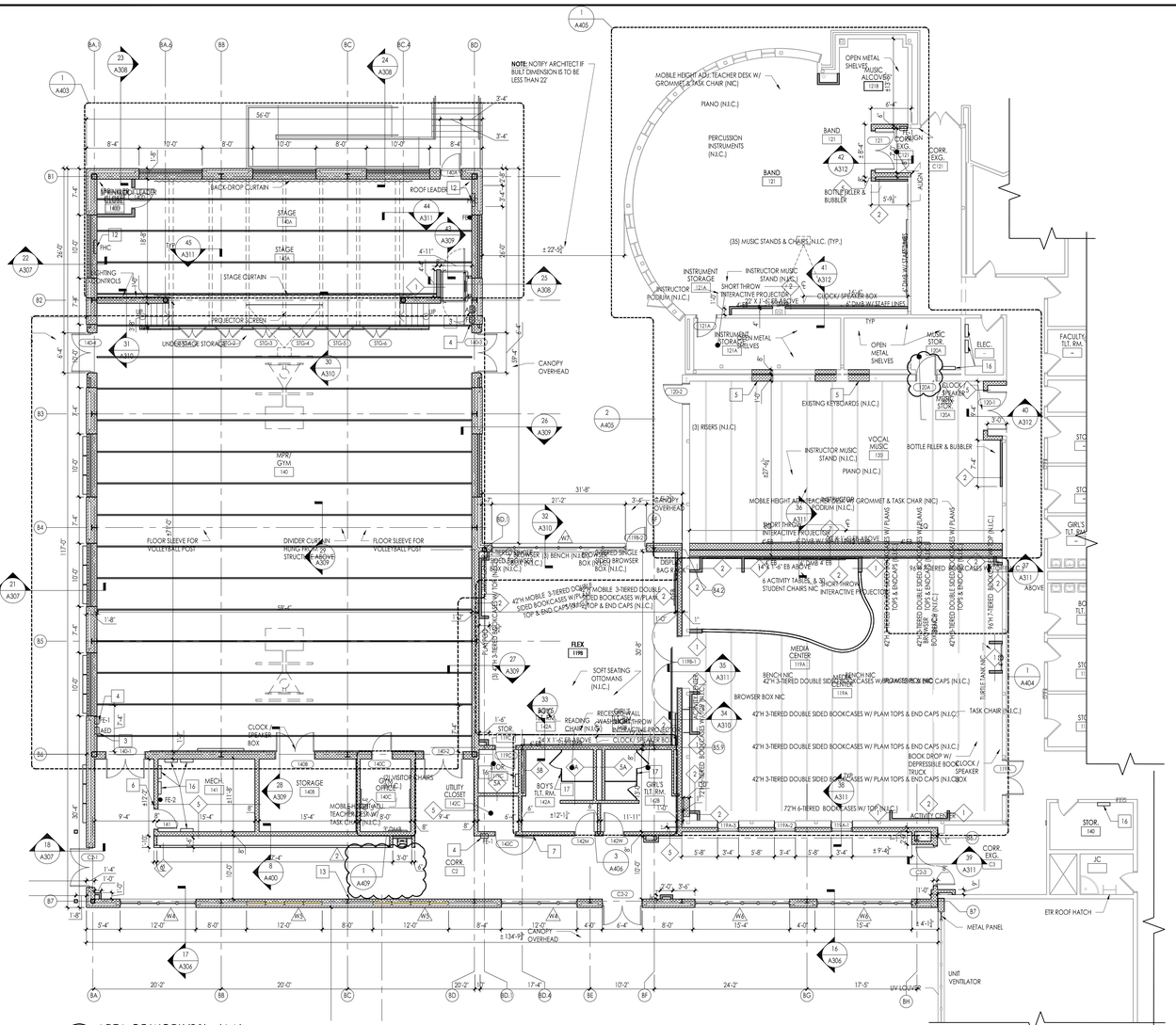
Project Number	5516C
Project Date	10.10.2025
Checked By	GRD
Drawn By	BMP
Scale	AS NOTED

Drawing Name
FIRST AND SECOND FLOOR PLANS - WORK AREAS 'AC' & 'C'

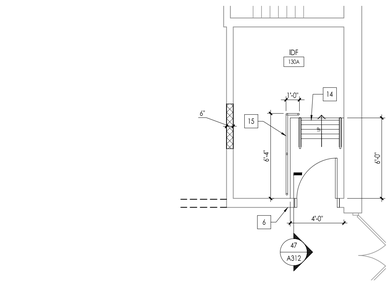
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	01.15.26	ADDENDUM 1
2	01.22.26	ADDENDUM 2

Drawing Number
A103



1 AREA OF WORK 'B1' + 'AA'
1/8" = 1'-0"



5 IDF ROOM
1/4" = 1'-0"

2 AREA OF WORK 'AB'
1/8" = 1'-0"

PLAN LEGEND

- BRICK
- NEW CMU PARTITION
- NEW GYPSUM BOARD PARTITION - MTL. STUDS (SEE FLOOR PLAN OR WALL SECTIONS FOR DEPTH) @ 16" O.C. W/ SOUND ATTENUATION BLANKET AND 5/8" GYPSUM BOARD EACH SIDE (TYP. U.N.O.)
- FE-1, FE-2: NEW FIRE EXTINGUISHER IN SEMI-RECESSED CABINET (CMU WALL) - SEE DETAIL 7 / G002
- EX FE: EXISTING FIRE EXTINGUISHER TO REMAIN
- NEW / EXISTING 2-HOUR RATED FIRE WALL
- NEW / EXISTING 1-HOUR RATED CORRIDOR FIRE PARTITION

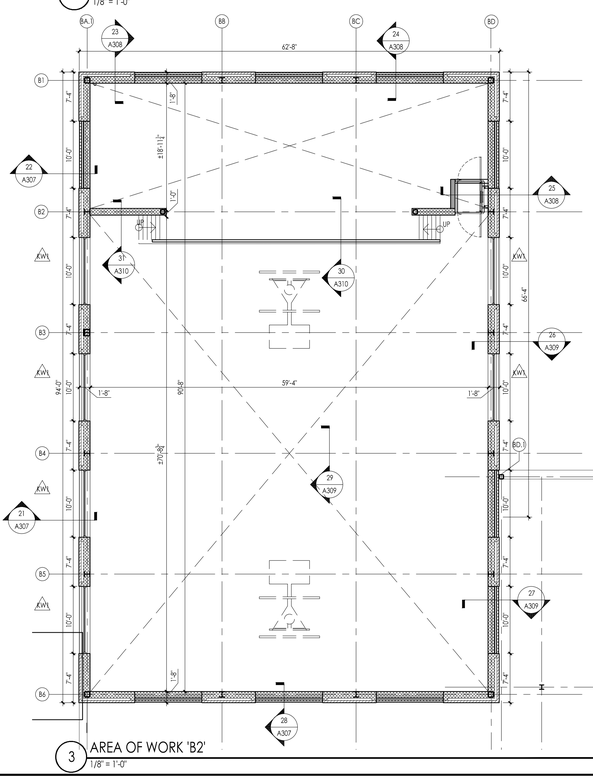
NEW FIRE RATED WALLS SHALL BE CONSTRUCTED OF CONCRETE MASONRY UNITS (CMU) PER UL DES U905 FOR 8" CMU AND THICKER AND PER UL DES U906 FOR 6" CMU. SEE FLOOR PLANS AND WALL SECTIONS FOR LOCATIONS AND ACTUAL CMU THICKNESS.

PLAN NOTES

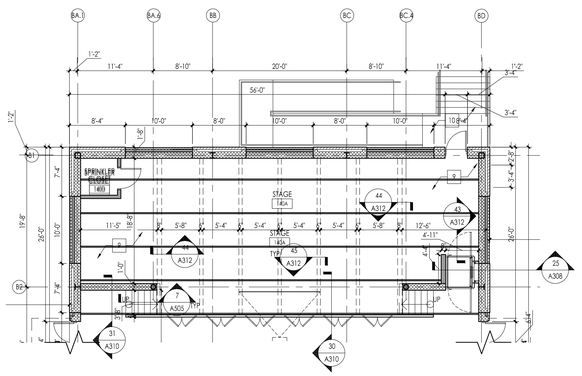
1. SEE 'PROJECT GENERAL NOTES' ON DRAWING G002.
2. ALL NEW WALLS SHALL EXTEND TO UNDERSIDE OF DECK ABOVE UNLESS NOTED OTHERWISE.
3. IN ALL LOCATIONS WHERE NEW STEEL STUD AND GYPSUM BOARD WALL CONSTRUCTION IS INDICATED, PROVIDE CONTROL JOINTS AT SPACING NOT TO EXCEED 24'-0" O.C.. FINAL LOCATIONS OF CONTROL JOINTS TO BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL.
4. ALL EXPOSED EXTERIOR STEEL LINTELS SHALL BE PAINTED GALVANIZED STEEL.

FLOOR PLAN & PICTURE KEYNOTES

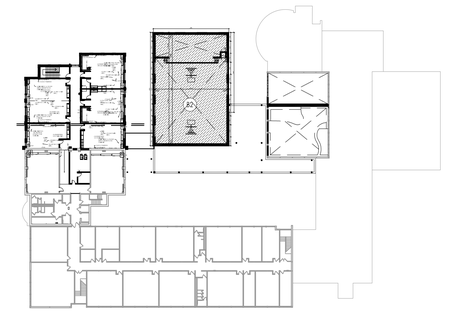
1. NEW/EXISTING MECHANICAL UNIT VENTILATOR LOUVRE. COORDINATE W/ MECHANICAL DRAWINGS.
2. LINE OF EXISTING EXTERIOR WALL BELOW.
3. RECESSED AED CABINET. REFER TO DETAILS ON G003.
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9. UNEXCAVATED, SLAB ON GRADE. REFER TO A300 SERIES DRAWINGS FOR DETAILS.
10. CONCRETE STAIRS & RAMP. REFER TO A500 SERIES DRAWINGS FOR DETAILS.
11. AREA OF REFUGE. PROVIDE TWO WAY COMMUNICATION. REFER TO ELEC. DRAWINGS. PROVIDE SIGN TYPE 'S'. REFER TO SIGN TYPES ON A601.
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15. ALUMINUM GUARD RAILING SYSTEM. REFER TO 16/A505.
16. ELECTRICAL/MECHANICAL PANELS. REFER TO ELEC./MECH. DRAWINGS.
17. PROVIDE SIGN TYPE #2 AT BARRIER-FREE TOILET COMPARTMENTS. REFER TO SIGN TYPES ON A601.
18. PROVIDE SIGN TYPE #27 INSIDE OF STAIRWELL AT AREA OF REFUGE LOCATIONS. REFER TO SIGN TYPES ON A601.



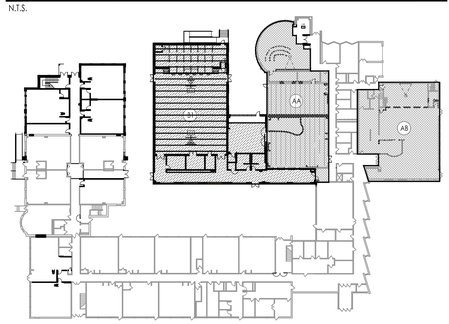
3 AREA OF WORK 'B2'
1/8" = 1'-0"



4 AREA OF WORK 'B1'
1/8" = 1'-0"



SECOND FLOOR - KEY PLAN
N.T.S.



FIRST FLOOR - KEY PLAN
N.T.S.

BUILDING A: EXISTING TO REMAIN
BUILDING A: ALTERATION/RENOVATIONS
BUILDING B: ADDITION/RENOVATION
BUILDING C: ADDITION/RENOVATION

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A01706000 | PA - RA-012520X

GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI01775000 | PA - RA-006709

JASON J. LUBOWITCH, AIA
NJ - 21AI02033100 | PA - RA-016565

STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02033100 | PA - RA-014565

Architect

FVHDPC.COM
Corporate: 1515 Lower Ferry Road, Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue, Mont Clare - Pennsylvania 19453

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

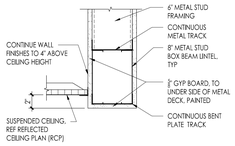
Project Number	5516C
Project Date	10.10.2025
Checked By	GRD
Drawn By	BMP
Scale	AS NOTED

Drawing Name
FIRST AND SECOND FLOOR PLANS - WORK AREA 'AA', 'AB', 'B1', & 'B2'

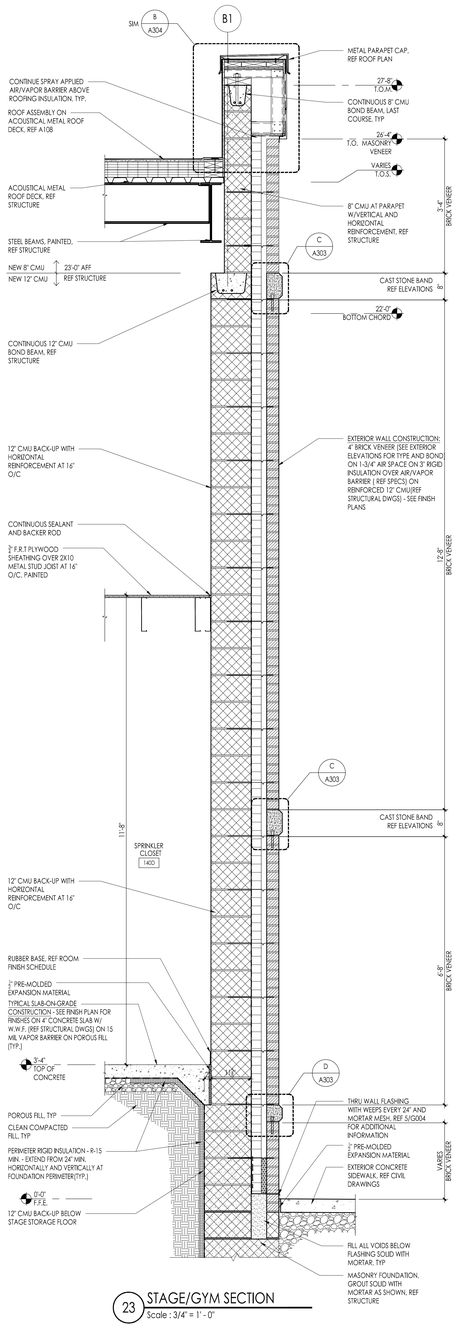
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	01.15.26	ADDENDUM 1
2	01.22.26	ADDENDUM 2

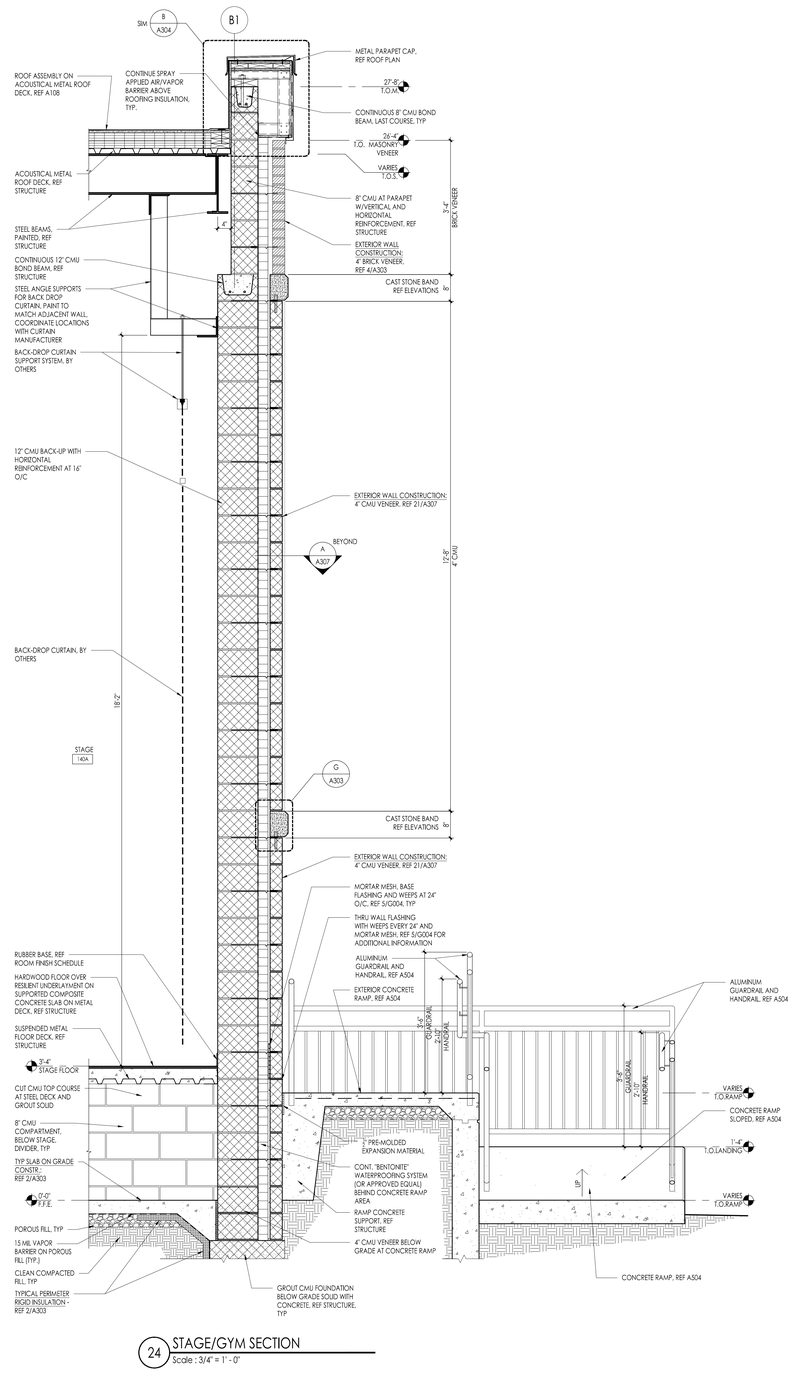
Drawing Number
A104



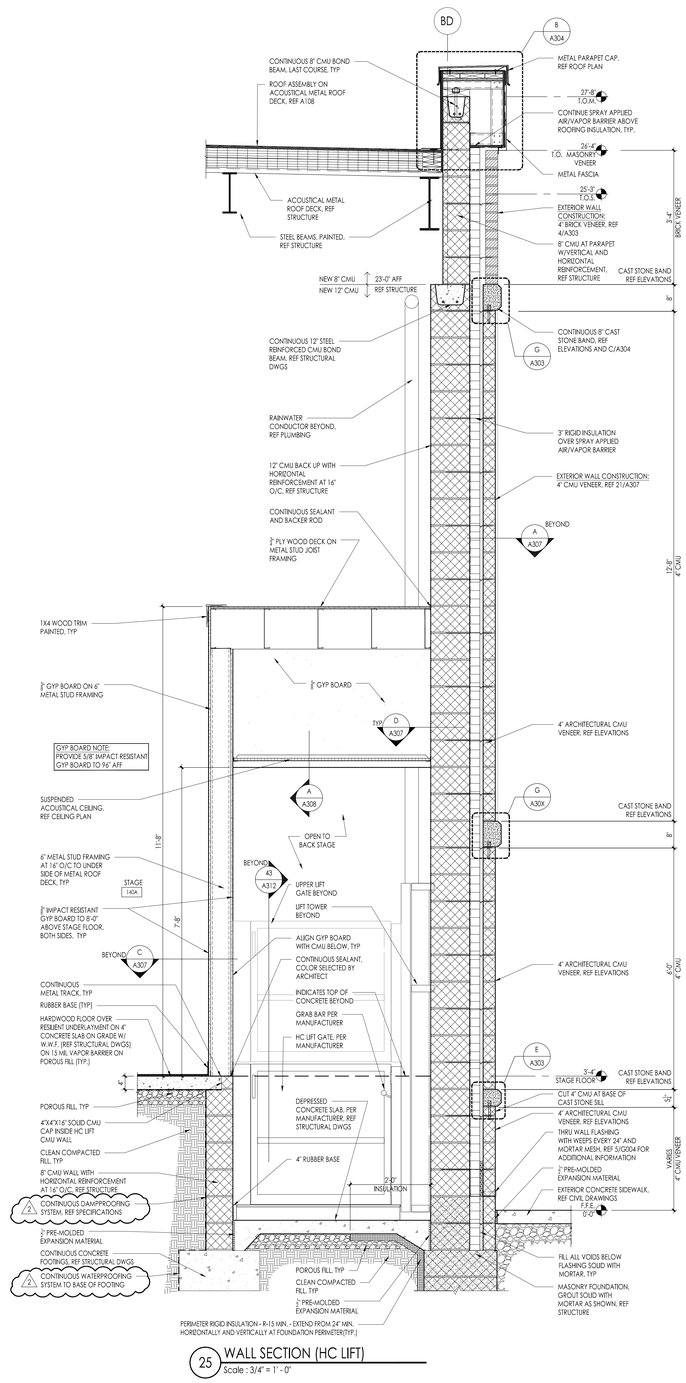
A BOX BEAM HEADER
Scale: 1 1/2" = 1'-0"



23 STAGE/GYM SECTION
Scale : 3/4" = 1' - 0"



24 STAGE/GYM SECTION
Scale : 3/4" = 1' - 0"



25 WALL SECTION (HC LIFT)
Scale : 3/4" = 1' - 0"

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07170000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI01370000
JASON J. LOBOWITCH, AIA
NJ - 21AI01775000 PA - RA426009
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21AI02031000 | PA - RA414565
Architect
Date
FVHDPC.COM
Corporate: 1515 Lower Ferry Road Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue Mont Clare - Pennsylvania 19453

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number
5516C

Project Date
10.10.2025

Checked By
GRD

Drawn By
BO

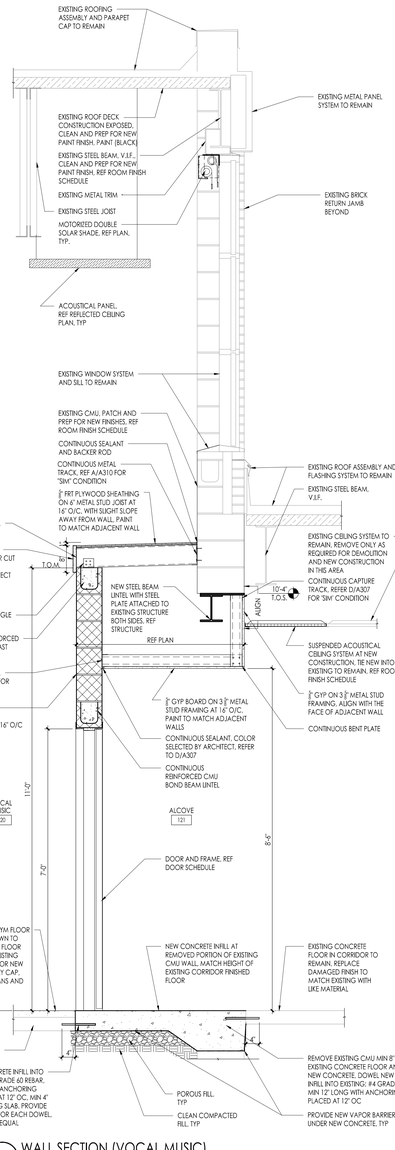
Scale
AS NOTED

Drawing Name
WALL SECTIONS AND DETAILS

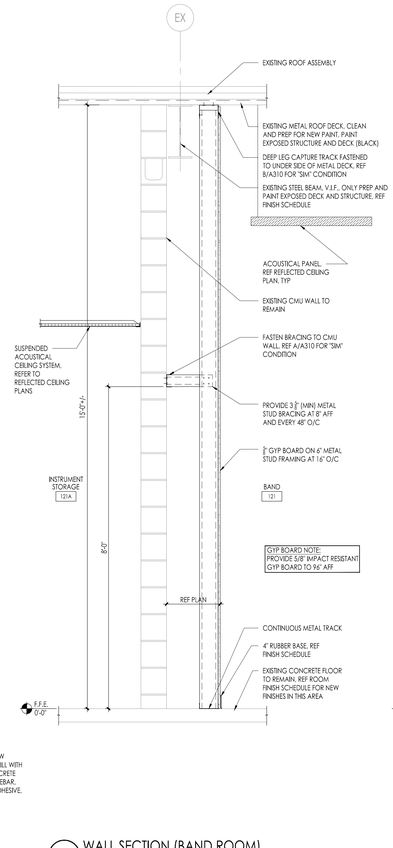
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

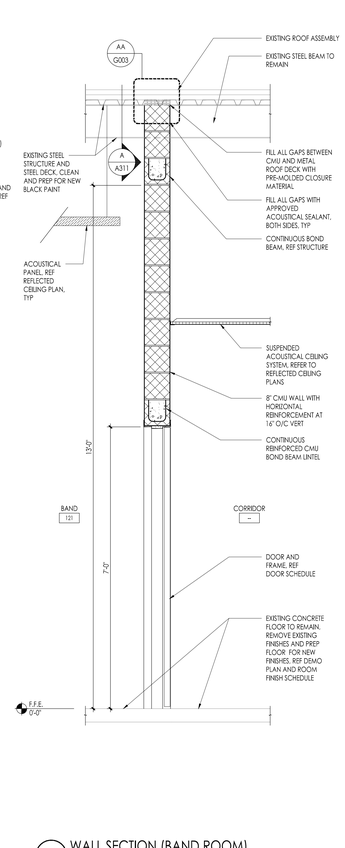
Drawing Number
A308



40 WALL SECTION (VOCAL MUSIC)
Scale: 3/4" = 1' - 0"

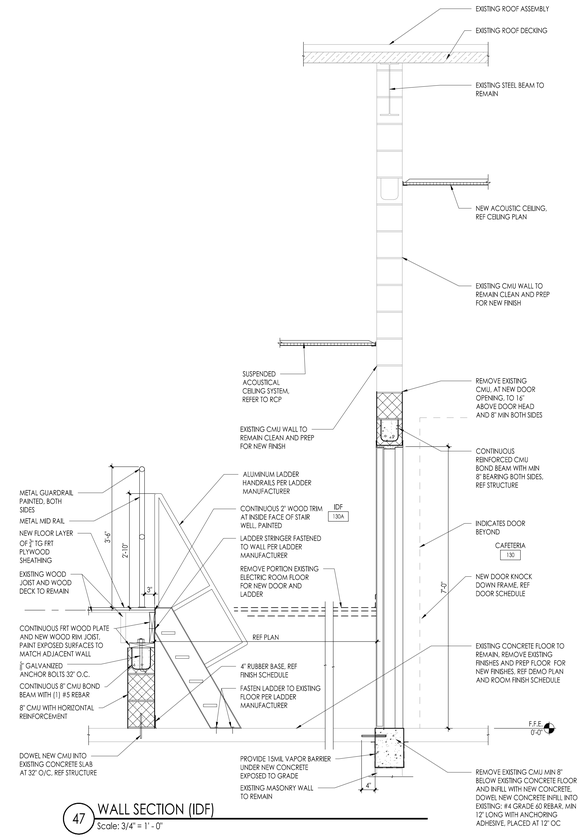


41 WALL SECTION (BAND ROOM)
Scale: 3/4" = 1' - 0"

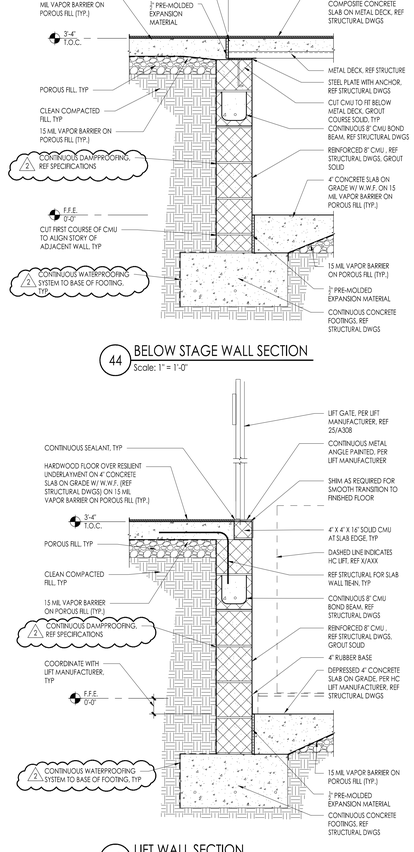


42 WALL SECTION (BAND ROOM)
Scale: 3/4" = 1' - 0"

45 BELOW STAGE WALL
Scale: 1" = 1'-0"

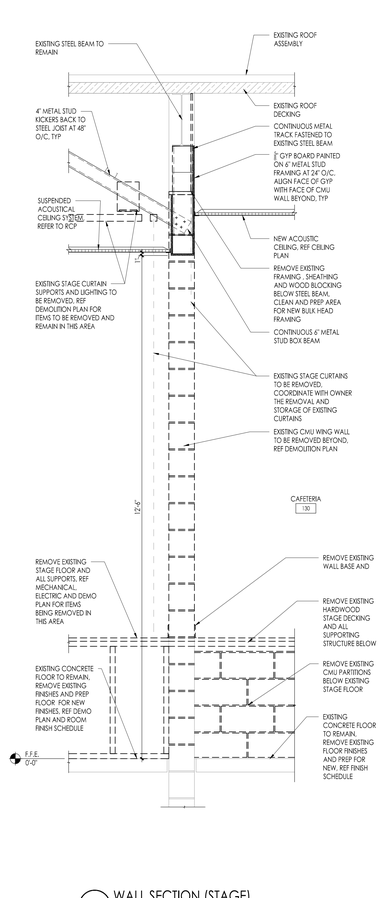


47 WALL SECTION (IDF)
Scale: 3/4" = 1' - 0"



44 BELOW STAGE WALL SECTION
Scale: 1" = 1'-0"

43 LIFT WALL SECTION
Scale: 1" = 1'-0"



46 WALL SECTION (STAGE)
Scale: 3/4" = 1' - 0"

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07170600 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI01237100
JASON J. LUBOWITCH, AIA
NJ - 21AI01779300 | PA - RA406909
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA414565
FVHD Fabiyas Veloz Hopkins Duthie P.C.
Corporate: 1515 Lower Ferry Road Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue Mont Clare - Pennsylvania 19453
F V H D P C . C O M
Architect

Date

Project Name

Addition and Renovations to Community Park Elementary School

Project Owner Name

Princeton Public Schools

Project Location

372 Witherspoon St, Princeton, NJ 08542

Project Number

5516C

Project Date

10.10.2025

Checked By

GRD

Drawn By

BO

Scale

AS NOTED

Drawing Name

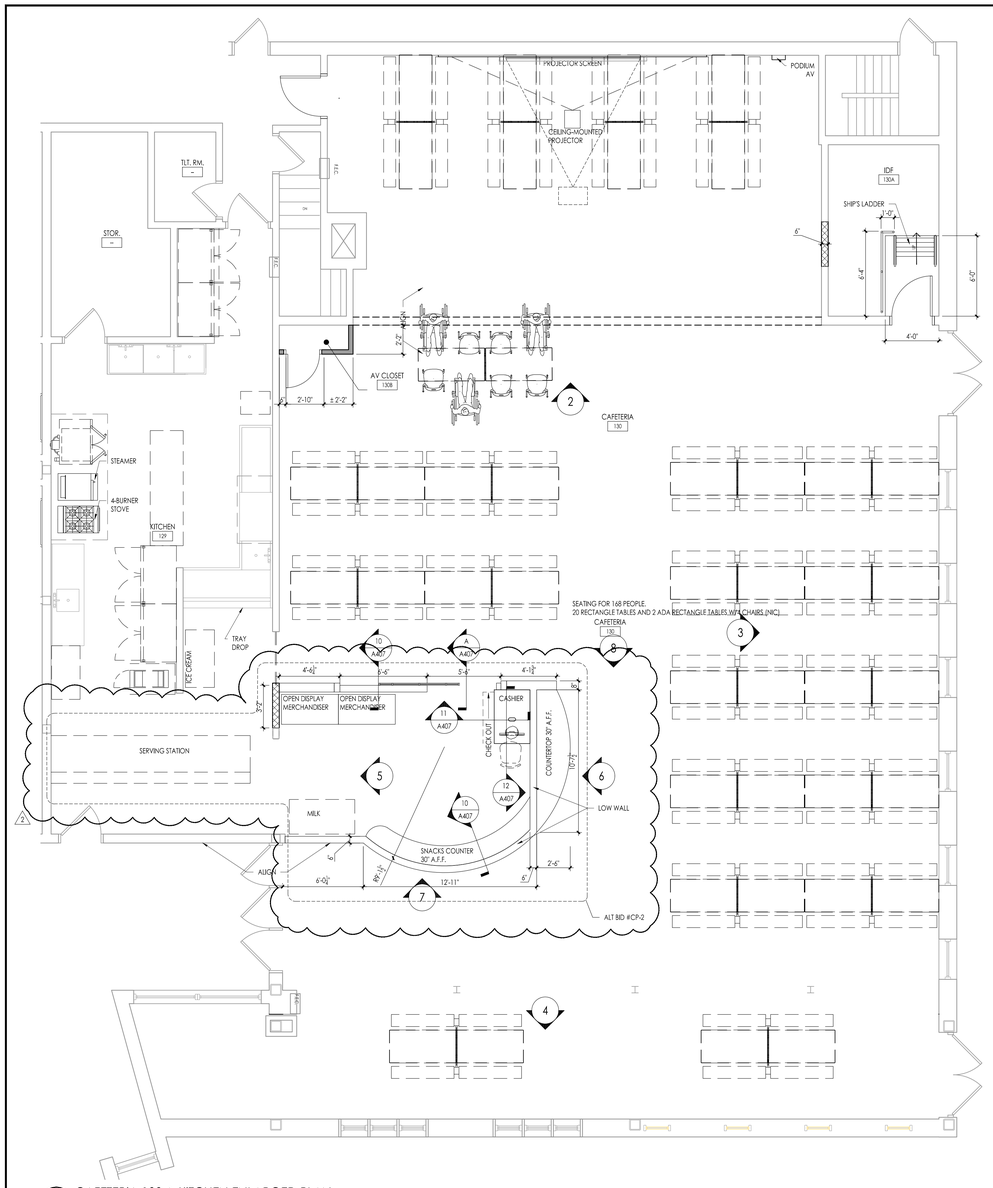
WALL SECTIONS AND DETAILS

Revisions

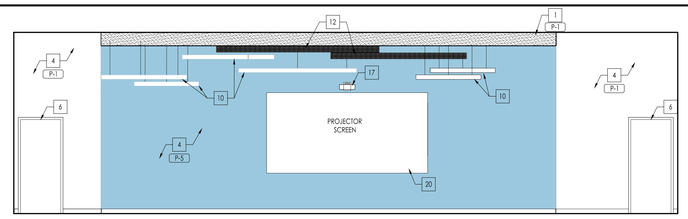
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

Drawing Number

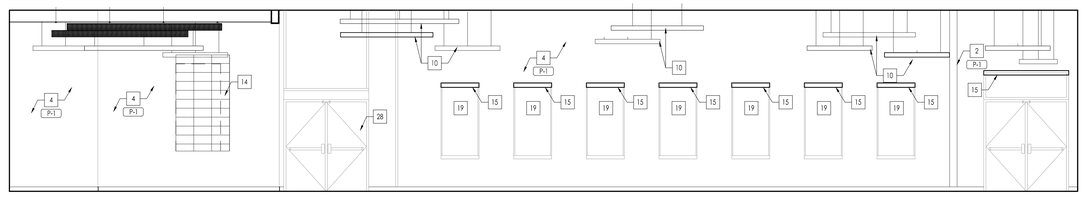
A312



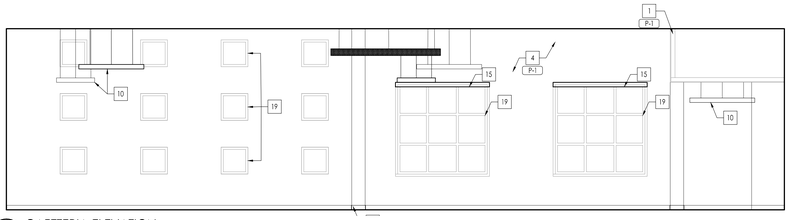
1 CAFETERIA 130 & KITCHEN ENLARGED PLAN
1/4"=1'-0"



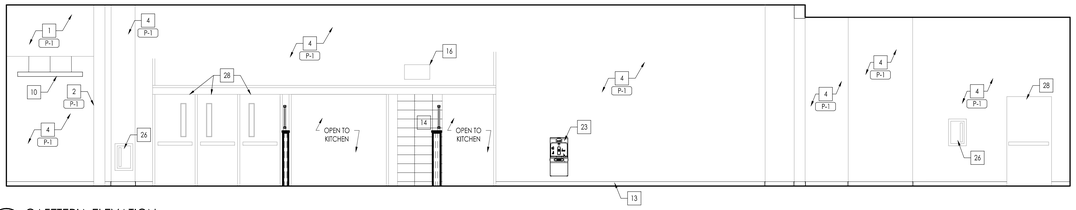
2 CAFETERIA ELEVATION
1/4"=1'-0"



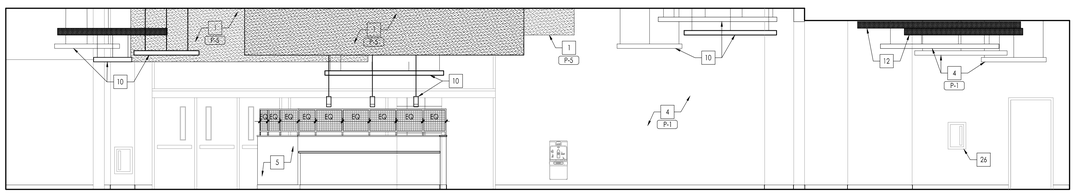
3 CAFETERIA ELEVATION
1/4"=1'-0"



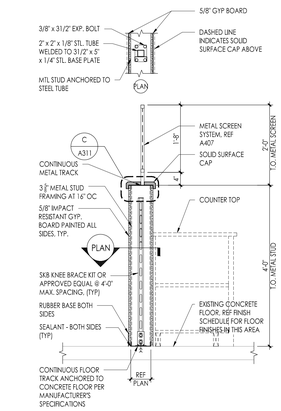
4 CAFETERIA ELEVATION
1/4"=1'-0"



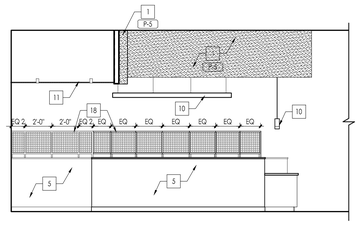
5 CAFETERIA ELEVATION
1/4"=1'-0"



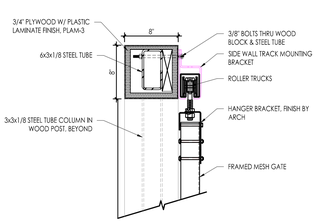
6 CAFETERIA ELEVATION
1/4"=1'-0"



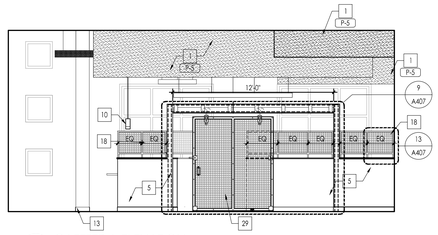
10 KNEE WALL AND BRACING
3/4" - 1'-0"



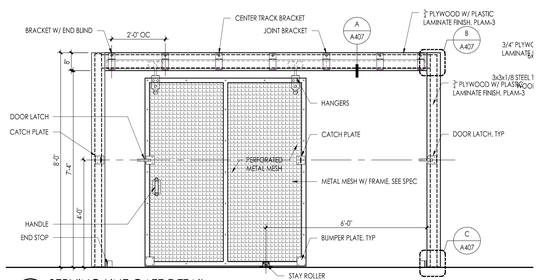
7 CAFETERIA ELEVATION
1/4"=1'-0"



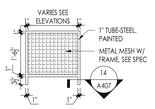
A GATE TRACK DETAIL
3/4"=1'-0"



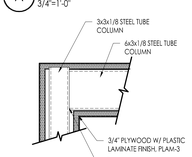
8 CAFETERIA ELEVATION
1/4"=1'-0"



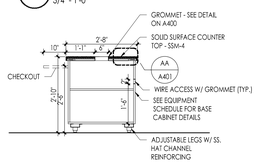
9 SERVING LINE GATE DETAIL
1/2"=1'-0"



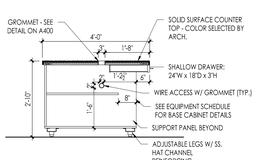
13 METAL MESH PANEL DETAIL
1/2"=1'-0"



B COLUMN /BEAM DETAIL
1 1/2"=1'-0"



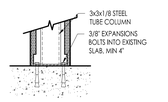
11 CAFETERIA CHECK OUT
1/2"=1'-0"



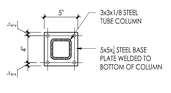
12 CAFETERIA CHECK OUT
1/2"=1'-0"



14 METAL MESH PANEL DETAIL
1/2"=1'-0"



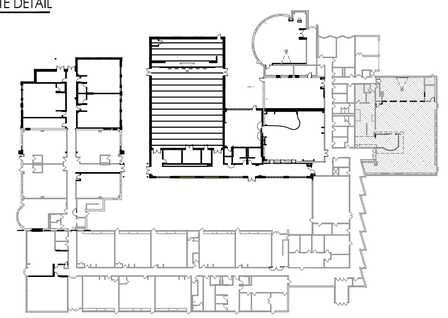
C BASE PLATE DETAIL
1 1/2"=1'-0"



D BASE PLATE DETAIL
1 1/2"=1'-0"

KEY NOTE LEGEND

1	5/8" GYP BOARD PAINTED. REFER TO A700 SERIES DRAWINGS FOR FINISHES
2	EXPOSED STEEL COLUMN PAINTED
3	NOT USED
4	EXISTING WALL, PAINTED. REFER TO A700 SERIES DRAWINGS FOR FINISHES
5	PLASTIC LAMINATE FINISH, PLAM-2. REFER TO A700 SERIES DRAWINGS FOR FINISHES
6	WOOD DOOR IN HOLLOW METAL FRAME. REFER TO DOOR SCHEDULE
7	NOT USED
8	NOT USED
9	DECORATIVE METAL PANEL SYSTEM. REFER TO REFLECTED CEILING PLAN FOR DETAILS
10	LED PENDANT/LIGHT FIXTURE. REFER TO REFLECTED CEILING PLAN FOR DETAILS
11	SUSPENDED ACOUSTICAL CEILING PANEL SYSTEM. REFER TO REFLECTED CEILING PLANS FOR DETAILS
12	SUSPENDED DECORATIVE CEILING SYSTEM. REFER TO REFLECTED CEILING PLAN FOR DETAILS
13	4" RUBBER BASE. REFER TO A700 SERIES DRAWINGS FOR FINISHES
14	INFILL EXISTING OPENING WITH CMU, STACK BOND. SIZE AND THICKNESS TO MATCH EXISTING
15	MANUAL BLACK-OUT ROLLING SHADES. REFER TO FINISH LEGEND AND SPECIFICATIONS FOR DETAILS
16	EXISTING CLOCK
17	SHORT THROW PROJECTOR, PROVIDED BY OWNER, CONTRACTOR TO PROVIDE BLOCKING AS NEEDED FOR MOUNTING
18	PERFORATED METAL MESH. REFER TO SPECIFICATIONS FOR DETAILS
19	EXISTING WINDOW TO REMAIN
20	ROLL DOWN PROJECTOR SCREEN
21	NOT USED
22	FURNITURE NOT IN CONTRACT, FOR REFERENCE ONLY
23	EXISTING ADA COMPLIANT DRINKING FOUNTAIN
24	FURNITURE NOT IN CONTRACT, FOR REFERENCE ONLY
25	NOT USED
26	EXISTING FIRE EXTINGUISHER CABINET
27	NOT USED
28	EXISTING DOOR TO REMAIN
29	PERFORATED METAL MESH SLIDING GATE. REFER TO SPECIFICATIONS FOR DETAILS



FIRST FLOOR - KEY PLAN
N.T.S.

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07170600 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21A07120700 | PA - RA406909
JASON J. LUKOWITCH, AIA
NJ - 21A07177000 | PA - RA416909
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21A02003100 | PA - RA414565
Date
Architect
FVHDPC.COM
Corporate: 1515 Lower Ferry Road Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue Mont Clare - Pennsylvania 19453

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

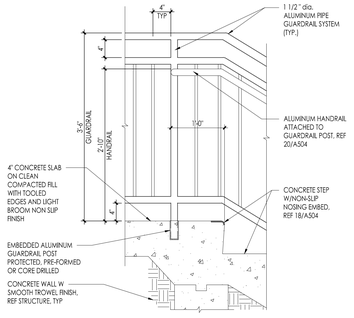
Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number	5516C
Project Date	10.10.2025
Checked By	GRD
Drawn By	JEK
Scale	AS NOTED

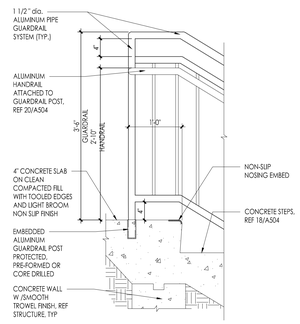
Drawing Name
ENLARGED PLANS & INTERIOR ELEVATIONS - CAFETERIA

Revisions		
No.	Date	Description
1	10.10.25 01.22.26	NJ DCA SUBMISSION ADDENDUM 2

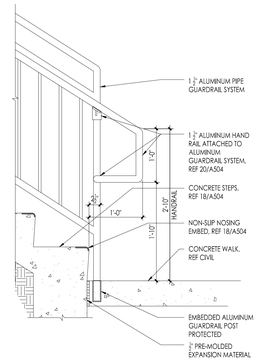
Drawing Number
A407



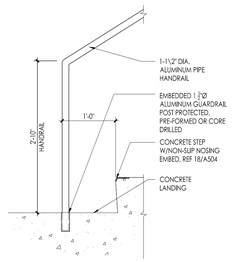
1 STAIR GUARDRAIL/HANDRAIL DETAIL
Scale: 1" = 1'-0"



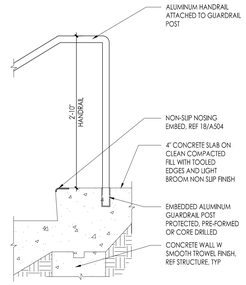
2 STAIR GUARDRAIL/HANDRAIL DETAIL
Scale: 1" = 1'-0"



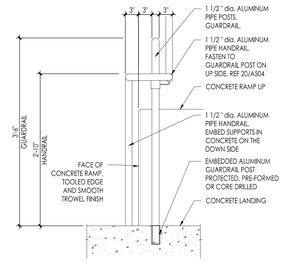
3 STAIR HANDRAIL DETAIL
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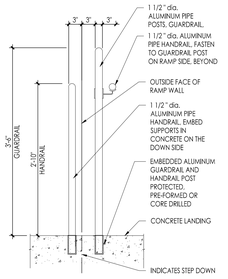
4 HANDRAIL POST DETAIL
Scale: 1" = 1'-0"



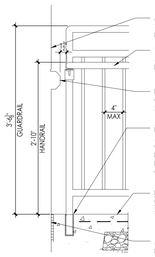
5 HANDRAIL POST DETAIL
Scale: 1" = 1'-0"



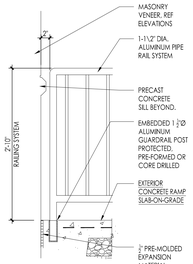
6 CONTINUOUS HANDRAIL
Scale: 1" = 1'-0"



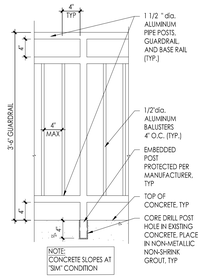
7 CONTINUOUS HANDRAIL
Scale: 1" = 1'-0"



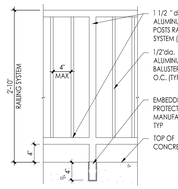
8 RAMP HANDRAIL DETAIL
Scale: 1" = 1'-0"



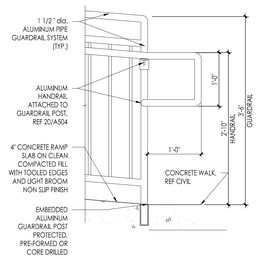
8B RAILINGL DETAIL
Scale: 1" = 1'-0"



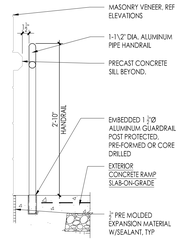
9 GUARDRAIL ELEVATION
Scale: 1" = 1'-0"



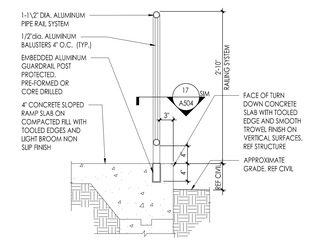
9B RAILING ELEVATION
Scale: 1" = 1'-0"



10 RAMP HANDRAIL DETAIL
Scale: 1" = 1'-0"



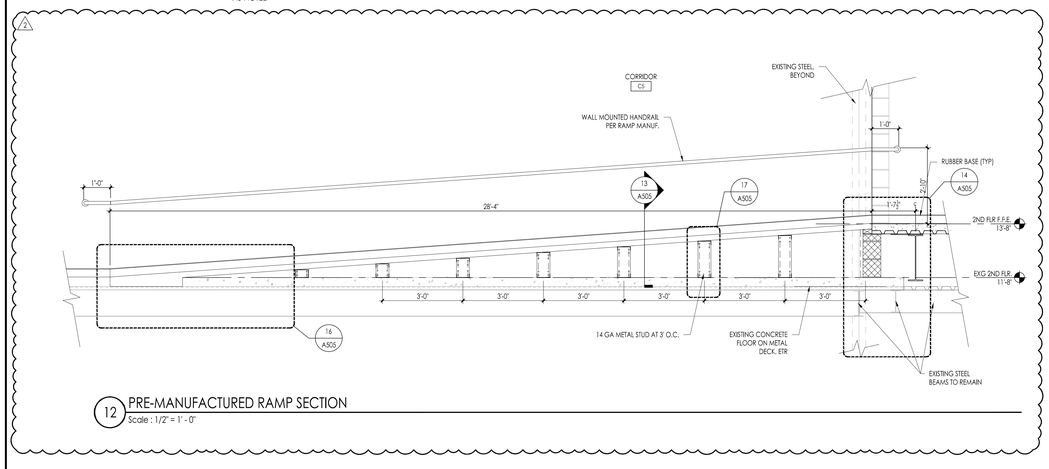
11 INNER POST DETAIL
Scale: 1" = 1'-0"



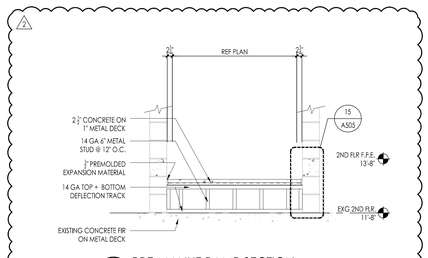
11B RAILINGL DETAIL
Scale: 1" = 1'-0"

EXTERIOR GUARDRAILS AND RAILINGS

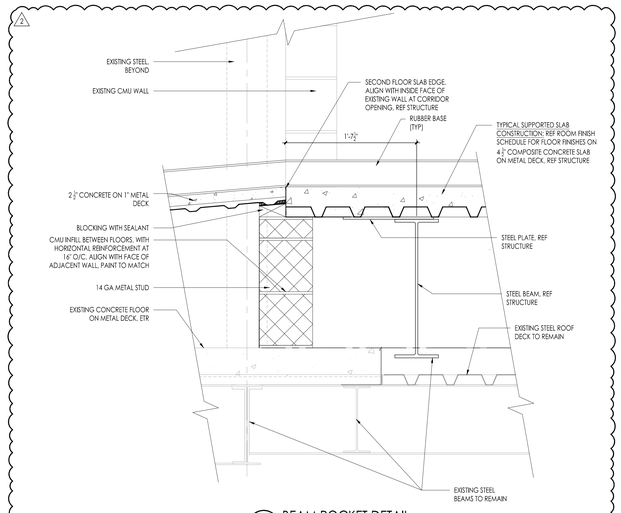
AS NOTED



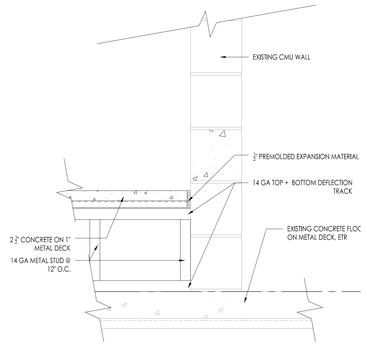
12 PRE-MANUFACTURED RAMP SECTION
Scale : 1/2" = 1' - 0"



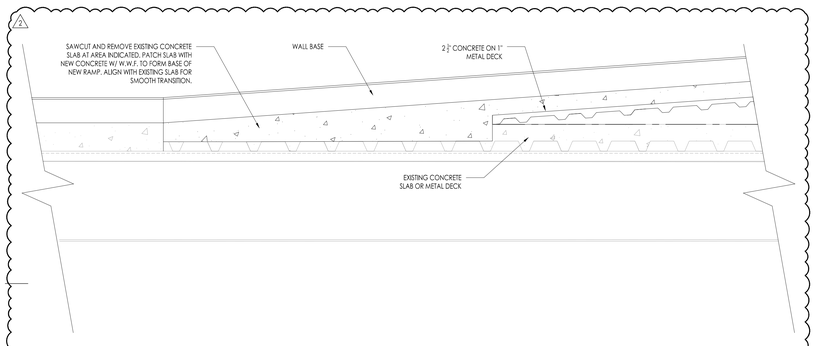
13 PRE-MANUF RAMP SECTION
Scale : 1/4" = 1' - 0"



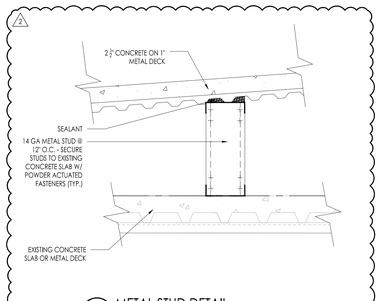
14 BEAM POCKET DETAIL
Scale: 1 1/2" = 1'-0"



15 BEAM POCKET DETAIL
Scale: 1 1/2" = 1'-0"



16 RAMP INSTALLATION DETAIL
Scale: 1 1/2" = 1'-0"



17 METAL STUD DETAIL
Scale: 1 1/2" = 1'-0"

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07170000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI00127100
JASON J. LUBOMITCH, AIA
NJ - 21AI00775000 | PA - RA426000
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21AI00035100 | PA - RA414565
Architect
Date

FVHD Architecture Planning Interiors
Fraytak Velez Hopkins Duthie PC
Corporate: 1515 Lower Ferry Road
Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number
5516C

Project Date
10.10.2025

Checked By
GRD

Drawn By
SJK

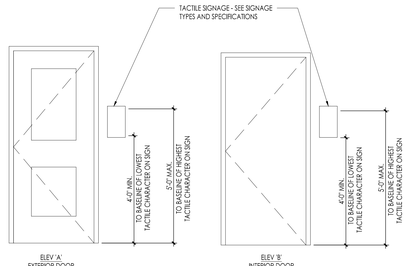
Scale
As Noted

Drawing Name
STAIR & RAMP DETAILS

Revisions

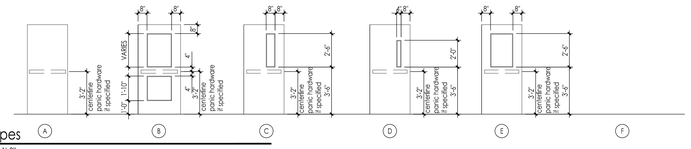
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

Drawing Number
A505

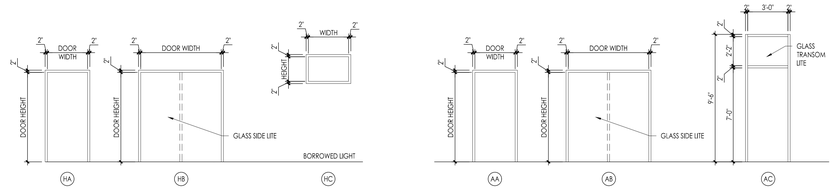


SIGNAGE LOCATIONS:
SINGLE LEAF DOORS - LATCH SIDE
DOUBLE LEAF DOORS - TO THE RIGHT SIDE OF RIGHT LEAF
WHERE NO SPACE IS AVAILABLE - NEAREST ADJACENT WALL

Signage Location Details
Scale: 1/2" = 1'-0"

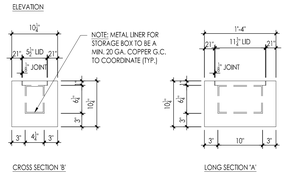


Door Types
Scale: 1/4" = 1'-0"



HM Frame Types
Scale: 1/4" = 1'-0"

AL Frame Types
Scale: 1/4" = 1'-0"



1 DATE STONE DETAIL
1" = 1'-0"

DOOR AND FRAME SCHEDULE

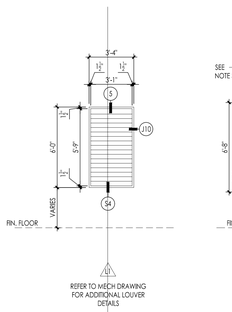
DR NO	DOOR LOCATION	DOOR SIZE	DOOR TYPE	DOOR MATL	DOOR GLAZING	FRAME TYPE	FRAME MATL	FRAME DETAIL HEAD	FRAME DETAIL JAMB	FRAME DETAIL SADDLE	HARDWARE	RATING	SIGN TYPE	NOTES
110	CLASSROOM 110	3'-0" x 7'-8"	C	WD	FRIG-1	HA	HM	H1	J1	S1	CRS-02	20	9	--
111-1	CLASSROOM 111	3'-0" x 7'-8"	C	WD	FRIG-1	HA	HM	H1	J1	S1	CRS-02	20	9	--
111-2	CLASSROOM 111	2'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	STO-01	--	--	--
119A	CORR. 1082	2 @ 3'-0" x 6'-10"	C	WD	FRIG-1	ER	ER	--	--	--	EXD-2F-1	20	8	5
119A-1	MEDIA CENTER 119A	3'-0" x 1'-10"	--	--	FRIG-1	HC	HM	38/A311	--	38/A311	--	90	--	6
119A-2	MEDIA CENTER 119A	3'-0" x 1'-10"	--	--	FRIG-1	HC	HM	38/A311	--	38/A311	--	90	--	6
119A-3	MEDIA CENTER 119A	3'-0" x 1'-10"	--	--	FRIG-1	HC	HM	38/A311	--	38/A311	--	90	--	6
119B-1	FLEX 119B	2 @ 4'-0" x 6'-10"	C	WD	FRIG-1	HB	HM	35/A311	--	S3	EXD-2G	90	8	1
119B-2	FLEX 119B	3'-0" x 7'-0"	E	FRP	TPG-F	AC	AL	--	--	--	EXD-EXT-1B	--	3	2
119C	STOR. 119C	3'-0" x 7'-0"	C	WD	TPG-F	HA	--	H1	J1	S1	STO-01.1	--	--	--
120-1	VOCAL MUSIC 120	2 @ 3'-0" x 7'-0"	C	WD	FRIG-1	HA	HM	40/A312	J6	S1	EXD-2F-1	20	9	3
120-2	VOCAL AL MUSIC 120	3'-0" x 7'-8"	A	FRP	INSUL-F	AA	AL	--	--	--	EXD-EXT-1F	--	3, 21	--
120A	MUSIC STOR. 120A	3'-0" x 7'-0"	A	WD	--	HA	HM	--	--	--	STO-01.1	--	8	5
121	BAND 121	2 @ 3'-0" x 7'-0"	C	WD	--	HA	HM	H1	J1	S1	EXD-2F-1	20	9	3
121A	INSTRUMENT STORAGE 121A	3'-0" x 7'-0"	A	WD	FRIG-1	HA	HM	H2	J7	S1	STO-01.1	--	8	--
130-1	CAFETERIA 130	3'-0" x 7'-8"	C	WD	FRIG-1	HA	HM	--	--	--	EXD-1E	20	4, 8	5
130A	ICP - 130A	3'-0" x 7'-8"	A	WD	--	HA	HM	H2	J7	S1	STO-01.2	--	8	2
130B	AV CLOSET 130B	2'-6" x 7'-7"	A	WD	--	HM	HA	H3	J9	S3	STO-01	--	8	--
133	S.G.I. 133	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.1	--	9	--
136	STOR/MECH 136	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	STO-01.1	--	8	--
137	PRE-K CLASSROOM 137	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.1	--	9	--
137A	TLT. RM. 137A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRS-04	--	15	--
138	PRE-K CLASSROOM 138	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.1	--	9	--
138A	TLT. RM. 138A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRS-04	--	15	--
139	PRE-K CLASSROOM 139	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.1	--	9	--
139A	TLT. RM. 139A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRS-04	--	15	--
140-1	MPR/ GYM 140	2 @ 3'-0" x 6'-10"	C	WD	TPG-F	HA	HM	28/A309	J9	S2	EXD-2F	--	8, 25	--
140-2	MPR/ GYM 140	2 @ 3'-0" x 6'-10"	C	WD	TPG-F	HA	HM	28/A309	J9	S2	EXD-2F	--	8	--
140-3	MPR/ GYM 140	2 @ 3'-0" x 6'-10"	D	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2B	--	3, 21	2
140-4	MPR/ GYM 140	2 @ 3'-0" x 6'-10"	D	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2B	--	3, 21	2
140A	STAGE 140A	3'-0" x 6'-10"	A	FRP	INSUL-F	AA	AL	--	--	--	EXD-EXT-1B	--	3, 21	2
140B	STORAGE 140B	2 @ 3'-0" x 6'-10"	A	WD	--	HB	HM	28/A309	J9	S2	STO-02	--	8	--
140C	GYM OFFICE 140C	3'-0" x 6'-10"	C	WD	TPG-F	HA	HM	28/A309	J9	S2	OH-01	--	9	--
140D	SPRINKLER CLOSET 140D	3'-0" x 7'-0"	A	WD	--	HA	HM	H3	J1	S1	STO-01	--	8, 28	--
141	MECH. 141	3'-0" x 7'-0"	A	WD	--	HA	HM	--	--	--	STO-01.2	--	8	2
142C	UTILITY/CLOSET 142C	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	STO-01	--	8	--
142W	BOYS TLT. RM. 142A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRN-01	--	13	--
142W	GIRLS TLT. RM. 142A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRN-01	--	14	--
235	STEM SCIENCE CLASSROOM 235	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.2	--	9	--
236	STORAGE/ELECTRICAL 236	3'-0" x 7'-0"	A	WD	FRIG-1	HA	HM	H1	J1	S1	STO-01.2	--	8, 28	2
236A	STORAGE/ELECTRICAL 236	3'-0" x 7'-0"	A	WD	--	HA	HM	H2	J7	S1	STO-01.2	--	8	2
238	S.G.I. 238	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.3	--	9	--
239	S.G.I. 239	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.3	--	9	--
240A	FLEX/CLASSROOM 240A	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.3	--	9	--
240B	FLEX/CLASSROOM 240B	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.3	--	9	--
241	TLT. RM. 241A	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02	--	9	--
241A	TLT. RM. 241A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRS-04	--	15	--
242	CLASSROOM 242	3'-0" x 7'-0"	C	WD	TPG-F	HA	HM	H1	J1	S1	CRS-02.3	--	9	--
242A	TLT. RM. 242A	3'-0" x 7'-0"	A	WD	--	HA	HM	H1	J1	S1	TRS-04	--	15	--
C1-1	CORR. C1	2 @ 3'-0" x 6'-10"	D	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2G	--	3, 21	2
C1000	CORR. 1003	6'-0" x 7'-0"	--	--	--	HB	HM	--	--	--	--	--	--	FO
C1003-1	CORR C-1003.1	2 @ 3'-0" x 7'-0"	E	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2G.2	--	3	2
C2-1	CORR. C2	2 @ 3'-0" x 6'-10"	E	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2G	--	3	2
C2-2	CORR. C2	2 @ 3'-0" x 6'-10"	D	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2G	--	--	2
C2-3	CORR. C2	2 @ 3'-0" x 6'-10"	D	WD	FRIG-1	HB	HM	39/A311	31/A503 OR J3	39/A311	EXD-2D	90	--	1
S-001	STAIR S-001	3'-0" x 7'-0"	--	--	--	--	--	--	--	--	STA-01	45	--	4
S-003	STAIR S-003	2 @ 3'-0" x 7'-0"	--	--	--	--	--	--	--	--	STA-02	45	--	4
S1-1	STAIR S1	3'-0" x 7'-0"	D	WD	FRIG-1	HA	HM	H1	J1	S1	EXD-1D	45	3	4
S1-2	STAIR S1	2 @ 3'-0" x 6'-10"	D	FRP	TPG-F	AB	AL	--	--	--	EXD-EXT-2F	--	3, 6, 21	--
S1-3	STAIR S1	3'-0" x 7'-0"	D	WD	FRIG-1	HA	HM	H1	J1	S1	EXD-1D	45	3, 5, 6	4
STG-1	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7
STG-2	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7
STG-3	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7
STG-4	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7
STG-5	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7
STG-6	MPR/ GYM 140	2 @ 2'-0" x 2'-8"	A	WD	--	HA	HM	D/A307	--	S2	STO-03	--	--	7

DOOR SCHEDULE NOTES
1. ELECTRO-MAGNETICALLY HELD OPEN - SEE SPECIFICATION AND ELECTRICAL DRAWINGS.
2. PROXIMITY READER BY OWNER'S VENDOR - SEE GENERAL DOOR NOTE 7 AND ELECT. DRAWINGS.
3. ACOUSTICAL DOORS. SEE SPECIFICATION.
4. DOOR RATED FOR STAIR TOWER CONSTRUCTION.
5. EXISTING DOOR & FRAMED REPLACED WITH NEW. VERIFY EXISTING OPENING WIDTH IN FIELD.
6. BORROWED LITE IN HOLLOW METAL FRAME. REFER TO FRAME TYPES FOR DETAILS.
7. UNDERSTAND STAGE STORAGE ACCESS DOORS

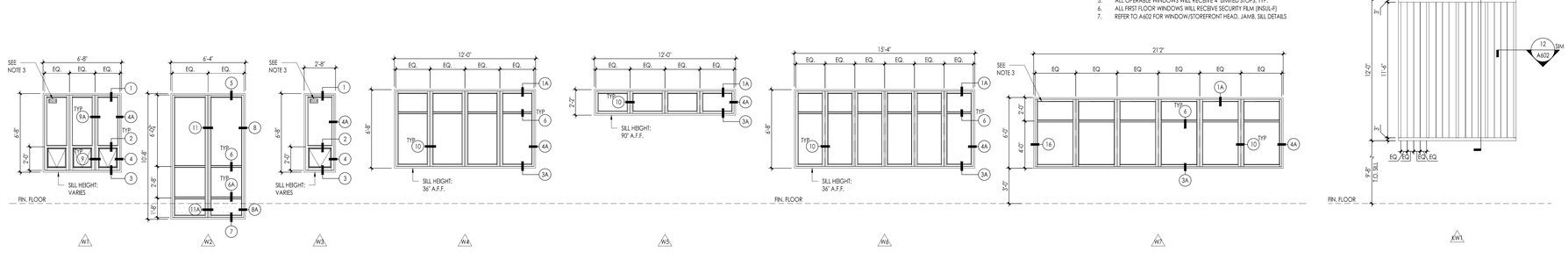
GENERAL DOOR NOTES
1. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. SEE DOOR TYPES, HOLLOW METAL FRAME TYPES AND ALUMINUM FRAME TYPES ON THIS DRAWING.
3. SEE SIGNAGE TYPES AND DETAILS ON THIS DRAWING.
4. SEE HEAD, JAMB, SADDLE AND SILL DETAILS ON DRAWING Axxx.
5. SEE STOREFRONT TYPES AND DETAILS ON DRAWING Axxx.
6. SEE CURTAIN WALL TYPES AND DETAILS ON DRAWING Axxx.
7. COORDINATE ALL ACCESS CONTROL PREP AND WIRING WITH ELECTRICAL CONTRACTOR AND OWNER'S VENDOR (TYP.)

ABBREVIATIONS
AL - ALUMINUM
ETR - EXISTING TO REMAIN
FO - FRAMED OPENING
FRIG-1 - FIRE-RATED IMPACT-RESISTANT GLAZING - TYPE 1
FRP - FIBERGLASS REINFORCED POLYESTER
HM - HOLLOW METAL
INSUL - INSULATED TINTED TEMPERED GLASS
INSUL-F - INSULATED TINTED TEMPERED GLASS W/ SECURITY WINDOW FILM
MTL - METAL
SWF - SECURITY WINDOW FILM
TPG - TEMPERED PLATE GLASS
TPG-F - TEMPERED PLATE GLASS W/ SECURITY WINDOW FILM
WD - WOOD

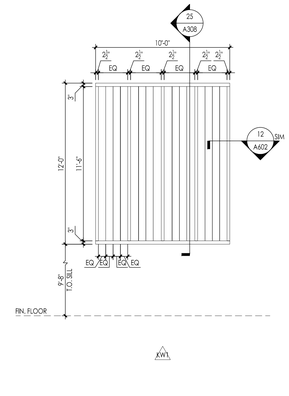
WINDOW NOTES
1. PROVIDE INSULATED TINTED TEMPERED GLASS W/ SECURITY WINDOW FILM (INSUL-F) AT NEW EXTERIOR WINDOWS, UN-LESS NOTED OTHERWISE
2. VERIFY ALL EXISTING OPENING SIZES WITH FIELD CONDITION PRIOR TO ORDERING WINDOWS
3. PROVIDE BUILDING ROOM NUMBERS ON EXTERIOR SIDE OF WINDOWS. SEE ELEVATIONS. ROOM NUMBERS TO BE AN EXTERIOR GRADE REFLECTIVE VINYL MIN OF 5" HIGH. REFER TO SPECS FOR DETAILS.
4. REFERENCE A603-HEAD, JAMB, AND SILL DETAILS FOR WINDOWS TO RECEIVE SHADING DEVICES.
5. ALL OPERABLE WINDOWS WILL RECEIVE 4" LIMITED STOPS, TYP.
6. ALL FIRST FLOOR WINDOWS WILL RECEIVE SECURITY FILM (INSUL-F)
7. REFER TO A602 FOR WINDOW/STOREFRONT HEAD, JAMB, SILL DETAILS



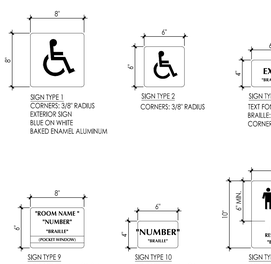
LOUVER TYPES
Scale: 1/4" =1'-0"



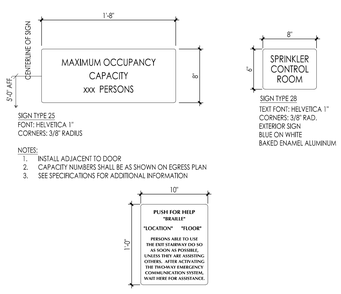
WINDOW TYPES
Scale: 1/4" = 1'-0"



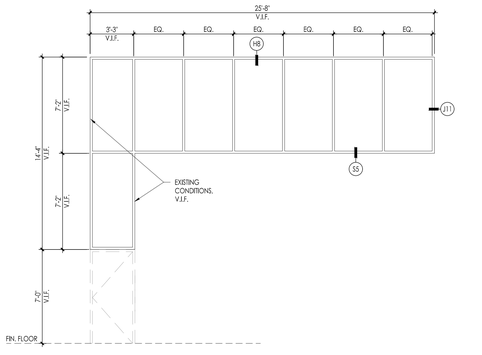
TRANSLUCENT INSULATED PANELS
Scale: 1/4" = 1'-0"



NOTES:
1. ALL LETTERS, NUMBERS, SYMBOLS, AND PICTOGRAPHS SHALL BE RAISED MINIMUM 1/32" FROM SIGN FACE AND SHALL MEET ALL REQUIREMENTS FOR COLOR CONTRAST RATIO.
2. AT SIGN TYPES 7-18 AND 29-30, CONTRACTOR IS ADVISED HEREBY THAT FINAL SIGN VERBIAGE AND LAYOUT, INCLUDING THE ADDITION OR DELETION OF PICTOGRAMS, WILL BE FINALIZED BY THE ARCHITECT AND OWNER DURING THE SHOP DRAWING PROCESS.



Signage Types
Scale: 1-1/2" = 1'-0"



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

NJDCA Electronic Release Stamp

FVHD Architects
Frayzak Velez Hopkins Duthie P.C.
WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A01706001 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21A01777100
JASON J. ZITOLI
NJ - 21A01795600 | PA - RA406500
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AE00351100 | PA - RA414565
Date
Architect
Corporate: 1515 Lower Ferry Road, Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue, Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number
5516C

Project Date
10.10.2025

Checked By
GRD

Drawn By
BMP

Scale
As Noted

Drawing Name
DOOR & WINDOW SCHEDULES, TYPES, NOTES, & DETAILS

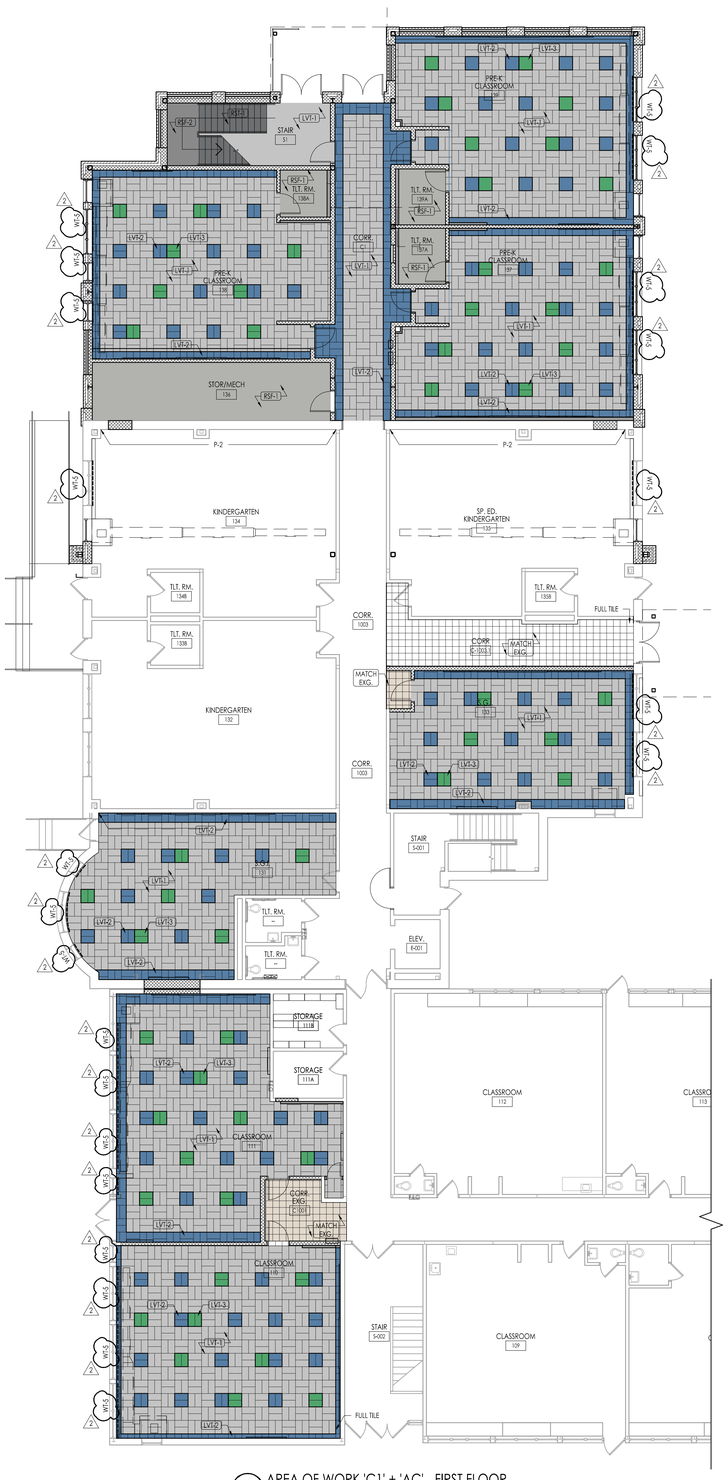
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	01.15.26	ADDENDUM 1
2	01.22.26	ADDENDUM 2

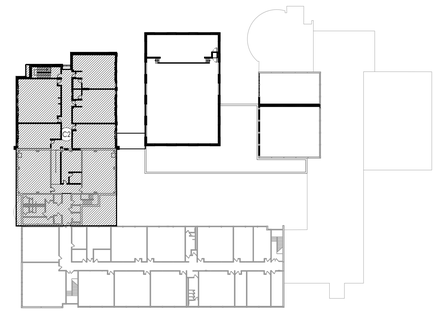
Drawing Number
A601



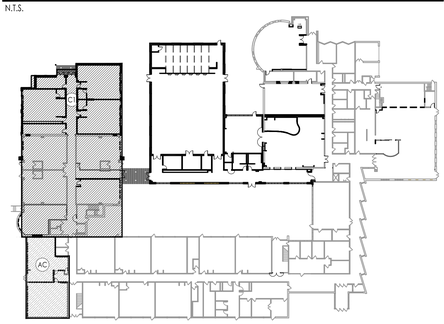
1 AREA OF WORK 'C2' - SECOND FLOOR
1/8" = 1'-0"



2 AREA OF WORK 'C1' + 'AC' - FIRST FLOOR
1/8" = 1'-0"



SECOND FLOOR - KEY PLAN
N.T.S.



FIRST FLOOR - KEY PLAN
N.T.S.

BUILDING A: EXISTING TO REMAIN
BUILDING B: ADDITION/RENOVATION
BUILDING C: ADDITION/RENOVATION

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21A07706000 | PA - RA412520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI00127700
JASON J. LUBOWITCH, AIA
NJ - 21AI01770000 | PA - RA426090
STEPHEN W. SCHREYER, JR., AIA, LEED AP BD+C
NJ - 21AI02031100 | PA - RA414565
Architect
Date

FVHD Architecture Planning Fraviak Velez Hopkins Duthie PC
Corporate: 1515 Lower Ferry Road Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number
5516C

Project Date
10.10.2025

Checked By
GRD

Drawn By
BMP

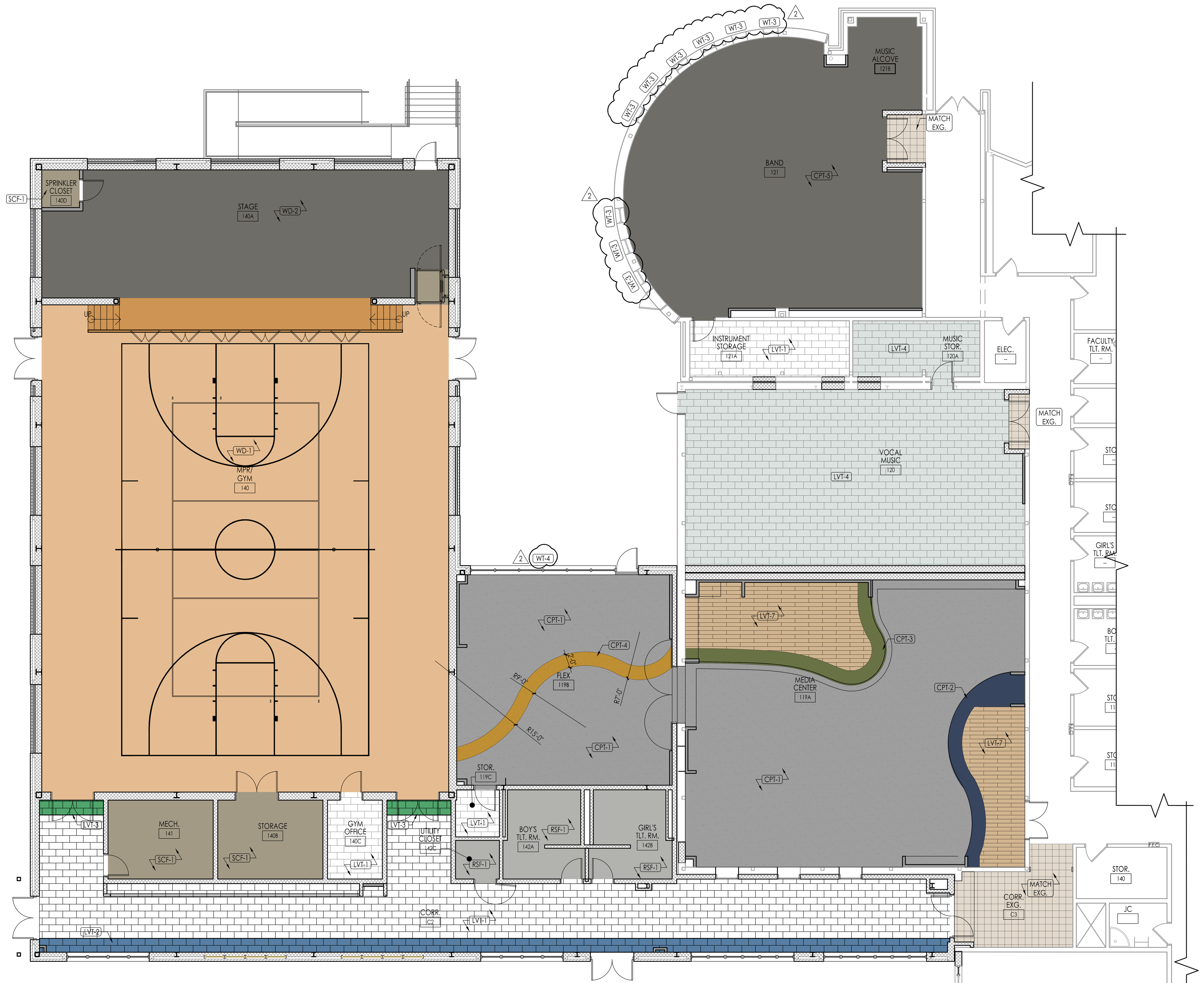
Scale
AS NOTED

Drawing Name
FIRST AND SECOND FLOOR FINISH PLANS - WORK AREA 'AC' & 'C'

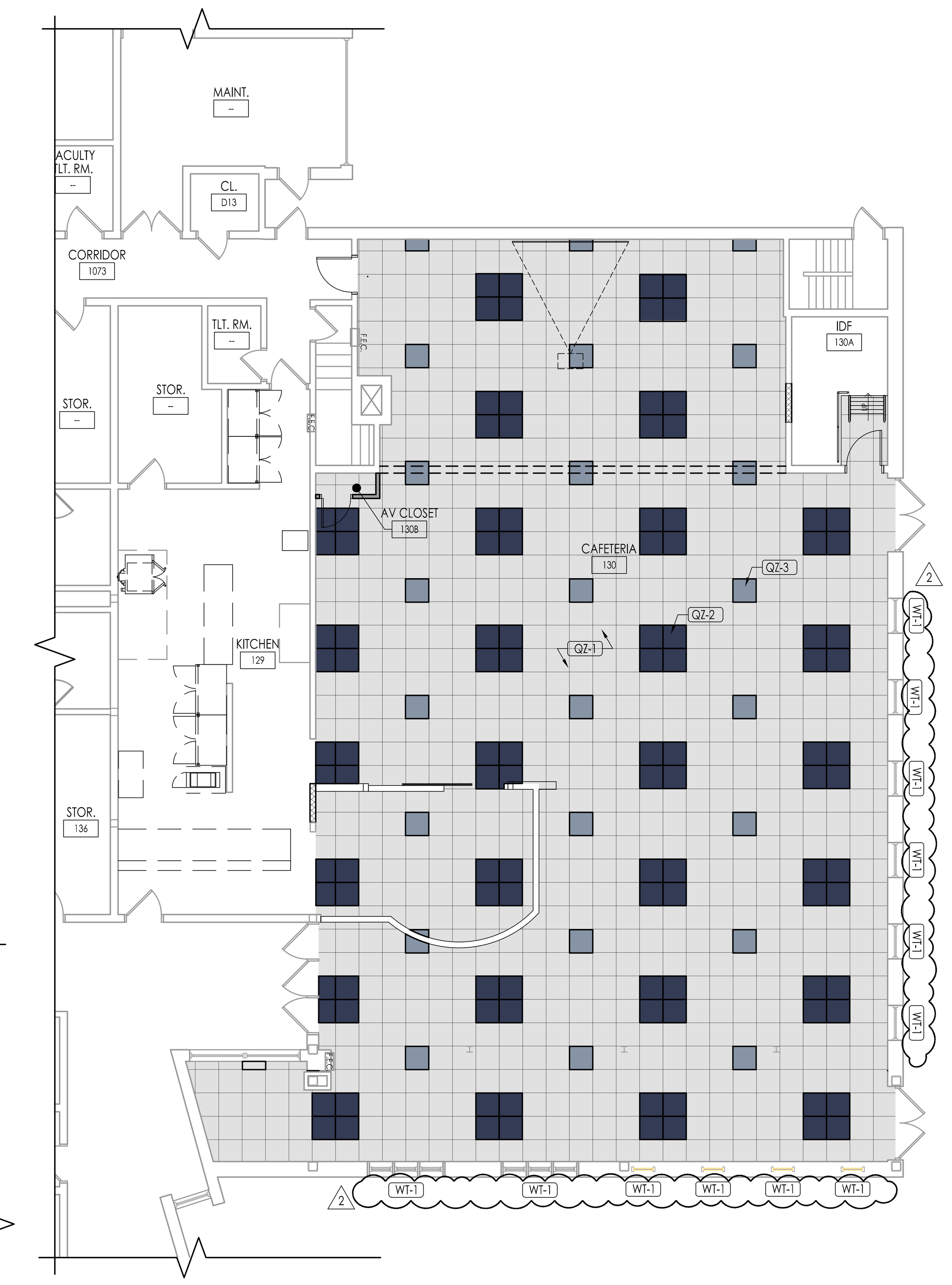
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

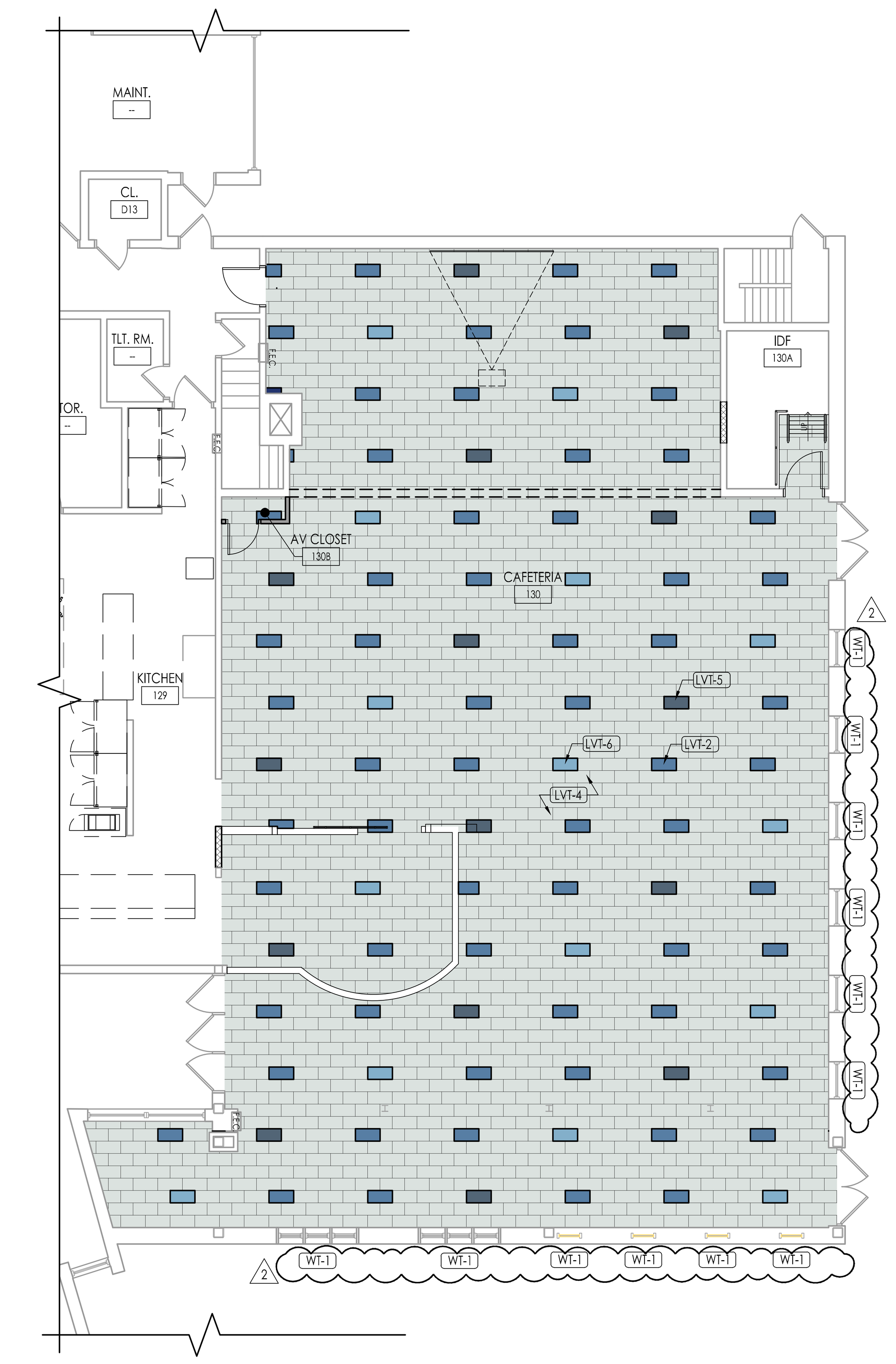
Drawing Number
A702



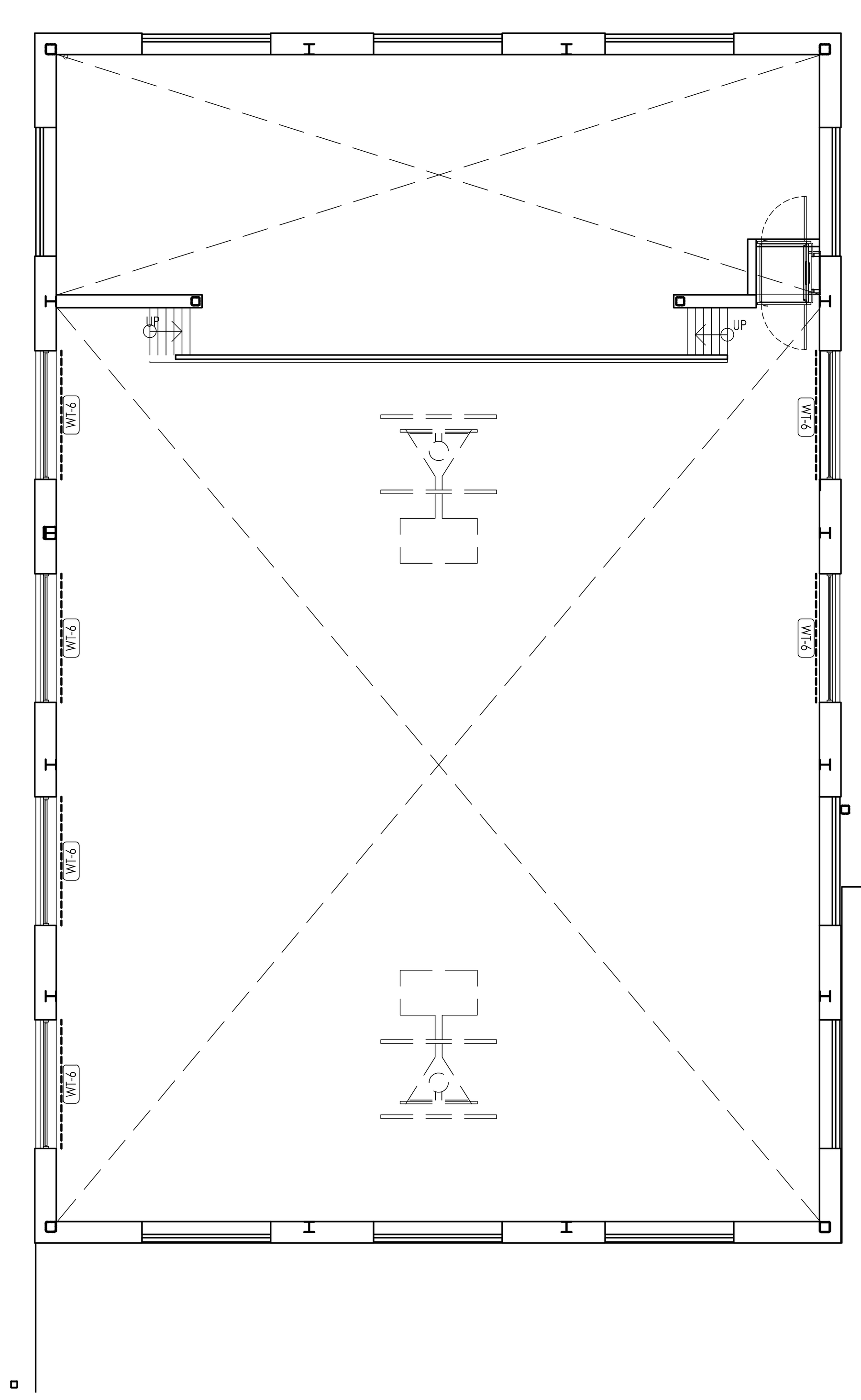
1 AREA OF WORK 'B1' + 'AA'
1/8" = 1'-0"



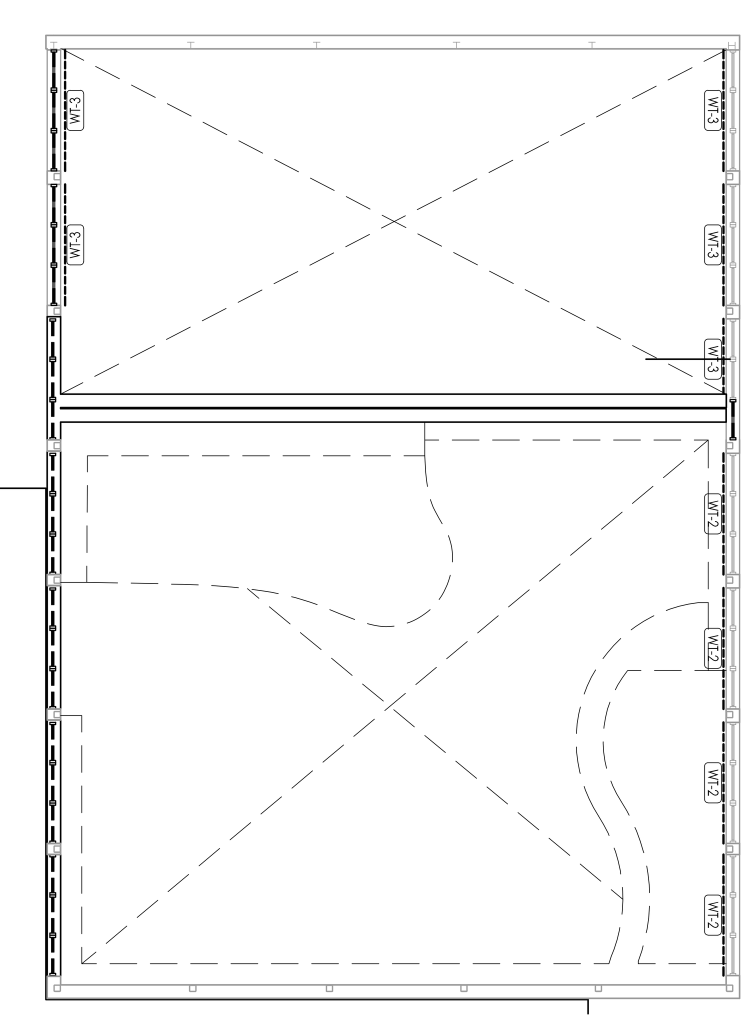
2 AREA OF WORK 'AB' - ALT-BID CP-3
1/8" = 1'-0"



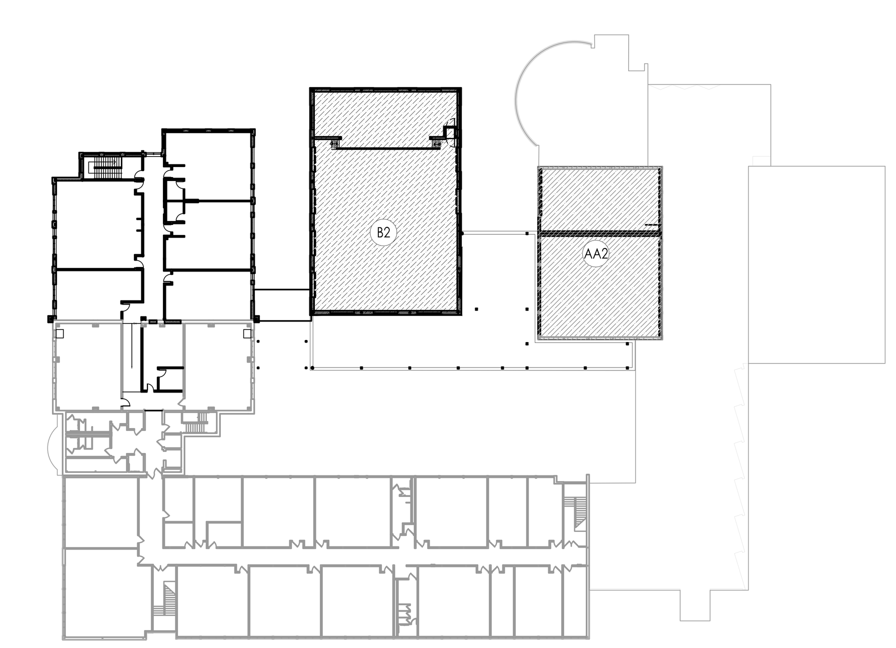
2 AREA OF WORK 'AB' BASE-BID
1/8" = 1'-0"



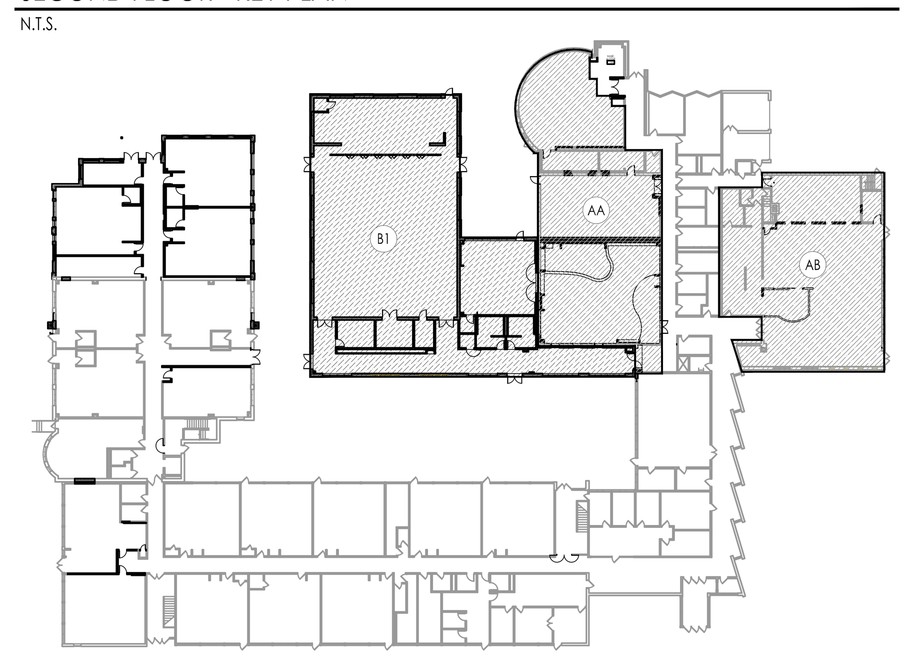
3 AREA OF WORK 'B2'
1/8" = 1'-0"



4 AREA OF WORK 'AA2'
1/8" = 1'-0"



SECOND FLOOR - KEY PLAN
N.T.S.



FIRST FLOOR - KEY PLAN
N.T.S.

BUILDING A: EXISTING TO REMAIN
BUILDING B: ADDITION/RENOVATION
BUILDING C: ADDITION/RENOVATION

NJDCA Electronic Release Stamp

WILLIAM D. HOPKINS III, AIA, LEED AP
NJ - 21AI01706000 | PA - RA012520X
GEORGE R. DUTHIE JR., AIA, PP
NJ - 21AI01299200
JASON J. DUBOWITCH, AIA
NJ - 21AI01979800 | PA - RA406009
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435

Architect
Date

FVHD architects planners
Fraytak Veisz Hopkins Duthie PC
Corporate: 1515 Lower Ferry Road
Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Community Park Elementary School

Project Owner Name
Princeton Public Schools

Project Location
372 Witherspoon St, Princeton, NJ 08542

Project Number	5516C
Project Date	10.10.2025
Checked By	GRD
Drawn By	BMP
Scale	AS NOTED

Drawing Name
FIRST AND SECOND FLOOR FINISH PLANS - WORK AREA 'AA', 'AB' & 'B'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
2	01.22.26	ADDENDUM 2

Drawing Number
A703