ADDENDUM NO. 2
to
CONTRACT DOCUMENTS

for
ADDITIONS AND RENOVATIONS TO LITTLEBROOK ELEMENTARY SCHOOL
located at 39 Magnolia Lane, Princeton, NJ 08540

for the
PRINCETON PUBLIC SCHOOLS
Princeton, Mercer County, New Jersey

FVHD PROJECT NO. 5516D

Issued: March 24, 2026

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INTENT

This Document supersedes all conflicting and contrary information in said Bid 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 Bid Documents. Bidders shall acknowledge receiving this document and previously issued Addendum No. 1 on the Bid Proposal Form.

This Addendum includes thirteen (13) pages and the following:

1. Pre-Bid Meeting Sign-In Sheet, dated 2/25/26, 2-pages.

2. Revised Bid Proposal Form (8-pages).

3. Revised Drawings:
   a. Architectural: A001, A002, A003, A105, A106, A107, A108, A109, A110, A401, A404, A503, A603, A701, A702.
   b. Civil: C2.0, C2.1, C2.2, C3.0, C3.1, C3.2, C4.0, C4.1, C4.2, C5.0, C5.1, C5.2, C6.0, C7.0, C8.2, C8.3, C9.0.
   c. Plumbing: P1.0, P2.0, P3.0, P3.1, P3.2, P4.0, P4.1, P4.2, P5.0, P5.1, P5.2, P6.0, P7.0, P7.1, P8.0.
   d. HVAC: M3.1, M3.2, M4.1, M5.1, M6.0, M6.1.
   e. Electrical: E2.1, E3.1, E4.0, E4.1, E5.0, E5.1, E5.2, E5.4, E6.1, E7.1, E8.0, E.9.0, E9.1.

4. Revised Specifications: AIA A132 - 2019, 01800.

5. New Specification Sections / Documents: Project Sign Details, 07241, 07250, 09940.

REQUESTS FOR INFORMATION (RFI'S)

1. Question: Please provide the Maintenance Bond requirements as there is a discrepancy in the project manual:

   Per Project Manual Volume 1 - page 1:00100-8:

   10. CONTRACT BONDS
   A. Prior to start of guarantee period and before the final payment is made, the Contractor shall provide the Owner with a Maintenance Bond in the amount of ten percent (10%) of Final Contract Amount, to insure the replacement or repair of defective materials or workmanship during the two-year guarantee period.

   Per General Conditions of the Contract for Construction

   § 11.4.1 Two (2) Year Maintenance Bond equal to 100 percent of the Contract Sum. Bonds shall be consistent with the requirements of N.J.S.A. 2A:44-143, and 2A:44-144.

   Response: Ten percent (10%) of Final Contract Amount.

2. Question: Please define what the expansion (area) is. Plan depicts standard paving of approx. 3900 sq yards of standard duty paving and 710 of light duty paving.

   Response: Refer to revised Civil/Site Drawings.

3. Question: Please identify on the site drawings what work is part of Alternate Bid 6; what section of the parking lot is part of this bid? Is the retaining wall and bio-retention basin part of this alternate? Please advise.

   Response: Refer to revised Civil/Site Drawings.

4. Question: Please identify where the end point is for the new sanitary line for the base bid, and where it starts for Alternate 1.

   Response: Refer to revised Civil/Site Drawings.

5. Question: Please confirm that the new water line is to be included as part of Alternate 1.

   Response: Refer to revised Civil/Site Drawings.

6. Question: Please identify what storm water piping is part of the base bid and what is part of Alternate 1, and Alternate 6.

   Response: Refer to revised Civil/Site Drawings.

7. Question: Over all, please identify what site work is to be included in the base bid, Alternate 1, and Alternate 6.

   Response: Refer to revised Civil/Site Drawings.

8. Question: Spec Section 00800 - 1.6 states that the GC is include the cost to outsource a CPM Scheduler. If we have the capabilities in-house, is that acceptable?

   Response: Princeton Public Schools requires an outsourced Scheduler.

9. Question: Spec Section 01050-1.2.b.10.E states that there is to be an allowance in section 01020 for Construction Manager Office Supplies. Please advise.

   Response: Refer to revisions to Section 01505, below.

10. Question: Spec 01505 states that the Contractor is responsible for electric & water costs. Please advise if we'll be able to tap off of the Owner's existing panels and water.

    Response: Scope of work is as defined in Section 01505.

11. Question: Spec 01020 Allowance amount indicated does not match with AIA A132-4 (4.2.3). Please update actual allowance amount as required to include in the bid form.

    Response: Delete AIA A132 in its entirety and review the attached revised document.

12. Question: Please confirm this project is NJ Prevailing Wage only and PLA - Project Labor Agreement is not applied. Kindly note that New Jersey recently enacted A-5967 / S-4864 (P.L. 2025, c.327), which significantly expands the authority of local public entities to utilize Project Labor Agreements (PLAs) on public works projects.

    Response: This project is a NJ Prevailing Wage project. There is no PLA.

13. Question: Spec 00860-11 (1.17) calls for Apprenticeship program which is offered by local trade Unions only. Please consider this project to sign PLA.

    Response: This project is a NJ Prevailing Wage project. There is no PLA.

14. Question: Please confirm Maintenance Bond required is for 2 years as standard is 1 year.

    Response: The Maintenance Bond is a indicated in the Bid Documents.

15. Question: Please confirm Builder's Risk insurance will be provided and paid by Owner if any required.

    Response: Refer to AIA A232, Article 10, para. 10.2.11.

16. Question: Please confirm all 3rd party testing and inspection will be hired and paid by Owner.

    Response: Refer to Specification Section 01400.

17. Question: Spec 00870-3 (1.7) refer to CM, please provide name of the CM on this project.

    Response: Refer to Specification Section 00800.

18. Question: Spec 01010-2 (1.4-C) says "Contract No 2". As documents say single contract. Please clarify what is contract No 1?

    Response: In Section 01020-2, para. 1.4, C, delete “Contract No. 2:” in its entirety.

19. Question: Please provide list of items by Others/Owner as per 01010-5 (1.5).

    Response: Items to be provided by the Owner are indicated on the Drawings.

20. Question: Please confirm Renovation area available for contractor to work in general working shift hours and no 2nd shift work or Overtime required to include in bid amount.

    Response: Refer to revised Section 01800-1, para. 1.2, C, attached to this Addendum.

21. Question: Please provide layout and locations for temporary Partition if any requirement.

    Response: Refer to Specification Section 01505, para 1.1, C.16. Refer to locations on revised drawing A001.

22. Question: Spec 01800-3 Milestone #01 indicates Notice of Award as March 17, 2026, while bid date is March 24, 2026. Milestone # 6 do not match with number of days and date provided. Please provide updated revised all milestone schedule.

    Response: Refer to revised Section 01800, attached to this Addendum.

23. Question: Dwg C-3.0 indicates 5' swing gate while shown as 20' W Gate please clarify.

    Response: Refer to revised Civil/Site Drawings.

24. Question: Please confirm licensed Geotech Engineer provided by Owner or to be paid from allowance per Spec 02200-2 (1.5-B-1).

    Response: Special Inspections are by the Owners Testing Inspection Agency and are listed on Drawing A100. 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.

25. Question: Dwg C-4.0 grading note 11 (sub note # 1) call for unit price & Allowance for 175 CY of subgrade reconstruction which are not found in unit price list. Please add if required and applicable.

    Response: Refer to revised Bid Proposal Form, attached to this Addendum, and revised reference to Section 01151 (below).

26. Question: Dwg C-5.0 please provide existing waterline size where connecting new 3" type K copper domestic water service.

    Response: Refer to revised Drawing C-5.1. Water service has been revised to connect to existing service in building.

27. Question: Dwg C-6.0 planting spec Note# 1 referring to coordinating with Irrigation Contractor. Please clarify who is responsible for hiring Irrigation Contractor? If Irrigation system is by this Contract, please provide spec & detail layout for irrigation.

    Response: Refer to revised Drawing C-6.0. Reference to irrigation has been deleted.

28. Question: Dwg C-7.0 does not indicate wheel cleaning blanket. Please confirm it is not applicable. If required, please provide applicable size and locations.

    Response: Refer to revised Drawing C-7.0.

29. Question: Dwg C-7.0 indicates tree protection 10 location outside disturbed work area at far distance. Please confirm it is to be included in bid proposal.

    Response: Yes. Trees outside of the limit of disturbance shall be protected as indicated.

30. Question: Dwg Detail 1/A-110 indicate C/S 4A/110 Typ (marked - 5 locations) with WT-1 (4 Location). Please confirm it is required Total WT-1 (20 locations) Skylight shade per detail.

    Response: Shade WT-4 is for Detail 4 - A/110. Details that call out 4-A110 (Typ.) is Detail 3-A110. Sheet A110 has been revised.

31. Questions: Please provide Spec for:
    a. Spray on Fireproofing as indicated 20/A-304.
    b. Exterior Sheathing.
    c. Bituminous Dampproofing, If applicable. None was found.
    d. Self-Adhering Sheet Waterproofing at foundation, If applicable. None was found.
    e. EIFS as indicated at Roof Parapet Walls (Bothside) 20/A-304. Note: Spec 07242 DEFS found for Soffits)
    f. Pyramid Skylights
    g. Expansion Joint Cover - Interior & Exterior
    h. Aluminum Louvers

    Responses:
    a. Refer to new Specification Section 07250, attached to this Addendum.
    b. Refer to Section 06100.
    c. Not applicable.
    d. Not applicable.
    e. Refer to Section 07241 attached to this Addendum for the EIFS. The Drawing Wall Section reference is 3 & 4/A301.
    f. Refer to Section 07800 and revised 07800 for double dome skylight(s) included in this Addendum.
    g. Refer to Section 05500.
    h. Refer to revised drawing M3.1 Key Note #1 and M3.2 Key Not #2 for louver spec.

32. Question: Please provide acceptable manufacturer name for Engineered Wood Fiber Playground Surfaces as Spec 02932 & Detail 16/C-8.0 do not indicates.

    Response: Any manufacturer that can provide engineered wood fiber shall meeting IPEMA certification for playground mulch surfacing is acceptable.

33. Question: Please confirm all alternates will be accepted by the sequence provided.

    Response: The Owner will award any alternate bid(s) if funds are available and not in sequential order as listed on the proposal form.

34. Question: Please provide existing roofing manufacturers and warranty details.

    Response: Refer to Drawing A111.

35. Question: Is there an allowance? If so, is it to be included in the base bid? Please identify the total amount of the allowance that all GC's are to carry in bid if applicable.

    Response: Refer to Section 01020.

36. Question: Bid date is 3/24/26, Section 1800-3 list the NTP will be given on or about 3/17/26 which precedes the bid date. Kindly explain or correct and does that also effect the other milestone dates listed in this section if they were all based of the NTP date?

    Response: Refer to revised Section 01800, attached to this Addendum.

37. Question: There is a sample AIA contract in the bid docs that has a different schedule of allowances than the allowances you have listed on Pages 1:01020-2 and 1:01020-3. Please advise which allowance amounts are correct for this project bid 5561D.

    Response: Refer to revised AIA A132, attached to this Addendum.

38. Question: Spec Section 01-1400 contains contradictory information as to the financial responsibilities regarding special inspections. In simple terms, kindly confirm the Owner is responsible for hiring special inspectors and paying for all special inspections?

    Response: Section 01400-1, para. 1.2, A indicates:
    1. The Owner's Special Inspections - Material Testing requirements (paid by the Owner), and,
    2. The Testing and inspection services other than the Special Inspections - Material Testing which are the responsibility of the Contractor (paid by the Contractor).

39. Question: Dwg M6.1 please have Engineer identify all base bid equipment versus alternate bid equipment and provide corresponding alt number in the table.

    Response: FVHD's Key Plan and Alternate Bid List identifies the number. Refer to Addendum No. 2 for Alternate Bids.

40. Question: Dwg E1.0 please confirm the direction in BOX Titled " Important Notes " also relates to the speakers and clocks identified in legend as Owners vendor to supply and install wiring and devices with all terminations and testing.

    Response: Yes. Contractor to provide pathways as described in the Symbol List descriptions.

41. Question: Dwg E 5.0 has a Detail labeled Cafeteria Alternate Bid. What alternate # should this work go with?

    Response: Refer to FVHD's Key Plan and Alternate Bid List which identifies the number.

42. Question: In reviewing the Electrical Drawings specifically it appears E Drawings 3.1, 4.1, PART of 4.3, 5.1, 5.4, 6.1, 7.1, PARTS of 8.0, 9.0, 9.1 all have scope that should go with pricing for an alternate, yet none of these Drawings make any reference to that. This probably hold true with all MEPS Drawings. Please identify rooms and corresponding Alt #'s all work goes with so that all bidders and trades alike are able to provide accurate bids.

    Response: Refer to FVHD's Key Plan and Alternate Bid List which identifies the number. Refer to Addendum No. 2 for MEP Alternate Bids.

43. Question: Who pays for permits?

    Response: Refer to AIA A232, Articles 2.3.1, 3.7; Section 00800-5, para 1.14 and Section 00860-1, para 1.3.

44. Question: Will a temp fence be required?

    Response: Yes. Refer to Section 01505.

45. Question: Please provide the existing BMS vendor's name/email/phone contact information for the building.

    Response: Refer to project General Note 32 on Drawing M1.0 for BMS Vendor Information.

46. Question: Please provide name/email/phone contact information for the Fire Alarm vendor for this facility.

    Response: Refer to project General Notes #83, 84 & 85 on Drawing E1.0.

47. Question: Will the building be vacant?

    Response: No

48. Question: What is the building keying system we are to match?

    Response: Refer to Section 08700.

49. Question: Will there be a designated spot for GC to put a dumpster?

    Response: Yes

50. Question: Does existing ductwork to remain have to be cleaned and tested with a report filed for record?

    Response: Testing and cleaning are not required for the existing system to remain in work area.

51. Question: Upon reviewing Spec book volume 1, we found 2 spec sections for 08700 with same name and heading. One found with 23 pages and 2nd one found with 31 pages. Please clarify which one to follow.

    Response: Delete Section 08700 document which has 23 pages and use Section 08700 document which has 31 pages.

52. Question: Please provide Spec for Wall Protection (Corner Guards, FRP Wall Panels etc.)

    Response: Refer to Section 09940 - High Impact Wall Guards, attached to this Addendum. FRP Wall Panel spec is included in the project manual.

53. Question: Please clarify who is responsible for Projection Screens and Projectors.

    Response: Refer to the revised A400 series Drawings, attached to this Addendum. Wall and ceiling mounted projection screens and Whiteboards are by the GC. Short-throw projectors are by the Owner and are Not-In-Contract.

54. Question: The folding partition is spec'd. to be electrically operated, the electric drawings do not show anything being ran for the partition.

    Response: Refer to the revised Electrical Drawings attached to this Addendum.

55. Question: The pocket width is too small to provide electrically operated partitions. The pocket will need to be at least 3'10" wide without pocket doors and if pocket doors are needed the minimum width would be 5'. We can provide individual panels with electric autoset that will be able to fit into the pocket. The specs call for pocket doors as well and adding them will require a 5' wide pocket.

    Response: Refer to the revised Drawings, attached to this Addendum.

REFER TO DRAWINGS

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

DRAWING NO.	TITLE
A001	PROJECT NARRATIVE AND SCOPE OF WORK, TEMPORARY EGRESS PLAN & PHASING PLAN -1
A002	PHASING PLANS - 1A & 2
A003	EGRESS PLAN, WORK KEY PLAN & CODE ANALYSIS
A105	FLOOR PLAN, WALL PARTITION TYPES & PLAN CONSTRUCTION NOTES - BLOCK ‘A’
A106	FLOOR PLAN & CONSTRUCTION NOTES - BLOCK 'B'
A107	FLOOR PLAN & CONSTRUCTION NOTES - BLOCK 'C'
A108	REFLECTED CEILING PLANS - BLOCK 'A'
A109	REFLECTED CEILING PLANS - BLOCK 'B'
A110	REFLECTED CEILING PLANS - BLOCK 'C'
A401	ROOM LAYOUTS WITH GENERAL NOTES, DETAILS, ROOM FINISH & EQUIPMENT SCHEDULE
A404	INTERIOR ELEVATIONS
A503	MISCELLANEOUS DETAILS
A603	DOOR FRAME SILL DETAILS & WINDOW FRAME DETAILS
A701	INTERIOR ROOM FLOOR PATTERN LAYOUTS & FINISHES BLOCK ‘A’
A702	INTERIOR ROOM FLOOR PATTERN LAYOUTS & FINISHES BLOCK 'B' & BLOCK ‘C’

C2.0	DEMOLITION PLAN BASE BID
C2.1	DEMOLITION PLAN ALTERNATE BID LB1
C2.2	DEMOLITION PLAN ALTERNATE BID LB6

C3.0	SITE LAYOUT PLAN BASE BID
C3.1	SITE LAYOUT PLAN ALTERNATE BIDS LB1 & LB2
C3.2	SITE LAYOUT PLAN ALTERNATE BID LB6
C4.0	SITE GRADING PLAN BASE BID
C4.1	SITE GRADING PLAN ALTERNATE BIDS LB1 & LB2
C4.2	SITE GRADING PLAN ALTERNATE BID LB6
C5.0	SITE UTILITY PLAN BASE BID
C5.1	SITE UTILITY PLAN ALTERNATE BID LB1
C5.2	SITE UTILITY PLAN ALTERNATE BID LB6
C6.0	LANDSCAPING PLAN
C7.0	SOIL EROSION & SEDIMENT CONTROL PLAN
C8.2	DETAILS
C8.3	DETAILS
C9.0	BIORETENTION BASIN PLAN ALTERNATE BID LB7

P1.0	PLUMBING SYMBOLS, NOTES, & SCHEDULES
P2.0	PLUMBING DEMOLITION PLAN - BLOCK C
P3.0	PLUMBING UNDERSLAB PIPING PLAN - BLOCK A
P3.1	PLUMBING UNDERSLAB PIPING PLAN - BLOCK B (ALTERNATE BID)
P3.2	PLUMBING UNDERSLAB PIPING PLAN - BLOCK C
P4.0	PLUMBING FLOOR PLAN - BLOCK A
P4.1	PLUMBING FLOOR PLAN - BLOCK B (ALTERNATE BID)
P4.2	PLUMBING FLOOR PLAN - BLOCK C
P5.0	PLUMBING ROOF PLAN - BLOCK A
P5.1	PLUMBING ROOF PLAN - BLOCK A (ALTERNATE BID)
P5.2	PLUMBING ROOF PLAN - BLOCK B (ALTERNATE BID)
P6.0	PLUMBING PART PLANS
P7.0	PLUMBING SANITARY AND DOMESTIC RISER DIAGRAMS
P7.1	PLUMBING STORM AND GAS RISER DIAGRAM
P8.0	PLUMBING DETAILS

M3.1	MECHANICAL NEW DUCTWORK PLAN - BLOCK B (ALTERNATE BID)
M3.2	MECHANICAL NEW DUCTWORK PLAN - BLOCK C
M4.1	MECHANICAL NEW PIPING PLAN - BLOCK B (ALTERNATE BID)
M5.1	MECHANICAL ROOF PLAN - BLOCK B (ALTERNATE BID)
M6.0	MECHANICAL SCHEDULES
M6.1	MECHANICAL SCHEDULES

E2.1	ELECTRICAL DEMOLITION PLAN - BLOCK B (ALTERNATE BID)
E3.1	ELECTRICAL POWER PLAN - BLOCK B (ALTERNATE BID)
E4.0	ELECTRICAL HVAC POWER PLAN - BLOCK A
E4.1	ELECTRICAL HVAC POWER PLAN - BLOCK B (ALTERNATE BID)
E5.0	ELECTRICAL LIGHTING PLAN - BLOCK A
E5.1	ELECTRICAL LIGHTING PLAN - BLOCK B (ALTERNATE BID)
E5.2	ELECTRICAL LIGHTING PLAN - BLOCK C
E5.4	ELECTRICAL LIGHTING CONTROLS PLAN BLOCK B (ALTERNATE BID)
E6.1	ELECTRICAL LOW VOLTAGE PLAN BLOCK B (ALTERNATE BID)
E7.1	ELECTRICAL FIRE ALARM PLAN BLOCK B (ALTERNATE BID)
E8.0	ELECTRICAL ONE LINE DIAGRAM
E9.0	ELECTRICAL PANEL SCHEDULES & VOLTAGE DROP TABLE
E9.1	ELECTRICAL MECHANICAL EQUIPMENT COORDINATION SCHEDULE

The following Drawings to be revised or corrected as follows:

DRAWING NO.	CHANGES AND CORRECTIONS
A001, A002, A003, A105, A106, A107, A108, A109, A110, A401, A404, A503, A603, A701, A702	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
C2.0, C2.1, C2.2, C3.0, C3.1, C3.2, C4.0, C4.1, C4.2, C5.0, C5.1, C5.2, C6.0, C7.0, C8.2, C8.3, C9.0	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
P1.0, P2.0, P3.0, P3.1, P3.2, P4.0, P4.1, P4.2, P5.0, P5.1, P5.2, P6.0, P7.0, P7.1, P8.0	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
M3.1, M3.2, M4.1, M5.1, M6.0, M6.1	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
E2.1, E3.1, E4.0, E4.1, E5.0, E5.1, E5.2, E5.4, E6.1, E7.1, E8.0, E9.0, E9.1	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.

PROPOSAL FORM

Delete the Bid Proposal Form in its entirety and substitute with the enclosed revised document.

REFER TO SPECIFICATIONS

TABLE OF CONTENTS

Under Part - 1 Contract Conditions and General Requirements, add the following document after Section 01505, which is attached to this Addendum:

Project Sign Details, 2 pages.

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

07241	Water Managed Exterior Insulation and Finish System, 21 pages
07250	Sprayed-On Fireproofing, 7 pages.
09940	High Impact Wall Guards, 3 pages.

PART 1 - SECTION 01010 - SUMMARY OF WORK

Page	Paragraph	
01010-2	1.4, B	Add the following subparagraph:

8. Alternate Bid No. LB7: Storm Water Management Basin

PART 1 - SECTION 01020 - ALLOWANCES

Page	Paragraph	
01020-2	1.2, A.1	Add the following subparagraph:

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

PART 1 - SECTION 01030 - ALTERNATE BIDS

Page	Paragraph	
01030-2	1.2	Add the following subparagraph:

H. **Alternate Bid No. LB7: Storm Water Management Basin**

State the amount to be added to the base bid to provide and install grading, storm sewer pipes and structures, landscaping, and fencing associated with the new storm water management basin and all associated Work, as shown on various Drawings and as indicated in various Specification sections.

PART 1 - SECTION 01151 - UNIT PRICES

Page	Paragraph	
01151-2	1.4	After "Concrete Walk" (including subbase) add the following Unit Price:

Subgrade Reconstruction $__________per cu. yd.

1.4 Add the following General Construction Unit Price after Cement Based Self-Leveling Underlayment:

Labor cost to receive, unload, and handle Owner-provided items from truck and install in locations as directed by the Owner $______ laborer per hour

PART 1 - SECTION 01400 - MATERIAL TESTING / QUALITY CONTROL SERVICES

Page	Paragraph	
01400-8	3.1, A	Add the following subparagraph:

4. Sprayed Fire-Resistant Materials (ICC, Section 1705.15).

PART 1 - SECTION 01505 - TEMPORARY FACIITIES

Page	Paragraph	
01505-3	1.2	Delete subparagraph "B" in its entirety.

After Section 01505, add "Project Sign Details" Drawings.

PART 2 - SECTION 07241 - WATER MANAGED EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

Add new Section 07241, attached to this Addendum.

PART 2 - SECTION 07250 - SPRAYED-ON FIREPROOFING

Add new Section 07250, attached to this Addendum.

PART 2 - SECTION 07800 - ROOF SPECIALTIES AND ACCESSORIES

Page	Paragraph	
07800-7	2.6	Delete subparagraph "M" in its entirety and substitute with the following:

M. Basis of Design: Model "TSF-9-FG", thermalized sealed double dome, thermally broken and insulated self flashing 9" skylight, dome color - white, frame color - bronze anodized, as manufactured by American Skylites; or approved equal.

  1. Other Acceptable Manufacturers: Subject to compliance with requirements, manufacturers offering prefabricated plastic skylight units which may be incorporated in the work include, but are not limited to, the following:
     a. Nanogel, Model "Sentinel Fall Protection Unit", as manufactured by Wasco Products, Inc.,
     b. Approved equal by CPI Daylighting,
     c. Or approved equal.

PART 2 - SECTION 08700 - FINISH HARDWARE

Delete Section 08700 document which has 23 pages and use Section 08700 document which has 31 pages.

PART 2 - SECTION 09940 - HIGH IMPACT WALL GUARDS

Add new Section 09940, attached to this Addendum.

PART 2 - SECTION 10650 - OPERABLE PARTITION

Page	Paragraph	
10650-4	2.2, D	Change “208-volt, 3-phase”, to read “115-volt, 1-phase, 1 HP, 14.0 FLA”.

END OF ADDENDUM NO. 2

William D. Hopkins III, AIA, LEED AP, NCARB
Jason J. Dubowitch, AIA, NCARB
Stephen W. Schreyer Jr., AIA, NCARB, LEED AP BD+C

FVHD architects planners
Fraytak Veisz Hopkins Duthie, P.C.

PROJECT NAME: Additions/Renovations at Littlebrook Elementary School for Princeton Public Schools

WEDNESDAY, 2/25/2026
DATE: ~~Tuesday, 2/24/2026~~ at 10:30 AM

FVHD PROJECT#: 5516D

PRE-BID SIGN-IN SHEET

REPRESENTATIVE NAME (Please Print)	COMPANY NAME & ADDRESS	CONTRACT NUMBER	TELEPHONE#	FAX#	E-MAIL
Robert Duckers	GPC Inc. Millburn NJ		973 376 6116		bob@grafas.net
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Anthony DeSapio III	DeSapio Const. Inc		908-996-3868	908-996-3610	Bids@DeSapioconstruction.com
Brandon Saner	Tester Construction		856-924-8266		brandon@testerconstruction.com
ED HILBERT III	TE CONSTRUCTION		215-441-8223	215-441-8224	EJHILBERT@TECBUILDS.COM

William D. Hopkins III, AIA, LEED AP, NCARB
Jason J. Dubowitch, AIA, NCARB
Stephen W. Schreyer Jr., AIA, NCARB, LEED AP BD+C

FVHD architects planners
Fraytak Veisz Hopkins Duthie, P.C.

Steve Bird	QPI Electrical Co. Inc.		215-947-1592		Steve@qpi-electrical .com

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ADDENDUM NO. 2

BID PROPOSAL FORM

SINGLE OVERALL CONTRACT
LITTLEBROOK ELEMENTARY SCHOOL

DPMC Classifications: C008 or C009 Prime Contractor
with C029, C030, C032, C047 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 Littlebrook Elementary School (FVHD#5516D)**, 39 Magnolia Lane, 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:

   SINGLE OVERALL CONTRACT - LITTLE BROOK 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 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. LB1: Classroom Addition and all Related Work including Site Work ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB2: Courtyard Improvements ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB3: Renovation Work at Existing Music Room ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB4: Serving Line Improvements ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB5: Quartz Tile Flooring In Lieu of LVT at Cafeteria/Serving Area ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB6: Parking Lot Expansion ADD $_________________
(Numerical)

____
(To be written in full)

Alternate Bid No. LB7: Storm Water Management Basin ADD $_________________
(Numerical)

____
(To be written in full)

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 Curb	$____________	per lin. ft.
Concrete Walk (including subbase)	$____________	per sq. ft.
Subgrade Reconstruction	$____________	per cu. yd.
Cement Based Self-Leveling Underlayment per Section 03452	$____________	per sq. ft.
Labor cost to receive, unload, and handle Owner provided items from truck and install in location as directed by the Owner	$____________	laborer/hour
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:	$____________	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.

UNIT PRICES - PLUMBING & DRAINAGE: 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.

Submitted by:______________________________
(Firm Name)

3″ Type ‘L’ copper tubing	$____________	per lin. ft.
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.

Submitted by:____
(Firm Name)

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.
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.

Submitted by:____
(Firm Name)

2" Mineral-Fiber Board Duct Insulation (Outdoors)	$____________	per sq. ft.

UNIT PRICES - ELECTRICAL WORK: 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, 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

Submitted by:____
(Firm Name)

Fire Alarm monitor/control module including wiring, programming and testing.	$____________	per unit
Fire Alarm door holder including wiring, programming and testing.	$____________	per unit
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__________ received__________(initial)
   Addendum No. 2, 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)

AIA Document A132® – 2019

Standard Form of Agreement Between Owner and Contractor, *Construction Manager as Adviser Edition*

AGREEMENT made as of the day of in the year
(In words, indicate day, month, and year.)

BETWEEN the Owner:
(Name, legal status, address, and other information)

Princeton Public Schools
25 Valley Road, Princeton, NJ 08540

and the Contractor:
(Name, legal status, address, and other information)

for the following Project:
(Name, location, and detailed description)

Additions and Renovations to Littlebrook Elementary School
39 Magnolia Lane, Princeton, NJ 08540

The Construction Manager:
(Name, legal status, address, and other information)

New Road Construction Management Co., Inc.
1876 Greentree Road, Cherry Hill, NJ 08003

The Architect:
(Name, legal status, address, and other information)

Fraytak Veisz Hopkins Duthie, P.C.
1515 Lower Ferry Road
Trenton, NJ 08618
FVHD-5516D

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.
AIA Document A232™–2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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TABLE OF ARTICLES

1 THE CONTRACT DOCUMENTS

2 THE WORK OF THIS CONTRACT

3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

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9 ENUMERATION OF CONTRACT DOCUMENTS

EXHIBIT A INSURANCE AND BONDS
EXHIBIT B DETERMINATION OF THE COST OF THE WORK

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement Instructions to Bidders and the Bid Package, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9. In the event of any conflict among the Contract Documents, the Contractor shall notify the Owner and the Architect of same and follow and comply with their interpretation of same.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:
(Check one of the following boxes.)

☐ The date of this Agreement.

☒ A date set forth in a notice to proceed issued by the Owner.

☐ Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

(Paragraph deleted)

§ 3.3 Substantial Completion of the Project or Portions Thereof

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be:

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(Insert the date of Substantial Completion of the Work of all Contractors for the Project.)

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of all of the Contractors for the Project are to be completed prior to Substantial Completion of the entire Work of all of the Contractors for the Project, the Contractors shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date

§ 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete

§ 3.4.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract:
(Check one of the following boxes and complete the necessary information.)

[X] Not later than (898) calendar days from the Notice to Proceed.

[ ] By the following date:

§ 3.4.1.1 If the number of days exceeds the number of days allowed in the specifications, a deduction from the contract price or any wages paid by the Board of Education to any inspector or inspectors necessarily employed by it on the work may be permitted by Owner. All deductions of wages shall be pursuant to the provisions contained in N.J.S.A. 18A:18A-19.

§ 3.4.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of this Contract are to be substantially complete prior to when the entire Work of this Contract shall be substantially complete, the Contractor shall substantially complete such portions by the following dates:

Portion of Work	Date to be substantially complete

§ 3.4.3 If the Contractor fails to substantially complete the Work of this Contract, or portions thereof, as provided in this Section 3.4, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:
(Check the appropriate box.)

[X] Stipulated Sum, in accordance with Section 4.2 below

[ ] Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below

[ ] Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

§ 4.2 Stipulated Sum

§ 4.2.1 The Contract Sum shall be ($), subject to additions and deductions as provided in the Contract Documents.

§ 4.2.2 Alternates

§ 4.2.2.1 Alternates, if any, included in the Contract Sum: Section 01030 – Alternate Bids

Item	Price

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§ 4.2.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance

§ 4.2.3 Allowances, if any, included in the Contract Sum: Section 01020 - Allowances
(Identify each allowance.)

Item	Price
Work not specifically shown on the Drawings, the Work shall be Performed as directed in the field	$175,000.00
Abatement of hazardous materials that my be uncovered during the work	$10,000.00
Unit cost allowance for brick delivered and stored at project site as follows: Modular Face Brick – Running Bond, including special shapes.	$1,050.00 per 1,000
Receiving, unloading, handling and installing Owner furnished items, Whether or not indicated on drawings	$25,000.00
(2 tons of steel @ $6,000.000 per ton) for additional fabricated and erected steel as defined by and specified in Section 05120 Structural Steel	$12,000.00

Electrical Work:

1) Additional outlets:
   a) Allow a sum of money in the Base Bid for **5** additional outlets, location to be selected by the Architect. Work will include the following:
   b) Conduit from closest panelboard, outlet box of size and type required, wire and connection to branch circuit protective device in panelboards.
   c) An outlet shall be as defined in the National Electric Code or American Standard with the addition of a local light control switch for lighting fixtures, which shall also be defined as an outlet.
   d) Include a unit price for one outlet, reflecting all of the above, in the proposal to be used in computing additions to or deductions from the Contract price.
2) Moving outlets:
   a) The Owner, through the Architect, reserves the right to move any outlet a distance of 10 feet before roughing in without additional expense to the Owner.

§ 4.2.4 Unit prices, if any: Section 01151 – Unit Prices
(Identify the item and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit ($0.00)
UNIT PRICES - GENERAL CONSTRUCTION, PLUMBING AND DRAINAGE, HEATING, VENTILATING AND AIR CONDITIONING, AND ELECTRICAL: EARTHWORK		
A. Bulk Rock and Trench or Pit Rock Excavation requiring jackhammering - Per Cubic Yard. Price shall include the breaking up of the rock by other means as directed by the Architect and its removal from the site, specified for other excavated material, and shall be the price over and above the price for earth excavation.		
Unit Price for bulk rock shall be $ 300.00 per cu. yd.		$ per cu. Yd.

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User Notes: (1984382020)

Unit Price for trench or pit rock excavation shall be $ 400.00 per cu. yd.	$	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 Curb	$	per lin. ft.
Concrete Walk (including subbase)	$	per sq. ft.
Cement Based Self Leveling Underlayment per Section 03452	$	per sq. ft.
Labor to receive, unload, and handle Owner provided item from truck and install In location directed by Owner	$	laborer/hr.
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:	$	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.

UNIT PRICES - PLUMBING & DRAINAGE: 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.
2" piping insulation	$	per lin. ft.
4" piping insulation	$	per lin. ft.
1" black steel schedule 40 pipe	$	per lin. ft.

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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.
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.

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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.

UNIT PRICES - ELECTRICAL WORK: Materials in Place.

20A-1 Pole branch circuit installation 600V, including MC cable and termination.	$	per lin. ft.

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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
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.

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User Notes:

(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

§ 4.5 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any, to be assessed in accordance with Section 3.4.)

Liquidated Damages to be assessed in accordance with the Specification requirements, Section 01800, entitled "Time of Completion and Liquidated Damages." By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work. TIME IS OF THE ESSENCE. If the Contractor fails to complete his work or fails to complete a portion of his work and therefore not achieve Substantial Completion and/or Final Completion on the respective dates required, s/he shall pay the Owner, as liquidated damages and not as a penalty, ($2,000) per day, which is agreed upon as a reasonable and proper measure which the Owner will sustain each calendar day by failure of the Contractor to complete work within the stipulated time. Substantial Completion and Final Completion liquidated damages shall be stacked and be concurrently imposed.

ARTICLE 5 PAYMENTS

§ 5.0 No billings shall be deemed approved and certified by passage of time unless submitted in accordance with the application date as specified in Section 5.1.3 above. Moreover, if the contractor materially fails to perform in accordance with the provisions of the contract, the remedies of the Prompt Payment Act will not be applied, and failure by the Owner to act within the time allowed by N.J.S.A. 2A:30A-1 *et seq.* , resulting from the contractor's significant failure to perform, shall not constitute an implied approval of the Payment Application.

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows: Each Application for Payment must be accompanied by Certified Payroll Records for the period covered by the Application. The payroll records shall indicate the proper classification of employees and the payment of overtime, if any. These records shall include each Contractor's subcontractor's certified payroll. Payment will not be authorized if the required payroll records have not been submitted.

§ 5.1.3 Provided that an Application for Payment is received by the Construction Manager not later than the 25th day of a month, and provided the Application for Payment is approved, and the Owner thereafter approves the Application for Payment, the Owner shall make payment of the amount certified to the Contractor not later than the end of the following month. All payments made in accordance with the provisions herein shall comply with the New Jersey Prompt Payment Act.

§ 5.1.3 .1 The Owner will issue timely payments for those duly approved and undisputed to the contractor(s) in accordance with the requirements of the Prompt Payment Act, N.J.S.A. 2A:30A-1 et seq., as described in Section 00860.

§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum

§ 5.1.4.1 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to

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substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment. Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay. Moreover, if the contractor fail to perform in accordance with the provisions of the contract in a significant way, the remedies of the Prompt Payment Act will not be applied, and failure by the Owner to act within the time allowed by N.J.S.A. 2A:30A-1 et seq. shall not constitute an implied approval of the Payment Application.

§ 5.1.4.2 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment, which period shall be a calendar month in accordance with N.J.S.A. 40A:11-16.2. No billings shall be deemed approved and certified by passage of time unless submitted in accordance with the application date as specified in Section 5.1.3 above. Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 5.1.4.3 In accordance with AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.4.3.1 The amount of each progress payment shall first include:

- **.1** That portion of the Contract Sum properly allocable to completed Work;
- **.2** That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and for which releases of liens have been furnished; and
- **.3** That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.4.3.2 The amount of each progress payment shall then be reduced by:

- **.1** The aggregate of any amounts previously paid by the Owner;
- **.2** The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- **.3** Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- **.4** For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
- **.5** Retainage withheld pursuant to Section 5.1.7.

(Paragraphs deleted

§ 5.1.5.6 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.5.7 If final completion of the Work is materially delayed through no fault of the Contractor, then the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A232-2019.

(Paragraphs deleted)

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

.1 Pursuant to N.J.S.A. 18A: 18-40.3, unless indicated otherwise in the Contract Documents, if the Contractor does have a performance bond, 2% of the amount due on each partial payment shall be withheld by the Owner when the outstanding balance of the contract exceeds $500,000, and 5% of the amount due on each partial payment shall be withheld by the Owner when the outstanding balance of the Contract is $500,000 or less, until final completion and acceptance of all work covered by the Contract until final completion and acceptance of all work covered by the Contract, including the completion of all corrective or punch list items. Pending final

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es:

determination of cost to the Owner of changes in the Work, amounts not in dispute may be included as provided in Section 7.3 of the General Conditions.

.2 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Sum allocable to that portion of the Work in the schedule of values, less retainage of two percent (2%) when the contract balance is over $500,000 and five percent (5%) when the contract balance is $500,000 or less. **.3** Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of two percent (2% when the Contract balance is over $500,000 and five percent (5% when the contract balance is $500,000 or less**.**

.**4** Retainage shall be withheld until the Owner approves the Architect’s determination that the work has been satisfactorily completed and no unsettled claims exist. The final acceptance shall not be binding or conclusive upon the Owner should it subsequently discover that the Contractor has supplied inferior material or workmanship or has departed from the terms of his contract. Should such a condition appear the Owner shall have the right, notwithstanding final acceptance and payment, to cause the work to be properly done in accordance with the drawings and specifications at the cost and expense of the Contractor.

§ 5.2 Final Payment

§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum

§ 5.2.1.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Article 12 of AIA Document A232–2019, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect.

§ 5.2.1.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment or as follows: The Architect will submit the final Certificate for Payment once the Contractor has satisfactorily addressed all punch-list items and requisite close-out documents, including but not limited to, the Release of Mechanic Lien claims of all sub-contractors, suppliers and other contractor(s).

§ 5.3 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

No interest will be paid. Interest at a rate equal to the prime rate plus 1%.

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

[ ] Arbitration pursuant to Article 15 of AIA Document A232–2019.

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[**X**] Litigation in a court of competent jurisdiction.

[ ] Other: *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction. If there are any claims or disputes, the Contractor is to submit in accordance with Article 15 as a pre-requisite to such a claim. Notwithstanding the foregoing and anything construed to the contrary, the foregoing shall only be applicable in the event that: (i) the Contractor has produced an updated Schedule prior to the alleged material delay; (ii) there are no components of the project for which the Contractor has delayed; and (iii) the alleged materially delayed component of the project affects the critical path and no other Work can continue to keep the project on schedule.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 Where the Contract Sum is a Stipulated Sum

§ 7.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019.

§ 7.1.2 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A232–2019, then the Owner shall pay the Contractor a termination fee as follow: No Termination Fee.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.1.1 A condition of this Agreement is that the Contractor will comply with all applicable governmental laws and regulations including, but without limitation, those set forth in Section 00860 of the Specifications, which are hereby incorporated by reference as if set forth herein at length.

§ 8.4 The Contractor's representative shall not be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Contractor shall purchase and maintain insurance as set forth in AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A132™–2019, Exhibit A, and elsewhere in the Contract Documents.

(Paragraphs deleted)

§ 8.7 Relationship of the Parties

:

(Paragraphs deleted)

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

.1 AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

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.2 AIA Document A132™–2019, Exhibit A, Insurance and Bonds Exhibit (Bond requirements are intended to comply with the Public Works Bond Act, N.J.S.A 2A:44-143-147. Any conflicting provisions are deleted and replaced with those conforming to applicable law.)

.3 AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition and its revisions.

(Paragraphs deleted)

.5 Drawings

Number	**Title**	**Date**
G001	Title Sheet and Drawing Index	10.10.2025
G002	Abbreviations and General Notes	10.10.2025
G003	Typical Details	10.10.2025
G004	Typical Details	10.10.2025
C-1.0	Existing Conditions	10.10.2025
C-2.0	Demolition Plan	10.10.2025
C-3.0	Site Layout Plan	10.10.2025
C-4.0	Site Grading Plan	10.10.2025
C-5.0	Site Utility Plan	10.10.2025
C-6.0	Site Landscaping Plan	10.10.2025
C-7.0	Soil Erosion & Sediment Control Plan	10.10.2025
C-7.1	Soil Erosion & Sediment Control Details	10.10.2025
C-8.0	Details	10.10.2025
C-8.1	Details	10.10.2025
C08.2	Details	10.10.2025
C08.3	Details	10.10.2025
A001	Code Analysis Key Plan and Code Information	10.10.2025
A002	Egress Plan - First Floor	10.10.2025
A003	Egress Plan - Second Floor	10.10.2025
A004	Rehabilitation and Accessibility Key	10.10.2025
A005	Temp. Egress Plan - First Floor - Construction Phase 1	10.10.2025
A006	Temp. Egress Plan - Second Floor - Construction Phase 1	10.10.2025
A007	Phasing Key Plans	10.10.2025
A101	Demolition Plans - Block 'A' - First & Second Floors	10.10.2025
A102	Demolition Plan - Block 'B' - First Floor	10.10.2025
A103	Floor Plan - Block 'A' - First Floor	10.10.2025
A104	Floor Plan - Block 'A' - Second Floor	10.10.2025
A105	Floor Plan - Block 'B'	10.10.2025
A106	Reflected Ceiling Plan - Block 'A' - First Floor	10.10.2025
A107	Reflected Ceiling Plan - Block 'A' - Second Floor	10.10.2025
A108	Reflected Ceiling Plan - Block 'B'	10.10.2025
A109	Radon Ventilation Plans - Block 'A' - First & Second Floors	10.10.2025
A110	Radon Ventilation Plan - Block 'B'	10.10.2025
A111	Roof Plans, Existing Roof Warranty Information and Notes	10.10.2025
A112	Roof Details	10.10.2025
A113	Roof Details	10.10.2025
A201	Exterior Elevations	10.10.2025
A202	Exterior Elevations	10.10.2025
A203	Building Sections	10.10.2025
A301	Wall Sections	10.10.2025
A302	Wall Sections	10.10.2025
A303	Wall Sections	10.10.2025
A304	Wall Sections	10.10.2025

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A305	Wall Sections	10.10.2025
A306	Wall Section	10.10.2025
A307	Wall Sections	10.10.2025
A400	Equipment Schedules, Details and Notes	10.10.2025
A401	Enlarged Plans & Interior Elevations - Administration Offices and I. T. Offices	10.10.2025
A402	Enlarged Plans & Interior Elevations - Classrooms, S.G.I. & Work Room G10	10.10.2025
A403	Enlarged Plans & Interior Elevations - Science Classrooms and Ensemble Room	10.10.2025
A404	Enlarged Plans & Interior Elevations - Music Department	10.10.2025
A405	Enlarged Plans & Interior Elevations - Cafeteria G108	10.10.2025
A406	Enlarged Plans & Interior Elevations - Multi-Purpose Room	10.10.2025
A407	Enlarged Plans & Interior Elevations - New Cafeteria	10.10.2025
A408	Enlarged Plans & Interior Elevations - Faculty Dining & Life Skills	10.10.2025
A409	Enlarged Plans & Interior Elevations – Toilet Rooms	10.10.2025
A501	Plan Details	10.10.2025
A502	Plan Details	10.10.2025
A503	Miscellaneous Details	10.10.2025
A504	Stair and Ramp Details	10.10.2025
A505	New Canopy Enlarged Plan and Details	10.10.2025
A506	New Waste Receptacle & Walk-In Enclosure Plan, Elevations and Details	10.10.2025
A507	Millwork Details	10.10.2025
A601	Room Finish and Door Schedules, Details and Notes	10.10.2025
A602	Window, Storefront and Translucent Panel Types and Details	10.10.2025
A603	Door Head & Jamb Details, Saddle Details	10.10.2025
A701	Floor Finish Plans	10.10.2025
A702	Floor Finish Plans	10.10.2025
A703	Floor Finish Plans	10.10.2025
S101	Foundation Plan Block 'B'	10.10.2025
S201	Roof Framing Plan Block ‘B’	10.10.2025
S202	Block - A Roof Framing Plan	10.10.2025
S301	Sections	10.10.2025
S302	Sections	10.10.2025
S303	Sections	10.10.2025
S401	Typical Details / General Notes / Schedules	10.10.2025
P1.0	Plumbing, Symbols, Notes & Schedules	10.10.2025
P2.0	Plumbing Demolition Plan - Block C	10.10.2025
P3.0	Plumbing Underslab Piping Plan - Block A	10.10.2025
P3.1	Plumbing Underslab Piping Plan - Block B	10.10.2025
P3.1	Plumbing Underslab Piping Plan - Block C	10.10.2025
P4.0	Plumbing First Floor Plan – Block A	10.10.2025
P4.1	Plumbing First Floor Plan - Block B	10.10.2025
P4.2	Plumbing First Floor Plan - Block C	10.10.2025
P5.0	Plumbing Roof Plan - Block A	10.10.2025
P5.1	Plumbing Roof Plan - Block B	10.10.2025
P6.0	Plumbing Part Plans	10.10.2025
P7.0	Plumbing Sanitary Riser Diagram	10.10.2025
P7.1	Plumbing Storm and Gas Riser Diagram	10.10.2025
P8.0	Plumbing Details	10.10.2025
M1.0	Mechanical Symbols, Notes & Abbreviations	10.10.2025
M2.0	Mechanical Demolition Plan - Block A	10.10.2025
M2.1	Mechanical Demolition Plan - Block C	10.10.2025

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M2.2	Mechanical Demolition Plan – Block A	10.10.2025
M2.3	Mechanical Roof Demolition Plan - Block C	10.10.2025
M3.0	Mechanical New Ductwork Plan – Block A	10.10.2025
M3.1	Mechanical New Ductwork Plan – Block B	10.10.2025
M3.2	Mechanical New Ductwork Plan – Block C	10.10.2025
M4.0	Mechanical New Piping Plan – Block A	10.10.2025
M4.1	Mechanical New Piping Plan – Block B	10.10.2025
M4.2	Mechanical New Piping Plan - Block C	10.10.2025
M5.0	Mechanical Roof Plan – Block A	10.10.2025
M5.1	Mechanical Roof Plan – Block B	10.10.2025
M5.2	Mechanical Roof Plan - Block C	10.10.2025
M6.0	Mechanical Schedules	10.10.2025
M6.1	Mechanical Schedules	10.10.2025
M7.0	Mechanical Details	10.10.2025
M7.1	Mechanical Details	10.10.2025
M7.2	Mechanical Details	10.10.2025
M7.3	Mechanical Details	10.10.2025
M7.4	Mechanical Details	10.10.2025
E1.0	Electrical Symbols, Notes, & Abbreviations	10.10.2025
E1.1	Electrical Lighting Fixture Schedule & Details	10.10.2025
E2.0	Electrical Demolition Plans - Block A	10.10.2025
E2.1	Electrical Demolition Plans - Block B	10.10.2025
E2.2	Electrical Demolition Plans - Block B	10.10.2025
E3.0	Electrical Power Plan - Block A	10.10.2025
E3.1	Electrical Power Plan - Block B	10.10.2025
E3.2	Electrical Power Plan - Block C	10.10.2025
E4.0	Electrical HVAC Power Plan - Block A	10.10.2025
E4.1	Electrical HVAC Power Plan - Block B	10.10.2025
E4.2	Electrical HVAC Power Plan - Block C	10.10.2025
E4.3	Electrical HVAC Power Plan - Roof	10.10.2025
E5.0	Electrical Lighting Plan - Block A	10.10.2025
E5.1	Electrical Lighting Plan - Block B	10.10.2025
E5.2	Electrical Lighting Plan - Block C	10.10.2025
E5.3	Electrical Lighting Controls Plan - Block A	10.10.2025
E5.4	Electrical Lighting Controls Plan - Block B	10.10.2025
E5.5	Electrical Lighting Controls Plan – Block C	10.10.2025
E6.0	Electrical Low Voltage Plan - Block A	10.10.2025
E6.1	Electrical Low Voltage Plan - Block B	10.10.2025
E6.2	Electrical Low Voltage Plan - Block C	10.10.2025
E7.0	Electrical Fire Alarm Plan - Block A	10.10.2025
E7.1	Electrical Fire Alarm Plan – Block B	10.10.2025
E7.2	Electrical Fire Alarm Plan – Block C	10.10.2025
E8.0	Electrical One Line Diagram	10.10.2025
E8.1	Electrical Generator & Grounding Details	10.10.2025
E9.0	Electrical Panel Schedules & Voltage Drop Table	10.10.2025
E9.1	Electrical Mechanical Equipment Coordination Schedule	10.10.2025
E10.0	Electrical Fire Alarm Riser Diagram & Details	10.10.2025

.6 Specifications (Refer to Project Manual Table of Contents)

Section	**Title**	**Date**	**Pages**
Part 1			

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.7 Addenda, ifany:

	Contract Conditions and General Requirements		In Full

Number	Date	Pages
None at this time, but subject to change.		

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

[ ] Supplementary and other Conditions of the Contract: (Refer to Project Manual Table of Contents)

Document	Title	Date	Pages
Part 1	Contract Conditions and General Requirements		In Full

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.9 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232–2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Proposal, dated
Exhibit B

This Agreement is entered into as of the day and year first written above.

OWNER *(Signature)*	**CONTRACTOR** *(Signature)*
(Printed name and title)	*(Printed name and title)*

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SECTION 01800 - TIME OF COMPLETION AND LIQUIDATED DAMAGES

PART 1 - GENERAL

1.1 SUMMARY

A. This section describes the requirements for completion of interim milestone events and final completion of all Work required by the Bid Documents.

B. Related Sections:

1. Items of Work attached to the "Certificate of Substantial Completion" and establishing "Final Completion Time" as per Section 00800.

C. This section also establishes the relation of liquidated damages for failure to complete the interim milestone events or final completion requirements within the time requirements stated herein.

D. **The building (or part of the building) will be occupied at all times. The Contractor shall maintain heat, electric, fire safety systems and emergency egress paths, control dust and water infiltration at all times.**

1.2 TIME FOR COMPLETION

A. It is understood that the Contractor has a responsibility to complete its Work in sequence with the Work of their Subcontractor(s) and to allow the other Contractor(s) access to the Work site so that they may complete their Work within the times established.

B. Completion of the Contract Work by the Contractor shall be time of the essence.

C. The Contractor shall Work overtime, additional shifts, weekends or holidays to complete the Work on time with no additional cost to the Owner except as otherwise previously accounted for in the bid submission.

1. Scarce resources will be no excuse for not completing the Work on time.

2. **Work may take place during regular shift and second shift (7:00 AM - 10:00 PM) after May 27, 2026 until August 25, 2028; however, the Contractor is required to review and coordinate all Work activities with the Architect, Construction Manager and School Facilities Director prior to commencing with the Work.**
    a. **Contractor to review permitted Work hours to comply with the local "Noise Ordinance".**

3. **Contractor is required to include the cost of any premium time, second shift and weekend Work which may be required in their bid to complete the Work within the indicated milestone dates.**

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D. Substantial and final completion of the Work shall include but is not limited to final inspection and acceptance by the Local Building Officials.

1.3 BUILDING ENCLOSURE

A. The building shall be considered "enclosed" when:

1. The exterior walls have been constructed;

2. A permanent roofing and flashing is installed and in watertight condition;

3. Temporary or permanent doors are hung and window openings are closed with either permanent or temporary weather-tight enclosures; any impervious transparent material is acceptable.

1.4 SEQUENCE OF CONSTRUCTION

A. In order to allow the Contractor and Subcontractor(s) to understand the requirements of the Project, the following general sequence of construction Work will be followed:

1. Generally, the Contractor is to schedule, sequence and coordinate the Work with Subcontractors, as required, to logically progress the Work, meeting the overall design intent, construction quality and time of completion. **Schedule inspections and obtain required approvals of all stages of the Work as required by the Local Construction Officials.**

2. Proper scheduling of the Work includes timely sequencing, preparation, review and approval by the Contractor and **submission of requisite technical and other project submittals and shop drawings** to the Architect / Engineer(s) for approval to advance the proper, logical progression of the Work.

3. After mobilization and securing the Work site, the Contractor is to perform selective demolition of existing general building construction, layout and coordinate the proposed new addition / construction with existing construction to remain, as noted on the Contract Drawings.
   a. Apply for and obtain demolition permit to allow commencement of the Work while permit applications for new Construction are under review by the Construction Official.

4. Progress the Work of all Trades to achieve completion of underground utilities and preparation of subgrades for construction of new footings and foundations. After completion of Structural Steel Work, Plumbing, Drainage & Gas Fittings, HVAC and Electrical Subcontractors will commence with interior “rough-ins” and related Work in sequence to the steel erection completion.

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5. Sequentially Work to achieve **weather-tight building enclosure** with completed roof construction and utilizing temporary partitions and barriers, as required, to facilitate interior Work including, but not limited to, interior partitions, insulation and building finishes.

6. All (Sub)Contractors are mutually responsible to coordinate their Work with the general construction for installation of Plumbing, Drainage & Gas Fittings, HVAC and Electrical **rough-in construction Work below and in floor slabs, interior and exterior walls**.

7. Progress the Work of all Trades towards completion, as required, by the Contract Documents to obtain **Substantial Completion** including, inspection and testing by local construction officials, commissioning, testing and balancing of the HVAC, Automatic Temperature Controls, Plumbing and Electrical Work to obtain the Certificate of Occupancy.

8. Provide written formal notification of **Substantial Completion** to the Architect / Engineer(s) and request Punch-List Observations.

9. Complete proper preparation, review and approval by the Contractor and submission of all Close-out Documents, Operation and Maintenance Manuals, As-built surveys and Drawings to the Architect / Engineer(s) within Contract time required to achieve **Final Completion**.

1.5 PROJECT CONTRACT MILESTONE DATES

A. TIME OF COMPLETION

1. **Milestone No. 1**
   a. Sign Contract, no later than **twenty (20)** calendar days, Sundays and Holiday's excepted, from **Notice of Award;** on or about **April 29, 2026.**
   b. Contractor submits Bonds and Insurance **ten (10) calendar days from Notice of Award, Sundays and holidays excepted**.
   c. **Notice to Proceed** shall be within **three (3) business days** of date of signing Contract; on or about **May 27, 2026.**

2. **Milestone No. 2**
   a. **Time Critical submittals** for special equipment, fixtures, etc. shall be submitted within **twenty (20) calendar days from Notice to Proceed.**

3. **Milestone No. 3**
   a. Submission of all remaining technical shop drawing submittals shall be submitted within **sixty (60) calendar days from Notice to Proceed.**

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4. **Milestone No. 4A**
    a. Physical Work at the site on the Phase 1 - New Construction - Additions: Base Bid Vocal Music Rm. and Alternate Bid Classroom Wing (if awarded) shall commence on or about **May 27, 2026.**

5. **Milestone No. 4B**
    a. Physical Work at the site on the Phase 1A - Renovations shall commence on or about **June 21, 2027.**

6. **Milestone No. 4C**
    a. Physical Work at the site on the Phase 2 - Renovations shall commence on or about **December 6, 2027.**

7. **Milestone No. 5A**
    a. Substantial Completion of the Phase 1 - New Construction - Additions shall be on or before **584 Calendar Days from the Notice to Proceed, December 31, 2027.**
    b. Liquidated Damages - $2,000.00 / Calendar day of delay.

8. **Milestone No. 5B**
    a. Substantial Completion of the Phase 1A - Renovations shall be on or before **458 Calendar Days from the Notice to Proceed, August 27, 2027.**
    b. Liquidated Damages - $2,000.00 / Calendar day of delay.

9. **Milestone No. 5C**
    a. Substantial Completion of the Phase 2 - Renovations shall be on or before **822 Calendar Days from the Notice to Proceed, August 25, 2028.**
    b. Liquidated Damages - $2,000.00 / Calendar day of delay.

10. **Milestone No. 6A**
    a. Final Completion of the Phase 1 & 1A - New Construction Additions and Renovations shall be on or before **612 Calendar Days from the Notice to Proceed, January 28, 2028.**
    b. Liquidated Damages - $2,000.00 / Calendar day of delay.

11. **Milestone No. 6B**
    a. Final Completion of Phase 2 - Renovations including punch list items and closeout documents, no later than **31 Calendar Days from Substantial Completion, September 25, 2028.**
    b. Damages - $2,000.00 / Calendar day of delay.

1.6 LIQUIDATED AND OTHER DAMAGES

A. By bidding the Project, the Contractor is accepting that the time allotted for the completion of Work is reasonable. Completion of Work on or about these milestones are prerequisites for the coordinated Work of the Contractor. When the Owner will suffer financial loss and/or extra cost if a milestone task is not completed within the allotted time, the Contractor responsible for the delay in achievement of each

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milestone, as determined by the Owner's Project Manager and the Architect, shall pay to the Owner a fixed, agreed sum as liquidated damages for each calendar day of delay until the milestone task is substantially completed.

B. The Liquidated Damages set for above shall be in addition to other consequential losses or damages the Owner may incur by reason of such delay, such as, but not limited to, the cost of additional architectural and engineering, independent third party inspection and other services resulting from the delay, additional costs to the Owner for payments to (Sub)Contractor(s) resulting from delay.

C. Liquidated Damages are fixed and agreed upon by and between the Contractor and the Owner because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amounts shall be retained from time to time by the Owner for the current periodical payments.

  1. The Liquidated Damages set for above are intended to compensate Owner for loss of use during the period of delay, for other delay during construction which may result further delay in substantial and/or final completion dates and for any acceleration costs by (Sub)Contractor(s) to recover the defaulting (Sub)Contractor's delay.

  2. In no way shall costs of Liquidated Damages be construed as a penalty to the Contractor.

D. The Owner shall have the right to deduct the total amount any Liquidated Damages for which the Contractor may be liable from any monies otherwise due the Contractor, including any retainage under control of the Owner.

E. The Surety providing the Performance Bond, furnished by the Contractor, will be liable for Liquidated Damages assessed against the Contractor, to the extent that the Contractor shall not make settlement thereof with the Owner.

F. The Contractor agrees that in the event the Owner is required to incur or advance any additional necessary and reasonable costs (including but not limited to Architect, Attorney or other fees related expenses), as a result of the failure of the Contractor to perform any obligation of this Contract or to perform its obligations in a timely manner as required by the Bid Documents, the Contractor agrees that such additional necessary and reasonable costs shall be borne by the Contractor and may be deducted by the Owner from any payment due the Contractor.

G. In accordance with N.J.S.A. 18A:18A-19, the Owner shall deduct from the Contract Price, for any wages paid by the Owner to any inspector or inspectors necessarily employed by for the Work of this project, for any number of days in excess of the number of days or indicated dates allowed in milestones above. Such sums shall be part of the Liquidated Damages indicated herein after.

END OF SECTION 01800

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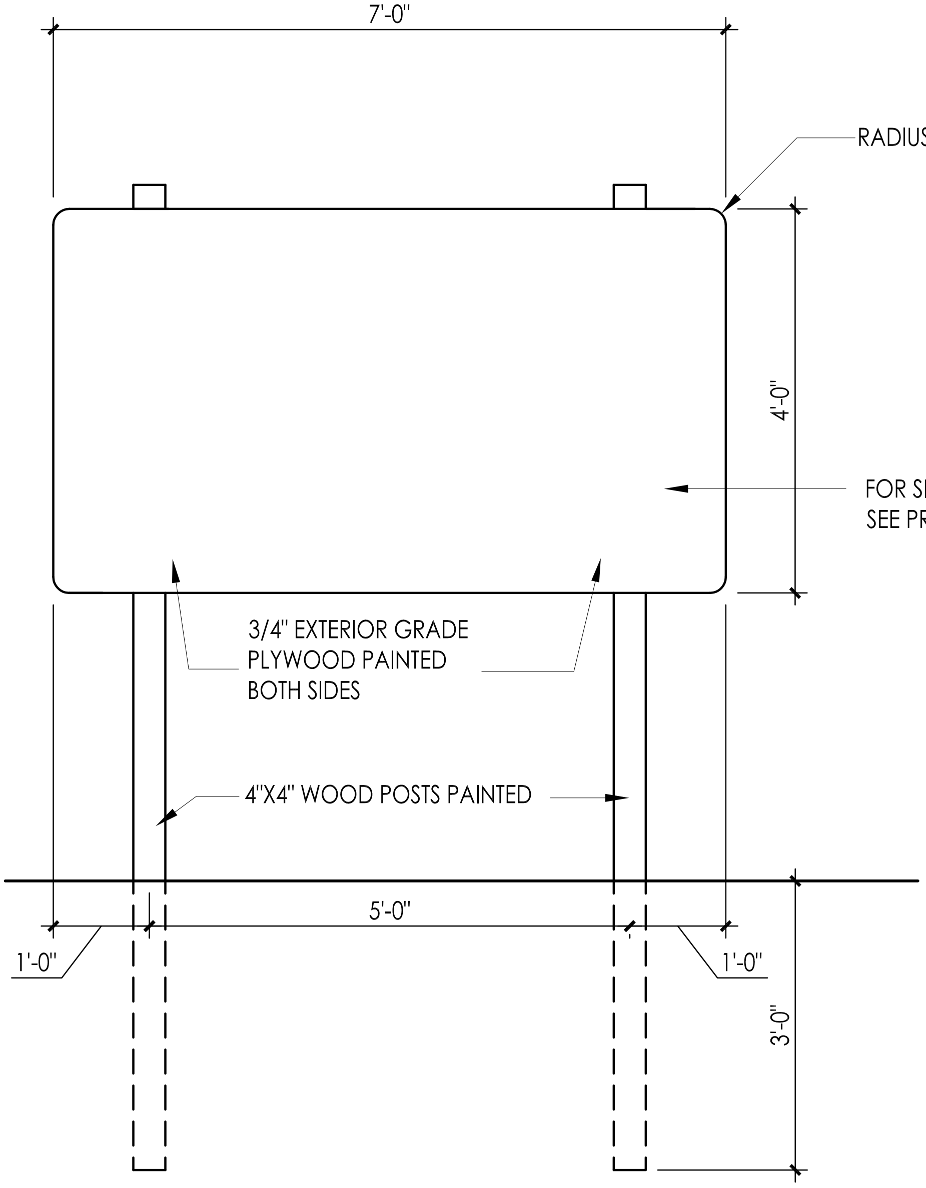
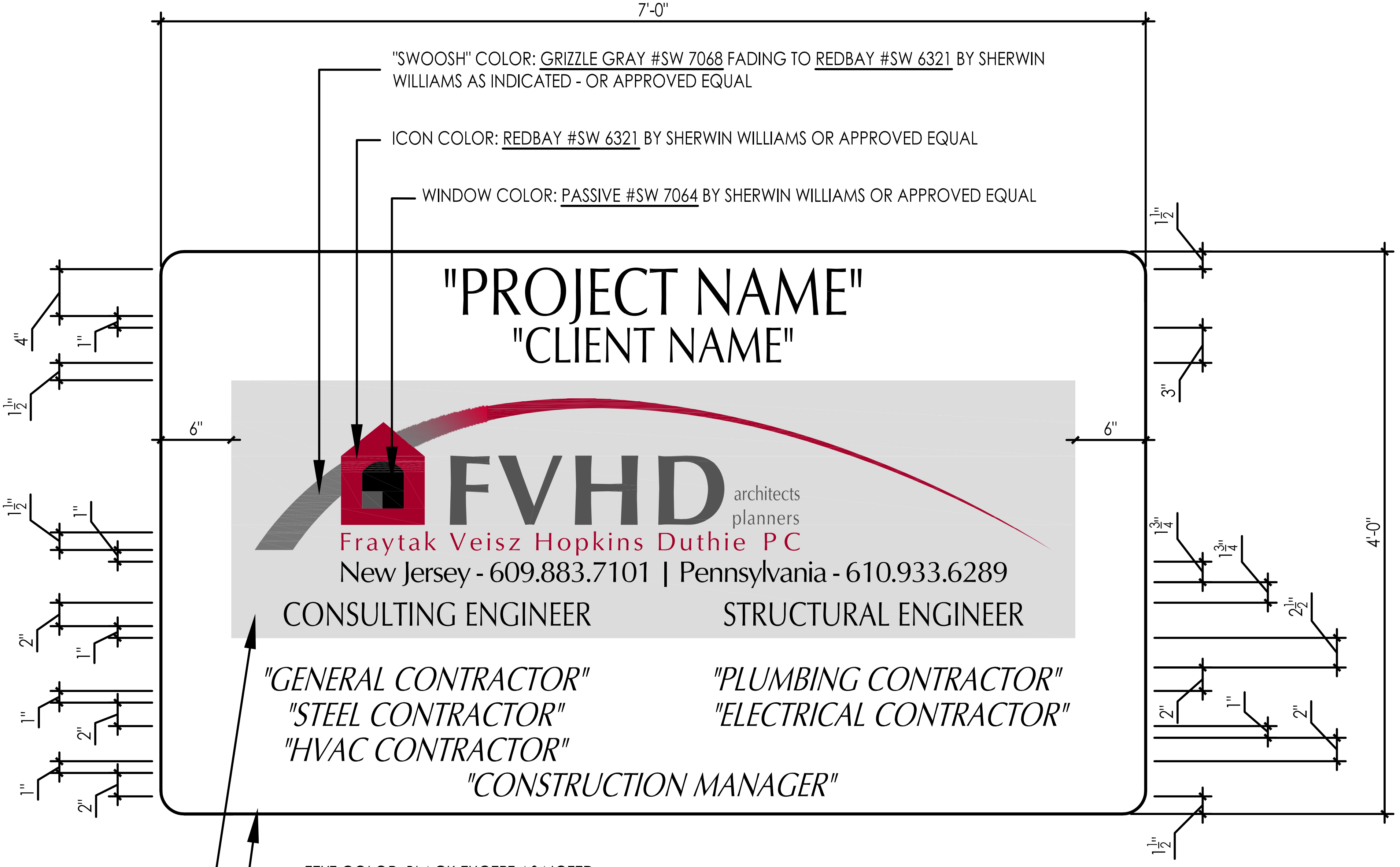


PROJECT SIGN DETAIL 1



"SWOOSH" COLOR: GRIZZLE GRAY #SW 7068 FADING TO REDBAY #SW 6321 BY SHERWIN WILLIAMS AS INDICATED - OR APPROVED EQUAL

ICON COLOR: REDBAY #SW 6321 BY SHERWIN WILLIAMS OR APPROVED EQUAL

WINDOW COLOR: PASSIVE #SW 7064 BY SHERWIN WILLIAMS OR APPROVED EQUAL

TEXT COLOR: BLACK EXCEPT AS NOTED

PLYWOOD BACKGROUND, SIGN BACK, SIDES & POST COLOR: PASSIVE #SW 7064 BY SHERWIN WILLIAMS OR APPROVED EQUAL

BACKGROUND COLOR: GRAY MATTERS #SW 7066 BY SHERWIN WILLIAMS OR APPROVED EQUAL

SECTION 07241 - WATER MANAGED EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Provide air and moisture barrier and compatible EIFS for vertical above grade exterior walls.

B. Related Sections:

1. Section 04200 - Unit Masonry
2. Section 06100 - Carpentry
3. Section 07600 - Flashing, Sheet Metal, and Roof Accessories
4. Section 07900 - Joint Sealer Assemblies

1.3 SUBMITTALS

A. Manufacturer's Specifications, details, installation instructions and product data.

B. Manufacturer's code compliance report.

C. Manufacturer's standard warranty.

D. Applicator's industry training credentials.

E. Samples for approval as directed by Architect or Owner.

F. Sealant manufacturer's certificate of compliance with ASTM C 1382.

G. Prepare and submit project-specific details (when required by Bid Documents).

1.4 REFERENCES

A. ASTM Standards:

B 117	Test Method for Salt Spray (Fog) Testing
C 297	Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
C 578	Specification for Preformed, Cellular Polystyrene Thermal Insulation
C 1382	Test Method for Determining Tensile Adhesion Properties of Sealants when used in Exterior Insulation and Finish Systems (EIFS) Joints
D 968	Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive
D 1784	Specification for Rigid Poly (Vinyl Chloride) (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

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D 2247	Practice for Testing Water Resistance of Coatings in 100% Relative Humidity STO GUIDE SPECIFICATION A100G – StoTherm ci Classic; or approved equal
D 3273	Test for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
E 72	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
E 84	Test Method for Surface Burning Characteristics of Building Materials
E 96	Test Methods for Water Vapor Transmission of Materials
E 119	Method for Fire Tests of Building Construction and Materials
E 2098	Test Method for Determining Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish System after Exposure to a Sodium Hydroxide Solution
E 2134	Test Method for Evaluating the Tensile-Adhesion Performance of an Exterior Insulation and Finish System (EIFS)
E 2178	Test Method for Air Permeance of Building Materials
E 2273	Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish System (EIFS) Clad Wall Assemblies
E 2357	Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
E 2485	Standard Test Method for Freeze/Thaw Resistance of Exterior Insulation and Finish Systems (EIFS) and Water Resistive Barrier Coatings.
E 2486	Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS).
E 2568	Standard Specification for PB Exterior Insulation and Finish Systems.
E 2570	Test Method for Water-Resistive (WRB) Coatings used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage.
G 153	Recommended Practice for Operating Light-and Water-Exposure Apparatus (Carbon-Arc Type) for Exposure of Nonmetallic Materials.
G 154	Recommended Practice for Operating Light-and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.

B. Building Code Standards:

AC 235	Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (November, 2009).

C. National Fire Protection Association (NFPA) Standards:

NFPA 268	Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source.
NFPA 285	Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Non-Load-Bearing Wall Assemblies containing Combustible Components Using the Intermediate-Scale, Multistory Test Apparatus.

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D. Other Referenced Documents

1. American Association of Textile Chemists and Colorists AATCC-127 Water Resistance: Hydrostatic Pressure Test.

2. ICC-ES ESR-1233, StoGuard with Gold Coat, StoGuard with EmeraldCoat; or approved equal, and StoGuard VaporSeal Water-Resistive Barriers; or approved equal and StoEnergy Guard; or approved equal.

3. ICC-ES ESR-1748, StoTherm®ci; or approved equal.

1.5 DESIGN REQUIREMENTS

A. Wind Load.

1. Design for maximum allowable system deflection, normal to the plane of the wall, of L/240.

2. Design for wind load in conformance with code requirements.

3. Maximum wind load resistance: + 188 psf (9.00 kPa), provided structural supports and sheathing/sheathing attachment are adequate to resist these pressures.

B. Moisture Control

1. Prevent the accumulation of water behind the EIFS or into the wall assembly, either by condensation or leakage through the wall construction, in the design and detailing of the wall assembly:

   a. Provide flashing to direct water to the exterior where it is likely to penetrate components in the wall assembly, including, at roof/wall intersections, abutments of lower walls with higher walls, and at the base of the wall.

   b. Air Leakage Prevention – Provide continuity of the air barrier system at roof, and other penetrations through the wall with connecting and compatible air barrier components to minimize condensation and leakage caused by air movement.

   c. Vapor Diffusion and Condensation – Perform a dew point analysis and/or dynamic hygrothermal modeling of the wall assembly to determine the potential for accumulation of moisture in the wall assembly by diffusion. Adjust insulation thickness and/or other wall assembly components accordingly to minimize risk. Avoid the use of vapor retarders on the interior side of the wall in warm, humid climates.

C. Impact Resistance

1. Provide standard impact resistance of the EIFS. Indicate the areas with impact resistance other than "Standard" on Contract Drawings.

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D. Color Selection

1. Select finish coat with a light reflectance value of 20 or greater. (The use of dark colors is not recommended over expanded polystyrene [EPS]. EPS has a service temperature limitation of approximately 165°F [74°C]).

E. Joints

1. Provide minimum 3/4 inch (19 mm) wide joints in the EIFS where they exist in the substrate or supporting construction, where the cladding adjoins dissimilar construction or materials, at changes in building height, at expansion, control, and cold joints in construction. Size joints to correspond with anticipated movement. Align terminating edges of EIFS with joint edges of through wall expansion joints and similar joints in construction. Refer to manufacturer's details.

2. Provide minimum 1/2 inch (13 mm) wide perimeter sealant joints at all penetrations through the EIFS (mechanical, electrical, and plumbing penetrations, etc.).

3. Specify compatible backer rod and sealant that has been evaluated in accordance with ASTM C 1382, and that meets minimum 50% elongation after conditioning.

4. Provide joints so that air barrier continuity is maintained across the joint, and drain joints to the exterior, or provide other means to prevent or control water infiltration at joints.

F. Insulation Thickness

1. EPS insulation thickness is 1 inch (25 mm) as indicated on the Drawings.

G. Fire Protection

1. Where a fire-resistance rating is required by code use the EIFS over a rated concrete masonry assembly. Limit use over rated frame assemblies to non-load bearing assemblies (the EIFS is considered not to add or detract from the fire-resistance of the rated assembly). Maximum allowable EPS thickness: 4 inches (102 mm).

2. Refer to manufacturer's testing or applicable code compliance report for other limitations that may apply.

1.6 PERFORMANCE REQUIREMENTS

A. Comply with ASTM E 2570 (Air/Moisture Barrier) and ASTM E 2568 (EIFS):

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Table 1 - Air/Moisture Barrier Performance

TEST	METHOD	CRITERIA	RESULT
1. Weathering	AATCC 127 (Water Column)	No cracking, bond failure or water penetration after 210 hours UV exposure, 25 wet/dry cycles, and 21.6 in (55 cm) water column	Pass
2. Durability	ASTM E 1233 / ASTM E72/ ASTM E 331	No cracking or water penetration at sheathing joints after 10 cycles transverse loading, 1 cycle racking, 5 cyles environmental conditioning, and 15 minute water spray at 2.86 psf (137 kPa) pressure differential	No cracking or water penetration
3. Water Resistance	ASTM D 2247	Absence of deleterious effects after 14 day exposure	No deleterious effects
4. Water Vapor Transmission	ASTM E 96 Method B (Water Method)	Measure	Sto Gold Fill®: 7.10 perms [408 ng/(Pa·s·m2)] Sto Gold Coat: > 10 perms [574 ng/(Pa·s·m2)] Sto AirSeal: > 12 perms [689 ng/(Pa·s·m2)]; or approved equal
5. Air Leakage (material)	ASTM E 2178	< 0.004 cfm/ft2 at 1.57 psf (0.02 L/s•m2 at 75 Pa)	Pass
6. Air Leakage (assembly)	ASTM E 2357	< 0.04 cfm/ft2 (0.2 L/s•m2)	Pass[1]
7. Freeze-Thaw	ASTM E 2485	No delamination or surface changes after 10 cycles when viewed under 5X magnification	No delamination or surface changes
8. Surface Burning	ASTM E 84	Flame Spread less than or equal to 25 Smoke developed less than or equal to 450	Flame Spread: < 25 Smoke Density: < 450
9. Tensile Bond	ASTM C 297	Greater than 15 psi (103 kPa)	Pass over Plywood, OSB, GlassMat Faced Gypsum sheathing, CMU

1. Based on testing of air barrier joint treatment material at sheathing joints and no top coat

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Table 2 - EIFS Weather Resistance and Durability Performance*

TEST	METHOD	CRITERIA	RESULTS
1. Accelerated Weathering	ASTM G 153 ASTM G 155	No deleterious effects* at 2000 hours	Pass (Stolit) Pass (Stolit X); or approved equal
2. Freeze/Thaw Resistance	ASTM E 2485	No deleterious effects* at 10 cycles when viewed under 5x magnification	Pass
3. Water Penetration	ASTM E 331 (modified per ICC-ES AC 235)	No water penetration beyond the plane of the base coat/insulation board interface after 15 minutes at 6.24 psf (299 Pa)	Pass
4. Drainage Efficiency	ASTM E 2273	90% minimum	> 90%
5. Tensile Adhesion	ASTM E 2134	Minimum 15 psi (103kPa) tensile strength	Pass
6. Water Resistance	ASTM D 2247	No deleterious effects*at 14 day exposure	Pass @ 28 days
7. Salt Spray	ASTM B 117	No deleterious effects* at 300 hours	Pass @ 300 hrs
8. Abrasion Resistance	ASTM D 968	No cracking or loss of film integrity at 528 quarts (500 L) of sand	Pass @ 528 quarts (1000 L) (Stolit); or approved equal
9. Mildew Resistance	ASTM D 3273	No growth supported during 28 day exposure period	Pass @ 28 days (Stolit); or approved equal
10. Impact Resistance	ASTM E 2486	Standard: 25-49 in-lbs (2.83-5.54J) Medium2: 50-89 in-lbs (5.65-10.1J) High: 90-150 in-lbs (10.2-17J) Ultra-High: >150 in-lbs (>17J)	Pass with one layer Sto Mesh Pass with two layers Sto Mesh Pass with one layer Sto Intermediate Mesh Pass with one layer Sto Armor Mat and one layer Sto Mesh; or approved equal

* No deleterious effects: no cracking, checking, crazing, erosion, rusting, blistering, peeling or delamination

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Table 3 - Air/Moisture Barrier and EIFS Fire Performance

TEST	METHOD	CRITERIA	RESULT
1. Fire Endurance	ASTM E 119	Maintain fire resistance of existing rated assembly	Pass (4 inch [102 mm] maximum allowable insulation thickness)
2. Intermediate Scale Multi-Story Fire Test	NFPA 285 (formerly UBC Standard 26-9)	1. Resistance to vertical spread of flame within the core of the panel from one story to the next 2. Resistance to flame propagation over the exterior surface 3. Resistance to vertical spread of flame over the interior surface from one story to the next 4. Resistance to significant lateral spread of flame from the compartment of fire origin to adjacent spaces	Pass with 12 inches (305 mm) insulation
3. Radiant Heat Ignition	NFPA 268	No ignition @ 20 minutes	Pass with 1 and 12 inches (25 and 305 mm) insulation
4. Surface Burning (individual components)	ASTM E 84	Individual components shall each have a flame spread of 25 or less, and smoke developed of 450 or less	Flame Spread: < 25 Smoke Developed: < 450

Table 4 - EIFS Component Performance

TEST	METHOD	CRITERIA	RESULT
1. Alkali Resistance of Reinforcing Mesh	ASTM E 2098	Greater than 120 pli (21 dN/cm) retained tensile strength	Pass
2. Requirements for Rigid PVC Accessories	ASTM D 1784	Meets cell classification 13244C	Pass

1.7 QUALITY ASSURANCE

A. Manufacturer Requirements:

1. Member in good standing of the EIFS Industry Members Association (EIMA).

2. Air/moisture barrier and EIFS manufacturer for a recommended minimum of thirty (30) years.

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3. Manufacturing facilities ISO 9001:2015 Certified Quality System and ISO 14001:2015 Certified Environmental Management System.

B. Contractor Requirements

1. Engaged in application of similar systems for a recommended minimum of three (3) years.

2. Knowledgeable in the proper use and handling of materials.

3. Employ skilled mechanics who are experienced and knowledgeable in air/moisture barrier and EIFS application, and familiar with the requirements of the specified work.

4. Successful completion of minimum of three (3) projects of similar size and complexity to the specified project.

5. Provide the proper equipment, manpower and supervision on the job site to install the system in compliance with the manufacturer's published Specifications and details and the project plans and Specifications.

C. Insulation Board Manufacturer Requirements

1. EPS board listed by an approved agency.

2. EPS board manufactured under Sto; or approved equal, licensing agreement and recognized by the manufacturer as being capable of producing EPS insulation board to meet EIFS requirements.

3. EPS board labeled with information required by the manufacturer, the approved listing agency, and the applicable building code.

D. Mock-up Testing

1. Construct full-scale mock-up of typical air/moisture barrier and wall assembly with specified tools and materials and test air and water infiltration and structural performance in accordance with ASTM E 283, ASTM E 331 and ASTM E 330, respectively, through independent laboratory. Mock-up shall comply with requirements of project Specifications. Where mock-up is tested at job site maintain approved mock-up at site as reference standard. If tested off-site accurately record construction detailing and sequencing of approved mock-up for replication during construction.

E. Inspections:

1. Provide independent third party inspection where required by code or Bid Documents.

2. Conduct inspections in accordance with code requirements and Bid Documents.

1.8 DELIVERY, STORAGE AND HANDLING

A. Deliver all materials in their original sealed containers bearing manufacturer's name and identification of product.

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B. Protect coatings (pail products) from freezing and temperatures in excess of 90°F (32° C). Store away from direct sunlight.

C. Protect Portland cement based materials (bag products) from moisture and humidity. Store under cover off the ground in a dry location.

1.9 PROJECT/SITE CONDITIONS

A. Maintain ambient and surface temperatures above 40°F (4°C) during application and drying period, minimum 24 hours after application of Air/Moisture barrier and EIFS products.

B. Provide supplementary heat for installation in temperatures less than 40°F (4°C).

C. Provide protection of surrounding areas and adjacent surfaces from application of products.

1.10 COORDINATION/SCHEDULING

A. Provide site grading such that the EIFS terminates above grade a minimum of 6 inches (150 mm) or as required by code.

B. Coordinate installation of roofing membrane, and other wall penetrations to provide a continuously connected air and moisture barrier.

C. Provide protection of rough openings before installing penetrations through the wall.

D. Install diverter flashings wherever water can enter the wall assembly to direct water to the exterior.

E. Install splices or tie-ins from air/moisture barrier over back leg of flashings, starter tracks, and similar details to form a shingle lap that directs incidental water to the exterior.

F. Install copings and sealant immediately after installation of the the EIFS when coatings are dry, and such that, where sealant is applied against the EIFS surface, it is applied against the base coat or primed base coat surface.

G. Schedule work such that air/moisture barrier is exposed to weather no longer than 30 days if Sto Gold Coat, or approved equal, is used, 90 days if Sto AirSeal; or approved equal, is used.

H. Attach penetrations through the EIFS to structural support and provide water tight seal at penetrations.

1.11 WARRANTY

A. Provide manufacturer's standard **twelve (12) year** Limited Warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Provide Air/Moisture Barrier and EIFS coatings and accessories from single source manufacturer or approved supplier.

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B. Basis of Design Manufacturer:

1. Sto Corp. – Air/Moisture Barrier, EIFS.
2. Plastic Components, Inc. – EIFS Accessories.
3. Or approved equal.

C. Comparable products of the following manufacturers will be considered if it can be clearly shown that their products are equal to or will exceed the construction quality requirements and other design attributes listed above.

1. Dryvit Systems, Inc.
2. Master Wall Inc.
3. Senergy - BASF Wall Systems.
4. Or approved equal.

2.2 AIR/MOISTURE BARRIER

A. StoGuard®, or approved equal:

1. Joint Treatment, Rough Opening Protection, and Detail Components:
    a. StoGuard RapidSeal™, or approved equal – one component rapid drying gun-applied rough opening protection for CMU walls without mesh or fabric reinforcement. Also use as a joint treatment for sheathing when used with StoGuard Mesh, or approved equal. Also used to seal fish mouths, wrinkles, seams, gaps, holes, or other voids in StoGuard, or approved equal, air barrier materials.

2. Waterproof Coating:
    a. Sto AirSeal™, or approved equal - ready mixed medium-high build waterproof coating for concrete masonry.

3. Transition Membrane: StoGuard Transition Membrane, or approved equal – flexible air barrier membrane for continuity at flashing shingle lap transitions, floor line deflection joints, masonry control joints, and through wall joints in masonry construction.

2.3 ADHESIVE

A. Sto BTS Plus, or approved equal – factory blended one-component polymer-modified portland cement based high build adhesive.

2.4 INSULATION BOARD

A. Sto EPS Insulation Board, or approved equal: nominal 1.0 lb/ft3 (16 kg/m3) Expanded Polystyrene (EPS) insulation board in compliance with ASTM E 2430 and ASTM C 578 Type I requirements and listed, labeled, and furnished in accordance with Section 1.7C.

2.5 BASE COAT

A. Cementitious Base Coat

1. Sto BTS Plus, or approved equal – factory blended one component polymer modified portland cement based high build base coat. Also used as a leveler for masonry surfaces.

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B. Non-cementitious Base Coat

1. Sto RFP, or approved equal – ready mixed acrylic based plaster base coat material.

C. Waterproof Base Coat

1. Sto Flexyl, or approved equal – Fiber reinforced acrylic based waterproof base coat mixed with portland cement (for use as a waterproof base coat over Sto BTS Plus or BTS Xtra, or approved equal, for parapets, splash areas, trim and other projecting architectural features).

2.6 REINFORCING MESHES

A. Standard Mesh

1. Sto Mesh, or approved equal – Nominal 4.5 oz/yd2 (153 g/m2), symmetrical, interlaced open-weave glass fiber fabric made with alkaline resistant coating for compatibility with Sto, or approved equal, materials (achieves Standard Impact Classification).

2.7 FINISH COAT

A. Stolit®, or approved equal – Acrylic based textured wall finish with graded marble aggregate.

2.8 JOB MIXED INGREDIENTS

A. Water – Clean and potable.

B. Portland cement – Type I, Type II, or Type I-II in conformance with ASTM C 150.

2.9 ACCESSORIES

A. Starter Track – Rigid PVC (polyvinyl chloride) plastic track Part No. STDE as furnished by Plastic Components, Inc.; or approved equal.

B. Sto-Mesh Corner Bead Standard, or approved equal – One component PVC (polyvinyl chloride) accessory with integral reinforcing mesh for outside corner reinforcement; or approved equal.

C. Sto Drip Edge Profile, or approved equal - One component PVC (polyvinyl chloride) accessory with integral reinforcing mesh that creates a drip edge and plaster return; or approved equal.

2.10 MIXING

A. Sto Gold Fill, or approved equal – Mix with a clean, rust-free high speed mixer to a uniform consistency.

B. Sto Gold Coat, or approved equal – mix with a clean, rust-free high speed mixer to a uniform consistency.

C. Sto AirSeal, or approved equal – mix with a clean, rust-free high speed mixer to a uniform consistency.

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D. Sto BTS Plus, or approved equal – mix ratio with water: 5-6.5 quarts (4.7-6.2 L) of water per 47 pound (21.3 kg) bag of Sto BTS Plus, or approved equal. Pour water into a clean mixing pail. Add Sto BTS Plus, or approved equal, mix to a uniform consistency and allow to set for approximately 5 minutes. Adjust mix if necessary with additional Sto BTS Plus, or approved equal, or water and remix to a uniform trowel consistency. Avoid retempering. Keep mix ratio consistent. Do not exceed maximum water amount in mix ratio.

E. Sto BTS Xtra, or approved equal – mix ratio with water: 4.75- 5 quarts (4.5-4.7 L) of clean potable water per 38 pound (17.2 kg) bag of Sto BTS Xtra, or approved equal. Pour water into a clean mixing pail. Add Sto BTS Xtra, or approved equal, mix to a uniform consistency and allow to set for approximately 5 minutes. Adjust mix if necessary with additional Sto BTS Xtra, or approved equal, or water and remix to a uniform trowel consistency. Avoid retempering. Keep mix ratio consistent. Do not exceed maximum amount of water in mix ratio.

F. Sto Flexyl, or approved equal – mix ratio with portland cement: 1:1 ratio by weight. Pour Sto Flexyl, or approved equal, into a clean mixing pail. Add portland cement, mix to a uniform consistency and allow to set for approximately five minutes. Adjust mix if necessary with additional Sto Flexyl, or approved equal, and remix to a uniform trowel consistency. Avoid retempering. Keep mix ratio consistent.

G. Sto Watertight Coat, or approved equal – pour liquid component into a clean mixing pail. Add dry component, mix to a uniform consistency and allow to set for approximately five minutes. Adjust mix if necessary and remix to a uniform trowel consistency. Avoid retempering. Keep mix ratio consistent.

H. Sto primer, or approved equal – mix with a clean, rust-free high speed mixer to a uniform consistency.

I. Stolit, or approved equal – mix with a clean, rust-free high speed mixer to a uniform consistency. A small amount of water may be added to adjust workability. Limit addition of water to amount needed to achieve the finish texture.

J. Mix only as much material as can readily be used.

K. Do not use anti-freeze compounds or other additives.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS

A. Prequalify under Quality Assurance requirements of this Specification (paragraph 1.06 B).

3.2 EXAMINATION

A. Inspect masonry substrates prior to start of application for:

1. Contamination—algae, chalkiness, dirt, dust, efflorescence, form oil, fungus, grease, laitance, mildew or other foreign substances.

2. Surface absorption and chalkiness.

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3. Cracks—measure crack width and record location of cracks.

4. Damage and deterioration such as voids, honeycombs and spalls.

5. Moisture content and moisture damage—use a moisture meter to determine if the surface is dry enough to receive the products and record any areas of moisture damage.

6. Compliance with specification tolerances—record areas that are out of tolerance (greater than ¼ inch in 8-0 feet [6mm in 2438 mm] deviation in plane).

B. Report deviations from the requirements of project Specifications or other conditions that might adversely affect the Air/Moisture Barrier and the EIFS installation to the General Contractor. Do not start work until deviations are corrected.

3.3 SURFACE PREPARATION

A. Remove surface contaminants on concrete masonry surfaces.

B. Repair cracks, spalls or damage in concrete masonry surfaces and level masonry surfaces to comply with required tolerances.

C. Apply conditioner (consult manufacturer) by spray or roller to chalking or excessively absorptive surfaces or pressure wash to remove surface chalkiness.

D. Remove fasteners that are not anchored into supporting construction and seal holes with air barrier material.

E. Seal over-driven fasteners with air barrier material and install additional fasteners as needed to comply with fastener spacing requirement.

F. Fill large gaps between sheathing or voids around pipe, conduit, and similar penetrations with spray foam and shave flush with surface (refer to Sto Details, or approved equal).

G. Replace weather-damaged sheathing and repair or replace damaged or cracked sheathing.

3.4 INSTALLATION

IMPORTANT: Ensure the air/moisture barrier surface, insulation board surface, and reinforced base coat surface are free of surface contamination. Install Sto; or approved equal, EPS Insulation Board within 30 days of the application of Sto Gold Coat; or approved equal, or within 90 days of the application of Sto AirSeal; or approved equal.

3.4.1 Air/Moisture Barrier Installation over Concrete Masonry (CMU) Wall Construction

A. Transition Detailing with StoGuard Transition Membrane; or approved equal:

1. At static joints and transitions such as: flashing shingle-lap transitions, and wall to balcony floor slab or ceiling:
    a. Apply waterproof coating (Sto Gold Coat or Sto AirSeal, or approved equal) liberally to properly prepared surfaces with brush, roller, or spray.
    b. Place pre-cut lengths of StoGuard Transition Membrane, or approved equal,

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centered over the transition in the wet coating. At changes in plane crease the membrane and similarly place the membrane material in the wet coating. At floor line deflection joints achieve a slightly concave profile (recessed into the joint) of the membrane.

   c. Immediately top coat the membrane with additional coating and apply pressure with brush or roller to fully embed the membrane in the coating and achieve a smooth and wrinkle-free surface without gaps or voids.
   d. Apply coating liberally along all top horizontal edges on walls and along all edges on balcony floor slabs to fully seal the edges.
   e. Overlap minimum 2 inches (51 mm) at ends and adhere lap seams together with coating. Shingle lap vertical seams and vertical to horizontal intersections with minimum 2 inch (51 mm) overlap.

2. At movement joints up to 1 inch (25 mm) wide with up to + 50% movement such as masonry control joints, and through wall joints in masonry construction:
   a. Insert backer rod sized to friction fit in the joint (diameter 25% greater than joint width).
   b. Recess the backer rod ½ inch (13 mm).
   c. Apply the waterproof coating liberally to properly prepared surfaces with brush, roller, or spray along the outer surface on each side of the joint (not in the joint).
   d. Immediately place the membrane by looping it into the joint against the backer rod surface to provide slack.
   e. Embed the membrane in the wet coating along the outer surface on the sides of the joint by top coating with additional coating material and applying pressure with a brush or roller.

3. For all applications, after the membrane installation is complete and the waterproof coating is dry:
   a. Apply a final liberal coat of the waterproof coating to all top horizontal edges on walls to ensure waterproofing integrity. Similarly apply coating at all edges on balcony floor slabs.
   b. Inspect the installed membrane for fish mouths, wrinkles, gaps, holes or other deficiencies. Correct fish mouths or wrinkles by cutting, then embedding the area with additional coating applied under and over the membrane.
   c. Seal gaps, holes, and complex geometries at three dimensional corners with StoGuard, RapidFill, StoGuard RapidSeal, or approved equal.

B. Transition Detailing with StoGuard RapidFill, or approved equal.

1. At flashing shingle laps, and through wall penetrations such as pipes, electrical box penetrations:
   a. Flashing leg or penetration flange must be seated flat against the wall surface without gaps. Apply StoGuard RapidFill, or approved equal, liberally with a caulking gun in a zig-zag pattern across the flashing leg or flange/wall surface seam and spread to a thickness that covers the flange and fastener penetrations and directs water away from the wall. Extend application minimum 1 inch (25 mm) onto both surfaces (flashing leg/flange and wall surface).
   b. At through wall penetrations without flanges ensure the penetrating element (i.e., pipe or scupper) is fitted snug against abutting wall surfaces. Apply a fillet bead with a caulking gun around the penetration and tool against both surfaces (penetration and wall surface) to create a bead profile that directs water away from the

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penetration. Extend application minimum 1 inch (25 mm) onto both surfaces.

2. Rough Opening Protection (select 1, 2, or 3 for concrete masonry rough openings with wood bucks and similar openings with complex 3-dimensional geometry, select no. 3, StoGuard RapidSeal, or approved equal):
    a. Sto Gold Fill with StoGuard Mesh, or approved equal: apply 9 inch (229 mm) wide StoGuard Mesh, or approved equal, at rough openings. Immediately apply Sto Gold Fill, or approved equal, by spray or trowel over the mesh and spread with a trowel to create a smooth surface that completely covers the mesh (refer to Sto Detail 20.20M, or approved equal).
    b. Sto Gold Coat or Sto AirSeal with StoGuard Fabric; or approved equal: apply coating liberally by spray or roller to corners of openings, immediately place StoGuard RediCorners, or approved equal, in the wet coating, and apply additional coating over the RediCorners, or approved equal, to completely embed them. After all corners have been completed apply coating liberally to the entire rough opening, immediately place StoGuard Fabric; or approved equal in the wet coating, smooth any wrinkles with a brush or roller, and apply additional coating over the fabric to completely embed it. Overlap all seams minimum 2 inches (51 mm). Once completed top coat with additional coating as needed to completely seal the surface. Allow to dry and inspect for pinholes or voids. If pinholes or voids are present, seal with additional coating or StoGuard RapidSeal, or approved equal (refer to Sto Detail 20.20F, or approved equal).
    c. StoGuard RapidSeal, or approved equal: apply a generous bead of StoGuard RapidSeal, or approved equal with a caulking gun in a zig-zag pattern along the inside and outside surface of the rough opening. Spread with a 6 inch (152 mm) wide plastic drywall knife all the way around the opening (refer to Sto Details 20.20R and 21.20R, or approved equal)

3. Air/Moisture Barrier Coating Installation
    a. CMU Surfaces:
        1) Repair static cracks up to 1/2 inch (13 mm) wide with StoGuard RapidFill, or approved equal. Rake the crack with a sharp tool to remove loose or friable material and blow clean with oilfree compressed air. Apply the crack filler with a trowel or putty knife over the crack and tool the surface smooth. (Note: For moving cracks or cracks larger than ½ inch [13mm]), consult with a structural engineer for repair method). Protect repair from weather until dry.
        2) Liberally apply coating to the surface with a ¾ inch nap roller or spray equipment to a wet thickness of 10-30 mils (Sto Gold Coat, or approved equal) or 20-40 wet mils (Sto AirSeal, or approved equal), depending on surface condition. Apply to a uniform thickness. Additional coats may be necessary to provide a void and pinhole free surface. Protect from weather until dry.

           IMPORTANT: The Sto, or approved equal, coating functions as an air and moisture barrier on normal weight concrete masonry wall construction with flush (struck flush with the surface of the CMU) or concave joints when minimum two liberal coats are applied. Additional coats may be necessary depending on the condition of the CMU wall surface, CMU porosity, joint profile, and other variables that may exist. For "rough" CMU wall surfaces, skim coat the entire surface with one of Sto's cementious levelers (Sto BTS Plus or Sto BTS Xtra, or approved equal) before application of coating. A

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VOID AND PINHOLE FREE SURFACE must be achieved for the coating to properly function as an air and moisture barrier on CMU wall surfaces.

4. Air /Moisture Barrier Connections and Shingle Laps
   a. Coordinate installation of connecting air barrier components with other Trades to provide a continuous air tight membrane.
   b. Coordinate installation of flashing and other moisture protection components with other Trades to achieve complete moisture protection such that water is directed to the exterior, not into the wall assembly, and drained to the exterior at sources of leaks.
   c. Splice-in head flashings above roof/sidewall step flashing, and similar locations with StoGuard; or approved equal, detail component to achieve shingle lap of the air/moisture barrier such that water is directed to the exterior.

      NOTE: Windows and doors are typically installed immediately following installation of the air/moisture barrier and work should be sequenced accordingly. Consult with window manufacturer for installation requirements to maintain air barrier continuity and for sill flashing and perimeter sealant requirements needed to prevent leaks into the wall assembly.

3.4.2 EIFS INSTALLATION

A. Starter Track

1. Strike a level line at the base of the wall to mark where the top of the starter track terminates.

2. Attach the starter track even with the line into structural supports with the proper fastener:
   a. Type S-12 corrosion resistant screws for steel framing with minimum 3/8 inch (9 mm) and three thread penetration, galvanized or zinc coated nails for wood framing with minimum 3/4 inch (19 mm) penetration, and corrosion resistant concrete or masonry screws with minimum 1 inch (25 mm) penetration for concrete or CMU. Attach between studs into blocking as needed to secure the track flat against the wall surface. Attach at maximum 16 inches (406 mm) on center into framing. For solid wood sheathing or concrete/masonry surfaces, attach directly at 12 inches (305 mm) on center maximum.

3. Butt sections of starter track together. Miter cut outside corners and abut. Snip front flange of one inside corner piece (to allow EPS insulation board to be seated inside of track) and abut.

4. Install Starter Track at other EIFS terminations as designated on detail Drawings.

B. Detail Splice Strips for Starter Track and Flashing

1. Starter Track, Roof/Side Wall Step Flashing: Install minimum 4 inch (100 mm) wide detail component over back flange of starter track, roof/side wall step flashing. Center the detail component so it spans evenly between the back leg of flashing (or accessory) and the coated sheathing. Make a smooth transition to the coated sheathing with a trowel, knife, or roller, depending on the detail component material being used. When Sto Gold Fill

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with StoGuard Mesh, or approved equal, is the detail component apply another coat of the waterproof coating over the detail area. Do not leave detail components exposed for more than 30 days.

C. Backwrapping

1. Apply a strip of detail mesh to the dry air/moisture barrier at all system terminations (expansion joints, etc.) except where the Starter Track is installed. The mesh must be wide enough to adhere approximately 4 inches (100 mm) of mesh onto the wall, be able to wrap around the insulation board edge and cover a minimum of 2½ inches (64 mm) on the outside surface of the insulation board. Attach mesh strips to the air/moisture barrier and allow them to dangle until the backwrap procedure is completed. Alternatively, pre-wrap terminating edges of insulation board.

   NOTE: Backwrapping can be replaced by "pre-wrapping" terminating edges of insulation board with Sto Mesh or Sto Detail Mesh, or approved equal, embedded in the Sto base coat, or approved equal. This method is often preferred to facilitate installation in the field. This method may also be used in conjunction with flashing at the base of the wall, roof/wall intersections, floor lines, and similar terminations to replace the starter track.

D. Adhesive Application and Installation of Insulation Board

1. Ensure the air/moisture barrier surface (Sto Gold Coat, or approved equal) is free of surface contamination. Install the insulation board within 30 days of the application of the air/moisture barrier coating (Sto Gold Coat, or approved equal), or clean the surface and recoat with Sto Gold Coat, or approved equal.

2. Rasp the interior lower face of insulation boards to provide a snug friction fit into the Starter Track. (Note: rasping prevents an outward bow at the Starter Track).

3. Use either polyurethane spray foam adhesive (Sto TurboStick, or approved equal) or cementitous adhesive (Sto BTS Plus or Sto BTS Xtra, or approved equal):
   a. Polyurethane Spray Foam Adhesive (Sto TurboStick, or approved equal): apply adhesive to the back of the insulation board with the dispensing pistol approximately ¾ inch (19 mm) from ends. Apply 5 additional ribbons spaced equally at no greater than 7 inches (177 mm) apart between the end ribbons. Apply uniform ribbons of adhesive parallel with the SHORT dimension of the board so that when boards are placed on the wall the ribbons will be VERTICAL. Apply adhesive ribbons approximately ½ inch (51 mm) in diameter which will expand to ¾ – 1 inch (19 – 25 mm). Keep adhesive ½ inch (51 mm) short of board edges. Apply adhesive uniformly so ribbons of adhesive do not converge. Allow adhesive to "dwell" and become "tacky" before placing boards on wall. Adhesive will look smooth, not jagged, when ready to apply to wall surface. Place boards while adhesive is "tacky" and before adhesive "skins".

   IMPORTANT: Adhesive tack time varies with temperature and humidity. High temperature or high humidity decreases tack time. Low temperature or low humidity increases tack time. Generally adhesive will remain tacky between 1-5 minutes. If adhesive "skins" remove it and apply fresh adhesive. Place insulation boards in a running bond pattern on the wall with the long dimension horizontal. Start by inserting the lower edge of the boards inside the starter track at the base of the wall until they contact the

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bottom of the track. Apply light pressure when placing the boards. After boards have been in place for 5-10 minutes use a straight edge to lightly press the boards inward and keep board joints flush, as post expansion of the adhesive may force boards slightly outward.

   b. Cementitious Adhesive (Sto BTS Plus or Sto BTS Xtra, or approved equal): apply adhesive to the back of the insulation board with the proper size (1/2 x ½ x 2 inch [13 x 13 x 51 mm]) stainless steel notched trowel. Apply uniform ribbons of adhesive parallel with the SHORT dimension of the board so that when boards are placed on the wall the ribbons will be VERTICAL. Apply adhesive uniformly so ribbons of adhesive do not converge. Immediately place insulation boards in a running bond pattern on the wall with the long dimension horizontal. Start by inserting the lower edge of the boards inside the starter track at the base of the wall until they contact the bottom of the track. Apply firm pressure over the entire surface of the boards to ensure uniform contact of adhesive. IMPORTANT: do not delay installation once adhesive is applied. If adhesive “skins” remove it and apply fresh adhesive.

4. Bridge sheathing joints by a minimum of 6 inches (152 mm). Interlock inside and outside corners.

5. Butt all board joints tightly together to eliminate any thermal breaks. Care must be taken to prevent any adhesive from getting between the joints of the boards.

6. Cut insulation board in an L-shaped pattern to fit around openings. Do not align board joints with corners of openings.

7. Check for satisfactory contact of the insulation board with the substrate. If any boards have loose areas use the spray foam adhesive dispensing pistol to create a hole through the board and inject adhesive to attach the loose area. Allow the adhesive to expand to the outer face of the board while withdrawing the pistol. Cut excess adhesive flush with the surface of the insulation. Do not use nails, screws, or any other type of non-thermal mechanical fastener.

E. Slivering and Rasping of Insulation Board Surface

1. Make sure insulation boards are fully adhered to the substrate before proceeding to steps 3.4, E.2 and 3.4, E.3 below.

2. Fill any open joints in the insulation board layer with slivers of insulation or the spray foam adhesive.

3. Rasp the insulation board surface to achieve a smooth, even surface and to remove any ultraviolet ray damage.

F. Completion of Backwrapping

1. Complete the backwrapping procedure by applying base coat to exposed edges of insulation board and approximately 4 inches (100 mm) onto the face of the insulation board. Pull mesh tight around the board and embed it in the base coat with a stainless steel trowel. Use a corner trowel for clean, straight lines. Smooth any wrinkles or gaps in

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the mesh.

G. Accessory Installation

1. Corner Bead: cut the corner bead accessory to proper length as needed. Use full pieces wherever possible and avoid using short filler pieces. Offset accessory butt joints from substrate joints. Apply base coat with a stainless steel trowel to an approximate thickness of 1/8 inch (3 mm) to the outside corner area that will receive the accessory. Immediately place the accessory directly into the wet base coat material. Do not slide into place. Press the accessory into place. A corner trowel is best for this purpose. Embed and completely cover the mesh and PVC by troweling from the corner to the edge of the mesh so that no mesh or PVC color is visible. Avoid excess build-up of base coat and feather along mesh edges. Adjoin separate pieces by abutting PVC to PVC and overlapping the mesh "tail" from one piece onto the next piece. Fully embed the accessory and mesh "tail" in base coat material. When installing field mesh reinforcement overlap accessory mesh and PVC. Remove any excess base coat from the outside corner.

   NOTE: Install the corner bead accessory prior to the application of field mesh. If installing a multi-layer mesh system such as StoTherm ci high impact systems with Sto Armor Mat; Sto Armor Mat XX, or approved equal, install the corner bead accessory over the first layer of mesh and before the final layer of mesh is installed. For additional reinforcement at the corner the field mesh (paragraph 3.4.2 I5 below) may be wrapped around the corner and extend a minimum of 6 inches (152 mm) in one or both directions.

2. Drip Edge: install the drip edge accessory prior to application of field mesh (paragraph 3.4.2, I.5 below). Install with arrow on mesh pointing UP. Cut the accessory to proper length as needed. Use full pieces wherever possible and avoid using short filler pieces. Offset accessory butt joints from substrate joints. Apply base coat with a stainless steel trowel to an approximate thickness of 1/8 inch (3 mm) to the area that will receive the accessory. Immediately place the accessory directly into the wet base coat material and press into place. Do not slide into place. Embed and completely cover the mesh and PVC by troweling from the drip edge screed rail to the edge of the mesh. Avoid excess build-up of base coat, feather along mesh edges, and remove any excess base coat from the drip edge nosing. Abut adjoining pieces and install as described above. When installing field mesh reinforcement overlap accessory mesh 4 inches (10 cm) on both vertical and horizontal faces so the PVC is overlapped, and remove any excess base coat from the drip edge nosing. On vertical and horizontal faces of the accessory install finish to the drip edge lines and remove any protruding finish from the drip edge nosing.

H. Base Coat and Reinforcing Mesh Application

1. Ensure the insulation board is firmly adhered and free of surface contamination or UV degradation, and is thoroughly rasped before commencing the base coat application.

2. Apply minimum 9x12 inch (225x300 mm) diagonal strips of detail mesh at corners of windows, doors, and all penetrations through the system. Embed the strips in wet base coat and trowel from the center to the edges of the mesh to avoid wrinkles.

3. Apply detail mesh at trim, reveals and projecting architectural features. Embed the mesh in the wet base coat. Trowel from the base of reveals to the edges of the mesh.

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4. Standard mesh application: Apply base coat over the insulation board, including areas with Ultra-High, or approved equal, impact mesh, or approved equal, with a stainless steel trowel to a uniform thickness of approximately 1/8 inch (3 mm). Work horizontally or vertically in strips of 40 inches (1016 mm), and immediately embed the mesh into the wet base coat by troweling from the center to the edge of the mesh. Overlap mesh not less than 2½ inches (64 mm) at mesh seams and at overlaps of detail mesh. Feather seams and edges. Double wrap all inside and outside corners with minimum 6 inch (152 mm) overlap in each direction (optional if corner bead accessory is used – see NOTE to paragraph 3.4.2,H.1 above). Avoid wrinkles in the mesh. The mesh must be fully embedded so that no mesh color shows through the base coat when it is dry. Re-skim with additional base coat if mesh color is visible.

5. Allow base coat to thoroughly dry before applying primer or finish.

   NOTE: All trim and projecting architectural features must have a minimum 1:2 [27°] slope along their top surface. All horizontal reveals must have a minimum 1:2 [27°] slope along their bottom surface. Increase slope for northern climates to prevent accumulation of ice/snow and water on surface. Where trim/feature or bottom surface of reveal projects more than 2 inches (51 mm) from the face of the EIFS wall plane, protect the weather exposed sloped surface with waterproof base coat. Maximum insulation board thickness is 12 inches (305 mm), which includes trim and architectural features. Periodic inspections and increased maintenance may be required to maintain surface integrity of the EIFS on sloped, weather exposed surfaces. Limit projecting features to easily accessible areas and limit total area to facilitate maintenance and minimize maintenance burden. Refer to Sto Details, or approved equal. Do not use the EIFS on weather exposed projecting ledges, sills, or other projecting features unless supported by framing or other structural support and protected with metal coping or flashing. Refer to Sto Detail 10.61, or approved equal.

I. Finish Coat Application

1. Ensure the base coat surface or primed base coat is free of surface contamination before commencing the finish application.

2. Apply finish directly over the base coat or primed base coat when dry. Apply finish by spray or stainless steel trowel, depending on the finish specified. Follow these general rules for application of finish:
   a. Avoid application in direct sunlight.
   b. Apply finish in a continuous application, and work to an architectural break in the wall.
   c. Weather conditions affect application and drying time. Hot or dry conditions limit working time and accelerate drying. Adjustments in the scheduling of work may be required to achieve desired results. Cool or damp conditions extend working time and retard drying and may require added measures of protection against wind, dust, dirt, rain and freezing. Adjust work schedule and provide protection.
   d. Do not install separate batches of finish side-by-side.
   e. Do not apply finish into or over sealant joints. Apply finish to outside face of wall only.
   f. Do not apply finish over irregular or unprepared surfaces, or surfaces not in compliance with the requirements of the project Specifications.

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3.5 PROTECTION

A. Provide protection of installed materials from water infiltration into or behind them.

B. Provide protection of installed materials from dust, dirt, precipitation, freezing and continuous high humidity until they are fully dry.

3.6 CLEANING, REPAIR AND MAINTENANCE

A. Clean and maintain the EIFS for a fresh appearance and to prevent water entry into and behind the system. Repair cracks, impact damage, spalls or delamination promptly.

B. Maintain adjacent components of construction such as sealants, windows, doors, and flashing, to prevent water entry into or behind the EIFS and anywhere into the wall assembly.

C. Refer to Sto reStore Repair, or approved equal, and Maintenance Guide (reStore Program; or approved equal) for detailed information on restoration – cleaning, repairs, recoating, resurfacing and refinishing, or re-cladding

END OF SECTION 07241

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SECTION 07250 - SPRAYED-ON FIREPROOFING

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. This Section includes the following:

1. Sprayed-on fireproofing, for use where indicated on the Drawings.

B. Related Sections:

1. Section 01400 - Special Testing and Inspections
2. Section 02070 - Selective Demolition.
3. Section 05120 - Structural Steel
5. Section 05300 - Metal Decking

1.3 SUBMITTALS

A. Product data for sprayed-on fireproofing product indicated.

B. Test reports containing the following information:

C. Test results from an independent testing laboratory indicating compliance of sprayed-on fireproofing products with performance requirements indicated, including asbestos content where applicable.

D. Test results of in-place performance as required under Part 3 of this section for field quality control.

E. Certificates from fireproofing manufacturer, for each fireproofing product required, indicating that:

F. Primers applied to steel in shop or field are compatible with sprayed-on fireproofing and will not impair its performance under fire exposure for applications indicated, as proved by ASTM E 119 test. Include test and other data as evidence.

G. Each fireproofing product required complies with specified product requirements and is suitable for the use indicated.

1.4 QUALITY ASSURANCE

A. Testing Laboratory Qualifications: To qualify for acceptance, an Independent Testing Laboratory must demonstrate to Architect's satisfaction, based on evaluation of laboratory-submitted criteria conforming to ASTM E 699, that it has the experience and

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capability to conduct satisfactorily the testing indicated without delaying the progress of the Work.

B. Single Source Responsibility: Obtain sprayed-on fireproofing materials from a single manufacturer for each different product required.

C. Fire Performance Characteristics: Provide materials and construction which are identical to those tested for the following fire performance characteristics, per test method indicated, by UL or other testing and inspecting organizations acceptable to Authorities Having Jurisdiction.

D. Fire Resistance Ratings: As indicated by reference to design designation in UL "Fire Resistance Directory" for fire-resistance-rated assemblies in which sprayed-on fireproofing serves as direct-applied protection, tested per ASTM E 119.

E. Surface Burning Characteristics: As indicated for each sprayed-on fireproofing product required, tested per ASTM E 84 and listed in UL "Building Materials Directory".

F. Field-Constructed Mock-Up: Prior to installation of exposed sprayed-on fireproofing, apply each product indicated for exposed applications, in locations indicated or selected by Architect, to represent completed work for qualities of appearance, materials and application.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to project site in original, unopened packages with manufacturers' labels identifying products legible and intact. Include on labels names of products and manufacturers, date of manufacture and shelf life, where applicable. Also include UL labels for fire-resistance ratings applicable to project.

B. Use materials with limited shelf life within period indicated. Remove from project site and discard any materials whose shelf life has expired.

C. Store materials inside, under cover, above ground and in a manner to keep them dry until ready to use. Remove from project site and discard any materials that have been exposed to moisture or have otherwise deteriorated.

1.6 PROJECT CONDITIONS

A. Environmental Conditions: Do not install sprayed-on fireproofing when ambient or substrate temperatures are 40°F (4.4°C) and falling, unless temporary protection and heat can be provided to maintain temperatures of both at or above this temperature level for 24 hours before, during, and for 24 hours after application of sprayed fireproofing.

B. Ventilation: Ventilate spray fireproofing by means of natural or, where this is inadequate, of forced air circulation during and after application until it dries thoroughly.

1.7 SEQUENCING

A. Sequence and coordinate application of sprayed-on fireproofing with other, related work specified in other sections to comply with the following requirements.

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B. Provide temporary enclosures to prevent deterioration of sprayed-on fireproofing for interior applications due to exposure to unfavorable environmental conditions.

C. Avoid unnecessary exposure of sprayed-on fireproofing to abrasion and other damage likely to occur during construction operations subsequent to its application.

D. Do not apply fireproofing to metal roof decking substrates until application of roofing has been completed; prohibit roof traffic during application and drying of fireproofing.

E. Do not install enclosing or concealing construction until after fireproofing has been applied, inspected, tested, and corrections made to any defective fireproofing.

PART 2 - PRODUCTS

2.1 SPRAYED-ON FIREPROOFING MATERIALS

A. Basis of Design: Provide Cementitious Fireproofing on structural steel framing and metal decking, as manufactured by one of the following:

1. "Monokote MK-6"; Grace Construction Products Div., W.R. Grace & Co.,
2. "Cafco 300", Isolatek International,
3. “Carbonline Type 15", Carbonline Protective Coatings and Linings,
4. “SWV Type 5", Southwest Fireproofing Co.,
5. Or approved equal.

B. Material Composition:

1. Cementitious Fireproofing: Factory-mixed dry formulation of inorganic binders and lightweight mineral aggregates mixed with water at project site to form a slurry for pumping and for dispersal by compressed air introduced at spray nozzle.
    a. Mineral fiber products will not be accepted for this project.

2. Dry Density (ASTM E605): 15 pcf. minimum average density regardless of density indicated in referenced fire-resistive design, or greater if required to attain fire- resistive rated indicated and as determined per ASTM E 605.

3. Deflection: Material shall not crack or delaminate from the surface from the surface to which it is applied when tested in accordance with ASTM E759.

4. Bond Impact: Material subject to impact tests in accordance with ASTM E760; shall not crack or delaminate.

5. Bond Strength (ASTM E736): Minimum average bond strength of 200 psf, minimum individual bond strength of 150 psf.

6. Air Erosion (ASTM E859): Maximum allowable weight loss of material shall be 0.005 gm/sf.

7. Compressive Strength (ASTM E761): Shall not deform more than 10% when subjected to compressive forces of 1000 psf.

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8. Non-corrosive, as determined by ASTM E937.

9. Abrasion Resistance: No more than 15 cc (cubic centimeters) shall be abraded or removed from the fireproofing substrate when tested by the methods of the City of San Francisco, Bureau of Building Inspection.

10. Impact Penetration: Material shall not show a loss of more than 6 cc when subjected to testing methods developed by the City of San Francisco, Bureau of Building Inspection.

11. Maximum flame spread (ASTM E84): 0.

12. Maximum Smoke developed (ASTM E84): 0.

13. Resistance to Mold: Add mix formulated at the time of manufacturing with mold inhibitor to comply with ASTM G21 testing procedure and shall show resistance to mold for 21 days for general use and 60 days for materials to be installed in plenums.

C. Fireproofing material shall have been tested and reported by Underwriters Laboratories, Inc. in accordance with the procedures of UL 263 (ASTM E119).

D. Mixing water shall be clean, fresh and suitable for domestic consumption and free from such amounts of mineral or organic substances as would affect the set of the fireproofing material.

2.3 HIGH DENSITY SPRAYED-ON FIREPROOFING - INTERIOR EXPOSED APPLICATION

A. Basis of Design: Provide one of the following:
   a. "Monokote Type Z-146;" Grace Construction Products Div., W. R. Grace Corp.
   b. "Cafco 300;" Isolatek International.
   c. Or approved equal.

B. Coordinate manufacturer's requirements with Structural Steel and Metal Deck surface preparations.

C. Installation shall be for trowel grade material, "Trowel Finished" in accordance with manufacturer's instructions and recommendations.

2.4 AUXILIARY FIREPROOFING MATERIALS

A. General: Provide auxiliary fireproofing materials that are compatible with sprayed-on fireproofing products and substrates, are approved for use indicated by manufacturer of sprayed-on fireproofing, and are approved by UL or other testing and inspecting agency acceptable to Authorities Having Jurisdiction for use in fire-resistance rated designs indicated.

B. Substrate Primers: Type approved by manufacturer of sprayed-on fireproofing for substrate and for conditions of exposure indicated.

C. Adhesive for Bonding Fireproofing: Type recommended and approved by manufacturer of sprayed-on fireproofing.

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PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, to determine if they are in satisfactory condition to receive sprayed-on fireproofing. A substrate is in satisfactory condition if it complies with the following:

1. Substrate complies with requirements of the section in which the substrate and related work is specified and is free of oil, grease, rolling compounds, incompatible primers, loose mill scale, dirt or other foreign substances capable of impairing bond of fireproofing with substrate under conditions of normal use or fire exposure.

2. Objects which will penetrate fireproofing, including clips, hangers, support sleeves and similar items have been securely attached to substrates.

3. Substrates are not obstructed by ducts, piping, equipment and other suspended construction that could interfere with application of fireproofing.

B. For steel, sheet metal and other substrates suspected of being coated with oil, rolling compounds or other substances not readily identifiable but potentially capable of impairing bond, conduct tests recommended by fireproofing manufacturer to determine their presence and effect on adhesion of fireproofing.

C. Do not proceed with installation of fireproofing until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean substrates of substances which could impair bond of fireproofing, including oil, grease, rolling compounds, incompatible primers, and loose mill scale.

B. Do not prime substrates unless recommended by fireproofing manufacturer, and except where compatible shop primer has been applied and is in satisfactory condition to receive fireproofing.

C. Cover other work which might be damaged by fall-out or overspray of fireproofing materials during application. Provide temporary enclosure as required to confine spraying operations, protect the environment, and to ensure adequate ambient conditions for temperature and ventilation.

3.3 INSTALLATION, GENERAL

A. General: Comply with fireproofing manufacturer's instructions for mixing materials, for application procedures and for types of equipment used to convey and spray-on fireproofing materials; as applicable to the particular conditions of installation and as required to achieve fire-resistance ratings indicated.

B. Coat substrates with adhesive prior to application of fireproofing where required to achieve fire-resistance rating or recommended by fireproofing manufacturer for material and

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application indicated.

C. Extend fireproofing full thickness over entire area of each substrate to be protected. Unless otherwise recommended by fireproofing manufacturer, install body of fireproof covering in a single course.

D. Apply fireproofing in thicknesses and densities not less than that required to achieve fire resistance ratings designated for each condition, unless greater thicknesses and densities are indicated.

E. Apply fireproofing materials by sprayed-on method to maximum extent possible. Following spraying operation in each area, complete the coverage by trowel application or other placement method acceptable to manufacturer.

F. Painted topcoat finish shall be the type recommended and approved by the manufacturer of each spray-applied fire resistive material required for the application indicated.

    1. Contractor shall spray apply painted finish of paint with a flame spread of less than 200, in area(s) as indicated on the Drawings.

3.4 FIELD QUALITY CONTROL

A. Testing Laboratory: The Owner shall employ and pay a qualified Independent Testing Laboratory to perform field quality control testing.

B. Extent and Testing Methodology: Arrange for testing of completed fireproofing in successive stages in areas of extent described below; do not proceed with fireproofing of next area until test results for previously completed work evidence compliance with requirements.

    1. Within each area, testing laboratory shall randomly select one typical structural element of each type and test fireproofing for cohesion/adhesion per ASTM E 736.

    2. Thickness for Structural Frame Members: Form a sample of 25 percent of structural members per floor, taking 9 measurements at a single cross section for structural frame beams or girders, 7 measurements of a single section for joists and trusses and 12 measurement of a single cross section for columns per ASTM E 605.

C. Testing Laboratory shall report test results promptly and in writing to Contractor, Architect and Construction Manager.

D. Repair or replace fireproofing within areas where test results indicate fireproofing does not comply with requirements.

3.5 PATCHING AND REPAIR WORK

A. Coordinate installation of fireproofing with other work in order to minimize the need for other Trades to cut or remove fireproofing. As other Trades successively complete installation of their work, maintain protection of structure afforded by fireproofing by patching any areas which have been removed or damaged prior to concealment of fireproofing by other work.

    1. All patching and repairing of sprayed-on applied fireproofing, including damage which

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occurs during work by other Trades, shall be performed with same materials under this section, without any additional cost to the Owner.

3.6 CLEANING AND PROTECTION

A. Cleaning: Immediately upon completion of spraying operations in each containable area of project, remove over-spray and fall-out of materials from surfaces of other work and clean exposed surfaces to remove evidence of soiling.

B. Cure exposed cementitious fireproofing materials in compliance with fireproofing manufacturers recommendations to prevent premature drying.

C. Protect fireproofing according to advice of fireproofing manufacturer and Installer from damage resulting from construction operations or other causes so that fireproofing will be without damage or deterioration at time of Substantial Completion.

D. Repair or replace work which has not been successfully protected.

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SECTION 09940 – HIGH IMPACT WALL GUARDS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Corner guard system for wall protection.

1.03 SECTION INCLUDES

A. 160 High Impact Surface Mount Corner Guard System.

1.04 REFERENCES

A. American Society for Testing and Materials (ASTM)
B. National Fire Protection Association (NFPA)
C. American National Standards Institute (ANSI)
D. Society of Automotive Engineers (SAE)
E. Underwriters Laboratory (U.L.)
F. International Building Code (IBC)

1.05 SYSTEM DESCRIPTION

A. Performance Requirements: Provide corner guard system that conform to the following requirements of regulatory agencies and the quality control of IPC Door and Wall Protection Systems, InPro Corporation; or approved equal.

1. Fire Performance Characteristics: Provide UL Classified corner guards conforming with NFPA Class A fire rating. Surface burning characteristics, as determined by UL-723 (ASTM E-84), shall be flame spread of 10 and smoke development of 350 - 450.
2. Self-Extinguishing: Provide corner guards with a CC1 classification, as tested in accordance with the procedures specified in ASTM D-635-74, Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position, as referenced in UBC 52-4-1988.
3. Impact Strength: Provide rigid vinyl profile materials that have an Impact Strength of 30.2 ft-lbs/inch of thickness as tested in accordance with the procedures specified in ASTM D-256-90b, Impact Resistance of Plastics.
4. Chemical and Stain Resistance: Provide corner guards that show resistance to stain when tested in accordance with applicable provisions of ASTM D-543.
5. GREENGUARD Certified: Provide GREENGUARD Certified material. Profiles shall meet the requirements of GREENGUARD Certification Standards for Low-Emitting Products and GREENGUARD Product Emission Standard for Children & Schools.
6. Fungal and Bacterial Resistance: Provide rigid vinyl that does not support fungal or bacterial growth as tested in accordance with ASTM G-21 and ASTM G-22.
7. Color Consistency: Provide components matched in accordance with SAE J-1545 - (Delta E) with a color difference no greater than 1.0 units using CIE Lab, CIE CMC, CIE LCh, Hunter Lab or similar color space scale systems.

1.06 SUBMITTALS

A. Product Data: Manufacturer's printed product data for each type of corner guard specified.
B. Detail Drawings: Mounting details with the appropriate adhesives for specific project substrates.
C. Samples: Verification samples of corner guard, 8" (203mm) long, in full size profiles of each type and color indicated.
D. Manufacturer's Installation Instruction: Printed installation instructions for each corner guard.

1.07 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in unopened factory packaging to the jobsite.
B. Inspect materials at delivery to ensure that specified products have been received.
C. Store in original packaging in a climate-controlled location away from direct sunlight.

1.08 PROJECT CONDITIONS

A. Environmental Requirements: Products must be installed in an interior climate-controlled environment.

1.09 WARRANTY

A. Standard IPC **Limited Lifetime** Warranty against material and manufacturing defects.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Basis of Design Manufacturer: IPC Door and Wall Protection Systems, InPro Corporation; or approved equal.
B. Provide all corner guards from a single source.

2.02 MANUFACTURED UNITS

A. Corner Guard System:
   1. 160 High Impact Corner Guard Profile.
   2. 2" (51mm) x 2" (51mm), 90 degree.
   3. 4′ (1.22m), 8' (2.44m) and 9' (2.74m) standard heights.

2.03 MATERIALS

A. Corner Guard System:
   1. Vinyl: Snap on cover of .080" (2mm) thickness shall be made from chemical and stain-resistant unplasticized polyvinyl chloride (uPVC) with the addition of impact modifiers. No plasticizers shall be added (plasticizers may aid in bacterial growth).
   2. Aluminum: Continuous aluminum retainer of .070" (1.8mm) thickness shall be fabricated from 6063-T5 aluminum, with a mill finish.

2.04 COMPONENTS

A. Top caps and bottom caps shall be made of injection molded thermoplastics.
B. Fasteners: All mounting system accessories appropriate for substrates indicated on the Drawings shall be provided.

2.05 FINISHES

A. Corner Guard System:
   1. Vinyl Covers: Colors of the corner guard to be selected by the Architect from the IPC finish selection. Surface shall have a pebblette texture.
   2. Molded Components: Top caps and bottom caps shall be of a color matching the corner guards. Surface shall have a pebblette texture.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions in which the corner guard systems will be installed.
   1. Complete all finishing operations, including painting, before beginning installation of corner guard system materials.

B. Wall surface shall be dry and free from dirt, grease and loose paint.

3.02 PREPARATION

A. General: Prior to installation, clean substrate to remove dust, debris and loose particles.

3.03 INSTALLATION

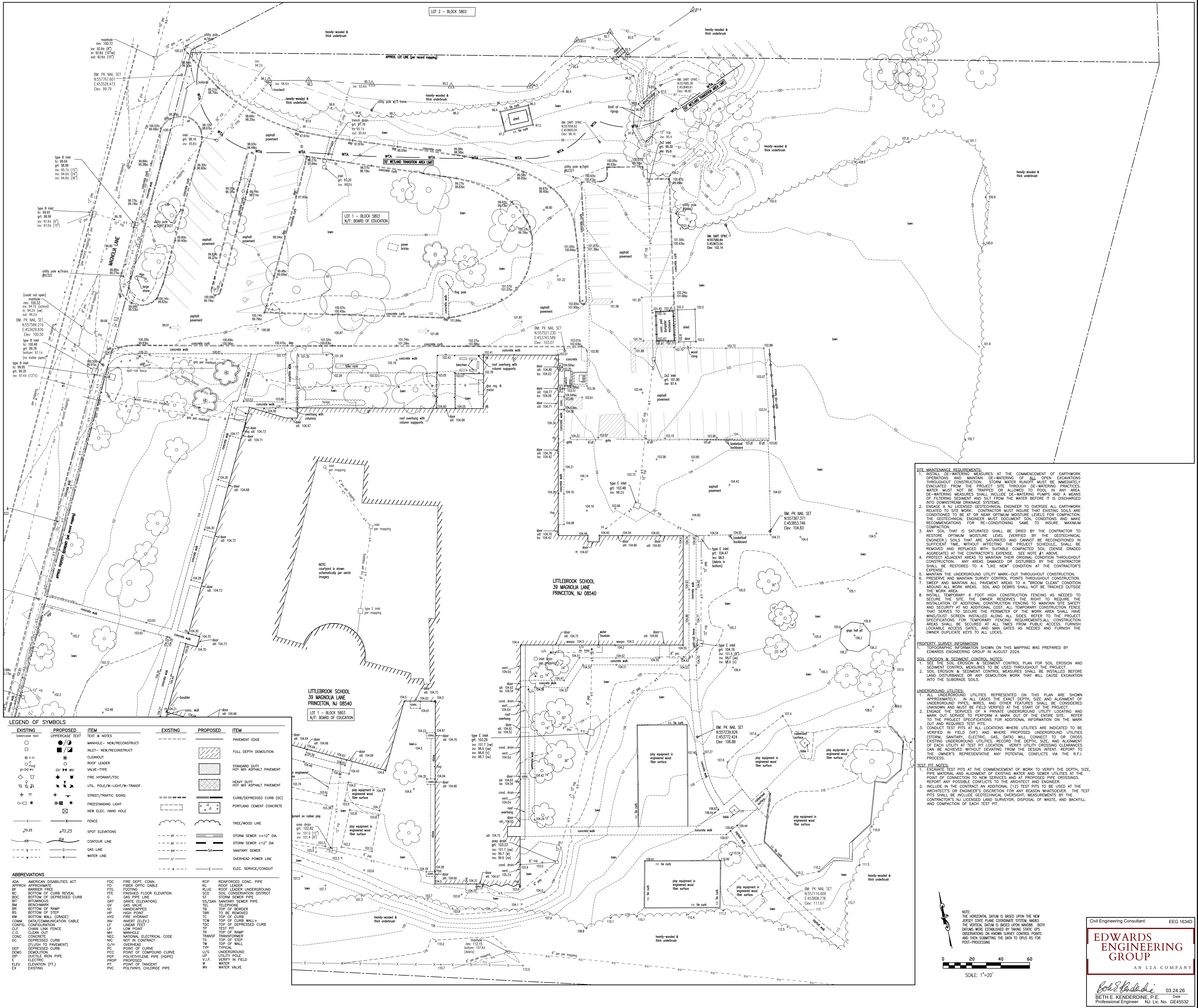
A. General: Locate corner guard as indicated on the approved detail Drawings for the appropriate substrate and in compliance with the IPC installation instructions. Install corner guard level and plumb at the height indicated on Drawings.

B. Installation of 160; or approved equal, High Impact Surface Mount Corner Guard:
   1. Position the aluminum retainer against the wall, allowing 5/16" (8mm) from the bottom of the aluminum to the top of the cove base or baseboard for the bottom cap.
   2. Aluminum Retainer Installation:
      Drywall installation: Secure the aluminum retainer to the wall using 1-1/4" phillips round head self-tapping screws. Use 6 screws per 4' (1.22m) length, 10 screws per 8' (2.44m) length, or 12 screws per 9' (2.74m) length. The aluminum retainer is pre-slotted to aid in the installation.
   3. Top and Bottom Cap Installation
      Drywall installation: Overlap the aluminum with the mounting tabs of the top cap and attach them to the aluminum retainer using two, 1-3/4" phillips flat head self-tapping screws per cap. Concrete installation: Overlap the aluminum with the mounting tabs of the top and bottom caps and attach them to the aluminum retainer using two, #8 x 1-1/2" phillips flat head screws per cap. When installing flexible top caps on custom angle corner guards, use cup washers and flat head screws to fasten the top caps to the retainer.
   4. Position the vinyl cover on the aluminum retainer to check the fit. Adjust the top cap on the aluminum retainer to obtain a tight fit with the vinyl cover. Starting at the top, push the vinyl cover over the aluminum, by pressing over the length until the vinyl snaps securely into place.

3.04 CLEANING

A. At completion of the installation, clean surfaces in accordance with the IPC clean-up and maintenance instructions.

END OF SECTION 09940


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
50' WETLAND TRANSITION AREA LIMIT
WTA
LOT 1 – BLOCK 5803
N/F: BOARD OF EDUCATION
MAGNOLIA LANE
APPROX. PROPERTY BOUNDARY (per record mapping)
heavily-wooded & thick underbrush
asphalt pavement
lawn
NOTE: courtyard is shown schematically per aerial imagery
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
play equipment in engineered wood fiber surface
gaga ball pit
shed
basketball backboard
0
20
40
60
SCALE: 1"=20'

NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING

SITE MAINTENANCE REQUIREMENTS:

1. INSTALL DE–WATERING MEASURES AT THE COMMENCEMENT OF EARTHWORK OPERATIONS AND MAINTAIN DE–WATERING OF ALL OPEN EXCAVATIONS THROUGHOUT CONSTRUCTION. STORM WATER RUNOFF MUST BE IMMEDIATELY EVACUATED FROM THE PROJECT SITE THROUGH DE–WATERING PRACTICES. WATER MUST NOT BE TRAPPED OR ALLOWED TO POOL IN ANY AREA. DE–WATERING MEASURES SHALL INCLUDE DE–WATERING PUMPS AND A MEANS OF FILTERING SEDIMENT AND SILT FROM THE WATER BEFORE IT IS DISCHARGED INTO DOWNSTREAM DRAINAGE SYSTEMS.
2. ENGAGE A NJ LICENSED GEOTECHNICAL ENGINEER TO OVERSEE ALL EARTHWORK RELATED TO SITE WORK. CONTRACTOR MUST INSURE THAT EXISTING SOILS ARE CONDITIONED TO BE AT OR NEAR OPTIMUM MOISTURE LEVELS FOR COMPACTION. THE GEOTECHNICAL ENGINEER MUST DOCUMENT SOIL CONDITIONS AND MAKE RECOMMENDATIONS FOR RE–CONDITIONING SAME TO INSURE MAXIMUM COMPACTION.
3. ANY SOIL THAT IS SATURATED SHALL BE DRIED BY THE CONTRACTOR TO RESTORE OPTIMUM MOISTURE LEVEL (VERIFIED BY THE GEOTECHNICAL ENGINEER.) SOILS THAT ARE SATURATED AND CANNOT BE RECONDITIONED IN SUFFICIENT TIME, WITHOUT AFFECTING THE PROJECT SCHEDULE, SHALL BE REMOVED AND REPLACED WITH SUITABLE COMPACTED SOIL (DENSE GRADED AGGREGATE) AT THE CONTRACTOR'S EXPENSE. SEE NOTE #1 ABOVE.
4. PROTECT ADJACENT AREAS TO MAINTAIN THEIR ORIGINAL CONDITION THROUGHOUT CONSTRUCTION. ANY AREAS DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO A "LIKE NEW" CONDITION AT THE CONTRACTOR'S EXPENSE.
5. MAINTAIN THE UNDERGROUND UTILITY MARK–OUT THROUGHOUT CONSTRUCTION.
6. PRESERVE AND MAINTAIN SURVEY CONTROL POINTS THROUGHOUT CONSTRUCTION.
7. SWEEP AND MAINTAIN ALL PAVEMENT AREAS TO A "BROOM CLEAN" CONDITION AROUND ALL WORK AREAS. SOIL AND DEBRIS SHALL NOT BE TRACKED OUTSIDE THE WORK AREA.
8. INSTALL TEMPORARY 6 FOOT HIGH CONSTRUCTION FENCING AS NEEDED TO SECURE THE SITE. THE OWNER RESERVES THE RIGHT TO REQUIRE THE INSTALLATION OF ADDITIONAL CONSTRUCTION FENCING TO MAINTAIN SITE SAFETY AND SECURITY AT NO ADDITIONAL COST. ALL TEMPORARY CONSTRUCTION FENCE THAT SERVES TO SECURE THE PERIMETER OF THE WORK AREA SHALL HAVE WIND/DUST SCREEN INSTALLED ALONG ALL SIDES. REFER TO THE PROJECT SPECIFICATIONS FOR TEMPORARY FENCING REQUIREMENTS.ALL CONSTRUCTION AREAS SHALL BE SECURED AT ALL TIMES FROM PUBLIC ACCESS. FURNISH LOCKABLE ACCESS GATES, AND MAN GATES AS NEEDED AND FURNISH THE OWNER DUPLICATE KEYS TO ALL LOCKS.

PROPERTY SURVEY INFORMATION

1. TOPOGRAPHIC INFORMATION SHOWN ON THIS MAPPING WAS PREPARED BY EDWARDS ENGINEERING GROUP IN AUGUST 2024.

SOIL EROSION & SEDIMENT CONTROL NOTES:

1. SEE THE SOIL EROSION & SEDIMENT CONTROL PLAN FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE USED THROUGHOUT THE PROJECT.
2. SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE LAND DISTURBANCE OR ANY DEMOLITION WORK THAT WILL CAUSE EXCAVATION INTO THE SUBGRADE SOILS.

UNDERGROUND UTILITIES:

1. ALL UNDERGROUND UTILITIES REPRESENTED ON THIS PLAN ARE SHOWN APPROXIMATELY. IN ALL CASES THE EXACT DEPTH, SIZE AND ALIGNMENT OF UNDERGROUND PIPES, WIRES, AND OTHER FEATURES SHALL BE CONSIDERED UNKNOWN AND MUST BE FIELD VERIFIED AT THE START OF THE PROJECT.
2. ENGAGE THE SERVICES OF A PRIVATE UNDERGROUND UTILITY LOCATING AND MARK OUT SERVICE TO PERFORM A MARK OUT OF THE ENTIRE SITE. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION ON THE MARK OUT AND REQUIRED TEST PITS.
3. CONDUCT TEST PITS AT ALL LOCATIONS WHERE UTILITIES ARE INDICATED TO BE VERIFIED IN FIELD (VIF) AND WHERE PROPOSED UNDERGROUND UTILITIES (STORM, SANITARY, ELECTRIC, GAS, DATA) WILL CONNECT TO OR CROSS EXISTING UNDERGROUND UTILITIES. RECORD THE DEPTH, SIZE, AND ALIGNMENT OF EACH UTILITY AT TEST PIT LOCATION. VERIFY UTILITY CROSSING CLEARANCES CAN BE ACHIEVED WITHOUT DEVIATING FROM THE DESIGN INTENT. REPORT TO THE OWNER'S REPRESENTATIVE ANY POTENTIAL CONFLICTS VIA THE R.F.I. PROCESS.

TEST PIT NOTES:

1. EXCAVATE TEST PITS AT THE COMMENCEMENT OF WORK TO VERIFY THE DEPTH, SIZE, PIPE MATERIAL AND ALIGNMENT OF EXISTING WATER AND SEWER UTILITIES AT THE POINT OF CONNECTION TO NEW SERVICES AND AT PROPOSED PIPE CROSSINGS. REPORT ANY POSSIBLE CONFLICTS TO THE ARCHITECT AND ENGINEER.
2. INCLUDE IN THE CONTRACT AN ADDITIONAL (12) TEST PITS TO BE USED AT THE ARCHITECT'S OR ENGINEER'S DISCRETION FOR ANY REASON WHATSOEVER. THE TEST PITS SHALL BE INCLUDE GEOTECHNICAL OVERSIGHT, MEASUREMENTS BY THE CONTRACTOR'S NJ LICENSED LAND SURVEYOR, DISPOSAL OF WASTE, AND BACKFILL AND COMPACTION OF EACH TEST PIT.

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE– NEW/RECONSTRUCT
□	■ / ◪	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	*GV* ⧓ *WV*	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——X——	FENCE
+70.25	*x70.25*	SPOT ELEVATIONS
68	*68*	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▨	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▨	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	══════	CURB/DEPRESSED CURB (DC)
	▨	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
– – – st – – –		STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
——//——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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Architect 2/12/26 Date

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Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln, Princeton, NJ 08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

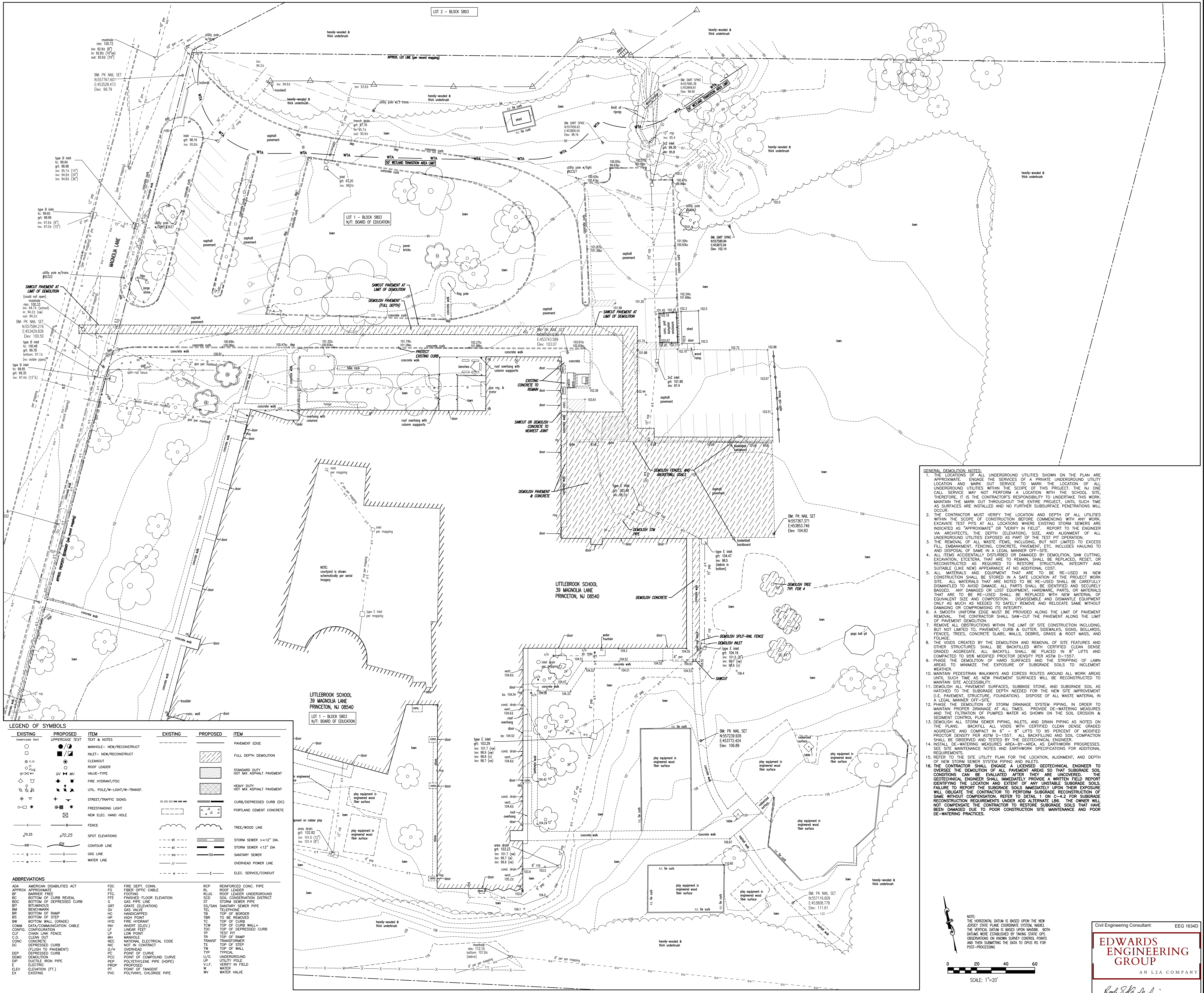
Scale

Drawing Name
EXISTING CONDITIONS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-1.0


LOT 2 - BLOCK 5803
APPROX. LOT LINE (per record mapping)
LOT 1 - BLOCK 5803
N/F: BOARD OF EDUCATION
MAGNOLIA LANE
50' WETLAND TRANSITION AREA LIMIT
WTA
heavily-wooded & thick underbrush
asphalt pavement
lawn
shed
SAWCUT PAVEMENT AT LIMIT OF DEMOLITION
DEMOLISH PAVEMENT (FULL DEPTH)
PROTECT EXISTING CURB
EXISTING CONCRETE TO REMAIN
SAWCUT OR DEMOLISH CONCRETE TO NEAREST JOINT
DEMOLISH PAVEMENT & CONCRETE
DEMOLISH FENCES, AND BASKETBALL GOALS
DEMOLISH STM PIPE
DEMOLISH CONCRETE
DEMOLISH TREE TYP. FOR 4
DEMOLISH SPLIT-RAIL FENCE
DEMOLISH INLET
SAWCUT
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
NOTE: courtyard is shown schematically per aerial imagery
play equipment in engineered wood fiber surface
gaga ball pit
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557367.371 E:453853.746 Elev: 104.83
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14

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 VIA 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.
16. **THE CONTRACTOR SHALL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO OVERSEE THE DEMOLITION OF ALL PAVEMENT AREAS SO THAT SUBGRADE SOIL CONDITIONS CAN BE EVALUATED AFTER THEY ARE UNCOVERED. THE GEOTECHNICAL ENGINEER SHALL IMMEDIATELY PROVIDE A WRITTEN FIELD REPORT IDENTIFYING THE LOCATION AND EXTENT OF ANY UNSTABLE SUBGRADE SOILS. FAILURE TO REPORT THE SUBGRADE SOILS IMMEDIATELY UPON THEIR EXPOSURE WILL OBLIGATE THE CONTRACTOR TO PERFORM SUBGRADE RECONSTRUCTION OF SAME WITHOUT COMPENSATION. REFER TO DETAIL 1 ON C–4.2 FOR SUBGRADE RECONSTRUCTION REQUIREMENTS UNDER ADD ALTERNATE LB6. THE OWNER WILL NOT COMPENSATE THE CONTRACTOR TO RESTORE SUBGRADE SOILS THAT HAVE BEEN DAMAGED DUE TO POOR CONSTRUCTION SITE MAINTENANCE AND POOR DE–WATERING PRACTICES.**

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE– NEW/RECONSTRUCT
□	■ / ◪	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	*GV* ⧓ *WV*	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	*x70.25*	SPOT ELEVATIONS
—68—	*68*	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	——————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▨	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▨	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	══════	CURB/DEPRESSED CURB (DC)
	▨	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
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– – – sa – – –	——SA——	SANITARY SEWER
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– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

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BR	BOTTOM OF RAMP
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BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
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DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
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FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
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NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING

0 20 40 60
SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
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Beth E Kenderdine 03.24.26
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Mont Clare - Pennsylvania 19453

F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name

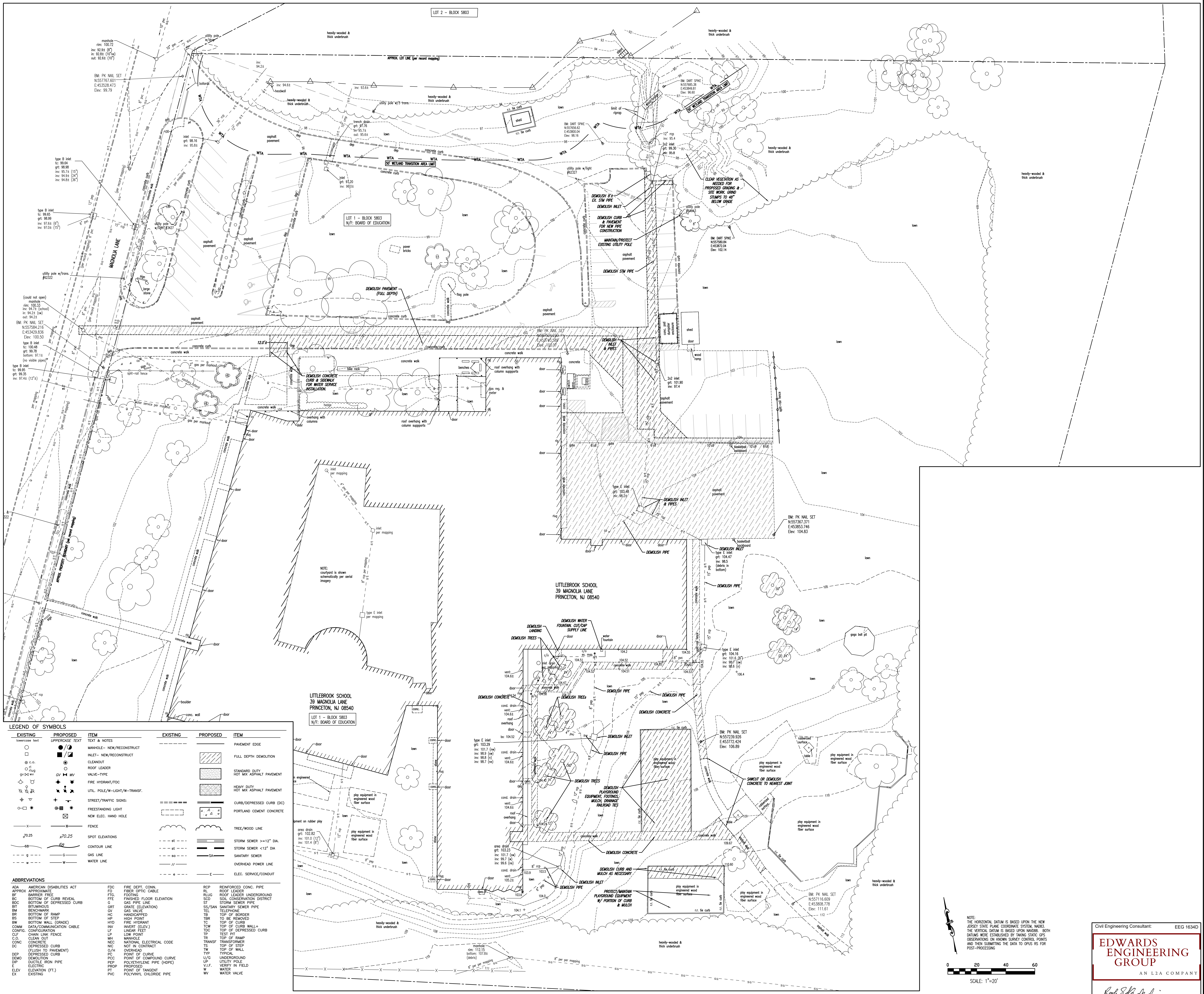
DEMOLITION PLAN

BASE BID

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-2.0 A2


LOT 2 - BLOCK 5803
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PRINCETON, NJ 08540
50' WETLAND TRANSITION AREA LIMIT
WTA
heavily-wooded & thick underbrush
lawn
asphalt pavement
concrete walk
concrete curb
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
BM: PK NAIL SET N:557367.371 E:453853.746 Elev: 104.83
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
CLEAR VEGETATION AS NEEDED FOR PROPOSED GRADING & SITE WORK. GRIND STUMPS TO 48" BELOW GRADE
DEMOLISH 8'± EX. STM PIPE
DEMOLISH INLET
DEMOLISH CURB & PAVEMENT FOR NEW PIPE CONSTRUCTION
MAINTAIN/PROTECT EXISTING UTILITY POLE
DEMOLISH STM PIPE
DEMOLISH PAVEMENT (FULL DEPTH)
DEMOLISH CONCRETE CURB & SIDEWALK FOR WATER SERVICE INSTALLATION.
DEMOLISH INLET & PIPES
DEMOLISH PIPE
DEMOLISH WATER FOUNTAIN. CUT/CAP SUPPLY LINE
DEMOLISH LANDING
DEMOLISH TREES
DEMOLISH CONCRETE
DEMOLISH PLAYGROUND EQUIPMENT, FOOTINGS, MULCH, DRAINAGE RAILROAD TIES
SAWCUT OR DEMOLISH CONCRETE TO NEAREST JOINT
DEMOLISH CURB AND MULCH AS NECESSARY
PROTECT/MAINTAIN PLAYGROUND EQUIPMENT W/ PORTION OF CURB & MULCH
NOTE: courtyard is shown schematically per aerial imagery
play equipment in engineered wood fiber surface
rubberized surface
gaga ball pit
conc. pad dumpster enclosure
shed
wood ramp
split-rail fence
basketball backboard
flag pole
bike rack
benches
hedge
roof overhang with column suppports
gas reg. & meter
manhole rim: 112.15 bottom: 107.8± (debris)

ALTERNATE BID LB1

SCALE: 1" = 20'

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	●/◐	MANHOLE- NEW/RECONSTRUCT
□	■/◪	INLET- NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⧓ WV	VALVE-TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W-LIGHT/W-TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
—68—	—68—	CONTOUR LINE
- - - g - - -	——G——	GAS LINE
- - - w - - -	——W——	WATER LINE
— — — —	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
		STANDARD DUTY HOT MIX ASPHALT PAVEMENT
		HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════		CURB/DEPRESSED CURB (DC)
		PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
- - - st - - -		STORM SEWER >=12" DIA.
- - - st - - -		STORM SEWER <12" DIA
- - - sa - - -	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
- - - e - - -	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
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NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST-PROCESSING

0 20 40 60
SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E. Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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

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NJ - 21AI01979800 | PA - RA406009
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435

Architect 2/12/26 Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

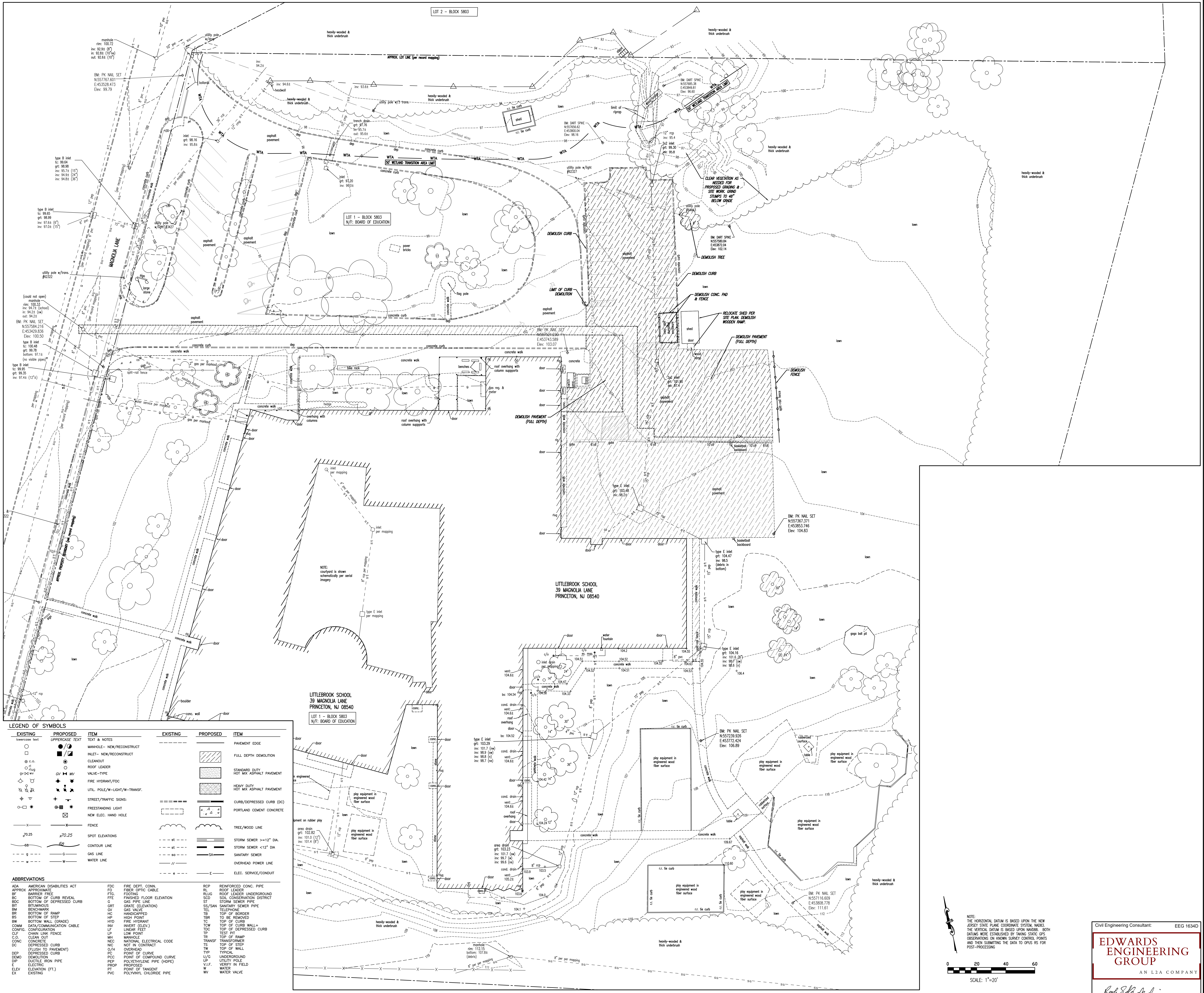
Drawing Name
DEMOLITION PLAN

ALTERNATE BIDS LB1

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-2.1 A2


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
LOT 1 – BLOCK 5803
N/F: BOARD OF EDUCATION
MAGNOLIA LANE
APPROX. PROPERTY BOUNDARY (per record mapping)
50' WETLAND TRANSITION AREA LIMIT
WTA
CLEAR VEGETATION AS NEEDED FOR PROPOSED GRADING & SITE WORK. GRIND STUMPS TO 48" BELOW GRADE
DEMOLISH CURB
DEMOLISH TREE
LIMIT OF CURB DEMOLITION
DEMOLISH CONC. PAD & FENCE
RELOCATE SHED PER SITE PLAN. DEMOLISH WOODEN RAMP.
DEMOLISH PAVEMENT (FULL DEPTH)
DEMOLISH FENCE
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: PK NAIL SET N:557367.371 E:453853.746 Elev: 104.83
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
NOTE: courtyard is shown schematically per aerial imagery
asphalt pavement
concrete walk
lawn
heavily-wooded & thick underbrush
play equipment in engineered wood fiber surface
0 20 40 60
SCALE: 1"=20'

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V.I.F.	VERIFY IN FIELD
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Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
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Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
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Princeton, NJ
08540

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

Scale

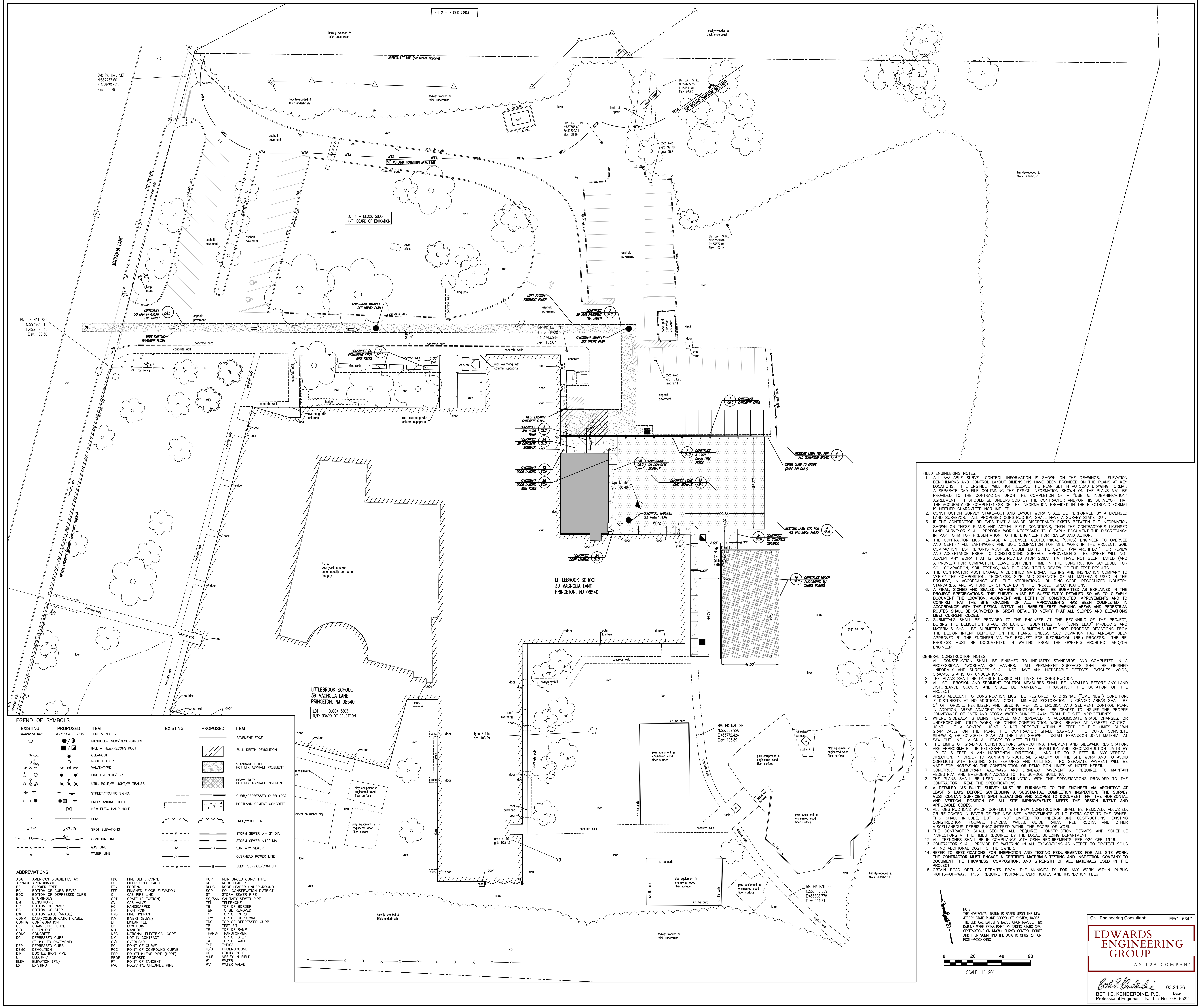
Drawing Name
DEMOLITION PLAN

ALTERNATE BID LB6

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-2.2 A2


LOT 2 – BLOCK 5803
heavily–wooded & thick underbrush
APPROX. LOT LINE (per record mapping)
steps
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
bollards
WTA
50' WETLAND TRANSITION AREA LIMIT
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
wood bridge
limit of riprap
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
2x2 inlet grt: 99.30 inv: 95.8
shed
r.r. tie curb
lawn
asphalt pavement
concrete curb
concrete walk
dep
MAGNOLIA LANE
sign
large stone
LOT 1 – BLOCK 5803 N/F: BOARD OF EDUCATION
paver bricks
flag pole
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
8"
CONSTRUCT MANHOLE SEE UTILITY PLAN
CONSTRUCT SD HMA PAVEMENT TYP. HATCH 3 C8.0
MEET EXISTING PAVEMENT FLUSH
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
14.92' +/-
conc. pad dumpster enclosure
door
wood ramp
2x2 inlet grt: 101.90 inv: 97.4
split–rail fence
CONSTRUCT (4) PERMANENT STEEL BIKE RACKS 13 C8.1
bike rack
2.00' TYP.
benches
roof overhang with column suppports
overhang with columns
roof overhang with column supports
hedge
concrete
conc.
CONSTRUCT CONCRETE CURB 1 C8.0
MEET EXISTING CONCRETE FLUSH
CONSTRUCT ADA CURB RAMP 4 C8.2
CONSTRUCT SD CONCRETE SIDEWALK 2A C8.0
CONSTRUCT DOOR LANDING 8A C8.0
CONSTRUCT DOOR LANDING WITH RISER 8B C8.0
CONSTRUCT 6' HIGH CHAIN LINK FENCE 7 C8.0
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS. 4 C8.0
TAPER CURB TO GRADE (BASE BID ONLY)
CONSTRUCT LIGHT DUTY ASPHALT 17 C8.0
type E inlet grt: 103.48
type E inlet grt: 104.47 inv: 98.5 (debris in bottom)
18.00'
6.00'
12.24'
64.23'
55.12'
52.20'
14.00'
4.00' TYP.
5.00'
15.67'
88.71'
75.00'
40.00'
CONSTRUCT MULCH PLAYGROUND W/ TIMBER BORDER 16 C8.0
gaga ball pit
rlg
rlug
LITTLEBROOK SCHOOL 39 MAGNOLIA LANE PRINCETON, NJ 08540
NOTE: courtyard is shown schematically per aerial imagery
water fountain
24"
14"
30"
36"
12"
roof overhang
play equipment in engineered wood fiber surface
equipment on rubber play
rubberized surface
table
area drain grt: 103.23
type E inlet grt: 103.29
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
boulder
conc. wall

LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540

LOT 1 – BLOCK 5803
N/F: BOARD OF EDUCATION

FIELD ENGINEERING NOTES:

1. ALL AVAILABLE SURVEY CONTROL INFORMATION IS SHOWN ON THE DRAWINGS. ELEVATION BENCHMARKS AND CONTROL LAYOUT DIMENSIONS HAVE BEEN PROVIDED ON THE PLANS AT KEY LOCATIONS. THE ENGINEER WILL NOT RELEASE THE PLAN SET IN AUTOCAD DRAWING FORMAT. A SEPARATE CAD FILE CONTAINING THE DESIGN INFORMATION SHOWN ON THE PLANS MAY BE PROVIDED TO THE CONTRACTOR UPON THE COMPLETION OF A "USE & INDEMNIFICATION" AGREEMENT. IT SHOULD BE UNDERSTOOD BY THE CONTRACTOR AND/OR HIS SURVEYOR THAT THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED IN THE ELECTRONIC FORMAT IS NEITHER GUARANTEED NOR IMPLIED.
2. CONSTRUCTION SURVEY STAKE–OUT AND LAYOUT WORK SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR. ALL PROPOSED CONSTRUCTION SHALL HAVE A SURVEY STAKE OUT.
3. IF THE CONTRACTOR BELIEVES THAT A MAJOR DISCREPANCY EXISTS BETWEEN THE INFORMATION SHOWN ON THESE PLANS AND ACTUAL FIELD CONDITIONS, THEN THE CONTRACTOR'S LICENSED LAND SURVEYOR SHALL PERFORM WORK NECESSARY TO CLEARLY DOCUMENT THE DISCREPANCY IN MAP FORM FOR PRESENTATION TO THE ENGINEER FOR REVIEW AND ACTION.
4. THE CONTRACTOR MUST ENGAGE A LICENSED GEOTECHNICAL (SOILS) ENGINEER TO OVERSEE AND CERTIFY ALL EARTHWORK AND SOIL COMPACTION FOR SITE WORK IN THE PROJECT. SOIL COMPACTION TEST REPORTS MUST BE SUBMITTED TO THE OWNER (VIA ARCHITECT) FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTING SURFACE IMPROVEMENTS. THE OWNER WILL NOT ACCEPT ANY WORK THAT IS CONSTRUCTED ATOP SOILS THAT HAVE NOT BEEN TESTED (AND APPROVED) FOR COMPACTION. LEAVE SUFFICIENT TIME IN THE CONSTRUCTION SCHEDULE FOR SOIL COMPACTION, SOIL TESTING, AND THE ARCHITECT'S REVIEW OF THE TEST RESULTS.
5. THE CONTRACTOR MUST ENGAGE A CERTIFIED MATERIALS TESTING AND INSPECTION COMPANY TO VERIFY THE COMPOSITION, THICKNESS, SIZE, AND STRENGTH OF ALL MATERIALS USED IN THE PROJECT, IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, RECOGNIZED INDUSTRY STANDARDS, AND AS FURTHER STIPULATED IN THE PROJECT SPECIFICATIONS.
6. **A FINAL, SIGNED AND SEALED, AS–BUILT SURVEY MUST BE SUBMITTED AS EXPLAINED IN THE PROJECT SPECIFICATIONS. THE SURVEY MUST BE SUFFICIENTLY DETAILED SO AS TO CLEARLY DOCUMENT THE LOCATION, ALIGNMENT AND DEPTH OF CONSTRUCTED IMPROVEMENTS AND TO CONFIRM THAT THE SITE GRADING OF ALL IMPROVEMENTS HAS BEEN COMPLETED IN ACCORDANCE WITH THE DESIGN INTENT. ALL BARRIER–FREE PARKING AREAS AND PEDESTRIAN ROUTES SHALL BE SURVEYED IN GREAT DETAIL TO VERIFY THAT ALL SLOPES AND ELEVATIONS MEET CURRENT CODES.**
7. SUBMITTALS SHALL BE PROVIDED TO THE ENGINEER AT THE BEGINNING OF THE PROJECT, DURING THE DEMOLITION STAGE OR EARLIER. SUBMITTALS FOR "LONG LEAD" PRODUCTS AND MATERIALS SHALL BE SUBMITTED FIRST. SUBMITTALS MUST NOT PROPOSE DEVIATIONS FROM THE DESIGN INTENT DEPICTED ON THE PLANS, UNLESS SAID DEVIATION HAS ALREADY BEEN APPROVED BY THE ENGINEER VIA THE REQUEST FOR INFORMATION (RFI) PROCESS. THE RFI PROCESS MUST BE DOCUMENTED IN WRITING FROM THE OWNER'S ARCHITECT AND/OR ENGINEER.

GENERAL CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL BE FINISHED TO INDUSTRY STANDARDS AND COMPLETED IN A PROFESSIONAL "WORKMANLIKE" MANNER. ALL PERMANENT SURFACES SHALL BE FINISHED UNIFORMLY AND SURFACES SHALL NOT HAVE ANY NOTICEABLE DEFECTS, PATCHES, VOIDS, CRACKS, STAINS OR UNDULATIONS.
2. THE PLANS SHALL BE ON–SITE DURING ALL TIMES OF CONSTRUCTION.
3. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE ANY LAND DISTURBANCE OCCURS AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
4. AREAS ADJACENT TO CONSTRUCTION MUST BE RESTORED TO ORIGINAL ("LIKE NEW") CONDITION, IF DISTURBED, AT NO ADDITIONAL COST. MINIMUM RESTORATION IN GRADED AREAS SHALL BE 5" OF TOPSOIL, FERTILIZER, AND SEEDING PER SOIL EROSION AND SEDIMENT CONTROL PLAN. IN ADDITION, AREAS ADJACENT TO CONSTRUCTION SHALL BE GRADED TO INSURE THE PROPER CONVEYANCE OF OVERLAND STORM WATER RUNOFF AWAY FROM THE SITE IMPROVEMENTS.
5. WHERE SIDEWALK IS BEING REMOVED AND REPLACED TO ACCOMMODATE GRADE CHANGES, OR UNDERGROUND UTILITY WORK, OR OTHER CONSTRUCTION WORK, REMOVE AT NEAREST CONTROL JOINT. IF A CONTROL JOINT IS NOT PRESENT WITHIN 5 FEET OF THE LIMITS SHOWN GRAPHICALLY ON THE PLAN, THE CONTRACTOR SHALL SAW–CUT THE CURB, CONCRETE SIDEWALK, OR CONCRETE SLAB, AT THE LIMIT SHOWN. INSTALL EXPANSION JOINT MATERIAL AT SAW–CUT LINE. ALIGN ALL EDGES TO MEET FLUSH.
6. THE LIMITS OF GRADING, CONSTRUCTION, SAW–CUTTING, PAVEMENT AND SIDEWALK RESTORATION, ARE APPROXIMATE. IF NECESSARY, INCREASE THE DEMOLITION AND RECONSTRUCTION LIMITS BY UP TO 5 FEET IN ANY HORIZONTAL DIRECTION, AND UP TO 2 FEET IN ANY VERTICAL DIRECTION, IN ORDER TO MAINTAIN STRUCTURAL STABILITY OF THE SITE WORK AND TO AVOID CONFLICTS WITH EXISTING SITE FEATURES AND UTILITIES. NO SEPARATE PAYMENT WILL BE MADE FOR INCREASING THE CONSTRUCTION OR DEMOLITION LIMITS AS NOTED HEREIN.
7. CONSTRUCT TEMPORARY WALKWAYS AND DRIVEWAY PAVEMENT AS REQUIRED TO MAINTAIN PEDESTRIAN AND EMERGENCY ACCESS TO THE SCHOOL BUILDING.
8. THE PLANS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS PROVIDED TO THE CONTRACTOR. READ THE SPECIFICATIONS.
9. **A DETAILED "AS–BUILT" SURVEY MUST BE FURNISHED TO THE ENGINEER VIA ARCHITECT AT LEAST 5 DAYS BEFORE SCHEDULING A SUBSTANTIAL COMPLETION INSPECTION. THE SURVEY MUST CONTAIN SUFFICIENT SPOT ELEVATIONS AND SLOPES TO DOCUMENT THAT THE HORIZONTAL AND VERTICAL POSITION OF ALL SITE IMPROVEMENTS MEETS THE DESIGN INTENT AND APPLICABLE CODES.**
10. ALL OBSTRUCTIONS WHICH CONFLICT WITH NEW CONSTRUCTION SHALL BE REMOVED, ADJUSTED, OR RELOCATED IN FAVOR OF THE NEW SITE IMPROVEMENTS AT NO EXTRA COST TO THE OWNER. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO UNDERGROUND OBSTRUCTIONS, EXISTING CONSTRUCTION, FOLIAGE, FENCES, WALLS, GUIDE RAILS, TREE ROOTS, AND OTHER MISCELLANEOUS DEBRIS ENCOUNTERED WITHIN THE SCOPE OF WORK.
11. THE CONTRACTOR SHALL SECURE ALL REQUIRED CONSTRUCTION PERMITS AND SCHEDULE INSPECTIONS AT THE TIMES REQUIRED BY THE LOCAL BUILDING DEPARTMENT.
12. ALL TRENCHES SHALL BE IN COMPLIANCE WITH OSHA REQUIREMENTS, PER 029 CFR 1926.
13. CONTRACTOR SHALL PROVIDE DE–WATERING IN ALL EXCAVATIONS AS NEEDED TO PROTECT SOILS AT NO ADDITIONAL COST TO THE OWNER.
14. **REFER TO SPECIFICATIONS FOR INSPECTION AND TESTING REQUIREMENTS FOR ALL SITE WORK. THE CONTRACTOR MUST ENGAGE A CERTIFIED MATERIALS TESTING AND INSPECTION COMPANY TO DOCUMENT THE THICKNESS, COMPOSITION, AND STRENGTH OF ALL MATERIALS USED IN THE PROJECT.**
15. OBTAIN ROAD OPENING PERMITS FROM THE MUNICIPALITY FOR ANY WORK WITHIN PUBLIC RIGHTS–OF–WAY. POST REQUIRE INSURANCE CERTIFICATES AND INSPECTION FEES.

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		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	*x70.25*	SPOT ELEVATIONS
~68~	*68*	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	——————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▒	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▩	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	══════	CURB/DEPRESSED CURB (DC)
┌ – – ┐	▭	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
– – – st – – –	▬ ▬	STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

FVHD architects planners
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Architect 2/12/26 Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln, Princeton, NJ 08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
SITE LAYOUT PLAN

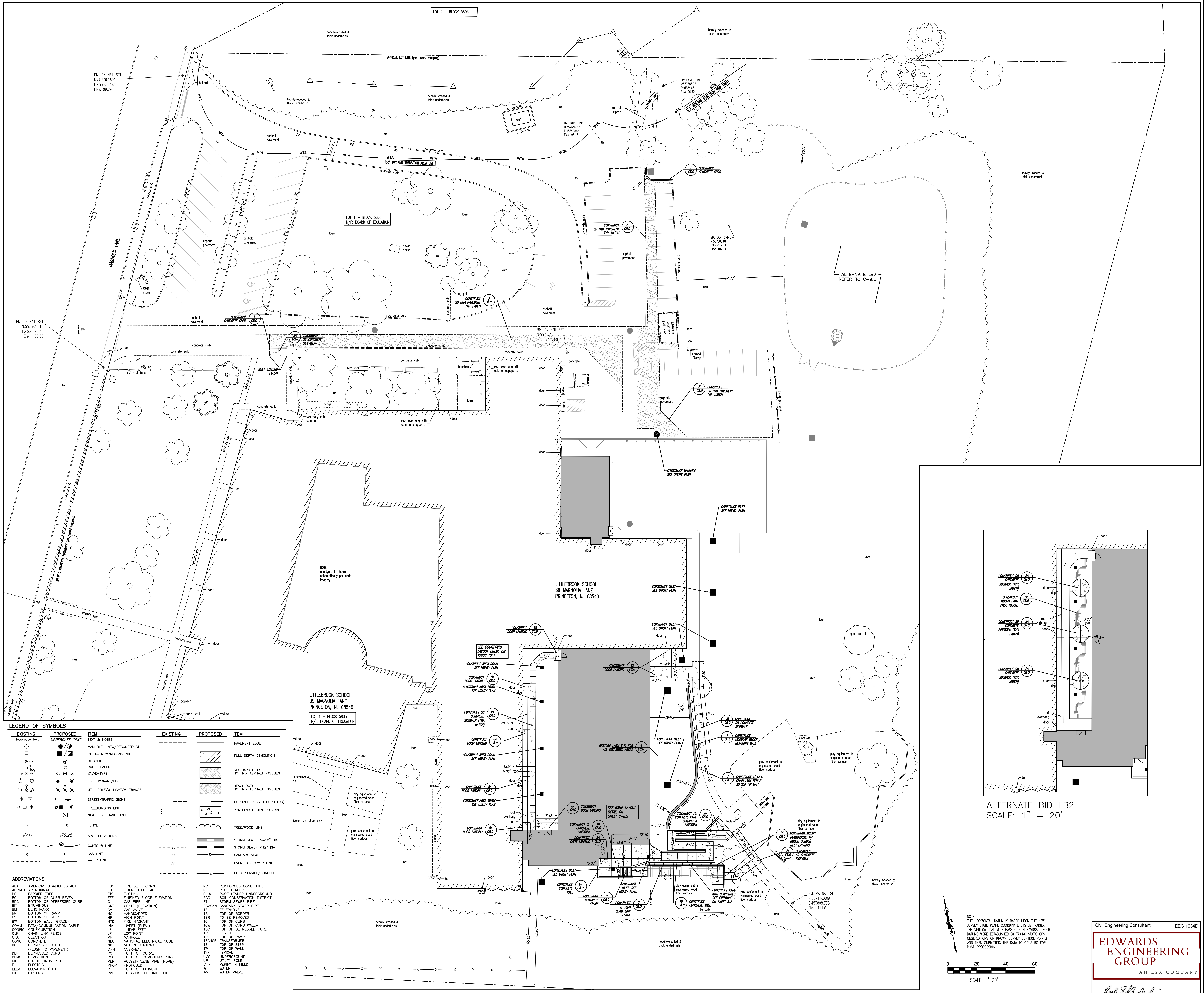
BASE BID

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-3.0 A2

NJDCA Electronic Release Stamp


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
heavily–wooded & thick underbrush
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
bollards
MAGNOLIA LANE
WTA
50' WETLAND TRANSITION AREA LIMIT
asphalt pavement
lawn
shed
r.r. tie curb
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
limit of riprap
wood bridge
steps
LOT 1 – BLOCK 5803 N/F: BOARD OF EDUCATION
paver bricks
flag pole
concrete curb
concrete walk
dep
sign
large stone
CONSTRUCT CONCRETE CURB 1 C8.0
CONSTRUCT SD HMA PAVEMENT TYP. HATCH 3 C8.0
CONSTRUCT SD CONCRETE SIDEWALK 2A C8.0
MEET EXISTING FLUSH
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
split–rail fence
bike rack
benches
hedge
roof overhang with column suppports
overhang with columns
concrete
door
conc.
R5.00'
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
74.70'
R20.00'
ALTERNATE LB7 REFER TO C–9.0
conc. pad dumpster enclosure
wood ramp
CONSTRUCT MANHOLE SEE UTILITY PLAN
CONSTRUCT INLET SEE UTILITY PLAN
NOTE: courtyard is shown schematically per aerial imagery
LITTLEBROOK SCHOOL 39 MAGNOLIA LANE PRINCETON, NJ 08540
boulder
conc. wall
gaga ball pit
SEE COURTYARD LAYOUT DETAIL ON SHEET C8.2
CONSTRUCT DOOR LANDING 8A C8.0
CONSTRUCT AREA DRAIN SEE UTILITY PLAN
CONSTRUCT SD CONCRETE SIDEWALK (TYP. HATCH) 2A C8.0
roof overhang
rlug
4.00' TYP.
5.00' TYP.
15.43'
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS. 4 C8.0
SEE RAMP LAYOUT DETAIL ON SHEET C–8.2
VARIES
2.50' TYP.
CONSTRUCT MODULAR BLOCK RETAINING WALL 1 C8.1
CONSTRUCT 4' HIGH CHAIN LINK FENCE AT TOP OF WALL 7 C8.0
R30.00'
R20.00'
CONSTRUCT HD CONCRETE RAMP LANDING & SIDEWALK 2B C8.0
33.40'
26.00'
13.61'
20.00'
34.59'
CONSTRUCT MULCH PLAYGROUND W/ TIMBER BORDER MEET EXISTING. 16 C8.0
CONSTRUCT CONCRETE WALL 10 C8.0
CONSTRUCT CONCRETE STAIRS 9 C8.0
CONSTRUCT 6' HIGH CHAIN LINK FENCE 7 C8.0
CONSTRUCT INLET. SEE UTILITY PLAN.
CONSTRUCT RAMP WITH GUARDRAILS SEE ENTRANCE 1 ON SHEET 8.2
play equipment in engineered wood fiber surface
rubberized surface
table
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
asphalt walk
65.15'
83.07'
CONSTRUCT MULCH PATH (TYP. HATCH) 12 C8.0
3.00' TYP.
R6.00' TYP.
2.00' TYP.

ALTERNATE BID LB1

SCALE: 1" = 20'

ALTERNATE BID LB2
SCALE: 1" = 20'

NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING

0 20 40 60
SCALE: 1"=20'

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE– NEW/RECONSTRUCT
□	■ / ◩	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⋈ WV	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
——68——	——68——	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE
– – – – – –	———	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▒	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▩	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
======	══━━	CURB/DEPRESSED CURB (DC)
┌ – – ┐	◬	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –	═══	STORM SEWER >=12" DIA.
– – – st – – –	━ ━	STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
——//——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

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INV	INVERT (ELEV.)
LF	LINEAR FEET
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NIC	NOT IN CONTRACT
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PEP	POLYETHYLENE PIPE (HDPE)
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RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

Civil Engineering Consultant: EEG 1634D

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Architect 2/12/26 Date

Project Name
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Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

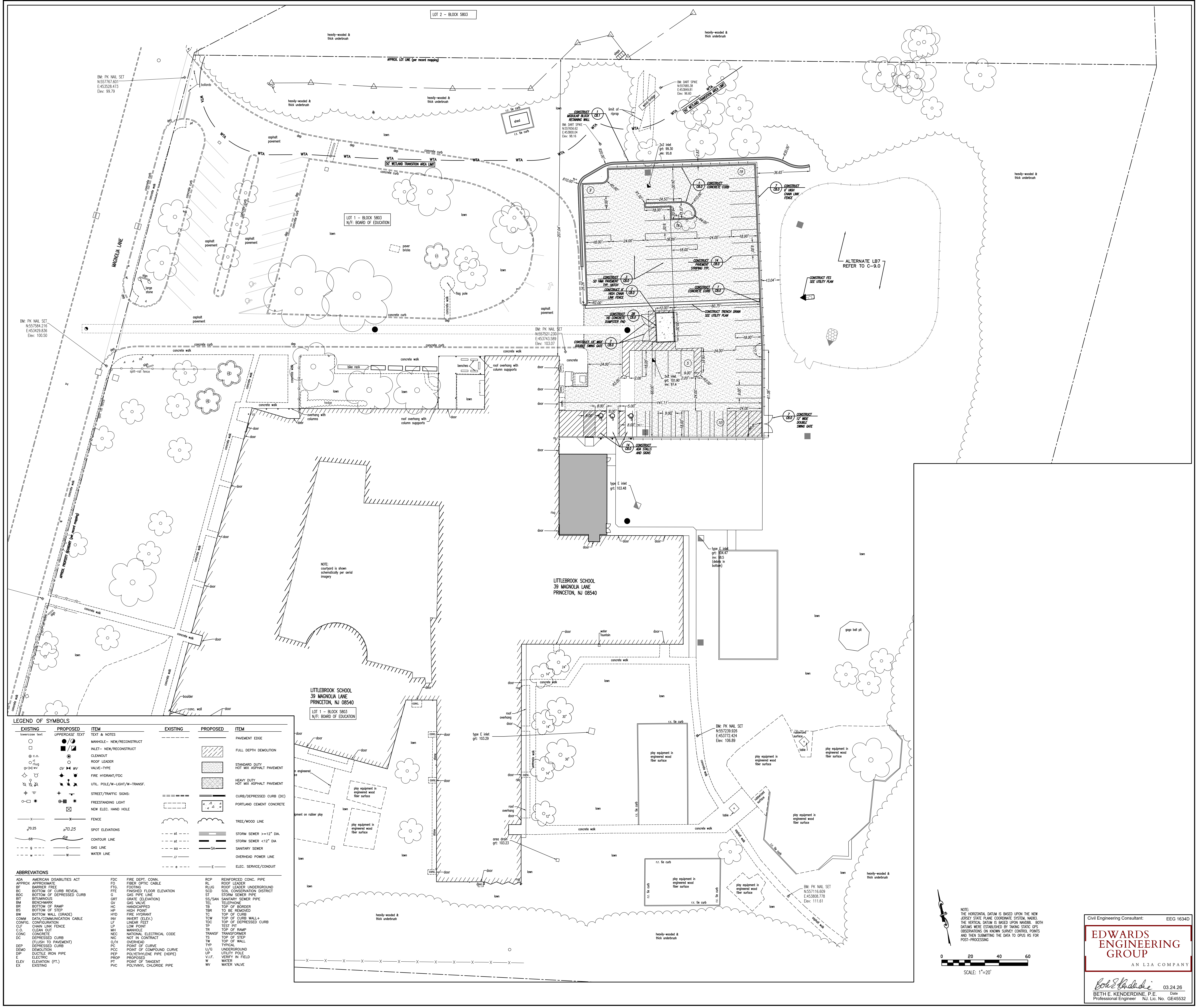
Drawing Name
SITE LAYOUT PLAN

ALTERNATE BIDS LB1 & LB2

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-3.1 A2


LOT 2 – BLOCK 5803
heavily–wooded & thick underbrush
APPROX. LOT LINE (per record mapping)
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
50' WETLAND TRANSITION AREA LIMIT
WTA
MAGNOLIA LANE
LOT 1 – BLOCK 5803 N/F: BOARD OF EDUCATION
asphalt pavement
lawn
shed
r.r. tie curb
bollards
flag pole
paver bricks
concrete curb
concrete walk
split–rail fence
bike rack
benches
roof overhang with column supports
overhang with columns
hedge
door
steps
wood bridge
limit of riprap
CONSTRUCT MODULAR BLOCK RETAINING WALL 1 C8.1
2x2 inlet grt: 99.30 inv: 95.8
CONSTRUCT CONCRETE CURB 1 C8.0
CONSTRUCT 6' HIGH CHAIN LINK FENCE 7 C8.0
CONSTRUCT PAVEMENT STRIPING TYP. 14 C8.0
CONSTRUCT SD HMA PAVEMENT TYP. HATCH 3 C8.0
CONSTRUCT 8' HIGH CHAIN LINK FENCE 7 C8.0
CONSTRUCT TRENCH DRAIN SEE UTILITY PLAN
CONSTRUCT HD CONCRETE DUMPSTER PAD 2B C8.0
CONSTRUCT 18' WIDE DOUBLE SWING GATE 7 C8.0
2x2 inlet grt: 101.90 inv: 97.4
CONSTRUCT 12' WIDE DOUBLE SWING GATE 7 C8.0
CONSTRUCT ADA STALLS AND SIGNS 14 C8.0
CONSTRUCT FES SEE UTILITY PLAN
ALTERNATE LB7 REFER TO C–9.0
207.04'
36.65'
13.04'
60.75'
141.11'
61.08'
type E inlet grt: 103.48
type E inlet grt: 104.47 inv: 98.5 (details in bottom)
type E inlet grt: 103.29
area drain grt: 103.23
NOTE: courtyard is shown schematically per aerial imagery
LITTLEBROOK SCHOOL 39 MAGNOLIA LANE PRINCETON, NJ 08540
water fountain
boulder
conc. wall
gaga ball pit
play equipment in engineered wood fiber surface
rubberized surface
table
heavily–wooded & thick underbrush

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◑	MANHOLE– NEW/RECONSTRUCT
□	■ / ◪	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⧓ WV	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	☒	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
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– – – g – – –	——G——	GAS LINE
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EXISTING	PROPOSED	ITEM
– – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
		STANDARD DUTY HOT MIX ASPHALT PAVEMENT
		HEAVY DUTY HOT MIX ASPHALT PAVEMENT
═ ═ ═ ═	═══	CURB/DEPRESSED CURB (DC)
		PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
– – – st – – –		STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT	FDC	FIRE DEPT. CONN.	RCP	REINFORCED CONC. PIPE
APPROX	APPROXIMATE	FO	FIBER OPTIC CABLE	RL	ROOF LEADER
BF	BARRIER FREE	FTG.	FOOTING	RLUG	ROOF LEADER UNDERGROUND
BC	BOTTOM OF CURB REVEAL	FFE	FINISHED FLOOR ELEVATION	SCD	SOIL CONSERVATION DISTRICT
BDC	BOTTOM OF DEPRESSED CURB	G	GAS PIPE LINE	ST	STORM SEWER PIPE
BIT	BITUMINOUS	GRT	GRATE (ELEVATION)	SS/SAN	SANITARY SEWER PIPE
BM	BENCHMARK	GV	GAS VALVE	TEL	TELEPHONE
BR	BOTTOM OF RAMP	HC	HANDICAPPED	TB	TOP OF BORDER
BS	BOTTOM OF STEP	HP	HIGH POINT	TBR	TO BE REMOVED
BW	BOTTOM WALL (GRADE)	HYD	FIRE HYDRANT	TC	TOP OF CURB
COMM	DATA/COMMUNICATION CABLE	INV	INVERT (ELEV.)	TCW	TOP OF CURB WALL+
CONFIG.	CONFIGURATION	LF	LINEAR FEET	TDC	TOP OF DEPRESSED CURB
CLF	CHAIN LINK FENCE	LP	LOW POINT	TP	TEST PIT
C.O.	CLEAN OUT	MH	MANHOLE	TR	TOP OF RAMP
CONC	CONCRETE	NEC	NATIONAL ELECTRICAL CODE	TRANSF	TRANSFORMER
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)	NIC	NOT IN CONTRACT	TS	TOP OF STEP
DEP	DEPRESSED CURB	O/H	OVERHEAD	TW	TOP OF WALL
DEMO	DEMOLITION	PC	POINT OF CURVE	TYP	TYPICAL
DIP	DUCTILE IRON PIPE	PCC	POINT OF COMPOUND CURVE	U/G	UNDERGROUND
E	ELECTRIC	PEP	POLYETHYLENE PIPE (HDPE)	UP	UTILITY POLE
ELEV	ELEVATION (FT.)	PROP	PROPOSED	V.I.F.	VERIFY IN FIELD
EX	EXISTING	PT	POINT OF TANGENT	W	WATER
		PVC	POLYVINYL CHLORIDE PIPE	WV	WATER VALVE

NOTE:
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0 20 40 60
SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

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5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

Scale

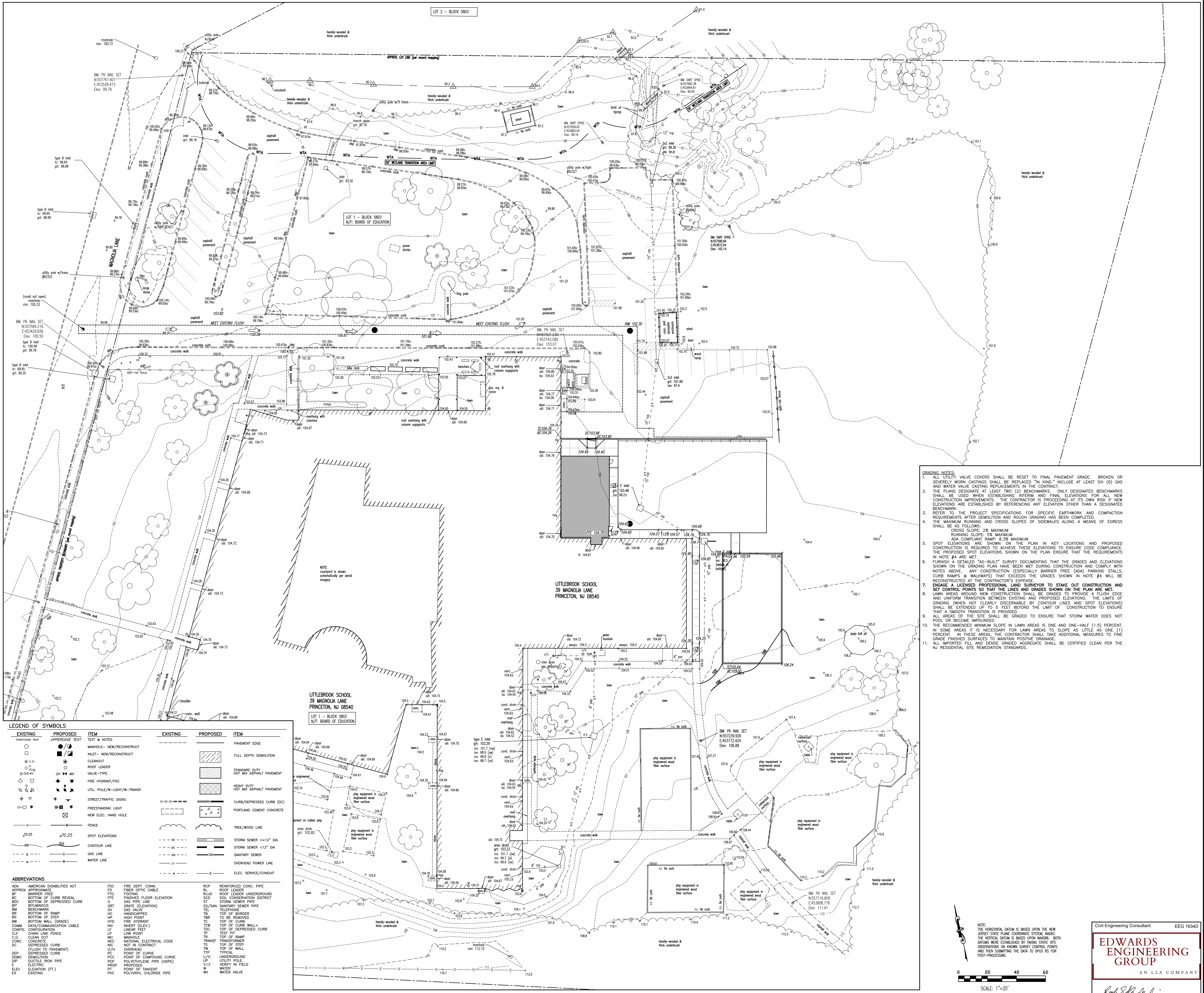
Drawing Name
SITE LAYOUT PLAN

ALTERNATE BID LB6

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-3.2 A2


LOT 2 - BLOCK 5803
APPROX. LOT LINE (per record mapping)
50' WETLAND TRANSITION AREA LIMIT
WTA
LOT 1 - BLOCK 5803
N/F: BOARD OF EDUCATION
MAGNOLIA LANE
APPROX. PROPERTY BOUNDARY (per record mapping)
manhole rim: 100.72
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
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heavily-wooded & thick underbrush
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concrete curb
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LITTLEBROOK SCHOOL
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NOTE: courtyard is shown schematically per aerial imagery
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0 20 40 60
SCALE: 1"=20'

GRADING NOTES:

1. ALL UTILITY VALVE COVERS SHALL BE RESET TO FINAL PAVEMENT GRADE. BROKEN OR SEVERELY WORN CASTINGS SHALL BE REPLACED "IN KIND." INCLUDE AT LEAST SIX (6) GAS AND WATER VALVE CASTING REPLACEMENTS IN THE CONTRACT.
2. THE PLANS DESIGNATE AT LEAST TWO (2) BENCHMARKS. ONLY DESIGNATED BENCHMARKS SHALL BE USED WHEN ESTABLISHING INTERIM AND FINAL ELEVATIONS FOR ALL NEW CONSTRUCTION IMPROVEMENTS. THE CONTRACTOR IS PROCEEDING AT ITS OWN RISK IF NEW ELEVATIONS ARE ESTABLISHED BY REFERENCING ANY ELEVATION OTHER THAN A DESIGNATED BENCHMARK.
3. REFER TO THE PROJECT SPECIFICATIONS FOR SPECIFIC EARTHWORK AND COMPACTION REQUIREMENTS AFTER DEMOLITION AND ROUGH GRADING HAS BEEN COMPLETED.
4. THE MAXIMUM RUNNING AND CROSS SLOPES OF SIDEWALKS ALONG A MEANS OF EGRESS SHALL BE AS FOLLOWS:
   CROSS SLOPE: 2% MAXIMUM
   RUNNING SLOPE: 5% MAXIMUM
   ADA COMPLIANT RAMP: 8.3% MAXIMUM
5. SPOT ELEVATIONS ARE SHOWN ON THE PLAN IN KEY LOCATIONS AND PROPOSED CONSTRUCTION IS REQUIRED TO ACHIEVE THESE ELEVATIONS TO ENSURE CODE COMPLIANCE. THE PROPOSED SPOT ELEVATIONS SHOWN ON THE PLAN ENSURE THAT THE REQUIREMENTS IN NOTE #4 ARE MET.
6. FURNISH A DETAILED "AS-BUILT" SURVEY DOCUMENTING THAT THE GRADES AND ELEVATIONS SHOWN ON THE GRADING PLAN HAVE BEEN MET DURING CONSTRUCTION AND COMPLY WITH NOTES ABOVE. ANY CONSTRUCTION (ESPECIALLY BARRIER FREE (ADA) PARKING STALLS, CURB RAMPS & WALKWAYS) THAT EXCEEDS THE GRADES SHOWN IN NOTE #4 WILL BE RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
7. **ENGAGE A LICENSED PROFESSIONAL LAND SURVEYOR TO STAKE OUT CONSTRUCTION AND SET CONTROL POINTS SO THAT THE LINES AND GRADES SHOWN ON THE PLAN ARE MET.**
8. LAWN AREAS AROUND NEW CONSTRUCTION SHALL BE GRADED TO PROVIDE A FLUSH EDGE AND UNIFORM TRANSITION BETWEEN EXISTING AND PROPOSED ELEVATIONS. THE LIMITS OF GRADING (WHEN NOT CLEARLY DISCERNABLE BY CONTOUR LINES AND SPOT ELEVATIONS) SHALL BE EXTENDED UP TO 5 FEET BEYOND THE LIMIT OF CONSTRUCTION TO ENSURE THAT A SMOOTH TRANSITION IS PROVIDED.
9. ALL AREAS OF THE SITE SHALL BE GRADED TO ENSURE THAT STORM WATER DOES NOT POOL OR BECOME IMPOUNDED.
10. THE RECOMMENDED MINIMUM SLOPE IN LAWN AREAS IS ONE AND ONE-HALF (1.5) PERCENT. IN SOME AREAS IT IS NECESSARY FOR LAWN AREAS TO SLOPE AS LITTLE AS ONE (1) PERCENT. IN THESE AREAS, THE CONTRACTOR SHALL TAKE ADDITIONAL MEASURES TO FINE GRADE FINISHED SURFACES TO MAINTAIN POSITIVE DRAINAGE.
11. ALL IMPORTED FILL AND DENSE GRADED AGGREGATE SHALL BE CERTIFIED CLEAN PER THE NJ RESIDENTIAL SITE REMEDIATION STANDARDS.

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE- NEW/RECONSTRUCT
□	■ / ◪	INLET- NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⋈ WV	VALVE-TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W-LIGHT/W-TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	☒	NEW ELEC. HAND HOLE
——x——	——X——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
—68—	—68—	CONTOUR LINE
- - - g - - -	——G——	GAS LINE
- - - w - - -	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
- - - - - -	———	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▨	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▨	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
======	═══	CURB/DEPRESSED CURB (DC)
⬚	▨	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
- - - st - - -	═══	STORM SEWER >=12" DIA.
- - - st - - -	━━ ━━	STORM SEWER <12" DIA
- - - sa - - -	——SA——	SANITARY SEWER
——//——		OVERHEAD POWER LINE
- - - e - - -	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
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PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
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TRANSF	TRANSFORMER
TS	TOP OF STEP
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TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
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Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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Architect 2/12/26 Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
SITE GRADING PLAN

BASE BID

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
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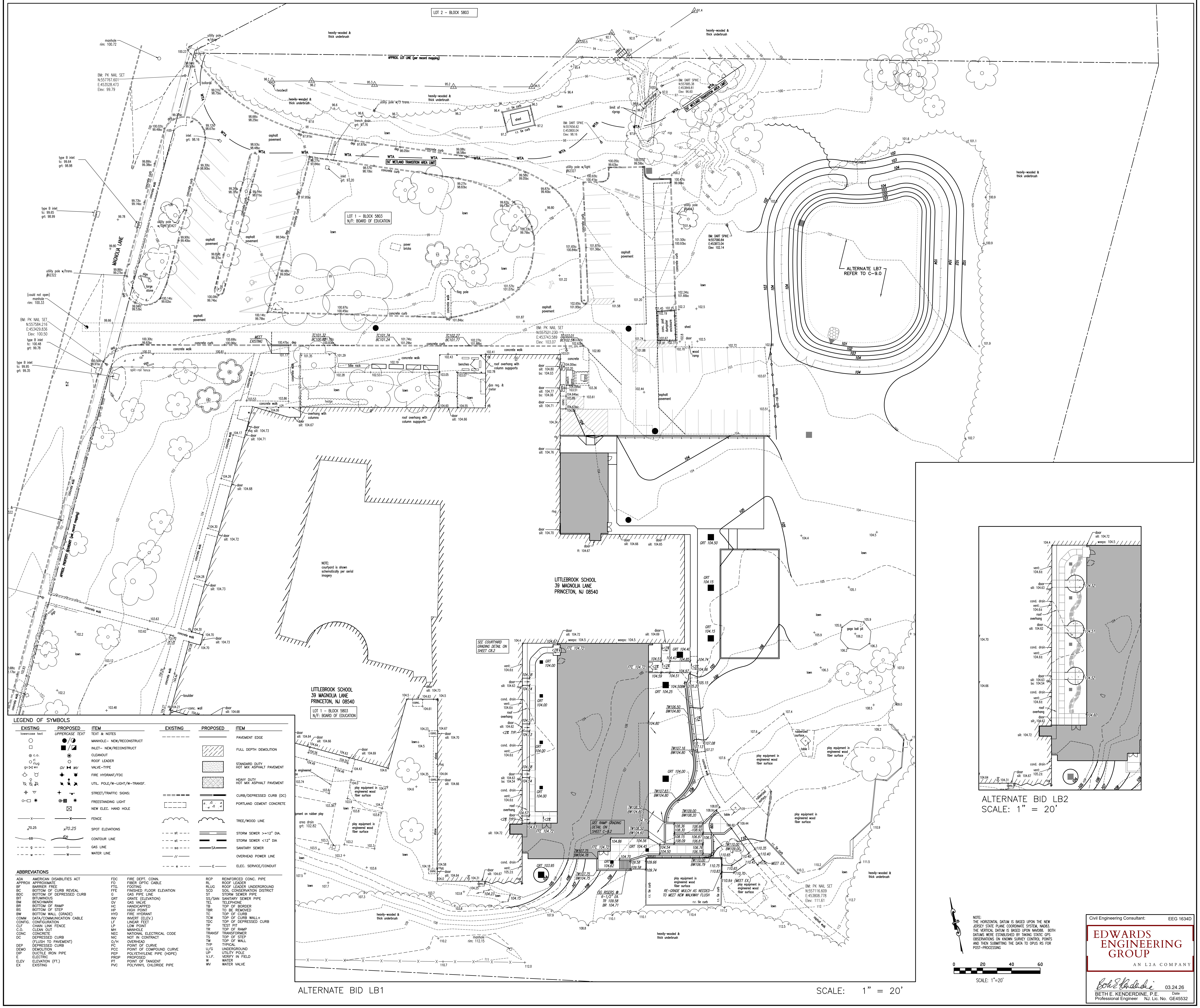
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-4.0 A2


LOT 2 - BLOCK 5803
APPROX. LOT LINE (per record mapping)
50' WETLAND TRANSITION AREA LIMIT
WTA
heavily-wooded & thick underbrush
MAGNOLIA LANE
APPROX. PROPERTY BOUNDARY (per record mapping)
LOT 1 - BLOCK 5803
N/F: BOARD OF EDUCATION
asphalt pavement
concrete walk
lawn
shed
flag pole
BM: PK NAIL SET
BM: DART SPIKE
ALTERNATE LB7
REFER TO C-9.0
NOTE: courtyard is shown schematically per aerial imagery
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
SEE COURTYARD GRADING DETAIL ON SHEET C8.2
SEE RAMP GRADING DETAIL ON SHEET C-8.2
(6) RISERS @ 6-1/2" EA.
RE-GRADE MULCH AS NEEDED TO MEET NEW WALKWAY FLUSH
play equipment in engineered wood fiber surface
rubberized surface
gaga ball pit
MEET EX.
0
20
40
60
SCALE: 1"=20'

ALTERNATE BID LB1 SCALE: 1" = 20'

ALTERNATE BID LB2
SCALE: 1" = 20'

LEGEND OF SYMBOLS

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gv ⋈ wv	*GV* ⧓ *WV*	VALVE–TYPE
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		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
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——x——	——x——	FENCE
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Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
SITE GRADING PLAN

ALTERNATE BIDS LB1 & LB2

Revisions

No.	Date	Description
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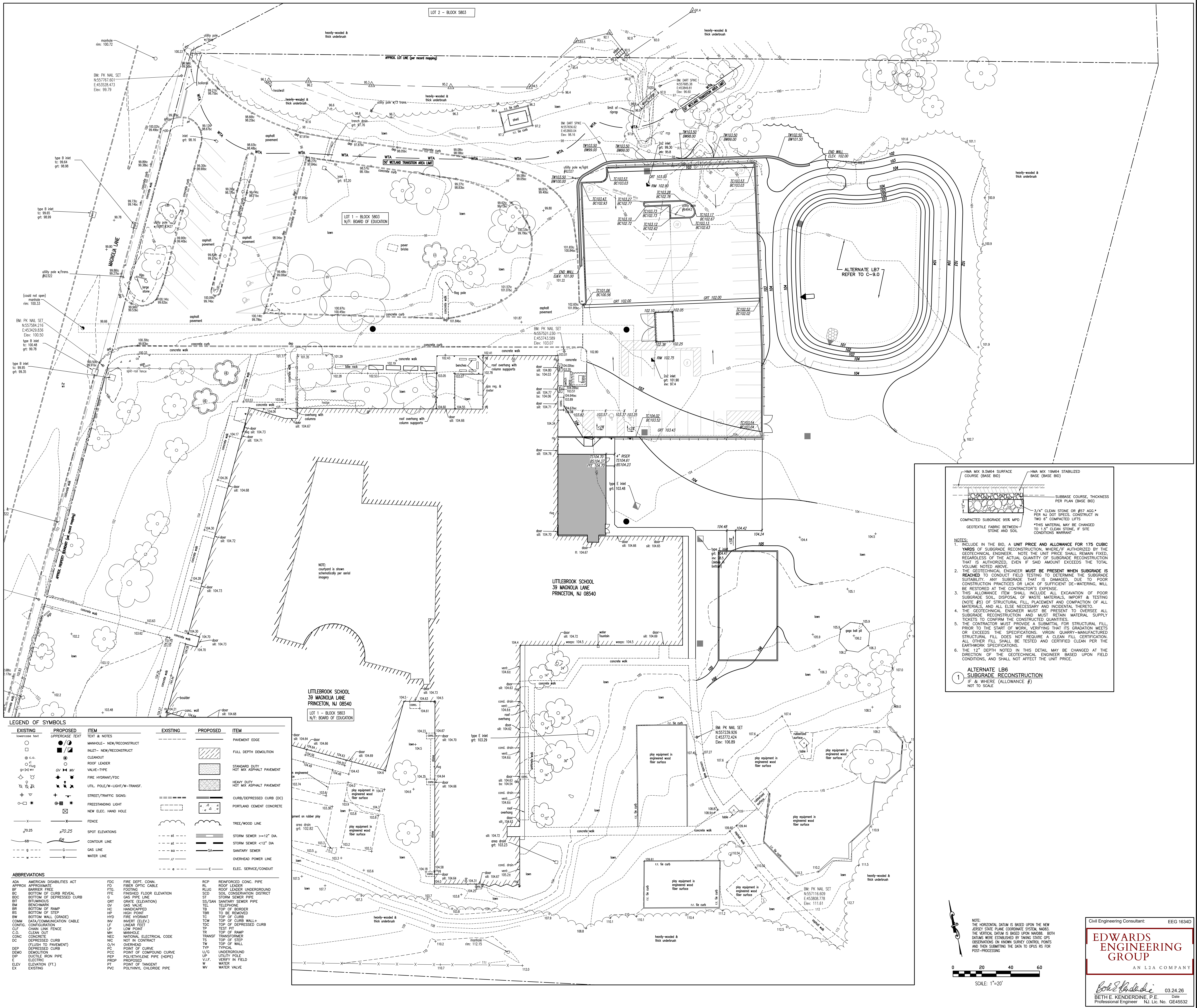
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-4.1 A2



HMA MIX 9.5M64 SURFACE COURSE (BASE BID)

HMA MIX 19M64 STABILIZED BASE (BASE BID)

SUBBASE COURSE, THICKNESS PER PLAN (BASE BID)

12"

3/4" CLEAN STONE OR #57 AGG.* PER NJ DOT SPECS. CONSTRUCT IN TWO 6" COMPACTED LIFTS

*THIS MATERIAL MAY BE CHANGED TO 1.5" CLEAN STONE, IF SITE CONDITIONS WARRANT

COMPACTED SUBGRADE 95% MPD

GEOTEXTILE FABRIC BETWEEN STONE AND SOIL

NOTES:

1. INCLUDE IN THE BID, A **UNIT PRICE AND ALLOWANCE FOR 175 CUBIC YARDS** OF SUBGRADE RECONSTRUCTION, WHERE/IF AUTHORIZED BY THE GEOTECHNICAL ENGINEER. NOTE THE UNIT PRICE SHALL REMAIN FIXED, REGARDLESS OF THE ACTUAL QUANTITY OF SUBGRADE RECONSTRUCTION THAT IS AUTHORIZED, EVEN IF SAID AMOUNT EXCEEDS THE TOTAL VOLUME NOTED ABOVE.
2. THE GEOTECHNICAL ENGINEER **MUST BE PRESENT WHEN SUBGRADE IS REACHED** TO CONDUCT FIELD TESTING TO DETERMINE THE SUBGRADE SUITABILITY. ANY SUBGRADE THAT IS DAMAGED, DUE TO POOR CONSTRUCTION PRACTICES OR LACK OF SUFFICIENT DE–WATERING, WILL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
3. THIS ALLOWANCE ITEM SHALL INCLUDE ALL EXCAVATION OF POOR SUBGRADE SOIL, DISPOSAL OF WASTE MATERIALS, IMPORT & TESTING (NOTE #5) OF STRUCTURAL FILL, PLACEMENT AND COMPACTION OF ALL MATERIALS, AND ALL ELSE NECESSARY AND INCIDENTAL THERETO.
4. THE GEOTECHNICAL ENGINEER MUST BE PRESENT TO OVERSEE ALL SUBGRADE RECONSTRUCTION AND MUST RETAIN MATERIAL SUPPLY TICKETS TO CONFIRM THE CONSTRUCTED QUANTITIES.
5. THE CONTRACTOR MUST PROVIDE A SUBMITTAL FOR STRUCTURAL FILL, PRIOR TO THE START OF WORK, VERIFYING THAT ITS GRADATION MEETS OR EXCEEDS THE SPECIFICATIONS. VIRGIN QUARRY–MANUFACTURED STRUCTURAL FILL DOES NOT REQUIRE A CLEAN FILL CERTIFICATION. ALL OTHER FILL SHALL BE TESTED AND CERTIFIED CLEAN PER THE EARTHWORK SPECIFICATIONS.
6. THE 12" DEPTH NOTED IN THIS DETAIL MAY BE CHANGED AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER BASED UPON FIELD CONDITIONS, AND SHALL NOT AFFECT THE UNIT PRICE.

① ALTERNATE LB6 SUBGRADE RECONSTRUCTION

IF & WHERE (ALLOWANCE #)
NOT TO SCALE

LEGEND OF SYMBOLS

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gv ⋈ wv	*GV* ⧓ *WV*	VALVE–TYPE
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	▨	FULL DEPTH DEMOLITION
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0 20 40 60
SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

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Project Number	5516D
Project Date	10.10.2025
Checked By	WDH
Drawn By	
Scale	

Drawing Name
SITE GRADING PLAN

ALTERNATE BID LB6

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
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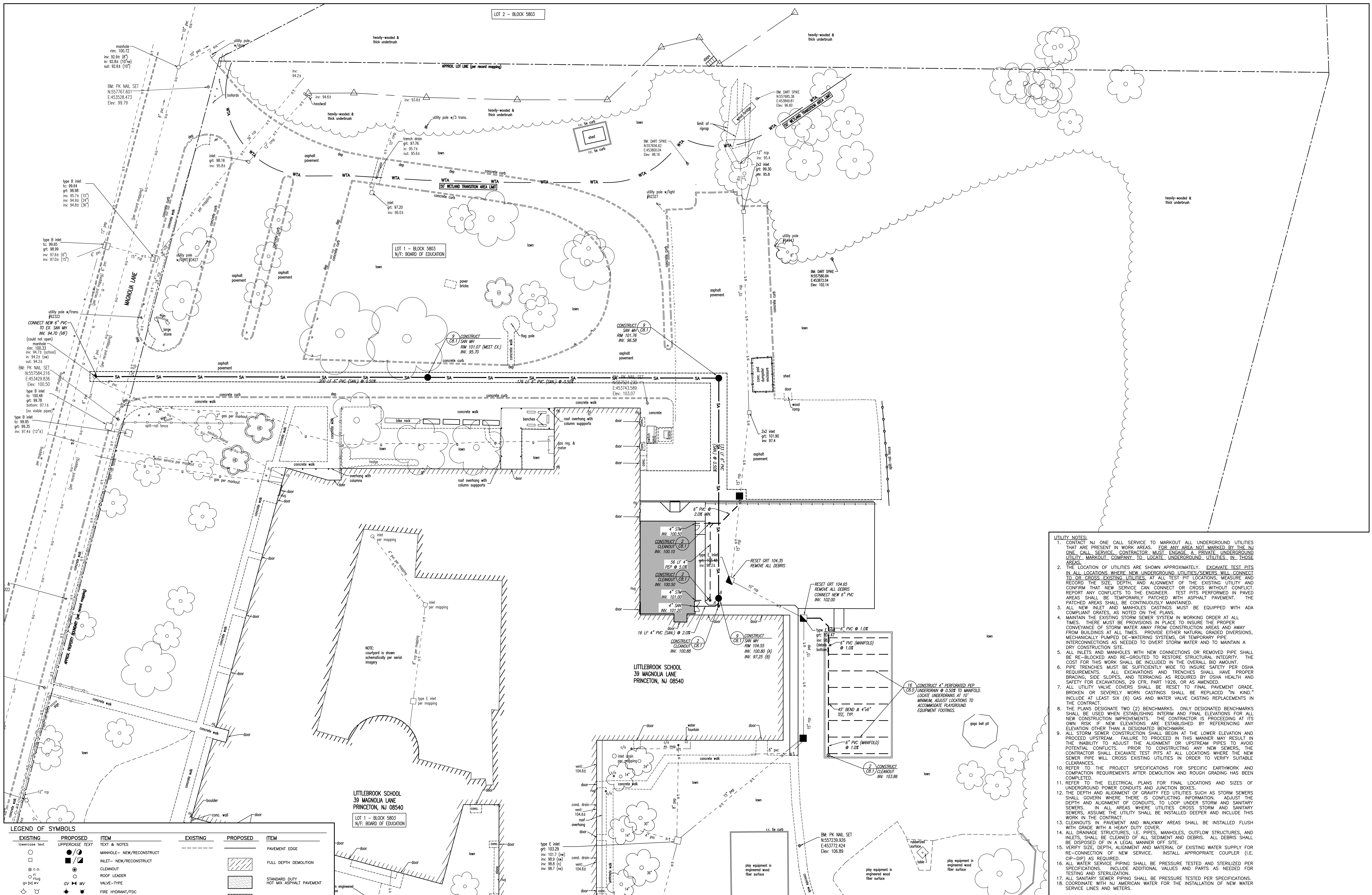
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-4.2 A2


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
heavily-wooded & thick underbrush
manhole rim: 100.72 inv. 92.9± (8") inv. 92.8± (10") out: 92.6± (10")
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
utility pole w/trans.
bollards
headwall
WTA
50' WETLAND TRANSITION AREA LIMIT
trench drain grt: 97.76 inv: 95.7± out: 95.6±
shed
limit of riprap
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
12" rcp inv: 95.4
2x2 inlet grt: 99.30 inv: 95.8
utility pole w/light #82327
inlet grt: 98.16 inv: 95.8±
inlet grt: 97.20 inv: 96.0±
type B inlet tc: 99.64 grt: 98.98 inv: 95.7± (15") inv: 94.9± (24") inv: 94.8± (36")
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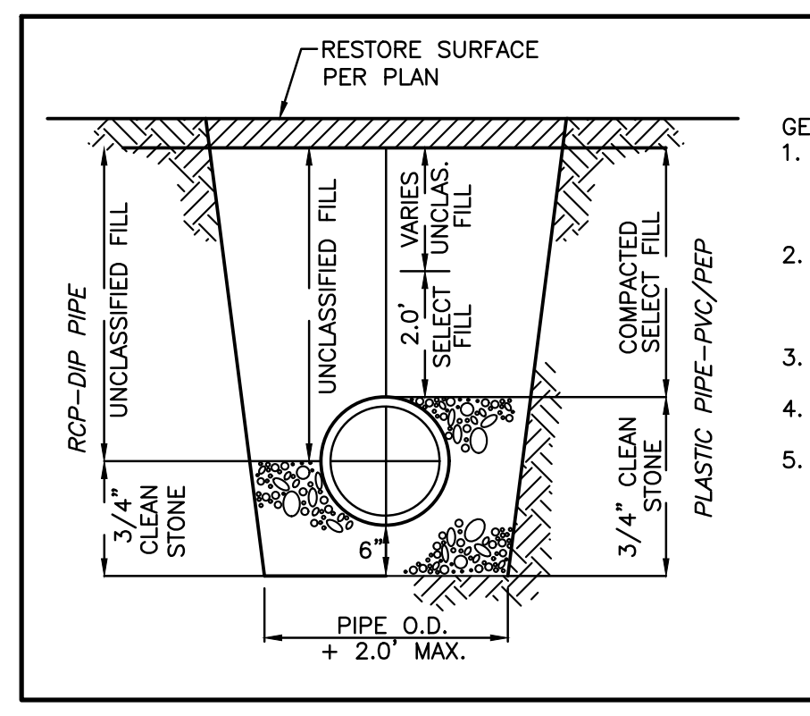
lawn
large stone
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
utility pole #64445
utility pole w/trans. #82322
CONNECT NEW 6" PVC TO EX. SAN MH INV. 94.70 (WF) (could not open)
manhole rim: 100.33 inv. 94.7± (school) inv. 94.2± (w) out: 94.2±
BM: PK NAIL SET N:557584.216 E:453429.836 Elev: 100.50
type B inlet tc: 100.48 grt: 99.78 bottom: 97.1± (no visible pipes)
type B inlet tc: 99.95 grt: 99.35 inv. 97.4± (12")
CONSTRUCT SAN MH RIM 101.07 (MEET EX.) INV. 95.70
CONSTRUCT SAN MH RIM 101.76 INV. 96.58
200 LF 6" PVC (SAN.) @ 0.50%
176 LF 6" PVC (SAN.) @ 0.50%
BM: PK NAIL SET N:557524.235 E:453743.589 Elev: 103.07
conc. pad dumpster enclosure
shed
wood ramp
2x2 inlet grt: 101.90 inv: 97.4
concrete curb
concrete walk
bike rack
benches
roof overhang with column supports
gas reg. & meter
split-rail fence
gas per markout
water service per markout
hedge
overhang with columns
door
6" PVC @ 2.0% MIN.
4" STM INV. 100.50
CONSTRUCT CLEANOUT INV. 100.10
56 LF 4" PEP @ 5.0%
CONSTRUCT CLEANOUT INV. 100.50
4" STM INV. 101.00
4" SAN INV. 101.20
16 LF 4" PVC (SAN.) @ 2.0%
CONSTRUCT CLEANOUT INV. 100.88
CONSTRUCT SAN MH RIM 104.55 INV. 100.80 (A) INV. 97.25 (B)
RESET GRT 104.35 REMOVE ALL DEBRIS
RESET GRT 104.65 REMOVE ALL DEBRIS CONNECT NEW 6" PVC INV. 102.00
6" PVC @ 1.0%
6" PVC (MANIFOLD) @ 1.0%
CONSTRUCT 4" PERFORATED PEP UNDERDRAIN @ 0.50% TO MANIFOLD. LOCATE UNDERDRAINS AT 10' MINIMUM, ADJUST LOCATIONS TO ACCOMMODATE PLAYGROUND EQUIPMENT FOOTINGS.
45° BEND & 4"x6" TEE, TYP.
CONSTRUCT CLEANOUT INV. 103.86
gaga ball pit
LITTLEBROOK SCHOOL 39 MAGNOLIA LANE PRINCETON, NJ 08540
inlet per mapping
NOTE: courtyard is shown schematically per aerial imagery
type E inlet per mapping
water fountain
type E inlet grt: 103.29 inv: 101.7 (w) inv: 98.9 (w) inv: 98.6 (n) inv: 98.7 (n)
roof overhang
cond. drain
vent
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
rubberized surface
table
r.r. tie curb
play equipment in engineered wood fiber surface
boulder
conc. wall
12" rcp
area drain grt: 102.82 inv: 101.0 (12") inv: 101.4 (8")
area drain grt: 103.23 inv: 101.7 (w) inv: 99.7 (w) inv: 99.6 (nw)
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
manhole rim: 112.15 bottom: 107.8± (debris)
8" per per mapping
heavily-wooded & thick underbrush

UTILITY NOTES:

1. CONTACT NJ ONE CALL SERVICE TO MARKOUT ALL UNDERGROUND UTILITIES THAT ARE PRESENT IN WORK AREAS. FOR ANY AREA NOT MARKED BY THE NJ ONE CALL SERVICE, CONTRACTOR MUST ENGAGE A PRIVATE UNDERGROUND UTILITY MARKOUT COMPANY TO LOCATE UNDERGROUND UTILITIES IN THOSE AREAS.
2. THE LOCATION OF UTILITIES ARE SHOWN APPROXIMATELY. EXCAVATE TEST PITS IN ALL LOCATIONS WHERE NEW UNDERGROUND UTILITIES/SEWERS WILL CONNECT TO OR CROSS EXISTING UTILITIES. AT ALL TEST PIT LOCATIONS, MEASURE AND RECORD THE SIZE, DEPTH, AND ALIGNMENT OF THE EXISTING UTILITY AND CONFIRM THAT NEW SERVICE CAN CONNECT OR CROSS WITHOUT CONFLICT. REPORT ANY CONFLICTS TO THE ENGINEER. TEST PITS PERFORMED IN PAVED AREAS SHALL BE TEMPORARILY PATCHED WITH ASPHALT PAVEMENT. THE PATCHED AREAS SHALL BE CONTINUOUSLY MAINTAINED.
3. ALL NEW INLET AND MANHOLES CASTINGS MUST BE EQUIPPED WITH ADA COMPLIANT GRATES, AS NOTED ON THE PLANS.
4. MAINTAIN THE EXISTING STORM SEWER SYSTEM IN WORKING ORDER AT ALL TIMES. THERE MUST BE PROVISIONS IN PLACE TO INSURE THE PROPER CONVEYANCE OF STORM WATER AWAY FROM CONSTRUCTION AREAS AND AWAY FROM BUILDINGS AT ALL TIMES. PROVIDE EITHER NATURAL GRADED DIVERSIONS, MECHANICALLY PUMPED DE–WATERING SYSTEMS, OR TEMPORARY PIPE INTERCONNECTIONS AS NEEDED TO DIVERT STORM WATER AND TO MAINTAIN A DRY CONSTRUCTION SITE.
5. ALL INLETS AND MANHOLES WITH NEW CONNECTIONS OR REMOVED PIPE SHALL BE RE–BLOCKED AND RE–GROUTED TO RESTORE STRUCTURAL INTEGRITY. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE OVERALL BID AMOUNT.
6. PIPE TRENCHES MUST BE SUFFICIENTLY WIDE TO INSURE SAFETY PER OSHA REQUIREMENTS. ALL EXCAVATIONS AND TRENCHES SHALL HAVE PROPER BRACING, SIDE SLOPES, AND TERRACING AS REQUIRED BY OSHA HEALTH AND SAFETY FOR EXCAVATIONS, 29 CFR, PART 1926, OR AS AMENDED.
7. ALL UTILITY VALVE COVERS SHALL BE RESET TO FINAL PAVEMENT GRADE. BROKEN OR SEVERELY WORN CASTINGS SHALL BE REPLACED "IN KIND." INCLUDE AT LEAST SIX (6) GAS AND WATER VALVE CASTING REPLACEMENTS IN THE CONTRACT.
8. THE PLANS DESIGNATE TWO (2) BENCHMARKS. ONLY DESIGNATED BENCHMARKS SHALL BE USED WHEN ESTABLISHING INTERIM AND FINAL ELEVATIONS FOR ALL NEW CONSTRUCTION IMPROVEMENTS. THE CONTRACTOR IS PROCEEDING AT ITS OWN RISK IF NEW ELEVATIONS ARE ESTABLISHED BY REFERENCING ANY ELEVATION OTHER THAN A DESIGNATED BENCHMARK.
9. ALL STORM SEWER CONSTRUCTION SHALL BEGIN AT THE LOWER ELEVATION AND PROCEED UPSTREAM. FAILURE TO PROCEED IN THIS MANNER MAY RESULT IN THE INABILITY TO ADJUST THE ALIGNMENT OR UPSTREAM PIPES TO AVOID POTENTIAL CONFLICTS. PRIOR TO CONSTRUCTING ANY NEW SEWERS, THE CONTRACTOR SHALL EXCAVATE TEST PITS AT ALL LOCATIONS WHERE THE NEW SEWER PIPE WILL CROSS EXISTING UTILITIES IN ORDER TO VERIFY SUITABLE CLEARANCES.
10. REFER TO THE PROJECT SPECIFICATIONS FOR SPECIFIC EARTHWORK AND COMPACTION REQUIREMENTS AFTER DEMOLITION AND ROUGH GRADING HAS BEEN COMPLETED.
11. REFER TO THE ELECTRICAL PLANS FOR FINAL LOCATIONS AND SIZES OF UNDERGROUND POWER CONDUITS AND JUNCTION BOXES.
12. THE DEPTH AND ALIGNMENT OF GRAVITY FED UTILITIES SUCH AS STORM SEWERS SHALL GOVERN WHERE THERE IS CONFLICTING INFORMATION. ADJUST THE DEPTH AND ALIGNMENT OF CONDUITS, TO LOOP UNDER STORM AND SANITARY SEWERS. IN ALL AREAS WHERE UTILITIES CROSS STORM AND SANITARY SEWERS, ASSUME THE UTILITY SHALL BE INSTALLED DEEPER AND INCLUDE THIS WORK IN THE CONTRACT.
13. CLEANOUTS IN PAVEMENT AND WALKWAY AREAS SHALL BE INSTALLED FLUSH WITH GRADE WITH A HEAVY DUTY COVER.
14. ALL DRAINAGE STRUCTURES, I.E. PIPES, MANHOLES, OUTFLOW STRUCTURES, AND INLETS, SHALL BE CLEANED OF ALL SEDIMENT AND DEBRIS. ALL DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER OFF SITE.
15. VERIFY SIZE, DEPTH, ALIGNMENT AND MATERIAL OF EXISTING WATER SUPPLY FOR RE–CONNECTION OF NEW SERVICE. INSTALL APPROPRIATE COUPLER (I.E. CIP–DIP) AS REQUIRED.
16. ALL WATER SERVICE PIPING SHALL BE PRESSURE TESTED AND STERILIZED PER SPECIFICATIONS. INCLUDE ADDITIONAL VALUES AND PARTS AS NEEDED FOR TESTING AND STERILIZATION.
17. ALL SANITARY SEWER PIPING SHALL BE PRESSURE TESTED PER SPECIFICATIONS.
18. COORDINATE WITH NJ AMERICAN WATER FOR THE INSTALLATION OF NEW WATER SERVICE LINES AND METERS.



GENERAL NOTES
1. TRENCH TO BE FREE OF STANDING WATER. DE–WATERING TO BE PROVIDED BY CONTRACTOR AT NO ADDITIONAL CHARGE.
2. REFER TO PROJECT SPECIFICATIONS FOR BEDDING, BACKFILL & TRENCHING REQUIREMENTS.
3. TRENCH SAFETY PER O.S.H.A. STANDARDS.
4. NO TRENCH SHALL BE WITHIN FIVE FEET OF BLDG. FOUNDATIONS
5. UTILITY TRENCHES SHALL RECEIVE A TEMPORARY PATCH UNTIL FINAL PAVEMENTS ARE CONSTRUCTED.

TRENCH DETAIL FOR GENERAL USE

NOT TO SCALE

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE– NEW/RECONSTRUCT
□	■ / ◪	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	*GV* ⋈ *WV*	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	*x70.25*	SPOT ELEVATIONS
——68——	*68*	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
		STANDARD DUTY HOT MIX ASPHALT PAVEMENT
		HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	═══━━━	CURB/DEPRESSED CURB (DC)
		PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
– – – st – – –	━━ ━━	STORM SEWER <12" DIA
– – – sa – – –	━━SA━━	SANITARY SEWER
——//——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING

0 20 40 60
SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

03.24.26
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
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JASON J. DUBOWITCH, AIA
NJ - 21AI01979800 | PA - RA406009
STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435

Architect
2/12/26
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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

Scale

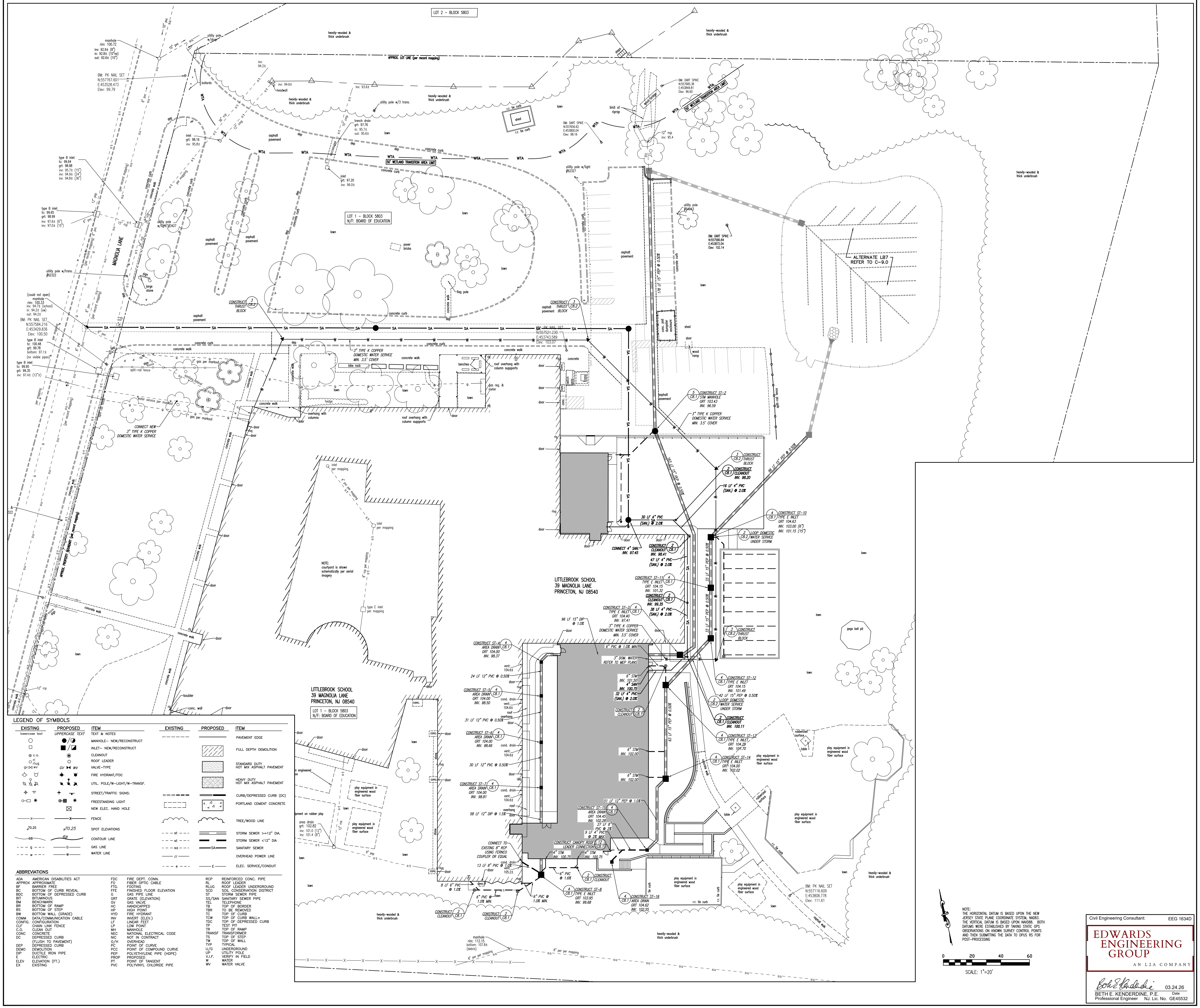
Drawing Name
SITE UTILITY PLAN

BASE BID

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
△1	12.10.25	NJ DCA REVISIONS
△2	12.10.25	DESIGN REVISIONS
△3	01.02.26	NJ DCA REVISIONS
△4	01.02.26	DESIGN REVISIONS
△5	01.23.26	NJ DCA REVISIONS
△A2	03.24.26	ADDENDUM #2

Drawing Number
C-5.0 △A2



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◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⋈ WV	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
—68—	—68—	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▨	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▨	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
======	══━━	CURB/DEPRESSED CURB (DC)
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		TREE/WOOD LINE
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– – – st – – –		STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

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Scale

Drawing Name
SITE UTILITY PLAN

ALTERNATE BID LB1

Revisions

No.	Date	Description
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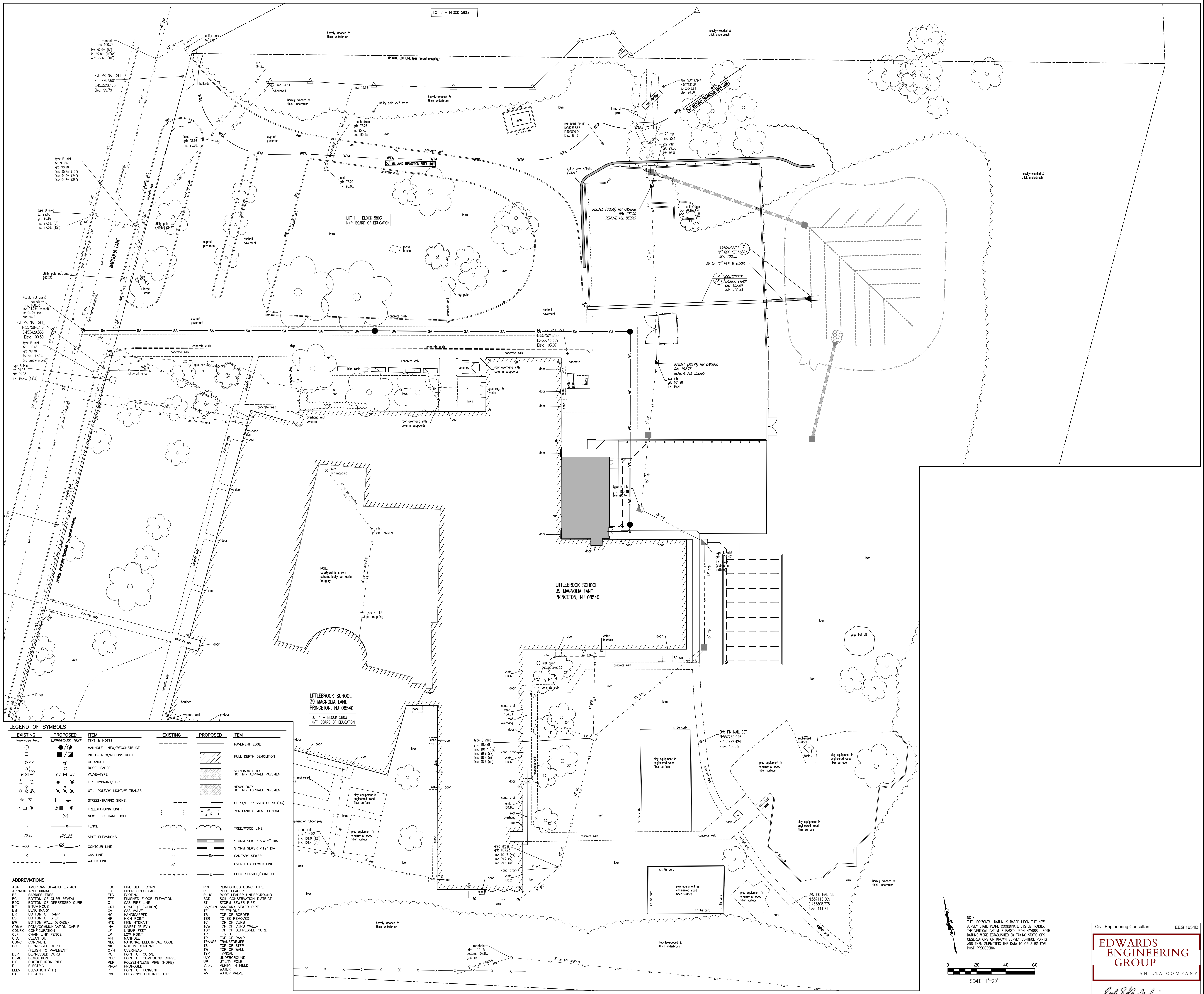
A2	03.24.26	ADDENDUM #2

Drawing Number
C-5.1 A2


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
heavily–wooded & thick underbrush
manhole rim: 100.72 inv: 92.9± (8") inv: 92.8± (10"w) out: 92.6± (10")
BM: PK NAIL SET N:557767.601 E:453528.473 Elev: 99.79
utility pole w/trans.
MAGNOLIA LANE
WTA
50' WETLAND TRANSITION AREA LIMIT
asphalt pavement
lawn
LOT 1 – BLOCK 5803 N/F: BOARD OF EDUCATION
flag pole
BM: DART SPIKE N:557656.62 E:453800.04 Elev: 98.16
BM: DART SPIKE N:557685.38 E:453849.81 Elev: 96.60
limit of riprap
12" rcp inv: 95.4
2x2 inlet grt: 99.30 inv: 95.8
utility pole w/light #62327
utility pole #64943
INSTALL (SOLID) MH CASTING RIM 102.90 REMOVE ALL DEBRIS
CONSTRUCT 7 C8.1 12" RCP FES INV. 100.33
30 LF 12" PEP @ 0.50%
4 C8.1 CONSTRUCT TRENCH DRAIN GRT 102.00 INV. 100.48
INSTALL (SOLID) MH CASTING RIM 102.75 REMOVE ALL DEBRIS
2x2 inlet grt: 101.90 inv: 97.4
BM: PK NAIL SET N:557521.230 E:453743.589 Elev: 103.07
15" rcp
SA
concrete walk
concrete curb
door
NOTE: courtyard is shown schematically per aerial imagery
LITTLEBROOK SCHOOL 39 MAGNOLIA LANE PRINCETON, NJ 08540
LOT 1 – BLOCK 5803 N/F: BOARD OF EDUCATION
gaga ball pit
play equipment in engineered wood fiber surface
r.r. tie curb
BM: PK NAIL SET N:557239.926 E:453772.424 Elev: 106.89
BM: PK NAIL SET N:557116.609 E:453808.778 Elev: 111.61
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area drain grt: 103.23 inv: 101.7 (w) inv: 99.7 (w) inv: 99.6 (nw)
heavily–wooded & thick underbrush

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		STANDARD DUTY HOT MIX ASPHALT PAVEMENT
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FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
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NOTE:
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0 20 40 60

SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

FVHD architects planners
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Trenton - New Jersey 08628
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Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name

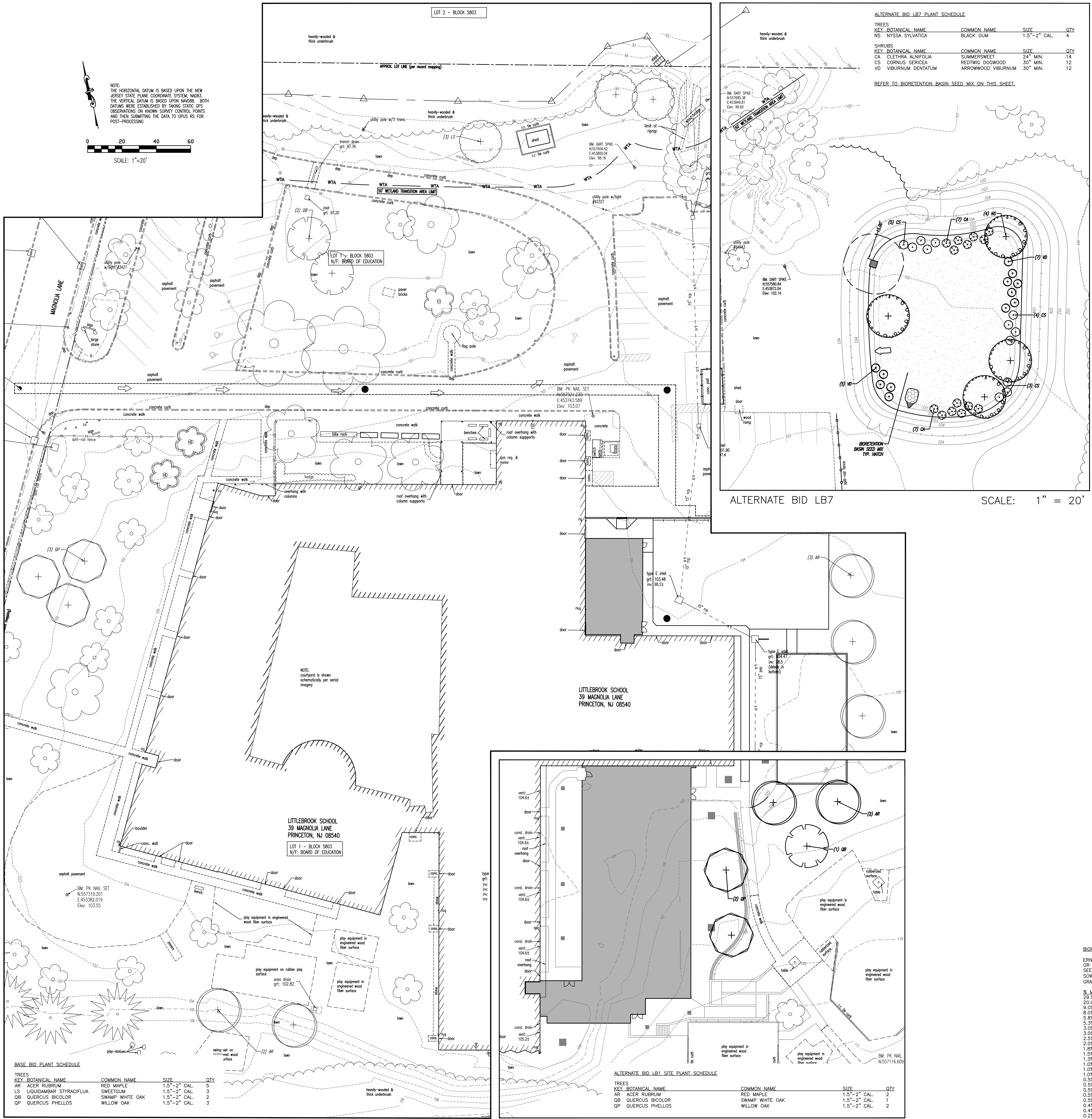
SITE UTILITY PLAN

ALTERNATE BID LB6

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-5.2 A2


MAGNOLIA LANE
LOT 2 – BLOCK 5803
LOT 1 – BLOCK 5803
N/F: BOARD OF EDUCATION
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
50' WETLAND TRANSITION AREA LIMIT
APPROX. LOT LINE (per record mapping)
heavily–wooded & thick underbrush
asphalt pavement
concrete walk
lawn
play equipment in engineered wood fiber surface
BIORETENTION BASIN SEED MIX TYP. HATCH
NOTE: courtyard is shown schematically per aerial imagery
BM: PK NAIL SET
BM: DART SPIKE

NOTE:
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0 20 40 60
SCALE: 1"=20'

BASE BID PLANT SCHEDULE

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
AR	ACER RUBRUM	RED MAPLE	1.5"–2" CAL.	5
LS	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	1.5"–2" CAL.	3
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	1.5"–2" CAL.	2
QP	QUERCUS PHELLOS	WILLOW OAK	1.5"–2" CAL.	3

BASE BID PLAN
SCALE: 1" = 20'

ALTERNATE BID LB7 PLANT SCHEDULE

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
NS	NYSSA SYLVATICA	BLACK GUM	1.5"–2" CAL.	4

SHRUBS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
CA	CLETHRA ALNIFOLIA	SUMMERSWEET	24" MIN.	14
CS	CORNUS SERICEA	REDTWIG DOGWOOD	30" MIN.	12
VD	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	30" MIN.	12

REFER TO BIORETENTION BASIN SEED MIX ON THIS SHEET.

ALTERNATE BID LB7
SCALE: 1" = 20'

ALTERNATE BID LB1 SITE PLANT SCHEDULE

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
AR	ACER RUBRUM	RED MAPLE	1.5"–2" CAL.	2
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	1.5"–2" CAL.	1
QP	QUERCUS PHELLOS	WILLOW OAK	1.5"–2" CAL.	2

ALTERNATE BID LB1
REFER TO SHEET C–8.3 FOR LB2
COURTYARD PLANTING PLAN DETAIL
SCALE: 1" = 20'

LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	●/◑	MANHOLE– NEW/RECONSTRUCT
□	■/◪	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⋈ WV	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	⊠	NEW ELEC. HAND HOLE
—x—	—X—	FENCE
+70.25	x70.25	SPOT ELEVATIONS
68	68	CONTOUR LINE
– – – g – – –	—G—	GAS LINE
– – – w – – –	—W—	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – – –	———	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▨	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▨	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
═══	═══	CURB/DEPRESSED CURB (DC)
┌ – – ┐	▨	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –		STORM SEWER >=12" DIA.
– – – st – – –		STORM SEWER <12" DIA
– – – sa – – –	—SA—	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	—E—	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
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U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

PLANTING SPECIFICATIONS

1. SCOPE OF WORK: THIS WORK SHALL CONSIST OF PERFORMING, CLEARING AND SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT. THE CONTRACTOR SHALL COORDINATE WITH LIGHTING AND IRRIGATION CONTRACTORS REGARDING TIMING OF INSTALLATION OF PLANT MATERIAL.
2. MATERIALS:
   A. ALL MATERIALS SHALL BE BEST OF ITS KIND AVAILABLE.
   B. PLANTS SHALL CONFORM TO CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" BY AMERICAN ASSOCIATION OF NURSERYMEN (AAN), PARTICULARLY WITH REGARD TO SIZE, GROWTH, SIZE OF BALL, AND DENSITY OF BRANCH STRUCTURE.
   C. ALL PLANTS SHALL HAVE NORMAL, WELL–DEVELOPED BRANCHES & VIGOROUS ROOT SYSTEMS. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM DEFECTS, DISFIGURING KNOTS, ABRASIONS OF THE BARK, SUN SCALD INJURIES, PLANT DISEASES, INSECT EGGS, BORERS AND ALL OTHER FORMS OF INFECTION. ALL PLANTS SHALL BE NURSERY GROWN. ALL PLANTS SHALL BE GRADE "A" NURSERY STOCK.
   D. PLANTS PLANTED IN ROWS SHALL BE MATCHED SPECIMENS AND BE UNIFORM IN SIZE AND FORM.
   E. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
   F. HARDWOOD MULCH TO BE DOUBLE–SHREDDED HARDWOOD MULCH TO MEET THE STANDARDS SET FORTH IN THE "SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARDS"
4. GENERAL WORK PROCEDURES:
   A. LANDSCAPE WORK SHALL BE ACCORDING TO THE WORKMANLIKE STANDARDS ESTABLISHED FOR LANDSCAPE CONSTRUCTION AND PLANTING.
   B. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE ENCOUNTERED.
   C. IN THE EVENT OF VARIATIONS BETWEEN WRITTEN QUANTITIES SHOWN ON THE PLAN AND THE PLANT LIST, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING.
   D. PERMEABLE WEED RETARDANT BARRIER SHALL BE USED IN ALL NON–GRASSED AREA.
5. WEEDING: BEFORE AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
6. TOPSOILING:
   A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM THICK TOPSOIL LAYER IN ALL PLANTING AREA AND FIVE INCHES (5") MINIMUM THICK TOPSOIL LAYER IN ALL SEEDED AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO PRODUCE THE REQUIRED COMPACTED THICKNESS.
   B. TOPSOIL TO MEET THE STANDARDS SET FORTH IN THE "SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARDS." BEFORE PLANTING, CONTRACTOR SHALL TEST TOPSOIL UTILIZED IN ALL PLANTING AREAS FOR PH, FERTILIZER SALTS, ORGANIC MATTER AND BULK DENSITY AND ADJUST LEVELS AS REQUIRED BY STANDARDS SET FORTH IN THE "SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARDS."
   G. THE CONTRACTOR SHALL FERTILIZE ALL PLANT MATERIAL WITH 5–10–5 FERTILIZER, OR APPROVED EQUAL AT THE RATE SPECIFIED BY THE MANUFACTURER AS NECESSARY. ALL TURF AREAS SHALL BE LIMED AND FERTILIZED APPROPRIATELY FOR THE TYPES OF SOILS ON THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE SOIL ACIDITY AND A SOIL TEST CONDUCTED BY THE COUNTY SOIL DISTRICT OR EXTENSION SERVICE TO ESTABLISH THE SOIL'S LIME AND FERTILIZER RATES.
   H. CULTIVATE ALL AREAS TO BE PLANTED TO A DEPTH OF 6". ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
   I. THOROUGHLY TILL ORGANIC MATTER INTO THE TOP SIX INCHES (6") OF PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. USE COMPOSTED BARK, RECYCLED YARD WASTE, OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED MATERIALS (UP TO 30% BY VOLUME). IMPROVE DRAINAGE IN HEAVY SOILS BY INCLUDING SUBSURFACE DRAINAGE LINES. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. PLANTING:
   A. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED. IF UTILITY LINES ARE ENCOUNTERED IN EXCAVATION OF TREE PITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
   B. PLANTS SHALL BE PRUNED OF DEAD, DAMAGED, OR DISEASED BRANCHES PRIOR TO DELIVERY. PRUNING SHALL MAINTAIN THE NATURAL FORM OR HABIT OF THE PLANT UNLESS A FORMAL HEDGE HAS BEEN SPECIFIED BY THE LANDSCAPE ARCHITECT. FLOWERING SHRUBS/TREES TO BE PRUNED AFTER FLOWERING. A CLEAN CUT SHALL BE MADE PERPENDICULAR TO THE BRANCH WITH A SHARP IMPLEMENT. TREE LEADERS SHALL NEVER BE CUT. ALL INJURED ROOTS SHALL BE PRUNED PRIOR TO PLANTING. A CLEAN CUT SHALL BE MADE PERPENDICULAR TO THE ROOT WITH A SHARP IMPLEMENT. PRUNE ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS TO A MIN. OF 7' BRANCHING HEIGHT.
   C. PLANTS SHOULD BE PLANTED ON DAY OF DELIVERY; CONTRACTOR SHALL PROTECT AND WATER MATERIALS NOT PLANTED ON DAY OF DELIVERY. ALL MATERIALS TO BE PLANTED WITHIN THREE DAYS AFTER DELIVERY.
   D. PREPARED SOIL SHALL BE TAMPED FIRMLY AT BOTTOM OF PIT. FILL PREPARED SOIL AROUND BALL OF PLANT 1/2 WAY, AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
   E. CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKET FROM THE TOP 1/3 OF THE ROOT BALL. NYLON ROPE AND/OR NYLON BALLING MATERIAL SHALL NOT BE USED.
   F. ALL PLANTS SHALL BE SET SO THAT THEY BEAR THE SAME RELATION TO THE REQUIRED GRADE AS THEY BORE TO THE NATURAL GRADE BEFORE BEING TRANSPLANTED.
   G. WATER IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH PLANT IN SUCH MANNER AS NOT TO DISTURB BACK FILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. ALL WATER APPLIED TO PLANTED OR TURF AREAS SHALL BE FREE FROM IMPURITIES HARMFUL TO VEGETATION AND APPLIED AT A RATE OF 5 GALLONS OF WATER PER SQUARE YARD OF PLANT PIT IMMEDIATELY AFTER PLANTING AND INSTALLATION. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE IRRIGATION TO ALL PLANT MATERIALS AND LAWN AREAS INSTALLED AS PART OF THIS CONTRACT DURING THE CONSTRUCTION TIME PERIOD UP TO AND INCLUDING THE TIME PERIOD ESTABLISHED FOR PLANT MATERIAL SURVIVAL GUARANTEE. WATER APPLIED DURING THE GUARANTEE PERIOD SHALL BE AT THE RATE OF 1 INCH OF WATER PER WEEK, WITH AN ALLOWANCE FOR NATURAL PRECIPITATION AND RAINFALL.
   H. ROOT BARRIER PRODUCT SHALL BE INSTALLED IN THE PLANTING PITS OF TREES BEING INSTALLED WITHIN TEN FEET OF NEW OR EXISTING PAVEMENT, CURB OR SIDEWALK. ROOT BARRIER SHALL ONLY BE INSTALLED IN SIDE(S) OF PLANTING PITS THAT ARE WITHIN TEN FEET OF NEW OR EXISTING PAVEMENT, CURB OR SIDEWALK
   I. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND CONDITIONS OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS.
   J. ALL GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING GROUND COVER.
8. SEEDING:
   A. ALL CLEARED GROUND NOT INDICATED FOR PLANTING SHALL BE SEEDED WITH LAWN GRASS.
   B. ALL SEEDED AREAS TO BE MULCHED IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
9. GUARANTEE:
   A. CONTRACTOR SHALL GUARANTEE ALL PLANTS AND LAWN FOR A PERIOD OF TWO (2) YEAR FROM ACCEPTANCE OF JOB TO BE ALIVE AND IN VIGOROUS GROWING CONDITION DURING AND AT THE END OF THE GUARANTEE PERIOD. REMOVE UNSATISFACTORY AND DEAD PLANTS EVERY MONTH DURING THE GUARANTEE PERIOD AND REPLACE WITH PLANTS OF THE SAME KIND, QUALITY, AND SIZE AS SPECIFIED.
   B. UPON COMPLETION OF THE TWO (2) YEAR PLANT GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR REMOVING TREE STAKES AND GUY WIRES FROM ALL TREES. THIS SHALL BE DONE IN CONSULTATION WITH THE LANDSCAPE ARCHITECT.
   C. MEADOW AREAS SHALL BE NO MORE THAN 20% WEED SPECIES AT THE END OF FIRST TWO (2) GROWING SEASONS.

BIORETENTION BASIN SEED MIX

ERNST SEED ITEM NUMBER: ERNMX–180 (RAIN GARDEN SEED MIX)
OR APPROVED EQUAL
SEEDING RATE: 20 LBS PER ACRE
SOW WITH COVER CROP: OATS (1 JAN TO 31 JUL; 30 LBS/ACRE) OR GRAIN RYE (1 AUG TO 31 DEC; 30 LBS/ACRE).

% MIX	BOTANICAL NAME	COMMON NAME
29.5%	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
20.0%	ELYMUS VIRGINICUS	VIRGINIA WILDRYE
9.0%	CAREX VULPINOIDEA	FOX SEDGE
8.0%	ECHINACEA PURPUREA	PURPLE CONEFLOWER
5.8%	PANICUM RIGIDULUM	REDTOP PANICGRASS
5.3%	CHASMANTHIUM LATIFOLIUM	RIVER OATS, WV ECOTYPE
3.0%	COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS
3.0%	RUDBECKIA HIRTA	BLACKEYED SUSAN
2.5%	VERBENA HASTATA	BLUE VERVAIN
2.0%	PANICUM CLANDESTINUM	DEERTONGUE
1.8%	HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER
1.5%	ASCLEPIAS INCARNATA	SWAMP MILKWEED
1.3%	PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE
1.0%	CAREX SCOPARIA	BLUNT BROOM SEDGE
1.0%	SENNA HEBECARPA	WILD SENNA
1.0%	ZIZIA AUREA	GOLDEN ALEXANDERS
0.5%	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO
0.5%	JUNCUS EFFUSUS	SOFT RUSH
0.5%	JUNCUS TENUIS	PATH RUSH
0.5%	PYCNANTHEMUM TENUIFOLIUM	NARROWLEAF MOUNTAINMINT
0.5%	VERNONIA NOVEBORACENSIS	NEW YORK IRONWEED
0.4%	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER
0.4%	MONARDA FISTULOSA	WILD BERGAMOT
0.2%	ASTER LATERIFLORUS	CALICO ASTER
0.2%	ASTER PRENANTHOIDES	ZIGZAG ASTER
0.1%	ASTER PILOSUS	HEATH ASTER
0.1%	EUPATORIUM PERFOLIATUM	BONESET
0.1%	MIMULUS RINGENS	SQUARE STEMMED MONKEYFLOWER
0.1%	SOLIDAGO JUNCEA	EARLY GOLDENROD
0.1%	SOLIDAGO NEMORALIS	GRAY GOLDENROD
0.1%	SOLIDAGO RUGOSA	WRINKLELEAF GOLDENROD

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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2/12/26
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F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

Scale

Drawing Name
LANDSCAPING PLANS

BASE & ALTERNATE BIDS LB1 & LB2

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
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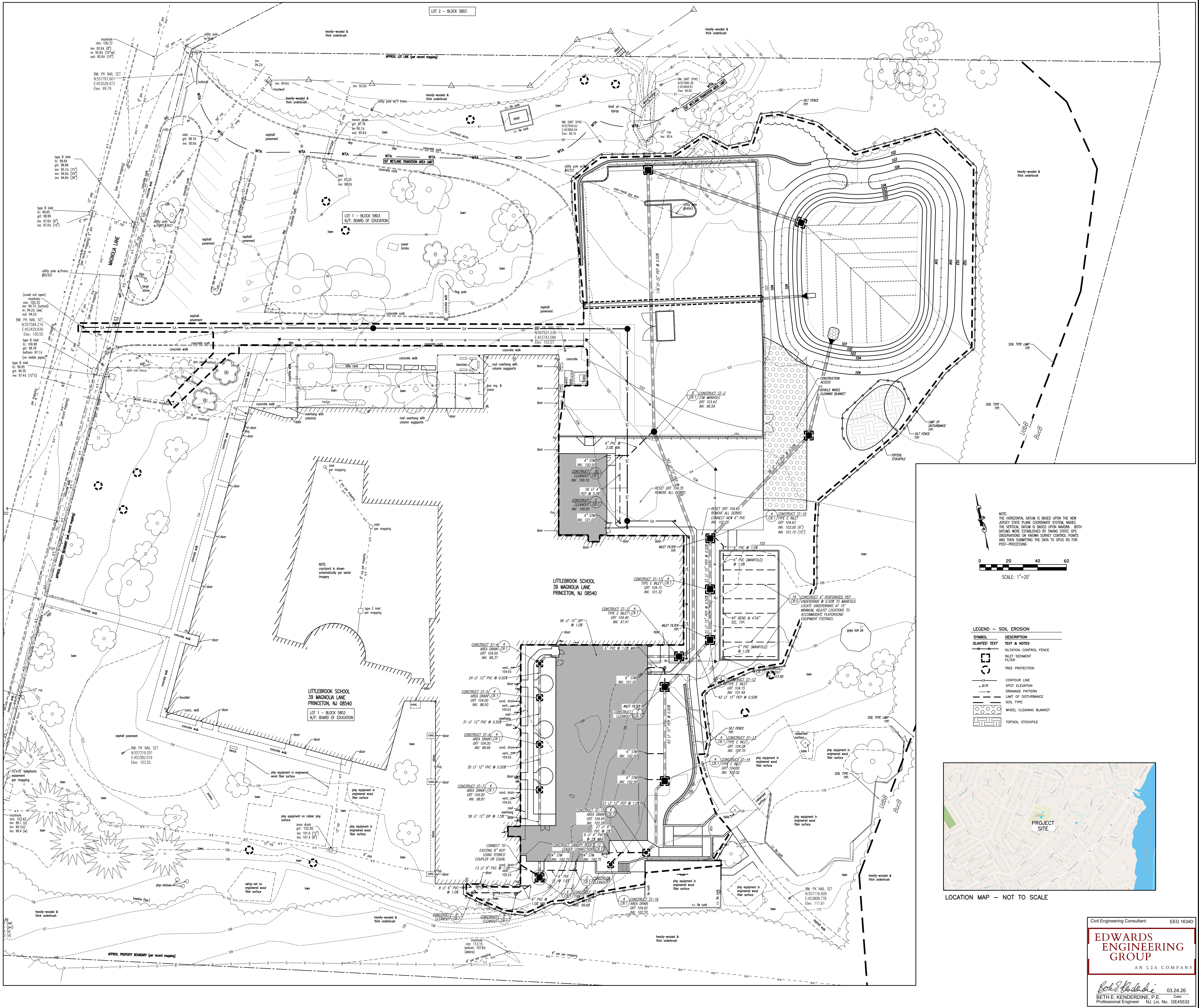
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-6.0 A2


LOT 2 – BLOCK 5803
APPROX. LOT LINE (per record mapping)
50' WETLAND TRANSITION AREA LIMIT
WTA
MAGNOLIA LANE
LOT 1 – BLOCK 5803
N/F: BOARD OF EDUCATION
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
APPROX. PROPERTY BOUNDARY (per record mapping)
heavily-wooded & thick underbrush
asphalt pavement
concrete walk
lawn
play equipment in engineered wood fiber surface
SILT FENCE TYP.
SOIL TYPE LIMIT TYP.
UdhB
BucB
CONSTRUCTION ACCESS
VEHICLE WHEEL CLEANING BLANKET
TOPSOIL STOCKPILE
LIMIT OF DISTURBANCE TYP.
INLET FILTER TYP.
NOTE: courtyard is shown schematically per aerial imagery
PROJECT SITE

LOCATION MAP – NOT TO SCALE

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0 20 40 60

SCALE: 1"=20'

LEGEND – SOIL EROSION

SYMBOL	DESCRIPTION
SLANTED TEXT	**TEXT & NOTES**
—□—□—	SILTATION CONTROL FENCE
⌜ ⌝	INLET SEDIMENT FILTER
◌	TREE PROTECTION
—15—	CONTOUR LINE
+ 22.75	SPOT ELEVATION
→	DRAINAGE PATTERN
— — —	LIMIT OF DISTURBANCE
— —	SOIL TYPE
⬡	WHEEL CLEANING BLANKET
▤	TOPSOIL STOCKPILE

NJDCA Electronic Release Stamp

Fraytak Veisz Hopkins Duthie PC
architects planners

Corporate: 1515 Lower Ferry Road
Trenton - New Jersey 08628
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F V H D P C . C O M

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Architect 2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
SOIL EROSION & SEDIMENT CONTROL PLAN

Revisions

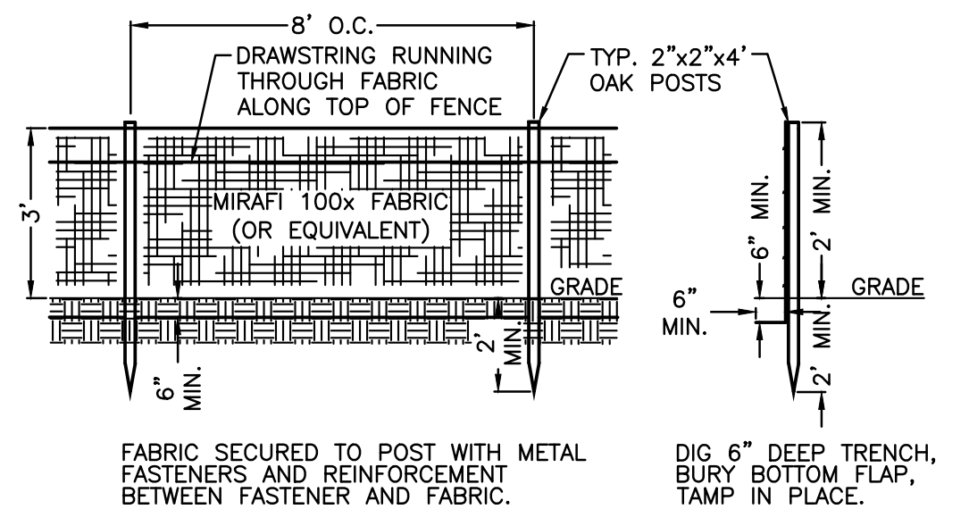
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

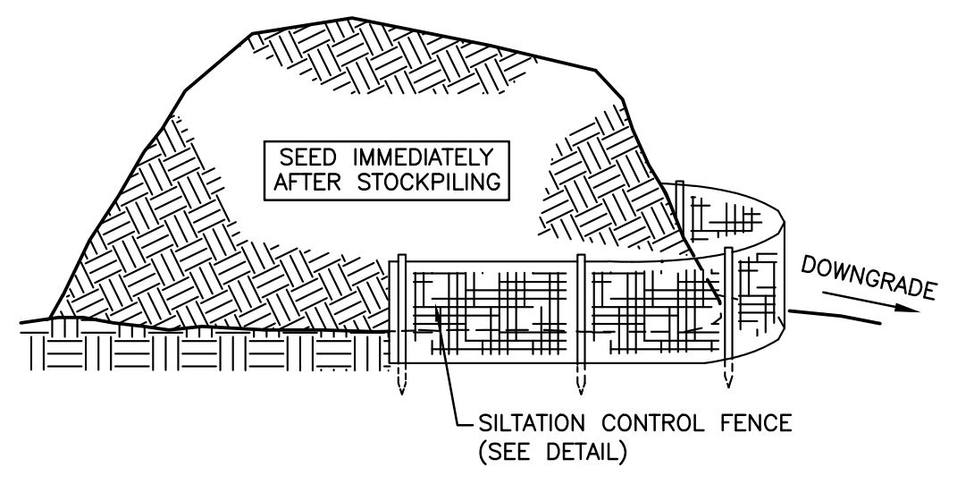
Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

Drawing Number
C-7.0 A2


8' O.C.
DRAWSTRING RUNNING THROUGH FABRIC ALONG TOP OF FENCE
TYP. 2"x2"x4' OAK POSTS
MIRAFI 100x FABRIC (OR EQUIVALENT)
3'
GRADE
6" MIN.
2' MIN.
FABRIC SECURED TO POST WITH METAL FASTENERS AND REINFORCEMENT BETWEEN FASTENER AND FABRIC.
DIG 6" DEEP TRENCH, BURY BOTTOM FLAP, TAMP IN PLACE.

NOTES:
1. ALL SILT FENCE WILL BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR WITHIN 24 HOURS AFTER EACH RAIN.
2. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/2 THE BARRIER HEIGHT
3. REPAIR OR REPLACE BARRIER WHEN DAMAGED
4. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL

TEMPORARY SILTATION CONTROL FENCE
NOT TO SCALE


SEED IMMEDIATELY AFTER STOCKPILING
DOWNGRADE
SILTATION CONTROL FENCE (SEE DETAIL)

TYPICAL TOPSOIL STOCKPILE
NOT TO SCALE

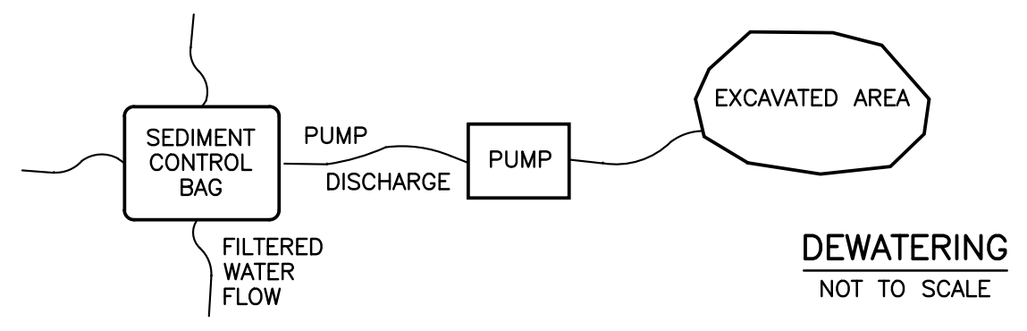
CONTRACTOR IS ADVISED THAT DE-WATERING PROCEDURES ARE REQUIRED DURING CONSTRUCTION PRACTICES. ALL DE-WATERING PROCEDURES MUST INCLUDE A METHOD OF REMOVING SEDIMENT PRIOR TO DISCHARGING. SEDIMENT REMOVAL METHODS SHALL FOLLOW STANDARDS FOR SOIL EROSION & SEDIMENT CONTROL IN NEW JERSEY, SECTION 14.

TEMPORARY FILTERS (SMALL IMPOUNDMENTS)

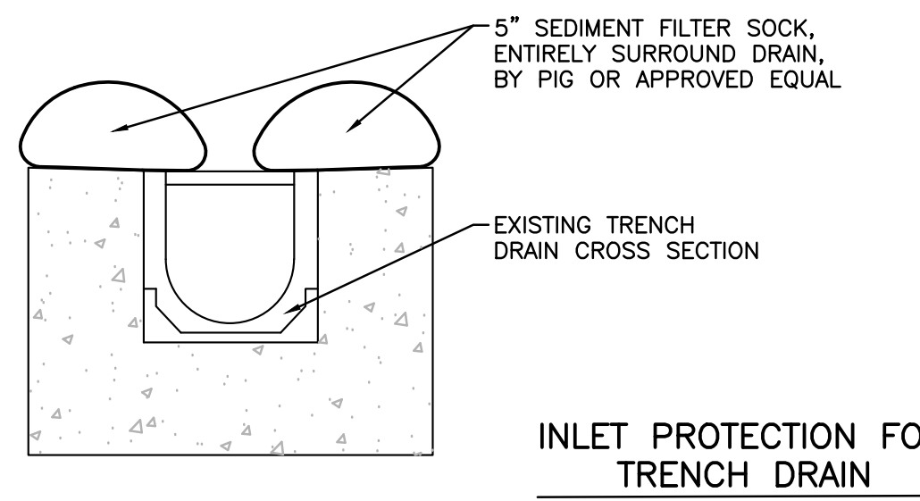
FOR SMALL QUANTITIES OF PONDED WATER SUCH AS MAY BE FOUND IN SHALLOW EXCAVATIONS (SMALL TRENCHES, MANHOLE INSTALLATIONS, ETC.) A SEDIMENT FILTER MAY BE CONSTRUCTED USING COMBINATIONS OF HAY BALES, SMALL CLEAN STONE AND FILTER FABRIC. THIS METHOD IS LIMITED TO SMALL QUANTITIES OF TRAPPED SURFACE WATER AND WHERE SEDIMENTS ARE NOT HIGHLY COLLOIDAL IN NATURE.

SEDIMENT CONTROL BAG

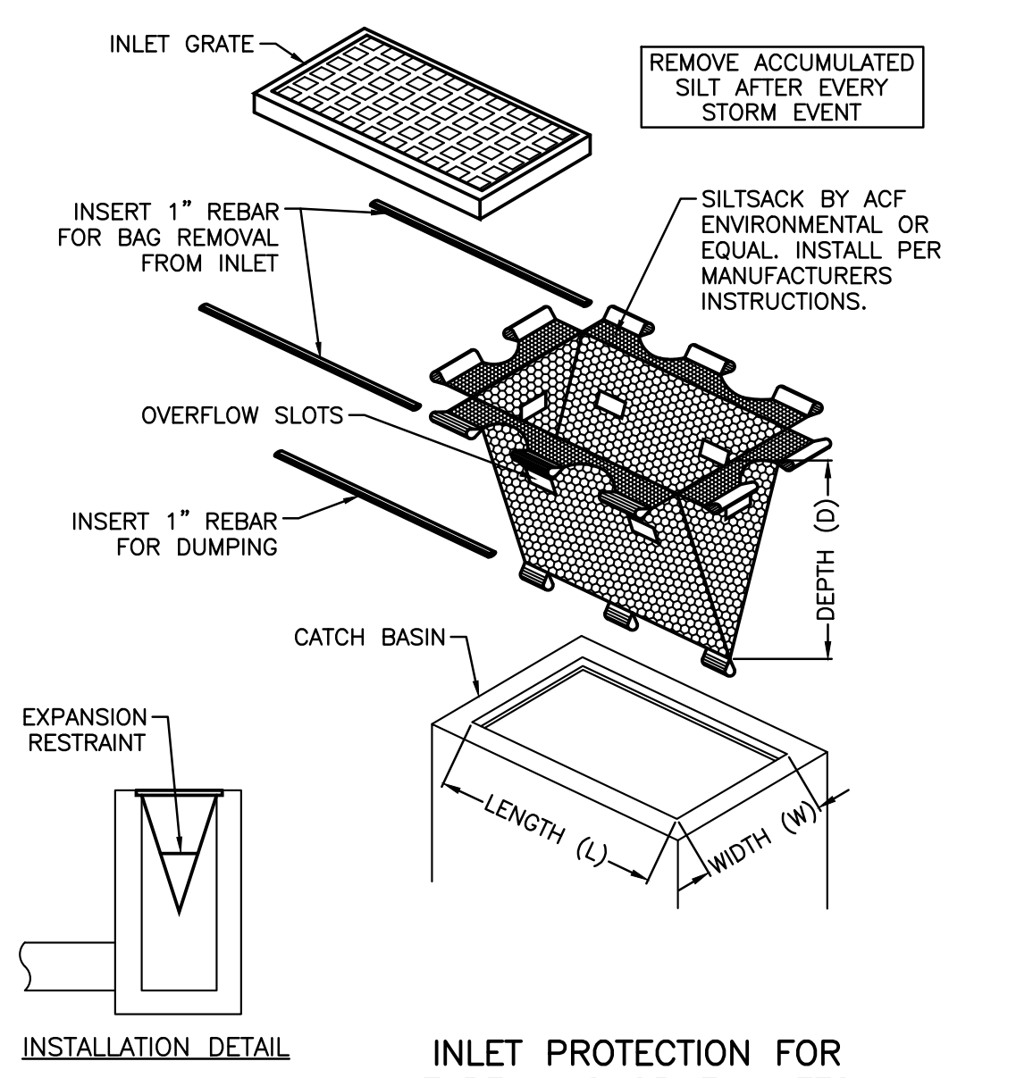
1. BAGS SHALL BE LOCATED FOR EASE OF CLEAN-OUT AND DISPOSAL OF THE TRAPPED SEDIMENT AND TO MINIMIZE INTERFERENCE WITH CONSTRUC-TION ACTIVITIES AND PEDESTRIAN TRAFFIC. BAGS SHALL NOT BE PLACED DIRECTLY INTO RECEIVING WATERS.
2. SEDIMENT CONTROL BAGS SHALL BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.



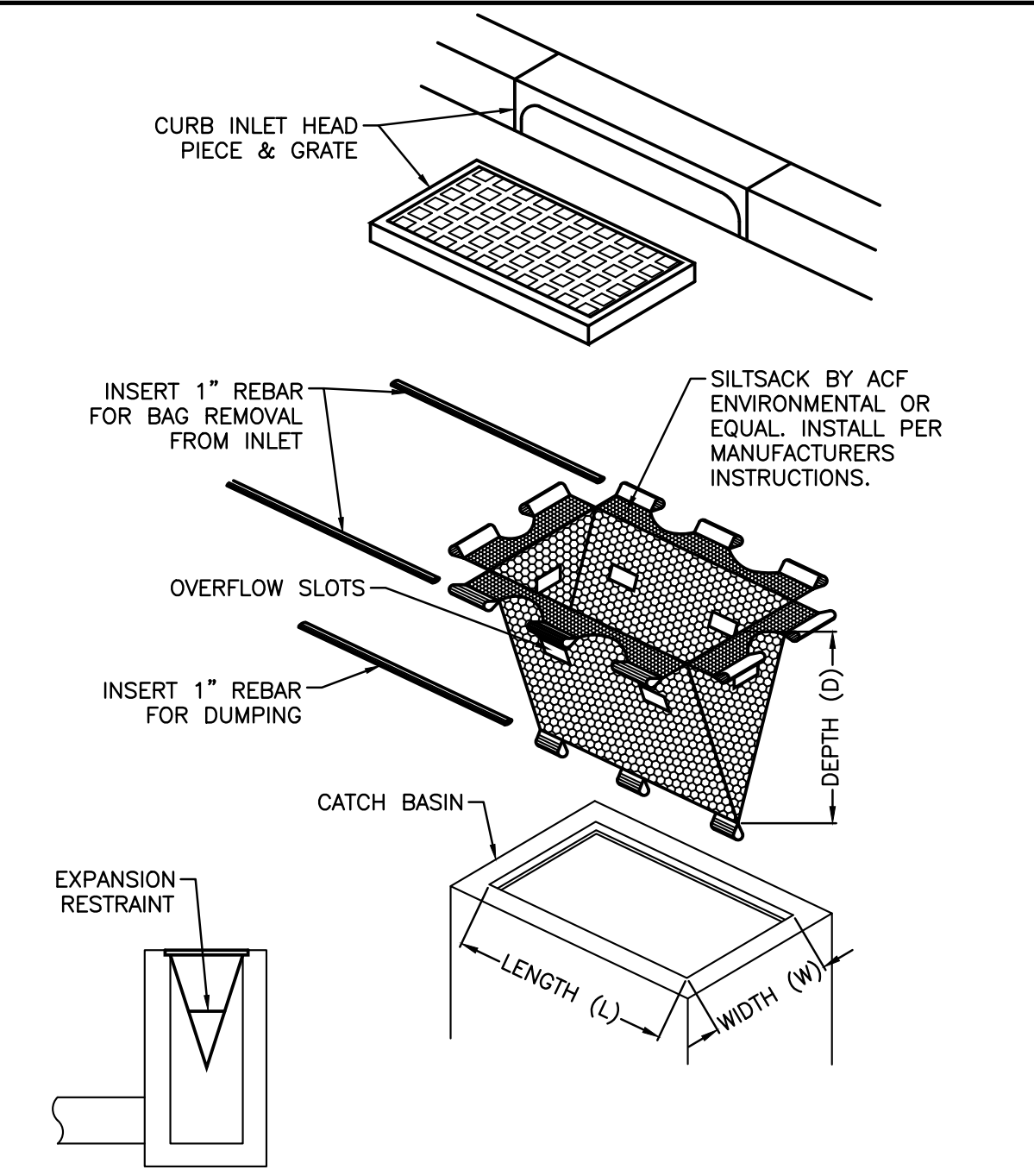
DEWATERING
NOT TO SCALE


5" SEDIMENT FILTER SOCK, ENTIRELY SURROUND DRAIN, BY PIG OR APPROVED EQUAL
EXISTING TRENCH DRAIN CROSS SECTION

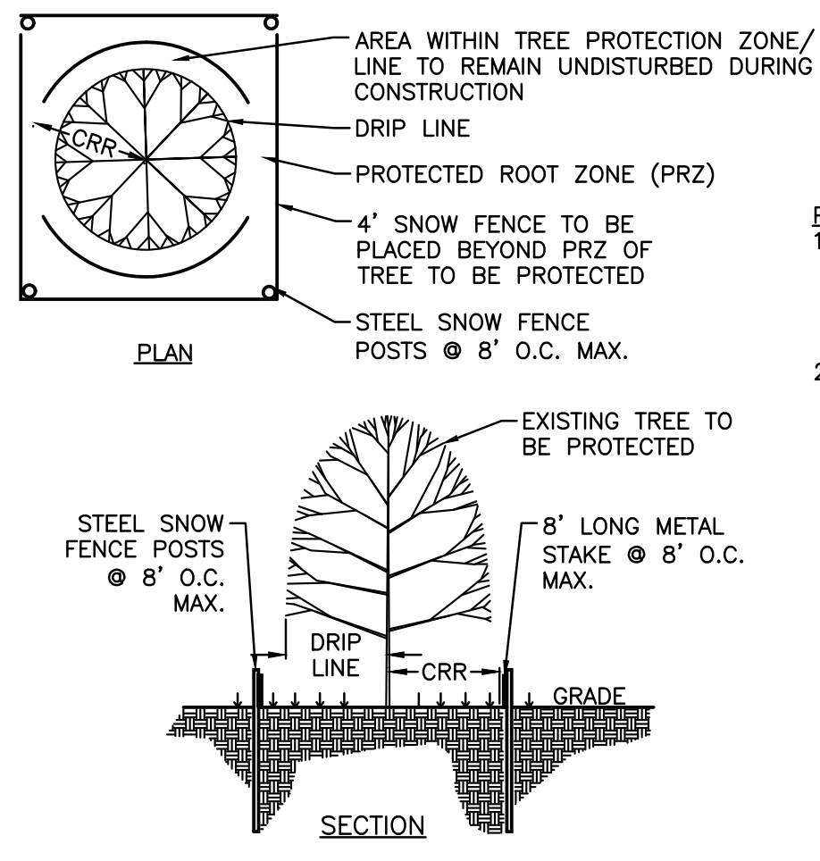
INLET PROTECTION FOR TRENCH DRAIN
NOT TO SCALE


INLET GRATE
REMOVE ACCUMULATED SILT AFTER EVERY STORM EVENT
INSERT 1" REBAR FOR BAG REMOVAL FROM INLET
SILTSACK BY ACF ENVIRONMENTAL OR EQUAL. INSTALL PER MANUFACTURERS INSTRUCTIONS.
OVERFLOW SLOTS
INSERT 1" REBAR FOR DUMPING
DEPTH (D)
CATCH BASIN
EXPANSION RESTRAINT
LENGTH (L)
WIDTH (W)
INSTALLATION DETAIL

INLET PROTECTION FOR TYPE A, C OR E INLETS
NOT TO SCALE


CURB INLET HEAD PIECE & GRATE
INSERT 1" REBAR FOR BAG REMOVAL FROM INLET
SILTSACK BY ACF ENVIRONMENTAL OR EQUAL. INSTALL PER MANUFACTURERS INSTRUCTIONS.
OVERFLOW SLOTS
INSERT 1" REBAR FOR DUMPING
DEPTH (D)
CATCH BASIN
EXPANSION RESTRAINT
LENGTH (L)
WIDTH (W)

INLET PROTECTION FOR TYPE B INLETS
NOT TO SCALE


AREA WITHIN TREE PROTECTION ZONE/ DRIP LINE TO REMAIN UNDISTURBED DURING CONSTRUCTION
DRIP LINE
PROTECTED ROOT ZONE (PRZ)
CRR
4' SNOW FENCE TO BE PLACED BEYOND PRZ OF TREE TO BE PROTECTED
STEEL SNOW FENCE POSTS @ 8' O.C. MAX.
PLAN
EXISTING TREE TO BE PROTECTED
STEEL SNOW FENCE POSTS @ 8' O.C. MAX.
8' LONG METAL STAKE @ 8' O.C. MAX.
DRIP LINE
CRR
GRADE
SECTION

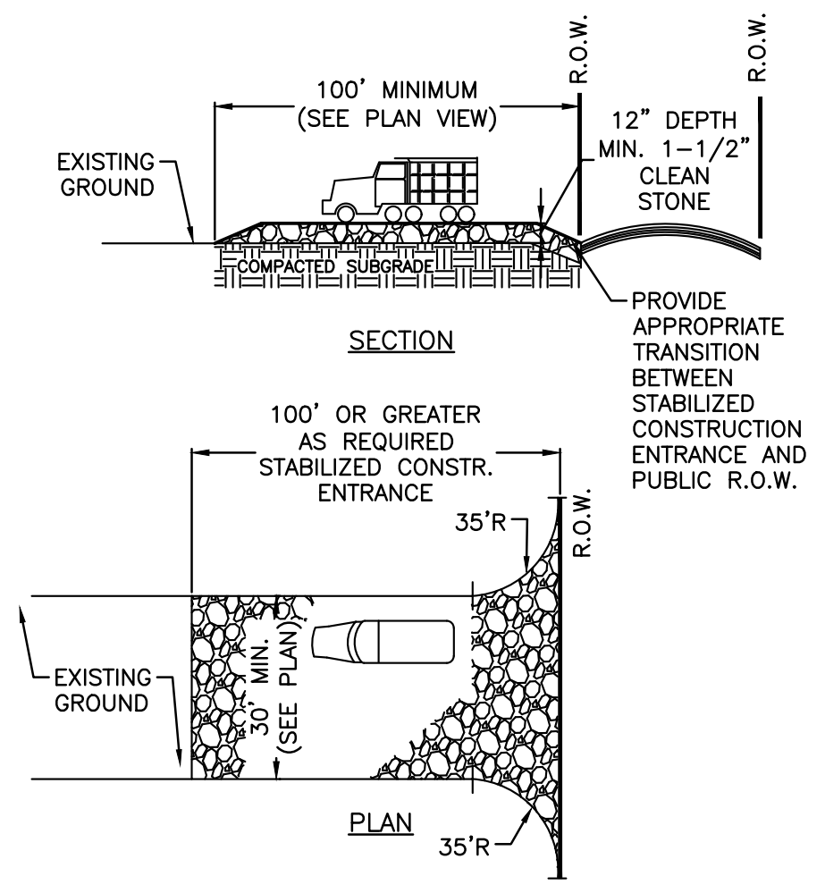
PROTECTED ROOT ZONE:
1. MEASURE THE DIAMETER OF THE TREE 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF THE TREE (DBH), IN INCHES.
2. CALCULATE THE CRITICAL ROOT RADIUS (CRR): MULTIPLY THE MEASURED DBH BY 1.0 OR 1.5. EXPRESS THE RESULT IN FEET.

DBH x 1.0: CRR FOR YOUNGER, HEALTHY, OR TOLERANT SPECIES

DBH x 1.5: CRR FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES

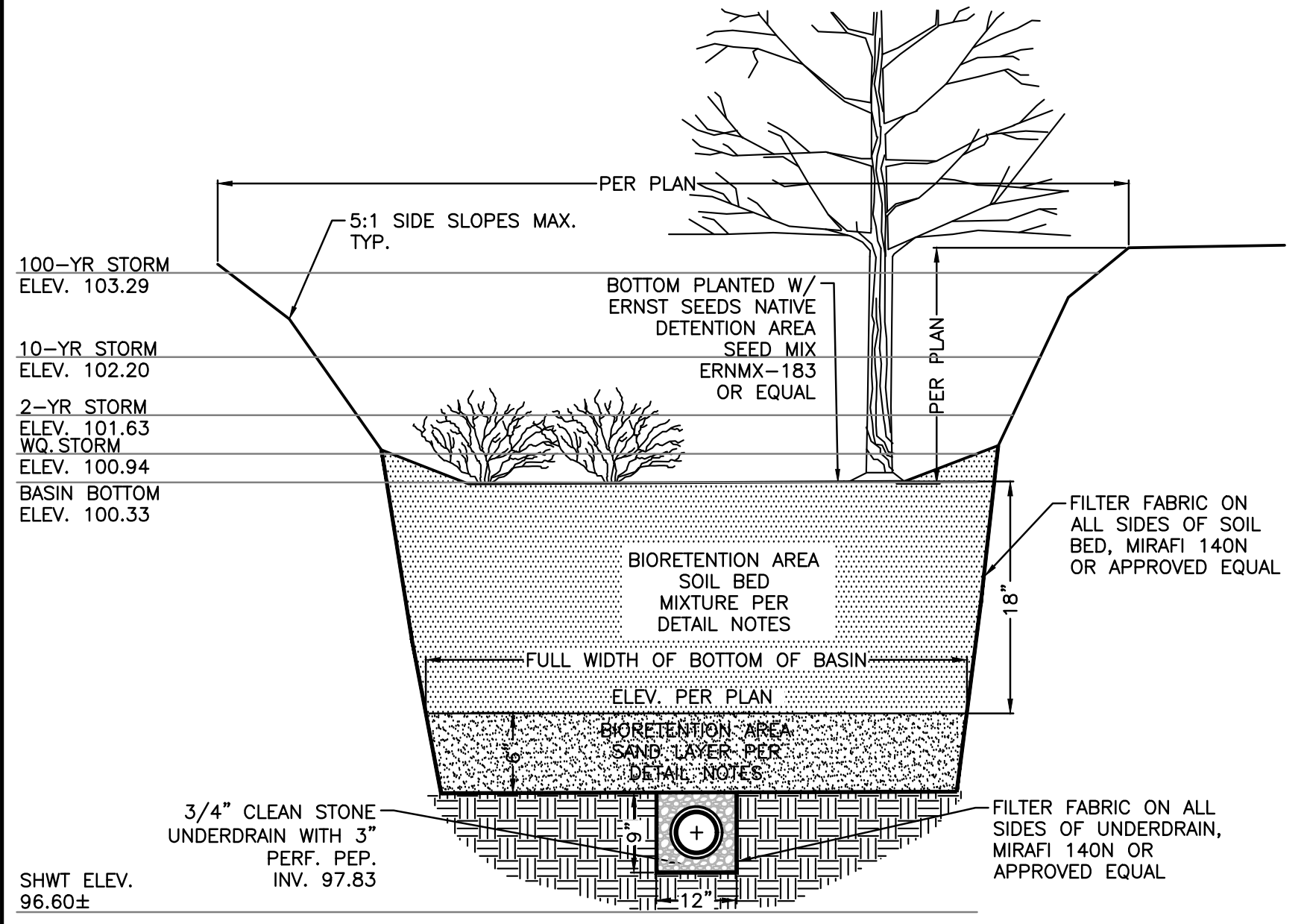
NOTES:
1. TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PRESERVED DURING AND AFTER CONSTRUCTION. THE CONTRACTOR SHALL TAKE WHATEVER ADDITIONAL MEASURES NECESSARY TO PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF MATERIALS OR EXCAVATED MATERIAL WITHIN PRZ, EXCESS FOOT OR VEHICLE TRAFFIC OR PARKING OF VEHICLES WITHIN PRZ.
2. BOARDS WILL NOT BE NAILED TO TREES DURING BUILDING OPERATIONS.
3. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA INSIDE THE PRZ.
4. DAMAGED TRUNKS OR EXPOSED ROOTS SHOULD HAVE DAMAGED BARK REMOVED IMMEDIATELY AND NO PAINT SHALL BE APPLIED. EXPOSED ROOTS SHOULD BE COVERED WITH TOPSOIL IMMEDIATELY AFTER EXCAVATION IS COMPLETE. ROOTS SHALL BE PRUNED TO GIVE A CLEAN, SHARP SURFACE AMENABLE TO HEALING. ROOTS EXPOSED DURING HOT WEATHER SHOULD BE IRRIGATED TO PREVENT PERMANENT TREE INJURY. CARE FOR SERIOUS INJURY SHOULD BE PRESCRIBED BY A PROFESSIONAL FORESTER OR LICENSED TREE EXPERT.
5. TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE AS NATURAL TARGET PRUNING TO REMOVE THE DESIRED BRANCH AS CLOSE AS POSSIBLE TO THE BRANCH COLLAR. THERE SHOULD BE NO FLUSH CUTS. NO TREE PAINT SHALL BE APPLIED. ALL CUTS SHALL BE MADE AT THE OUTSIDE EDGE OF THE BRANCH COLLAR.

EXISTING TREE PROTECTION
NOT TO SCALE


100' MINIMUM (SEE PLAN VIEW)
R.O.W.
R.O.W.
12" DEPTH MIN. 1-1/2" CLEAN STONE
EXISTING GROUND
COMPACTED SUBGRADE
SECTION
PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC R.O.W.
100' OR GREATER AS REQUIRED STABILIZED CONSTR. ENTRANCE
35'R
R.O.W.
EXISTING GROUND
30' MIN. (SEE PLAN)
PLAN
35'R

MAINTENANCE NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO ROADWAYS OR OTHER IMPERVIOUS SURFACES MUST BE REMOVED IMMEDIATELY.
2. WHERE ACCUMULATION OF DUST/SEDIMENT IS INADEQUATELY CLEANED OR REMOVED BY CONVENTIONAL METHODS, A POWER BROOM OR STREET SWEEPER WILL BE REQUIRED TO CLEAN PAVED OR IMPERVIOUS SURFACES. ALL OTHER ACCESS POINTS WHICH ARE NOT STABILIZED SHALL BE BLOCKED OFF.

VEHICLE WHEEL-CLEANING BLANKET
NOT TO SCALE

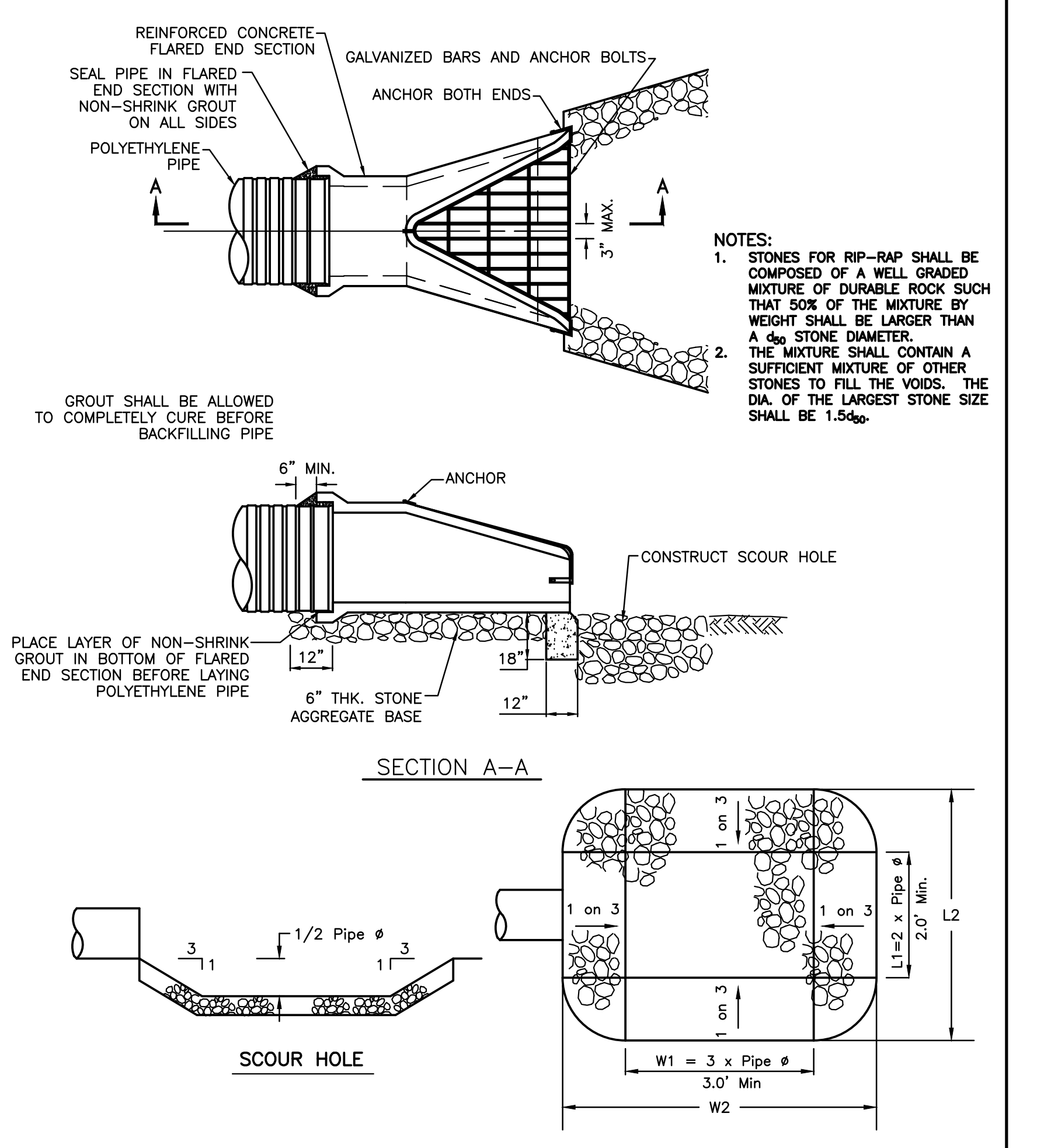

PER PLAN
5:1 SIDE SLOPES MAX. TYP.
100-YR STORM ELEV. 103.29
10-YR STORM ELEV. 102.20
2-YR STORM ELEV. 101.63
WQ. STORM ELEV. 100.94
BASIN BOTTOM ELEV. 100.33
BOTTOM PLANTED W/ ERNST SEEDS NATIVE DETENTION AREA SEED MIX ERNMX-183 OR EQUAL
PER PLAN
FILTER FABRIC ON ALL SIDES OF SOIL BED, MIRAFI 140N OR APPROVED EQUAL
BIORETENTION AREA SOIL BED MIXTURE PER DETAIL NOTES
18"
FULL WIDTH OF BOTTOM OF BASIN
ELEV. PER PLAN
BIORETENTION AREA SAND LAYER PER DETAIL NOTES
6"
3/4" CLEAN STONE UNDERDRAIN WITH 3" PERF. PEP. INV. 97.83
9"
12"
FILTER FABRIC ON ALL SIDES OF UNDERDRAIN, MIRAFI 140N OR APPROVED EQUAL
SHWT ELEV. 96.60±

DO NOT OVER-COMPACT SUB-SOILS SCARIFY SUB-SOILS PRIOR TO PLACEMENT OF SOIL BED

NOTES:
1. THE SOIL BED MATERIAL MUST CONSIST OF THE FOLLOWING MIX, BY WEIGHT: 85 TO 95% SAND, WITH NO MORE THAN 25% OF THE SAND AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX MUST THEN BE AMENDED WITH 3 TO 7% ORGANICS, BY WEIGHT.
2. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
3. THE PH OF THE SOIL BED MATERIAL MUST RANGE FROM 5.5 TO 6.5.
4. THE SOIL BED MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES. ADDITIONAL MATERIALS MAY BE NECESSARY TO ACCOUNT FOR SETTLING OVER TIME.
5. THE SAND LAYER, WHICH ACTS AS A TRANSITION BETWEEN THE SOIL BED AND THE SUBSEQUENT LAYERS, MUST BE AT LEAST 6 INCHES IN DEPTH AND MUST CONSIST OF CLEAN, MEDIUM-AGGREGATE CONCRETE SAND (AASHTO M-6/ASTM C-33). TO ENSURE PROPER SYSTEM OPERATION, THE PERMEABILITY RATE OF THE SAND LAYER MUST BE AT LEAST TWICE THE DESIGN PERMEABILITY RATE OF THE SOIL BED.

BIORETENTION AREA SECTION
NOT TO SCALE

NOTES:
1. SIZE AND DIMENSIONS OF FLARED-END SECTION VARIES WITH DIAMETER AND TYPE OF PIPE.


REINFORCED CONCRETE FLARED END SECTION
GALVANIZED BARS AND ANCHOR BOLTS
SEAL PIPE IN FLARED END SECTION WITH NON-SHRINK GROUT ON ALL SIDES
ANCHOR BOTH ENDS
POLYETHYLENE PIPE
A
A
3" MAX.
GROUT SHALL BE ALLOWED TO COMPLETELY CURE BEFORE BACKFILLING PIPE
6" MIN.
ANCHOR
CONSTRUCT SCOUR HOLE
PLACE LAYER OF NON-SHRINK GROUT IN BOTTOM OF FLARED END SECTION BEFORE LAYING POLYETHYLENE PIPE
12"
18"
6" THK. STONE AGGREGATE BASE
12"
SECTION A-A
1/2 Pipe ø
3
1
1
3
SCOUR HOLE
1 on 3
1 on 3
1 on 3
1 on 3
L1=2 x Pipe ø 2.0' Min.
L2
W1 = 3 x Pipe ø 3.0' Min
W2

NOTES:
1. **STONES FOR RIP-RAP SHALL BE COMPOSED OF A WELL GRADED MIXTURE OF DURABLE ROCK SUCH THAT 50% OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN A d_{50} STONE DIAMETER.**
2. **THE MIXTURE SHALL CONTAIN A SUFFICIENT MIXTURE OF OTHER STONES TO FILL THE VOIDS. THE DIA. OF THE LARGEST STONE SIZE SHALL BE $1.5d_{50}$.**

CONCRETE FLARED END SECTION W/ SCOUR HOLE
NOT TO SCALE

SCOUR HOLE	D	W1	W2	L1	L2	d50	THK
15" FES	0.75'	3.75'	8.25'	2.5'	7.0'	4"	12"
12" FES	0.50'	3.0'	6.0'	2.0'	5.0'	7"	21"

TOPSOILING NOTES
1. MATERIALS
   - A. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICCATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
   - B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.
2. STRIPPING & STOCKPILING
   - A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
   - B. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
   - C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL pH TO APPROXIMATELY 6.5.
   - D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
   - E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
   - F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.
3. SITE PREPARATION
   - A. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE.
   - B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE IF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
   - C. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A pH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
   - D. PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING.
   - E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS.
4. APPLYING TOPSOIL
   - A. HANDLE TOPSOIL ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
   - B. APPLY A UNIFORM AVERAGE DEPTH OF 5 INCHES, MINIMUM 4 INCHES, FIRMED IN PLACE. HIGH ACID PRODUCING SOILS: SOILS HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A pH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION.
   - C. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION.

STABILIZATION SPECIFICATIONS
1. SEEDBED PREPARATION: UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS, SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY).
2. WORK FERTILIZER AND LIME AND LIME INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
3. TEMPORARY SEEDING AND MULCHING
   LIME – AS RECOMMENDED BY SOIL TESTING.
   FERTILIZER – 500 LBS PER ACRE OF 10-20-10 OR EQUAL, WITH 50% WATER INSOLUBLE NITROGEN, UNLESS SOIL TESTING INDICATES OTHERWISE.
   SEED – SPRING OATS AT 86 LBS PER ACRE (2 LBS PER 1,000 SQ.FT.)
   PLANTING DATES: FEBRUARY 15 THRU MAY 1
   AUGUST 15 THRU OCTOBER 15
   MULCH – SALT HAY OR SMALL GRAIN STRAW AT 70-90 LBS PER 1,000 SQ.FT.
   BINDER – LIQUID SYNTHETIC OR ORGANIC SUCH AS CURASOL DCA 70, PETRO SET, OR TERRA TACK AT RATES ESTABLISHED BY THE MANUFACTURER TO BIND THE MULCH BLANKET.
4. PERMANENT SEEDING – LAWN AREAS
   ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE
   LIME – AS RECOMMENDED BY SOIL TESTING.
   FERTILIZER – 500 LBS PER ACRE 10-10-10 OR EQUAL, WITH 50% WATER INSOLUBLE NITROGEN, UNLESS SOIL TESTING INDICATES OTHERWISE.
   SEED – HARD FESCUE AND/OR CHEWING FESCUE AND/OR STRONG CREEPING RED FESCUE AT 175 LBS/ACRE
   PERENNIAL RYEGRASS AT 45 LBS/ACRE
   KENTUCKY BLUEGRASS (BLEND) AT 45 LBS/ACRE
   PLANTING DATES: FEBRUARY 1 THRU APRIL 30
   AUGUST 15 THRU OCTOBER 30 (OPTIMUM).
   MULCH – SALT HAY OR SMALL GRAIN STRAW AT 70-90 LBS PER 1,000 SQ.FT.
   BINDER – LIQUID SYNTHETIC OR ORGANIC SUCH AS CURASOL DCA 70, PETRO SET, OR TERRA TACK AT RATES ESTABLISHED BY THE MANUFACTURER TO BIND THE MULCH BLANKET.
5. STABILIZATION WITH MULCH ONLY
   MULCH – UNROTTED SMALL-GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE, SPREAD UNIFORMLY AT 90 TO 115 LBS PER 1.000 SQUARE FEET, ANCHORED WITH LIQUID MULCH BINDERS.
   BINDER – LIQUID SYNTHETIC OR ORGANIC SUCH AS CURASOL DCA 70, PETRO SET, OR TERRA TACK AT RATES ESTABLISHED BY THE MANUFACTURER TO BIND THE MULCH BLANKET. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKD. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

IMMEDIATELY PRIOR TO SEEDING, SURFACE SHALL BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. (ONLY APPLICABLE WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES.)
HIGH ACID PRODUCING SOILS: SOILS HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A pH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. THE OWNER IS RESPONSIBLE FOR LONG-TERM MAINTENANCE OF PERMANENT EROSION & SEDIMENT CONTROL MEASURES.

DUST CONTROL NOTES:
ANY OF THE FOLLOWING METHODS SHALL BE USED FOR DUST CONTROL:
1. MULCHES: SEE STABILIZATION SPECIFICATIONS.
2. TILLAGE: TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED APPROXIMATELY 12" APART AND SPRING-TOOTHED HARROWS ARE EXMAPLED OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
3. SPRINKLING: THE SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET.
4. BARRIERS: BALES OF HAY AND/OR SILT STOP FENCES CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

SOIL EROSION & SEDIMENT CONTROL NOTES:
1. SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE LAND DISTURBANCE OR ANY DEMOLITION WORK THAT WILL CAUSE EXCAVATION INTO THE SUBGRADE SOILS.

RESTORATION NOTES:
1. VEGETATED AREAS ADJACENT TO CONSTRUCTION SHALL BE RESTORED AS LAWN AND ADDITIONAL SCREENED TOPSOIL SHALL BE CONSTRUCTED AS NEEDED TO MEET NEW SURFACES FLUSH. FINISH THE TOPSOIL WITH A SURFACE GRADE OF AT LEAST 1.5 PERCENT WHENEVER POSSIBLE, TO MAINTAIN POSITIVE OVERLAND DRAINAGE.
2. RE-GRADE AREAS ALONGSIDE NEW PAVEMENT, CURBING, AND SIDEWALKS TO MEET SURFACES FLUSH. IN NO CASE SHALL TOPSOIL BE MORE THAN 1/2 INCH BELOW THE ADJACENT PAVEMENT SURFACE.

SOIL RESTORATION, DE-COMPACTION, AND TESTING REQUIREMENTS:
THE PROJECT SITE IS LOCATED WITHIN A METROPOLITAN PLANNING AREA ACCORDING TO THE STATE PLAN POLICY MAP. THE EXISTING SITE IS NOT COVERED IN WOODY VEGETATION, THEREFORE THIS SITE IS EXCLUDED FROM SOIL RESTORATION REMEDIATION REQUIREMENTS.

SOIL COMPACTION MITIGATION NOTES:
1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE [6" MINIMUM DEPTH] OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

AREA OF DISTURBANCE: 1.79 AC

SOIL TYPES:
UdbB: UDORTHENTS, BEDROCK SUBSTRATUM, 0 TO 8 PERCENT SLOPES
BucB: BUCKS SILT LOAM, 2 TO 6 PERCENT SLOPES

SEQUENCE OF CONSTRUCTION

TIME (WEEKS)	WORK DESCRIPTION
1	INSTALL PERIMETER SEDIMENT BARRIER (SILT FENCE), STABILIZED CONSTRUCTION ENTRANCE AND SOIL EROSION MEASURES INCLUDING TREE PROTECTION WHERE SHOWN ON THE PLAN.
6	PERFORM DEMOLITION OPERATIONS.
1	STRIP AND STOCKPILE TOPSOIL WITHIN LIMIT OF DISTURBANCE.
4	PERFORM EARTHWORK OPERATIONS.
2	CONSTRUCT AND PERMANENTLY STABILIZE BIORETENTION BASIN.
2	CONSTRUCT STORM SEWER SYSTEM
24	CONSTRUCT BUILDING; CONNECT UTILITIES
6	CONSTRUCT NEW PAVEMENT, CURBS AND WALKWAYS.
4	CONSTRUCT BALANCE OF SITE WORK.
2	RESTORE LAWN AREAS PER SEEDING SPECIFICATIONS. TILL SUBSOILS 6" MIN PRIOR TO PLACING 5" TOPSOIL.
1	WHEN SITE IS COMPLETELY AND PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
CONTINUOUS	MAINTENANCE OF ALL SOIL EROSION CONTROL MEASURES. TRACKING PADS SHALL BE TOP-DRESSED AS NEEDED TO PROVIDE A STABLE CONSTRUCTION ENTRANCE AND PROHIBIT TRACKING OF SILT AND SEDIMENT ONTO PUBLIC ROADWAYS. SILT FENCE SHALL BE CLEANED AND MAINTAINED IN AN UPRIGHT POSITION. INLET PROTECTION SHALL BE CLEANED AND MAINTAINED REGULARLY TO PROHIBIT DOWNSTREAM SILTATION WHILE MAINTAINING POSITIVE DRAINAGE.

THE ACTIVITIES LISTED ABOVE MAY OVERLAP. THE ESTIMATED CONSTRUCTION TIME FOR THIS PROJECT IS 6 MONTHS.

THE ABOVE SEQUENCE IS INTENDED FOR GUIDANCE PURPOSES ONLY, IN ORDER TO MINIMIZE DISTURBANCE AND EXPOSURE OF SITE SOILS. REFER TO MANDATORY CONSTRUCTION MILESTONES LISTED IN THE PROJECT MANUAL FOR SPECIFIC PHASING.

MERCER COUNTY SOIL EROSION AND SEDIMENT CONTROL NOTES
1. THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO STARTING LAND DISTURBANCE ACTIVITY. NOTICE MAY BE MAILED, FAXED OR EMAILED TO:
   MCSCD, 590 HUGHES DRIVE, HAMILTON SQUARE, NJ 08690
   PHONE: 609-586-9603
   FAX: 609-586-1117
   EMAIL: PAULS1MERCER@AOL.COM, LINDA1MERCER@AOL.COM
2. IF APPLICABLE TO THIS PROJECT, THE OWNER SHOULD BE AWARE OF HIS OR HER OBLIGATION TO FILE FOR A NJPDES CONSTRUCTION ACTIVITY STORMWATER 5G3 PERMIT (5G3-NJ0088323) VIA THE NJDEP ONLINE PERMITTING SYSTEM (WWW.NJ.GOV/DEP/ONLINE) AND TO MAINTAIN THE ASSOCIATED BEST MANAGEMENT PRACTICES AND STORMWATER POLLUTION PREVENTION PLAN SELF-INSPECTION LOGBOOK ONSITE AT ALL TIMES. THIS PERMIT MUST BE FILED PRIOR TO THE START OF SOIL DISTURBANCE. THE ONLINE APPLICATION PROCESS WILL REQUIRE ENTRY OF AN SCD CERTIFICATION CODE, WHICH IS PROVIDED BY THE SOIL CONSERVATION DISTRICT UPON CERTIFICATION OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
3. THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
4. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INCLUDING AN INCREASE IN THE LIMIT OF DISTURBANCE, WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
5. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES.
6. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AS OUTLINED WITHIN THE SEQUENCE OF CONSTRUCTION ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NJ. IF LANGUAGE CONTAINED WITHIN ANY OTHER PERMIT FOR THIS PROJECT IS MORE RESTRICTIVE THAN (BUT NOT CONTRADICTORY TO) WHAT IS CONTAINED WITHIN THESE NOTES OR ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, THEN THE MORE RESTRICTIVE PERMIT REQUIREMENTS SHALL BE FOLLOWED.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A 1½" TO 2½" CLEAN STONE TRACKING PAD AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE, WHETHER IDENTIFIED ON THE CERTIFIED PLAN OR NOT. THE WIDTH SHALL SPAN THE FULL WIDTH OF EGRESS, AND LENGTH SHALL BE 50 FT. OR MORE, DEPENDING ON SITE CONDITIONS AND AS REQUIRED BY THE STANDARD. THIS SHALL INCLUDE INDIVIDUAL LOT ACCESS POINTS WITHIN RESIDENTIAL SUBDIVISIONS. IF THE EGRESS IS TO A COUNTY ROAD, THEN A 20 FT. LONG PAVED TRANSITION SHALL BE PROVIDED BETWEEN THE EDGE OF PAVEMENT AND THE STONE ACCESS PAD.
9. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING, PROVIDED THAT ALL OTHER REQUIREMENTS RELATED TO DETENTION BASINS, SWALES, AND THE SEQUENCE OF CONSTRUCTION HAVE BEEN MET.
10. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION ACTIVITY WILL IMMEDIATELY RECEIVE TEMPORARY STABILIZATION. IF THE SEASON PREVENTS ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER, OR IF THE AREA IS NOT TOPSOILED, THEN THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS. SLOPED AREAS IN EXCESS OF 3H:1V SHALL BE PROVIDED WITH EROSION CONTROL BLANKETS. CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES, ROADWAY EMBANKMENTS, ENVIRONMENTALLY SENSITIVE AREAS) WILL RECEIVE TEMPORARY STABILIZATION IMMEDIATELY AFTER INITIAL DISTURBANCE OR ROUGH GRADING
11. ANY STEEP SLOPES (I.E. SLOPES GREATER THAN 3H:1V) RECEIVING PIPELINE OR UTILITY INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS.
12. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING AND TOPSOILING. ALL AGRONOMIC REQUIREMENTS CONTAINED WITHIN THE STANDARDS AND ON THE CERTIFIED PLAN SHALL BE EMPLOYED. MULCH WITH BINDER, IN ACCORDANCE WITH THE STANDARDS, SHALL BE USED ON ALL SEEDED AREAS. SAVE ALL TAGS AND/OR BAGS USED FOR SEED, LIME, AND FERTILIZER, AND PROVIDE THEM TO THE DISTRICT INSPECTOR TO VERIFY THAT MIXTURES AND RATES MEET THE STANDARDS.
13. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, THEN NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
14. DURING THE COURSE OF CONSTRUCTION, SOIL COMPACTION MAY OCCUR WITHIN HAUL ROUTES, STAGING AREAS AND OTHER PROJECT AREAS. IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING, COMPACTED SURFACES SHOULD BE SCARIFIED 6" TO 12" IMMEDIATELY PRIOR TO TOPSOIL APPLICATION. THIS WILL HELP ENSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
15. PRIOR TO SEEDING, TOPSOIL SHALL BE WORKED TO PREPARE A PROPER SEEDBED. THIS SHALL INCLUDE RAKING OF THE TOPSOIL AND REMOVAL OF DEBRIS AND STONES, ALONG WITH OTHER REQUIREMENTS OF THE STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION.
16. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE BURIED WITH LIMESTONE IN ACCORDANCE WITH THE STANDARD AND BE COVERED WITH A MINIMUM OF 12" OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO TOPSOIL APPLICATION AND SEEDBED PREPARATION. IF THE AREA IS TO RECEIVE TREE OR SHRUB PLANTINGS, OR IS LOCATED ON A SLOPE, THEN THE AREA SHALL BE COVERED WITH A MINIMUM OF 24" OF SOIL HAVING A PH OF 5 OR MORE.
17. MULCHING TO THE STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONAL ROC'S ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING. PERMANENT STABILIZATION MUST THEN BE COMPLETED DURING THE OPTIMUM SEEDING SEASON IMMEDIATELY FOLLOWING THE CONDITIONAL ROC, OR THE COMPLETION OF WORK IN A GIVEN AREA.
18. HYDROSEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED-TO-SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF THE SEEDING OPERATION, HYDROMULCH SHOULD BE APPLIED AT A MINIMUM RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE STANDARDS. THE USE OF HYDROMULCH ON SLOPED AREAS IS DISCOURAGED.
19. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF THE CONSTRUCTION PROJECT. ALL SEDIMENT WASHED, DROPPED, TRACKED OR SPILLED ONTO PAVED SURFACES SHALL BE IMMEDIATELY REMOVED.
20. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION, AND FOR EMPLOYING ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AT THE REQUEST OF THE MERCER COUNTY SOIL CONSERVATION DISTRICT.
21. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
22. ALL DETENTION / RETENTION BASINS MUST BE FULLY CONSTRUCTED (INCLUSIVE OF ALL STRUCTURAL COMPONENTS AND LINERS) AND PERMANENTLY STABILIZED PRIOR TO PAVING OR PRIOR TO THE ADDITION OF ANY IMPERVIOUS SURFACES. PERMANENT STABILIZATION INCLUDES, BUT MAY NOT BE LIMITED TO: TOPSOIL, SEED, STRAW MULCH AND BINDERS OR EROSION CONTROL BLANKETS ON ALL SEEDING, ALL AGRONOMIC REQUIREMENTS AS SPECIFIED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INSTALLATION OF THE OUTFLOW CONTROL STRUCTURES AND DISCHARGE STORM DRAINAGE PIPING, LOW FLOW CHANNELS, CONDUIT OUTLET PROTECTION, EMERGENCY SPILLWAYS, AND LAP RING PROTECTION.
23. THE RIDING SURFACE OF ALL UTILITY TRENCHES WITHIN PAVED AREAS SHALL BE 3/4" CLEAN STONE OR BASE PAVEMENT UNTIL SUCH TIME AS FINAL PAVEMENT HAS BEEN INSTALLED. TEMPORARY SOIL RIDING SURFACES ARE PROHIBITED.
24. ALL CONSTRUCTION DEWATERING (TRENCHES, EXCAVATIONS, ETC.) MUST BE DONE THROUGH AN INLET OR OUTLET FILTER IN ACCORDANCE WITH THE STANDARD FOR DEWATERING OR AS DEPICTED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN. DISCHARGE LOCATIONS FOR THE DEWATERING OPERATION MUST CONTAIN PERENNIAL VEGETATION OR SIMILAR STABLE SURFACE.
25. ALL SWALES OR CHANNELS THAT WILL RECEIVE RUNOFF FROM PAVED SURFACES MUST BE PERMANENTLY STABILIZED PRIOR TO THE INSTALLATION OF PAVEMENT. IF THE SEASON PROHIBITS THE ESTABLISHMENT OF PERMANENT STABILIZATION, THE SWALES OR CHANNELS MAY BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE STANDARDS.
26. NJSA 4:24-39 ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY BE ISSUED BY THE MUNICIPALITY BEFORE THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN SATISFIED. THEREFORE, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS MUST BE COMPLETED BEFORE THE DISTRICT ISSUES A REPORT OF COMPLIANCE OR CONDITIONAL REPORT OF COMPLIANCE, WHICH MUST BE FORWARDED TO THE MUNICIPALITY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY, RESPECTIVELY.

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

03.24.26
Date
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F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

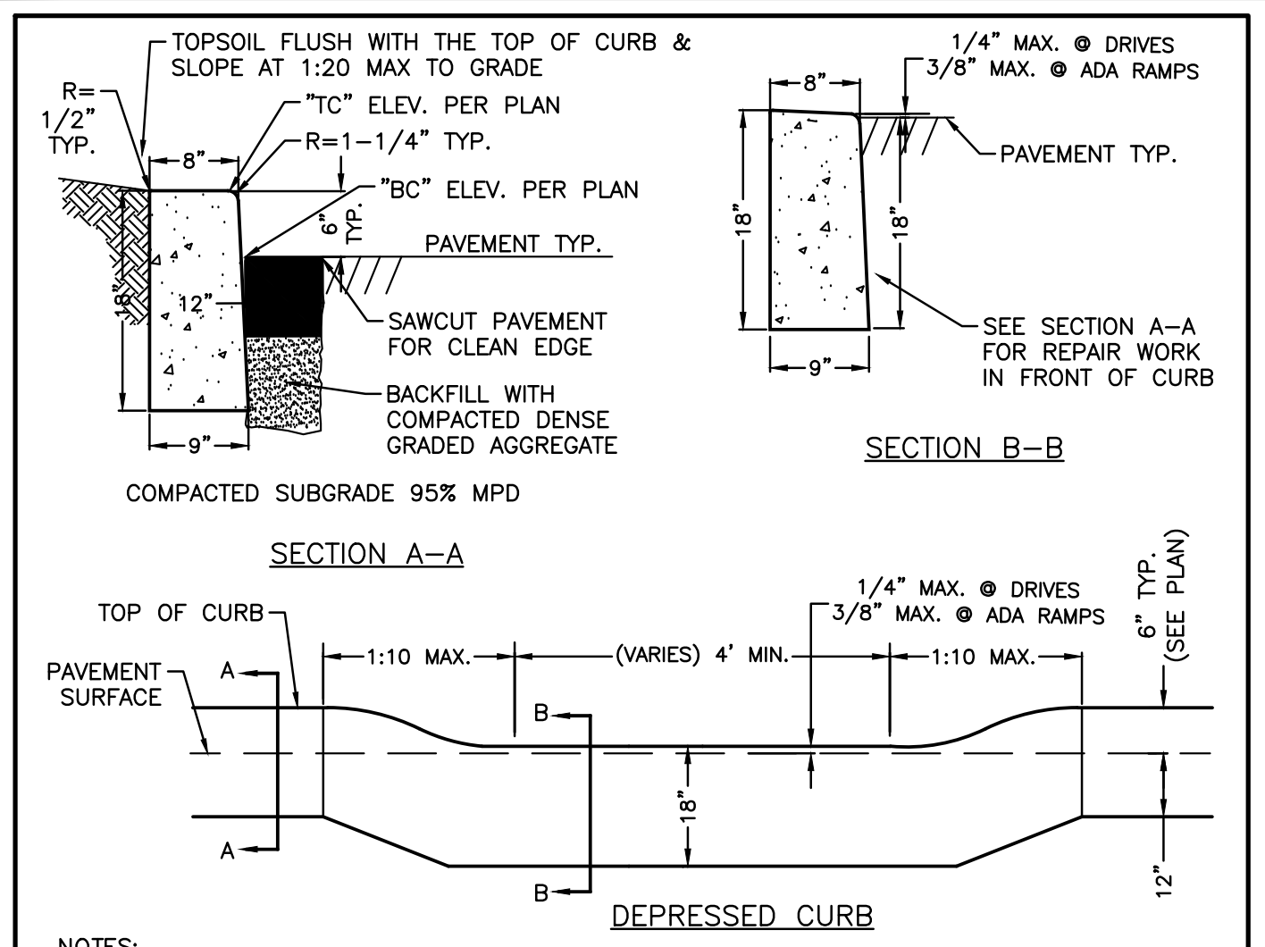
Scale

Drawing Name
SOIL EROSION & SEDIMENT CONTROL DETAILS

Revisions

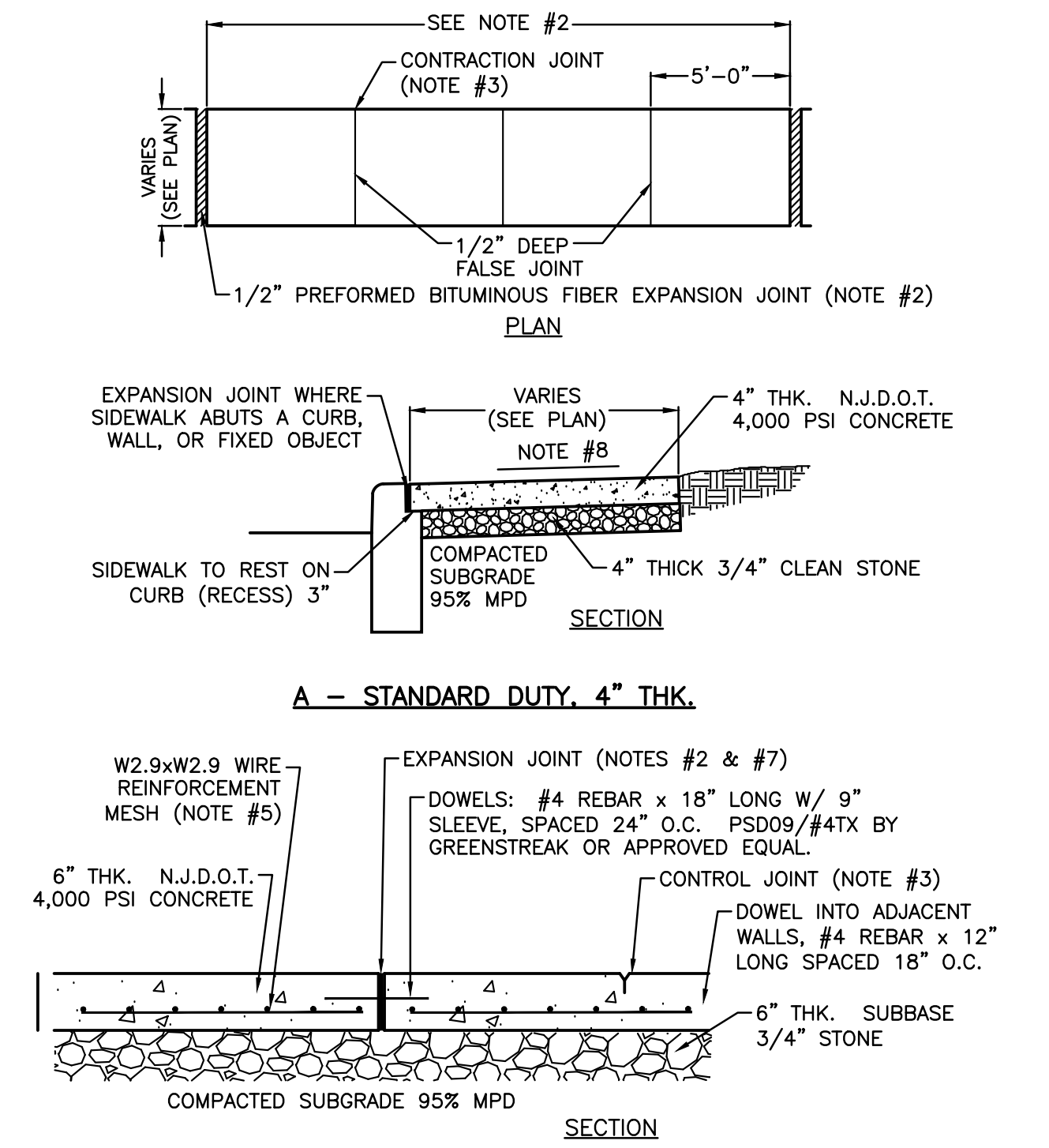
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
△	12.10.25	NJ DCA REVISIONS
△	12.12.25	DESIGN REVISIONS
△	01.02.26	NJ DCA REVISIONS
△	01.02.26	DESIGN REVISIONS
△	02.12.26	NJ DCA REVISIONS
△	03.24.26	ADDENDUM #2

Drawing Number
C-7.1



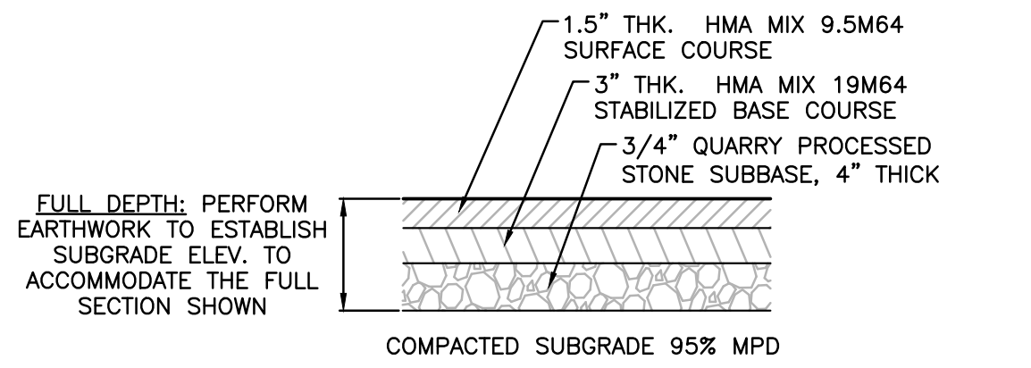
NOTES:
1. CONCRETE TO BE N.J.DOT. 4000 PSI, AIR–ENTRAINED
2. CURB FACE (REVEAL) TO BE 6 INCHES OR PER SPOT ELEVATIONS ON THE GRADING PLAN.
3. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK @ 20 FT. MAX. INTERVAL.
4. ALL DEPRESSED CURBS AT ADA RAMPS MUST BE FLUSH (MAX 3/8" LIP). PAINT 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


SEE NOTE #2
CONTRACTION JOINT (NOTE #3)
5'-0"
VARIES (SEE PLAN)
1/2" DEEP FALSE JOINT
1/2" PREFORMED BITUMINOUS FIBER EXPANSION JOINT (NOTE #2)
PLAN
EXPANSION JOINT WHERE SIDEWALK ABUTS A CURB, WALL, OR FIXED OBJECT
VARIES (SEE PLAN)
NOTE #8
4" THK. N.J.DOT. 4,000 PSI CONCRETE
COMPACTED SUBGRADE 95% MPD
SIDEWALK TO REST ON CURB (RECESS) 3"
4" THICK 3/4" CLEAN STONE
SECTION
A – STANDARD DUTY, 4" THK.
W2.9xW2.9 WIRE REINFORCEMENT MESH (NOTE #5)
EXPANSION JOINT (NOTES #2 & #7)
DOWELS: #4 REBAR x 18" LONG W/ 9" SLEEVE, SPACED 24" O.C. PSD09/#4TX BY GREENSTREAK OR APPROVED EQUAL
CONTROL JOINT (NOTE #3)
6" THK. N.J.DOT. 4,000 PSI CONCRETE
DOWEL INTO ADJACENT WALLS, #4 REBAR x 12" LONG SPACED 18" O.C.
6" THK. SUBBASE 3/4" STONE
COMPACTED SUBGRADE 95% MPD
SECTION
B – HEAVY DUTY, 6" THK. W/ REINFORCEMENT

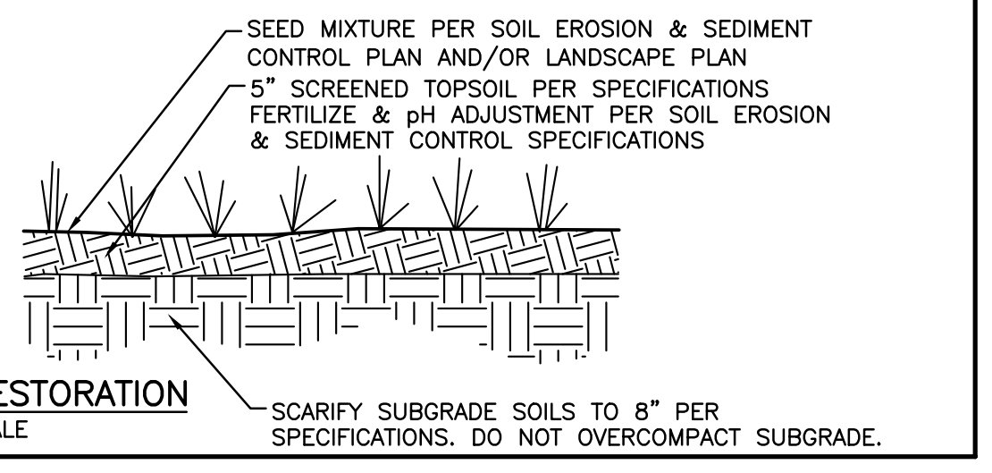
NOTES:
1. PORTLAND CEMENT CONCRETE TO BE NJ DOT, 4,000 PSI, AIR ENTRAINED
2. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK ALONG ALL BUILDING WALLS AND OTHER RIGID SURFACES. THE MAXIMUM SPACING OF EXPANSION JOINTS SHALL BE AS FOLLOWS:
   - 4" THICK SLAB: 16 FT.
   - 6" THICK SLAB: 24 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

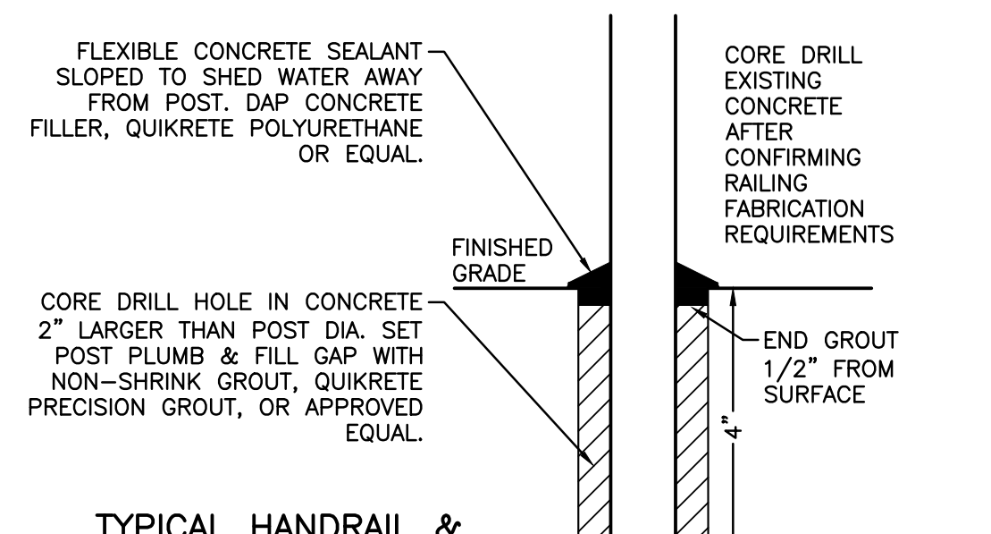

1.5" THK. HMA MIX 9.5M64 SURFACE COURSE
3" THK. HMA MIX 19M64 STABILIZED BASE COURSE
3/4" QUARRY PROCESSED STONE SUBBASE, 4" THICK
FULL DEPTH: PERFORM EARTHWORK TO ESTABLISH SUBGRADE ELEV. TO ACCOMMODATE THE FULL SECTION SHOWN
COMPACTED SUBGRADE 95% MPD
STANDARD DUTY PAVEMENT

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.

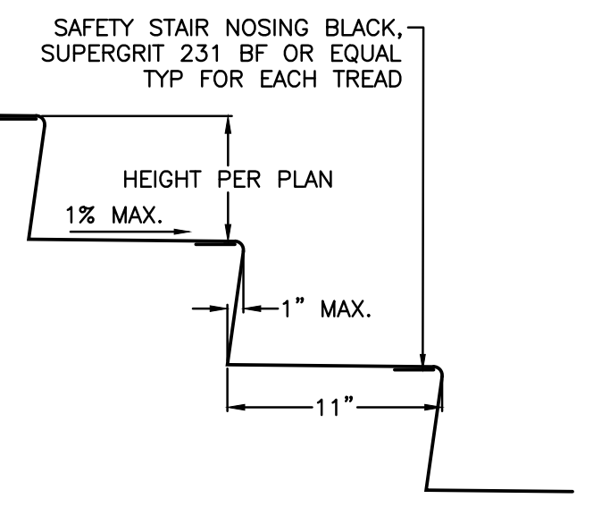
3 BITUMINOUS PAVEMENT (HOT MIX ASPHALT)
NOT TO SCALE


SEED MIXTURE PER SOIL EROSION & SEDIMENT CONTROL PLAN AND/OR LANDSCAPE PLAN
5" SCREENED TOPSOIL PER SPECIFICATIONS FERTILIZE & pH ADJUSTMENT PER SOIL EROSION & SEDIMENT CONTROL SPECIFICATIONS
SCARIFY SUBGRADE SOILS TO 8" PER SPECIFICATIONS. DO NOT OVERCOMPACT SUBGRADE.

4 LAWN RESTORATION
NOT TO SCALE

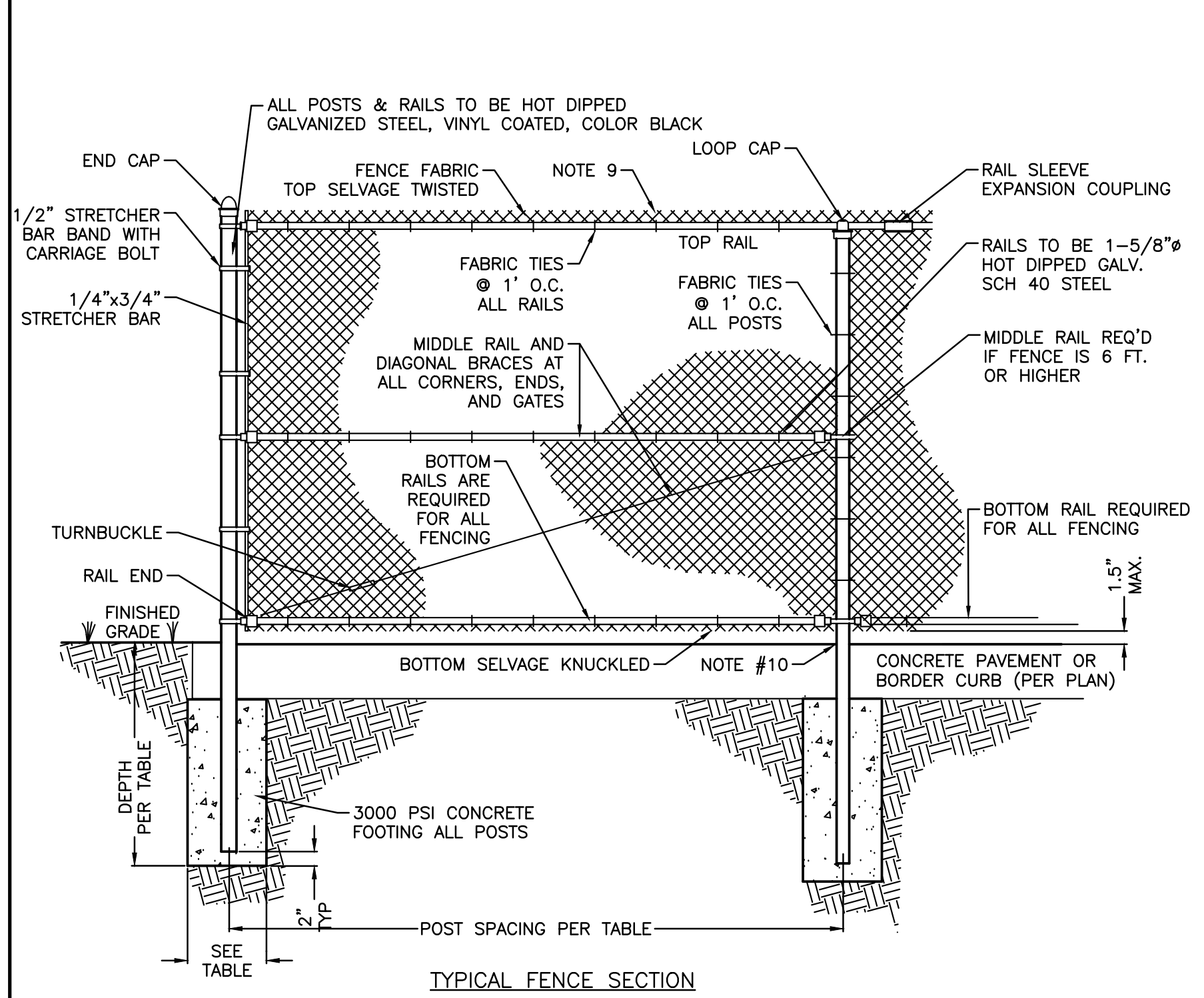

FLEXIBLE CONCRETE SEALANT SLOPED TO SHED WATER AWAY FROM POST. DAP CONCRETE FILLER, QUIKRETE POLYURETHANE OR EQUAL.
FINISHED GRADE
CORE DRILL HOLE IN CONCRETE 2" LARGER THAN POST DIA. SET POST PLUMB & FILL GAP WITH NON-SHRINK GROUT, QUIKRETE PRECISION GROUT, OR APPROVED EQUAL.
CORE DRILL EXISTING CONCRETE AFTER CONFIRMING RAILING FABRICATION REQUIREMENTS
END GROUT 1/2" FROM SURFACE

5 TYPICAL HANDRAIL & GUARDRAIL POST MOUNT
NOT TO SCALE


SAFETY STAIR NOSING BLACK, SUPERGRIT 231 BF OR EQUAL TYP FOR EACH TREAD
HEIGHT PER PLAN
1% MAX.
1" MAX.
11"

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


END CAP
1/2" STRETCHER BAR BAND WITH CARRIAGE BOLT
1/4"x3/4" STRETCHER BAR
ALL POSTS & RAILS TO BE HOT DIPPED GALVANIZED STEEL, VINYL COATED, COLOR BLACK
FENCE FABRIC
TOP SELVAGE TWISTED
LOOP CAP
FABRIC TIES @ 1' O.C. ALL RAILS
FABRIC TIES @ 1' O.C. ALL POSTS
TOP RAIL
NOTE 9
RAIL SLEEVE EXPANSION COUPLING
RAILS TO BE 1-5/8"ø HOT DIPPED GALV. SCH 40 STEEL
MIDDLE RAIL AND DIAGONAL BRACES AT ALL CORNERS, ENDS, AND GATES
MIDDLE RAIL REQ'D IF FENCE IS 6 FT. OR HIGHER
BOTTOM RAILS ARE REQUIRED FOR ALL FENCING
BOTTOM RAIL REQUIRED FOR ALL FENCING
TURNBUCKLE
RAIL END
FINISHED GRADE
BOTTOM SELVAGE KNUCKLED
NOTE #10
1.5" MAX.
CONCRETE PAVEMENT OR BORDER CURB (PER PLAN)
DEPTH PER TABLE
3000 PSI CONCRETE FOOTING ALL POSTS
POST SPACING PER TABLE
SEE TABLE

TYPICAL FENCE SECTION

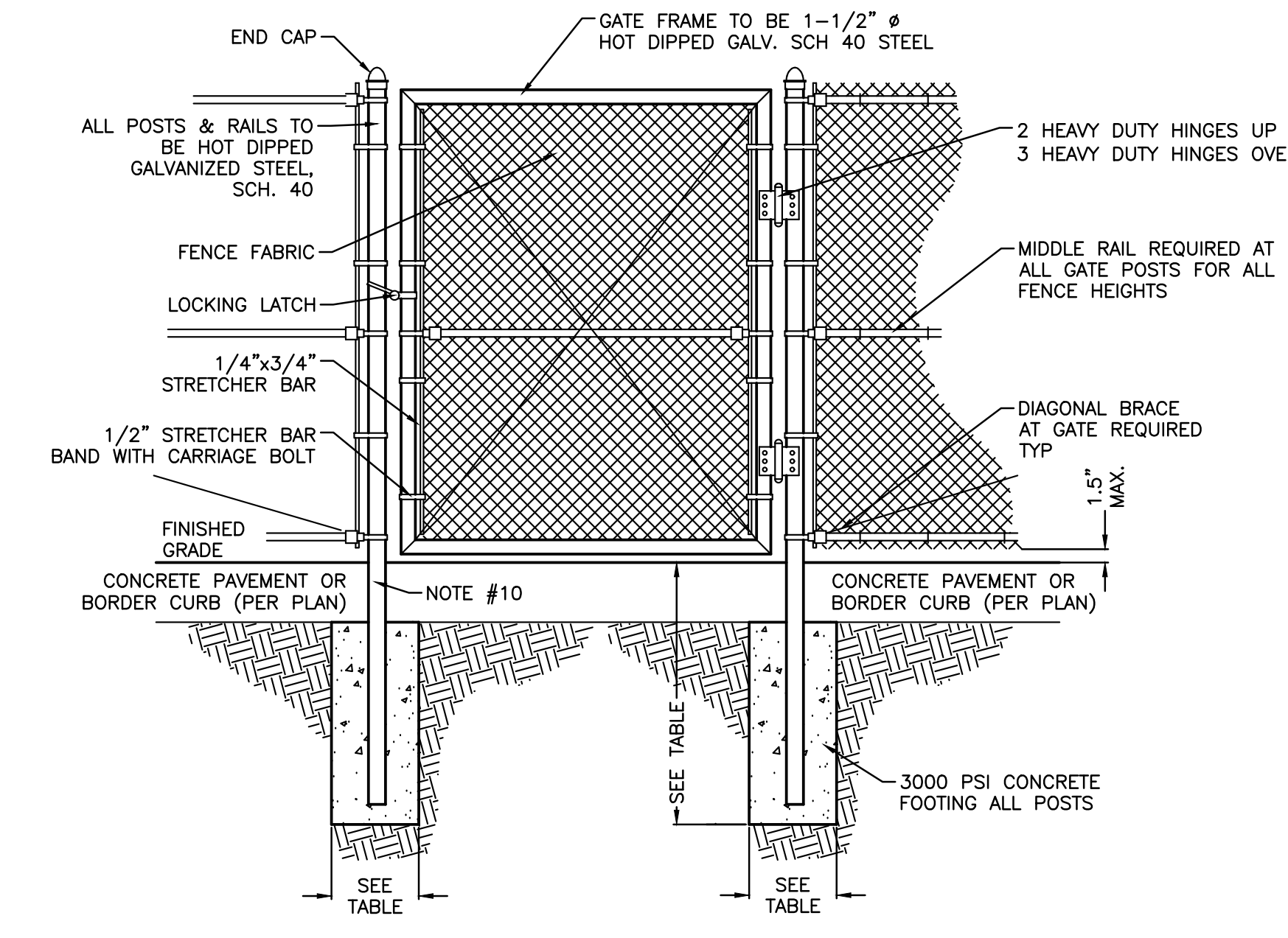
GENERAL NOTES
1. FENCE FABRIC (MESH) TO BLACK, VINYL COATED NO. 9 GALVANIZED STEEL WIRE. FABRIC TO FACE PLAYING FIELD. MESH OPENING SIZE IS 1.75".
2. POST SIZES, STRENGTH, AND SPACING TO BE PER TABLE.
3. ALL FENCE POSTS SHALL BE GALVANIZED STEEL, VINYL COATED, COLOR BLACK. MATERIAL STRENGTH PER TABLE.
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:

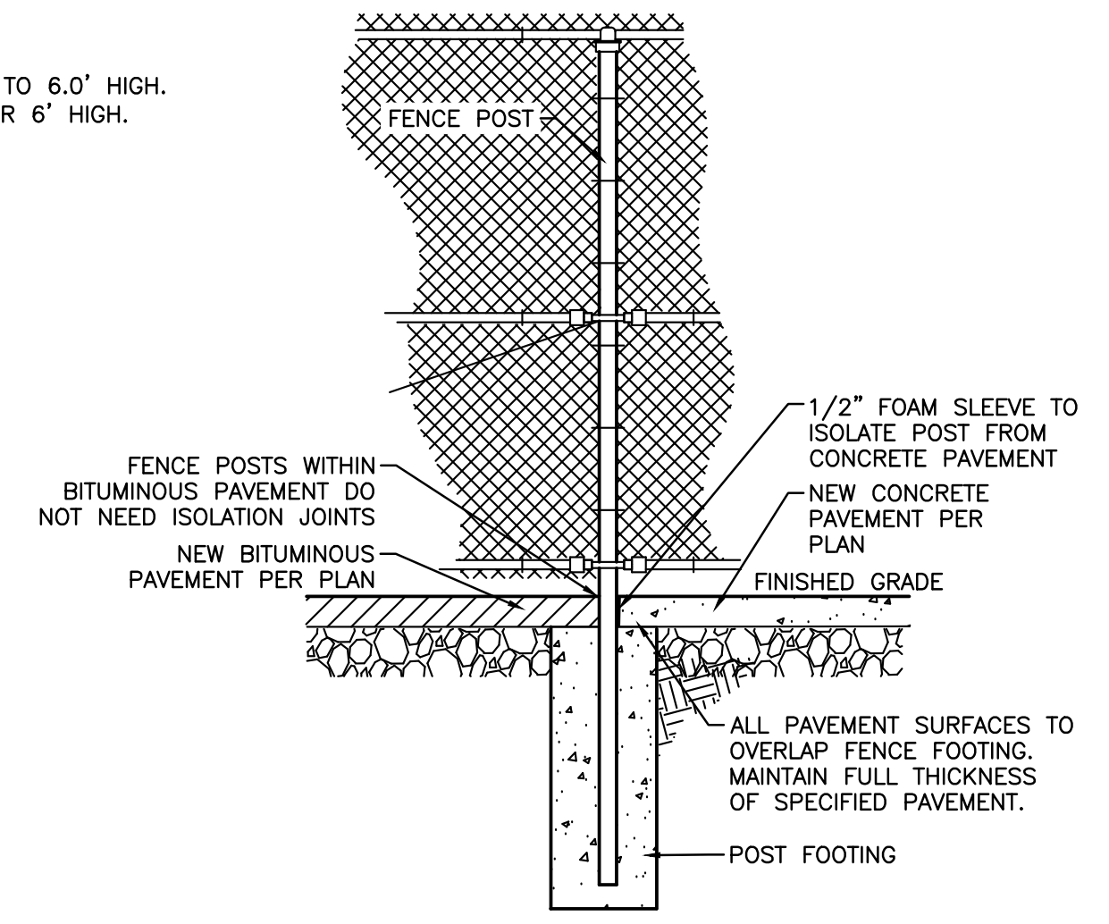
FENCE	STEEL POST MATERIAL	POST SIZE (IN.)	MAX. POST SPACING (FT.)	MIN. POST DEPTH (FT.)	MIN. FOOTING DIAMETER (FT.)
6 FEET	ASTM F1083 (50 KSI)	3	10	4	2.5
8 FEET	ASTM F1083 (50KSI)	3	8	5	3.0

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

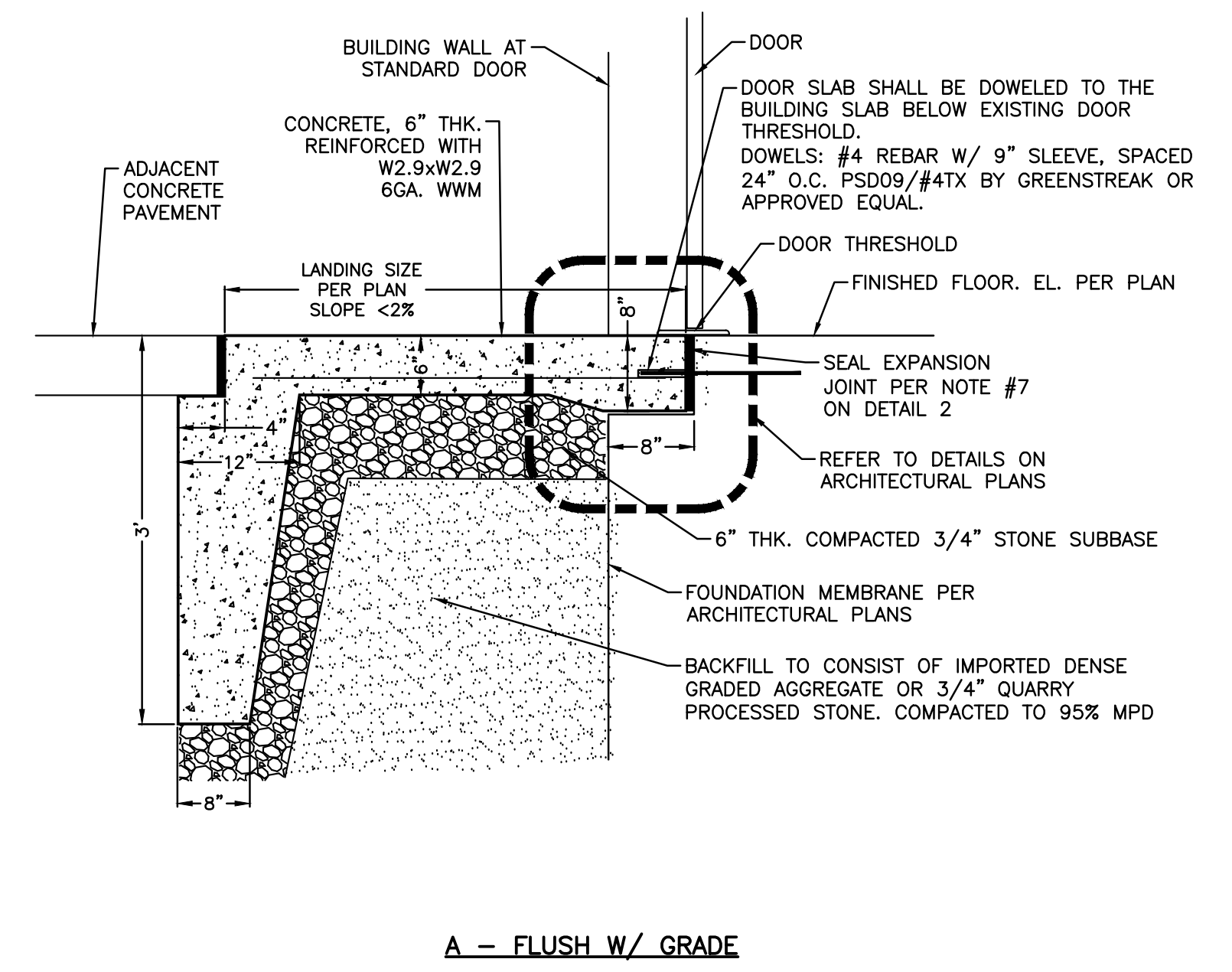

END CAP
GATE FRAME TO BE 1-1/2"ø HOT DIPPED GALV. SCH 40 STEEL
ALL POSTS & RAILS TO BE HOT DIPPED GALVANIZED STEEL, SCH. 40
2 HEAVY DUTY HINGES UP TO 6.0' HIGH.
3 HEAVY DUTY HINGES OVER 6' HIGH.
FENCE FABRIC
LOCKING LATCH
MIDDLE RAIL REQUIRED AT ALL GATE POSTS FOR ALL FENCE HEIGHTS
1/4"x3/4" STRETCHER BAR
1/2" STRETCHER BAR BAND WITH CARRIAGE BOLT
DIAGONAL BRACE AT GATE REQUIRED TYP
FINISHED GRADE
1.5" MAX.
CONCRETE PAVEMENT OR BORDER CURB (PER PLAN)
NOTE #10
3000 PSI CONCRETE FOOTING ALL POSTS
SEE TABLE

TYPICAL FENCE GATE SECTION

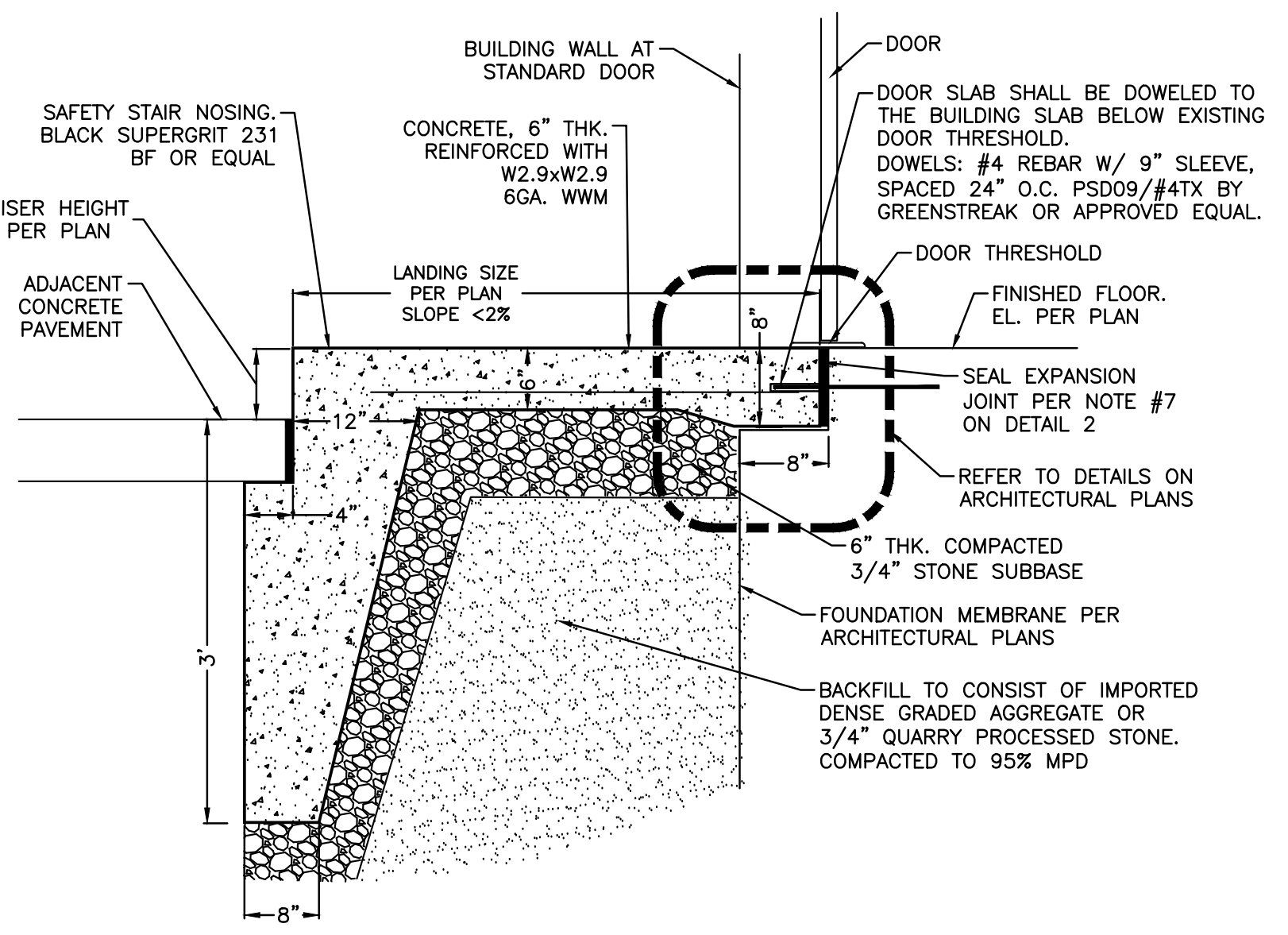

FENCE POST
FENCE POSTS WITHIN BITUMINOUS PAVEMENT DO NOT NEED ISOLATION JOINTS
NEW BITUMINOUS PAVEMENT PER PLAN
1/2" FOAM SLEEVE TO ISOLATE POST FROM CONCRETE PAVEMENT
NEW CONCRETE PAVEMENT PER PLAN
FINISHED GRADE
ALL PAVEMENT SURFACES TO OVERLAP FENCE FOOTING. MAINTAIN FULL THICKNESS OF SPECIFIED PAVEMENT.
POST FOOTING

TYPICAL FENCE POSTS SET IN PAVEMENT

7 CHAIN LINK FENCE
NOT TO SCALE


BUILDING WALL AT STANDARD DOOR
DOOR
CONCRETE, 6" THK. REINFORCED WITH W2.9xW2.9 6GA. WWM
DOOR SLAB SHALL BE DOWELED TO THE BUILDING SLAB BELOW EXISTING DOOR THRESHOLD. DOWELS: #4 REBAR W/ 9" SLEEVE, SPACED 24" O.C. PSD09/#4TX BY GREENSTREAK OR APPROVED EQUAL.
ADJACENT CONCRETE PAVEMENT
LANDING SIZE PER PLAN SLOPE ≤2%
DOOR THRESHOLD
FINISHED FLOOR, EL. PER PLAN
SEAL EXPANSION JOINT PER NOTE #7 ON DETAIL 2
REFER TO DETAILS ON ARCHITECTURAL PLANS
6" THK. COMPACTED 3/4" STONE SUBBASE
FOUNDATION MEMBRANE PER ARCHITECTURAL PLANS
BACKFILL TO CONSIST OF IMPORTED DENSE GRADED AGGREGATE OR 3/4" QUARRY PROCESSED STONE. COMPACTED TO 95% MPD

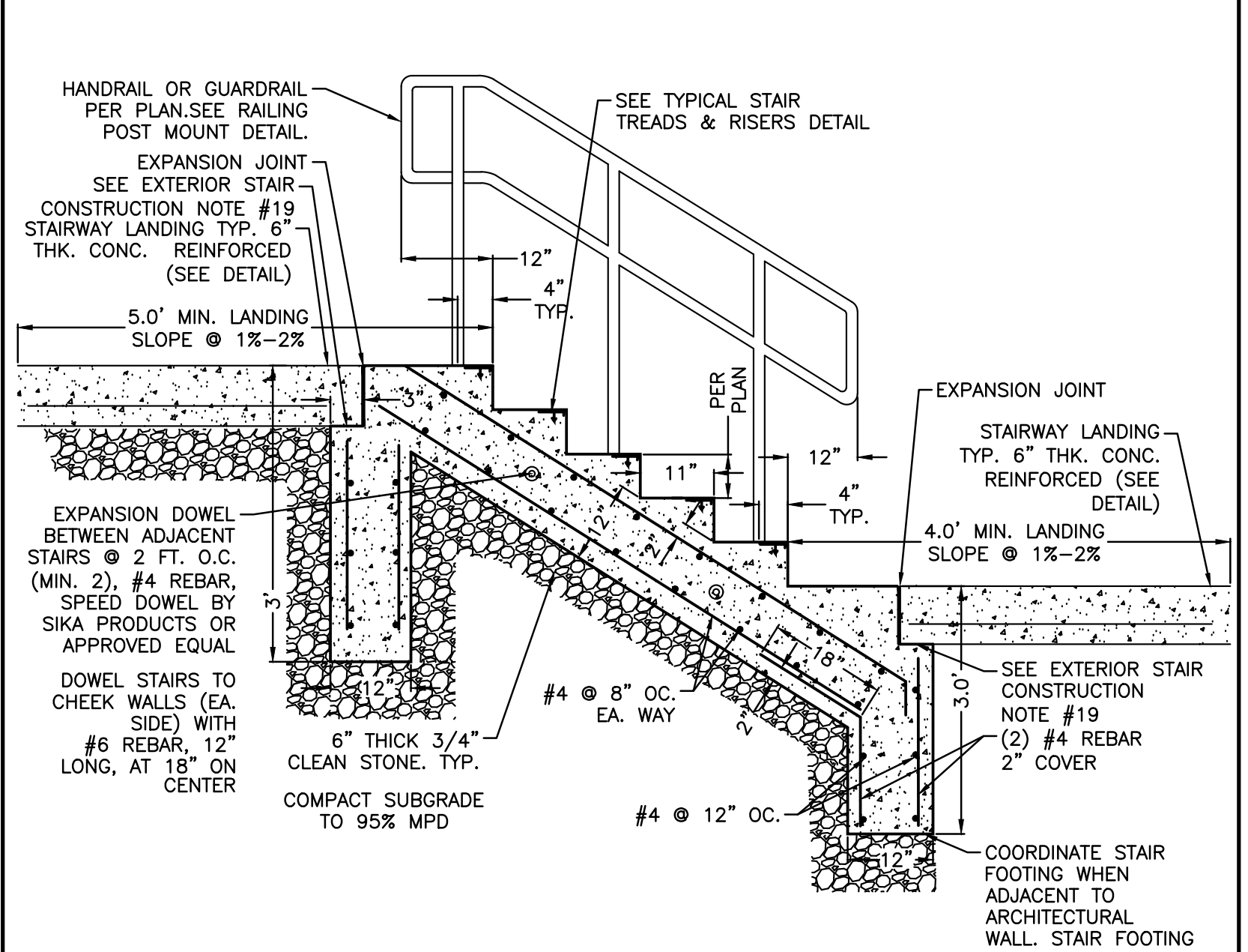
A – FLUSH W/ GRADE


BUILDING WALL AT STANDARD DOOR
DOOR
SAFETY STAIR NOSING BLACK, SUPERGRIT 231 BF OR EQUAL
CONCRETE, 6" THK. REINFORCED WITH W2.9xW2.9 6GA. WWM
DOOR SLAB SHALL BE DOWELED TO THE BUILDING SLAB BELOW EXISTING DOOR THRESHOLD. DOWELS: #4 REBAR W/ 9" SLEEVE, SPACED 24" O.C. PSD09/#4TX BY GREENSTREAK OR APPROVED EQUAL.
RISER HEIGHT PER PLAN
ADJACENT CONCRETE PAVEMENT
LANDING SIZE PER PLAN SLOPE ≤2%
DOOR THRESHOLD
FINISHED FLOOR, EL. PER PLAN
SEAL EXPANSION JOINT PER NOTE #7 ON DETAIL 2
REFER TO DETAILS ON ARCHITECTURAL PLANS
6" THK. COMPACTED 3/4" STONE SUBBASE
FOUNDATION MEMBRANE PER ARCHITECTURAL PLANS
BACKFILL TO CONSIST OF IMPORTED DENSE GRADED AGGREGATE OR 3/4" QUARRY PROCESSED STONE. COMPACTED TO 95% MPD

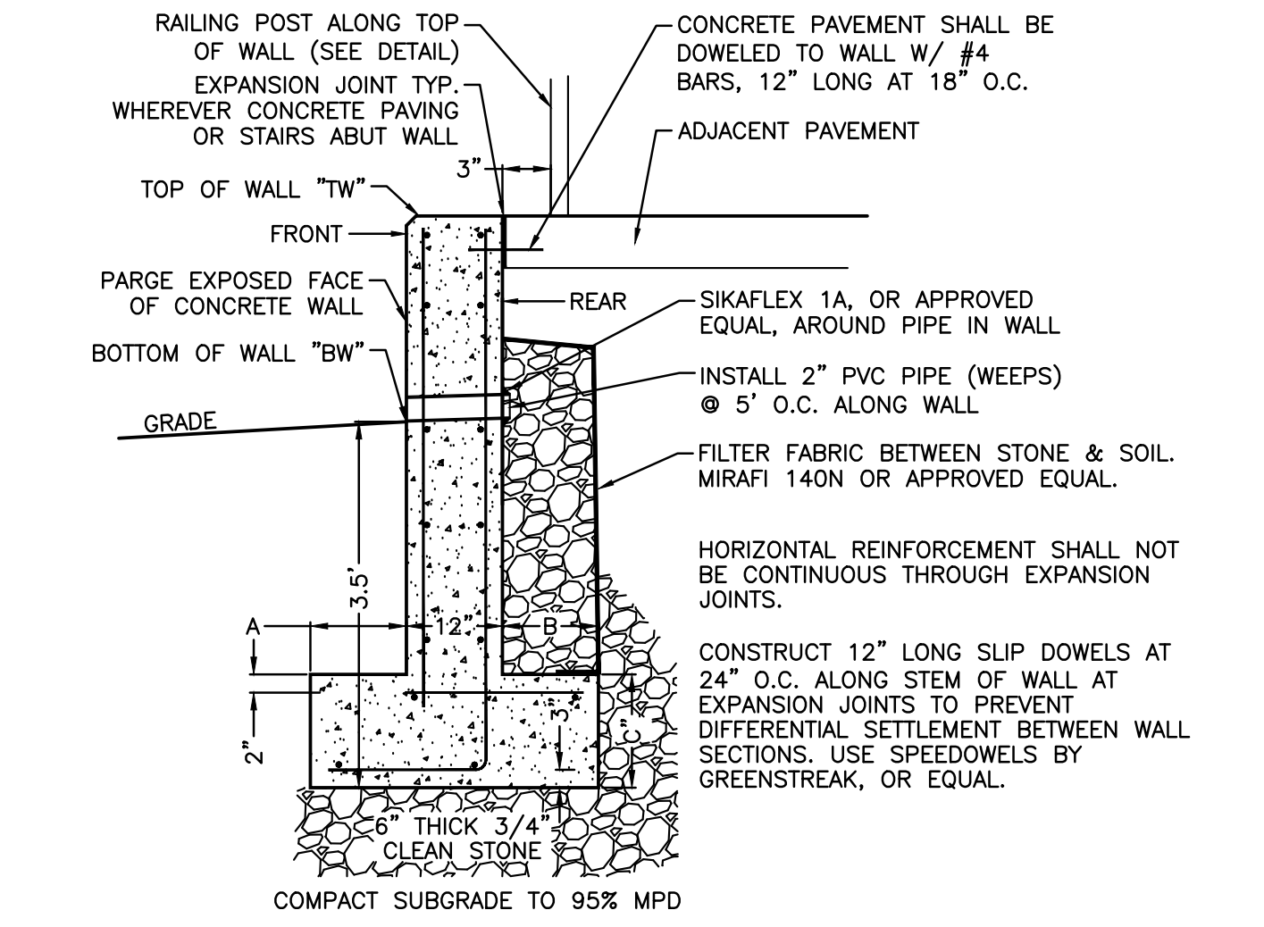
REFER TO CONCRETE PAVEMENT DETAIL FOR STANDARD NOTES THAT APPLY TO CONCRETE WORK SHOWN IN THIS DETAIL

B – W/ RISER

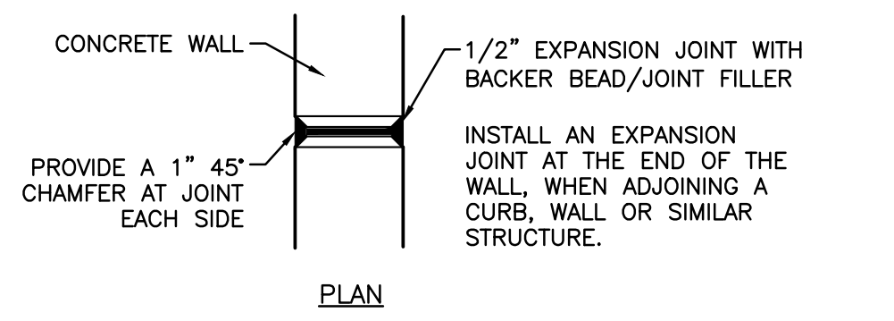
8 CONCRETE LANDING
NOT TO SCALE


HANDRAIL OR GUARDRAIL PER PLAN/SEE RAILING POST MOUNT DETAIL
SEE TYPICAL STAIR TREADS & RISERS DETAIL
EXPANSION JOINT SEE EXTERIOR STAIR CONSTRUCTION NOTE #19
STAIRWAY LANDING TYP. 6" THK. CONC. REINFORCED (SEE DETAIL)
5.0" MIN. LANDING SLOPE @ 1%-2%
12" TYP.
4" TYP.
PER PLAN
EXPANSION JOINT
STAIRWAY LANDING TYP. 6" THK. CONC. REINFORCED (SEE DETAIL)
4.0" MIN. LANDING SLOPE @ 1%-2%
EXPANSION DOWEL BETWEEN ADJACENT STAIRS @ 2 FT. O.C. (MIN. 2), #4 REBAR, SPEED DOWEL BY SIKA PRODUCTS OR APPROVED EQUAL
DOWEL STAIRS TO CHEEK WALLS (EA. SIDE) WITH #6 REBAR, 12" LONG, AT 18" ON CENTER
6" THICK 3/4" CLEAN STONE. TYP.
COMPACT SUBGRADE TO 95% MPD
#4 @ 8" OC. EA. WAY
#4 @ 12" OC.
SEE EXTERIOR STAIR CONSTRUCTION NOTE #19
(2) #4 REBAR
2" COVER
COORDINATE STAIR FOOTING WHEN ADJACENT TO ARCHITECTURAL WALL. STAIR FOOTING MAY PARTIALLY REST ON WALL FOOTING.

9 TYPICAL CONCRETE STAIRS W/ CHEEKWALLS
NOT TO SCALE


RAILING POST ALONG TOP OF WALL (SEE DETAIL) EXPANSION JOINT TYP. WHEREVER CONCRETE PAVING OR STAIRS ABUT WALL
CONCRETE PAVEMENT SHALL BE DOWELED TO WALL W/ #4 BARS, 12" LONG AT 18" O.C.
ADJACENT PAVEMENT
TOP OF WALL "TW"
FRONT
PARGE EXPOSED FACE OF CONCRETE WALL
BOTTOM OF WALL "BW"
GRADE
REAR
SIKAFLEX 1A, OR APPROVED EQUAL, AROUND PIPE IN WALL
INSTALL 2" PVC PIPE (WEEPS) @ 5' O.C. ALONG WALL
FILTER FABRIC BETWEEN STONE & SOIL, MIRAFI 140N OR APPROVED EQUAL
HORIZONTAL REINFORCEMENT SHALL NOT BE CONTINUOUS THROUGH EXPANSION JOINTS.
CONSTRUCT 12" LONG SLIP DOWELS AT 24" O.C. ALONG STEM OF WALL AT EXPANSION JOINTS TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN WALL SECTIONS. USE SPEEDOWELS BY GREENSTREAK, OR EQUAL.
6" THICK 3/4" CLEAN STONE
COMPACT SUBGRADE TO 95% MPD

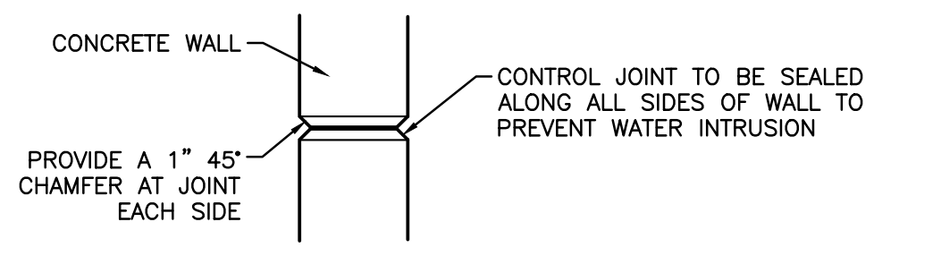
WALL HEIGHT	DIM "A"	DIM "B"	DIM "C"	STEM REINFORCEMENT	FOOTING REINF.
UP TO 4'-0"	1'-2"	1'-3"	1'-3"	VERTICAL: BACK: #5 BARS @ 18" O.C. FRONT: #4 BARS @ 36" O.C. (REQUIRED TO SUPPORT HORIZONTAL BARS) HORIZONTAL #5 BARS @ 24" O.C. FRONT & REAR	TOE: #6 BARS @ 18" O.C. HEEL: #6 BARS @ 18" O.C. HORIZONTAL: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


CONCRETE WALL
1/2" EXPANSION JOINT WITH BACKER BEAD/JOINT FILLER
PROVIDE A 1" 45° CHAMFER AT JOINT EACH SIDE
INSTALL AN EXPANSION JOINT AT THE END OF THE WALL WHEN ADJOINING A CURB, WALL OR SIMILAR STRUCTURE.

PLAN

EXPANSION JOINT IN CONCRETE WALL

CONSTRUCT AT 30' MAX. INTERVALS


CONCRETE WALL
CONTROL JOINT TO BE SEALED ALONG ALL SIDES OF WALL TO PREVENT WATER INTRUSION
PROVIDE A 1" 45° CHAMFER AT JOINT EACH SIDE

PLAN

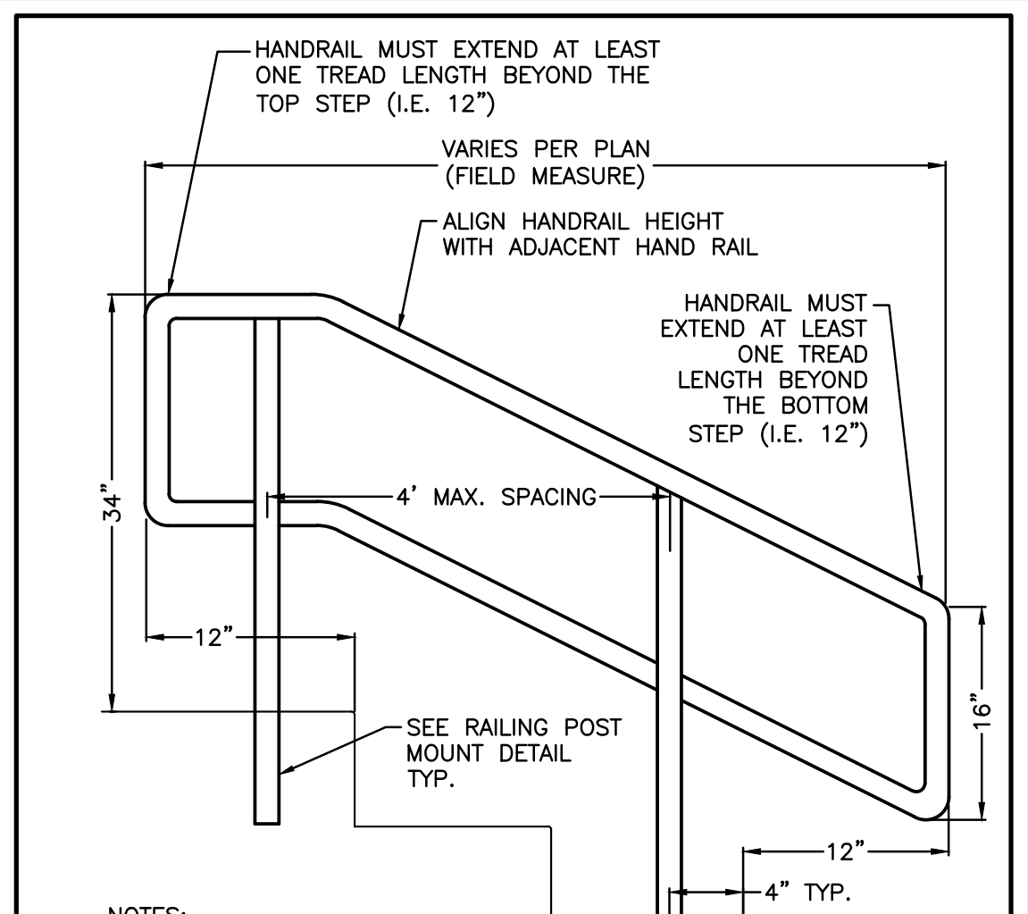
CONTROL JOINT IN CONCRETE WALL

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.

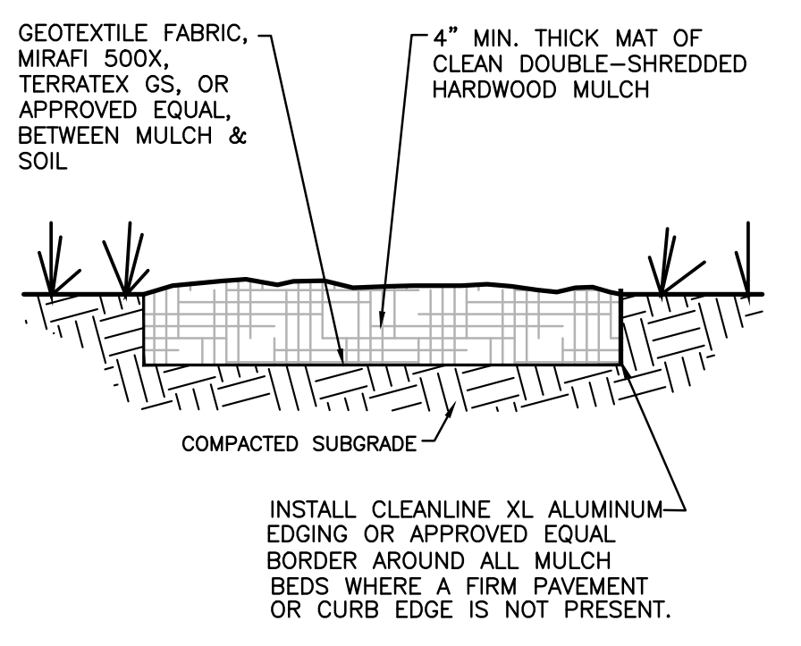
CAST–IN–PLACE CONCRETE NOTES
1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI–318) LATEST EDITION, AND THE SPECIFICATIONS. ALL CONCRETE WORK SHALL ALSO COMPLY WITH THE LATEST EDITIONS OF THE FOLLOWING ACI 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.

10 CONCRETE WALL
NOT TO SCALE

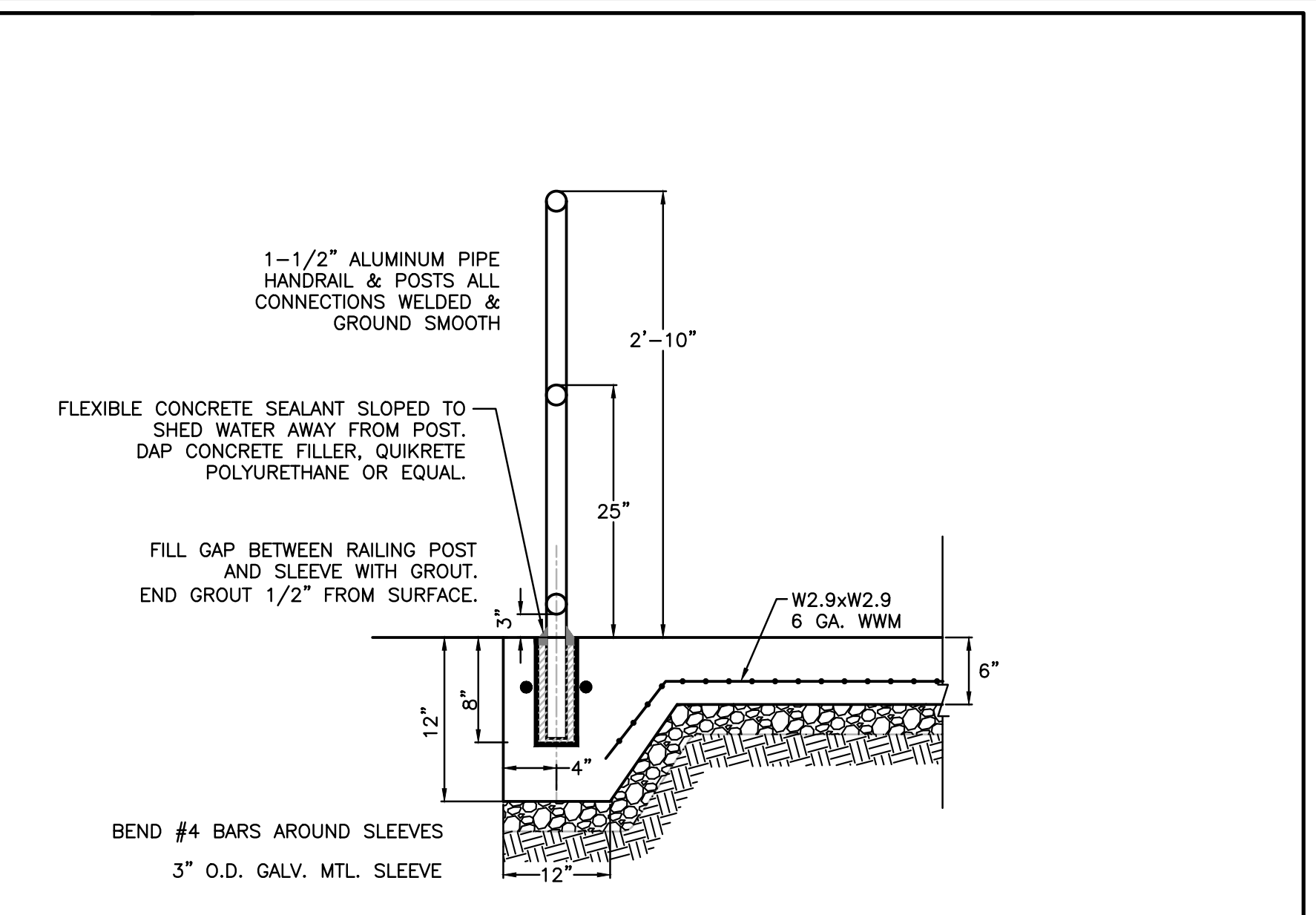

HANDRAIL MUST EXTEND AT LEAST ONE TREAD LENGTH BEYOND THE TOP STEP (I.E. 12")
VARIES PER PLAN (FIELD MEASURE)
ALIGN HANDRAIL HEIGHT WITH ADJACENT HAND RAIL
HANDRAIL MUST EXTEND AT LEAST ONE TREAD LENGTH BEYOND THE BOTTOM STEP (I.E. 12")
4' MAX. SPACING
34"
12"
16"
SEE RAILING POST MOUNT DETAIL TYP.
4" TYP.

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

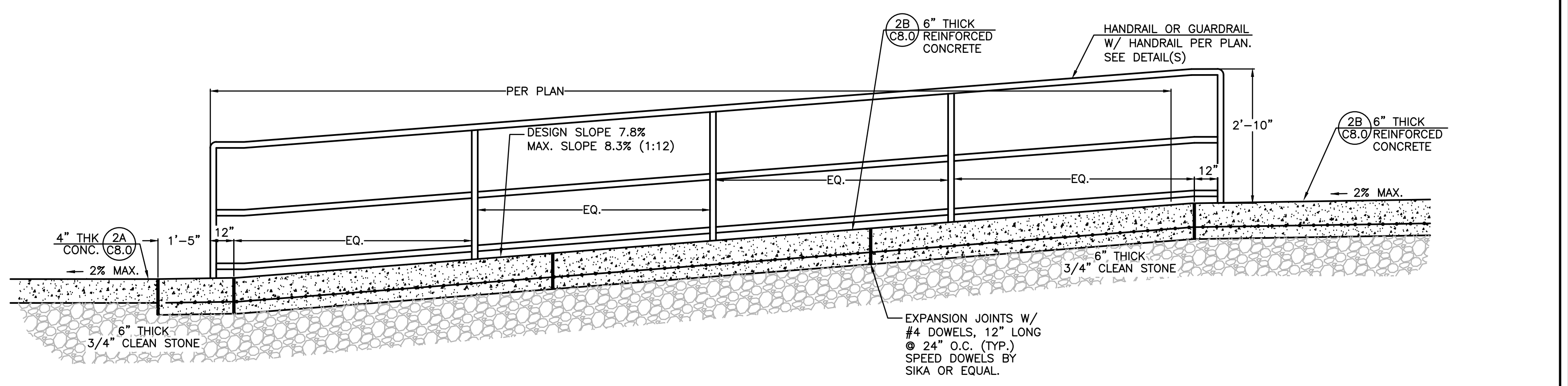
11 TYPICAL HANDRAIL FOR STAIRS
NOT TO SCALE


GEOTEXTILE FABRIC, MIRAFI 500X, TERRATEX GS, OR APPROVED EQUAL. BETWEEN MULCH & SOIL
4" MIN. THICK MAT OF CLEAN DOUBLE-SHREDDED HARDWOOD MULCH
COMPACTED SUBGRADE
INSTALL CLEANLINE XL ALUMINUM EDGING OR APPROVED EQUAL BORDER AROUND ALL MULCH BEDS WHERE A FIRM PAVEMENT OR CURB EDGE IS NOT PRESENT.

12 MULCH
NOT TO SCALE

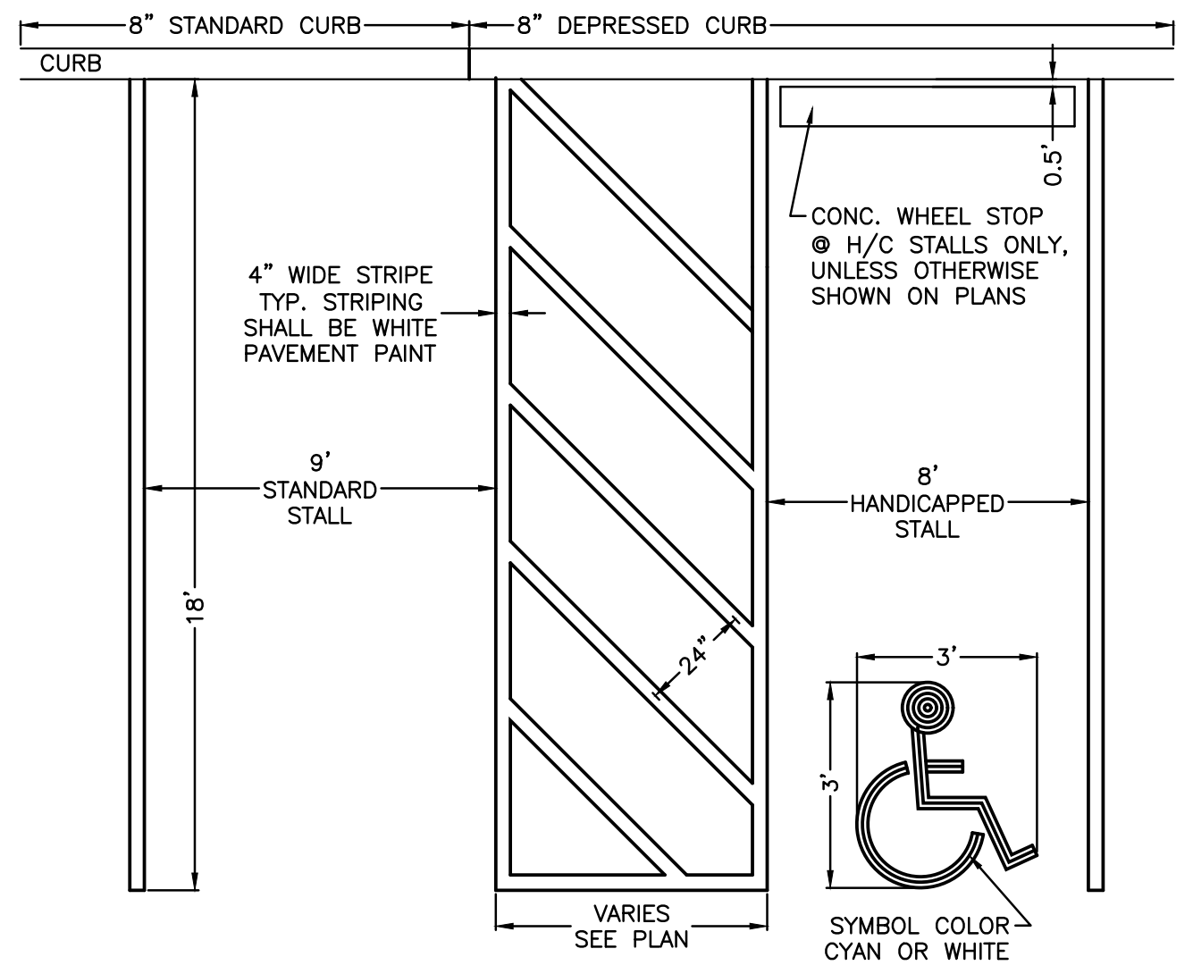

1-1/2" ALUMINUM PIPE HANDRAIL & POSTS ALL CONNECTIONS WELDED & GROUND SMOOTH
2'-10"
FLEXIBLE CONCRETE SEALANT SLOPED TO SHED WATER AWAY FROM POST. DAP CONCRETE FILLER, QUIKRETE POLYURETHANE OR EQUAL.
25"
FILL GAP BETWEEN RAILING POST AND SLEEVE WITH GROUT. END GROUT 1/2" FROM SURFACE.
W2.9xW2.9 6 GA. WWM
6"
8"
4"
BEND #4 BARS AROUND SLEEVES
3" O.D. GALV. MTL. SLEEVE
CLASS "B" CONCRETE (4,000 PSI)
4" THICK 3/4" CLEAN STONE

HANDRAIL
NOT TO SCALE


2B 6" THICK C8.0 REINFORCED CONCRETE
HANDRAIL OR GUARDRAIL W/ HANDRAIL PER PLAN. SEE DETAIL(S)
PER PLAN
2B 6" THICK C8.0 REINFORCED CONCRETE
DESIGN SLOPE 7.8% MAX. SLOPE 8.3% (1:12)
2'-10"
EQ.
12"
2% MAX.
4" THK 2A CONC. C8.0
1'-5"
2% MAX.
6" THICK 3/4" CLEAN STONE
6" THICK 3/4" CLEAN STONE
EXPANSION JOINTS W/ #4 DOWELS, 12" LONG @ 24" O.C. (TYP.) SPEED DOWELS BY SIKA OR EQUAL.

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.

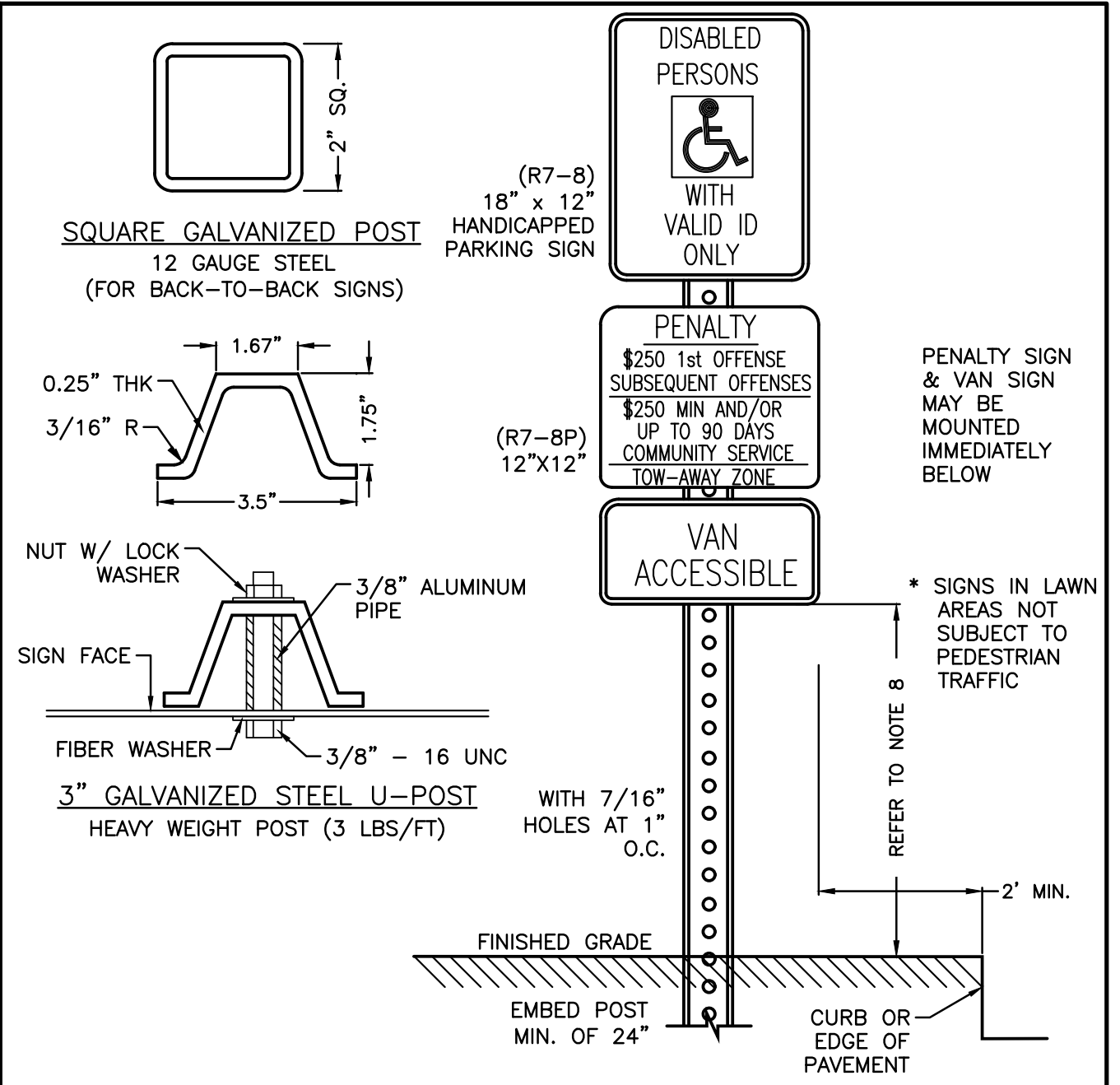
13 RAMP DETAILS
NOT TO SCALE


8" STANDARD CURB
8" DEPRESSED CURB
CURB
0.5'
CONC. WHEEL STOP @ H/C STALLS ONLY, UNLESS OTHERWISE SHOWN ON PLANS
4" WIDE STRIPE TYP. STRIPING SHALL BE WHITE PAVEMENT PAINT
9' STANDARD STALL
18'
8' HANDICAPPED STALL
3'
VARIES SEE PLAN
SYMBOL COLOR CYAN OR WHITE

STALL MARKINGS

NOTES:
1. A NORMAL WIDTH LINE SHALL BE 4"–6" WIDE. DOUBLE CENTERLINE SHALL BE 4" STRIPE, 4" GAP, 4" STRIPE.
2. 3. PARKING STALL LINES SHALL BE WHITE, EXCEPT BARRIER–FREE STALLS.
4. ALL PAVEMENT MARKINGS SHALL BE PER PART 3 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
5. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PER NJDOT SPECIFICATIONS, COLOR WHITE, YELLOW, OR BLUE AS SPECIFIED HEREIN, UNLESS NOTES OTHERWISE BY MUTCD.
6. THE PAVEMENT MARKING CONTRACTOR SHALL HAVE AT LEAST 3 YEARS EXPERIENCE WITH NJDOT AND FEDERAL PAVEMENT MARKING REQUIREMENTS.

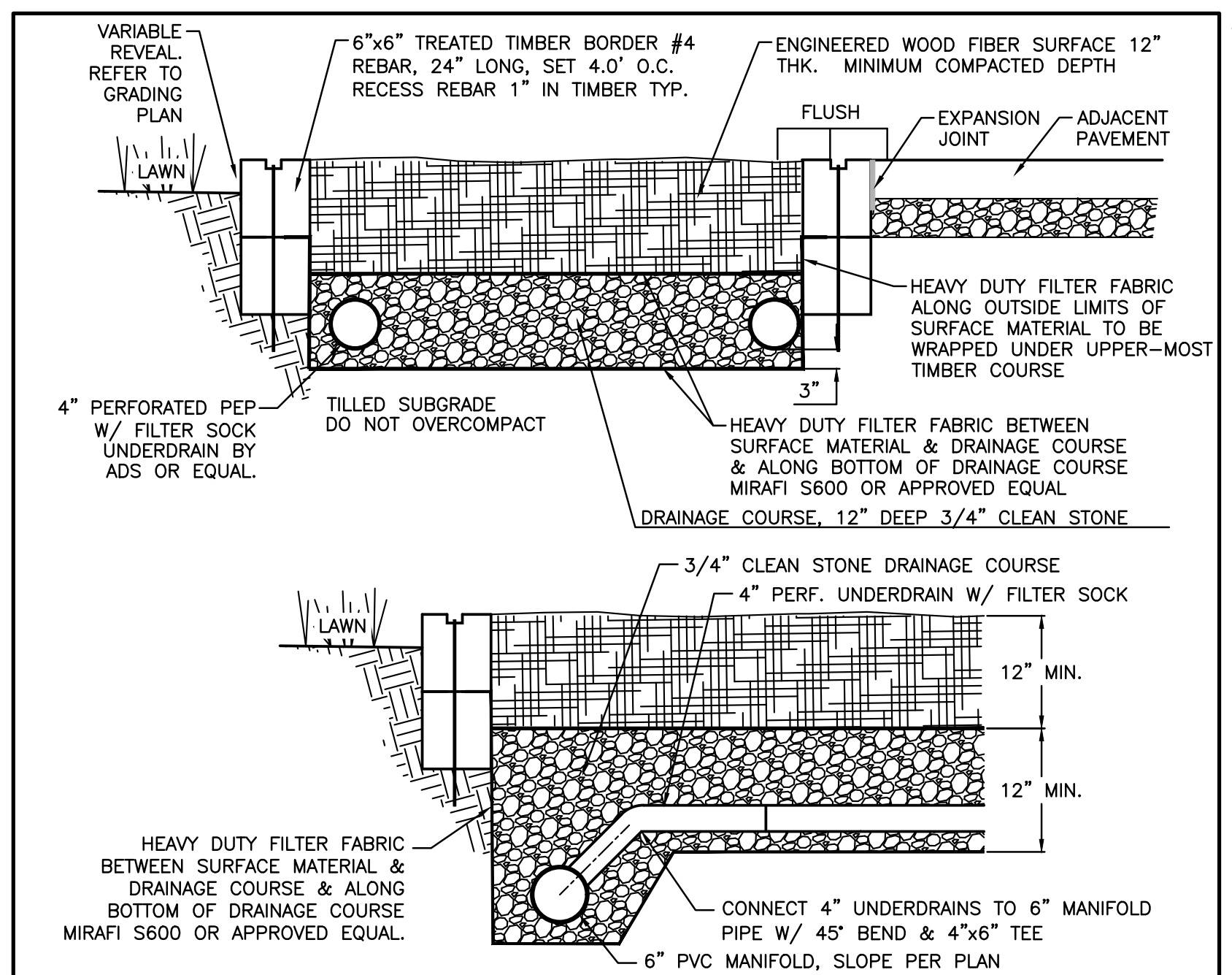
14 PAVEMENT MARKINGS
NOT TO SCALE

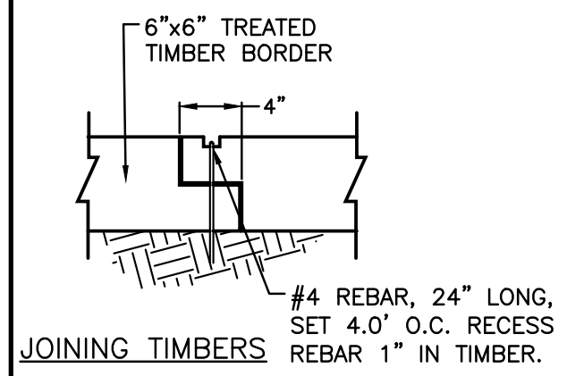

2" SQ.
SQUARE GALVANIZED POST 12 GAUGE STEEL (FOR BACK-TO-BACK SIGNS)
DISABLED PERSONS
WITH VALID ID ONLY
(R7-8) 18" x 12" HANDICAPPED PARKING SIGN
PENALTY $250 1st OFFENSE SUBSEQUENT OFFENSES $250 MIN AND/OR UP TO 90 DAYS COMMUNITY SERVICE
(R7-8P) 12"x12"
PENALTY SIGN & VAN SIGN MAY BE MOUNTED IMMEDIATELY BELOW
VAN ACCESSIBLE
0.25" THK
3/16" R
1.67"
1.75"
3.5"
NUT W/ LOCK WASHER
3/8" ALUMINUM PIPE
SIGN FACE
FIBER WASHER
3/8" – 16 UNC
3" GALVANIZED STEEL U–POST
HEAVY WEIGHT POST (3 LBS/FT)
WITH 7/16" HOLES AT 1" O.C.
SIGNS IN LAWN AREAS NOT SUBJECT TO PEDESTRIAN TRAFFIC
REFER TO NOTE 8
2' MIN.
FINISHED GRADE
EMBED POST MIN. OF 24"
CURB OR EDGE OF PAVEMENT

TYPICAL SIGN POST

NOTES:
1. ALL SIGNS SHALL BE INSTALLED AS SHOWN FOR THE HANDICAPPED SIGN ON THIS DETAIL. DOUBLE FACED (BACK TO BACK) SIGNS SHALL HAVE A SQUARE POST AS SHOWN.
2. ALL SIGN BLANKS SHALL BE MANUFACTURED PER U.S BUREAU OF PUBLIC ROADS STANDARDS AND SHALL BE TREATED PER ASTM B449.
3. THE SIGN FINISH SHALL BE ENGINEER GRADE.
4. ALL SIGN POSTS SHALL HAVE PRE–DRILLED HOLES, 7/16" @ 1" O.C.
5. SIGNS SHOWN ALONG DRIVEWAYS, ROADWAYS, AND PARKING LOTS SHALL BE POSITIONED TO THE NEAREST SIGN EDGE IS AT LEAST 2 FEET FROM THE TRAVELED WAY, WHENEVER POSSIBLE.
6. ALL SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
7. SIGN POST BASES SHALL BE EQUIPPED WITH BREAKAWAY HARDWARE.
8. THE BOTTOM OF THE LOWEST SIGN SHALL BE MOUNTED APPROXIMATELY 60 INCHES ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN THE SIGN IS PARALLEL TO THE SIDEWALK AND APPROXIMATELY 72 INCHES ABOVE THE PARKING LOT OR SIDEWALK WHEN THE SIGN IS PERPENDICULAR TO THE SIDEWALK.

15 TRAFFIC SIGNS WITH TYPICAL POSTS
NOT TO SCALE

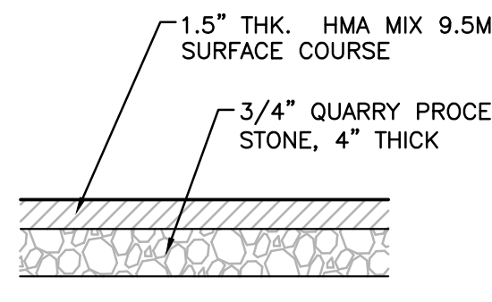

VARIABLE REVEAL. REFER TO GRADING PLAN
6"x6" TREATED TIMBER BORDER #4 REBAR, 24" LONG, SET 4.0' O.C. RECESS REBAR 1" IN TIMBER TYP.
ENGINEERED WOOD FIBER SURFACE 12" THK. MINIMUM COMPACTED DEPTH
FLUSH
EXPANSION JOINT
ADJACENT PAVEMENT
LAWN
4" PERFORATED PEP W/ FILTER SOCK UNDERDRAIN BY ADS OR EQUAL
HEAVY DUTY FILTER FABRIC ALONG OUTSIDE LIMITS OF SURFACE MATERIAL TO BE WRAPPED UNDER UPPER-MOST TIMBER COURSE
TILTED SUBGRADE DO NOT OVERCOMPACT
HEAVY DUTY FILTER FABRIC BETWEEN SURFACE MATERIAL & DRAINAGE COURSE & ALONG BOTTOM OF DRAINAGE COURSE MIRAFI S600 OR APPROVED EQUAL
DRAINAGE COURSE, 12" DEEP 3/4" CLEAN STONE
3/4" CLEAN STONE DRAINAGE COURSE
4" PERF. UNDERDRAIN W/ FILTER SOCK
12" MIN.
HEAVY DUTY FILTER FABRIC BETWEEN SURFACE MATERIAL & DRAINAGE COURSE & ALONG BOTTOM OF DRAINAGE COURSE MIRAFI S600 OR APPROVED EQUAL.
CONNECT 4" UNDERDRAINS TO 6" MANIFOLD PIPE W/ 45° BEND & 4"x6" TEE
6" PVC MANIFOLD, SLOPE PER PLAN


6"x6" TREATED TIMBER BORDER
4"
#4 REBAR, 24" LONG, SET 4.0' O.C. RECESS REBAR 1" IN TIMBER.

JOINING TIMBERS

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.

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


1.5" THK. HMA MIX 9.5M64 SURFACE COURSE
3/4" QUARRY PROCESSED STONE, 4" THICK
COMPACTED SUBGRADE 95% MPD

NOTES:
1. ALL BITUMINOUS PAVEMENT SHALL BE HOT MIX ASPHALT, PER NJ DOT SPECIFICATIONS.
2. DISPOSE OF ALL WASTE MATERIALS AND EXCESS SOILS IN A LEGAL MANNER OFF SITE.
3. PROVIDE A TACK COAT BETWEEN PAVEMENT COURSES.

17 LIGHT DUTY BITUMINOUS PAVEMENT (HOT MIX ASPHALT)
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

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.

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
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NJDCA Electronic Release Stamp

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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

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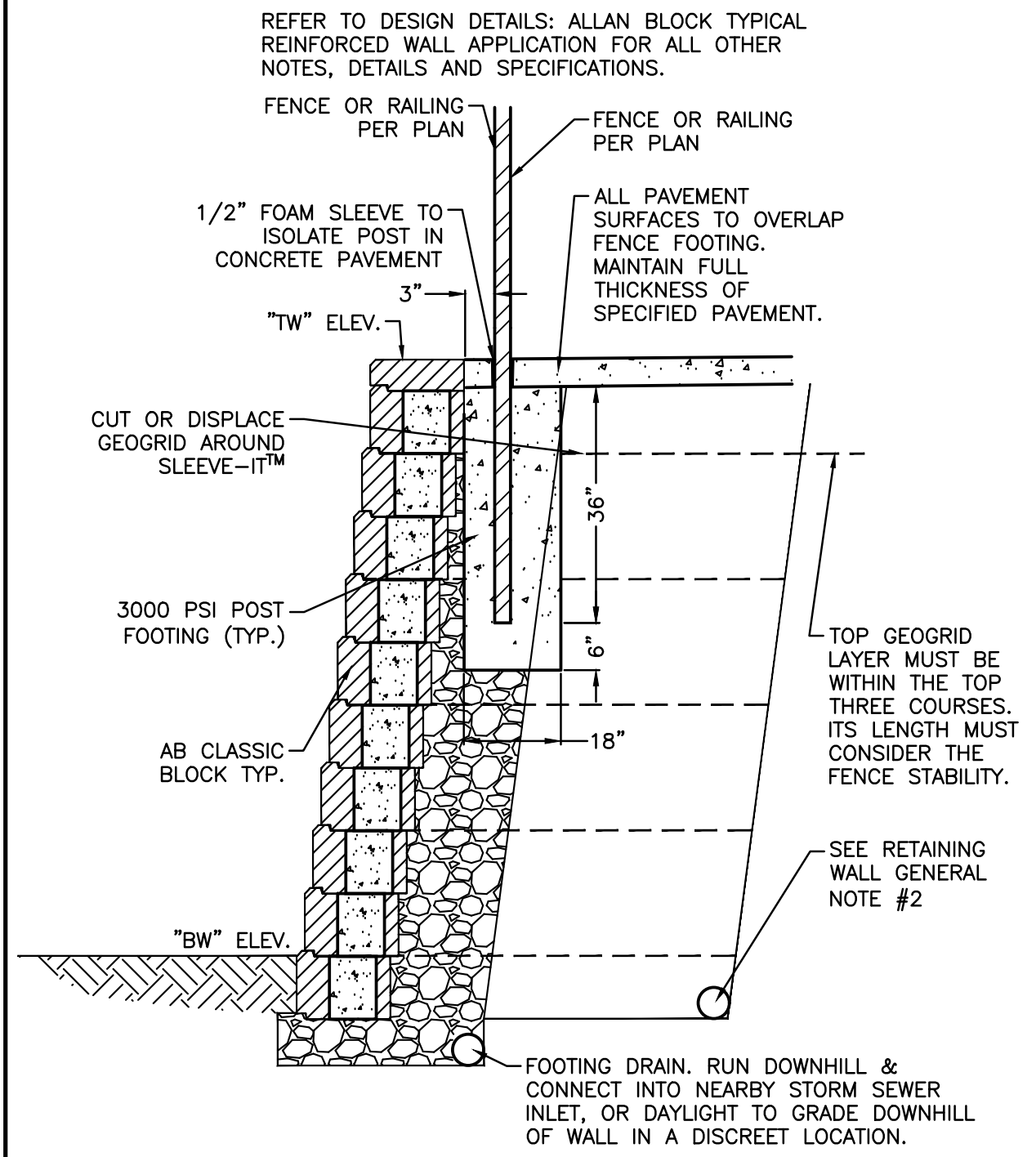
C-8.0


REFER TO DESIGN DETAILS: ALLAN BLOCK TYPICAL REINFORCED WALL APPLICATION FOR ALL OTHER NOTES, DETAILS AND SPECIFICATIONS.
FENCE OR RAILING PER PLAN
FENCE OR RAILING PER PLAN
1/2" FOAM SLEEVE TO ISOLATE POST IN CONCRETE PAVEMENT
ALL PAVEMENT SURFACES TO OVERLAP FENCE FOOTING. MAINTAIN FULL THICKNESS OF SPECIFIED PAVEMENT.
3"
"TW" ELEV.
CUT OR DISPLACE GEOGRID AROUND SLEEVE-IT™
36"
3000 PSI POST FOOTING (TYP.)
6"
TOP GEOGRID LAYER MUST BE WITHIN THE TOP THREE COURSES. ITS LENGTH MUST CONSIDER THE FENCE STABILITY.
18"
AB CLASSIC BLOCK TYP.
SEE RETAINING WALL GENERAL NOTE #2
"BW" ELEV.
FOOTING DRAIN. RUN DOWNHILL & CONNECT INTO NEARBY STORM SEWER INLET, OR DAYLIGHT TO GRADE DOWNHILL OF WALL IN A DISCREET LOCATION.

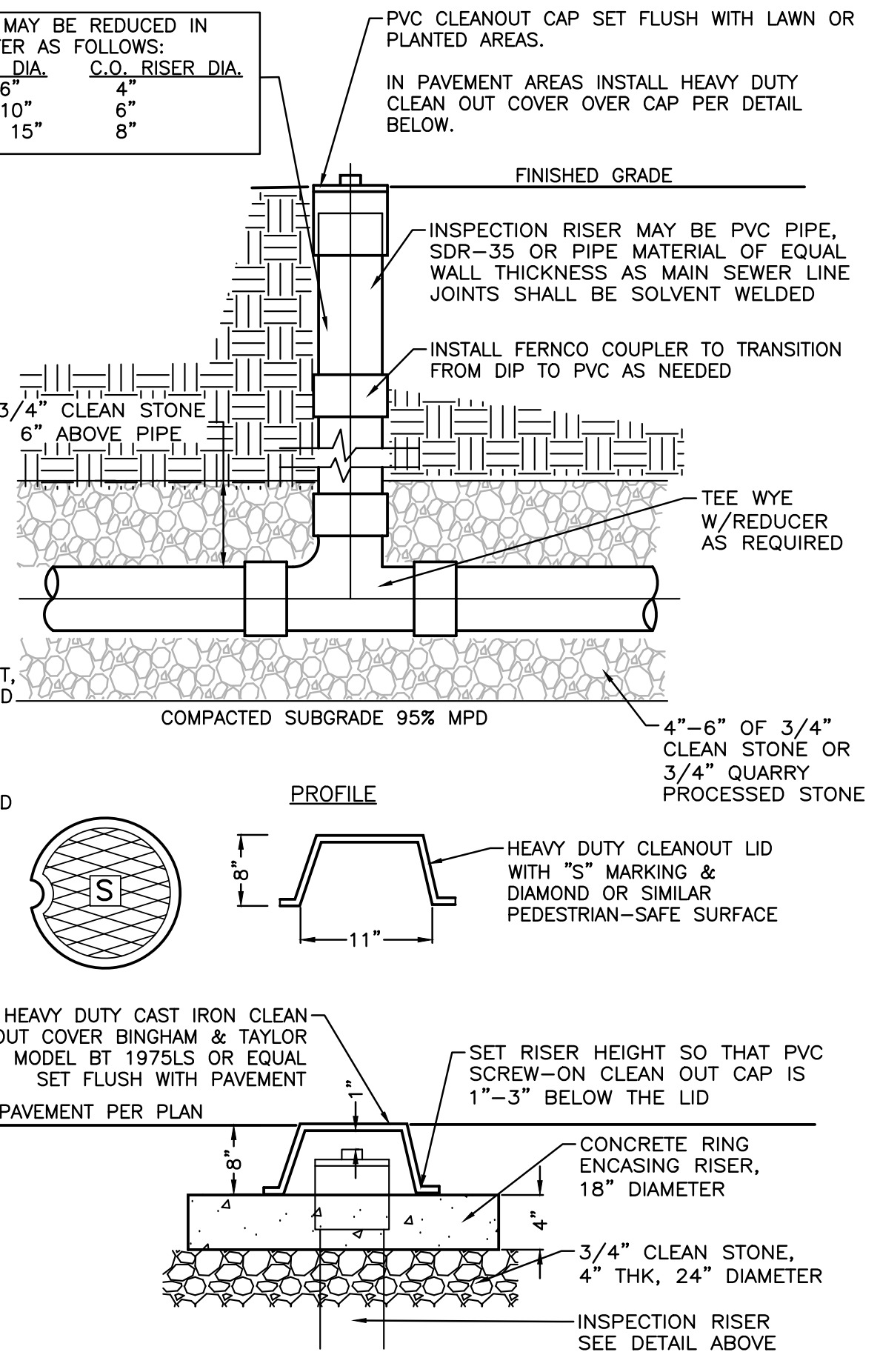
RETAINING WALL GENERAL NOTES:
BASIS OF DESIGN: ALLAN BLOCK RETAINING WALLS, AB CLASSIC BLOCKS

1. RETAINING WALL INSTALLATION SHALL CONFORM TO THE ALLAN BLOCK MODULAR RETAINING WALL SYSTEMS SPECIFICATION GUIDELINES, GEOGRID REINFORCEMENT SYSTEMS SPECIFICATION GUIDELINES, AND WATER MANAGEMENT SPECIFICATION GUIDELINES CONTAINED HEREIN OR IN THE ALLAN BLOCK SPEC BOOK, DOC. #R0901.
2. HYDROSTATIC LOADING IS NOT CONSIDERED IN THIS ANALYSIS. SUFFICIENT DRAINAGE MUST BE PROVIDED SUCH THAT HYDROSTATIC LOADING (PORE PRESSURE) DOES NOT DEVELOP IN THE REINFORCED ZONE. ADD ADDITIONAL REAR WALL DRAINAGE SYSTEM AS REQUIRED.
3. RETAINING WALLS MUST BE STAKED ACCORDING TO THE CONTRACT DRAWINGS.

SOILS NOTES:
1. SITE GEOTECHNICAL ENGINEER SHALL CERTIFY THE COMPACTION AND DENSITY OF SUBGRADE BEARING SOILS PRIOR TO WALL CONSTRUCTION.
2. ACTUAL DEPTH OF STONE FOOTING TO BE BASED ON SUITABILITY OF ON-SITE SOILS.
3. INFILL ZONE BACKFILL MATERIAL SHALL MEET THE NJ DOT GRADATION SPECIFICATION FOR DENSE GRADED AGGREGATE (DGA).

1. THIS IS NOT A FINAL DESIGN DETAIL. SITE SPECIFIC SHOP DRAWINGS OF THE APPROVED WALL SYSTEM SHALL BE PROVIDED BY THE CONTRACTOR, PER SPECIFICATIONS. SEE NOTE 4.
2. THE MODULAR BLOCK RETAINING WALLS SHOWN ON THIS PLAN SET ARE BY ALLAN BLOCK, AB CLASSIC STYLE, OR APPROVED EQUAL.
3. THE DETAILS SHOWN ON THIS PLAN HAVE BEEN PROVIDED BY ALLAN BLOCK. THE BASIS OF DESIGN IS THE AB CLASSIC BY ALLAN BLOCK RETAINING WALLS, LOCALLY DISTRIBUTED BY CLAYTON BLOCK.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING "SITE SPECIFIC" SHOP DRAWINGS PREPARED BY A MODULAR BLOCK RETAINING WALL SYSTEM MANUFACTURER AND SIGNED BY AN ENGINEER LICENSED IN THE STATE OF NEW JERSEY.
5. GEOTECHNICAL OVERSIGHT IS REQUIRED. PLEASE REFER TO THE SPECIFICATIONS.

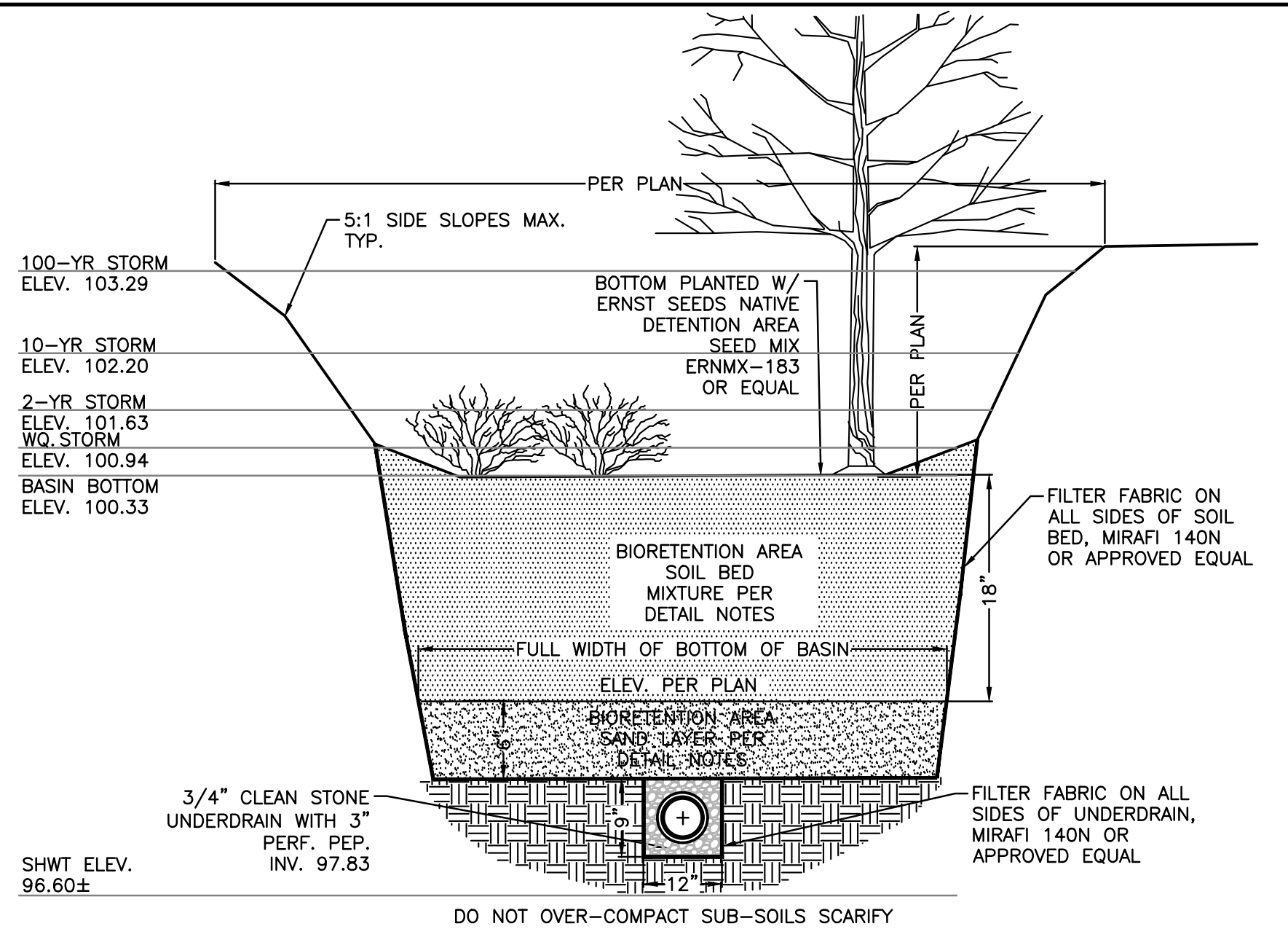
1 MODULAR BLOCK RETAINING WALL WITH FENCE IN PAVEMENT
NOT TO SCALE


RISER MAY BE REDUCED IN DIAMETER AS FOLLOWS:
SEWER DIA. / C.O. RISER DIA.
4" – 6" / 4"
8" – 10" / 6"
12" – 15" / 8"
PVC CLEANOUT CAP SET FLUSH WITH LAWN OR PLANTED AREAS.
IN PAVEMENT AREAS INSTALL HEAVY DUTY CLEAN OUT COVER OVER CAP PER DETAIL BELOW.
FINISHED GRADE
INSPECTION RISER MAY BE PVC PIPE, SDR-35 OR PIPE MATERIAL OF EQUAL WALL THICKNESS AS MAIN SEWER LINE JOINTS SHALL BE SOLVENT WELDED
INSTALL FERNCO COUPLER TO TRANSITION FROM DIP TO PVC AS NEEDED
3/4" CLEAN STONE 6" ABOVE PIPE
TEE WYE W/REDUCER AS REQUIRED
COMPACTED SUBGRADE 95% MPD
4"-6" OF 3/4" CLEAN STONE OR 3/4" QUARRY PROCESSED STONE
PROFILE
S
8"
11"
HEAVY DUTY CLEANOUT LID WITH "S" MARKING & DIAMOND OR SIMILAR PEDESTRIAN-SAFE SURFACE
HEAVY DUTY CAST IRON CLEAN OUT COVER BINGHAM & TAYLOR MODEL BT 1975LS OR EQUAL SET FLUSH WITH PAVEMENT
SET RISER HEIGHT SO THAT PVC SCREW-ON CLEAN OUT CAP IS 1"-3" BELOW THE LID
PAVEMENT PER PLAN
1"
8"
CONCRETE RING ENCASING RISER, 18" DIAMETER
4"
3/4" CLEAN STONE, 4" THK, 24" DIAMETER
INSPECTION RISER SEE DETAIL ABOVE

NOTES:
1. PORTLAND CEMENT CONCRETE TO BE NJ DOT, 4,000 PSI, AIR ENTRAINED
2. THE HEAVY DUTY COVER MUST BE USED FOR ALL CLEANOUTS LOCATED WITHIN PAVEMENT INCLUDING WALKWAYS AND PLAZAS

HEAVY DUTY (HD) CLEANOUT COVER

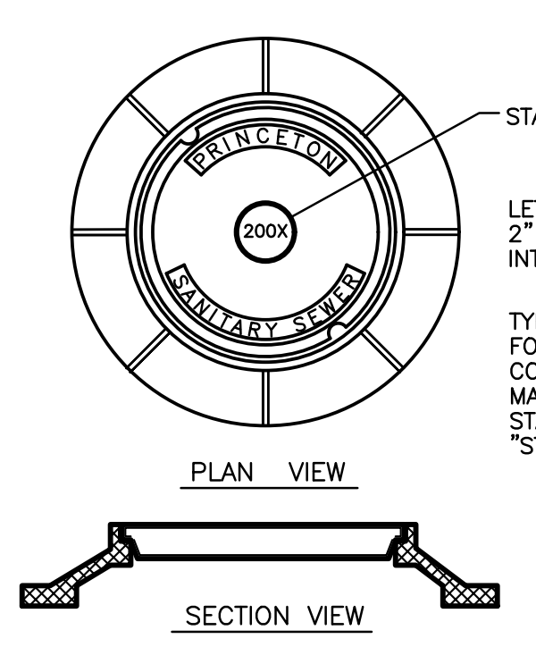
2 CLEANOUT
NOT TO SCALE


PER PLAN
5:1 SIDE SLOPES MAX. TYP.
100-YR STORM ELEV. 103.29
10-YR STORM ELEV. 102.20
2-YR STORM ELEV. 101.63
WQ. STORM ELEV. 100.94
BASIN BOTTOM ELEV. 100.33
BOTTOM PLANTED W/ ERNST SEEDS NATIVE DETENTION AREA SEED MIX ERNMX-183 OR EQUAL
PER PLAN
FILTER FABRIC ON ALL SIDES OF SOIL BED, MIRAFI 140N OR APPROVED EQUAL
BIORETENTION AREA SOIL BED MIXTURE PER DETAIL NOTES
18"
FULL WIDTH OF BOTTOM OF BASIN
ELEV. PER PLAN
BIORETENTION AREA SAND LAYER PER DETAIL NOTES
6"
3/4" CLEAN STONE UNDERDRAIN WITH 3" PERF. PEP. INV. 97.83
6"
12"
FILTER FABRIC ON ALL SIDES OF UNDERDRAIN, MIRAFI 140N OR APPROVED EQUAL
SHWT ELEV. 96.60±

DO NOT OVER-COMPACT SUB-SOILS SCARIFY SUB-SOILS PRIOR TO PLACEMENT OF SOIL BED

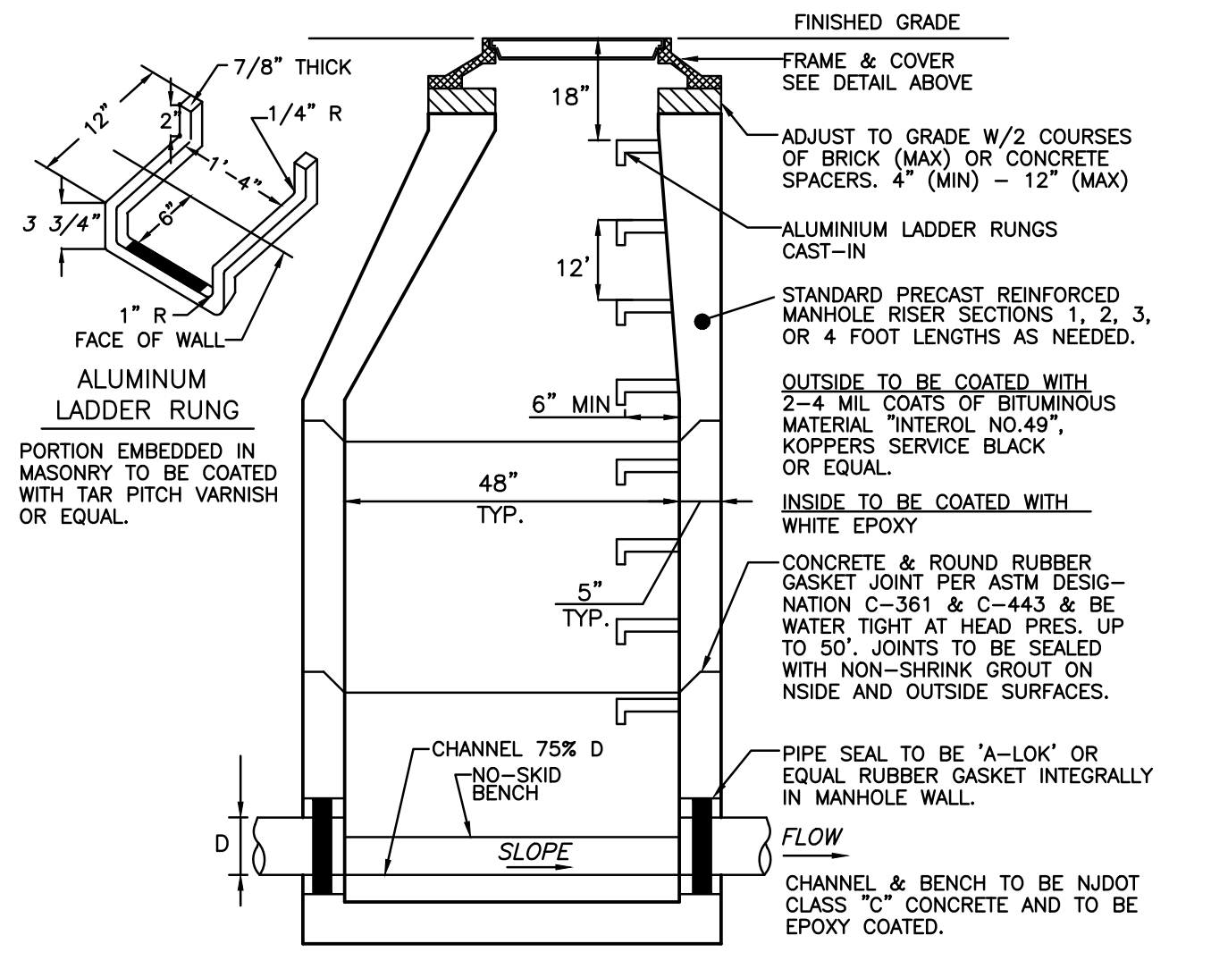
NOTES:
1. THE SOIL BED MATERIAL MUST CONSIST OF THE FOLLOWING MIX, BY WEIGHT: 85 TO 95% SAND, WITH NO MORE THAN 25% OF THE SAND AS FINE OR VERY FINE SANDS; NO MORE THAN 15% SILT AND CLAY WITH 2% TO 5% CLAY CONTENT. THE ENTIRE MIX MUST THEN BE AMENDED WITH 3 TO 7% ORGANICS, BY WEIGHT.
2. PRE-MIXED SOIL MUST BE CERTIFIED TO BE CONSISTENT WITH THE REQUIREMENT ABOVE BY EITHER THE VENDOR OR BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY. THE CONTENT OF ANY SOIL MIXED ON-SITE MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF NEW JERSEY; IN ADDITION, THE ENGINEER MUST BE PRESENT WHILE THE SOIL IS MIXED.
3. THE PH OF THE SOIL BED MATERIAL MUST RANGE FROM 5.5 TO 6.5.
4. THE SOIL BED MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES. ADDITIONAL MATERIALS MAY BE NECESSARY TO ACCOUNT FOR SETTLING OVER TIME.
5. THE SAND LAYER, WHICH ACTS AS A TRANSITION BETWEEN THE SOIL BED AND THE SUBSEQUENT LAYERS, MUST BE AT LEAST 6 INCHES IN DEPTH AND MUST CONSIST OF CLEAN, MEDIUM-AGGREGATE CONCRETE SAND (AASHTO M-6/ASTM C-33). TO ENSURE PROPER SYSTEM OPERATION, THE PERMEABILITY RATE OF THE SAND LAYER MUST BE AT LEAST TWICE THE DESIGN PERMEABILITY RATE OF THE SOIL BED.

6 BIORETENTION AREA SECTION
NOT TO SCALE


PRINCETON
200X
SANITARY SEWER
STAMP W/CURRENT YEAR
LETTERING SHALL BE 2" BLOCK STYLE STAMPED INTO MANHOLE LID.
TYPICAL LETTERING SHOWN FOR SANITARY MANHOLE COVERS ON STORM MANHOLES SHALL BE STAMPED WITH "STORM SEWER"
PLAN VIEW
SECTION VIEW

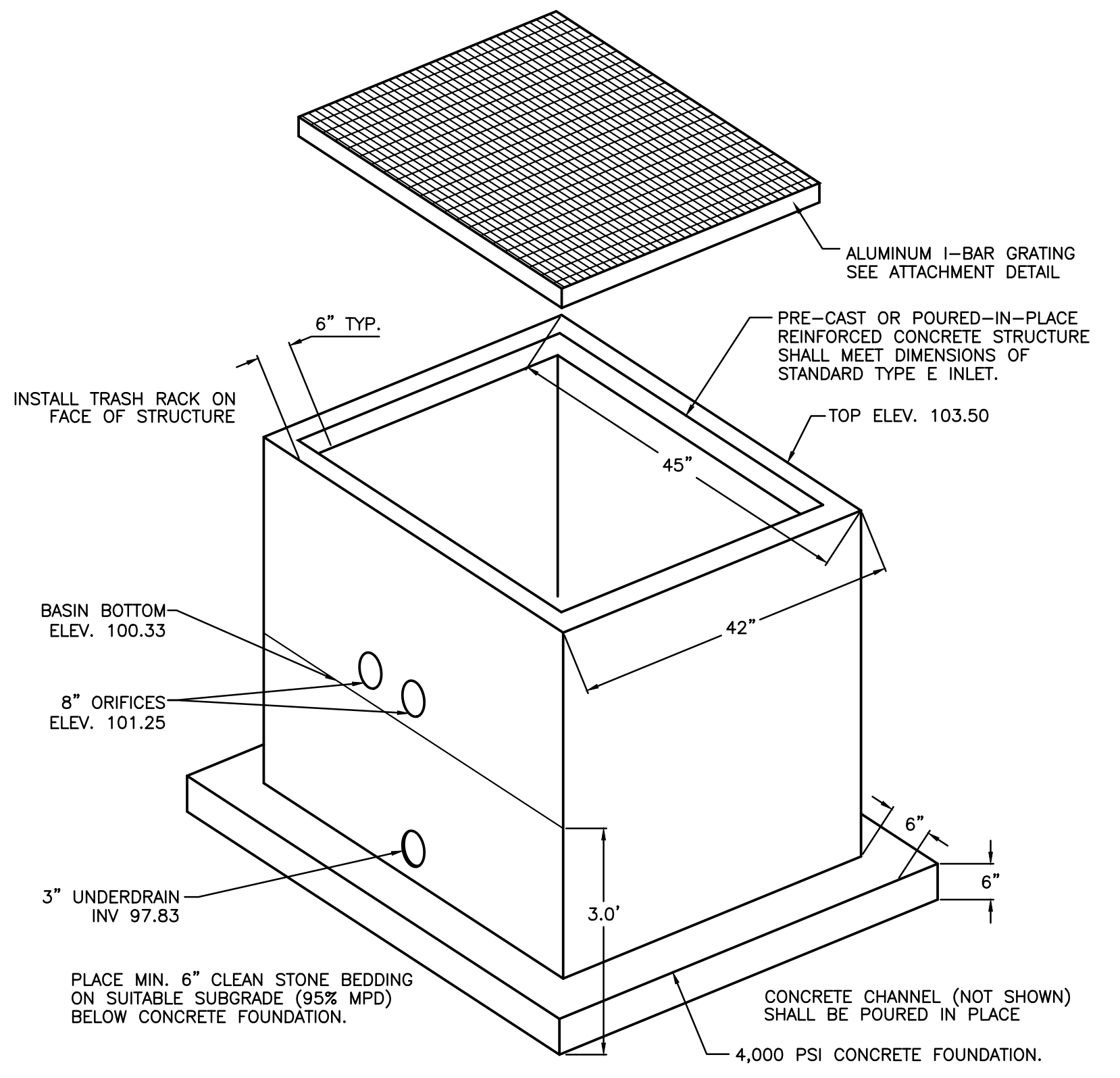
1. MANHOLE FRAME & COVER SHALL BE PATTERN NO. 1202B AS MANUFACTURED BY THE CAMPBELL FOUNDRY CO., OR APPROVED EQUAL.
2. MANHOLE FRAME AND COVER TO BE HEAVY DUTY CONFORMING TO ASTM SPECIFICATION A-48 CLASS 30-B WITH SHOP COAT OF ASPHALTIC PITCH.
3. LOCKING MANHOLE COVER SHALL BE PATTERN NO. 1487 AS MANUFACTURED BY CAMPBELL FOUNDRY CO., OR APPROVED EQUAL.
4. WATERTIGHT MANHOLE FRAME & COVER SHALL REQUIRE SIX (6) STAINLESS STEEL CAP SCREWS IN LID AND FLAT RUBBER GASKET UNDER THE LID. CAMPBELL NO. 1539B OR APPROVED EQUAL.

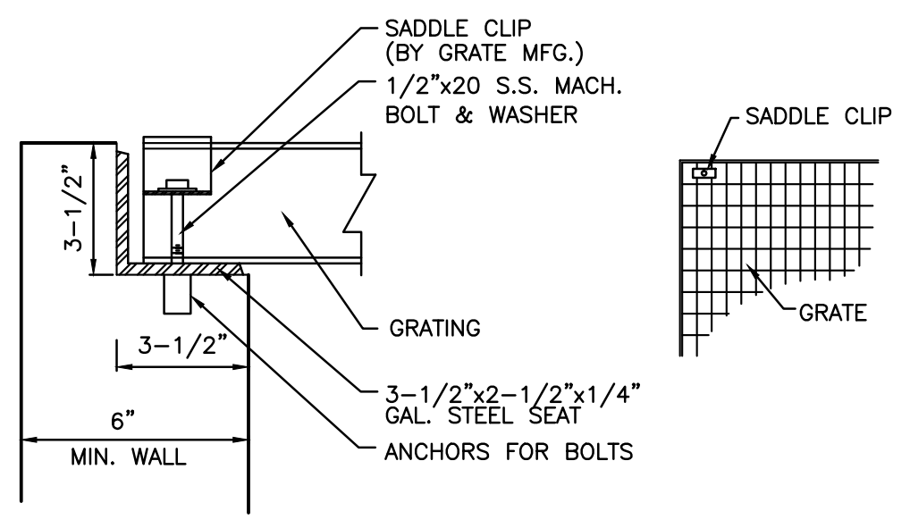
MANHOLE FRAME & COVER
N.T.S.


7/8" THICK
12"
2"
1/4" R
1'-4"
3 3/4"
6"
1" R
FACE OF WALL
ALUMINUM LADDER RUNG
PORTION EMBEDDED IN MASONRY TO BE COATED WITH TAR PITCH VARNISH OR EQUAL.
FINISHED GRADE
FRAME & COVER SEE DETAIL ABOVE
18"
ADJUST TO GRADE W/2 COURSES OF BRICK (MAX) OR CONCRETE SPACERS. 4" (MIN) – 12" (MAX)
ALUMINIUM LADDER RUNGS CAST-IN
12'
STANDARD PRECAST REINFORCED MANHOLE RISER SECTIONS 1, 2, 3, OR 4 FOOT LENGTHS AS NEEDED.
6" MIN
OUTSIDE TO BE COATED WITH 2-4 MIL COATS OF BITUMINOUS MATERIAL "INTEROL NO.49", KOPPERS SERVICE BLACK OR EQUAL.
48" TYP.
INSIDE TO BE COATED WITH WHITE EPOXY
5" TYP.
CONCRETE & ROUND RUBBER GASKET JOINT PER ASTM DESIGNATION C-361 & C-443 & BE WATER TIGHT AT HEAD PRES. UP TO 50'. JOINTS TO BE SEALED WITH NON-SHRINK GROUT ON NSIDE AND OUTSIDE SURFACES.
CHANNEL 75% D
NO-SKID BENCH
D
SLOPE
PIPE SEAL TO BE 'A-LOK' OR EQUAL RUBBER GASKET INTEGRALLY IN MANHOLE WALL.
FLOW
CHANNEL & BENCH TO BE NJDOT CLASS "C" CONCRETE AND TO BE EPOXY COATED.

FOOTING TO BE
3/4" CLEAN STONE (12" THK.) MH DEPTH TO 10'
3000 psi CONCRETE (12" THK.) MH DEPTH OVER 10'

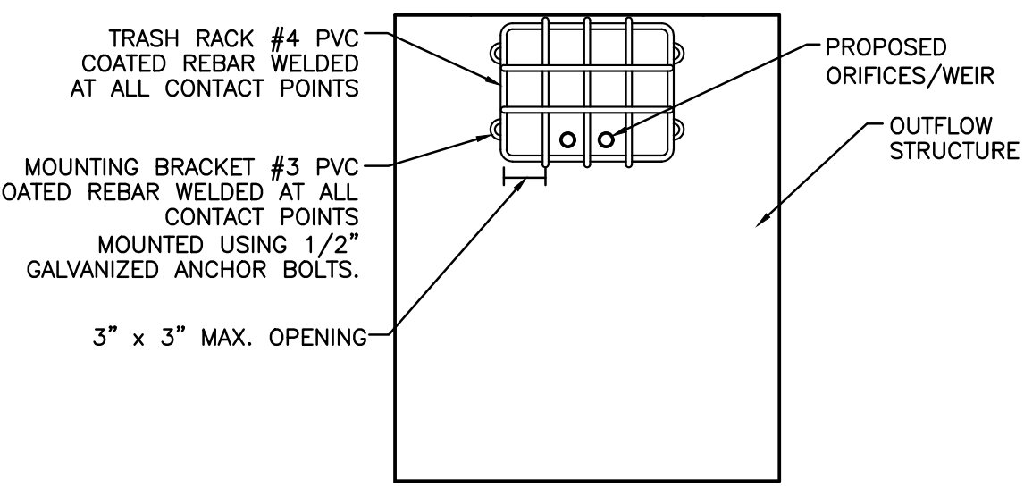
9 PRECAST MANHOLE
SANITARY SEWER


ALUMINUM I-BAR GRATING SEE ATTACHMENT DETAIL
6" TYP.
PRE-CAST OR POURED-IN-PLACE REINFORCED CONCRETE STRUCTURE SHALL MEET DIMENSIONS OF STANDARD TYPE E INLET.
INSTALL TRASH RACK ON FACE OF STRUCTURE
TOP ELEV. 103.50
45"
42"
BASIN BOTTOM ELEV. 100.33
8" ORIFICES ELEV. 101.25
6"
6"
3" UNDERDRAIN INV 97.83
3.0'
PLACE MIN. 6" CLEAN STONE BEDDING ON SUITABLE SUBGRADE (95% MPD) BELOW CONCRETE FOUNDATION.
CONCRETE CHANNEL (NOT SHOWN) SHALL BE POURED IN PLACE
4,000 PSI CONCRETE FOUNDATION.


SADDLE CLIP (BY GRATE MFG.)
1/2"x20 S.S. MACH. BOLT & WASHER
3-1/2"
GRATING
3-1/2"
6" MIN. WALL
3-1/2"x2-1/2"x1/4" GAL. STEEL SEAT
ANCHORS FOR BOLTS
SADDLE CLIP
GRATE

GRATING SHALL BE GALOK I-BAR AS MANUFACTURED BY IKG INDUSTRIES OR APPROVED EQUAL. BEARING BARS 2-1/4" ON 1-3/16" C. TO C. CROSS BARS ON 4" CENTERS. MATERIAL TO BE ALUMINUM

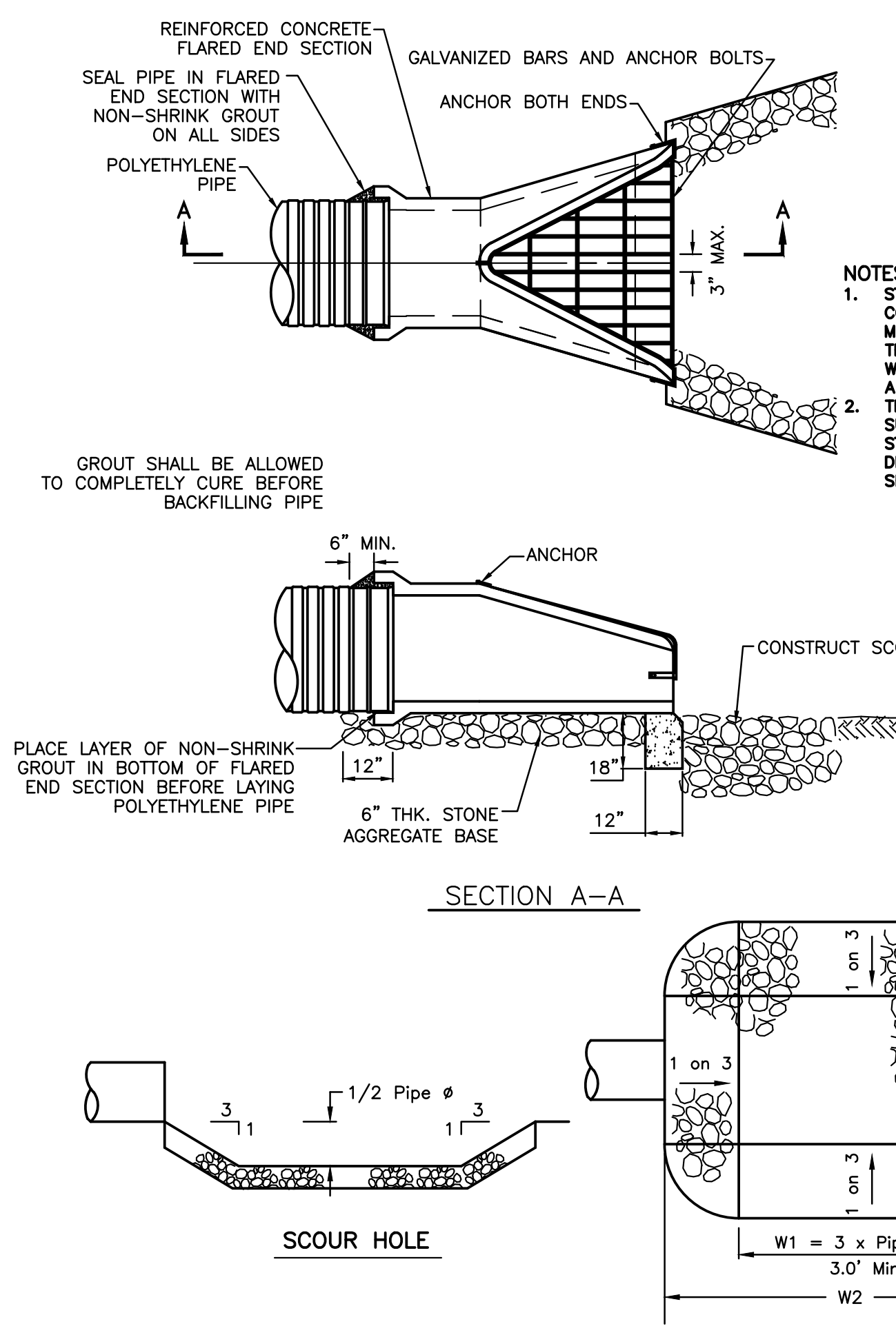
ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL BE COATED WITH AN ALKALINE RESISTANT POLYMERIC COATING.


TRASH RACK #4 PVC COATED REBAR WELDED AT ALL CONTACT POINTS
MOUNTING BRACKET #3 PVC COATED REBAR WELDED AT ALL CONTACT POINTS MOUNTED USING 1/2" GALVANIZED ANCHOR BOLTS.
3" x 3" MAX. OPENING
PROPOSED ORIFICES/WEIR
OUTFLOW STRUCTURE

TRASH RACK DETAIL
N.T.S.

3 ABOVE GROUND OUTFLOW STRUCTURE
NOT TO SCALE

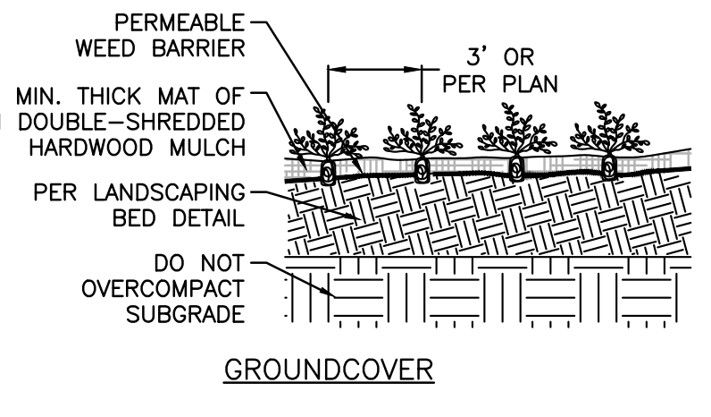
NOTES:
1. SIZE AND DIMENSIONS OF FLARED-END SECTION VARIES WITH DIAMETER AND TYPE OF PIPE.


REINFORCED CONCRETE FLARED END SECTION
GALVANIZED BARS AND ANCHOR BOLTS
SEAL PIPE IN FLARED END SECTION WITH NON-SHRINK GROUT ON ALL SIDES
ANCHOR BOTH ENDS
POLYETHYLENE PIPE
A
A
3" MAX.
GROUT SHALL BE ALLOWED TO COMPLETELY CURE BEFORE BACKFILLING PIPE
6" MIN.
ANCHOR
CONSTRUCT SCOUR HOLE
PLACE LAYER OF NON-SHRINK GROUT IN BOTTOM OF FLARED END SECTION BEFORE LAYING POLYETHYLENE PIPE
12"
6" THK. STONE AGGREGATE BASE
18"
12"
SECTION A-A
1/2 Pipe ø
3
1
3
1
SCOUR HOLE
1 on 3
1 on 3
1 on 3
1 on 3
L1=2 x Pipe ø
2.0' Min.
L2
W1 = 3 x Pipe ø
3.0' Min
W2

NOTES:
1. **STONES FOR RIP-RAP SHALL BE COMPOSED OF A WELL GRADED MIXTURE OF DURABLE ROCK SUCH THAT 50% OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN A d_{50} STONE DIAMETER.**
2. **THE MIXTURE SHALL CONTAIN A SUFFICIENT MIXTURE OF OTHER STONES TO FILL THE VOIDS. THE DIA. OF THE LARGEST STONE SIZE SHALL BE 1.5d_{50}.**

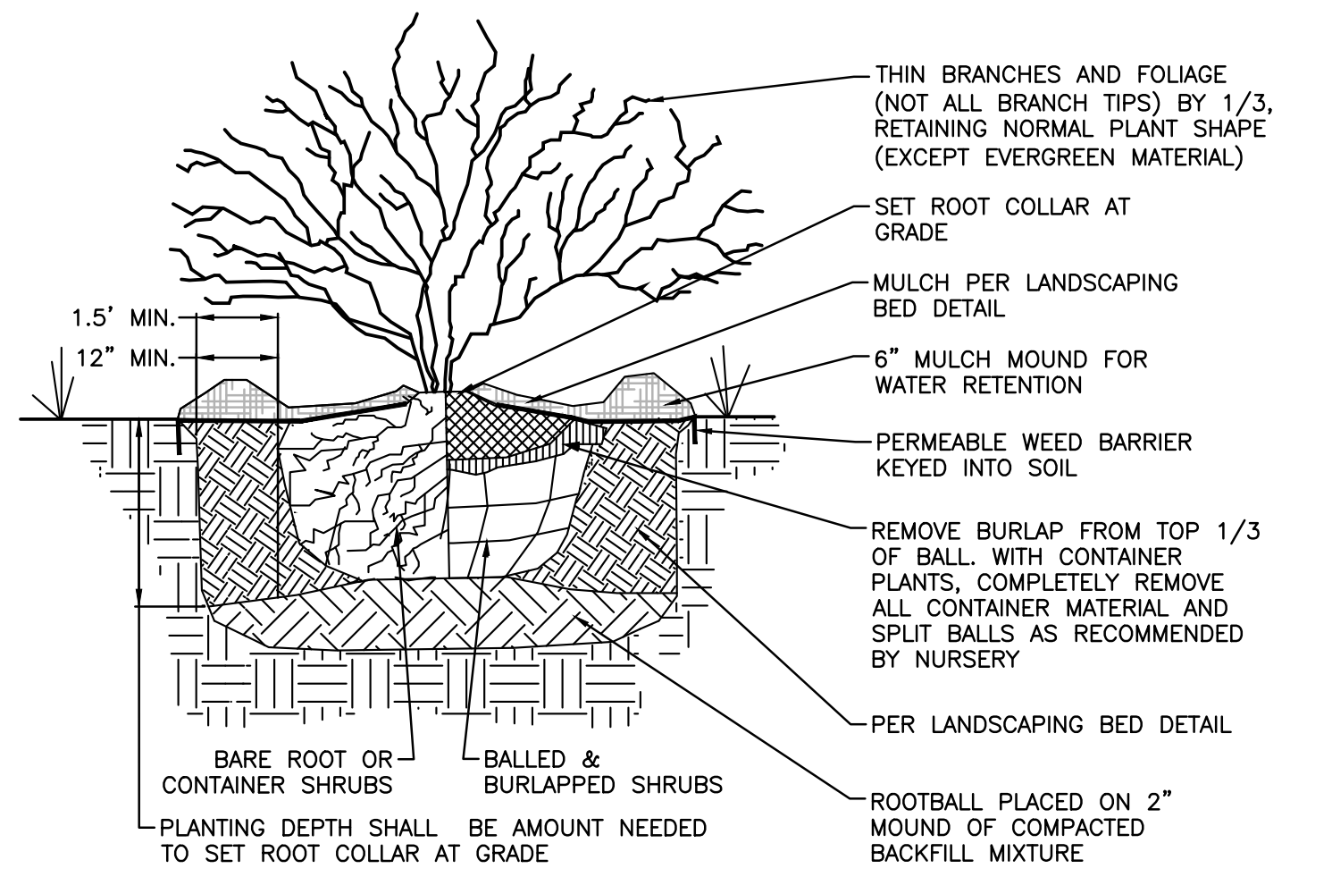
7 CONCRETE FLARED END SECTION W/ SCOUR HOLE
NOT TO SCALE

SCOUR HOLE	D	W1	W2	L1	L2	d50	THK
15" FES	0.75'	3.75'	8.25'	2.5'	7.0'	4"	12"
12" FES	0.50'	3.0'	6.0'	2.0'	5.0'	4"	21"


PERMEABLE WEED BARRIER
3' OR PER PLAN
4" MIN. THICK MAT OF CLEAN DOUBLE-SHREDDED HARDWOOD MULCH
PER LANDSCAPING BED DETAIL
DO NOT OVERCOMPACT SUBGRADE

GROUNDCOVER

NOTES:
1. MAINTAIN SAME GROUND LINE AS IN THE NURSERY
2. DO NOT PRUNE EVERGREEN SHRUBS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES
3. ALL SHRUBS ARE TO BE FULL AND HAVE GOOD CONFORMANCE
4. WHERE CLUSTERED IN A BED, THE HOLE FOR SHRUBS MUST BE A CONTINUOUS HOLE AND BE PREPARED PER LANDSCAPE BED DETAIL

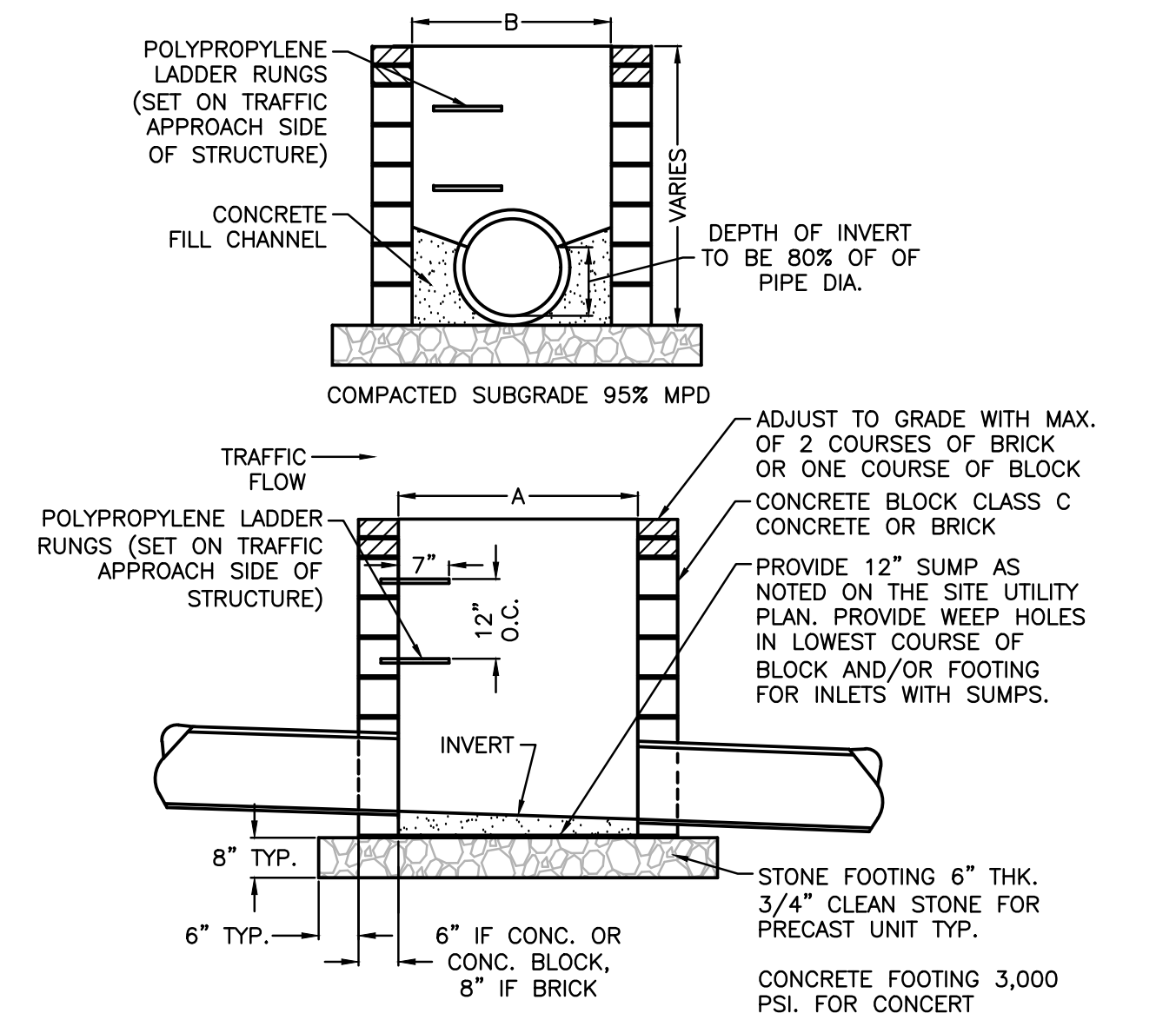

THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE (EXCEPT EVERGREEN MATERIAL)
SET ROOT COLLAR AT GRADE
MULCH PER LANDSCAPING BED DETAIL
1.5' MIN.
12" MIN.
6" MULCH MOUND FOR WATER RETENTION
PERMEABLE WEED BARRIER KEYED INTO SOIL
REMOVE BURLAP FROM TOP 1/3 OF BALL. WITH CONTAINER PLANTS, COMPLETELY REMOVE ALL CONTAINER MATERIAL AND SPLIT BALLS AS RECOMMENDED BY NURSERY
PER LANDSCAPING BED DETAIL
BARE ROOT OR CONTAINER SHRUBS
BALLED & BURLAPPED SHRUBS
PLANTING DEPTH SHALL BE AMOUNT NEEDED TO SET ROOT COLLAR AT GRADE
ROOTBALL PLACED ON 2" MOUND OF COMPACTED BACKFILL MIXTURE

SHRUB

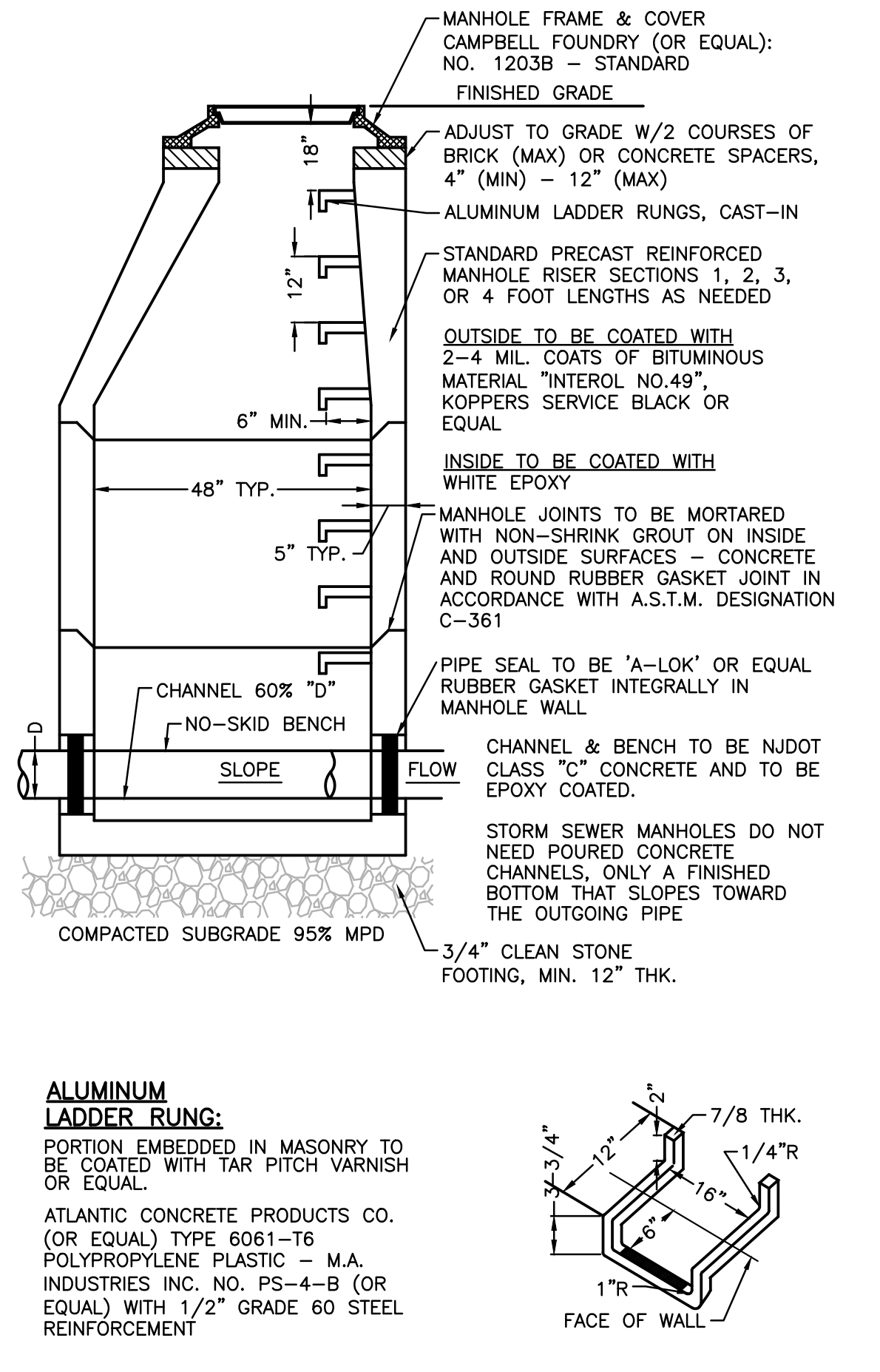
10 LANDSCAPE PLANT INSTALLATION
NOT TO SCALE

GENERAL NOTES:
1. FOOTING TO BE NJDOT CLASS 'C' CONCRETE, 3000 PSI. FOR PRECAST INLETS USE 6" OF 3/4" CLEAN STONE.
2. CONCRETE CHANNELS (INVERTS) TO BE NJDOT CLASS 'C' CONCRETE, 3000 PSI.
3. IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THEN THE WALLS SHALL BE PLASTERED INSIDE & OUT WITH A 1/2" THICK CEMENT PLASTER.
4. PROVIDE POLYPROPYLENE LADDER RUNGS AT 12" O.C. MAXIMUM.
5. ALL PRECAST STRUCTURES SHALL RECEIVE BITUMASTIC TAR COAT OUTSIDE ONLY.
6. CASTINGS SHALL BE CAMPBELL CASTING CO. OR AN APPROVED EQUAL. ALL CASTINGS SHALL HAVE BICYCLE SAFE GRATES.
7. PERFORM TEST PITS TO DETERMINE THE ALIGNMENT OF ALL EXISTING PIPES THAT CONNECT TO EACH INLET BEING CONSTRUCTED OR RE-CONSTRUCTED. INLETS BUILT IN PLACE MUST ALSO ACCOMMODATE EXISTING PIPES.
8. INSTALL FERNCO COUPLERS & PVC PIPE SECTIONS TO EXISTING DRAINAGE PIPES AS NEEDED TO EXTEND THE PIPES INTO EACH NEW INLET.
9. ALL INLETS SHALL CONFORM TO NJ DOT SPECIFICATIONS AND DETAILS. INLETS WITH A NJ DOT DESIGNATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH NJ DOT STANDARD DETAILS AS REFERENCED BELOW
10. ALL STRUCTURES AND CASTINGS SHALL BE RATED FOR H-20 LOADING.

TYPE	NJ DOT SHEET#	A	B	CASTING (CAMPBELL)
GENERAL DETAILS	CD-602-1			
NJ DOT TYPE E	CD-602-4	48"	45"	3425
NJ DOT TYPE B	CD-602-2	48"	42"	NO. 2618-B WITH TYPE J CURB (HEAD) "DUMPS NO WASTE- DRAINS TO STREAM" CAST INTO IRON.
AREA DRAIN		24"	24"	3193-1400 ADA
TRENCH		VARIES	24"	4529


B
POLYPROPYLENE LADDER RUNGS (SET ON TRAFFIC APPROACH SIDE OF STRUCTURE)
VARIES
CONCRETE FILL CHANNEL
DEPTH OF INVERT TO BE 80% OF OF PIPE DIA.
COMPACTED SUBGRADE 95% MPD
ADJUST TO GRADE WITH MAX. OF 2 COURSES OF BRICK OR ONE COURSE OF BLOCK
TRAFFIC FLOW
A
CONCRETE BLOCK CLASS C CONCRETE OR BRICK
POLYPROPYLENE LADDER RUNGS (SET ON TRAFFIC APPROACH SIDE OF STRUCTURE)
7"
12" O.C.
PROVIDE 12" SUMP AS NOTED ON THE SITE UTILITY PLAN. PROVIDE WEEP HOLES IN LOWEST COURSE OF BLOCK AND/OR FOOTING FOR INLETS WITH SUMPS.
INVERT
8" TYP.
6" TYP.
6" IF CONC. OR CONC. BLOCK, 8" IF BRICK
STONE FOOTING 6" THK. 3/4" CLEAN STONE FOR PRECAST UNIT TYP.
CONCRETE FOOTING 3,000 PSI. FOR CONCERT BLOCK OR BRICK UNIT

4 INLET CONSTRUCTION
NOT TO SCALE


MANHOLE FRAME & COVER CAMPBELL FOUNDRY (OR EQUAL): NO. 1203B – STANDARD
FINISHED GRADE
18"
ADJUST TO GRADE W/2 COURSES OF BRICK (MAX) OR CONCRETE SPACERS, 4" (MIN) – 12" (MAX)
ALUMINUM LADDER RUNGS, CAST-IN
12"
STANDARD PRECAST REINFORCED MANHOLE RISER SECTIONS 1, 2, 3, OR 4 FOOT LENGTHS AS NEEDED
OUTSIDE TO BE COATED WITH 2-4 MIL. COATS OF BITUMINOUS MATERIAL "INTEROL NO.49", KOPPERS SERVICE BLACK OR EQUAL
6" MIN.
INSIDE TO BE COATED WITH WHITE EPOXY
48" TYP.
5" TYP.
MANHOLE JOINTS TO BE MORTARED WITH NON-SHRINK GROUT ON INSIDE AND OUTSIDE SURFACES – CONCRETE AND ROUND RUBBER GASKET JOINT IN ACCORDANCE WITH A.S.T.M. DESIGNATION C-361
CHANNEL 60% "D"
NO-SKID BENCH
PIPE SEAL TO BE 'A-LOK' OR EQUAL RUBBER GASKET INTEGRALLY IN MANHOLE WALL
D
SLOPE
FLOW
CHANNEL & BENCH TO BE NJDOT CLASS "C" CONCRETE AND TO BE EPOXY COATED.
STORM SEWER MANHOLES DO NOT NEED POURED CONCRETE CHANNELS, ONLY A FINISHED BOTTOM THAT SLOPES TOWARD THE OUTGOING PIPE
COMPACTED SUBGRADE 95% MPD
3/4" CLEAN STONE FOOTING, MIN. 12" THK.
2"
7/8 THK.
1/4"R
12"
16"
3-3/4"
6"
1"R
FACE OF WALL

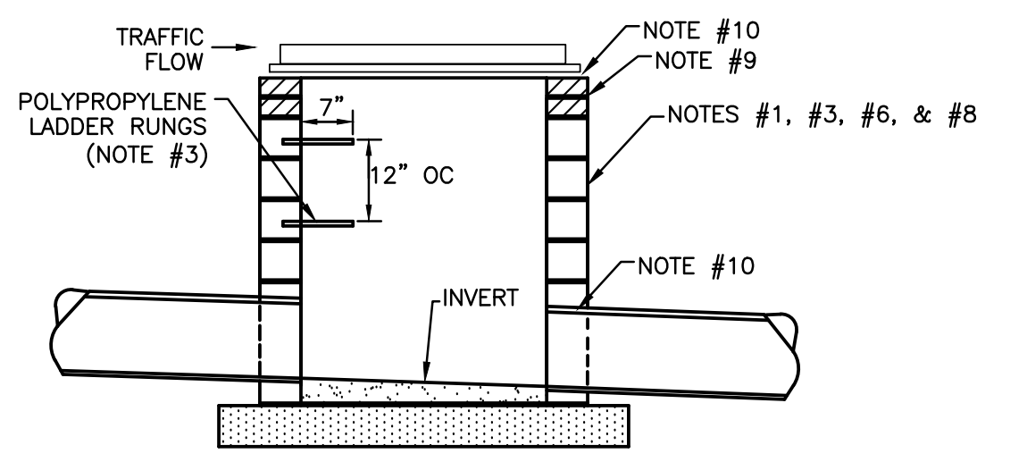
ALUMINUM LADDER RUNG:

PORTION EMBEDDED IN MASONRY TO BE COATED WITH TAR PITCH VARNISH OR EQUAL.

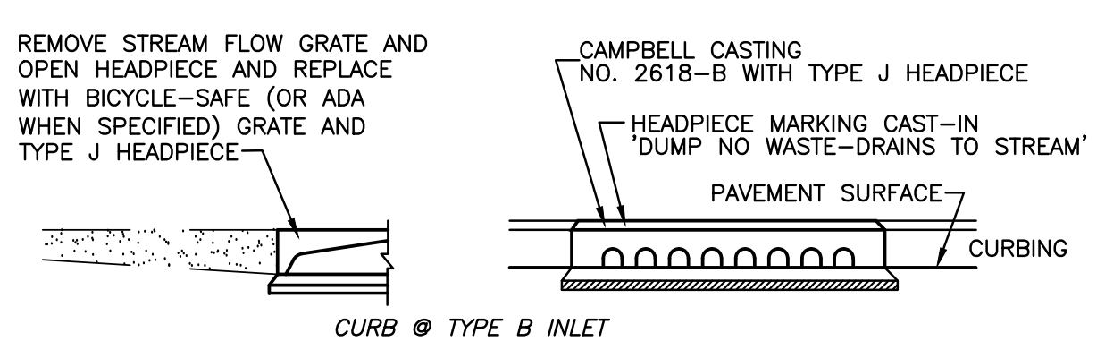
ATLANTIC CONCRETE PRODUCTS CO. (OR EQUAL) TYPE 6061-T6 POLYPROPYLENE PLASTIC – M.A. INDUSTRIES INC. NO. PS-4-B (OR EQUAL) WITH 1/2" GRADE 60 STEEL REINFORCEMENT

5 PRECAST MANHOLE-STORM SEWER
NOT TO SCALE

GENERAL NOTES
1. INSPECT CHAMBER WALL FOR MISSING OR LOOSE BLOCK AND REMOVE SAME. IT MAY BE NECESSARY TO REMOVE SOLID BLOCK TO ACCESS LOOSE BLOCK.
2. CLEAN BLOCK OF ALL MORTAR. REPLACE ANY BLOCK THAT CANNOT BE RE-USED. RE-MORTAR BLOCKS TO EXISTING WALLS USING MORTAR PER PROJECT SPECIFICATIONS.
3. PROVIDE POLYPROPYLENE LADDER RUNGS AT 12" O.C. MAXIMUM. INCLUDE UP TO 4 LADDER RUNGS PER STRUCTURE.
4. REPLACE OPEN TYPE B INLET HEAD PIECES WITH THE ECO FRIENDLY STYLE SHOWN BELOW.
5. REPLACE STREAM FLOW GRATE WITH BICYCLE SAFE GRATES. USE ADA GRATES WHEN LOCATED WITHIN WALKWAYS AND SIMILAR PEDESTRIAN AREAS.
6. INCLUDE ALL EXCAVATION COST TO EXPOSE THE EXTERIOR OF THE CHAMBER AS NEEDED TO REPAIR THE STRUCTURE & BACKFILL WITH DGA PER NJ DOT SPECS.
7. SAWCUT PAVEMENT AROUND EACH INLET/MANHOLE AS NEEDED. DEMOLISH PAVEMENT TO THE EXTENT NEEDED FOR RECONSTRUCTION WORK.
8. BACKFILL AROUND THE STRUCTURE WITH COMPACTED DENSE GRADED AGGREGATE AND RECONSTRUCT WITH FULL DEPTH HEAVY DUTY PAVEMENT CROSS SECTION.
9. ADD/REMOVE BRICK (OR PRE-CAST RINGS) AS NEEDED TO RESET THE CASTING TO FINAL GRADE, PER THE GRADING & DRAINAGE PLANS
10. RE-MORTAR CASTING TO STRUCTURE AND SEAL ALL GAPS AROUND CONNECTING PIPES.
11. WHEN CHANGING CASTING DESIGNATIONS (I.E. TYPE "B" TO TYPE "E") MEASURE THE STRUCTURE TO VERIFY INNER AND OUTER DIMENSIONS BEFORE ORDERING NEW CASTINGS.

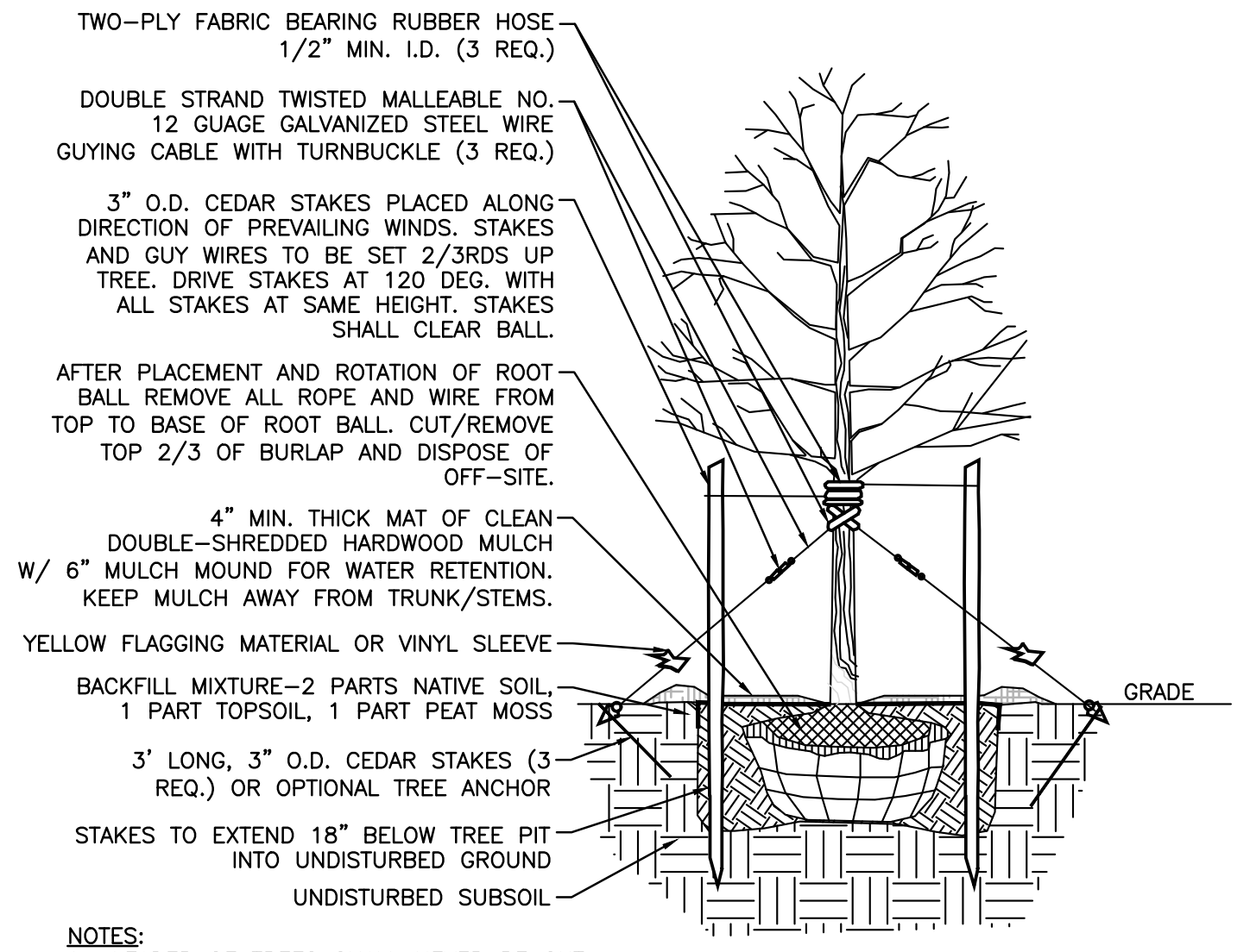


INLET CROSS SECTION


REMOVE STREAM FLOW GRATE AND OPEN HEADPIECE AND REPLACE WITH BICYCLE-SAFE (OR ADA WHEN SPECIFIED) GRATE AND TYPE J HEADPIECE
CAMPBELL CASTING NO. 2618-B WITH TYPE J HEADPIECE
HEADPIECE MARKING CAST-IN 'DUMP NO WASTE-DRAINS TO STREAM'
PAVEMENT SURFACE
CURBING

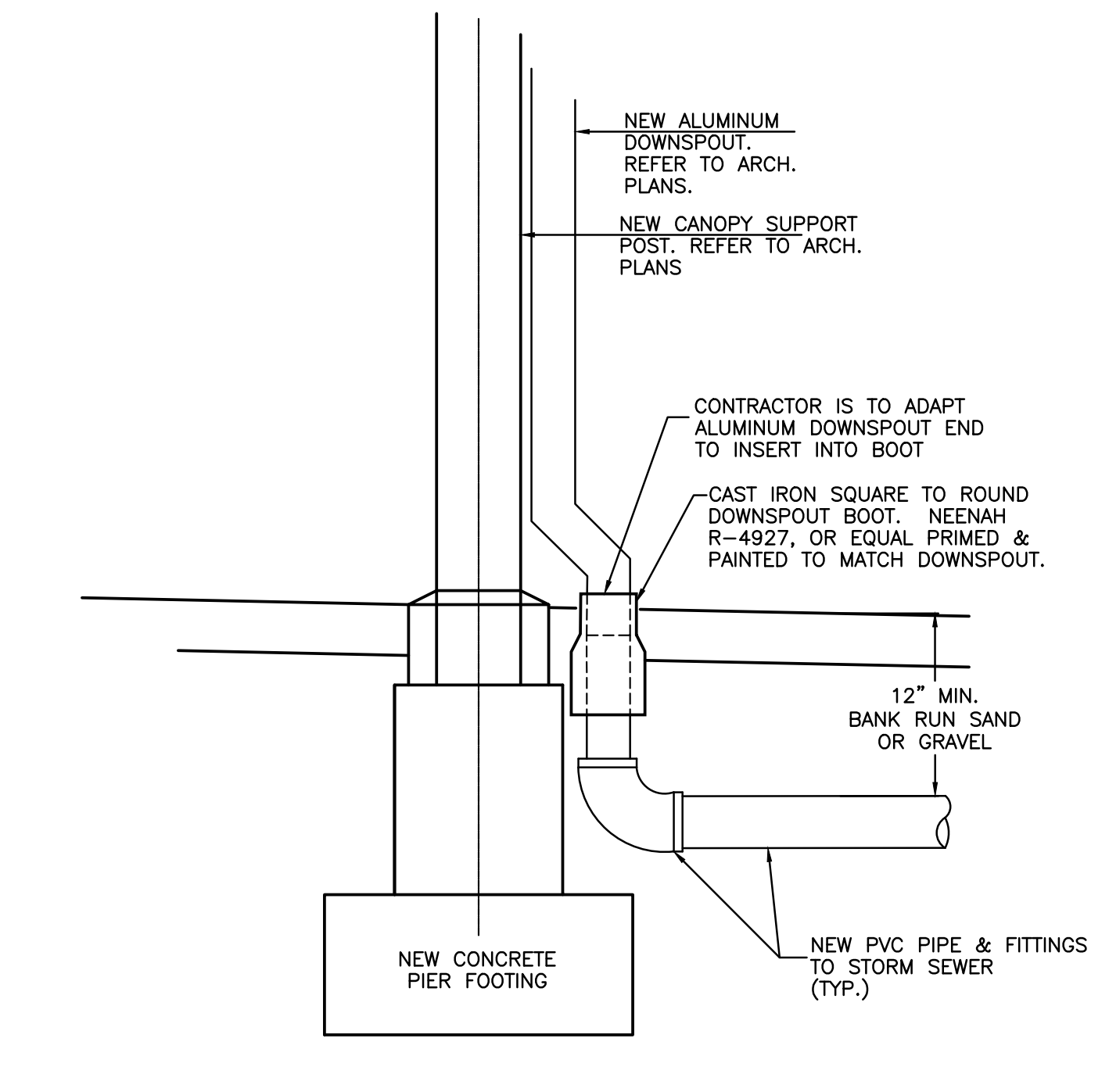
CURB @ TYPE B INLET

8 INLET RECONSTRUCTION
NOT TO SCALE

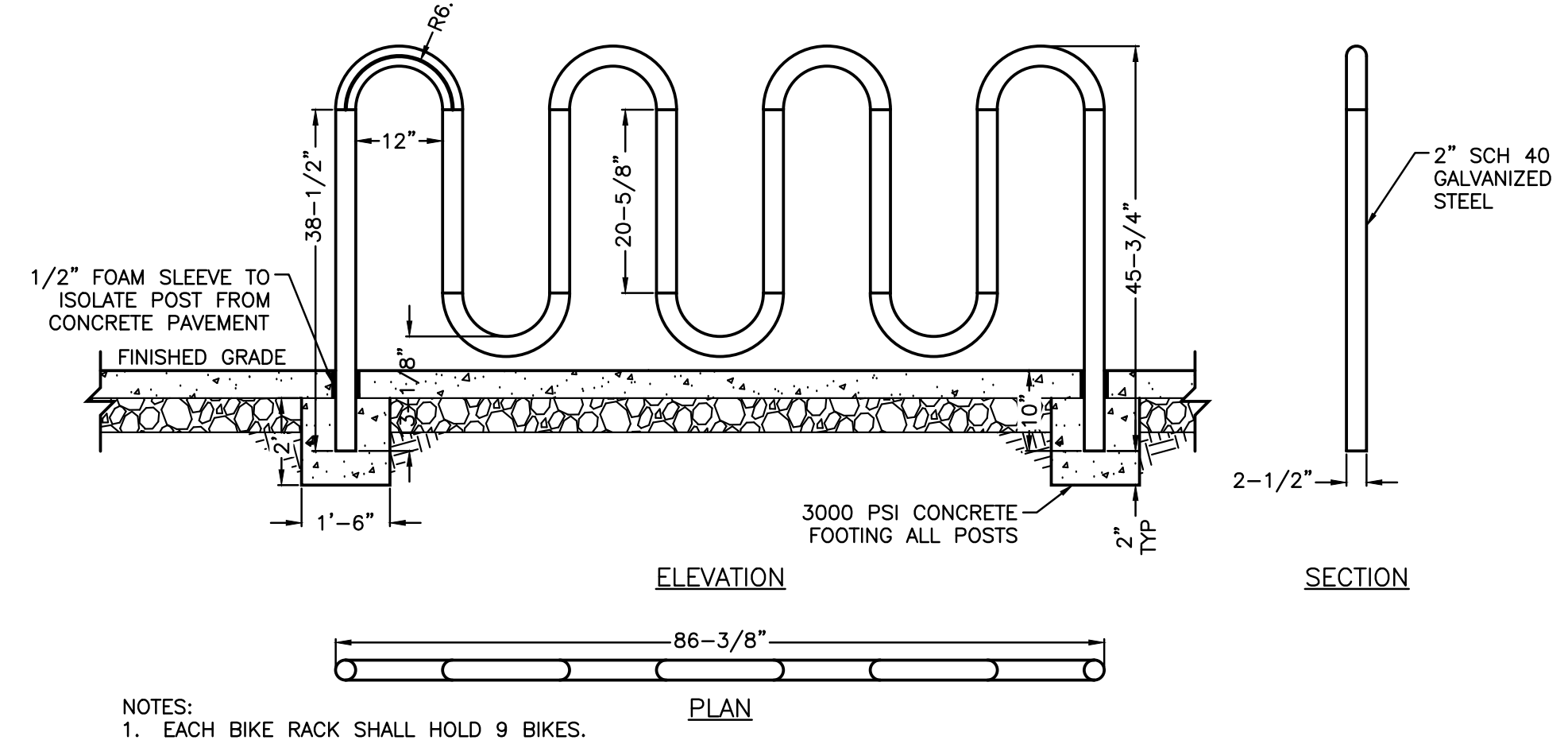

TWO-PLY FABRIC BEARING RUBBER HOSE 1/2" MIN. I.D. (3 REQ.)
DOUBLE STRAND TWISTED MALLEABLE NO. 12 GUAGE GALVANIZED STEEL WIRE GUYING CABLE WITH TURNBUCKLE (3 REQ.)
3" O.D. CEDAR STAKES PLACED ALONG DIRECTION OF PREVAILING WINDS. STAKES AND GUY WIRES TO BE SET 2/3RDS UP TREE. DRIVE STAKES AT 120 DEG. WITH ALL STAKES AT SAME HEIGHT. STAKES SHALL CLEAR BALL.
AFTER PLACEMENT AND ROTATION OF ROOT BALL REMOVE ALL ROPE AND WIRE FROM TOP TO BASE OF ROOT BALL. CUT/REMOVE TOP 2/3 OF BURLAP AND DISPOSE OF OFF-SITE.
4" MIN. THICK MAT OF CLEAN DOUBLE-SHREDDED HARDWOOD MULCH W/ 6" MULCH MOUND FOR WATER RETENTION. KEEP MULCH AWAY FROM TRUNK/STEMS.
YELLOW FLAGGING MATERIAL OR VINYL SLEEVE
GRADE
BACKFILL MIXTURE-2 PARTS NATIVE SOIL, 1 PART TOPSOIL, 1 PART PEAT MOSS
3' LONG, 3" O.D. CEDAR STAKES (3 REQ.) OR OPTIONAL TREE ANCHOR
STAKES TO EXTEND 18" BELOW TREE PIT INTO UNDISTURBED GROUND
UNDISTURBED SUBSOIL

NOTES:
1. LEADER OF TREES SHALL NEVER BE CUT.
2. STAKING IS REQUIRED FOR ALL DECIDUOUS TREES UNDER 3" IN CALIPER AND ALL EVERGREEN TREES UNDER 8' IN HEIGHT.
3. GUYING IS REQUIRED FOR ALL DECIDUOUS TREES 3" IN CALIPER AND GREATER AND ALL EVERGREEN TREES OVER 8' IN HEIGHT.
4. DECIDUOUS TREES SHALL BE PRUNED TO THIN AND SHAPE CANOPY. EVERGREEN TREES SHALL HAVE ONLY DAMAGED OR BROKEN BRANCHES REMOVED.
5. TREE SHALL BEAR SAME RELATION TO GRADE AS IT BORE TO PREVIOUS GRADE IN THE NURSERY.

11 TREE INSTALLATION
NOT TO SCALE


NEW ALUMINUM DOWNSPOUT. REFER TO ARCH. PLANS.
NEW CANOPY SUPPORT POST. REFER TO ARCH. PLANS
CONTRACTOR IS TO ADAPT ALUMINUM DOWNSPOUT END TO INSERT INTO BOOT
CAST IRON SQUARE TO ROUND DOWNSPOUT BOOT. NEENAH R-4927, OR EQUAL PRIMED & PAINTED TO MATCH DOWNSPOUT.
12" MIN. BANK RUN SAND OR GRAVEL
NEW CONCRETE PIER FOOTING
NEW PVC PIPE & FITTINGS TO STORM SEWER (TYP.)

12 CANOPY DRAIN LEADER CONNECTION
NOT TO SCALE


R6.0"
12"
38-1/2"
20-5/8"
45-3/4"
2" SCH 40 GALVANIZED STEEL
1/2" FOAM SLEEVE TO ISOLATE POST FROM CONCRETE PAVEMENT
FINISHED GRADE
2'
1'-6"
10"
3000 PSI CONCRETE FOOTING ALL POSTS
2" TYP
2-1/2"
ELEVATION
SECTION
86-3/8"
PLAN

NOTES:
1. EACH BIKE RACK SHALL HOLD 9 BIKES.
2. RACK MUST BE MADE OF GALVANIZED, RUST-RESISTANT, HEAVY DUTY STEEL.
3. BIKE RACK SHALL BE PARK WAREHOUSE 9 BIKE SONIC WAVE RACK (900br165) OR APPROVED EQUAL. REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION

13 PERMANENT STEEL BIKE RACK
NOT TO SCALE

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
AN L2A COMPANY

Beth E. Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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2/12/26
Architect Date

FVHD architects planners
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F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

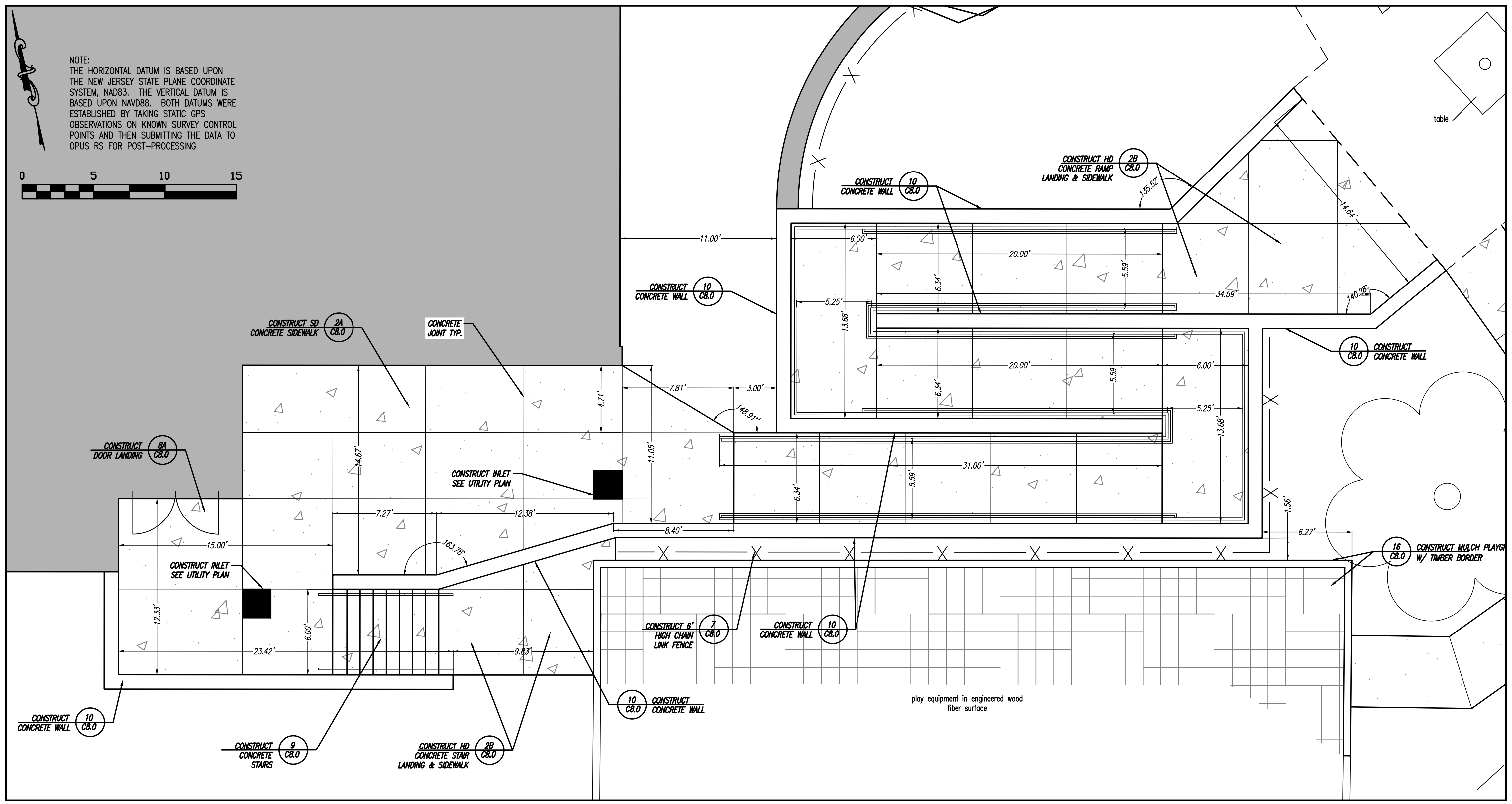
Drawing Name
DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
	12.10.25	NJ DCA REVISIONS
	12.10.25	DESIGN REVISIONS
	01.02.26	NJ DCA REVISIONS
	01.02.26	DESIGN REVISIONS
	01.23.26	NJ DCA REVISIONS
	03.24.26	ADDENDUM #2

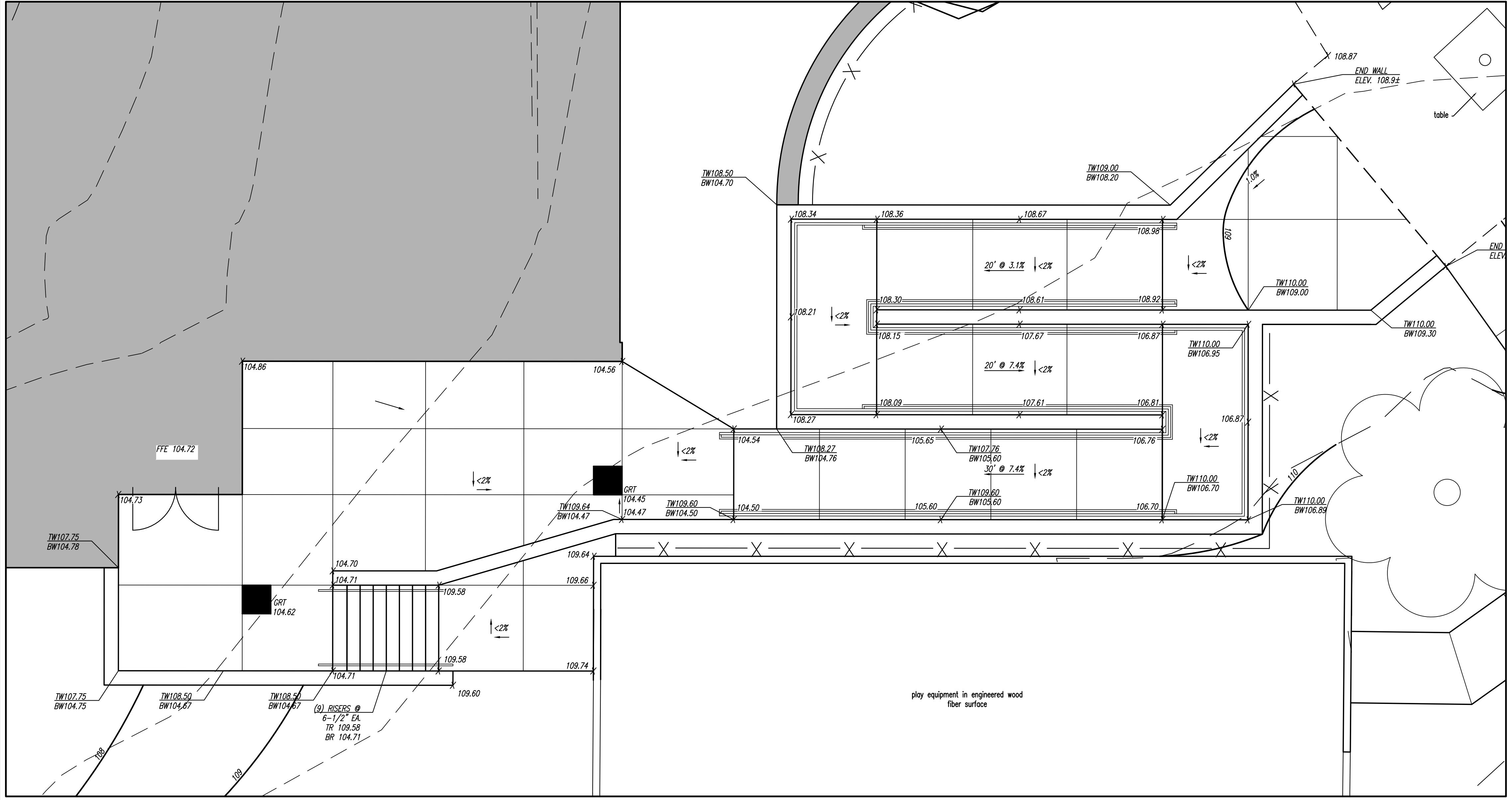
Drawing Number
C-8.1

NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST-PROCESSING


0
5
10
15
CONSTRUCT SD CONCRETE SIDEWALK 2A C8.0
CONCRETE JOINT TYP.
CONSTRUCT DOOR LANDING 2B C8.0
CONSTRUCT INLET SEE UTILITY PLAN
CONSTRUCT CONCRETE WALL 10 C8.0
CONSTRUCT CONCRETE STAIRS 3 C8.0
CONSTRUCT HD CONCRETE STAIR LANDING & SIDEWALK 2B C8.0
CONSTRUCT HD CONCRETE RAMP LANDING & SIDEWALK 2B C8.0
CONSTRUCT 6' HIGH CHAIN LINK FENCE 7 C8.0
CONSTRUCT MULCH PLAYG W/ TIMBER BORDER 16 C8.0
play equipment in engineered wood fiber surface
11.00'
20.00'
31.00'
15.00'
23.40'
8.40'
6.00'
5.25'
table

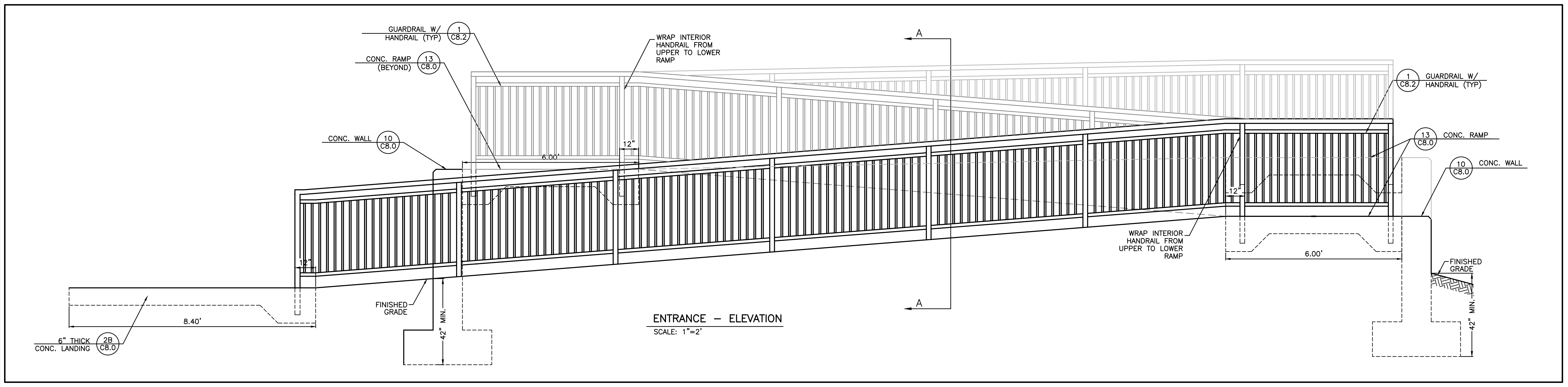
ENTRANCE 1 SITE PLAN (ALTERNATE LB1)

SCALE: 1"=5'



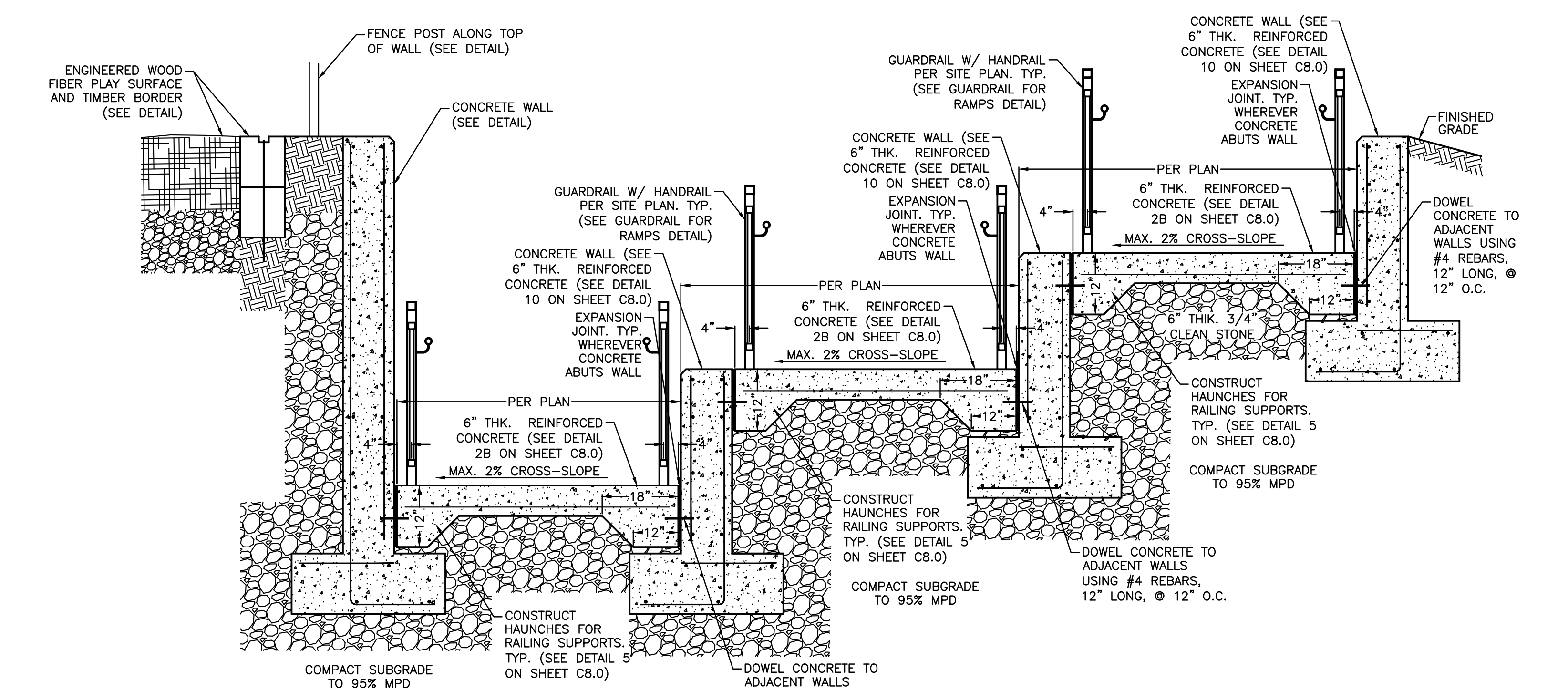
ENTRANCE 1 GRADING PLAN (ALTERNATE LB1)

SCALE: 1"=5'


GUARDRAIL W/ HANDRAIL (TYP) 1 C8.2
CONC. RAMP (BEYOND) 13 C8.0
WRAP INTERIOR HANDRAIL FROM UPPER TO LOWER RAMP
A
GUARDRAIL W/ HANDRAIL (TYP) 1 C8.2
CONC. WALL 10 C8.0
CONC. RAMP 13 C8.0
CONC. WALL 10 C8.0
WRAP INTERIOR HANDRAIL FROM UPPER TO LOWER RAMP
6.00'
12"
6.00'
FINISHED GRADE
FINISHED GRADE
42" MIN.
42" MIN.
8.40'
6" THICK CONC. LANDING 2B C8.0

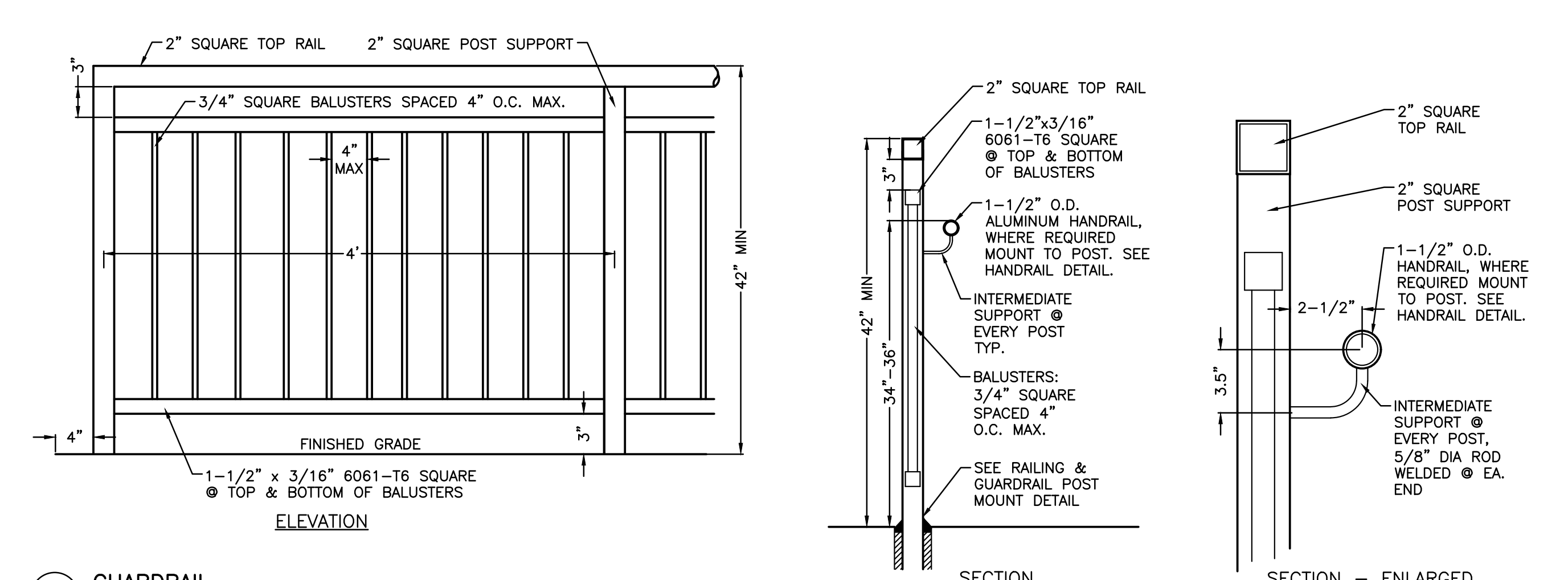
ENTRANCE – ELEVATION

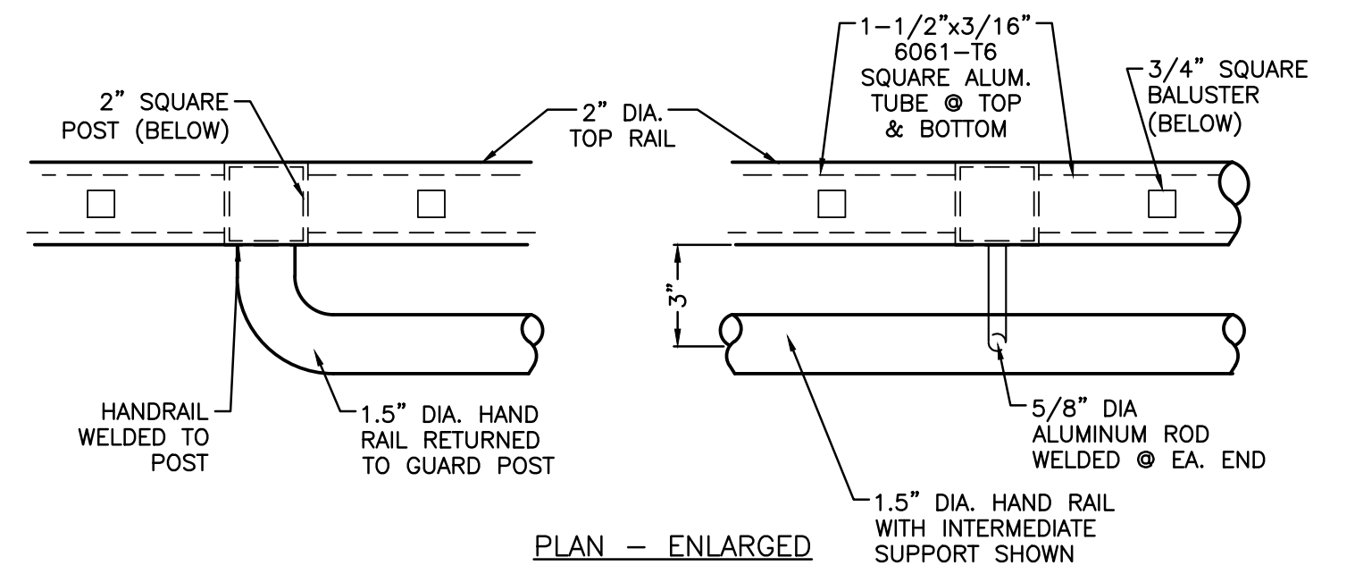
SCALE: 1"=2'


ENGINEERED WOOD FIBER PLAY SURFACE AND TIMBER BORDER (SEE DETAIL)
FENCE POST ALONG TOP OF WALL (SEE DETAIL)
CONCRETE WALL (SEE DETAIL)
GUARDRAIL W/ HANDRAIL PER SITE PLAN. TYP. (SEE GUARDRAIL FOR RAMPS DETAIL)
CONCRETE WALL (SEE 6" THK. REINFORCED CONCRETE (SEE DETAIL 10 ON SHEET C8.0)
EXPANSION JOINT. TYP. WHEREVER CONCRETE ABUTS WALL
PER PLAN
6" THK. REINFORCED CONCRETE (SEE DETAIL 2B ON SHEET C8.0)
MAX. 2% CROSS-SLOPE
6" THK. 3/4" CLEAN STONE
CONSTRUCT HAUNCHES FOR RAILING SUPPORTS. TYP. (SEE DETAIL 5 ON SHEET C8.0)
COMPACT SUBGRADE TO 95% MPD
DOWEL CONCRETE TO ADJACENT WALLS USING #4 REBARS, 12" LONG, @ 12" O.C.
FINISHED GRADE
18"
12"

SECTION A–A

NOT TO SCALE

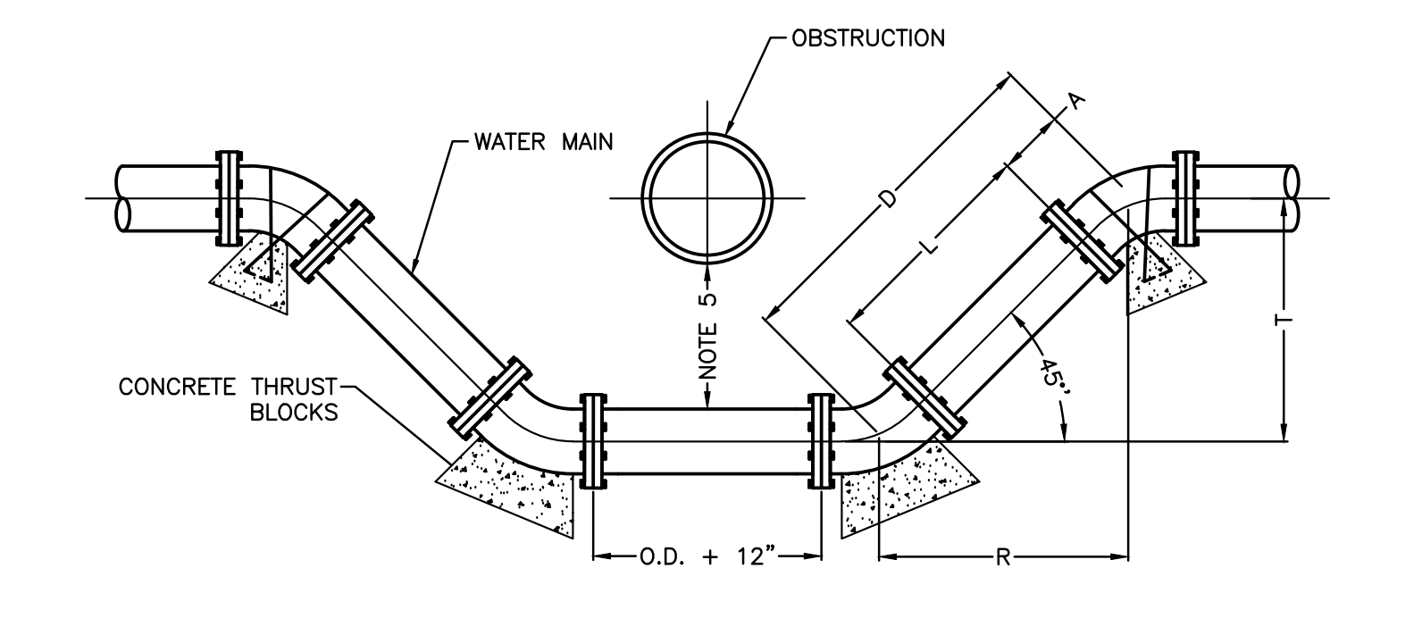

2" SQUARE TOP RAIL
2" SQUARE POST SUPPORT
3/4" SQUARE BALUSTERS SPACED 4" O.C. MAX.
4" MAX
4'
42" MIN
3"
4"
FINISHED GRADE
1-1/2" x 3/16" 6061-T6 SQUARE @ TOP & BOTTOM OF BALUSTERS
ELEVATION
1-1/2"x3/16" 6061-T6 SQUARE @ TOP & BOTTOM OF BALUSTERS
1-1/2" O.D. ALUMINUM HANDRAIL, WHERE REQUIRED MOUNT TO POST. SEE HANDRAIL DETAIL.
INTERMEDIATE SUPPORT @ EVERY POST TYP.
BALUSTERS: 3/4" SQUARE SPACED 4" O.C. MAX.
SEE RAILING & GUARDRAIL POST MOUNT DETAIL
42" MIN
34"-36"
SECTION
2" SQUARE TOP RAIL
2" SQUARE POST SUPPORT
1-1/2" O.D. HANDRAIL, WHERE REQUIRED MOUNT TO POST. SEE HANDRAIL DETAIL.
2-1/2"
3.5"
INTERMEDIATE SUPPORT @ EVERY POST, 5/8" DIA ROD WELDED @ EA. END
SECTION – ENLARGED


2" SQUARE POST (BELOW)
2" DIA. TOP RAIL
1-1/2"x3/16" 6061-T6 SQUARE ALUM. TUBE @ TOP & BOTTOM
3/4" SQUARE BALUSTER (BELOW)
3"
HANDRAIL WELDED TO POST
1.5" DIA. HAND RAIL RETURNED TO GUARD POST
5/8" DIA ALUMINUM ROD WELDED @ EA. END
1.5" DIA. HAND RAIL WITH INTERMEDIATE SUPPORT SHOWN
PLAN – ENLARGED

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.

① GUARDRAIL

NOT TO SCALE



1. WATER MAIN MAY BE LOOPED ABOVE OBSTRUCTION, IF 3' MINIMUM COVER IS MAINTAINED ABOVE WATER MAIN.
2. WATER MAIN SHALL BE DUCTILE IRON CEMENT LINED PIPE, ALL JOINTS SHALL BE MECHANICAL JOINT OR PUSH–ON AND ALL FITTINGS BE MECHANICALLY JOINT CAST IRON.
3. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24' IF APPROVED BY THE ENGINEER.
4. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
5. MINIMUM CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN SHALL BE 18" MIN. CLEARANCE BETWEEN WATER MAIN AND OTHER OBSTRUCTIONS SHALL BE 6".
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

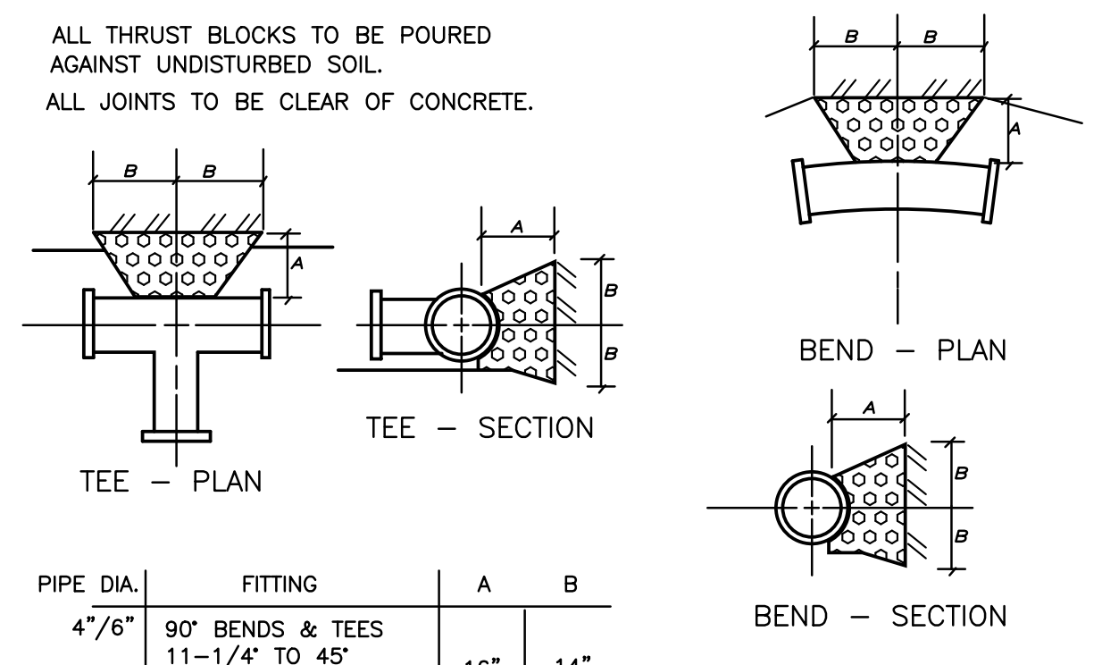
MECHANICAL JOINTS

ANGLE	D =	R =	L =
45°	T x 1.414	T x 1.000	D–2A
22.5°	T x 2.613	T x 2.414	D–2A
11.25°	T x 5.126	T x 5.027	D–2A

④ WATER LOOP

NOT TO SCALE

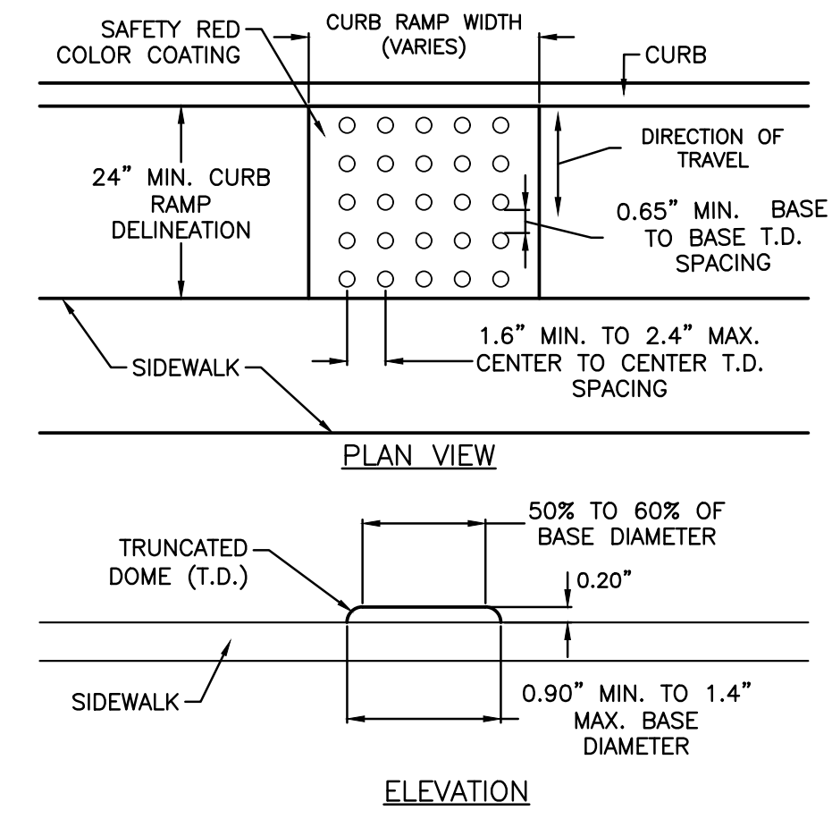
ALL THRUST BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL.
ALL JOINTS TO BE CLEAR OF CONCRETE.



PIPE DIA.	FITTING	A	B
4"/6"	90° BENDS & TEES 11–1/4° TO 45°	16"	14"
8"	90° BENDS & TEES 11–1/4° TO 45°	16" 16"	12" 18"
10"	90° BENDS & TEES 11–1/4° TO 45°	16" 24"	16" 24"
12"	90° BENDS & TEES 11–1/4° TO 45°	18" 24"	18" 28"
16"	90° BENDS & TEES 11–1/4° TO 45°	20" 24"	20" 36"
		24"	28"

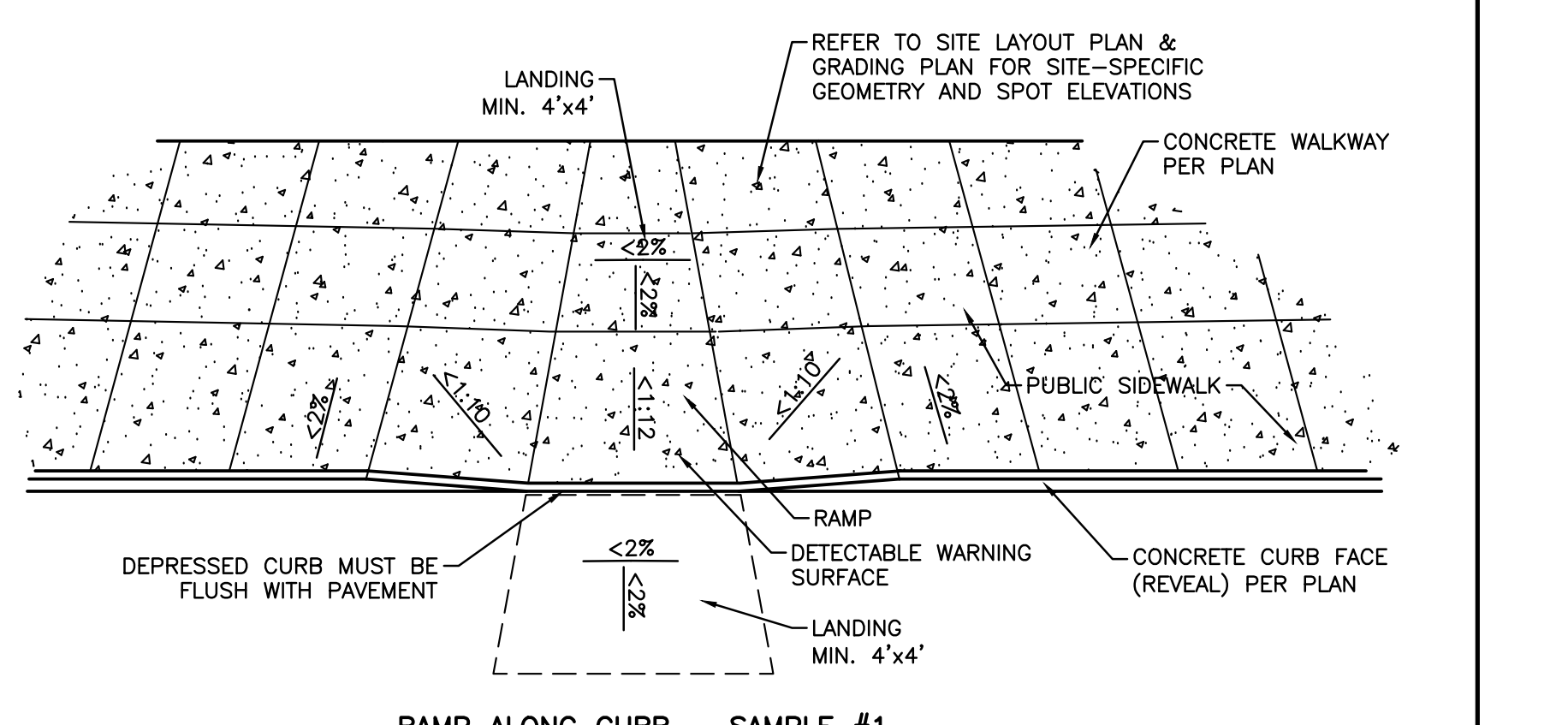
⑤ CONCRETE THRUST BLOCKS

NOT TO SCALE

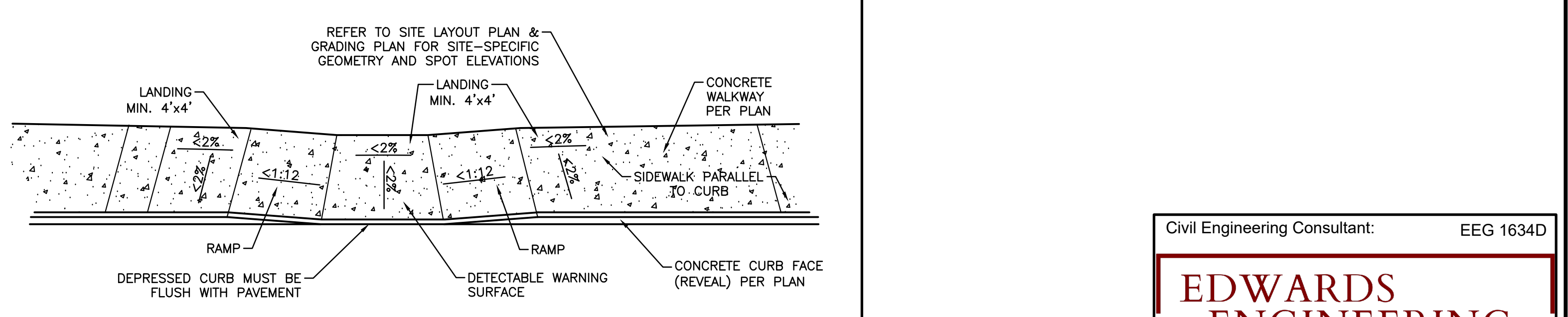

SAFETY RED COLOR COATING
CURB RAMP WIDTH (VARIES)
CURB
24" MIN. CURB RAMP DELINEATION
DIRECTION OF TRAVEL
0.65" MIN. BASE TO BASE T.D. SPACING
1.6" MIN. TO 2.4" MAX. CENTER TO CENTER T.D. SPACING
SIDEWALK
PLAN VIEW
TRUNCATED DOME (T.D.)
50% TO 60% OF BASE DIAMETER
0.20"
SIDEWALK
0.90" MIN. TO 1.4" MAX. BASE DIAMETER
ELEVATION

DETECTABLE WARNING SURFACE

GENERAL NOTES:
1. THESE DETAILS ARE INTENDED TO DEPICT THE GENERAL LAYOUT & GEOMETRY OF VARIOUS CONFIGURATIONS OF BARRIER FREE (ADA) RAMPS. EACH RAMP SHALL HAVE A LANDING AT ITS TOP AND BOTTOM SLOPING NOT MORE THAN 2% IN ANY DIRECTION.
2. REFER TO CONCRETE PAVEMENT DETAIL FOR CONCRETE REQUIREMENTS.
3. REFER TO THE PLAN FOR SITE LAYOUT INFORMATION PERTAINING TO RAMPS AND LANDINGS.
4. WALKWAYS SLOPING 5% OR LESS ARE NOT CONSIDERED RAMPS, BUT ARE KNOWN AS BLENDED TRANSITIONS. LANDINGS ARE NOT REQUIRED FOR BLENDED TRANSITIONS.
5. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
6. DEPRESSED CURB SHALL BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4' AT ALL CURB RAMPS.
7. DETECTABLE WARNING SURFACES (SHADED AREA) SHALL BE SAFETY RED COLOR ON CONCRETE.
8. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SIDEWALK.
9. IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.


LANDING MIN. 4'x4'
REFER TO SITE LAYOUT PLAN & GRADING PLAN FOR SITE-SPECIFIC GEOMETRY AND SPOT ELEVATIONS
CONCRETE WALKWAY PER PLAN
PUBLIC SIDEWALK
<2%
RAMP
DETECTABLE WARNING SURFACE
DEPRESSED CURB MUST BE FLUSH WITH PAVEMENT
CONCRETE CURB FACE (REVEAL) PER PLAN
LANDING MIN. 4'x4'

RAMP ALONG CURB – SAMPLE #1


REFER TO SITE LAYOUT PLAN & GRADING PLAN FOR SITE-SPECIFIC GEOMETRY AND SPOT ELEVATIONS
LANDING MIN. 4'x4'
LANDING MIN. 4'x4'
CONCRETE WALKWAY PER PLAN
SIDEWALK PARALLEL TO CURB
<2%
RAMP
RAMP
DETECTABLE WARNING SURFACE
DEPRESSED CURB MUST BE FLUSH WITH PAVEMENT
CONCRETE CURB FACE (REVEAL) PER PLAN

RAMP ALONG CURB – SAMPLE #2

⑥ BARRIER–FREE (ADA COMPLIANT) CURB RAMP

NOT TO SCALE

Civil Engineering Consultant: EEG 1634D

EDWARDS ENGINEERING GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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Architect
2/12/26
Date

FVHD architects planners
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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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

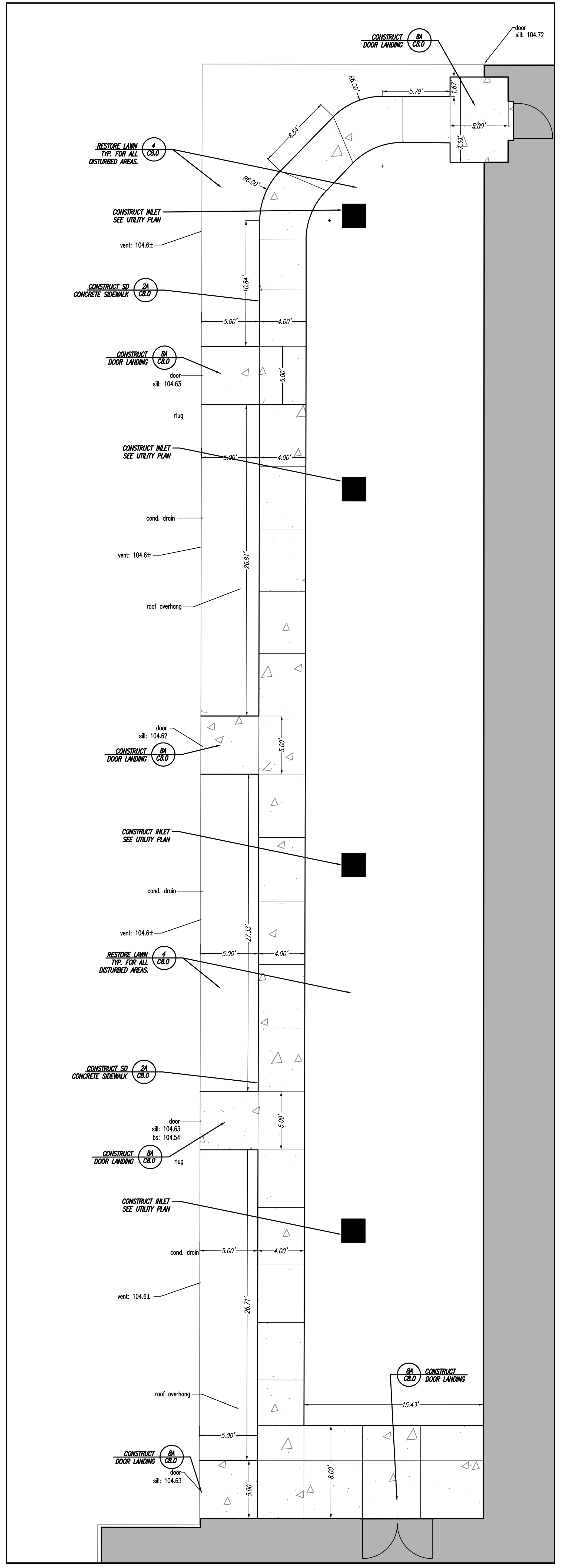
Scale

Drawing Name
DETAILS

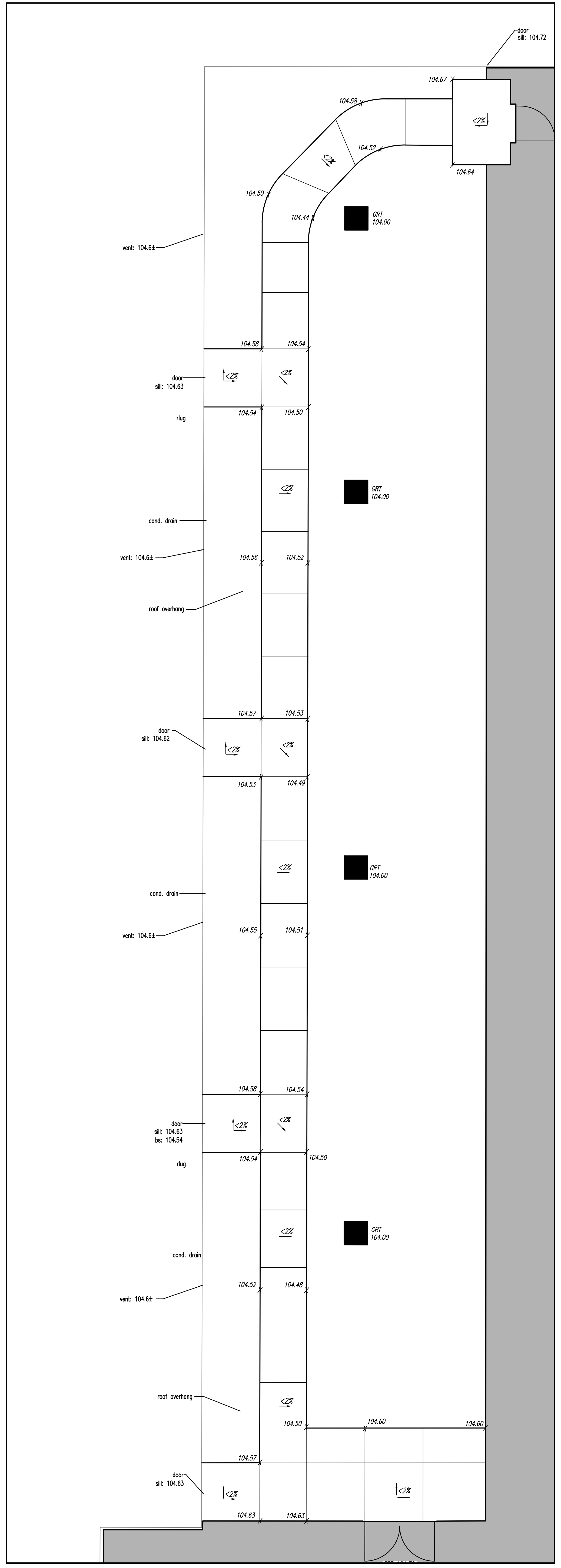
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

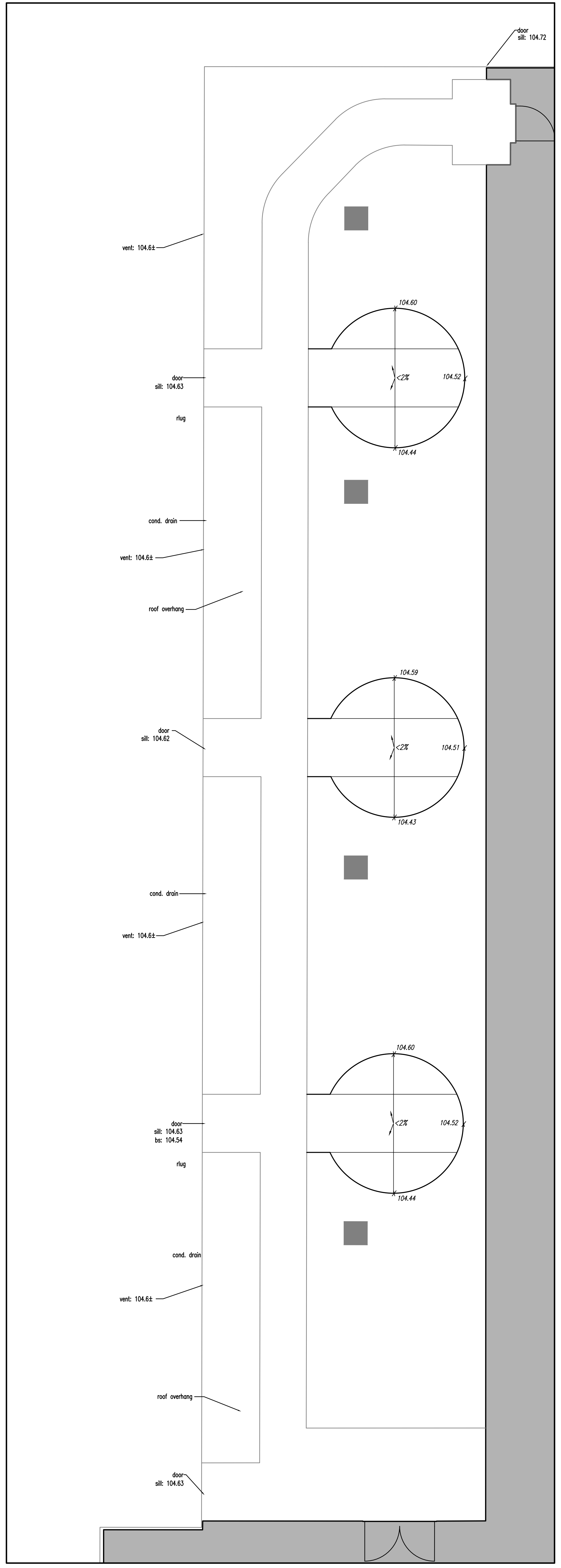
Drawing Number
C-8.2 A2


CONSTRUCT DOOR LANDING 8A C8.0
door sill: 104.72
R6.00'
5.79'
1.67'
5.00'
7.33'
6.54'
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS. 4 C8.0
R6.00'
CONSTRUCT INLET SEE UTILITY PLAN
vent: 104.6±
CONSTRUCT SD CONCRETE SIDEWALK 2A C8.0
10.84'
5.00'
4.00'
CONSTRUCT DOOR LANDING 8A C8.0
door sill: 104.63
rlug
26.81'
cond. drain
roof overhang
door sill: 104.62
27.33'
door sill: 104.63 bs: 104.54
26.71'
15.43'
8.00'

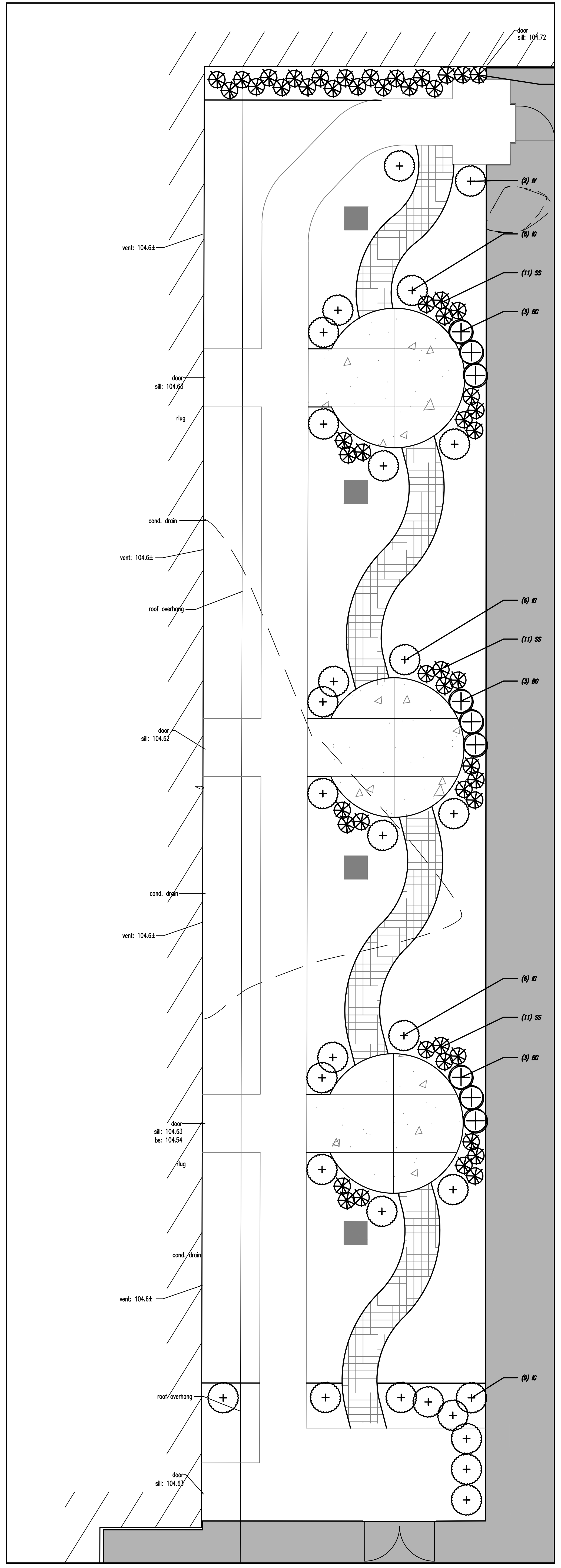
LB1 COURTYARD SITE PLAN SCALE: 1"=5'



LB1 COURTYARD GRADING PLAN SCALE: 1"=5'



LB2 COURTYARD GRADING PLAN SCALE: 1"=5'



LB2 COURTYARD LANDSCAPING PLAN SCALE: 1"=5'

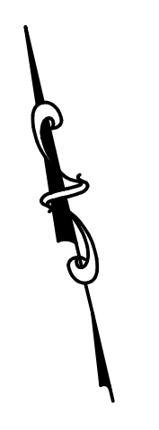
LEGEND OF SYMBOLS

EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◑	MANHOLE– NEW/RECONSTRUCT
□	■ / ◩	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	*GV* ⧓ *WV*	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	☒	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	*x70.25*	SPOT ELEVATIONS
——68——	*68*	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▒	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▩	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	════━━━	CURB/DEPRESSED CURB (DC)
┌ – – – ┐	△	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –	═══	STORM SEWER >=12" DIA.
– – – st – – –	━━ ━━	STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE



NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING

ALTERNATE BID LB2 COURTYARD PLANT SCHEDULE

SHRUB

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
IG	ILEX GLABRA 'GEM BOX'	'GEM BOX' INKBERRY HOLLY	24"–30"29	29

GROUNDCOVERS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY
BG	BOUTELOUA GRACILIS 'BLONDE AMBITION'	'BLONDE AMBITION' BLUE GRAMA GRASS	1 GAL.	9
SS	SCHIZACHYRIUM SCOPARIUM	'STANDING OVATION' LITTLE BLUESTEM	1 GAL.	54

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

NJDCA Electronic Release Stamp

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Architect 2/12/26 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

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08540

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Scale

Drawing Name
DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
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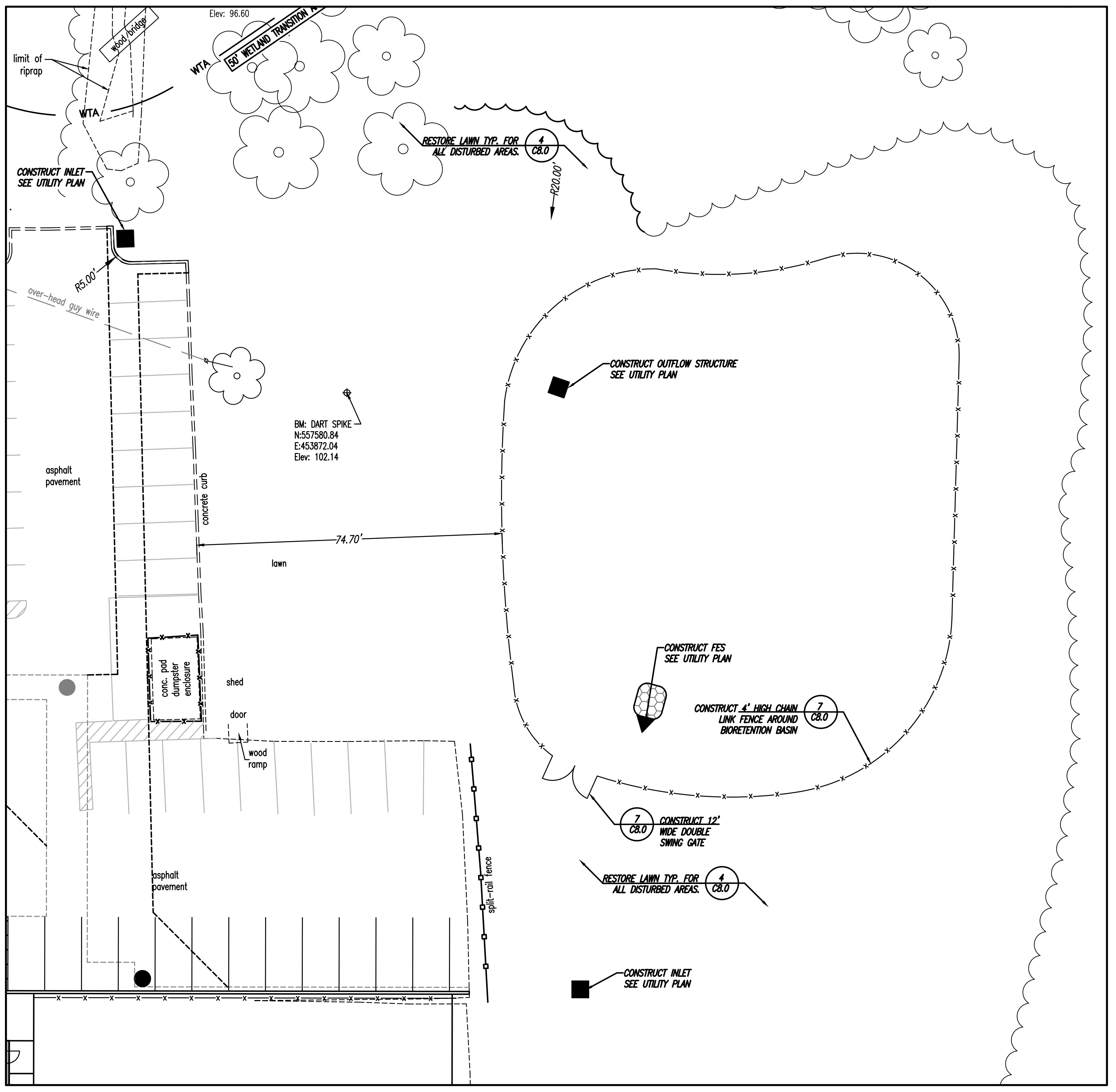
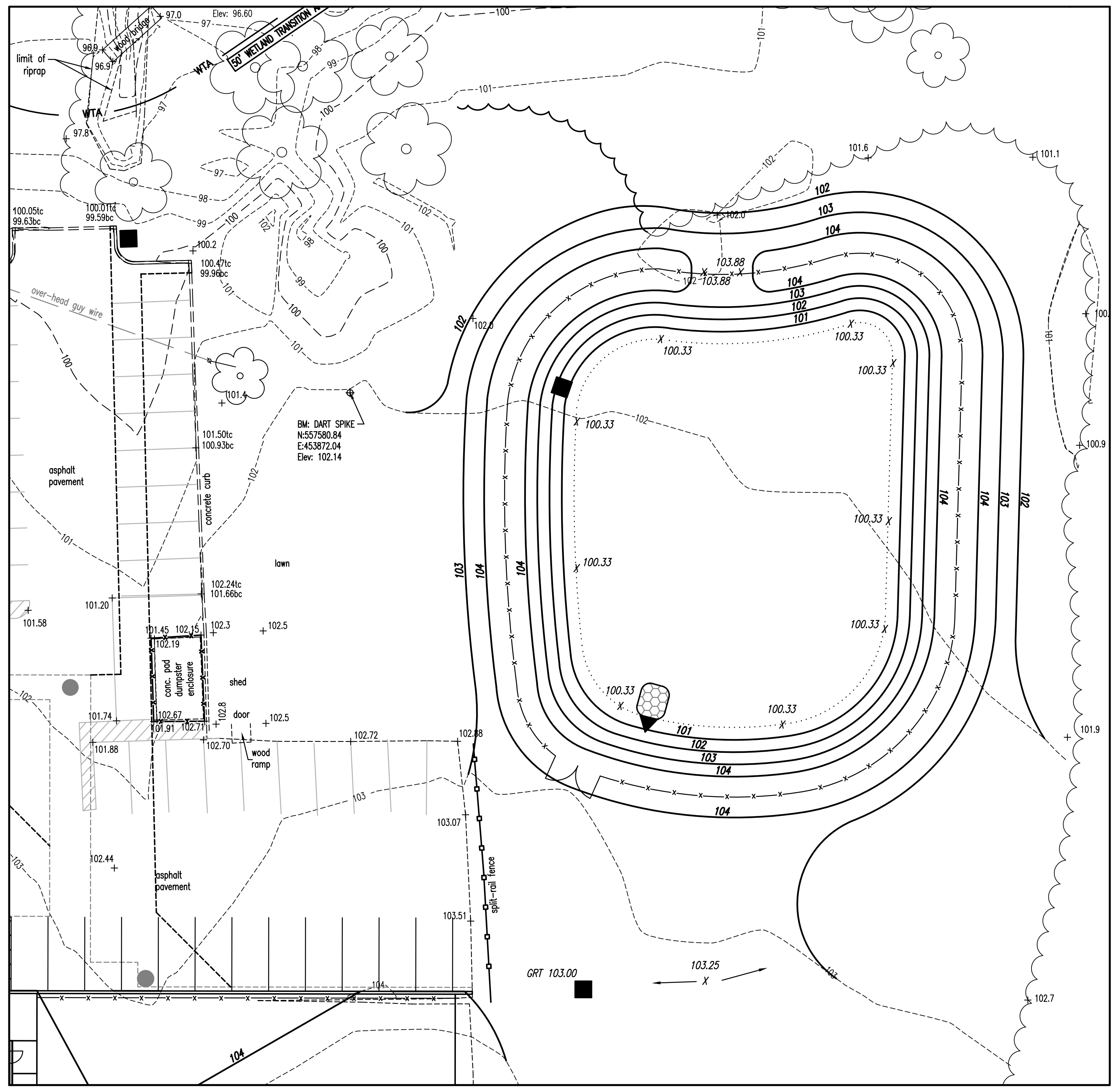
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
A2	03.24.26	ADDENDUM #2

Drawing Number
C-8.3 A2


limit of riprap
WTA
DEP WETLAND TRANSITION
CONSTRUCT INLET SEE UTILITY PLAN
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS.
CONSTRUCT OUTLOW STRUCTURE SEE UTILITY PLAN
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
asphalt pavement
lawn
74.70'
shed
door
wood ramp
conc. pad dumpster enclosure
CONSTRUCT FES SEE UTILITY PLAN
CONSTRUCT 6' HIGH CHAIN LINK FENCE AROUND BIORETENTION BASIN
CONSTRUCT 12' WIDE DOUBLE SWING GATE
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS.
CONSTRUCT INLET SEE UTILITY PLAN
split-rail fence

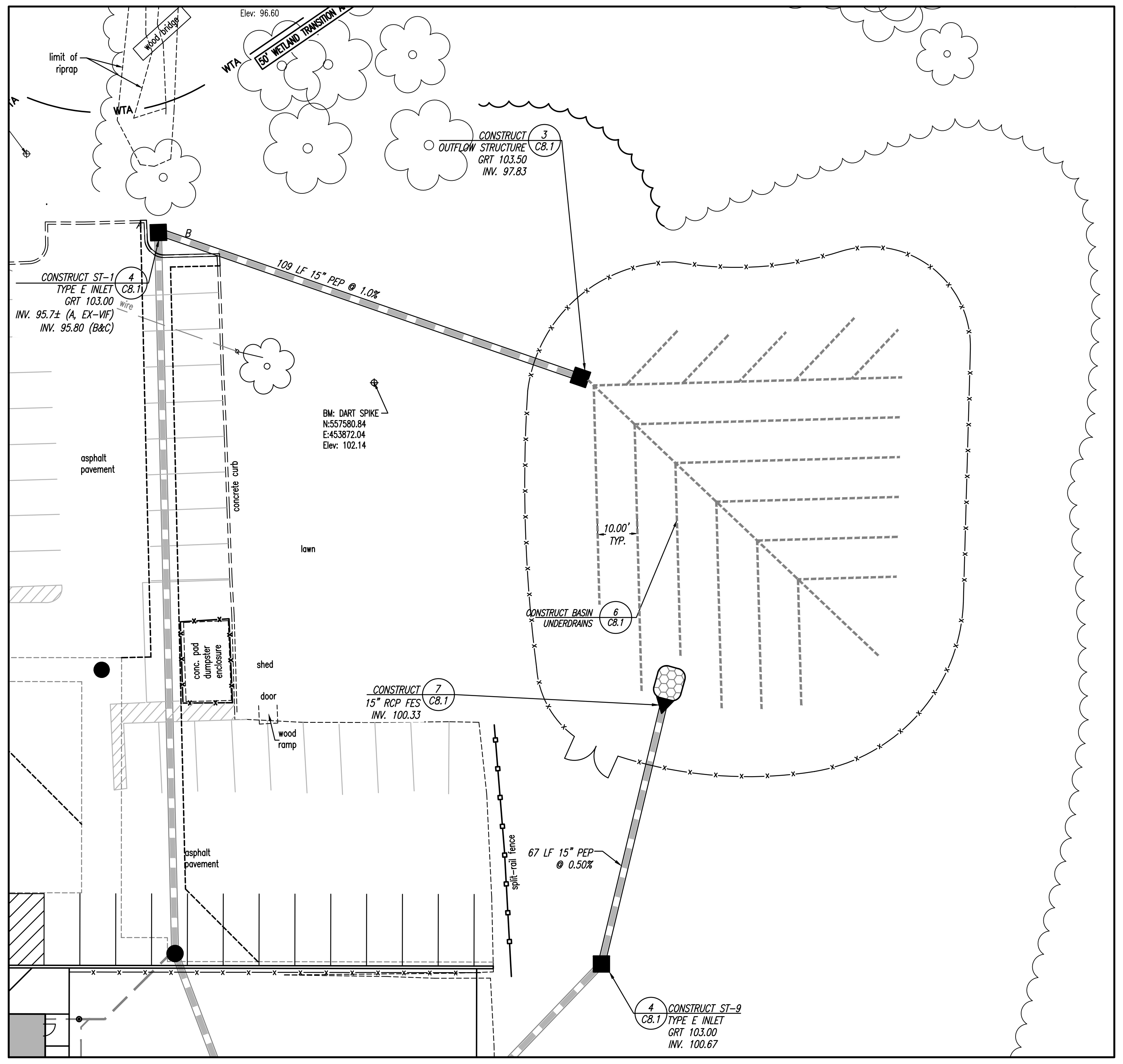
SITE PLAN – ALTERNATE BID LB7
W/ ALT BID LB1

SCALE: 1" = 20'



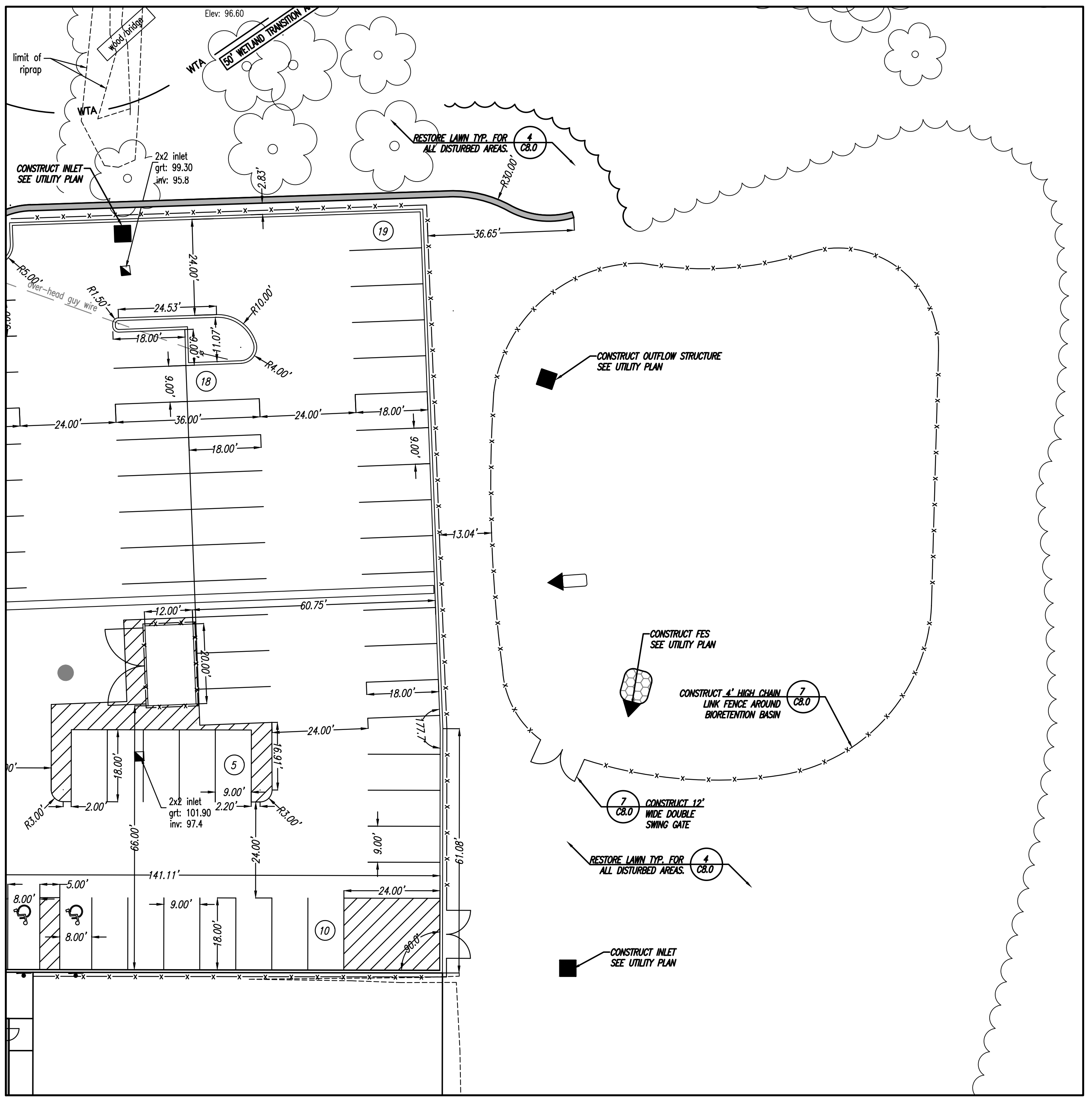
GRADING PLAN – ALTERNATE BID LB7
W/ ALT BID LB1

SCALE: 1" = 20'


limit of riprap
WTA
CONSTRUCT OUTFLOW STRUCTURE GRT 103.50 INV. 97.83
CONSTRUCT ST-1 TYPE E INLET GRT 103.00 INV. 95.7± (A, EX-W) INV. 95.80 (B&C)
109 LF 15" PEP @ 1.0%
BM: DART SPIKE N:557580.84 E:453872.04 Elev: 102.14
asphalt pavement
lawn
shed
door
wood ramp
10.00' TYP.
CONSTRUCT BASIN UNDERDRAINS
CONSTRUCT 15" RCP FES INV. 100.33
67 LF 15" PEP @ 0.50%
CONSTRUCT ST-9 TYPE E INLET GRT 103.00 INV. 100.67

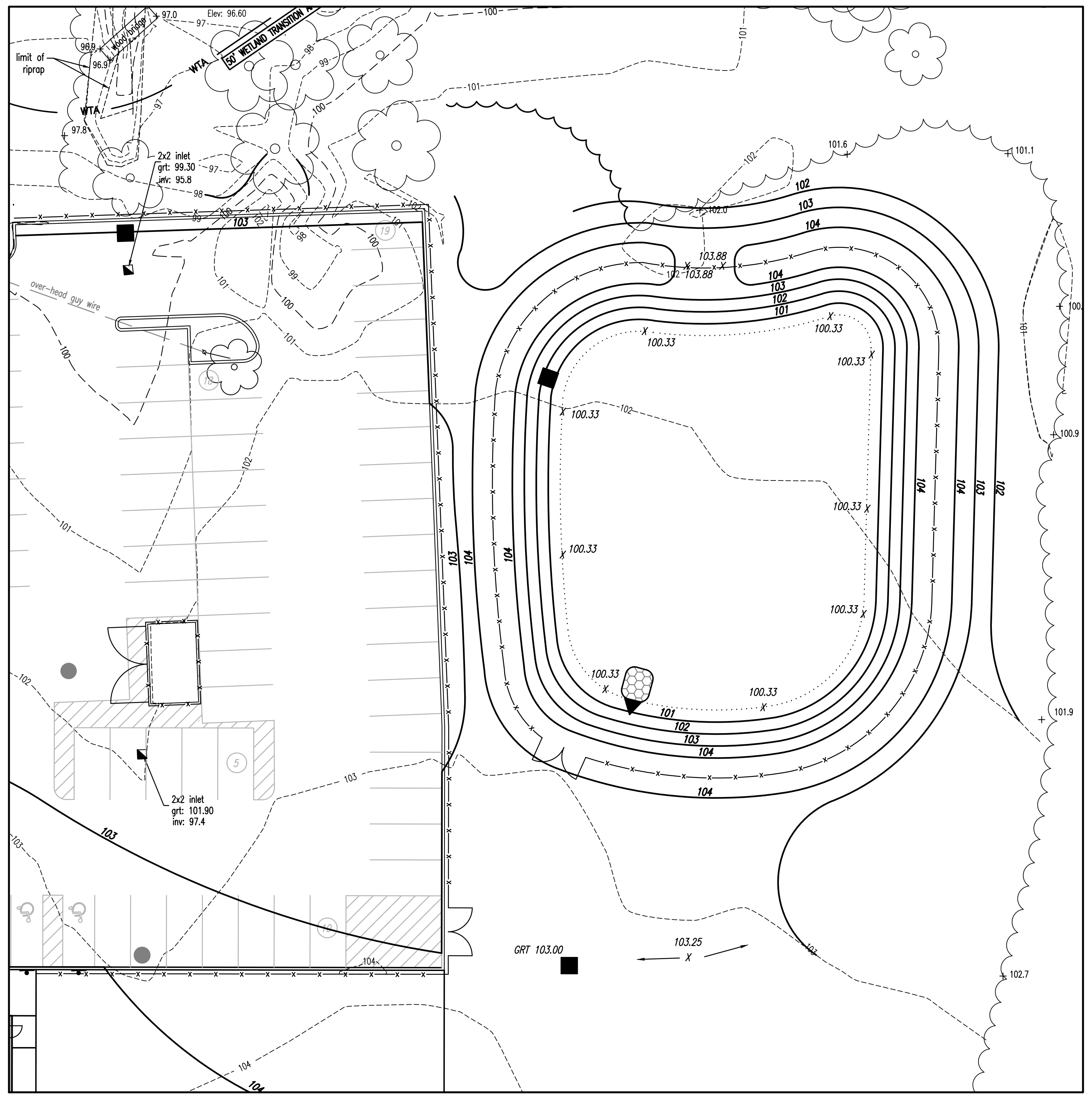
UTILITY PLAN – ALTERNATE BID LB7
W/ ALT BID LB1

SCALE: 1" = 20'


limit of riprap
WTA
DEP WETLAND TRANSITION
CONSTRUCT INLET SEE UTILITY PLAN
2x2 inlet grt: 99.30 inv: 95.8
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS.
36.65'
24.53'
18.00'
24.00'
36.00'
18.00'
13.04'
60.75'
12.00'
141.11'
5.00'
8.00'
9.00'
2x2 inlet grt: 101.90 inv: 97.4
CONSTRUCT OUTFLOW STRUCTURE SEE UTILITY PLAN
CONSTRUCT FES SEE UTILITY PLAN
CONSTRUCT 6' HIGH CHAIN LINK FENCE AROUND BIORETENTION BASIN
CONSTRUCT 12' WIDE DOUBLE SWING GATE
RESTORE LAWN TYP. FOR ALL DISTURBED AREAS.
CONSTRUCT INLET SEE UTILITY PLAN

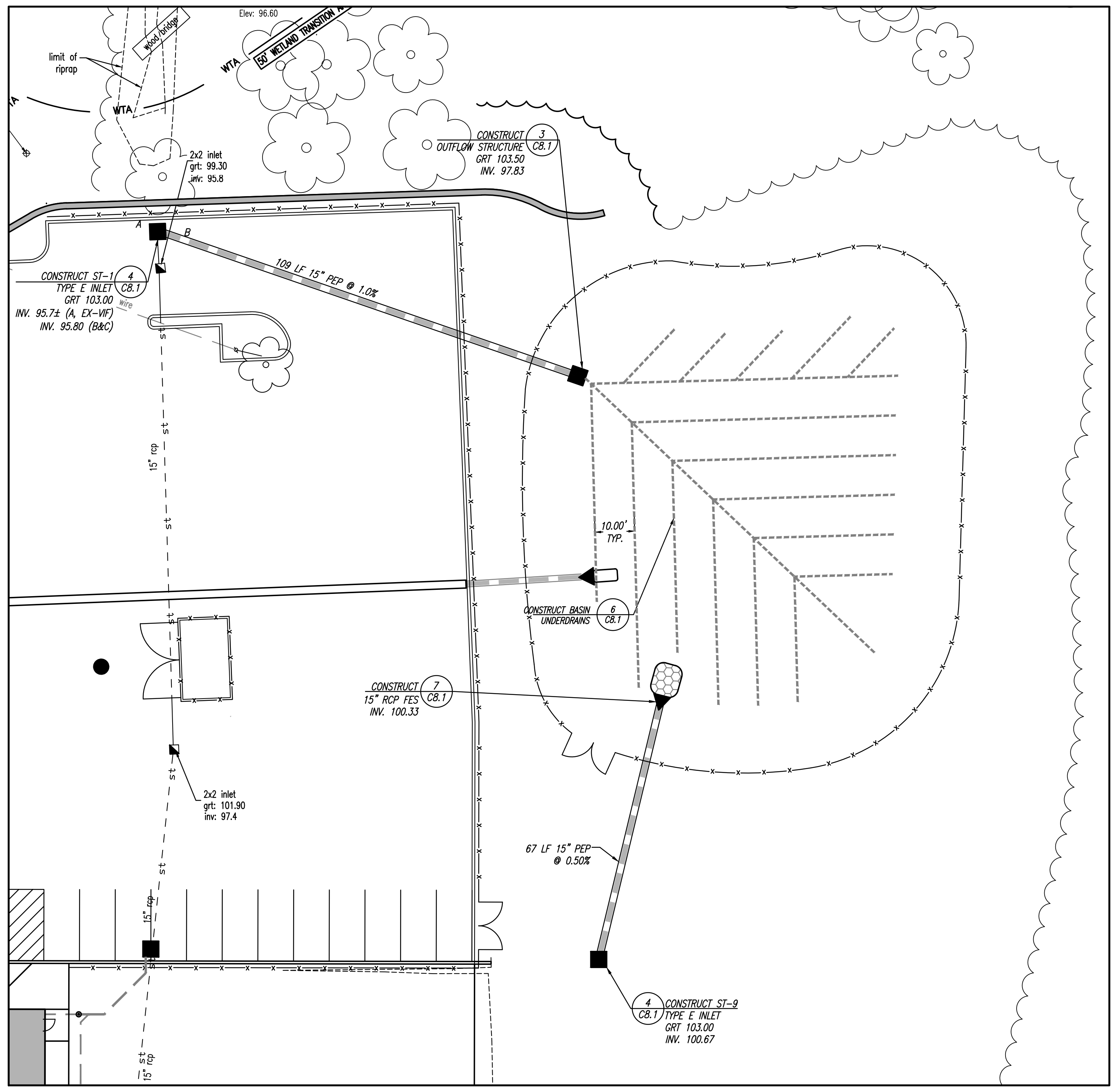
SITE PLAN – ALTERNATE BID LB7
W/ ALT BID LB6

SCALE: 1" = 20'



GRADING PLAN – ALTERNATE BID LB7
W/ ALT BID LB6

SCALE: 1" = 20'


limit of riprap
WTA
2x2 inlet grt: 99.30 inv: 95.8
CONSTRUCT OUTFLOW STRUCTURE GRT 103.50 INV. 97.83
CONSTRUCT ST-1 TYPE E INLET GRT 103.00 INV. 95.7± (A, EX-W) INV. 95.80 (B&C)
109 LF 15" PEP @ 1.0%
10.00' TYP.
CONSTRUCT BASIN UNDERDRAINS
CONSTRUCT 15" RCP FES INV. 100.33
2x2 inlet grt: 101.90 inv: 97.4
67 LF 15" PEP @ 0.50%
CONSTRUCT ST-9 TYPE E INLET GRT 103.00 INV. 100.67

UTILITY PLAN – ALTERNATE BID LB7
W/ ALT BID LB6

SCALE: 1" = 20'

LEGEND OF SYMBOLS

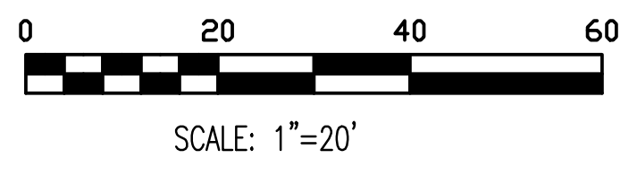
EXISTING	PROPOSED	ITEM
lowercase text	*UPPERCASE TEXT*	TEXT & NOTES
○	● / ◐	MANHOLE– NEW/RECONSTRUCT
□	■ / ◩	INLET– NEW/RECONSTRUCT
◎ c.o.	◉	CLEANOUT
○ rl rlug	○	ROOF LEADER
gv ⋈ wv	GV ⧓ WV	VALVE–TYPE
		FIRE HYDRANT/FDC
		UTIL. POLE/W–LIGHT/W–TRANSF.
		STREET/TRAFFIC SIGNS:
		FREESTANDING LIGHT
	☒	NEW ELEC. HAND HOLE
——x——	——x——	FENCE
+70.25	x70.25	SPOT ELEVATIONS
——68——	——68——	CONTOUR LINE
– – – g – – –	——G——	GAS LINE
– – – w – – –	——W——	WATER LINE

EXISTING	PROPOSED	ITEM
– – – – – –	————	PAVEMENT EDGE
	▨	FULL DEPTH DEMOLITION
	▒	STANDARD DUTY HOT MIX ASPHALT PAVEMENT
	▩	HEAVY DUTY HOT MIX ASPHALT PAVEMENT
══════	══════	CURB/DEPRESSED CURB (DC)
⬚	⬚	PORTLAND CEMENT CONCRETE
		TREE/WOOD LINE
– – – st – – –	════	STORM SEWER >=12" DIA.
– – – st – – –	▬ ▬	STORM SEWER <12" DIA
– – – sa – – –	——SA——	SANITARY SEWER
—— // ——		OVERHEAD POWER LINE
– – – e – – –	——E——	ELEC. SERVICE/CONDUIT

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
APPROX	APPROXIMATE
BF	BARRIER FREE
BC	BOTTOM OF CURB REVEAL
BDC	BOTTOM OF DEPRESSED CURB
BIT	BITUMINOUS
BM	BENCHMARK
BR	BOTTOM OF RAMP
BS	BOTTOM OF STEP
BW	BOTTOM WALL (GRADE)
COMM	DATA/COMMUNICATION CABLE
CONFIG.	CONFIGURATION
CLF	CHAIN LINK FENCE
C.O.	CLEAN OUT
CONC	CONCRETE
DC	DEPRESSED CURB (FLUSH TO PAVEMENT)
DEP	DEPRESSED CURB
DEMO	DEMOLITION
DIP	DUCTILE IRON PIPE
E	ELECTRIC
ELEV	ELEVATION (FT.)
EX	EXISTING
FDC	FIRE DEPT. CONN.
FO	FIBER OPTIC CABLE
FTG.	FOOTING
FFE	FINISHED FLOOR ELEVATION
G	GAS PIPE LINE
GRT	GRATE (ELEVATION)
GV	GAS VALVE
HC	HANDICAPPED
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT (ELEV.)
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
O/H	OVERHEAD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PEP	POLYETHYLENE PIPE (HDPE)
PROP	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONC. PIPE
RL	ROOF LEADER
RLUG	ROOF LEADER UNDERGROUND
SCD	SOIL CONSERVATION DISTRICT
ST	STORM SEWER PIPE
SS/SAN	SANITARY SEWER PIPE
TEL	TELEPHONE
TB	TOP OF BORDER
TBR	TO BE REMOVED
TC	TOP OF CURB
TCW	TOP OF CURB WALL+
TDC	TOP OF DEPRESSED CURB
TP	TEST PIT
TR	TOP OF RAMP
TRANSF	TRANSFORMER
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
U/G	UNDERGROUND
UP	UTILITY POLE
V.I.F.	VERIFY IN FIELD
W	WATER
WV	WATER VALVE

NOTE:
THE HORIZONTAL DATUM IS BASED UPON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD83. THE VERTICAL DATUM IS BASED UPON NAVD88. BOTH DATUMS WERE ESTABLISHED BY TAKING STATIC GPS OBSERVATIONS ON KNOWN SURVEY CONTROL POINTS AND THEN SUBMITTING THE DATA TO OPUS RS FOR POST–PROCESSING



SCALE: 1"=20'

Civil Engineering Consultant: EEG 1634D

EDWARDS
ENGINEERING
GROUP
AN L2A COMPANY

Beth E Kenderdine 03.24.26
BETH E. KENDERDINE, P.E. Date
Professional Engineer NJ. Lic. No. GE45532

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Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
08540

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale

Drawing Name
BIORETENTION BASIN PLAN

ALTERNATE BID LB7

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
△1	12.10.25	NJ DCA REVISIONS
△2	12.10.25	DESIGN REVISIONS
△3	01.02.26	NJ DCA REVISIONS
△4	01.02.26	DESIGN REVISIONS
△5	01.23.26	NJ DCA REVISIONS
△A2	03.24.26	ADDENDUM #2

Drawing Number
C-9.0 △A2

Scope of Work:

- Building Use Group: E
- Construction Type: 2B
- Non-sprinkler construction
- Actual Building Height: Varies;
- Average Building Height: 19'-1" FT A.F.F.
- Allowable Building Height: 55'-0" FT A.F.F.
- Actual Number of Stories: 1
- Allowable Number of Stories: 2

Project Narratives:

The project consists of Additions, Alterations and Renovations to Littlebrook Elementary School for the Princeton Public Schools, Board of Education, Mercer County, New Jersey.
Disciplines of work involved in the project will include Civil, Structural and MEP.

ADDITION:
New Vocal Music Wing with Corridor. This area will be built onto the existing building due to the combined allowable area being under the 14,500 SFT per code.
New Classroom Wing with Corridor. This wing will consist of (6) six new classrooms - (2) two being a flex classroom w/ self-contained toilet rooms, (2) two Mechanical Rooms, (1) one IDF area partitioned in one of the mechanical rooms, new multi-user toilet rooms and single user toilet rooms.

ALTERATIONS:
(2)Two existing Kindergarten Classrooms will be altered to create (2) two new Small Group Instructional (S.G.I.) spaces.
An existing library office will be converted into a new Reading Area
The existing vocal music room will be demolished to make way for the new connecting corridor link to the new classroom wing, Instrumental Music Storage and a seating nook.
The current gymnasium storage room will be converted from (3)three individual spaces to (1) one.
New Conference room to be portioned out of an existing classroom, the remaining will be provided to the existing staff room area adjacent.

RENOVATION:
The current Instrumental Music Room will get a new bottle water filler and sink w/ base and wall cabinets.
The staff room area will be renovated after the room expansion from the adjacent classroom.
A new floor will be installed in the existing Multi-purpose space, along with new food service line improvement and furniture.

CIVIL:
All Site Work includes parking lot expansion, re-grading, concrete curbs, chain link fence, playground pavement, mulch playground w/ timber border, concrete sidewalks, concrete ramp w/ concrete wall & aluminum handrails.

STRUCTURAL:
Fabrication and erection of new structural steel, framing, metal deck, and miscellaneous metal fabrications.

HVAC:
New Heating, ventilating, and air conditioning systems as well as the temperature and daylight control systems.

ELECTRICAL:
Electrical work will include whatever is necessary for electrical power distribution, lighting, and the connections to equipment tied into such systems.

PLUMBING:
Piping servicing domestic water piping, gas piping, drainage systems and connection of equipment tied into the above types of systems.

Phasing Plans and Temporary Egress Plan can be referenced on sheets A001 and A002.
See sheet A100 for additional Project Code Analysis Information and New Egress Plan.

LEGEND:

▨ **PHASES OF CONSTRUCTION -**
NEW CONSTRUCTION:
1- NEW BUILDING ADDITION FOR VOCAL CLASSROOM (BASE BID)
1- NEW BUILDING ADDITION FOR MULTIPLE CLASSROOMS, TOILET ROOMS & UTILITY SPACES (ALTERNATE BID NO. LB1)

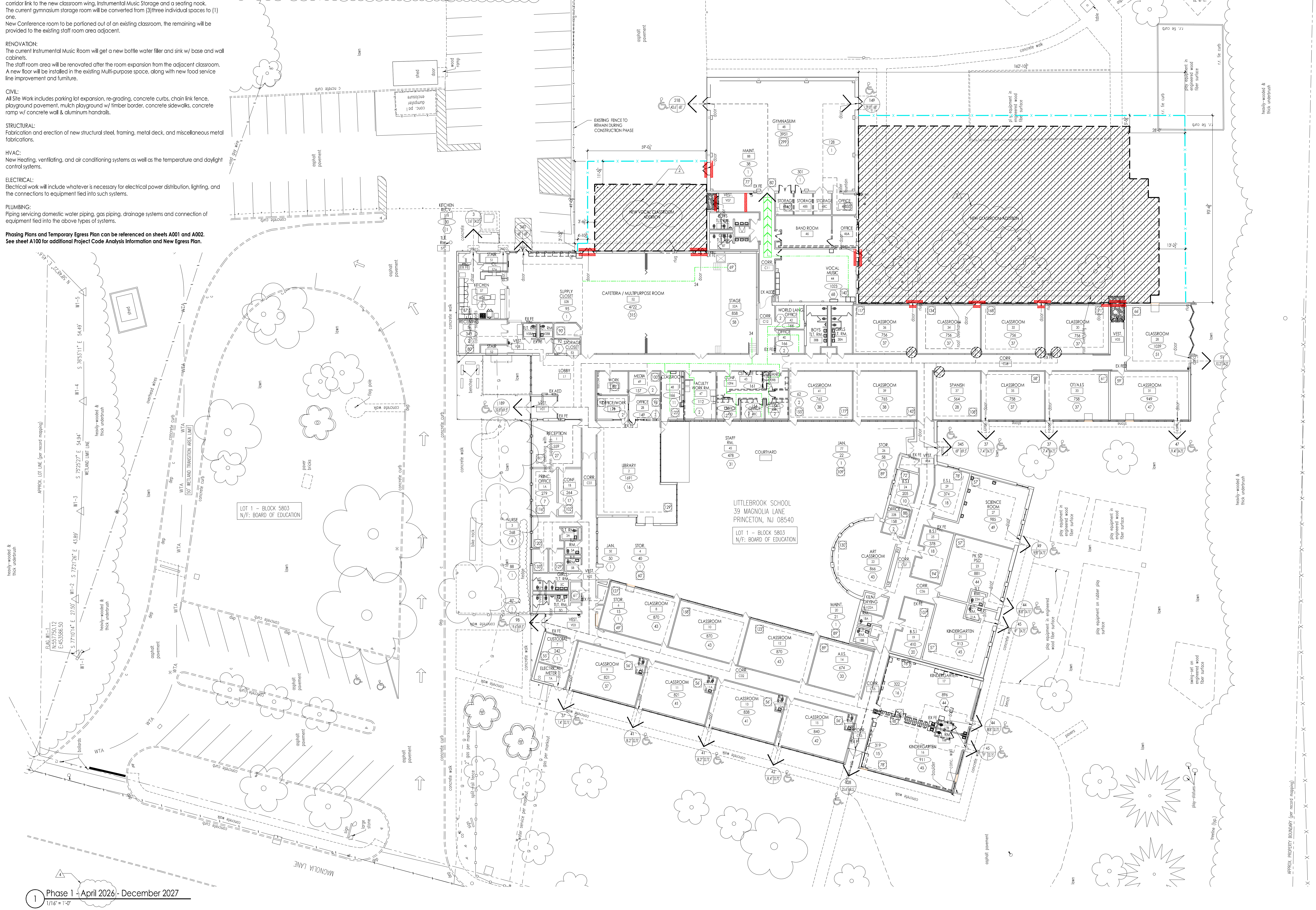
ALTERATIONS:
1A- ALTERATIONS TO EXISTING GYM STORAGE (BASE BID)
1A- NEW INSTRUMENTAL STORAGE ROOM (ALTERNATE BID NO. LB1)
1A-ALTERATIONS TO EXISTING LIBRARY AND STAFF OFFICES (BASE BID)
1A-ALTERATIONS TO EXISTING KINDERGARTEN CLASSROOMS (BASE BID)
1A- ALTERATIONS SERVICE LINE IMPROVEMENTS (ALTERNATE BID NO. LB4)
1A-ALTERATIONS WORK TO EXISTING CAFETERIA SPACE (ALTERNATE BID NO. LB5)

RENOVATIONS:
1A- RENOVATION WORK TO EXISTING INSTRUMENTAL CLASSROOM (ALTERNATE BID NO. LB3)
2- RENOVATION WORK TO EXISTING WOOD DECK (BASE BID)

LEGEND- TEMPORARY EGRESS CONSTRUCTION:

🟩	TEMPORARY PATH OF EGRESS
🟥	BLOCKED ACCESS
<<<<<<<<	ANTI-SKID PHOTOLUMINESCENCT EGRESS MARKING TAPE
— x —	TEMPORARY FENCING
☐	CONTAINMENT WALL - 4' MIN.

▒ **EXTERIOR WORK:**
2- COURTYARD IMPROVEMENTS - PATHWAYS ONLY (BASE BID)
2- COURTYARD IMPROVEMENTS - PATHWAYS AND CONCRETE PODS (ALTERNATE BID NO. LB2)
2- PARKING LOT EXPANSION (ALTERNATE BID NO. LB6)



1 Phase 1 - April 2026 - December 2027
1/16" = 1'-0"

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Architect
2/12/26
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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
SB

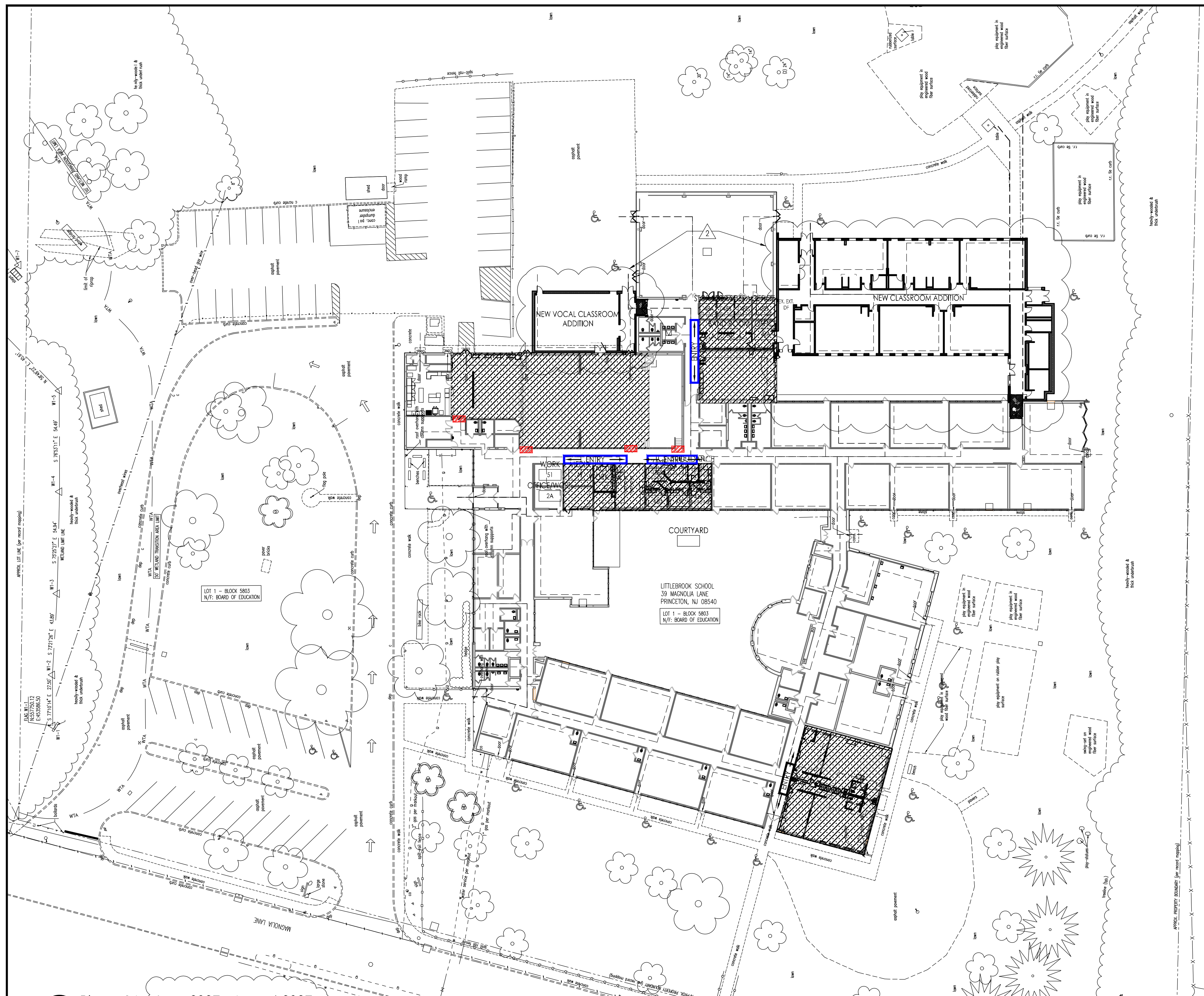
Scale
AS NOTED

Drawing Name
PROJECT NARRATIVE AND SCOPE OF WORK, TEMPORARY EGRESS PLAN & PHASING PLAN - 1

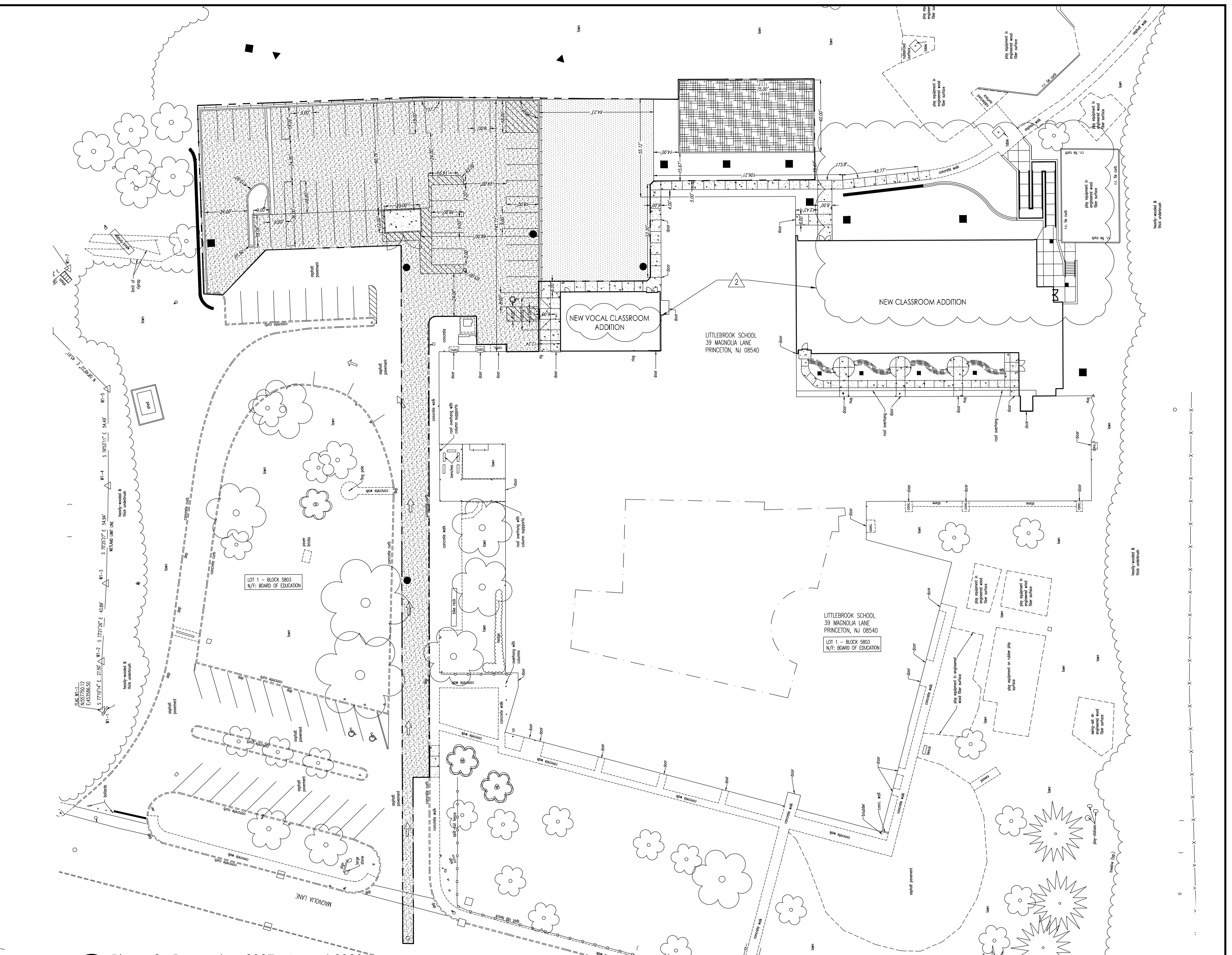
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A001



1A Phase 1A - June 2027 - August 2027
1/32" = 1'-0"
4



2 Phase 2 - December 2027 - August 2028
1/32" = 1'-0"

LEGEND:

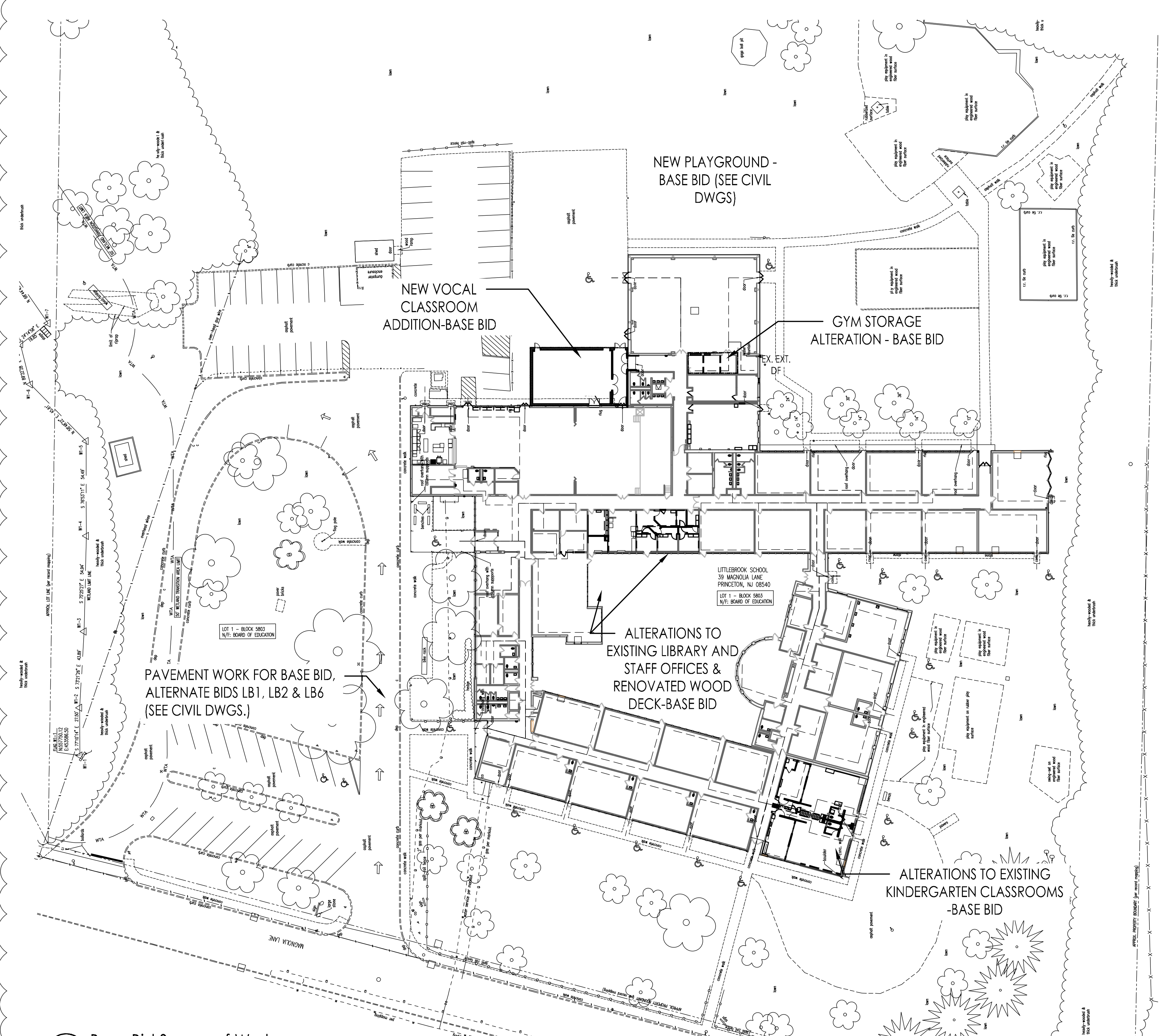
▨ **PHASES OF CONSTRUCTION -**
NEW CONSTRUCTION:
1- NEW BUILDING ADDITION FOR VOCAL CLASSROOM (BASE BID)
1- NEW BUILDING ADDITION FOR MULTIPLE CLASSROOMS, TOILET ROOMS & UTILITY SPACES (ALTERNATE BID NO. LB1)

ALTERATIONS:
1A- ALTERATIONS TO EXISTING GYM STORAGE (BASE BID)
1A- NEW INSTRUMENTAL STORAGE ROOM (ALTERNATE BID NO. LB1)
1A-ALTERATIONS TO EXISTING LIBRARY AND STAFF OFFICES (BASE BID)
1A-ALTERATIONS TO EXISTING KINDERGARTEN CLASSROOMS (BASE BID)
1A- ALTERATIONS SERVICE LINE IMPROVEMENTS (ALTERNATE BID NO. LB4)
1A-ALTERATIONS WORK TO EXISTING CAFETERIA SPACE (ALTERNATE BID NO. LB5)

RENOVATIONS:
1A- RENOVATION WORK TO EXISTING INSTRUMENTAL CLASSROOM 44 (ALTERNATE BID NO. LB3)
2- RENOVATION WORK TO EXISTING WOOD DECK (BASE BID)

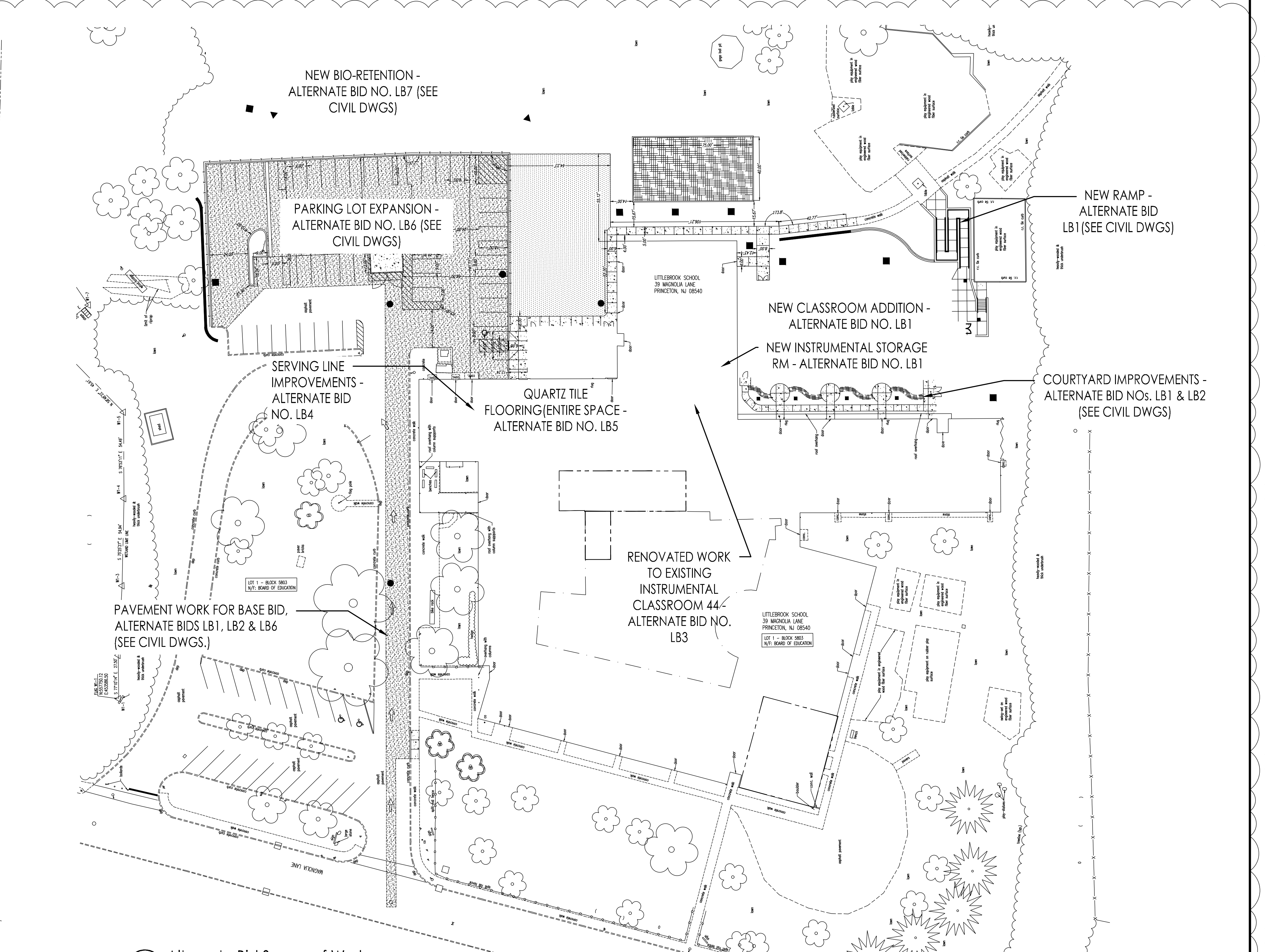
▒ **EXTERIOR WORK:**
2- COURTYARD IMPROVEMENTS - PATHWAYS ONLY (ALTERNATE BID NO. LB1)
2- COURTYARD IMPROVEMENTS - PATHWAYS AND CONCRETE PODS (ALTERNATE BID NO. LB2)
2- PARKING LOT EXPANSION (ALTERNATE BID NO. LB6)

6


NEW PLAYGROUND - BASE BID (SEE CIVIL DWGS)
NEW VOCAL CLASSROOM ADDITION-BASE BID
GYM STORAGE ALTERATION - BASE BID
EX. EXT. DF
PAVEMENT WORK FOR BASE BID, ALTERNATE BIDS LB1, LB2 & LB6 (SEE CIVIL DWGS.)
ALTERATIONS TO EXISTING LIBRARY AND STAFF OFFICES & RENOVATED WOOD DECK-BASE BID
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
LOT 1 - BLOCK 5803
N/F: BOARD OF EDUCATION
ALTERATIONS TO EXISTING KINDERGARTEN CLASSROOMS -BASE BID
MAGNOLIA LANE

3 Base Bid Scope of Work
N.T.S.

PLAN NOTE:
REFERENCE FLOOR PLANS FOR EXTENT OF WORK FOR EACH SCOPE.


NEW BIO-RETENTION - ALTERNATE BID NO. LB7 (SEE CIVIL DWGS)
PARKING LOT EXPANSION - ALTERNATE BID NO. LB6 (SEE CIVIL DWGS)
NEW RAMP - ALTERNATE BID LB1(SEE CIVIL DWGS)
LITTLEBROOK SCHOOL
39 MAGNOLIA LANE
PRINCETON, NJ 08540
NEW CLASSROOM ADDITION - ALTERNATE BID NO. LB1
NEW INSTRUMENTAL STORAGE RM - ALTERNATE BID NO. LB1
SERVING LINE IMPROVEMENTS - ALTERNATE BID NO. LB4
QUARTZ TILE FLOORING(ENTIRE SPACE - ALTERNATE BID NO. LB5
COURTYARD IMPROVEMENTS - ALTERNATE BID NOs. LB1 & LB2 (SEE CIVIL DWGS)
PAVEMENT WORK FOR BASE BID, ALTERNATE BIDS LB1, LB2 & LB6 (SEE CIVIL DWGS.)
RENOVATED WORK TO EXISTING INSTRUMENTAL CLASSROOM 44 - ALTERNATE BID NO. LB3
LOT 1 - BLOCK 5803
N/F: BOARD OF EDUCATION

4 Alternate Bid Scope of Work
N.T.S.

PLAN NOTE:
REFERENCE FLOOR PLANS FOR EXTENT OF WORK FOR EACH SCOPE.

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Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln, Princeton, NJ 085402

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By
SB
Scale
AS NOTED

Drawing Name
PHASING PLANS - 1A & 2
BASE & ALTERNATE BIDS SCOPE OF WORK

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A002

DEMOLITION / RENOVATION NOTES:

SEE GENERAL DEMOLITION NOTES ON THIS DRAWING.

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

EXTERIOR / BUILDING

1. REMOVE EXISTING DOOR AND FRAME IN THEIR ENTIRETY, THIS INCLUDES ALL ASSOCIATED HARDWARE (CLOSERS, STOPS, BUMPERS, ETC.). PREP OPENING FOR NEW DOOR AND FRAME, REF DOOR SCHEDULE. CONTRACTORS SHALL TAKE ALL NECESSARY STEPS TO ENSURE BUILDING SECURITY AND WEATHERTIGHTNESS. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL AND NEW CONSTRUCTION TO MATCH EXISTING ADJACENT FINISHES, INCLUDING BRICK, CMU AND GYP BOARD FINISHES.
2. REMOVE EXISTING SECURITY CAMERA, HORN, AND ELECTRICAL BOX WITH WIRE FROM EXISTING WALL. RELOCATED COMPONENTS TO THE FACE OF THE NEW FIRE WALL. VERIFY WITH ELECTRICAL AND OWNER ON WHETHER THE HORN AND ELECTRICAL BOX IS STILL IN USE. REMOVE COMPONENTS THAT ARE NOT NECESSARY AND PROPERLY TAKE WIRES BACK TO ELECTRICAL SOURCE OR PANEL. 3
3. DEMOLISH AND REMOVE EXISTING SIDEWALKS AND DRIVEWAYS TO THE EXTENT SHOWN. SEE CIVIL DRAWINGS FOR ADDITIONAL DEMOLITION WORK REQUIRED. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXISTING ADJACENT FINISHES, INCLUDING BRICK, ETC. UNLESS NOTED OTHERWISE ON SITE WORK DRAWINGS, ALL SITE WORK DEMOLITION WORK IN THIS AREA SHALL BE BY THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND REPAIR ALL DAMAGE CAUSED BY SITE WORK DEMOLITION TO MATCH EXISTING ADJACENT FINISH.
4. SAWCUT AND DEMOLISH EXISTING CONCRETE FROST FREE STOOP.
5. RE-GRADE AT ALL DOWNSPOUT LOCATIONS TO PROVIDE POSITIVE DRAINAGE TOWARD INLETS. RE-SEED AS NECESSARY AND PROVIDE NEW SPLASH BLOCK. REMOVE AND TURN OVER TO OWNER ANY EXISTING BLACK PIPE. REF CIVIL
6. REMOVE EXISTING SIDING AND EXTERIOR SHEATHING IN ITS ENTIRETY FROM FINISHED FLOOR ELEVATION TO PARAPET FOR NEW FIREWALL CONSTRUCTION, CUT AND REMOVE EXISTING CONCRETE THRESHOLD BACK TO INTERIOR EXISTING FLOOR, REMOVE ANY EXTERIOR LIGHTING AND CONDUIT , REF ELECTRIC FOR ADDITIONAL ITEMS TO BE REMOVED IN THIS AREA, REF PLAN AND WALL SECTIONS FOR FULL EXTENT OF NEW CONSTRUCTION.
7. CUT AND REMOVE PORTION OF EXISTING CONCRETE THRESHOLD FOR NEW WALL CONSTRUCTION. CUT AND REMOVE EXISTING SIDING AND CORNER TRIM FOR NEW FIRE WALL CONSTRUCTION. KEEP CUTS STRAIGHT AND PLUMB, REF ELEVATIONS FOR ADDITIONAL NOTES AND FULL EXTENT OF NEW CONSTRUCTION
8. REMOVE EXISTING DOWNSPOUT AND SCUPPER ABOVE, THIS INCLUDES ALL STRAPS AND FASTENERS. REF ROOF PLAN FOR ADDITIONAL SCUPPER INFORMATION.
9. REMOVE EXISTING WALL PACK LIGHTING, REF ELECTRIC SHEETS FOR ADDITIONAL INFORMATION AND ITEMS BEING REMOVED.
10. REMOVE PORTION OF EXISTING ROOF OVERHANG AND ASSOCIATED STRUCTURAL STEEL MEMBERS. THIS INCLUDES, BUT IS NOT LIMITED TO, ROOF MEMBRANE, ROOFING INSULATION, METAL FASCIA AND WOOD BLOCKING, REF WALL SECTIONS, ROOF PLAN AND STRUCTURE FOR ADDITIONAL INFORMATION AND EXTENT OF NEW CONSTRUCTION.

WALLS

11. BRACE AND SHORE UP EXISTING ADJACENT WALL CONSTRUCTION TO REMAIN. DEMOLISH AND REMOVE INDICATED EXISTING WALLS IN THEIR ENTIRETY FULL HEIGHT. **NOTE: ALL EXISTING STRUCTURAL COLUMNS SHALL REMAIN.** AT EXTERIOR WALLS REMOVE MASONRY TO 8" MIN BELOW FINISHED FLOOR, TYE.PATCH ADJACENT FLOOR TO SUIT NEW CONDITIONS. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXISTING ADJACENT FINISH.
12. REMOVE EXISTING DOOR AND FRAME OR WINDOW AND FRAME IN THEIR ENTIRETY, INCLUDING ALL ASSOCIATED HARDWARE (CLOSERS, STOPS, BUMPERS, ETC.) PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL. CLEAN AND PREP EXISTING OPENING FOR NEW INFILL OR CONSTRUCTION TIE-INS. MATCH EXISTING ADJACENT FINISHES, INCLUDING BRICK, TILE, FLOORING, BASE, ETC.
13. REMOVE EXISTING WINDOWS IN CLEARSTORY ABOVE. THIS INCLUDES ALL FRAMES, SUB-FRAMES AND FASTENERS. PREP OPENINGS AND JAMBS FOR NEW INFILL.
14. ON EXISTING WALLS TO REMAIN, REMOVE WALL FINISH (TILE, PANELING, WALL PAPER, ACOUSTIC PANELS, ETC., **BUT NOT PLASTER**) IN ITS ENTIRETY DOWN TO SUBSTRATE. CLEAN AND PREPARE WALL TO RECEIVE NEW FINISH. SEE ROOM FINISH SCHEDULE FOR NEW FINISH.
15. EXISTING DOOR AND FRAME TO REMAIN, CONTRACTOR WILL PROTECT DOOR AND FRAME FINISH THROUGH DEMOLITION AND NEW WORK.
16. BRACE AND SHORE UP EXISTING ADJACENT CONSTRUCTION TO REMAIN, REF STRUCTURE. SAWCUT EXISTING CMU FOR THOOTHING IN NEW AND DEMOLISH EXISTING WALL CONSTRUCTION TO WIDTH INDICATED ON DEMOLITION PLAN. REF NEW WORK PLAN AND WALL SECTIONS FOR FULL EXTENT OF NEW CONSTRUCTION. **NOTE: EXISTING STRUCTURAL COLUMNS SHALL REMAIN UNLESS NOTED OTHERWISE.** PATCH AND REPAIR ALL DAMAGE CAUSED BY DEMOLITION AND NEW WORK IN THIS AREA TO MATCH EXISTING ADJACENT FINISH. SEE FLOOR PLAN AND DOOR SCHEDULE.
17. BRACE AND SHORE UP EXISTING ADJACENT CONSTRUCTION TO REMAIN. SAWCUT EXISTING CMU WALL FOR NEW TOOTHING CONSTRUCTION TO WIDTH INDICATED ON DEMOLITION PLAN (IN RESPECT TO NEW BORROWED LITE SIZE.) REMOVE CMU (2) COURSES ABOVE OPENING FOR NEW LINTEL CONSTRUCTION. NOTE: EXISTING STRUCTURAL COLUMNS SHALL REMAIN UNLESS NOTED OTHERWISE. PATCH AND REPAIR ALL DAMAGE CAUSED BY DEMOLITION TO MATCH EXISTING ADJACENT FINISH. INFILL OPENING WITH NEW BORROWED LITE AND/OR CONSTRUCTION OF THICKNESS TO MATCH EXISTING ADJACENT WALL.

FLOORS

18. REMOVE EXISTING BASE. REMOVE FLOOR FINISH DOWN TO CONCRETE SLAB, INCLUDING ALL TILE AND ADHESIVES. CLEAN, PREPARE & LEVEL EXISTING FLOOR SLAB WITH SELF-LEVELING UNDERLAYMENT (COMPATIBLE WITH NEW FLOOR FINISHES) OVER **ENTIRE SURFACE OF EXISTING FLOOR** TO MAKE FLOOR LEVEL AND FLUSH. INSTALL NEW FLOOR FINISH AND BASE. SEE ROOM FINISH SCHEDULE AND SPECIFICATION SECTION 03450.
19. SAWCUT SLAB AND REMOVE PORTION OF EXISTING CONCRETE FLOOR, EXCAVATE AS REQUIRED FOR NEW CONCRETE FLOOR. PATCH AND REPAIR EXISTING FLOOR SLAB AND PREP FOR NEW SLAB TIE-IN. SEE STRUCTURAL DRAWINGS WALL SECTIONS FOR FULL EXTENT OF NEW CONSTRUCTION IN THIS AREA. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXISTING ADJACENT FINISH.
20. PATCH AND REPAIR, AS REQUIRED, ALL DAMAGE RESULTING FROM DEMOLITION AND REMOVAL OF EXISTING WALL, DOOR, FRAME AND HARDWARE AND ADJACENT PLUMBING. MATCH EXISTING ADJACENT FINISH. SEE ROOM FINISH SCHEDULE FOR NEW FINISHES IN THIS AREA.

CEILINGS

21. REMOVE EXISTING CEILING CONSTRUCTION IN ITS ENTIRETY. PATCH, PLUG AND FILL ALL OPENINGS IN ADJACENT WALL, ETC. TO RESTORE TO A UNIFORM, FLUSH, CONTINUOUS SURFACE TO RECEIVE NEW FINISHES - SEE ROOM FINISH SCHEDULE. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL. MATCH EXISTING ADJACENT FINISH. **ALL PLUMBING / HVAC / ELECTRICAL WORK, INCLUDING DEMOLITION, PATCHING AND REPAIR, BY RESPECTIVE TRADE CONTR.**
22. CLEAN AND PREPARE EXISTING EXPOSED STRUCTURE, DECK, ETC. TO REMAIN TO RECEIVE NEW FINISH. SEE ROOM FINISH SCHEDULE FOR NEW FINISH.
23. REPAIR EXISTING CEILING FROM WALL DEMOLITION. PATCH AND REPAIR FOR NEW WALL LAYOUT. REFER TO PLANS FOR WALL LOCATION.

EQUIPMENT

24. REMOVE EXISTING CABINETS, EQUIPMENT, APPLIANCES, LOCKERS, CURTAINS, TOILET PARTITIONS, MIRRORS, BENCHES, SHELVES, ACOUSTIC WALL PANELS, GUARDRAILS, AND/OR HANDRAILS IN THEIR ENTIRETY. SEE GENERAL NOTE. PATCH, PLUG AND FILL ALL OPENINGS IN ADJACENT WALL, FLOOR, ETC. TO RESTORE TO A UNIFORM, FLUSH, CONTINUOUS SURFACE. FINISH ALL NEWLY EXPOSED SURFACES AND PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXISTING ADJACENT FINISHES.
25. REMOVE EXISTING TOILET ACCESSORIES (SOAP DISPENSERS, PAPER TOWEL DISPENSERS, ETC.) IN THEIR ENTIRETY. SEE GENERAL NOTE. PATCH, PLUG AND FILL ALL OPENINGS IN ADJACENT WALL, ETC. TO RESTORE TO A UNIFORM, FLUSH, CONTINUOUS SURFACE TO RECEIVE NEW FINISHES. SEE ROOM FINISH SCHEDULE. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL TO MATCH EXISTING ADJACENT FINISH.
26. REMOVE EXISTING PROJECTOR SCREENS, PROJECTOR MACHINE AND ALL APPURTENANCES. SALVAGE AND RETURN OWNER FOR THEIR DISCRETION.
27. DEMOLISH AND REMOVE EXISTING TACK STRIPS IN THEIR ENTIRETY INCLUDING MECHANICAL FASTENERS. PATCH, PLUG, FILL AND REFINISH ALL OPENINGS LEFT IN WALL AFTER REMOVAL, INCLUDING THOSE FROM TACK STRIPS PREVIOUSLY REMOVED. RESTORE TO A FINISHED LEVEL/PLUMB CONDITION TO MATCH EXISTING ADJACENT SURFACE FINISHES.
28. REMOVE EXISTING PLUMBING FIXTURES INCLUDING SINKS, AND TOILETS. PATCH AND REPAIR AS NECESSARY AND PREPARE FOR NEW FIXTURES.
29. REMOVE EXISTING DRY ERASE MARKER BOARDS, EXHIBITION BOARDS AND CHALKBOARDS. PATCH AND REPAIR WALLS AS NECESSARY TO MATCH ADJACENT.
30. REMOVE EXISTING PHONE AND ELECTRONIC AV STATION. PATCH AND REPAIR AS NECESSARY AND PREP FOR NEW AV MACHINE.
31 REMOVE AND RELOCATE EXISTING FIRE EXTINGUISHER. PATCH AND REPAIR ANY DAMAGE FROM REMOVAL AS NECESSARY. REFER TO PLANS FOR NEW LOCATION OF FIRE EXTINGUISHER.
32. REMOVE AND RELOCATE EXISTING SPEAKER CLOCK BOX. PATCH AND REPAIR ANY DAMAGE FROM REMOVAL AS NECESSARY. REFER TO PLANS FOR NEW LOCATION OF CLOCK SPEAKER BOX.
33. REMOVE EXISTING WALL SHELVES. PATCH AND REPAIR WALL AS NECESSARY TO MATCH ADJACENT FINISHES.
34. REMOVE EXISTING PIPE. PATCH AND REPAIR ANY DAMAGE AS NECESSARY.

MISCELLANEOUS

35. REMOVE EXISTING SIGNAGE. AT ALL LOCATIONS OF SIGN FASTENERS, REMOVE ANY EXISTING BRICK AND MORTAR THAT IS NOT SOUND AND INTACT AND REPLACE WITH NEW BRICK AND MORTAR TO MATCH EXISTING. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL.
36. REMOVE AND STORE EXISTING DEDICATION PLAQUE AND ALL APPURTENANCES. PRIOR TO RENOVATION, GENERAL CONTRACTOR SHALL PATCH EXISTING WALL TO RESTORE TO A UNIFORM SURFACE. AFTER NEW WALL FINISH IS INSTALLED, REINSTALL PLAQUE IN NEW LOCATION. SEE INTERIOR ELEVATIONS FOR MORE INFORMATION.
37. REMOVE EXISTING ELECTRIC CONDUIT AND WALL MOUNTED BOXES, REMOVE RECESSED BOXES IN EXTERIOR WALL AND FILL WITH MORTAR, AS REQUIRED, REF ELECTRIC FOR ITEMS BEING REMOVED AND TO REMAIN IN THIS AREA.
38. REMOVE EXISTING DOOR AND PREP EXISTING FRAME FOR NEW DOOR WITH REVERSE SWING. SEE DOOR SCHEDULE NOTE # 15. 1
39. EXTEND CONDENSER PIPE THRU NEW FIRE WALL. SEAL WITH PROPER FIRE-THRU WALL SEALANT.
40. REMOVE EXISTING MECHANICAL LOUVER FROM EXISTING WALL AND REPLACE IN NEW FIRE WALL. PROVIDE NEW EXTENDED SLEEVE, REF. MECHANICAL, AND SEAL WITH PROPER FIRE-THRU WALL SEALANT.
41. REMOVE MECHANICAL LOUVER IN WALL. VERIFY WITH MECHANICAL ENG. ON WHETHER THE LOUVER IS STILL IN USE. IF NOT IN USE, BLOCK UP OPENING WITH CMU BLOCKS. IF LOUVER IS STILL CONNECTED TO A SOURCE, THEN REPLACE LOUVER WITH NEW AND EXTEND WITH SLEEVE INTO THE NEW FIREWALL. 3
42. RELOCATE EXISTING SCUPPER BOX AND DOWNSPOUT OVER TO ACCOMMODATE FOR NEW FIRE WALL. MODIFY OPENING OF SCUPPER TO ALLOW FOR PROPER DRAINAGE TO THE DOWNSPOUT. AFFIX WITH STRAPS AND FASTENERS AND RECONNECT TO EXISTING BOOT.

GENERAL DEMOLITION NOTES:

A. ALL CONTRACTORS ARE ADVISED TO VISIT THE SITE AND VERIFY ALL AREAS AND CONDITIONS PRIOR TO SUBMITTING THEIR BIDS. THE CONTRACTOR MUST NOTIFY THE ARCHITECT OF ANY DISCREPANCIES AND/OR OMISSIONS IN WRITING AT LEAST SEVEN DAYS PRIOR TO THE RECEIPT OF BIDS. FAILURE TO SO NOTIFY THE ARCHITECT INDICATES THAT ANY ADDITIONAL COSTS ASSOCIATED WITH THE DISCREPANCIES AND / OR OMISSIONS ARE INCLUDED IN THE CONTRACTOR'S BID AND THAT NO CHANGE TO THE CONTRACT AMOUNT WILL BE MADE AFTER THE RECEIPT OF BIDS OR THE AWARD OF CONTRACTS.

B. ALL PLUMBING, MECHANICAL OR ELECTRICAL DISCONNECTS SHALL BE MADE BY THE RESPECTIVE TRADE SUBCONTRACTOR. ALL EQUIPMENT, DEVICES, FIXTURES, ETC. SHALL BE REMOVED FROM THE SITE BY THE RESPECTIVE SUBCONTRACTOR. NOTE: THE EXISTING FIRE ALARM SYSTEM SHALL NOT BE DIMINISHED NOR SHALL EXISTING FIRE ALARM DEVICES BE REMOVED UNTIL NEW DEVICES ARE READY FOR SWITCHOVER.

C. UNLESS NOTED OTHERWISE ALL DEMOLITION MATERIAL SHALL BE REMOVED OFF SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D. THERE ARE SOME SPECIFIC ITEMS DESIGNATED BY THE ARCHITECT FOR SALVAGE. THESE ITEMS ARE INTENDED FOR REUSE IN THE NEW CONSTRUCTION. THE CONTRACTOR MUST TAKE CARE IN THE REMOVAL AND STORAGE OF THESE ITEMS UNTIL THEY ARE NEEDED IN THE NEW CONSTRUCTION.

E. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT PORTIONS OF THE EXISTING CONSTRUCTION WHICH ARE ADJACENT TO AREAS TO BE DEMOLISHED. MAKE ALL CUTS AS NEATLY AS POSSIBLE. REFER TO FLOOR PLAN DRAWINGS FOR FINISHING OF THESE AREAS.

F. IF NOT OTHERWISE NOTED OR DETAILED, ALL SURFACES LEFT ROUGH OR UNFINISHED BY DEMOLITION AND WHICH ARE EXPOSED TO VIEW, SHALL BE PATCHED TO MATCH ADJACENT SURFACES AND FINISHED TO PROVIDE A UNIFORM APPEARANCE WITH REGARD TO SIZE, SHAPE, COLOR, TEXTURE AND MATERIAL.

G. THE CONTRACTOR SHALL PROVIDE A PHYSICAL BARRIER TO CONTAIN DUST AND DIRT AROUND THE DEMOLITION AREA AND SHALL MAKE EVERY EFFORT TO KEEP THE DEMOLITION SITE AND SURROUNDING AREAS AS CLEAN AS POSSIBLE. ALL TEMPORARY PARTITIONS SHALL BE 1 HOUR RATED CONSTRUCTION AND INCLUDE A DOOR.

H. NO DEMOLITION SHALL BEGIN UNTIL PROPER PROTECTION IS IN PLACE AND APPROVED BY ARCHITECT & OWNER TO ENSURE THE SAFETY OF THE PUBLIC, THE BUILDING OCCUPANTS, CONSTRUCTION WORKERS AND TO CONTAIN DUST AND DIRT WITHIN THE AREA OF DEMOLITION.

I. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REGARDING THE REMOVAL AND DISPOSAL OF ALL MATERIALS & EQUIPMENT.

J. THE CONTRACTOR SHALL PROVIDE PROTECTION AGAINST INCLEMENT WEATHER FOR THE EXISTING BUILDING DURING THE INTERIM PERIOD BETWEEN DEMOLITION AND THE COMPLETION OF NEW CONSTRUCTION.

K. THE CONTRACTORS SHALL TAKE INTO ACCOUNT THEIR METHODS OF CONSTRUCTION FOR THE NEW WORK AND INCLUDE IN THEIR BID THE COST OF ADDITIONAL DEMOLITION WORK NECESSARY TO FACILITATE THE CONSTRUCTION. THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE PARTIAL DEMOLITION OF WALLS AT THE POINTS WHERE NEW STEEL CONNECTS TO EXISTING BEAMS OR COLUMNS, THE AREA AROUND JOINTS BETWEEN NEW AND EXISTING CONSTRUCTION IN WALLS, FLOORS AND CEILINGS, AREAS OF SIDEWALK AND PAVING, ETC. MUCH OF THIS WORK IS INDICATED IN SECTIONS AND DETAILS RELATING TO THE NEW CONSTRUCTION.

L. THE DEMOLITION WORK SHOWN ON THIS PLAN IS INTENDED TO BE A GENERAL OVERVIEW OF MAJOR DEMOLITION WORK REQUIRED. IT IS NOT A COMPLETE AND EXCLUSIVE REPRESENTATION OF ALL DEMOLITION WORK NEEDED FOR EXECUTION OF THE PROJECT. WHEN PREPARING THEIR BIDS, CONTRACTORS MUST REFER TO THE FULL SET OF CONSTRUCTION DOCUMENTS FOR VARIOUS MISCELLANEOUS ITEMS WHICH MUST BE REMOVED AND/OR RELOCATED AS PART OF THE WORK.

M. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN CUTTING AND PATCHING - SEE SPECIFICATION.

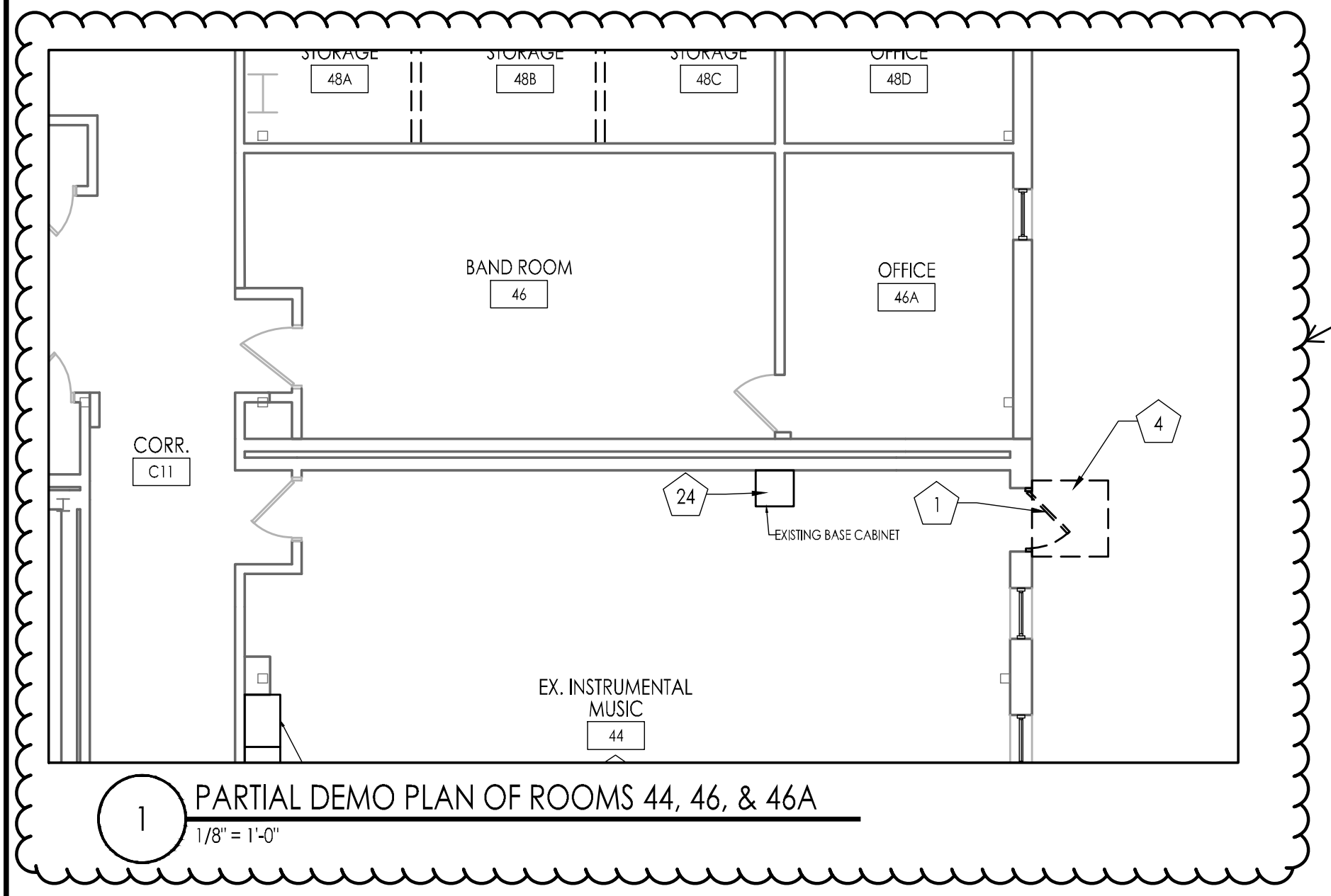
N. THE CONTRACTOR SHALL INSPECT ALL EXISTING ROOF DRAIN PIPING AND CONNECTIONS IN THE WORK AREA TO DETERMINE THAT PROPER "LEAK-PROOF" CONNECTIONS EXIST. IF ANY LEAKS EXIST (IE. DAMAGED PIPES, INSULATION, CLOGS, ETC.), THEN THE CONTRACTOR SHALL CORRECT ANY AND ALL DEFICIENCIES THAT MAY EXIST.

O. IN ROOMS WHERE EXISTING FLOOR FINISH AND BASE ARE INDICATED TO BE REMOVED, IF ASBESTOS TILE IS ENCOUNTERED, STOP REMOVAL AND NOTIFY OWNER IMMEDIATELY. ASBESTOS TILE SHALL BE REMOVED DOWN TO THE EXISTING CONCRETE SLAB AND THE SURFACE PREPARED FOR NEW FINISH BY OTHERS PRIOR TO CONTINUING WITH RENOVATION WORK. AFTER ASBESTOS ABATEMENT, THE GENERAL CONTRACTOR SHALL CLEAN SLAB TO REMOVE ADHESIVES AND INFILL WITH SELF-DRYING FINISHING UNDERLAYMENT (COMPATIBLE WITH NEW FLOOR FINISHES) OVER ENTIRE SURFACE OF EXISTING FLOOR TO MAKE FLOOR LEVEL AND FLUSH. APPLY NEW FINISH AND BASE - SEE ROOM FINISH SCHEDULE.

P. IF DURING THE DEMOLITION, RENOVATION AND ALTERATION WORK IN THE EXISTING BUILDING, STRUCTURAL ELEMENTS ARE UNCOVERED AND ARE FOUND TO BE UNSOUND OR OTHERWISE STRUCTURALLY DEFICIENT, THE GENERAL CONTRACTOR SHALL IMMEDIATELY ADVISE THE ARCHITECT AND THE STRUCTURAL ENGINEER OF RECORD OF THE CONDITION SO THAT APPROPRIATE MEASURES TO REINFORCE, SUPPORT OR REPLACE THE UNSOUND ELEMENTS CAN BE DESIGNED AND IMPLEMENTED.

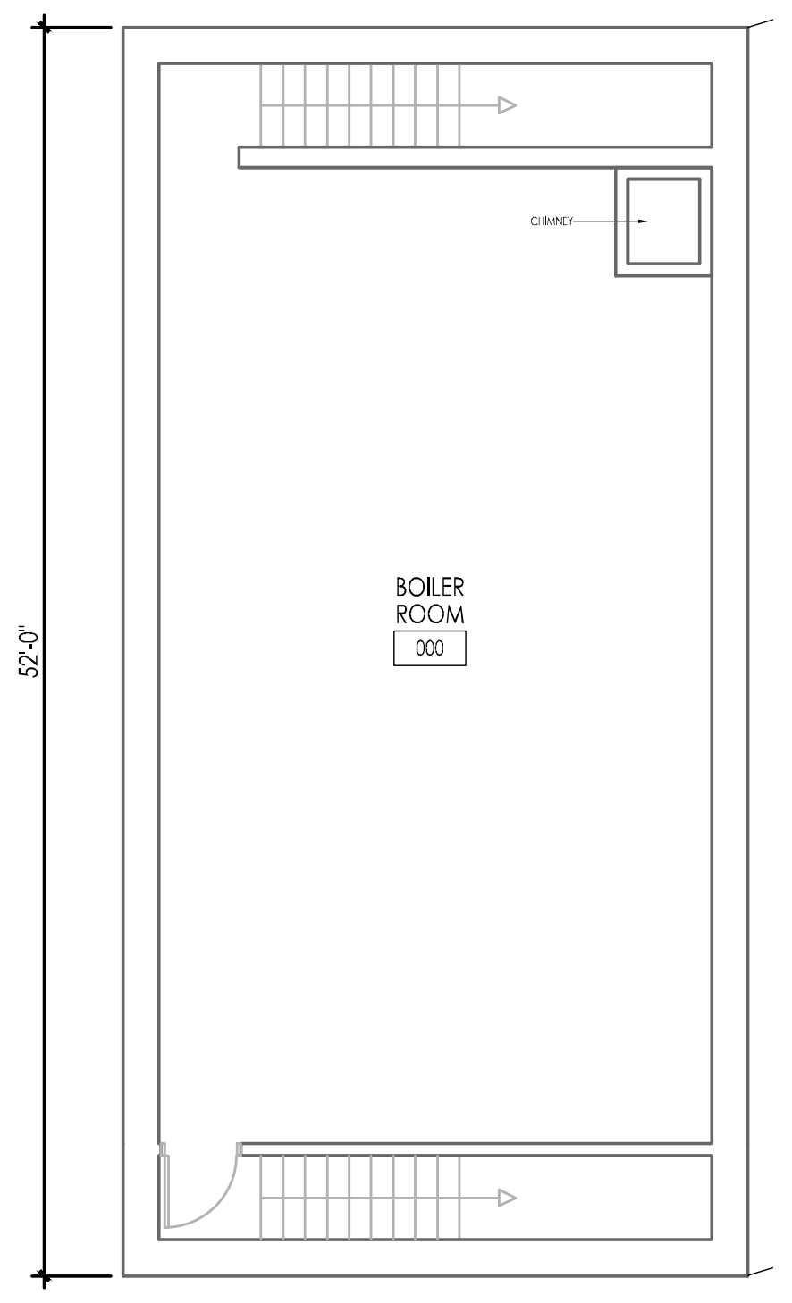
Q. CONTRACTOR SHALL MAINTAIN ALL EXISTING FIRE-RATED CONSTRUCTION ASSEMBLIES, INCLUDING PROTECTED OPENINGS (DOORS, ETC.) DURING DEMOLITION AND ALTERATION WORK IN ORDER TO MAINTAIN EXISTING LIFE SAFETY AND EGRESS. CONTRACTOR IS RESPONSIBLE FOR ALL SEQUENCING AND SHALL NOT REMOVE ANY EXISTING FIRE-RATED ASSEMBLIES UNTIL NEW WORK IS READY FOR INSTALLATION. CONTRACTOR SHALL NOT REMOVE ANY EXISTING FIRE-RATED ASSEMBLIES BEYOND THAT WHICH CAN BE REPLACED IN A SINGLE DAY.

R. DARK, DASHED LINES ON THE DEMOLITION PLAN, WHETHER TAGGED OR NOT, INDICATES WORK THAT SHALL BE INCLUDED AS PART OF THE DEMOLITION/RENOVATION SCOPE. COORDINATE WITH WORK SHOWN ON THE FLOOR PLANS



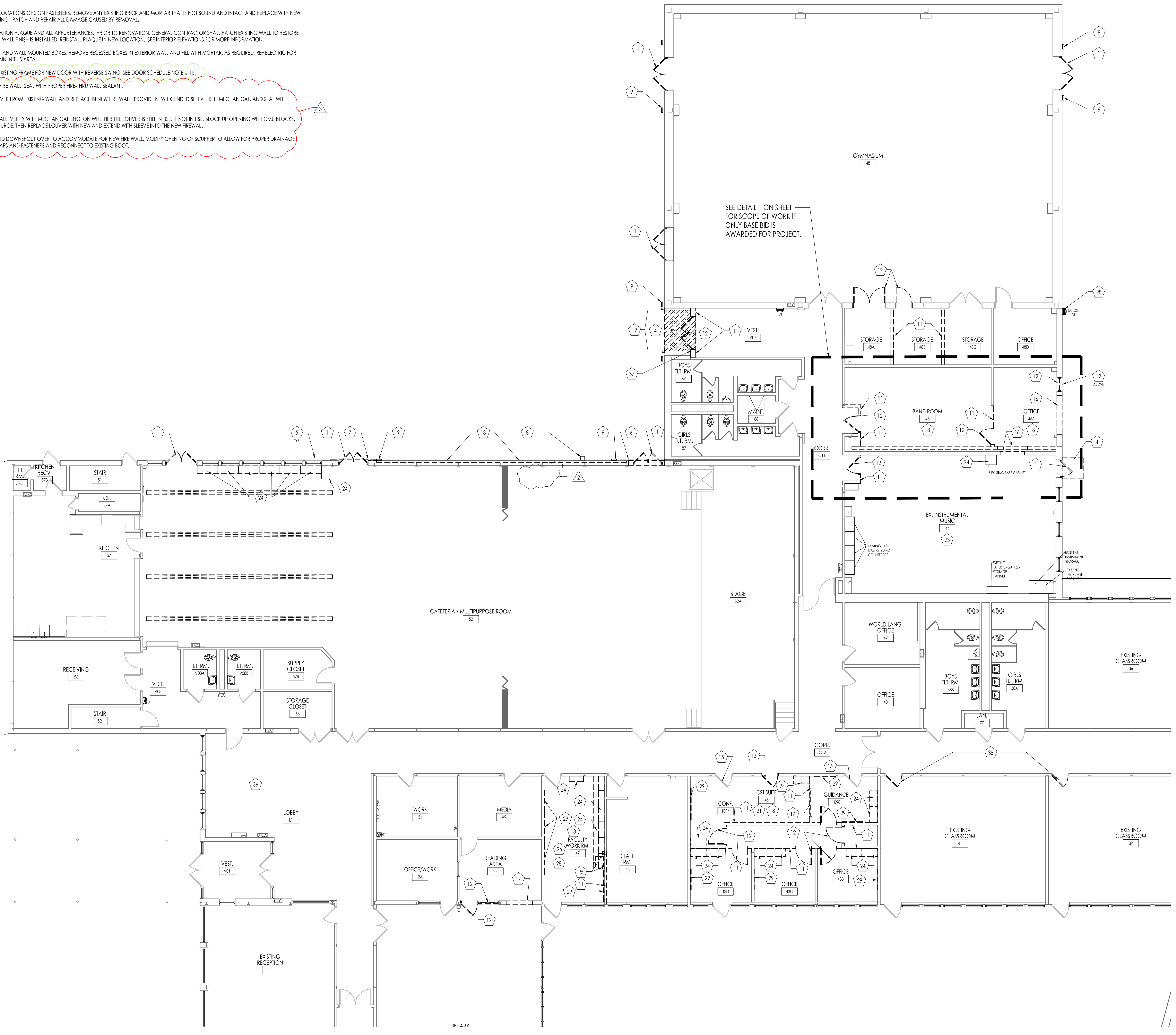
1 PARTIAL DEMO PLAN OF ROOMS 44, 46, & 46A

1/8" = 1'-0"



BASEMENT PLAN

1/8" = 1'-0"



DEMOLITION PLAN - BLOCK 'A'

1/8" = 1'-0"

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Architect

2/12/26

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F V H D P C . C O M

Project Name

Addition and Renovations to Littlebrook Elementary School

Project Owner Name

Princeton Public Schools

Project Location

39 Magnolia Ln,
Princeton, NJ
085402

Project Number

5516D

Project Date

10.10.2025

Checked By

WDH

Drawn By

MJS

Scale

AS NOTED

Drawing Name

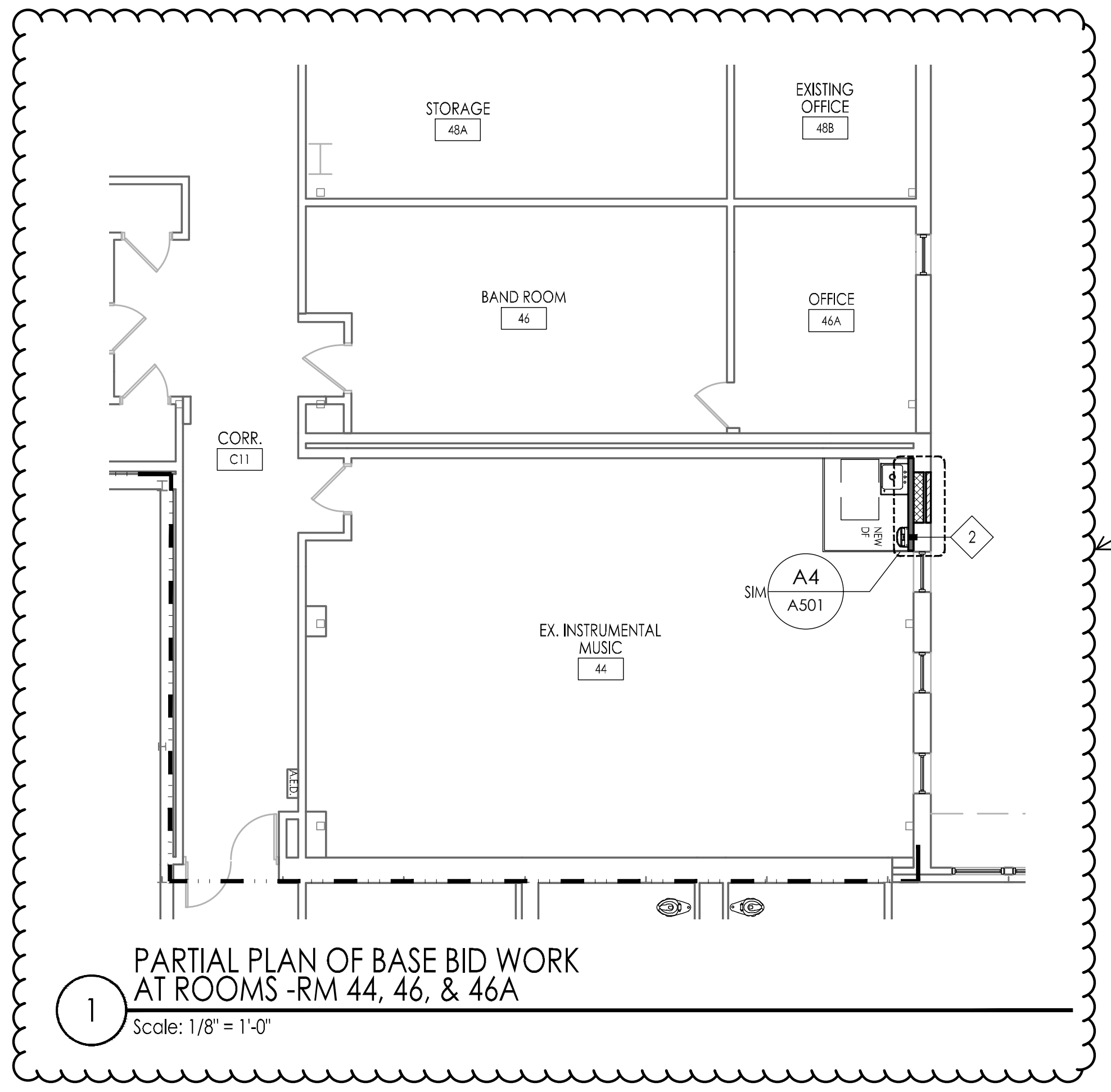
DEMOLITION PLAN & DEMOLITION NOTES BLOCK 'A'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

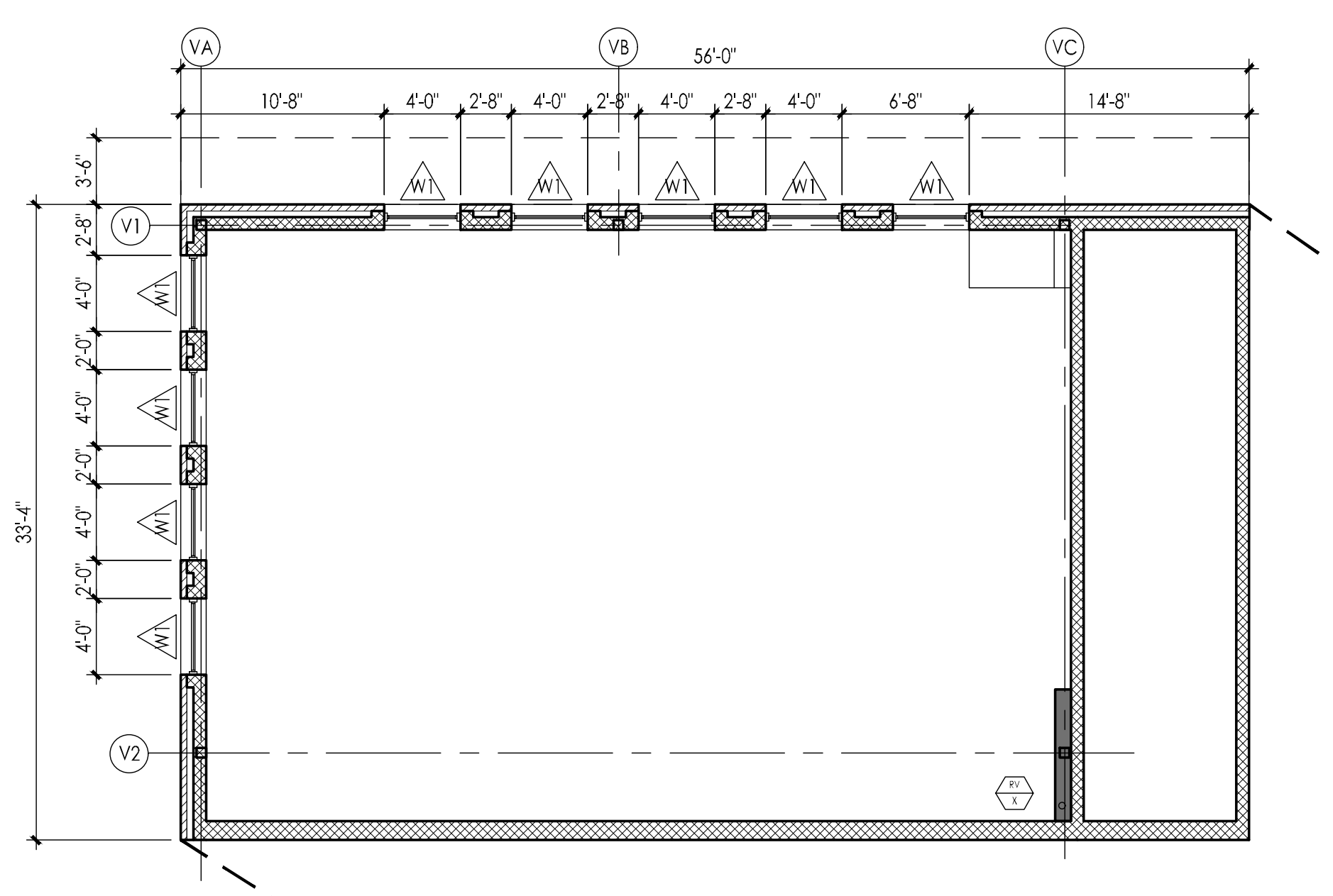
Drawing Number

A102



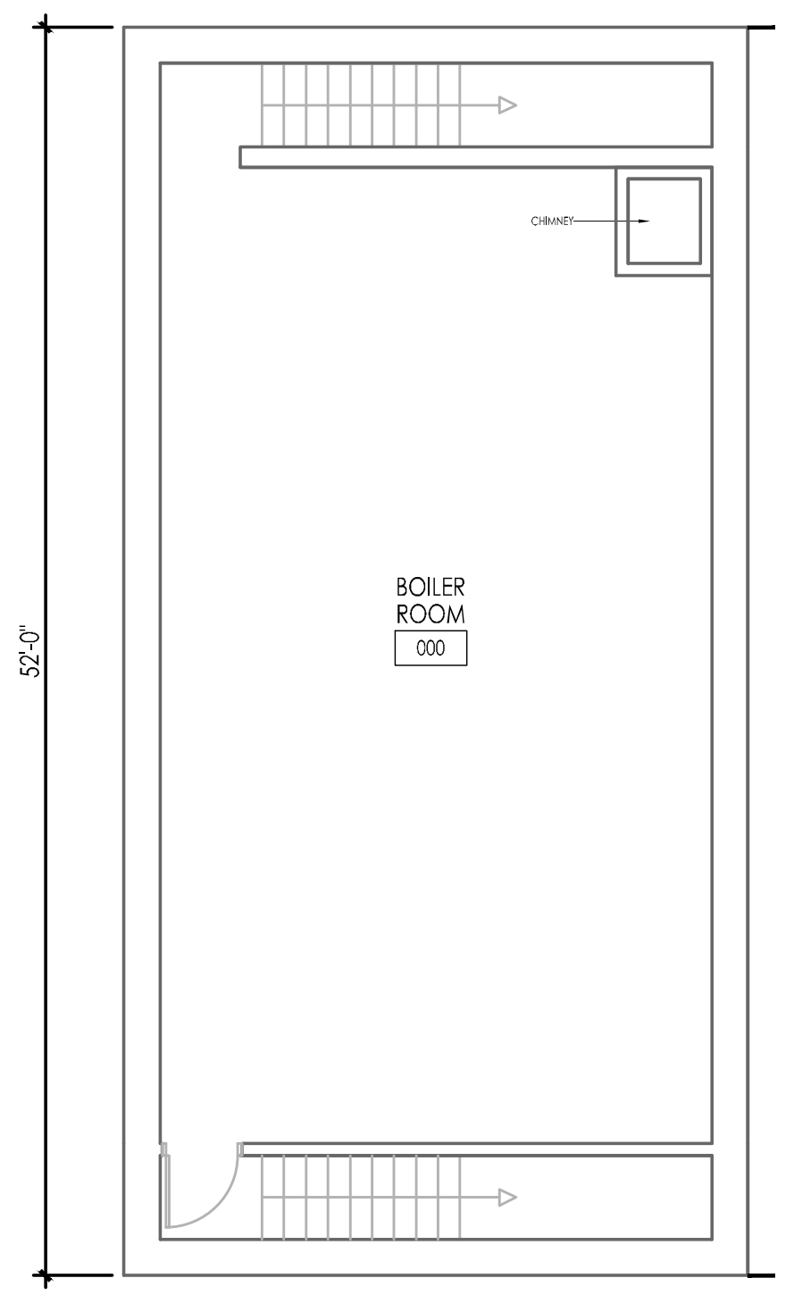
PARTIAL PLAN OF BASE BID WORK AT ROOMS -RM 44, 46, & 46A

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



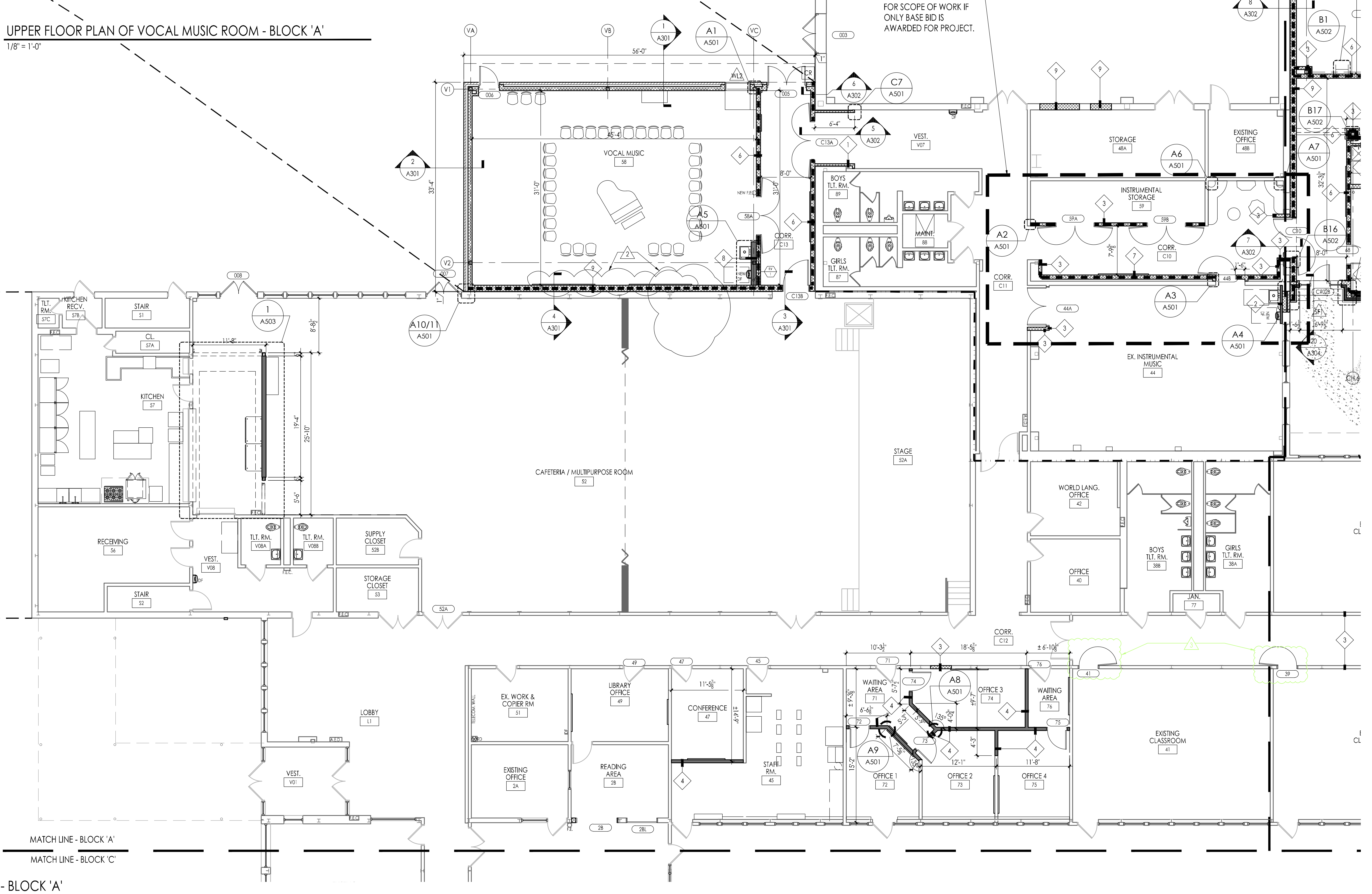
UPPER FLOOR PLAN OF VOCAL MUSIC ROOM - BLOCK 'A'

1/8" = 1'-0"



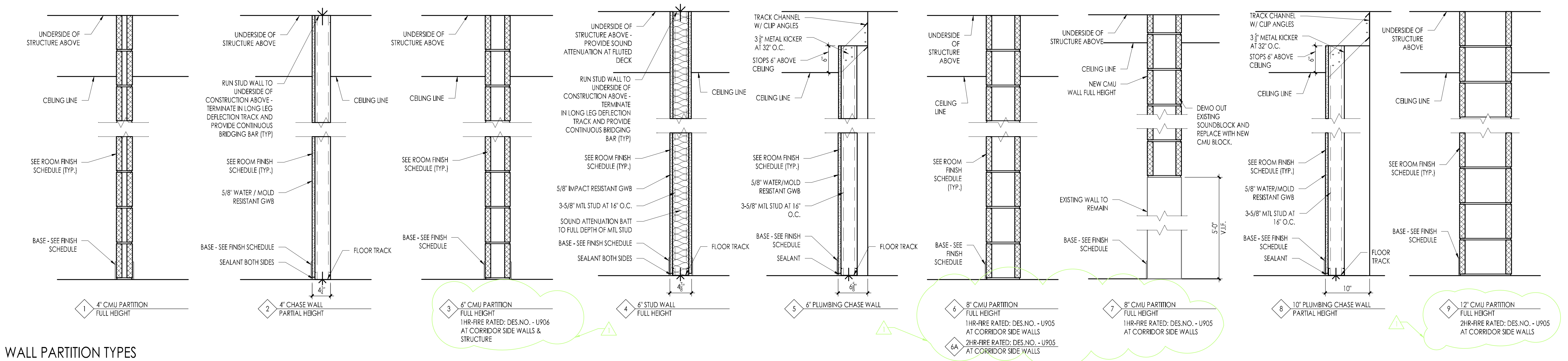
BASEMENT PLAN

1/8" = 1'-0"



FLOOR PLAN - BLOCK 'A'

1/8" = 1'-0"


UNDERSIDE OF STRUCTURE ABOVE
CEILING LINE
SEE ROOM FINISH SCHEDULE (TYP.)
BASE - SEE FINISH SCHEDULE
1 4" CMU PARTITION FULL HEIGHT
RUN STUD WALL TO UNDERSIDE OF CONSTRUCTION ABOVE - TERMINATE IN LONG LEG DEFLECTION TRACK AND PROVIDE CONTINUOUS BRIDGING BAR (TYP)
5/8" WATER / MOLD RESISTANT GWB
SEALANT BOTH SIDES
FLOOR TRACK
4¼"
2 4" CHASE WALL PARTIAL HEIGHT
3 6" CMU PARTITION FULL HEIGHT 1HR-FIRE RATED: DES.NO. - U906 AT CORRIDOR SIDE WALLS & STRUCTURE
UNDERSIDE OF STRUCTURE ABOVE - PROVIDE SOUND ATTENUATION AT FLUTED DECK
5/8" IMPACT RESISTANT GWB
3-5/8" MTL STUD AT 16" O.C.
SOUND ATTENUATION BATT TO FULL DEPTH OF MTL STUD
4⅞"
4 6" STUD WALL FULL HEIGHT
TRACK CHANNEL W/ CLIP ANGLES
3⅝" METAL KICKER AT 32" O.C.
STOPS 6" ABOVE CEILING
SEALANT
6⅝"
5 6" PLUMBING CHASE WALL
6 8" CMU PARTITION FULL HEIGHT 1HR-FIRE RATED: DES.NO. - U905 AT CORRIDOR SIDE WALLS
6A 2HR-FIRE RATED: DES.NO. - U905 AT CORRIDOR SIDE WALLS
NEW CMU WALL FULL HEIGHT
DEMO OUT EXISTING SOUNDBLOCK AND REPLACE WITH NEW CMU BLOCK.
EXISTING WALL TO REMAIN
5'-0" V.I.F.
7 8" CMU PARTITION FULL HEIGHT 1HR-FIRE RATED: DES.NO. - U905 AT CORRIDOR SIDE WALLS
10"
8 10" PLUMBING CHASE WALL PARTIAL HEIGHT
9 12" CMU PARTITION FULL HEIGHT 2HR-FIRE RATED: DES.NO. - U905 AT CORRIDOR SIDE WALLS

WALL PARTITION TYPES

1" = 1'-0"

GENERAL PLAN NOTES:

1. ALL NEW WALLS SHALL EXTEND TO UNDERSIDE OF STEEL DECK UNLESS NOTED OTHERWISE.
2. REFER TO EXTERIOR ELEVATIONS FOR LOCATIONS OF EXTERIOR CONTROL JOINTS - SEE ALSO DTL. 3 / G004.
3. IN ALL LOCATIONS WHERE NEW STEEL STUD AND GYPSUM BOARD WALL CONSTRUCTION IS INDICATED, PROVIDE CONTROL JOINTS AT SPACING NOT TO EXCEED 25'-0" O.C. FINAL LOCATIONS OF CONTROL JOINTS TO BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL.
4. SEE STRUCTURAL DRAWINGS FOR SEISMIC REINFORCEMENT DETAILS AND REQUIREMENTS FOR ALL INTERIOR AND EXTERIOR MASONRY WALLS.
5. ALL EXPOSED EXTERIOR STEEL LINTELS SHALL BE PAINTED GALVANIZED STEEL.
6. ALL BIDDERS MUST VISIT THE SITE AND VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO SUBMITTING A BID. IF ANY DISCREPANCIES OR OMISSIONS ARE FOUND, THE BIDDER(S) MUST NOTIFY THE ARCHITECT OF THESE, IN WRITING, AT LEAST TEN (7) WORKING DAYS PRIOR TO RECEIPT OF BIDS. IF THEY DO NOT DO SO, ANY MODIFICATION OR CORRECTION SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. EXISTING CORRIDOR WALLS ARE CLASSIFIED AS 6" CINDER BLOCKS, 1HR FIRE RATED - PER 2021 IBC NJ ED., TABLE 721.1(2) ITEM# 3-1.3.
8. NEW ROOM AND CORRIDOR WALLS ARE TAGGED PER "WALL PARTITION TYPES" FOUND ON SHEET A105.

5

PLAN NOTE:

PLAN MAY SHOW WORK FOR BASE BID AND ALTERNATE BID SCOPE OF WORK.

6

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Architect

2/12/26
Date

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Mont Clare - Pennsylvania 19453

F V H D P C . C O M

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
MJS

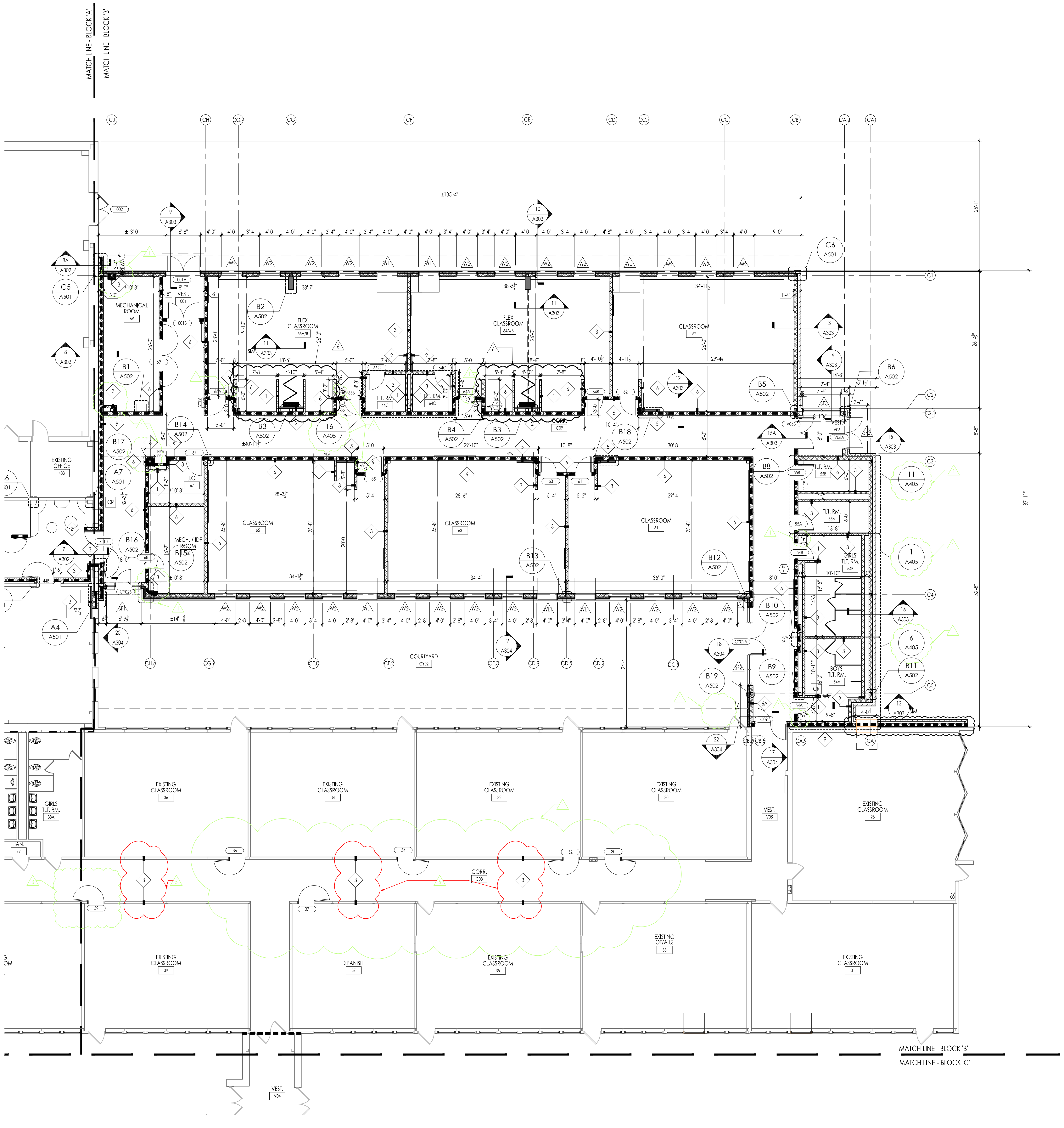
Scale
AS NOTED

Drawing Name
FLOOR PLAN, WALL PARTITION TYPES & PLAN CONSTRUCTION NOTES BLOCK 'A'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A105



FLOOR PLAN - BLOCK 'B'
1/8" = 1'-0"

PLAN NOTE:
PLAN MAY SHOW WORK FOR BASE BID AND ALTERNATE BID SCOPE OF WORK.

6

GENERAL PLAN NOTES:

1. ALL NEW WALLS SHALL EXTEND TO UNDERSIDE OF STEEL DECK UNLESS NOTED OTHERWISE.
2. REFER TO EXTERIOR ELEVATIONS FOR LOCATIONS OF EXTERIOR CONTROL JOINTS - SEE ALSO DTL. 3 / G004.
3. IN ALL LOCATIONS WHERE NEW STEEL STUD AND GYPSUM BOARD WALL CONSTRUCTION IS INDICATED, PROVIDE CONTROL JOINTS AT SPACING NOT TO EXCEED 25'-0" O.C. FINAL LOCATIONS OF CONTROL JOINTS TO BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL.
4. SEE STRUCTURAL DRAWINGS FOR SEISMIC REINFORCEMENT DETAILS AND REQUIREMENTS FOR ALL INTERIOR AND EXTERIOR MASONRY WALLS.
5. ALL EXPOSED EXTERIOR STEEL LINTELS SHALL BE PAINTED GALVANIZED STEEL.
6. ALL BIDDERS MUST VISIT THE SITE AND VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO SUBMITTING A BID. IF ANY DISCREPANCIES OR OMISSIONS ARE FOUND, THE BIDDER(S) MUST NOTIFY THE ARCHITECT OF THESE, IN WRITING, AT LEAST TEN (7) WORKING DAYS PRIOR TO RECEIPT OF BIDS. IF THEY DO NOT DO SO, ANY MODIFICATION OR CORRECTION SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. EXISTING CORRIDOR WALLS ARE CLASSIFIED AS 6" CINDER BLOCKS, 1HR FIRE RATED - PER 2021 IBC NJ ED., TABLE 721.1(2) ITEM# 3-1.3.
8. NEW ROOM AND CORRIDOR WALLS ARE TAGGED PER "WALL PARTITION TYPES" FOUND ON SHEET A105.

5

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Architect
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Date

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Princeton Public Schools

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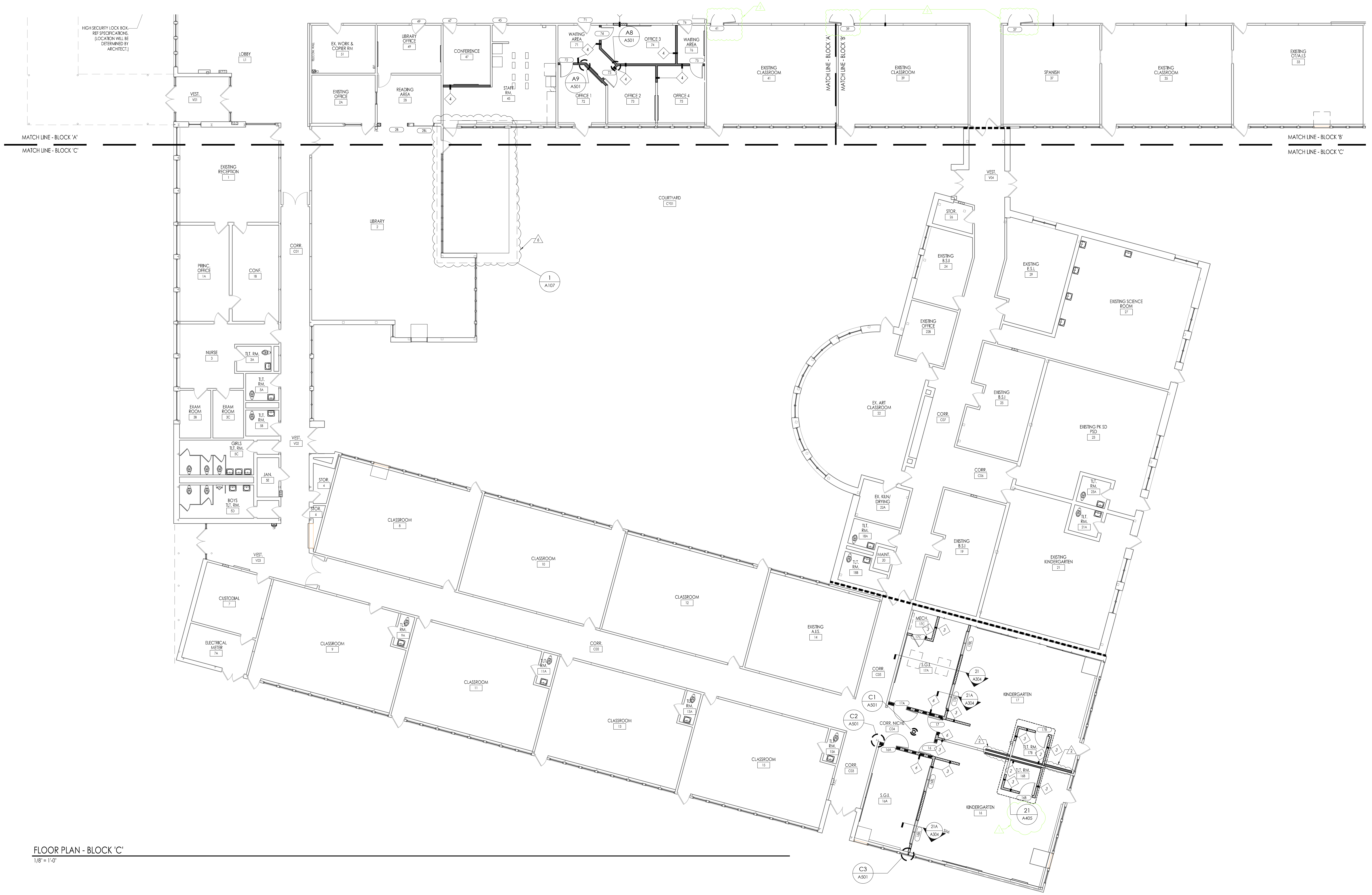
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By
MJS
Scale
AS NOTED

Drawing Name
FLOOR PLAN & CONSTRUCTION NOTES BLOCK 'B'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A106



FLOOR PLAN - BLOCK 'C'

1/8" = 1'-0"

PLAN NOTE:

PLAN MAY SHOW WORK FOR BASE BID AND ALTERNATE BID SCOPE OF WORK.

GENERAL PLAN NOTES:

1. ALL NEW WALLS SHALL EXTEND TO UNDERSIDE OF STEEL DECK UNLESS NOTED OTHERWISE.
2. REFER TO EXTERIOR ELEVATIONS FOR LOCATIONS OF EXTERIOR CONTROL JOINTS - SEE ALSO DTL. 3 / G004.
3. IN ALL LOCATIONS WHERE NEW STEEL STUD AND GYPSUM BOARD WALL CONSTRUCTION IS INDICATED, PROVIDE CONTROL JOINTS AT SPACING NOT TO EXCEED 25'-0" O.C. FINAL LOCATIONS OF CONTROL JOINTS TO BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL.
4. SEE STRUCTURAL DRAWINGS FOR SEISMIC REINFORCEMENT DETAILS AND REQUIREMENTS FOR ALL INTERIOR AND EXTERIOR MASONRY WALLS.
5. ALL EXPOSED EXTERIOR STEEL LINTELS SHALL BE PAINTED GALVANIZED STEEL.
6. ALL BIDDERS MUST VISIT THE SITE AND VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO SUBMITTING A BID. IF ANY DISCREPANCIES OR OMISSIONS ARE FOUND, THE BIDDER(S) MUST NOTIFY THE ARCHITECT OF THESE, IN WRITING, AT LEAST TEN (7) WORKING DAYS PRIOR TO RECEIPT OF BIDS. IF THEY DO NOT DO SO, ANY MODIFICATION OR CORRECTION SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
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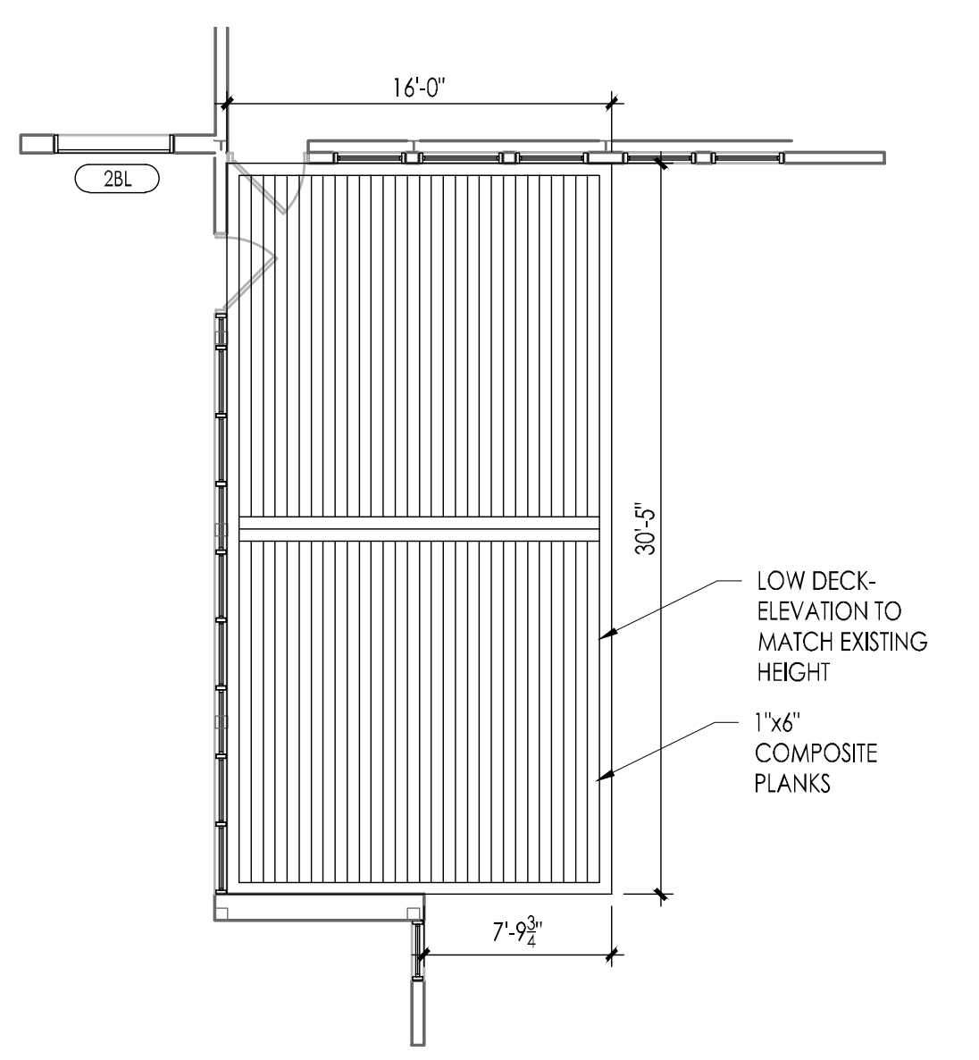
8. NEW ROOM AND CORRIDOR WALLS ARE TAGGED PER "WALL PARTITION TYPES" FOUND ON SHEET A105.



1 RENOVATED LOW COMPOSITE DECK

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

BOD: Trex Enhance - Basics and Natural, or approved as equal

Material: Trex Decking and Trex® Fascia are wood thermoplastic composite lumber (WTCL) boards

Deck Construction Notes:

1. 1" x 6" Grooved Edge Deck
2. 1" x 8" Fascia Board (GC TO VIF Height needed) - construct fascia under deck
3. Color match composite screws to chosen deck color; screws are to be flush.
4. Use stainless steel screws at ledger
5. Min. gapping 3⁄16"; max. gapping ½" between planks
6. At building structure, gap deck min. ¼" - max. ½"

Sheet Specifications:

Codes: 2021 IBC NJ ED. Commercial Composite Deck Footings - Chapter 18; and UCC

Requirements:
Composite Decking consisting of recycled Linear Low-Density Polyethylene (LLDPE)
Color – To be specified by owner from Trex' standard list of colors
Flame Spread Index\ ASTM E 84 \Class C
Thermal Expansion \ASTM D1037 \1.9 x 10^{-5} inch/inch/degree F
Moisture Absorption \ASTM D1037\ < 1%
Screw Head Pull-Through \ASTM D1761 \161 lbf per screw**
Fungus Resistance \ASTM D1413 \Rating - no decay
Termite Resistance \AWPA E1-72 \ Rating = 9.6

Corrosion resistant Fastener used in testing: #8 x 2.5 in. approved Stainless Steel Screw

Delivery, Storage, and Handling:

A. Store Trex products on a flat and level surface. Support bundles on supplied dunnage.
B. Keep material covered using the provided bundle cover until time of installation

Structural Performance:

a. Deck board: Uniform Load – An allowable span of 16 in. on-center and 100 lbf/sq.ft.
b. Live load at columns - 50 psf; diameter 18"; concrete > 3,000 psi
c. Footings 36"-42" below grade; design professional to verify footing types and depths with local codes.
d. Ledger Board to be connected to building with proper anchors, lag bolts or through bolts.

Warranty:

Warranty period of commercial deck - 10 years

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
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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

Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
MJS

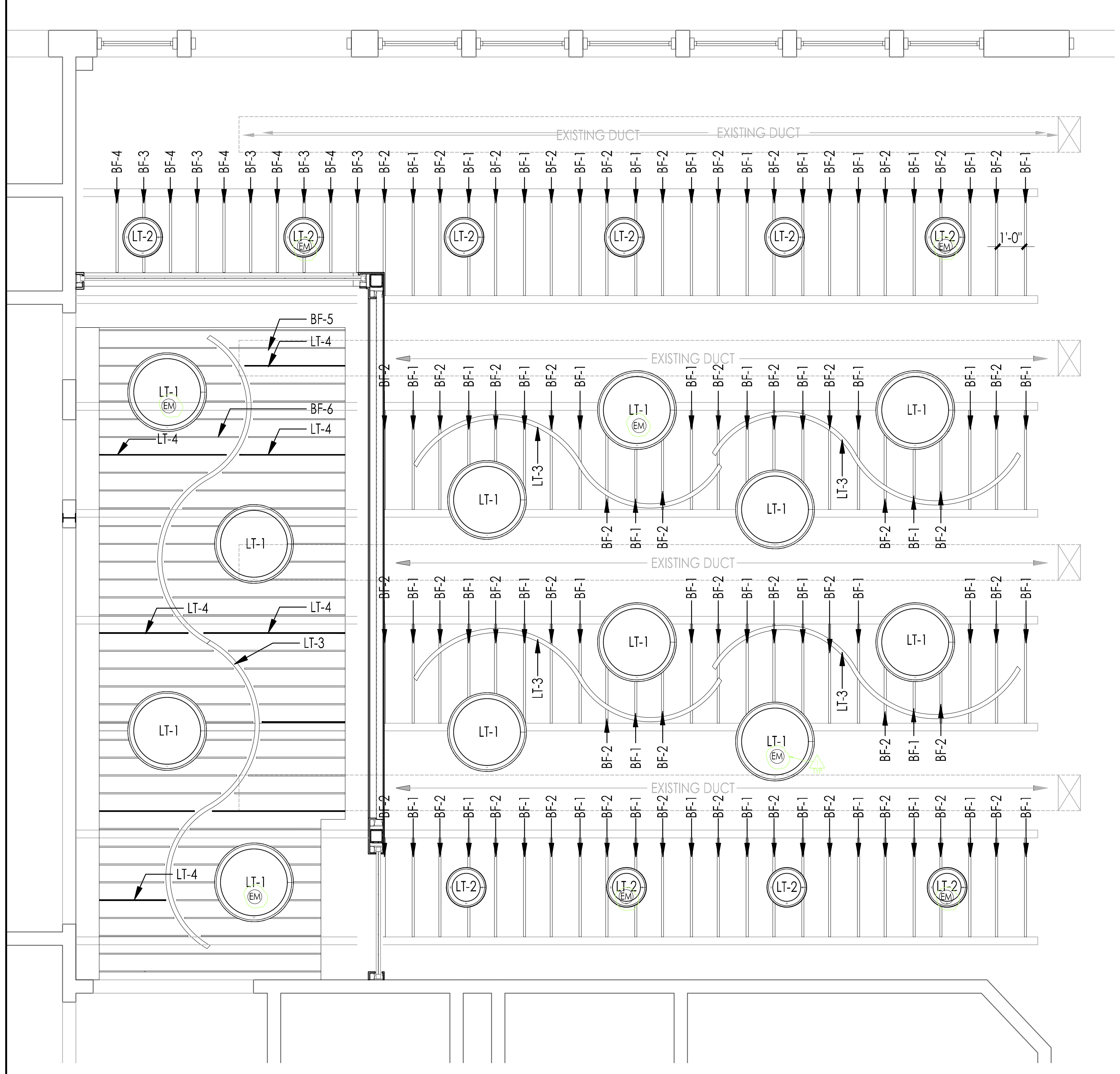
Scale
AS NOTED

Drawing Name
FLOOR PLAN & CONSTRUCTION NOTES BLOCK 'C'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A107



2 ENLARGED CAFETERIA REFLECTED CEILING PLAN

1/2" = 1'-0"

ACOUSTICAL FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
BFL-1	WING CEILING BAFFLE	ACOUFELT	3'-8 1/2"	COLOR 1
BFL-2	WING CEILING BAFFLE	ACOUFELT	3'-8 1/2"	COLOR 2
BFL-3	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 1
BFL-4	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 2
BFL-5	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 1
BFL-6	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 2
DCS-1	HEXAGON CEILING BAFFLE	ACOUFELT	36"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION
DCS-2	HEXAGON CEILING BAFFLE	ACOUFELT	24"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION

SPECIALTY LIGHTING FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
LT-1	LOOPITA DIRECT	CORONET	36" WIDE	EMERALD FELT COLOR
LT-2	LOOPITA DIRECT	CORONET	18" WIDE	EMERALD FELT COLOR
LT-3	LOOPITA CURVE	CORONET	12' LONG SEGMENTS	-
LT-4	TRUSS LED CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	-
LT-5	HIGH PERFORMANCE 2" APERTURE CIRCLE	FINELITE	4 FOOT NOMINAL SIZE	-

REFLECTED CEILING PLAN LEGEND

⊕	ELEVATION DATUM - A.F.F.
⊞	ACB-1 -2'x4' ACOUSTICAL CEILING BOARD - SEE FINISH SCHEDULE FOR LOCATION
◫	ACB-2 - 2'x2' ACOUSTICAL CEILING BOARD - SEE FINISH SCHEDULE FOR LOCATION
⊞	AACB - 2'x4' ACRYLIC ACOUSTICAL CEILING BOARD -SEE FINISH SCHEDULE FOR LOCATION
▨	ACB-3 - 2'x2' ACOUSTICAL CEILING BOARD COLOR 2 - SEE FINISH SCHEDULE FOR LOCATION
▒	PAINTED GYPSUM BOARD SOFFIT
⊠	SUPPLY / RETURN / EXHAUST DIFFUSER (SEE HVAC DRAWINGS)
⊠ ○	LIGHTS (SEE ELECTRICAL DRAWINGS)

SAFETY & EMERGENCY LIGHTS (SEE ELECTRICAL DRAWINGS)

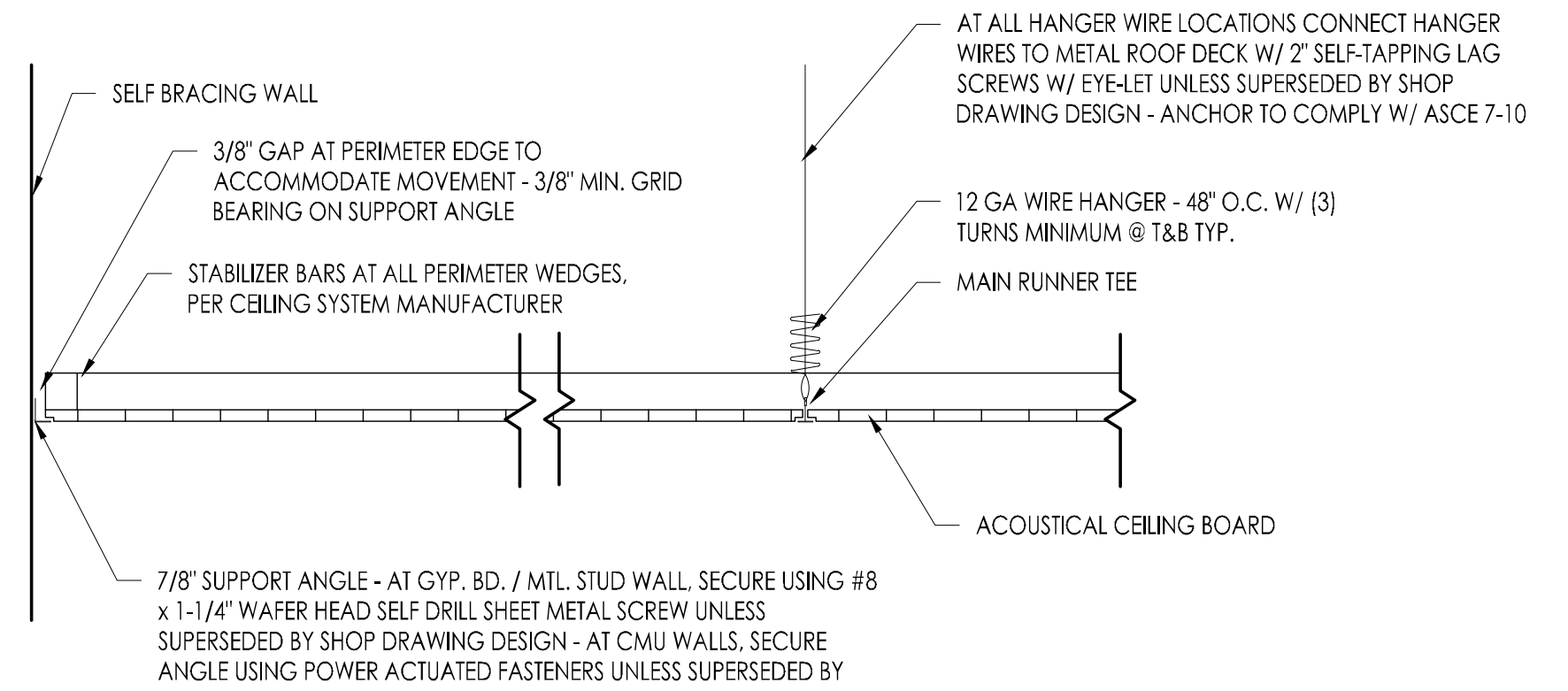
EX	EXIT SIGN W/ BATTERY BACK-UP
EX	DIRECTIONAL EXIT SIGN W/ BATTERY BACK-UP
EM ● ⊠	FIXTURES ON EMERGENCY CIRCUIT

1

NOTES:

1. SEE HVAC, PLUMBING AND ELECTRICAL DRAWINGS FOR TYPE, SIZE AND ADDITIONAL INFORMATION.
2. ALL SPRINKLER HEADS, DIFFUSERS AND LIGHTS TO BE CENTERED IN THE GWB OR ACB CEILING UNLESS NOTED OTHERWISE
3. GENERAL, HVAC, PLUMBING AND ELECTRICAL CONTRACTORS TO COORDINATE LOCATION OF SPRINKLER HEADS DIFFUSERS AND LIGHTS.
4. SEE ROOM FINISH SCHEDULE FOR CEILING HEIGHTS
5. A.F.F. = ABOVE FINISH FLOOR (MAIN DATUM ELEVATION)
6. SEE INTERIOR FINISH LEGEND ON SHEET A701

6

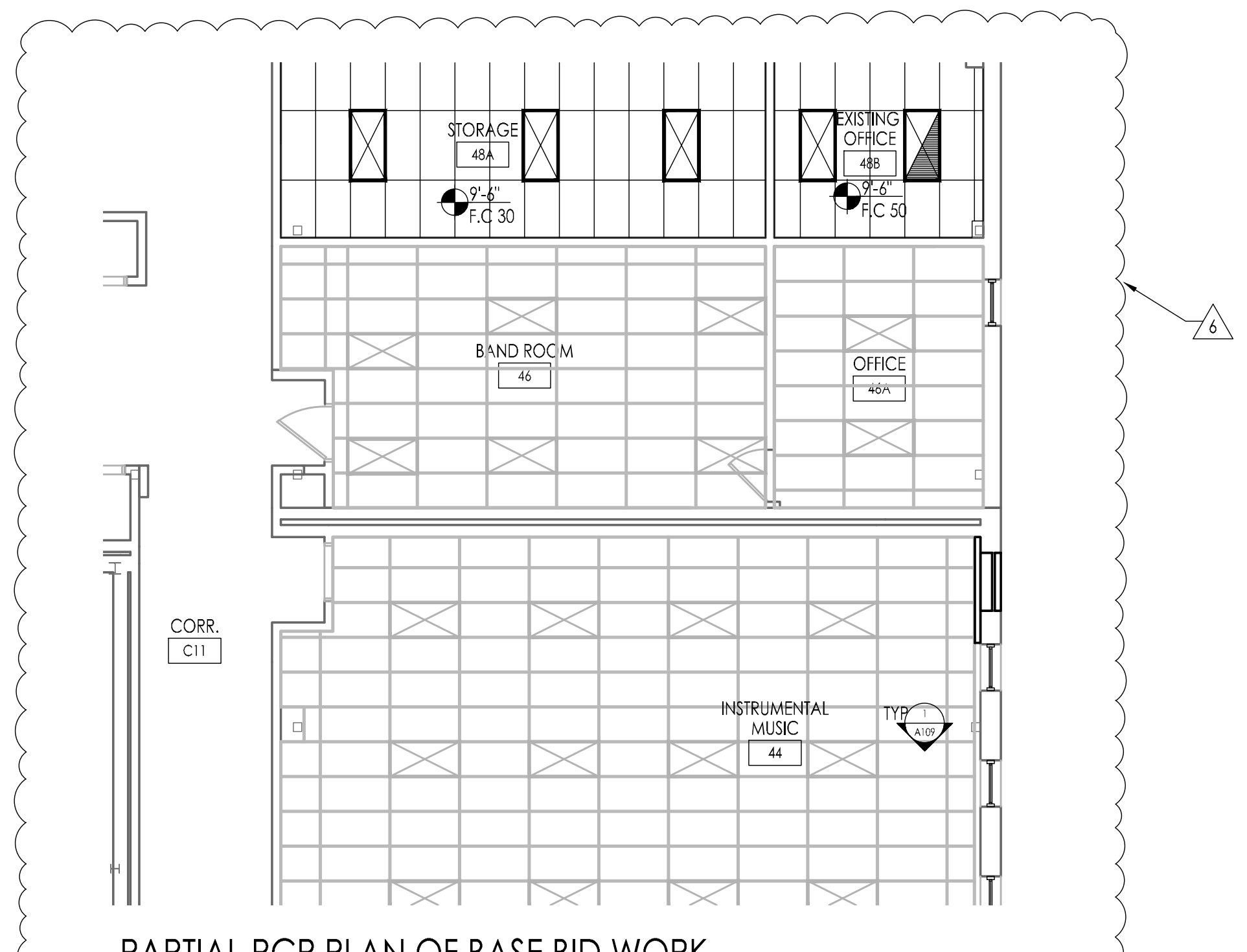

SELF BRACING WALL
3/8" GAP AT PERIMETER EDGE TO ACCOMMODATE MOVEMENT - 3/8" MIN. GRID BEARING ON SUPPORT ANGLE
STABILIZER BARS AT ALL PERIMETER WEDGES, PER CEILING SYSTEM MANUFACTURER
AT ALL HANGER WIRE LOCATIONS CONNECT HANGER WIRES TO METAL ROOF DECK W/ 2" SELF-TAPPING LAG SCREWS W/ EYE-LET UNLESS SUPERSEDED BY SHOP DRAWING DESIGN - ANCHOR TO COMPLY W/ ASCE 7-10
12 GA WIRE HANGER - 48" O.C. W/ (3) TURNS MINIMUM @ T&B TYP.
MAIN RUNNER TEE
ACOUSTICAL CEILING BOARD
7/8" SUPPORT ANGLE - AT GYP. BD. / MTL. STUD WALL, SECURE USING #8 x 1-1/4" WAFER HEAD SELF DRILL SHEET METAL SCREW UNLESS SUPERSEDED BY SHOP DRAWING DESIGN - AT CMU WALLS, SECURE ANGLE USING POWER ACTUATED FASTENERS UNLESS SUPERSEDED BY SHOP DRAWING DESIGN

NOTE: *INSTALL SUSPENSION SYSTEMS TO COMPLY WITH MANUFACTURER'S RECOMMENDED INSTALLATION, ASTM C636 AND PER SPECIFICATION (TYP.) LOCATE HANGERS NOT LESS THAN 6" FROM EACH END AND SPACED 48" ALONG EACH CARRYING CHANNEL OR DIRECT HUNG RUNNER, UNLESS OTHERWISE INDICATED. LEVELING TO TOLERANCE OF 1/8" IN 12'-0".*

3 TYPICAL ACOUSTICAL CEILING SYSTEM DETAIL

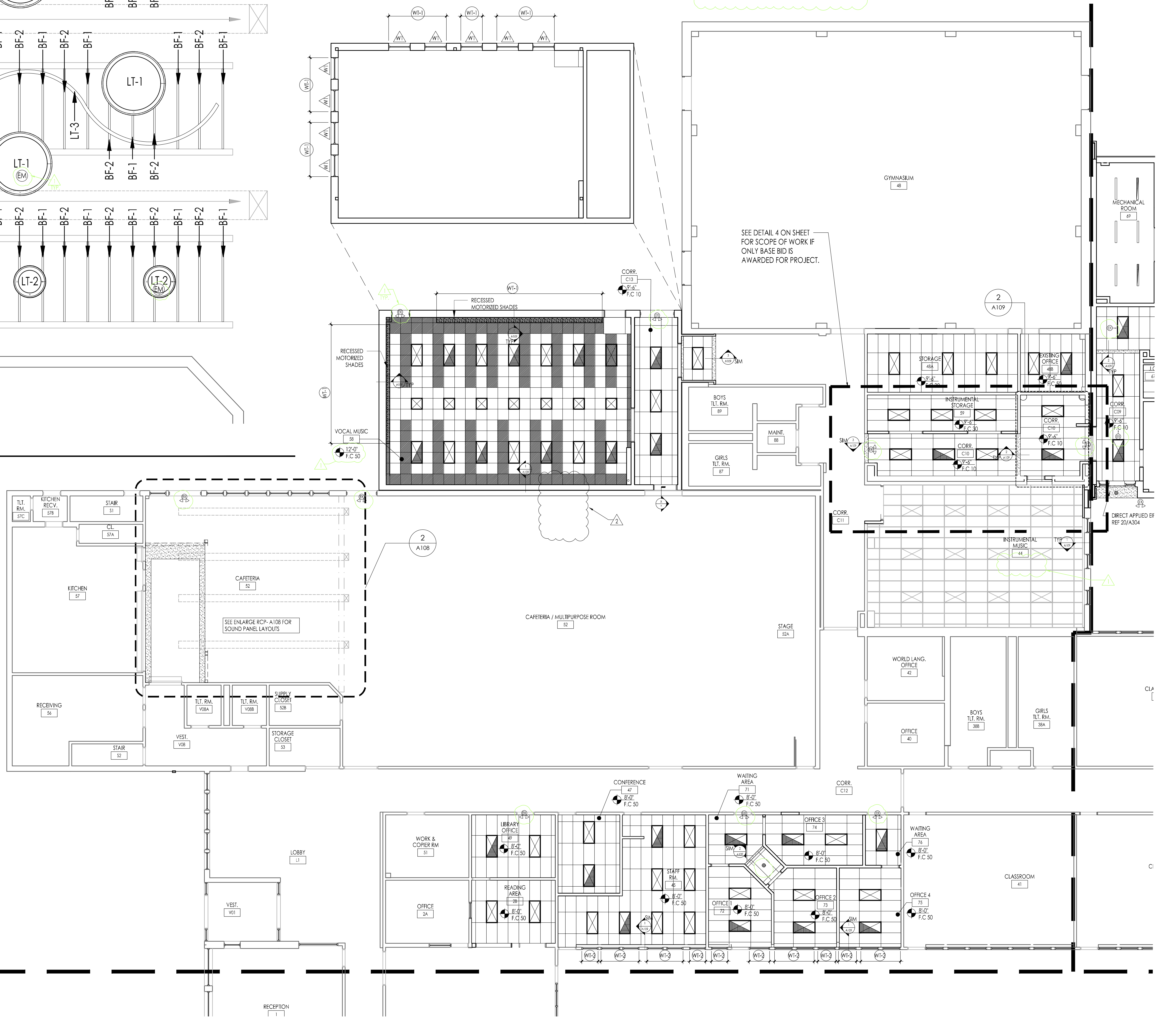
1/4" = 1'-0"

MECHO SHADE EQUIPMENT KEY (X)	
MARK	REMARKS
WT-1	SINGLE MULTI-BANDED ELECTROL MECHOSHADE IN 4124 POCKET WITH 0270 CHELSEA ROOM-DARKENING FABRIC
WT-2	DOUBLE MANUAL M5-WI SURFACE-MOUNTED ROLLER SHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-3	DOUBLE MANUAL M5-WI JAMB-MOUNTED MECHOSHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-4	MOTOR SPRING SKYLIGHT SHADE SURFACE MOUNTED WITH FASCIA IN 0800 SERIES DISTINCTIVE BLACKOUT
WT-5	SINGLE MOTORIZED ELECTRO2 MECHOSHADE WITH WALL ANGLE BRACKETS AND FASCIA IN 0270 CHELSEA ROOM-DARKENING FABRIC



4 PARTIAL RCP PLAN OF BASE BID WORK AT ROOMS -RM 44, 46, & 46A

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



1 REFLECTED CEILING PLAN - BLOCK 'A'

1/8" = 1'-0"

NJDCA Electronic Release Stamp

FVHD architects planners
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Corporate: 1515 Lower Ferry Road
Trenton - New Jersey 08628
Pennsylvania: 140 Whitaker Avenue
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F V H D P C . C O M

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WDH

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MJS

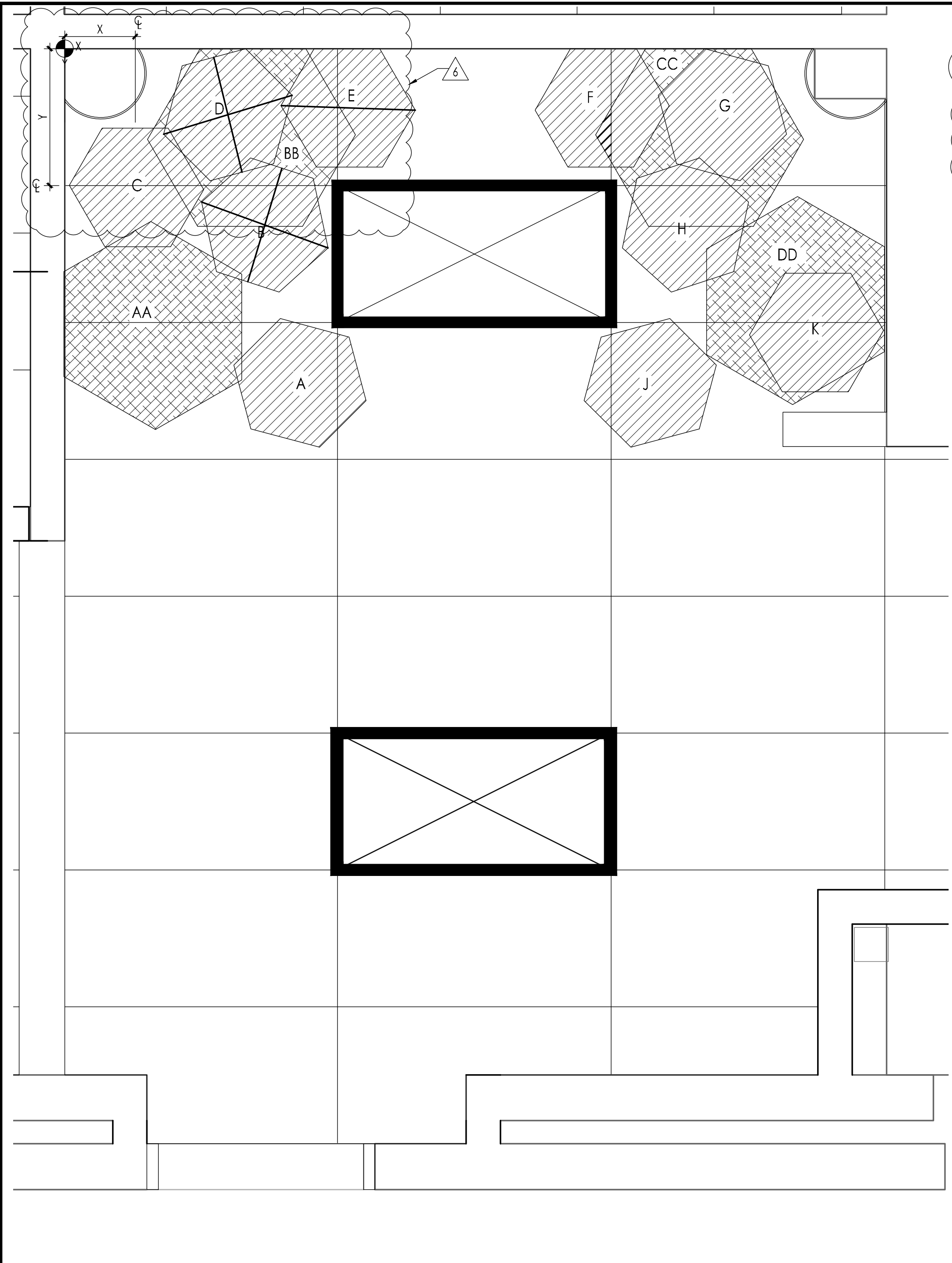
Scale
AS NOTED

Drawing Name
REFLECTED CEILING PLANS

BLOCK 'A'

Revisions		
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

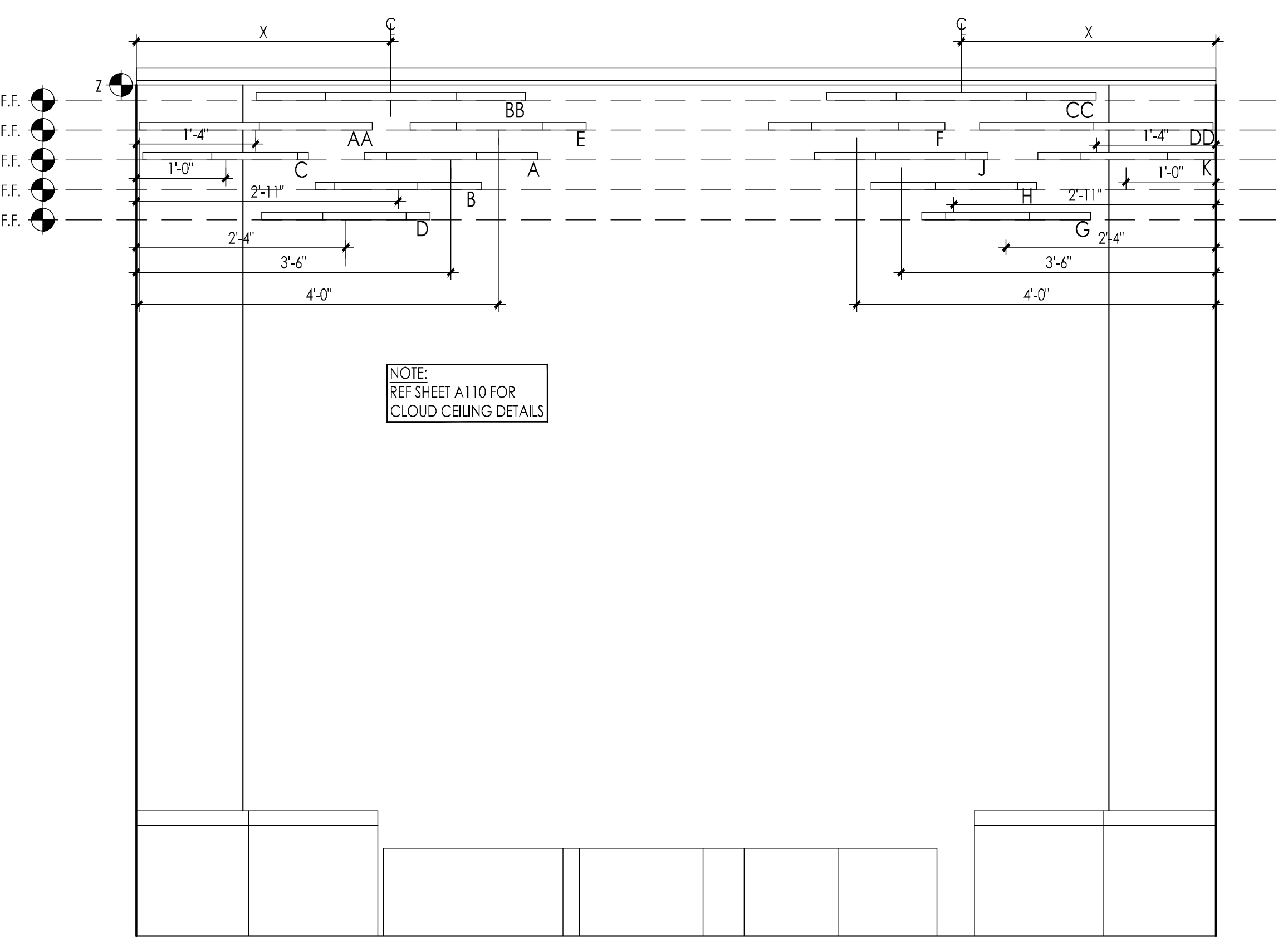
Drawing Number
A108



2 ENLARGED CORRIDOR C10 RCP
3/4" = 1'-0"

ACOUSTICAL FIXTURE TYPE:
SEE ACOUSTICAL FIXTURE SCHEDULE ON SHEET FOR DETAILS
- ▧ DCS-1
- ▨ DCS-2

NOTE:
X & Y AXIS COORDINATES ARE TO THE CL OF TILE
Z-AXIS COORDINATE IS TO THE BOTTOM OF THE TILE.
REFERENCE Z-AXIS COORDINATE FOR EACH TILE ON DETAIL 3/A109



3 CORRIDOR (C10) FIXTURE HEIGHTS
3/4" = 1'-0"

MATCH LINE - BLOCK 'A'

MATCH LINE - BLOCK 'B'

ACOUSTICAL FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
BFL-1	WING CEILING BAFFLE	ACOUFELT	LENGTH 1	COLOR 1
BFL-2	WING CEILING BAFFLE	ACOUFELT	LENGTH 1	COLOR 2
BFL-3	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 1
BFL-4	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 2
BFL-5	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 1
BFL-6	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 2
DCS-1	HEXAGON CEILING BAFFLE	ACOUFELT	36"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION
DCS-2	HEXAGON CEILING BAFFLE	ACOUFELT	24"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION

SPECIALTY LIGHTING FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
LT-1	LOOPITA DIRECT	CORONET	36" WIDE	-
LT-2	LOOPITA DIRECT	CORONET	18" WIDE	-
LT-3	LOOPITA CURVE	CORONET	12' LONG SEGMENTS	-
LT-4	TRUSS LED CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	-
LT-5	HIGH PERFORMANCE 2" APERTURE CIRCLE	FINELITE	4 FOOT NOMINAL SIZE	-

MECHO SHADE EQUIPMENT KEY (X)	
MARK	REMARKS
WT-1	SINGLE MULTI-BANDED ELECTROL MECHOSHADE IN 4124 POCKET WITH 0270 CHELSEA ROOM-DARKENING FABRIC
WT-2	DOUBLE MANUAL M5-WI SURFACE-MOUNTED ROLLER SHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-3	DOUBLE MANUAL M5-WI JAMB-MOUNTED MECHOSHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-4	MOTOR SPRING SKYLIGHT SHADE SURFACE MOUNTED WITH FASCIA IN 0800 SERIES DISTINCTIVE BLACKOUT
WT-5	SINGLE MOTORIZED ELECTRO2 MECHOSHADE WITH WALL ANGLE BRACKETS AND FASCIA IN 0270 CHELSEA ROOM-DARKENING FABRIC

REFLECTED CEILING PLAN LEGEND

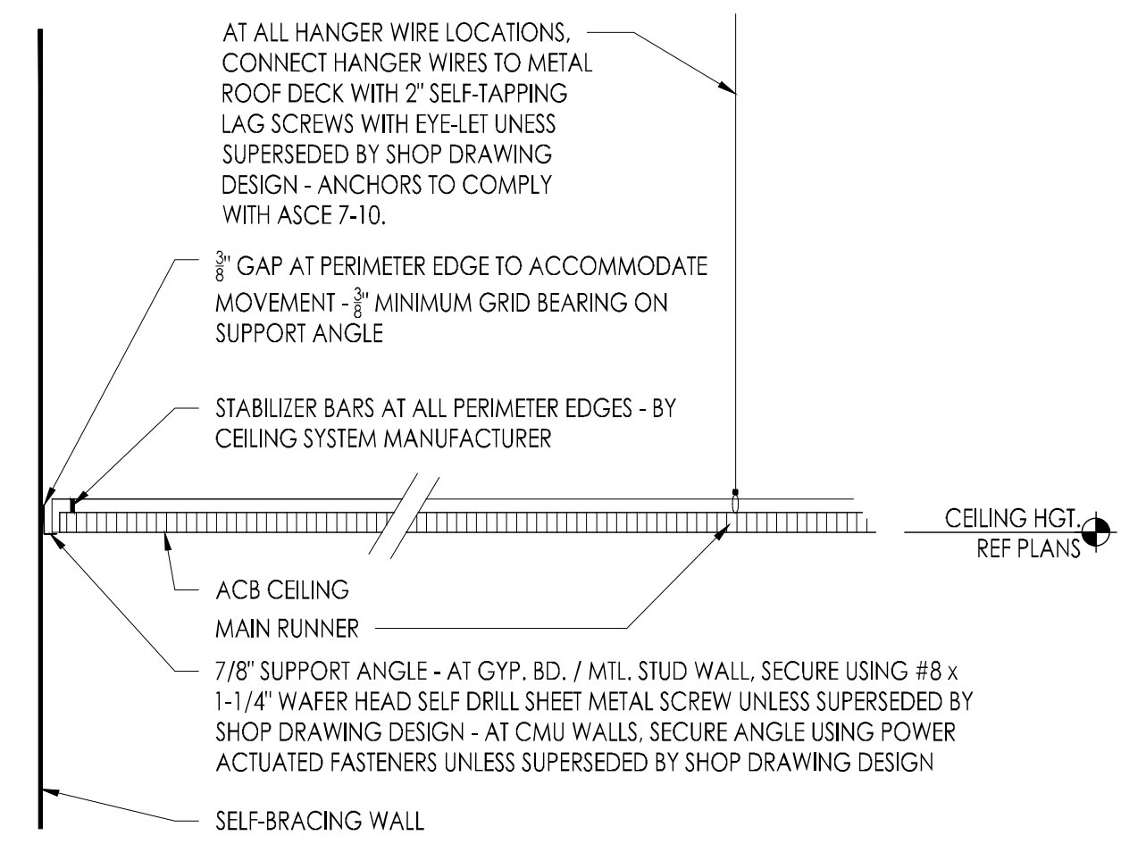
◐	ELEVATION DATUM - A.F.F.
▦	ACB-1 -2'x4' ACOUSTICAL CEILING BOARD - SEE FINISH SCHEDULE FOR LOCATION
▦	ACB-2 - 2'x2' ACOUSTICAL CEILING BOARD - SEE FINISH SCHEDULE FOR LOCATION
▦	AACB - 2'x4' ACRYLIC ACOUSTICAL CEILING BOARD -SEE FINISH SCHEDULE FOR LOCATION
▒	PAINTED GYPSUM BOARD SOFFIT
⧄ ▨	SUPPLY / RETURN / EXHAUST DIFFUSER (SEE HVAC DRAWINGS)
☒ ☒ ▭ ○	LIGHTS (SEE ELECTRICAL DRAWINGS)

SAFETY & EMERGENCY LIGHTS (SEE ELECTRICAL DRAWINGS)

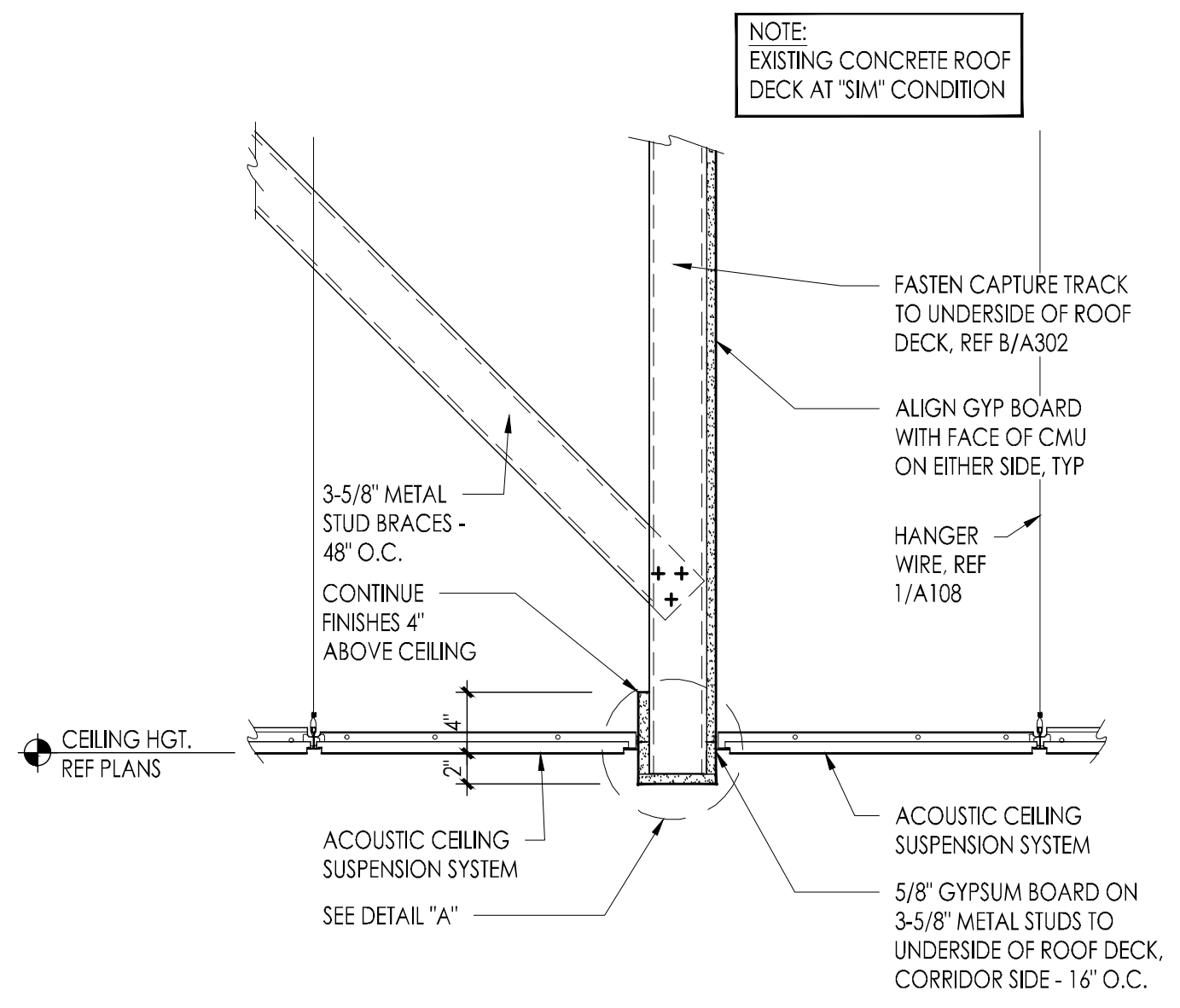
(EX)	EXIT SIGN W/ BATTERY BACK-UP
(EX)	DIRECTIONAL EXIT SIGN W/ BATTERY BACK-UP
(EM) ● ▬ ☒	FIXTURES ON EMERGENCY CIRCUIT

NOTES:

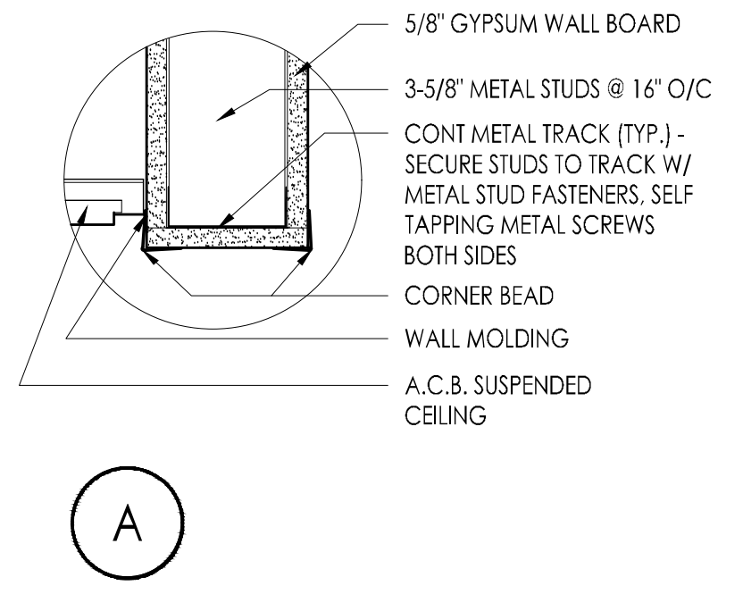
1. SEE HVAC, PLUMBING AND ELECTRICAL DRAWINGS FOR TYPE, SIZE AND ADDITIONAL INFORMATION.
2. ALL SPRINKLER HEADS, DIFFUSERS AND LIGHTS TO BE CENTERED IN THE GWB OR ACB CEILING UNLESS NOTED OTHERWISE
3. GENERAL, HVAC, PLUMBING AND ELECTRICAL CONTRACTORS TO COORDINATE LOCATION OF SPRINKLER HEADS DIFFUSERS AND LIGHTS.
4. SEE ROOM FINISH SCHEDULE FOR CEILING HEIGHTS
5. A.F.F. = ABOVE FINISH FLOOR (MAIN DATUM ELEVATION)
6. SEE INTERIOR FINISH LEGEND ON SHEET A701


AT ALL HANGER WIRE LOCATIONS, CONNECT HANGER WIRES TO METAL ROOF DECK WITH 2" SELF-TAPPING LAG SCREWS WITH EYE-LET UNESS SUPERSEDED BY SHOP DRAWING DESIGN - ANCHORS TO COMPLY WITH ASCE 7-10.
3/8" GAP AT PERIMETER EDGE TO ACCOMMODATE MOVEMENT - 3/8" MINIMUM GRID BEARING ON SUPPORT ANGLE
STABILIZER BARS AT ALL PERIMETER EDGES - BY CEILING SYSTEM MANUFACTURER
CEILING HGT. REF PLANS
ACB CEILING
MAIN RUNNER
7/8" SUPPORT ANGLE - AT GYP. BD. / MTL. STUD WALL, SECURE USING #8 x 1-1/4" WAFER HEAD SELF DRILL SHEET METAL SCREW UNLESS SUPERSEDED BY SHOP DRAWING DESIGN - AT CMU WALLS, SECURE ANGLE USING POWER ACTUATED FASTENERS UNLESS SUPERSEDED BY SHOP DRAWING DESIGN
SELF-BRACING WALL

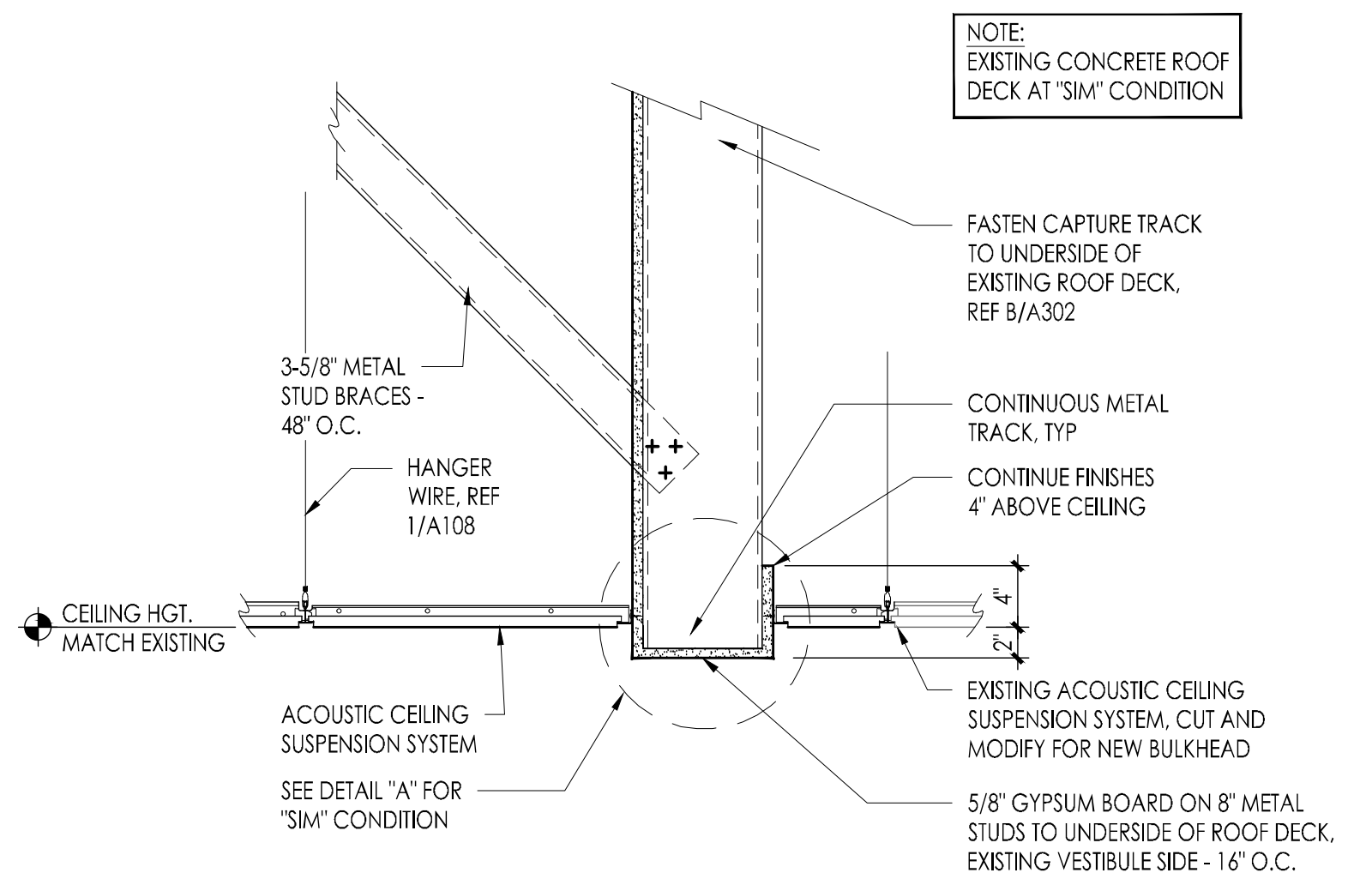
1 ACB SEISMIC BRACING DETAIL
Scale: 1"=1'-0"


NOTE:
EXISTING CONCRETE ROOF DECK AT "SIM" CONDITION
FASTEN CAPTURE TRACK TO UNDERSIDE OF ROOF DECK, REF B/A302
ALIGN GYP BOARD WITH FACE OF CMU ON EITHER SIDE, TYP
HANGER WIRE, REF 1/A108
3-5/8" METAL STUD BRACES - 48" O.C.
CONTINUE FINISHES 4" ABOVE CEILING
2"
4"
CEILING HGT. REF PLANS
ACOUSTIC CEILING SUSPENSION SYSTEM
SEE DETAIL "A"
ACOUSTIC CEILING SUSPENSION SYSTEM
5/8" GYPSUM BOARD ON 3-5/8" METAL STUDS TO UNDERSIDE OF ROOF DECK, CORRIDOR SIDE - 16" O.C.

2 CORRIDOR BULKHEAD DETAIL
Scale: 1"=1'-0"

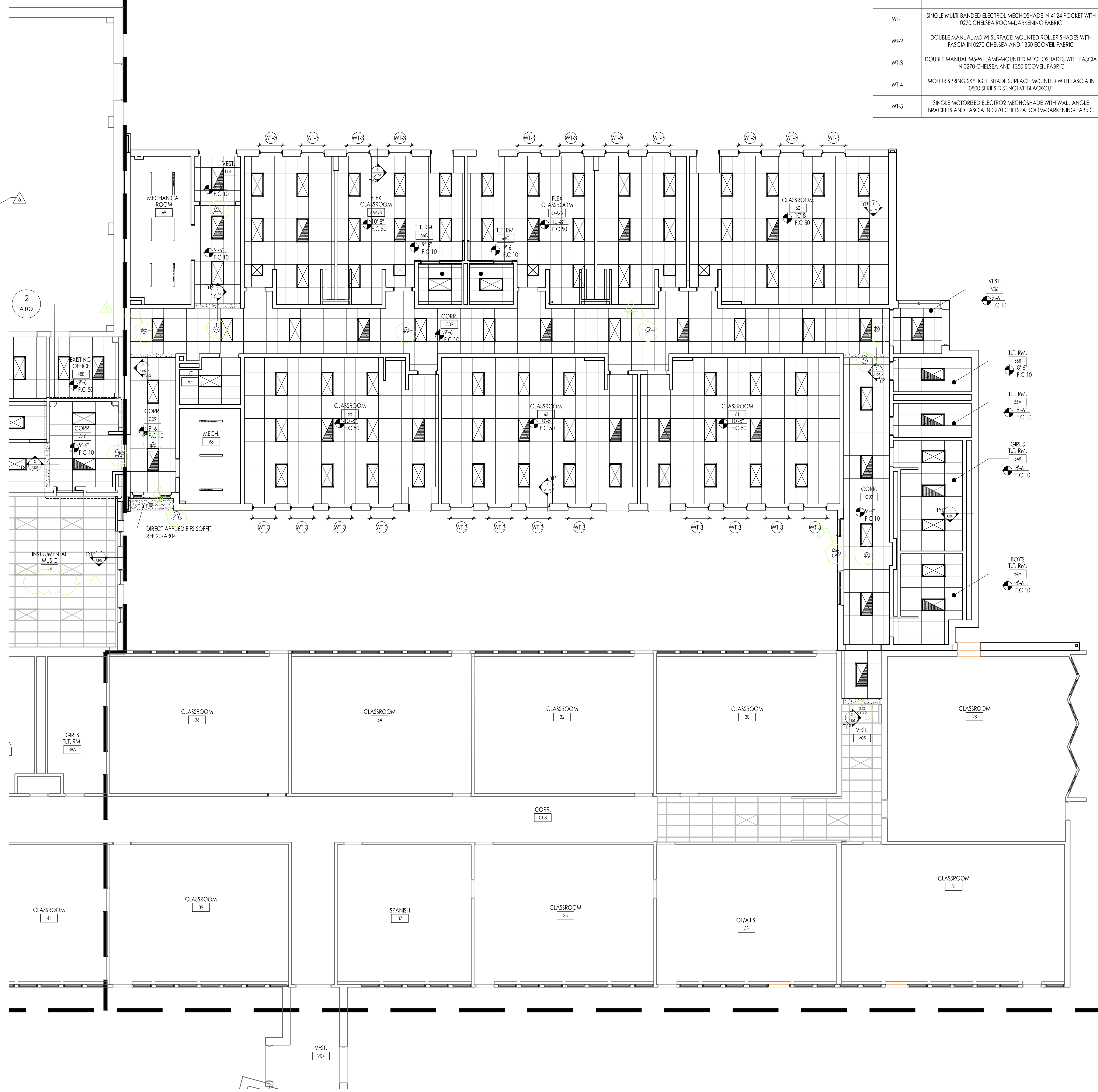

5/8" GYPSUM WALL BOARD
3-5/8" METAL STUDS @ 16" O/C
CONT METAL TRACK (TYP.) - SECURE STUDS TO TRACK W/ METAL STUD FASTENERS, SELF TAPPING METAL SCREWS BOTH SIDES
CORNER BEAD
WALL MOLDING
A.C.B. SUSPENDED CEILING

A


NOTE:
EXISTING CONCRETE ROOF DECK AT "SIM" CONDITION
FASTEN CAPTURE TRACK TO UNDERSIDE OF EXISTING ROOF DECK, REF B/A302
3-5/8" METAL STUD BRACES - 48" O.C.
HANGER WIRE, REF 1/A108
CONTINUOUS METAL TRACK, TYP
CONTINUE FINISHES 4" ABOVE CEILING
CEILING HGT. MATCH EXISTING
ACOUSTIC CEILING SUSPENSION SYSTEM
SEE DETAIL "A" FOR "SIM" CONDITION
EXISTING ACOUSTIC CEILING SUSPENSION SYSTEM, CUT AND MODIFY FOR NEW BULKHEAD
5/8" GYPSUM BOARD ON 8" METAL STUDS TO UNDERSIDE OF ROOF DECK, EXISTING VESTIBULE SIDE - 16" O.C.
2"
4"

3 EXISTING CORRIDOR BULKHEAD DETAIL
Scale: 1"=1'-0"

ACOUSTICAL FIXTURE LOCATION		
CEILING TYPES	X-AXIS	Y-AXIS
A	3'-6"	4'-10"
B	2'-11"	2'-7"
C	1'-0"	2'-0"
D	3'-6"	1'-0"
E	4'-0"	10"
F	4'-0"	10"
G	2'-4"	1'-0"
H	2'-11"	2'-7"
J	3'-6"	4'-10"
K	1'-0"	4'-2"
AA	1'-4"	4'-0"
BB	2'-10"	1'-3"
CC	2'-10"	1'-3"
DD	1'-4"	3'-8"



MATCH LINE - BLOCK 'B'

MATCH LINE - BLOCK 'C'

1 REFLECTED CEILING PLAN - BLOCK 'B'
1/8" = 1'-0"

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

2/12/26
Architect　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
FVHDPC.COM

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number	5516D
Project Date	10.10.2025
Checked By	WDH
Drawn By	MJS
Scale	AS NOTED

Drawing Name
REFLECTED CEILING PLANS

BLOCK 'B'

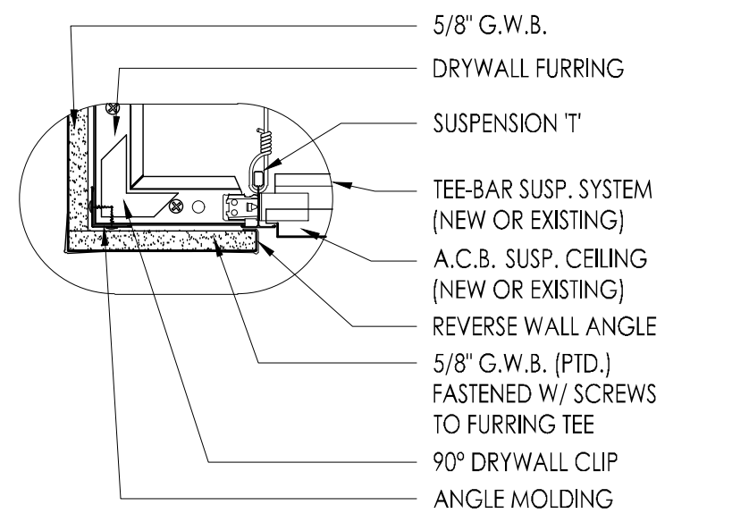
Revisions

No.	Date	Description
1	10.10.25	NJ DCA SUBMISSION
2	12.10.25	NJ DCA REVISIONS
3	12.10.25	DESIGN REVISIONS
4	01.02.26	NJ DCA REVISIONS
5	01.02.26	DESIGN REVISIONS
6	01.23.26	NJ DCA REVISIONS
7	03.24.26	ADDENDUM NO. 2

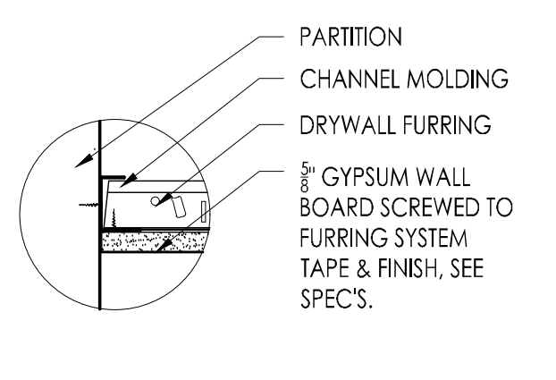
Drawing Number
A109

ACOUSTICAL FIXTURE LOCATION		
CEILING TYPES	X-AXIS	Y-AXIS
L	1'-1"	5'-8"
M	3'-4"	5'-2"
N	2'-1"	2'-2"
O	3'-2"	2'-0"
P	3'-0"	5'-6"
Q	1'-3"	6'-4"
R	4'-8"	8'-11"
S	3'-4"	9'-5"
EE	2'-0"	7'-9"
FF	2'-3"	3'-2"
GG	1'-10"	3'-4"
HH	2'-10"	8'-6"

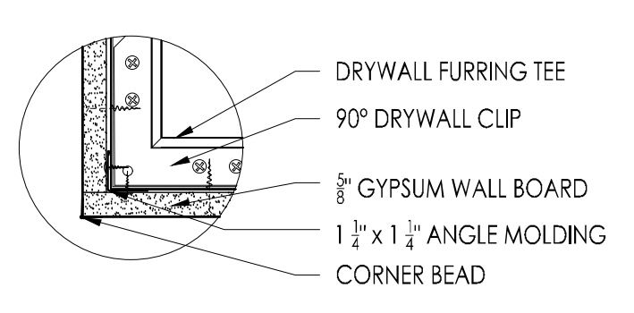
NOTE:
X & Y AXIS COORDINATES ARE TO THE CL OF TILE
Z-AXIS COORDINATE IS TO THE BOTTOM OF THE TILE.
REFERENCE Z-AXIS COORDINATE FOR EACH TILE ON DETAIL 3/A109


5/8" G.W.B.
DRYWALL FURRING
SUSPENSION 'T'
TEE-BAR SUSP. SYSTEM (NEW OR EXISTING)
A.C.B. SUSP. CEILING (NEW OR EXISTING)
REVERSE WALL ANGLE
5/8" G.W.B. (PTD.) FASTENED W/ SCREWS TO FURRING TEE
90° DRYWALL CLIP
ANGLE MOLDING

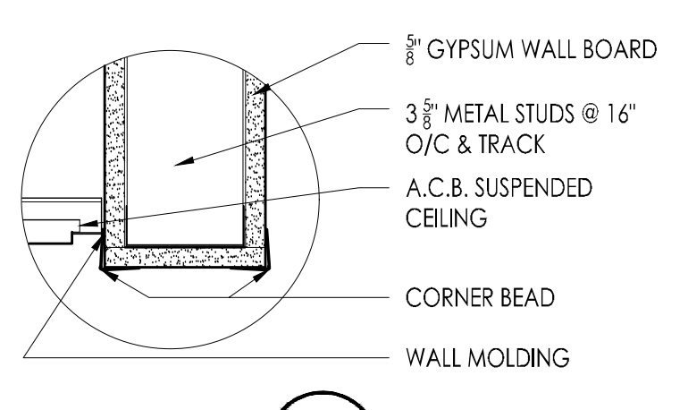
A


PARTITION
CHANNEL MOLDING
DRYWALL FURRING
5/8" GYPSUM WALL BOARD SCREWED TO FURRING SYSTEM TAPE & FINISH, SEE SPEC'S.

C



E



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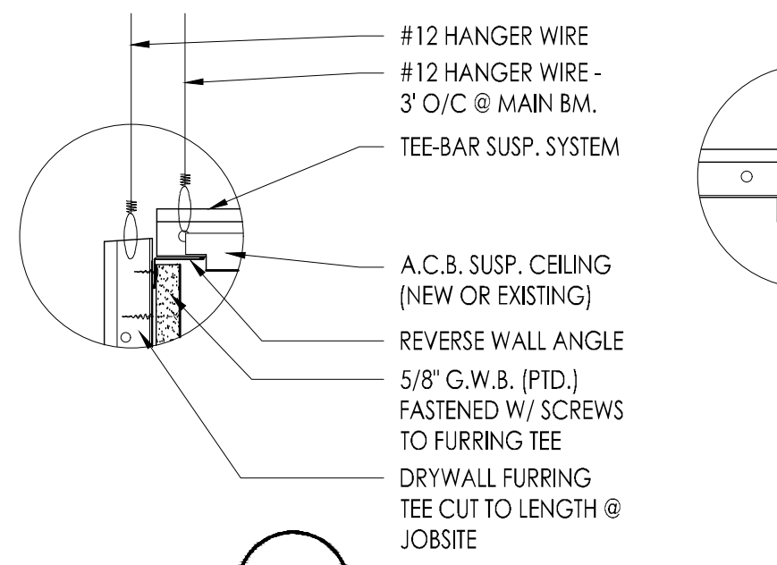
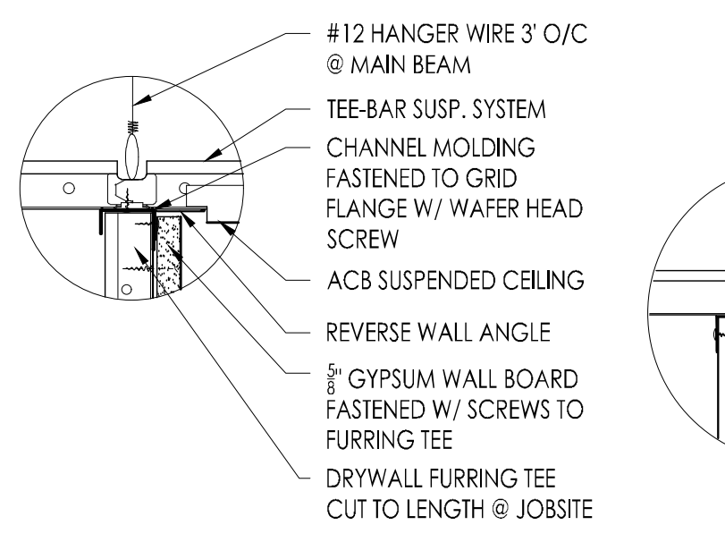
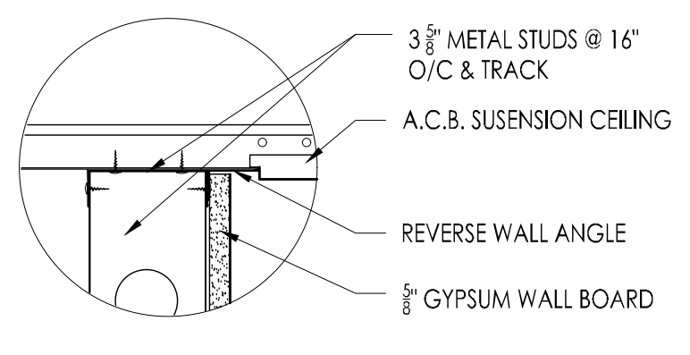

#12 HANGER WIRE
#12 HANGER WIRE - 3' O/C @ MAIN BM.
TEE-BAR SUSP. SYSTEM
A.C.B. SUSP. CEILING (NEW OR EXISTING)
REVERSE WALL ANGLE
5/8" G.W.B. (PTD.) FASTENED W/ SCREWS TO FURRING TEE
DRYWALL FURRING TEE CUT TO LENGTH @ JOBSITE

B


#12 HANGER WIRE 3' O/C @ MAIN BEAM
TEE-BAR SUSP. SYSTEM
CHANNEL MOLDING FASTENED TO GRID FLANGE W/ WAFER HEAD SCREW
ACB SUSPENDED CEILING
REVERSE WALL ANGLE
5/8" GYPSUM WALL BOARD FASTENED W/ SCREWS TO FURRING TEE
DRYWALL FURRING TEE CUT TO LENGTH @ JOBSITE

D



F

ACOUSTICAL FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
BFL-1	WING CEILING BAFFLE	ACOUFELT	LENGTH 1	COLOR 1
BFL-2	WING CEILING BAFFLE	ACOUFELT	LENGTH 1	COLOR 2
BFL-3	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 1
BFL-4	WING CEILING BAFFLE	ACOUFELT	LENGTH 2	COLOR 2
BFL-5	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 1
BFL-6	LINEAR CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	COLOR 2
DCS-1	HEXAGON CEILING BAFFLE	ACOUFELT	36"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION
DCS-2	HEXAGON CEILING BAFFLE	ACOUFELT	24"	SEE ELEVATION FOR HEIGHTS AND PLAN FOR ORIENTATION

SPECIALTY LIGHTING FIXTURE SCHEDULE				
CEILING TYPES		MANUFACTURER	SIZE	REMARKS
LT-1	LOOPITA DIRECT	CORONET	36" WIDE	-
LT-2	LOOPITA DIRECT	CORONET	18" WIDE	-
LT-3	LOOPITA CURVE	CORONET	12' LONG SEGMENTS	-
LT-4	TRUSS LED CEILING BAFFLE	ACOUFELT	VARYING LENGTHS	-
LT-5	HIGH PERFORMANCE 2" APERTURE CIRCLE	FINELITE	4 FOOT NOMINAL SIZE	-

NOTES:

1. SEE HVAC, PLUMBING AND ELECTRICAL DRAWINGS FOR TYPE, SIZE AND ADDITIONAL INFORMATION.
2. ALL SPRINKLER HEADS, DIFFUSERS AND LIGHTS TO BE CENTERED IN THE GWB OR ACB CEILING UNLESS NOTED OTHERWISE
3. GENERAL, HVAC, PLUMBING AND ELECTRICAL CONTRACTORS TO COORDINATE LOCATION OF SPRINKLER HEADS DIFFUSERS AND LIGHTS.
4. SEE ROOM FINISH SCHEDULE FOR CEILING HEIGHTS
5. A.F.F. = ABOVE FINISH FLOOR (MAIN DATUM ELEVATION)
6. SEE INTERIOR FINISH LEGEND ON SHEET A701

MECHO SHADE EQUIPMENT KEY (X)	
MARK	REMARKS
WT-1	SINGLE MULTI-BANDED ELECTROL MECHOSHADE IN 4124 POCKET WITH 0270 CHELSEA ROOM-DARKENING FABRIC
WT-2	DOUBLE MANUAL M5-WI SURFACE-MOUNTED ROLLER SHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-3	DOUBLE MANUAL M5-WI JAMB-MOUNTED MECHOSHADES WITH FASCIA IN 0270 CHELSEA AND 1350 ECOVEIL FABRIC
WT-4	MOTOR SPRING SKYLIGHT SHADE SURFACE MOUNTED WITH FASCIA IN 0800 SERIES DISTINCTIVE BLACKOUT
WT-5	SINGLE MOTORIZED ELECTRO2 MECHOSHADE WITH WALL ANGLE BRACKETS AND FASCIA IN 0270 CHELSEA ROOM-DARKENING FABRIC

REFLECTED CEILING PLAN LEGEND

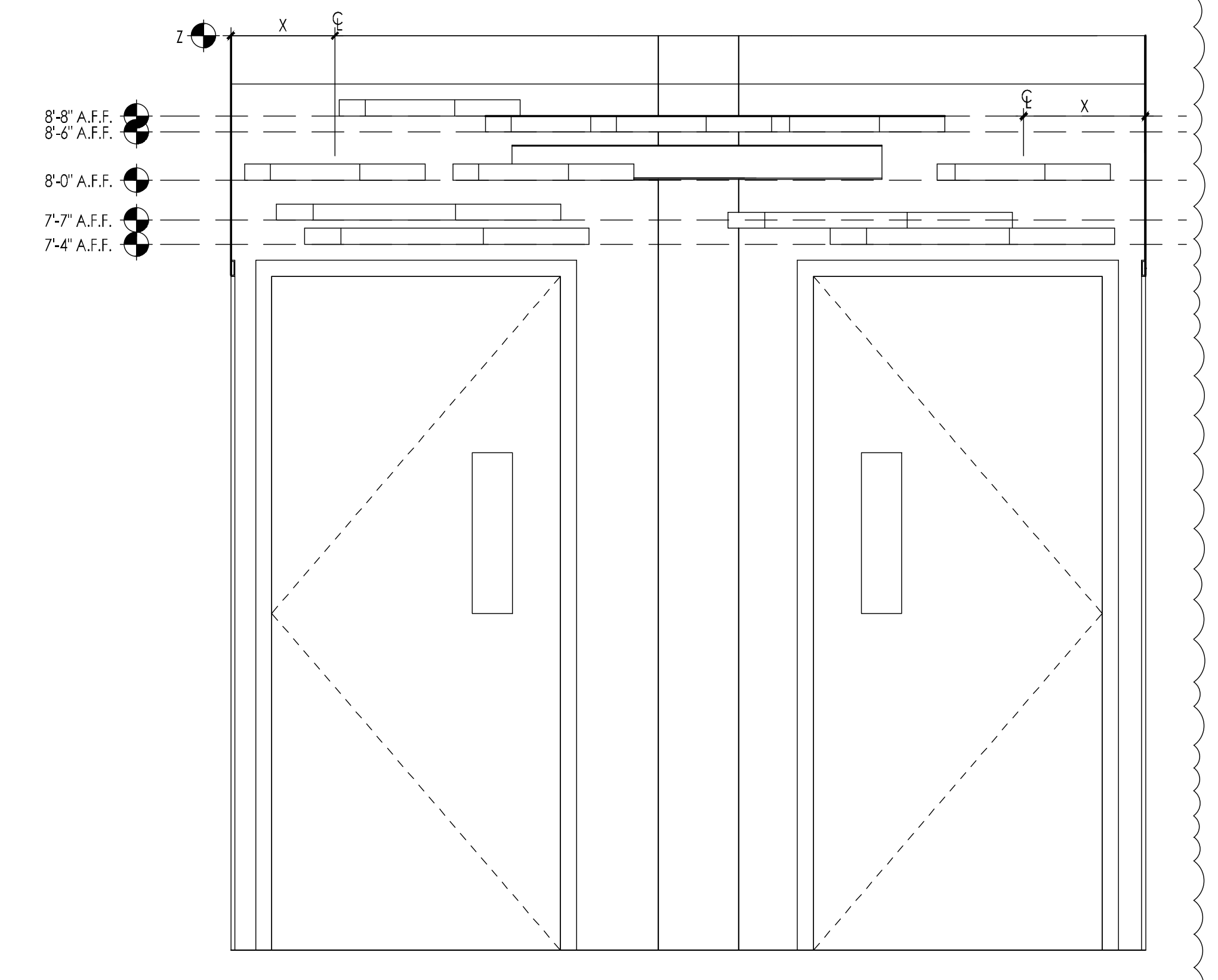
⊕	ELEVATION DATUM - A.F.F.
▦	ACB-1 -2'x4' ACOUSTICAL CEILING BOARD - SEE FINISH SCHEDULE FOR LOCATION
▦	ACB-3 - 2'x4' ACOUSTICAL CEILING SOUND BOARD - SEE FINISH SCHEDULE FOR LOCATION
▦	AACB - 2'x4' ACRYLIC ACOUSTICAL CEILING BOARD -SEE FINISH SCHEDULE FOR LOCATION
▒	PAINTED GYPSUM BOARD SOFFIT
⊠	SUPPLY / RETURN / EXHAUST DIFFUSER (SEE HVAC DRAWINGS)
⊠ ○	LIGHTS (SEE ELECTRICAL DRAWINGS)

SAFETY & EMERGENCY LIGHTS (SEE ELECTRICAL DRAWINGS)

EX	EXIT SIGN W/ BATTERY BACK-UP
EX	DIRECTIONAL EXIT SIGN W/ BATTERY BACK-UP
EM ● ⊠	FIXTURES ON EMERGENCY CIRCUIT

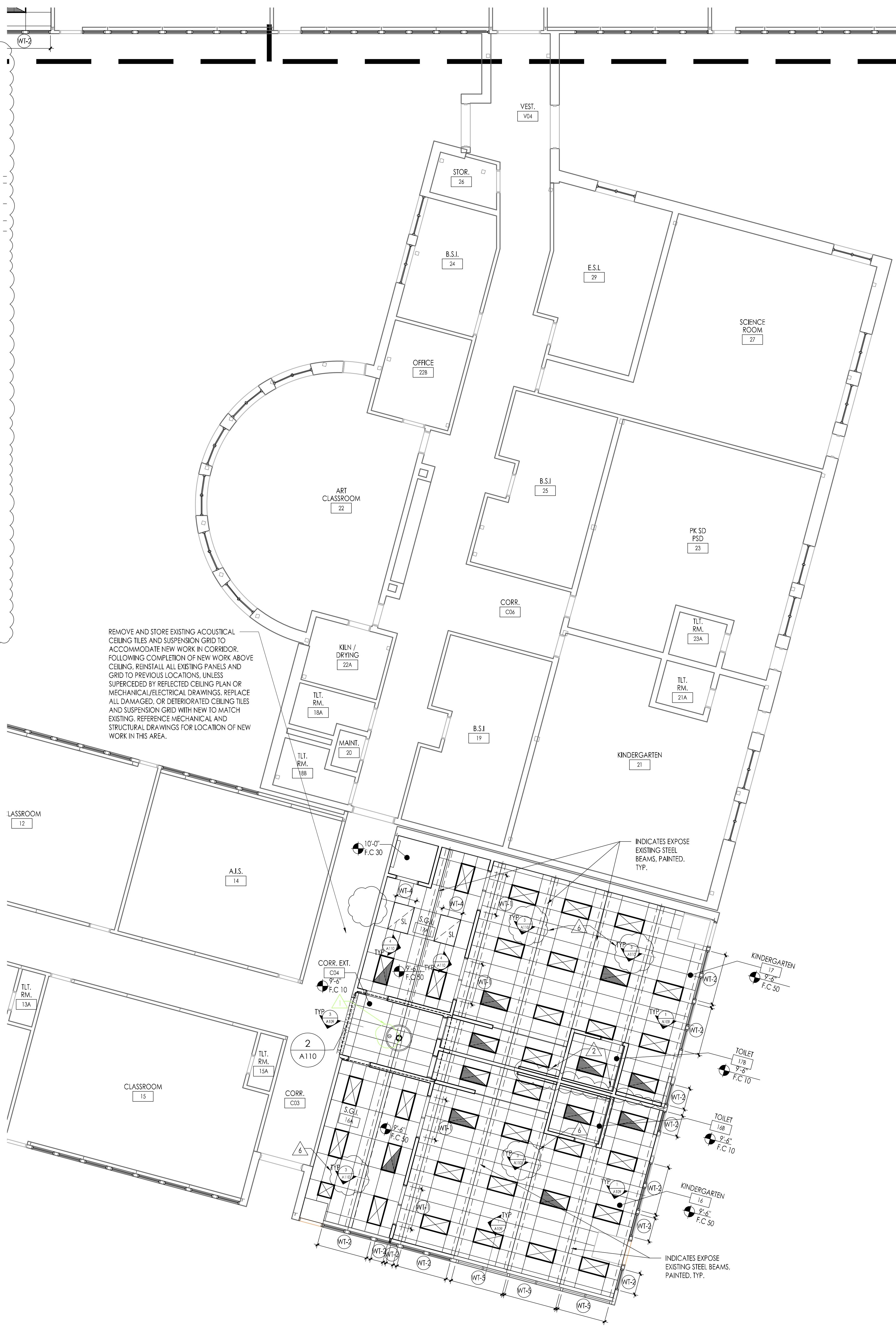
MATCH LINE - BLOCK 'B'

MATCH LINE - BLOCK 'C'



3 CORRIDOR (C04) FIXTURE HEIGHTS

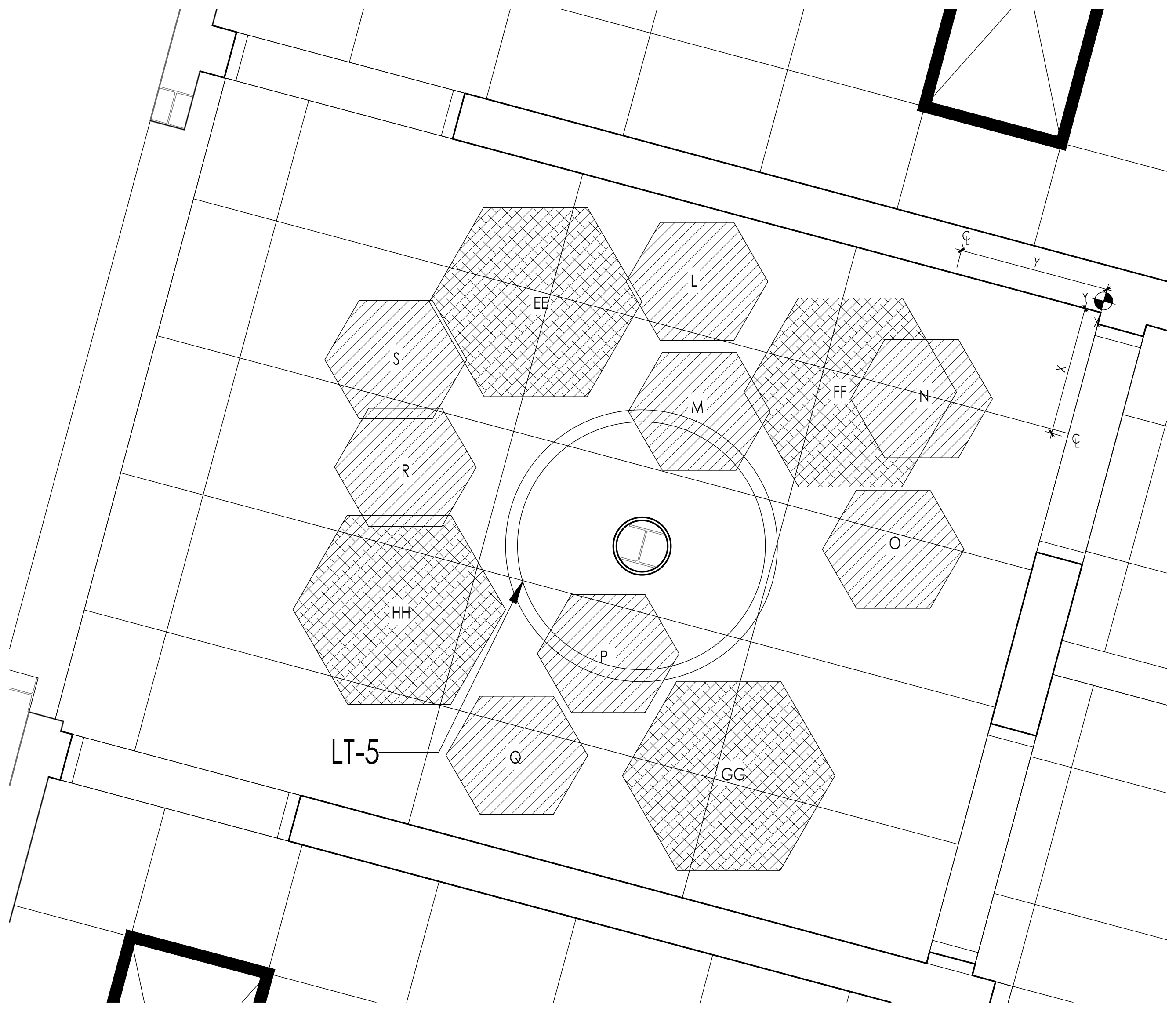
1/8" = 1'-0"



REMOVE AND STORE EXISTING ACOUSTICAL CEILING TILES AND SUSPENSION GRID TO ACCOMMODATE NEW WORK IN CORRIDOR. FOLLOWING COMPLETION OF NEW WORK ABOVE CEILING, REINSTALL ALL EXISTING PANELS AND GRID TO PREVIOUS LOCATIONS, UNLESS SUPERCEDED BY REFLECTED CEILING PLAN OR MECHANICAL/ELECTRICAL DRAWINGS. REPLACE ALL DAMAGED, OR DETERIORATED CEILING TILES AND SUSPENSION GRID WITH NEW TO MATCH EXISTING. REFERENCE MECHANICAL AND STRUCTURAL DRAWINGS FOR LOCATION OF NEW WORK IN THIS AREA.

1 REFLECTED CEILING PLAN - BLOCK 'C'

1/8" = 1'-0"

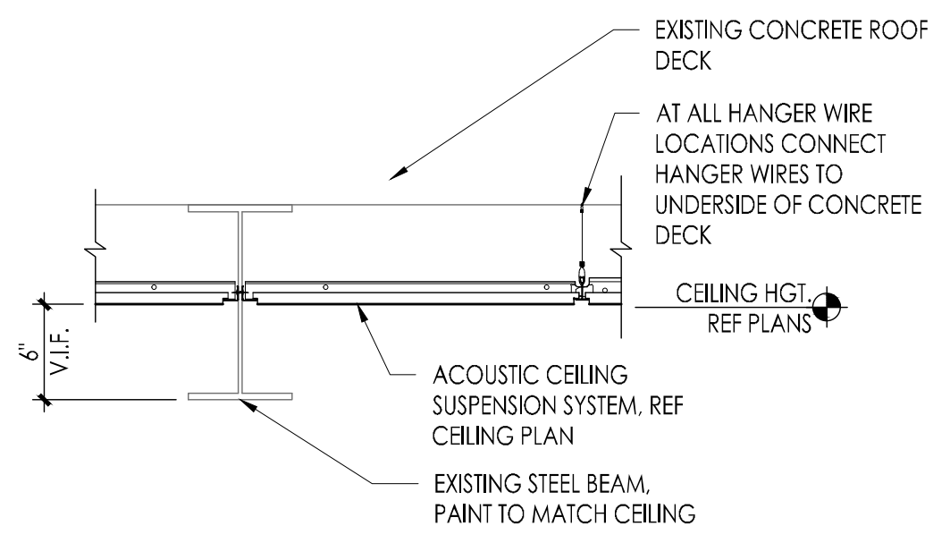


2 ENLARGED CORR. EXT. C04 REFLECTED CEILING PLAN

3/4" = 1'-0"

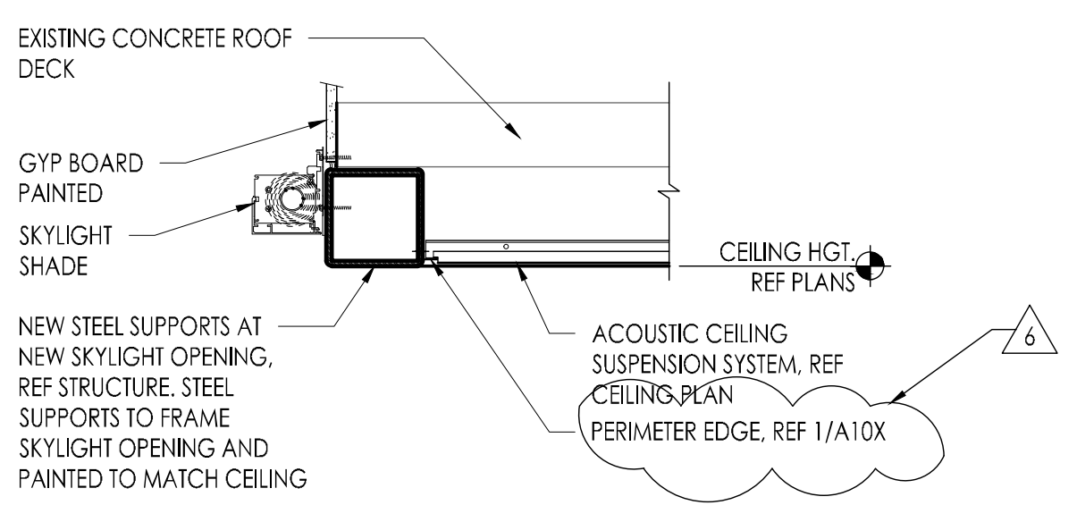
▨	DCS-1
▨	DCS-2

ACOUSTICAL FIXTURE TYPE:
SEE ACOUSTICAL FIXTURE SCHEDULE ON SHEET FOR DETAILS


EXISTING CONCRETE ROOF DECK
AT ALL HANGER WIRE LOCATIONS CONNECT HANGER WIRES TO UNDERSIDE OF CONCRETE DECK
CEILING HGT. REF PLANS
6" V.I.F.
ACOUSTIC CEILING SUSPENSION SYSTEM, REF CEILING PLAN
EXISTING STEEL BEAM, PAINT TO MATCH CEILING

3 CEILING AT EXISTING STEEL BEAM

Scale: 1"=1'-0"


EXISTING CONCRETE ROOF DECK
GYP BOARD PAINTED
SKYLIGHT SHADE
NEW STEEL SUPPORTS AT NEW SKYLIGHT OPENING, REF STRUCTURE. STEEL SUPPORTS TO FRAME SKYLIGHT OPENING AND PAINTED TO MATCH CEILING
CEILING HGT. REF PLANS
ACOUSTIC CEILING SUSPENSION SYSTEM, REF CEILING PLAN
PERIMETER EDGE, REF 1/A10X

4 CEILING AT SKYLIGHT

Scale: 1"=1'-0"

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
2/12/26
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
FVHDPC.COM

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
MJS

Scale
AS NOTED

Drawing Name
REFLECTED CEILING PLANS

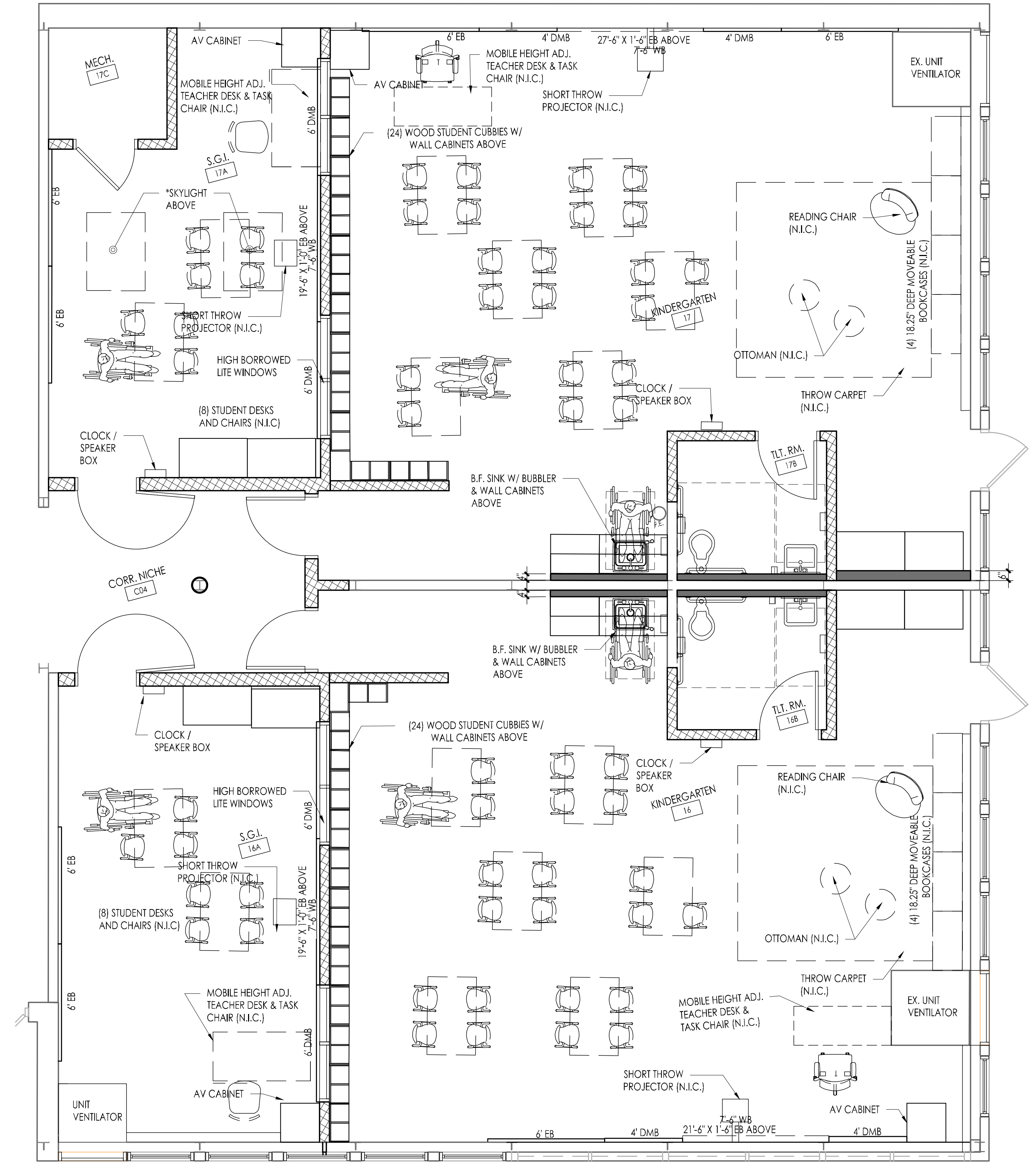
BLOCK 'C'

Revisions		
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

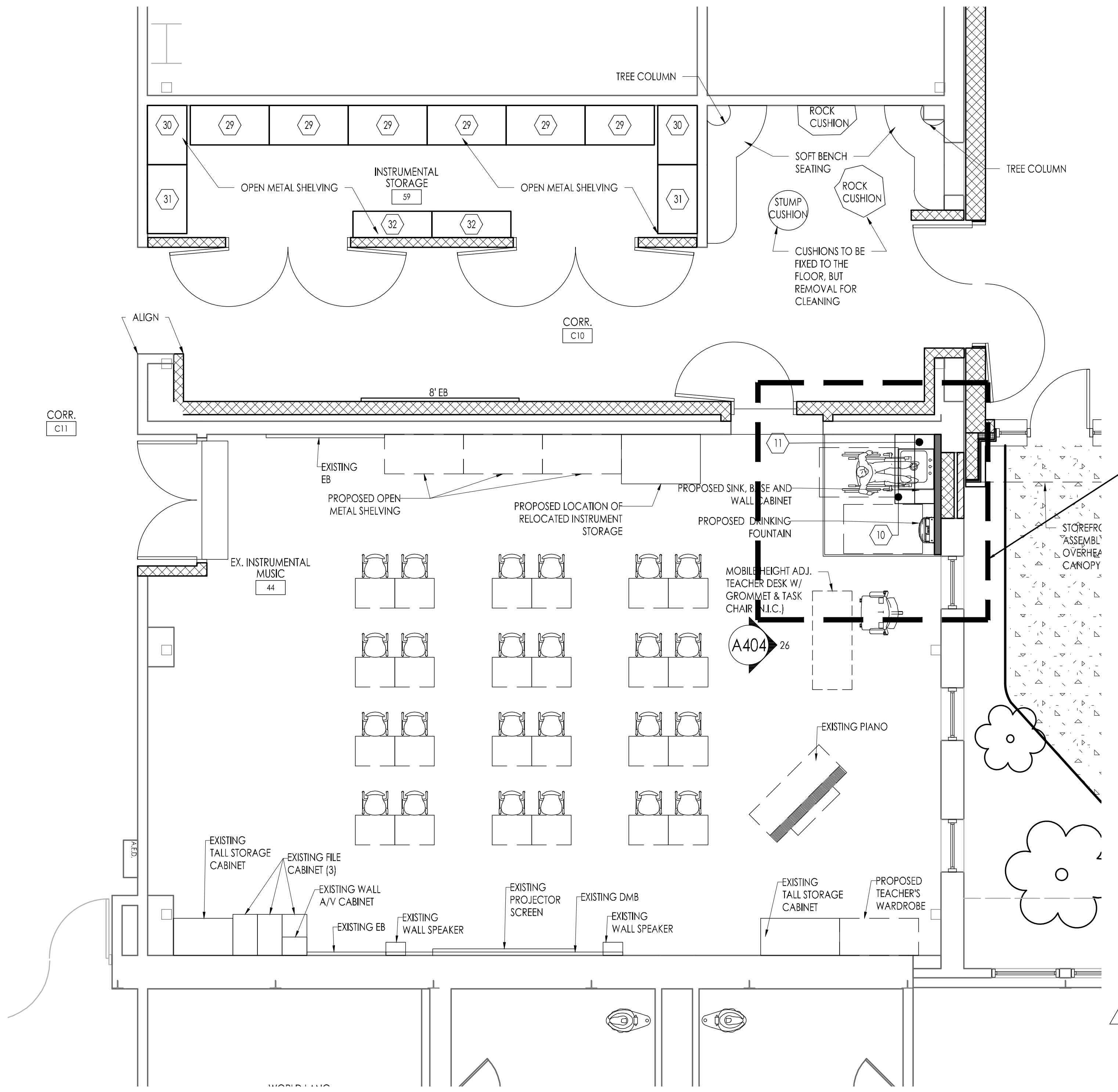
Drawing Number
A110

GENERAL ROOM FINISH NOTES

A. SEE SPECIFICATION FOR ADDITIONAL INFORMATION ON MATERIALS / MANUFACTURER / PERFORMANCE AND WARRANTY INFORMATION .
B. WITHIN THE EXISTING BUILDING, AT ALL AREAS OF NEW CONSTRUCTION ADJACENT TO EXISTING, NEW CONSTRUCTION SHALL BE FINISHED TO MATCH EXISTING ADJACENT CONSTRUCTION INCLUDING BRICK, TILE, PLASTER BASE, ETC.
C. AT ALL AREA OF EXISTING SURFACES BEING PAINTED, THE GENERAL CONSTRUCTION WORK CONTRACTOR SHALL REMOVE PRIOR TO PAINTING AND RE-INSTALL AFTER PAINTING ALL ELECTRICAL DEVICE (SWITCH ,OUTLETS,ETC) & COVER PLATES TO REMAIN.
D. IN ALL SPACES (EXISTING AND RE-CONFIGURED) WHERE EXISTING FLOORING SHALL REMAIN, THE GENERAL CONSTRUCTION WORK CONTRACTOR (GC) SHALL PROVIDE, INSTALLED MAINTAIN TEMPORARY PROTECTION OF EXISTING FLOORING FOR THE FULL DURATION OF WORK IN THAT LOCATION, TEMPORARY PROTECTION SHALL CONSIST OF SHEETS OF 1/2 " PLYWOOD TIGHTLY BUTTED TOGETHER AND TAPED, (GC) SHALL REMOVE ALL TEMPORARY PROTECTION BY THE DATE OF SUBSTANTIAL COMPLETION.
E. PATCH AND REPAIR SURROUNDING WALL SURFACES THAT IS DAMAGE DURING DEMOLITION OR CONSTRUCTION TO THEIR FORMER CONDITION, UNLESS NOTED OTHERWISE PER ROOM SCHEDULED.
F. REFER TO FINISH LEGEND ON SHEET A701 FOR ADDITIONAL INFORMATION ON GENERAL FINISHES.
G. REFER TO ALL DRAWINGS (INCLUDING PLANS, ELEVATIONS AND DETAILS) FOR COMPLETE INTERIORS INFORMATION.
H. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING PRODUCT LEAD TIMES TO ENSURE DELIVERY THAT MEETS THE PROJECT SCHEDULE.
I. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL SITE CONDITIONS AND CONFIRM QUANTITIES PRIOR TO ORDERING PRODUCTS. IN THE EVENT OF CONTRADICTORY INFORMATION CONTACT THE INTERIOR DESIGNER/ARCHITECT FOR CLARIFICATION PRIOR TO ORDERING.
J. ALL MATERIALS SHALL BE INSTALLED USING MANUFACTURERS RECOMMENDED INSTALLATION METHODS, ACCESSORIES AND ADHESIVES.
K. WARRANTY INFORMATION AND INSTRUCTIONS OF MAINTENANCE ON ALL FINISH MATERIALS SHALL BE PROVIDED AND INCLUDED IN THE CLOSEOUT WARRANTY AND MAINTENANCE MANUAL.
L. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SAMPLES OF ALL FINISHES SPECIFIED TO INTERIOR DESIGNER/ARCHITECT FOR APPROVAL PRIOR TO ORDERING MATERIAL.
M. ALL SUBSTRATE SURFACES ARE TO BE PROPERLY PREPARED TO RECEIVE FINISH MATERIALS. SUBCONTRACTOR IS NOT TO APPLY FINISHES UNTIL SUBSTRATE IS PREPARED PER MANUFACTURES WRITTEN INSTRUCTIONS FOR ALL INSTALLATIONS OR APPLICATIONS.


MECH.
AV CABINET
MOBILE HEIGHT ADJ. TEACHER DESK & TASK CHAIR (N.I.C.)
S.G.I.
*SKYLIGHT ABOVE
SHORT THROW PROJECTOR (N.I.C.)
HIGH BORROWED LITE WINDOWS
(8) STUDENT DESKS AND CHAIRS (N.I.C.)
CLOCK / SPEAKER BOX
(24) WOOD STUDENT CUBBIES W/ WALL CABINETS ABOVE
KINDERGARTEN
READING CHAIR (N.I.C.)
(4) 18.25" DEEP MOVEABLE BOOKCASES (N.I.C.)
OTTOMAN (N.I.C.)
THROW CARPET (N.I.C.)
EX. UNIT VENTILATOR
B.F. SINK W/ BUBBLER & WALL CABINETS ABOVE
TLT. RM.
CORR. NICHE
UNIT VENTILATOR
6' EB
4' DMB

1 SGI & KINDERGARTEN ROOM LAYOUTS
1/4" = 1'-0"


TREE COLUMN
OPEN METAL SHELVING
INSTRUMENTAL STORAGE
ROCK CUSHION
SOFT BENCH SEATING
STUMP CUSHION
CUSHIONS TO BE FIXED TO THE FLOOR, BUT REMOVAL FOR CLEANING
CORR.
C10
C11
EX. INSTRUMENTAL MUSIC 44
EXISTING EB
PROPOSED OPEN METAL SHELVING
PROPOSED LOCATION OF RELOCATED INSTRUMENT STORAGE
PROPOSED SINK, BASE AND WALL CABINET
PROPOSED DRINKING FOUNTAIN
MOBILE HEIGHT ADJ. TEACHER DESK W/ GROMMET & TASK CHAIR (N.I.C.)
A404
EXISTING PIANO
EXISTING TALL STORAGE CABINET
EXISTING FILE CABINET (3)
EXISTING WALL A/V CABINET
EXISTING EB
EXISTING WALL SPEAKER
EXISTING PROJECTOR SCREEN
EXISTING DMB
PROPOSED TEACHER'S WARDROBE
8' EB

SEE ENLARGE PLAN DETAIL #9 ON SHEET FOR BASE BID WORK

2 INSTRUMENTAL MUSIC 44 LAYOUT
1/4" = 1'-0"

ABBREVIATIONS

ACB	- ACOUSTIC CEILING BOARD
AL	- ALUMINUM
BFL	- CEILING BAFFLE
CG	- CORNER GUARD
CEM	- CARPET ENTRY MAT
CEP	- CMU EPOXY PAINTED
CP	- CMU PAINTED
CPT	- CARPET/CARPET TILE
DCS	- DECORATIVE CEILING SYSTEM
EXP	- EXPOSED
ETR	- EXISTING TO REMAIN
ETR-P	- EXISTING TO REMAIN, PAINTED
EXP-P	- EXPOSED PAINTED
FRP	- FIBER REINFORCED PLASTIC
GCB	- GYPSUM CEILING BOARD
GP	- GYPSUM PAINTED
LVT	- LUXURY VINYL TILE
QZ	- QUARTZ TILE
RUB	- RUBBER BASE
RSF	- RESILIENT SHEET FLOORING
RST	- RUBBER STAIR TREADS
RTF	- RESILIENT TILE FLOORING
RWS	- ROLLER WINDOW SHADE
SEAL-C	- SEALED CONCRETE FLOOR
SSM	- SOLID SURFACE MATERIAL
VCT	- VINYL COMPOSITE TILE
SST	- STAINLESS STEEL
TI	- TILE
WC	- WALL COVERING
WD	- WOOD

ROOM FINISH SCHEDULE

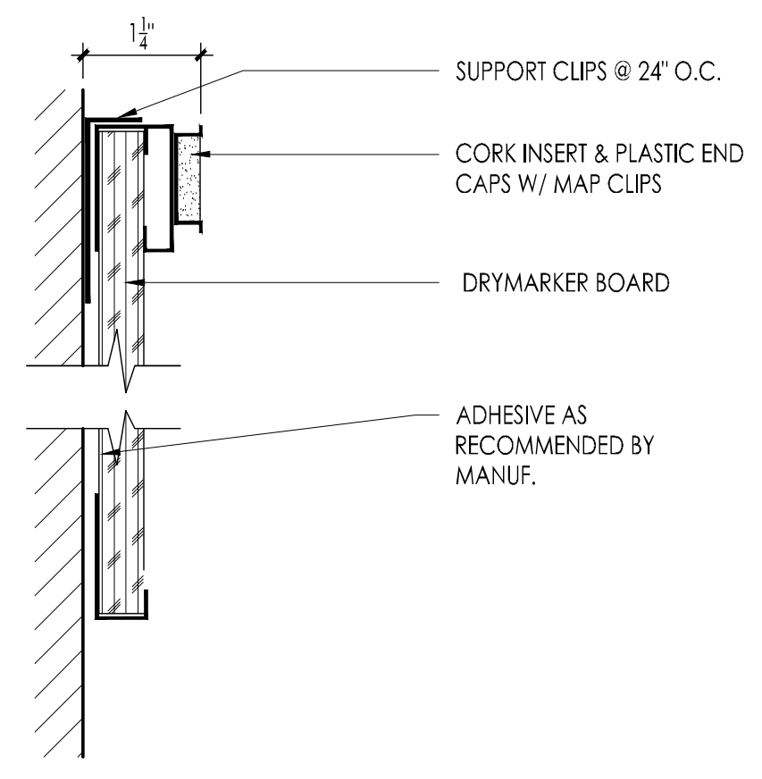
NUMBER	ROOM NAME	FLOOR	BASE		WAINSCOT		WALL FINISH	CEILING		NOTES
			MAT.	HT.	MAT.	HT.		MAT.	HT.	
001	VEST.	CEM	RUB	4"	--	--	CP	ACB-1	9'-6"	--
16	KINDERGARTEN	LVT	RUB	4"	--	--	CP / GP	ACB-1	9'-6"	--
16A	S.G.I.	LVT	RUB	4"	--	--	CP / ETR-P	ACB-1	9'-6"	--
16B	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
17	KINDERGARTEN	LVT	RUB	4"	--	--	CP / GP	ACB-1	9'-6"	--
17A	S.G.I.	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
17B	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
17C	MECH.	VCT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
2B	READINGAREA	LVT	RUB	4"	--	--	GP	ACB-1	8'-0"	--
44	EX. INSTRUMENTAL MUSIC	CPT	RUB	4"	--	--	CP	ACB-1	ETR	--
45	STAFF RM.	LVT	RUB	4"	--	--	GP	ACB-1	8'-0"	--
47	CONFERENCE	LVT	RUB	4"	--	--	GP	ACB-1	8'-0"	--
49	LIBRARY OFFICE	LVT	RUB	4"	--	--	GP	ACB-1	8'-0"	--
52	CAFETERIA / MULTIPURPOSE ROOM	QZ	RUB	4"	--	--	CEP	ETR-P	12'-0" / 8'-0"	SEE ROOM FINISH SCHEDULE NOTES: #1 & 2
54A	BOYS'TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
54B	GIRLS' TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
55A	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
55B	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
58	VOCAL MUSIC	LVT	RUB	4"	--	--	CP	ACB-1	12'-0"	--
59	INSTRUMENTAL STORAGE	VCT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
61	CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
62	CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
63	CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
64A/B	FLEX CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
64C	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
65	CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
66A/B	FLEX CLASSROOM	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
66C	TLT. RM.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
67	J.C.	RSF	RSF	4"	FRP	5'-0"	CEP	AACB-1	9'-6"	--
68	MECH. / IDFROOM	SEAL-C	RUB	4"	--	--	CP	EXP-P	--	--
69	MECHANICAL ROOM	SEAL-C	RUB	4"	--	--	CP	EXP-P	--	--
71	WAITING AREA	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
72	OFFICE 1	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
73	OFFICE 2	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
74	OFFICE 3	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
75	OFFICE 4	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
76	WAITING AREA	CPT	RUB	4"	--	--	CP / GP	ACB-1	8'-0"	--
C04	CORR. NICHE	VCT	RUB	4"	--	--	CEP	ACB-1	9'-6"	SEE ROOM FINISH SCHEDULE NOTE: #1
C09	CORR.	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
C10	CORR.	LVT	RUB	4"	--	--	CP / GP	ACB-1	9'-6"	SEE ROOM FINISH SCHEDULE NOTE: #1
C11	CORR.	VCT	RUB	4"	--	--	CP	ACB-1	ETR	--
C13	CORR.	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
V05	VEST.	LVT	RUB	4"	--	--	CP	ACB-1	9'-6"	--
V06	VEST.	CEM	RUB	4"	--	--	CP	ACB-1	9'-6"	--
V07	VEST.	LVT	RUB	4"	--	--	CP	ACB-1	9' 4-1/2"	--

ROOM FINISH SCHEDULE NOTES

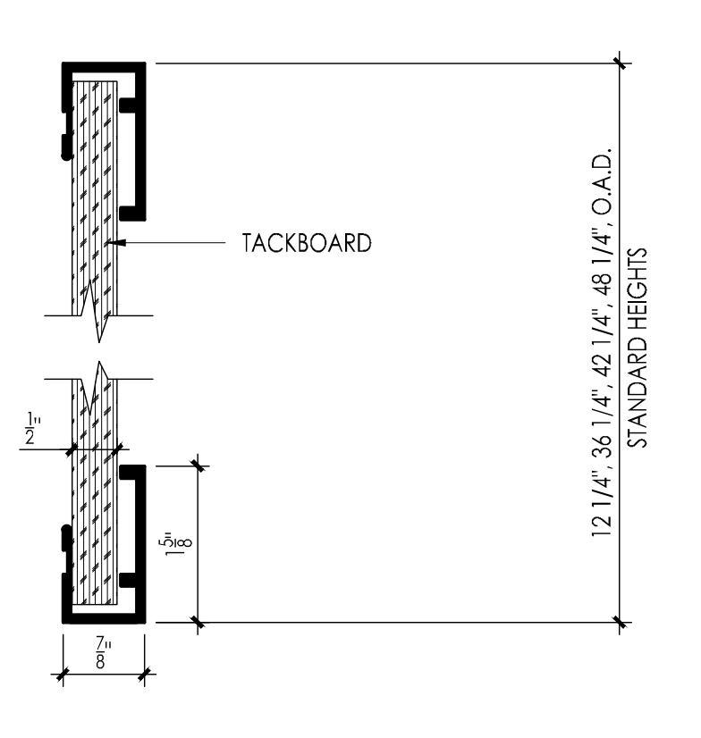
1. HEIGHT OF SOUND PANELS IN SPACE VARIES - SEE RCPS ON SHEETS A108-110 .
2. EXPOSED STRUCTURE (i.e. STEEL FRAMING, METAL DECK, ETC.) TO BE PAINTED- TBD.
3. REFER TO A701 FOR INTERIOR FINISH LEGEND

EQUIPMENT SCHEDULE X

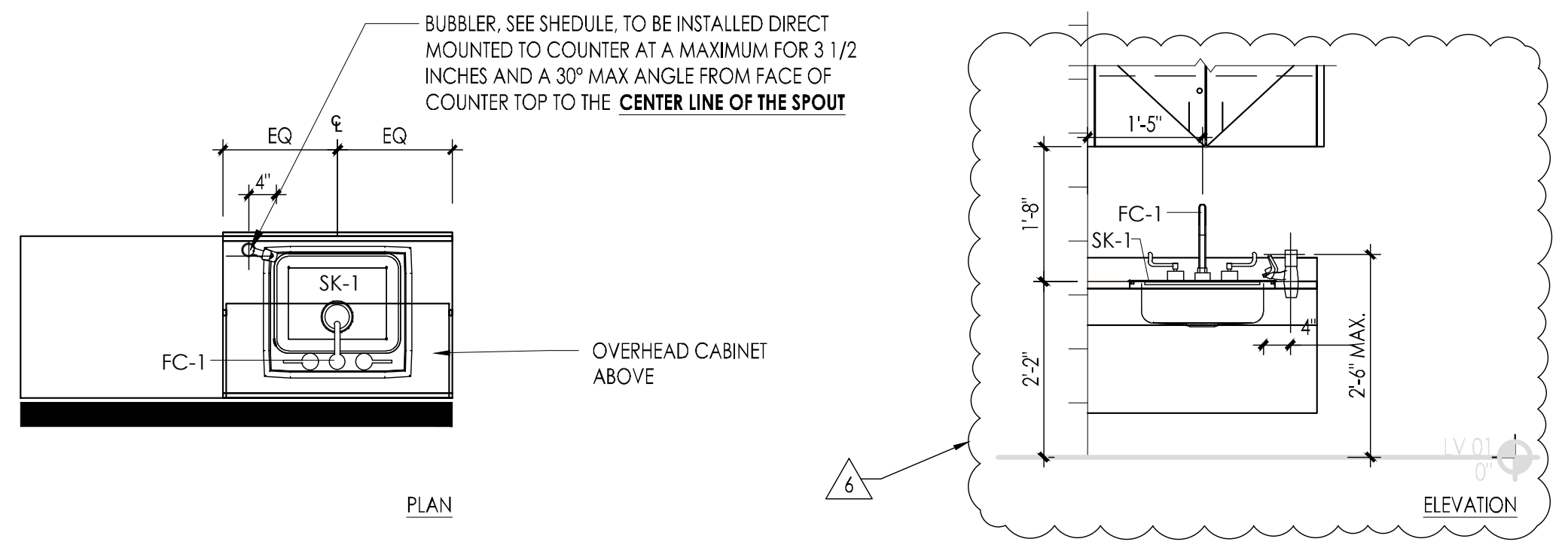
ITEM NO.	MANUFACTURER	CAT. NO.	DESCRIPTION	WIDTH	DEPTH	HEIGHT	REMARKS	FINISH
1	CAMPBELL RHEA	6954-A	TEACHER WARDROBE CABINET	42"	22 1/2"	84"	DBL DOOR. L-1 FIXED SHELF, 3 ADJUSTABLE SHELVES. R-1 HANGER ROD, 1 FIXED SHELF	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
2	CAMPBELL RHEA	5690	TALL CABINET	42"	22 1/2"	84"	DBL DOOR. 1 FIXED SHELF, 4 ADJUSTABLE SHELVES	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
3	CAMPBELL RHEA	7432	2 UNIT CUBBY	24"	12"	48"	2 HANGING HOOKS IN EACH LOCKER COMPARTMENT, FINISHED TOP	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
4	CAMPBELL RHEA	5420	UPPER CABINET	24"	12"	36"	SINGLE DOOR. 2 ADJUSTABLE SHELVES	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
5	CAMPBELL RHEA	7442	3 UNIT CUBBY	35 1/4"	12"	48"	2 HANGING HOOKS IN EACH LOCKER COMPARTMENT, FINISHED TOP	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
6	CAMPBELL RHEA	5340	UPPER CABINET	12"	12"	36"	DBL DOOR. 2 ADJUSTABLE SHELVES	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
7	CAMPBELL RHEA	7444	4 UNIT CUBBY	47 1/4"	12"	48"	2 HANGING HOOKS IN EACH LOCKER COMPARTMENT, FINISHED TOP	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
8	CAMPBELL RHEA	2438	BASE AV CABINET	24"	22 1/2"	29"	1 ADJUSTABLE SHELF	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
9	CAMPBELL RHEA	6954-B	TEACHER WARDROBE CABINET	36"	22 1/2"	84"	DBL DOOR. L-1 FIXED SHELF, 3 ADJUSTABLE SHELVES. R-1 HANGER ROD, 1 FIXED SHELF	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
10	CAMPBELL RHEA	8760	ADA CLOSURE PANEL ASSEMBLY	42"	22 1/2"	32 1/2"	1" COUNTER AND 4" BACKSPLASH	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
10A	CAMPBELL RHEA	3760	SINK CABINET	50-5/8"	22 1/2"	32-1/2"	DBL DOOR. 1 ADJUSTABLE SHELF	USE FOR BASE BID WORK; WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
11	CAMPBELL RHEA	5440	UPPER CABINET	42"	16"	36"	DBL DOOR. 2 ADJUSTABLE SHELVES	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
11A	CAMPBELL RHEA	4700	UPPER CABINET	24"	16"	23-3/4"	DBL DOOR. 1 ADJUSTABLE SHELVES	USE FOR BASE BID WORK; WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
12	CAMPBELL RHEA	3681C	BASE CABINET	30"	22 1/2"	32 1/2"	DBL DOOR. 1 ADJUSTABLE SHELF	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
13	CAMPBELL RHEA	5436	UPPER CABINET	30"	16"	36"	DBL DOOR. 2 ADJUSTABLE SHELVES	WOOD SPECIES: MAPLE / RED OAK STAIN: TBD
18			SHORT THROW PROJECTOR				PROVIDED BY OWNER	
27	JUST MANUFACTURING	CRBADA2022A554-J	SINGLE BOWL DROP-IN CLASSROOM ADA SINK	22"	5 1/2"	19 1/2"	DROP IN SINK, 3-1/2" CENTER DRAIN REFERENCE PLUMBING DRAWINGS FOR DETAILS	SEE SINK NOTE 'A'
28	JUST MANUFACTURING	JBB5	BUBBLER	-	-	-	BUBBLER TO BE PROVIDED. REFERENCE PLUMBING DRAWINGS FOR DETAILS	-
29	ICI SCIENTIFIC	J348-48	PAINTED STEEL SHELVES	48"	24"	84"	5 ADJUSTABLE SHELVES	-
30	ICI SCIENTIFIC	J348-36	PAINTED STEEL SHELVES	36"	24"	84"	5 ADJUSTABLE SHELVES	-
31	ICI SCIENTIFIC	J348-42	PAINTED STEEL SHELVES	42"	24"	84"	5 ADJUSTABLE SHELVES	-
32	ICI SCIENTIFIC	J351-48	PAINTED STEEL SHELVES	48"	16"	84"	5 ADJUSTABLE SHELVES	-


1 1/4"
SUPPORT CLIPS @ 24" O.C.
CORK INSERT & PLASTIC END CAPS W/ MAP CLIPS
DRYMARKER BOARD
ADHESIVE AS RECOMMENDED BY MANUF.

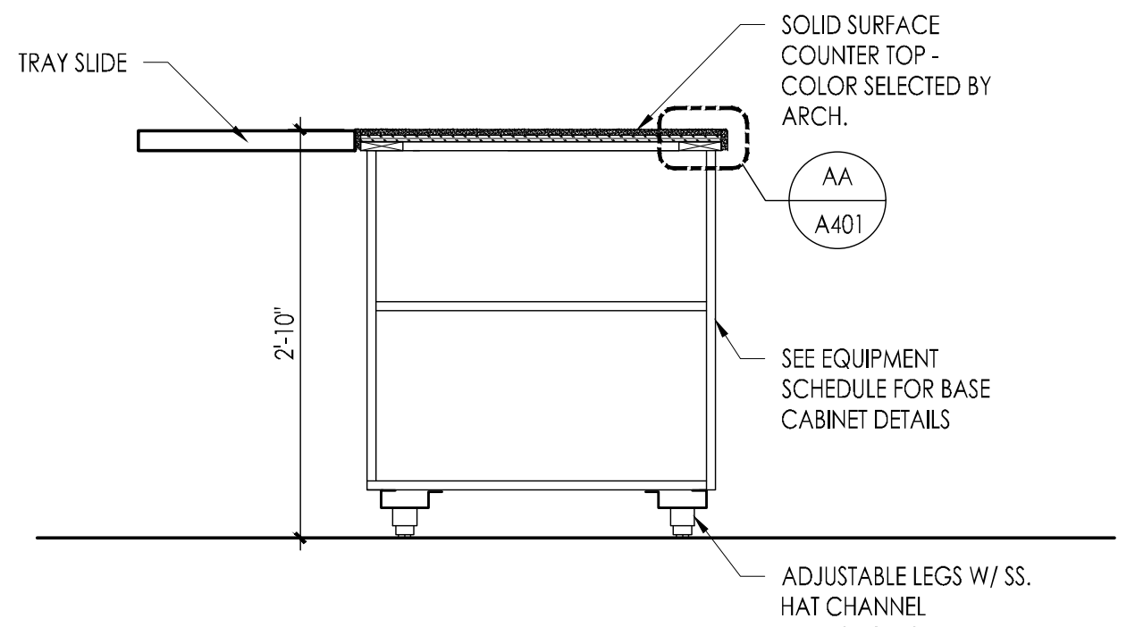
3 TYP. MARKERBOARD SECTION DETAIL
6" = 1'-0"



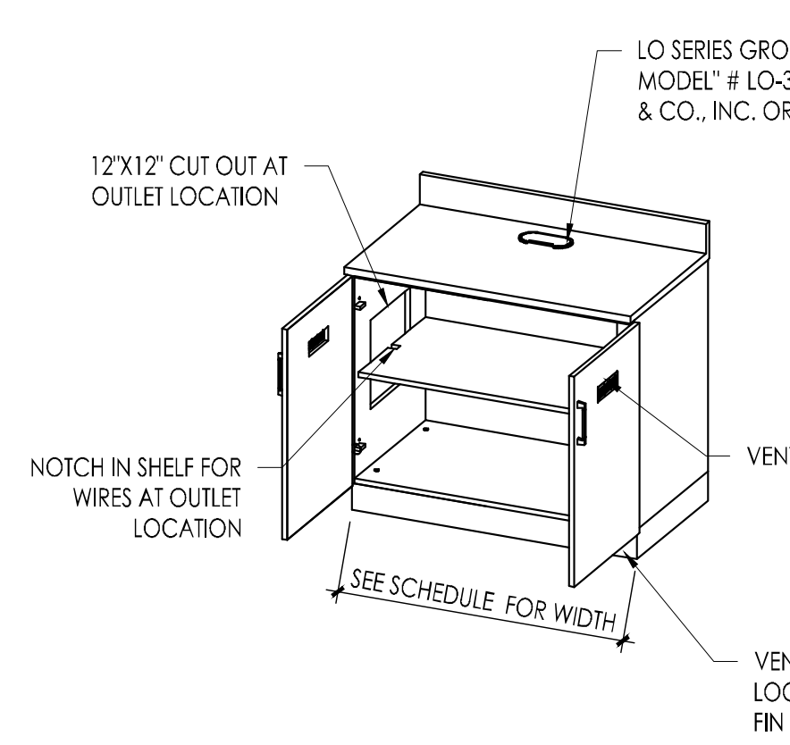
4 TYP. EXHIBITION BOARD SECTION DETAIL
6" = 1'-0"


BUBBLER, SEE SHEDULE, TO BE INSTALLED DIRECT MOUNTED TO COUNTER AT A MAXIMUM FOR 3 1/2 INCHES AND A 30° MAX ANGLE FROM FACE OF COUNTER TOP TO THE CENTER LINE OF THE SPOUT
EQ
EQ
4"
SK-1
FC-1
OVERHEAD CABINET ABOVE
PLAN
NOTE: SEE EQUIPMENT SCHEDULE FOR BASE AND UPPER CABINETS TO BE USED UNDER BASE BID WORK.
1'-5"
1'-8"
FC-1
SK-1
2'-2"
2'-6" MAX.
4"
6
ELEVATION

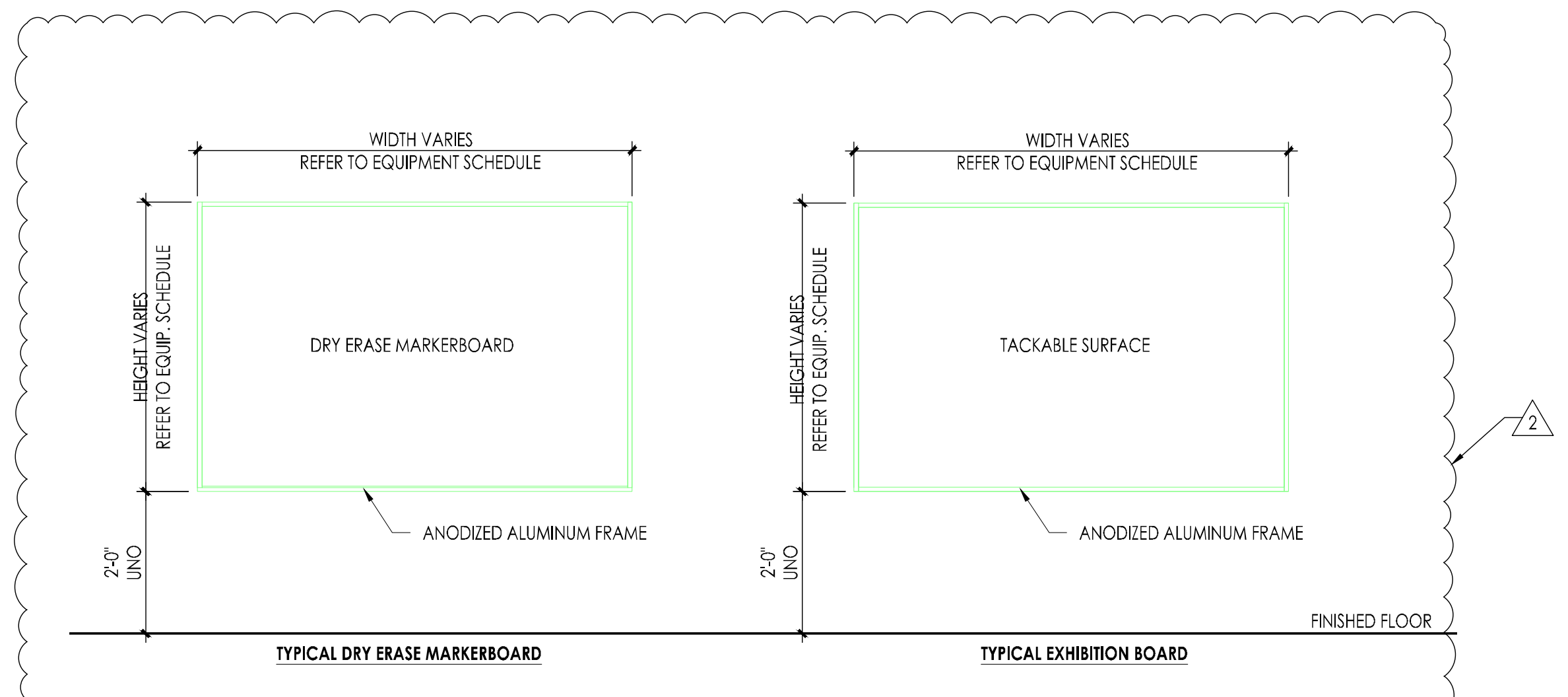
5 BUBBLER-SINK PLAN & ELEVATION DETAIL
1/2" = 1'-0"


TRAY SLIDE
SOLID SURFACE COUNTER TOP - COLOR SELECTED BY ARCH.
AA
A401
2'-10"
SEE EQUIPMENT SCHEDULE FOR BASE CABINET DETAILS
ADJUSTABLE LEGS W/ SS. HAT CHANNEL REINFORCING

6 CAFETERIA CHECK OUT STATION
3/4" = 1'-0"

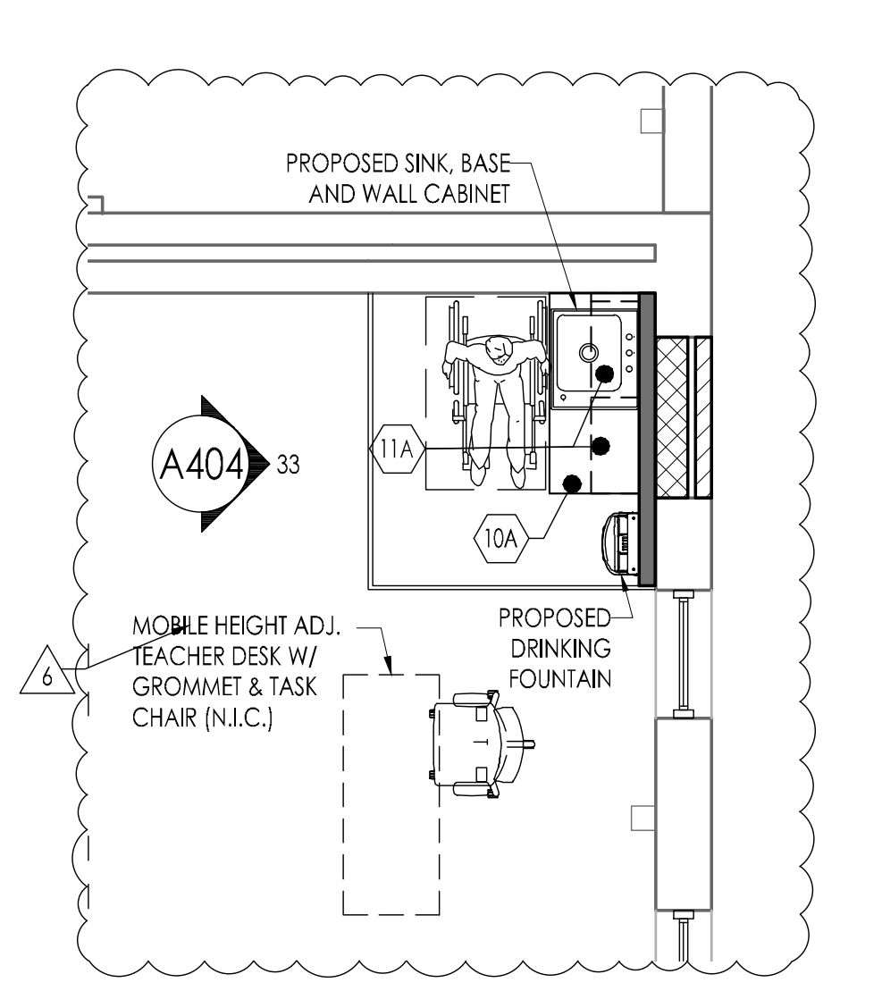

LO SERIES GROMMET "KING KONG MODEL" # LO-3 DOUG MOCKETT & CO., INC. OR EQUIVALENT
12"X12" CUT OUT AT OUTLET LOCATION
NOTCH IN SHELF FOR WIRES AT OUTLET LOCATION
VENTED DOOR
SEE SCHEDULE FOR WIDTH
VENTED BASE WHEN LOCATED AGAINST FIN TUBE

7 AV CABINET DETAIL
1/2" = 1'-0"


WIDTH VARIES REFER TO EQUIPMENT SCHEDULE
HEIGHT VARIES REFER TO EQUIP. SCHEDULE
DRY ERASE MARKERBOARD
ANODIZED ALUMINUM FRAME
2'-0" UNO
TYPICAL DRY ERASE MARKERBOARD
WIDTH VARIES REFER TO EQUIPMENT SCHEDULE
HEIGHT VARIES REFER TO EQUIP. SCHEDULE
TACKABLE SURFACE
ANODIZED ALUMINUM FRAME
2'-0" UNO
FINISHED FLOOR
TYPICAL EXHIBITION BOARD

NOTE: CHECK WITH ARCHITECT OR INTERIOR ELEVATIONS FOR ANY POSSIBLE INTERFERENCE WITH MOUNTING HEIGHT OF ANY BOARDS IN SPACE.
- KINDERGARTEN, 1ST & 2ND GRADE CLASSROOMS: 2'-0" A.F.F.
- 4TH, 5TH GRADE CLASSROOMS: 2'6" A.F.F.

8 TYPICAL DRY MARKERBOARD AND EXHIBITION BOARD MOUNTING HEIGHTS
1/2" = 1'-0"


PROPOSED SINK, BASE AND WALL CABINET
A404
33
11A
10A
MOBILE HEIGHT ADJ. TEACHER DESK W/ GROMMET & TASK CHAIR (N.I.C.)
PROPOSED DRINKING FOUNTAIN

9 PARTIAL INSTRUMENTAL MUSIC 44 LAYOUT - BASE BID
1/4" = 1'-0"

GENERAL CASEWORK NOTES:

1. CATALOG NUMBERS REFER TO MOST CURRENT CAMPBELL RHEA CASEWORK CATALOG AND JUST MANUFACTURING CATALOG UNLESS OTHERWISE NOTED. FOR REFERENCE ONLY.
2. ALL CASEWORK DOORS AND DRAWERS TO HAVE LOCKS KEYED ALIKE PER ROOM AND MASTER KEYED.
3. ALL TOPS SHALL BE 1/2" SOLID SURFACE ON 1/2" PLYWOOD (UNLESS NOTED OTHERWISE). LAMINATE TOPS ARE NOT ACCEPTABLE AND WILL BE REJECTED.
4. ALL BACKSPLASHES SHALL BE 1/2" SOLID SURFACE (UNLESS NOTED OTHERWISE).
5. ALL FURNITURE AND EQUIPMENT SHOWN DOTTED AND/OR INDICATED AS (N.I.C.) IS NOT IN CONTRACT.
6. THE CASEWORK & EQUIPMENT SUB-CONTRACTOR(S) SHALL TURN OVER TO THE PLUMBING AND ELECTRICAL SUB-CONTRACTOR(S) IN A PACKAGE, ALL SINKS, FIXTURES, FAUCETS, TAILPIECES, STRAINERS, ETC., AND ELECTRICAL DEVICES, NIPPLES AND LOCKNUTS, ETC., FOR INSTALLATION AND FINAL CONNECTION.
7. THE CASEWORK AND EQUIPMENT SUB-CONTRACTOR SHALL PROVIDE AN ITEMIZED LIST AND A DESIGNATED SITE LOCATION FOR THE TRANSFER OF THE MATERIALS REFERENCED IN NOTE 6 TO THE PLUMBING AND ELECTRICAL SUB-CONTRACTORS. THE LIST SHALL HAVE A DESCRIPTION OF THE ITEMS AND QUANTITY ALONG WITH A SIGN-OFF LINE FOR THE PLUMBING AND ELECTRICAL SUB-CONTRACTORS. A COPY OF THE SIGNED LIST IS TO BE SUBMITTED TO THE ARCHITECT / OWNER PRIOR TO BILLING FOR THIS EQUIPMENT.
8. EQUIPMENT SUB-CONTRACTOR SHALL MAKE SINK CUT-OUTS.
9. ALL DUPLEX OUTLETS SHALL BE G.F.C.I. UNLESS NOTED OTHERWISE AND SHALL BE TAMPER-RESISTANT.
10. SINK CABINETS SHALL BE INSTALLED BEFORE THE INSTALLATION OF ADJACENT CABINETS.
11. ALL CONTRACTORS TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IN WRITTEN FORM OF ANY DISCREPANCIES.
12. PROVIDE ALL FILLERS AS REQUIRED. FILLERS AT BASE CABINETS SHALL BE AT FRONT OF CABINET AND COUNTERTOP SHALL BE CONTINUOUS OVER FILLER PANEL. FILLERS AT TALL CABINETS SHALL BE AT FRONT AND TOP OF CABINET. FILLERS AT WALL CASES SHALL BE AT FRONT, TOP AND BOTTOM OF CABINET. FINISH TO MATCH CASEWORK.
13. ALL PRINTERS AND COMPUTERS ARE N.I.C. (TYPICAL)
14. RUBBER BASE ON ALL CASEWORK BY G.C. (TYPICAL)
15. ALL SCHEDULED EQUIPMENT MANUFACTURERS ARE "BASIS OF DESIGN", OR APPROVED EQUAL.
16. SEE DETAILS A AND B / A403 FOR MOUNTING OF DRYMARKER BOARDS AND EXHIBITION BOARDS.

SINK NOTE 'A': (ITEMS# 27 & 28)

CRB-ADA-2022A554-J JUST STAINLESS STEEL SINK W/ BUBBLER COMBINATION, "THE ACADEMIC GROUP A" SERIES, TYPE 304, LEDGE TYPE, FAUCET LEDGE REAR, BUBBLER LEDGE LEFT, SINGLE COMPARTMENT, SELF-RIM, 18 GAUGE STAINLESS STEEL, 22"L x 19-1/2" W x 5-1/2" DEEP, SINK UNDERCOATED W/ SOUND DEADENING MATERIAL. FURNISH COMPLETE WITH JUST FAUCET (#J-1174-KS) CONCEALED HOT & COLD WATER MIXING FAUCET WITH SWIVEL GOOSENECK SPOUT, AERATOR & WRIST BLADE HANDLES. INCLUDE ONE JUST BUBBLER (#JBB5) W/ SELF-CLOSING LEVER HANDLE. INCLUDE ONE JUST CENTER DRAIN ASSEMBLY (#J-ADA-35-FS) W/ DRAIN INSULATING KIT (#J-ADA-150), JUST STAINLESS STEEL FLAT STRAINER & 4" LONG STAINLESS STEEL TAILPIECE (#J-35-SSF).

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

NOTE:

ALL FURNITURE AND EQUIPMENT WITHOUT THE SYMBOL ⬡ OR MARKED (N.I.C.) IS NOT IN CONTRACT UNLESS NOTED OTHERWISE. SEE EQUIPMENT SCHEDULE FOR EQUIPMENT MARKED WITH THE SYMBOL ⬡

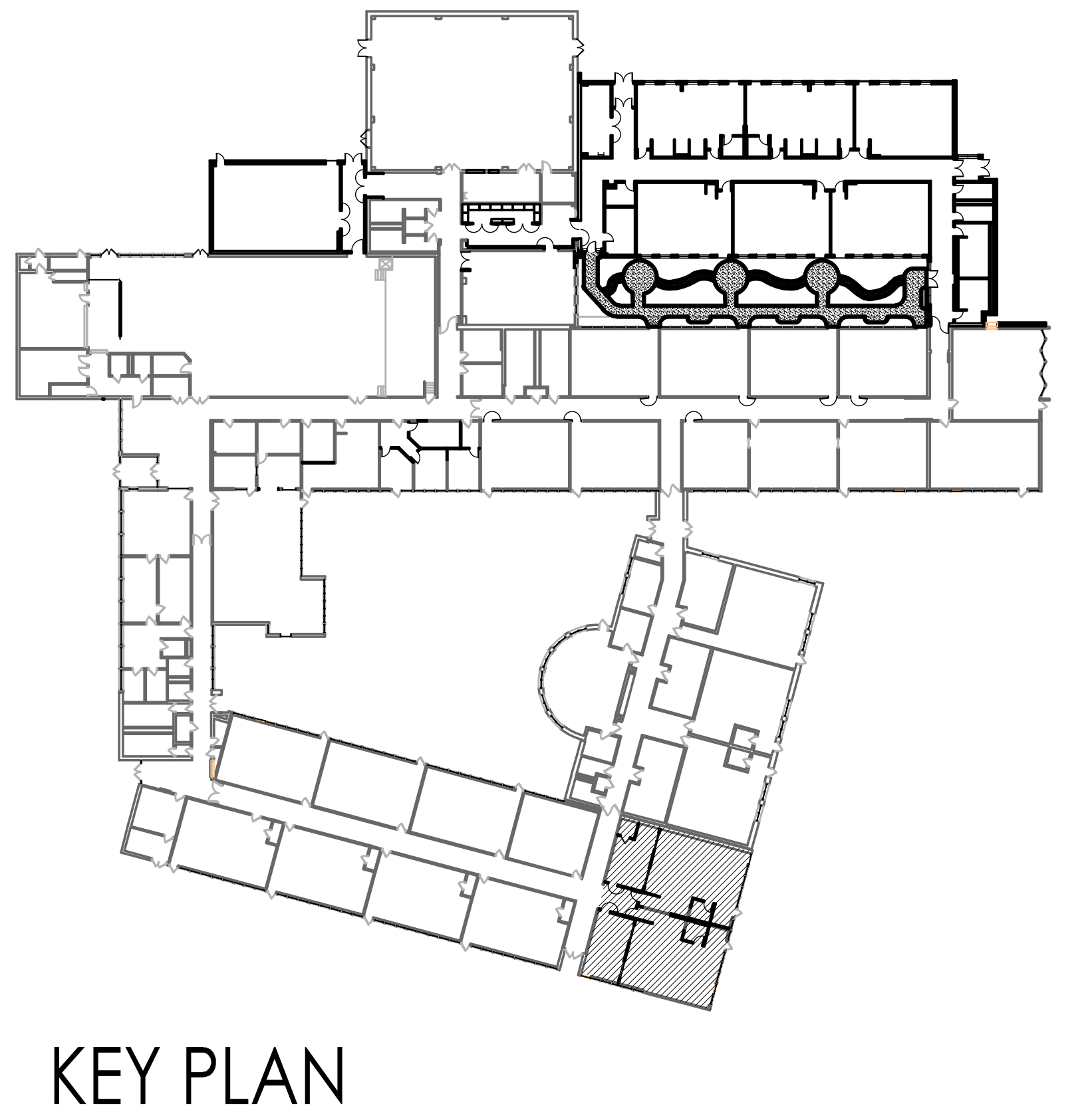
NOTE:

SEE 1/8" FLOOR PLAN FOR LOCATION & ROOM NUMBERS.

NOTE:

PROVIDE A MINIMUM 18" BARRIER-FREE MANEUVERING CLEARANCE AT THE PULL SIDE OF ALL DOORS ADJACENT TO CABINETS, SHELVING, ETC.

PROVIDE A MINIMUM 12" BARRIER-FREE MANEUVERING CLEARANCE AT THE PUSH SIDE OF ALL DOORS ADJACENT TO CABINETS, SHELVING, ETC.



KEY PLAN
N.T.S.

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

2/12/26
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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
MJS

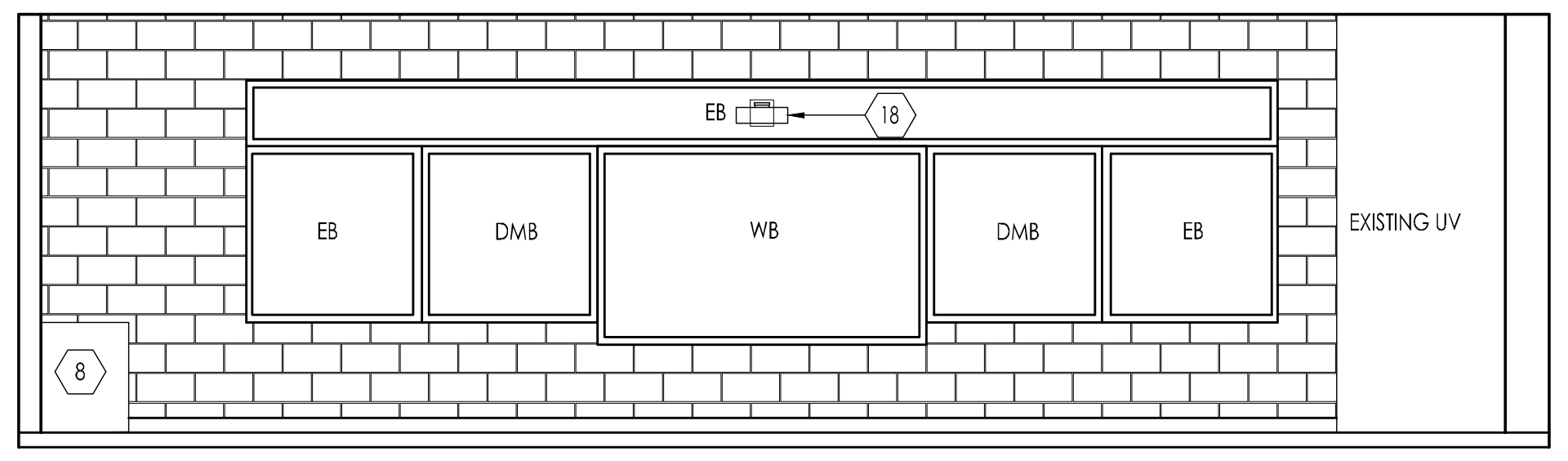
Scale
AS NOTED

Drawing Name
ROOM LAYOUTS WITH GENERAL NOTES, DETAILS ROOM FINISH & EQUIPMENT SCHEDULE

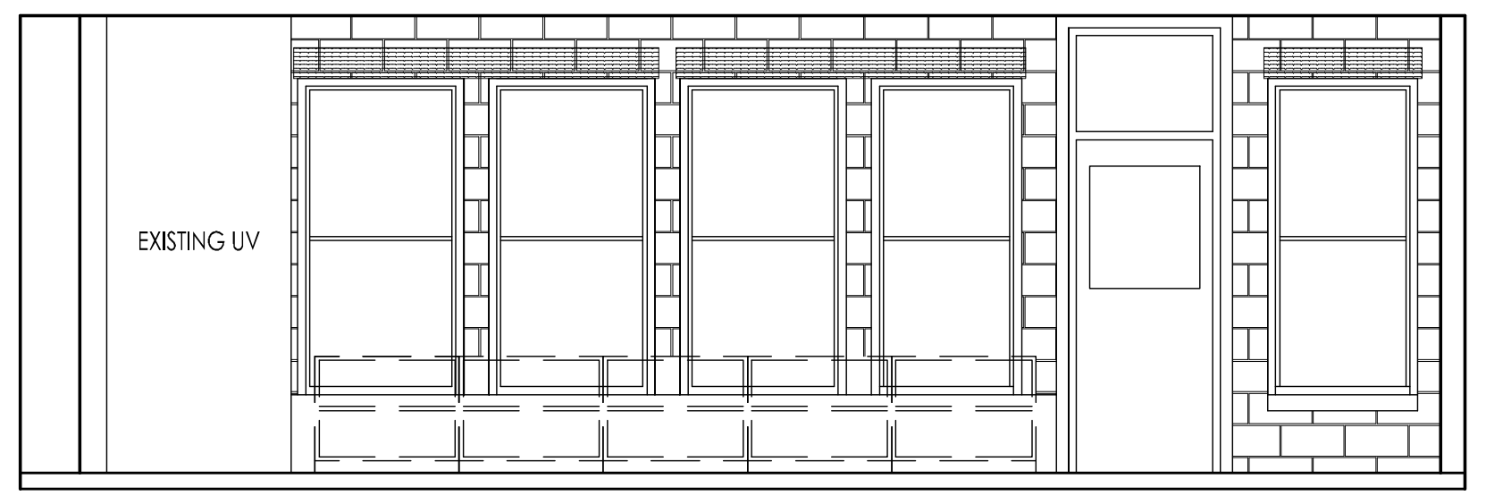
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

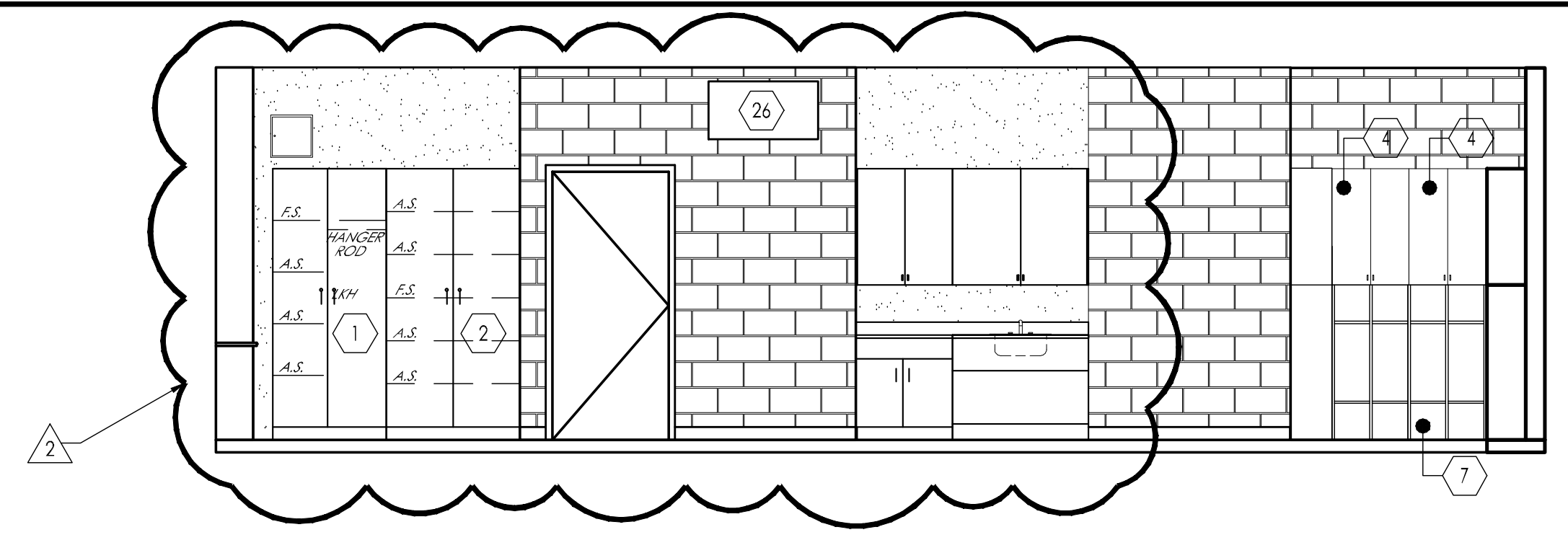
Drawing Number
A401



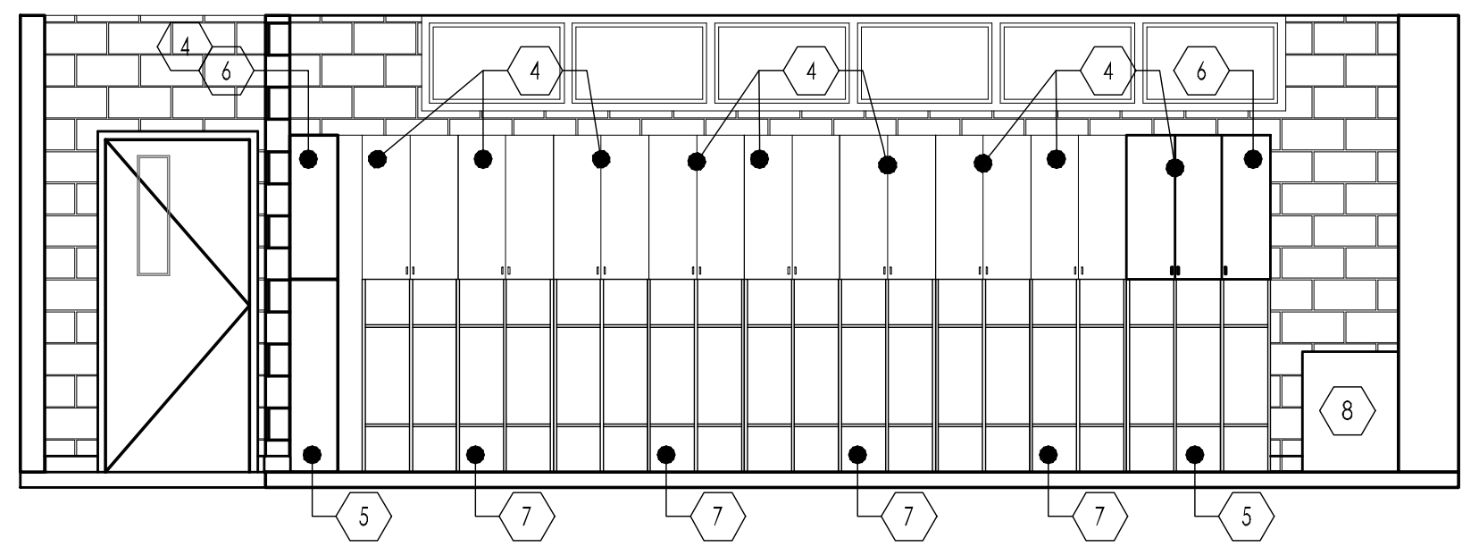
1 ROOM 17 ELEVATION
1/4" - 1'-0"



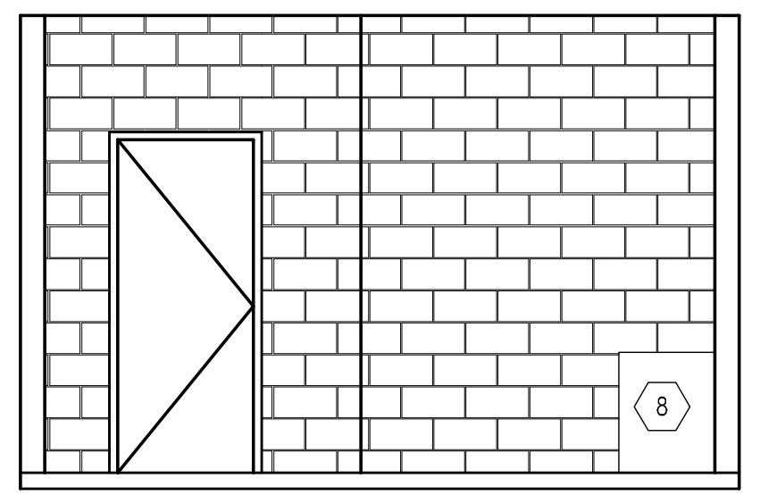
2 ROOM 17 ELEVATION
1/4" - 1'-0"



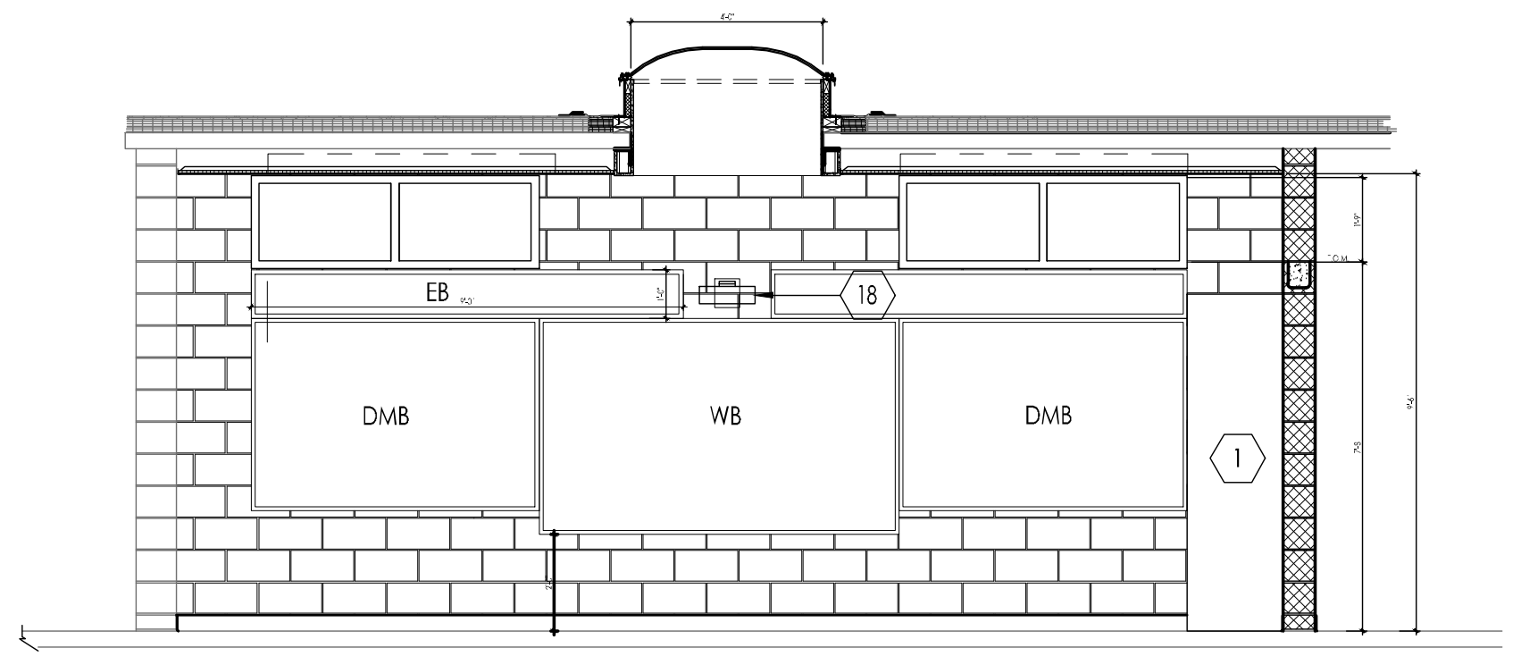
3 ROOM 17 ELEVATION
1/4" = 1'-0"



4 ROOM 17 ELEVATION
1/4" - 1'-0"



5 ROOM 17A ELEVATION
1/4" = 1'-0"



6 ROOM 17A ELEVATION
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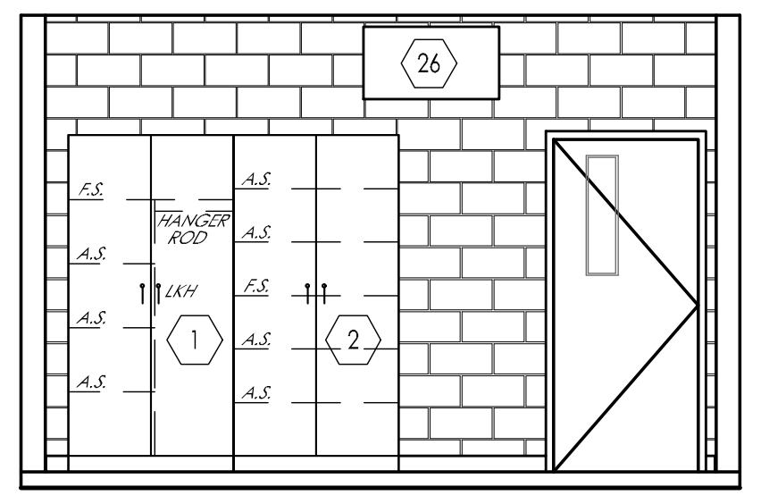
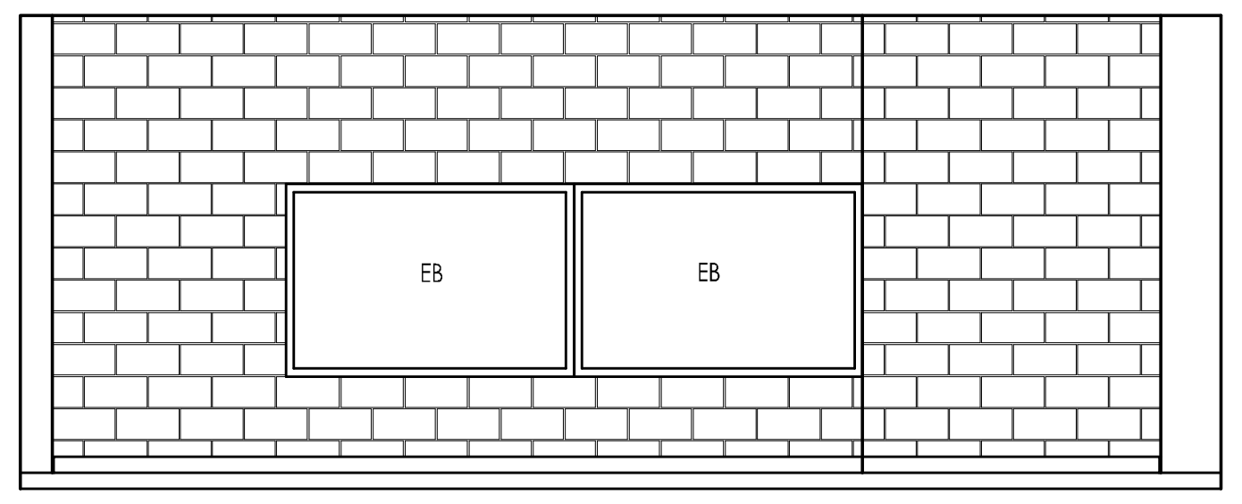
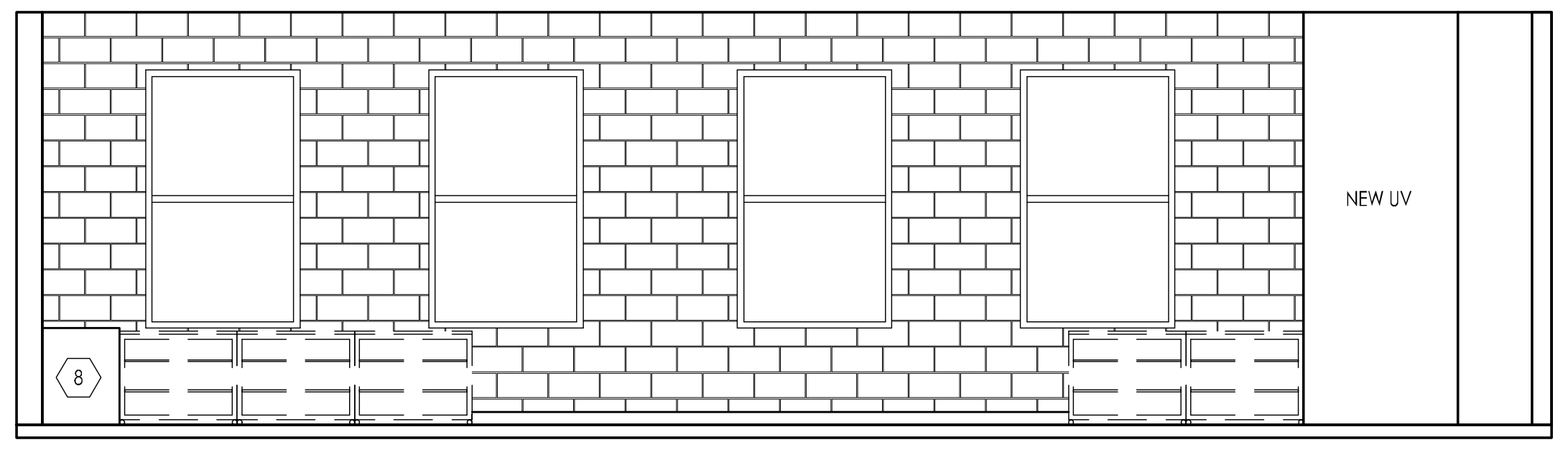


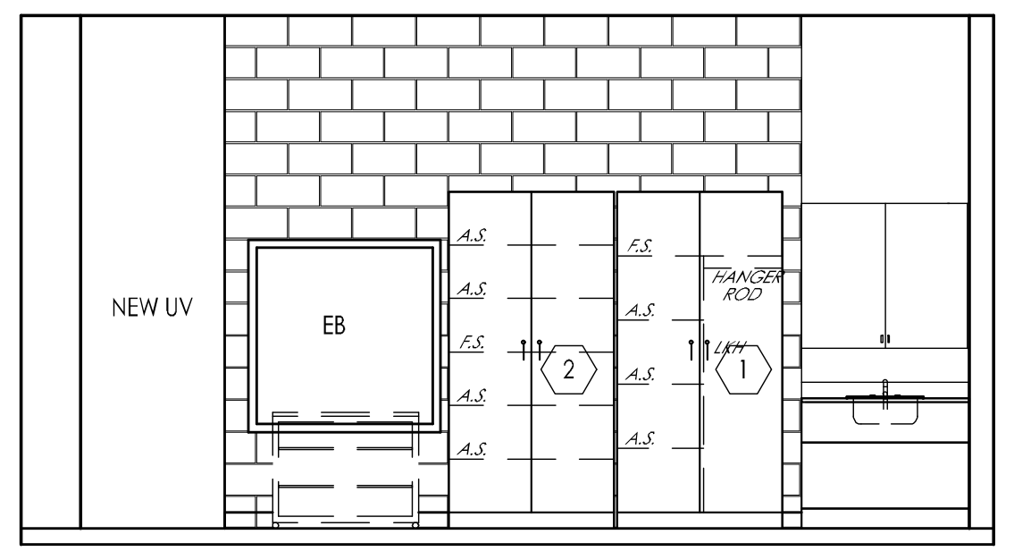
7 ROOM 17A ELEVATION
1/4" = 1'-0"



8 ROOM 17A ELEVATION
1/4" = 1'-0"



9 ROOM 66 ELEVATION
1/4" = 1'-0"



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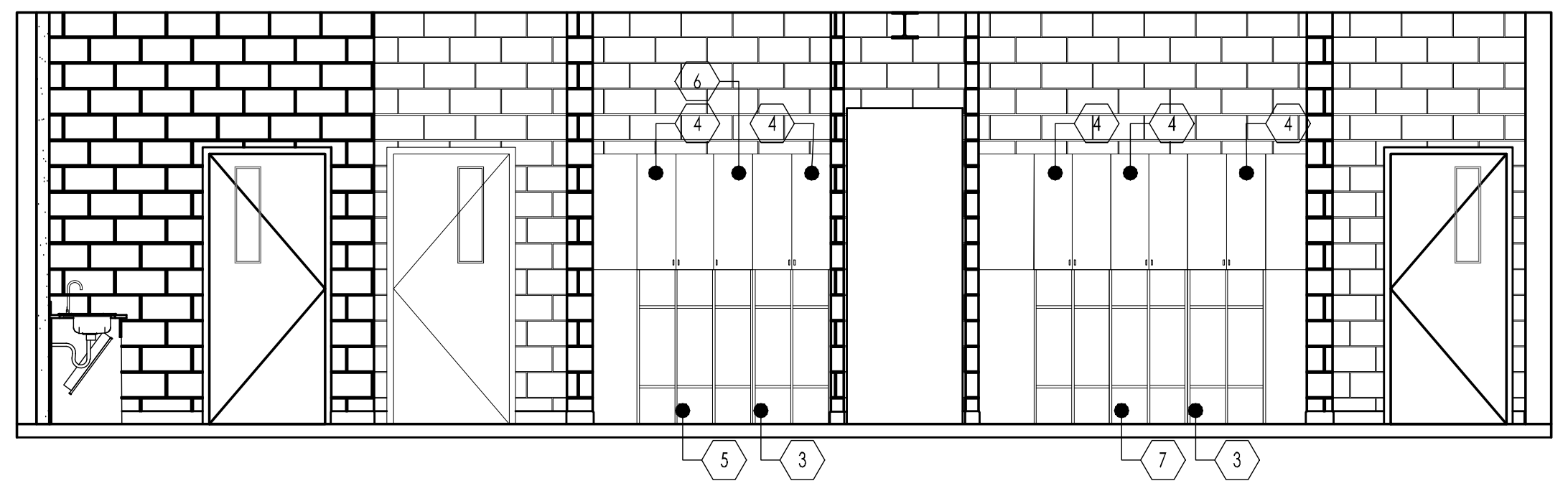
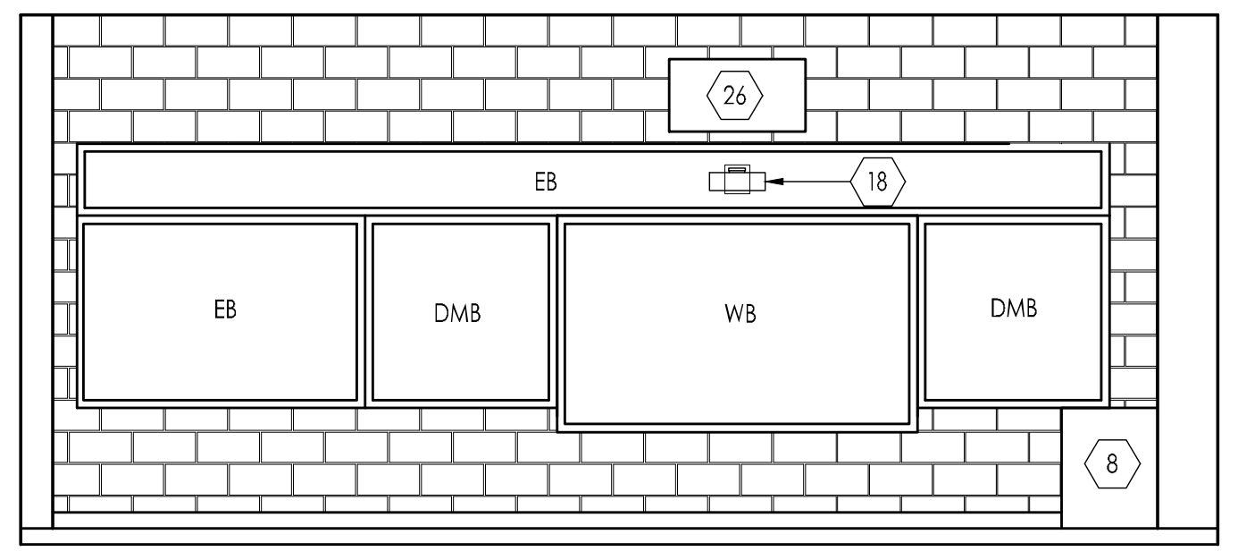
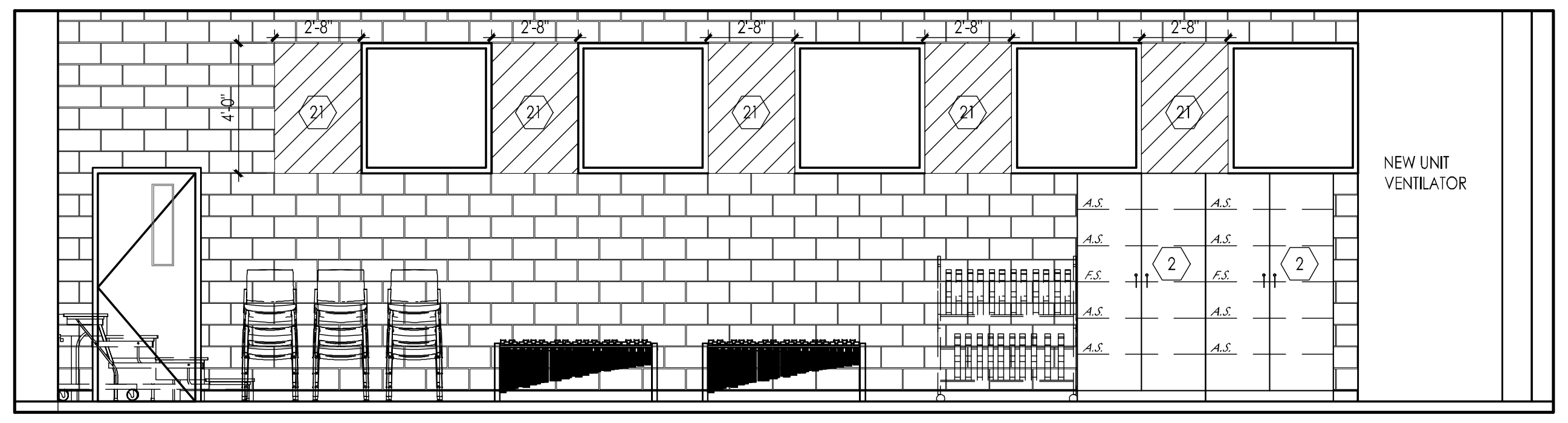
1/4" = 1'-0"



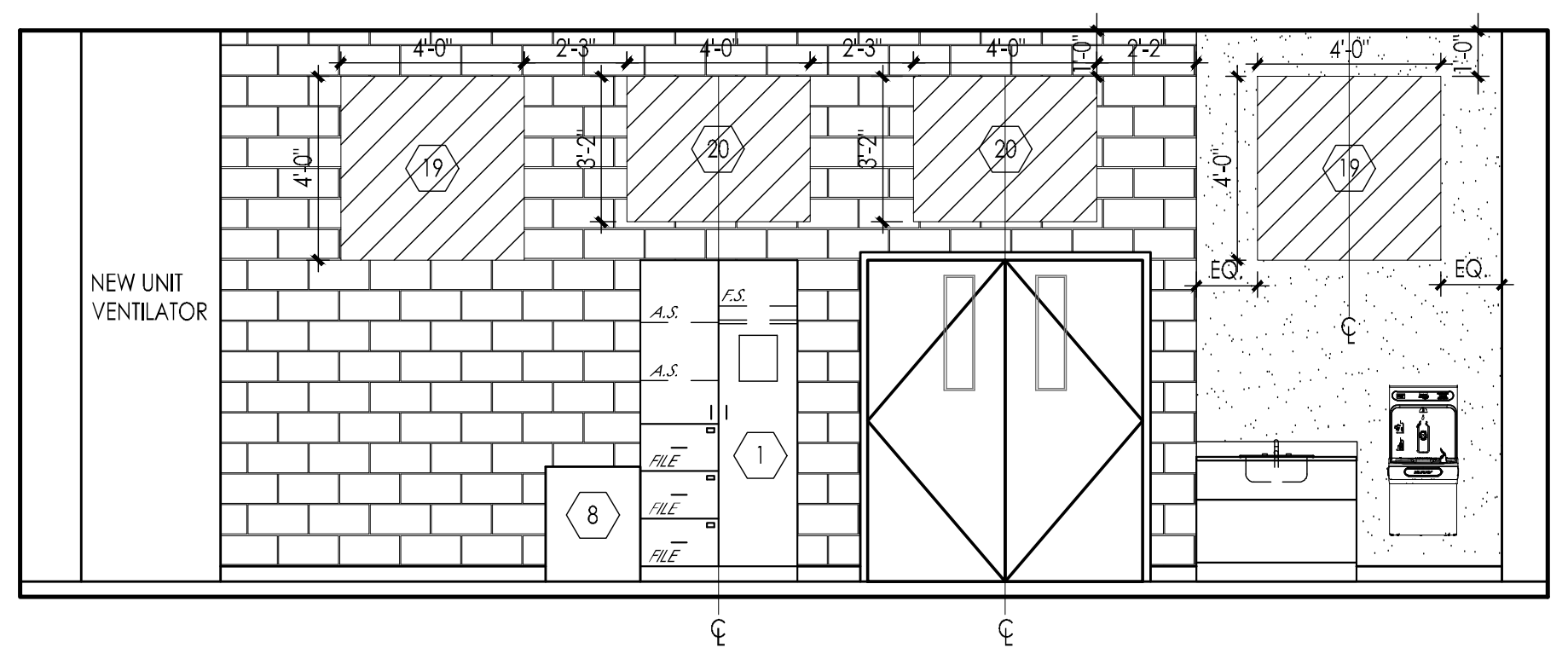
11 ROOM 66 ELEVATION
1/4" = 1'-0"



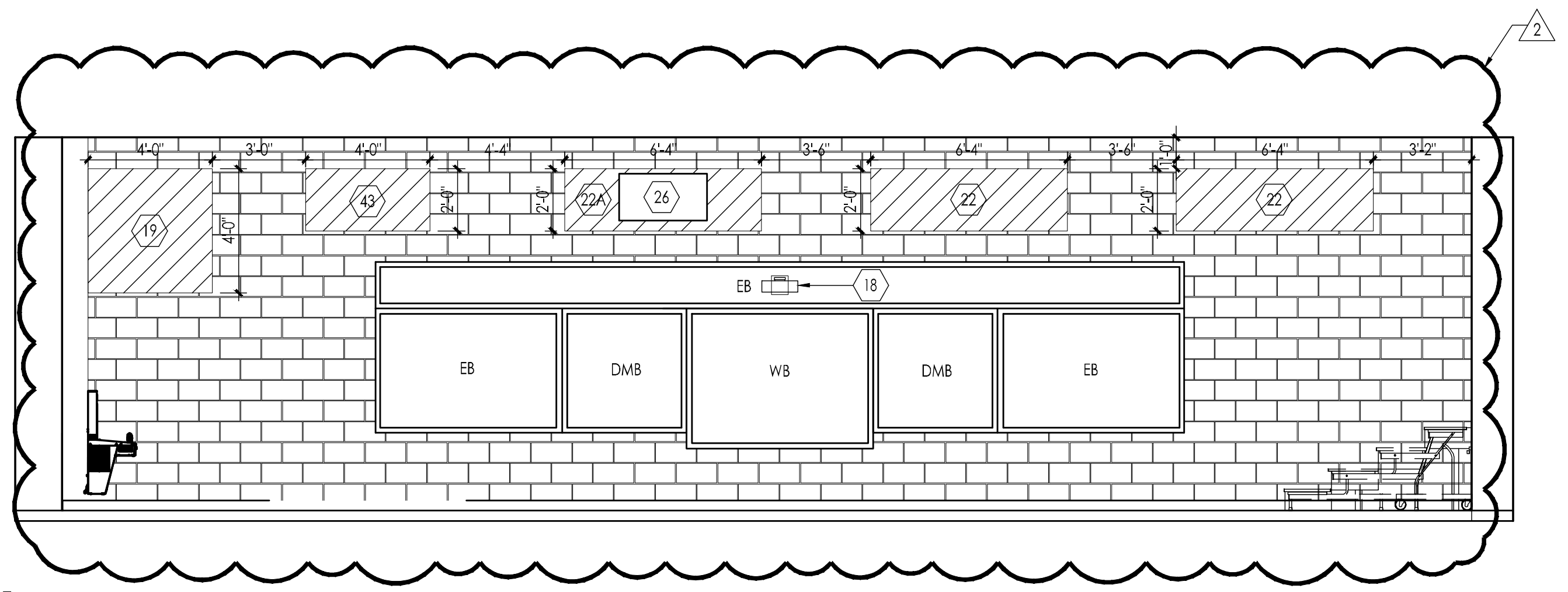
12 ROOM 66 ELEVATION
1/4" = 1'-0"



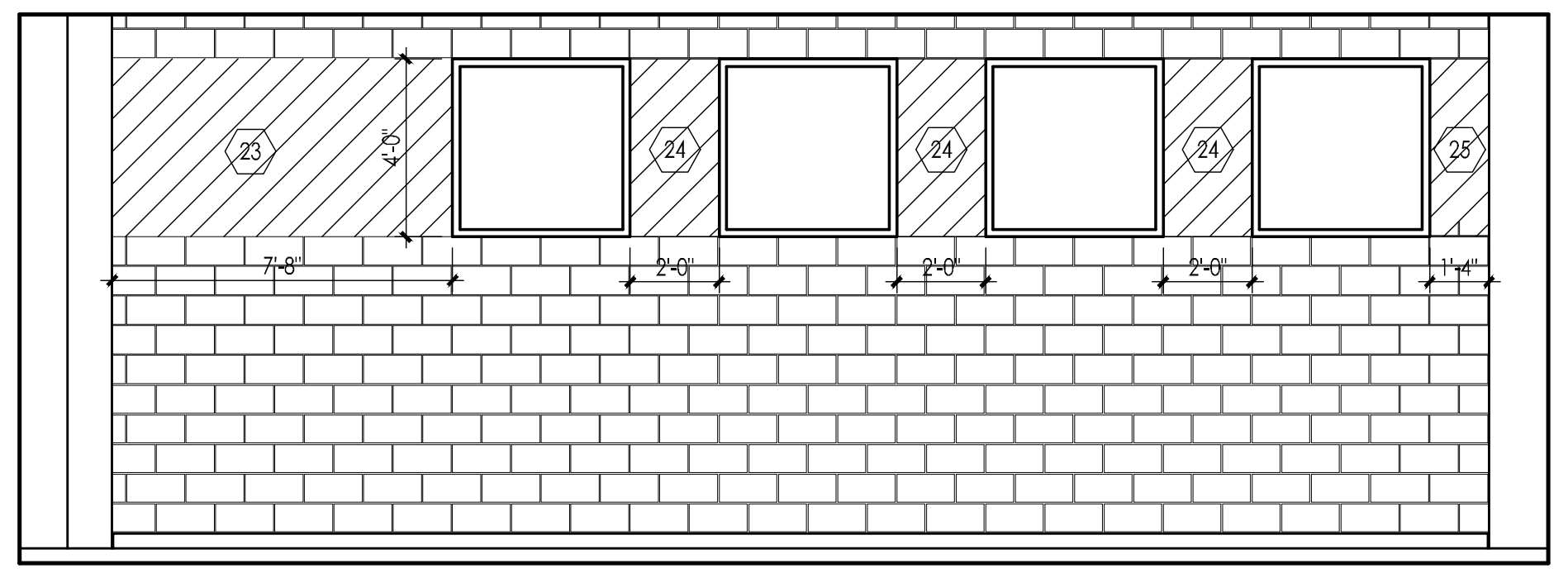
13 VOCAL ROOM 53 ELEVATION
1/4" = 1'-0"



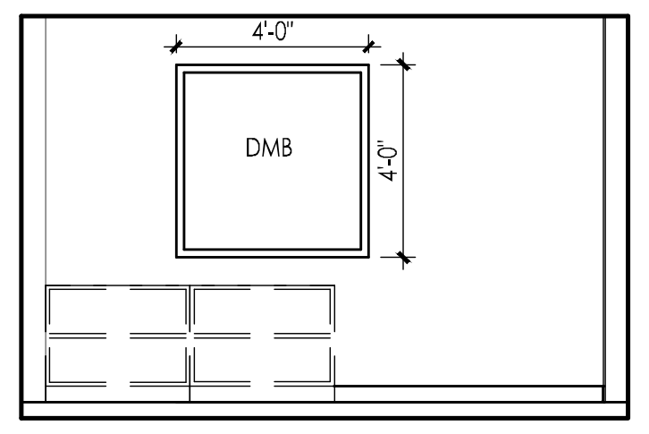
14 VOCAL ROOM 53 ELEVATION
1/4" = 1'-0"



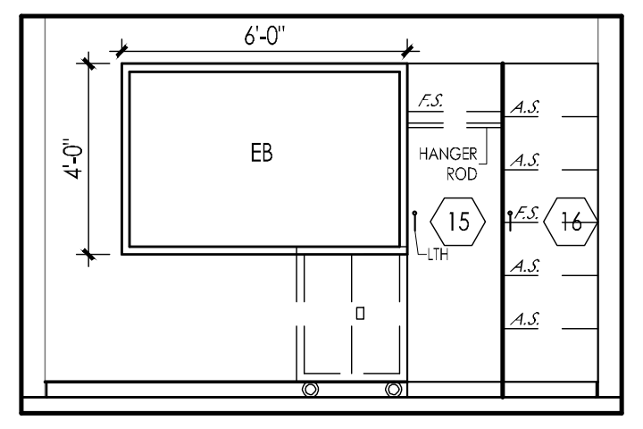
15 VOCAL ROOM 53 ELEVATION
1/4" = 1'-0"



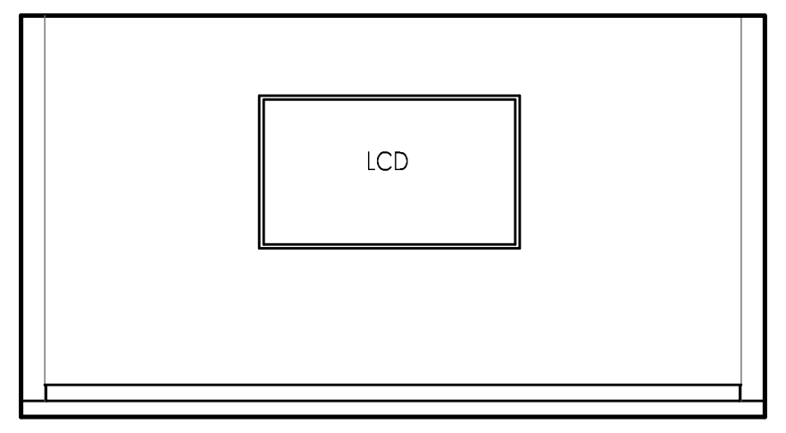
16 VOCAL ROOM 53 ELEVATION
1/4" = 1'-0"



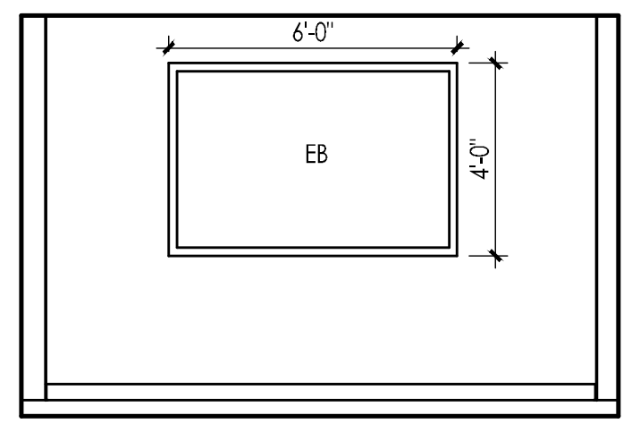
17 LIBRARY OFFICE 49
1/4" = 1'-0"



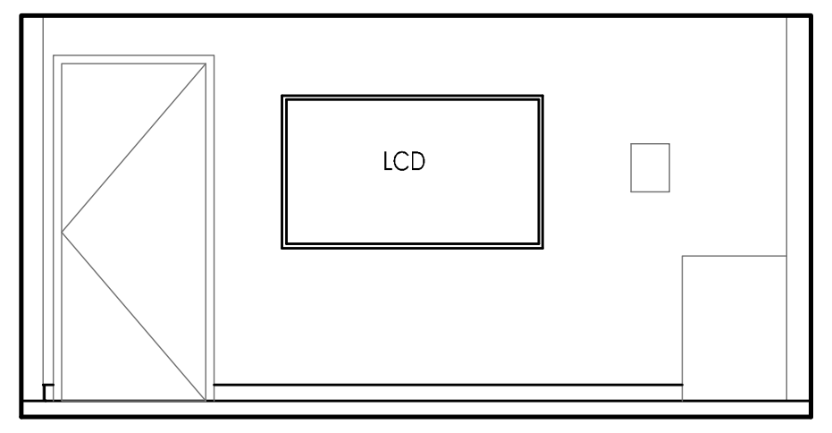
18 LIBRARY OFFICE 49
1/4" = 1'-0"



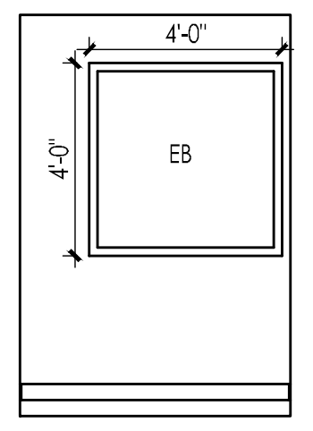
19 CONFERENCE ROOM 47
1/4" = 1'-0"



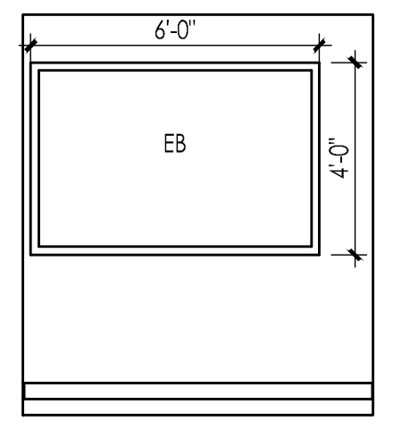
20 CONFERENCE ROOM 47
1/4" = 1'-0"



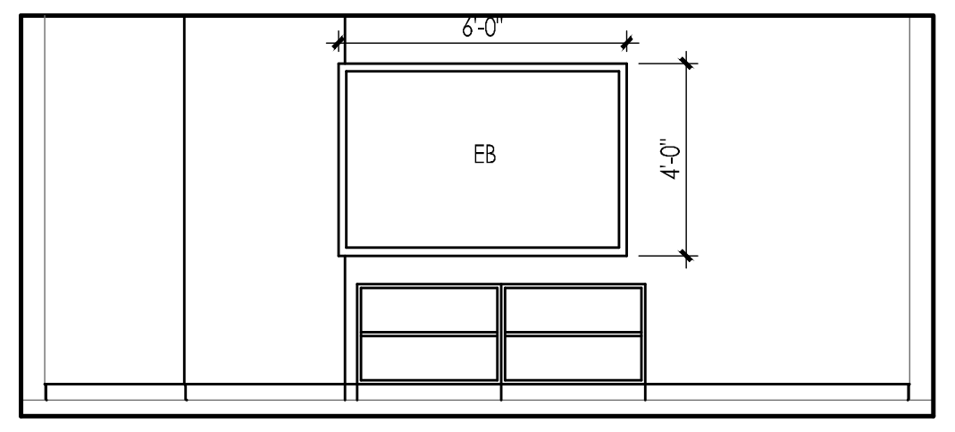
21 STAFF ROOM 45
1/4" = 1'-0"



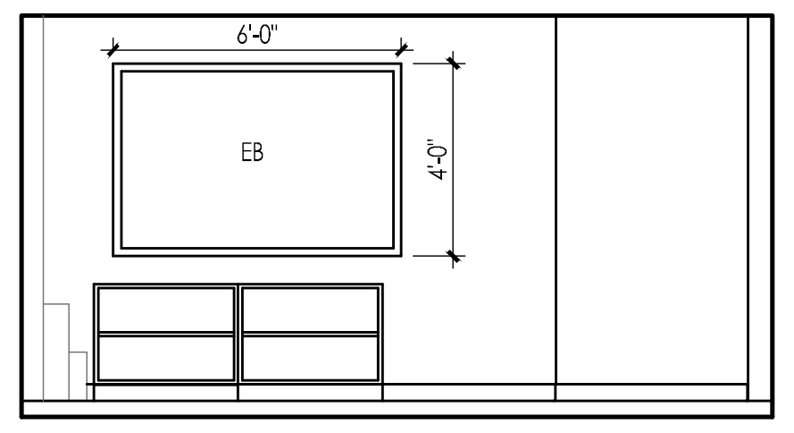
22 WAITING AREA
1/4" = 1'-0"



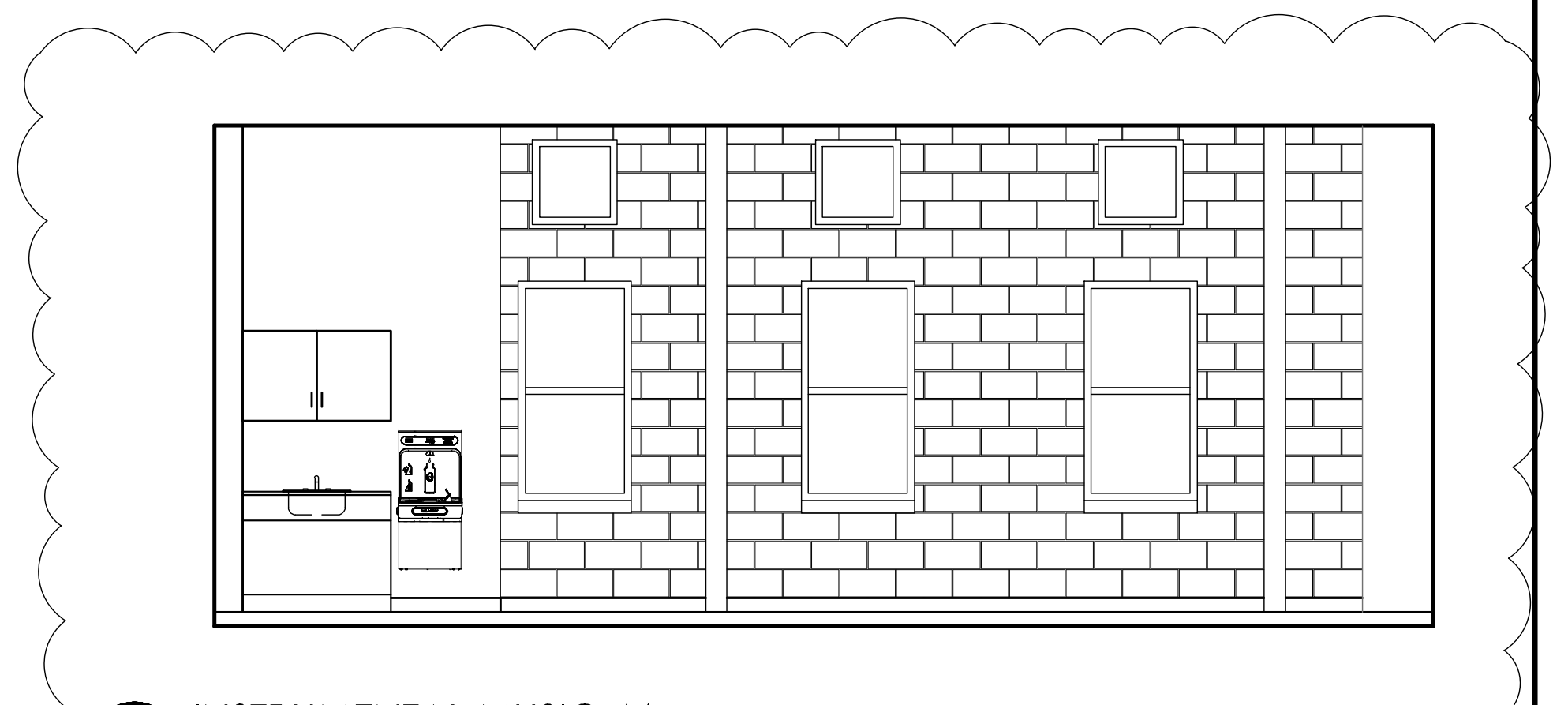
23 OFFICE 1
1/4" = 1'-0"



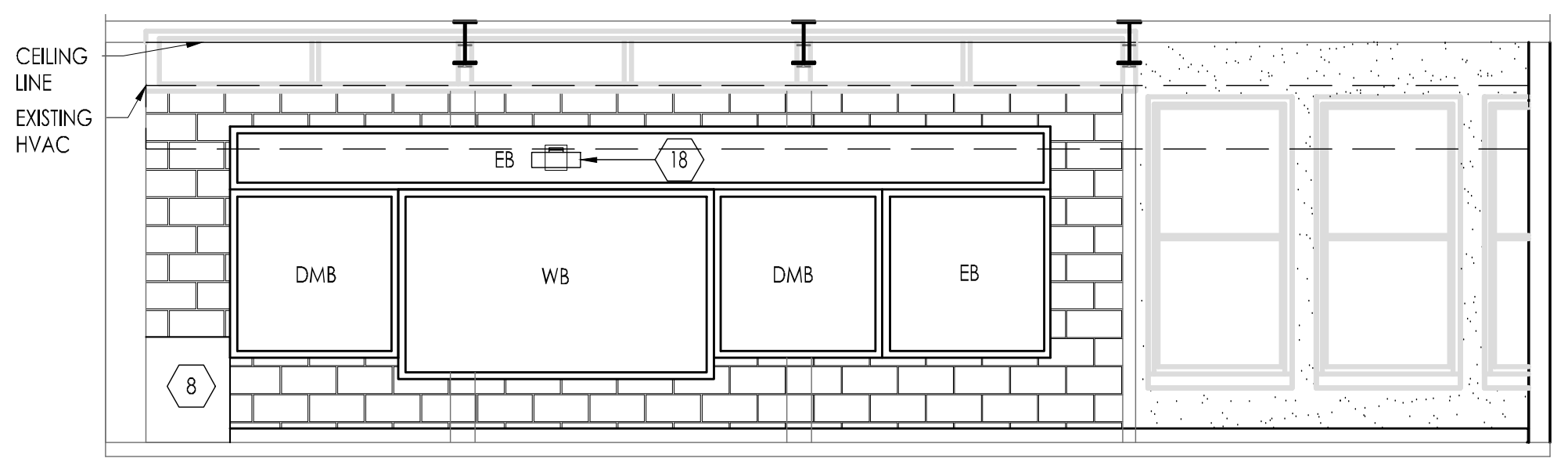
24 OFFICE 3
1/4" = 1'-0"



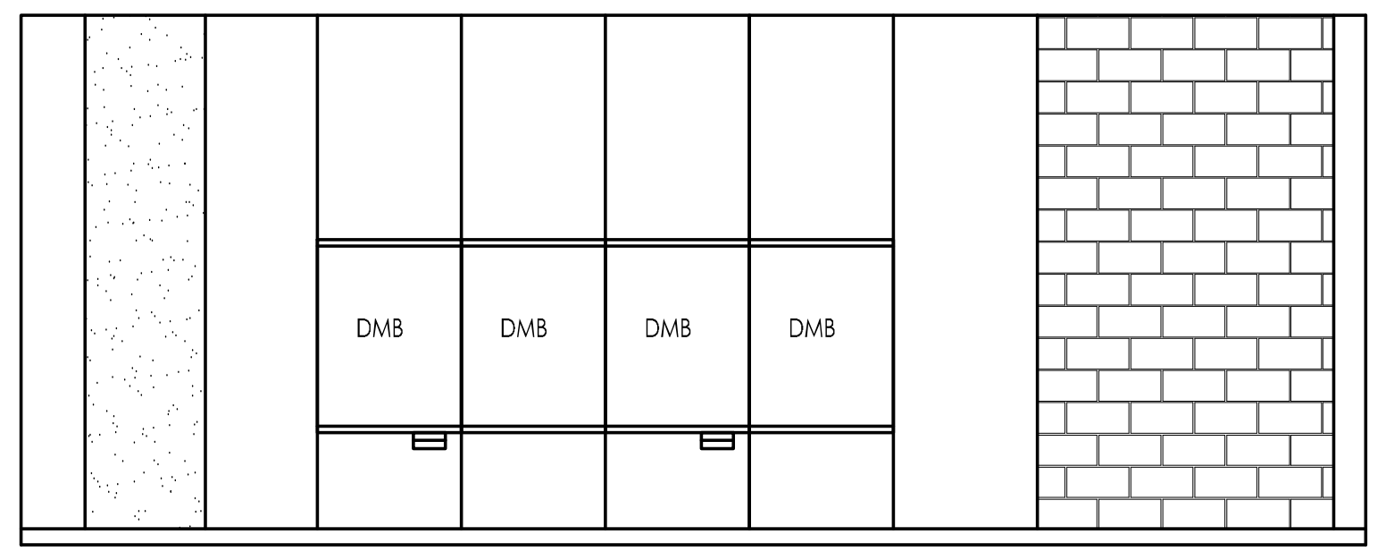
25 OFFICE 4
1/4" = 1'-0"



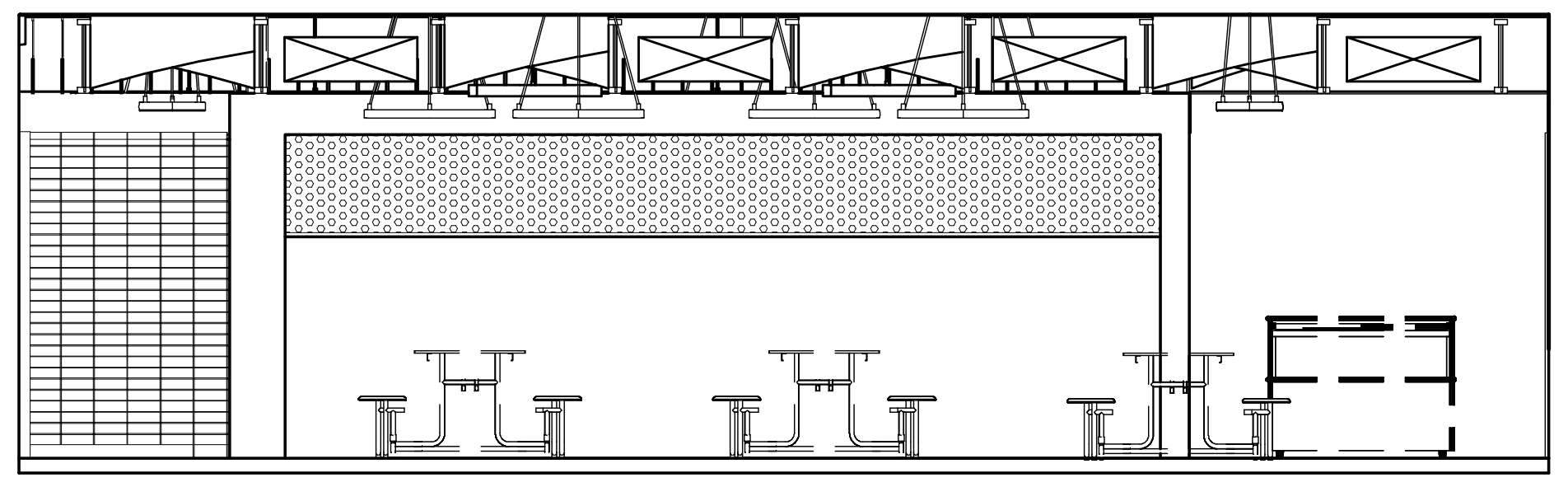
26 INSTRUMENTAL MUSIC 44
1/4" = 1'-0"



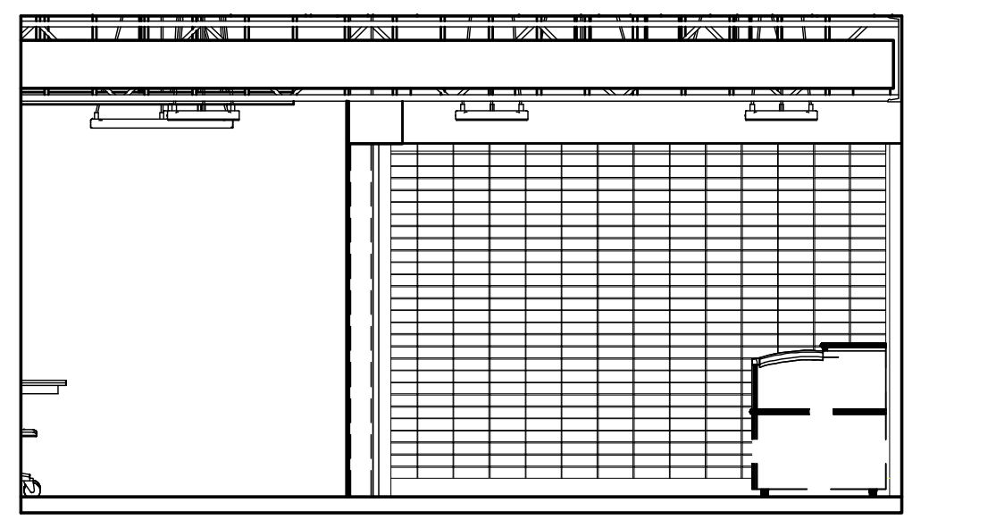
27 ROOM 16 ELEVATION
1/4" = 1'-0"



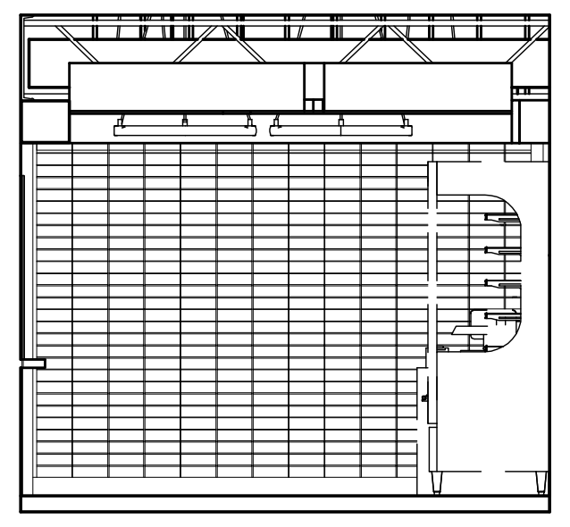
28 OPERABLE PARTITION WALL
1/4" = 1'-0"



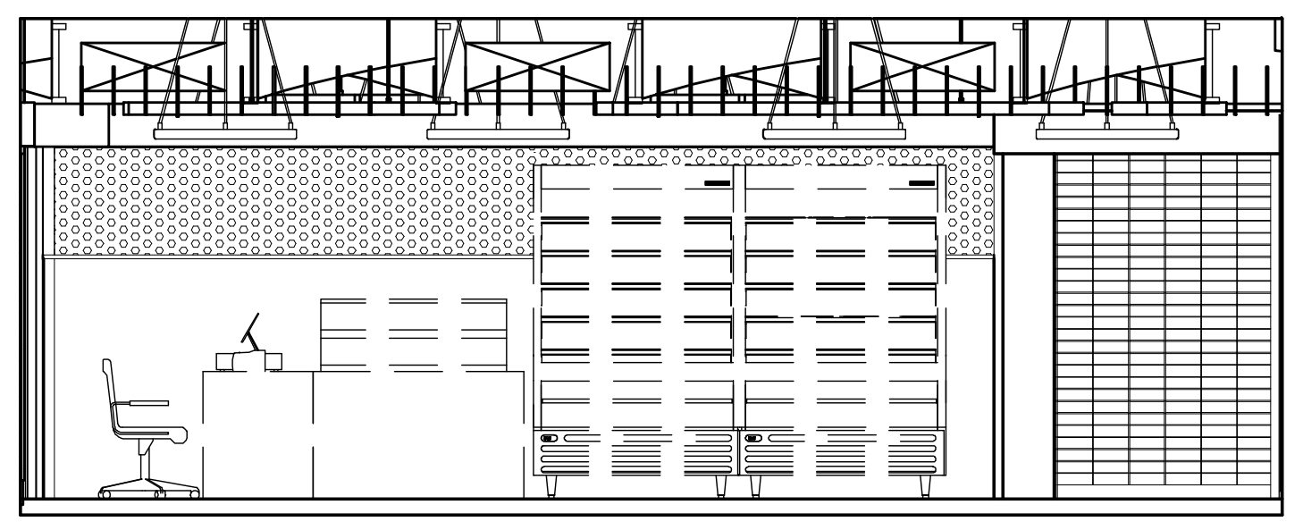
29 FRONT ELEVATION CAFE SERVICE AREA
1/4" = 1'-0"



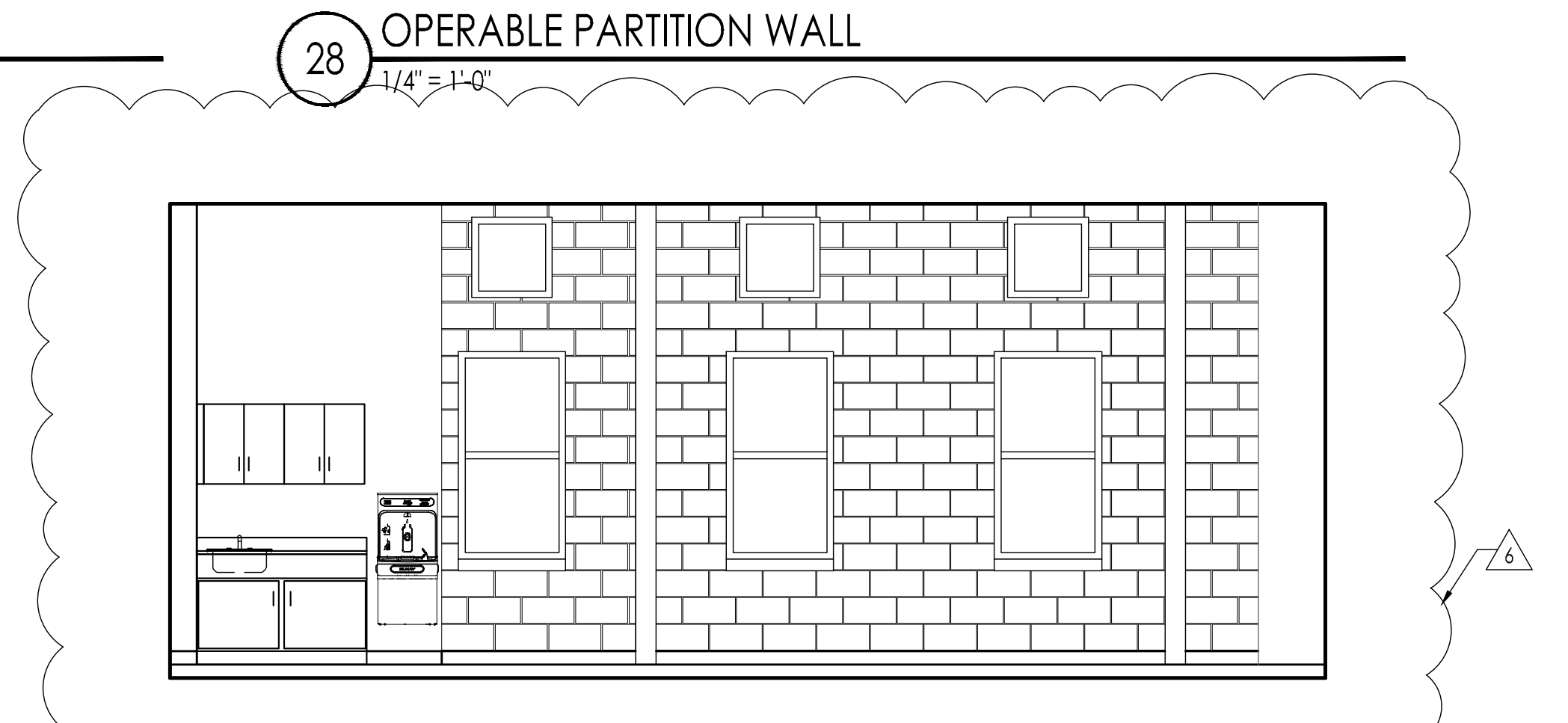
30 SIDE ELEVATION
1/4" = 1'-0"



31 INSIDE CAFE SIDE
1/4" = 1'-0"



32 INSIDE CAFE FRONT
1/4" = 1'-0"



33 INSTRUMENTAL MUSIC 44 - BASE BID
1/4" = 1'-0"

NJDCA Electronic Release Stamp

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

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
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

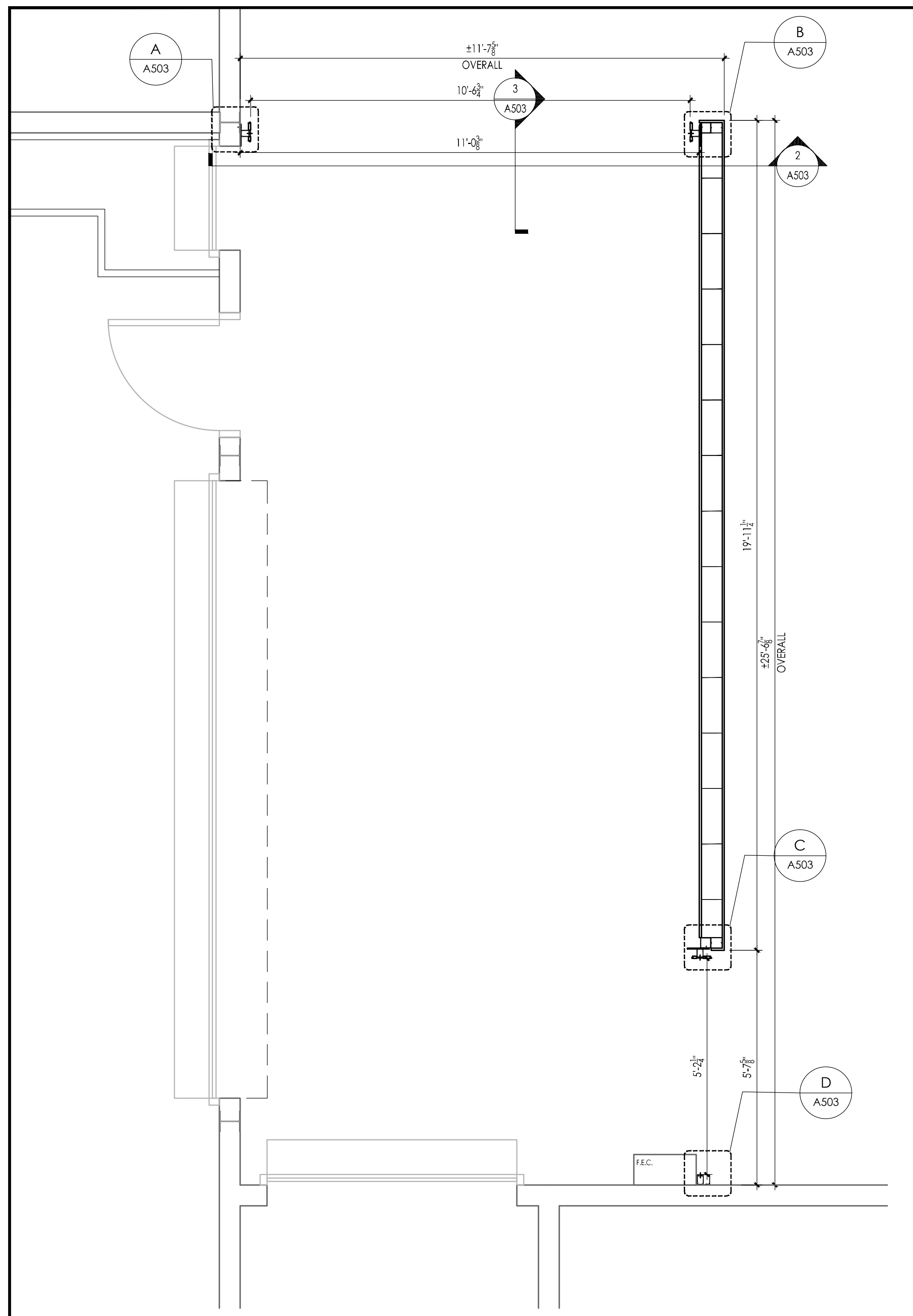
Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By
MJS
Scale
AS NOTED

Drawing Name
INTERIOR ELEVATIONS

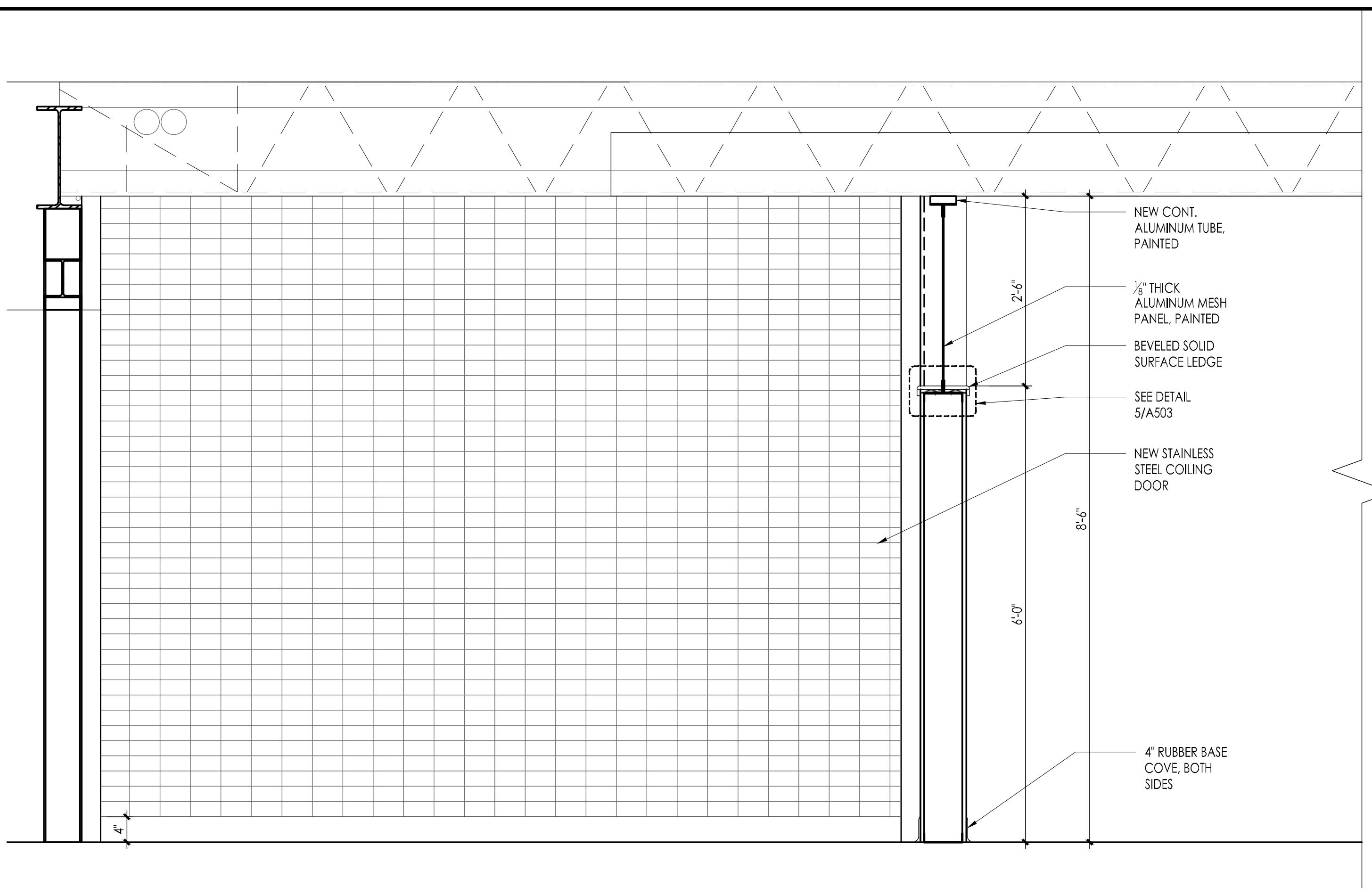
Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

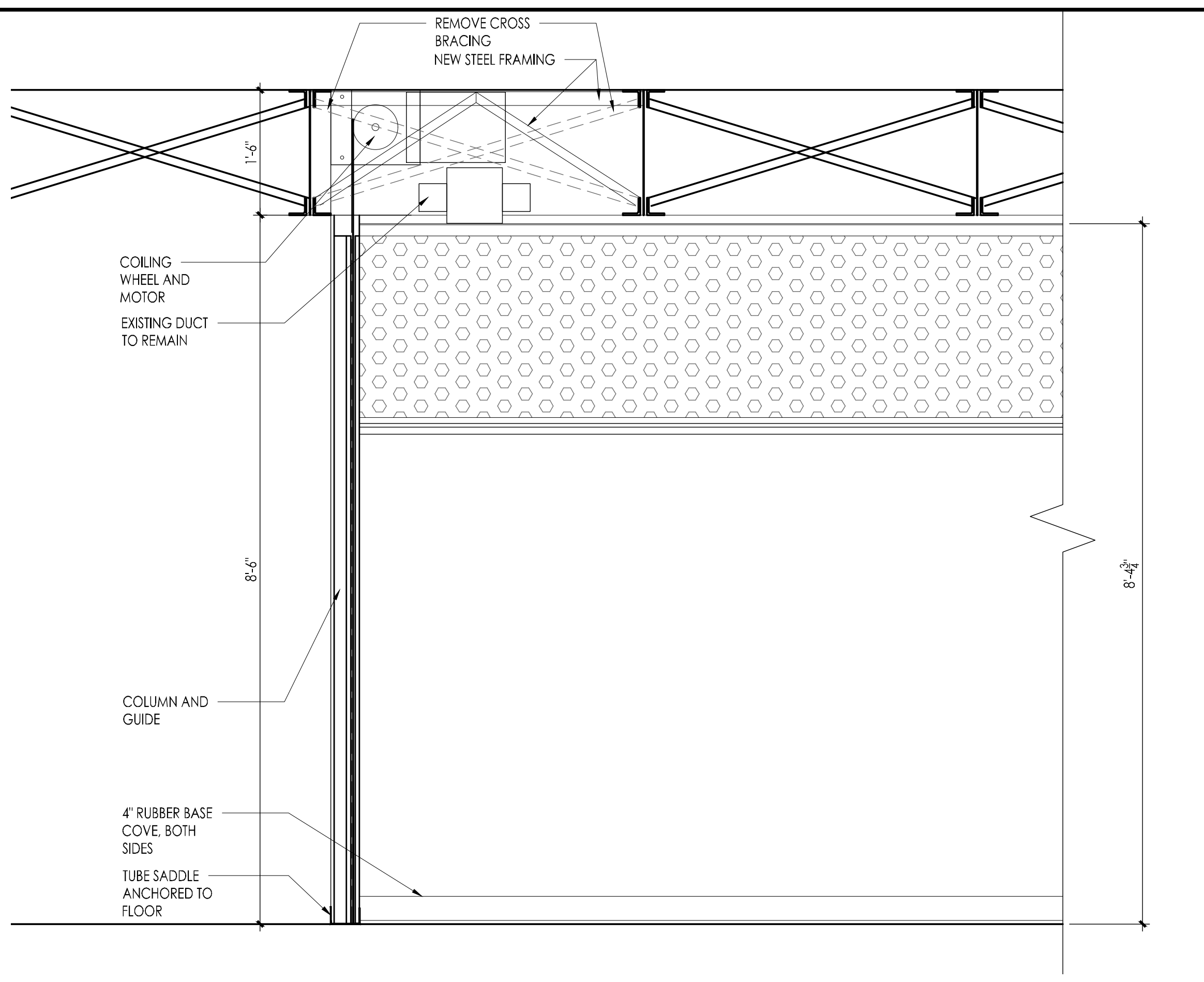
Drawing Number
A404



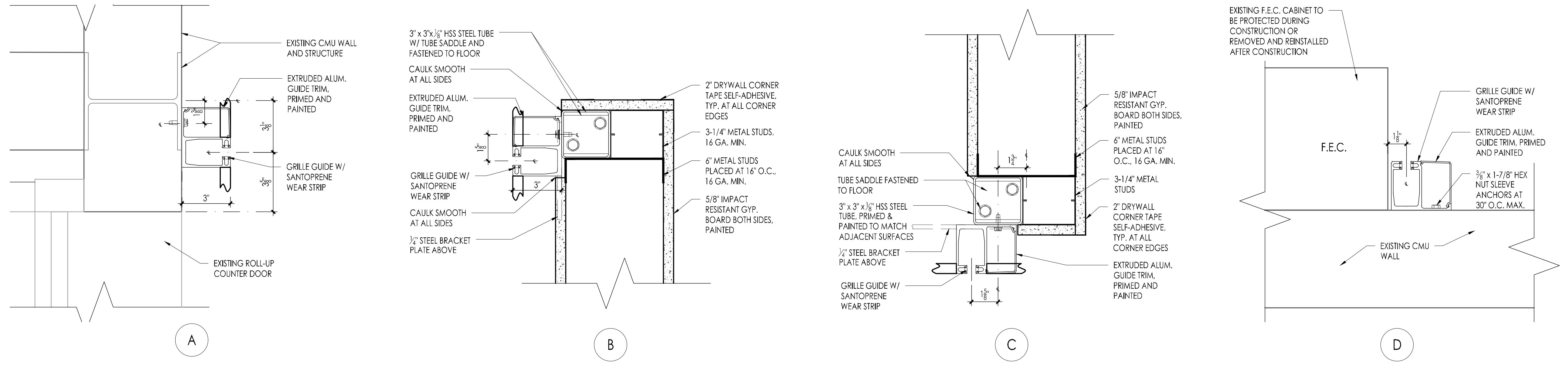
1 FLOOR PLAN OF SERVICE LINE AREA
1/2" = 1'-0"


NEW CONT. ALUMINUM TUBE, PAINTED
1/8" THICK ALUMINUM MESH PANEL, PAINTED
BEVELED SOLID SURFACE LEDGE
SEE DETAIL 5/A503
NEW STAINLESS STEEL COILING DOOR
4" RUBBER BASE COVE, BOTH SIDES
2'-6"
6'-0"
8'-6"
4"

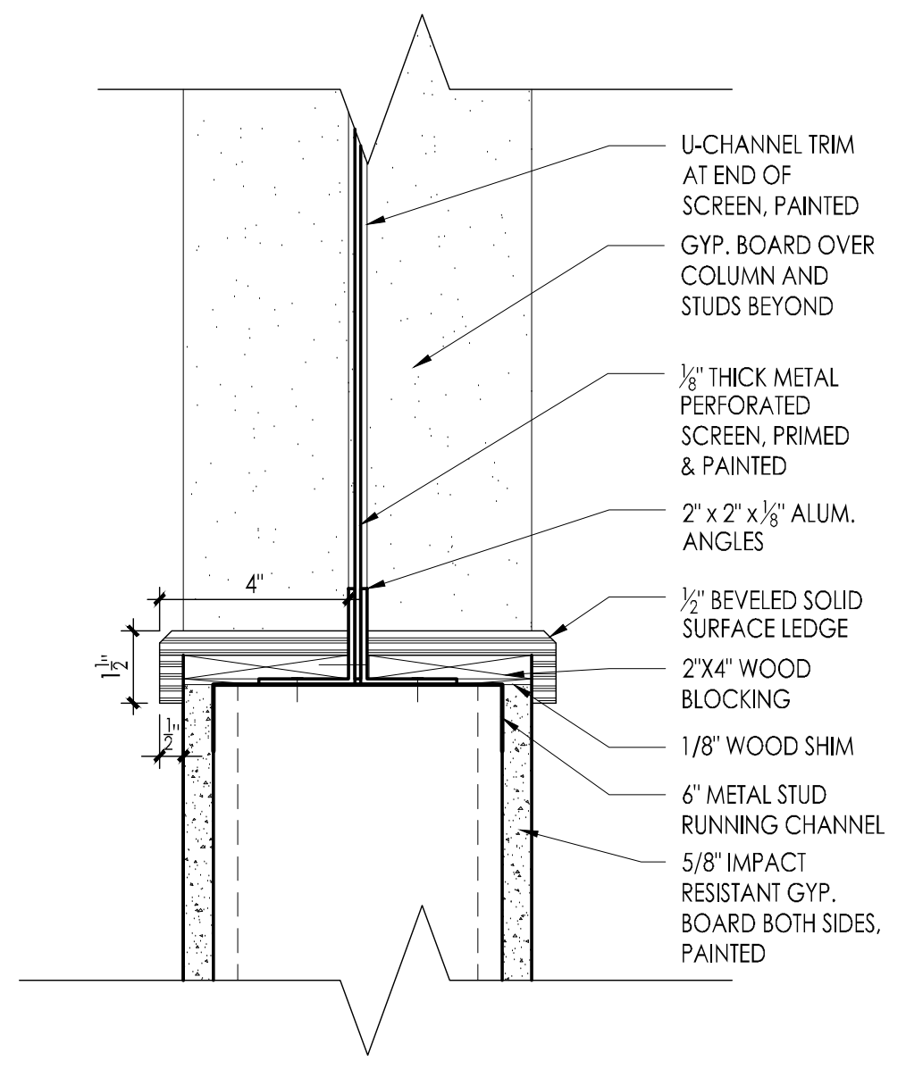
2 SERVICE LINE AREA ELEVATION & SECTION
3/4" = 1'-0"



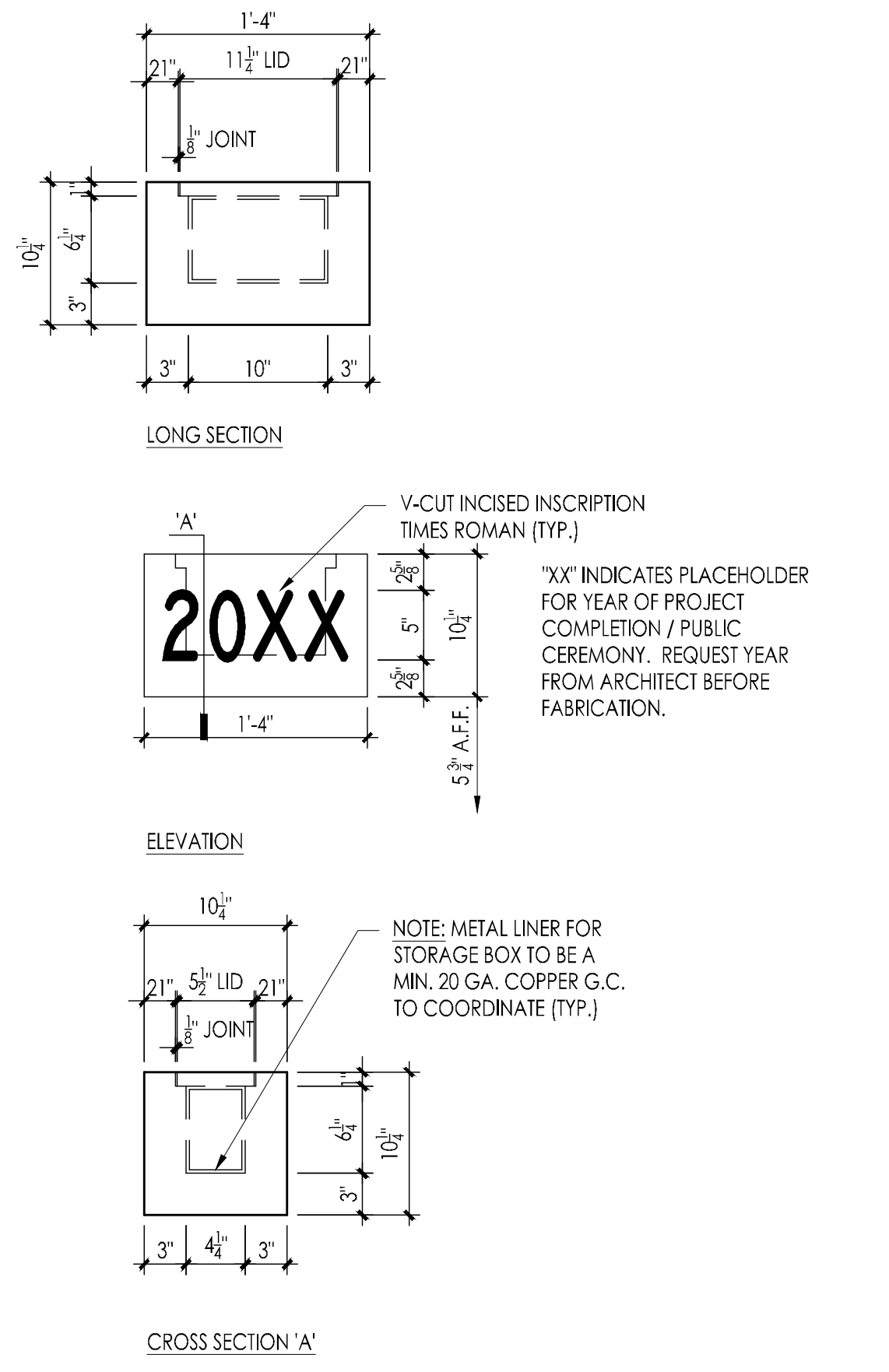
3 SERVICE LINE AREA PARTIAL ELEVATION & SECTION
3/4" = 1'-0"


EXISTING CMU WALL AND STRUCTURE
EXTRUDED ALUM. GUIDE TRIM, PRIMED AND PAINTED
GRILLE GUIDE W/ SANTOPRENE WEAR STRIP
EXISTING ROLL-UP COUNTER DOOR
1 3/8"
3 1/8"
3 5/8"
3"
A
3" x 3"x 1/8" HSS STEEL TUBE W/ TUBE SADDLE AND FASTENED TO FLOOR
CAULK SMOOTH AT ALL SIDES
EXTRUDED ALUM. GUIDE TRIM, PRIMED AND PAINTED
GRILLE GUIDE W/ SANTOPRENE WEAR STRIP
CAULK SMOOTH AT ALL SIDES
1/4" STEEL BRACKET PLATE ABOVE
2" DRYWALL CORNER TAPE SELF-ADHESIVE, TYP. AT ALL CORNER EDGES
3-1/4" METAL STUDS, 16 GA. MIN.
6" METAL STUDS PLACED AT 16" O.C., 16 GA. MIN.
5/8" IMPACT RESISTANT GYP. BOARD BOTH SIDES, PAINTED
1 5/8"
3"
B
CAULK SMOOTH AT ALL SIDES
TUBE SADDLE FASTENED TO FLOOR
3" x 3" x 1/8" HSS STEEL TUBE, PRIMED & PAINTED TO MATCH ADJACENT SURFACES
1/4" STEEL BRACKET PLATE ABOVE
GRILLE GUIDE W/ SANTOPRENE WEAR STRIP
5/8" IMPACT RESISTANT GYP. BOARD BOTH SIDES, PAINTED
6" METAL STUDS PLACED AT 16" O.C., 16 GA. MIN.
3-1/4" METAL STUDS
2" DRYWALL CORNER TAPE SELF-ADHESIVE, TYP. AT ALL CORNER EDGES
EXTRUDED ALUM. GUIDE TRIM, PRIMED AND PAINTED
1 3/4"
1 5/8"
C
EXISTING F.E.C. CABINET TO BE PROTECTED DURING CONSTRUCTION OR REMOVED AND REINSTALLED AFTER CONSTRUCTION
F.E.C.
1 1/8"
GRILLE GUIDE W/ SANTOPRENE WEAR STRIP
EXTRUDED ALUM. GUIDE TRIM, PRIMED AND PAINTED
3/8" x 1-7/8" HEX NUT SLEEVE ANCHORS AT 30" O.C. MAX.
EXISTING CMU WALL
D

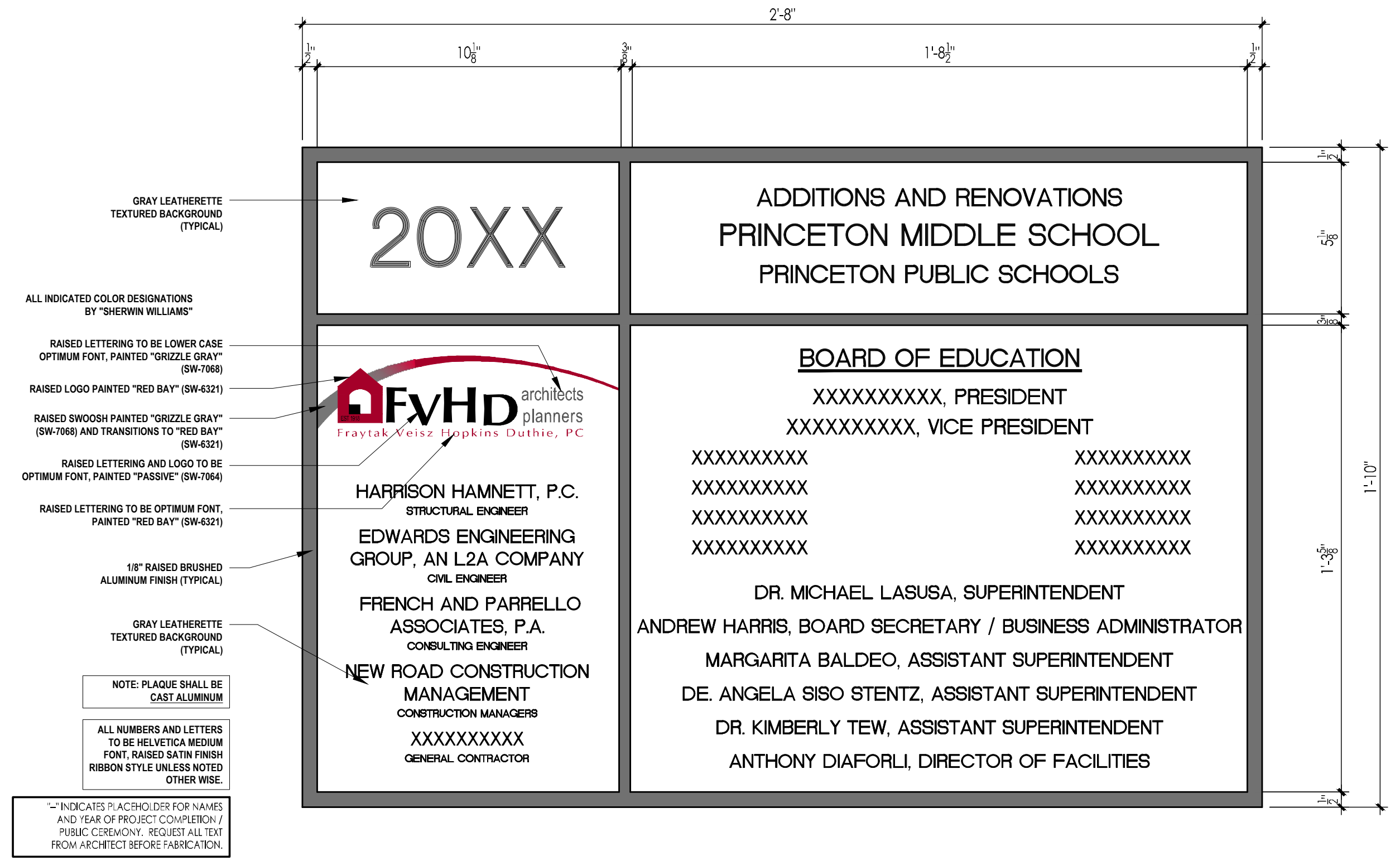
4 PLAN DETAILS AT SERVICE LINE AREA
3" = 1'-0"


U-CHANNEL TRIM AT END OF SCREEN, PAINTED
GYP. BOARD OVER COLUMN AND STUDS BEYOND
1/8" THICK METAL PERFORATED SCREEN, PRIMED & PAINTED
2" x 2" x 1/8" ALUM. ANGLES
1/2" BEVELED SOLID SURFACE LEDGE
2"X4" WOOD BLOCKING
1/8" WOOD SHIM
6" METAL STUD RUNNING CHANNEL
5/8" IMPACT RESISTANT GYP. BOARD BOTH SIDES, PAINTED
4"
1 1/2"
1/2"

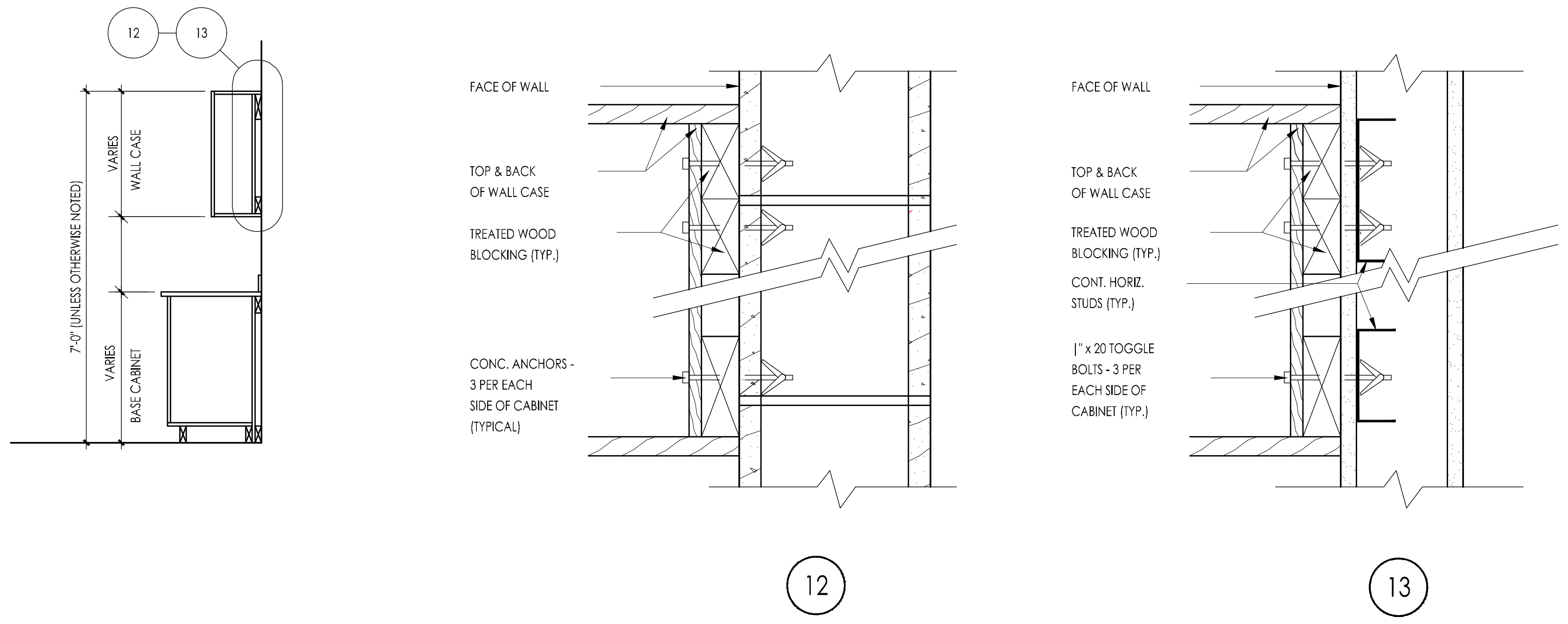
5 LEDGE DETAIL
3" = 1'-0"


1'-4"
21"
11 1/4" LID
21"
1/8" JOINT
10 1/4"
6 1/4"
1"
3"
3"
10"
3"
LONG SECTION
'A'
20XX
V-CUT INCISED INSCRIPTION TIMES ROMAN (TYP.)
"XX" INDICATES PLACEHOLDER FOR YEAR OF PROJECT COMPLETION / PUBLIC CEREMONY. REQUEST YEAR FROM ARCHITECT BEFORE FABRICATION.
2 5/8"
5"
2 5/8"
10 1/4"
1'-4"
5 3/4" A.F.F.
ELEVATION
10 1/4"
21"
5 1/2" LID
21"
1/8" JOINT
NOTE: METAL LINER FOR STORAGE BOX TO BE A MIN. 20 GA. COPPER G.C. TO COORDINATE (TYP.)
1"
6 1/4"
3"
10 1/4"
3"
4 1/4"
3"
CROSS SECTION 'A'

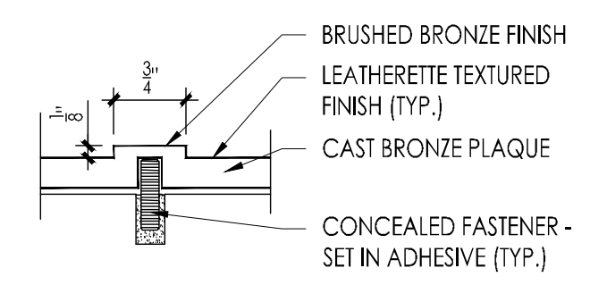
9 DATE STONE DETAIL
1" = 1'-0"


2'-8"
1/2"
10 1/8"
3/8"
1'-8 1/2"
1/2"
1/2"
5 1/8"
3/8"
1'-3 5/8"
1/2"
1'-10"
GRAY LEATHERETTE TEXTURED BACKGROUND (TYPICAL)
ALL INDICATED COLOR DESIGNATIONS BY "SHERWIN WILLIAMS"
RAISED LETTERING TO BE LOWER CASE OPTIMUM FONT, PAINTED "GRIZZLE GRAY" (SW-7068)
RAISED LOGO PAINTED "RED BAY" (SW-6321)
RAISED SWOOSH PAINTED "GRIZZLE GRAY" (SW-7068) AND TRANSITIONS TO "RED BAY" (SW-6321)
RAISED LETTERING AND LOGO TO BE OPTIMUM FONT, PAINTED "PASSIVE" (SW-7064)
RAISED LETTERING TO BE OPTIMUM FONT, PAINTED "RED BAY" (SW-6321)
1/8" RAISED BRUSHED ALUMINUM FINISH (TYPICAL)
GRAY LEATHERETTE TEXTURED BACKGROUND (TYPICAL)
NOTE: PLAQUE SHALL BE CAST ALUMINUM
ALL NUMBERS AND LETTERS TO BE HELVETICA MEDIUM FONT, RAISED SATIN FINISH RIBBON STYLE UNLESS NOTED OTHER WISE.
"–" INDICATES PLACEHOLDER FOR NAMES AND YEAR OF PROJECT COMPLETION / PUBLIC CEREMONY. REQUEST ALL TEXT FROM ARCHITECT BEFORE FABRICATION.
20XX
FVHD architects planners
Fraytak Veisz Hopkins Duthie, PC
HARRISON HAMNETT, P.C.
STRUCTURAL ENGINEER
EDWARDS ENGINEERING GROUP, AN L2A COMPANY
CIVIL ENGINEER
FRENCH AND PARRELLO ASSOCIATES, P.A.
CONSULTING ENGINEER
NEW ROAD CONSTRUCTION MANAGEMENT
CONSTRUCTION MANAGERS
XXXXXXXXXX
GENERAL CONTRACTOR
ADDITIONS AND RENOVATIONS
PRINCETON MIDDLE SCHOOL
PRINCETON PUBLIC SCHOOLS
BOARD OF EDUCATION
XXXXXXXXXX, PRESIDENT
XXXXXXXXXX, VICE PRESIDENT
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
DR. MICHAEL LASUSA, SUPERINTENDENT
ANDREW HARRIS, BOARD SECRETARY / BUSINESS ADMINISTRATOR
MARGARITA BALDEO, ASSISTANT SUPERINTENDENT
DE. ANGELA SISO STENTZ, ASSISTANT SUPERINTENDENT
DR. KIMBERLY TEW, ASSISTANT SUPERINTENDENT
ANTHONY DIAFORLI, DIRECTOR OF FACILITIES

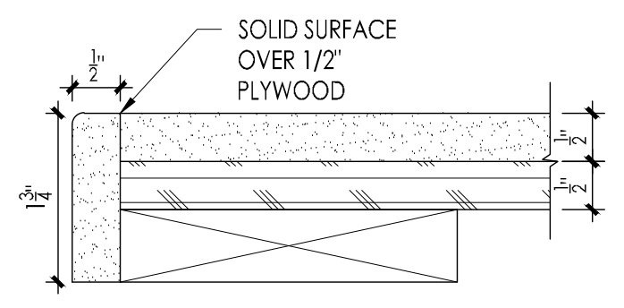
10 COMMEMORATIVE PLAQUE
3" = 1'-0"


12
13
7'-0" (UNLESS OTHERWISE NOTED)
VARIES
WALL CASE
VARIES
BASE CABINET
FACE OF WALL
TOP & BACK OF WALL CASE
TREATED WOOD BLOCKING (TYP.)
CONC. ANCHORS - 3 PER EACH SIDE OF CABINET (TYPICAL)
12
FACE OF WALL
TOP & BACK OF WALL CASE
TREATED WOOD BLOCKING (TYP.)
CONT. HORIZ. STUDS (TYP.)
|" x 20 TOGGLE BOLTS - 3 PER EACH SIDE OF CABINET (TYP.)
13

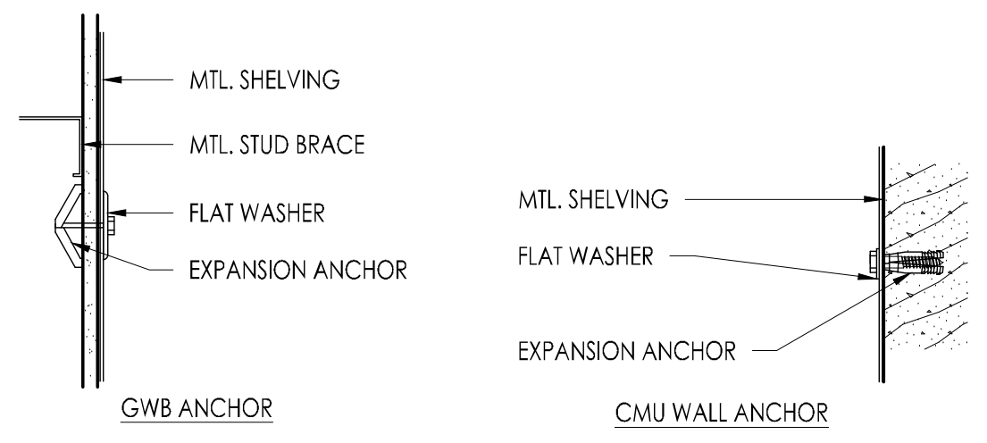
11 WALL CABINET MOUNTING DETAIL
1/2" = 1'-0"


BRUSHED BRONZE FINISH
LEATHERETTE TEXTURED FINISH (TYP.)
CAST BRONZE PLAQUE
CONCEALED FASTENER - SET IN ADHESIVE (TYP.)
3/4"
1/8"

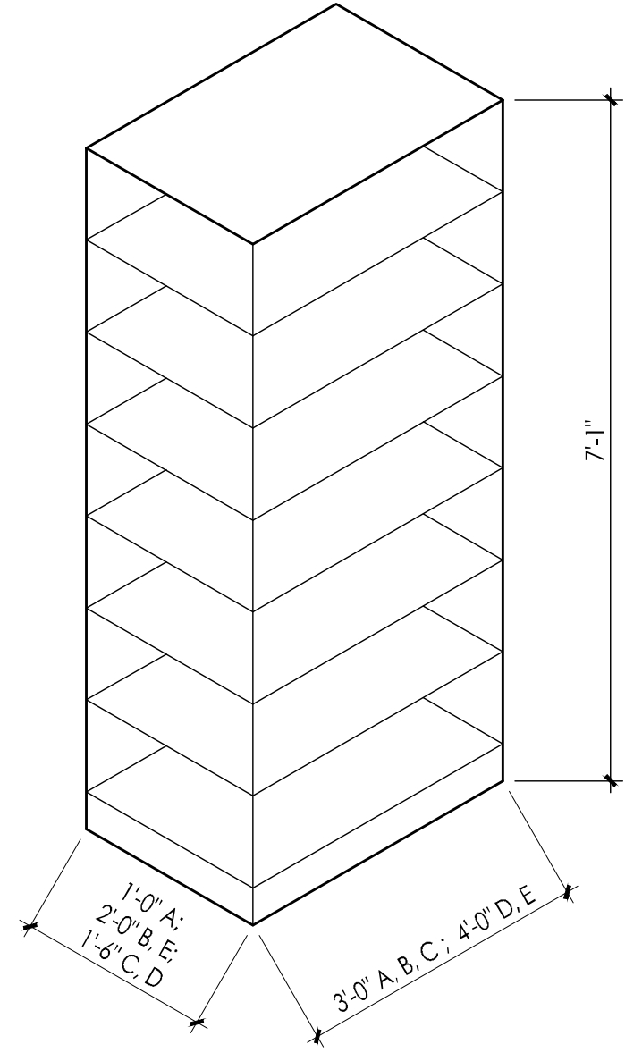
8 FASTENER DETAIL
6" = 1'-0"



14 SOLID SURFACE COUNTER EDGE DETAIL
6" = 1'-0"



15 METAL SHELF INSTALLATION DETAIL
1 1/2" = 1'-0"



SEE DETAIL 15 / A503 FOR SHELVING ANCHORAGE

16 METAL SHELF DETAIL
1/2" = 1'-0"

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
2/12/26
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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln, Princeton, NJ 085402

Project Number
5516D
Project Date
10.10.2025
Checked By
WDH
Drawn By

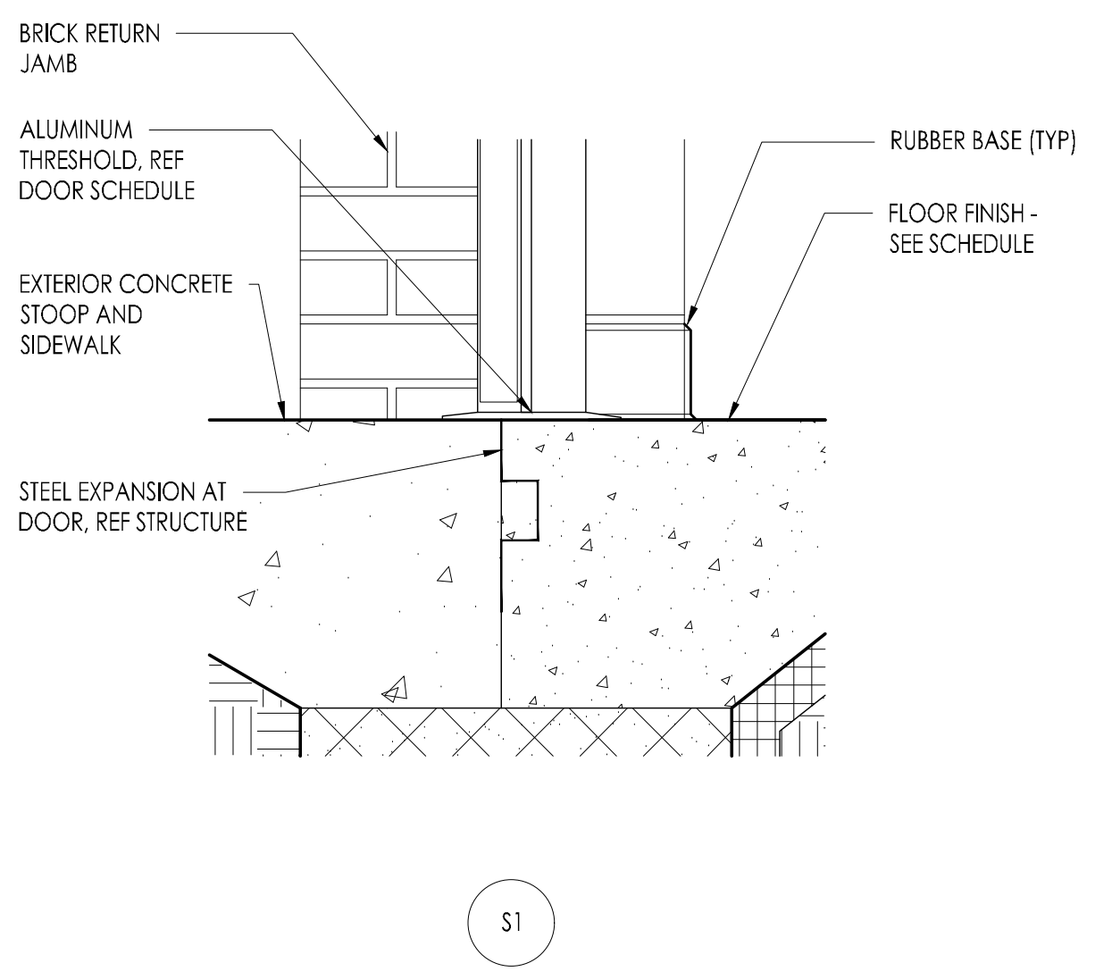
Scale
AS NOTED

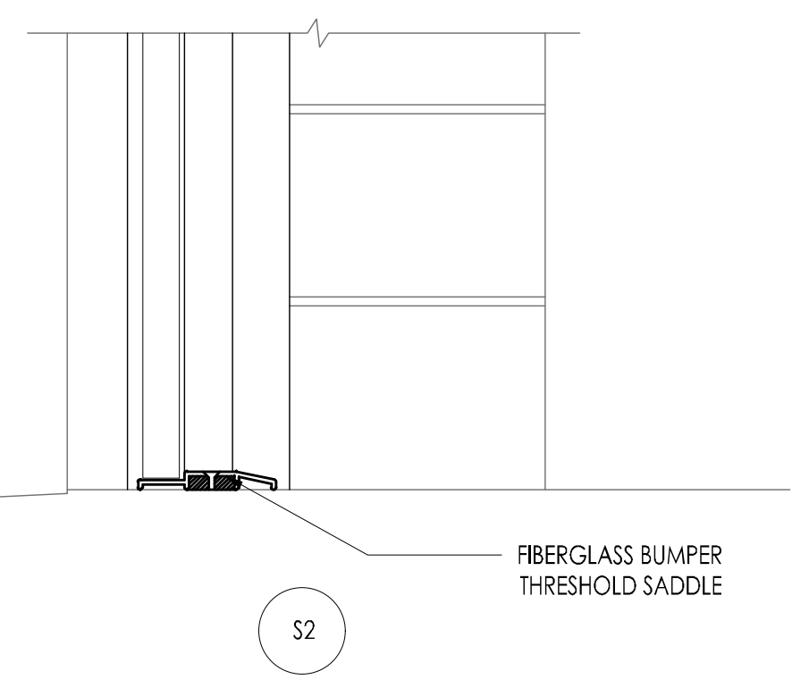
Drawing Name
MISCELLANEOUS DETAILS

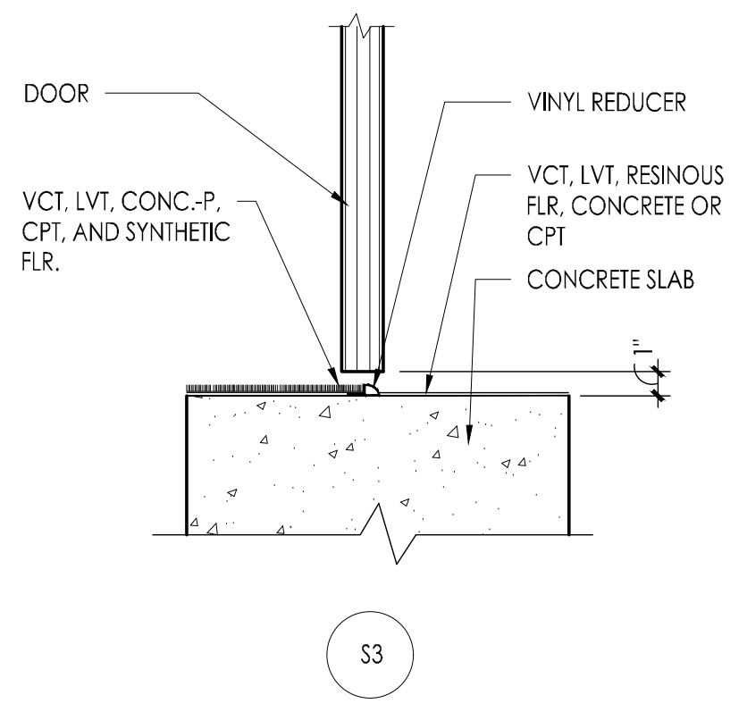
Revisions

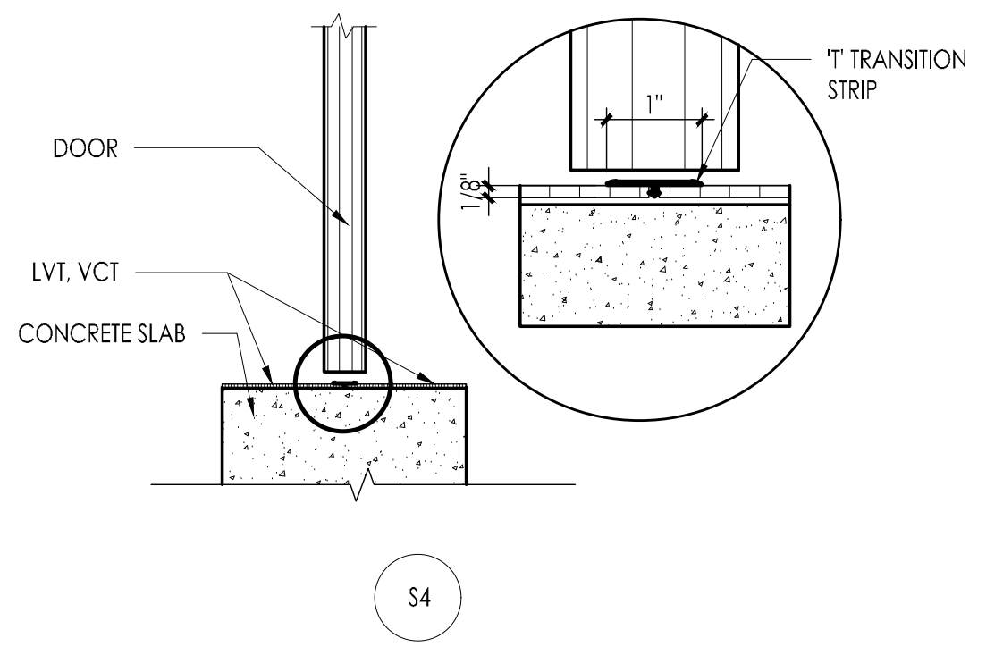
No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

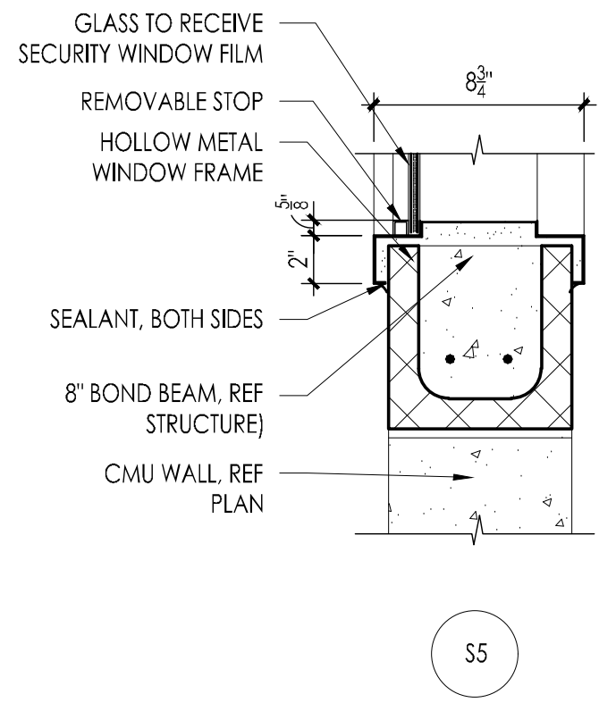
Drawing Number
A503


BRICK RETURN JAMB
ALUMINUM THRESHOLD, REF DOOR SCHEDULE
EXTERIOR CONCRETE STOOP AND SIDEWALK
STEEL EXPANSION AT DOOR, REF STRUCTURE
RUBBER BASE (TYP)
FLOOR FINISH - SEE SCHEDULE
S1



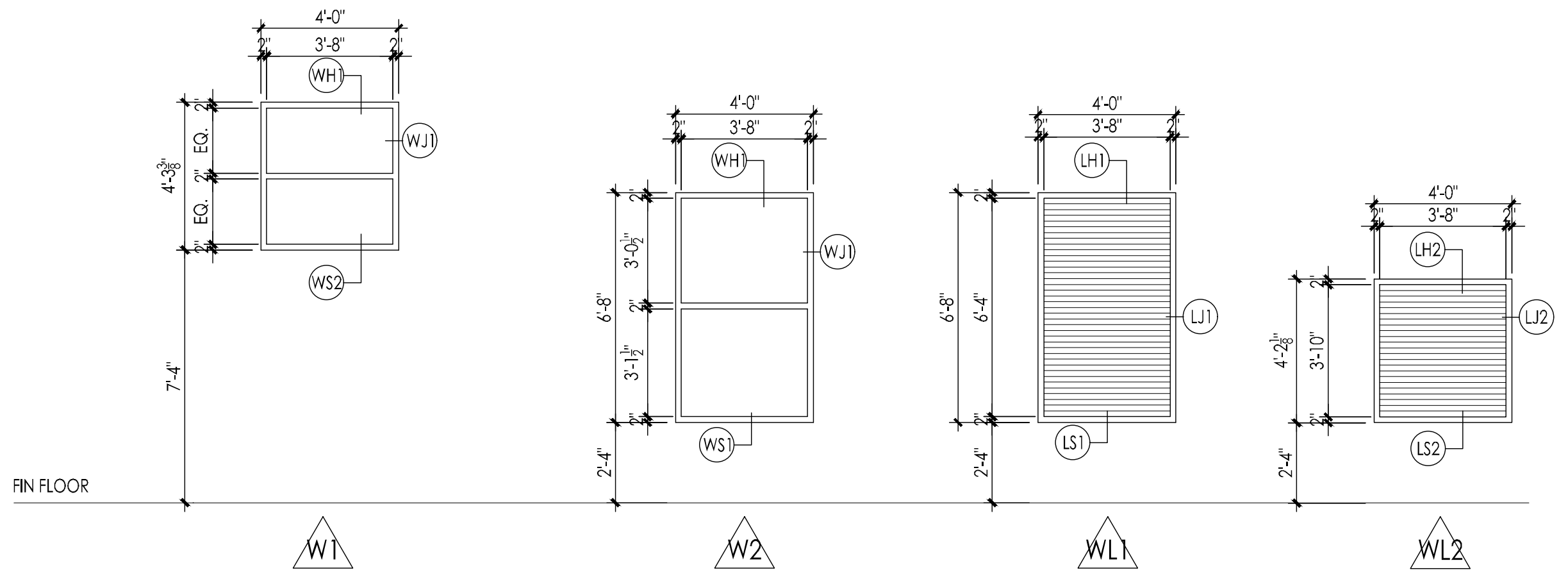

DOOR
VCT, LVT, CONC.-P, CPT, AND SYNTHETIC FLR.
VINYL REDUCER
VCT, LVT, RESINOUS FLR, CONCRETE OR CPT
CONCRETE SLAB
1"
S3




GLASS TO RECEIVE SECURITY WINDOW FILM
REMOVABLE STOP
HOLLOW METAL WINDOW FRAME
SEALANT, BOTH SIDES
8" BOND BEAM, REF STRUCTURE)
CMU WALL, REF PLAN
8 3/4"
5/8"
2"
S5

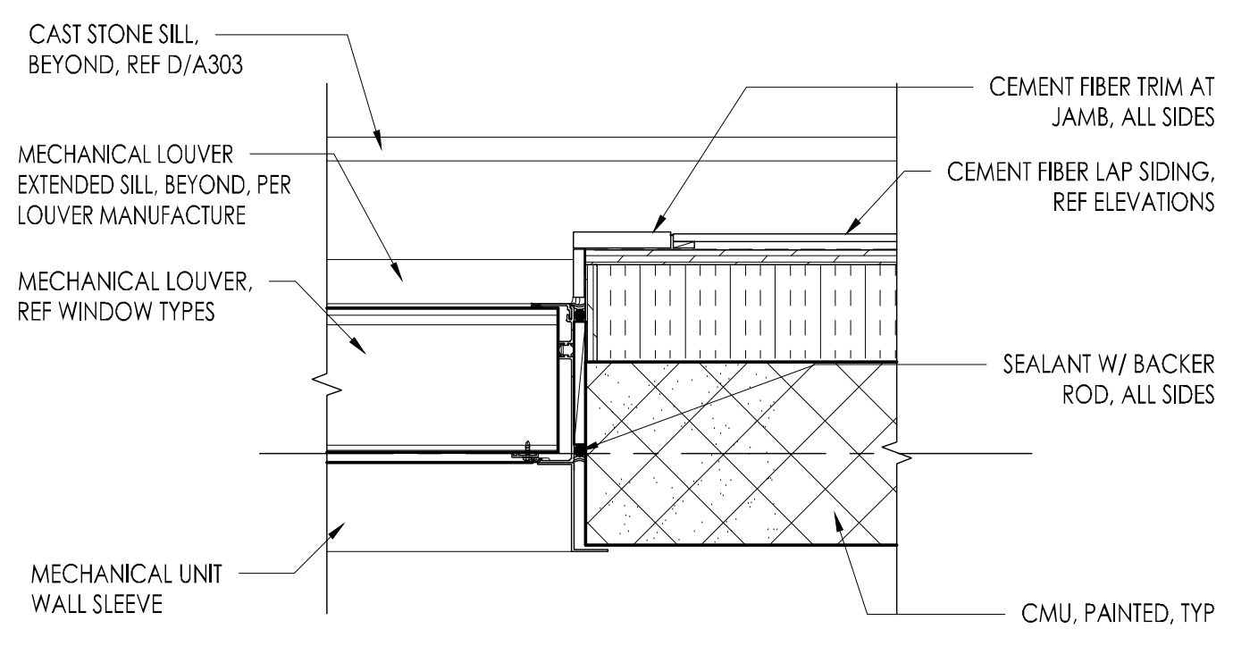
DOOR SILL DETAILS

1/4"=1'-0"



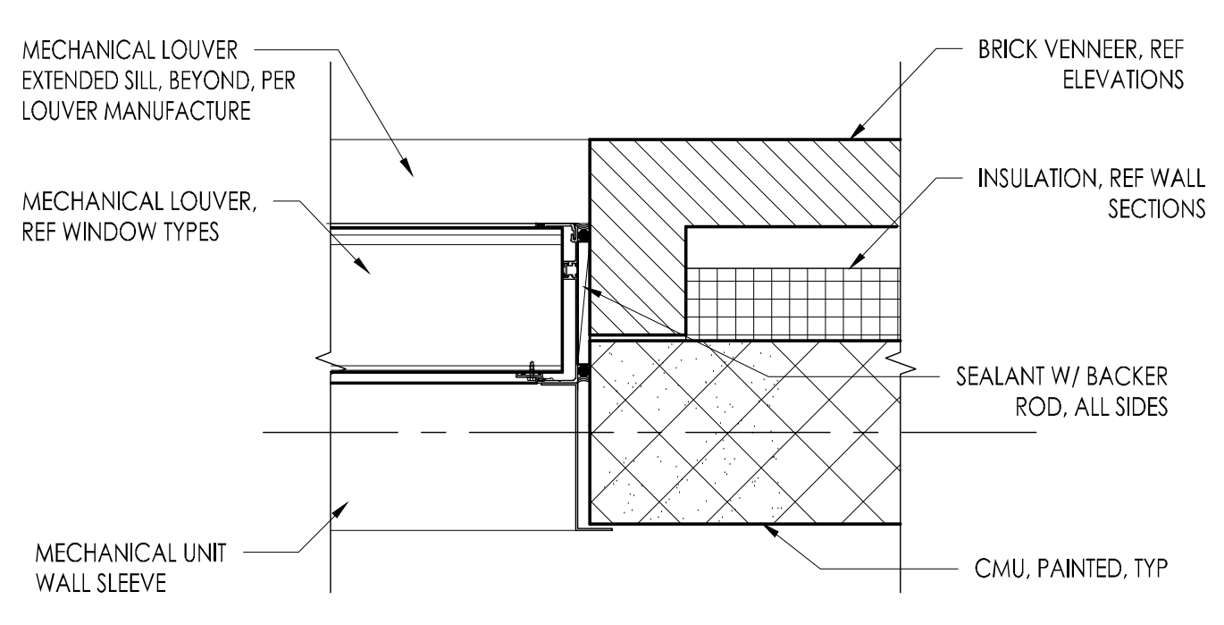
WINDOW TYPES

1/4"=1'-0"


CAST STONE SILL, BEYOND, REF D/A303
MECHANICAL LOUVER EXTENDED SILL, BEYOND, PER LOUVER MANUFACTURE
MECHANICAL LOUVER, REF WINDOW TYPES
MECHANICAL UNIT WALL SLEEVE
CEMENT FIBER TRIM AT JAMB, ALL SIDES
CEMENT FIBER LAP SIDING, REF ELEVATIONS
SEALANT W/ BACKER ROD, ALL SIDES
CMU, PAINTED, TYP

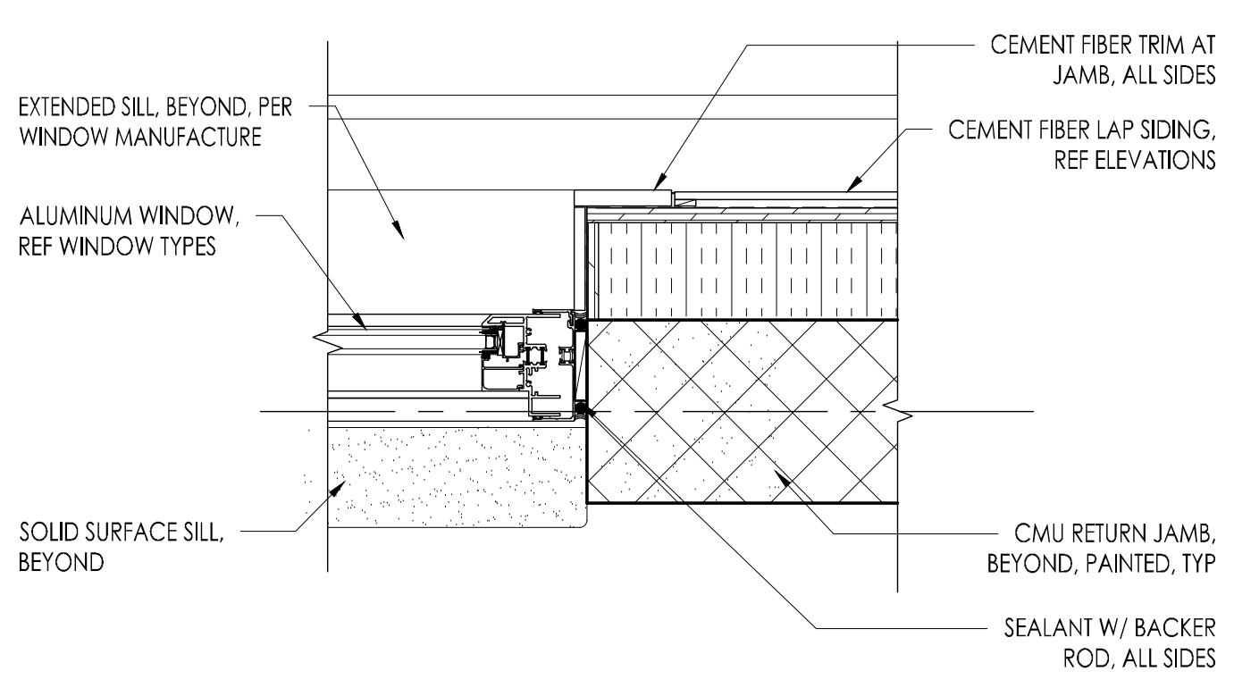
LJ1 LOUVER JAMB DETAIL (CLASSROOM)

1-1/2" = 1'-0"


MECHANICAL LOUVER EXTENDED SILL, BEYOND, PER LOUVER MANUFACTURE
MECHANICAL LOUVER, REF WINDOW TYPES
MECHANICAL UNIT WALL SLEEVE
BRICK VENNEER, REF ELEVATIONS
INSULATION, REF WALL SECTIONS
SEALANT W/ BACKER ROD, ALL SIDES
CMU, PAINTED, TYP

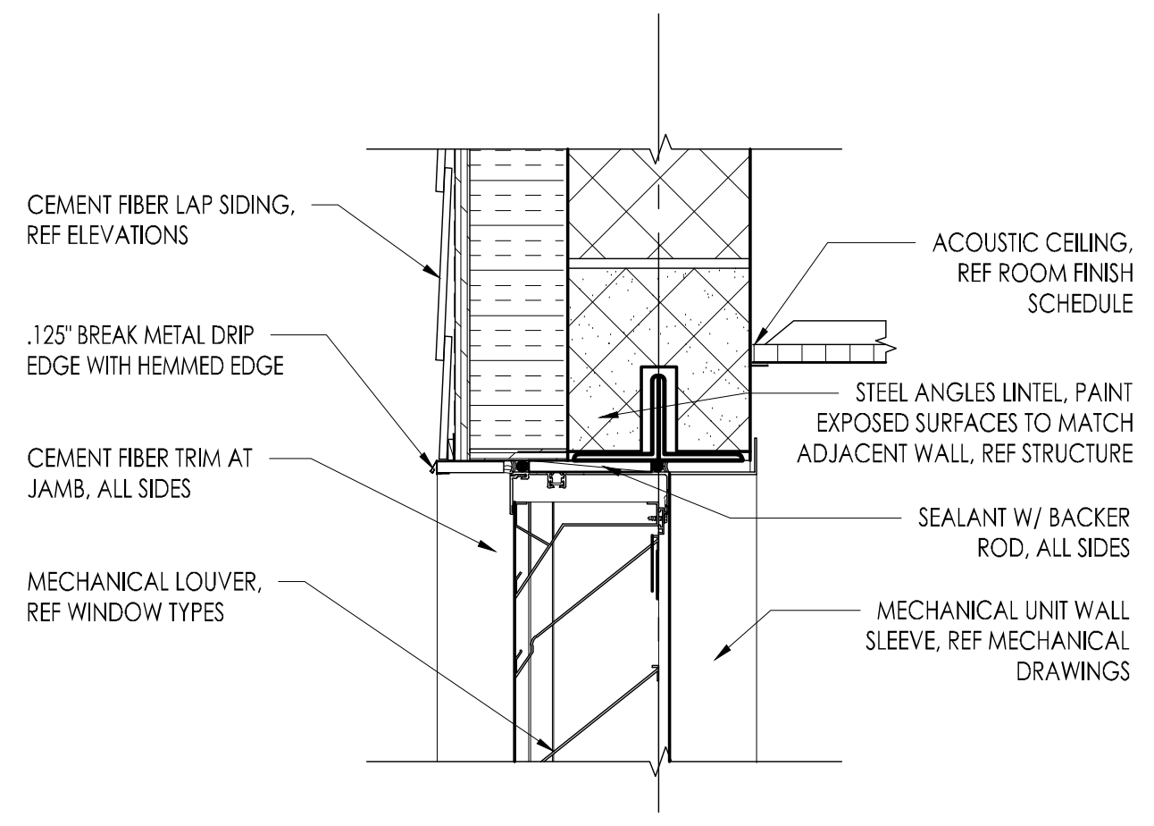
LJ2 LOUVER JAMB DETAIL (CLASSROOM)

1-1/2" = 1'-0"


EXTENDED SILL, BEYOND, PER WINDOW MANUFACTURE
ALUMINUM WINDOW, REF WINDOW TYPES
SOLID SURFACE SILL, BEYOND
CEMENT FIBER TRIM AT JAMB, ALL SIDES
CEMENT FIBER LAP SIDING, REF ELEVATIONS
CMU RETURN JAMB, BEYOND, PAINTED, TYP
SEALANT W/ BACKER ROD, ALL SIDES

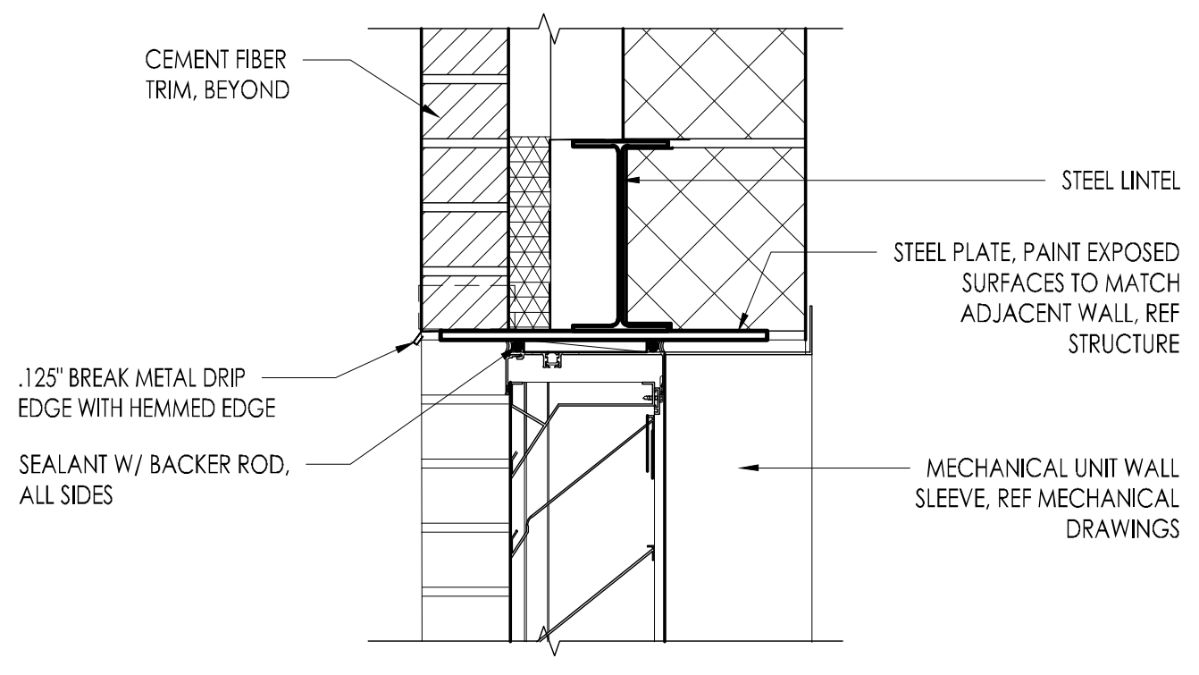
WJ1 WINDOW JAMB DETAIL (CLASSROOM)

1-1/2" = 1'-0"


CEMENT FIBER LAP SIDING, REF ELEVATIONS
.125" BREAK METAL DRIP EDGE WITH HEMMED EDGE
CEMENT FIBER TRIM AT JAMB, ALL SIDES
MECHANICAL LOUVER, REF WINDOW TYPES
ACOUSTIC CEILING, REF ROOM FINISH SCHEDULE
STEEL ANGLES LINTEL, PAINT EXPOSED SURFACES TO MATCH ADJACENT WALL, REF STRUCTURE
SEALANT W/ BACKER ROD, ALL SIDES
MECHANICAL UNIT WALL SLEEVE, REF MECHANICAL DRAWINGS

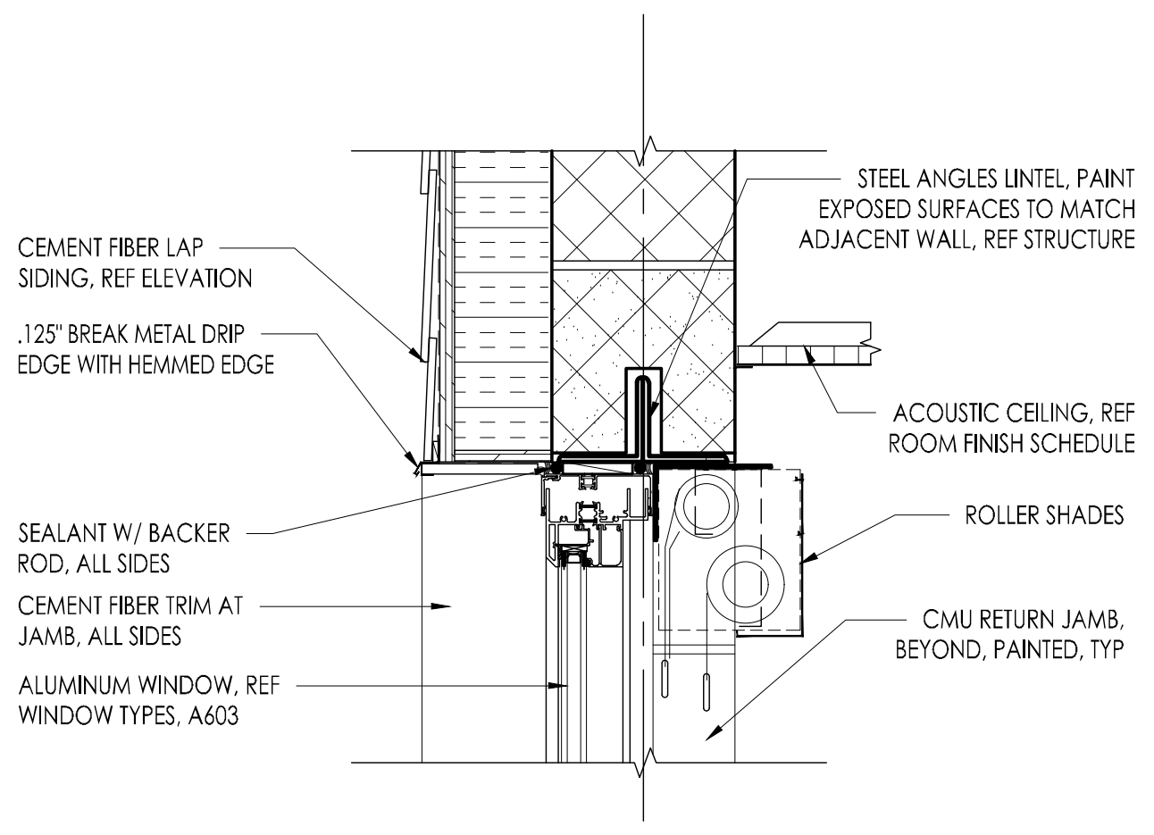
LH1 LOUVER HEAD DETAIL (CLASSROOM)

1-1/2" = 1'-0"


CEMENT FIBER TRIM, BEYOND
.125" BREAK METAL DRIP EDGE WITH HEMMED EDGE
SEALANT W/ BACKER ROD, ALL SIDES
STEEL LINTEL
STEEL PLATE, PAINT EXPOSED SURFACES TO MATCH ADJACENT WALL, REF STRUCTURE
MECHANICAL UNIT WALL SLEEVE, REF MECHANICAL DRAWINGS

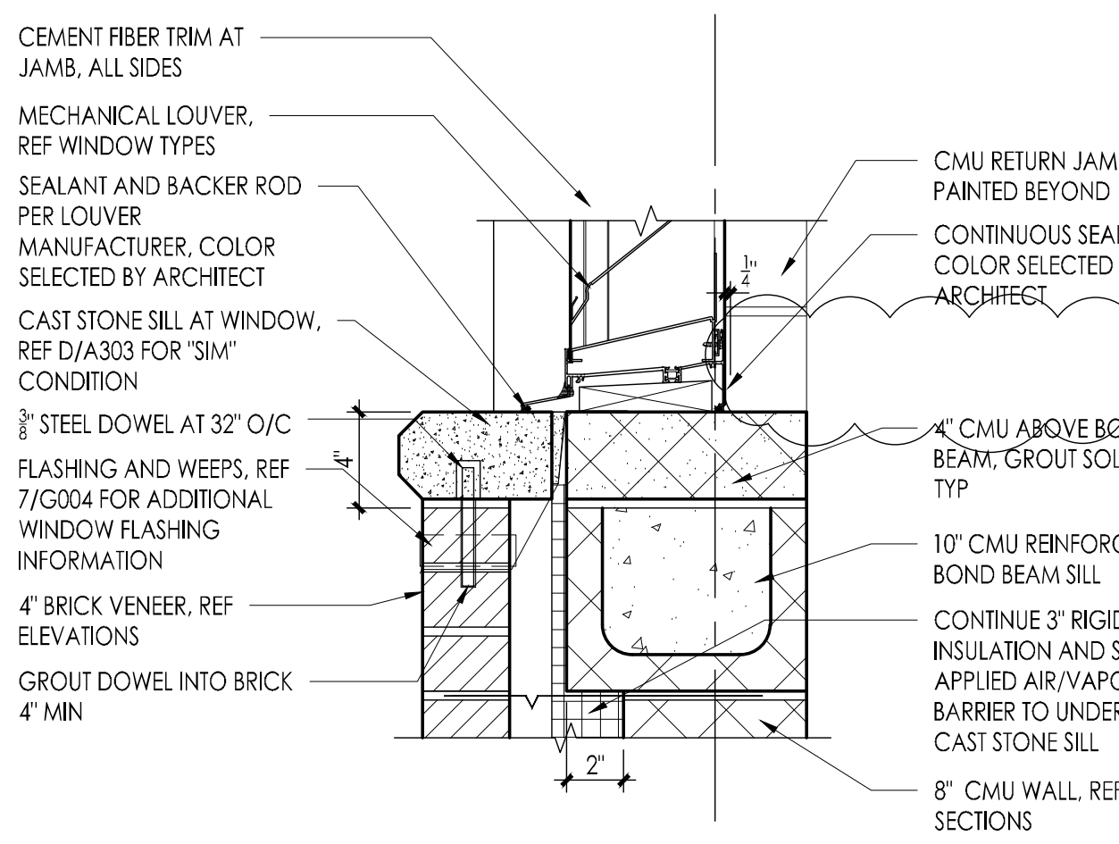
LH2 STOREFRONT HEAD DETAIL

1-1/2" = 1'-0"


CEMENT FIBER LAP SIDING, REF ELEVATION
.125" BREAK METAL DRIP EDGE WITH HEMMED EDGE
SEALANT W/ BACKER ROD, ALL SIDES
CEMENT FIBER TRIM AT JAMB, ALL SIDES
ALUMINUM WINDOW, REF WINDOW TYPES, A603
STEEL ANGLES LINTEL, PAINT EXPOSED SURFACES TO MATCH ADJACENT WALL, REF STRUCTURE
ACOUSTIC CEILING, REF ROOM FINISH SCHEDULE
ROLLER SHADES
CMU RETURN JAMB, BEYOND, PAINTED, TYP

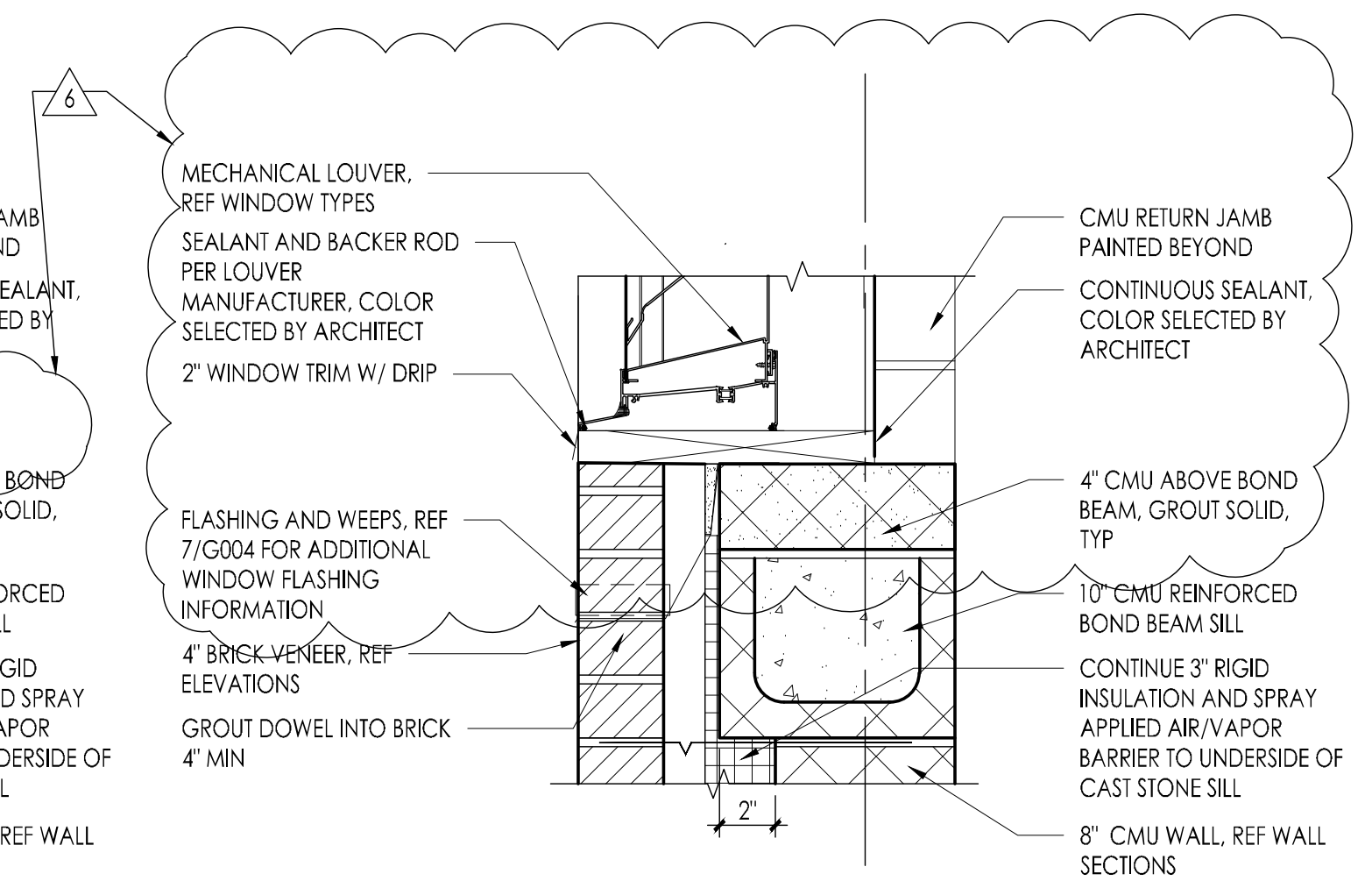
WH1 HEAD DETAIL (ALUMINUM WINDOW)

1-1/2" = 1'-0"


CEMENT FIBER TRIM AT JAMB, ALL SIDES
MECHANICAL LOUVER, REF WINDOW TYPES
SEALANT AND BACKER ROD PER LOUVER MANUFACTURER, COLOR SELECTED BY ARCHITECT
CAST STONE SILL AT WINDOW, REF D/A303 FOR "SIM" CONDITION
3/8" STEEL DOWEL AT 32" O/C
FLASHING AND WEEPS, REF 7/G004 FOR ADDITIONAL WINDOW FLASHING INFORMATION
4" BRICK VENEER, REF ELEVATIONS
GROUT DOWEL INTO BRICK 4" MIN
CMU RETURN JAMB PAINTED BEYOND
CONTINUOUS SEALANT, COLOR SELECTED BY ARCHITECT
4" CMU ABOVE BOND BEAM, GROUT SOLID, TYP
10" CMU REINFORCED BOND BEAM SILL
CONTINUE 3" RIGID INSULATION AND SPRAY APPLIED AIR/VAPOR BARRIER TO UNDERSIDE OF CAST STONE SILL
8" CMU WALL, REF WALL SECTIONS
1/4"
4"
2"

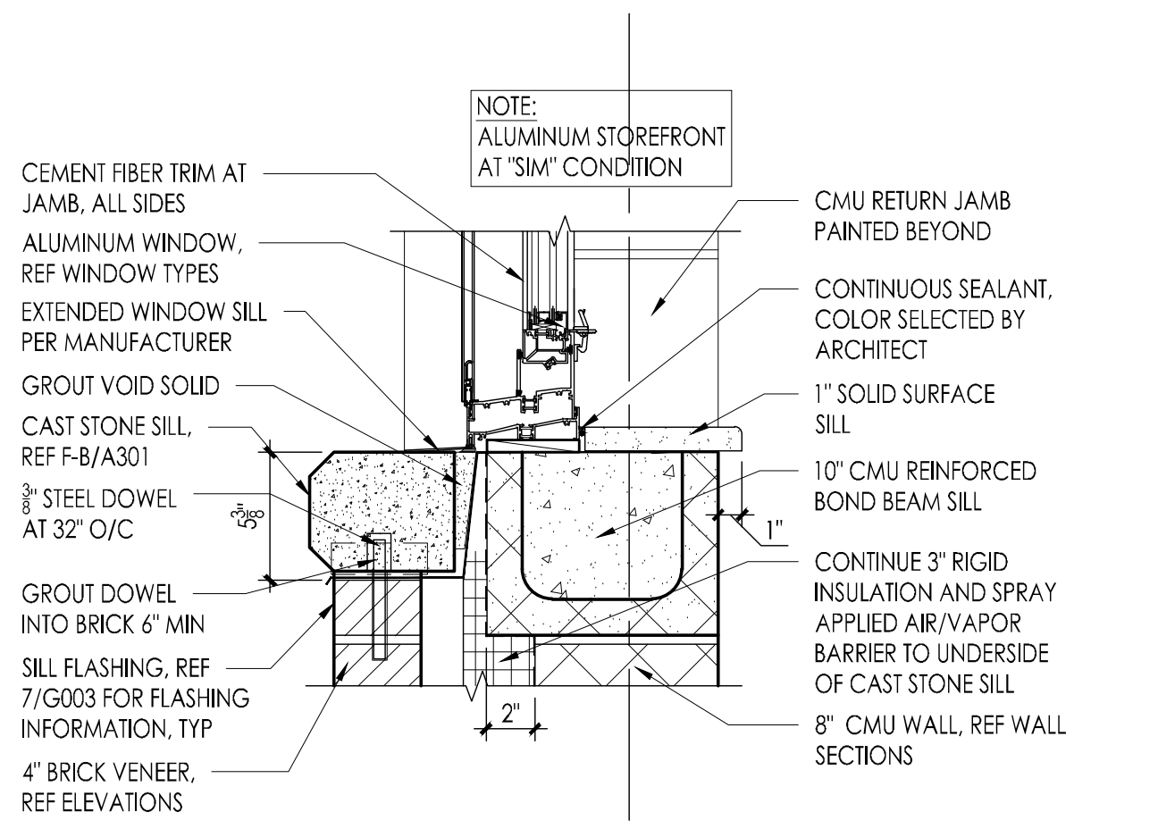
LS1 LOUVER SILL DETAIL (CLASSROOM)

1-1/2" = 1'-0"


6
MECHANICAL LOUVER, REF WINDOW TYPES
SEALANT AND BACKER ROD PER LOUVER MANUFACTURER, COLOR SELECTED BY ARCHITECT
2" WINDOW TRIM W/ DRIP
FLASHING AND WEEPS, REF 7/G004 FOR ADDITIONAL WINDOW FLASHING INFORMATION
4" BRICK VENEER, REF ELEVATIONS
GROUT DOWEL INTO BRICK 4" MIN
CMU RETURN JAMB PAINTED BEYOND
CONTINUOUS SEALANT, COLOR SELECTED BY ARCHITECT
4" CMU ABOVE BOND BEAM, GROUT SOLID, TYP
10" CMU REINFORCED BOND BEAM SILL
CONTINUE 3" RIGID INSULATION AND SPRAY APPLIED AIR/VAPOR BARRIER TO UNDERSIDE OF CAST STONE SILL
8" CMU WALL, REF WALL SECTIONS
2"

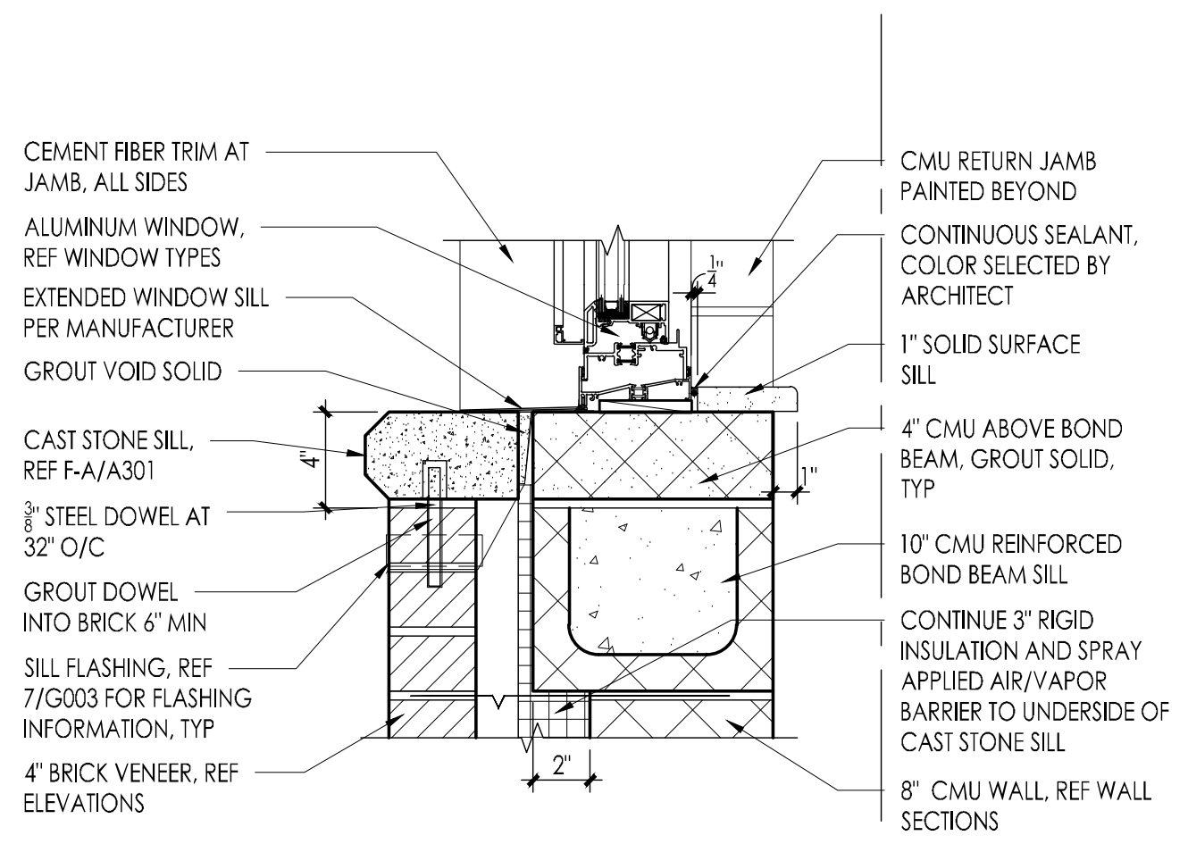
LS2 LOUVER SILL DETAIL (CLASSROOM)

1-1/2" = 1'-0"


NOTE:
ALUMINUM STOREFRONT AT "SIM" CONDITION
CEMENT FIBER TRIM AT JAMB, ALL SIDES
ALUMINUM WINDOW, REF WINDOW TYPES
EXTENDED WINDOW SILL PER MANUFACTURER
GROUT VOID SOLID
CAST STONE SILL, REF F-B/A301
3/8" STEEL DOWEL AT 32" O/C
GROUT DOWEL INTO BRICK 6" MIN
SILL FLASHING, REF 7/G003 FOR FLASHING INFORMATION, TYP
4" BRICK VENEER, REF ELEVATIONS
CMU RETURN JAMB PAINTED BEYOND
CONTINUOUS SEALANT, COLOR SELECTED BY ARCHITECT
1" SOLID SURFACE SILL
10" CMU REINFORCED BOND BEAM SILL
CONTINUE 3" RIGID INSULATION AND SPRAY APPLIED AIR/VAPOR BARRIER TO UNDERSIDE OF CAST STONE SILL
8" CMU WALL, REF WALL SECTIONS
5 3/8"
1"
2"

WH1 SILL DETAIL (CLASSROOM)

1-1/2" = 1'-0"


CEMENT FIBER TRIM AT JAMB, ALL SIDES
ALUMINUM WINDOW, REF WINDOW TYPES
EXTENDED WINDOW SILL PER MANUFACTURER
GROUT VOID SOLID
CAST STONE SILL, REF F-A/A301
3/8" STEEL DOWEL AT 32" O/C
GROUT DOWEL INTO BRICK 6" MIN
SILL FLASHING, REF 7/G003 FOR FLASHING INFORMATION, TYP
4" BRICK VENEER, REF ELEVATIONS
CMU RETURN JAMB PAINTED BEYOND
CONTINUOUS SEALANT, COLOR SELECTED BY ARCHITECT
1" SOLID SURFACE SILL
4" CMU ABOVE BOND BEAM, GROUT SOLID, TYP
10" CMU REINFORCED BOND BEAM SILL
CONTINUE 3" RIGID INSULATION AND SPRAY APPLIED AIR/VAPOR BARRIER TO UNDERSIDE OF CAST STONE SILL
8" CMU WALL, REF WALL SECTIONS
1/4"
4"
1"
2"

WH2 SILL DETAIL (VOCAL MUSIC)

1-1/2" = 1'-0"

WINDOW NOTES

1. PROVIDE INSULATED TEMPERED GLASS W/ SECURITY WINDOW FILM (INSUL-F) AT NEW EXTERIOR WINDOWS, UNLESS NOTED OTHERWISE.
2. PROVIDE ROOM NUMBERS ON EXTERIOR SIDE OF WINDOWS. ROOM NUMBERS TO BE AN EXTERIOR GRADE REFLECTIVE VINYL MIN OF 5" HIGH, REFER TO SPECS FOR DETAILS.
3. REFERENCE THIS SHEET FOR HEAD, JAMB, AND SILL DETAILS FOR WINDOWS.
4. REFERENCE SPECS. AND MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF WINDOW SHADES.
5. ALL OPERABLE WINDOWS WILL RECEIVE 4" LIMITED STOPS, TYP.
6. ALL FIRST FLOOR WINDOWS WILL RECEIVE SECURITY FILM.

3

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 2/12/26 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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By

Scale
AS NOTED

Drawing Name
DOOR FRAME SILL DETAILS & WINDOW FRAME DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A603

INTERIOR FINISH LEGEND

ACOUSTICAL CEILING SYSTEMS

ACB-1	DESCRIPTION: 2x4 ACOUSTICAL CEILING BOARD MANUF: ARMSTRONG OR APPROVED EQUAL SERIES: 863 ULTIMA HIGH NRC COLOR: WHITE SIZE: 24" x 48" x 7/8" EDGE PROFILE: LAY-IN NOTE: REFER TO SPECIFICATIONS
ACB-2	DESCRIPTION: 2x2 ACOUSTICAL CEILING BOARD MANUF: ARMSTRONG OR APPROVED EQUAL SERIES: ULTIMA HIGH NRC COLOR: WHITE SIZE: 24" x 24" x 7/8" EDGE PROFILE: LAY-IN NOTE: REFER TO SPECIFICATIONS
ACB-3	DESCRIPTION: 2x2 ACOUSTICAL CEILING BOARD MANUF: ARMSTRONG OR APPROVED EQUAL SERIES: ULTIMA HIGH NRC COLOR: BLACK SIZE: 24" x 24" x 7/8" EDGE PROFILE: LAY-IN NOTE: REFER TO SPECIFICATIONS
AACB-1	DESCRIPTION: 2x4 ACOUSTICAL CEILING BOARD MANUF: ARMSTRONG OR APPROVED EQUAL SERIES: 605 CERAGUARD MAX COLOR: WHITE SIZE: 24" x 48" x 5/8" EDGE PROFILE: LAY-IN NOTE: REFER TO SPECIFICATIONS

CARPET ENTRY MAT

CEM-1	MANUF: PATCRAFT COLLECTION: WALK FORWARD SERIES/COLOR: TBD SIZE: 24" x 24" INSTALL METHOD: QUARTER TURN

CARPET TILE

CPT-1	MANUF: INTERFACE OR APPROVED EQUAL COLLECTION: NIGHT LIGHTS SERIES/COLOR: TBD SIZE: 9.845" x 39.38" INSTALL METHOD: ASHLAR
CPT-2	MANUF: INTERFACE OR APPROVED EQUAL COLLECTION: ONLINE SERIES/COLOR: TBD SIZE: 9.845" x 39.38" INSTALL METHOD: ASHLAR
CPT-3	ALL TO MATCH EXISTING

CORNER GUARDS

CG-1	DESCRIPTION: 2" SURFACE MOUNT CORNER GUARD MANUF: INPRO OR APPROVED EQUAL STYLE: 160 HIGH IMPACT CORNER GUARD COLOR: TBD (MANUF. FULL RANGE) DIMENSIONS: 2" WING x 48" H INSTALL: INSTALL WITH PRE-SLOTTED ALUMINUM RETAINER
CG-1	DESCRIPTION: SURFACE MOUNT END WALL PROTECTOR W/ END CAPS MANUF: INPRO OR APPROVED EQUAL STYLE: 160 HIGH IMPACT END WALL PROTECTOR COLOR: TBD (MANUF. FULL RANGE) DIMENSIONS: 2" WING x 4'H. INSTALL: INSTALL WITH PRE-SLOTTED ALUMINUM RETAINER

DECORATIVE CEILING FIXTURES

BFL-1	MANUF: ACOUFELT COLLECTION: WING SERIES/COLOR: TBD SIZE: THICKNESS: ½" HEIGHT:10"-20" LENGTH: INSTALL METHOD: QUARTER TURN
BFL-2	MANUF: ACOUFELT COLLECTION: WING SERIES/COLOR: TBD SIZE: WIDTH: ½" HEIGHT: 10"-20" LENGTH INSTALL METHOD: QUARTER TURN
BFL-3	MANUF: ACOUFELT COLLECTION: WING SERIES/COLOR: TBD SIZE: 24" x 24" INSTALL METHOD: QUARTER TURN
BFL-4	MANUF: ACOUFELT COLLECTION: WING SERIES/COLOR: TBD SIZE: 24" x 24" INSTALL METHOD: QUARTER TURN
BFL-5	MANUF: ACOUFELT COLLECTION: LINEAR SERIES/COLOR: TBD SIZE: WIDTH: ½" HEIGHT:1'-0" LENGTH:VARIES, REFER RCP INSTALL METHOD:
BFL-6	MANUF: ACOUFELT COLLECTION: LINEAR SERIES/COLOR: TBD SIZE: WIDTH: ½" HEIGHT: 1'-0" LENGTH: VARIES, REFER RCP INSTALL METHOD:

FIBER REINFORCED PLASTIC

FRP-1	MANUF: ALTRO OR APPROVED EQUAL COLLECTION: WHITEROCK COLOR: TBD DIMENSIONS: 4x10 PANELS INSTALL: PROVIDE ACCESSORIES AS SPECIFIED
FRP-2	MANUF: ALTRO OR APPROVED EQUAL COLLECTION: WHITEROCK COLOR: TBD DIMENSIONS: 4x10 PANELS INSTALL: PROVIDE ACCESSORIES AS SPECIFIED

LUXURY VINYL TILE

LVT-1	DESCRIPTION: CORRIDOR / CLASSROOM MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CMYK SERIES/COLOR: TBD SIZE: 12" x 24" INSTALL METHOD: STAGGERED/BRICK SEE FINISH PLANS
LVT-2	DESCRIPTION: VOCAL MUSIC ROOM MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CMYK SERIES/COLOR: TBD SIZE: 12" x 24" INSTALL METHOD: STAGGERED/BRICK SEE FINISH PLANS
LVT-3	DESCRIPTION: VOCAL MUSIC ROOM MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CMYK SERIES/COLOR: TBD SIZE: 12" x 24" INSTALL METHOD: STAGGERED
LVT-4	DESCRIPTION: STAFF ROOM AND CONFERENCE LVT MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CROSSOVER SERIES/COLOR: TBD SIZE: 7" x 48" INSTALL METHOD: STAGGERED
LVT-5	DESCRIPTION: CORRIDOR / CLASSROOM ACCENT MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CMYK SERIES/COLOR: TBD SIZE: 12" x 24" INSTALL METHOD: STAGGERED/BRICK SEE FINISH PLANS
LVT-6	DESCRIPTION: CORRIDOR / CLASSROOM ACCENT MANUF: PATCRAFT OR APPROVED EQUAL COLLECTION: CMYK SERIES/COLOR: TBD SIZE: 12" x 24" INSTALL METHOD: STAGGERED/BRICK SEE FINISH PLANS

METAL STORAGE

MB-1	DESCRIPTION: INSTRUMENT STORAGE METAL SHELF MANUF: ICISCIENTIFIC COLOR: TBD FINISH: FLAT

PAINT

P-1	DESCRIPTION: FIELD COLOR WALL PAINT MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: EGGSHELL
P-2	DESCRIPTION: CLASSROOM ACCENT PAINT MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: EGGSHELL
P-3	DESCRIPTION: CEILING PAINT MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
P-4	DESCRIPTION: CEILING PAINT MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
P-5	DESCRIPTION: CEILING PAINT MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
P-6	DESCRIPTION: EXPOSED CLASSROOM DUCTWORK MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
P-7	DESCRIPTION: TBD MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT

QUARTZ TILE

QZ-1	MANUF: RIKETT OR APPROVED EQUAL COLLECTION: MEDLEY SERIES/COLOR: TBD SIZE: 24" x 24" INSTALL METHOD: TBD

RESILIENT SHEET FLOORING

RSF-1	DESCRIPTION: SHEET VINYL FLOORING MANUF: ALTRO OR APPROVED EQUAL SERIES: ILLUSTRA COLOR: TBD ACCESSORIES: ALTRO FLASHCOVE SYSTEM FOR INTEGRAL BASE, C4 CAP STRIP H-SHAPE AND ALTRO WELD STRIP, COLOR TO MATCH

RUBBER WALL BASE

RWB-1	DESCRIPTION: TYPICAL WALL BASE MANUF: ROPPE OR APPROVED EQUAL SERIES: PINNACLE RUBBER BASE COLOR: TBD DIMENSIONS: 4" H
RWB-2	DESCRIPTION: VOCAL ROOM WALL BASE MANUF: ROPPE OR APPROVED EQUAL SERIES: PINNACLE RUBBER BASE COLOR: TBD DIMENSIONS: 4" H
RWB-3	DESCRIPTION: CLASSROOM WALL BASE MANUF: ROPPE OR APPROVED EQUAL SERIES: PINNACLE RUBBER BASE COLOR: TBD DIMENSIONS: 4" H
RWB-4	DESCRIPTION: CAFETERIA WALL BASE MANUF: ROPPE OR APPROVED EQUAL SERIES: PINNACLE RUBBER BASE COLOR: TBD DIMENSIONS: 4" H

SEALED CONCRETE FLOOR

SCF-1	DESCRIPTION: CONCRETE SEALER MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: CLEAR FINISH: MATTE TEXTURE:

SOUND PANELS

SP-1	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD
SP-2	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD
SP-3	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD
SP-4	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD
SP-5	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD
SP-6	MANUF: KINETICS NOISE SERIES: KINETICS HIGH IMPACT HARDSIDE SIZE: REFER TO A400 SERIES DRAWINGS COLOR: TBD

SOLID SURFACE MATERIAL

SSM-1	MANUF: CORIAN (WINDOW SILLS) COLOR: TBD
SSM-2	MANUF: CORIAN (CAFE) COLOR: TBD
SSM-3	MANUF: CORIAN (CLASSROOM & VOCAL SINK) COLOR: TBD
SSM-4	MANUF: CORIAN COLOR: TBD

VINYL COMPOSITE TILE

VCT-1	DESCRIPTION: VINYL COMPOSITE TILE MANUF: MATCH EXISTING COLOR: MATCH EXISTING
VCT-2	DESCRIPTION: VINYL COMPOSITE TILE (MUSIC STG) MANUF: ARMSTRONG INDUSTRIES OR APPROVED EQUAL COLOR: TBD

WALL COVERING

WC-1	DESCRIPTION: WALL COVERING: MUSIC NOTE 01 MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
WC-2	DESCRIPTION: WALL COVERING: MUSIC NOTE 02 MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT
WC-3	DESCRIPTION: WALL COVERING: ANIMALS MANUF: SHERWIN WILLIAMS OR APPROVED EQUAL COLOR: TBD FINISH: FLAT

6

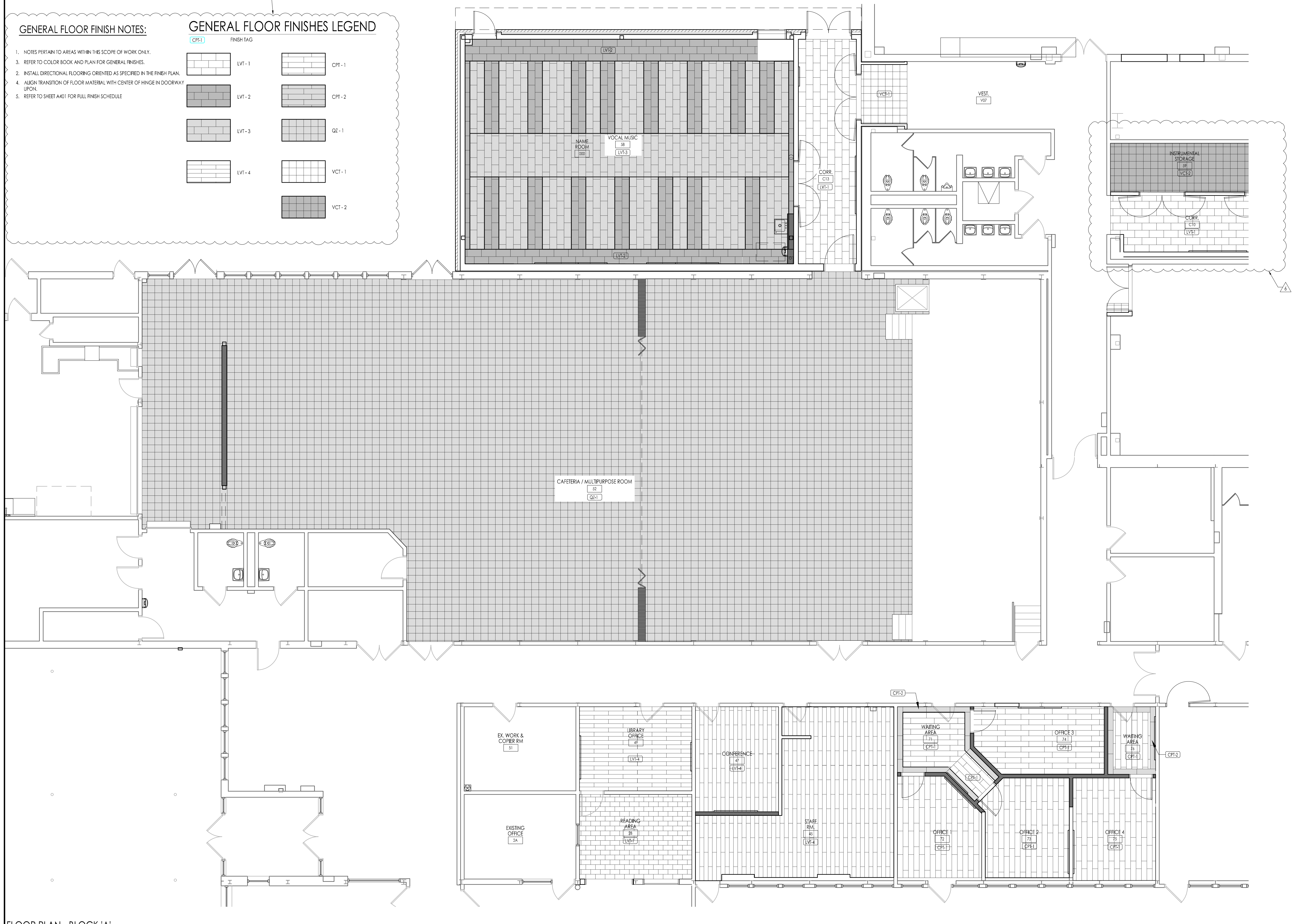
GENERAL FLOOR FINISH NOTES:

1. NOTES PERTAIN TO AREAS WITHIN THIS SCOPE OF WORK ONLY.
3. REFER TO COLOR BOOK AND PLAN FOR GENERAL FINISHES.
2. INSTALL DIRECTIONAL FLOORING ORIENTED AS SPECIFIED IN THE FINISH PLAN.
4. ALIGN TRANSITION OF FLOOR MATERIAL WITH CENTER OF HINGE IN DOORWAY UPON.
5. REFER TO SHEET A401 FOR FULL FINISH SCHEDULE

GENERAL FLOOR FINISHES LEGEND

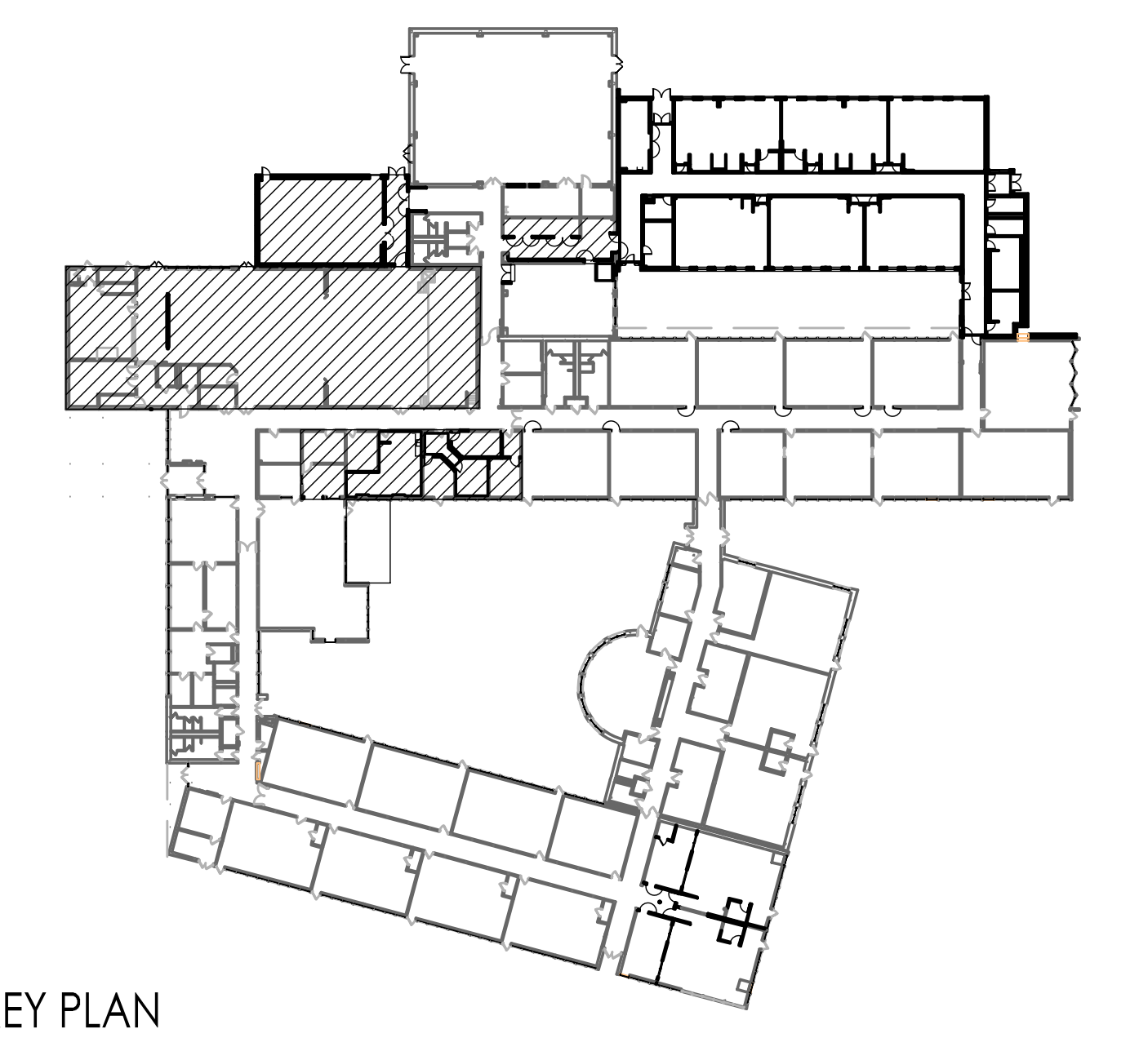
CPT-1 FINISH TAG

▭	LVT - 1	▭	CPT - 1
▨	LVT - 2	▨	CPT - 2
▨	LVT - 3	▨	QZ - 1
▭	LVT - 4	▭	VCT - 1
		▨	VCT - 2



FLOOR PLAN - BLOCK 'A'

3/16" = 1'-0"



KEY PLAN

1/64"=1'-0"

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

2/12/26
Date

FVHD architects planners
EST 1913
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 Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
ETS

Scale
AS NOTED

Drawing Name
INTERIOR ROOM FLOOR PATTERN LAYOUTS & FINISHES BLOCK 'A'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A701

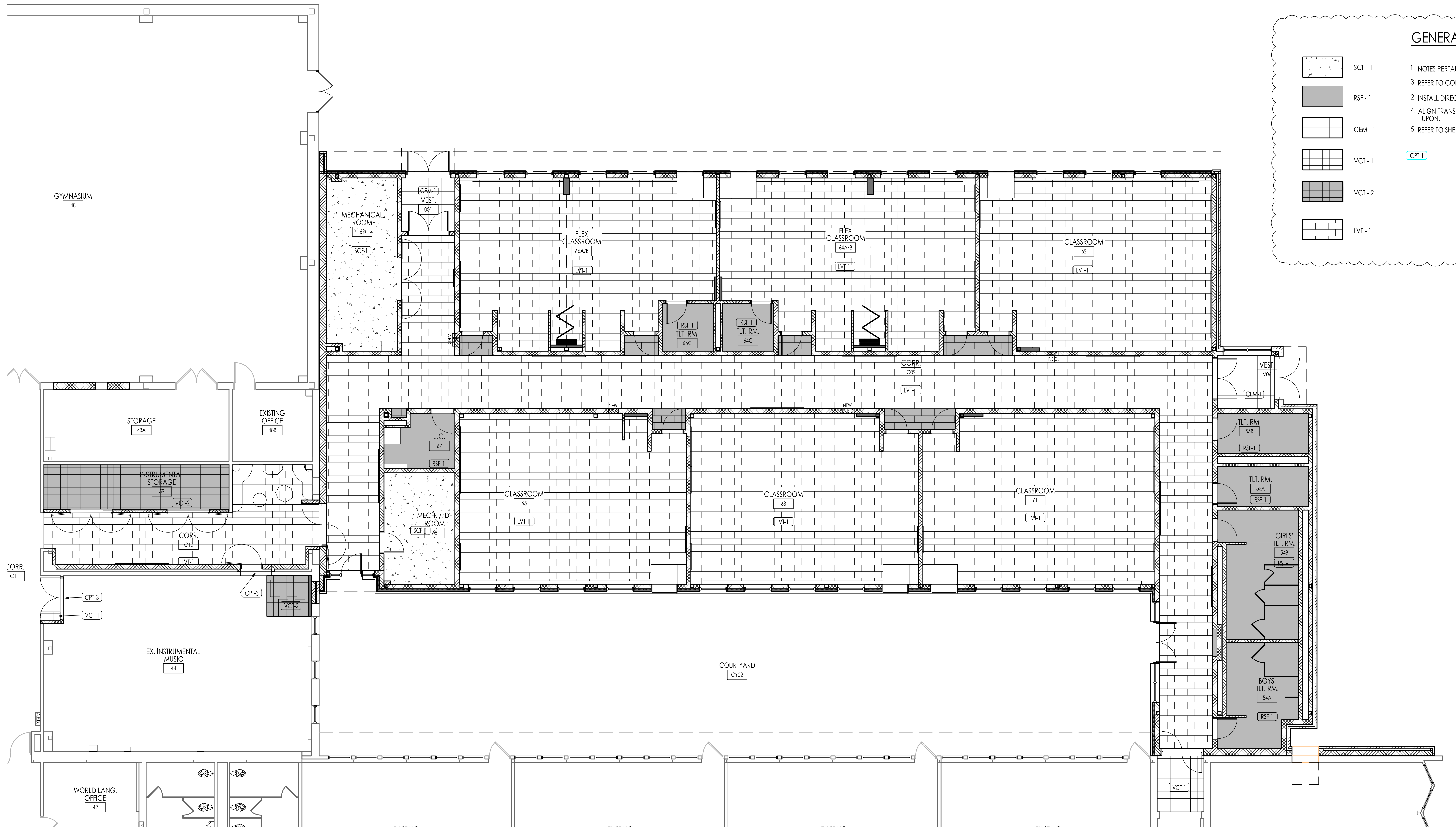
GENERAL FLOOR FINISH NOTES:

▨	SCF - 1
▨	RSF - 1
▨	CEM - 1
▨	VCT - 1
▨	VCT - 2
▨	LVT - 1

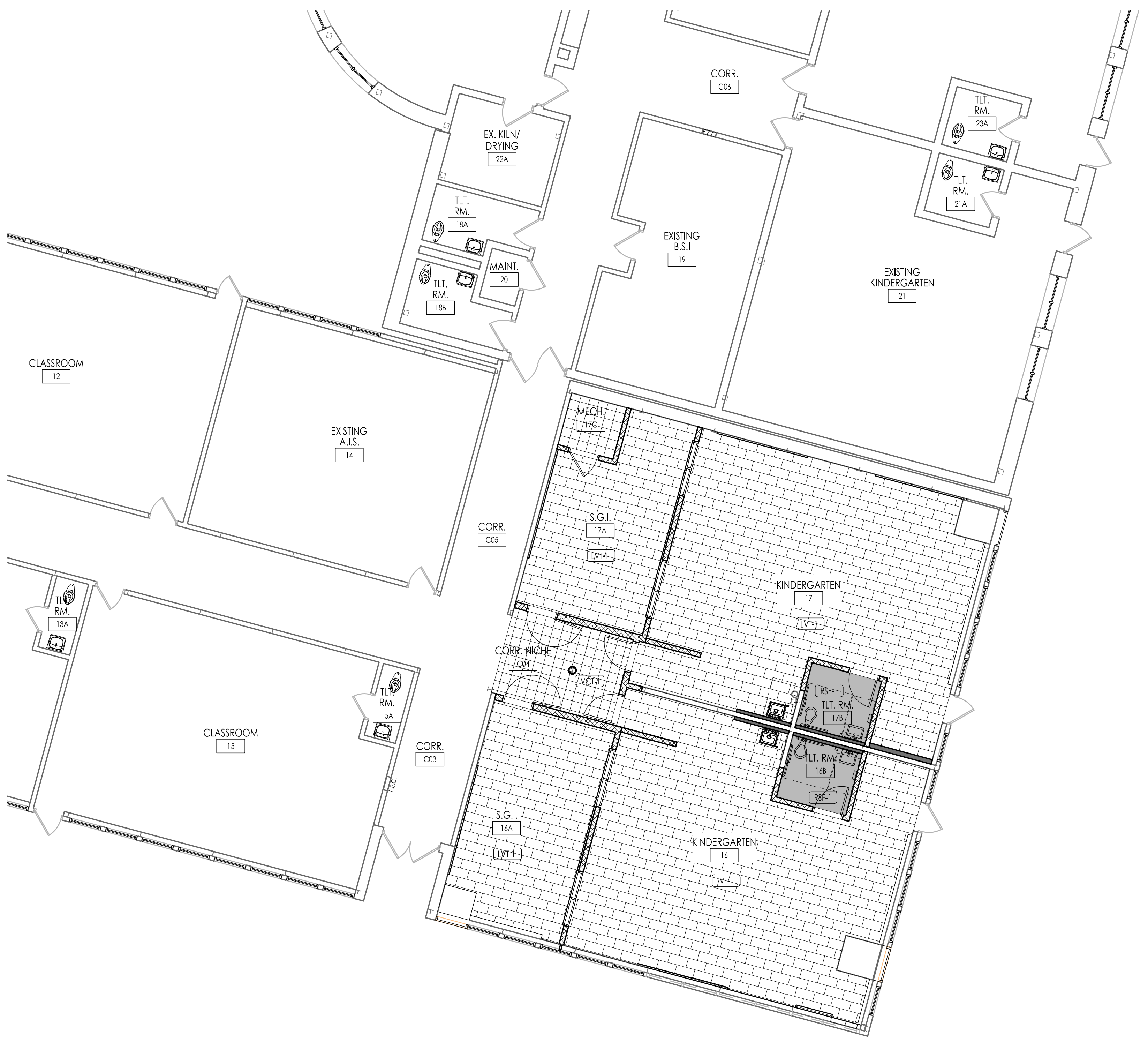
1. NOTES PERTAIN TO AREAS WITHIN THIS SCOPE OF WORK ONLY.
3. REFER TO COLOR BOOK AND PLAN FOR GENERAL FINISHES.
2. INSTALL DIRECTIONAL FLOORING ORIENTED AS SPECIFIED IN THE FINISH PLAN.
4. ALIGN TRANSITION OF FLOOR MATERIAL WITH CENTER OF HINGE IN DOORWAY UPON.
5. REFER TO SHEET A401 FOR FULL FINISH SCHEDULE

CPT-1 FINISH TAG

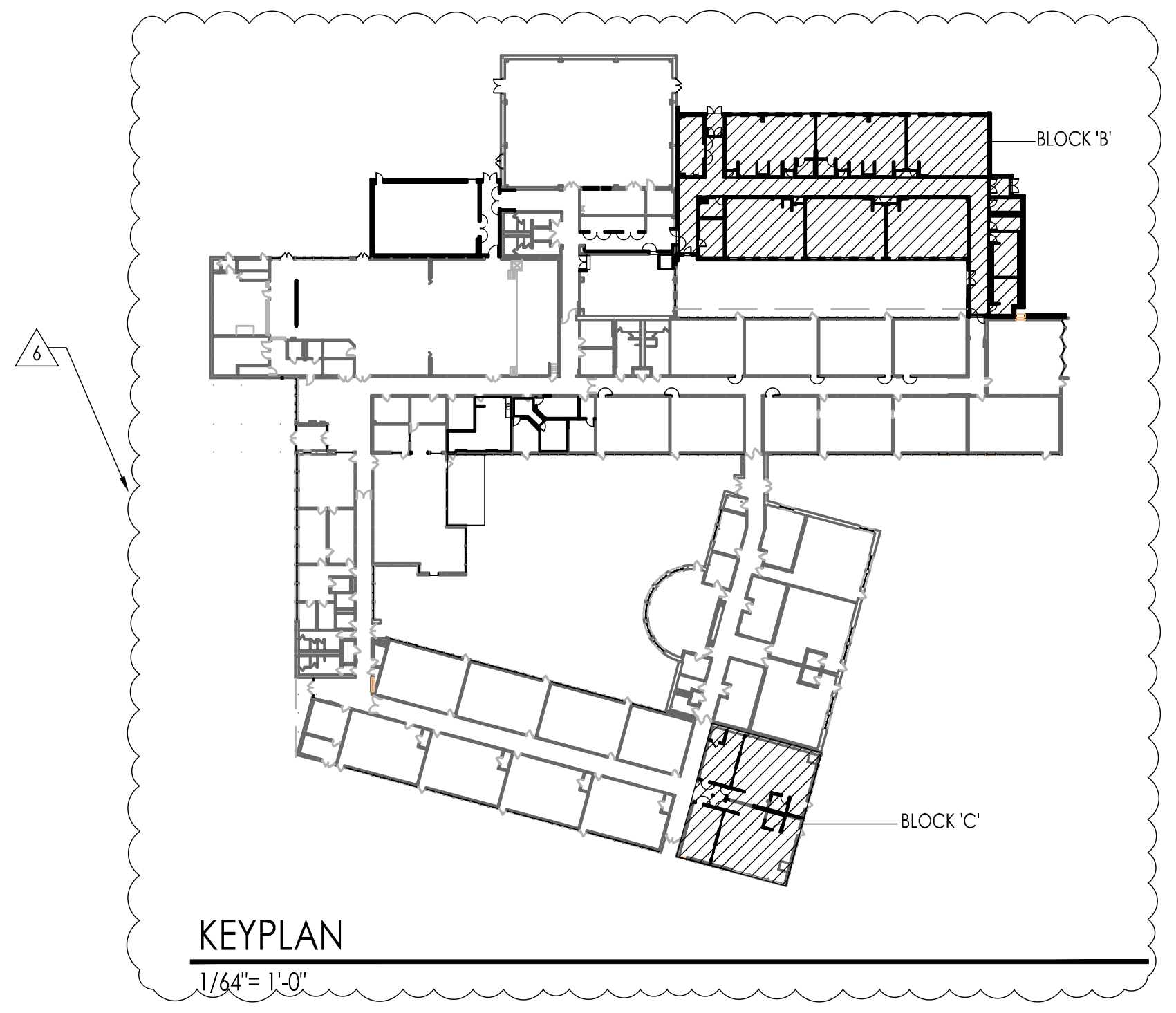
6



① FLOOR PLAN - BLOCK 'B'
1/8" = 1'-0"



② FLOOR PLAN - BLOCK 'C'
1/8" = 1'-0"



KEYPLAN
1/64" = 1'-0"

NJDCA Electronic Release Stamp

FVHD architects planners
Fraytak Veisz Hopkins Duthie P C

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Trenton - New Jersey 08628
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Architect

2/12/26
Date

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Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
WDH

Drawn By
MJS

Scale
AS NOTED

Drawing Name
INTERIOR ROOM FLOOR PATTERN LAYOUTS & FINISHES BLOCK 'B' & BLOCK 'C'

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	12.10.25	NJ DCA REVISIONS
2	12.10.25	DESIGN REVISIONS
3	01.02.26	NJ DCA REVISIONS
4	01.02.26	DESIGN REVISIONS
5	01.23.26	NJ DCA REVISIONS
6	03.24.26	ADDENDUM NO. 2

Drawing Number
A702

PLUMBING LEGEND

SYMBOLS	DESCRIPTION
———	SOIL OR WASTE PIPING
------------	VENT PIPING
— — —	PIPING BURIED OR UNDER FLOOR (SERVICE NOTED)
—·—·—·—	DOMESTIC COLD WATER PIPING
—··—··—	DOMESTIC HOT WATER PIPING
— - - - —	DOMESTIC HOT WATER CIRCULATION PIPING
—G—	NATURAL GAS PIPING
—■—	WATER HAMMER ARRESTER
⊣	HOSE BIBB
⋈	WALL HYDRANT
‖——	CLEAN-OUT/PLUG OUTLET
○——	CLEAN-OUT DECK PLATE OR GRADE PLATE
○C——	"P" TRAP
—⊖—	BOTTOM PIPE CONNECTION
—⊕—	TOP PIPE CONNECTION
C——	ELBOW TURNED DOWN
○——	ELBOW TURNED UP/CONNECTION TO VERTICAL LINE
—⊃—	VALVE IN VERTICAL
◎ ⋈	GATE OR BALL VALVE
◎ ●	BALL VALVE
◎ N	CHECK VALVE
◎ ⋈	OS&Y (OUTSIDE SCREW & YOKE) VALVE
—▼—	GAS COCK
↗	RELIEF VALVE
—‖—	UNION
⊡	FLOOR DRAIN
—▷—	PUMP
—[M]—	METER
◆⋈	CIRCUIT SETTER ASSEMBLY
⋈[BPA]⋈	BACKFLOW PREVENTER ASSEMBLY
⧗	REGULATOR

PLUMBING ABBREVIATIONS

AW	ACID WASTE	IE	INVERT ELEVATION
CO	CLEANOUT	LAV	LAVATORY
CODP	CLEANOUT DECK PLATE	OSY	OUTSIDE SCREW & YOKE GATE VALVE
COG	CLEANOUT GRADE		
COWP	CLEANOUT WALL PLATE	PSI	POUNDS PER SQUARE INCH (GAUGE)
CW	COLD WATER		
DN	DOWN (PENETRATES FLOOR SLAB)	SAN	SANITARY
DFU	DRAINAGE FIXTURE UNIT	ST	STORM
EJDIS	EJECTOR DISCHARGE	SF	SQUARE FOOT
EWC	ELECTRIC WATER COOLER	TP	TRAP PRIMER
FPWH	FROST PROOF WALL HYDRANT	TW	TEMPERED WATER
FD	FLOOR DRAIN	UG	UNDERGROUND
FU	FIXTURE UNIT	UP	UP (PENETRATES FLOOR SLAB)
FT	FEET	UR	URINAL
G	GAS	V	VENT
GPM	GALLONS PER MINUTE	VIF	VERIFY IN FIELD
GAL	GALLONS	VTR	VENT THROUGH ROOF
HB	HOSE BIBB	WC	WATER CLOSET
HW	HOT WATER	WFU	WATER FIXTURE UNITS
HWR	HOT WATER RETURN	WHA	WATER HAMMER ARRESTOR
IW	INDIRECT WASTE		

APPLICABLE CODES & STANDARDS:

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST CODES AND SUBCODES AS ADOPTED BY THE STATE OF NEW JERSEY:

- NEW JERSEY UNIFORM CONSTRUCTION CODE (NJUCC)
- REHABILITATION SUBCODE 5:23-6
- ADMINISTRATIVE CODE: TITLE 6
- 2021 INTERNATIONAL BUILDING CODE - NJ EDITION
- 2023 NATIONAL ELECTRICAL CODE
- 2021 NATIONAL STANDARD PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2019 ASHRAE 90.1 ENERGY STANDARD
- 2022 NFPA STANDARD 13
- REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION
- ICC A117.1 - 2017 STANDARD FOR BARRIER FREE SUB CODE

PLUMBING GENERAL NOTES

1. DO NOT SCALE FROM THESE DRAWINGS.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE AND ADOPTED REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, LOCAL CODES AND ORDINANCES WHICH MAY BE IN EFFECT. ALL PLUMBING MATERIALS, INSTALLATION PROCEDURES AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION. THE PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION.
3. THE DRAWINGS HAVE BEEN PRODUCED ENTIRELY ON FPA CADD SYSTEM. ANY OTHER LETTERING, LINES OR SYMBOLS, OTHER THAN PROFESSIONAL STAMPS AND SIGNATURES, HAVE BEEN MADE WITHOUT THE AUTHORIZATION OF FPA AND ARE INVALID.
4. REPRODUCTION OF ANY PORTION OF THE CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
5. UPON CONTRACT AWARD, CONTRACTOR SHALL CONTACT LOCAL UTILITY COMPANY TO SCHEDULE ANY UTILITY UPGRADES. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL UTILITY UPGRADES, SECURE ALL PERMITS AND INSPECTIONS.
6. ALL CONNECTIONS TO EXISTING BUILDING SERVICES SHALL BE CAREFULLY COORDINATED WITH THE UTILITY CO. AND THE OWNER'S SCHEDULE. SERVICE WORK OF THIS NATURE TO OCCUR DURING UNOCCUPIED BUILDING HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL EXISTING EQUIPMENT IS OPERATIONAL AFTER ANY SHUTDOWN OCCURS.
7. CHANGES OR SUBSTITUTIONS OF EQUIPMENT WILL NOT BE ALLOWED WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER. ALL COSTS RESULTING FROM THE SELECTION OF OTHER THAN SPECIFIED EQUIPMENT SHALL BE BORNE BY THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO WORK AFFECTING OTHER CONTRACTORS, THE OWNER, OR RE-DESIGN ISSUES.
8. ALL INDICATED WORK SHALL BE PERFORMED BY THE PLUMBING CONTRACTOR UNLESS OTHERWISE NOTED.
9. DO NOT USE ANY PART OF THE OWNER'S BUILDING AS A SHOP, EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES BY THE OWNER.
10. ALL CONTRACT WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE WRITTEN SPECIFICATIONS FOR THIS PROJECT WHICH ARE CONSIDERED TO BE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS SHALL MAINTAIN (AT THE JOB SITE) AND REFER TO COPIES OF THE WRITTEN SPECIFICATIONS AS PART OF THESE DRAWINGS. REFER TO THE WRITTEN SPECIFICATIONS IN CONJUNCTION WITH THE PLANS FOR FULL PROJECT SCOPE. IN ALL CASES OF DISCREPANCY BETWEEN PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN AND WHERE IT IS UNCLEAR, SUCH CASES SHALL BE REFERRED TO THE ENGINEER FOR ADJUDICATION.
11. ANY DISCREPANCIES OR INADEQUACIES WITHIN THESE BID DOCUMENTS OR BETWEEN THESE BID DOCUMENTS AND RELATED HVAC, ELECTRICAL, FIRE PROTECTION, ARCHITECTURAL, INTERIOR DECOR AND FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER PRIOR TO BID SUBMISSION.
12. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING HIS BID FOR THE PROPOSED WORK. HE SHALL BE RESPONSIBLE TO VERIFY FIELD CONDITIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMISSION OF BIDS IN WRITING.
13. THE PLUMBING CONTRACTOR SHALL REVIEW THESE PLANS AND SPECIFICATIONS, AS WELL AS THE RELATED HVAC, ELECTRICAL, ARCHITECTURAL, INTERIOR DECOR AND SITE ENGINEERING DRAWINGS TO BECOME FAMILIAR WITH THE FULL PROJECT SCOPE. DURING THE COURSE OF CONSTRUCTION COORDINATION AND ACTUAL CONSTRUCTION, THE PLUMBING CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS AND TRADES ON THIS PROJECT TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
14. CONTRACTOR SHALL COORDINATE HIS SCHEDULING WITH THE OWNER AND GENERAL CONTRACTOR TO COMPLY WITH THE OWNERS USAGE OF THE BUILDING.
15. IF ANY UNEXPECTED DISCOVERY OF SUSPECTED HAZARDOUS MATERIALS IS MADE DURING THE COURSE OF WORK, THE CONTRACTOR SHALL REPORT THE DISCOVERY IMMEDIATELY TO THE OWNER. THE CONTRACTOR SHALL STOP ANY WORK THAT MAY DISTURB THE SUSPECTED HAZARDOUS MATERIAL. CONTRACTOR SHALL RESUME WORK AFTER ALL HAZARDOUS MATERIAL HAS BEEN REMEDIATED.
16. CONTRACTOR RESPONSIBLE FOR THE PROPER CARE OF ALL OWNER'S EQUIPMENT AND/OR FURNISHINGS WHICH ARE REQUIRED TO BE TEMPORARILY REMOVED, STORED OR RELOCATED. CONTRACTOR SHALL REPLACE, REPAIR OR REIMBURSE OWNER FOR ALL DAMAGES TO SUCH PROPERTIES AT FULL REPLACEMENT VALUE AND EQUIVALENCY. CONTRACTOR SHALL ADVISE OWNER FOR DISPOSITION OR REMOVED EQUIPMENT AND/OR MATERIALS.
17. CONTRACTOR'S WORK MAY BE REQUIRED OUTSIDE OF DESIGNATED SPACE. ALL SYSTEMS BEING DEMOLISHED AND REMOVED, MODIFIED, AND/OR TERMINATED SHALL BE FIELD VERIFIED TO INSURE NO WORK PERFORMED, INSIDE OR OUTSIDE OF THE DESIGNATED SPACE, SHALL DISRUPT ANY SERVICE OR SYSTEMS OF ANY OTHER AREAS. IF ANY CONDITIONS ARISE THAT ARE NOT IDENTIFIED ON DRAWINGS, IMMEDIATE NOTIFICATION SHALL BE PROVIDED TO THE ENGINEER OR OWNER. NO WORK SHALL PROCEED WITHOUT APPROVALS FROM ENGINEER OR OWNER.
18. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND MAY HAVE TO BE ADAPTED TO COMPLY WITH EXISTING BUILDING CONDITIONS. CONTRACTOR SHALL SUBMIT PLUMBING SHOP DRAWINGS, INDICATING LOCATIONS, AND ROUTING OF DUCTS, PIPING, AND WIRING.
19. PIPING SHOWN ON DRAWINGS SHOW THE GENERAL RUN AND CONNECTIONS AND MAY OR MAY NOT IN ALL PARTS BE SHOWN IN ITS EXACT POSITION. CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING THE PIPING SUITABLE IN EVERY RESPECT FOR THE WORK. PIPING SHALL BE INSTALLED SO THAT ACCESS, CLEARANCE, HEADROOM AND PITCH ARE MAINTAINED. CONTRACTORS OF THE VARIOUS TRADES SHALL COORDINATE THE INSTALLATION.
20. ALL CONTRACTORS SHALL PROVIDE CUTTING AND PATCHING FOR THEIR RESPECTIVE TRADES.
21. REMOVE AND REINSTALL CEILING SYSTEM AS REQUIRED FOR THE INSTALLATION OF THE PLUMBING WORK AND REPLACE ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF WORK. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL, MATCH EXISTING ADJACENT SURFACES.
22. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONNECTION OF DOMESTIC WATER, GAS, SANITARY AND VENT PIPING INCLUDING VALVES, TRIMS AND EQUIPMENT, TO PLUMBING FIXTURES AT LOCATIONS INDICATED ON THE PLANS.
23. RUN ALL DOMESTIC WATER AND SANITARY WASTE AT LOWEST LEVEL, AND SANITARY VENT AS HIGH AS POSSIBLE THROUGHOUT ENTIRE BUILDING. INSTALL LONG RUNS OF PIPING WITHIN STEEL (JOIST) SPACE AND OTHER PIPING TIGHT TO BOTTOM OF STEEL. COORDINATE AND VERIFY WITH OTHER CONTRACTORS SO AS NOT TO INTERFERE WITH DUCTWORK, LIGHTING SYSTEMS, ETC.
24. ALL EXPOSED HORIZONTAL AND VERTICAL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT IN LOCATIONS WHICH ARE THE MOST INCONSPICUOUS. VERTICAL DROPS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND THEIR FINAL LOCATIONS SHALL BE COORDINATED AND RUN WITHIN CHASES, WALLS, SOFFITS WITH OTHER MECHANICAL/ELECTRICAL FEEDS. PLUMBING CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE LOCATIONS TO COORDINATE ALL VERTICAL PIPING ROUTING. ALL SUCH LOCATIONS ARE TO BE REVIEWED WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
25. ALL PLUMBING FIXTURES/APPLIANCES SHALL HAVE THEIR OWN INDEPENDENT SHUT-OFF VALVES, INSTALLED IN AN EASILY ACCESSIBLE AND CONVENIENT LOCATION. EACH DOMESTIC WATER BRANCH LINE SHALL HAVE ITS OWN SHUT-OFF VALVE.
26. CONNECT GAS PIPING TO APPLIANCES USING MANUAL SHUTOFF VALVES AND UNIONS. INSTALL VALVE WITHIN 72 INCHES OF EACH GAS FIRED APPLIANCE AND EQUIPMENT. INSTALL UNION BETWEEN VALVE AND APPLIANCE OR EQUIPMENT.
27. DOMESTIC HOT WATER HEATER TEMPERATURE/PRESSURE RELIEF VALVES SHALL BE PIPED FULL SIZE TO THE NEAREST APPROVED STANDPIPE OR FLOOR DRAIN. THIS REQUIREMENT SHALL BE APPLICABLE TO ALL DOMESTIC WATER HEATERS EXCEPT INSTANTANEOUS WATER HEATERS.
28. THE PLUMBING CONTRACTOR SHALL RUN OUT ALL BUILDING DRAINAGE AND WASTE LINES TO WITHIN 5'-0" OF THE BUILDING FOUNDATION AND MAKE FINAL CONNECTIONS TO SITE SYSTEMS AS INDICATED ON PLANS. COORDINATE WITH SITE ENGINEER.
29. FURNISH AND INSTALL PIPE SLEEVES OR SLEEVE SEAL SYSTEMS AS REQUIRED. SEE SPECIFICATION FOR DETAILS.
30. ALL PIPING SYSTEM PENETRATIONS OF FIRE-RATED WALLS AND FLOORS SHALL BE SEALED WITH UL APPROVED FIRE RESISTANT JOINT SEALER TO MAINTAIN FIRE,SMOKE AND DRAFT INTEGRITY OF STRUCTURE. SPECIFIED TECHNOLOGIES "PENSIL 200" OR EQUAL, TWO-PART FOAMED-IN-PLACE SILICONE SEALANT. FIRE RESISTANT SEALER SHALL BE TESTED IN ACCORDANCE WITH ASTM 814. INSTALL SEALANT, INCLUDING FOAMING, PACKING AND OTHER ACCESSORY MATERIALS TO FILL OPENINGS WHERE FIRE-RATED WALL PENETRATIONS OCCUR. COMPLY WITH INSTALLATION REQUIREMENTS ESTABLISHED BY TESTERS AND INSPECTION AGENCY.
31. ALL PENETRATIONS IN FOUNDATION WALLS AND FLOORS INCLUDING SLAB PENETRATIONS SHALL BE SUBSTANTIALLY SEALED BY UTILIZING A NON-CRACKING POLYURETHANE OR SIMILAR CAULK, OR EQUIVALENT IN ORDER TO CLOSE OFF THE SOIL GAS (RADON) ENTRY ROUTES AS REQUIRED BY CODE.
32. INSULATE ALL NEW HOT WATER AND COLD WATER PIPING SYSTEMS. INSULATION SHALL BE INSTALLED AS A COMPLETE SYSTEM INCLUDING VALVES, FITTINGS, ETC. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
33. INSULATE ROOF DRAIN & OVERFLOW DRAIN BODIES AND ALL INTERIOR STORM PIPING. INSULATION SHALL BE INSTALLED AS A COMPLETE SYSTEM INCLUDING FITTINGS, ETC. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
34. ALL CONTRACTORS REMOVING ANY EQUIPMENT, PIPES, DUCTS, CONDUITS, ETC SHALL PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
35. PROVIDE GAS PIPING SUPPORTS ON ROOF AT ALL DIRECTION CHANGES AND STRAIGHT RUNS WITH SPACING NOT EXCEEDING LENGTHS STATED IN TABLE 415.1 OF IFGC, 2018 FOR MATERIALS AND LISTED PIPE SIZES. SUPPORTS SHALL BE SADDLE BLOCK ROLLER TYPE WITH PIPE SECURED TO STAND WITH CLAMP OR METAL BAND. SUPPORT SHALL NOT BE SECURED TO ROOF SURFACE. BOTTOM OF PIPING SHALL BE MINIMUM 3 1/2" ABOVE ROOF SURFACE.
36. WHERE SLABS ARE CUT FOR UNDERSLAB PIPING OR BEING REPLACED, COORDINATE WITH ARCHITECTURAL DRAWINGS TO PITCH FLOOR TO FLOOR DRAIN.
37. ALL FLOOR DRAIN TRAPS SHALL BE PROVIDED WITH DEEP SEAL TRAPS.
38. THE PLUMBING CONTRACTOR SHALL PROVIDE A COMPLETE SET OF "AS-BUILT" DRAWINGS INDICATING THE PRECISE LOCATION OF ALL SYSTEMS, EQUIPMENT CONCEALED OR EMBEDDED PIPES, PIPE CONNECTIONS AND ACCESS DOORS. THESE PLANS SHALL ALSO INCLUDE ALL CHANGES AND DEVIATIONS FROM BID DOCUMENTS.

2

PLUMBING EQUIPMENT SCHEDULE

ALT. BID

WH-1	WATER HEATER: AO SMITH #BTH-120 (A) CYCLONE MXI MODULATING GAS-FIRED WATER HEATER, ASME, 60 GALLON STORAGE CAPACITY, 154 GPH RECOVERY AT 90°F RISE, 120/1Ø, 120 MBH INPUT. FURNISH & INSTALL CONDENSATE NEUTRALIZING KIT.
WH-2	WATER HEATER: CHRONOMITE "MIGHTY MITE" R-63L/208 MOUNTED BELOW SINK. 60° TEMPERATURE RISE @ 1.5 GPM, 13.1 KW, 208 V SINGLE PHASE. DIMENSIONS: 10 5/8"x4 1/4"x9 7/8"HIGH. PROVIDE WITH OPTIONAL FACTORY SUPPLIED DISCONNECT SWITCH.
WH-3	SAME AS WH-2.
SP-1	SINK PUMP: LIBERTY MODEL #404, PRE-ASSEMBLED SINK PUMP WITH 4.3 BASIN CAPACITY, 1 1/2" CONNECTIONS, 12 GPM @ 115 FT HEAD, 1/3 HP, 115V, 3450 RPM. MAKE CONNECTIONS AS INDICATED ON SANITARY RISER DIAGRAM.
ET-1	EXPANSION TANK: AMTROL MODEL ST-12C-DD, 6.4 GALLON TANK, FIXED DIAPHRAGM CONSTRUCTION, ASME, 3/4" CONNECTION AND 1 YEAR WARRANTY.
HWR-1	HOT WATER RETURN PUMP: BELL AND GOSSETT MODEL NBF-22; LEAD-FREE ALL BRONZE CIRCULATING PUMP, 2 GPM @ 13 FT OF HEAD, 92 WATTS AT 115V, 2940 RPM. PROVIDE WITH TIMER AND AQUASTAT WIRED IN SERIES FOR PUMP CONTROL AND WITH 3/4" FLANGES.
MV-1	THERMOSTATIC MIXING VALVE: LEONARD "ECO-MIX" MODEL TM-26-LF-BDT HIGH-LOW, LEAD FREE WITH 3/4" INLETS, 3/4" OUTLET, INLET CHECK STOPS, WALL SUPPORT, OUTLET DIAL THERMOMETER AND BALL VALVE AND ROUGH BRONZE FINISH. ASSE 1017 CERTIFIED. MINIMUM FLOW 1 GPM. VALVE SHALL BE PIPED AND INSTALLED PER MANUFACTURERS REQUIREMENTS.
FPWH	FROST PROOF WALL HYDRANT: JR SMITH #5509QT NON-FREEZE WITH INTEGRAL VACUUM BREAKER.
WHA	WATER HAMMER ARRESTER: SIOUX CHIEF HYDRA-RESTER OR APPROVED EQUAL. SIZE PER MANUFACTURER'S REQUIREMENTS. SUPPLY WITH JR SMITH 4762-CL 6" X 6" STAINLESS STEEL ACCESS PANEL WITH CYLINDER LOCK.
RPZ-1	CHEMICAL DISPENSER CW MAKE UP BACKFLOW PREVENTION ASSEMBLY: WATTS SERIES LF009 QT, LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY, 3/4" WITH QUARTER TURN BALL VALVES (QT), AND AIR GAP FITTING. PIPE AIR GAP DRAIN TIGHT AGAINST WALL AND TERMINATE 6" ABOVE MOP SINK RIM WITH 45 DEGREE ELBOW. ATTACH TO WALL WITH BRACKETS MAXIMUM 12" ON CENTER.
RPZ-2	MECHANICAL CW MAKE UP BACKFLOW PREVENTION ASSEMBLY: WATTS SERIES LF009 QT, LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY, 1" WITH QUARTER TURN BALL VALVES (QT), AND AIR GAP FITTING. PIPE AIR GAP DRAIN TO FUNNEL FLOOR DRAIN AND SPILL ABOVE GRATE.
HB-1	CHEMICAL DISPENSER HOSE BIB: CHICAGO 998-RCF WITH BUILT IN VACUUM BREAKER, TEE HANDLE, 3/4" HOSE THREAD OUTLET AND ROUGH CHROME FINISH.

ALT. BID

ALT. BID

2

ALTERNATE BID

DRAIN SCHEDULE

FD-1	FLOOR DRAIN: JR SMITH #2005 SQUARE TOP, FLASHING COLOR, CAST IRON BODY, ADJUSTABLE STRAINER, WITH #2692 QUAD CLOSE TRAP SEAL AND DEEP SEAL P-TRAP. SIZE PER PLAN.
FD-2	FLOOR DRAIN: JR SMITH FIGURE #2110-M 8" DIAMETER TOP, FLASHING COLLAR, CAST IRON BODY, DUCTILE IRON GRATE, WITH 2692 QUAD CLOSE TRAP SEAL AND DEEP SEAL TRAP. SIZE PER PLAN.
FD-3	FUNNEL DRAIN: SAME AS FD-2 EXCEPT WITH FIGURE 9704 8 3/4" X 3 3/4" STAINLESS STEEL OVAL FUNNEL ATTACHED TO GRATE. SIZE PER PLAN.
RD	ROOF DRAIN: JR SMITH FIGURE #1015 CAST IRON ROOF DRAIN WITH ADJUSTABLE EXTENSION. PROVIDE WITH UNDERDECK CLAMP, SUMP RECEIVER AND CAST IRON DOME. SIZE PER PLAN.
OD	OVERFLOW ROOF DRAIN: OVERFLOW ROOF DRAIN STANDPIPE. SEE DETAIL ON ARCHITECTURAL DRAWINGS. OVERFLOW ROOF DRAIN STANDPIPE SHALL BE SAME DIAMETER AS ROOF DRAIN. SIZE PER PLAN.
CODP	CLEAN OUT DECK PLATE: JR SMITH FIGURE 4023, MEDIUM-DUTY CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORIATED SECURED NICKEL BRONZE TOP. TAPER THREAD, BRONZE PLUG. SIZE PER PLAN. IN AREAS WITH CARPET, TOP SHALL BE CARPET CLAMPING TYPE SUFFIX "X".
COG	CLEAN OUT GRADE: JR SMITH FIGURE 4233L-M, EXTRA HEAVY DUTY CAST IRON CLEANOUT WITH DUCTILE IRON COVER. SIZE PER PLAN.
COWP	CLEAN OUT WALL PLATE: JR SMITH FIGURE 4422C, WALL CLEANOUT WITH ACCESS COVER, TAPER THREAD, BRONZE PLUG. SIZE PER PLAN.

PLUMBING FIXTURE ROUGHING SCHEDULE

PLAN NO	FIXTURE	WASTE	TRAP	VENT	CW	HW	NOTES
P-1	WATER CLOSET	4"	-	2"	1 1/2"	-	1
P-1A	WATER CLOSET	4"	-	2"	1 1/2"	-	1, 2
P-1AB	WATER CLOSET	4"	-	2"	1 1/2"	-	1, 2
P-2A	LAVATORY	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	1, 3
P-3, P-3A	URINAL	2"	-	2"	3/4"	-	1, 2
P-4	MOP SINK	3"	3"	2"	3/4"	3/4"	-
P-5A	ELECTRIC WATER COOLER	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	1
P-6A	CLASSROOM SINK	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	1, 4

NOTES

1. INSTALL ACCESSIBLE FIXTURES IN ACCORDANCE WITH STATE AND LOCAL BARRIER FREE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT TYPE, COUNT, AND MOUNTING HEIGHT OF ACCESIBLE FIXTURES.
2. LOCATE TRIP LEVER ON OPEN SIDE OF COMPARTMENT PER ADA REQUIREMENTS.
3. PROVIDE RIGID PIPE ENCLOSURE BELOW LAVATORIES BY TRUBRO OR EQUAL. SEE FIXTURE SCHEDULE.
4. INSULATE ALL EXPOSED PIPING BELOW HANDICAP SINKS WITH TRUBRO, LAV GUARD INSULATION KIT OR EQUAL.

2

PLUMBING FIXTURE SCHEDULE

P-1	(ALT. BID) JUVENILE HEIGHT WATER CLOSET: AMERICAN STANDARD #2599.001 "MADERA YOUTH" 1.28 GPF VITREOUS CHINA ELONGATED FLOOR MOUNTED TOILET, SLOAN MODEL #G2 8111-1.28 BATTERY POWERED SENSOR FLUSH VALVE WITH COURTESY FLUSH OVERRIDE BUTTON AND CHURCH MODEL #9500SSC OPEN FRONT SEAT WITHOUT COVER.
P-1A	(ALT. BID) ACCESSIBLE WATER CLOSET: AMERICAN STANDARD #3461.001 "MADERA" 1.28 GPF VITREOUS CHINA ELONGATED FLOOR MOUNTED TOILET, SLOAN MODEL #G2 8111-1.28 BATTERY POWERED SENSOR FLUSH VALVE WITH COURTESY FLUSH OVERRIDE BUTTON AND CHURCH MODEL #9500SSC OPEN FRONT SEAT WITHOUT COVER. MOUNT FIXTURE TO MEET ADA REQUIREMENTS.
P-1AB	ACCESSIBLE JUVENILE WATER CLOSET: SAME AS P-1. MOUNT JUVENILE FIXTURE TO MEET ADA REQUIREMENTS.
P-2A	(ALT. BID) ACCESSIBLE LAVATORY: AMERICAN STANDARD #0356.041 "LUCERNE" WALL-MOUNTED VITREOUS CHINA LAVATORY WITH AMERICAN STANDARD #7755.205 BATTERY POWERED SENSOR 0.5 GPM FAUCET WITH ZURN MODEL ZW1070XL THERMOSTATIC MIXING VALVE, SUPPLIES, STOP VALVES, P-TRAP, GRID DRAIN AND JR SMITH CARRIER FIGURE #0710. PROVIDE WITH TRUBRO 2018ASL1 RIGID ENCLOSURE BENEATH LAVATORY TO CONCEAL PIPING. MOUNT FIXTURE TO MEET ADA REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
P-2AC	ACCESSIBLE CHILDREN'S HEIGHT LAVATORY: SAME AS P-2A EXCEPT HANG AT CHILDREN'S HEIGHT. MOUNT FIXTURE TO MEET ADA REQUIREMENTS.
P-3	(ALT. BID) URINAL: AMERICAN STANDARD #6590.001 "WASHBROOK" 0.5 GPF VITREOUS CHINA WALL HUNG URINAL, SLOAN MODEL #8186 - 0.5 BATTERY POWERED SENSOR FLUSH VALVE WITH COURTESY FLUSH OVERRIDE BUTTON AND JR SMITH FIXTURE SUPPORT #0616. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
P-3A	(ALT. BID) ACCESSIBLE URINAL: SAME AS ABOVE EXCEPT MOUNT FIXTURE TO MEET ADA REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
P-4	(ALT. BID) MOP SINK: FIAT #TSB100 24" X 24" TERRAZZO WITH STAINLESS STEEL RIM GUARDS, #830-AA FAUCET AND #832-AA HOSE AND HOSE BRACKET, MSG STAINLESS STEEL WALL GUARDS,SUPPLIES, STOP VALVES, P-TRAP AND GRID DRAIN.
P-5A	ACCESSIBLE WATER COOLER: ELKAY #LZS8WSLP ENHANCED BOTTLE FILLING STATION WITH SINGLE COOLER, WATER FILTER AND WALL CARRIER, 8 GPH OF 50°F DRINKING WATER @ 90°F ROOM TEMP, 370W, 120/1Ø. PROVIDE SUPPLY, STOP VALVE AND P-TRAP. MOUNT FIXTURE TO MEET ADA REQUIREMENTS.
P-6AC	ACCESSIBLE CHILDREN'S HEIGHT CLASSROOM SINK WITH BUBBLER: SINK, FAUCET, BUBBLER, STRAINER & TAILPIECE SHALL BE PROVIDED BY THE EQUIPMENT CONTRACTOR. SEE ARCHITECTURAL DRAWINGS. PLUMBING CONTRACTOR SHALL PROVIDE ZURN MODEL ZW1070XL THERMOSTATIC MIXING VALVE, TRAP, SUPPLIES, STOPS, ETC AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM AND MAKE ALL FINAL CONNECTIONS. PLUMBING CONTRACTOR SHALL PROVIDE ELKAY MODEL # EWF3000 UNDER COUNTER MOUNT LEAD FILTRATION SYSTEM WITH FILTER CARTRIDGE, MOUNTING BRACKET, FILTER HEAD, TUBING, QUICK DISCONNECTS AND MOUNTING SCREWS FOR THE COLD WATER SUPPLY TO THE BUBBLER. ATTACH FILTER TO WALL BELOW COUNTER. INSTALL IN A NEAT MANNER, HIGH AS POSSIBLE, WITH CLEARANCE FOR FILTER REMOVAL. PROVIDE DEDICATED SHUT OFF VALVE FOR FILTER. MOUNT FILTER OUTSIDE OF REQUIRED SINK ADA ACCESSIBILTY CLEARANCE SPACE. COORDINATE ALL WORK WITH THE EQUIPMENT CONTRACTOR. INSULATE TRAP, SUPPLIES AND ANGLE STOPS WITH INSULATION KIT BY TRUBRO LAV GUARD.
P-7AC	ACCESSIBLE CHILDREN'S HEIGHT CLASSROOM SINK: SAME AS P-6AC EXCEPT WITHOUT BUBBLER AND FILTER. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. MOUNT FIXTURE TO MEET ADA REQUIREMENTS.

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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING SYMBOLS, NOTES, & SCHEDULES

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

Drawing Number
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DEMOLITION KEY NOTES

① DISCONNECT AND REMOVE EXISTING CLASSROOM SINK AND FIXTURE SUPPORTS AND ASSOCIATED HOT AND COLD WATER PIPING. REMOVE EXISTING SANITARY AND VENT BACK TO BEHIND WALL AND PREPARE FOR EXTENSION TO NEW CLASSROOM SINK FIXTURE. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

② DISCONNECT AND REMOVE EXISTING FLOOR MOUNTED WATER CLOSET AND FLUSH VALVE AND ASSOCIATED COLD WATER PIPING. REMOVE SANITARY PIPING BACK TO BELOW FLOOR AND MAKE READY FOR EXTENSION AND CONNECTION TO NEW WATER CLOSET. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

③ DISCONNECT AND REMOVE EXISTING LAVATORY SINK AND FIXTURE SUPPORTS AND ASSOCIATED HOT AND COLD WATER PIPING. REMOVE EXISTING SANITARY PIPING BACK TO CONNECTION TO MAIN BELOW FLOOR AND CAP WATER TIGHT. FIELD VERIFY EXACT LOCATION OF EXISTING PIPING. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

④ REMOVE EXISTING PIPE ENCLOSURE AND HOT AND COLD WATER PIPING. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

⑤ REMOVE EXISTING 4" STORM PIPING BACK TO POINT ABOVE CEILING AS INDICATED AND DOWN TO BELOW FLOOR AND PREPARE FOR CONNECTION TO NEW PIPING. REFER TO NEW WORK PLAN FOR ADDITIONAL INFORMATION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

⑥ FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.

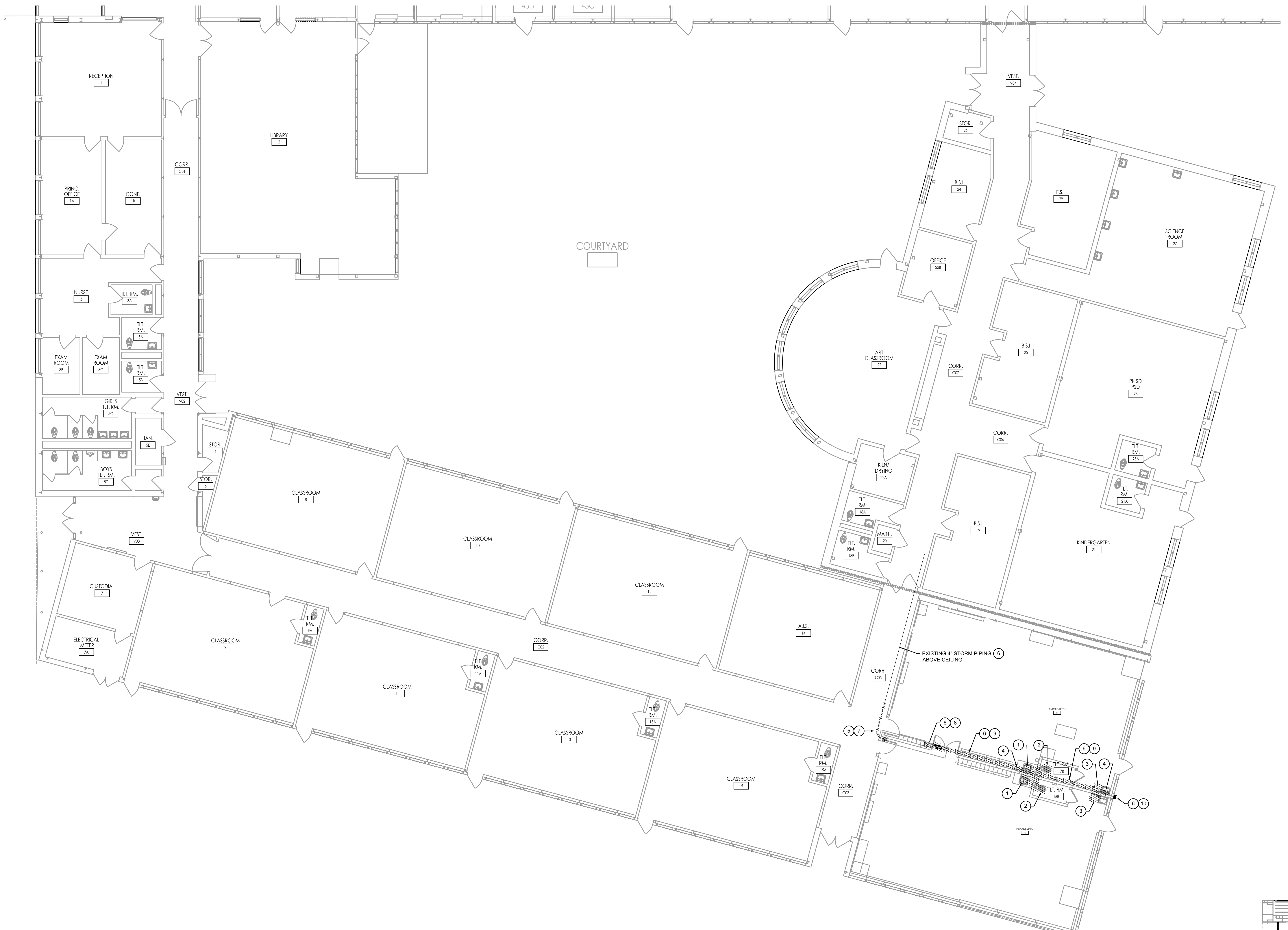
⑦ CAREFULLY REMOVE EXISTING CEILING TILE FOR THIS WORK AND REINSTALL IN ORIGINAL CONDITION. CONTRACTOR RESPONSIBLE TO REPLACE ANY CEILING TILE DAMAGED AS PART OF THIS WORK WITH NEW TILE TO MATCH EXISTING.

⑧ REMOVE EXISTING PIPE ENCLOSURE AND EXISTING 1" HW AND 1 1/4" CW PIPING DOWN TO BELOW FINISHED FLOOR AND PREPARE FOR CONNECTION TO NEW PIPING. REFER TO NEW WORK PLAN FOR ADDITIONAL INFORMATION.

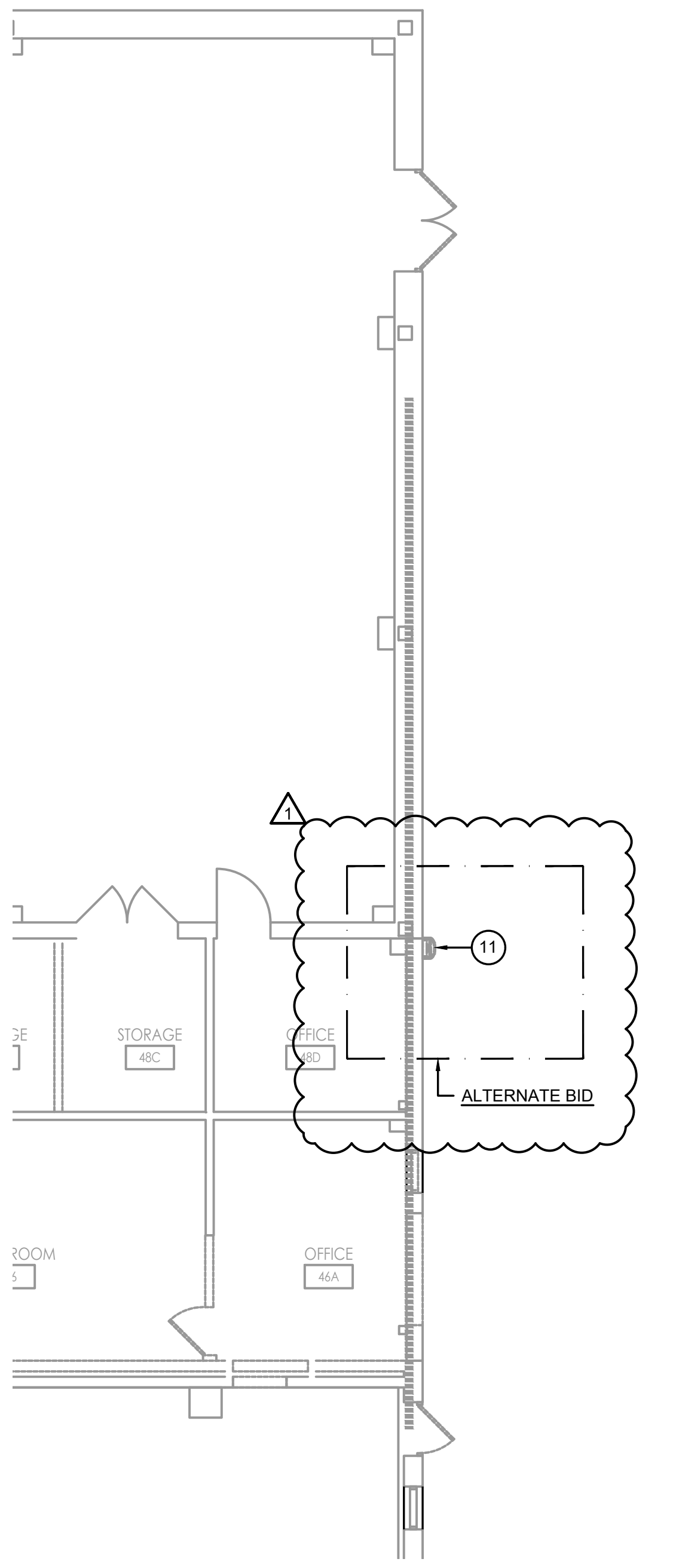
⑨ REMOVE EXISTING COLD WATER AND HOT WATER PIPING ALONG WALL IN ITS ENTIRETY INCLUDING ALL PIPE HANGERS. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

⑩ EXISTING FROST PROOF WALL HYDRANT TO REMAIN. DISCONNECT EXISTING COLD WATER PIPING CONNECTION INSIDE AND MAKE READY FOR CONNECTION TO NEW PIPING. REFER TO NEW WORK PLAN FOR ADDITIONAL INFORMATION.

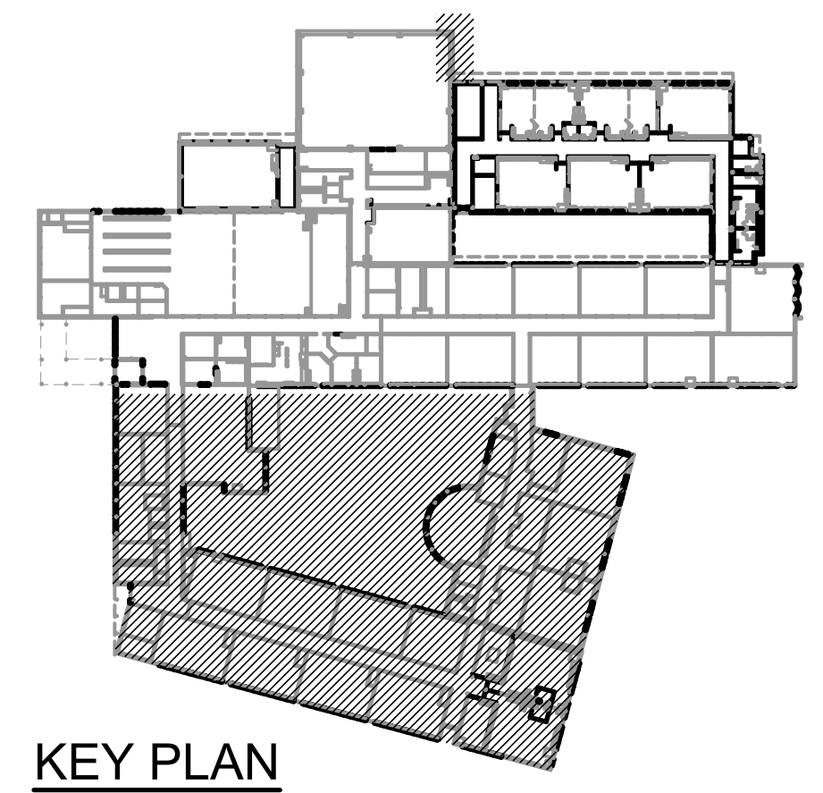
⑪ DISCONNECT AND REMOVE EXISTING DRINKING FOUNTAIN. REMOVE EXISTING COLD WATER PIPING BACK TO EXISTING ACTIVE MAIN INSIDE BUILDING AND CAP WATER TIGHT. REMOVE EXISTING SANITARY AND VENT PIPING BACK TO BEHIND WALL AND CAP WATER TIGHT. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES. FIELD VERIFY EXACT LOCATION AND SIZES OF EXISTING PIPING.



DEMOLITION PLAN - BLOCK C
SCALE: 1/8" = 1'-0"



DEMOLITION PART PLAN - BLOCK A
SCALE: 1/8" = 1'-0"



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William D.
Architect

2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D
Project Date
10.10.2025
Checked By
AHG
Drawn By
JD
Scale
AS NOTED

Drawing Name
PLUMBING DEMOLITON PLAN - BLOCK C

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
P2.0

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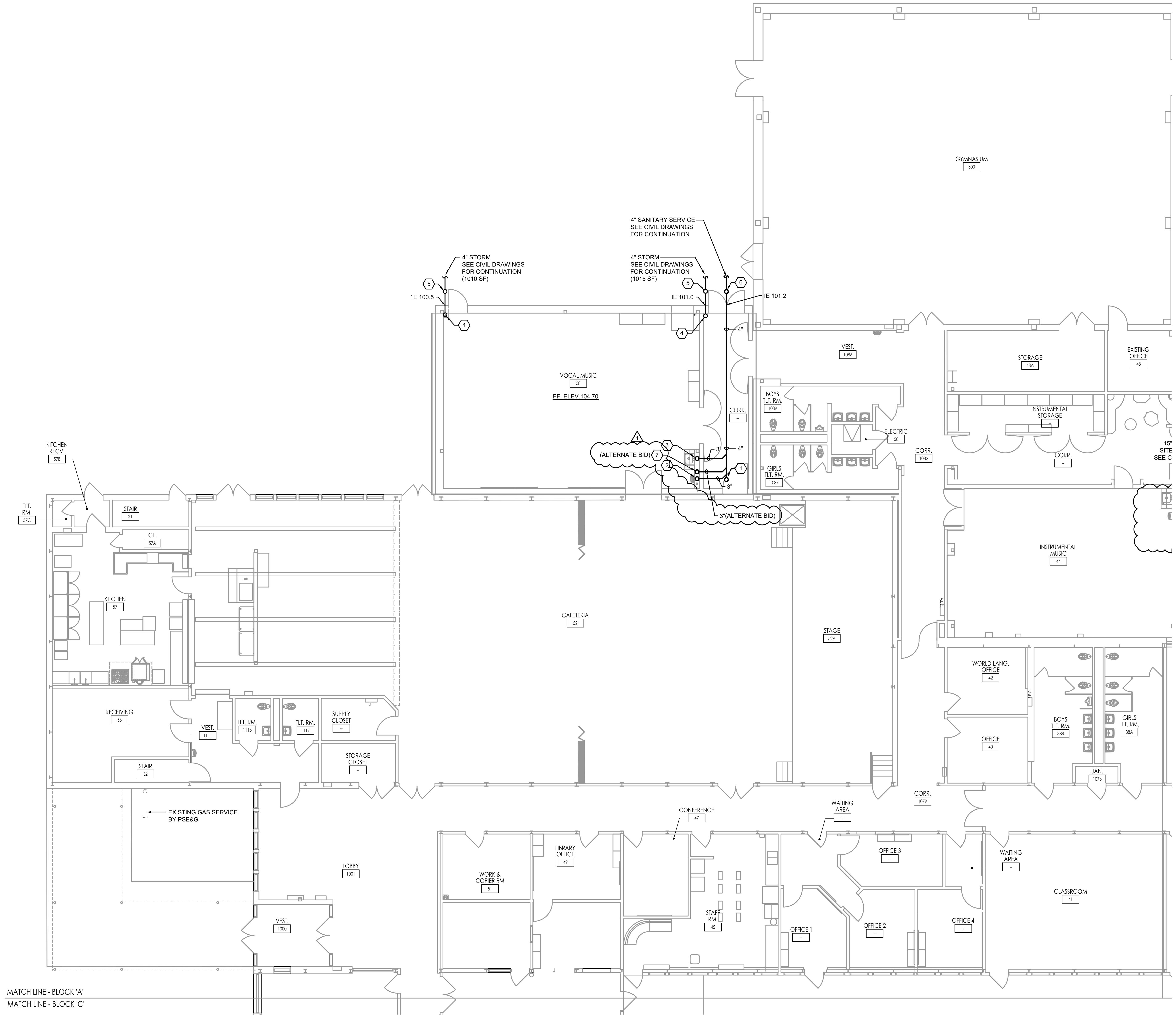
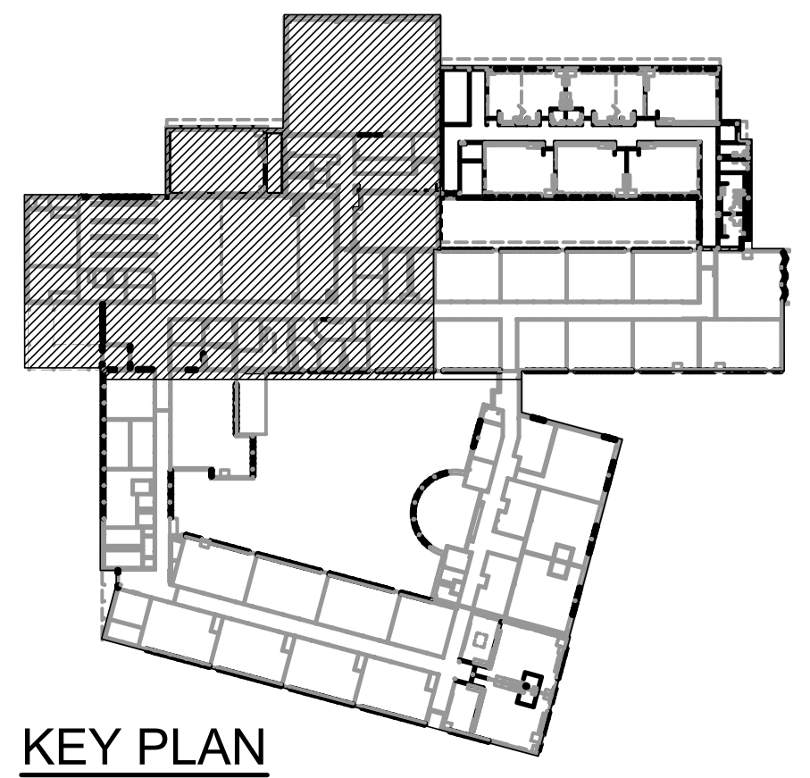
KEY NOTES

1. 4" SANITARY UP TO CODP.
2. 2" SANITARY UP TO P-5A.
3. 2" SANITARY UP TO P-7AC.
4. 4" STORM UP
5. 4" STORM UP TO COG
6. 4" SANITARY UP TO COG.
7. 3" SANITARY UP. (ALTERNATE BID)



UNDERSLAB PIPING PLAN - BLOCK A

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



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William D. Hopkins 2/12/26

Architect Date

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Drawing Name

PLUMBING UNDERSLAB PIPING PLAN - BLOCK A

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
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Drawing Number

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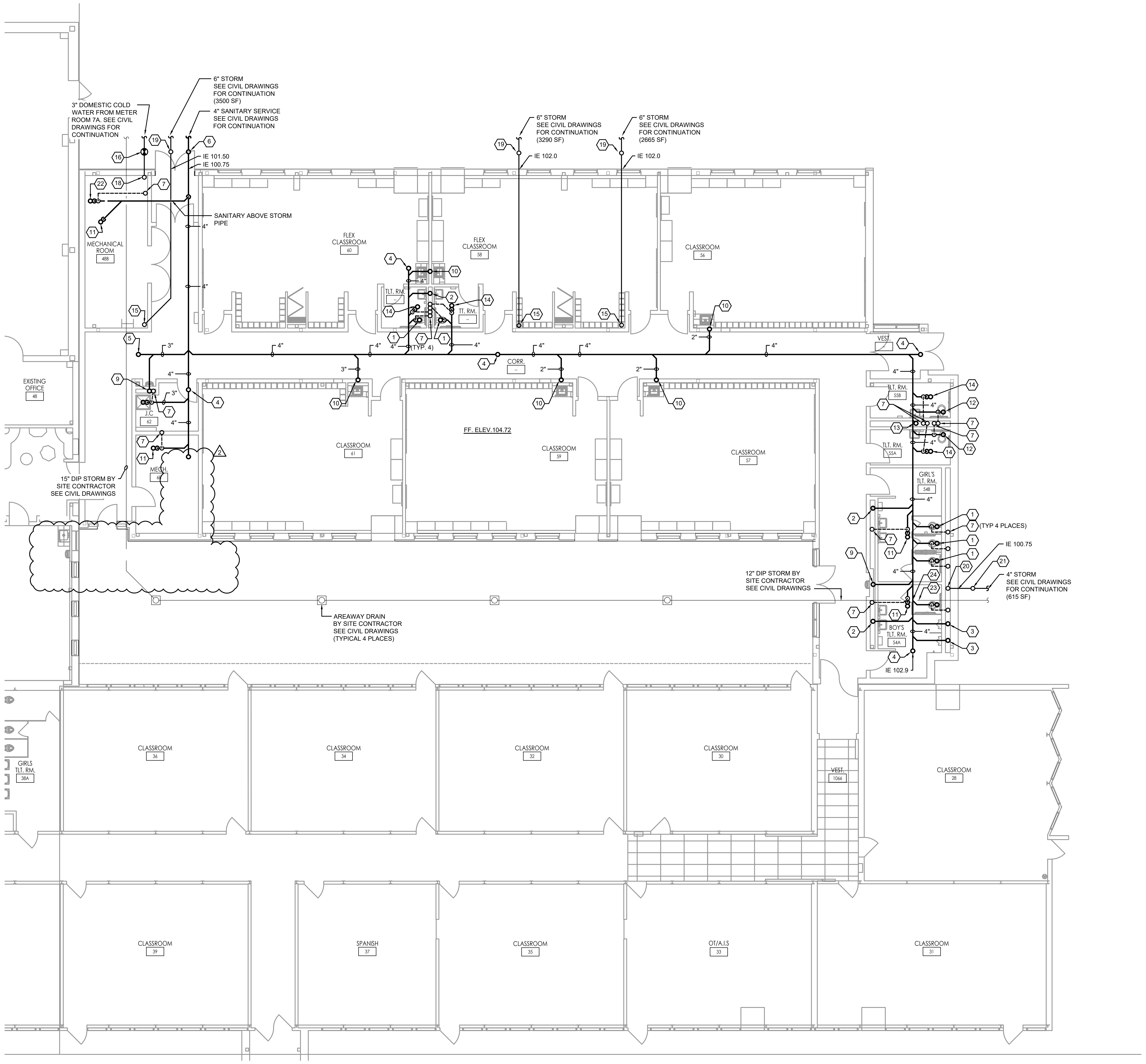

3" DOMESTIC COLD WATER FROM METER ROOM 7A. SEE CIVIL DRAWINGS FOR CONTINUATION
6" STORM SEE CIVIL DRAWINGS FOR CONTINUATION (3500 SF)
4" SANITARY SERVICE SEE CIVIL DRAWINGS FOR CONTINUATION
IE 101.50
IE 100.75
SANITARY ABOVE STORM PIPE
6" STORM SEE CIVIL DRAWINGS FOR CONTINUATION (3290 SF)
IE 102.0
6" STORM SEE CIVIL DRAWINGS FOR CONTINUATION (2665 SF)
IE 102.0
MECHANICAL ROOM 48B
FLEX CLASSROOM 60
FLEX CLASSROOM 58
CLASSROOM 56
TLT. RM.
TT. RM.
(TYP. 4)
CORR.
VEST.
EXISTING OFFICE 48
J.C 62
MECH. 68
CLASSROOM 61
FF. ELEV.104.72
CLASSROOM 59
CLASSROOM 57
TLT. RM. 55B
TLT. RM. 55A
GIRL'S TLT. RM. 54B
BOY'S TLT. RM. 54A
(TYP 4 PLACES)
IE 100.75
4" STORM SEE CIVIL DRAWINGS FOR CONTINUATION (615 SF)
IE 102.9
15" DIP STORM BY SITE CONTRACTOR SEE CIVIL DRAWINGS
12" DIP STORM BY SITE CONTRACTOR SEE CIVIL DRAWINGS
AREAWAY DRAIN BY SITE CONTRACTOR SEE CIVIL DRAWINGS (TYPICAL 4 PLACES)
CLASSROOM 36
CLASSROOM 34
CLASSROOM 32
CLASSROOM 30
CLASSROOM 28
VEST. 106A
GIRLS TLT. RM. 38A
CLASSROOM 39
SPANISH 37
CLASSROOM 35
OT/A.I.S 33
CLASSROOM 31
4"
3"
2"
2

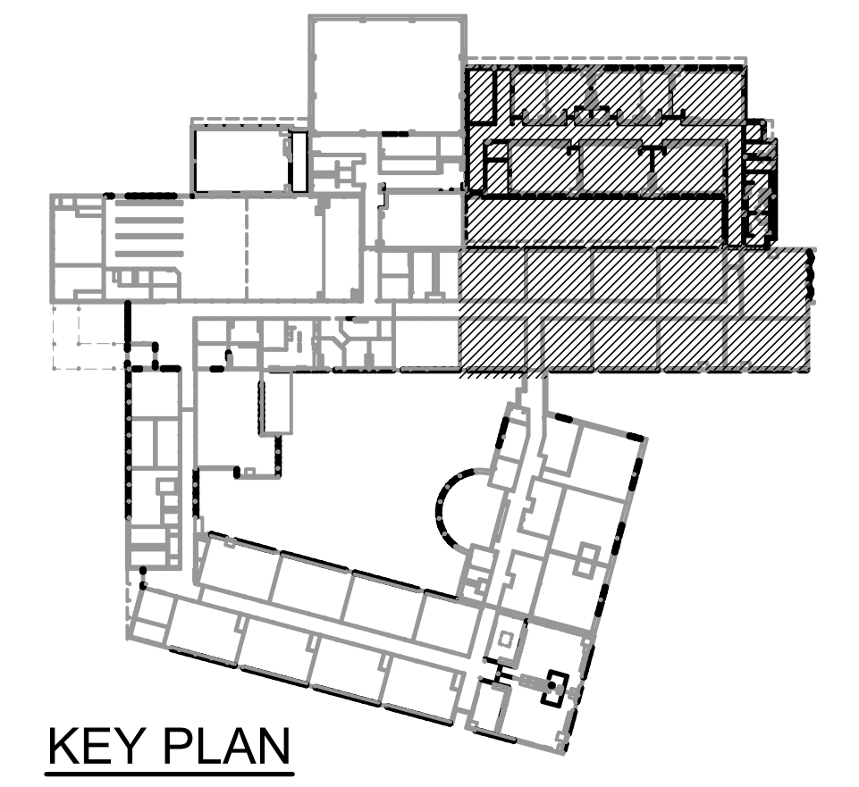
UNDERSLAB PIPING PLAN - BLOCK B ALTERNATE BID

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

KEY NOTES

1. 4" SANITARY UP TO P-1AB.
2. 2" SANITARY UP TO P-2AC.
3. 2" SANITARY UP TO P-3AC.
4. 4" SANITARY UP TO CODP.
5. 3" SANITARY UP TO CODP.
6. 4" SANITARY UP TO COG.
7. 2" VENT UP.
8. 3" VENT UP.
9. 2" SANITARY UP TO P-5A.
10. 2" SANITARY UP TO P-6AC.
11. 3" SANITARY UP TO FD-2.
12. 4" SANITARY UP TO P-1A.
13. 2" SANITARY UP TO P-2A.
14. 3" SANITARY UP TO FD-1.
15. 6" STORM UP.
16. PROVIDE SHUT OFF VALVE IN CURB BOX. SET IN 24" X 24" CONCRETE PAD.
17. 6" FIRE SERVICE UP.
18. 3" DOMESTIC WATER SERVICE UP.
19. 6" STORM UP TO COG.
20. 4" STORM UP.
21. 4" STORM UP TO COG.
22. 3" SANITARY UP TO FD-3.
23. 12" STORM DRAIN PIPING. INVERT ELEVATION APPROXIMATELY 99.44. TOP OF PIPE APPROXIMATELY 100.44.
24. 4" SANITARY. INVERT ELEVATION 102.8.

2



KEY PLAN

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William D. Hopkins — 2/12/26

Architect — Date

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Project Owner Name

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Project Location

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085402

Project Number

5516D

Project Date

10.10.2025

Checked By

AHG

Drawn By

JD

Scale

AS NOTED

Drawing Name

PLUMBING UNDERSLAB PIPING PLAN - BLOCK B 2 (ALTERNATE BID)

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

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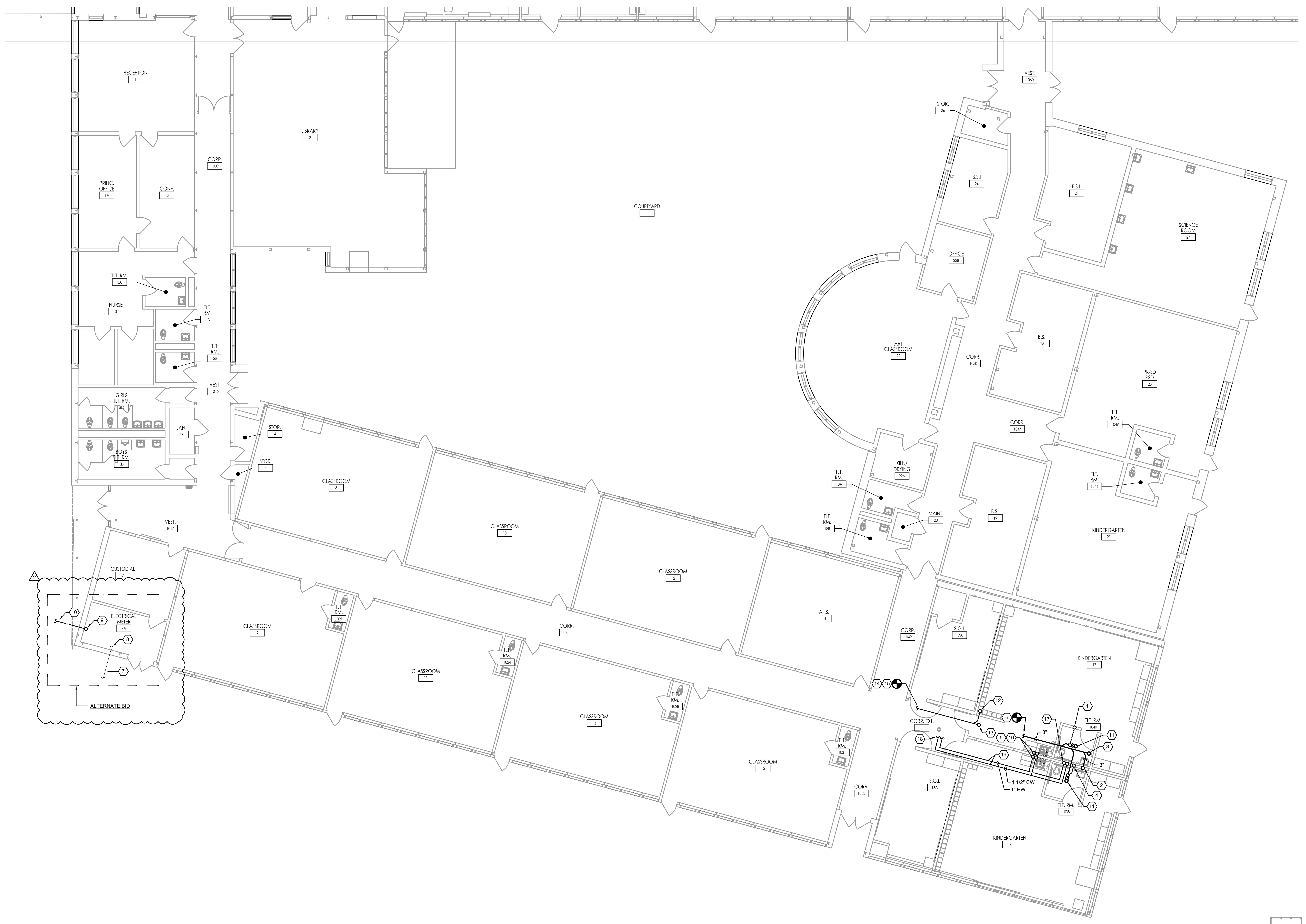
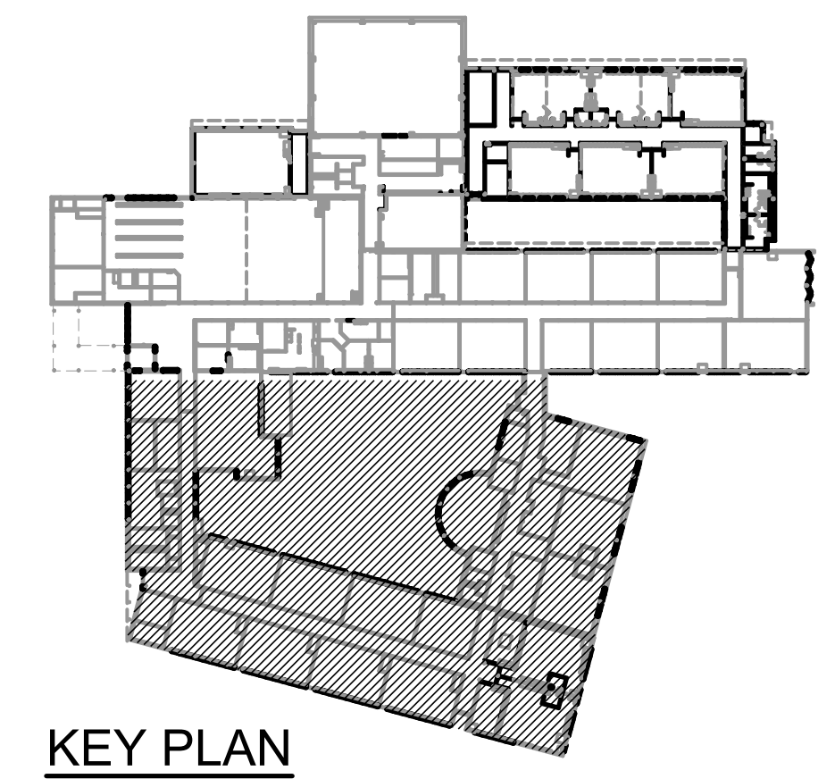


UNDERSLAB PIPING PLAN - BLOCK C

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

KEY NOTES

1. 1 1/2" VENT UP INSIDE CONCRETE MASONRY UNIT (CMU) BLOCK CORES.
2. 2" SANITARY UP TO P-2AC.
3. 3" SANITARY UP TO CODP.
4. 2" VENT UP.
5. 3/4" HOT AND COLD WATER UP.
6. DURING DEMOLITION AND PRIOR TO NEW CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF EXISTING UNDER SLAB PIPING WITH UNDERGROUND UTILITY LOCATOR APPARATUS AND/OR GROUND PENETRATING RADAR. AFTER THE LOCATION OF THE EXISTING PIPING IS VERIFIED, CONTRACTOR SHALL SAW CUT FLOOR, EXCAVATE, AND VERIFY THE DEPTH AND SIZE AND DIRECTION OF FLOW OF THE EXISTING SANITARY PIPING AND MAKE CONNECTION TO EXISTING SANITARY PIPING AS INDICATED. EXTEND, OFFSET, MODIFY AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTIONS. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
7. EXISTING 4" DOMESTIC WATER SERVICE TO REMAIN. SEE CIVIL DRAWINGS FOR CONTINUATION.
8. EXISTING 4" CW UP.
9. NEW 3" CW UP.
10. NEW 3" COLD WATER TO MECHANICAL ROOM 48B. SEE CIVIL DRAWINGS FOR CONTINUATION
11. 3" SANITARY UP TO FD-1.
12. 4" STORM UP.
13. 4" STORM UP TO CODP.
14. CONNECT NEW 4" STORM TO EXISTING STORM PIPING FROM REMOVED RISER. EXTEND, OFFSET, MODIFY, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION.
15. DURING DEMOLITION AND PRIOR TO NEW CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF EXISTING UNDER SLAB PIPING WITH UNDERGROUND UTILITY LOCATOR APPARATUS AND/OR GROUND PENETRATING RADAR. AFTER THE LOCATION OF THE EXISTING PIPING IS VERIFIED, CONTRACTOR SHALL SAW CUT FLOOR, EXCAVATE, AND VERIFY THE DEPTH AND SIZE AND DIRECTION OF FLOW OF THE EXISTING STORM PIPING AND MAKE CONNECTION TO EXISTING STORM PIPING AS INDICATED. EXTEND, OFFSET, MODIFY AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTIONS. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
16. PIPING UP THROUGH FLOOR INSIDE PVC PIPE SLEEVE. SEAL ANNULAR SPACE BETWEEN PIPE AND SLEEVE WATER TIGHT WITH SILICON CAULK AND PIPE CAP.
17. 1 1/2" COLD WATER AND 3/4" HOT WATER UP.
18. CONNECT NEW 1 1/2" CW AND 1" HW TO EXISTING 1 1/4" CW AND 1" HW PIPING. EXTEND, OFFSET, MODIFY, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING.
19. EACH PIPE SHALL BE TYPE "K" SOFT COPPER BELOW FLOOR INSIDE SCHEDULE PVC PIPE SLEEVES. SAW CUT FLOOR AS REQUIRED TO INSTALL NEW PIPING AND PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.



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William D. Hopkins 2/12/26
Architect Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number	5516D
Project Date	10.10.2025
Checked By	AHG
Drawn By	JD
Scale	AS NOTED

Drawing Name
PLUMBING UNDERSLAB PIPING PLAN - BLOCK C

Revisions

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1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

Drawing Number
P3.2

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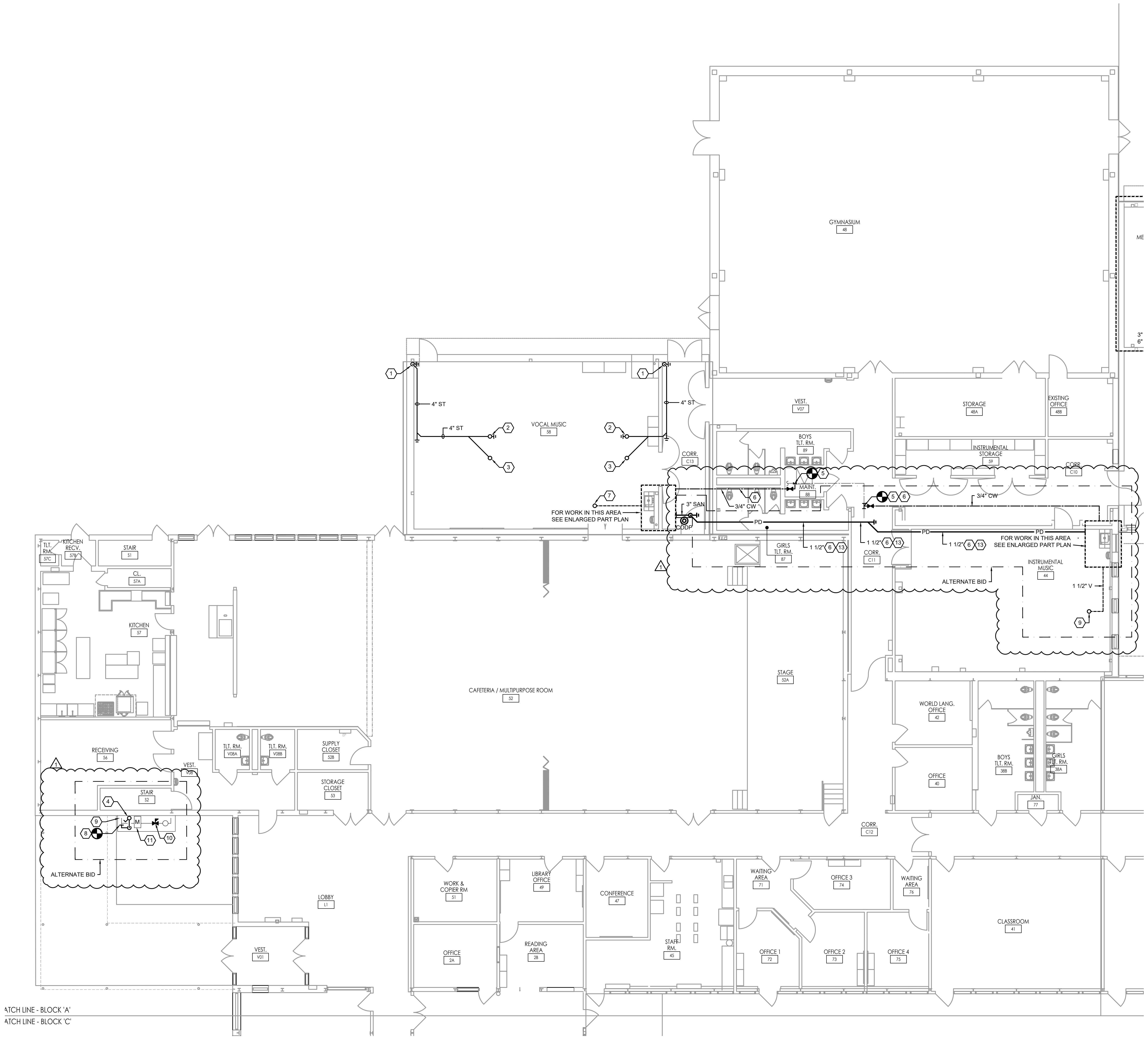
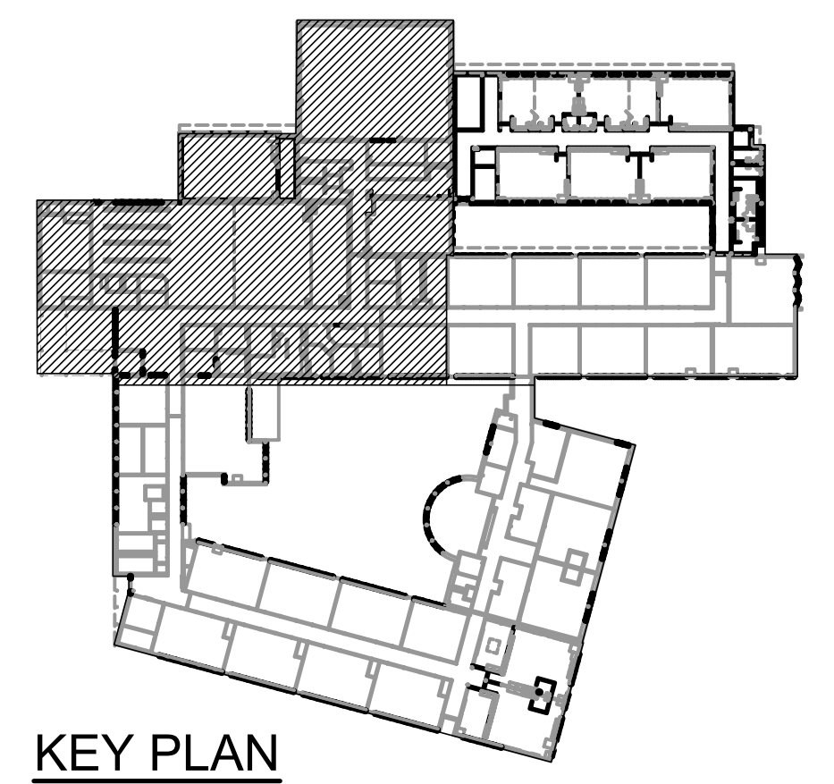


FLOOR PLAN - BLOCK A

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

KEY NOTES

1. 4" STORM DOWN (COWP AT BASE).
2. 4" STORM UP TO ROOF DRAIN.
3. 4" STORM UP TO OVERFLOW DRAIN.
4. REMOVE EXISTING 1 1/2" GAS PIPING AND RELATED PIPE SUPPORTS UP TO ROOF AND REPLACE WITH NEW 4" GAS PIPING AND SUPPORTS. PROVIDE DEDICATED SHUT OFF VALVE AT BASE OF NEW RISER. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
5. CONNECT NEW 3/4" COLD WATER PIPING TO EXISTING COLD WATER PIPING. MODIFY EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
6. CAREFULLY REMOVE EXISTING CEILING TILE FOR THIS WORK AND REINSTALL IN ORIGINAL CONDITION. CONTRACTOR RESPONSIBLE TO REPLACE ANY CEILING TILE DAMAGED AS PART OF THIS WORK WITH NEW TILE TO MATCH EXISTING.
7. 2" VENT UP TO 4" VENT THRU ROOF.
8. REMOVE EXISTING PIPE HEADER DOWNSTREAM OF METER AND CONSTRUCT NEW 4" HEADER. EXTEND NEW 4" HEADER AS REQUIRED TO PSE&G TIE IN POINT. CONTRACTOR SHALL MEET WITH PSE&G ON SITE TO REVIEW REQUIREMENTS AND TIE IN POINT LOCATION AND ADJUST NEW HEADER AS REQUIRED. SEE GAS RISER DIAGRAM.
9. CONNECT NEW 4" GAS PIPING TO EXISTING 4" GAS PIPING DROPPING DOWN INTO EXISTING BOILER ROOM. PROVIDE NEW 4" SHUT OFF VALVE TO ISOLATE EXISTING BOILER ROOM PIPING. EXTEND, OFFSET, ADJUST, AND MODIFY EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.
10. PSE&G SHALL REMOVE EXISTING SERVICE REGULATOR AND REPLACE WITH NEW LARGER CAPACITY SERVICE REGULATOR. CONTRACTOR SHALL CONFIRM WITH PSE&G NEW REGULATOR OUTLET PRESSURE WILL BE SET TO 1 PSI TO MATCH EXISTING PRESSURE SET POINT.
11. PSE&G SHALL REMOVE EXISTING GAS METER AND REPLACE WITH NEW LARGER CAPACITY METER. CONFIRM WITH PSE&G NEW TIE IN POINT AND ADJUST PIPING ARRANGEMENT AS REQUIRED TO ACCOMMODATE ACTUAL NEW METER LOCATION. PROVIDE NEW CONCRETE PAD AS REQUIRED TO MEET PSE&G REQUIREMENTS.
12. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.
13. PIPE SHALL BE SCHEDULE 40 GALVANIZED STEEL.



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Drawing Name
PLUMBING FLOOR PLAN - BLOCK A

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
P4.0

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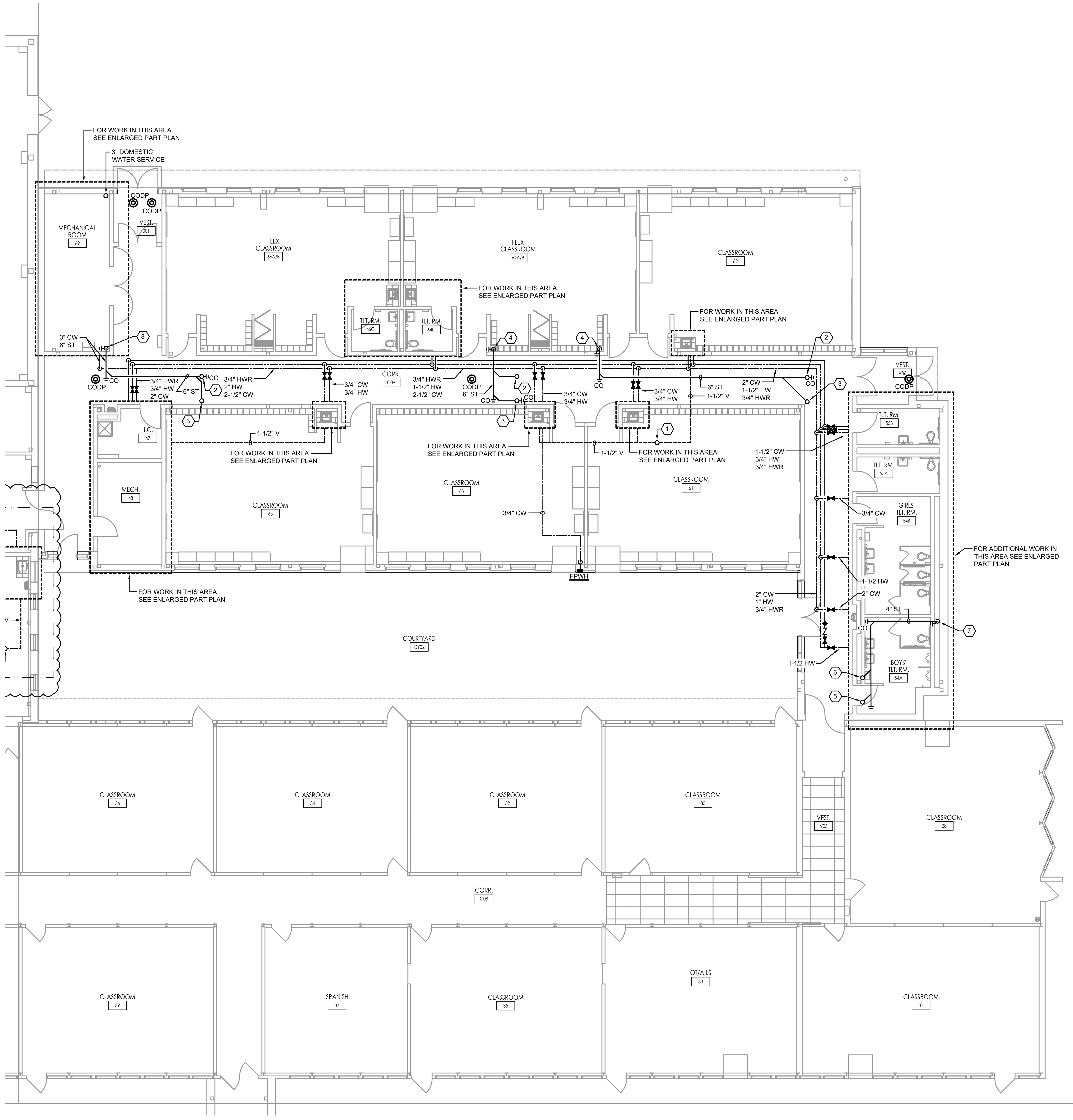
KEY NOTES

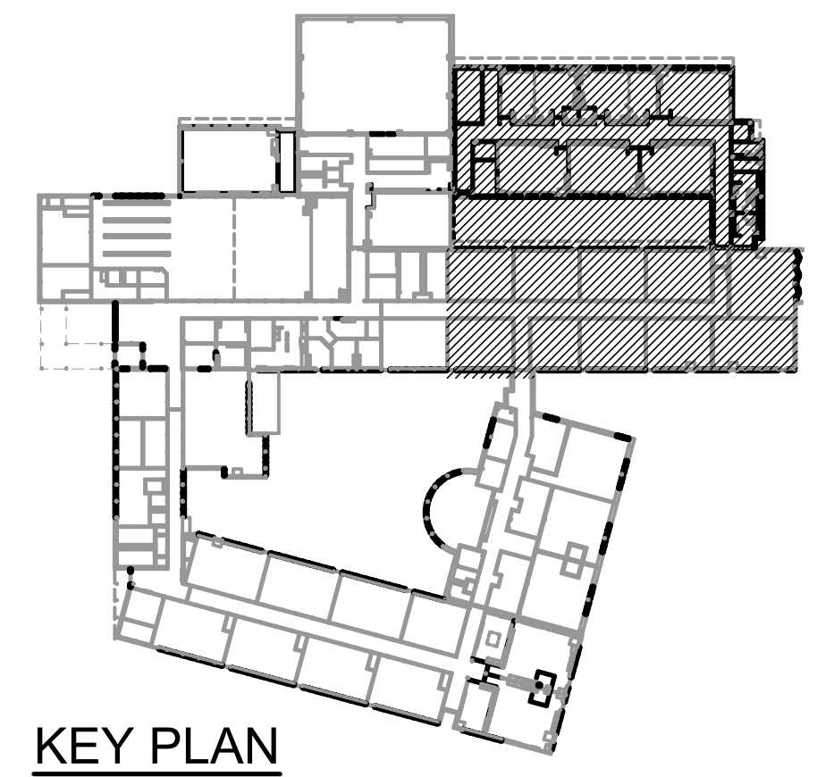
1. 3" VENT UP TO 3" VENT THRU ROOF.
2. 6" STORM UP TO ROOF DRAIN.
3. 6" STORM UP TO OVERFLOW ROOF DRAIN.
4. 6" STORM DOWN (COWP AT BASE).
5. 4" STORM UP TO ROOF DRAIN.
6. 4" STORM UP TO OVERFLOW DRAIN.
7. 4" STORM DOWN (COWP AT BASE).
8. 6" STORM DOWN (CO AT BASE).
9. 1 1/2" VENT UP TO 3" VTR.



2

FLOOR PLAN - BLOCK B ALTERNATE BID

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



KEY PLAN

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FVHD architects planners

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Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
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STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435

William D. Hopkins
Architect

2/12/26
Date

Project Name

Addition and Renovations to Littlebrook Elementary School

Project Owner Name

Princeton Public Schools

Project Location

39 Magnolia Ln,
Princeton, NJ
085402

Project Number

5516D

Project Date

10.10.2025

Checked By

AHG

Drawn By

JD

Scale

AS NOTED

Drawing Name

PLUMBING FLOOR PLAN - BLOCK B (ALTERNATE BID)

2

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

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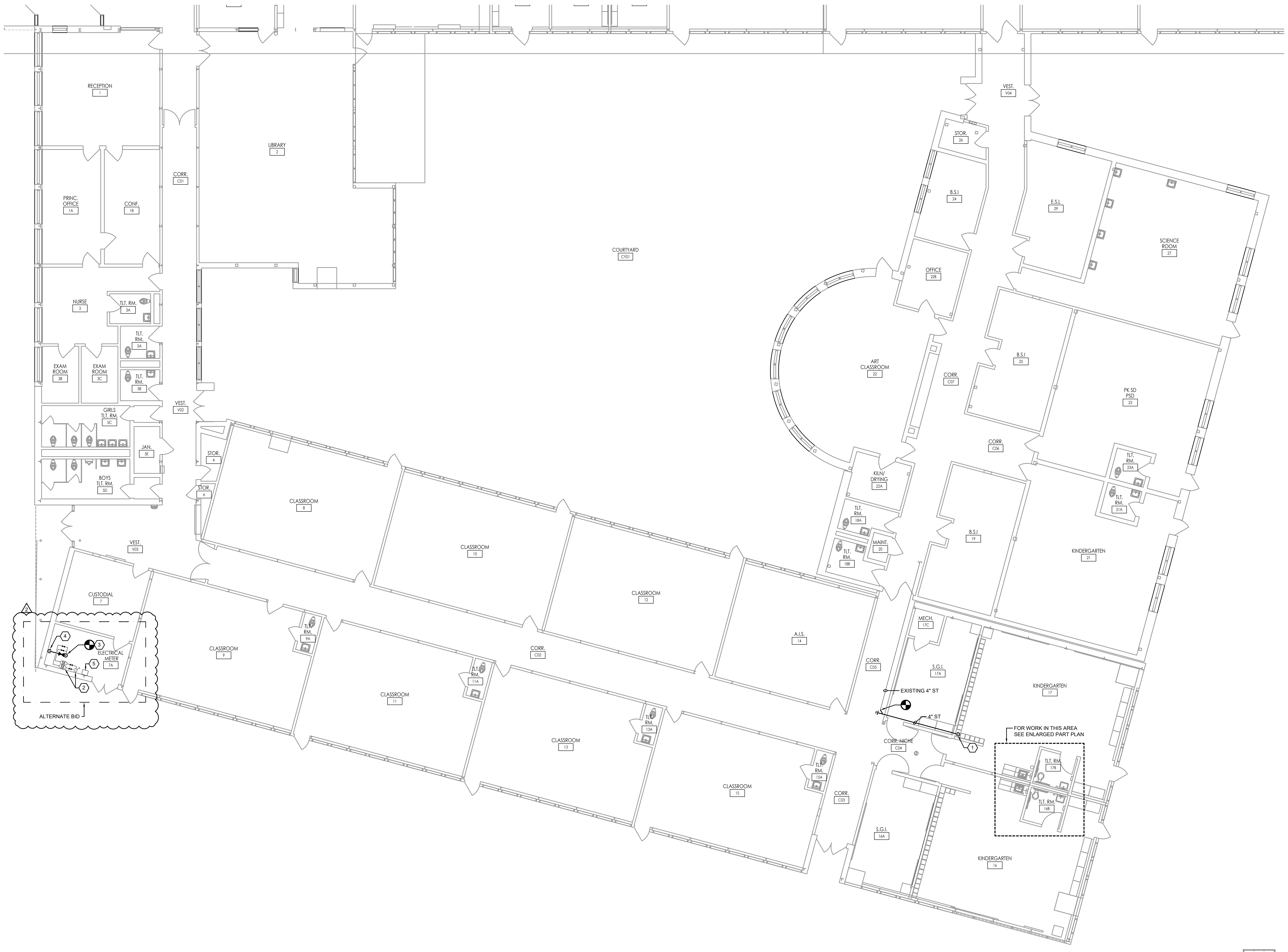
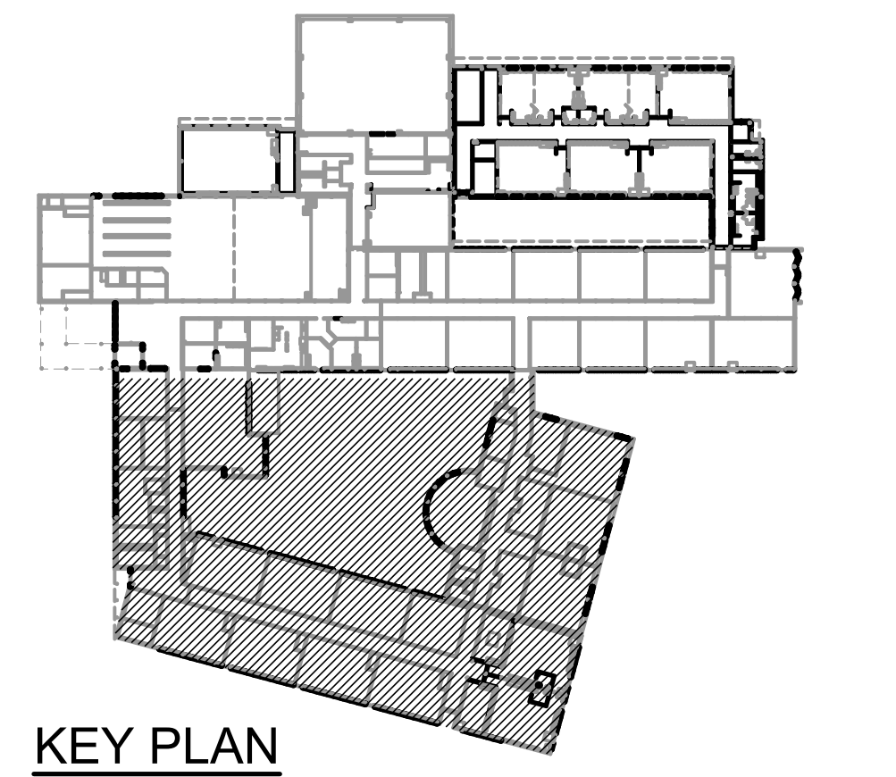
KEY NOTES

ALTERNATE BID

1. 4" STORM DOWN (COWP AT BASE).
2. EXISTING 4" DOMESTIC WATER SERVICE DN AND TWO (2) 2" WATER METERS TO REMAIN.
3. CONNECT NEW 3" COLD WATER FOR NEW BUILDING ADDITION TO TOP OF EXISTING 4" MANIFOLD. EXTEND, OFFSET, MODIFY, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION.
4. 3" CW DN.
5. EXISTING GAS METER TO REMAIN.



FLOOR PLAN - BLOCK C
SCALE: 1/8" = 1'-0"



KEY PLAN
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William D. Hopkins
Architect

2/12/26
Date

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F V H D P C . C O M

Project Name
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Princeton Public Schools

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Princeton, NJ
085402

Project Number
5516D
Project Date
10.10.2025
Checked By
AHG
Drawn By
JD
Scale
AS NOTED

Drawing Name
PLUMBING FLOOR PLAN - BLOCK C

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
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2	03.24.26	ADDENDUM NO. 2

Drawing Number
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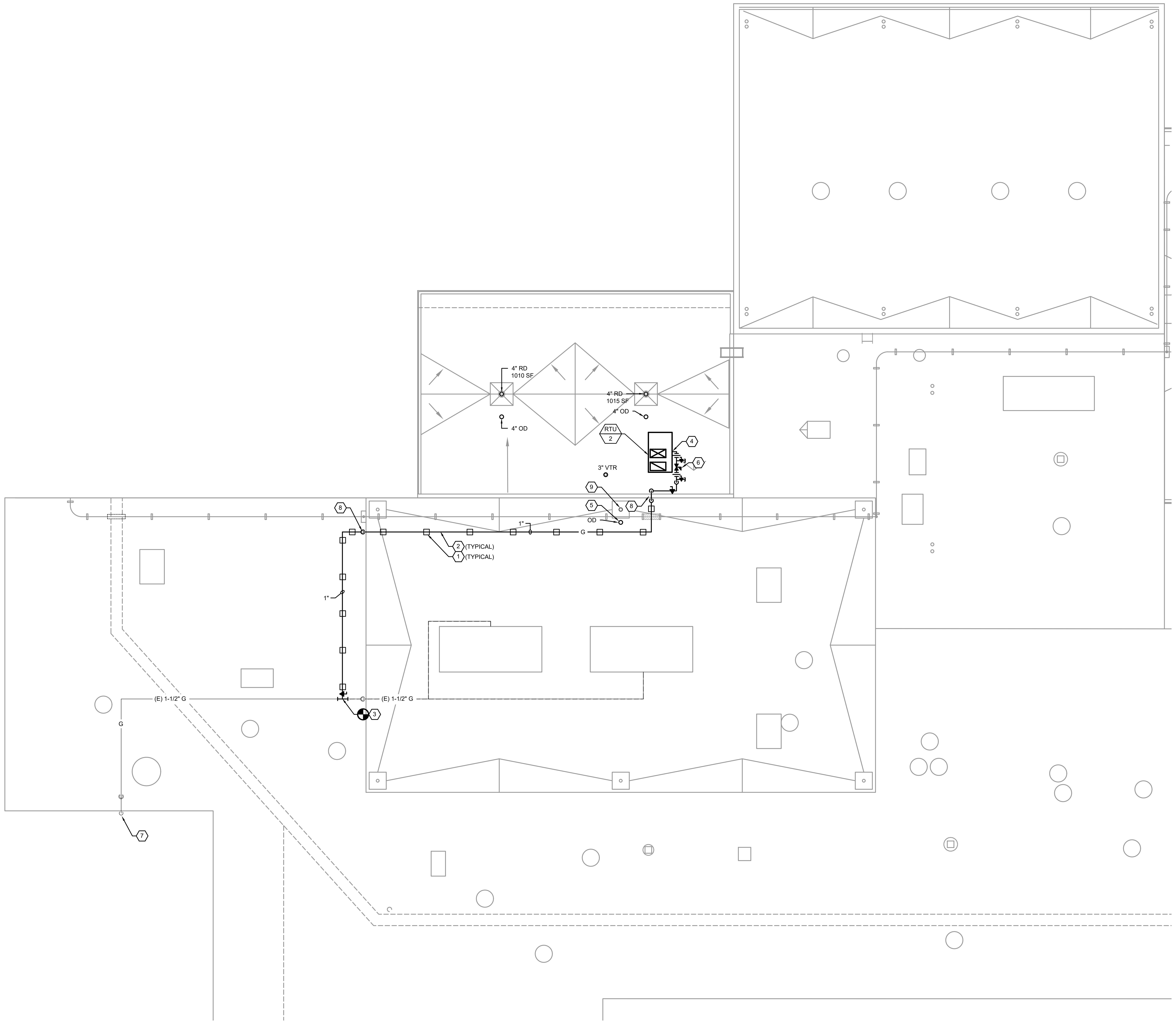
KEY NOTES

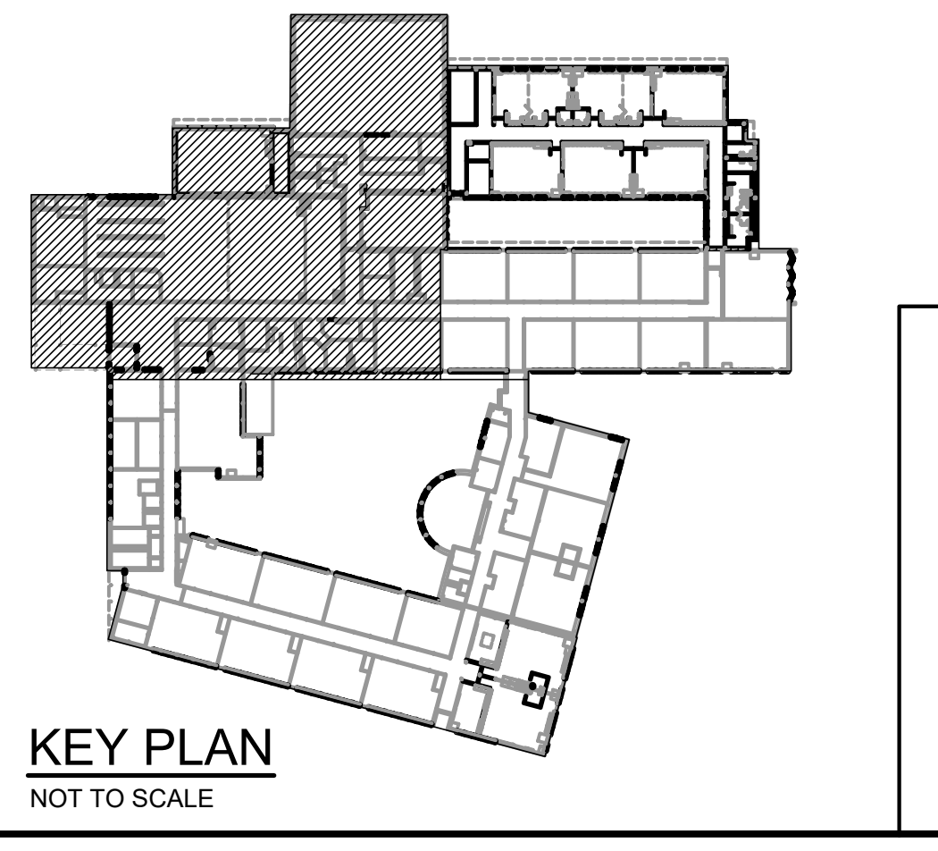
1. PROVIDE PIPE SUPPORTS AT ALL DIRECTION CHANGES AND STRAIGHT RUNS WITH SPACING NOT EXCEEDING LENGTHS STATED IN TABLE 415.1 OF IFGC, LATEST ADOPTED EDITION, FOR MATERIALS AND LISTED PIPE SIZES. SUPPORTS SHALL BE SADDLE BLOCK ROLLER TYPE WITH PIPE SECURED TO STAND WITH CLAMP OR METAL BAND. SUPPORT IS NOT SECURED TO ROOF SURFACE. BOTTOM OF PIPING SHALL BE MINIMUM 3 1/2" ABOVE ROOF SURFACE.
2. CLEAN, PRIME AND PAINT ALL EXTERIOR GAS PIPING WITH TWO COATS MARINE GRADE RUST RESISTANT PAINT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. CONNECT NEW 1" GAS TO EXISTING 1 1/2" GAS. EXTEND, OFFSET, MODIFY, AND ADJUST EXISTING PIPING AS REQURIED TO MAKE RECONNECTION. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.
4. FIELD VERIFY SIZE AND LOCATION OF UNIT GAS CONNECTION AND PROVIDE TRANSITION FITTINGS AS REQUIRED.
5. PROVIDE NEW OVERFLOW DRAIN TO MATCH SIZE OF EXISTING ROOF DRAIN. CONNECT OVERFLOW DRAIN TO EXISTING STORM LEADER BELOW ROOF. MODIFY, EXTEND, AND/OR ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING ROOF DRAIN AND PIPING.
6. PROVIDE PRESSURE REGULATOR. CONTRACTOR SHALL TAKE PRESSURE READING FOR GAS PRESSURE TO PROPERLY SELECT REGULATOR SPRING RATES. REGULATORS SHALL BE ANSI Z21.80 COMPLIANT LOCK UP TYPE. PROVIDE WITH VENT CAP POINTED DOWNWARD WITH BUILT IN INSECT SCREEN. VENTS TO BE LOCATED MINIMUM 10'-0" AWAY FROM ALL OUTSIDE AIR INTAKES. REFER TO MECHANICAL DRAWINGS FOR ROOFTOP HVAC EQUIPMENT GAS PRESSURE REQUIREMENTS. PROVIDE VALVED AND CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION OF PRESSURE MEASURING DEVICE UPSTREAM AND DOWNSTREAM OF REGULATOR IN COMPLIANCE WITH THE IFGC SECTION 410.2, LATEST ADOPTED EDITION.
7. EXISTING 1 1/2" GAS PIPING DROPPING DOWN TO EXISTING GAS METER ASSEMBLY TO REMAIN. EXISTING GAS METER ASSEMBLY TO REMAIN.
8. PROVIDE PIPE SUPPORTS ATTACHED TO WALL AT TOP AND BOTTOM OF RISE.
9. EXISTING ROOF DRAIN TO REMAIN



ROOF PLAN - BLOCK A BASE BID

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

2



KEY PLAN

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William D. Hopkins
Architect

2/12/26
Date

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Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453

FVHDPC.COM

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING ROOF PLAN - BLOCK A

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

Drawing Number
P5.0

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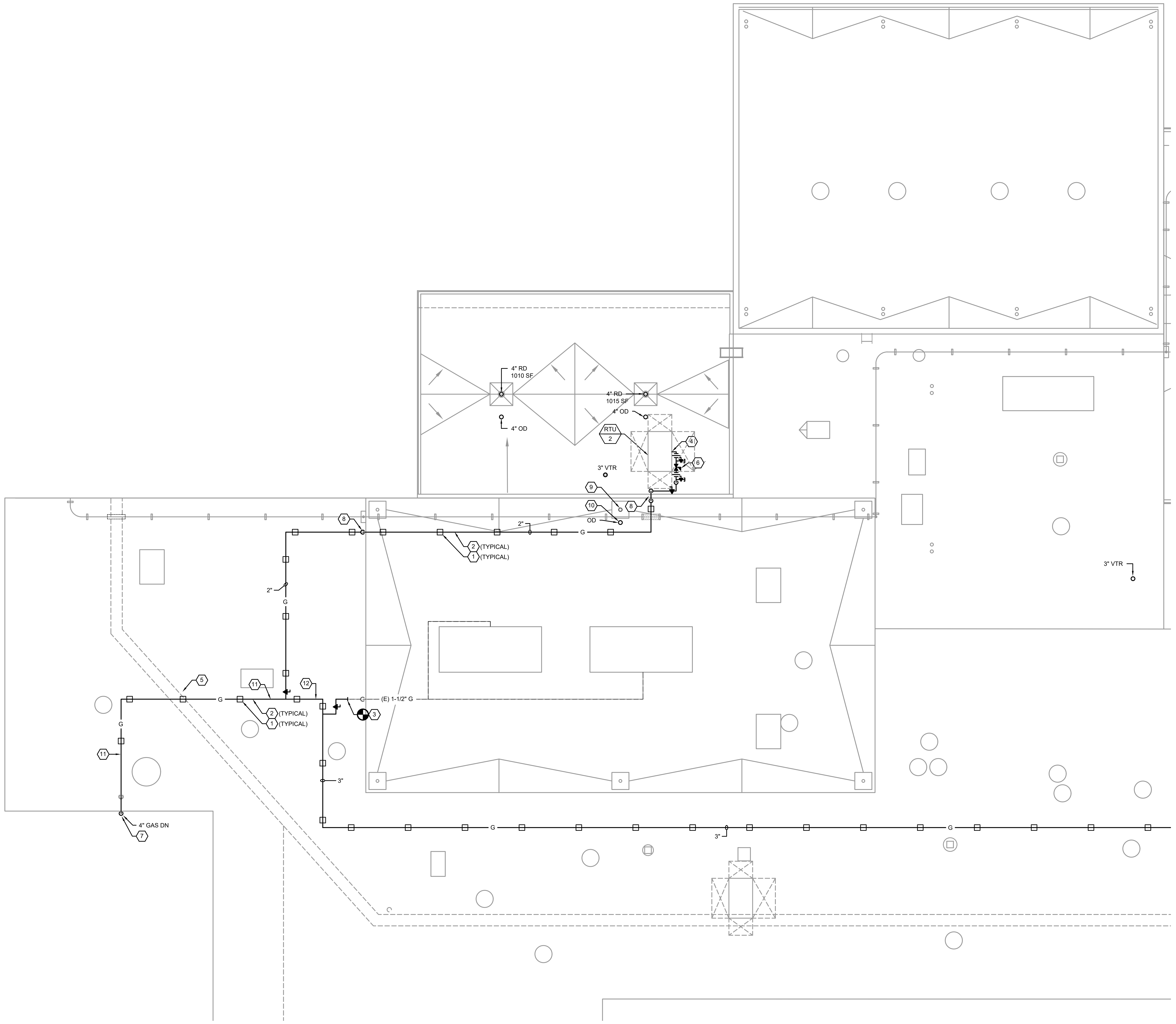
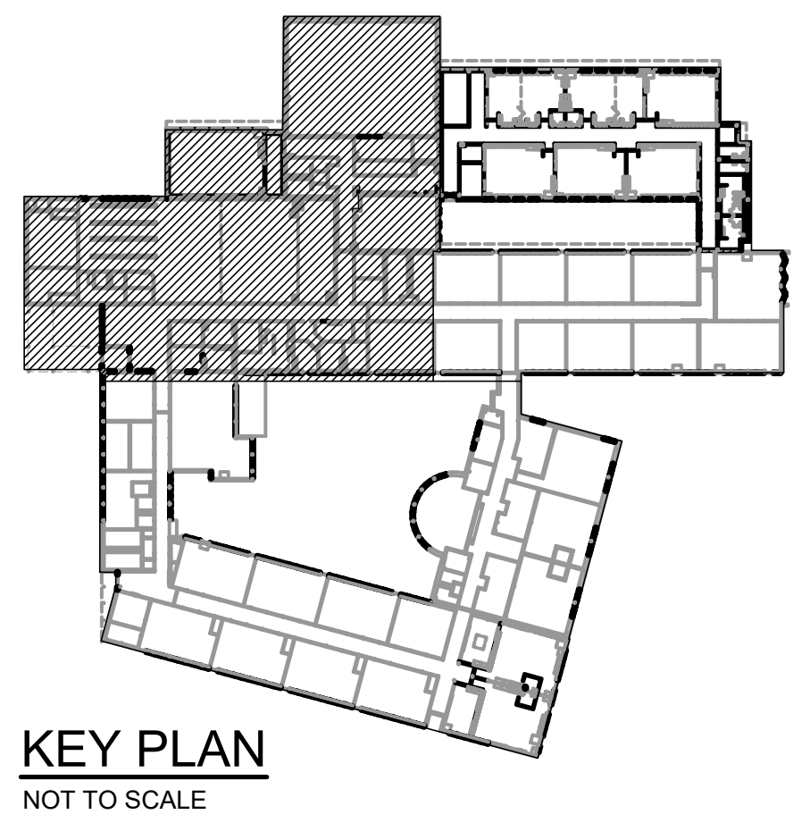


ROOF PLAN - BLOCK A ALTERNATE BID △1

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

KEY NOTES

1. PROVIDE PIPE SUPPORTS AT ALL DIRECTION CHANGES AND STRAIGHT RUNS WITH SPACING NOT EXCEEDING LENGTHS STATED IN TABLE 415.1 OF IFGC, LATEST ADOPTED EDITION, FOR MATERIALS AND LISTED PIPE SIZES. SUPPORTS SHALL BE SADDLE BLOCK ROLLER TYPE WITH PIPE SECURED TO STAND WITH CLAMP OR METAL BAND. SUPPORT IS NOT SECURED TO ROOF SURFACE. BOTTOM OF PIPING SHALL BE MINIMUM 3 1/2" ABOVE ROOF SURFACE.
2. CLEAN, PRIME AND PAINT ALL EXTERIOR GAS PIPING WITH TWO COATS MARINE GRADE RUST RESISTANT PAINT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. CONNECT NEW 3" GAS TO EXISTING 1 1/2" GAS. EXTEND, OFFSET, MODIFY, AND ADJUST EXISTING PIPING AS REQURIED TO MAKE RECONNECTION. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.
4. FIELD VERIFY SIZE AND LOCATION OF UNIT GAS CONNECTION AND PROVIDE TRANSITION FITTINGS AS REQUIRED.
5. COORDINATE ROUTING OF GAS PIPING IN THIS AREA WITH EXISTING ELECTRIC CONDUIT.
6. PROVIDE PRESSURE REGULATOR. CONTRACTOR SHALL TAKE PRESSURE READING FOR GAS PRESSURE TO PROPERLY SELECT REGULATOR SPRING RATES. REGULATORS SHALL BE ANSI Z21.80 COMPLIANT LOCK UP TYPE. PROVIDE WITH VENT CAP POINTED DOWNWARD WITH BUILT IN INSECT SCREEN. VENTS TO BE LOCATED MINIMUM 10'-0" AWAY FROM ALL OUTSIDE AIR INTAKES. REFER TO MECHANICAL DRAWINGS FOR ROOFTOP HVAC EQUIPMENT GAS PRESSURE REQUIREMENTS. PROVIDE VALVED AND CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION OF PRESSURE MEASURING DEVICE UPSTREAM AND DOWNSTREAM OF REGULATOR IN COMPLIANCE WITH THE IFGC SECTION 410.2, LATEST ADOPTED EDITION.
7. REMOVE EXISTING 1 1/2" GAS PIPING DROPPING DOWN TO EXISTING GAS METER ASSEMBLY AND RELATED PIPE SUPPORTS AND REPLACE WITH NEW 4" GAS PIPING AND SUPPORTS. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
8. PROVIDE PIPE SUPPORTS ATTACHED TO WALL AT TOP AND BOTTOM OF RISE.
9. EXISTING ROOF DRAIN TO REMAIN
10. PROVIDE NEW OVERFLOW DRAIN TO MATCH SIZE OF EXISTING ROOF DRAIN. CONNECT OVERFLOW DRAIN TO EXISTING STORM LEADER BELOW ROOF. MODIFY, EXTEND, AND/OR ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING ROOF DRAIN AND PIPING.
11. REMOVE EXISTING 1 1/2" GAS PIPING AND RELATED PIPE SUPPORTS AND REPLACE WITH NEW 4" GAS PIPING AND SUPPORTS. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.
12. REMOVE EXISTING 1 1/2" GAS PIPING AND RELATED PIPE SUPPORTS AND REPLACE WITH NEW 3" GAS PIPING AND SUPPORTS. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING.



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William D. Hopkins 2/12/26
Architect Date

FVHD architects planners
Fraytak Veisz Hopkins Duthie P C

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Pennsylvania: 140 Whitaker Avenue
Mont Clare - Pennsylvania 19453
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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING ROOF PLAN - BLOCK A △1 (ALTERNATE BID)

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
P5.1

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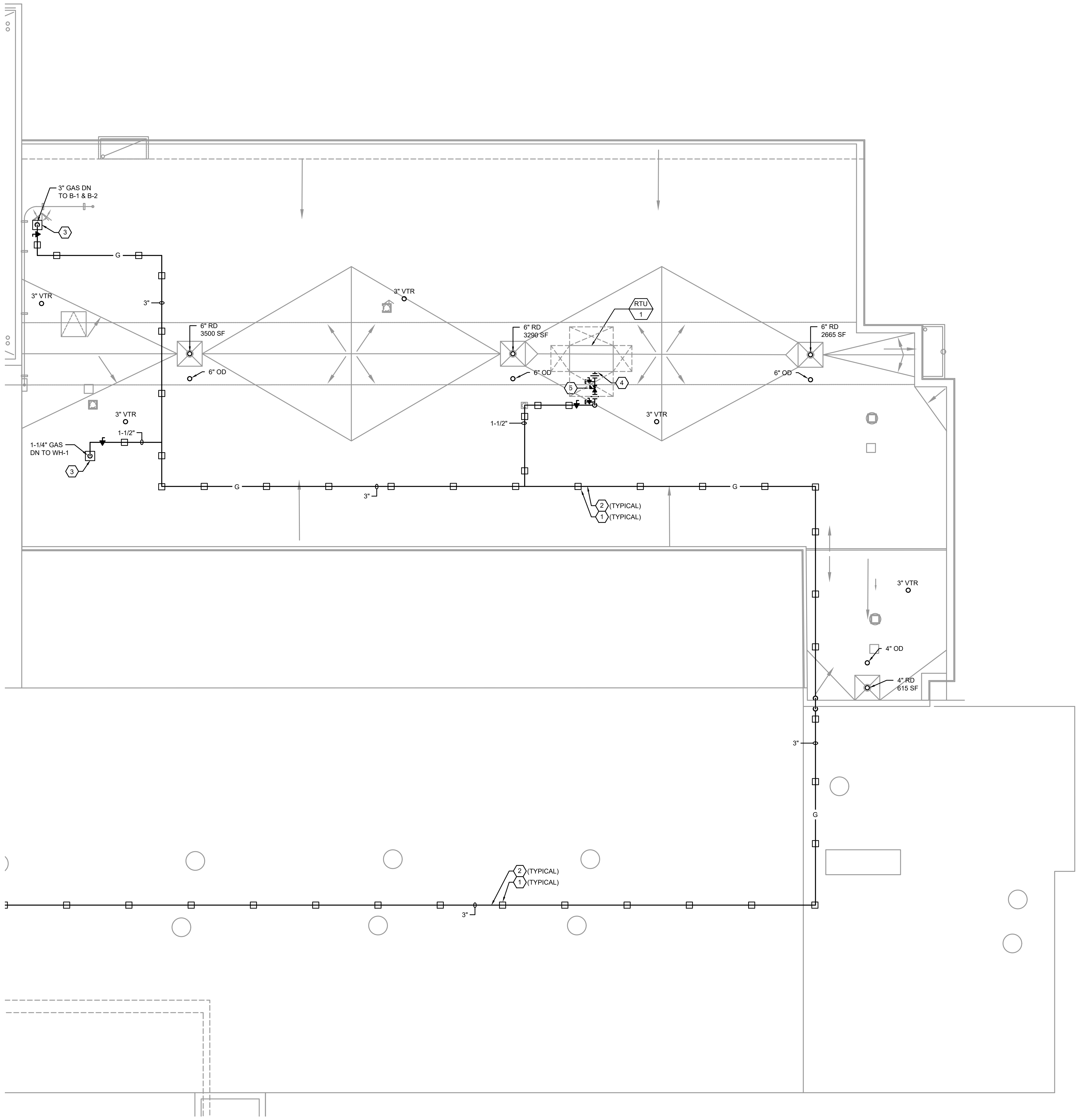
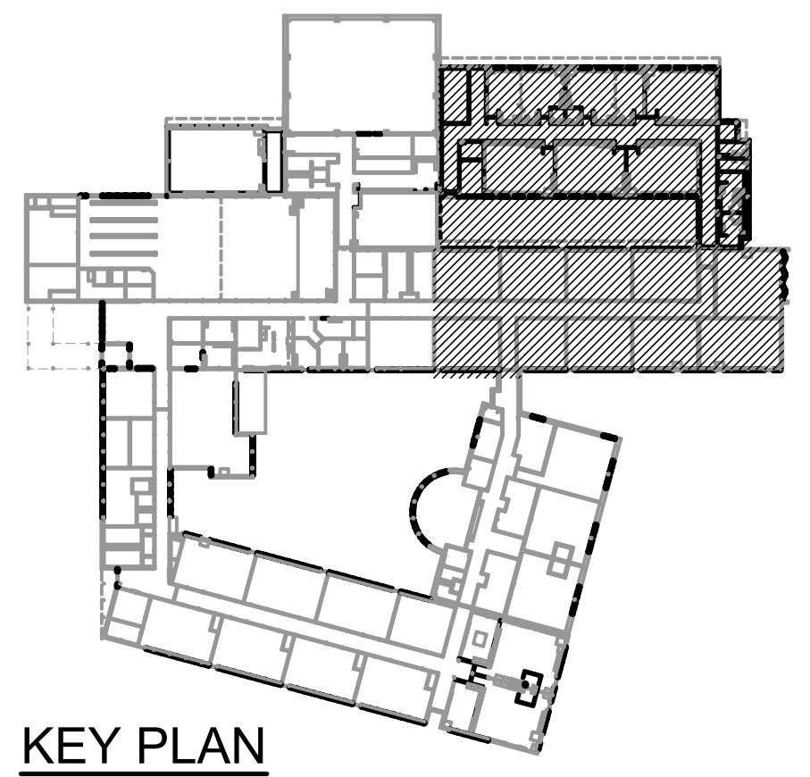
2. CLEAN, PRIME AND PAINT ALL EXTERIOR GAS PIPING WITH TWO COATS MARINE GRADE RUST RESISTANT PAINT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. PROVIDE & INSTALL ROOF PORTAL PATE CO OR EQUAL. PROVIDE SEPARATE BOOT FOR EACH PIPE. DO NOT PASS MORE THAN (1) PIPE THRU EACH NIPPLE TO FACILITATE PROPER SEALING.
4. FIELD VERIFY SIZE AND LOCATION OF UNIT GAS CONNECTION AND PROVIDE TRANSITION FITTINGS AS REQUIRED.
5. PROVIDE PRESSURE REGULATOR. CONTRACTOR SHALL TAKE PRESSURE READING FOR GAS PRESSURE TO PROPERLY SELECT REGULATOR SPRING RATES. REGULATORS SHALL BE ANSI Z21.80 COMPLIANT LOCK UP TYPE. PROVIDE WITH VENT CAP POINTED DOWNWARD WITH BUILT IN INSECT SCREEN. VENTS TO BE LOCATED MINIMUM 10'-0" AWAY FROM ALL OUTSIDE AIR INTAKES. REFER TO MECHANICAL DRAWINGS FOR ROOFTOP HVAC EQUIPMENT GAS PRESSURE REQUIREMENTS. PROVIDE VALVED AND CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION OF PRESSURE MEASURING DEVICE UPSTREAM AND DOWNSTREAM OF REGULATOR IN COMPLIANCE WITH THE IFGC SECTION 410.2, LATEST ADOPTED EDITION.



ROOF PLAN - BLOCK B ALTERNATE BID 1

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



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Drawing Name
PLUMBING ROOF PLAN - BLOCK B 1 (ALTERNATE BID)

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
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Drawing Number
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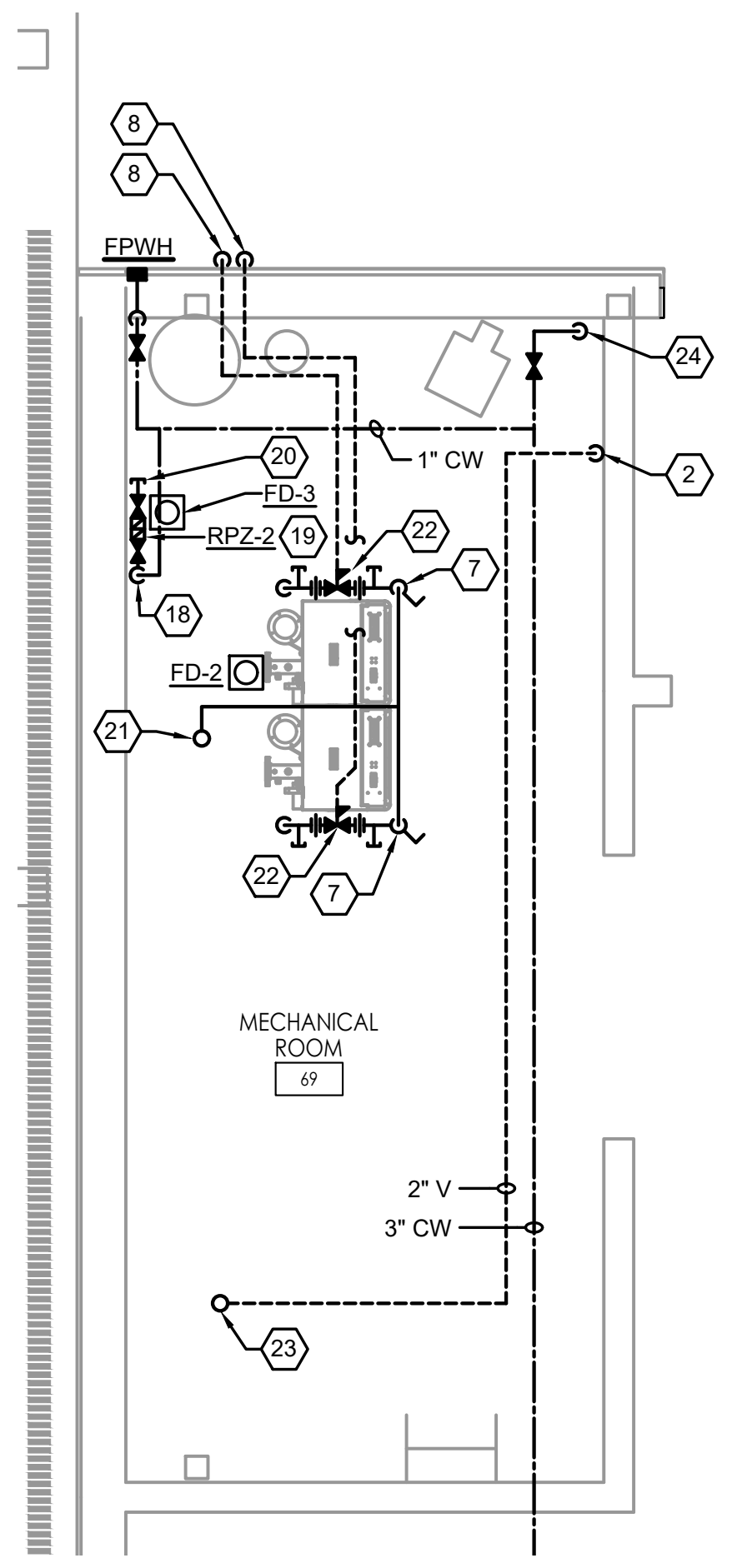
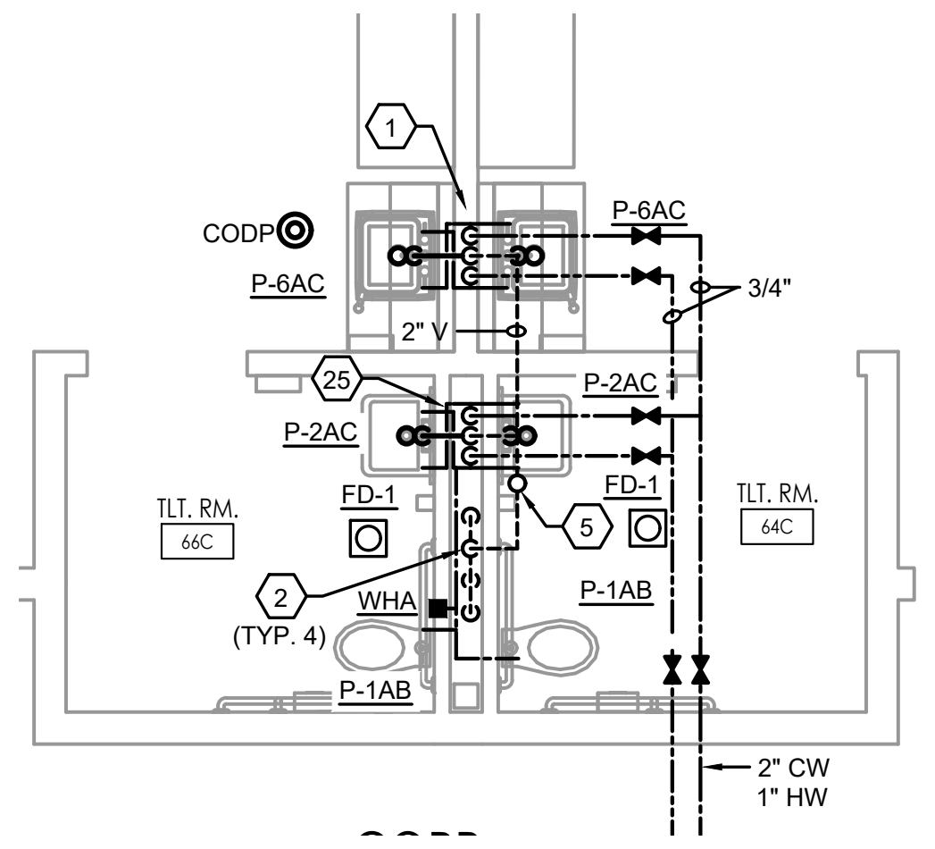
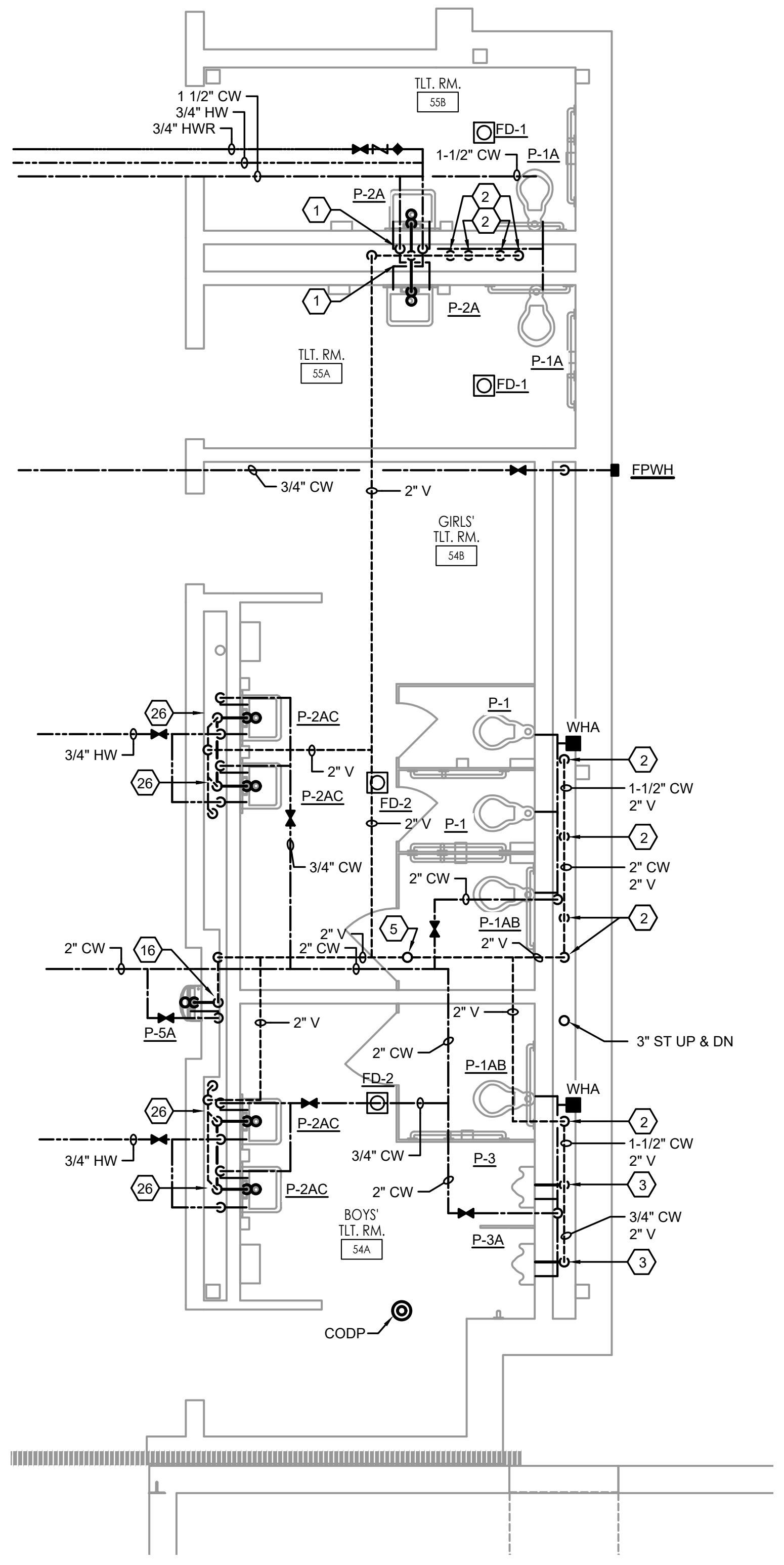


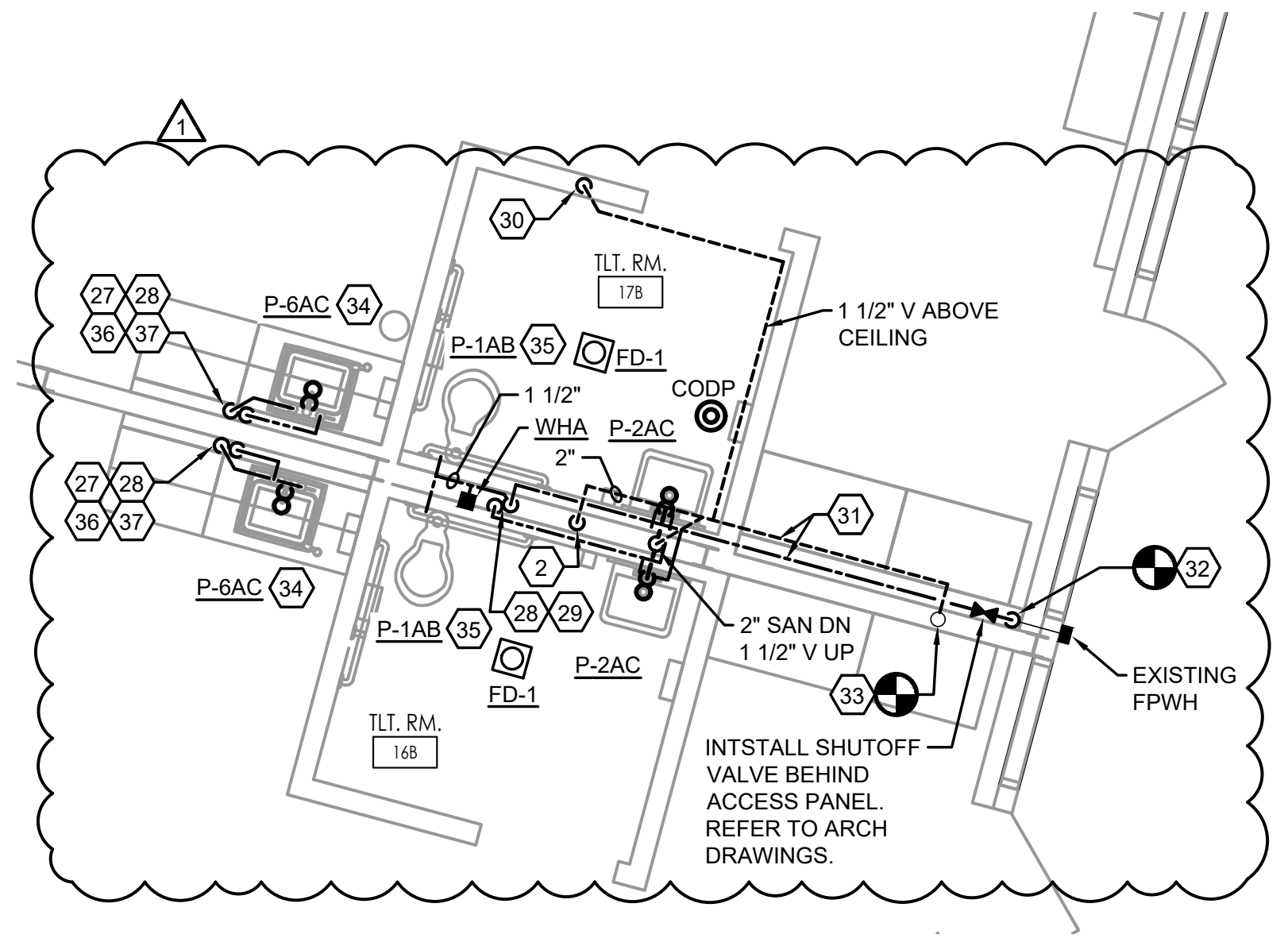
PART PLAN - MECHANICAL ROOM 69 ALTENATE BID
SCALE: 1/4" = 1'-0"



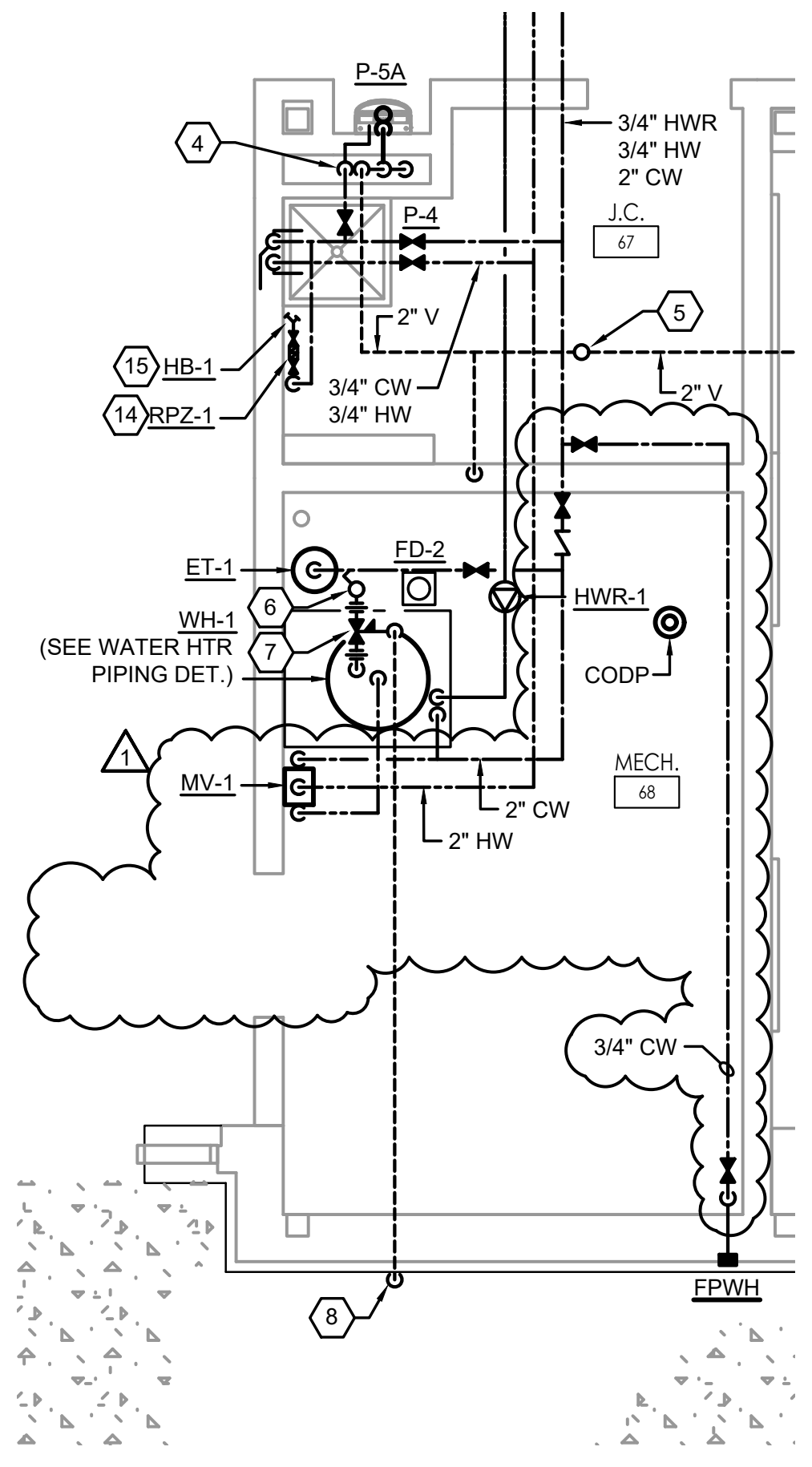
PART PLAN - TLT RM. ALTERNATE BID
SCALE: 1/4" = 1'-0"



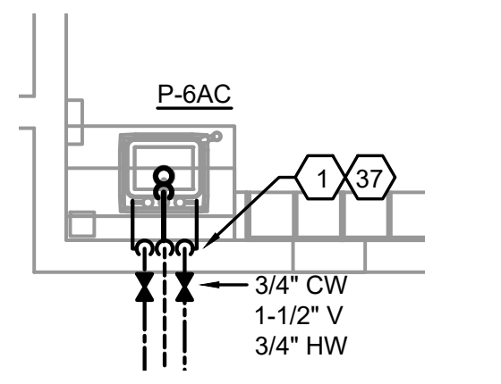
PART PLAN - 54A, 54B, 55A, 55B ALTERNATE BID
SCALE: 1/4" = 1'-0"



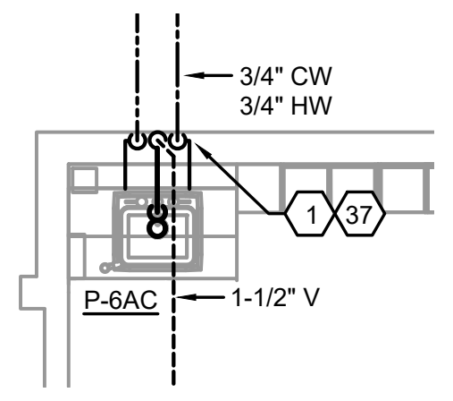
PART PLAN - TLT RM. 16B,17B
SCALE: 1/4" = 1'-0"



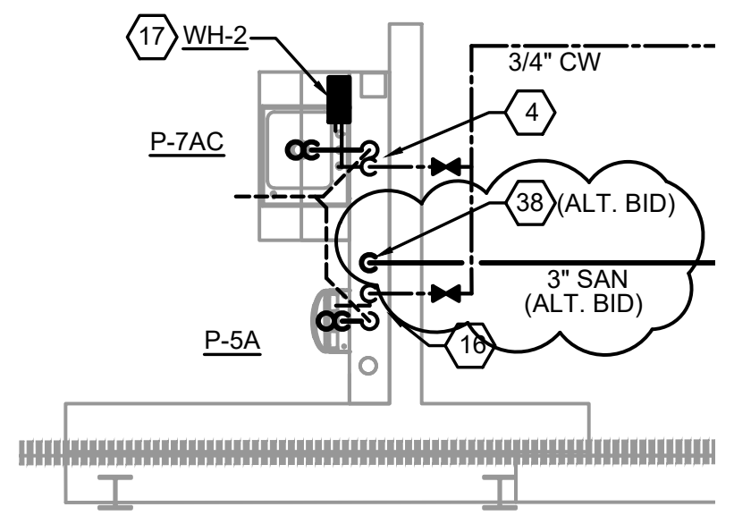
PART PLAN - MECH 68, JC 67 ALTERNATE BID
SCALE: 1/4" = 1'-0"



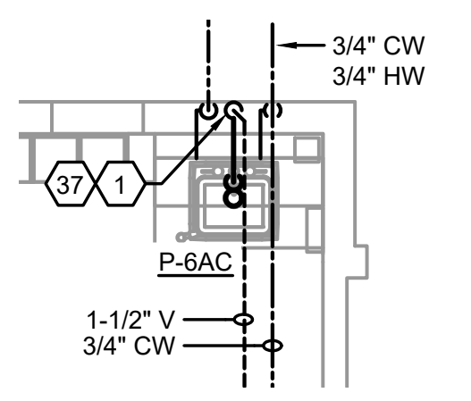
PART PLAN - CLASSROOM 62 ALTERNATE BID
SCALE: 1/4" = 1'-0"



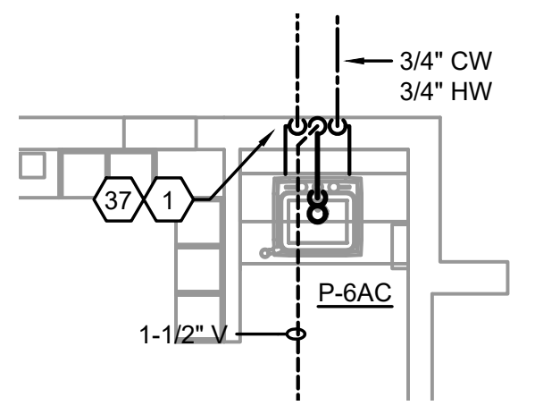
PART PLAN - CLASSROOM 61 ALTERNATE BID
SCALE: 1/4" = 1'-0"



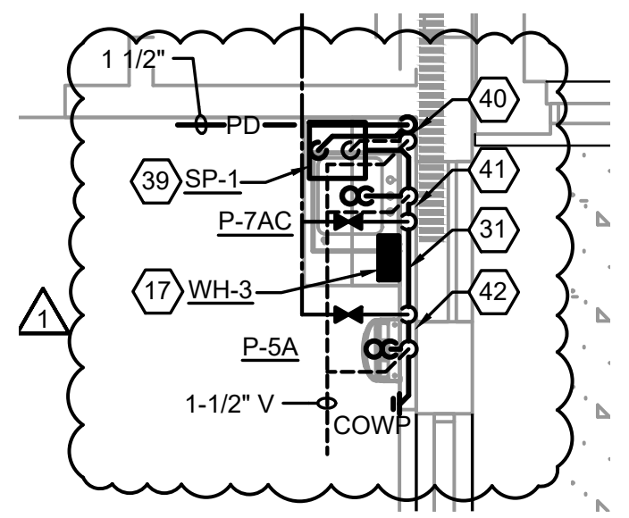
PART PLAN - VOCAL MUSIC 58
SCALE: 1/4" = 1'-0"



PART PLAN - CLASSROOM 63 ALTERNATE BID
SCALE: 1/4" = 1'-0"



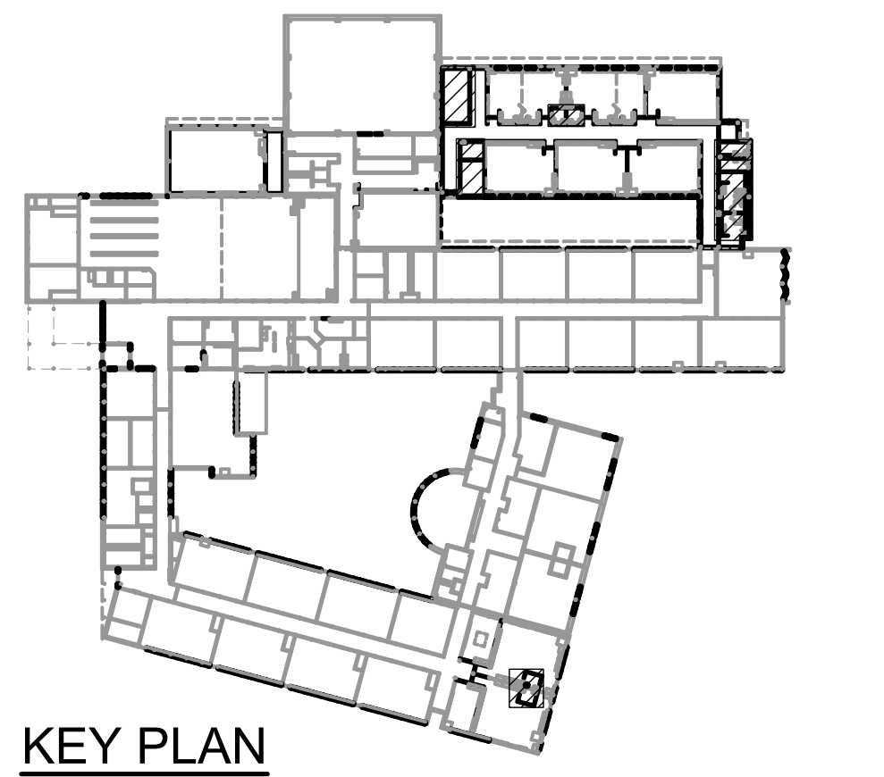
PART PLAN - CLASSROOM 65 ALTERNATE BID
SCALE: 1/4" = 1'-0"



PART PLAN - INSTRUMENTAL MUSIC 44 ALTERNATE BID
SCALE: 1/4" = 1'-0"

KEY NOTES

1. 3/4" CW DROP, 3/4" HW DROP, 1-1/2" VENT RISE, 2" SANITARY DOWN.
2. 2" VENT DOWN.
3. 2" VENT RISE, 2" SANITARY DOWN.
4. 3/4" CW DROP, 1-1/2" VENT RISE, 2" SANITARY DOWN.
5. 3" VENT UP TO 3" VENT THRU ROOF.
6. 1 1/2" GAS UP TO ROOF. PROVIDE SHUT OFF VALVE AND DIRT LEG IN PIPE DROP. SHUT OFF VALVE SHALL BE WITHIN 6'-0" FROM WATER HEATER CONNECTION.
7. 3" GAS DROP. PROVIDE SHUT OFF VALVE AND SEDIMENT TRAP IN PIPE DROP. SEE RISER DIAGRAM.
8. GAS PRESSURE REGULATOR VENT THROUGH EXTERIOR WALL. TERMINATE AS PER IFGC 2018 AND GAS COMPANY REQUIREMENTS. PROVIDE TURN DOWN ELBOW AND VENT CAP WITH BUILT IN INSECT SCREEN. MAINTAIN A MINIMUM 10 FEET FROM ALL BUILDING AND OUTSIDE AIR INTAKE OPENINGS.
9. INSTALL ON 4" HIGH CONCRETE PAD.
10. PROVIDE FULL SIZE PUMP BYPASS.
11. MOUNT 48" ABOVE FINISHED FLOOR. PROVIDE WALL SUPPORTS FOR MOUNTING RPZ. PROVIDE CHROME PLATED BRASS PIPE ESCUTCHEON AT WALL PENETRATION.
12. HOSE BIB FOR ATTACHMENT OF CHEMICAL DISPENSER. CHEMICAL DISPENSER SHALL BE SUPPLIED AND INSTALLED BY OWNER.
13. 3" DOMESTIC WATER SUPPLIED AND INSTALLED BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR SHALL PURCHASE METER AT THE WOODBURY WATER AND SEWER DEPARTMENT AND INSTALL PER WATER AND SEWER DEPARTMENT REQUIREMENTS.
14. MOUNT 48" ABOVE FINISHED FLOOR. PROVIDE WALL SUPPORTS FOR MOUNTING RPZ. PROVIDE CHROME PLATED BRASS PIPE ESCUTCHEON AT WALL PENETRATION.
15. HOSE BIB FOR ATTACHMENT OF CHEMICAL DISPENSER. CHEMICAL DISPENSER SHALL BE SUPPLIED AND INSTALLED BY OWNER.
16. 1/2" CW DROP, 2" VENT RISE, 2" SANITARY DOWN.
17. INSTALL TANKLESS WATER HEATER BELOW SINK INSIDE SINK CABINET. EXTEND HOT WATER FROM HEATER TO SINK FAUCET. PROVIDE SUPPLY STOP VALVE ON COLD WATER SUPPLY TO WATER HEATER.
18. 1" CW DROP
19. PROVIDE WALL SUPPORTS AS REQUIRED AND MOUNT 2'-6" ABOVE FINISHED FLOOR. PROVIDE FIXED AIR GAP AND EXTEND RELIEF TO FUNNEL FLOOR DRAIN.
20. 1" CW VALVED AND CAPPED FOR CONTINUATION BY MECHANICAL CONTRACTOR FOR BOILER COLD WATER MAKE UP CONNECTION.
21. 3" GAS UP TO ROOF.
22. PROVIDE PRESSURE REGULATOR. CONTRACTOR SHALL TAKE PRESSURE READING FOR GAS PRESSURE TO PROPERLY SELECT REGULATOR SPRING RATES. REGULATORS SHALL BE ANSI Z21.80 COMPLIANT LOCK UP TYPE. REFER TO MECHANICAL DRAWINGS FOR BOILER GAS PRESSURE REQUIREMENTS. PROVIDE VALVED AND CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION OF PRESSURE MEASURING DEVICE UPSTREAM AND DOWNSTREAM OF REGULATOR IN COMPLIANCE WITH THE IFGC SECTION 410.2, LATEST ADOPTED EDITION.
23. 2" VENT UP TO 3" VTR.
24. 3" COLD WATER DOWN. PROVIDE SHUTOFF VALVE 48" ABOVE FINISHED FLOOR.
25. 1 1/2" CW DROP, 1/2" HW DROP, 1 1/2" VENT RISE, 2" SANITARY DOWN.
26. 1/2" CW DROP, 1/2" HW DROP, 1 1/2" VENT RISE, 2" SANITARY DOWN.
27. 3/4" HW & CW DOWN TO BELOW FLOOR.
28. PROVIDE SHUTOFF VALVES APPROX. 12" A.F.F. PROVIDE JR SMITH OR APPROVED EQUAL MODEL #4760 8"X12" ACCESS PANEL WITH SCREWDRIVER OPERATED LATCH FOR VALVE ACCESS.
29. 1 1/2" CW & 3/4" HW DOWN.
30. 1 1/2" VENT DOWN INSIDE CMU CORES.
31. INSTALL PIPING THRU NEW STUD WALL.
32. 3/4" COLD WATER DOWN. CONNECT TO EXISTING 3/4" CW TO EXISTING FPWH. EXTEND, MODIFY, OFFSET, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION.
33. CONNECT NEW 2" VENT TO EXISTING 3" VTR. EXTEND, MODIFY, OFFSET, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. FIELD VERIFY EXACT LOCATION AND SIZE OF EXISTING PIPING. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
34. CONNECT NEW 1 1/2" SANITARY PIPING TO EXISTING SANITARY PIPING FROM REMOVED SINK. EXTEND, MODIFY, OFFSET, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
35. CONNECT NEW 4" SANITARY PIPING TO EXISTING SANITARY PIPING FROM REMOVED WATER CLOSET. EXTEND, MODIFY, OFFSET, AND ADJUST EXISTING PIPING AS REQUIRED TO MAKE CONNECTION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.
36. ROUTE HOT & COLD WATER PIPING BELOW COUNTER TOP TO SINK FAUCET AND COLD WATER PIPING TO FILTER AND FILTERED WATER BUBBLER.
37. PRIOR TO CONNECTION TO SINK BUBBLER, PROVIDE UNDER COUNTER WATER FILTER ON CW SUPPLY LINE. PROVIDE SUPPORTS AND ATTACH FILTER TO WALL BELOW COUNTER. INSTALL IN A NEAT MANNER, HIGH AS POSSIBLE, WITH CLEARANCE FOR FILTER REMOVAL. PROVIDE SHUT OFF VALVE UPSTREAM OF FILTER. MOUNT FILTER OUTSIDE OF REQUIRED SINK ADA ACCESSIBILITY CLEARANCE SPACE.
38. 3" SANITARY DOWN. PROVIDE 3" COWP AT BASE.
39. MOUNT BELOW COUNTER. MAKE CONECTIONS AS INDICATED ON SANITARY RISER DIAGRAM.
40. 1 1/2" PUMPED DISCHARGE DOWN AND VENT DOWN.
41. 1 1/2" SANITARY DOWN, 1 1/2" VENT UP AND 3/4" COLD WATER DOWN.
42. 1 1/2" SANITARY DOWN, 1 1/2" VENT UP AND 1/2" COLD WATER DOWN.



KEY PLAN
NOT TO SCALE

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085402

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5516D

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AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING PART PLANS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
P6.0

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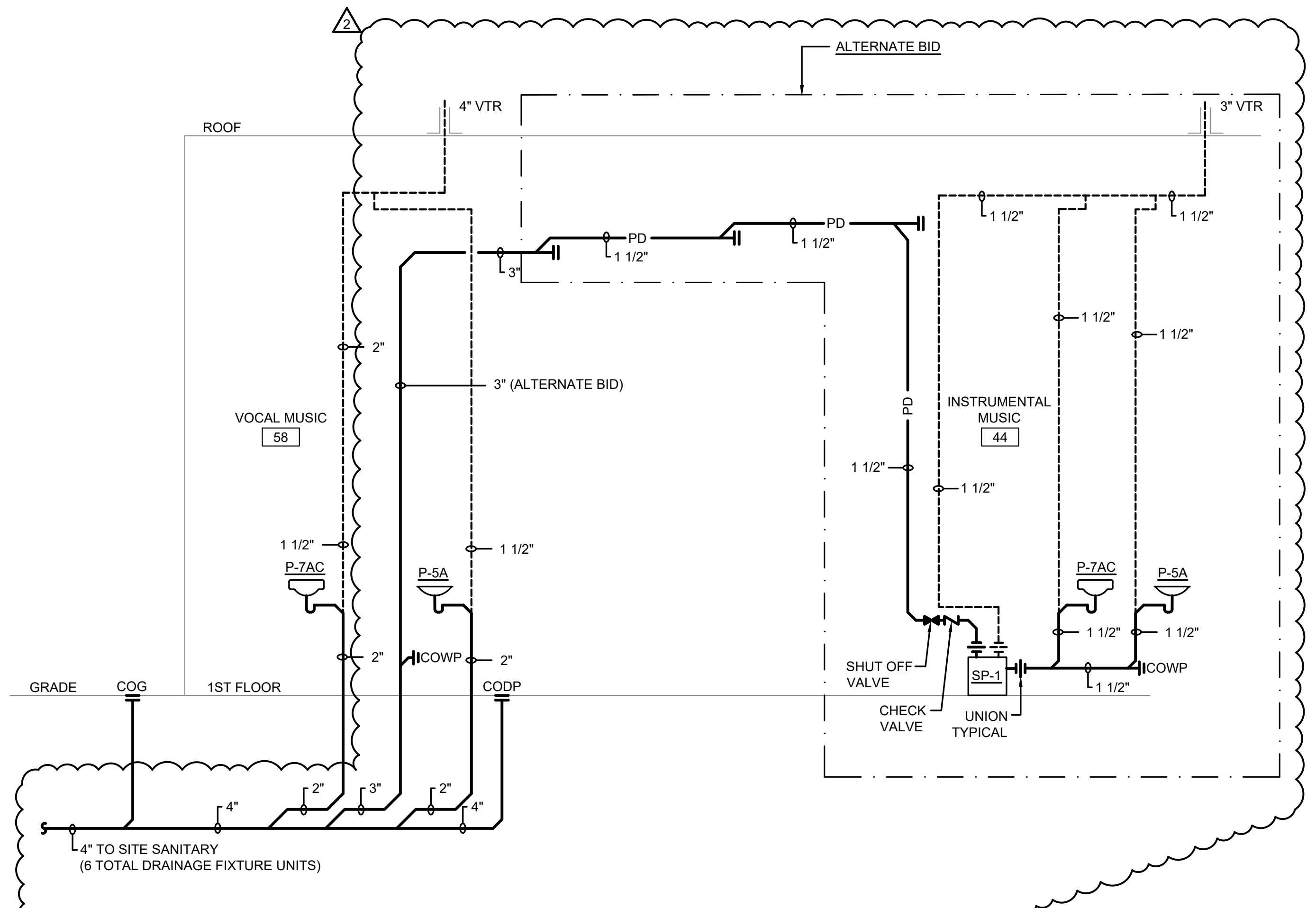
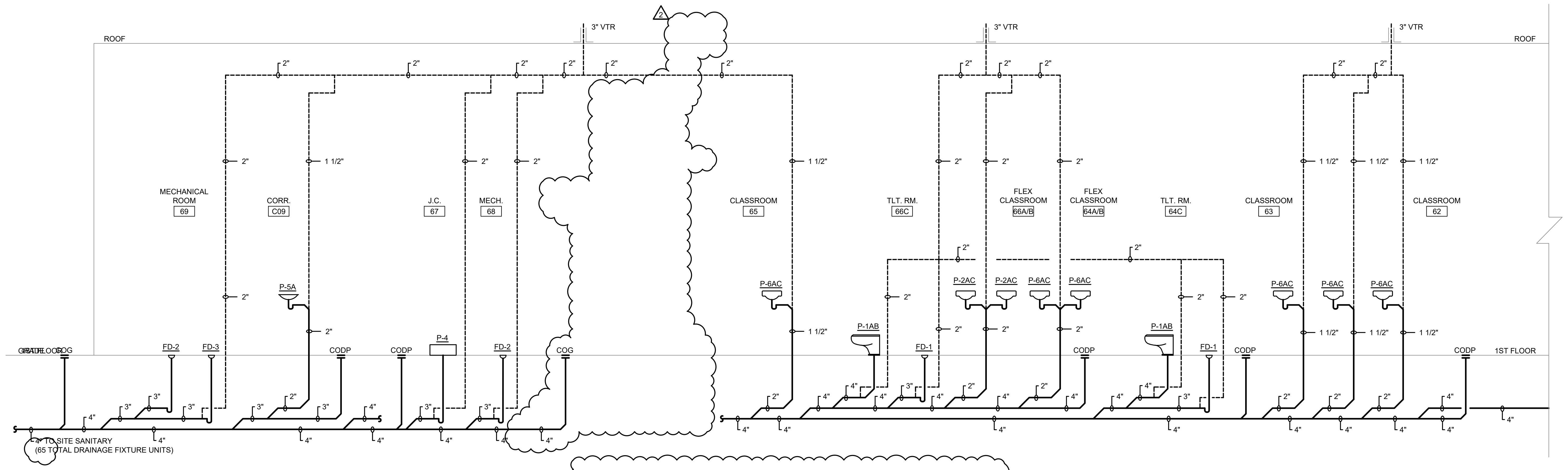


SANITARY RISER DIAGRAM - BLOCK A

NOT TO SCALE

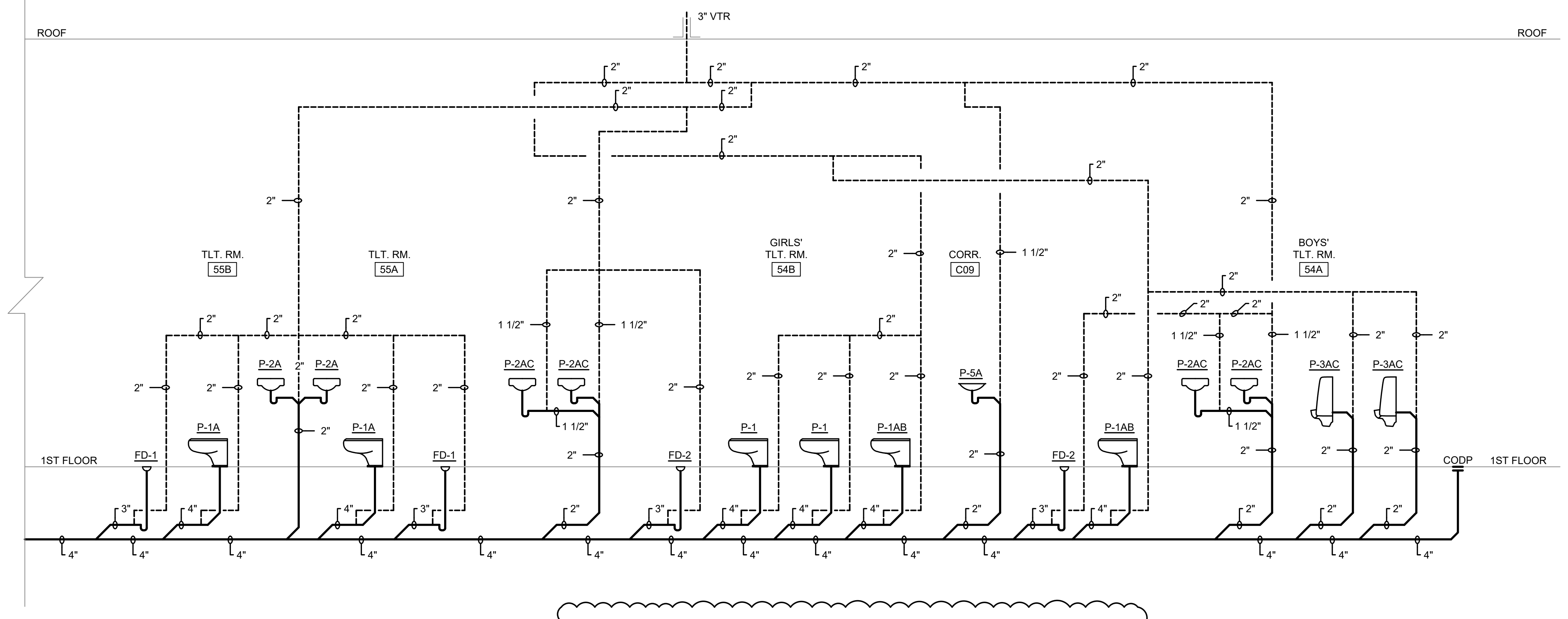
SANITARY BUILDING DRAIN PIPE SIZES ARE BASED UPON 2021 NSPC TABLE 11.5.1A @ 1/8" SLOPE AND HORIZONTAL BRANCHES AND STACKS PER TABLE 11.5.1B



SANITARY RISER DIAGRAM - BLOCK B ALTERNATE BID

NOT TO SCALE

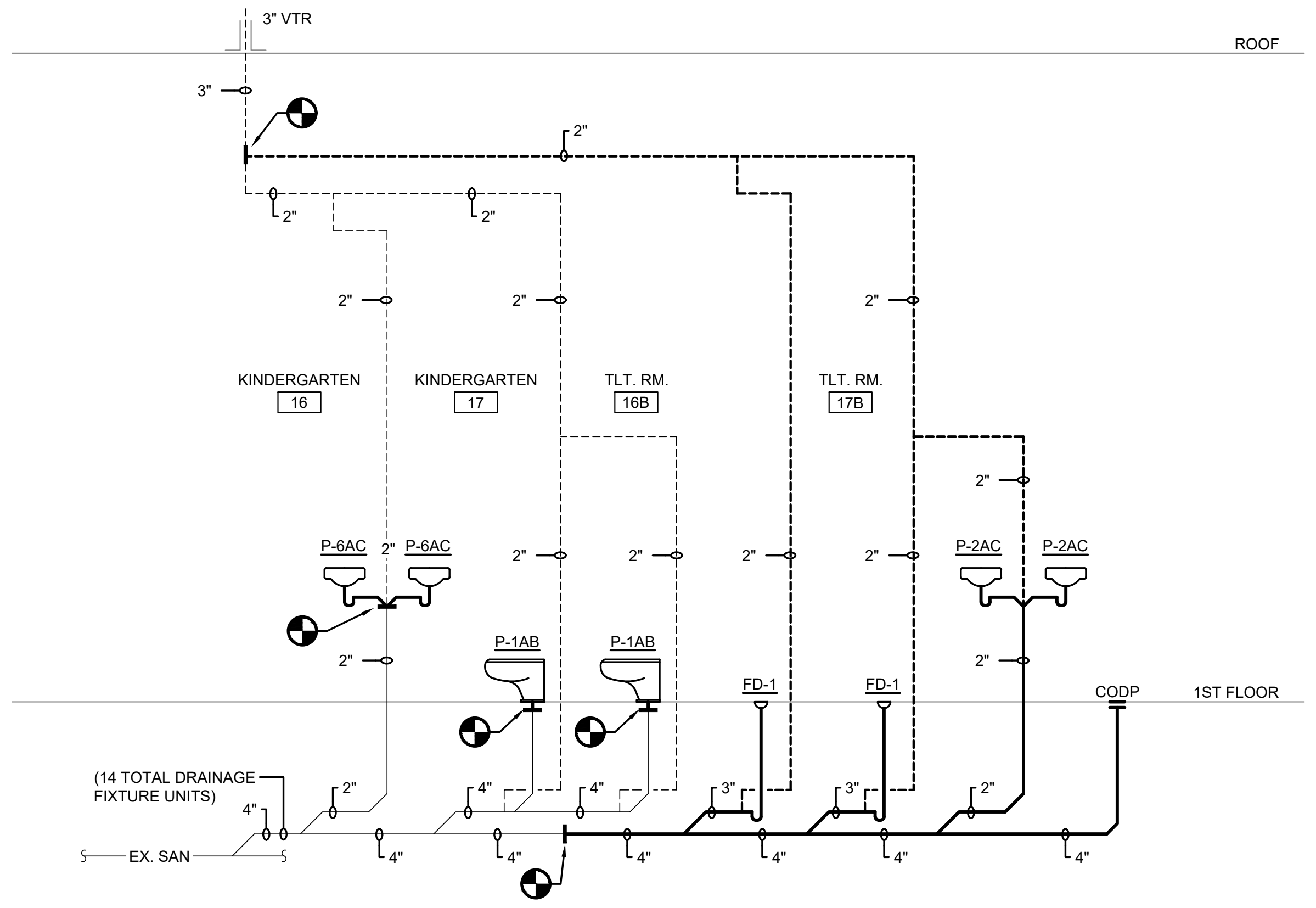
SANITARY BUILDING DRAIN PIPE SIZES ARE BASED UPON 2021 NSPC TABLE 11.5.1A @ 1/8" SLOPE AND HORIZONTAL BRANCHES AND STACKS PER TABLE 11.5.1B



SANITARY RISER DIAGRAM - BLOCK B ALTERNATE BID

NOT TO SCALE

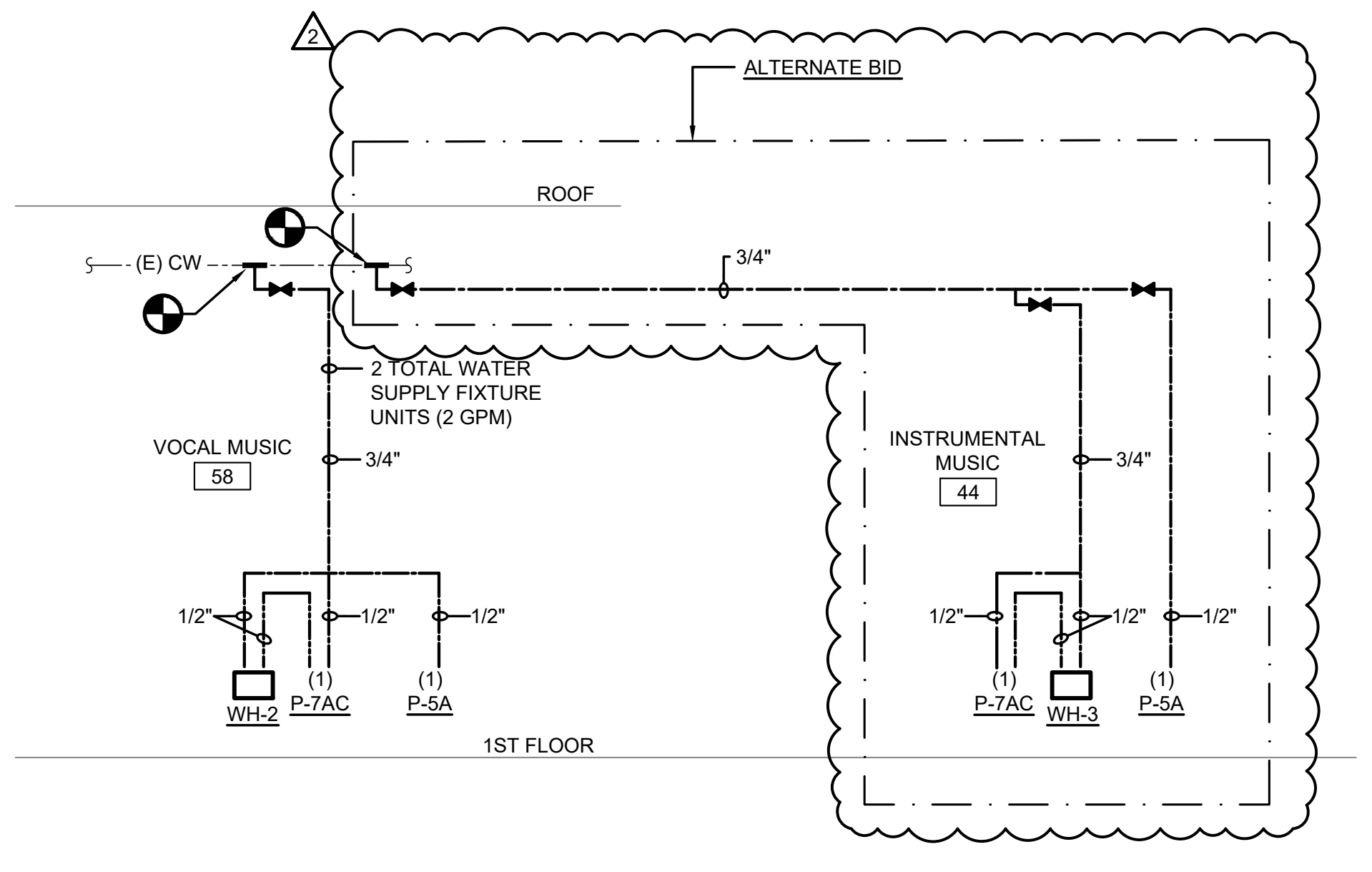
SANITARY BUILDING DRAIN PIPE SIZES ARE BASED UPON 2021 NSPC TABLE 11.5.1A @ 1/8" SLOPE AND HORIZONTAL BRANCHES AND STACKS PER TABLE 11.5.1B



SANITARY RISER DIAGRAM - BLOCK C

NOT TO SCALE

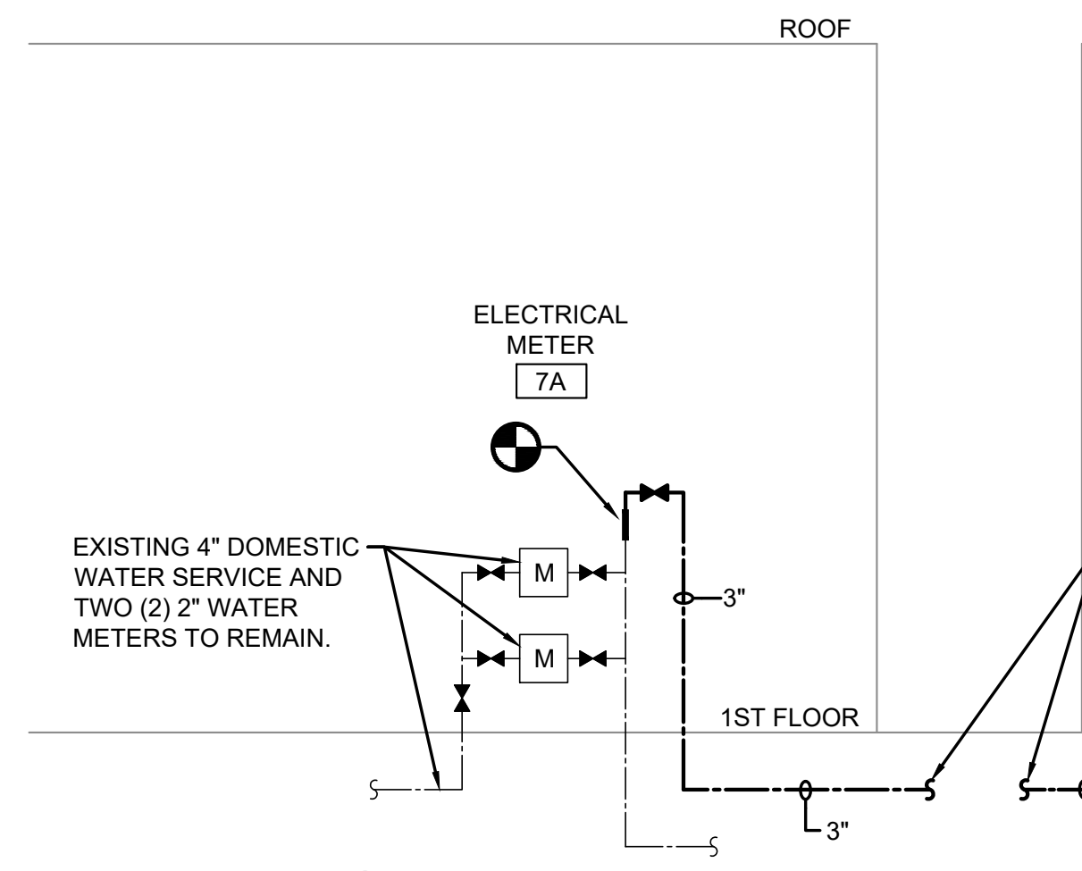
SANITARY BUILDING DRAIN PIPE SIZES ARE BASED UPON 2021 NSPC TABLE 11.5.1A @ 1/8" SLOPE AND HORIZONTAL BRANCHES AND STACKS PER TABLE 11.5.1B



DOMESTIC WATER RISER DIAGRAM - BLOCK A

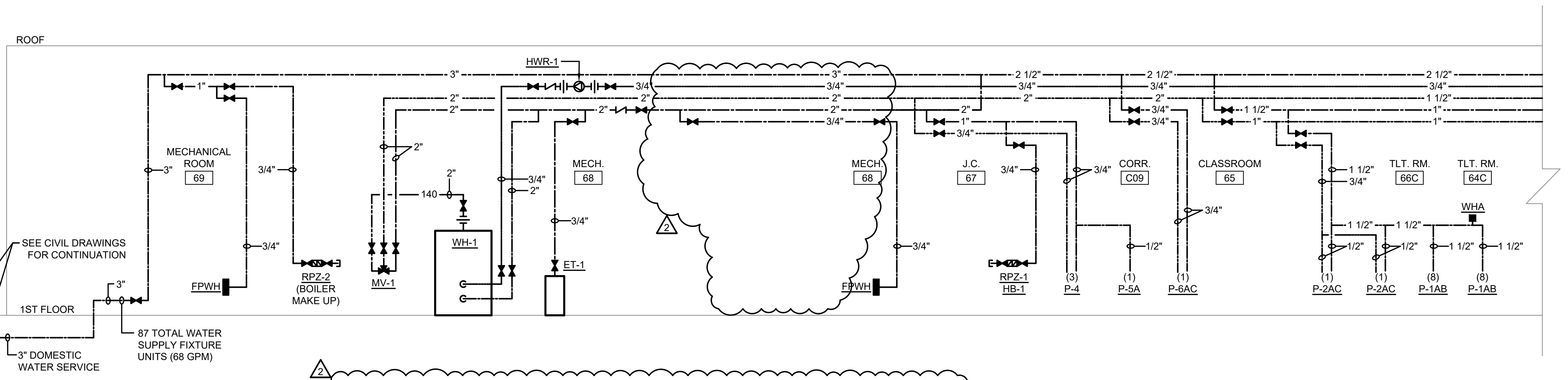
NOT TO SCALE

FAUCETS SHALL BE INSTALLED WITH AIR GAPS PER NSPC 10.5.1, FROST PROOF WALL HYDRANTS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS AND FLUSHOMETERS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS INSTALLED IN COMPLIANCE WITH NSPC 10.5.5


ROOF
ELECTRICAL METER 7A
EXISTING 4" DOMESTIC WATER SERVICE AND TWO (2) 2" WATER METERS TO REMAIN.
1ST FLOOR
SEE CIVIL DRAWINGS FOR CONTINUATION

DOMESTIC WATER RISER DIAGRAM - BLOCK C ALTERNATE BID

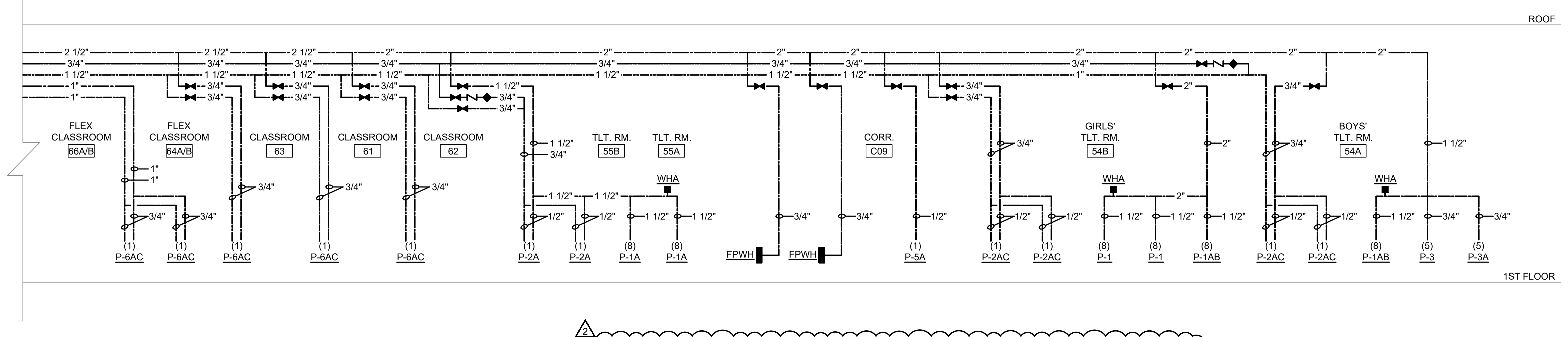
NOT TO SCALE



DOMESTIC WATER RISER DIAGRAM - BLOCK B ALTERNATE BID

NOT TO SCALE

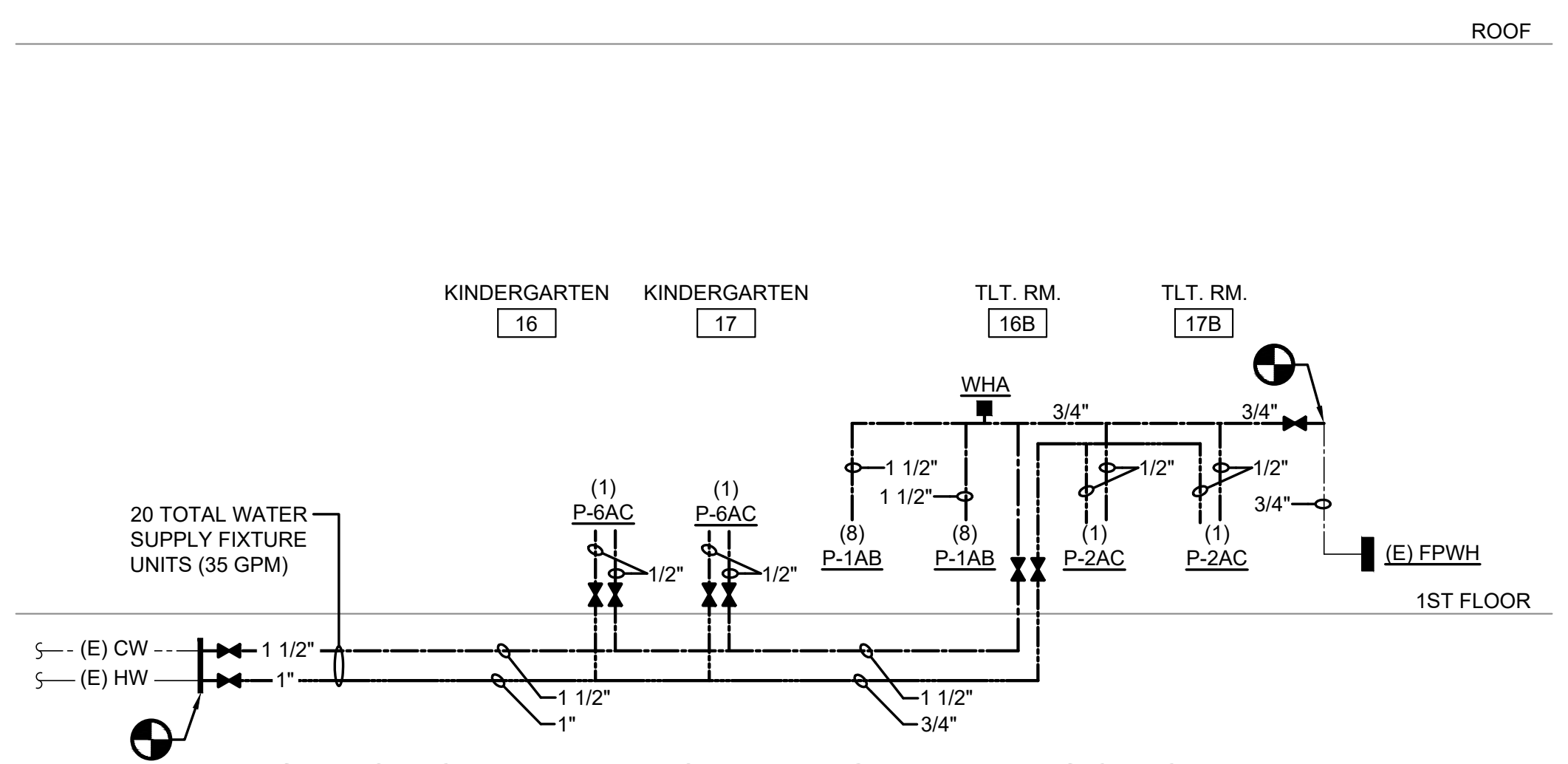
FAUCETS SHALL BE INSTALLED WITH AIR GAPS PER NSPC 10.5.1, FROST PROOF WALL HYDRANTS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS AND FLUSHOMETERS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS INSTALLED IN COMPLIANCE WITH NSPC 10.5.5



DOMESTIC WATER RISER DIAGRAM - BLOCK B ALTERNATE BID

NOT TO SCALE

FAUCETS SHALL BE INSTALLED WITH AIR GAPS PER NSPC 10.5.1, FROST PROOF WALL HYDRANTS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS AND FLUSHOMETERS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS INSTALLED IN COMPLIANCE WITH NSPC 10.5.5



DOMESTIC WATER RISER DIAGRAM - BLOCK C

NOT TO SCALE

FAUCETS SHALL BE INSTALLED WITH AIR GAPS PER NSPC 10.5.1, FROST PROOF WALL HYDRANTS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS AND FLUSHOMETERS SHALL BE SUPPLIED WITH BUILT IN VACUUM BREAKERS INSTALLED IN COMPLIANCE WITH NSPC 10.5.5

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William D. Hopkins
Architect

2/12/26
Date

Project Name
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Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING SANITARY AND DOMESTIC WATER RISER DIAGRAMS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

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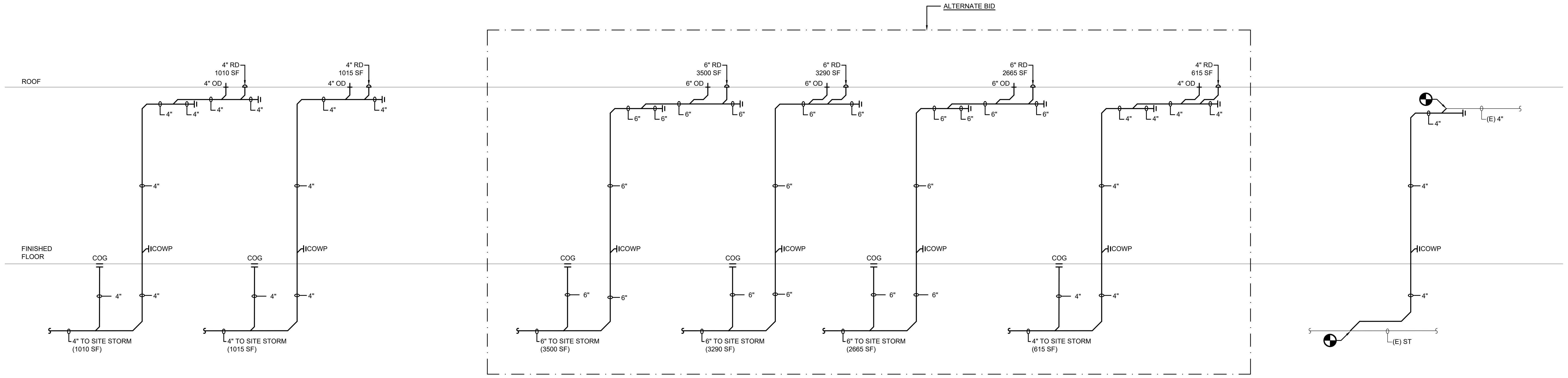
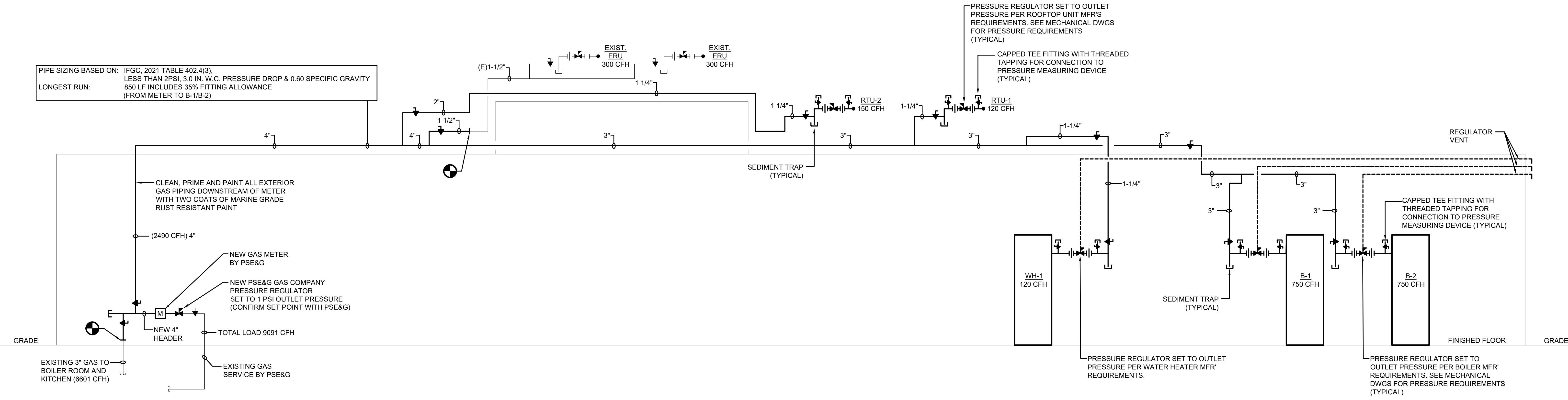

ALTERNATE BID
ROOF
FINISHED FLOOR
4" RD 1010 SF
4" RD 1015 SF
6" RD 3500 SF
6" RD 3290 SF
6" RD 2665 SF
4" RD 615 SF
4" OD
6" OD
4"
6"
COWP
COG
4" TO SITE STORM (1010 SF)
4" TO SITE STORM (1015 SF)
6" TO SITE STORM (3500 SF)
6" TO SITE STORM (3290 SF)
6" TO SITE STORM (2665 SF)
4" TO SITE STORM (615 SF)
(E) 4"
(E) ST

STORM RISER DIAGRAM

NOT TO SCALE

PIPE SIZES ARE BASED UPON 2021 NSPC TABLE 13.6.2
5" PER HOUR RAINFAL RATE @ 1/8" PER FOOT SLOPE



PIPE SIZING BASED ON: IFGC, 2021 TABLE 402.4(3),
LESS THAN 2PSI, 3.0 IN. W.C. PRESSURE DROP & 0.60 SPECIFIC GRAVITY
LONGEST RUN: 850 LF INCLUDES 35% FITTING ALLOWANCE
(FROM METER TO B-1/B-2)

PRESSURE REGULATOR SET TO OUTLET PRESSURE PER ROOFTOP UNIT MFR'S REQUIREMENTS. SEE MECHANICAL DWGS FOR PRESSURE REQUIREMENTS (TYPICAL)

CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION TO PRESSURE MEASURING DEVICE (TYPICAL)

CLEAN, PRIME AND PAINT ALL EXTERIOR GAS PIPING DOWNSTREAM OF METER WITH TWO COATS OF MARINE GRADE RUST RESISTANT PAINT

NEW PSE&G GAS COMPANY PRESSURE REGULATOR SET TO 1 PSI OUTLET PRESSURE (CONFIRM SET POINT WITH PSE&G)

EXISTING 3" GAS TO BOILER ROOM AND KITCHEN (6601 CFH)

EXISTING GAS SERVICE BY PSE&G

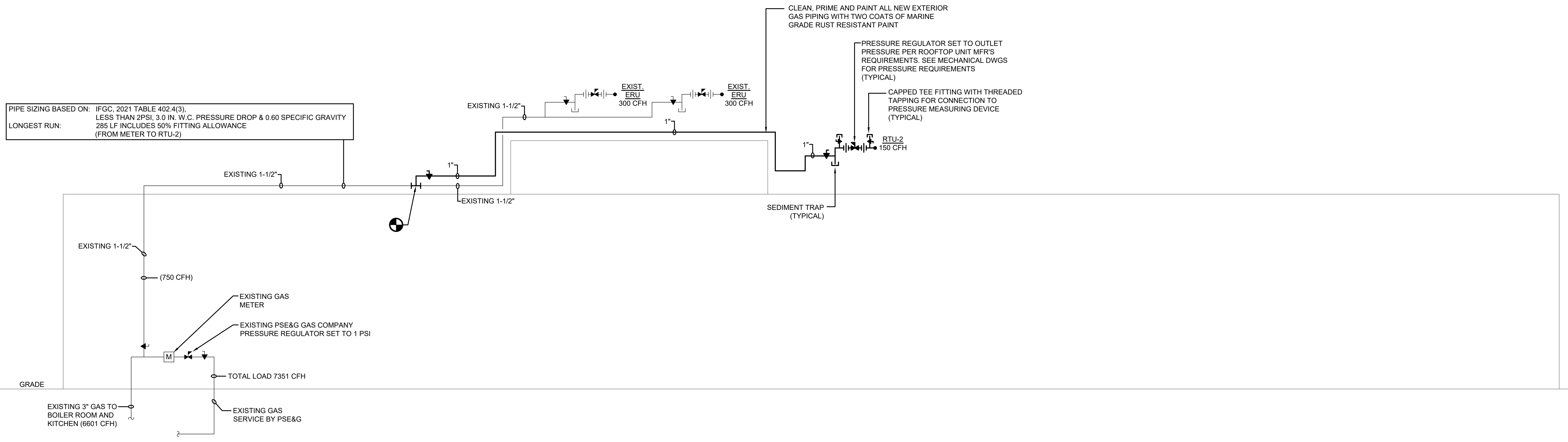
CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION TO PRESSURE MEASURING DEVICE (TYPICAL)

PRESSURE REGULATOR SET TO OUTLET PRESSURE PER WATER HEATER MFR' REQUIREMENTS.

PRESSURE REGULATOR SET TO OUTLET PRESSURE PER BOILER MFR' REQUIREMENTS. SEE MECHANICAL DWGS FOR PRESSURE REQUIREMENTS (TYPICAL)

GAS RISER DIAGRAM - ALTERNATE BID

NOT TO SCALE



PIPE SIZING BASED ON: IFGC, 2021 TABLE 402.4(3),
LESS THAN 2PSI, 3.0 IN. W.C. PRESSURE DROP & 0.60 SPECIFIC GRAVITY
LONGEST RUN: 285 LF INCLUDES 50% FITTING ALLOWANCE
(FROM METER TO RTU-2)

CLEAN, PRIME AND PAINT ALL NEW EXTERIOR GAS PIPING WITH TWO COATS OF MARINE GRADE RUST RESISTANT PAINT

PRESSURE REGULATOR SET TO OUTLET PRESSURE PER ROOFTOP UNIT MFR'S REQUIREMENTS. SEE MECHANICAL DWGS FOR PRESSURE REQUIREMENTS (TYPICAL)

CAPPED TEE FITTING WITH THREADED TAPPING FOR CONNECTION TO PRESSURE MEASURING DEVICE (TYPICAL)

EXISTING GAS METER

EXISTING PSE&G GAS COMPANY PRESSURE REGULATOR SET TO 1 PSI

EXISTING 3" GAS TO BOILER ROOM AND KITCHEN (6601 CFH)

EXISTING GAS SERVICE BY PSE&G

GAS RISER DIAGRAM - BASE BID

NOT TO SCALE

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Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING STORM AND GAS RISER DIAGRAM

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

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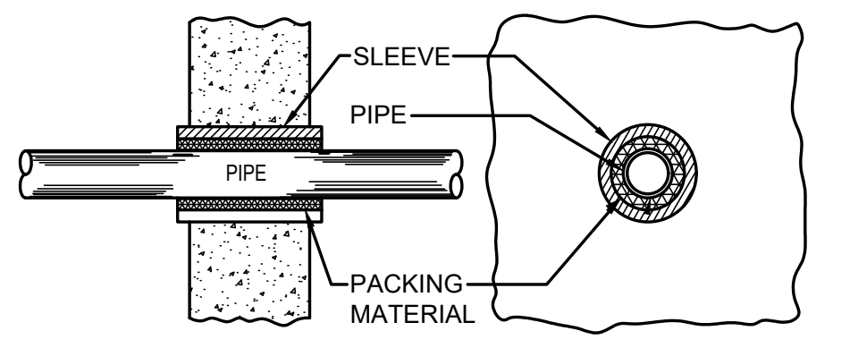
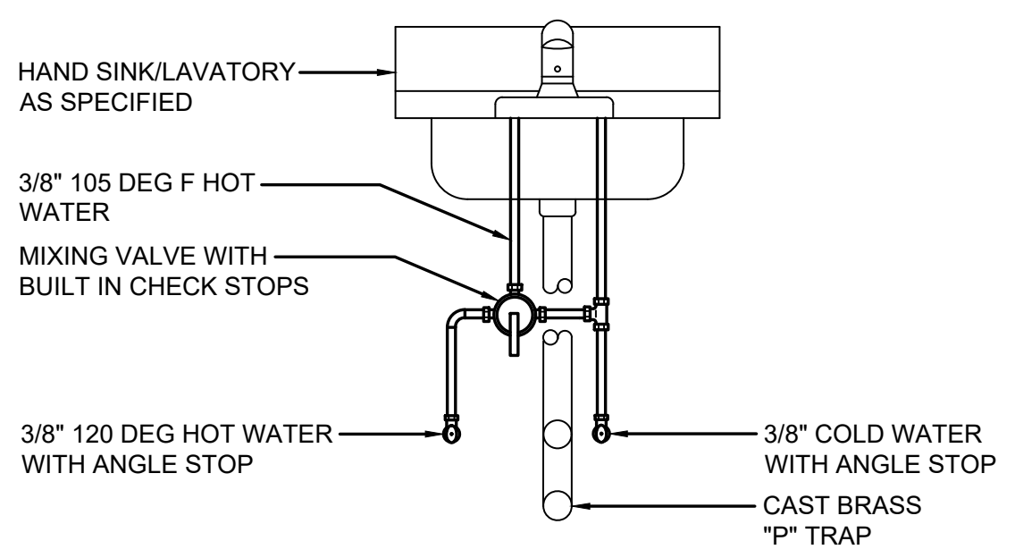


(CONCRETE AND FOUNDATION WALLS)

NOTE:
NO STRUCTURAL STRAIN SHOULD BE TRANSMITTED FROM ANY WALL TO THE PIPING SYSTEM THE SLEEVING, RELIEVING ARCH, OR STRUCTURAL BEAM SUPPORT METHODS PROTECT THE PIPING FROM SUPERIMPOSED LOADS THE "PACKING" MATERIAL AROUND THE PIPE IS FLEXIBLE ENOUGH TO RESPOND TO SETTLING IN THE STRUCTURE OR PIPING

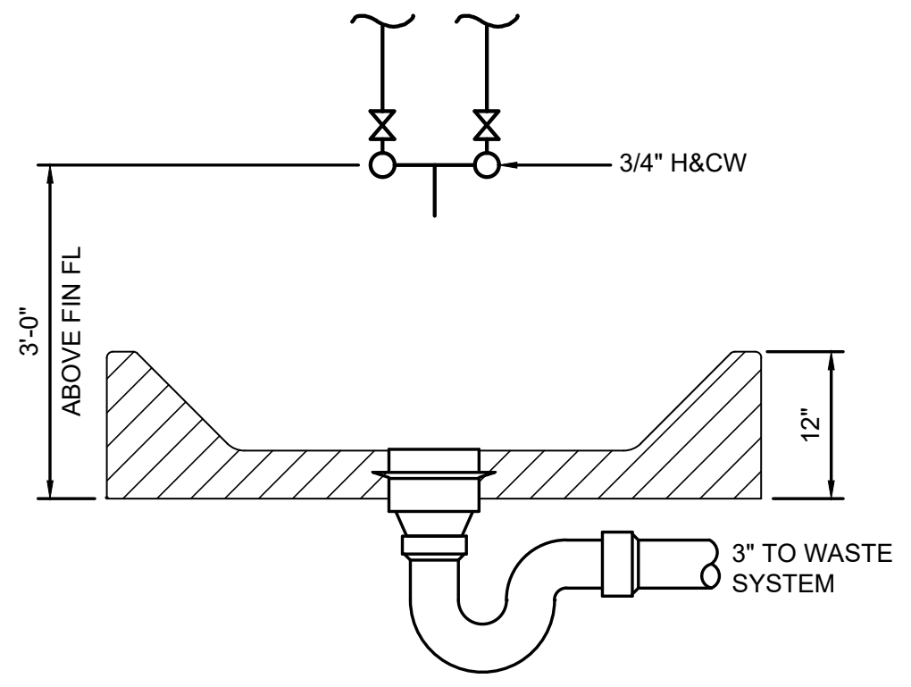
WALL PENETRATION PIPE SLEEVE DETAIL

NOT TO SCALE


HAND SINK/LAVATORY AS SPECIFIED
3/8" 105 DEG F HOT WATER
MIXING VALVE WITH BUILT IN CHECK STOPS
3/8" 120 DEG HOT WATER WITH ANGLE STOP
3/8" COLD WATER WITH ANGLE STOP
CAST BRASS "P" TRAP

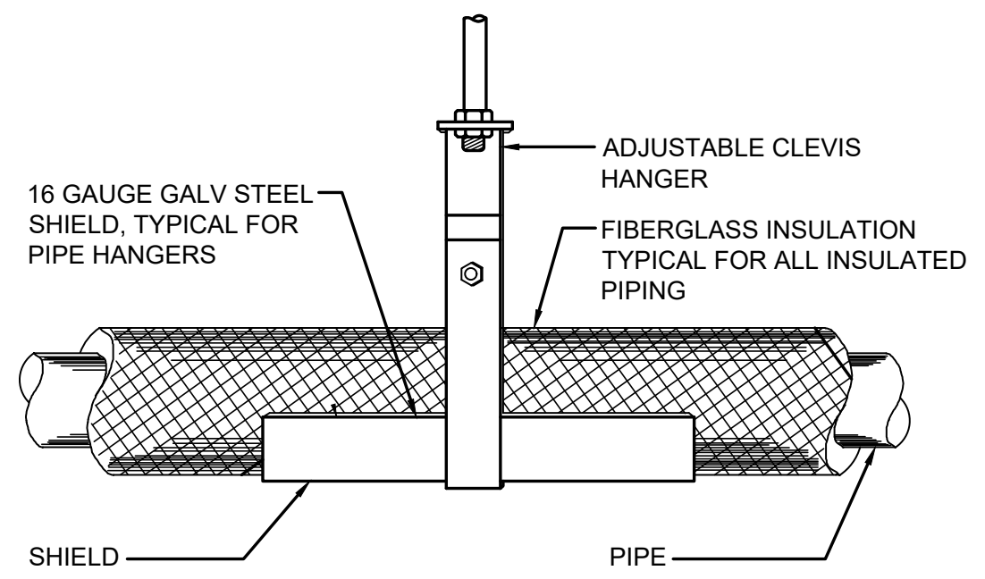
MIXING VALVE AT HAND SINKS AND LAVATORIES

NOT TO SCALE



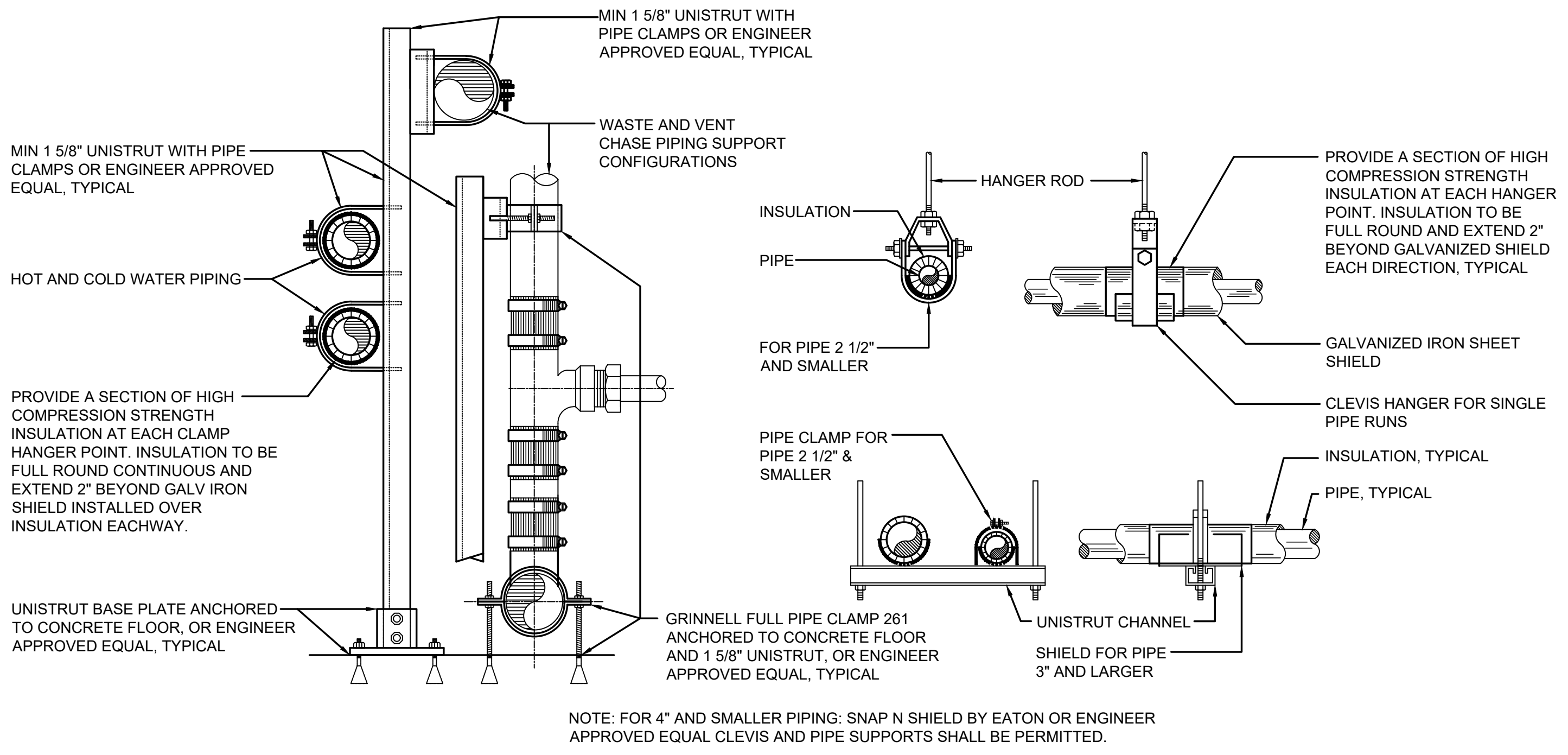
SERVICE SINK DETAIL

NOT TO SCALE


ADJUSTABLE CLEVIS HANGER
16 GAUGE GALV STEEL SHIELD, TYPICAL FOR PIPE HANGERS
FIBERGLASS INSULATION TYPICAL FOR ALL INSULATED PIPING
SHIELD
PIPE

TYPICAL PIPE HANGER DETAIL

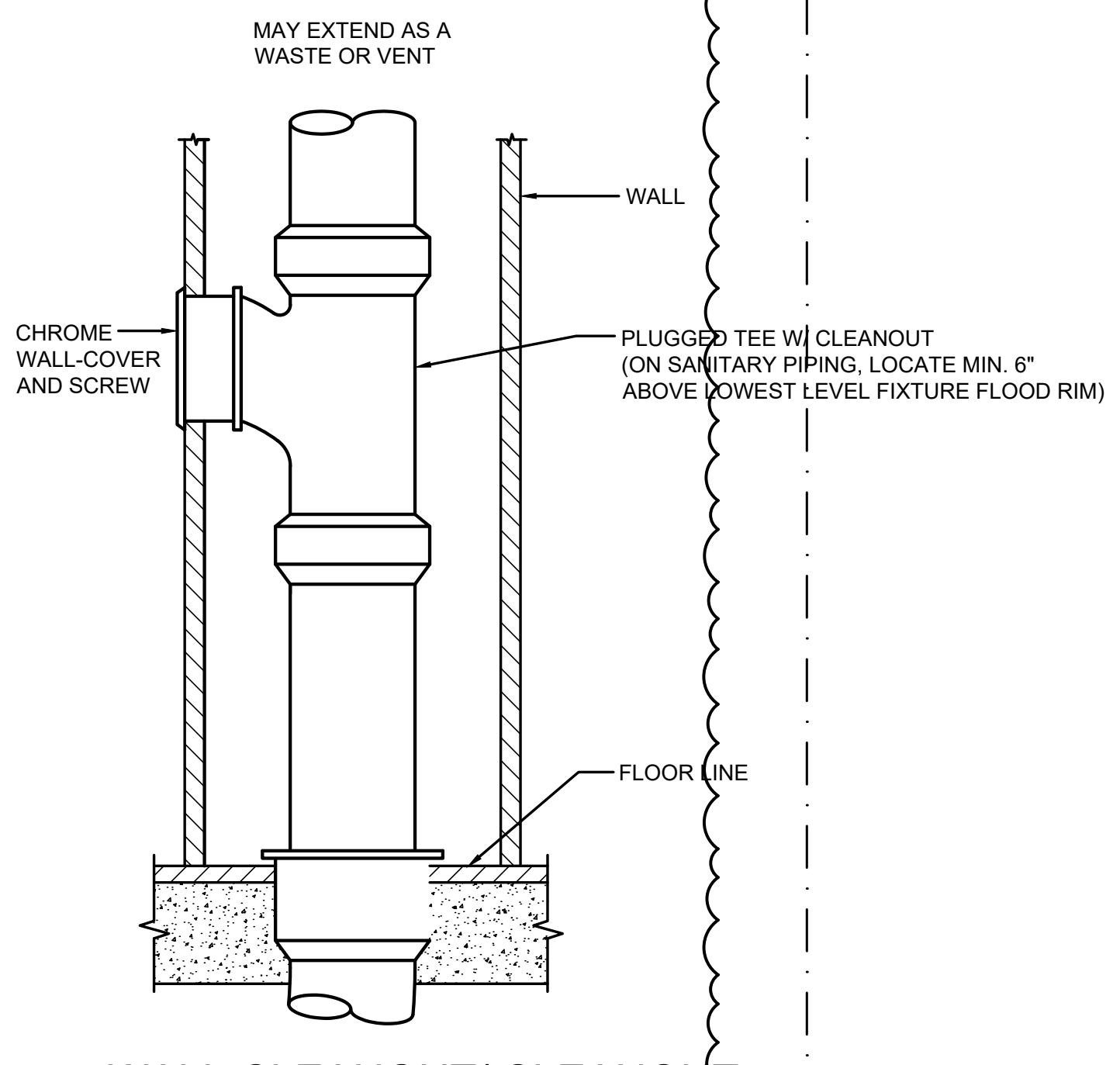
NOT TO SCALE


MIN 1 5/8" UNISTRUT WITH PIPE CLAMPS OR ENGINEER APPROVED EQUAL, TYPICAL
WASTE AND VENT CHASE PIPING SUPPORT CONFIGURATIONS
MIN 1 5/8" UNISTRUT WITH PIPE CLAMPS OR ENGINEER APPROVED EQUAL, TYPICAL
HOT AND COLD WATER PIPING
PROVIDE A SECTION OF HIGH COMPRESSION STRENGTH INSULATION AT EACH CLAMP HANGER POINT. INSULATION TO BE FULL ROUND CONTINUOUS AND EXTEND 2" BEYOND GALV IRON SHIELD INSTALLED OVER INSULATION EACHWAY.
UNISTRUT BASE PLATE ANCHORED TO CONCRETE FLOOR, OR ENGINEER APPROVED EQUAL, TYPICAL
GRINNELL FULL PIPE CLAMP 261 ANCHORED TO CONCRETE FLOOR AND 1 5/8" UNISTRUT, OR ENGINEER APPROVED EQUAL, TYPICAL
HANGER ROD
INSULATION
PIPE
FOR PIPE 2 1/2" AND SMALLER
PROVIDE A SECTION OF HIGH COMPRESSION STRENGTH INSULATION AT EACH HANGER POINT. INSULATION TO BE FULL ROUND AND EXTEND 2" BEYOND GALVANIZED SHIELD EACH DIRECTION, TYPICAL
GALVANIZED IRON SHEET SHIELD
CLEVIS HANGER FOR SINGLE PIPE RUNS
PIPE CLAMP FOR PIPE 2 1/2" & SMALLER
INSULATION, TYPICAL
PIPE, TYPICAL
UNISTRUT CHANNEL
SHIELD FOR PIPE 3" AND LARGER

NOTE: FOR 4" AND SMALLER PIPING: SNAP N SHIELD BY EATON OR ENGINEER APPROVED EQUAL CLEVIS AND PIPE SUPPORTS SHALL BE PERMITTED.

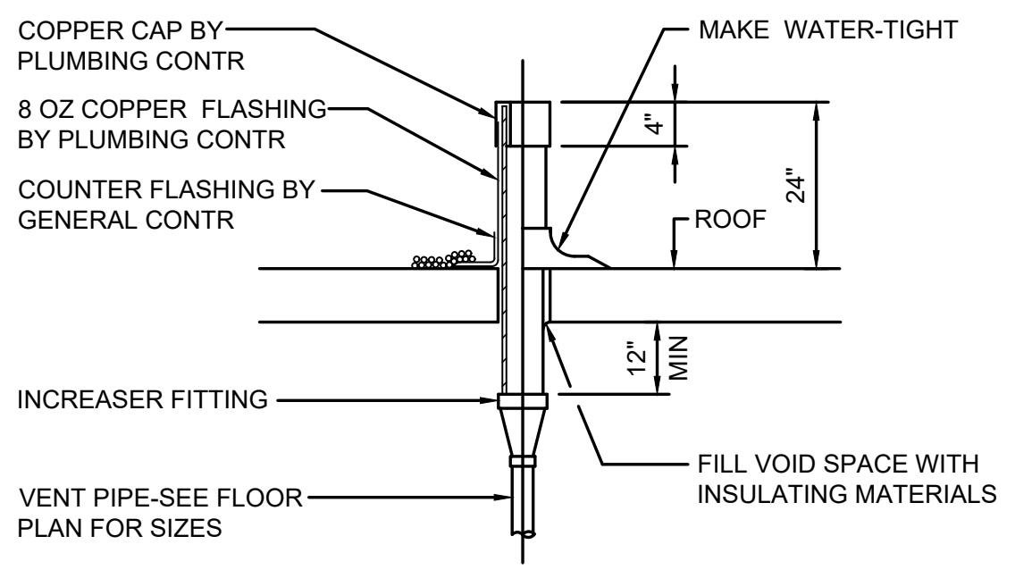
PIPE HANGERS & SUPPORT DETAIL - WATER, WASTE & VENT

NOT TO SCALE


MAY EXTEND AS A WASTE OR VENT
WALL
CHROME WALL-COVER AND SCREW
PLUGGED TEE W/ CLEANOUT (ON SANITARY PIPING, LOCATE MIN. 6" ABOVE LOWEST LEVEL FIXTURE FLOOD RIM)
FLOOR LINE

WALL CLEANOUT/ CLEANOUT AT BASE OF STACK DETAIL

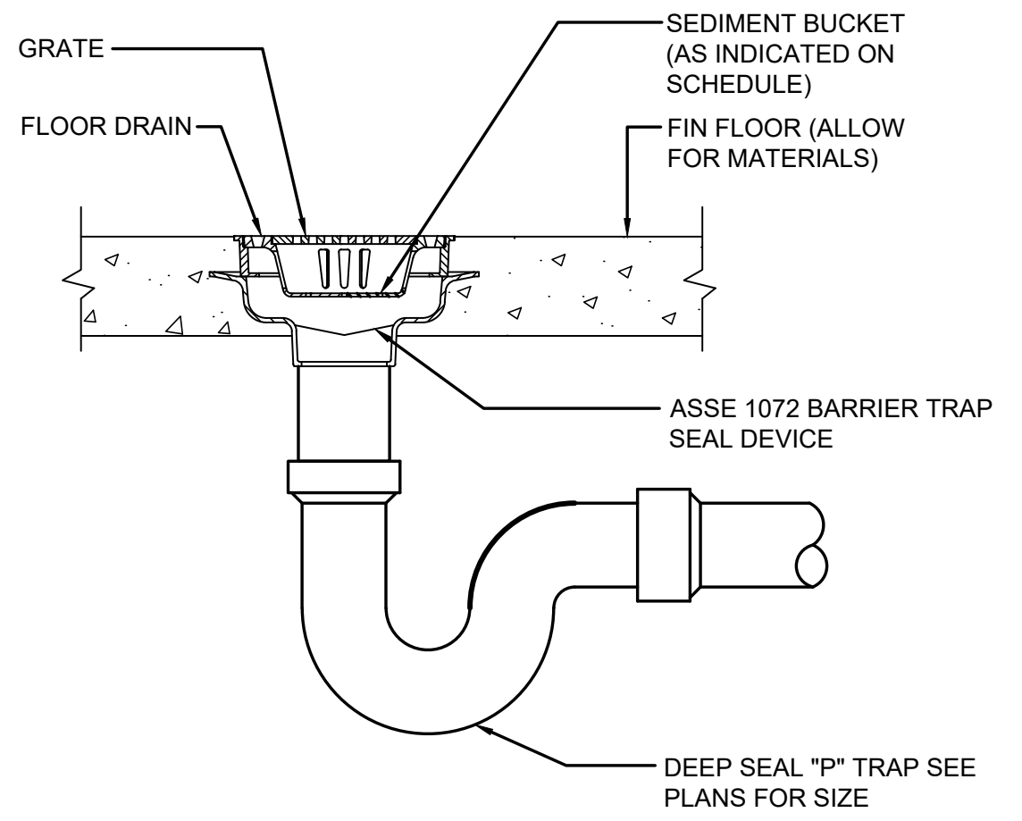
NOT TO SCALE


COPPER CAP BY PLUMBING CONTR
8 OZ COPPER FLASHING BY PLUMBING CONTR
COUNTER FLASHING BY GENERAL CONTR
MAKE WATER-TIGHT
4"
24"
ROOF
12" MIN
INCREASER FITTING
FILL VOID SPACE WITH INSULATING MATERIALS
VENT PIPE-SEE FLOOR PLAN FOR SIZES

NOTES:
1. MINIMUM SIZE OF VENT EXTENSION THROUGH ROOF TO BE 3".
2. CHANGE OF DIAMETER TO BE MADE AT LEAST 12" BELOW ROOF.
3. VENT PIPE TO EXTEND 24" ABOVE ROOF AND TO BE SEALED WATERTIGHT BY PROPER FLASHING.
4. ALL VENT RISERS SHALL BE OFFSET AS REQUIRED TO CLEAR ROOF STRUCTURE, DUCTWORK OR MECH ROOFTOP UNITS. PLUMBING CONTRACTOR TO COORDINATE WITH OTHER TRADES.
5. ROOFING CONTRACTOR SHALL SUPPLY BOOT FLASHING FOR RUBBER ROOF SYSTEMS.

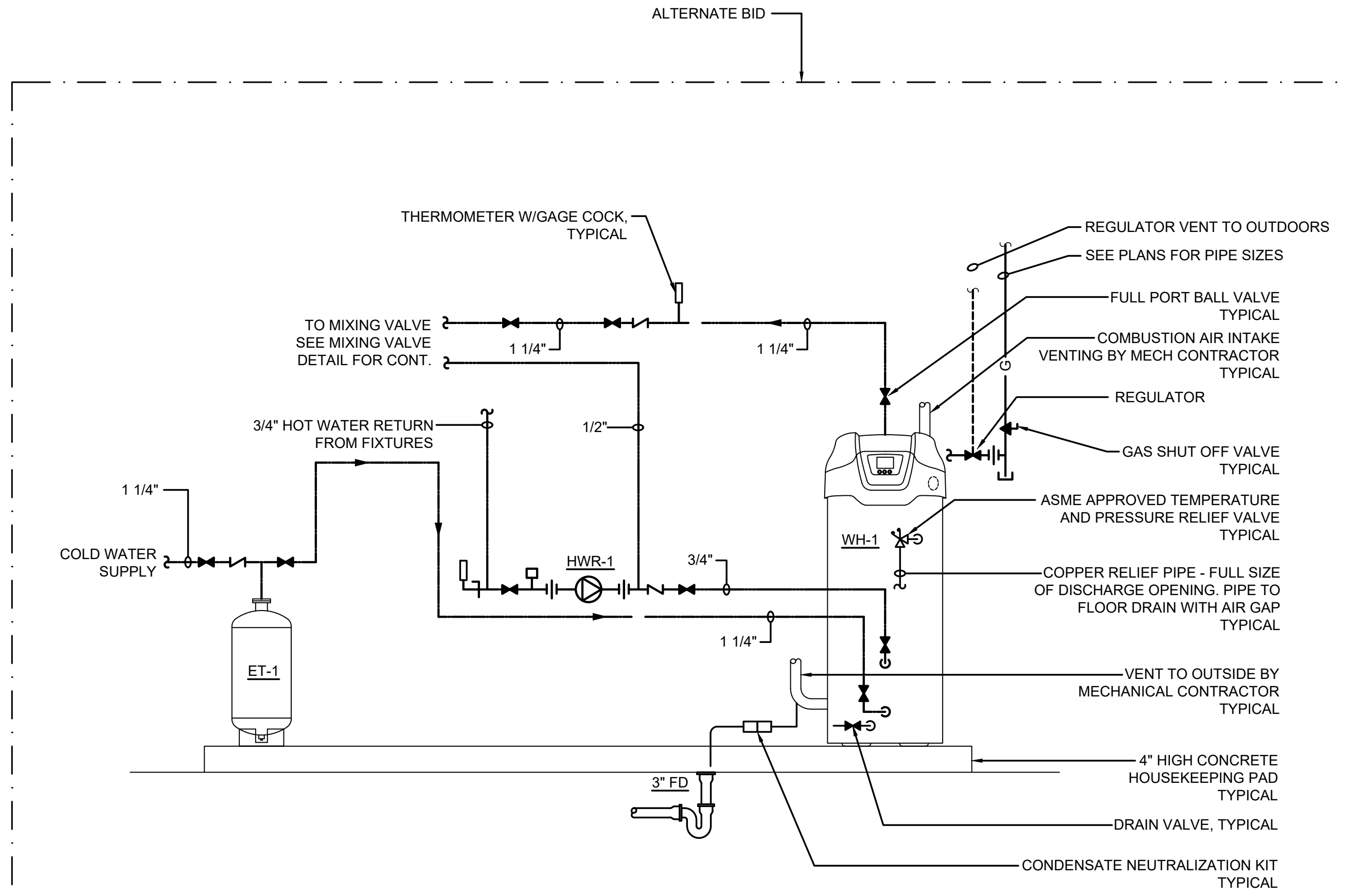
VENT INCREASER DETAIL

NOT TO SCALE


GRATE
FLOOR DRAIN
SEDIMENT BUCKET (AS INDICATED ON SCHEDULE)
FIN FLOOR (ALLOW FOR MATERIALS)
ASSE 1072 BARRIER TRAP SEAL DEVICE
DEEP SEAL "P" TRAP SEE PLANS FOR SIZE

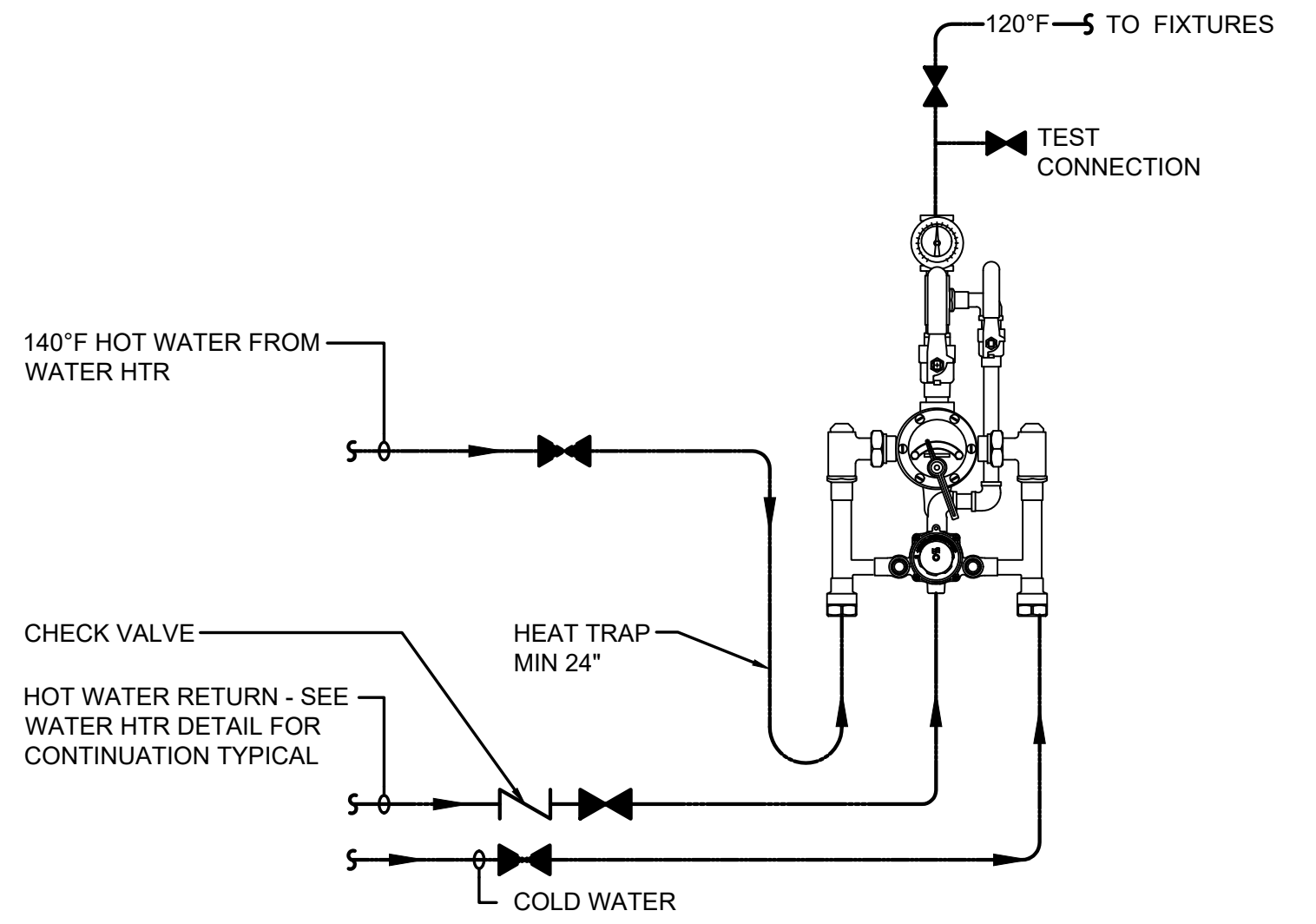
TYPICAL FLOOR DRAIN DETAIL

NOT TO SCALE


ALTERNATE BID
THERMOMETER W/GAGE COCK, TYPICAL
TO MIXING VALVE SEE MIXING VALVE DETAIL FOR CONT.
1 1/4"
1 1/4"
3/4" HOT WATER RETURN FROM FIXTURES
1/2"
1 1/4"
COLD WATER SUPPLY
HWR-1
3/4"
1 1/4"
ET-1
WH-1
3" FD
REGULATOR VENT TO OUTDOORS
SEE PLANS FOR PIPE SIZES
FULL PORT BALL VALVE TYPICAL
COMBUSTION AIR INTAKE VENTING BY MECH CONTRACTOR TYPICAL
REGULATOR
GAS SHUT OFF VALVE TYPICAL
ASME APPROVED TEMPERATURE AND PRESSURE RELIEF VALVE TYPICAL
COPPER RELIEF PIPE - FULL SIZE OF DISCHARGE OPENING. PIPE TO FLOOR DRAIN WITH AIR GAP TYPICAL
VENT TO OUTSIDE BY MECHANICAL CONTRACTOR TYPICAL
4" HIGH CONCRETE HOUSEKEEPING PAD TYPICAL
DRAIN VALVE, TYPICAL
CONDENSATE NEUTRALIZATION KIT TYPICAL

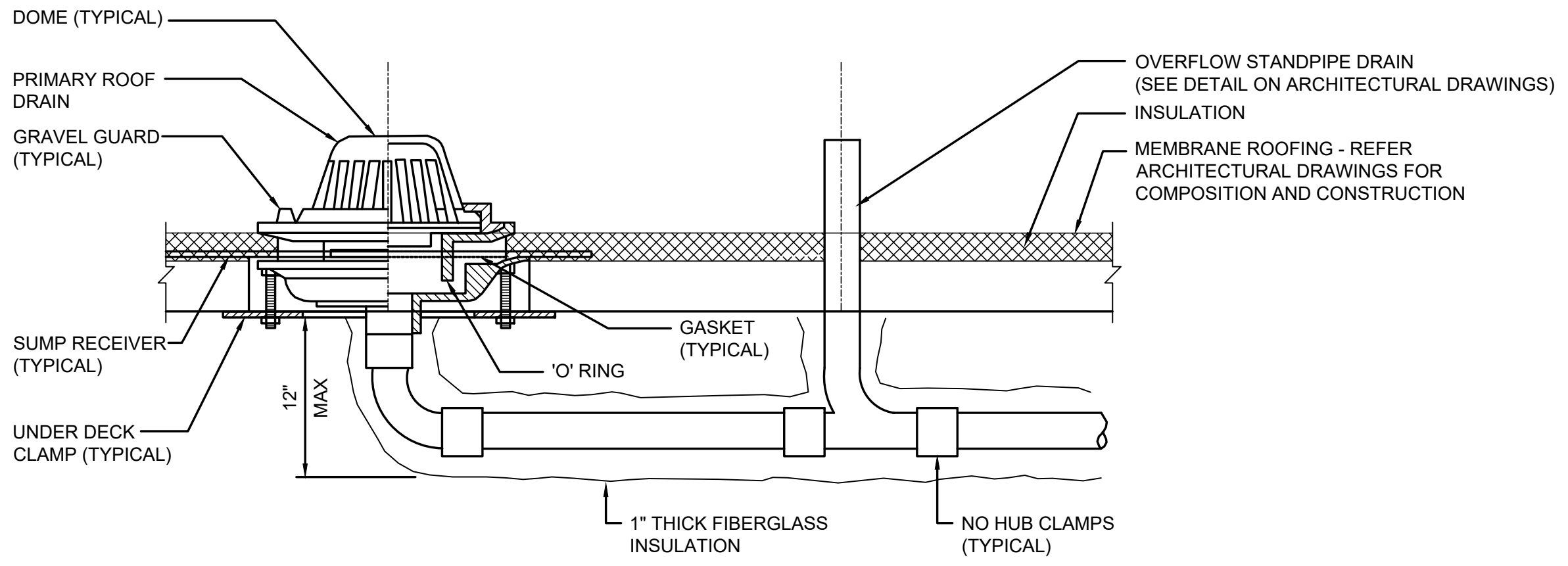
WATER HEATER PIPING DETAIL

NOT TO SCALE


120°F TO FIXTURES
TEST CONNECTION
140°F HOT WATER FROM WATER HTR
CHECK VALVE
HEAT TRAP MIN 24"
HOT WATER RETURN - SEE WATER HTR DETAIL FOR CONTINUATION TYPICAL
COLD WATER

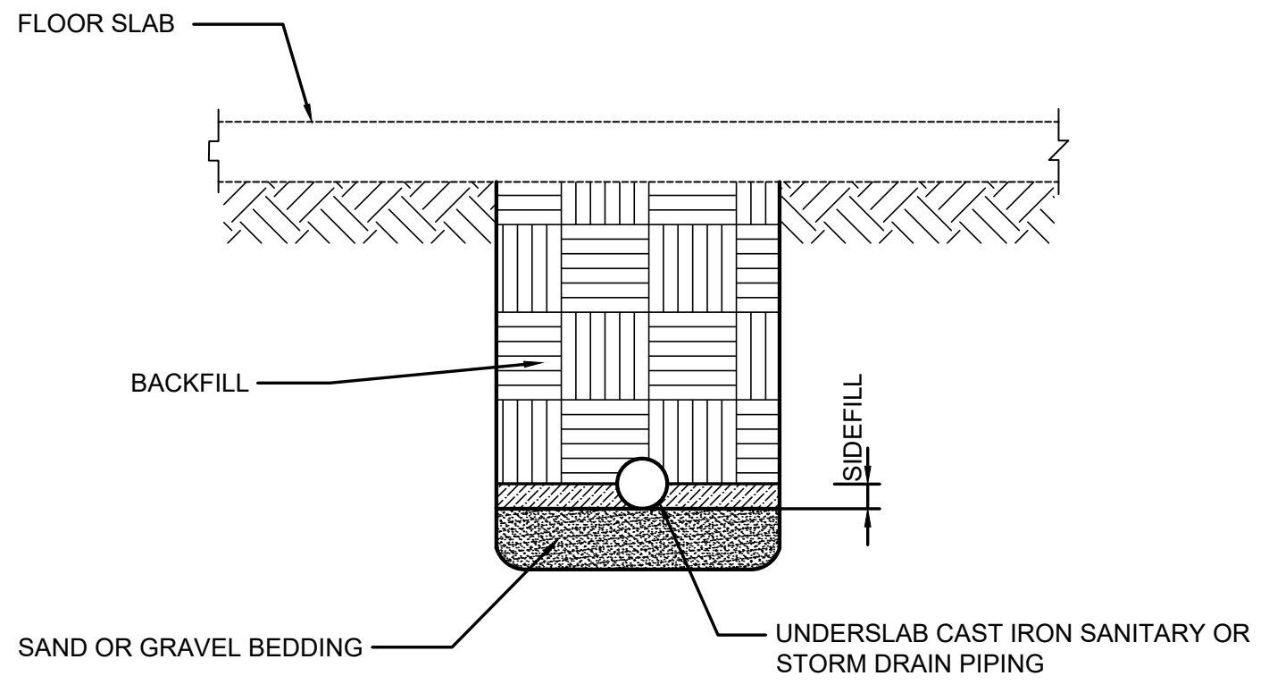
HIGH LOW MIXING VALVE DETAIL (MV-1)

NOT TO SCALE


DOME (TYPICAL)
PRIMARY ROOF DRAIN
GRAVEL GUARD (TYPICAL)
SUMP RECEIVER (TYPICAL)
UNDER DECK CLAMP (TYPICAL)
12" MAX
GASKET (TYPICAL)
'O' RING
OVERFLOW STANDPIPE DRAIN (SEE DETAIL ON ARCHITECTURAL DRAWINGS)
INSULATION
MEMBRANE ROOFING - REFER ARCHITECTURAL DRAWINGS FOR COMPOSITION AND CONSTRUCTION
1" THICK FIBERGLASS INSULATION
NO HUB CLAMPS (TYPICAL)

ROOF DRAIN AND OVERFLOW DRAIN DETAIL

NOT TO SCALE



UNDERSLAB PIPE BEDDING DETAIL

NOT TO SCALE

NOTES:
1. PIPE BEDDING SHALL BE IN COMPLIANCE WITH NSPC SECTION 2.6

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William D. Hopkins
Architect

2/12/26
Date

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Project Owner Name
Princeton Public Schools

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Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JD

Scale
AS NOTED

Drawing Name
PLUMBING DETAILS

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO. 2

FPA FRENCH & PARRELLO ASSOCIATES

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Drawing Number
P8.0

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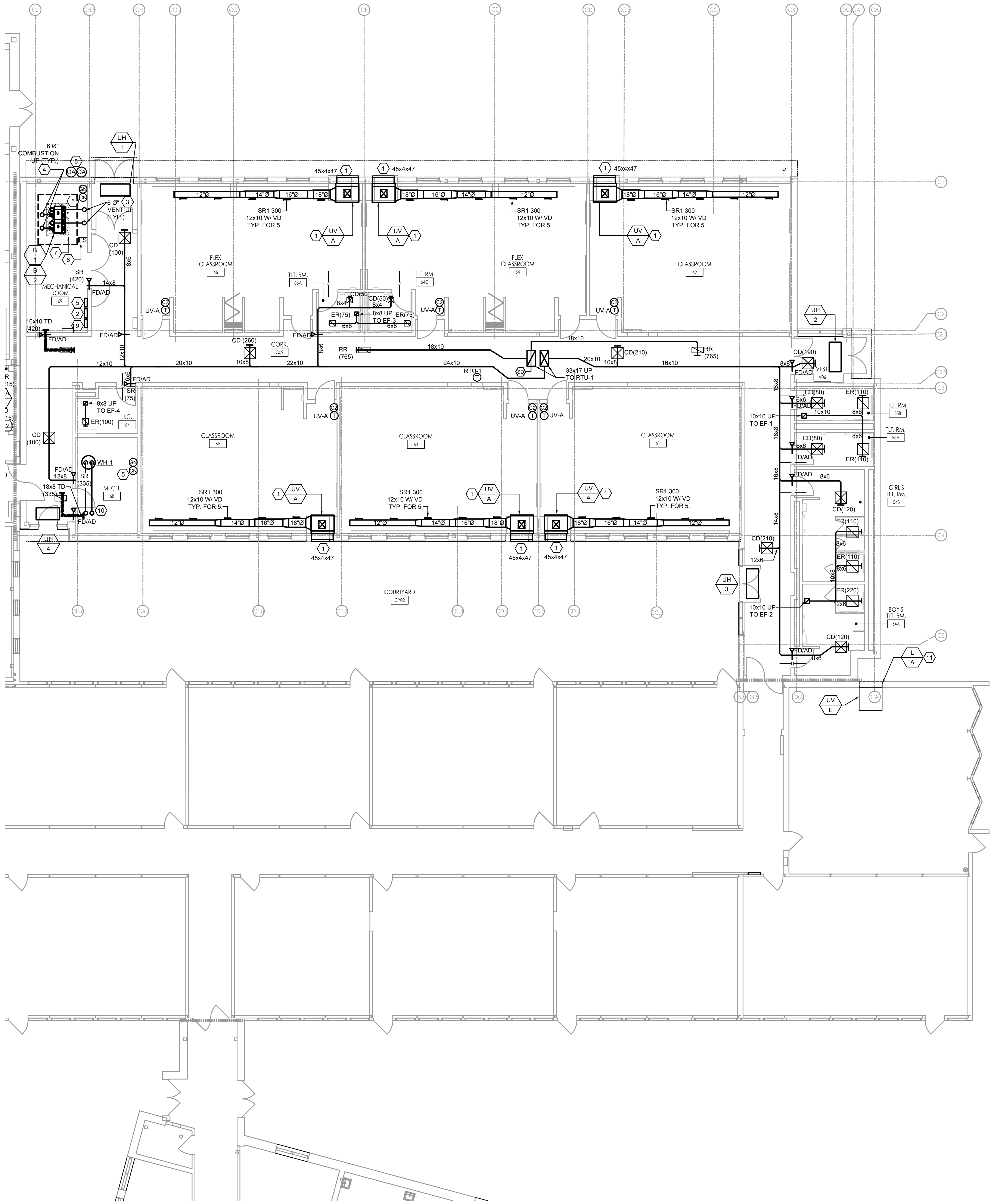


NEW DUCTWORK PLAN - BLOCK B (ALTERNATE BID)

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

GENERAL NOTES

1 REFER TO ARCH AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

2 REMOVE AND REINSTALL CEILING SYSTEM AS REQUIRED FOR THE INSTALLATION OF MECHANICAL WORK AND REPLACE IN KIND ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL, MATCH EXISTING ADJACENT SURFACES.

3 PROVIDE AND INSTALL METAL PIPE ENCLOSURE SYSTEM ON ALL EXPOSED PIPING. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

4 PROVIDE NEW DAMPER IN EXISTING DUCTWORK FOR BALANCING. IF DAMPER ALREADY EXIST, REPLACE WITH NEW. SEAL DUCTWORK AIRTIGHT.

5 PROVIDE VOLUME DAMPERS AT EACH BRANCH FOR BALANCING ALL SUPPLY, RETURN AND EXHAUST AIRFLOW DEVICES FOR NEW AND EXISTING. PROVIDE REMOTE CABLE OPERATED VOLUME DAMPERS AS NEEDED FOR BALANCING IN INACCESSIBLE CEILING. REFER TO MECHANICAL DETAILS FOR ADDITIONAL INFORMATION.

6 FINAL MECHANICAL EQUIPMENT LOCATIONS, EQUIPMENT CLEARANCES AND SERVICE ACCESS CLEARANCES TO BE COORDINATED WITH CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL COORDINATION BETWEEN TRADES. COORDINATE FINAL UNIT ORIENTATION TO ENSURE EQUIPMENT SERVICE ACCESS IS PROVIDED.

7 ALL SPACE SENSORS; IE. TEMPERATURE, CARBON DIOXIDE, HUMIDITY, ETC., SHALL BE MOUNTED AT 48" AFF TO MEET ADA REQUIREMENTS. COORDINATE THE FINAL LOCATION OF ALL SPACE SENSORS WITH OTHER TRADE. PROVIDE TAMPER PROOF COVERS FOR ALL TEMPERATURE SENSORS. PROVIDE TG500 SERIES VENTED GUARD, CLEAR; OR ENGINEER APPROVED EQUAL, ON ALL SPACE SENSORS.

8 ALL EXISTING EQUIPMENT TO REMAIN SHALL BE PROTECTED THROUGH ALL PHASES OF CONSTRUCTION. UPON COMPLETION OF ALL PHASES OF CONSTRUCTION CONTRACTOR SHALL CLEAN UNIT, ALL COILS AND REPLACE FILTERS.

9 IF UNITS ARE RUNNING DURING ANY PHASE OF CONSTRUCTION, CONTRACTOR SHALL REPLACE FILTERS WEEKLY.

10 EACH BRANCH DUCTWORK SHALL BE PROVIDED WITH VOLUME DAMPER FOR BALANCING.

11 PROVIDE 1/4" UNDER CUT FOR ALL RESTROOMS, JANITOR CLOSETS, AND TOILETS DOOR FOR AIR TRANSFER.

KEY NOTES

1 PROVIDE NEW UNIT VENTILATOR WITH FACTORY PAINTED 6" REAR EXTENSION, WALL SLEEVE, LOUVER AND SUPPLY DISCHARGE PLENUM FOR TOP SUPPLY AND ALL ASSOCIATED ACCESSORIES. PROVIDE FACTORY SUPPLIED LOUVERS (45X4X47" (H)) WITH ALUMINUM CLEAR COAT FINISH AND BIRDSCREEN. INSTALL PER MANUFACTURER RECOMMENDATION. REFER TO SCHEDULE AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

2 ATC PANEL LOCATION. COORDINATE THE EXACT LOCATION IN FIELD WITH OWNER. REFER TO ELECTRICAL DRAWINGS FOR TELE-DATA REQUIREMENT.

3 6" CONDENSING APPLIANCE EXHAUST VENT WITH AERCO EXHAUST MUFFLER UP THRU ROOF, HEATFAB SAF-T VENT CI PLUS; TERMINATE MIN. 72" ABOVE ROOF WITH VELOCITY CONE AND LATERAL SUPPORTS (TYP. 4). PROVIDE AND INSTALL AS PER MANUFACTURER'S RECOMMENDATION AND PER THE LATEST INTERNATIONAL FUEL GAS CODE.

4 6" COMBUSTION AIR INTAKE UP TO ROOF. TERMINATE DUCT 30 INCHES ABOVE ROOF WITH TEE FITTING AND WIRE MESH SCREEN. PROVIDE AND INSTALL AS PER MANUFACTURER'S RECOMMENDATION AND PER THE LATEST INTERNATIONAL FUEL GAS CODE.

5 PROVIDE GAS DETECTION PANEL AND SENSORS FOR NATURAL GAS AND CO GAS DETECTION. SEE SPECIFICATION FOR MORE INFORMATION.

6 PROVIDE NEW OUTSIDE AIR TEMPERATURE SENSOR FOR EACH NEW BOILER. CONNECT TO NEW BOILERS (B-1, B-2) CONTROL PANEL AS PER MANUFACTURER'S RECOMMENDATION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

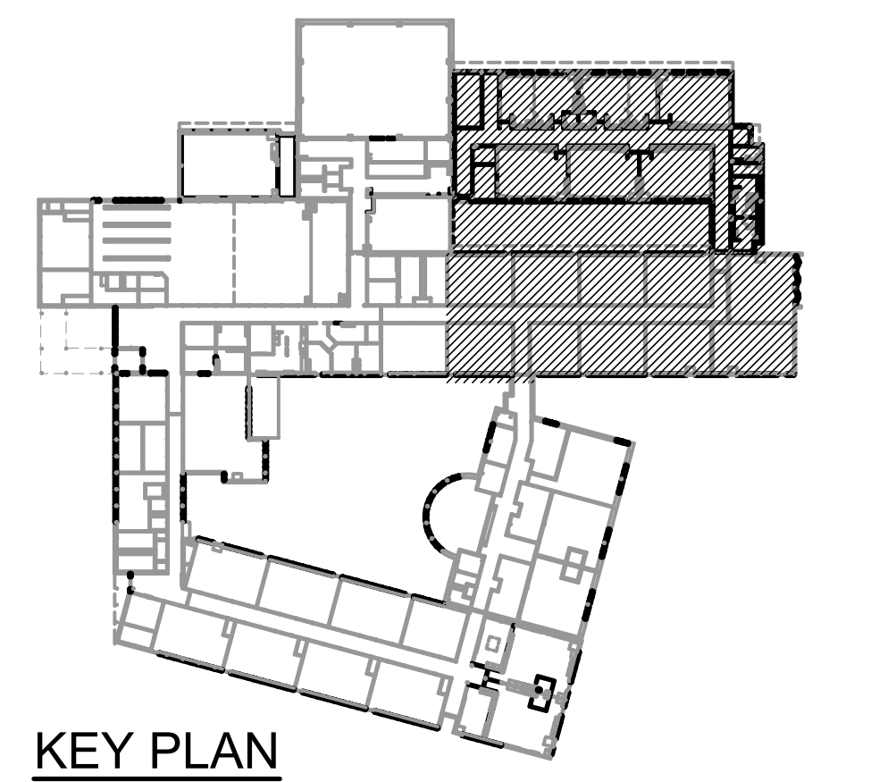
7 PROVIDE NEW 6" HIGH CONCRETE HOUSEKEEPING PAD AND 6" LARGER THAN EQUIPMENT FOOTPRINT. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

8 PROVIDE EMERGENCY BOILER/BURNER LOCKABLE SHUTDOWN SWITCH WITH BREAK GLASS COVER SERVING BOILERS, B-1 AND B-2.

9 NEW BOILERS (B-1, B-2) CONTROL PANEL.

10 PROVIDE 4" AL29-4C INTAKE AND EXHAUST VENT UP TO ROOF AND TERMINATE AS PER MANUFACTURER'S RECOMMENDATION. VERTICAL VENT AND FLUE TERMINATION (GOOSENECK CONNECTION) SHALL BE 3'-0" ABOVE THE HIGHEST PORTION OF THE ROOF WITHIN 10'-0" HORIZONTAL RADIUS. THE DISTANCE BETWEEN THE CLOSET VENT AND INTAKE AIR FOR WATER HEATER TERMINATION MUST BE A MINIMUM OF 48" IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. PROVIDE AIR INTAKE MOISTURE DRAIN TRAP AND INSTALL AS PER MANUFACTURER'S RECOMMENDATION. INTAKE AIR TERMINAL SHALL BE SLOPED DOWNWARD 1/8 INCH PER FOOT TOWARD THE WATER HEATER FOR THE MOISTURE REMOVAL FROM INLET AIR THROUGH THE AIR INTAKE MOISTURE DRAIN TRAP. EXHAUST VENT SHALL BE PITCHED A MINIMUM OF A 1/4 INCH PER FOOT BACK TO WATER HEATER FOR PROPER CONDENSATE REMOVAL THROUGH THE CONDENSATE TRAP. INSTALL ALL VENT PIPING IN ACCORDANCE WITH LATEST INTERNATIONAL FUEL GAS CODE.

11 CONTRACTOR TO REMOVE EXISTING LOUVER AND EXTEND OR REPLACE SLEEVE AND REINSTALL EXISTING LOUVER DUE TO FIREWALL EXTENSION.CONTRACTOR TO VERIFY IN FIELD FOR EXACT SLEEVE DIMENSIONS. REINSTALL PER MANUFACTURER'S RECOMMENDATION AND GUIDELINES.



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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

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39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
MV

Drawn By
VA

Scale
AS NOTED

Drawing Name
MECHANICAL NEW DUCTWORK PLAN - BLOCK B (ALTERNATE BID)

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
M3.1

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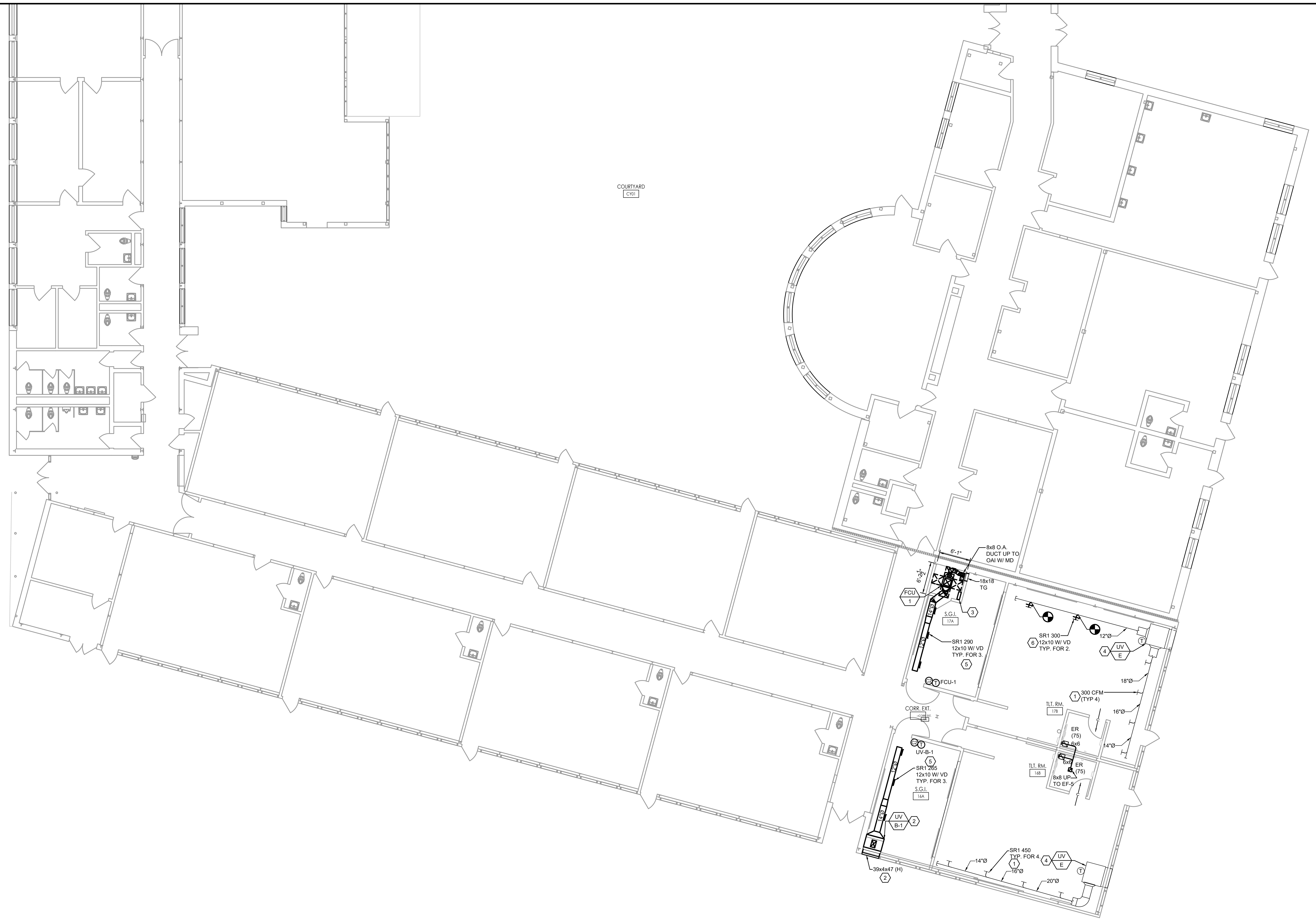


NEW DUCTWORK PLAN - BLOCK C

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

GENERAL NOTES

1 REFER TO ARCH AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

2 REMOVE AND REINSTALL CEILING SYSTEM AS REQUIRED FOR THE INSTALLATION OF MECHANICAL WORK AND REPLACE IN KIND ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL, MATCH EXISTING ADJACENT SURFACES.

3 PROVIDE AND INSTALL METAL PIPE ENCLOSURE SYSTEM ON ALL EXPOSED PIPING. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

4 PROVIDE NEW DAMPER IN EXISTING DUCTWORK FOR BALANCING. IF DAMPER ALREADY EXIST, REPLACE WITH NEW. SEAL DUCTWORK AIRTIGHT.

5 PROVIDE VOLUME DAMPERS AT EACH BRANCH FOR BALANCING ALL SUPPLY, RETURN AND EXHAUST AIRFLOW DEVICES FOR NEW AND EXISTING. PROVIDE REMOTE CABLE OPERATED VOLUME DAMPERS AS NEEDED FOR BALANCING IN INACCESSIBLE CEILING. REFER TO MECHANICAL DETAILS FOR ADDITIONAL INFORMATION.

6 FINAL MECHANICAL EQUIPMENT LOCATIONS, EQUIPMENT CLEARANCES AND SERVICE ACCESS CLEARANCES TO BE COORDINATED WITH CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL COORDINATION BETWEEN TRADES. COORDINATE FINAL UNIT ORIENTATION TO ENSURE EQUIPMENT SERVICE ACCESS IS PROVIDED.

7 ALL SPACE SENSORS; IE. TEMPERATURE, CARBON DIOXIDE, HUMIDITY, ETC., SHALL BE MOUNTED AT 48" AFF TO MEET ADA REQUIREMENTS. COORDINATE THE FINAL LOCATION OF ALL SPACE SENSORS WITH OTHER TRADE. PROVIDE TAMPER PROOF COVERS FOR ALL TEMPERATURE SENSORS. PROVIDE TG500 SERIES VENTED GUARD, CLEAR; OR ENGINEER APPROVED EQUAL, ON ALL SPACE SENSORS.

8 ALL EXISTING EQUIPMENT TO REMAIN SHALL BE PROTECTED THROUGH ALL PHASES OF CONSTRUCTION. UPON COMPLETION OF ALL PHASES OF CONSTRUCTION CONTRACTOR SHALL CLEAN UNIT, ALL COILS AND REPLACE FILTERS.

9 IF UNITS ARE RUNNING DURING ANY PHASE OF CONSTRUCTION, CONTRACTOR SHALL REPLACE FILTERS WEEKLY.

10 EACH BRANCH DUCTWORK SHALL BE PROVIDED WITH VOLUME DAMPER FOR BALANCING.

11 PROVIDE 1/4" UNDER CUT FOR ALL RESTROOMS, JANITOR CLOSETS, AND TOILETS DOOR FOR AIR TRANSFER.

KEY NOTES

1 REBALANCE THE EXISTING GRILLES/DIFFUSERS TO CFM NOTED ON PLAN.

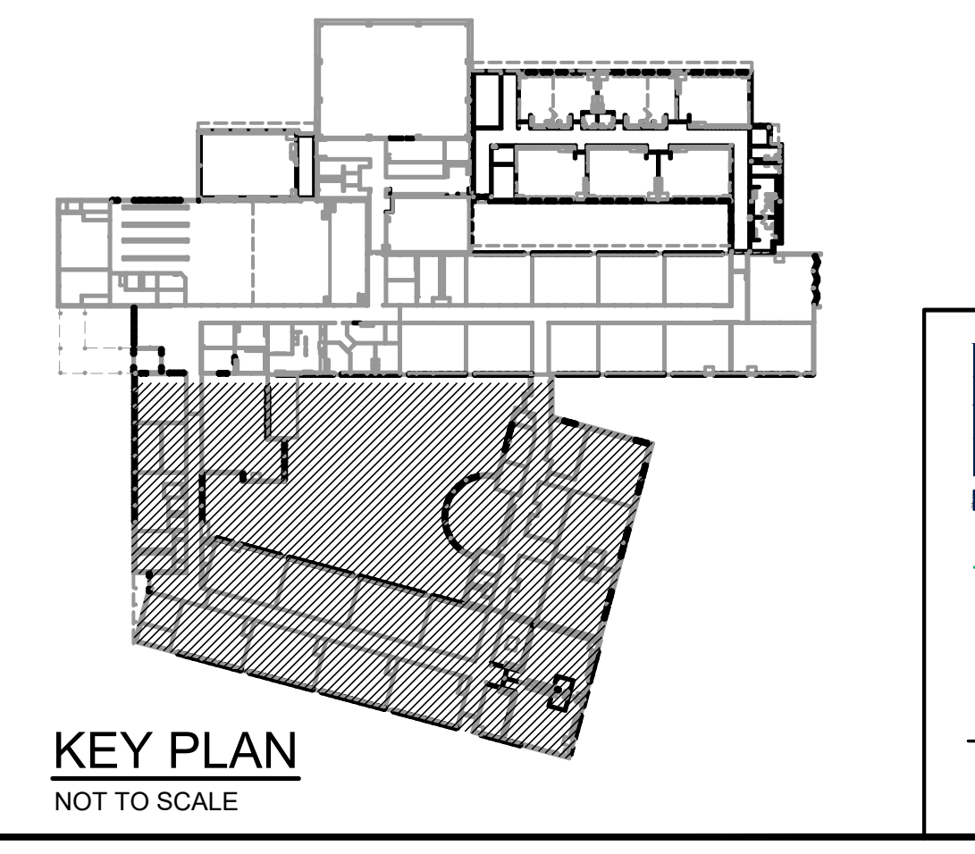
2 PROVIDE NEW UNIT VENTILATOR WITH FACTORY WALL SLEEVE, LOUVER AND SUPPLY DISCHARGE PLENUM FOR TOP SUPPLY AND ALL ASSOCIATED ACCESSORIES. PROVIDE FACTORY SUPPLIED LOUVERS (39X4X47" (H)) WITH ALUMINUM CLEAR COAT FINISH AND BIRDSCREEN. PROVIDE CUSTOM FACTORY PAINTED REAR EXTENSION TO ACCOMMODATE LOUVERS AND WALL SLEEVES. COORDINATE REQUIREMENTS WITH MANUFACTURER. VERIFY AND MEASURE IN FIELD ALL REQUIREMENTS BEFORE ORDERING CUSTOM REAR EXTENSIONS. PROVIDE ALL ACCESSORIES REQUIRED. INSTALL PER MANUFACTURER RECOMMENDATION. REFER TO SCHEDULE AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS. 1

3 ATC PANEL LOCATION. COORDINATE THE EXACT LOCATION IN FIELD WITH OWNER. REFER TO ELECTRICAL DRAWINGS FOR TELE-DATA REQUIREMENT.

4 EXISTING TO REMAIN.

5 ALL INDOOR DUCT SHALL HAVE STICKERS AND LABELS REMOVE AND PREPARED FOR PAINT. PAINT ALL EXPOSED INDOOR DUCTWORK, REGISTERS/DIFFUSERS, HANGER AND SUPPORTS. PROVIDE MINIMUM 2 COATS PRIMER AND 2 COATS OF INTERIOR GRADE PAINT. COORDINATE WITH ARCHITECT FOR COLOR SELECTION.

6 PROVIDE AND INSTALL NEW SUPPLY REGISTER IN EXISTING DUCTOWORK. SEAL DUCTWORK AIRTIGHT. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.



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Revisions

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M3.2

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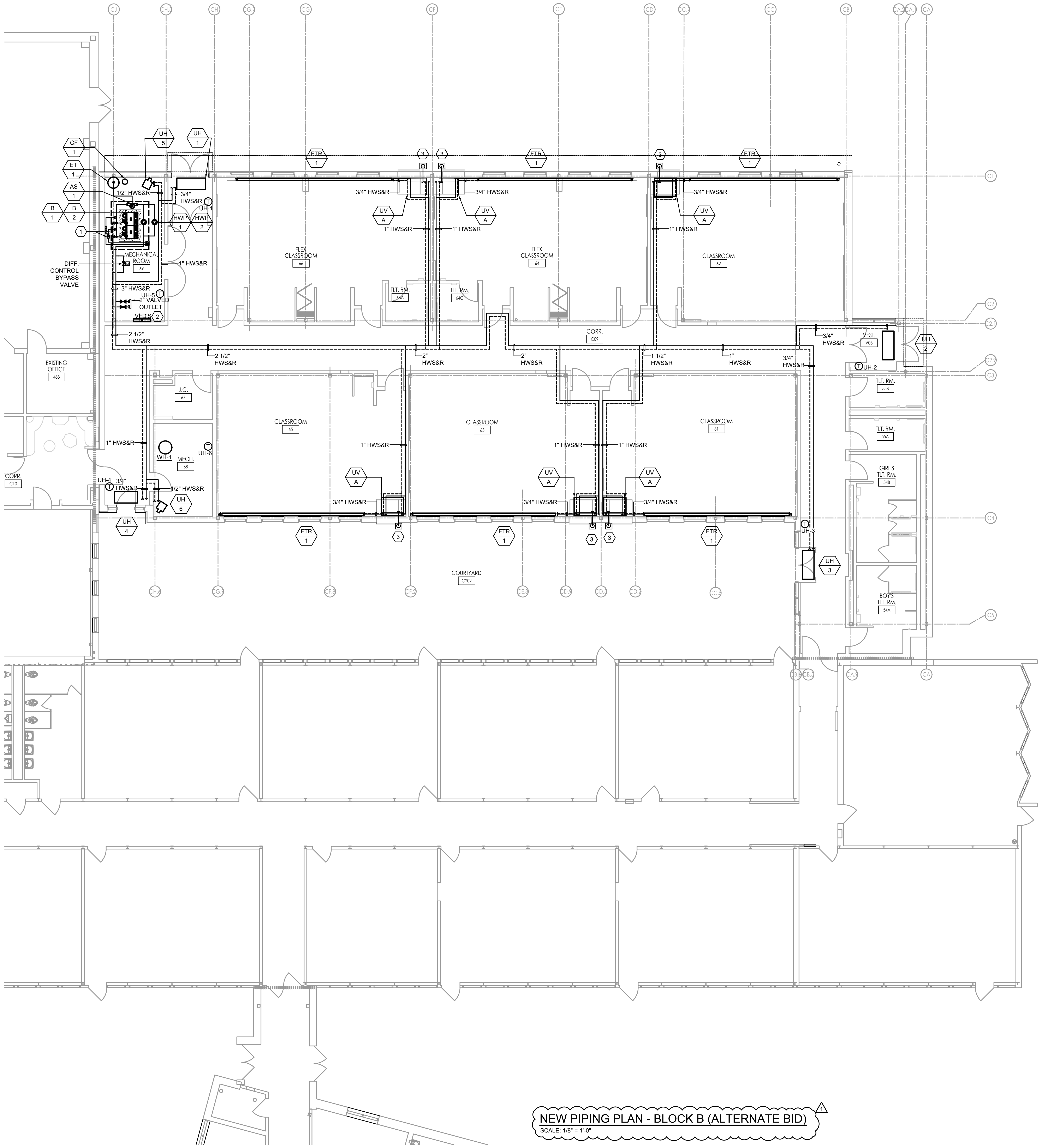


NEW PIPING PLAN - BLOCK B (ALTERNATE BID) 1

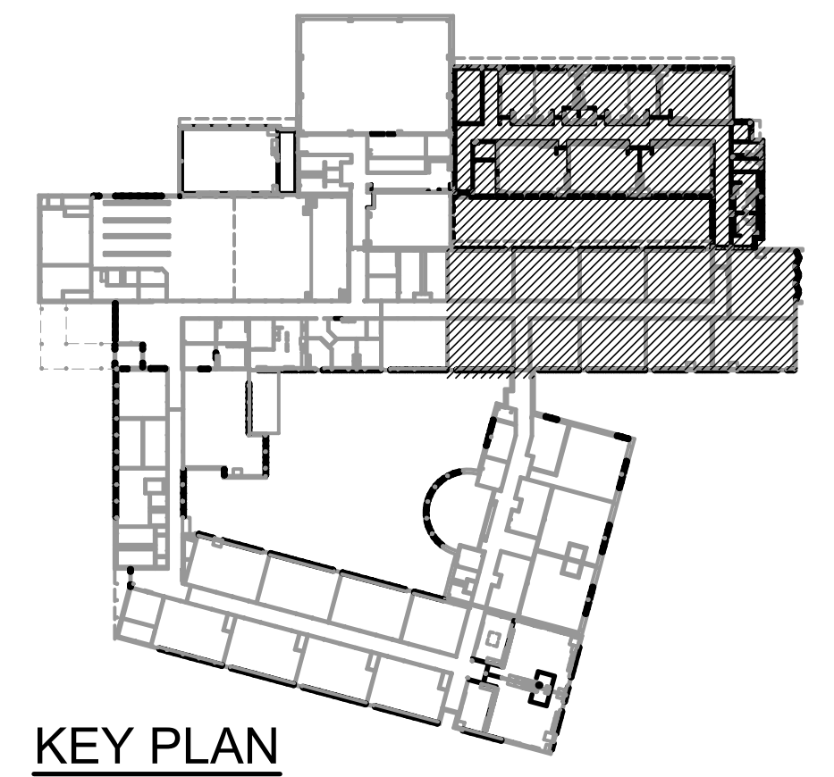
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR NOTES AND DETAILS PERTAINING TO ROOFING, STRUCTURAL, GENERAL CONSTRUCTION, ETC.
2. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITIES . AVOID CONFLICTS WITH OTHER TRADES AND EXISTING CONDITIONS. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITIES AND MARK OUT THEIR LOCATIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL CONTRACT THE SERVICES OF A PRIVATE UTILITY LOCATOR COMPANY TO MARK OUT ALL EXISTING UNDERGROUND UTILITIES IN THE PROJECT AREA PRIOR TO COMMENCING ANY WORK AND PROVIDE EXISTING CONDITIONS PLAN TO THE OWNER AND ENGINEER.
3. REMOVE AND REINSTALL CEILING SYSTEM AS REQUIRED FOR THE INSTALLATION OF MECHANICAL WORK AND REPLACE IN KIND ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK. PATCH AND REPAIR ALL DAMAGE CAUSED BY REMOVAL, MATCH EXISTING ADJACENT SURFACES.
4. PROVIDE AND INSTALL METAL PIPE ENCLOSURE SYSTEM ON ALL EXPOSED PIPING. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. ALL SPACE SENSORS; IE. TEMPERATURE, CARBON DIOXIDE, HUMIDITY, ETC., SHALL BE MOUNTED AT 48" AFF TO MEET ADA REQUIREMENTS. COORDINATE THE FINAL LOCATION OF ALL SPACE SENSORS WITH OTHER TRADE. PROVIDE TAMPER PROOF COVERS FOR ALL TEMPERATURE SENSORS. PROVIDE TG500 SERIES VENTED GUARD, CLEAR; OR ENGINEER APPROVED EQUAL, ON ALL SPACE SENSORS.
6. ALL EXISTING EQUIPMENT TO REMAIN SHALL BE PROTECTED THROUGH ALL PHASES OF CONSTRUCTION. UPON COMPLETION OF ALL PHASES OF CONSTRUCTION, CONTRACTOR SHALL CLEAN UNIT, ALL COILS AND REPLACE FILTERS.
7. IF UNITS ARE RUNNING DURING ANY PHASE OF CONSTRUCTION, CONTRACTOR SHALL REPLACE FILTERS WEEKLY.
8. ALL BRANCH PIPING CONNECTED TO TWO OR MORE UNIT VENTILATOR INTERNAL CONDENSATE PUMPS SHALL BE MINIMUM 1" PUMPED CONDENSATE UNLESS OTHERWISE NOTED.
9. PROVIDE PIPE ANCHOR, GUIDE & EXPANSION LOOP SERVING EACH HVAC PIPING AS REQUIRED PER SPECIFICATION. SEE SPECIFICATION AND DETAILS FOR ADDITIONAL INFORMATION.
10. EACH BRANCH DUCTWORK SHALL BE PROVIDED WITH VOLUME DAMPER FOR BALANCING.
11. PROVIDE 1/4" UNDER CUT FOR ALL RESTROOMS, JANITOR CLOSETS, AND TOILETS DOOR FOR AIR TRANSFER.
12. PROVIDE SHUTOFF VALVES AT EACH BRANCH TAKE OFF PIPING SERVING THE UNIT VENTILATOR AND FIN TUBE RADIATOR.

KEY NOTES

1. PROVIDE BOILER DRAIN PIPING TO FLOOR DRAIN WITH NEUTRALIZING KIT. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
2. WALL MOUNTED REMOTE VFD. COORDINATE WITH ELECTRICAL CONTRACTOR FOR FINAL CONNECTIONS.
3. 3/4" CONDENSATE DRAIN PIPING THRU WALL 6" ABOVE FINISHED GRADE WITH PIPE SLEEVE. DISCHARGE TO 24x11 CONCRETE SPLASH BLOCK, MANUFACTURED BY MERSHONE CONCRETE OR ENGINEER APPROVED EQUAL AND EPDM SLIP SHEET. MAINTAIN MINIMUM PITCH. CORE DRILL WALL AND SEAL PIPE AND ANNULAR SPACE WATERTIGHT.



KEY PLAN
NOT TO SCALE

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William D. Hopkins 2/12/26
Architect Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
MV

Drawn By
VA

Scale
AS NOTED

Drawing Name
MECHANICAL NEW PIPING PLAN - BLOCK B (ALTERNATE BID) 1

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

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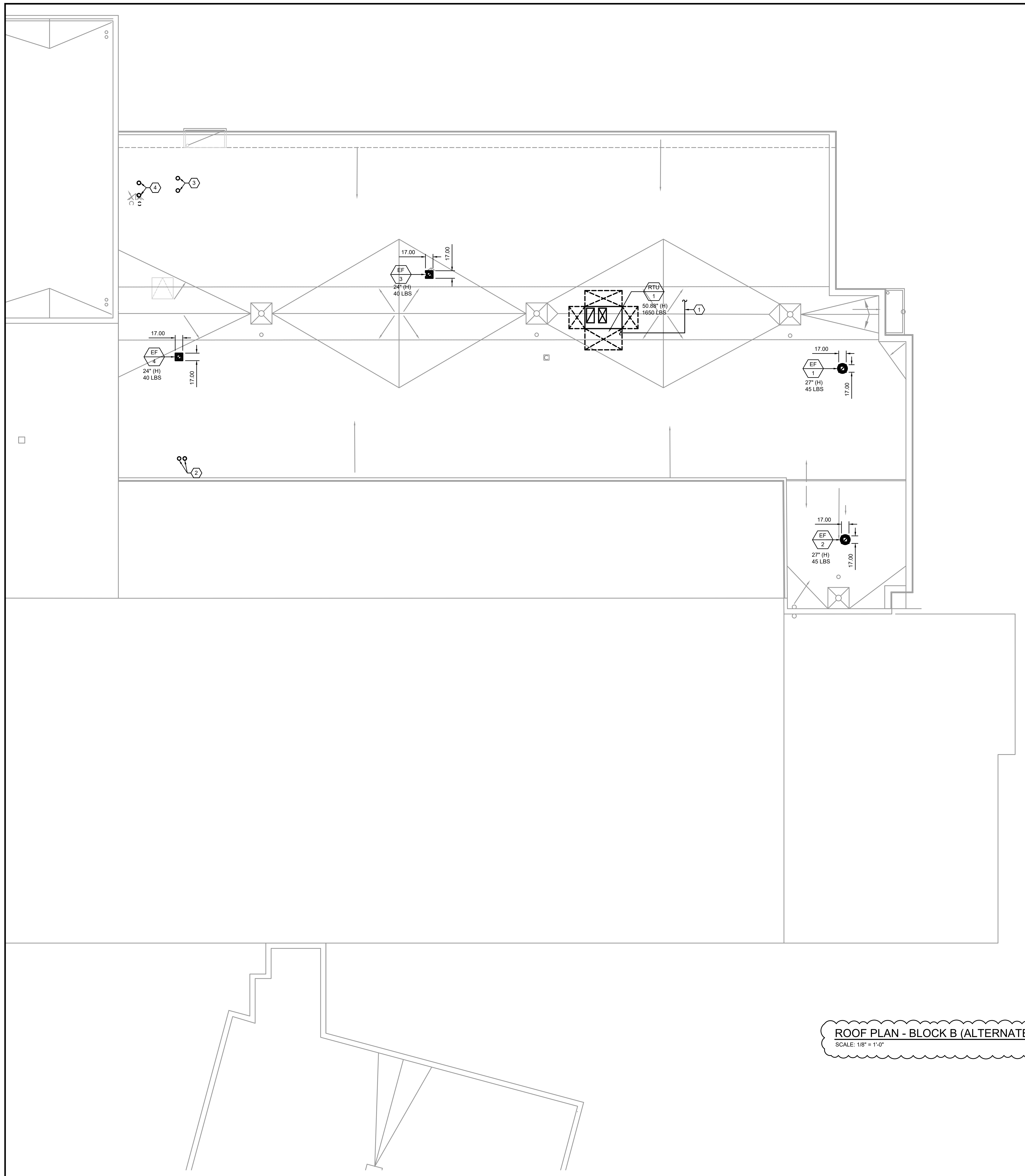
Drawing Number
M4.1



ROOF PLAN - BLOCK B (ALTERNATE BID) 1

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

SHEET NOTES

1. ALL EXISTING EQUIPMENT TO REMAIN SHALL BE PROTECTED THROUGH ALL PHASES OF CONSTRUCTION. UPON COMPLETION OF ALL PHASES OF CONSTRUCTION, CONTRACTOR SHALL CLEAN UNIT, ALL COILS AND REPLACE FILTERS.
2 IF UNITS ARE RUNNING DURING ANY PHASE OF CONSTRUCTION CONTRACTOR SHALL REPLACE FILTERS WEEKLY.

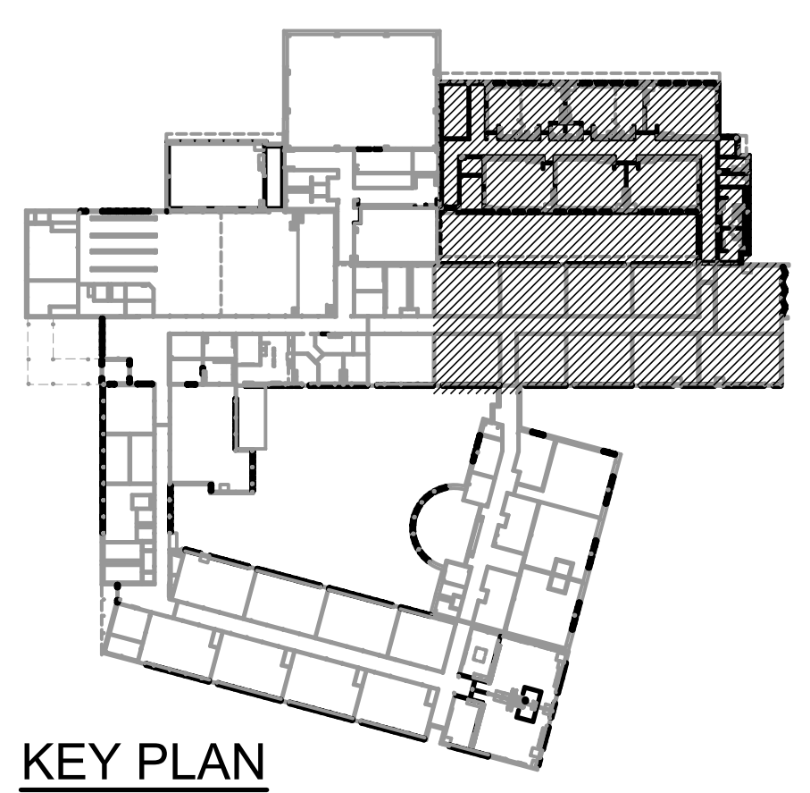
KEY NOTES

① 1 1/2" CONDENSATE DRAIN WITH MINIMUM 4" DEEP TRAP. DISCHARGE TO 24x11 CONCRETE SPLASH BLOCK, MANUFACTURED BY MERSHONE CONCRETE OR ENGINEER APPROVED EQUAL AND EPDM SLIP SHEET. MAINTAIN MINIMUM PITCH.

② PROVIDE 4" DIA AL29-4C WATER HEATER INTAKE AND EXHAUST VENT AND TERMINATE WITH GOOSENECK CONNECTION IN ACCORDANCE WITH DETAIL AND AS PER MANUFACTURER'S RECOMMENDATION. VERTICAL INTAKE AND VENT EXTENSION SHALL BE 2'-0" ABOVE THE HIGHEST PORTION OF THE ROOF WITHIN 10'-0" HORIZONTAL RADIUS. THE DISTANCE BETWEEN THE CLOSET VENT AND INTAKE AIR FOR WATER HEATER TERMINATION MUST BE MINIMUM OF 48" IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

③ PROVIDE 6" EXHAUST VENT WITH AERCO EXHAUST MUFFLER UP THRU ROOF, HEATFAB SAF-T VENT CI PLUS, TERMINATE MIN. 72" ABOVE ROOF WITH VELOCITY CONE, RAIN CAP AND LATERAL SUPPORTS (TYP-2).

④ PROVIDE 6" COMBUSTION AIR INTAKE UP TO ROOF. TERMINATE DUCT 30" ABOVE ROOF WITH TEE FITTING AND WIRE MESH SCREEN.



KEY PLAN
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AS NOTED

Drawing Name
MECHANICAL ROOF PLAN - BLOCK B (ALTERNATE BID) 1

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO. 2

Drawing Number
M5.1

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SELF CONTAINED UNIT VENTILATOR SCHEDULE

UV / X

PLAN NO	MANUFACTURER MODEL	SUPPLY FAN DATA						EXHAUST FAN DATA			DX COOLING DATA					HOT WATER HEATING DATA									ENERGY WHEEL PERFORMANCE DATA								FILTER DATA		ELECTRICAL DATA				WEIGHT LBS	REMARKS
																							HEATING COIL		WINTER DESIGN CONDITION				SUMMER DESIGN CONDITION											
		TOTAL AIR FLOW	OA & EA FLOW MIN CFM	ESP IN. WC	FAN SPEED RPM	MOTOR TYPE	MOTOR SIZE HP	AIR FLOW CFM	ESP IN. WC	MOTOR SIZE HP	TOTAL MBH	SENS MBH	EAT DB/WB	LAT DB/WB	EER	MBH	MBH W/ WHEEL	EAT	LAT	GPM	EWT	LWT	PD PSI	NO ROWS	OUTSIDE AIR DB/WB	ROOM EXHAUST AIR DB/WB	SUPPLY AIR DB/WB	TOTAL RECOVERED MBH	OUTSIDE AIR DB/WB	ROOM EXHAUST AIR DB/WB	SUPPLY AIR DB/WB	TOTAL RECOVERED MBH	TYPE	MIN MERV	VOLTS/Ø	FLA	MCA	MOP		
UV-A	AIREDALE CMD48BDCECSNNB92N1	1500	410	0.5	-	DIRECT DRIVE	3/4	1500	0.5	1.07	48.9	33.8	80/67	59.5/56.7	11.8	68.1	94.9	64.2	105.8	2.8	160	129	0.3	1	0.0 / -1.4	70 / 53	48.8 / 39.2	26.8	95 / 75	75 / 63	80.5 / 67.3	11.5	PLEATED THROWAWAY	13	208 / 1	32.3	36.9	50	1,350	SEE NOTES 2, 5-18
UV-B-1	AIREDALE CMD24BDCECSNNB92N1	800	160	0.5	-	DIRECT DRIVE	3/4	800	0.5	1.07	24.9	17.2	80/67	60.5/57.2	12.0	51.2	63.7	67.5	126.4	2.8	160	142	0.3	1	0.0 / -1.4	70 / 53	57.5 / 45.3	12.5	95 / 75	75 / 63	78.2 / 65.5	5.5	PLEATED THROWAWAY	13	208 / 1	21.0	23.6	30	1,080	PROVIDE FRONT RETURN GRILLES

ALTERNATE BID

NOTES:

1. PROVIDE 2-WAY HW MODULATING VALVE PACKAGE. ATC CONTROL VALVE BY ATC CONTRACTOR, OTHER VALVE PACKAGE FITTINGS TO BE PROVIDED BY UNIT MANUFACTURER.
2. PROVIDE FACTORY INSTALLED HUMIDITY SENSOR FOR DEHUMIDIFICATION MODE. RETURN AIR HUMIDITY SENSOR BY ATC CONTRACTOR.
3. PROVIDE FACTORY INSTALLED FREEZE PROTECTION SENSOR. LOW LIMIT SWITCH TO BE PROVIDED BY ATC CONTRACTOR.
4. PROVIDE OUTSIDE AIR AND EXHAUST AIR MOTORIZED DAMPERS.
5. PROVIDE FACTORY INSTALLED CONDENSER COIL FILTER.
6. PROVIDE UNIT WITH SALT RESISTANT COIL PACKAGE INCLUDING ELECTOFIN COATING ON ALL CONDENSER COIL.
7. PROVIDE 100% OA ECONOMIZER.
8. PROVIDE ELECTRICAL DISCONNECT SWITCH.
9. PROVIDE FACTORY INSTALLED COMPRESSOR SOUND JACKET WITH ACOUSTICALLY LINED DOOR FOR REDUCED SOUND LEVELS.
10. PROVIDE FACTORY INSTALLED CONDENSATE PAN OVERFLOW SENSOR, UL #508 APPROVED, FOR SYSTEM SHUTDOWN, WIRED BY THE ATC CONTRACTOR. LEAK DETECTOR IS PROVIDED, FIELD MOUNTED AND WIRED BY ATC CONTRACTOR.
11. PROVIDE FIELD MOUNTED TEMPERATURE CONTROLS FROM ATC CONTRACTOR.
12. PROVIDE UNIT WITH INTERNAL CONDENSATE PUMP AND HOT GAS REHEAT COIL FOR DEHUMIDIFICATION.
13. PROVIDE WITH DDC BACNET MTSP CONTROLS FOR INTERFACE WITH ATC CONTROL SYSTEM. ATC PANEL SHALL BE BACNET BASED AND PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED PROGRAMMING, GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINTS AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING.
14. PROVIDE FULL ADAPTER BACK WITH CLOSED PIPE TUNNEL, END PANELS, FILLER PANEL SECTIONS AND SUB BASE FOR FLOOR MOUNTED UNITS.
15. PROVIDE UNIT WITH INTERNAL CONDENSATE PUMP, WALL SLEEVE, LOUVER, OUTSIDE AIR REAR EXTENSION, AND TOP SUPPLY PLENUM.
17. PROVIDE FACTORY SUPPLIED DISCHARGE SUPPLY PLENUM TO EXTEND 6" ABOVE THE ARCHITECTURE DROP CEILING FOR ALL UNITS. FIELD VERIFY THE EXACT HEIGHT OF DISCHARGE PLENUM AND COORDINATE THE DISCHARGE PLENUM HEIGHT WITH ARCHITECT CEILING HEIGHT.
18. PROVIDE EQUIPMENT START UP BY MANUFACTURER'S CERTIFIED TECHNICIAN. MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, ATC CONTRACTOR AND TESTING AND BALANCING AGENT SHALL BE PRESENT DURING START UP; PROVIDE ASSOCIATED STARTUP REPORT ACCORDINGLY.

FAN SCHEDULE

EF / X

PLAN NO	MANUFACTURER MODEL	LOCATION	AREA SERVED	FAN TYPE	FAN PERFORMANCE			ELECTRICAL DATA				dBA	WEIGHT LBS	REMARKS
					CFM	TOTAL SP IN WC	FAN RPM	HP	RPM	VOLTS/Ø	DRIVE			
EF-1	GREENHECK G-095-VG	BLOCK B ROOF	TLT RM 55A/55B	ROOF EXH	220	0.13	701	1/6	-	115/1	DIRECT	32	43	SEE NOTES
EF-2	GREENHECK G-095-VG	BLOCK B ROOF	TLT RM 54A/54B	ROOF EXH	440	0.13	915	1/6	-	115/1	DIRECT	41	43	SEE NOTES
EF-3	GREENHECK G-070-VG	BLOCK B ROOF	TLT RM 58A/60A	ROOF EXH	150	0.13	985	1/15	-	115/1	DIRECT	33	36	SEE NOTES
EF-4	GREENHECK G-060-VG	BLOCK B ROOF	JC 62	ROOF EXH	100	0.13	1173	1/15	-	115/1	DIRECT	39	35	SEE NOTES
EF-5	GREENHECK G-070-VG	BLOCK C ROOF	TLT RM 58A/60A	ROOF EXH	150	0.13	985	1/15	-	115/1	DIRECT	33	36	SEE NOTES

ALTERNATE BID

NOTES:
1. MOUNT FAN ON MINIMUM 12" HIGH ROOF CURB.
2. PROVIDE SOLID STATE SPEED CONTROL, NEMA-1 TOGGLE SWITCH, BIRDSCREEN & BACKDRAFT DAMPER.
3. PROVIDE ELECTRICAL DISCONNECT, VIBRATION ISOLATION SUPPORT RODS WITH MOUNTING BRACKETS, SPEED CONTROLLER AND ROUND DUCT CONNECTION.
4. PROVIDE CONTROLS FROM ATC CONTRACTOR.

PACKAGED ROOF TOP UNIT SCHEDULE W/ HOT WATER HEATING COIL

RTU / X

GENERAL DATA			SUPPLY FAN						EXHAUST/RETURN FAN			COOLING (DX EVAPORATOR COIL)									HOT GAS REHEAT			HOT WATER HEATING								FILTERS		ELECTRICAL DATA			WEIGHT LBS W/CURB & ACCESS.	REMARKS
PLAN NO.	MANUFACTURER MODEL	AREA SERVED	TOTAL AIR CFM	TOTAL STATIC PRESS IN. WC	ESP IN. WC	FAN SPEED RPM	FAN HP	MIN OA CFM	MIN EXH FAN CFM	NO. OF FAN	FAN FLA	NOM TONS	EER	IEER	TOTAL MBH	SENS MBH	EAT DB °F	EAT WB °F	LAT DB °F	LAT WB °F	EAT DB °F	LAT DB °F	SENS CAP MBH	TOTAL CAP MBH	EWT	LWT	FLOW GPM	WATER ΔP FT H2O	AIR ΔP IN H2O	EAT DB °F	LAT DB °F	TYPE	MIN MERV RATING	VOLTS/Ø	MCA	MOP		
RTU-3	TRANE THK072A3S00	OFFICES/CONF. ROOMS	2400	0.911	0.750	1030	3.0	330	-	-	-	6	12.40	17.80	77.55	60.79	77.8	64.7	53.32	53.21	-	-	-	91.0	180.0	160	9.3	3.97	0.02	60.2	95.0	PLEATED THROWA WAY	13	208 / 3	44	50	1200	SEE NOTES

NOTES:

1. UNIT TO BE MOUNTED ON WIND ISOLATION CURB BASIS-OF-DESIGN: THE VMC GROUP
   - A. LESS THAN 10 TON - MODEL #P6200 WITH SOUND PACKAGE #1 - RPFMA
   - B. 10 TON AND ABOVE - MODEL #P6300 WITH SOUND PACKAGE #1 - RPFMA
2. PROVIDE DRAIN PAN WITH UL #508 APPROVED WATER DETECTION SENSOR FOR UNIT SHUTDOWN. WIRE CONTROL CIRCUIT THROUGH NC CONTACT.
3. PROVIDE UNIT WITH VFD FOR VAV OPERATION.
4. PROVIDE WITH COMPARATIVE ENTHALPY ECONOMIZER.
5. PROVIDE WITH POWER EXHAUST.
6. PROVIDE THRU BASE ELECTRIC AND HOT WATER SUPPLY & RETURN PIPING. PROVIDE SINGLE POINT POWER CONNECTION.
7. PROVIDE UNIT MOUNTED NON-FUSED DISCONNECT SWITCH.
8. PROVIDE CONVENIENCE RECEPTACLE. REFER TO ELECTRICAL PLANS.
9. PROVIDE HINGED ACCESS DOORS.
10. PROVIDE HAIL GUARDS.
11. PROVIDE UNIT WITH BACNET INTERFACE TO INCLUDE CONTROL OF HOT WATER 3-WAY VALVE AND FREEZE PROTECTION PUMP. REFER TO ATC DIAGRAM AND SPECIFICATIONS.
12. PROVIDE BACNET INTERFACE AND CONNECT TO EXISTING BMS SYSTEM. PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINT AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING.
13. DUCT SMOKE DETECTOR TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR, INSTALLED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL PLANS.
14. PROVIDE SHUT OFF VALVES FOR HOT WATER SUPPLY & RETURN COIL PIPING AT UNIT AND DRAIN VALVE WITH DRAIN PIPE AT UNIT.
15. ALL UNITS PURCHASED/SHIPPED AFTER JANUARY 2025 TO HAVE R454B REFRIGERANT AND PROVIDE FACTORY INSTALLED UL APPROVED REFRIGERANT LEAK DETECTION SYSTEM.

ELECTRIC CABINET/UNIT HEATER SCHEDULE

EUH / 1

PLAN NO	MANUFACTURER MODEL	LOCATION	HTG CAP KW	MBH	CFM	ELECTRICAL DATA			DIMENSION (IN.)			WEIGHT LBS	REMARKS
						VOLTS/Ø	MCA	MOP	LENGTH	WIDTH	HEIGHT		
EUH-1	INDEECO CDIRE	VOCAL MUSIC CORR. C13	5	17.10	310	208/1	18.10	30	23 5/8	23 5/8	8 3/4	40	SEE NOTES

NOTES:

1. MOUNT UNIT FROM STRUCTURE VIA 4 POINTS WITH VIBRATION ISOLATION SUPPORT RODS AND MOUNTING BRACKETS AS PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE REMOTE WALL THERMOSTAT WITH TAMPER RESISTANT COVER.
3. PROVIDE INTEGRAL DISCONNECT SWITCH.
4. COLOR AS SELECTED BY ARCHITECT FROM ALL AVAILABLE COLORS.

PACKAGED GAS-FIRED ROOF TOP UNIT SCHEDULE

RTU / X

GENERAL DATA			SUPPLY FAN					EXH FAN CFM	COOLING (EVAPORATOR COIL)								HOT GAS REHEAT			NATURAL GAS BURNER						FILTERS		ELECTRICAL DATA			WEIGHT LBS W/CURB & ACCESS.	REMARKS
PLAN NO.	MANUFACTURER MODEL	AREA SERVED	TOTAL AIR CFM	EXT STATIC PRESS IN. WC	FAN SPEED RPM	FAN HP	MIN OA CFM		NOM TONS	EER	TOTAL MBH	SENS MBH	EAT DB °F	EAT WB °F	LAT DB °F	LAT WB °F	EAT DB °F	LAT DB °F	SENS CAP MBH	INPUT MBH	OUTPUT MBH	AFUE %	STAGES	EAT DB °F	LAT DB °F	TYPE	MIN MERV RATING	VOLTS/Ø	MCA	MOP		
RTU-1	TRANE YHK072A3S0M	ADDITION BLDG COMMON AREAS	2400	0.972	1063	3.0	250	-	6	12.2	76.9	60.0	77.0	64.2	52.8	52.7	56.3	71.1	38.7	120	97.2	-	2	63.0	99.7	PLEATED THROWAWAY	13	208 / 3	44	50	1277	SEE NOTES
RTU-2	TRANE YHK090A3S0M	VOCAL/MUSIC 53	3000	1.173	1238	3.0	500	-	7.5	12.1	87.2	71.1	78.4	65.1	55.3	54.8	56.4	71.2	48.5	150	121.5	-	2	58.1	95.1	PLEATED THROWAWAY	13	208 / 3	49	60	1321	SEE NOTES

ALTERNATE BID

NOTES:
1. UNIT TO BE MOUNTED ON WIND/SEISMIC ISOLATION CURB BASIS-OF-DESIGN: THE VMC GROUP
   - A. LESS THAN 10 TON - MODEL #P6200 WITH SOUND PACKAGE #1 - RPFMA
   - B. 10 TON AND ABOVE - MODEL #P6300 WITH SOUND PACKAGE #1 - RPFMA
2. STEEL DUNNAGE USING VMC TYPE "MS" VIBRATION ISOLATION HOT DIPPED GALVANIZED BASE MOUNTED BETWEEN VIBRATION ISOLATORS AND ERU FRAME.
3. REQUIRED TO MOUNT THE NEW UNIT ON EXISTING CURB. FIELD MEASURE THE EXISTING CURB AND PROVIDE CURB ADAPTOR.
4. PROVIDE DRAIN PAN WITH UL #508 APPROVED WATER DETECTION SENSOR FOR UNIT SHUTDOWN. WIRE CONTROL CIRCUIT THROUGH NC CONTACT.
5. PROVIDE UNIT WITH SINGLE ZONE OPERATION.
6. PROVIDE WITH BAROMETRIC RELIEF.
7. PROVIDE THRU BASE ELECTRIC.
8. PROVIDE UNIT MOUNTED NON-FUSED DISCONNECT SWITCH.
9. PROVIDE 120V CONVENIENCE RECEPTACLE (ALWAYS HOT) WITH CIRCUIT PROTECTION BY EC.
10. PROVIDE HINGED ACCESS DOORS.
11. PROVIDE HAIL GUARDS.
12. PROVIDE BACNET INTERFACE AND CONNECT TO EXISTING BMS SYSTEM. PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINT AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING.
13. UNIT FURNISHED WITH 4" PLEATED THROWAWAY FILTERS, MINIMUM MERV-13 FOR BOTH AIR STREAM.
14. DUCT SMOKE DETECTOR TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR, INSTALLED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL PLANS.
15. PROVIDE RETURN AIR SMOKE DETECTOR WIRED TO SHUT DOWN UNIT EITHER ACCESSORY REMOTE KEY OPERATED TEST STATION. LOCATE TEST STATION NEAR THERMOSTAT.
16. AFTER COMPLETING SYSTEM INSTALLATION AND TESTING, ADJUSTING, AND BALANCING RTU AND AIR-DISTRIBUTION SYSTEMS, CLEAN FILTER HOUSING AND PROVIDE NEW FILTERS.
17. PROVIDE MODULATING OUTDOOR AND RETURN AIR DAMPERS FOR ECONOMIZER WITH FAULT DETECTION AS PER ASHRAE 90.1 LATEST EDITION.
18. PROVIDE UNIT WITH MODULATING CONTROL WITH VARIABLE SPEED COMPRESSORS.
19. PROVIDE EQUIPMENT START UP BY MANUFACTURER'S CERTIFIED TECHNICIAN. MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, ATC CONTRACTOR AND TESTING AND BALANCING AGENT SHALL BE PRESENT DURING START UP; PROVIDE ASSOCIATED STARTUP REPORT ACCORDINGLY.
20. ALL UNITS PURCHASED/SHIPPED AFTER JANUARY 2025 TO HAVE R454B REFRIGERANT AND PROVIDE FACTORY INSTALLED UL APPROVED REFRIGERANT LEAK DETECTION SYSTEM.

EXPANSION TANK SCHEDULE - ALTERNATE BID

ET / X

PLAN NO	MANUFACTURER MODEL	LOCATION	SYSTEM VOLUME GAL	ACCEPT VOLUME GAL	FILL CHARGE PRESS PSI	SYSTEM CONN INCH	MAX OPER TEMP °F	MAX OPER PRESS PSI	DIMENSIONS (IN.)		DRY WEIGHT LBS	MAX OPER WEIGHT LBS	REMARKS
									HEIGHT	DIA			
ET-1	BELL & GOSSETT B50	BOILER RM	400	13	12	1	160	125	24	14	50	158	SEE NOTES BELOW.

NOTES:
1. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD EXTENDING MINIMUM 6" BEYOND EQUIPMENT FOOTPRINT ON ALL SIDES.
2. PROVIDE B&G ATFL AIRTROL TANK FITTING.

AIR AND DIRT SEPARATOR SCHEDULE - ALTERNATE BID

AS / X

PLAN NO.	MANUFACTURER MODEL	SERVICE	SYSTEM MAX FLOW GPM	TANK DIAMETER IN	PIPE DIA IN.	HEIGHT IN.	VENT CONN IN.	BLOW DN CONN IN.	MAX OPER TEMP °F	MAX OPER PRESS PSI	DRY WEIGHT LBS	REMARKS
AS-1	XYLEM RL-3F	HOT WATER	190	14	3	26.88	-	-	350	125	115	SEE NOTES BELOW.

NOTES:
1. SUPPORT INDEPENDENTLY FROM STRUCTURE.
2. PROVIDE HIGH CAPACITY AUTOMATIC AIR VENT.
3. UNIT SHALL HAVE REMOVABLE STRAINER BASKET.

DUCTED VERTICAL SPLIT / HEAT PUMP SYSTEM SCHEDULE

FCU / X HP / X

VERTICAL INDOOR UNIT

PLAN NO	AREA SERVED	MANUFACTURER MODEL	TOTAL CFM	EXT SP	OA CFM	HP/ WATTS	ELECTRICAL DATA			DIMENSIONS			WEIGHT LBS	REMARKS
							VOLTS/Ø	MCA	MOP	LENGTH	WIDTH	HEIGHT		
FCU-1	SGI-17A	MITSUBISHI PVA-AA24NL	875	0.8	130	244 WATTS	SEE OUTDOOR UNIT			21	21 5/8	54 1/4	150	SEE NOTES

NOTES:
1. MOUNT OUTDOOR UNIT ON MINIMUM 18" HIGH NONISOLATED WIND AND SEISMIC RESTRAINT RAILS. BASIS OF DESIGN: THE VMC GROUP MODEL #R-7000.
2. PROVIDE A FLOOR STAND FOR THE INDOOR UNIT FOR A BOTTOM RETURN ARRANGEMENT.
3. PROVIDE WITH LOW AMBIENT WIND BAFFLE KIT FOR COOLING DOWN TO 0°F.
4. PROVIDE WITH INTEGRAL CONDENSATE PUMP.
5. PROVIDE ELECTRICAL DISCONNECT.
6. PROVIDE THERMOSTAT INTERFACE FOR CONNECTION TO BMS SYSTEM.
7. PROVIDE DRAIN PAN WITH UL #508 APPROVED WATER DETECTION SENSOR FOR UNIT SHUTDOWN. WIRE CONTROL CIRCUIT THROUGH NC CONTACT.
8. PROVIDE 24"X12" HINGED FILTER FOR PLENUM RETURN.
9. PROVIDE WITH MERV-13 FILTERS.
10. PROVIDE WITH R-454B REFRIGERANT WITH FACTORY INSTALLED LEAK DETECTOR.
11. PROVIDE WITH HYPER HEATING INVERTER.

OUTDOOR UNIT

PLAN NO	MANUFACURER MODEL	TOTAL COOL CAP MBH	SENS COOL CAP MBH	HTG MBH	HSPF	SEER	ELECTRICAL DATA				DIMENSIONS			WEIGHT LBS	REMARKS
							COP @ 17°F	VOLTS/Ø	MCA	MOP	HEIGHT	WIDTH	DEPTH		
HP-1	MITSUBISHI PUZ-AK24NLKZ	24	16.80	28	8.8	19.7	2	208 / 1	24	40	52 43/64	41 11/32	13 31/32	240	SEE NOTES

1. MOUNT UNIT ON MINIMUM 18" HIGH NONISOLATED WIND AND SEISMIC RESTRAINT RAILS. BASIS-OF-DESIGN: THE VMC GROUP MODEL #R-7000.
2. PROVIDE UNIT MOUNTED DISCONNECT SWITCH, LOW AMBIENT CONTROL,HAIL GUARDS AND SNOWHOOD.
3. PROVIDE EXPANSION VALVE KIT FROM THE UNIT MANUFACTURER AND ELECTRICAL DISCONNECT.
4. PROVIDE FREEZESTAT WITH REFRIGERANT LINE KIT FROM THE UNIT MANUFACTURER WITH INSULATION ON BOTH LINES.
5. PROVIDE CRANK CASE HEATER, COMPRESSOR HARD START KIT AND LOW AMBIENT CUT-OFF SWITCH FROM THE UNIT MANUFACTURER.
6. PROVIDE WITH DDC BACNET CONTROLS FOR INTERFACE WITH EXISTING HONEYWELL NIAGARA 4 PLATFORM ATC CONTROL SYSTEM. ATC PANEL SHALL BE BACNET BASED AND PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED PROGRAMMING, GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINTS AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING.

HOT WATER UNIT HEATER SCHEDULE - ALTERNATE BID

UH / X

PLAN NO	MANUFACTURER, MODEL, SIZE	TYPE	LOCATION	HEATING CAP MBH	GPM	PD FT H20	CFM	EAT DEG F	LAT DEG F	HOT WATER		ELECTRICAL			DIMENSIONS (INCHES)			WEIGHT LBS	REMARKS
										EWT	LWT	VOLTS/Ø	HP	RPM	DEPTH	WIDTH	HEIGHT		
UH-1	MODINE CW-006 ARRANGEMENT 58	HORIZONTAL RECESSED CABINET	CORR. ENTRY	49.6	2.48	2.8	620	40	114	160	120	120 / 1	0.05	951	9.75	61.75	25	140	SEE NOTES
UH-2	MODINE CW-006 ARRANGEMENT 58	HORIZONTAL RECESSED CABINET	CORR. ENTRY	49.6	2.48	2.8	620	40	114	160	120	120 / 1	0.05	951	9.75	61.75	25	140	SEE NOTES
UH-3	MODINE CW-006 ARRANGEMENT 58	HORIZONTAL RECESSED CABINET	CORR. ENTRY	49.6	2.48	2.8	620	40	114	160	120	120 / 1	0.05	951	9.75	61.75	25	140	SEE NOTES
UH-4	MODINE CW-006 ARRANGEMENT 58	HORIZONTAL RECESSED CABINET	CORR. ENTRY	49.6	2.48	2.8	620	40	114	160	120	120 / 1	0.05	951	9.75	61.75	25	140	SEE NOTES
UH-5	MODINE HSB-33	VERTICAL CEILING HUNG	MECH. RM. 69	21.7	1.1	0.2	630	60	92	160	120	120 / 1	$\frac{1}{25}$	1550	15	17.5	16.4	40	SEE NOTES
UH-6	MODINE HSB-33	VERTICAL CEILING HUNG	MECH. RM. 68	21.7	1.1	0.2	630	60	92	160	120	120 / 1	$\frac{1}{25}$	1550	15	17.5	16.4	40	SEE NOTES

NOTES:
1. HANG VIA (4) POINTS FROM CONSTRUCTION ABOVE.
2. PROVIDE REMOTE THERMOSTAT WITH TAMPER COVER AND 2-WAY CONTROL VALVE. INTEGRATE WITH ATC.
3. PROVIDE AQUASTAT TO PROVE HW FLOW.
4. PROVIDE INTEGRAL DISCONNECT SWITCH DPST. DISCONNECTS BOTH HOT AND NEUTRAL POWER LINES.
5. FOR UH-1 THRU UH-4, PROVIDE WITH A 1" THROWAWAY FILTER (MERV 8). BOTTOM RETURN BOTTOM DISCHARGE WITH ADJUSTABLE LOUVERS.
6. PROVIDE FULL ADAPTER BACK WITH CLOSED PIPE TUNNEL, END PANELS, AND FILLER PANEL SECTIONS FOR FLOOR MOUNTED UNITS.

CONDENSING HOT WATER BOILER SCHEDULE - ALTERNATE BID

B / X

PLAN NO.	MANUFACTURER MODEL	AGA INPUT CFH	GROSS HEATING CAP MBH OUTPUT	MAX % EFF	WORKIN GAS PRESS RATING PSI	MAX GAS PRESSURE WC	GAS TURNDOWN RATIO	EWT °F	LWT °F	FLOWRATE GPM	MAX WATER PD PSIG	ELECTRICAL DATA		VENT SIZE INCH DIA		OPER WEIGHT LBS	REMARKS
												VOLTS/Ø	FLA	INLET	OUTLET		
B-1 / B-2	AERCO BMK750	750	720	98	160	14"	15:1	120	160	38	3.0	120/1	13	6	6	870	SEE NOTES

NOTES:
1. PROVIDE SAFETY/RELIEF VALVES (50 PSI) PIPED FULL SIZE OF BOILER CONNECTION DOWN TO TERMINATION 6" ABOVE FLOOR.
2. VERIFY EXISTING INLET GAS PRESSURE. IF IN ACCESS OF 14" WC PROVIDE LOCKUP REDUCING REGULATOR AND EXTERIOR VENT PIPING AS REQUIRED BY THE IFGC AND MANUFACTURER'S RECOMMENDATIONS.
3. TERMINATE VENT MINIMUM 10'-0" FROM ANY MECHANICAL OUTSIDE AIR INTAKE & ANY OPENING INTO BUILDING
4. INTERFACE BOILER CONTROL/SEQUENCING SYSTEM/PANEL (WALL-MOUNTED ACS) WITH EXISTING HONEYWELL NIAGARA 4 PLATFORM BMS SYSTEM. PROVIDE BACNET INTERFACE. PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINTS AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING SET POINTS.
5. PROVIDE ALL REQUIRED PIPE WELLS AND EXTERIOR SENSORS.
6. PROVIDE CONDENSATE NEUTRALIZATION KIT AND ASSOCIATED DRAIN PIPING.
7. PROVIDE MUFFLER AS PER MANUFACTURER'S RECOMMENDATIONS.
8. PROVIDE GAS VENTING AND SEALED COMBUSTION AIR INTAKE DUCTS TO THE OUTDOORS AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS & RECOMMENDATIONS. PROVIDE MANUFACTURER'S WARRANTY AS PER SPECIFICATIONS.
9. PROVIDE SHUT-OFF VALVES AND AUTOMATIC ISOLATION VALVES AT HWS&R CONNECTIONS AT EACH BOILER.
10. MOUNT ON 4" REINFORCED CONCRETE PAD 6" LARGER THAN EQUIPMENT FOOTPRINT.
11. PROVIDE BOILER MANUFACTURER'S STANDARD/INTEGRAL LOW-WATER CUT-OFF.
12. PROVIDE ASME CSD-1 GAS TRAIN & SAFETY CONTROLS.
13. PROVIDE BOILER CONTROL PANEL.
14. PROVIDE EQUIPMENT START UP BY MANUFACTURER'S CERTIFIED TECHNICIAN. MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, ATC CONTRACTOR AND TESTING AND BALANCING AGENT SHALL BE PRESENT DURING START UP; PROVIDE ASSOCIATED STARTUP REPORT ACCORDINGLY.

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Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
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Project Number
5516D

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10.10.2025

Checked By
MV

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VA

Scale
AS NOTED

Drawing Name
MECHANICAL SCHEDULES

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	10.10.25	NJ DCA SUBMISSION
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VENTILATION SCHEDULE

ROOM NO	ROOM NAME	AREA SQ FT	PROGRAM OCCUPANT LOAD	OUTSIDE AIR PER PERSON REQUIRED	OUTSIDE AIR PER SF REQUIRED	OUTSIDE AIR REQUIRED CFM	SPACE VENT EFFECT	REQUIRED OUTDOOR AIR CFM	EXHAUST AIR NO. OF FIXTURE	EXHAUST AIR CFM/FIXTURE	EXHAUST AIR CFM/SF	EXHAUST AIR REQUIRED CFM	ACTUAL CFM OUTSIDE AIR	ACTUAL CFM SUPPLY AIR	ACTUAL CFM RETURN AIR	ACTUAL CFM EXH AIR	ACTUAL CFM TRANSF AIR	EQUIPMENT SERVING SPACE
45	STAFF ROOM	480	3	5	0.06	43.80	0.8	54.75	N/A	N/A	N/A	N/A	115	810	810	115	-	RTU-3
47	CONFERENCE ROOM	166	3	5	0.06	24.96	0.8	31.20	N/A	N/A	N/A	N/A	30	200	200	30	-	RTU-3
49	LIBRARY OFFICE	180	3	5	0.06	25.80	0.8	32.25	N/A	N/A	N/A	N/A	85	350	350	85	-	RTU-6
2B	READING AREA	180	2	5	0.06	20.80	0.8	26.00	N/A	N/A	N/A	N/A	26	300	300	-	-	RTU-6
52	CAFETERIA/MULTI PURPOSE ROOM	4770	137	7.5	0.06	1313.70	0.8	1642.13	N/A	N/A	N/A	N/A	1650	13600	13600	-	-	ERU-E-1,ERU-E-2
71	WAITING AREA	112	3	5	0.06	21.72	0.8	27.15	N/A	N/A	N/A	N/A	30	160	160	30	-	RTU-3
72	OFFICE 1	156	2	5	0.06	19.36	0.8	24.20	N/A	N/A	N/A	N/A	40	280	280	40	-	RTU-3
73	OFFICE 2	162	2	5	0.06	19.72	0.8	24.65	N/A	N/A	N/A	N/A	50	350	350	50	-	RTU-3
74	OFFICE 3	161	2	5	0.06	19.66	0.8	24.58	N/A	N/A	N/A	N/A	25	175	175	25	-	RTU-3
75	OFFICE 4	162	2	5	0.06	19.72	0.8	24.65	N/A	N/A	N/A	N/A	50	350	350	50	-	RTU-3
76	WAITING AREA	62	3	5	0.06	18.72	0.8	23.40	N/A	N/A	N/A	N/A	20	75	75	-	-	RTU-3
C13	CORRIDOR	237	0	0	0.06	14.22	0.8	17.78	N/A	N/A	N/A	N/A	20	360	320	20	-	RTU-2
58	VOCAL MUSIC	1424	32	10	0.06	405.44	0.8	506.80	N/A	N/A	N/A	N/A	500	2640	2640	500	-	RTU-2
C10	CORRIDOR	409	0	0	0.06	24.54	0.8	30.68	N/A	N/A	N/A	N/A	35	450	450	-	-	RTU-5-E
48A	STORAGE	301	0	0	0.12	36.12	0.8	45.15	N/A	N/A	N/A	N/A	50	165	-	110	55	CUH-10
48B	EXISTING OFFICE	128	2	5	0.06	17.68	0.8	22.10	N/A	N/A	N/A	N/A	65	215	215	65	-	CUH-10
59	INSTRUMENTAL STORAGE	186	0	0	0.12	22.32	0.8	27.90	N/A	N/A	N/A	N/A	65	200	200	65	-	RTU-5
16	KINDERGARTEN	893	22	10	0.12	327.16	1	327.16	N/A	N/A	N/A	N/A	330	1800	1800	330	-	UV-E
16A	S.G.I.	319	9	10	0.12	128.28	1	128.28	N/A	N/A	N/A	N/A	160	795	795	160	-	UV-B
17	KINDERGARTEN	877	22	10	0.12	325.24	1	325.24	N/A	N/A	N/A	N/A	330	1800	1800	330	-	UV-E
17A	S.G.I.	322	9	10	0.12	128.64	1	128.64	N/A	N/A	N/A	N/A	130	870	870	130	-	FCU-1
61	CLASSROOM	876	22	10	0.12	325.12	1	325.12	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
63	CLASSROOM	851	22	10	0.12	322.12	1	322.12	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
65	CLASSROOM	852	22	10	0.12	322.24	1	322.24	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
62	CLASSROOM	881	22	10	0.12	325.72	1	325.72	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
64	FLEX CLASSROOM	888	22	10	0.12	326.56	1	326.56	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
64C	TLT. RM.	53	1	0	0	0.00	0.8	0.00	1	70	N/A	70	-	50	-	75	25	UV-A
66A	TLT. RM.	52	1	0	0	0.00	0.8	0.00	1	70	N/A	70	-	50	-	75	25	UV-A
66	FLEX CLASSROOM	877	22	10	0.12	325.24	1	325.24	N/A	N/A	N/A	N/A	410	1500	1500	410	-	UV-A
67	JC	92	1	0	0	0.00	0.8	0.00	N/A	N/A	1	92	-	75	-	100	25	RTU-1
68	MECH	190	1	0	0	0.00	0.8	0.00	N/A	N/A	N/A	N/A	-	335	-	-	335	RTU-1
69	MECHANICAL ROOM	328	1	0	0	0.00	0.8	0.00	N/A	N/A	N/A	N/A	-	420	-	-	420	RTU-1
V06	VEST.	75	0	0	0	0.00	0.8	0.00	N/A	N/A	N/A	N/A	-	190	-	190	-	RTU-1
55B	TLT. RM.	83	0	0	0	0.00	0.8	0.00	1	70	N/A	70	-	80	-	110	30	RTU-1
55A	TLT. RM.	84	0	0	0	0.00	0.8	0.00	1	70	N/A	70	-	80	-	110	30	RTU-1
54B	GIRLS TLT. RM.	221	0	0	0	0.00	0.8	0.00	3	70	N/A	210	-	120	-	220	100	RTU-1
54A	BOYS TLT. RM.	173	0	0	0	0.00	0.8	0.00	3	70	N/A	210	-	120	-	220	100	RTU-1
C09	CORRIDOR	2004	0	0	0.12	240.48	0.8	300.60	N/A	N/A	N/A	N/A	300	880	880	-	1520	RTU-1
16B	TLT. RM.	53	0	0	0	0.00	0.8	0.00	1	70	N/A	70	-	-	-	75	75	UV-E (EX) / EF-5
17B	TLT. RM.	54	0	0	0	0.00	0.8	0.00	1	70	N/A	70	-	-	-	75	75	UV-E (EX) / EF-5

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ALTERNATE BID

NOTES:

1. BASED ON 2021 INTERNATIONAL MECHANICAL CODE (IMC), TABLE 403.3, MINIMUM VENTILATION RATES.
2. ASHRAE VENTILATION STANDARD STANDARD 62.1 IS USED AS A SECONDARY REFERENCE SOURCE IF A PARTICULAR ROOM IS NOT INCLUDED IN THE IMC.

AIR DEVICES SCHEDULE

BASED ON TITUS CO

PLAN NO.	CFM RANGE	NECK SIZE	OVERALL SIZE	MANUFACTURER MODEL	REMARKS	PLAN NO.	CFM RANGE	NECK SIZE	OVERALL SIZE	MANUFACTURER MODEL	REMARKS
CD	0-100	6" DIA	12x12	OMNI	SEE NOTES 1,6,7	RR/ER	0-100	-	24x12	355RL	SEE NOTES 2,6,7
CD	101-225	8" DIA	12x12	OMNI	SEE NOTES 1,6,7	RR/ER	101-200	-	24x12	355RL	SEE NOTES 2,6,7
CD	0-100	6" DIA	24x24	OMNI	SEE NOTES 1,6,7	RR/ER	0-1000	-	24x12	355RL	SEE NOTES 2,6,7
CD	101-225	8" DIA	24x24	OMNI	SEE NOTES 1,6,7	RR/ER	0-1000	-	24x24	355RL	SEE NOTES 2,6,7
CD	226-360	10" DIA	24x24	OMNI	SEE NOTES 1,6,7	RR1/ER1	SEE PLANS	-	SEE PLANS	350RL	SEE NOTES 4,6,7
CD	361-550	12" DIA	24x24	OMNI	SEE NOTES 1,6,7						
CD	551-750	14" DIA	24x24	OMNI	SEE NOTES 1,6,7						
CD	751-900	15" DIA	24x24	OMNI	SEE NOTES 1,6,7						
SR	SEE PLANS	-	SEE PLANS	300RL	SEE NOTES 3,6,7						
SR1	SEE PLANS	-	SEE PLANS	S300FS	SEE NOTES 5,6,7						

NOTES:

1. PROVIDE FRAME WITH ACCESSORIES FOR T-BAR LAY-IN DROPPED CEILING GRID OR SURFACE MOUNTED BORDER FOR GYPSUM CEILING APPLICATION. SEE DRAWINGS FOR MOUNTING LOCATION. PROVIDE ACCESSORY ROUND BACK ADAPTER (SIZE AS INDICATED IN SCHEDULE) AND EQUALIZING GRID PROVIDE OPTIONAL DIRECTIONAL BLOW CLIPS WHERE INDICATED ON DRAWINGS. PROVIDE AND INSTALL R-6 FOIL-BACKED INSULATION ON 12x12 MODULE. PROVIDE FACTORY INSTALLED R-6 FOIL-BACKED INSULATION ON 24x24 MODULE.
2. PROVIDE WITH 35° DEFLECTION AT 1/2" BLADE SPACING WITH FRONT BLADE PARALLEL TO LONG DIMENSION. PROVIDE FRAME WITH ACCESSORIES FOR T-BAR LAY-IN CEILING GRID OR SURFACE MOUNTED BORDER FOR GYPSUM CEILING APPLICATION. SEE DRAWINGS FOR MOUNTING LOCATION. PROVIDE SQUARE TO ROUND TRANSITION AS REQUIRED. PROVIDE OPTIONAL OPPOSED BLADE DAMPER.
3. PROVIDE SUPPLY REGISTER WITH DOUBLE DEFLECTION AT 3/4" BLADE SPACING WITH FRONT BLADES PARALLEL TO LONG DIMENSION, OPTIONAL DAMPER AND SURFACE MOUNT BORDER MOUNTING FRAME.
4. PROVIDE RETURN REGISTER WITH SINGLE DEFLECTION AT 3/4" BLADE SPACING WITH BLADES PARALLEL TO LONG DIMENSION, OPTIONAL DAMPER AND SURFACE MOUNT BORDER MOUNTING FRAME.
5. PROVIDE WITH DOUBLE DEFLECTION AT 3/4" BLADE SPACING WITH FRONT BLADES PARALLEL TO SHORT DIMENSION AND ASD (AIR SCOOP DAMPER/EXTRACTOR).
6. PROVIDE STANDARD FINISH - #26 WHITE.
7. PROVIDE REMOTE CABLE OPERATED VOLUME DAMPERS LOCATED IN INACCESSIBLE CONSTRUCTION.

PUMP SCHEDULE

BP X | HWP X

PLAN NO	MANUFACTURER MODEL	LOCATION	SYSTEM SERVED	TYPE	GPM	HEAD FT	NET POS SUCT HD	MOTOR SPEED	RPM @ DUTY POINT	EFF %	MOTOR HP	DUTY POINT POWER HP	ELECTRICAL DATA VOLTS / Ø	WEIGHT LBS	SUCTION DIA	DISCHARGE DIA	REMARKS
HWP-1	BELL & GOSSETT E-80 1.5x1.5x7C	MECH ROOM	HEATING HW	INLINE	38	44	5.2	1800	1599	57.8	1.5	0.712	208/3	180	1.5	1.5	SEE NOTES
HWP-2	BELL & GOSSETT E-80 1.5x1.5x7C	MECH ROOM	HEATING HW	INLINE	38	44	5.2	1800	1599	57.8	1.5	0.712	208/3	180	1.5	1.5	SEE NOTES
P-1	BELL & GOSSETT E-90-ECM	SEE PLAN	SEE PLAN	INLINE	10	25	7.5	1717	-	28.9	0.5	-	208/1	70	-	-	SEE NOTES

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ALTERNATE BID

NOTES:
1. PROVIDE MOTOR MOUNTED VARIABLE FREQUENCY DRIVE, LCD KEYPAD, AND BACNET INTERFACE.
2. PROVIDE NEMA PREMIUM EFFICIENCY MOTOR SUITABLE FOR VFD OPERATION.
3. INTERFACE WITH DIRECT DIGITAL CONTROL (DDC) SYSTEM. PROVIDE WITH DDC BACNET CONTROLS FOR INTERFACE WITH AME BMS. PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SETPOINTS AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING SET POINTS.CONTROLS BY ATC.
4. PROVIDE VERTICAL PIPE SUPPORTS FROM STRUCTURAL ABOVE.
5. PROVIDE ANSI-125 ANGLE FLANGED, MAX PRESS: 175 PSI, MAX TEMP: 230°F.
6. PROVIDE EQUIPMENT START UP BY MANUFACTURER'S CERTIFIED TECHNICIAN. MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, ATC CONTRACTOR AND TESTING AND BALANCING AGENT SHALL BE PRESENT DURING START UP; PROVIDE ASSOCIATED STARTUP REPORT ACCORDINGLY.
7. BALANCE P-1 TO MEET THE RTU-3 HOT WATER COIL FLOW RATE.

VARIABLE AIR VOLUME UNIT (W/ HOT WATER COIL) SCHEDULE

VAV X

PLAN NO	MANUFACTURER MODEL	TYPE	BOX SIZE	COOLING CFM	MIN CFM	HOT WATER COIL HEATING (MBH)	HOT WATER COIL NO. OF ROWS	HOT WATER COIL EAT °F	HOT WATER COIL LAT °F	HOT WATER COIL APd (IN WC)	HOT WATER COIL EWT/LWT °F	HOT WATER COIL WPd (FT WG)	HOT WATER COIL GPM	CONTROLS	REMARKS
VAV 1-1	TITUS DESV	SINGLE DUCT	6	200	100	10.1	2	55	115.8	0.07	180 / 160	0.14	1	DDC	SEE NOTES
VAV 1-2	TITUS DESV	SINGLE DUCT	12	810	405	37.7	2	55	110.7	0.13	180 / 160	1.01	3.7	DDC	SEE NOTES
VAV 1-3	TITUS DESV	SINGLE DUCT	8	410	205	18.5	2	55	109	0.13	180 / 160	0.48	1.8	DDC	SEE NOTES
VAV 1-4	TITUS DESV	SINGLE DUCT	14	980	490	49	2	55	114.9	0.1	180 / 160	0.95	4.8	DDC	SEE NOTES

NOTES:
1. PROVIDE REMOTE ROOM SENSORS.
2. PROVIDE INDIVIDUAL CONTROL SYSTEMS FOR EACH.
3. PROVIDE NETWORK CONTROL PANELS WHERE INDICATED ON DRAWINGS.
4. PROVIDE A 120V JUNCTION BOX AND DISCONNECT IN CLOSE PROXIMITY TO THE ASSOCIATED CONTROL PANEL AND EACH VAV TERMINAL.
5. PROVIDE ALL CONTROL WIRING BETWEEN CONTROL PANEL AND DAMPERS, SENSORS, ETC., IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES, PROVIDE 120V/24V CONTROL TRANSFORMER SERVING EACH VAV TERMINAL.
6. PROVIDE AUTOMATIC HEATING/COOLING CHANGE OVER FOR ALL VAV TERMINALS.
7. PROVIDE 1/2" LINER WITH FOIL COVER.

CONDENSATE PUMP SCHEDULE

CP X

PLAN NO	EQUIPMENT SERVED	MANUFACTURER MODEL	GPH	HEAD FT	SHUT OFF HEAD FT	MOTOR	ELECTRICAL DATA VOLTS/Ø	ELECTRICAL DATA FLA	ELECTRICAL DATA MOP	REMARKS
CP-FCU	SEE PLAN	LITTLE GIANT VCCA-20-P	10	18	20	1/30	115/1	1.5	15	SEE NOTES

NOTES:
1. PROVIDE BUILT-IN CHECK VALVE.
2. PROVIDE DRAIN PAN WITH UL #508 APPROVED WATER DETECTION SENSOR FOR UNIT SHUTDOWN. WIRE CONTROL CIRCUIT THROUGH NC CONTACT.
3. PROVIDE SAFETY SWITCH AND CONNECT TO ASSOCIATED MECHANICAL EQUIPMENT TO SHUTDOWN ON HIGH LEVEL.
4. PROVIDE HARD WIRED FOR ALL UNITS.
5. ALL PUMP SHALL BE UL 2043 AND LABLED "FOR PLENUM APPLICATION".

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FIN-TUBE RADIATION SCHEDULE - ALTERNATE BID

FTR X

PLAN NO	MANUFACTURER MODEL	BTU/HR PER LF	AVG WATER TEMP	HEATING ELEMENT TUBE	HEATING ELEMENT FINS PER FT	HEATING ELEMENT ACTIVE LENGTH	HEATING ELEMENT ROWS	REMARKS
FTR-A	JVB-S-20	1130	140	3/4	50	SEE PLANS	2	SEE NOTES BELOW

NOTES:
1. PROVIDE DOUBLE SIDED TRIM PIECES AND CORNER PIECES FOR CONTINUOUS LOOK AND WALL MOUNTING KIT.
2. PROVIDE TOP SUPPLY AND RETURN TO WALL LOUVERED INLET FOR ALL RADIATORS.
3. MANUFACTURER TO PROVIDE RETURN PIPE HANGERS.
4. COLOR TO BE SELECTED FROM STANDARD OR OPTIONAL COLOR CHART BY ARCHITECT.
5. INTEGRATE INTO BMS WITH 2-WAY CONTROL VALVE. CONTROLS BY ATC.
6. CONTRACTOR TO FIELD MEASURE PER MANUFACTURER'S RECOMMENDATIONS PRIOR TO ORDERING.
7. SEE FLOOR PLAN FOR PIPING CONNECTION LOCATION.
8. PROVIDE WITH DDC BACNET CONTROLS FOR INTERFACE WITH HONEYWELL COMFORTPOINT NIAGARA 4 BMS CONTROL SYSTEM. PROVIDE CONTROLLABILITY OF ALL MECHANICAL EQUIPMENT WITH ASSOCIATED GRAPHICS AND PROVIDE SECURE REMOTE WEB ACCESS FOR SET POINTS AND SCHEDULING ADJUSTMENT FOR OCCUPIED AND UNOCCUPIED MODES OF HEATING AND COOLING SET POINTS.

OUTSIDE AIR INTAKE HOOD SCHEDULE

OAI X

PLAN NO	MANUFACTURER MODEL	LOCATION	MAX CFM	AREA SF	VELOCITY	AIR PRESS DROP	SERVICE	REMARKS
OAI-1	GREENHECK GRSI-8	ROOF	130	-	351	0.021	INTAKE	SEE NOTES

NOTES:
1. PROVIDE MINIMUM 18" HIGH CURB WITH INTERNAL MOTORIZED DAMPER AND INSECT SCREEN.

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William D. Hopkins
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Princeton Public Schools

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085402

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5516D

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Checked By
MV

Drawn By
VA

Scale
AS NOTED

Drawing Name
MECHANICAL SCHEDULES

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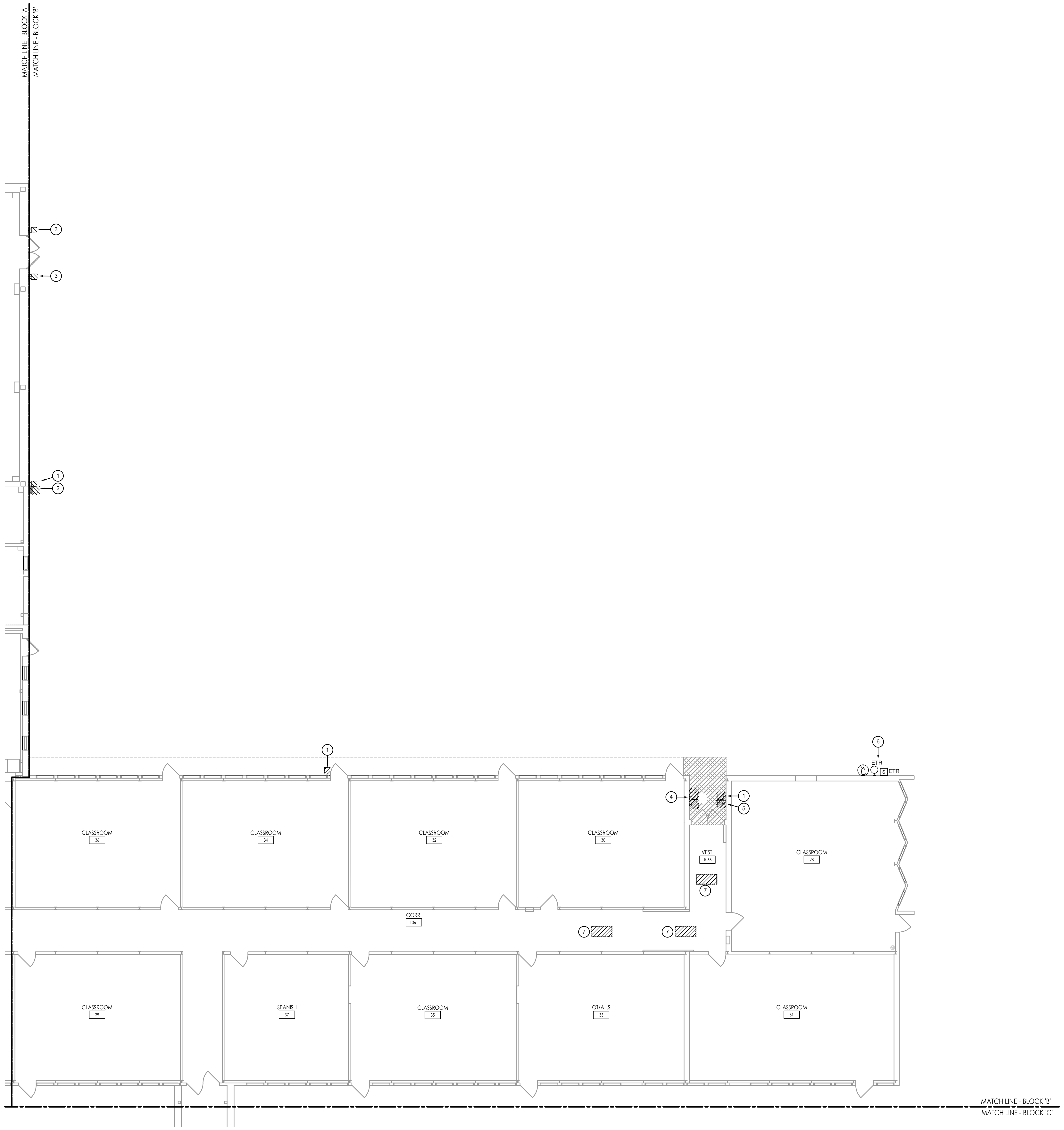


DEMOLITION PLAN - BLOCK B - ALTERNATE BID

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

1

SHEET NOTES

1. ALL EXISTING WIRING DEVICES AND LIGHTING FIXTURES SHALL BE EXISTING TO REMAIN UNLESS SHOWN FOR DEMOLITION OR INDICATED TO BE RELOCATED ON THE THIS DRAWING AND ARCHITECTURAL DRAWINGS. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR FULL EXTENT OF DEMOLITION AREAS.
2. REFER TO NEW WORK PLANS FOR NEW LOCATIONS OF RELOCATED WIRING DEVICES, LIGHTING FIXTURES, COMMUNICATIONS DEVICES AND FIRE ALARM DEVICES, ETC.
3. MAINTAIN CONTINUITY OF ALL BRANCH CIRCUITS TO EXISTING WIRING DEVICES AND LIGHTING TO REMAIN.
4. MAINTAIN CONTINUITY OF ALL FIRE ALARM CIRCUITS AND TEMPORARILY SUPPORT SMOKE DETECTORS FROM STRUCTURAL CEILING DURING DEMOLITION FOR REINSTALLATION TO CEILINGS AS REQUIRED.
5. DISCONNECT AND REMOVE ALL DEVICES IN WALLS INDICATED FOR DEMOLITION BACK TO SOURCE OR LAST DEVICE TO REMAIN. REFER TO ARCHITECTURAL DEMOLITION PLANS FOR FULL EXTENT OF DEMOLITION AREAS.
6. TURN OVER ALL SECURITY SYSTEM DEVICES, MOTION SENSORS, CARD READERS, PROJECTORS, SPECIALTY SPEAKERS, ETC. TO THE OWNER AFTER DEMOLITION UNLESS SPECIFICALLY DIRECTED TO BE DISCARDED BY THE OWNER.

DEMOLITION KEY NOTES

① EXISTING EXTERIOR LIGHTING FIXTURE TO BE DISCONNECTED AND REMOVED BACK TO SOURCE OR LAST LIGHTING FIXTURE TO REMAIN.

② EXISTING EXTERIOR WALL MOUNTED WATER COOLER TO BE REMOVED. DISCONNECT AND REMOVE POWER WIRING AND CONDUIT BACK TO SOURCE OR LAST DEVICE TO REMAIN.

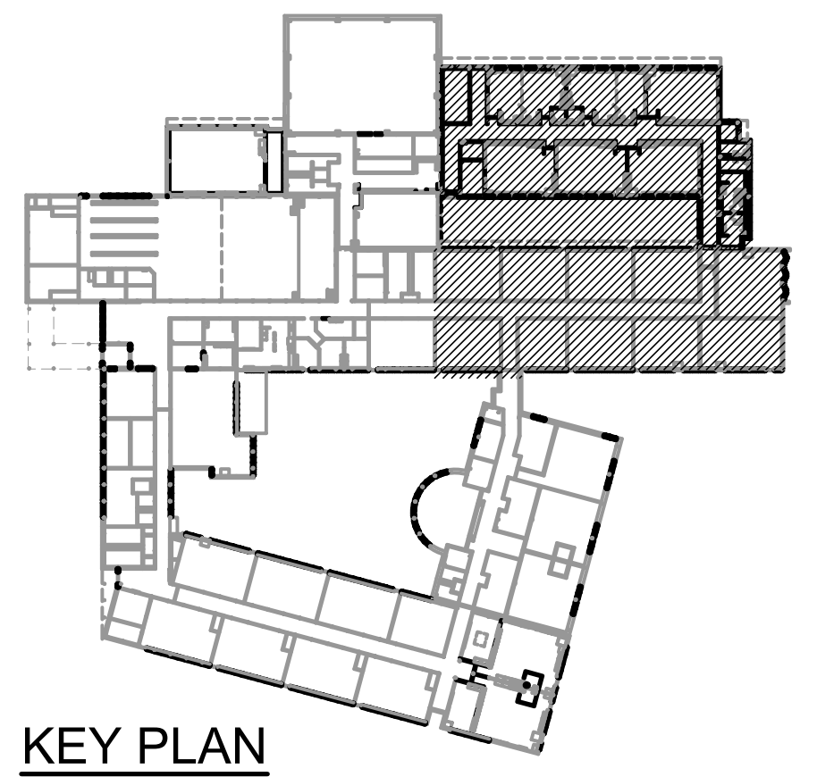
③ EXISTING EXTERIOR LIGHTING FIXTURE TO BE DISCONNECTED, REMOVED, AND REPLACED WITH NEW LIGHTING FIXTURE. REFER TO LIGHTING PLAN FOR NEW FIXTURES.

④ EXISTING EXTERIOR LIGHTING FIXTURE, JUNCTION BOX AND SWITCH TO BE DISCONNECTED, REMOVED, AND REPLACED WITH NEW LIGHTING FIXTURE. REFER TO LIGHTING PLAN FOR NEW FIXTURES.

⑤ EXISTING CARD READER TO BE DISCONNECTED AND REMOVED BACK TO SOURCE OR LAST DEVICE TO REMAIN.

⑥ EXISTING CCTV CAMERA AND SPEAKER TO REMAIN. DISCONNECT, REMOVE AND RELOCATE AS REQUIRED TO ACCOMMODATE THE NEW ADDITION CONSTRUCTION.

⑦ EXISTING CORRIDOR LIGHTING FIXTURE TO BE DISCONNECTED, REMOVED AND REPLACED WITH NEW. COIL WIRING FOR CONNECTION TO NEW FIXTURES. REFER TO LIGHTING PLAN.



KEY PLAN

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William D. Hopkins
Architect

2/12/26
Date

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ELECTRICAL DEMOLITON PLAN - BLOCK B (ALTERNATE BID)

1

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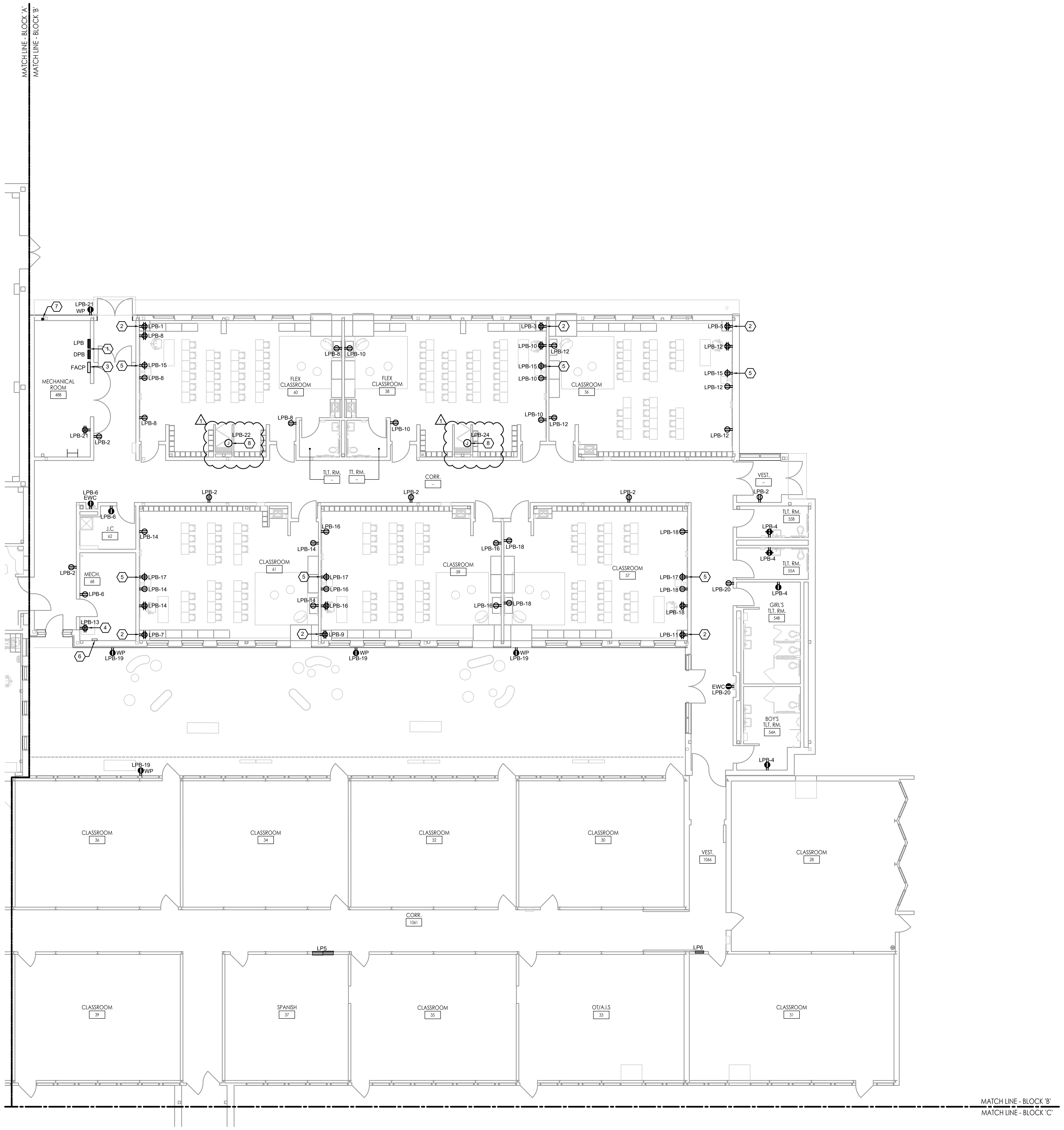


POWER PLAN - BLOCK B ALTERNATE BID

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

1

SHEET NOTES

1. COORDINATE ALL WIRING DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH THE ARCHITECT PRIOR TO ROUGH-IN. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.
2. CONTRACTOR SHALL CAREFULLY COORDINATE ALL ELECTRICAL EQUIPMENT LOCATIONS AND CLEARANCES. PANEL AND EQUIPMENT SIZES SHOWN ON THE PLANS ARE BASED ON SQUARE D.
3. CIRCUIT ELECTRONIC TRAP PRIMERS TO THE NEAREST RECEPTACLE CIRCUIT SERVING THE AREA LOCATED - 2#12 & 1#12EG IN 3/4"C. REFER TO PLUMBING PLANS FOR EXACT LOCATIONS.
4. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR ADDITIONAL INFORMATION.
5. UNLESS SHOWN ON THIS PLAN AS NEW OR RELOCATED, ALL EXISTING WIRING DEVICES SHALL REMAIN.
6. "ETR" DESIGNATES SPECIFIC EXISTING EQUIPMENT OR DEVICES TO REMAIN.
7. ALL EXTERIOR RECEPTACLES SHALL BE TAMPER RESISTANT GFCI TYPE WITH CAST ALUMINUM IN-USE LOCKABLE COVER.

KEY NOTES

1 NEW BLOCK B ADDITION POWER AND LIGHTING PANEL LPB AND DISTRIBUTION / MECHANICAL PANEL DPB.

2 QUAD OUTLET FOR CLASSROOM AUDIO CABINET. FIELD VERIFY EXACT MOUNTING HEIGHT AND LOCATION.

3 NEW FIRE ALARM EXPANDER PANEL.

4 NEW IDF RACK (BY OTHERS) AND QUAD RECEPTACLES.

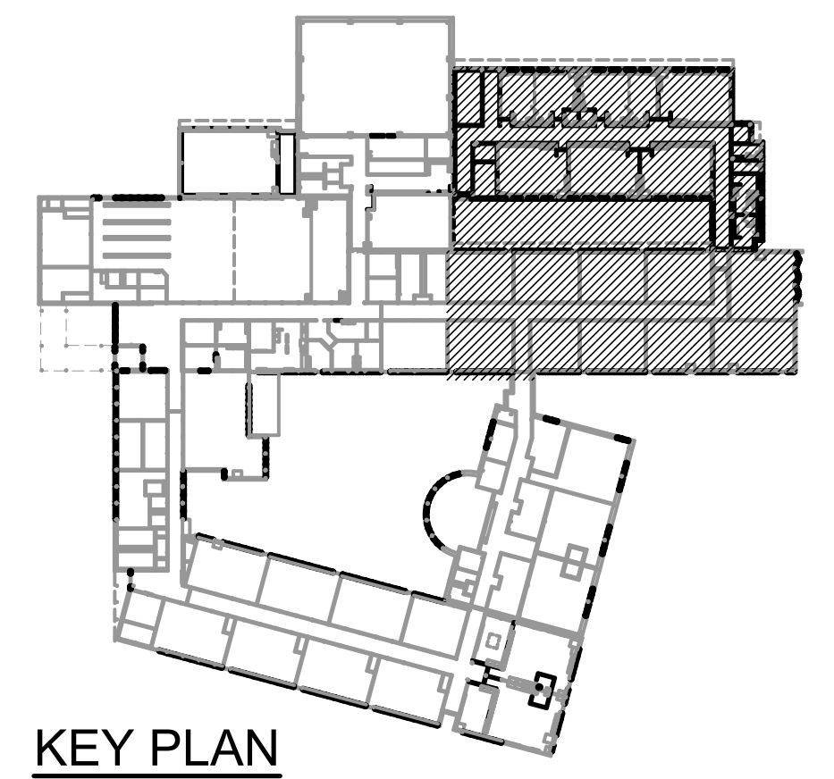
5 PROJECTOR RECEPTACLE. FIELD VERIFY MOUNTING HEIGHT WITH PROJECTOR MANUFACTURER'S INSTALLATION INSTRUCTIONS.

6 IDF MASTER GROUND BUS. SEE DETAIL SHEET.

7 FOUNDATION / UFER GROUNDING ELECTRODE CONDUCTOR LOCATION.

1

8 JUNCTION BOX AND POWER WIRING FOR OPERABLE MOTORIZED PARTITION. PROVIDE ALL REQUIRED DEVICES, WIRING AND CONDUIT AND INSTALL PER THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. FIELD VERIFY EXACT LOCATIONS OF DEVICES.



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William D. Hopkins 2/12/26
Architect Date

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Drawing Name
ELECTRICAL POWER PLAN - BLOCK B (ALTERNATE BID)
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SHEET NOTES

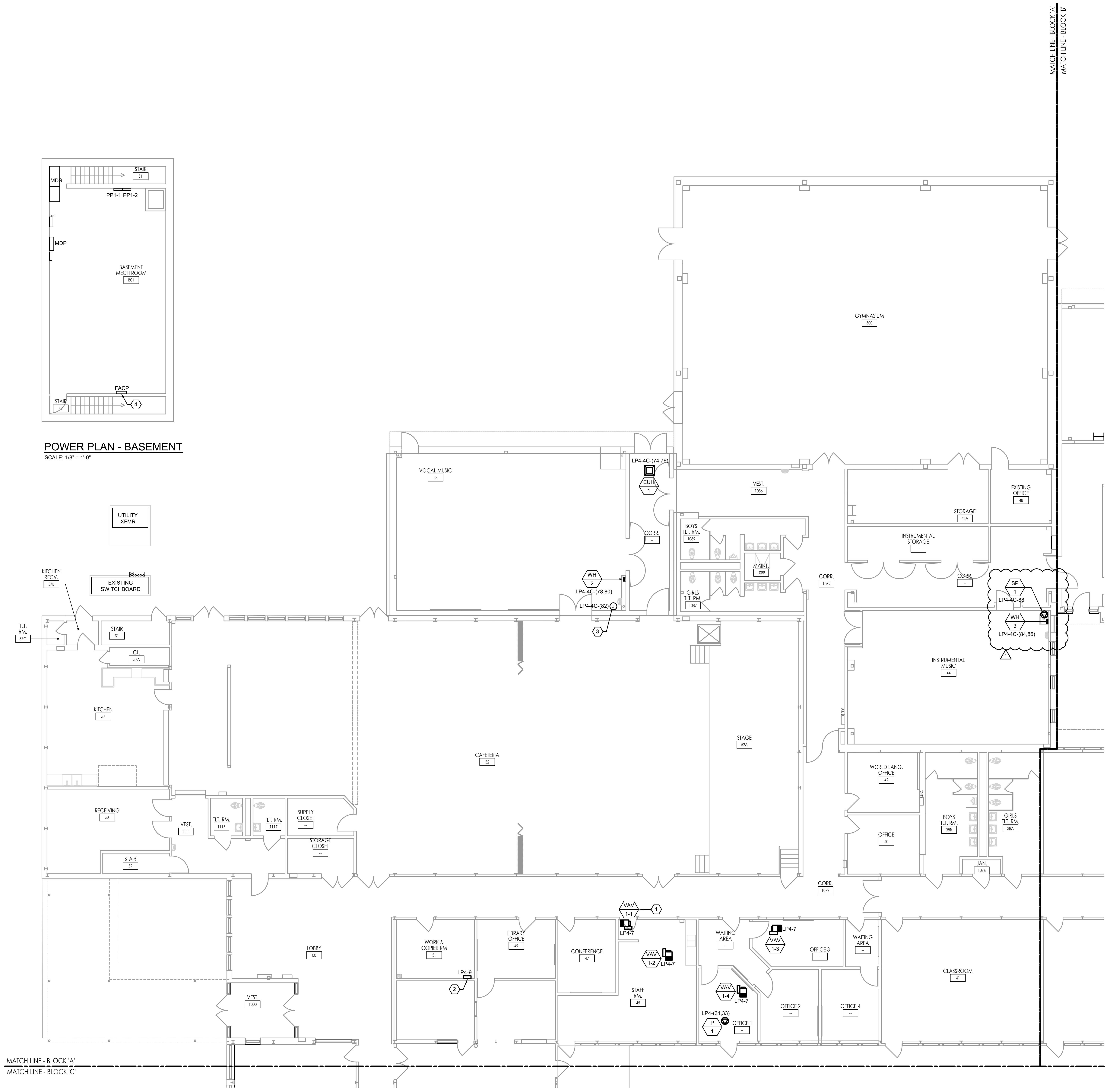
1. REFER TO LOW VOLTAGE & FIRE ALARM PLANS, AND FIRE ALARM RISER DIAGRAM FOR ADDITIONAL DUCT SMOKE DETECTOR INFORMATION.
2. FOR ADDITIONAL SCOPE OF WORK RELATED TO THE BUILDING MANAGEMENT SYSTEM AND HVAC CONTROLS, PLEASE REFER TO SPECIFICATION SECTION 230900 - INSTRUMENTATION AND CONTROL FOR HVAC EQUIPMENT
3. REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT EQUIPMENT LOCATIONS.
4. REFER TO POWER PLANS FOR LOCATIONS OF PANELBOARDS.

KEY NOTES

1 MECHANICAL EQUIPMENT TAG. REFER TO MECHANICAL EQUIPMENT COORDINATION SCHEDULE FOR LOCAL POWER DISCONNECT INFORMATION AND PANEL SCHEDULES FOR CIRCUIT, WIRE AND CONDUIT SIZES. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS. (TYPICAL).

2 ATC PANEL LOCATION. COORDINATE EXACT LOCATION WITH THE MECHANICAL CONTRACTOR

3 JUNCTION BOX AND POWER WIRING FOR FUTURE RADON VENT FAN. REFER TO DETAILS ON ARCHITECTURAL PLANS.

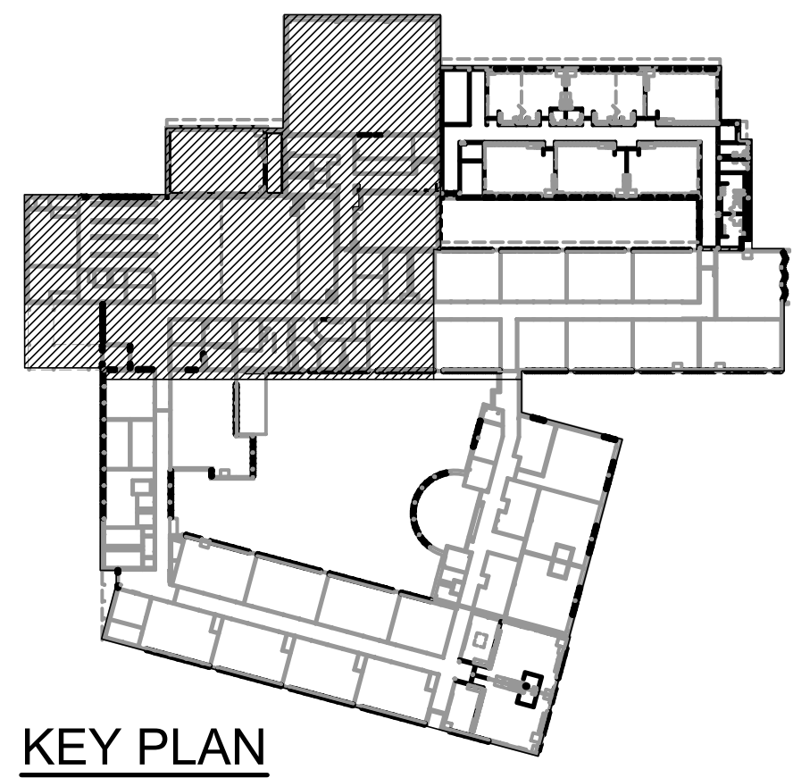


POWER PLAN - BASEMENT

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

HVAC POWER PLAN - BLOCK A

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



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Drawing Name
ELECTRICAL HVAC POWER PLAN - BLOCK A

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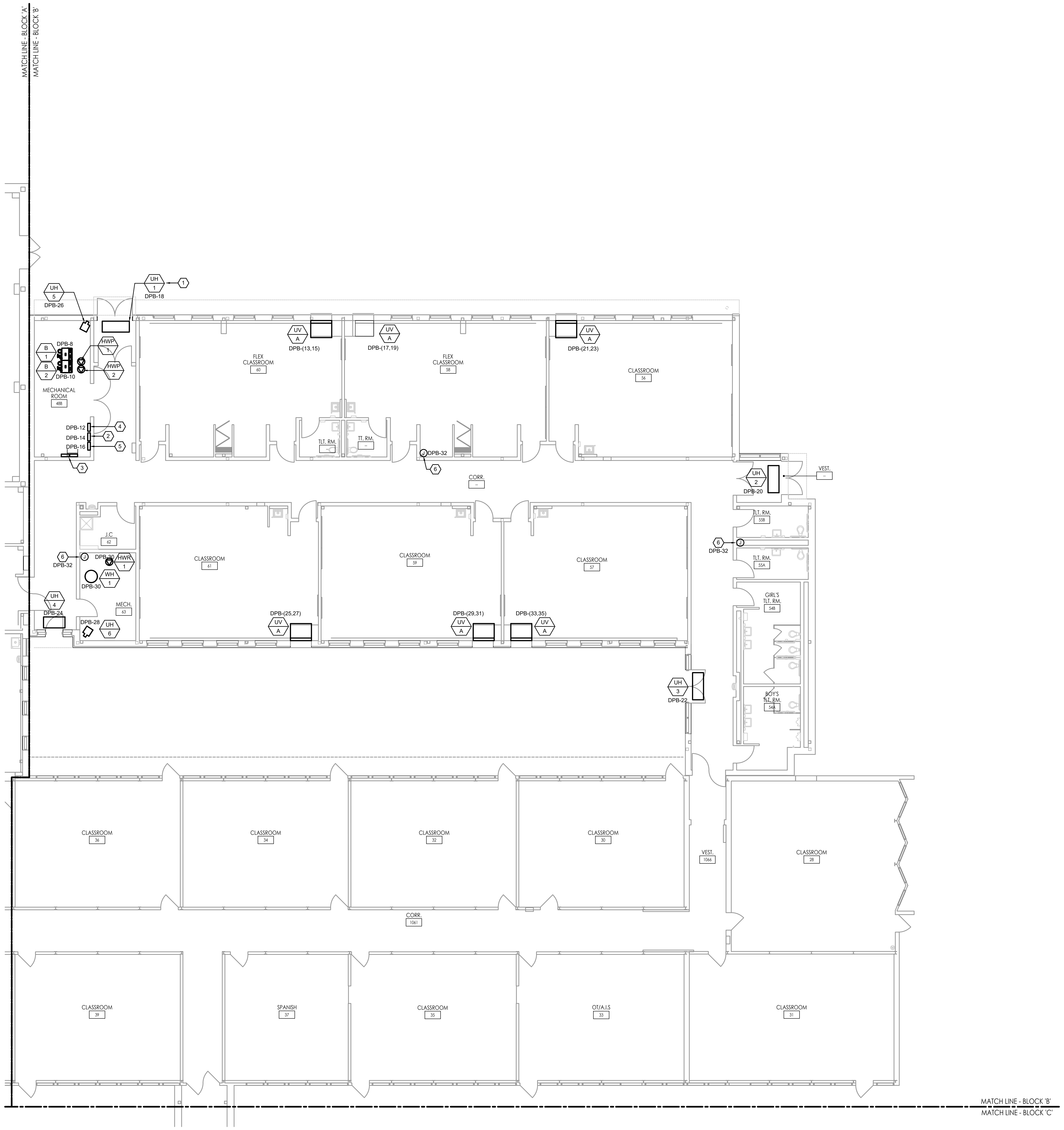


HVAC POWER PLAN - BLOCK B ALTERNATE BID

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

△1

SHEET NOTES

1. REFER TO LOW VOLTAGE & FIRE ALARM PLANS, AND FIRE ALARM RISER DIAGRAM FOR ADDITIONAL DUCT SMOKE DETECTOR INFORMATION.
2. FOR ADDITIONAL SCOPE OF WORK RELATED TO THE BUILDING MANAGEMENT SYSTEM AND HVAC CONTROLS, PLEASE REFER TO SPECIFICATION SECTION 230900 - INSTRUMENTATION AND CONTROL FOR HVAC EQUIPMENT
3. REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT EQUIPMENT LOCATIONS.
4. REFER TO POWER PLANS FOR LOCATIONS OF PANELBOARDS.

KEY NOTES

⟨1⟩ MECHANICAL EQUIPMENT TAG. REFER TO MECHANICAL EQUIPMENT COORDINATION SCHEDULE FOR LOCAL POWER DISCONNECT INFORMATION AND PANEL SCHEDULES FOR CIRCUIT, WIRE AND CONDUIT SIZES. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS. (TYPICAL).

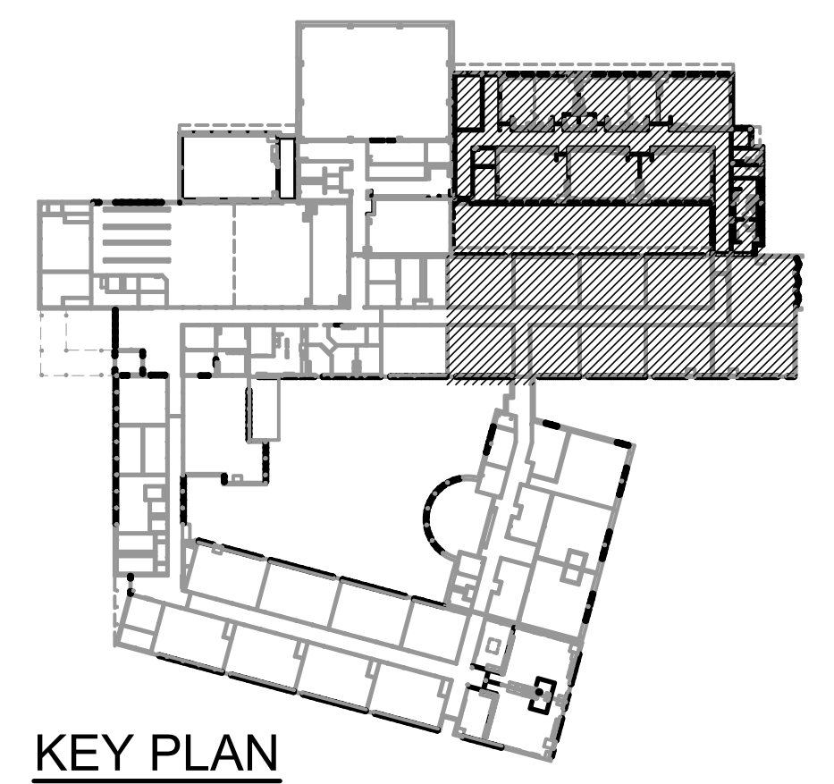
⟨2⟩ ATC PANEL LOCATION. COORDINATE EXACT LOCATION WITH THE MECHANICAL CONTRACTOR

⟨3⟩ WALL MOUNTED REMOTE VFD'S FOR HOT WATER PUMPS. COORDINATE WITH MECHANICAL CONTRACTOR.

⟨4⟩ GAS DETECTION PANEL LOCATION.

⟨5⟩ BOILER CONTROL PANEL LOCATION.

⟨6⟩ JUNCTION BOX AND POWER WIRING FOR FUTURE RADON VENT FAN. REFER TO DETAILS ON ARCHITECTURAL PLANS.



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ELECTRICAL HVAC POWER PLAN - BLOCK B (ALTERNATE BID)
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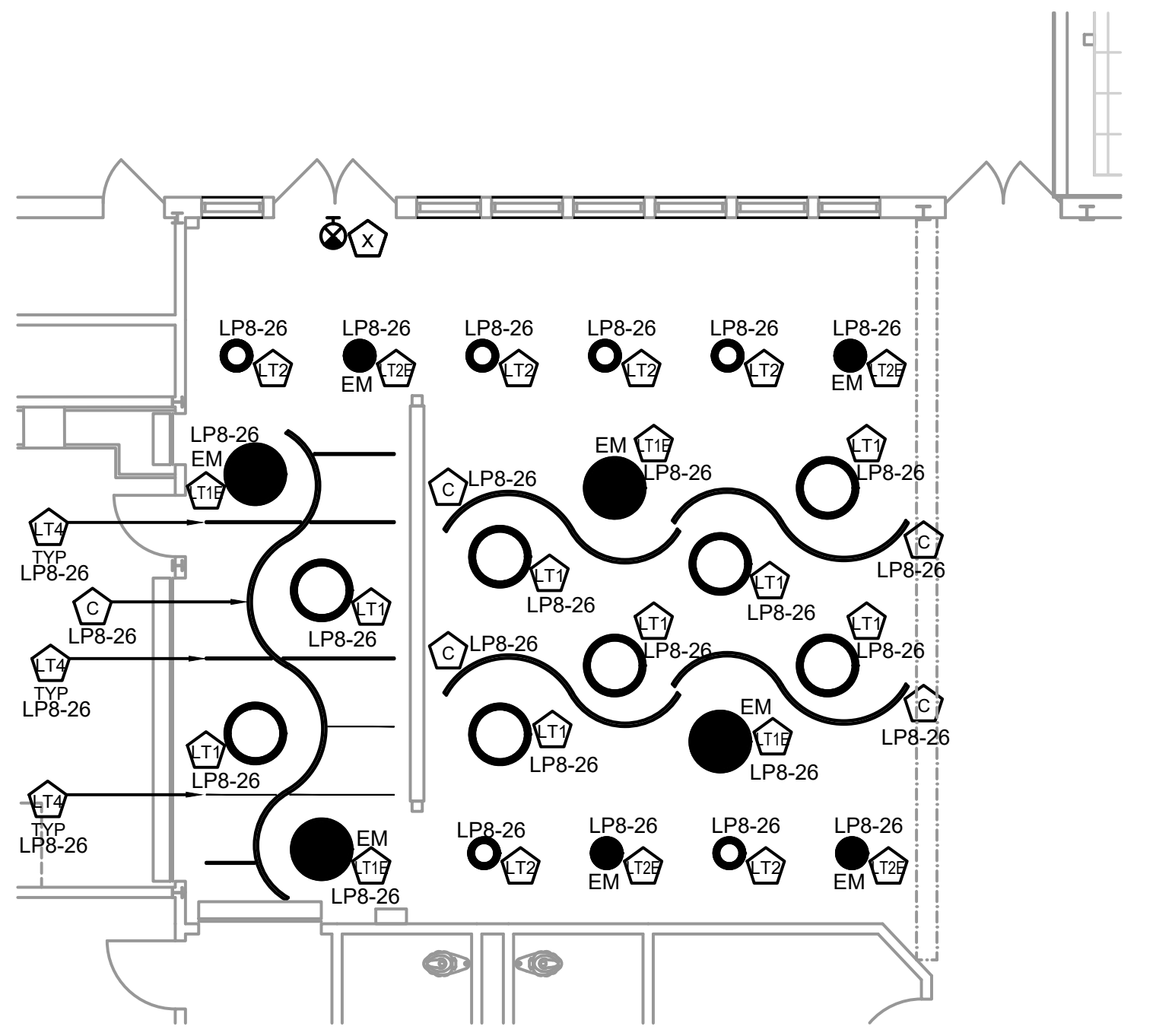
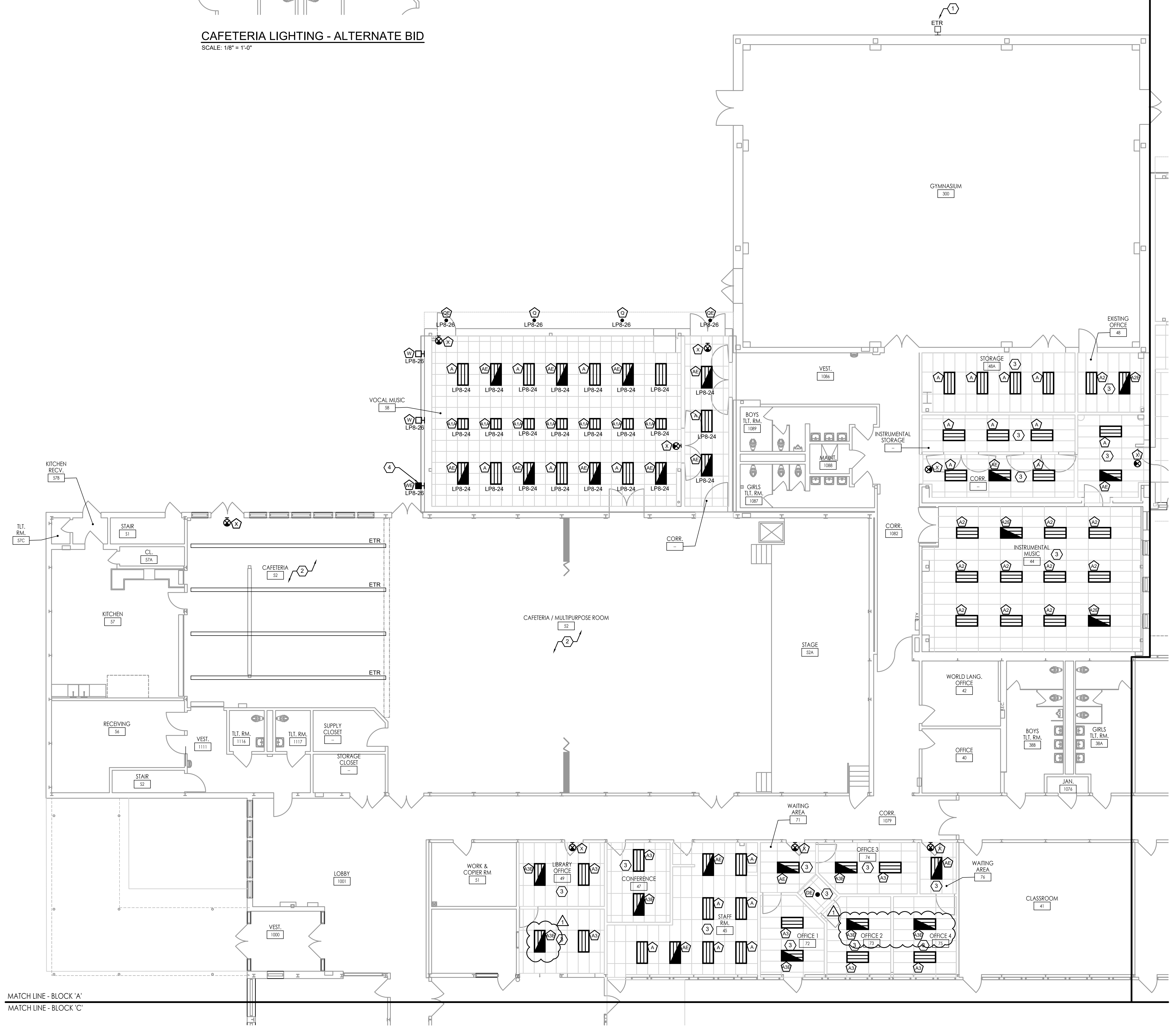


CAFETERIA LIGHTING - ALTERNATE BID

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



LIGHTING PLAN - BLOCK A

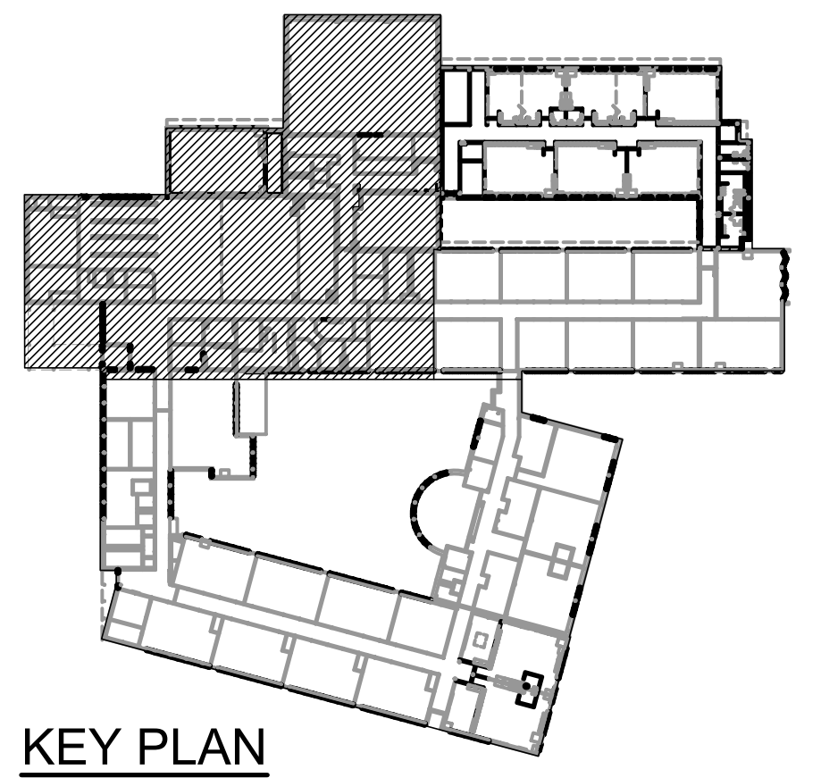
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. COORDINATE ALL LIGHTING FIXTURE AND WIRING DEVICE LOCATIONS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL COORDINATE ALL LIGHTING LOCATIONS, MOUNTING HEIGHTS AND SWITCHING LOCATIONS WITH THE ARCHITECTURAL PLANS PRIOR TO ROUGH-IN. REFER TO LIGHTING CONTROLS DRAWINGS.
3. ALL EXIT, UNIT EMERGENCY LIGHTING AND FIXTURE EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO THE LINE SIDE OF THE CIRCUIT SERVING AREA LOCATED AND AHEAD OF ANY SWITCHING OR LIGHTING CONTROL.
4. UNLESS SHOWN ON THIS PLAN AS NEW, ALL OTHER LIGHTING SHALL BE EXISTING TO REMAIN.

KEY NOTES

1. EXISTING EXTERIOR WALL PACK TO REMAIN.
2. EXISTIG CAFETERIA LIGHTING THIS AREA TO REMAIN.
3. CIRCUIT NEW LIGHTING THIS ROOM TO THE EXISTING LIGHTING CIRCUIT SERVING THIS AREA - 3#12 MC.
4. MOUNT WALL PACK FIXTURES 13'-0" TO BOTTOM OF FIXTURE ON VOCAL MUSIC ADDITION.



KEY PLAN

NOT TO SCALE

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FVHD architects planners
Fraytak Veisz Hopkins Duthie PC

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STEPHEN W. SCHREYER JR., AIA, LEED AP BD+C
NJ - 21AI02003100 | PA - RA410435

William D. Hopkins
Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
JDMP

Scale
AS NOTED

Drawing Name
ELECTRICAL LIGHTING PLAN - BLOCK A

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

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Drawing Number
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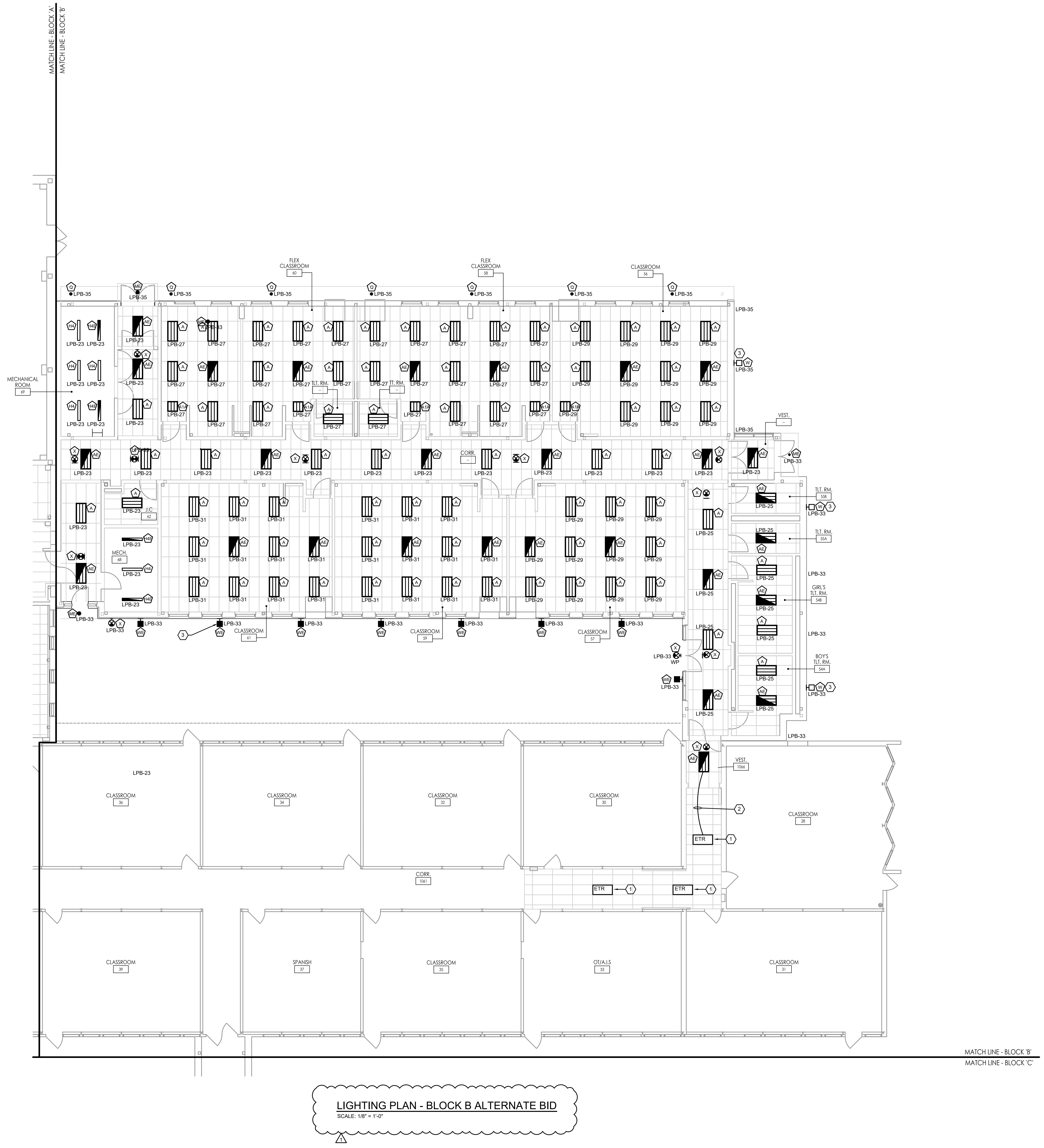


LIGHTING PLAN - BLOCK B ALTERNATE BID

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

△1

SHEET NOTES

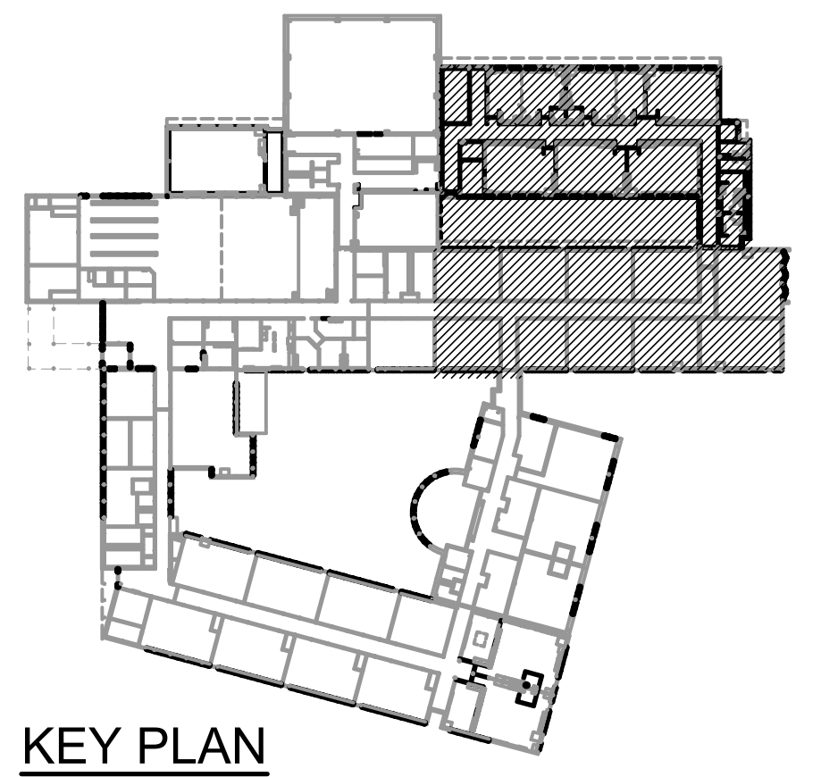
1. COORDINATE ALL LIGHTING FIXTURE AND WIRING DEVICE LOCATIONS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL COORDINATE ALL LIGHTING LOCATIONS, MOUNTING HEIGHTS AND SWITCHING LOCATIONS WITH THE ARCHITECTURAL PLANS PRIOR TO ROUGH-IN. REFER TO LIGHTING CONTROLS DRAWINGS.
3. ALL EXIT, UNIT EMERGENCY LIGHTING AND FIXTURE EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO THE LINE SIDE OF THE CIRCUIT SERVING AREA LOCATED AND AHEAD OF ANY SWITCHING OR LIGHTING CONTROL.
4. UNLESS SHOWN ON THIS PLAN AS NEW, ALL OTHER LIGHTING SHALL BE EXISTING TO REMAIN.

KEY NOTES

⟨1⟩ EXISTING LIGHTING FIXTURE TO BE RELOCATED TO NEW CEILING GRID. EXTEND EXISTING BRANCH CIRCUIT WIRING AS REQUIRED FOR A COMPLETE AND OPERATIONAL RELOCAITON. EXISTING CONTROLS TO REMAIN.

⟨2⟩ NEW LIGHTING FIXTURE TO BE CIRCUITED TO EXISTING CORRIDOR LIGHTING CIRCUIT AND CONTROLS - 3#12 MC.

⟨3⟩ MOUNT WALL PACK FIXTURES 12'- 4" TO BOTTOM OF FIXTURE ON NEW CLASSROOM ADDITION. (TYPICAL).



KEY PLAN
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NJ - 21AI02003100 | PA - RA410435

William D. Hopkins
Architect
2/12/26
Date

Project Name	Addition and Renovations to Littlebrook Elementary School
Project Owner Name	Princeton Public Schools
Project Location	39 Magnolia Ln, Princeton, NJ 085402
Project Number	5516D
Project Date	10.10.2025
Checked By	AHG
Drawn By	AMP
Scale	AS NOTED
Drawing Name	ELECTRICAL LIGHTING PLAN - BLOCK B (ALTERNATE BID) △1

Revisions

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	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

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Drawing Number

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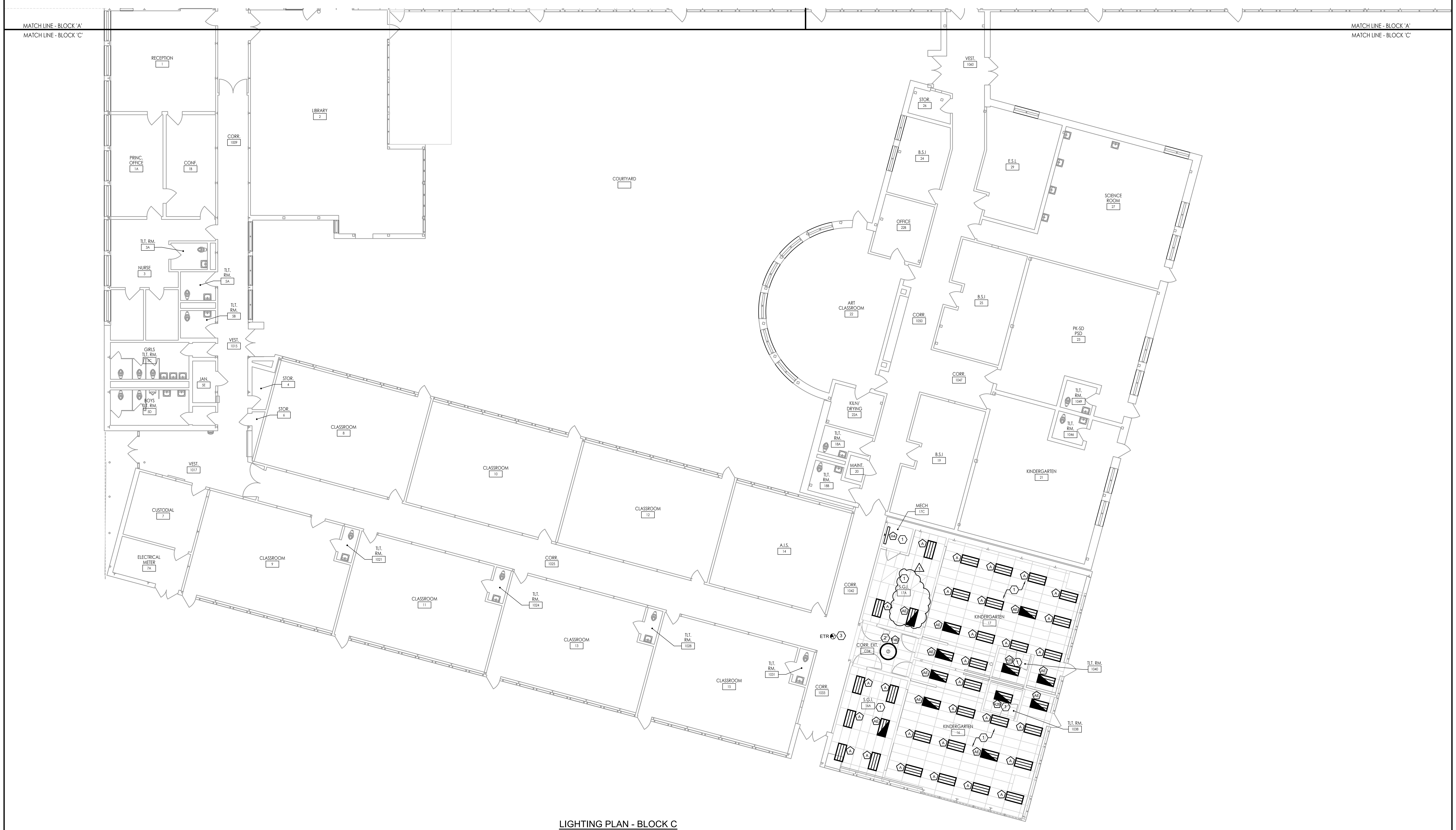


LIGHTING PLAN - BLOCK C

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

SHEET NOTES

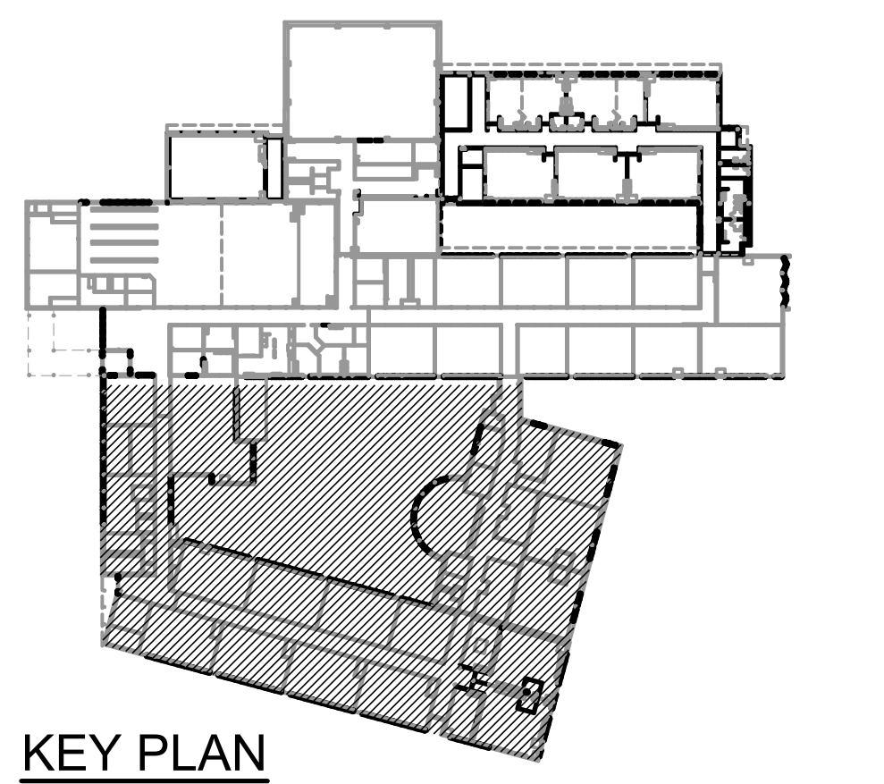
1. COORDINATE ALL LIGHTING FIXTURE AND WIRING DEVICE LOCATIONS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL COORDINATE ALL LIGHTING LOCATIONS, MOUNTING HEIGHTS AND SWITCHING LOCATIONS WITH THE ARCHITECTURAL PLANS PRIOR TO ROUGH-IN. REFER TO LIGHTING CONTROLS DRAWINGS.
3. ALL EXIT, UNIT EMERGENCY LIGHTING AND FIXTURE EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO THE LINE SIDE OF THE CIRCUIT SERVING AREA LOCATED AND AHEAD OF ANY SWITCHING OR LIGHTING CONTROL.
4. UNLESS SHOWN ON THIS PLAN AS NEW, ALL OTHER LIGHTING SHALL BE EXISTING TO REMAIN.

KEY NOTES

⟨1⟩ CIRCUIT NEW LIGHTING THIS ROOM TO THE EXISTING LIGHTING CIRCUIT SERVING THIS AREA - 3#12 MC.

⟨2⟩ CIRCUIT NEW CORRIDOR EXTENSION LIGHTING TO THE EXISTING CORRIDOR LIGHTING CIRCUIT - 3#12 MC.

⟨3⟩ EXISTING EXIT SIGN TO REMAIN.



KEY PLAN

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William D. Hopkins
Architect

2/12/26
Date

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Princeton Public Schools

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085402

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Project Date
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AHG

Drawn By
JDMP

Scale
AS NOTED

Drawing Name
ELECTRICAL LIGHTING PLAN - BLOCK C

Revisions

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1	03.24.26	ADDENDUM NO.2

Drawing Number
E5.2

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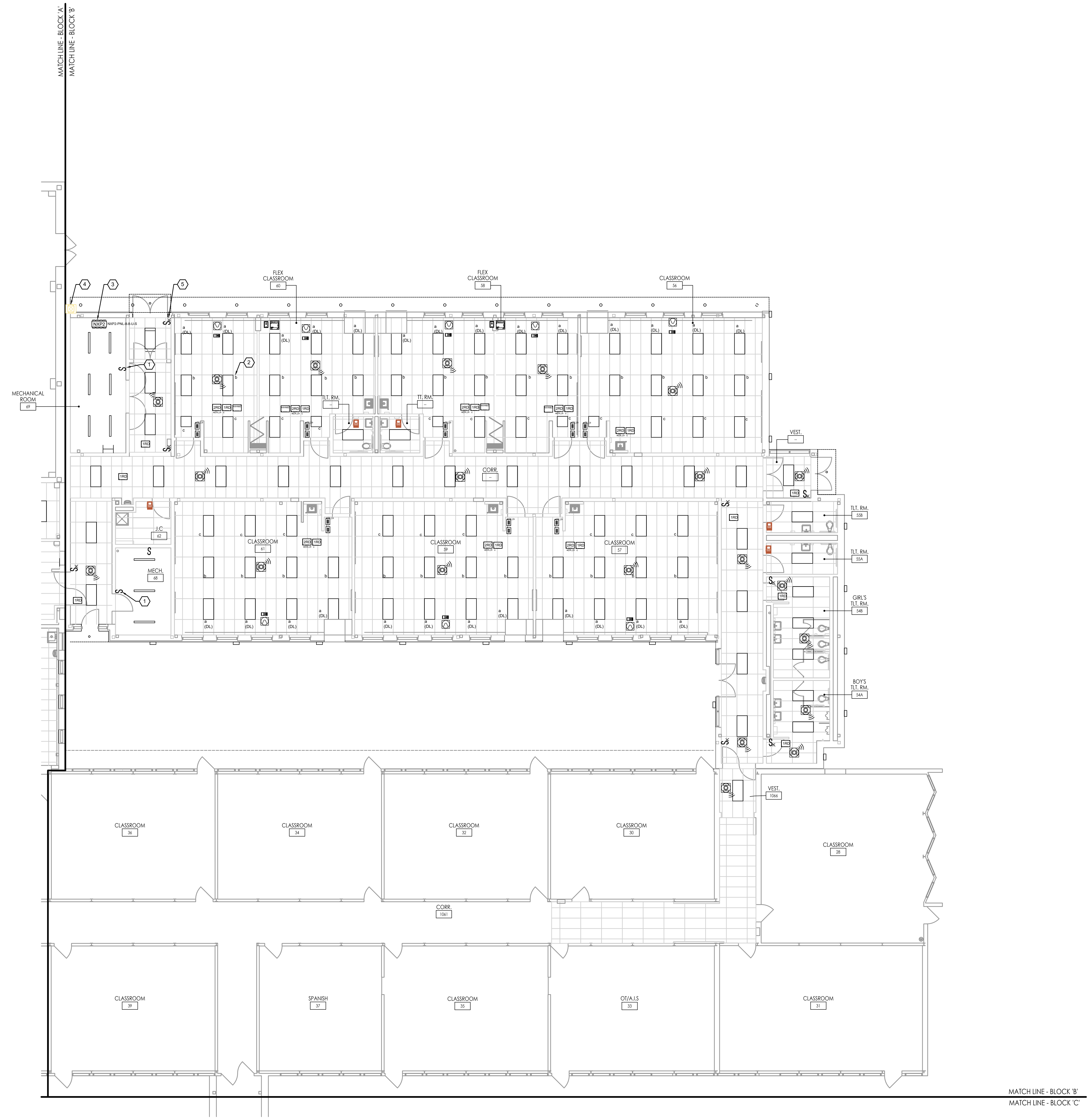


LIGHTING CONTROLS PLAN - BLOCK B ALTERNATE BID

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

1

Controls Legend

NXHNB2 S1.P1.B01
POE SWITCH ID
POE PORT ID
BRIDGE ID

*Bridge module example reference.

LV	* LV connection line is low voltage 18-22 AWG
CAT5	* CAT5 connection line is CAT5 cable for SP protocol
NX Network	* NX Network connection line is powered CAT5 network cable
FX BUS	* FX Bus connection line is CAT5 cable for FX protocol
LNV	* LNV connection line represents line voltage
LV-LNV	* LV-LNV connection represents line and low voltage

*Connection line types are for reference only and may not be shown on drawings.

(1) DLCPCO
PHOTOCELL SENSOR, OUTDOOR, WHITE

(2) LHRMTS1-G-WH
LIGHTHAWK MULTI-TECHNOLOGY WALL SWITCH SENSOR WITH INTELLIDAPT, SINGLE CIRCUIT, ONE BUTTON, 120/277VAC, 1000 SQ. FT., PHOTOCELL

NXP2 (1) NX PANEL=NXP2-PNL-8-8-U-S
NXP2 SERIES LIGHTING CONTROL PANEL

NXCI (2) NXCI
NX SMART PORT CONTACT INTEFACE MODULE

(10) NXDS
NX DAYLIGHT SENSOR

NXHNB2 (4) NXHNB2
NX HUBNET NETWORK BRIDGE MODULE

1RD (36) NXRCFX2-1RD-UNV
NX ROOM CONTROLLER, FX, 1 RELAY, 0 - 10V DIMMING, POWER MONITORING, UNIVERSAL VOLTAGE

2RD (15) NXRCFX2-2RD-UNV
NX ROOM CONTROLLER, FX, 2 RELAY, 0 - 10V DIMMING, POWER MONITORING, UNIVERSAL VOLTAGE

(49) NXSMDT-OMNI
NX SENSOR MODULE, DUAL TECH, 360° LENS, WHITE

(1) NXSW2-4-WH
NX DIGITAL SMART SWTICH, FOUR BUTTON, MOMENTARY, PILOT

(18) NXSW2-6-WH
NX DIGITAL SMART SWTICH, SIX BUTTON, MOMENTARY, PILOT

(12) NXSW2-OO-WH
NX DIGITAL SPECIALTY ON/OFF SWITCH

(29) NXSW2-ORLO-WH
NX DIGITAL SPECIALTY ON/RAISE/LOWER/OFF SWITCH

(2) NXWPS
NX WALL PARTITION SENSOR

(10) RJ45ADAPTER
RJ45 ADAPTER FOR OCCUPANCY AND DAYLIGHT SENSORS

NOTES:

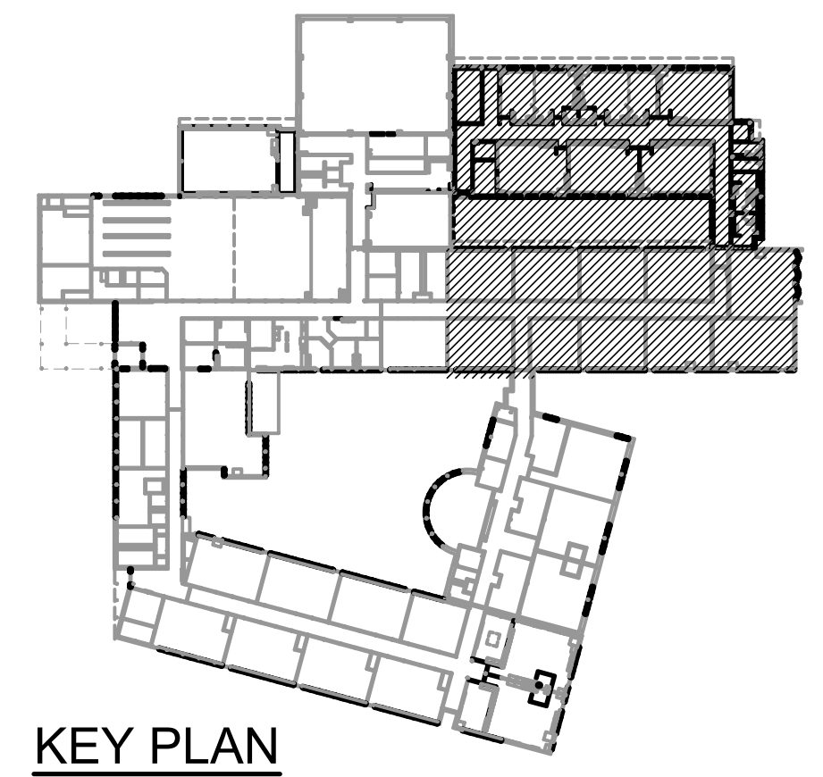
1. All device locations are approximate, refer to manufacturers installation instructions prior to installation.
2. Occupancy sensors utilizing ultrasonic technology must be located a minimum of four to six feet from HVAC supply and return vents.
3. 360 degree Occupancy sensors utilizing ultrasonic technology must be located a minimum of two feet from the wall.
4. Sensors mounted over a door must be placed one foot inside the threshold.
5. All switches are displayed as White. Please refer to your Bill of Material for correct color on each project.
6. By default line voltage wall switch occupancy sensors are selected as Ground leakage devices. If installation requires Neutral connection, please refer to your Bill of Material to for appropriate model number.
7. Contractor is responsible for: proper sensitivity & time delay settings (for non-adaptive products), recommended placement and verification of circuits with respect to power placement.
8. Contractor is responsible for field verification of required number of Power Packs/Smart Packs/Room Controllers:
   - One Power Pack/Room Controller is required for each circuit to be controlled.
   - One Room Controller can handle a total of 30 load points per module (see install instructions).
   - One power pack is required for every four sensors in the zone.
   - If multiple circuits are to be controlled by a sensor, an auxiliary relay can be used in conjunction with the power pack.
   - The maximum number of sensors that can be put on a power pack is to be reduced by one for each slave pack used.
   - Contractor is responsible for ensuring that the bill of materials complies with the intended design, project specifications and local codes.
9. NX Network is a powered network; do not connect NX Network CAT5 cables to standard Ethernet devices. Consult factory if additional network segments are required. Current is not liable for any damage caused.
10. If the distance between the Signal Generating Devices (Area Controller, NX Panel, NXHDI or NXHNB) exceeds 100 meters (328 feet) of cable, a Power over Ethernet Router (not provided by Current) will need to be installed.
11. The placement of the photocells are not the exact placement. They may need to be moved to a more optimum location per the individual room conditions.

SHEET NOTES

1. COORDINATE ALL LIGHTING FIXTURE AND WIRING DEVICE LOCATIONS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. UNLESS SHOWN ON THIS PLAN AS NEW, ALL OTHER LIGHTING AND CONTROLS SHALL BE EXISTING TO REMAIN.
3. ALL CORRIDOR LIGHTING SHALL BE CONTROLLED VIA TIMECLOCK WITH OCCUPANCY SENSOR OVERRIDE. PROVIDE KEY SWITCHES FOR LOCAL CONTROL BY AUTHORIZED PERSONNEL ONLY.

KEY NOTES

1. PROVIDE GENERAL USE SNAP SWITCH.
2. LOWER CASE LETTER DESIGNATES SWITCHING ARRANGEMENT (TYPICAL).
3. PROVIDE CONTROL PANEL FOR EXTERIOR AND CORRIDOR LIGHTING TIMECLOCK CONTROL. FIELD VERIFY EXACT LOCATION.
4. PHOTOCELL FOR EXTERIOR LIGHTING CONTROL.
5. PROVIDE KEY SWITCHES IN CORRIDORS FOR MANUAL OVERRIDE OF CORRIDOR LIGHTING FIXTURES FOR USE BY AUTHORIZED PERSONNEL ONLY. (TYPICAL).



KEY PLAN
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William D. Hopkins 2/12/26
Architect Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
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Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
AMP

Scale
AS NOTED

Drawing Name
ELECTRICAL LIGHTING CONTROLS PLAN - BLOCK B (ALTERNATE BID)
1

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

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SHEET NOTES

1. COORDINATE ALL WIRING DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. REFER TO SYMBOL LIST ON DRAWING E1.0 FOR ADDITIONAL INFORMATION.
3. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR ADDITIONAL INFORMATION.
4. ALL DEVICES LABELED "ETR" ARE EXISTING TO REMAIN.

KEY NOTES

⟨1⟩ DATA, TELEPHONE AND HDMI JUNCTION BOXS AT TEACHER'S AV CABINET LOCATION. REFER TO SYMBOL LIST.

⟨2⟩ 2" CONDUIT SLEEVE(S) INTO ROOM. PROVIDE QUANTITY AS SHOWN (TYPICAL).

⟨3⟩ LOCAL AUDIO SYSTEM WITH HDMI CABLES TO CEILING TEACHING SPEAKER, REMOTE MICROPHONE WITH VOLUME CONTROL AND SOURCE SETTING, AND SHORT THROW PROJECT.

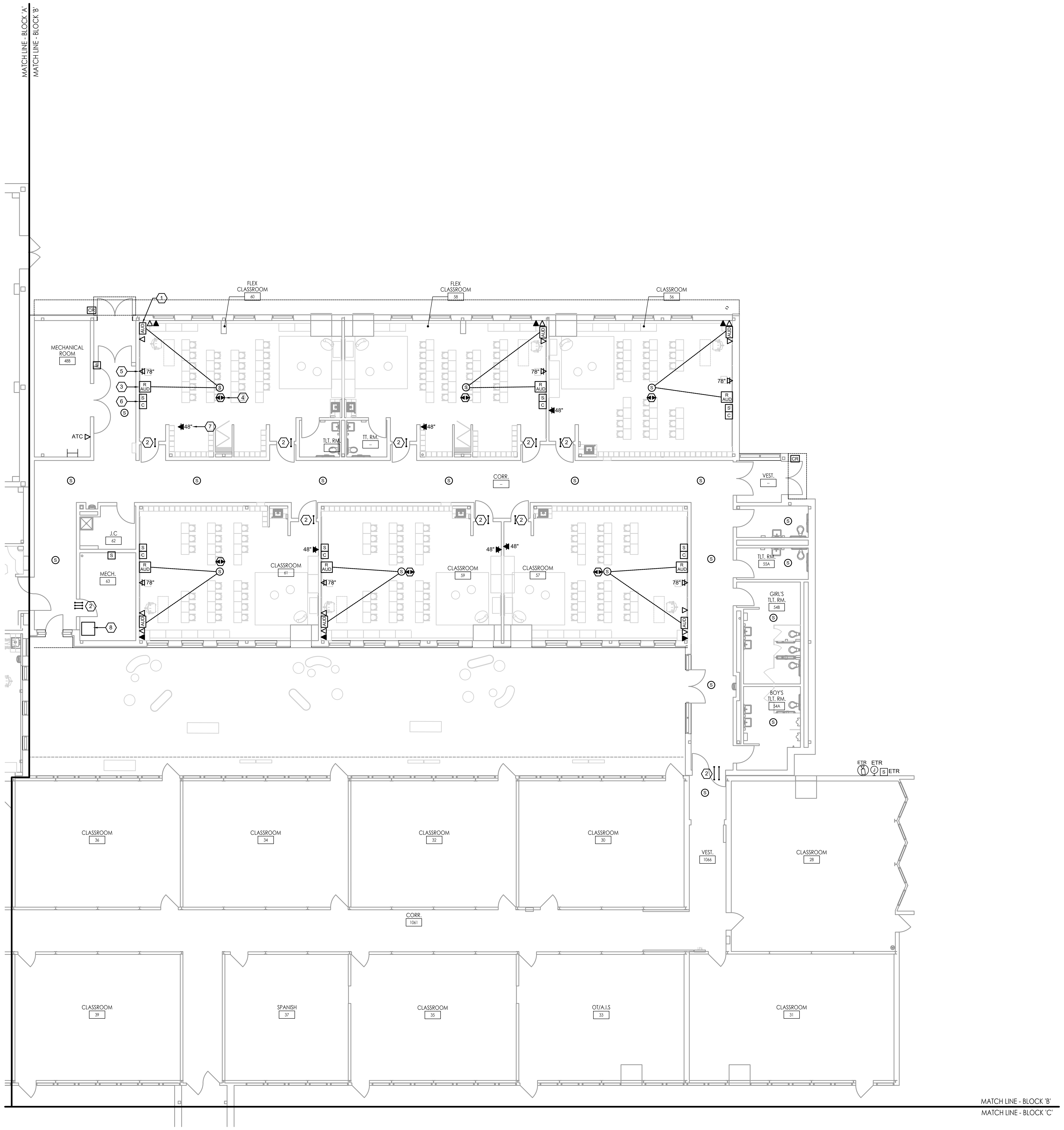
⟨4⟩ CEILING MOUNTED WIRELESS ACCESS (WIFI) ROUTER LOCATION.

⟨5⟩ DATA OUTLET FOR SHORT THROW PROJECTOR MOUNTED 78" AFF (TYPICAL).

⟨6⟩ CLOCK/SPEAKER LOCATION. REFER TO SYMBOL LIST (TYPICAL).

⟨7⟩ TELEPHONE MOUNTED AT 48" AFF (TYPICAL).

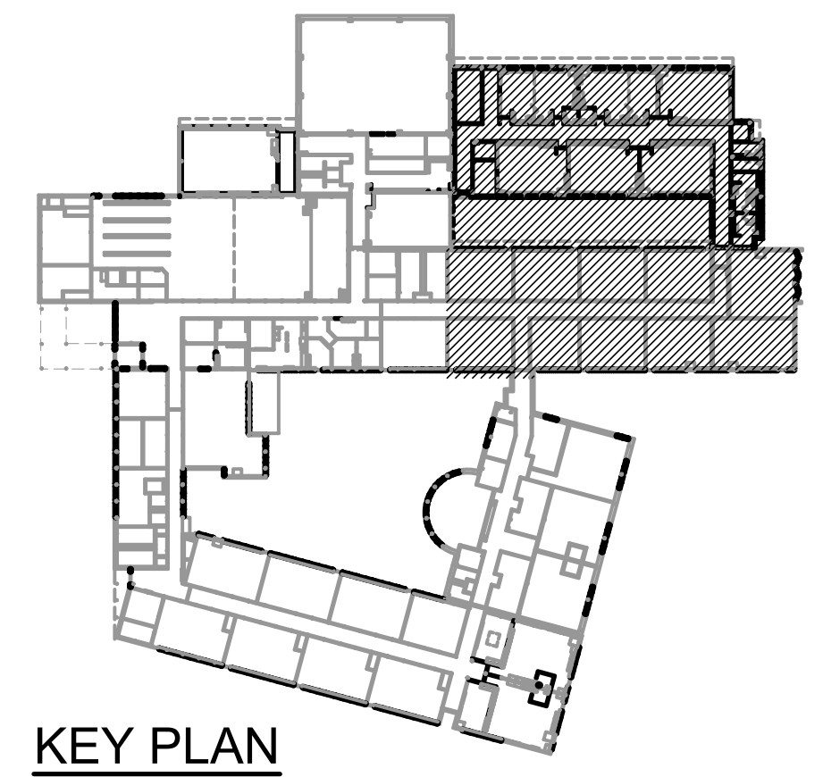
⟨8⟩ IDF RACK LOCATION. RACK FURNISHED BY OTHERS.



LOW VOLTAGE PLAN - BLOCK B ALTERNATE BID

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

△1



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William D.
Architect

2/12/26
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Drawn By
AMP

Scale
AS NOTED

Drawing Name
ELECTRICAL LOW VOLTAGE PLAN - BLOCK B (ALTERNATE BID)

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Drawing Number
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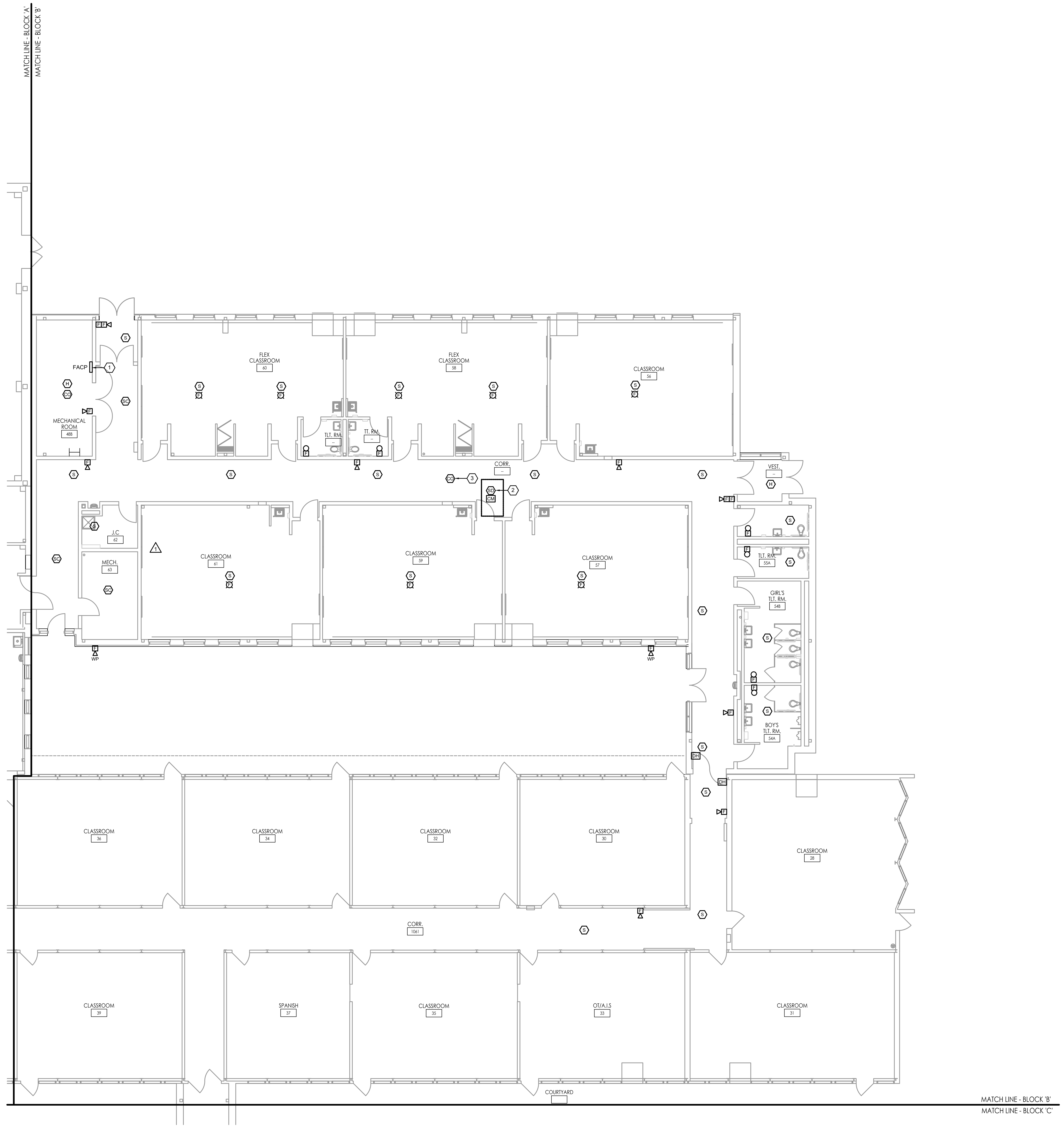


FIRE ALARM PLAN - BLOCK B ALTERNATE BID

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

2

SHEET NOTES

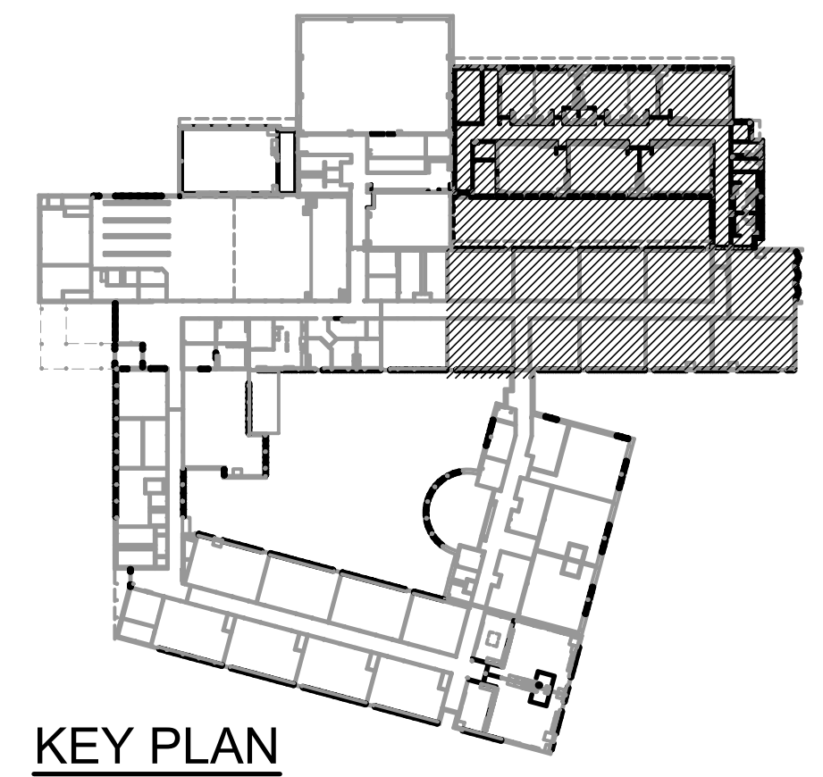
1. UNLESS SHOWN AS DEMOLITION ON DEMOLITION PLANS, OR AS NEW ON THIS SHEET, EXISTING FIRE ALARM DEVICES SHALL BE EXISTING TO REMAIN.
2. REFER TO FIRE ALARM RISER DIAGRAM FOR ADDITIONAL INFORMATION.
3. ALL GYMNASIUM AND PLAYGROUND DEVICES SHALL BE PROTECTED WITH A WIREGUARD.
4. ALL EXTERIOR DEVICES SHALL BE WEATHERPROOF.

KEY NOTES

1 NEW FIRE ALARM EXPANDER PANEL FOR NEW ADDITION.

2 DUCT SMOKE DETECTOR AND CONTROL MODULE FOR ROOFTOP UNIT. FIELD COORDINATE EXACT LOCATION WITH THE MECHANICAL CONTRACTOR.

3 CO DETECTOR TO BE LOCATED AT FIRST SUPPLY REGISTER AREA FROM ROOFTOP UNIT.



KEY PLAN
NOT TO SCALE

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NJDCA Electronic Release Stamp

FVHD architects planners
Fraytak Veisz Hopkins Duthie PC

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William D. Hopkins
Architect

2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
AMP

Scale
AS NOTED

Drawing Name
ELECTRICAL
FIRE ALARM
PLAN - BLOCK B
(ALTERNATE BID)

2

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	11.21.25	NJ DCA RESPONSES
2	03.24.26	ADDENDUM NO.2

Drawing Number
E7.1

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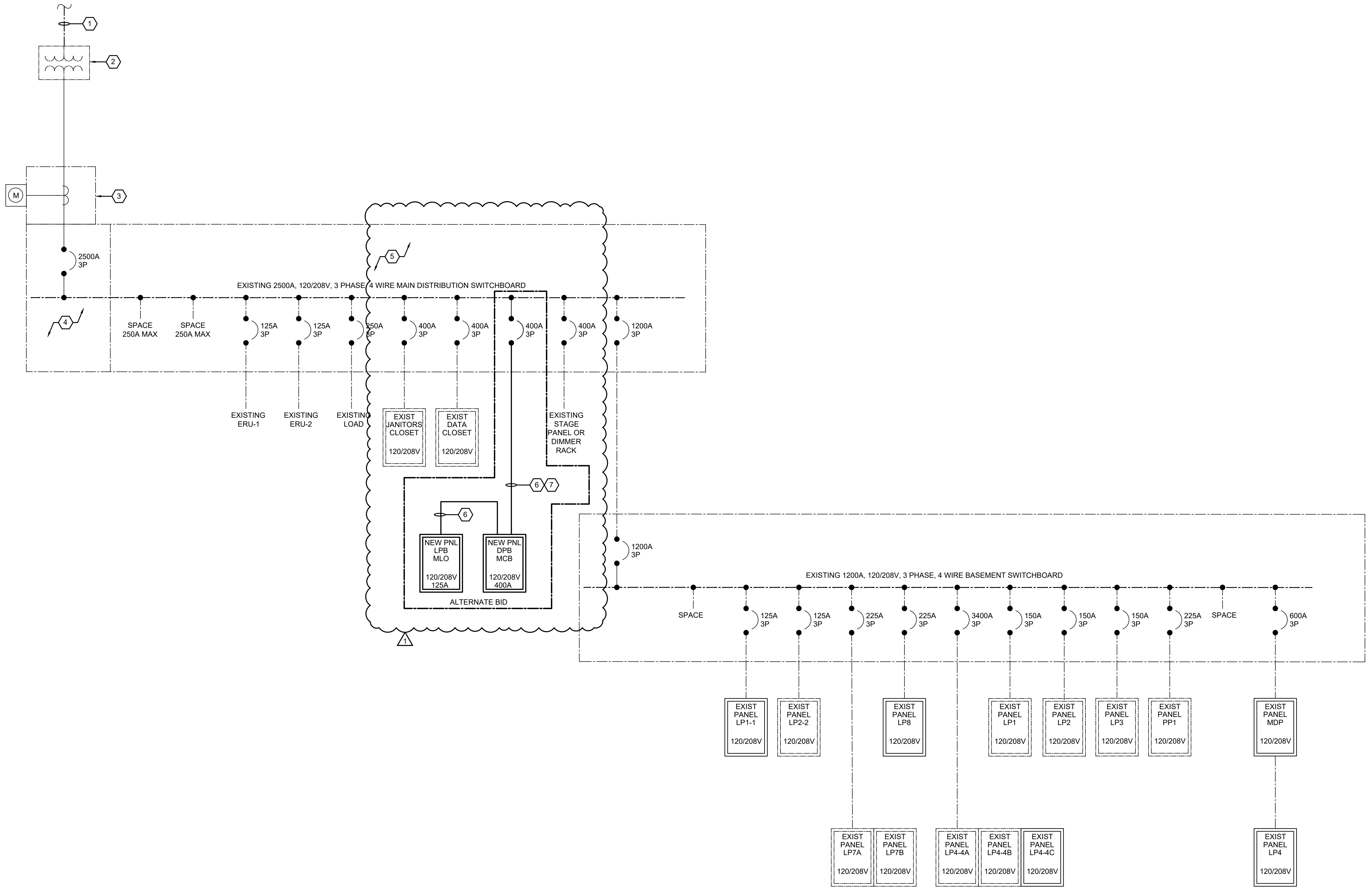

LINETYPE LEGEND	
—·—·—·—	EXISTING
———	EXISTING (MODIFED)
━━━	NEW

EXISTING PARTIAL ONE LINE DIAGRAM

NOT TO SCALE

SHEET NOTES

1. THE CONTRACTOR SHALL COORDINATE ANY REQUIRED ELECTRIC SERVICE OR AREA POWER SHUTDOWNS WITH THE OWNER AT LEAST SEVEN (7) DAYS PRIOR TO THE SHUTDOWN. ALL SHUTDOWN WORK SHALL BE PERFORMED ON WEEKENDS.
2. UNLESS NOTED OTHERWISE OR SHOWN AS NEW, ALL PANELS, CIRCUIT BREAKERS, WIRING AND CONDUIT SHALL BE EXISTING TO REMAIN.
3. THE CONTRACTOR SHALL CONFIRM EXISTING CIRCUIT ARRANGMENT WHERE INDICATED TO FIELD VERIFY AND UPDATE PANEL DIRECTORIES AND NAMEPLATE AS REQUIRED. REFER TO PANEL SCHEDULES.

ONE LINE DIAGRAM KEY NOTES

1 EXISTING UNDERGROUND PRIMARY SERVICE.

2 EXISTING UTILITY COMPANY TRANSFORMER.

3 EXISTING C/T SECTION AND SWITCHBOARD MOUNTED METER.

4 EXISTING MAIN SERVICE DISCONNECT SWITCH.

5 EXISTING DISTRIBUTION SECTION.

6 SEE PANEL SCHEDULES.

1

7 ALTERNATE BID:
CONDUITS TO BE ROUTED ALONG ROOF. REFER TO DRAWING E4.3.

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Scale
AS NOTED

Drawing Name
ELECTRICAL ONE LINE DIAGRAM

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

Drawing Number
E8.0

EXISTING OUTDOOR MDS

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 2500A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: EXTERIOR AT GRADE

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	C CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
	EXISTING MAIN DISCONNECT SWITCH	3	50.6 50.6 50.6	2500	HIGHEST PEAK DEMAND KW	50.6	50.6	50.6						
1	250A MAX SPACE	3			#N/A	0.0	0.0	0.0	#N/A			3	250A MAX SPACE	2
3	EXISTING ERU-1	3		125	EXISTING	0.0	0.0	0.0						
4	EXISTING ERU-2	3		125	EXISTING	0.0	0.0	0.0						
5	EXISTING LOAD	3		250	EXISTING	0.0	0.0	0.0						
6	EXISTING PANEL (JANITOR'S CLOSET)	3		400	EXISTING	0.0	0.0	0.0						
7	EXISTING PANEL (DATA CLOSET)	3		400	EXISTING	0.0	0.0	0.0						
8	**NEW ADDITION PANEL DPB**	**3**	**34.8 36.0 36.1**	**400**	**4#600 MCM & 1#3EG IN 4"C**	34.8	36.0	36.1						
9	EXISTING STAGE PANEL / DIMMER	3		400	EXISTING	0.0	0.0	0.0						
10	EXISTING BASEMENT MDS	3	17.3 15.8 27.2	1200	EXISTING	17.3	15.8	27.2						
					TOTAL (PHASE):	102.7	102.4	113.8						

PANEL TYPE: NEMA 3R
MOUNTING: SURFACE
MAIN CIRCUIT BREAKER: 2500A
INTERRUPTING RATING: 65KA SYM.
FED FROM: UTILITY CO. TRANSFORMER

TOTAL CONNECTED LOAD.: 318.8 KVA
886.1 AMPS

NOTES
1. EXISTING EATON POW-R-LINE PRL-C NEMA 3R SWITCHBOARD TO REMAIN. PSE&G METER #000009221609A.
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES

EXISTING BASEMENT MDS ③

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 1200A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: BASEMENT

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
	EXISTING MAIN DISCONNECT SWITCH	3		1200		0.0	0.0	0.0						
1	SPACE	3			#N/A	0.0	0.0	0.0						
2	EXISTING PANEL LP1-1	3	3.6 6.0 4.2	125	EXISTING	3.6	6.0	4.2						
3	EXISTING PANEL LP2-2	3		125	EXISTING	0.0	0.0	0.0						
4	EXISTING PANEL LP7	3	0.0 0.0 0.0	225	EXISTING	0.0	0.0	0.0						
5	EXISTING PANEL LP8	3	9.6 8.7 8.7	225	EXISTING	9.6	8.7	8.7						
6	PANEL LP4-4	3	3.3 0.0 13.1	300	EXISTING	3.3	0.0	13.1						
7	EXISTING PANEL LP1 (VERIFY)	3		150	EXISTING	0.0	0.0	0.0						
8	EXISTING PANEL LP2 (VERIFY)	3		150	EXISTING	0.0	0.0	0.0						
9	EXISTING PANEL LP3 (VERIFY)	3		150	EXISTING	0.0	0.0	0.0						
10	EXISTING PANEL PP1	3		225	EXISTING	0.0	0.0	0.0						
11	SPACE	3			#N/A	0.0	0.0	0.0						
12	EXISTING LOAD (PANEL MDP) CONFIRM IN FIELD	3	0.8 1.1 1.2	600	EXISTING	0.8	1.1	1.2						
					TOTAL (PHASE):	17.3	15.8	27.2						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN CIRCUIT BREAKER: 1200A
INTERRUPTING RATING: 65KA SYM.
FED FROM: EXISTING OUTDOOR MDS

NOTES
1. EXISTING CUTLER-HAMMER TYPE ES SWITCHBOARD TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES

EXISTING PANEL MDP ③

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 600A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: BASEMENT

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	EXISTING PANEL LP1	3		125	EXISTING	0.0	0.0	0.0	EXISTING	125	0.0 0.0 0.0	3	EXISTING STAGE PANEL SP	2
3	EXISTING SPARE	3		125		0.0	0.0	0.0	#N/A			3	125A MAX SPACE	4
5	EXISTING PANEL LP4	3	0.8 1.1 1.2	100	EXISTING	0.8	1.1	1.2		100		3	EXISTING SPARE	6
7	EXISTING PANEL LP2	3		100	EXISTING	0.0	0.0	0.0	EXISTING	100		3	EXISTING PANEL LP5	8
9	EXISTING PANEL LP3	3		50	EXISTING	0.0	0.0	0.0	EXISTING	100	0.0 0.0 0.0	3	EXISTING KITCHEN PANEL KP	10
11	EXISTING PANEL LPD	3		70	EXISTING	0.0	0.0	0.0	#N/A			3	125A MAX SPACE	12
					TOTAL (PHASE):	0.8	1.1	1.2						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: EXISTING SWITCHBOARD VIA 600A DISCONNECT SWITCH

NOTES
1. EXISTING SEIMENS TYPE P4 PANELBOARD TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES. PROVIDE UPDATED PANELBOARD DIRECTORY.

EXISTING PANEL LP1-1

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 225A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: COORIDOR 1042

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	EXISTING WIREMOLD	1		20	EXISTING	0.0			EXISTING	30		2	EXISTING - ROOM 14 AC RECEPTACLE	2
3	EXISTING WIREMOLD	1		20	EXISTING		0.0							4
5	EXISTING WIREMOLD	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING LOAD	6
7	EXISTING WIREMOLD	1		20	EXISTING	0.0			EXISTING	20		1	EXISTING LOAD	8
9	EXISTING WIREMOLD	1		20	EXISTING		0.0		EXISTING	20		1	EXISTING RM 21 WINDOW AC	10
11	EXISTING WIREMOLD	1		20	EXISTING			0.0		20		1	SPARE	12
13	EXISTING WIREMOLD	1		20	EXISTING	0.0				40		1	SPARE	14
15	EXISTING WIREMOLD	1		20	EXISTING		0.0			40		1	SPARE	16
17	EXISTING WIREMOLD	1		20	EXISTING			0.0		20		1	SPARE	18
19	EXISTING WIREMOLD	1		20	EXISTING	0.0				20		1	SPARE	20
21	EXISTING WIREMOLD	1		20	EXISTING		0.0			20		1	SPARE	22
23	EXISTING WIREMOLD	1		20	EXISTING			0.0	EXISTING	20		2	EXISTING - ROOM 15 AC RECEPTACLE	24
25	**NEW EXHAUST FAN EF-5**	**1**	**0.3**	**20**	**2#12 & 1#12EG IN 3/4"C**	0.3								26
27	**NEW MOD & CP-FCU**	**1**	**0.1**	**20**	**2#12 & 1#12EG IN 3/4"C**		2.6		**3#8 & 1#10EG IN 1"C**	**40**	**2.5**	**2**	**NEW FCU-1 & HP-1**	28
29	**AV CABINET QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**			2.9			**2.5**			30
31	**AV CABINET QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**	2.5			**3#10 & 1#10EG IN 3/4"C**	**30**	**2.2**	**2**	**NEW UNIT VENT UV-B1**	32
33	**PROJECTOR RECEPTACLES**	**1**	**0.6**	**20**	**2#12 & 1#12EG IN 3/4"C**		2.8				**2.2**			34
35	**AV CABINET QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**			1.3	**2#12 & 1#12EG IN 3/4"C**	**20**	**1.0**	**1**	**MOTORIZED SHADES**	36
37	**AV CABINET QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**	0.7			**2#12 & 1#12EG IN 3/4"C**	**20**	**0.4**	**1**	**MOTORIZED SHADES**	38
39	**PROJECTOR RECEPTACLES**	**1**	**0.6**	**20**	**2#12 & 1#12EG IN 3/4"C**		0.6		#N/A			1	SPACE	40
41	SPACE	1			#N/A			0.0	#N/A			1	SPACE	42
					TOTAL (PHASE):	3.6	6.0	4.2						

PANEL TYPE: NEMA 1
MOUNTING: FLUSH
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: EXISTING BASEMENT MDS

NOTES
1. EXISTING SQUARE D NQOD, SERIES E2 PANEL TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. EXISTING BREAKER TAGGED "NOT SAFED OFF". CONTRACTOR SHALL INVESTIGATE CIRCUIT AND MAKE SAFE ANY EXISTING JUNCTION POINTS PER NEC.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES. PROVIDE UPDATED PANELBOARD DIRECTORY.

EXISTING PANEL LP4

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 100A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: CORRIDOR 1079

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	EXISTING TRAY POWER FEED	2		20	EXISTING	0.0			EXISTING	20		1	EXISTING WIREMOLD	2
3							0.0		EXISTING	20		1	EXISTING WIREMOLD	4
5	EXISTING RECEPTACLES	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING STAGE QUAD RECEPT	6
7	**NEW VAV BOXES**	**1**	**0.2**	**15**	**2#12 & 1#12EG IN 3/4"C**	0.2			EXISTING	20		1	EXISTING LIFT	8
9	**NEW ATC PANEL**	**1**	**0.5**	**15**	**2#12 & 1#12EG IN 3/4"C**		0.5		EXISTING	20		1	EXISTING RECEPTACLES	10
11	EXISING OVEN (TEACHERS LOUNGE)	2		20	EXISTING			1.2	**2#12 & 1#12EG IN 3/4"C**	**20**	**1.2**	**1**	**NEW OFFICE COPIER**	12
13						0.0			EXISTING	20		1	EXISTING TRAY POWER FEED	14
15	EXISTING OUTSIDE GFI RECEPT	1		20	EXISTING		0.0		EXISTING	15		1	EXISTING CUH-6	16
17	EXISTING RECEPTACLES	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING LTG & EF	18
19	EXISTING RECEPTACLES	1		20	EXISTING	0.0			EXISTING	20		1	EXISTING LIGHTING	20
21	EXISTING LIBRARY AC UNIT	2		30	EXISTING		0.0		EXISTING	20		1	EXISTING EMLIGHTING	22
23								0.0	EXISTING	20		1	EXISTING TRAY POWER FEED	24
25	EXISTING LIBRARY AC UNIT	C		30	EXISTING	0.0			EXISTING	20		1	EXISTING TRAY POWER FEED	26
27							0.0		EXISTING	15		1	EXISTING BOOKSHELF	28
29	EXISTING LIGHTING	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING CLOSET LIGHTING	30
31	**PUMP P-1**	**2**	**0.6**	**15**	**3#12 & 1#12EG IN 3/4"C**	0.6			EXISTING	20		1	EXISTING HALLWAY LTG	32
33			**0.6**				0.6		EXISTING	15		1	SPARE (VERIFY)	34
35	EXISTING RECEPTACLES	1		20	EXISTING			0.0	EXISTING	15		1	EXISTING HALLWAY LTG	36
37	EXISTING RECEPTACLES	1		20	EXISTING	0.0			EXISTING	15		1	EXISTING HALLWAY LTG	38
39	EXISTING TOILET SENSORS	1		20	EXISTING		0.0		EXISTING	20		1	EXISTING HALLWAY LTG	40
41	EXISTING HALLWAY EM LTG	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING TRAY POWER FEED	42
					TOTAL (PHASE):	0.8	1.1	1.2						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: EXISTING PANEL MDP

NOTES
1. EXISTING SQUARE D NQOD, SERIES E2 PANEL TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES. PROVIDE UPDATED PANELBOARD DIRECTORY.

EXISTING PANEL LP4-4C

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 400A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: ELEC ROOM #50

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
73	EXISTING EMI PE OFFICE	2		15	EXISTING	2.5			**3#10 & 1#10EG IN 3/4"C**	**30**	**2.5**	**2**	**NEW ELECTRIC UNIT HEATER EUH-1**	74
75							2.5				**2.5**			76
77	SPACE	1			#N/A			6.6	**3#4 & 1#8EG IN 1 1/4"C**	**80**	**6.6**	**2**	**NEW ELECTRIC WATER HEATER WH-2**	78
79	SPACE	1			#N/A	6.6					**6.6**			80
81	SPACE	1			#N/A		0.0		**2#12 & 1#12EG IN 3/4"C**	20		**1**	**FUTURE RADON VENT FAN(S)**	82
83	SPACE	1			#N/A			6.6	**3#4 & 1#8EG IN 1 1/4"C**	**80**	**6.6**	**2**	**NEW ELECTRIC WATER HEATER WH-3**	84
85	SPACE	1			#N/A	6.6					**6.6**			86
87	SPACE	1			#N/A		0.8		**2#12 & 1#12EG IN 3/4"C**	**15**	**0.8**	**1**	**SINK PUMP SP-1**	88
89	SPACE	1			#N/A			0.0	#N/A			1	SPACE	90
91	SPACE	1			#N/A	0.0			#N/A			1	SPACE	92
93	SPACE	1			#N/A		0.0		#N/A			1	SPACE	94
95	SPACE	1			#N/A			0.0	#N/A			1	SPACE	96
					TOTAL (PHASE):	15.6	3.3	13.1						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: EXISTING BASEMENT MDS

NOTES
1. EXISTING SQUARE D NQOD, SERIES E1 PANEL TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES. PROVIDE UPDATED PANELBOARD DIRECTORY.

EXISTING PANEL LP8

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 225A
(EXISTING)
JOB: NO.: 23463.004
LOCATION: SUPPLY CLOSET 52B

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	EXISTING LOAD	1		20	EXISTING	0.0			EXISTING	20		1	EXISTING LOAD	2
3	EXISTING LOAD	1		20	EXISTING		0.0		EXISTING	20		1	EXISTING LOAD	4
5	EXISTING LOAD	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING LOAD	6
7	EXISTING LOAD	1		20	EXISTING	0.0			EXISTING	20		1	EXISTING LOAD	8
9	EXISTING LOAD	1		20	EXISTING		0.0		EXISTING	20		1	EXISTING LOAD	10
11	EXISTING LOAD	1		20	EXISTING			0.0	EXISTING	20		1	EXISTING LOAD	12
13	EXISTING LOAD	1		20	EXISTING	0.0			EXISTING	20		1	EXISTING LOAD	14
15	EXISTING LOAD	1		20	EXISTING		0.0		EXISTING	20		1	EXISTING LOAD	16
17	EXISTING LOAD	1		20	EXISTING			1.2	**2#12 & 1#12EG IN 3/4"C**	**20**	**1.2**	**1**	**MOTORIZED SHADE RECEPT**	18
19	**NEW RTU RECEPTACLE**	**1**	**1.8**	**20**	**2#12 & 1#12EG IN 3/4"C**	3.0			**2#12 & 1#12EG IN 3/4"C**	**20**	**1.2**	**1**	**MOTORIZED SHADE RECEPT**	20
21	**NEW COLD UNIT**	**1**	**1.2**	**20**	**2#12 & 1#12EG IN 3/4"C**		2.3		**2#12 & 1#12EG IN 3/4"C**	**20**	**1.1**	**1**	**OVERHEAD COILING DOORS**	22
23	**NEW COLD UNIT**	**1**	**1.2**	**20**	**2#12 & 1#12EG IN 3/4"C**			2.4	**2#12 & 1#12EG IN 3/4"C**	**20**	**1.2**	**1**	**NEW ADDITION LIGHTING**	24
25	**AV CABINET QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**	1.6			**2#12 & 1#12EG IN 3/4"C**	**20**	**1.2**	**1**	**CAFETERIA LTG- ALT BID**	26
27	**EWC & RECEPTACLES**	**1**	**1.3**	**20**	**2#12 & 1#12EG IN 3/4"C**		1.5		**2#12 & 1#12EG IN 3/4"C**	**20**	**0.2**	**1**	**NEW ADDITION EXTERIOR LTG**	28
29	**SOUND SYSTEM QUAD**	**1**	**0.4**	**20**	**2#12 & 1#12EG IN 3/4"C**			0.4	#N/A			1	SPACE	30
31	**PROJECTOR & RECEPTACLES**	**1**	**0.8**	**20**	**2#12 & 1#12EG IN 3/4"C**	0.8			#N/A			1	SPACE	32
33	**RECEPTACLS & SHADES**	**1**	**0.7**	**20**	**2#12 & 1#12EG IN 3/4"C**		0.7		#N/A			1	SPACE	34
35	**MECHO SHADE CONTROL PNL**	**1**	**0.5**	**20**	**2#12 & 1#12EG IN 3/4"C**			0.5	#N/A			1	SPACE	36
37	**NEW RTU-3**	**3**	**4.2**	**50**	**4#8 & 1#10EG IN 1"C**	4.2			#N/A			1	SPACE	38
39			**4.2**				4.2		#N/A			1	SPACE	40
41			**4.2**					4.2	#N/A			1	SPACE	42
					TOTAL (PHASE):	9.6	8.7	8.7						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: EXISTING BASEMENT MDS

W

NOTES
1. EXISTING SQUARE D NQOD, SERIES E2 PANEL TO REMAIN
2. ALL NEW CIRCUIT BREAKERS SHALL MATCH THE PANEL MANUFACTURER AND EXISTING SHORT CIRCUIT RATING.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. CONTRACTOR SHALL FIELD VERIFY ALL PANEL SPARES AND SPACES. PROVIDE UPDATED PANELBOARD DIRECTORY.

NEW PANEL LPB - ALTERNATE BID

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 225A
(NEW)
JOB: NO.: 23463.004
LOCATION: BLOCK B MECH RM 63

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C	1.9			2#12 & 1#12EG IN 3/4"C	20	1.5	1	CORRIDOR RECEPTACLES	2
3	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C		1.1		2#12 & 1#12EG IN 3/4"C	20	0.7	1	RESTROOM RECEPTS	4
5	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C			1.3	2#12 & 1#12EG IN 3/4"C	20	1.0	1	EWC & RECEPTACLES	6
7	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C	1.4			2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	8
9	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C		1.4		2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	10
11	AV CABINET QUAD	1	0.4	20	2#12 & 1#12EG IN 3/4"C			1.4	2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	12
13	DATA RACK - IDF ROOM	1	0.4	20	2#12 & 1#12EG IN 3/4"C	1.4			2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	14
15	PROJECTOR RECEPTACLES	1	0.9	20	2#12 & 1#12EG IN 3/4"C		2.0		2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	16
17	PROJECTOR RECEPTACLES	1	0.9	20	2#12 & 1#12EG IN 3/4"C			2.0	2#12 & 1#12EG IN 3/4"C	20	1.1	1	CLASSROOM RECEPT	18
19	EXTERIOR RECEPTACLES	1	0.7	20	2#12 & 1#12EG IN 3/4"C	1.5			2#12 & 1#12EG IN 3/4"C	20	0.6	1	EWC & RECEPTACLES	20
21	MECH ROOM RECEPT	1	0.4	20	2#12 & 1#12EG IN 3/4"C		2.0		2#10 & 1#10EG IN 3/4"C	25	1.7	1	MOTORIZED PARTITION	22
23	MECH / CORRIDOR LTG	1	1.5	20	2#12 & 1#12EG IN 3/4"C			3.1	2#10 & 1#10EG IN 3/4"C	25	1.7	1	MOTORIZED PARTITION	24
25	CORRIDOR / RESTROOM LTG	1	0.6	20	2#12 & 1#12EG IN 3/4"C	0.6				20		1	SPARE	26
27	CLASSROOM LIGHTNG	1	1.5	20	2#12 & 1#12EG IN 3/4"C		1.5			20		1	SPARE	28
29	CLASSROOM LIGHTNG	1	1.2	20	2#12 & 1#12EG IN 3/4"C			1.2		20		1	SPARE	30
31	CLASSROOM LIGHTNG	1	1.1	20	2#12 & 1#12EG IN 3/4"C	1.1				20		1	SPARE	32
33	COURTYARD & EAST EXT LTG	1	0.4	20	2#12 & 1#12EG IN 3/4"C		0.4			20		1	SPARE	34
35	NORTH EXTERIOR LIGHTING	1	0.8	20	2#12 & 1#12EG IN 3/4"C			0.8		20		1	SPARE	36
37	SPARE	1		20		0.0				20		1	SPARE	38
39	SPARE	1		20			0.0			20		1	SPARE	40
41	SPARE	1		20				0.0		20		1	SPARE	42
					TOTAL (PHASE):	7.9	8.4	9.8						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: 65KA SYM.
FED FROM: NEW PANEL MPB

TOTAL CONNECTED LOAD.: 26.1 KVA
72.7 AMPS

NOTES
1. ALL BUSING TO BE COPPER
2. BOLT ON BREAKERS ONLY
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. SHORT CIRCUIT RATING: PANEL SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE AT TERMINALS.

NEW PANEL DPB - ALTERNATE BID

JOB NAME: LITTLEBROOK ES
RATING: 208/120V, 3 PH, 4W, 400A
(NEW)
JOB: NO.: 23463.004
LOCATION: BLOCK B MECH RM 63

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	ROOFTOP UNIT RTU-1	3	4.2	50	4#8 & 1#10EG IN 1"C	4.6			2#12 & 1#12EG IN 3/4"C	20	0.4	1	RTU RECEPTACLES	2
3			4.2				5.3		2#12 & 1#12EG IN 3/4"C	20	1.1	1	EF-1 & EF-2	4
5			4.2					4.8	2#12 & 1#12EG IN 3/4"C	15	0.6	1	EF-3 & EF-4	6
7	ROOFTOP UNIT RTU-2	3	4.7	60	4#6 & 1#10EG IN 1-1/4"C	6.3			2#12 & 1#12EG IN 3/4"C	20	1.6	1	BOILER B-1	8
9			4.7				6.3		2#12 & 1#12EG IN 3/4"C	20	1.6	1	BOILER B-2	10
11			4.7					4.9	2#12 & 1#12EG IN 3/4"C	20	0.2	1	GAS DETECTION PANEL	12
13	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C	3.6			2#12 & 1#12EG IN 3/4"C	20	0.2	1	ATC PANEL	14
15			3.4				3.6		2#12 & 1#12EG IN 3/4"C	20	0.2	1	BOILER CONROL PANEL	16
17	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C			4.6	2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-1	18
19			3.4			4.6			2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-2	20
21	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C		4.6		2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-3	22
23			3.4					4.6	2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-4	24
25	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C	4.6			2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-5	26
27			3.4				4.6		2#12 & 1#12EG IN 3/4"C	20	1.2	1	UNIT HEATER UH-6	28
29	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C			4.1	2#12 & 1#12EG IN 3/4"C	20	0.7	1	WH-1 & HWR-1	30
31			3.4			3.4			2#12 & 1#12EG IN 3/4"C	20		1	FUTURE RADON VENT FAN(S)	32
33	UNIT VENTILATOR UV-A	2	3.4	50	3#8 & 1#10EG IN 1"C		3.4			20		1	SPARE	34
35			3.4					3.4		20		1	SPARE	36
37	SPARE	1		20		7.9			4#3 & 1#8EG IN 1-1/2"C	100	7.9	3	NEW PANEL LPB	38
39	SPARE	1		20			8.4				8.4			40
41	SPARE	1		20				9.8			9.8			42
					TOTAL (PHASE):	34.8	36.0	36.1						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN CIRCUIT BREAKER: 400A
INTERRUPTING RATING: 65KA SYM.
FED FROM: EXISTING OUTDOOR MDS

TOTAL CONNECTED LOAD.: 106.9 KVA
296.9 AMPS

NOTES
1. ALL BUSING TO BE COPPER
2. BOLT ON BREAKERS ONLY
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. SHORT CIRCUIT RATING: PANEL SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE AT TERMINALS.

PANEL SCHEDULE KEY NOTES

① CIRCUIT TO EXISTING LABELED SPARE IN OUTDOOR MAIN DISTRIBUTION SWITCHBOARD.

② PROVIDE NEW CIRCUIT BREAKERS IN EXISTING SPARES OR SPACES TO MATCH EXISTING PANEL MANUFACTURER AND SHORT CIRCUIT RATING.

③ PANEL SHOWN FOR REFERENCE ONLY. NO MODIFICATIONS TO THIS PANEL.

COPPER BRANCH CIRCUIT WIRE SIZING TABLES
208V - 3% VOLTAGE DROP

C/B TRIP		208V, 3P, 3W 120/208V, 3P, 4W			208V, 2P, 2W 120/208V, 2P, 3W				120V, 1P, 2W					
15	DISTANCE IN FEET	177	273	429	153	236	371	578	88	136	214	333	500	625
	MINIMUM WIRE SIZE	12	10	8	12	10	8	6	12	10	8	6	4	3
20	DISTANCE IN FEET	132	205	322	115	177	279	433	66	102	161	250	375	469
	MINIMUM WIRE SIZE	12	10	8	12	10	8	6	12	10	8	6	4	3
30	DISTANCE IN FEET	136	214	334	118	186	289	433	68	107	167	250	313	375
	MINIMUM WIRE SIZE	10	8	6	10	8	6	4	10	8	6	4	3	2
40	DISTANCE IN FEET	161	250	375	139	217	325	406	80	125	188	234	281	352
	MINIMUM WIRE SIZE	8	6	4	8	6	4	3	8	6	4	3	2	1
50	DISTANCE IN FEET	129	200	300	111	173	260	325	64	100	150	188	225	281
	MINIMUM WIRE SIZE	8	6	4	8	6	4	3	8	6	4	3	2	1
60	DISTANCE IN FEET	167	250	313	144	217	271	325	83	125	156	188	234	
	MINIMUM WIRE SIZE	6	4	3	6	4	3	2	6	4	3	2	1	
70	DISTANCE IN FEET	214	268	322	186	232	279	348	107	134	161	201		
	MINIMUM WIRE SIZE	4	3	2	4	3	2	1	4	3	2	1		
80	DISTANCE IN FEET	188	235	281	163	203	244	305	94	117	141	176		
	MINIMUM WIRE SIZE	4	3	2	4	3	2	1	4	3	2	1		
90	DISTANCE IN FEET	208	250	313	181	217	271		104	125	156			
	MINIMUM WIRE SIZE	3	2	1	3	2	1		3	2	1			
100	DISTANCE IN FEET	188	225	281	163	195	244		94	113	141			
	MINIMUM WIRE SIZE	3	2	1	3	2	1		3	2	1			

NOTES:
1. READ ACROSS TO THE RIGHT FROM C/B TRIP TO DESIRED VOLTAGE CHARACTERISTICS AND NEXT GREATER DISTANCE THAN CIRCUIT IN QUESTION.
2. READ DOWN TO MINIMUM WIRE SIZE.
3. DISTANCES ARE TO THE CENTER OF CONCENTRATED LOAD SUCH AS CLASSROOM LIGHTING OR THE MIDPOINT OF DISTRIBUTED LOAD SUCH AS CORRIDOR LIGHTING.
4. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INCREASED IN SIZE PROPORTIONATELY PER N.E.C.

NJDCA Electronic Release Stamp

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William D. Hopkins
Architect
2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D

Project Date
10.10.2025

Checked By
AHG

Drawn By
AMP

Scale
AS NOTED

Drawing Name
ELECTRICAL PANEL SCHEDULES & VOLTAGE DROP TABLE

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

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Drawing Number
E9.0

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MECHANICAL EQUIPMENT COORDINATION SCHEDULE

IDENTIFICATION		① ELECTRICAL CHARACTERISTICS							③ ④ LOCAL POWER DISCONNECT					
PLAN ID	DESCRIPTION	VOLTAGE & Ø	MOTOR HP	UNIT KW	FLA	MCA	MOCP	WIRING ②	AMPS	POLES	FUSE AMPS	NEMA TYPE	SERVICE RECEPTACLE	REMARKS
RTU-1	GAS-FIRED ROOFTOP UNIT	208V-3Ø				44.0	50	SEE PANEL SCHEDULES	60	3	50	NEMA 3R	YES	⑥
RTU-2	GAS-FIRED ROOFTOP UNIT	208V-3Ø				49.0	60	SEE PANEL SCHEDULES	60	3	60	NEMA 3R	YES	⑥
RTU-3	PACKAGED ROOFTOP UNIT	208V-3Ø				44.0	50	SEE PANEL SCHEDULES	60	3	50	NEMA 3R	YES	⑥
B-1	CONDENSING HOT WATER BOILER	120V-1Ø			13.0	16.3	20	SEE PANEL SCHEDULES	30	1	20	NEMA 1	NO	
B-2	CONDENSING HOT WATER BOILER	120V-1Ø			13.0	16.3	20	SEE PANEL SCHEDULES	30	1	20	NEMA 1	NO	
HWP-1	HOT WATER PUMP	208V-3Ø	1.5		6.6	8.3	15	SEE PANEL SCHEDULES	30	3	15	NEMA 1	NO	⑩
HWP-2	HOT WATER PUMP	208V-3Ø	1.5		6.6	8.3	15	SEE PANEL SCHEDULES	30	3	15	NEMA 1	NO	⑩
P-1	FREEZE PROTECTION PUMP	208V-1Ø	1/2		5.4	6.8	15	SEE PANEL SCHEDULES	30	2	15	NEMA 1	NO	
UV-A	SELF-CONTAINED UNIT VENTILATOR	208V-1Ø			32.3	36.9	50	SEE PANEL SCHEDULES	60	2	59	NEMA 1	NO	
UV-B1	SELF-CONTAINED UNIT VENTILATOR	208V-1Ø			21.0	23.6	30	SEE PANEL SCHEDULES	30	2	30	NEMA 1	NO	
FCU-1	DUCTED VERTICAL SPLIT SYSTEM	208V-1Ø				-	-	SEE PANEL SCHEDULES	⑤	-	-	NEMA 1	NO	INDOOR UNIT
HP-1	DUCTED VERTICAL SPLIT SYSTEM	208V-1Ø				24.0	40	SEE PANEL SCHEDULES	60	2	40	NEMA 3R	NO	OUTDOOR UNIT
EUH-1	ELECTRIC UNIT HEATER	208V-1Ø		5.0		18.1	30	SEE PANEL SCHEDULES	30	2	30	NEMA 1	NO	
UH-1	HOT WATER UNIT HEATER	120V-1Ø	1/2		9.8	12.3	20	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
UH-2	HOT WATER UNIT HEATER	120V-1Ø	1/2		9.8	12.3	20	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
UH-3	HOT WATER UNIT HEATER	120V-1Ø	1/2		9.8	12.3	20	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
UH-4	HOT WATER UNIT HEATER	120V-1Ø	1/2		9.8	12.3	20	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
UH-5	HOT WATER UNIT HEATER	120V-1Ø	1/25		1.5	1.9	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
UH-6	HOT WATER UNIT HEATER	120V-1Ø	1/25		1.5	1.9	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
EF-1	EXHAUST FAN	115V-1Ø	1/6		4.4	5.5	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
EF-2	EXHAUST FAN	115V-1Ø	1/6		4.4	5.5	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
EF-3	EXHAUST FAN	115V-1Ø	1/15		2.5	3.1	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
EF-4	EXHAUST FAN	115V-1Ø	1/15		2.5	3.1	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
EF-5	EXHAUST FAN	115V-1Ø	1/15		2.5	3.1	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
VAV-X	TYPICAL HOT WATER VAV UNIT	120V-1Ø			-	-	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	⑨
CP-FCU	CONDENSATE PUMP	115V-1Ø	1/30		1.5	1.9	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	⑧
WH-1	WATER HEATER	120V-1Ø			5.0	6.3	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
WH-2	WATER HEATER	208V-1Ø		13.1	63.0	78.7	80	SEE PANEL SCHEDULES	100	2	80	NEMA 1	NO	
WH-3	WATER HEATER	208V-1Ø		13.1	63.0	78.7	80	SEE PANEL SCHEDULES	100	2	80	NEMA 1	NO	
SP-1	SINK PUMP	115V-1Ø	1/3		7.2	9.0	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	
HWR-1	HOT WATER RECIRCULATING PUMP	120V-1Ø			92 WATTS	-	15	SEE PANEL SCHEDULES	⑦	-	-	NEMA 1	NO	

EQUIPMENT SCHEDULE KEY NOTES

① DATA FROM SPECIFIED MANUFACTURER. REFER TO MECHANICAL DRAWINGS

② QUANTITY AND SIZE OF POWER CONDUCTORS BASED ON DATA FROM SPECIFIED MANUFACTURER. PROVIDE GROUND WIRE IN ACCORDANCE WITH THE PROJECT GENERAL NOTES THIS SHEET.

③ WHERE A FUSE SIZE IS NOT ENTERED IN COLUMN TITLED "FUSE AMPS", THE DISCONNECT MAY BE UNFUSED.

④ EQUIPMENT FURNISHED AND INSTALLED UNDER OTHER SPECIFICATION DIVISIONS, WIRED AND CONNECTED UNDER DIVISION 16, UNLESS NOTED OTHERWISE. DISCONNECT SWITCHES FURNISHED UNDER DIVISION 15.

⑤ INDOOR UNIT FED VIA OUTDOOR CONDENSING UNIT. PROVIDE ALL WIRING AS REQUIRED TO MAKE A COMPLETE AND OPERATIONAL INSTALLATION.

⑥ PROVIDE DUCT SMOKE DETECTOR(S). LOCATE REMOTE TEST STATION NEXT TO THE THERMOSTAT.

⑦ PROVIDE MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION.

⑧ PROVIDE HARD WIRED 120V POWER FOR CONDENSATE PUMPS - 2#12 MC. CIRCUIT AS SHOWN OR TO THE NEAREST RECEPTACLE CIRCUIT SERVING THE AREA LOCATED.

⑨ REFER TO MECHANICAL PLANS FOR QUANTITIES OF VAV BOXES. POWER IS FOR CONTROL POWER ONLY.

⑩ IN ADDITION TO POWER TO THE VFD, PROVIDE ALL REQUIRED WIRING FROM VFD TO EQUIPMENT LOCATIONS. COORDINATE WITH MECHANICAL CONTRACTOR.

EQUIPMENT SCHEDULE GENERAL NOTES

1. REFER TO CIVIL ENGINEERING, MECHANICAL, AND PLUMBING PLANS FOR EXACT LOCATIONS OF EQUIPMENT.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL 120V POWER WIRING AND CIRCUIT BREAKERS REQUIRED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT, INCLUDING POWER FOR ALL MOTOR OPERATED DAMPER ACTUATORS, VAV BOXES, ETC. STARTERS AND POWER DISCONNECT SWITCHES SHALL BE BY THE MECHANICAL CONTRACTOR. REFER TO MECHANICAL SPECIFICATION SECTIONS AND COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXTENT OF WORK REQUIRED.
3. DUCT SMOKE DETECTORS SHALL BE PROVIDED AT ALL UNITS OVER 2000 CFM AND MOUNTED ON THE SUPPLY AND RETURN DUCT. DETECTORS SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR, INSTALLED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR. COORDINATE EXACT QUANTITY AND LOCATIONS WITH THE MECHANICAL CONTRACTOR AND MECHANICAL DRAWINGS.

NJDCA Electronic Release Stamp

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William D.
Architect

2/12/26
Date

Project Name
Addition and Renovations to Littlebrook Elementary School

Project Owner Name
Princeton Public Schools

Project Location
39 Magnolia Ln,
Princeton, NJ
085402

Project Number
5516D
Project Date
10.10.2025
Checked By
AHG
Drawn By
AMP
Scale
AS NOTED

Drawing Name
ELECTRICAL MECHANICAL EQUIPMENT COORDINATION SCHEDULE

Revisions

No.	Date	Description
	10.10.25	NJ DCA SUBMISSION
1	03.24.26	ADDENDUM NO.2

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Drawing Number
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