ADDENDUM NO. 1

TO

DRAWINGS AND SPECIFICATIONS

FOR

CONTRACT #20277.25.14

NEW HOPKINS GYMNASIUM

AND

ADDITION & ALTERATION TO J.F. TATEM ELEMENTARY SCHOOL

FOR

HADDONFIELD BOARD OF EDUCATION
95 GROVE STREET
HADDONFIELD, NEW JERSEY 08033

(DRAWINGS & SPECIFICATION DATED August 13th, 2026)

DATE: September 4th, 2026

Consulting Architects
LAN Associates E.P.A.S., Inc.
1018 Laurel Oak Drive, Suite 11
Voorhees, NJ 08043

Attention: Jeffrey M. Potter, RA
Registered Architect
856-375-2701

1.0 General: The original contract documents issued **August 13th, 2026,** for the subject contract is hereby amended as noted in this addendum which shall become part of said contract documents, as if originally included therein. Bidders must acknowledge receipt of this addendum and all other addenda on the proposal form when submitting proposals. In case any bidder fails to acknowledge receipt of addenda, his proposal will nevertheless be construed as though it has been received, acknowledged, and the submission of his proposal shall constitute acknowledgment by the bidder of the receipt of same.

This is to advise all prospective bidders that this addendum has been issued to all bidders and that it contains changes in the contract documents.

Note that the bid due date and time has remained **UNCHANGED** and shall be on **Thursday, September 17th, 2026, by 2:00 PM at the Haddonfield Board of Education Offices located at 95 Grove Street, Haddonfield, New Jersey 08033.** The bids will be publicly opened and read aloud immediately thereafter.

2.0 Amendments to Specifications:

Section No.	Page No.	Addendum Requirements
Front End	A201	**REVISE** Maintenance Bond to be 1 year.
Front End	A101	**REVISE** Liquidated Damages as follows: Tatem ES Liquidated Damages shall be $2,500/day; Hopkins Gymnasium Liquidated Damages shall be $1,000/day
Front End	A101	Tatem ES Substantial Completion Dates have been revised to **INCLUDE** the following: **ADD** Partial Substantial Completion, August 16th, 2027 for all Phase II, Summer Only Work as indicated in Summary of Work Specification Section 011000.
Front End	BPF	Bid Proposal Form has been revised to eliminate Unit Prices. See attached.
011000 (NHG)	2	**REVISED** Paragraph 1.5-A-1-a.
012200	All	**OMITTED** section from project manual.
013100	4	**REVISED** 1.7-A.
284600	10 & 22	**REVISED** Section 2.2(B): Fire Alarm Control Panel Model # specified as Potter Electric AFC-1000V. **REVISED** Section 3.5(E): Engage Fire-Alarm Testing Agency in lieu of factory-authorized service representative to supervise FAS field tests and inspections. **REVISED** Section 3.6(B): Engage Fire-Alarm Testing Agency in lieu of factory-authorized service representative to supervise FAS startup.
080671 (NHG)	All	**REVISED** door hardware schedule for NHG.
084413	All	**ADDED** section.
098413 (TES)	All	**OMITTED** Section from project manual.
TOC	Front End	**ADD** Table of Contents document.

CAD Release Form	New	**ADDED** section.
Pre-Bid Sign In Sheet	New	**ADDED** section.

3.0 Amendments to Drawings:

Drawing No.	Detail No.	Addendum Requirements
A1.03 (TES)	1	Note on plan **OMITTED**.
A2.05 (TES)	2	New proposed condensing unit and exhaust fan **ADDED** to roof plan.
A4.00 (TES)	All	**REVISED** all partition details.
A5.01 (TES)	Keynotes	**REVISED** Keynotes 4, 8 and 9.
A5.03 (TES)	Keynotes	**REVISED** Keynotes 4, 8 and 9.
A7.03 (TES)	1	Portion of Kitchen 113 layout **REVISED**.
A7.05 (TES)	1	Label **REVISED**. Specialty Equipment Schedule updated.
T0.04 (NHG)	All	**ADDED** Staging & Phasing Sheet.
C1.01 (NHG)		**REVISED** disturbance area for removal of previously proposed transformer concrete pad. **CLARIFIED** removal of containers and temporary fencing by owner. **ADDED** clarification for removal of all wheel stops on coordination for salvaging based on condition.
C2.01 (NHG)		**OMMITED** previously proposed transformer concrete pad. **ADDED** light poles, refer to electrical plans for additional information. Label **REVISED** for removal of Detail #14/C9.02. Light pole count **REVISED**. Total parking count **REVISED**. **ADDED** clarification for new wheel stops and coordination on reuse of existing wheel stops.
C3.01 (NHG)		**OMMITED** previously proposed transformer concrete pad.
C3.01 (TES)		**REVISED** electrical conduit sizes.
C4.01 (NHG)		**REMOVAL** of previously proposed transformer concrete pad.
C8.01 (NHG)		**REVISED** disturbance area for removal of previously proposed transformer concrete pad.

L1.01 (NHG)		Label & Planting Schedule **REVISED**. Replaced 5 Prunus 'Schipkaensis' with 5 Prunus 'Otto Luyken'.
C9.02 (NHG)	14	Detail 14/C9.02 **OMMITED**.
A2.01 (NHG)	1	**REVISED** (2) Grid line dimension changes.
A3.01 (NHG)		**OMMITED** (1) L-6 Fixture above entry door.
A5.01 (NHG)		**OMITTED** (1) L-2 fixture in Shower Room.
M2.01 (NHG)		**REVISED** CFM for Wrestling Room
M2.02 (NHG)		**REVISED** minor clarification of outdoor ductwork rerouting.
E0.01 (NHG)		**REVISED** Lighting Fixture Schedule. Scheduled Outdoor Photocell lighting control device.
E1.01 (TES)	3	**ADD** Office 306 Demo Plan – See enclosed.
E2.01 (TES)	5	**ADD** required convenience receptacle; Adjust receptacle layout. See enclosed.
E2.02 (TES)	3,4	**ADD** convenience receptacles. See attached.
E5.01 (TES)	2,3	**ADD** Office 306 Proposed Lighting Plan; **REVISE** Library lighting plan – see enclosed.
E6.01 (TES)	1	**REVISE** one line diagram to reflect civil scope of work. **REVISE** Panel Schedules to reflect other changes.
E6.02 (TES)	6	**ADD** Trenching Detail
E2.01 (NHG)		**REVISED** service & meter disconnect to be rated for 400A in lieu of 600A. **REVISED** proposed feeder conduit routing.
E3.01 (NHG)		**REVISED** proposed electrical service to be from Kings Hwy E in lieu of Hopkins Ln. **REVISED** utility transformer to be pole-mounted in lieu of pad-mounted. **REVISED** (4) Type E pole lights to be Type A. **ADDED** (3) Type D pole lights.
E5.01 (NHG)		**DELETED** L6EM fixture above Entry – 06 entrance. **REVISED** (1) L5 fixture to be L5EM and proposed remote battery / test switch location. **ADDED** (1) Outdoor Photocell. Circuited (3) Type D pole lights. **REVISED** Reduced quantity of EM-type fixtures (some L1EM fixtures changed to L1) within Athletic Trainer – 10, Locker Room – 11, & Scale Room – 15.
E5.02 (NHG)		**REVISED** proposed photometrics.
E5.52 (NHG)		**REVISED** Typical Exterior Area diagram to include more detail.

E6.01 (NHG)		**REVISED** utility transformer to be pole-mounted in lieu of pad-mounted. **REVISED** service & meter disconnect to be rated for 400A in lieu of 600A. **REVISED** CT Cabinet to be rated for 400A in lieu of 600A. **REVISED** PNL HV-1 to be provided with a 400A MCB in lieu of 600A. **REVISED** feeder wiring & conduit sizes. **OMITTED** scope of work associated with back-feed PNL (E) HLP1 from the new electrical service. Existing service & (E) HLP1 installation is to remain.
E6.02 (NHG)		**OMIT** PNL (E) HLP1 Schedule from the dwg. (3) Prepared Spaces to be provided within PNL HV-1 in lieu of 200A-3P breaker previously shown to feed (E) HLP1.
E7.01 (NHG)	6	**REVISED** Detail 6: Service Entrance Grounding Detail, including concrete-encased electrode requirements.
E7.02 (NHG)	6	**REVISED** Detail 6: Electrical Thru-Wall Conduit Seal to indicated NOT TO SCALE.
E7.04 (NHG)		**OMITTED** details from sheet. (Note: Currently no scope associated with this drawing)
FA0.01 (NHG)		**REVISED** Fire Alarm System Manufacturer District intent clarified to be Potter Electric **REVISED** Fire Alarm Control Panel model # indicated to be AFC-1000V.
FA2.01 (NHG)		WP designation **ADDED** to the (5) Monitoring Modules indicated to be provided within the Meter Vault WP designation **ADDED** to the (3) HVAC Shutdown Control Modules Speaker/Strobe **ADDED** within Riser – 01 Speaker/Strobe within Vestibule – 02 wattage **REVISED** Speaker/Strobe within Locker/Team Room – 03 location **REVISED**
S1.00 (NHG)	1	**REVISED** dimension.
S1.20 (NHG)	1	**REVISED** note.
S4.00 (NHG)	1	**REVISED** joist section.
S1.00 (TES)	1	**REVISED** dimensions.
S1.10 (TES)	1	**REVISED** column locations.

4.0 Questions/Answers:

Item No.	Addendum Requirements
1.	Q: Can the AISC Certification be waived? A: No, the requirement for AISC Certification cannot be waived.

2. Q: On drawing A7.05 (Tatem), there is a freestanding Markerboard labeled (MB-1) in the corner of SGI room 107A. Is it supposed to be a Smartboard (SB-1) by the owner?

   A: Yes, this item was mislabeled. Please see updated A7.05 (TES) enclosed.

3. Q: Can multiple primary subcontractors be named for the same trade for Contract C? For example, two different steel subcontractors, with one at each site for Tatem and Hopkins?

   A: Bidders may only name one primary subcontractor for any one trade per contract. This applies to all three contracts, including Contract C.

4. Q: Please confirm that listed Structural Steel Subcontractor must utilize 2nd tier subs who hold AISC Fabricators and/or AISC Erector certification as required, if listed structural steel sub do not hold AISC Certifications themself.

   A: That is correct. Please see the response to question 1 above.

5. Q: Please confirm that Builders Risk Insurance will be provided by Owner if it is required.

   A: Builder's Risk Insurance is required by the Contract Documents and shall be provided by the Contractor. Refer to the insurance requirements of the Project Manual, including AIA A201 Section 11.1.1.3. The cost of required Builder's Risk Insurance shall be included in the Bid.

6. Q: Please confirm that Owner Protective Liability Insurance will be provided by Owner if it is required.

   A: Owner's Protective Liability Insurance is not required by the Contract Documents. No separate Owner's Protective Liability policy is required to be provided by either the Owner or Contractor. Contractor shall provide the insurance coverages specifically required by the Contract Documents.

7. Q: Please provide the construction budget for the project for bonding purposes.

   A: The Owner wished to not disclose the budget at this time.

8. Q: Please confirm all 3rd party code/special testing and inspection will be provided and paid by Owner due to unknown cost.

   A: Yes, Code-required Special Inspections and associated third-party testing and inspection services identified as Owner-retained services in the Contract Documents will be provided and paid for by the Owner. Contractor shall coordinate with the Owner's testing and inspection agencies and provide access, notice, samples, and

other assistance required by the Contract Documents. This does not relieve the Contractor of testing, inspections, manufacturer's field services, commissioning, quality-control activities, or retesting specifically assigned to the Contractor by the Contract Documents. Costs associated with retesting or reinspection required due to nonconforming Work shall remain the responsibility of the Contractor where specified.

9. Q: If Traffic Control is required, please consider an allowance due to unknown cost.

A: Traffic Control is not anticipated to be required for either project.

10. Q: Please confirm CAD drawings will be provided to GC at no cost. Spec 013100-4 (1.7-A) says "Architect will not provide Architect's CAD drawing digital data files for Contractor's use during construction" If there are any charges required please clarify.

A: CAD drawings will be provided to the selected GC upon request, provided the contractor signs the required CAD Waiver Form. See attached, revised Section 013100 and referenced form.

11. Q: Please confirm Maintenance bond requirements. Standard Project Warranty is 1 year. GC 9.3.1.3 calls for 2 years while RFB-23(36) calls for 1 Year.

A: Contractor to provide one (1) year Maintenance Bond / Contractor's Warranty.

12. Q: Please confirm Building Permit Fees will be waived or paid by Owner due to unknown cost.

A: Both projects are exempt from Building Permit Fees.

13. Q: Please provide Table of Contents for Specification with applicable specs sections.

A: See Table of Contents attached to this Addendum.

14. Q: Please confirm that the plans have been reviewed by DCA/Local Authorities and building permit can be pulled out within 1 month.

A: Both projects will be reviewed locally. Both projects have been reviewed by the local planning board and are ready for Building Department approval.

15. Q: Please confirm if there is a Construction Manager on this project, if so, please provide name of CM.

A: The CM is Colliers Project Leaders, and the construction managers responsible for overseeing the projects are Richard Brown and Kyle Angelucci.

16. Q: Please provide detailed requirements and info for Site office Trailer & Equipment for exclusive use for CM/Archi/Owner during construction period.

A: The CM, Owner, and Architect do not require a Site Office / Trailer and/or equipment for use. Meeting space for bi-weekly meetings will be held at the District's Board of Education Offices at 95 Grove Street, Haddonfield NJ 08033. It is the Contractor's option to provide a construction trailer at either and/or both sites for their use.

17. Q: Please confirm if any special free standing Mockup Panel(s) are required.

A: Freestanding mockups are not required. Where technical specifications may require a "mockup", the work may be either submitted as samples, or applied directly to the building as an "in-place" mockup and reviewed on site.

18. Q: Please provide Pre bid Meeting Sign in Sheet & meeting minutes.

A: See Sign-In Sheet attached to this Addendum.

19. Q: Please confirm there is no any hidden hazardous or contaminated materials removal involved on this project and if it is required to be removed will be handle by Owner.

A: No hazardous-material abatement or contaminated-material removal is specifically identified as part of the Contractor's Work in the Contract Documents.
Any hazardous material abatement required will be by the Owner.

The Contract Documents do not warrant that concealed or previously unidentified hazardous materials are absent. If hazardous materials or substances not addressed in the Contract Documents are encountered, Contractor shall immediately stop work in the affected area and notify the Owner and Architect in accordance with AIA A201 Section 10.3. The Owner will arrange for required testing and, if confirmed, removal or rendering harmless of such materials in accordance with the Contract Documents. Contractor remains responsible for hazardous materials brought onto the site and for compliance with applicable worker-protection requirements.

A current AHERA plan exists for Tatem ES. There are no Asbestos Containing Materials nor lead paint known in the project's work areas.

20. Q: Please confirm there is no Rock removal involved. If there are any anticipated, please provide allowance with unit price provision in the bid form due to unknown cost.

A: Rock excavation is not anticipated based on the subsurface conditions identified in the Geotechnical Engineering Report.

21. Q: Please provide list of items supplied and installed by Owner on this project.

A: See Summary of Work specification sections. Owner will install loose furniture and equipment items not required to be physically connected to the floors, walls etc. Toilet Room Accessories indicated such as all dispensers will be Owner-Furnished, Contractor Installed. Athletic Equipment at Hopkins such as Motorized Bleachers, Scoreboard, Wall Pads, Basketball Backboards, Volleyball sleeves, & Lockers will be Owner-Furnished, Owner-Installed. However, there are requirements for the Contractor to provide power to applicable fixtures.

22. Q: Please confirm start date of the project, consider the date of building permit issued by authority received and not NTP.

A: The date of building permit issuance cannot be forecasted as the owner does not have control over the local building department. The Owner will award bids at their 9/24/2026 Board Meeting. The Contractor may proceed immediately. Contracts, including signed and sealed Drawings & Specifications will be provided within (5) business days following the project award. Recently for Projects of related size and complexity; the Haddonfield Borough Construction Office has been taking between 3-5 weeks for full release of permits, however, has been issuing demo-only permits to accelerate the Work.

23. Q: Please provide staging area plan for the project with temporary fence required.

A: See attached Staging & Phasing Plan T0.04.

24. Q: Clarify who is responsible for paying for the temporary utilities (water & electricity).

A: Owner will be responsible for the cost of metered water and electrical utility consumption for temporary construction utilities. Contractor shall be responsible for providing, installing, maintaining, and removing all temporary utility connections and associated equipment required for the Work, including temporary meters, backflow preventers, distribution, protection devices, and restoration of existing facilities, in accordance with Section 015000 – Temporary Facilities and Controls.

25. Q: Please clarify the proposed roofing systems for this Project.
The Request for Bids and Specification Section 011000 (NHG), Paragraph 1.5.A.1.a both describe the Hopkins Gymnasium roof as a 'partial modified bitumen roof / partial standing seam metal roof over continuous insulation.' The Project Summary on Drawing T0.01 describes the same roof as a 'steel joist roof, metal deck and single ply membrane roofing system.' Please confirm which roofing system or combination of systems is required, identify the governing specification sections and drawing details for each, and confirm the extent and boundaries of each system if both are required.

A: The drawings identify the correct roofing system. 011000 (NHG) has been revised and is attached to this addendum. All roofing areas for both projects shall be single ply membrane roofing systems.

26. Q: The Board advertises three contracts — 25.14A (New Hopkins Gym), 25.14B (Addition & Alterations to J.F. Tatem ES), and 25.14C (both) and the bid package includes a separate Bid Proposal Form for each. Please clarify the following so that all bidders may prepare their bids on a common basis:

(a) Is a bidder required to submit a price on all three Bid Proposal Forms, or may a bidder submit a price on one or two of the three?

(b) How will the Board determine the lowest responsible bidder across the three contracts? Specifically, will the Board compare the lowest bid on Contract 25.14C against the sum of the lowest bid on Contract 25.14A and the lowest bid on Contract 25.14B, and award whichever combination produces the lowest total cost to the Board?

(c) May the Board award Contract 25.14A to one bidder and Contract 25.14B to a different bidder?

(d) With respect to bid security, the Pre-Qualification Affidavit, the Notice of Classification, the Total Amount of Uncompleted Contracts form, and the Consent of Surety: where a bidder submits prices on more than one Bid Proposal Form, is one set of documents sufficient if it covers the largest contract amount bid, or is a separate set required for each contract? Please confirm the required amount of the bid guarantee and the Consent of Surety in that circumstance.

(e) Please confirm whether the Alternates and Unit Prices will be considered in determining the low bidder, and if so, in what order.

A: (a) Bidders are not required to bid on all three contracts.

(b) After receiving bids, the Board will decide whether to award Contract A only, Contract B only, Contracts A & B separately, or to award Contract C to a single bidder.

(c) Yes.

(d) One set of documents is sufficient.

(e) Unit Prices have been eliminated from the Project. Alternate(s) may or may not be awarded. Alternate(s) will be considered in determining the low bidder.

27. Q: The Request for Bids establishes Substantial Completion of the J.F. Tatem Elementary School work on Thursday, December 23, 2027 and Substantial Completion of the New Hopkins Gymnasium on Friday, March 3, 2028. Instructions to Bidders Article 35 provides for liquidated damages of $2,500.00 per calendar day. Please confirm, for a bidder awarded Contract 25.14C: (a) whether the two Substantial Completion dates apply independently to each portion of the Work; (b) whether liquidated damages of

$2,500.00 per calendar day would be assessed separately and concurrently against each portion, or whether a single $2,500.00 per calendar day assessment applies to the Contract as a whole; and (c) whether the Board will issue a separate Certificate of Substantial Completion for the J.F. Tatem Elementary School work upon its Completion, thereby ending the accrual of liquidated damages and commencing the warranty and maintenance bond periods for that portion of the Work.

A: Liquidated Damages have been revised as follows: Tatem ES Liquidated Damages shall remain at $2,500/day; Hopkins Gym shall be REVISED to $1,000/day.

For Contract 25.14C, the two separate projects are subject to separate and independent Substantial Completion dates as established in the Contract Documents. Liquidated damages will be evaluated independently with respect to the applicable Substantial Completion requirement for each portion of the Work, and achievement of Substantial Completion for one portion does not extend or modify the required Substantial Completion date for the other. Separate Certificates of Substantial Completion will be issued for each portion upon achievement of its required Substantial Completion. Liquidated damages shall be assessed at the rate indicated calendar day for each portion of the Work that fails to achieve its applicable required Substantial Completion milestone; therefore, if Contract C is awarded, and both portions are concurrently beyond their respective required Substantial Completion dates, liquidated damages may be assessed concurrently, not to exceed $3,500/day in total.

28. Q: Please clarify three administrative items so that the bid documents are internally consistent.

(a) Specification Section 012100, Paragraph 3.3 identifies the J.F. Tatem Elementary School allowance as 'Allowance No. 1 – Contract #25.10' in the amount of $175,000.00 and the Hopkins Gymnasium allowance as 'Allowance No. 2 – Contract #25.14' in the amount of $125,000.00. The Bid Proposal Forms identify the allowance on each of Contracts 25.14A, 25.14B and 25.14C as 'Allowance No. 1' in the amounts of $125,000.00, $175,000.00 and $300,000.00 respectively. Please confirm the allowance amounts to be included in the Base Bid for each of the three contracts.

(b) The J.F. Tatem Elementary School drawing set carries LAN Job No. 2.20277.25.10 while the Project Manual carries LAN Job No. 2.20277.25.14 and the contract is designated #25.14. Please confirm that both numbers refer to the same Work and that no separate contract #25.10 exists.

(c) Section 012200 describes Unit Price No. 1 'Selective Asphalt Sub-Base Repair' and Unit Price No. 2 'Selective Asphalt Base Course Repair' using identical descriptive language. Please issue a corrected description distinguishing the two and confirm the measurement basis and the limits of each.

A: Yes, the allowance amounts are confirmed. The correct contract numbers to be used are 2.20277.25.14A, 2.20277.25.14B and 2.20277.25.14C. Unit Prices have been removed from the project in this Addendum. Project 20277.25.10 does not apply.

29. Q: Specification Section 011000, Paragraph 1.8 for both the New Hopkins Gymnasium and J.F. Tatem Elementary School identifies low-voltage electrical devices — security cameras, door access control, wireless access portals, IT racks and wiring — as Owner-furnished and Owner-installed. Section 011000 (NHG) Paragraph 1.6.B also states that the Owner will perform information technology integration concurrently with the Work. Please confirm the extent of the Contractor's scope in support of these Owner-installed systems, specifically whether the Contractor is to provide conduit, raceway, sleeves, backboxes, pull strings, pathways, plywood backboards, dedicated power circuits and grounding for the Owner-furnished low-voltage devices and IT

racks, and identify the drawings on which such infrastructure is shown. Please also confirm the anticipated timing of the Owner's IT integration work relative to the Contractor's ceiling and finish work so that the Contractor may reflect it in the construction schedule.

A: The Owner will furnish and install the low-voltage devices, IT equipment, racks, data/security cabling and associated system components identified as Owner-Furnished/Owner-Installed in Section 011000. The Contractor shall provide the building infrastructure indicated in the Contract Documents to support these systems, including required conduit/raceway, sleeves, boxes, pathways, power, grounding, blocking/backboards and related rough-in where shown or specified. Refer to the Electrical Drawings and applicable Division 26 requirements, together with the door hardware requirements for infrastructure associated with electrified and access-controlled openings. The Contractor shall coordinate locations and rough-in requirements with the Owner's IT/security installers prior to concealment of walls and ceilings. Owner IT integration will occur concurrently with the Work as stated in Section 011000; the Contractor shall incorporate this coordination into the construction schedule and provide the Owner reasonable access to complete such work prior to closure of affected ceilings, walls and finishes.

30. Q: The Geotechnical Report included in the Project Manual is titled 'Proposed Gymnasium, Athletic Field Lighting and Related Improvements,' includes two soil borings advanced in the area of the proposed athletic field, and provides allowable bearing and lateral bearing capacities for circular isolated concrete pier foundations for light pole installations. The Request for Bids describes the Hopkins Gym site work as including 'a parking lot that will serve the new gym, site lighting, and landscaping,' and does not mention athletic field lighting. Please confirm whether athletic field lighting, including light pole pier foundations, poles, fixtures, feeders and controls, is included in the scope of Contract 25.14A and 25.14C, and if so identify the drawings and specification sections governing that work.

A: A new turf athletic field, inclusive of field lighting and a parking lot specifically for the athletic field were recently installed. The Geotechnical report included both that project area and this bid's New Hopkins Gymnasium project area. Athletic field lighting and related piers / poles, the athletic field parking lot and related parking lot lighting is <u>not</u> in this project. The New Hopkins Gymnasium, as indicated in the Drawings, will include a parking lot and parking lot lighting.

31. Q: Specification Section 011000 (TES), Paragraph 1.8.B.2 identifies food service equipment as Owner-furnished and Owner-installed and refers to Section 114000 (TES) for the Contractor's responsibilities related to food service equipment infrastructure. Please confirm the division of responsibility for the renovated cafeteria kitchen and pantry, specifically: which items of food service equipment are Owner-furnished; whether the Contractor is responsible for all plumbing, gas, electrical, ventilation and fire suppression rough-in, final connections, and start-up for Owner-furnished equipment; whether an equipment schedule with rough-in requirements and utility loads will be issued for bidding purposes; and the anticipated date on which Owner-furnished food service equipment will be delivered to the site.

A: Owner-furnished food service equipment will be furnished and installed by the Owner. The General Contractor is responsible for all required supporting infrastructure and

connections, including plumbing, gas, electrical power and raceways/service poles, mechanical ventilation, kitchen hood fire suppression and associated controls/interfaces, as well as ancillary items indicated in the Contract Documents such as the Class K fire extinguisher. The food service drawings and Section 114000 establish the applicable equipment and rough-in requirements for bidding. Delivery of Owner-furnished equipment will be coordinated with the Contractor during construction.

32. Q: Tatem Wall Sections on A4.02 tag exterior CMU bearing walls as Wall Type 9, however, Wall Type 9 is shown as a CFMF Stud backup wall on A4.00. Please clarify.

A: An incorrect version of drawing A4.00 (TES) was issued with the bidding documents. Sheet A4.00 has been revised and is enclosed in this Addendum.

33. Q: Based on the scope of work and close proximity of the projects, if awarded both can a single superintendent be utilized for both projects?

A: Yes, provided all contract provisions can be met.

34. Q: Upon award will a color board or preferred color scheme choices coordinated with the owner be provided for coordination of submittals to assist in expediting review?

A: Approved digital color boards have been presented to the Owner prior to bid. Public Bids require non-proprietary specifications to which an awarded contractor may submit materials that differ from our basis of design which may vary in color accordingly. Because of this, technical specifications require physical sample submittals for most items that need a color selection. These will be reviewed and approved by the architect with the Owner's input. Reference the finish schedule for basis of design selections.

35. Q: Please confirm the parapet walls are high enough to accommodate the bldg up roof system with required pitch. Base layer is (2) 2.6 layer rigid board plus starting gyp board of ½ .

A: Confirmed.

36. Q: Please confirm all items to be salvaged are limited to what is currently indicated and we are not salvaging items such as temporary fencing to be removed, iron fencing, light poles and fixtures, or parking signage.

A: Confirmed. For NHG owner will remove containers and temporary fencing prior to contractor mobilization.

37. Q: There is references to the Division 8 specification for curtain wall, however there is no spec included with the bid documents. Will this be provided?

A: Section 084413 – Glazed Aluminum Curtain Wall – has been attached to this Addendum.

38. Q: What is the responsibility and Scope of work to be performed by NJ American Water (NJAW)?

A: NJAW shall provide a service upgrade up to valve location as indicated in plan. Location of valves is schematically shown and will be finalized once NJAW reviews service upgrade application.

39. Q: (Hopkins) All curb stops (115) are to be salvage but only 72 to be reused. Is school keeping the remainder?

A: See Addendum #1 sheets C1.01 and C2.01. Scope of work has been revised to REMOVE all existing wheel stops and provide all new wheel stops.

40. Q: (Hopkins) Based on extent of disturbance is a SWPP required to be provided by the contractor?

A: As the project will exceed an acre of disturbance, the contractor is expected to comply with the rules and regulations of the 5G3 permit.

41. Q: (Hopkins) Container to be removed and contractor is to coordinate with Owner. If the contractor is responsible for the move, what is the new location?

A: The Owner will remove and relocate both the storage containers and temporary fencing adjacent to the A-wing of the High School. Contractor responsibility has been eliminated.

42. Q: (Hopkins) Gym floor references custom logo in center of the floor to selected by owner- Are we to quote this as it would be the bulldog mascot?

A: The Owner has confirmed this will be their typical ‘H’ logo, a standard Varsity Font style letter ‘H’ with one or two outline colors.

43. Q: (Hopkins) Note on drawing A7.05 references dwg A9.0 for finish schedule but it Is not on the dwg log and is missing from the bid set. Please advise if drawing A9.0 will be issued.

A: That particular detail meant to refer to A9.01. The Finish Sheet.

44. Q: (Hopkins) Quick comparison arch to structural- A2.01 east end CL A-F vary slightly between plans. A2.01 and S1.00 show dimensions between CL A to B is 1” different between plans and CL BA to C is also 1 inch difference between plans- Bldg length is showing a difference of 1 inch over all CL 0-9 . Please advise.

A: See enclosed Structural Drawings indicating dimensional revisions to address this discrepancy.

45. Q: (Hopkins) Wrestling room floor- the flooring specified is a rolled product and the direction the floor laid needs to be known. In order to reduce seams, reduce waste and avoid end coil, please confirm the flooring will be laid north to south (plan North).

A: Correct. This floor is to be laid plan-north to plan-south.

46. Q: (Hopkins) There are several doors indicated to be 86 inch tall- please confirm this is correct and should not be 84".

A: The doors indicated as 86" are correct.

47. Q: (Tatem) Dwg A6.03 show elevation of curtain wall system item symbol 5 and 18 as presumed glazing panels. It appears that 18 is the metal panel infill and 5 is to be G-3 glazing for all exterior. Please confirm.

A: Yes, confirmed.

48. Q: (Tatem) Please provide color for metal panel infill at curtain walls

A: The metal panel will be a standard white color as selected from the manufacturer's full range.

49. Q: (Tatem) The basketball court at Tatem that is to be utilized for contractor offices, parking, staging, and laydown is not in the best condition already. Please confirm if resurfacing/finishing the courts after project completion is part of the contract, as they will not hold up to the wear and tear of material and equipment being operated on them.

A: Contractor to mill and repave designated staging area in its entirety following the work. Owner to stripe / paint newly paved area following the work under separate contract.

52. Q: Please confirm completion date December 23, 2027 (Tatem ES) Friday, March 3, 2028 (Hopkins Gym) for Contract # 03 remain same.

A: Confirmed – completion dates for each project will remain as described with the two separate completion dates for each project, if contract C is rewarded.

53. Q: AIA A101-4 (4.5) calls for Liquidated damage as $1,000 while RFB-22 (35) Liquidate Damage calls for $2,500 per day. Please confirm the amount and confirm for Contract # 03 remain same.

A: Liquidated Damages have been revised to $2,500.00/day for Tatem & $1,000.00/day for Hopkins. See response to question 27 above.

54. Q: Please consider providing Bid Submission by 1 Original Bid Submission only without additional Copy & USB drive requirement as most main numbers released by Subs/suppliers on same day, final number finalized on last minutes, hard to keep it up with USB drive. GC can provide upon low bidder at later date if any required.

A: One Original Bid Submission is acceptable. A physical & digital copy is not required.

55. Q: Index page 3 & 18 (25) calls for Subcontractor's Disclosure Statement to be submitted with Bid while Bid Checklist page 6 does not call for it. As Bid Check list is to be considered final, please clarify.

A: Subcontractor's Disclosure Statement is to be submitted with a Contractor's Bid.

56. Q: Please consider this size of project to have Union/PLA to avoid any future issue due to stronghold of Unions in that area.

A: The Haddonfield Board of Education does not have a PLA in place.

57. Q: Appendix Section Pg 71 list only performance bond which required to submit after award and Surety Disclosure Statement which required to submit along with Bond. Please confirm there is no Bid Bond special form and AIA form for bid bond is acceptable. Or provide if any special requirement is applicable.

A: AIA form for Bid Bond is acceptable.

58. Q: Please provide 2nd walk through for site visits who could not attend Prebid on 08-25-2025 & for subs willing to join, if possible.

A: Please contact Tim McFerren, Dir. of Facilities at 609-828-7852 and/or Ken Lambert, Facilities at 609-238-6655 to schedule a site visit.

59. Q: Spec 011000-4 (1.11-B-3), Please identify area in existing school where off school hours/Overtime required to keep provision the bid amount.

A: Refer to Section 011000. No work may interfere with the District's (school's) operations <u>during the school year</u>. However, first shift work during the school year that does not negatively impact the district's operations may occur within the school with advance coordination with the District. Accordingly, work in existing building areas that cannot be completed during scheduled school breaks or otherwise isolated from school operations shall be performed after school hours, evenings, weekends, or other Owner-approved times, at no additional cost to the Owner. The Contractor shall account for these restrictions in its Bid and construction schedule.

60. Q: Spec 011000-5 (TES), Please review 1.13-D Phase 3 indicated Substantial Completion as Jan 2028 while at all other places say Dec 22, 2027. Please clarify.

A: December 22, 2027 is correct. Section 01100 (TES) has been updated.

61. Q: Spec 012200-2 Description for U/P-1 & U/P-2 are same, Please provide differentiate or confirm.

A: The two upholstery products are the same but are of a different color. See Finish Legend on A9.02 (TES).

62. Q: Please clarify specs on roof screening assemblies 055000 2.3A - what type of metal panel or product series from “CityScapes “ Envisor?

A: Contractor to provide the ‘PAN SOLID’ in color Alabaster. Frames are 6063 T6 extruded aluminum; 0.063 Powder-coated aluminum

63. Q: (Tatem) What is the electric conduit shown on the site drawings to the generator tied to? What panel does generator back up?

A: The generator is backing up panels EP1 and EP2 through ATS-1 and ATS-2. This equipment is located in the existing boiler room.

64. Q: (Tatem) On drawing C1.01 it shows the existing service to be abandoned in place, On drawing C3.01 it shows a proposed 4” conduit who is installing this conduit? Nothing is shown on the electrical drawings for this.

A: C3.01 has been updated to coordinate electrical scope. See the revised sheets C3.01 and E6.01 for additional information.

65. Q: (Tatem) On drawing E2.01 Construction note #7 states that the contractor is to provide back box and conduit only and the fire alarm devices are by a separate contractor under another contract. There is a similar note for data wiring (Note #6). Just want to confirm we do not have any fire alarm in our price.

A: Confirmed, there is no fire alarm or data wiring in the scope of the Tatem project, only back boxes and conduit should be provided.

Attachments:

#1 - Bid Proposal Form
#2 - 03_TOC_20277.25.14
#3 - 011000 (NHG) - SUMMARY - Add 01
#4 - 011000 (TES) - SUMMARY - Add 01
#5 - 013100 - PROJECT MANAGEMENT AND COORDINATION - Add 01
#6 - 20277.25.14_PreBidSignInSheet_2026-08-25 Scanned
#7 - 080671 (NHG) Door_Hardware_Schedule_2026-08-17 Add 01
#8 - 084413 - GLAZED ALUMINUM CURTAIN WALL - Add 01
#9 - CADrelease_20277.25.14

#10 - Section 284600 - FIRE DETECTION AND ALARM - Add 01
#11 - Tatem Elementary AHERA

Enclosures:

#1 - A1.03 (TES)
#2 - A2.01 (NHG)
#3 - A2.05 (TES)
#4 - A3.01 (NHG)
#5 - A4.00 (TES)
#6 - A5.01 (NHG)
#7 - A5.01 (TES)
#8 - A5.03 (TES)
#9 - A7.03 (TES)
#10 - A7.05 (TES)
#11 - C1.01 (NHG)
#12 - C2.01 (NHG)
#13 - C3.01 (NHG)
#14 - C3.01 (TES)
#15 - C4.01 (NHG)
#16 - C8.01 (NHG)
#17 - C9.02 (NHG)
#18 - C9.02 (TES)
#19 - E0.01 (NHG)
#20 - E1.01 (TES)
#21 - E2.01 (NHG)
#22 - E2.01 (TES)
#23 - E2.02 (TES)
#24 - E3.01 (NHG)
#25 - E5.01 (NHG)
#26 - E5.01 (TES)
#27 - E5.02 (NHG)
#28 - E5.52 (NHG)
#29 - E6.01 (NHG)
#30 - E6.01 (TES)
#31 - E6.02 (NHG)
#32 - E6.02 (TES)
#33 - E7.01 (NHG)
#34 - E7.02 (NHG)
#35 - E7.04 (NHG)
#36 - FA0.01 (NHG)
#37 - FA2.01 (NHG)
#38 - L1.01 (NHG)
#39 - M2.01 (NHG)
#40 - M2.02 (NHG)
#41 - M101 (TES)
#42 - M201 (TES)
#43 - M202 (TES)
#44 - M203 (TES)
#45 - M301 (TES)
#46 - M302 (TES)
#47 - M601 (TES)
#48 - M602 (TES)
#49 - M603 (TES)
#50 - M614 (TES)
#51 - S1.00 (NHG)
#52 - S1.00 (TES)
#53 - S1.10 (TES)
#54 - S1.20 (NHG)
#55 - S4.00 (NHG)
#56 - T0.04 (NHG)

END OF ADDENDUM NO. 1

BID PROPOSAL FORM

CONTRACT 25.14A: New Hopkins Gym

Base Bid in the sum of _____Dollars ($_____) which includes the Allowance No. 1 listed below.

ALLOWANCES (included in the Base Bid value above):

Contract A (HG) - Allowance No. 1: One Hundred Twenty-Five Thousand dollars ($125,000.00) included in the Base Bid amount above for unforeseen conditions encountered during the work.

ALTERNATE

ADD Alternate No.1: New Hopkins Gymnasium Landscaping (HG)

_____Dollars ($_____)

ADD Alternate No.2: New Hopkins Existing Iron Fence Restoration (HG)

_____Dollars ($_____)

Bidder's Authorized Representative:

Name: _____
(Printed/Typed)

Title: _____
(Printed/Typed)

Signature: _____

Date: _____

_____
(Seal)

BID PROPOSAL FORM

CONTRACT 25.14B: Addition & Alterations to J.F. Tatem ES

Base Bid in the sum of _____Dollars ($_____) which includes the Allowance No. 1 listed below.

ALLOWANCES (included in the Base Bid value above):

Contract B (TES) - Allowance No. 1: One Hundred Seventy-Five Thousand dollars ($175,000.00) included in the Base Bid amount above for unforeseen conditions encountered during the work.

Bidder's Authorized Representative:

Name: _____
(Printed/Typed)

Title: _____
(Printed/Typed)

Signature: _____

Date: _____

_____
(Seal)

BID PROPOSAL FORM

CONTRACT 25.14C: New Hopkins Gym and Addition & Alterations to J.F. Tatem ES

Base Bid in the sum of _____Dollars ($_____) which includes the Allowance No. 1 listed below.

ALLOWANCES (included in the Base Bid value above):

Contract C - Allowance No. 1: Three Hundred Thousand dollars ($300,000.00) included in the Base Bid amount above for unforeseen conditions encountered during the work.

ALTERNATE

ADD Alternate No.1: New Hopkins Gymnasium Landscaping (HG)

_____Dollars ($_____)

ADD Alternate No.2: New Hopkins Existing Iron Fence Restoration (HG)

_____Dollars ($_____)

Bidder's Authorized Representative:

Name: _____
(Printed/Typed)

Title: _____
(Printed/Typed)

Signature: _____

Date: _____

_____
(Seal)

TABLE OF CONTENTS

Section No.	Title	Page No.

GENERAL SPECIFICATIONS

Request for Bids
Haddonfield BOE Front End and Bid Documents

AIA Document A101 – 2007 – Standard Form of Agreement Between Owner & Contractor

AIA Document A201 – 2007 – General Conditions of the Contract for Construction

Application & Certificate for Payment & Continuation Sheet

TECHNICAL SPECIFICATIONS

A. (HG) New Hopkins Gymnasium

B. (TES) Addition & Alteration to J.F. Tatem Elementary School

Section No.	Title	Page No.
DIVISION 1 – GENERAL REQUIREMENTS		
011000	(HG) Summary	011000-1
011000	(TES) Summary	011000-1
012100	Allowances	012100-1
~~012200~~	~~Unit Prices~~	~~012200-1~~
012300	Alternates	012300-1
012500	Substitution Procedures	012500-1
012600	Contract Modification Procedures	012600-1
012900	Payment Procedures	012900-1
013100	Project Management and Coordination	013100-1
013200	Construction Progress Documentation	013200-1
013233	Photographic Documentation	013233-1
013300	Submittal Procedures	013300-1
014000	Quality Requirements	014000-1
015000	Temporary Facilities and Controls	015000-1
016000	Product Requirements	016000-1
017300	Execution	017300-1
017419	Construction Waste Management and Disposal	017419-1
017700	Closeout Procedures	017700-1
017823	Operation and Maintenance Data	017823-1
017839	Project Record Documents	017839-1

TABLE OF CONTENTS

DIVISION 02 – EXISTING CONDITIONS

020000 Site Conditions 020000-1
Attachment # 1 Geotech Report
Attachment # 2 Test Pit Report
Attachment # 3 Geotech Report (TES)
024119 Selective Demolition 033000-1

DIVISION 03– CONCRETE

033000 Cast-In-Place Concrete 033000-1

DIVISION 04 – MASONRY

042200 Concrete Unit Masonry 042000-1
042613 Masonry Veneer 042613-1
047200 Cast Stone Masonry (HG) 047200-1
047200 Cast Stone Masonry (TES) 047200-1

DIVISION 05 – METALS

051200 Structural Steel Framing 051200-1
052100 Steel Joist Framing (HG) 052100-1
052100 Steel Joist Framing (TES) 052100-1
053100 Steel Decking 053100-1
054000 Cold Formed Metal Framing 054000-1
055000 Metal Fabrications 055000-1
055100 Metal Stairs 055100-1
055213 Pipe and Tube Railings 055213-1

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

061000 Rough Carpentry 061000-1
061600 Sheathing 061600-1
062013 Exterior Finish Carpentry (HG) 062013-1

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

071113 Bituminous Dampproofing 071113-1
072100 Thermal Insulation 072100-1
072726 Fluid-Applied Membrane Air Barrier 072726-1
074214 Metal Wall Panels 074214-1
074646 Fiber-Cement Siding (HG) 074646-1
075323 EPDM Membrane Roofing 075323-1
076200 Sheet Metal Flashing and Trim 076200-1
077100 Roof Specialties 077100-1
077113 Manufactured Copings and Fascia 077113-1
077200 Roof Accessories 077200-1
078100 Spray Fireproofing 078100-1
078413 Penetration Firestopping 078413-1
079010 Pre-Compressed Seal Expansion Joint 079010-1

TABLE OF CONTENTS

079200 Joint Sealants 079200-1
079219 Acoustical Joint Sealants 079219-1
079513 Expansion Joint Cover Assemblies 079513-1

DIVISION 08 – OPENINGS

080671 (HG) Door Hardware Schedule 080671-1
080671 (TES) Door Hardware Schedule 080671-1
081113 Hollow Metal Doors and Frames 081113-1
081416 Flush Wood Doors 081416-1
083400 (TES) Special Function Doors 083400-1
084313 Aluminum-Framed Storefronts & Doors 084313-1
084523 (HG) Fiberglass-Sandwich-Panel Assemblies 084523-1
084523 Fiberglass Reinforced Plastic Doors 084523-1
085113 (TES) Aluminum Windows 085113-1
087100 Door Hardware 087100-1
088000 Glazing 088000-1

DIVISION 09 – FINISHES

092216 Non-Structural Metal Framing 092216-1
092900 Gypsum Board 092900-1
093013 Ceramic Tiling 093012-1
095113 Acoustical Panel Ceilings 095123-1
095126 Linear Wood Ceiling Panels (HG) 095126-1
096466 Wood Athletic Flooring 096466-1
096500 Resilient Floor Tile and Accessories 096500-1
096513 Resilient Base and Accessories 096513-1
096723 Resinous Flooring 096512-1
096813 Tile Carpeting 096813-1
097200 Vinyl Wall Coverings 097200-1
098413 Acoustic Ceiling Baffles (TES) 098413-1
099000 Interior Painting 099123-1
099100 Exterior Painting 099100-1

DIVISION 10 – SPECIALTIES

101100 Visual Display Boards 101100-1
101416 Dedication Plaque 101416-1
101419 Dimensional Letter Signage & Signs (HG) 101419-1
101419 - Attachment - Martino Estimate - Haddonfield Gym
101423 Interior Signage 101423-1
102100 Toilet Compartments (HG) 102100-1
102226 Operable Partitions (TES) 102226-1
102800 Toilet Room Accessories 102800-1
104300 Emergency Aid Specialties 104300-1
104413 Fire Protection Cabinets 104413-1
104416 Fire Extinguishers 104416-1

DIVISION 11 – EQUIPMENT

114000 Food Service Equipment (TES) 114000-1
114000 (TES) Attachment – Tatem Elementary School Equipment Cut Data

TABLE OF CONTENTS

DIVISION 12 – FURNISHINGS

122496	(TES) Window Roller Shades	122496-1
123000	Manufactured Casework	123000-1
123661	Solid Surfacing Countertops	123661-1
129300	Site Benches	129300-1

DIVISION 21 – FIRE SUPPRESSION

210000	Fire Protection (HG)	210000-1
210000	Fire Protection (TES)	210000-1

DIVISION 22 - PLUMBING

220000	Plumbing Summary of Work	220000-1
220501	Basic Plumbing Materials and Methods	220501-1
220523	Plumbing Valves	220523-1
220529	Hangers and Supports for Plumbing Piping and Equipment	220529-1
220553	Identification for Plumbing Piping and Equipment	220553-1
220719	Plumbing Piping Insulation	220719-1
221116	Domestic Water Piping	221116-1
221119	Domestic Water Piping Specialties	221119-1
221123	Facility Natural-Gas Piping	221123-1
221316	Sanitary Waste and Vent Piping	221316-1
221319	Sanitary Waste Piping Specialties	221319-1
221413	Facility Storm Drainage Piping	221413-1
221423	Storm Drainage Piping Specialties	221423-1
224213	Plumbing Fixtures	224213-1

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

230000	Mechanical Summary of Work	230000-1
230130	HVAC Air Duct Cleaning	230130-1
230500	Common Work Results for HVAC	230500-1
230513	Common Motor Requirements for HVAC Equipment	230513-1
230517	Sleeves and Sleeve Seals for HVAC Piping	230517-1
230518	Escutcheons for HVAC Piping	230518-1
230523	General-Duty Valves for HVAC Piping	230523-1
230529	Hangers and Supports for HVAC Piping and Equipment	230529-1
230548	Mechanical Vibration Controls	230548-1
230553	Mechanical Identification	230553-1
230593	Testing, Adjusting, and Balancing for HVAC	230593-1
230713	Duct Insulation	230713-1
230719	HVAC Piping Insulation	230719-1
230923	Direct Digital Control System	230923-1
230993	HVAC Sequence of Operations	230993-1
232113	Hydronic Piping	232113-1
232116	Hydronic Piping Specialties	232116-1
232123	Hydronic Pumps	232123-1
232300	Refrigerant Piping	232300-1
233113	Metal Ducts	233113-1
233116	Non Metal Ducts	233116-1

TABLE OF CONTENTS

233300 Air Duct Accessories 233300-1
233416 Centrifugal HVAC Fans 233416-1
233713 Diffusers, Registers, and Grilles 233713-1
233813 Commercial Kitchen Hoods 233813-1
236200 Packaged Compressor and Condenser Units 236200-1
237200 Air-to-Air Energy Recovery Equipment 237200-1
237313 Modular Indoor Central Station Air Handling Units 237313-1
237413 Packages Rooftop HVAC Units 237413-1
237433 Dedicated Outdoor-Air Units 237433-1
238126 Split-System Air-Conditioners 238126-1
238126.1 Split-System VRF System 238126.1-1

DIVISION 26 – ELECTRICAL

260010 Supplemental Requirements for Electrical 260010-1
260519 Low-Voltage Electrical Power Conductors and Cables 260519-1
260523 Control-Voltage Electrical Power Cables 260523-1
260526 Grounding and Bonding for Electrical Systems 260526-1
260529 Hangers and Supports for Electrical Systems 260529-1
260533.13 Conduits for Electrical Systems 260533.13-1
260533.16 Boxes and Covers for Electrical Systems 260533.16-1
260533.23 Surface Raceways for Electrical Systems 260533.23-1
260543 Underground Ducts and Raceways for Electrical Systems 260543-1
260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling 260544-1
260553 Identification for Electrical Systems 260553-1
260923 Lighting Control Devices 260923-1
262213 Low-Voltage Distribution Transformers 262213-1
262416 Panelboards 262416-1
262726 Wiring Devices 262726-1
262816 Enclosed Switches and Circuit Breakers 262816-1
264313 Surge Protective Devices for Low-Voltage Electrical Power Circuits 264313-1
265000 Lighting 265000-1
265213 Emergency and Exit Lighting 265213-1

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

284600 Fire Detection and Alarm 284600-1

DIVISION 31 – EARTHWORK

311000 Site Clearing 311000-1
312001 Earthwork 312001-1
312318 Site Trenching 312318-1
312319 Dewatering 312319-1
312500 Soil Erosion and Sediment Control 312500-1
315000 Excavation Support & Protection 315000-1

DIVISION 32 – EXTERIOR IMPROVEMENTS

321216 Bituminous Asphalt Paving 321216-1
321316 Decorative Cement Concrete Pavement 321316-1
321613 Concrete Curbing 321613-1
321614 Concrete Site Work 321614-1

TABLE OF CONTENTS

321723	Pavement Markings	321723-1
322001	Unit Pavers	322001-1
323113	Chain Link Fences and Gates	323113-1
329200	Lawns and Grasses	329200-1
329300	Landscaping	329300-1

DIVISION 33 – UTILITIES

330500	Common Work Results for Utilities	330500-1
331400	Water Utility Transmission and Distribution	331400-1
333100	Sanitary Utility Sewerage Piping	333100-1
334200	Subdrainage	334200-1
334600	Storm Drainage	334600-1

LIST OF DRAWINGS

Dwg. No.	Title
Addition & Alteration to J.F. Tatem Elementary School (TES)	
T0.01	Title Sheet
T0.02	Accessibility Diagrams, Notes & Signage
T0.03	Life Safety Plans & Code Analysis
T0.04	Life Safety Plans & Code Analysis
T0.05	UL Types
T0.06	Staging and Phasing
C1.01	Existing Conditions Plans
C2.01	Proposed Site Plan
C3.01	Proposed Site & Utility Plan
C8.01	Soil Erosion & Sediment Control Plan
C8.02	SESC Notes & Details
C9.01	Construction Details
C9.02	Construction Details
A1.01	Ground Floor Demolition Plan
A1.02	First And Second Floor Demolition Plan
A1.03	Ground And 1st Floor RCP Demolition Plan
A1.04	Demo Elevations and Photos
A2.00	Proposed Site Plan
A2.01	Proposed Ground Floor Plan
A2.02	Proposed Ground Floor Plan - Addition
A2.03	Proposed First Floor Plan / Low Roof Below
A2.04	Proposed Upper Floor Plan - Addition

TABLE OF CONTENTS

A2.05	2nd Floor And Overall Roof Plan
A2.06	Proposed Addition Roof Plan
A2.07	Roof Details
A3.01	Building Elevations - Addition
A3.02	Building Elevations - Addition
A4.00	Wall Types
A4.01	Building Sections
A4.02	Wall Sections
A4.03	Wall Details
A4.04	Stair Plans, Section & Details
A5.01	Reflected Ceiling Plan
A5.02	Reflected Ceiling Plan - Ground Fl -Addition
A5.03	Reflected Ceiling Plan
A5.04	Reflected Ceiling Plan - Upper Fl -Addition
A6.01	Door Schedule, Door Types & Details
A6.02	Window & Storefront Schedule, Types & Details
A6.03	Storefront Elevations
A7.00	Interior Elevations - Addition
A7.01	Interior Elevations - Addition
A7.02	Interior Elevations - Addition
A7.03	Enlarged Plans and Elevations - Kitchen Pantry
A7.04	Enlarged Plans and Elevations - Ot / Pt Suite
A7.05	Enlarged Plans and Elevations -Guidance and Sgi
A7.06	Enlarged Plans and Elevations - Nurse's Suite And Office
A7.07	Circulation Desk Details
A9.01	Finish Plans - Ground Floor
A9.02	Finish Plans - 1st Fl
S0.01	Structural Lead Sheet & Schedules
S0.10	Structural Lead Sheet & Schedules
S0.20	Structural Special Inspection Tables
S0.30	Structural Special Inspection Tables
S1.00	Foundation Plan
S1.10	Second Floor Framing Plan
S1.20	Roof Framing Plan
S1.30	Partial Existing Framing Plan
S2.00	Typical Concrete Details
S2.10	Typical Masonry Details
S2.11	Typical Masonry Details
S2.20	Typical Steel Details
S3.00	Foundation Sections

TABLE OF CONTENTS

S3.10	Second Floor Sections
S3.20	Roof Sections
M0.01	Notes, Symbols, & Abbreviations
M1.01	First Floor Mechanical Demolition Plan
M1.02	Second Floor And Lower Roof Mech Demo Plan
M2.01	Partial First Floor Ductwork Plan
M2.02	Partial Second Floor Ductwork Plan
M3.01	Partial First Floor Piping Plan
M3.02	Partial Second Floor Piping Plan
M6.01	Mechanical Schedules
M6.02	Mechanical Schedules
M6.03	Mechanical Details
M6.04	Mechanical Details
M6.05	Mechanical Control Diagrams
M6.06	Mechanical Kitchen Details
M6.07	Mechanical Kitchen Details
M6.08	Mechanical Kitchen Details
M6.09	Mechanical Kitchen Details
M6.10	Mechanical Kitchen Details
M6.11	Mechanical Kitchen Details
M6.12	Mechanical Kitchen Details
M6.13	Mechanical Control Diagrams
M6.14	Mechanical Control Diagrams
P1.01	Plumbing Demolition Plans & Notes
P2.01	1st Floor Plumbing Plan
P2.02	2nd Flr & Roof Plumbing Plans
P4.01	Enlarged Plans - Sanitary & Domestic
P4.02	Enlarged Plans - Kitchen Gas
P5.01	Plumbing Risers & Details
P5.02	Plumbing Gas Plans, Riser & Details
P6.01	Plumbing Schedule & Details
E0.01	Symbol, Abbr., And General Notes
E0.02	Electrical General Notes
E0.03	Electrical Demolition General Notes
E0.04	Fire Alarm General Notes
E1.01	Electrical Demolition Plan
E2.01	Electrical Power Plan
E2.02	Electrical Power Plan

TABLE OF CONTENTS

E5.01	Electrical Lighting Plan
E5.02	Electrical Lighting Plan
E6.01	Electrical Single Line
E6.02	Typical Lighting Control Details
FP0.01	Fire Protection Notes and Abbreviation
FP1.01	Ground Floor Fire Protection Plan
FP1.02	First Floor Fire Protection Plan
FP4.01	Fire Protection Elevations
FP5.01	Fire Protection Details
FP5.02	Fire Protection Details

New Hopkins Gymnasium (NHG)

T0.01	Cover Sheet
T0.02	Accessibility & Notes
T0.03	Life Safety Plan & Codes
C1.00	Notes
C1.01	Proposed Demolition Plan
C2.01	Proposed Site Plan
C3.01	Proposed Grading Plan
C4.01	Proposed Utility Plan
C8.01	Proposed SESC Plan
C8.02	SESC Notes And Details
C9.01	Construction Details
C9.02	Construction Details
C9.03	Construction Details
C9.04	Construction Details
C9.05	Construction Details
L1.01	Proposed Landscaping Plan
A2.01	Floor Plan
A2.02	Clerestory Plan
A2.03	Plan Details
A2.04	Clerestory Plan Details
A2.05	Roof Plan
A2.06	Roof Details
A3.01	Building Elevations
A3.02	Elevations Details
A4.00	Partition Types
A4.01	Building Sections
A4.02	Wall Sections @ Main Gym
A4.03	Wall Sections @ Wrestling Gym

TABLE OF CONTENTS

A4.04	Wall Sections @ Lobby
A4.05	Wall Details @ Main Gym
A4.06	Wall Details @ Wrestling Gym & Lobby
A4.07	Wall Details @ Wrestling Gym & Lobby
A5.01	Reflected Ceiling Plan
A6.01	Door Schedule, Door Types & Details
A6.02	Fiberglass Sandwich Panel Schedule & Details
A7.01	Main Gym Striping Plan
A7.02	Enlarged Elevations @ Main Gym
A7.03	Enlarged Elevations @ Main Gym, Cont.
A7.04	Enlarged Elevations @ Wrestling Room
A7.05	Enlarged Plans And Elevations @ Locker Rooms & Trainer's Room
A7.06	Enlarged Plans And Elevations @ Toilet Rooms
A9.01	Enlarged Finish Plan
S0.00	Structural Lead Sheet & Schedules
S0.10	Structural Lead Sheet & Schedules
S0.20	Structural Special Inspection Tables
S1.00	Foundation Plan
S1.10	Girt Framing Plan
S1.20	Roof Framing Plan
S2.00	Typical Concrete Details
S2.10	Typical Masonry Details
S2.11	Typical Masonry Details
S2.20	Typical Steel Details
S3.00	Foundation Sections
S3.10	Girt Framing Sections
S3.20	Roof Framing Sections
S4.00	Wrestling Roof Joists
S4.10	Main Gym Roof Joists
S4.20	Entrance Roof Joists
M0.01	Notes, Symbols, & Appreviations
M2.01	First Floor Plan
M2.02	Roof Plan
M6.01	Mechanical Schedules And Details
M6.02	Mechanical Details And Control Diagrams
P2.01	1st Floor Plumbing Plan - San/Dom
P2.02	1st Floor Plumbing Plan - Storm/Gas
P2.03	Plumbing Roof Plan
P4.01	Enlarged Plumbing Plans
P5.01	Plumbing Risers
P5.02	Plumbing Risers & Details
P5.03	Gas Risers & Details
P6.01	Plumbing Schedule & Details
FP0.01	Fire Protection Notes
FP1.01	Fire Protection Plan

TABLE OF CONTENTS

FP5.01	Fire Protection Details
FP5.02	Fire Protection Details
E0.01	Electrical Legend
E0.02	Electrical General Notes
E2.01	Electrical 1st Floor Power Plan
E2.02	Electrical Roof Power Plan
E3.01	Electrical Site Plan
E5.01	Electrical 1st Floor Lighting Plan
E5.02	Electrical Site & Lighting Plan Photometrics
E5.51	Electrical Lighting Notes
E5.52	Electrical Lighting Controls Wiring & Connection Diagram
E6.01	Electrical Single Line
E6.02	Electrical Panel Schedules
E7.01	Electrical Details I
E7.02	Electrical Details II
E7.03	Electrical Details III
E7.04	Electrical Details Iv
FA0.01	Fire Alarm General Notes
FA0.02	Fire Alarm Riser Diagram
FA2.01	Fire Alarm 1st Floor Plan
FA3.01	Fire Alarm Details

SECTION 011000 (NHG) – SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. **Section Includes the following information as it relates to Hopkins Gymnasium:**

1. Project information.
2. Work covered by Contract Documents.
3. Owner-furnished/Contractor-installed (OFCI) products.
4. Owner-furnished/Owner-installed (OFOI) products.
5. Contractor's use of site and premises.
6. Coordination with occupants.
7. Work restrictions.
8. Specification and Drawing conventions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Section 017300 "Execution" for coordination of Owner-installed products.

1.3 DEFINITIONS

A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.4 PROJECT INFORMATION

A. Project Identification: *Hopkins Gymnasium*

1. Project Location:
   a. Haddonfield Memorial High School, 401 Kings Highway East, Haddonfield, NJ 08033.

B. Owner: Haddonfield Public Schools, United States.

1. Owner's Representative: Michael Catalano, School Business Administrator.

C. Architect: LAN Associates, E.P.A.S., Inc.

1. Architect's Representative: Jeffrey M. Potter, AIA.

D. Engineer: LAN Associates, E.P.A.S., Inc.

1. Mechanical, Electrical, Plumbing Engineering Representative: Thomas Wighard, PE

E. Construction Manager: Colliers Engineering & Design.

1. Construction Manager Representative: Richard Brown.

1.5 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:

1. New construction of a single-story building.
   a. The Hopkins Gym parcel is a new gymnasium building to be built on the existing Haddonfield High School lot. This new construction will be an A-3 assembly occupancy. This building will be constructed as slab-on-grade with concrete and block foundations and footings. The exterior envelope will feature brick masonry, cast-stone details, and translucent daylighting sandwich panels. Bearing CMU and steel columns will support the steel joist roof, metal deck, and ~~partial modified bitumen roof/partial standing seam metal~~ roof over continuous insulation **as indicated**. The construction type will be II-B and the full building will be sprinklered.
   b. The program of this building includes a high school basketball gym, a wrestling gym with an office, locker rooms, trainer's room, toilet rooms, shower room, electrical and plumbing room, and a couple of storage rooms.
   c. The site work on this cleared and developed site will include a parking lot that will serve the new gym, site lighting, and landscaping.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.6 WORK PERFORMED BY OWNER

A. Cooperate fully with Owner, so work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

B. Concurrent Work: Owner will perform the following construction operations at Project site. Those operations will be conducted simultaneously with Work under this Contract.

1. Information Technology integration.

C. Subsequent Work: Owner will perform the following additional work at site after Substantial Completion. Completion of that work will depend on successful completion of preparatory Work under this Contract.

1. Installation of loose furnishings and equipment.

1.7 OWNER-FURNISHED/CONTRACTOR-INSTALLED (OFCI) PRODUCTS

A. Owner's Responsibilities: Owner will furnish the products indicated and perform the following, as applicable:

1. Provide for delivery of Owner-furnished products to Project site.
2. Upon delivery, inspect, with Contractor present, delivered items.
   a. If Owner-furnished products are damaged, defective, or missing, arrange for replacement.
3. Obtain manufacturer's inspections, service, and warranties.
4. Inform Contractor of earliest available delivery date for Owner-furnished products.

B. Contractor's Responsibilities: The Work includes the following, as applicable:

1. Designate delivery dates of Owner-furnished products in Contractor's construction schedule, utilizing Owner-furnished earliest available delivery dates.
2. Receive, unload, handle, store, protect, and install Owner-furnished products.
3. Protect Owner-furnished products from damage during storage, handling, and installation and prior to Substantial Completion.

C. Owner-Furnished/Contractor-Installed (OFCI) Products:

1. Soap Dispensers.
2. Toilet Paper Dispensers.
3. Paper Towel Dispensers.
4. Sanitary Napkin Despensers.
5. Volleyball Sleeves (in-floor).

1.8 OWNER-FURNISHED/OWNER-INSTALLED (OFOI) PRODUCTS

A. The Owner will furnish and install products indicated.

B. Owner-Furnished/Owner-Installed (OFOI) Products:

1. Loose furniture and equipment.
2. Metal Lockers.
3. Gym Equipment.
4. Gym Bleachers.
5. Gym Wall Pads.
6. Scoreboards.
7. Low-Voltage Electrical Devices (i.e. Security cameras, Door Access Control, Wireless Access Portals IT Racks and Wiring)

1.9 CONTRACTOR'S USE OF SITE AND PREMISES

A. Limits on Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
   a. Schedule deliveries to minimize use of driveways and entrances by construction operations.

b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.10 COORDINATION WITH OCCUPANTS

A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.11 WORK RESTRICTIONS

A. Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work to between 7:00 a.m. to 11:00 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.

1. Weekend Hours: Weekend hours are permitted at no additional cost to the Owner. Limit work to between 7:00 a.m. to 3:00 p.m.
2. Early Morning Hours: As approved by Owner and local authorities having jurisdiction and at no additional cost to Owner.
3. Work in Existing Building: No work shall occur within building during school hours .
4. Hours for Utility Shutdowns: Utilit Shutdowns must not occur during school hours while school is in session.

C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:

1. Notify Construction Manager Owner not less than two days in advance of proposed utility interruptions.
2. Obtain Construction Manager's Owner's written permission before proceeding with utility interruptions.

D. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.

1. Notify Construction Manager Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Construction Manager's Owner's written permission before proceeding with disruptive operations.

E. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Project site is not permitted.

F. Employee Identification: identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

1.12 SPECIFICATION AND DRAWING CONVENTIONS

A. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 011000 (TES) – SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. **Section Includes the following information as it relates to Additions and Alterations at J. Fithian Tatem Elementary School**:

1. Project information.
2. Work covered by Contract Documents.
3. Owner-furnished/Contractor-installed (OFCI) products.
4. Owner-furnished/Owner-installed (OFOI) products.
5. Contractor's use of site and premises.
6. Coordination with occupants.
7. Work restrictions.
8. Specification and Drawing conventions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Section 017300 "Execution" for coordination of Owner-installed products.

1.3 DEFINITIONS

A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.4 PROJECT INFORMATION

A. Project Identification: *Alterations & Additions To Tatem J. Fithian Elementary School*

1. Project Location:
   a. J. Fithian Tatem Elementary School: 1 Glover Ave., Haddonfield, NJ 08033.

B. Owner: Haddonfield Public Schools, United States.

1. Owner's Representative: Michael Catalano, School Business Administrator.

C. Architect: LAN Associates, E.P.A.S., Inc.

1. Architect's Representative: Jeffrey M. Potter, AIA.

D. Engineer: LAN Associates, E.P.A.S., Inc.

1. Mechanical, Electrical, Plumbing Engineering Representative: Thomas Wighard, PE

E. Construction Manager: Colliers Engineering & Design.

1. Construction Manager Representative: Richard Brown.

1.5 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:

1. The scope of work for the Alterations at J.F. Tatem Elementary School includes but is not limited to: Alterations to convert an existing Library into multiple Classrooms including all new finishes, wall partitions, electrical power & lighting, suspended acoustic tile ceilings, and modifications & upgrades to the existing HVAC system. Work also includes the installation of a wall with door access for the existing nurse's suite, a renovation of the existing cafeteria kitchen and pantry, and addition of a new office within the existing music room.
2. The scope also includes the new construction of a two story media center and classroom addition. The addition includes a 2-story exterior stair. The addition will be freestanding and attached to the building through a connecting corridor on both stories with floor, wall and roof expansion joints. The exterior envelope will closely match the existing facade materiality of brick and will include the use of metal panels, and glass curtain wall.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.6 WORK PERFORMED BY OWNER

A. Cooperate fully with Owner, so work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

B. Concurrent Work: Owner will perform the following construction operations at Project site. Those operations will be conducted simultaneously with Work under this Contract.

1. Information Technology integration.

C. Subsequent Work: Owner will perform the following additional work at site after Substantial Completion. Completion of that work will depend on successful completion of preparatory Work under this Contract.

1. Installation of loose furnishings and equipment.

1.7 OWNER-FURNISHED/CONTRACTOR-INSTALLED (OFCI) PRODUCTS

A. Owner's Responsibilities: Owner will furnish the products indicated and perform the following, as applicable:

1. Provide for delivery of Owner-furnished products to Project site.
2. Upon delivery, inspect, with Contractor present, delivered items.
   a. If Owner-furnished products are damaged, defective, or missing, arrange for replacement.
3. Obtain manufacturer's inspections, service, and warranties.
4. Inform Contractor of earliest available delivery date for Owner-furnished products.

B. Contractor's Responsibilities: The Work includes the following, as applicable:

1. Designate delivery dates of Owner-furnished products in Contractor's construction schedule, utilizing Owner-furnished earliest available delivery dates.
2. Receive, unload, handle, store, protect, and install Owner-furnished products.
3. Protect Owner-furnished products from damage during storage, handling, and installation and prior to Substantial Completion.

C. Owner-Furnished/Contractor-Installed (OFCI) Products:

1. Soap Dispensers.
2. Toilet Paper Dispensers.
3. Paper Towel Dispensers.
4. Sanitary Napkin Dispensers.

1.8 OWNER-FURNISHED/OWNER-INSTALLED (OFOI) PRODUCTS

A. The Owner will furnish and install products indicated.

B. Owner-Furnished/Owner-Installed (OFOI) Products:

1. Loose furniture and equipment.
2. Food Service Equipment
   a. Note: See Section 114000 (TES) for contractor’s responsibilities related to food service equipment infrastructure.
3. Low-Voltage Electrical Devices (i.e. Security cameras, Door Access Control, Wireless Access Portals IT Racks and Wiring).

1.9 CONTRACTOR'S USE OF SITE AND PREMISES

A. Limits on Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
   a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
   b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.10 COORDINATION WITH OCCUPANTS

A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.11 WORK RESTRICTIONS

A. Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work to between 7:00 a.m. to 11:00 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.

1. Weekend Hours: Weekend hours are permitted at no additional cost to the Owner. Limit work to between 7:00 a.m. to 3:00 p.m.
2. Early Morning Hours: As approved by Owner and local authorities having jurisdiction and at no additional cost to Owner.
3. Work in Existing Building: No work shall occur within building during school hours .
4. Hours for Utility Shutdowns: Utilit Shutdowns must not occur during school hours while school is in session.

C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:

1. Notify Construction Manager Owner not less than two days in advance of proposed utility interruptions.
2. Obtain Construction Manager's Owner's written permission before proceeding with utility interruptions.

D. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.

1. Notify Construction Manager Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Construction Manager's Owner's written permission before proceeding with disruptive operations.

E. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Project site is not permitted.

F. Employee Identification: identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

1.12 SPECIFICATION AND DRAWING CONVENTIONS

A. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.

1.13 PHASING & STAGING

A. General: Refer to Sheet T0.06 – Staging and Phasing in conjunction with this section.

B. Phase I - Starting with issuance of Notice to Proceed, and ending June 22nd, 2027

1. All Work associated with the new two-story addition and associated sitework may proceed.
2. Because Phase I occurs during the school year, construction activities shall be restricted to the fenced work zone and approved staging and access areas. Contractor shall coordinate deliveries, equipment movements, disruptive operations, utility shutdowns, and any work affecting occupied areas with the Owner and Construction Manager so as not to interfere with school operations.

C. Phase II – Summer Work - June 22nd, 2027 through August 16th, 2027

1. All Work associated with the project may proceed.
2. All interior renovation work must be completed in this timeframe, except for Corridors 116.1 and 206 (Phase III) which depend on the completeness of the connection to the new addition.
   a. Provide a temporary barrier at opening between Corridor 116.1 and main first floor corridor at conclusion of Phase II.
   b. Provide a temporary barrier at the opening between Corridor 206 and Corridor 213 at conclusion of Phase II.

D. Phase III - From August 16th, 2027 through Substantial Completion **(December 2027)**

1. All remaining exterior addition, sitework, and connection work associated with Phases I and III may proceed, subject to school-year restrictions and required separations from occupied areas.

2. Because Phase III occurs during the school year, Contractor shall maintain temporary barriers, construction fencing, and controlled access as required to separate construction activities from students, staff, visitors, and occupied school areas. No work shall occur within occupied school areas during school hours unless specifically approved by the Owner.
3. Finalize connection from existing building to new addition at the conclusion of Phase III.
   a. Remove temporary barrier at opening between Corridor 116.1 and main first floor corridor at conclusion of Phase III.
   b. Remove temporary barrier at the opening between Corridor 206 and Corridor 213 at conclusion of Phase III.

E. Staging:

1. The Contractor may stage all construction material, storage boxes, dumpsters, worker parking, etc. in the existing outdoor play area indicated on the Staging Plan (T0.06).
2. Access to the Contractor staging area, material laydown area, dumpsters, worker parking, and designated construction delivery drop-off zone shall be through the adjacent School District property at 95 Grove Street, as indicated on the Staging Plan. Contractor shall coordinate use of this access with the Owner and shall not use alternate access routes without prior written approval.
3. Maintain construction fencing, gates, and secured separations around the work zone, staging area, and construction delivery drop-off zone as shown on Sheet T0.06. Fencing shall remain in place for the duration of each applicable phase and shall separate construction activities from students, staff, visitors, and occupied school areas.
4. If the Contractor proposes a staging, access, fencing, pedestrian protection, delivery, or phasing plan that differs from the arrangements shown on Sheet T0.06, Contractor shall submit the proposed alternate work plan to the Owner, Construction Manager, and Architect for review and approval before implementing the change.

F. Temporary Barriers / Partitions:

1. The Contractor shall provide a full height temporary barrier at the first floor opening between Corridor 116.1 and Corridor 117, and at the second floor opening between Corridor 206 and Corridor 213.to separate the Work Area from Student / Staff area.
2. Temporary Barriers shall be made of wood stud construction with painted plywood (student-side). Doors within partitions are optional.
3. Additional Notes:
   a. Utility shutdowns must not disrupt the school's operations.
   b. Overhead lifting may not occur over any occupied space.
   c. Contractor must restore all damaged asphalt, concrete, grass, etc. areas as a result of the Work.

G. Scheduling and Means and Methods to complete all Work during the required milestone dates is the responsibility of the Contractor. The Owner will permit all 2nd shift, weekend, and holiday Work at no additional cost to the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:

1. General coordination procedures.
2. Coordination drawings.
3. RFIs.
4. Digital project management procedures.
5. Project meetings.

B. Related Requirements:

1. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
2. Section 017300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
3. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITION

A. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
2. Number and title of related Specification Section(s) covered by subcontract.
3. Drawing number and detail references, as appropriate, covered by subcontract.

B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses, cellular telephone

numbers, and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1.5 GENERAL COORDINATION PROCEDURES

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Prepare coordination drawings in accordance with Section 013300 'Submittal Procedures' to resolve spatial conflicts between building systems and structure prior to installation

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

1.6 REQUEST FOR INFORMATION (RFI)

A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Owner name.
3. Owner's Project number.
4. Name of Architect.
5. Architect's Project number.
6. Date.
7. Name of Contractor.
8. RFI number, numbered sequentially.
9. RFI subject.
10. Specification Section number and title and related paragraphs, as appropriate.
11. Drawing number and detail references, as appropriate.

12. Field dimensions and conditions, as appropriate.
13. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
14. Contractor's signature.
15. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFI Forms: AIA Document G716.

1. Attachments shall be electronic files in PDF format.

D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.

1. The following Contractor-generated RFIs will be returned without action:
    a. Requests for approval of submittals.
    b. Requests for approval of substitutions.
    c. Requests for approval of Contractor's means and methods.
    d. Requests for coordination information already indicated in the Contract Documents.
    e. Requests for adjustments in the Contract Time or the Contract Sum.
    f. Requests for interpretation of Architect's actions on submittals.
    g. Incomplete RFIs or inaccurately prepared RFIs.
2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
    a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 5 days of receipt of the RFI response.

E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log bi-weekly.

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect.
4. RFI number, including RFIs that were returned without action or withdrawn.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Include in the RFI Log a column identifying whether each RFI response results in a potential change to the Contract Time or Contract Sum. The Contractor shall submit the updated log with each Application for Payment for review.

F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

1.7 DIGITAL PROJECT MANAGEMENT PROCEDURES

A. Architect's Data Files Not Available: Architect will provide Architect's CAD drawing digital data files for Contractor's upon request, provided that the contractor signs and returns the Architect's Digital Information Release Agreement.

B. All digital correspondence, submittals, RFIs, and meeting minutes shall be transmitted through the Owner-approved web-based project management system (e.g., Procore or equivalent) once established.

1. Email submissions are acceptable if permitted by Owner's Construction Manager, and must include Architect's standard cover sheet.

C. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:

1. Assemble complete submittal package into a single indexed file, incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.
3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

1.8 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times a minimum of 10 working days prior to meeting.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.

B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.

1. Attendees: Authorized representatives of Owner Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including the following:
   a. Responsibilities and personnel assignments.
   b. Tentative construction schedule.
   c. Phasing.
   d. Critical work sequencing and long lead items.
   e. Designation of key personnel and their duties.
   f. Lines of communications.
   g. Use of web-based Project software.
   h. Procedures for processing field decisions and Change Orders.
   i. Procedures for RFIs.

j. Procedures for testing and inspecting.
k. Procedures for processing Applications for Payment.
l. Distribution of the Contract Documents.
m. Submittal procedures.
n. Preparation of Record Documents.
o. Use of the premises and existing building.
p. Work restrictions.
q. Working hours.
r. Owner's occupancy requirements.
s. Responsibility for temporary facilities and controls.
t. Procedures for moisture and mold control.
u. Procedures for disruptions and shutdowns.
v. Construction waste management and recycling.
w. Parking availability.
x. Office, work, and storage areas.
y. Equipment deliveries and priorities.
z. First aid.
aa. Security.
bb. Progress cleaning.

3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other Sections and when required for coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
a. Contract Documents.
b. Options.
c. Related RFIs.
d. Related Change Orders.
e. Purchases.
f. Deliveries.
g. Submittals.
h. Sustainable design requirements.
i. Review of mockups.
j. Possible conflicts.
k. Compatibility requirements.
l. Time schedules.
m. Weather limitations.
n. Manufacturer's written instructions.
o. Warranty requirements.
p. Compatibility of materials.
q. Acceptability of substrates.
r. Temporary facilities and controls.
s. Space and access limitations.
t. Regulations of authorities having jurisdiction.
u. Testing and inspecting requirements.
v. Installation procedures.
w. Coordination with other work.
x. Required performance results.

y. Protection of adjacent work.
z. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Project Closeout Conference: Schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 30 days prior to the scheduled date of Substantial Completion.

1. Conduct the conference to review requirements and responsibilities related to Project closeout.
2. Attendees: Authorized representatives of Owner, Owner's Commissioning Authority, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
   a. Preparation of Record Documents.
   b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
   c. Procedures for completing and archiving web-based Project software site data files.
   d. Submittal of written warranties.
   e. Requirements for completing sustainable design documentation.
   f. Requirements for preparing operations and maintenance data.
   g. Requirements for delivery of material samples, attic stock, and spare parts.
   h. Requirements for demonstration and training.
   i. Preparation of Contractor's punch list.
   j. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
   k. Submittal procedures.
   l. Coordination of separate contracts.
   m. Owner's partial occupancy requirements.
   n. Installation of Owner's furniture, fixtures, and equipment.
   o. Responsibility for removing temporary facilities and controls.
   p. Verification of submission status for all O&M manuals, warranties, training videos, and final as-built drawings, including electronic formats compatible with Owner’s record system.
4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

E. Progress Meetings: Conduct progress meetings at biweekly intervals.

1. Progress meetings shall be conducted biweekly, or more frequently as required by the Architect or Owner. Contractor shall be responsible for preparing and distributing meeting invitations, agendas, and draft minutes within 24 hours of each meeting.
2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.

3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
        1) Review schedule for next period.
    b. Review present and future needs of each entity present, including the following:
        1) Interface requirements.
        2) Sequence of operations.
        3) Status of submittals.
        4) Deliveries.
        5) Off-site fabrication.
        6) Access.
        7) Site use.
        8) Temporary facilities and controls.
        9) Progress cleaning.
        10) Quality and work standards.
        11) Status of correction of deficient items.
        12) Field observations.
        13) Status of RFIs.
        14) Status of Proposal Requests.
        15) Pending changes.
        16) Status of Change Orders.
        17) Pending claims and disputes.
        18) Documentation of information for payment requests.
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
    a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

LAN ASSOCIATES | Engineering, Planning, Architecture, Surveying Inc.

LAN Job #2.202277.25.14
Haddonfield Board of Education /Cont. #25.14
New Hopkins Gym and
Addition & Alterations to JFT ES

Bids Due: September 17th, 2026 @ 2:00 pm

PRE-BID
SIGN-IN SHEET

PLEASE PRINT ALL INFORMATION

INITIAL	NAME	AFFILIATION	TELEPHONE/FAX NO.	Email
	Mike Catalano	Haddonfield BOE	856.429.7510 x 6217	mcatalano@haddonfield.k12.nj.us
TM	Tim McFerren	Haddonfield BOE	856.429.0183 x 126	tmcferre@haddonfield.k12.nj.us
	Chuck Klaus	Haddonfield BOE	856-429-4130 x6205	cklaus@haddonfield.k12.nj.us
JP	Jeff Potter	LAN Associates	609.680.0592	jeff.potter@lanassociates.com
	Tyler Cooney	LAN Associates	856.524.5611	tyler.cooney@lanassociates.com
RS	Robyn Sanderson	LAN Associates		robyn.sanderson@lanassociates.com
	Chris Baldwin	Nacom Companies Inc	856-402-2005	JLM@Nacomco.com
	ED HILBERT III	TE CONSTRUCTION	215-441-9223	EJHILBERT@TECBUILDS.COM
	Brendan Williams	JH Williams Enterprises	P 856-793-7114 f. 856-222-0017	bw@jhwilliamsinc.com
	SEAN BROOKS	NEWPORT CONST.	856 662 9500 9511	estimating@newportconstruction.com
	Kyle Angelucci	Collins	856 448 3106	Kyle.angelucci@collinseng.com
	Kerry Ogren	Ogren	856 692 4226	Bids@AJogren.com
	Jim Rodgers	DANDREA	856 767 7750	DANDREA@DANDREAGNT.com
	Greg Pinj	Prefferovic	856-384-1849	greg@prafflg.com

SECTION 080671 (NHG) – DOOR HARDWARE SCHEDULE

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 references specification sections relating to commercial door hardware for the following:

1. Swinging doors.
2. Sliding Doors.
3. Other doors to the extent indicated.

B. Commercial door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical and access control door hardware.
3. Electromechanical and access control door hardware power supplies, back-ups and surge protection.
4. Automatic operators.
5. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Door Hardware”.
2. Division 26 Section “Electrical”.

D. Codes and References: Comply with the version adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: Reference Related Sections for requirements regarding compliance with applicable industry standards.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:

a. Type, style, function, size, label, hand, and finish of each door hardware item.
b. Manufacturer of each item.
c. Fastenings and other pertinent information.
d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
e. Explanation of abbreviations, symbols, and codes contained in schedule.
f. Mounting locations for door hardware.
g. Door and frame sizes and materials.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.

D. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.

F. Warranties and Maintenance: Special warranties and maintenance agreements specified in the Related Sections.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum [5] years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Installer Qualifications: Installers, trained by the primary product manufacturers, with a minimum [3] years documented experience installing both standard and electrified builders hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum [5] years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor in good standing by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

D. Source Limitations: Obtain each type and variety of Door Hardware specified in the Related Sections from a single source, qualified supplier unless otherwise indicated.

E. Regulatory Requirements: Comply with NFPA 70, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the applicable model building code.

F. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check

Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

1.8 MAINTENANCE SERVICE

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

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. Refer to “PART 3 – EXECUTION” for required specification sections.

PART 3 - EXECUTION

3.1 DOOR HARDWARE SETS

A. The door hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.

2. The supplier is responsible for handing and sizing all products.

3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Products listed in the hardware sets shall be supplied by and in accordance with the requirements described in the specification section as noted for each item.

1. Section 08 71 00 – Door Hardware.

C. Manufacturer's Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. SU - Securitron
4. RO - Rockwood
5. RU - Corbin Russwin
6. MC - Medeco
7. NO - Norton Rixson
8. OT - Other

Hardware Sets

Set: 1.0

Doors: 06A, 17C

2 Continuous Hinge	CFM_SLF-HD1 PT x Length Required		PE	087100	
2 Electric Power Transfer	EL-CEPT	630	SU	087100	⚡
1 CVR Exit, Nightlatch	PED5850T MELR PED159 AD M92 CT6SB	630	RU	087100	
1 CVR Exit, Exit Only	PED5801 MELR EO AD M92	630	RU	087100	
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100	
2 Pull	RM5277-36 Mtg-Type 12XHD	US32D	RO	087100	
2 Surface Closer	UNI7500H	600x689	NO	087100	
2 Drop Plate	As Required	600x689	NO	087100	
2 Blade Stop	As Required	600x689	NO	087100	
1 Rain Guard	346C (Omit at overhangs)		PE	087100	
2 Sweep	3452CNB x Length Required		PE	087100	
1 Threshold	273x224AFGT x Length Required x MSES25SS		PE	087100	
2 ElectroLynx Harness - Frame	QC-C1500P		MK	087100	⚡
2 ElectroLynx Harness - Door	QC-CXXX (Size as required)		MK	087100	⚡
1 Card Reader	By Security Supplier				
2 Position Switch	DPS - M/W		SU	087100	⚡
1 Power Supply	AQL4-R8E1 x Relays as Required		SU	087100	⚡
1 Wiring Diagram	Elevation and Point to Point as Specified		OT		

Notes: Perimeter and meeting stile gasket by door / frame manufacturer.
Operational narrative: Door normally closed and secure. Access by valid credential. Free egress always. Door remains latched and secure upon power loss or fire alarm activation. Access control system monitors door position and verifies valid egress via REX. Keyed cylinder for emergency access.

Set: 2.0

Doors: 02A, 12A

1 Continuous Hinge	CFM_SLF-HD1 PT x Length Required		PE	087100	
1 Electric Power Transfer	EL-CEPT	630	SU	087100	⚡
1 Fail Secure Lock	ML20606 x NAC-SEC NSA CT6SB	630	RU	087100	⚡
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100	
1 Surface Closer	UNI7500	600x689	NO	087100	
1 Rain Guard	346C (Omit at overhangs)		PE	087100	
1 Sweep	3452CNB x Length Required		PE	087100	
1 Threshold	273x224AFGT x Length Required x MSES25SS		PE	087100	
1 ElectroLynx Harness - Frame	QC-C1500P		MK	087100	⚡
1 ElectroLynx Harness - Door	QC-CXXX (Size as required)		MK	087100	⚡
1 Card Reader	By Security Supplier				
1 Position Switch	DPS - M/W		SU	087100	⚡
1 Power Supply	AQL4-R8E1 x Relays as Required		SU	087100	⚡
1 Wiring Diagram	Elevation and Point to Point as Specified		OT		

Notes: Perimeter and meeting stile gasket by door / frame manufacturer.
Operational narrative: Door normally closed and secure. Access by valid credential. Free egress always. Door remains latched and secure upon power loss or fire alarm activation. Access control system monitors door position and verifies valid egress via REX. Keyed cylinder for emergency access.

Set: 3.0

Doors: 13B, 13D

1 Continuous Hinge	CFM_SLF-HD1-M x Length Required		PE	087100
1 Rim Exit, Nightlatch	PED5257 K157ET CT6SB	630	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Concealed Overhead Stop	6-X36	630	NO	087100
1 Surface Closer	PR7500	689	NO	087100
1 Rain Guard	346C (Omit at overhangs)		PE	087100
1 Sweep	3452CNB x Length Required		PE	087100
1 Threshold	273x224AFGT x Length Required x		PE	087100

MSES25SS

Set: 4.0

Doors: 06B

2 Continuous Hinge	CFM_SLF-HD1 PT x Length Required		PE	087100	
2 Electric Power Transfer	EL-CEPT	630	SU	087100	⚡
1 CVR Exit, Nightlatch	PED5850T MELR PED159 AD M92 CT6SB	630	RU	087100	
1 CVR Exit, Exit Only	PED5801 MELR EO AD M92	630	RU	087100	
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100	
2 Pull	RM5277-36 Mtg-Type 12XHD	US32D	RO	087100	
2 Drop Plate	As Required	600x689	NO	087100	
2 Blade Stop	As Required	600x689	NO	087100	
2 Surface Closer	CPS7500T	689	NO	087100	
2 ElectroLynx Harness - Frame	QC-C1500P		MK	087100	⚡
2 ElectroLynx Harness - Door	QC-CXXX (Size as required)		MK	087100	⚡
1 Card Reader	By Security Supplier				
2 Position Switch	DPS - M/W		SU	087100	⚡
1 Power Supply	AQL4-R8E1 x Relays as Required		SU	087100	⚡
1 Wiring Diagram	Elevation and Point to Point as Specified		OT		

Notes: Perimeter and meeting stile gasket by door / frame manufacturer.
Operational narrative: Door normally closed and secure. Access by valid credential. Free egress always. Door remains latched and secure upon power loss or fire alarm activation. Access control system monitors door position and verifies valid egress via REX. Keyed cylinder for emergency access.

Set: 5.0

Doors: 17A

6 Hinge, Full Mortise, Hvy Wt	T4A3786-MCK [NRP-HVY] FT	US26D	MK	087100
1 Dust Proof Strike	570	US26D	RO	087100
2 Flush Bolt	557 (12"/72" AFF)	US26D	RO	087100
1 Classroom Intruder Lock	ML2052 NSA CT6SB	626	RU	087100
2 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Closer	CPS7500	689	NO	087100
2 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
2 Silencer	608		RO	087100

Set: 6.0

Doors: 14

6 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Dust Proof Strike	570	US26D	RO	087100
2 Flush Bolt	557 (12"/72" AFF)	US26D	RO	087100
1 Storeroom Lock	ML2057 NSA CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
2 Surface Overhead Stop	10-X36	689	NO	087100
2 Silencer	608		RO	087100

Set: 7.0

Doors: 01, 05, 09, 16

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Storeroom Lock	ML2057 NSA CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Closer	7500	689	NO	087100
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
1 Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3 Silencer	608		RO	087100

Set: 8.0

Doors: 15

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Office Lock	ML2054 NSA M34 CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3 Silencer	608		RO	087100
1 Coat Hook	RM801	US26D	RO	087100

Set: 8.1

Doors: 17B

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Office Lock	ML2054 NSA M34 CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3 Silencer	608		RO	087100

Set: 9.0

Doors: 10, 11

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Office Lock	ML2054 NSA M34 CT6SB	626	RU	087100

1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Closer	7500H	689	NO	087100
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
1 Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3 Silencer	608		RO	087100
1 Coat Hook	RM801	US26D	RO	087100

Set: 10.0

Doors: 03

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Office Lock	ML2054 NSA M34 CT6SB	626	RU	087100
2 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Closer	CPS7500T	689	NO	087100
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
3 Silencer	608		RO	087100
1 Coat Hook	RM801	US26D	RO	087100

Set: 11.0

Doors: 08

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Institutional Privacy Lock	ML2069 NSA M34 V21 CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Overhead Stop	10-X36	689	NO	087100
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
3 Silencer	608		RO	087100
1 Coat Hook	RM801	US26D	RO	087100

Set: 12.0

Doors: 02B, 12B

3 Hinge, Full Mortise	TA2714-MCK FT [NRP-STD]	US26D	MK	087100
1 Office Lock	ML2054 NSA M34 CT6SB	626	RU	087100
1 Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1 Surface Closer	CPS7500	689	NO	087100
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
3 Silencer	608		RO	087100

Set: 13.0

Doors: 04, 07

3 Hinge, Full Mortise, Hvy Wt	T4A3786-MCK [NRP-HVY] FT	US26D	MK	087100

1	Deadbolt	DL4117 CT6SB	626	RU	087100
1	Cylinder/Core	Match Existing; Field Verify	26	MC	087100
1	Push Pull	111x73C/73CL	US32D	RO	087100
1	Surface Closer	CPS7500	689	NO	087100
1	Kick Plate	K1050 10" high BEV CSK	US32D	RO	087100
3	Silencer	608		RO	087100

END OF SECTION 080671

SECTION 084413 - GLAZED ALUMINUM CURTAIN WALLS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Glazed aluminum curtain walls, including perimeter trims, stools, accessories, shims and anchors, and perimeter sealing of curtain wall framing.

B. Related Requirements:

1. Section 079200 “Joint Sealants” for installation of joint sealants installed with glazed aluminum curtain walls and for sealant to the extent not specified in this section.

2. Section 084113 “Aluminum-Framed Entrances and Storefronts” for aluminum entrance and storefront systems.

3. Section 088000 “Glazing” for curtain wall glazing.

1.3 DEFINITIONS

A. For fenestration industry standard terminology and definitions, refer to the American Architectural Manufacturers Association Glossary (AAMA AG-13).

1.4 PERFORMANCE REQUIREMENTS

A. General Performance: Aluminum-framed curtain wall shall withstand the effects of the following performance requirements without exceeding performance criteria or failure due to defective manufacture, fabrication, installation, or other defects in construction:

1. Movements of supporting structure indicated on Drawings including, but not limited to, story drift and deflection from uniformly distributed and concentrated live loads.
2. Dimensional tolerances of building frame and other adjacent construction.
3. Failure includes the following:

a. Deflection exceeding specified limits.
b. Thermal stresses transferring to building structure.
c. Framing members transferring stresses, including those caused by thermal and structural movements to glazing.
d. Noise or vibration created by wind and by thermal and structural movements.
e. Loosening or weakening of fasteners, attachments, and other components.

f. Sealant failure.
g. Failure of operating units.

B. Structural Loads:

1. Wind Loads: Provide glazed aluminum curtain wall systems, including anchorage, capable of withstanding wind pressures indicated on Structural Drawings and calculated in accordance with ASCE 7 and the applicable building code.

C. Deflection of Framing Members:

1. Deflection Normal to Wall Plane: Limited to edge of glass in a direction perpendicular to glass plane shall not exceed L/240 + ¼" at openings greater than 13'6" and shall not exceed L/175 at openings lesser than 13'6" of the glass edge length for each individual glazing lite or an amount that restricts edge deflection of individual glazing lites to 3/4 inch (19 mm), whichever is less.
2. Deflection Parallel to Glazing Plane: Limited to L/360 of clear span or 1/8 inch (3.2 mm), whichever is smaller.

D. Structural-Test Performance: Provide aluminum-framed systems tested according to ASTM E 330 as follows:

1. When tested at positive and negative wind-load design pressures, systems do not evidence deflection exceeding specified limits.
2. When tested at 150 percent of positive and negative wind-load design pressures, systems, including anchorage, do not evidence material failures, structural distress, and permanent deformation of main framing members exceeding 0.2 percent of span.
3. Test Durations: As required by design wind velocity, but not fewer than 10 seconds.

E. Air Infiltration: Provide aluminum-framed systems with maximum air leakage through fixed glazing and framing areas of 0.06 cfm/sq. ft. of fixed wall area when tested according to ASTM E 283 at a minimum static-air-pressure difference of 6.24 lbf/sq. ft.

F. Water Penetration under Static Pressure: Provide glazed aluminum curtain wall systems that do not evidence water penetration when tested according to ASTM E331 at a minimum static-air-pressure difference of 15 psf.

G. Thermal Movements: Provide aluminum-framed systems that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
2. Interior Ambient-Air Temperature: 75 deg F.

H. Thermal Conductance: Provide glazed aluminum curtain wall systems having U-factor not greater than that required by the applicable energy code and as indicated in the Contract Documents.

1.5 SUBMITTALS

A. Product Data:

1. For each type of product indicated, include:

a. Construction details

b. Material descriptions

c. Dimensions of individual components and profiles

d. Finishes

B. Shop Drawings:

1. Delegated-Design Submittal: For glazed aluminum curtain wall systems, including structural calculations and details of anchorage, prepared and signed and sealed by a professional engineer licensed in the State of New Jersey. Include:
   a. Plans
   b. Elevations
   c. Sections
   d. Full-size details
   e. Attachments to other work

C. Samples for Initial Selection:

1. Provide samples for units with factory-applied color finishes.

D. Product Test Reports:

1. Provide test reports for glazed aluminum curtain walls.

2. Test reports must be based on evaluation of comprehensive tests performed by a qualified preconstruction testing agency.

3. Test reports must indicate compliance with performance requirements.

1.6 QUALITY ASSURANCE

A. Installer Qualifications:

1. Installer must have successfully installed the same or similar systems required for the project and other projects of similar size and scope.

B. Manufacturer Qualifications:

1. Manufacturer must be capable of fabricating glazed aluminum curtain walls that meet or exceed the stated performance requirements.

C. Source Limitations:

1. Obtain aluminum curtain wall system through one source from a single manufacturer.

D. Product Options:

1. Information on drawings and in specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.

2. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.

1.7 PROJECT CONDITIONS

A. Field Measurements:

1. Verify actual locations of structural supports for glazed aluminum curtain walls by field measurements before fabrication.

2. Indicate measurements on shop drawings.

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of aluminum-framed systems that do not comply with requirements or that fail in materials or workmanship within specified warranty period.

1) Failures include, but are not limited to, the following:

a) Failure to meet performance requirements.

b) Structural failures including excessive deflection, water leakage, air infiltration, or condensation.

c) Deterioration of metals, other materials, & metal finishes beyond normal weathering.

d) Failure of insulating glass.

e) Noise or vibration caused by thermal movement

f) Water Leakage through fixed glazing and framing areas

2) Warranty Period: Five (5) years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components on which finishes do not comply with requirements or that fail in materials or workmanship within specified warranty period. Warranty does not include normal weathering.

1) Warranty Period: Ten (10) years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with the requirements, provide products manufactured by:

1. EFCO Corporation (Basis-of-Design Product: 5600 Series).

2. Kawneer Company, Inc.

3. Tubelite Systems.

4. Old Castle Building Envelope.

5. Or Approved Equal

B. System to include:

a. Sight line: 2-1/2".

b. Outside-glazed pressure plate format.

c. System depth: 6" (190.5 mm) for 1" (25.4 mm) insulating glazing.

2.2 MATERIALS

A. Aluminum Extrusions:

1. Alloy and temper recommended by glazed aluminum curtain wall manufacturer for strength, corrosion resistance, and application of required finish

2. Not less than 0.070" (1.8 mm) wall thickness at any location for the main frame

3. Complying with ASTM B221: 6063-T6 alloy and temper

B. Aluminum Sheet Alloy:

1. Shall meet the requirements of ASTM B209.

C. Fasteners:

1. Aluminum, nonmagnetic stainless steel or other materials must be non-corrosive and compatible with aluminum members, trim hardware, anchors, and other components.

D. Anchors, Clips, and Accessories:

1. Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating.

2. Anchors, clips, and accessories shall provide sufficient strength to withstand the design pressure indicated.

E. Pressure Plate:

1. Pressure plate shall be aluminum.

2. Pressure plate shall be fastened to the mullion with stainless steel screws.

F. Reinforcing Members:

1. Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating.

2. Reinforcing members must provide sufficient strength to withstand the design pressure indicated.

G. Sealant:

1. For sealants required within fabricated curtain wall system, provide permanently elastic, non-shrinking, and non-migrating type recommended by sealant manufacturer for joint size and movement.

H. Thermal Barrier:

1. Manufacturer's standard thermally broken construction as required to meet specified thermal-performance requirements.

I. Tolerances:

1. References to tolerances for wall thickness and other cross-sectional dimensions of glazed curtain wall members are nominal and in compliance with AA Aluminum Standards and Data.

2.3 CURTAIN WALL FRAMING

A. Framing Members:

1. Manufacturer's standard extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads

2. Glazing System: Four-sided captured

3. Glazing Plane: Front.

4. Construction: Thermally broken.

5. System: Field-assembled stick system.

B. Glass:

1. Insulating glass options:

a. 1" (25.4 mm)

C. Brackets and Reinforcements:

1. Manufacturer's standard high-strength aluminum with non-staining, non-ferrous shims for aligning system components.

D. Framing Sealants:

1. Shall be suitable for glazed aluminum curtain wall as recommended by sealant manufacturer.

E. Fasteners and Accessories:

1. Manufacturer's standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories must be compatible with adjacent materials.

2. Where exposed, fasteners and accessories shall be stainless steel.

F. Perimeter Anchors:

1. When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action.

G. Packing, Shipping, Handling, and Unloading:

1. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

H. Storage and Protection:

1. Store materials so that they are protected from exposure to harmful weather conditions.

2. Handle material and components to avoid damage.

3. Protect material against damage from elements, construction activities, and other hazards before, during, and after installation.

2.4 GLAZING

A. Glazing to meet requirements in Division 08000 – Glazing.

B. Glazing Gaskets:

1. Gaskets to meet requirements of ASTM C864.

C. Spacers and Setting Blocks:

1. Manufacturer's standard elastomeric type

D. Bond-Breaker Tape:

1. Manufacturer's standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.

E. Glazing Sealants:

1. As recommended by manufacturer for joint type.

2.5 ACCESSORY MATERIALS

A. Bituminous Paint:

1. Cold-applied asphalt-mastic paint

2. Complies with SSPC-Paint 12 requirements except containing no asbestos

3. Isolation Coating: Manufacturer's recommended coating or other approved means for separating aluminum from incompatible or dissimilar materials.

2.6 FABRICATION

A. Extrude or form aluminum shapes before finishing.

B. Fabricate components that, when assembled, have the following characteristics:

1. Profiles that are sharp, straight, and free of defects or deformations

2. Accurately fitted joints

3. Physical and thermal isolation of glazing from framing members

4. Accommodations for thermal and mechanical movements of glazing and framing that maintain required glazing edge clearances

5. Provisions for field replacement of glazing from exterior

6. Fasteners, anchors, and connection devices that are concealed from view to the greatest extent possible

7. Internal weeping system or other means to drain water passing joints, condensation occurring within framing members, and moisture migrating within glazed aluminum curtain wall to exterior

C. Curtain Wall Framing:

1. Fabricate components for field assembly in accordance with curtain wall manufacturer's standard tested system and installation requirements.

D. After fabrication, clearly mark components to identify their locations in project according to shop drawings.

2.7 ALUMINUM FINISHES

A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

PART 3 EXECUTION

3.1 EXAMINATION

A. With installer present, examine areas for compliance with requirements for installation tolerances and other conditions affecting performance of the work.

B. Proceed with installation only after correcting unsatisfactory conditions.

3.2 INSTALLATION

A. Curtain Wall System Installation:

1. Install curtain wall systems plumb, level, and true to line, without warp or rack of frames, within manufacturer’s prescribed tolerances, and complying with installation instructions.

2. Provide support and anchor in place.

3. Dissimilar Materials:

a. Provide separation of aluminum materials from sources of corrosion or electrolytic action contact points.

4. Glazing:

a. Glass shall be outside-glazed.

b. Glass shall be held in place with extruded aluminum pressure plates secured to mullions with stainless-steel fasteners in accordance with manufacturer's tested system and installation requirements.

5. Water Drainage

a. Each light of glass shall be compartmentalized using joint plugs and silicone sealant to divert water to the horizontal weep locations.

b. Weep holes shall be located in the horizontal pressure plates and covers to divert water to the exterior of the building.

B. Related Products Installation:

1. Sealants (Perimeter):

a. Refer to Joint Treatment (Sealants) Section.

2. Glass:

a. Refer to Glass and Glazing Section.

b. Reference: ANSI Z97.1, CPSC 16 CFR 1201, and GANA Glazing Manual.

3.3 FIELD QUALITY CONTROL

A. Manufacturer's Field Services:

1. Provide manufacturer's field representative for consultation and inspection when requested by Architect.

3.4 ADJUSTING, CLEANING, AND PROTECTION

A. Adjusting: Not applicable.

B. Protection:

1. Protect installed product’s finish surfaces from damage during construction.

2. Protect aluminum curtain wall system from damage from grinding and polishing compounds, plaster, lime, acid, cement, or other harmful contaminants.

C. Cleaning:

1. Repair or replace damaged installed products.

2. Clean installed products in accordance with manufacturer’s instructions prior to owner’s acceptance.

3. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during the construction period.

END OF SECTION 084413

LAN ASSOCIATES | Engineering, Planning, Architecture, Surveying Inc.

LAN-Inc. Job # 20277.25.14

DIGITAL INFORMATION RELEASE AGREEMENT

CAD DRAWINGS TO:

Date:

LAN Associates, Engineering, Planning, Architecture, Surveying, Inc. (LAN) is preparing construction documents on their computer system. The undersigned has requested to be provided certain information in digital format.

LAN will provide services to develop modified copies of digital files for the subject project with the following understandings and conditions:

1. The undersigned understands that the digital information may change after this issuance in digital format. The digital information has not been finally verified against the hard copy and thus may contain errors and extraneous data. The data stored on electronic media can deteriorate undetected and may be modified or altered without the knowledge of LAN. The use of the digital information is wholly at the risk of the undersigned.

2. The hard copy of these documents as issued by LAN are to be relied upon for purposes of schematic design only and not the digital information to the extent that there is any variation between the hard copy and the digital format thereof, the hard copy is the sole basis for determining all matters relating to the work. The hard copies of these drawings are not to be used for construction.

3. The digital information that was generated utilizing commercial software under license to LAN and LAN is under no obligation to provide any software or hardware required to read and/or manipulate said information. LAN is also under no obligation to provide supplemental files and linked data (e.g. font files, line types, or external references).

4. LAN is under no obligation to correct, modify, or update the digital information or to notify the undersigned of any need to correct, modify, or update the digital information.

5. The undersigned agrees to indemnify, release, and hold LAN, their consultants, and the other harmless from any responsibility or obligation as to the accuracy or completeness of the digital information and further waives any claim it may have for compensation for additional work, delay costs, losses, consequential damages, and expenses including but not limited to attorney fees resulting from the undersigned relying upon or utilizing the digital information.

6. The digital files are provided for the exclusive use of the undersigned personnel only. The information will not be transferable or transmitted by the undersigned for use by others.

7. The above shall constitute an agreement between LAN and the undersigned for providing a service.

8. This agreement does not constitute a waiver of copyright nor transfer of ownership of the said information and documents.

LAN-Inc. Job # 20277.25.14

FILE NAME	DATE

LAN Associates, Engineering • Planning • Architecture • Surveying, Inc. (LAN)
1018 Laurel Oak Road
Suite #11
Voorhees, NJ 08043

T. 856-375-2701
W. www.lanassociates.com

This agreement accepted by:

By

Signature

Title

Witness (Print Name)

Date

Witness Signature

Company:

Name

Address

City, State, Zip Code

SECTION 284600 - FIRE DETECTION AND ALARM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fire-alarm system control units.
2. Dedicated function control units.
3. Fire-alarm remote annunciators.
4. Fire-alarm auxiliary power supplies.
5. Fire-alarm audio amplifiers.
6. Fire-alarm terminal cabinets.
7. Manual fire-alarm boxes.
8. Heat-sensing fire detectors.
9. Smoke-sensing fire detectors.
10. Radiant energy-sensing fire detectors.
11. Combination, multi-criteria, and multi-sensor detectors.
12. Carbon monoxide detectors.
13. Sprinkler waterflow alarm-initiating devices.
14. Audible notification appliances.
15. Visual notification appliances.
16. Combination audible/visual notification appliances.
17. Firefighters' two-way, in-building wired telephone communications system.
18. Fire-alarm supervised control module interfaces for fire safety functions.
19. Fire-alarm supervisory signal-initiating devices.
20. Fire-alarm digital alarm communicator transmitters.
21. Fire-alarm radio alarm transmitters.
22. Fire-alarm record documentation cabinets.
23. Passive graphic maps.
24. Fire-alarm cables.

B. Related Requirements:

1. Section 260010 "Supplemental Requirements for Electrical" specifies additional requirements applicable to coordinating, scheduling, and sequencing of the Work specified in this Section.
2. Section 078413 "Penetration Firestopping" specifies materials and methods for sealing penetrations of rated walls and partitions referenced by this Section.
3. Section 230923 "Direct Digital Control (DDC) System for HVAC" specifies HVAC control interfaces referenced by this Section.
4. Section 260529 "Hangers and Supports for Electrical Systems" specifies hangers, supports, and concrete bases referenced by this Section.
5. Section 260533.13 "Conduits for Electrical Systems" specifies raceway types installed by this Section.
6. Section 260553 "Identification for Electrical Systems" specifies electrical equipment labels and warning signs installed by this Section.
7. Section 260923 "Lighting Control Devices" specifies emergency lighting control interfaces referenced by this Section.
8. Section 262816 "Enclosed Switches and Circuit Breakers" specifies shunt-trip control interfaces referenced by this Section.

1.2 REFERENCES

A. Abbreviations and Acronyms for Electrical Terms and Units of Measure:

1. AWG: American wire gauge; see ASTM B258.
2. BAS: Building automation system.
3. BMS: Building management system.
4. cd: Candela, the SI fundamental unit of luminous intensity.
5. DACR: Digital alarm communicator receiver.
6. DACT: Digital alarm communicator transmitter.
7. dB(A-weighted) or dB(A): Decibel acoustical sound pressure level with A-weighting applied in accordance with IEC 61672-1.
8. EMP: Electrical maintenance program (operation and maintenance); electromagnetic pulse (transient analysis).
9. EPS: Emergency power supply.
10. EPSS: Emergency power supply system.
11. ERCES: Emergency responder communications enhancement system.
12. ESS: Energy storage system.
13. FACU: Fire-alarm control unit.
14. FAS: Fire-alarm system.
15. IDC: Initiating device circuit.
16. IP: Internet Protocol.
17. IR: Infrared.
18. LAN: Local area network.
19. LCD: Liquid-crystal display.
20. LED: Light-emitting diode.
21. Li-ion: Lithium-ion.
22. NAC: Notification appliance circuit.
23. N.C.: Normally closed.
24. Ni-Cd: Nickel-cadmium.
25. Ni-MH: Nickel-metal hydride.
26. N.O.: Normally open.
27. PC: Personal computer.
28. PLFA: Power-limited fire alarm.
29. PoE: Power over Ethernet.
30. POTS: Plain old telephone service. See "public switched telephone network" definition.
31. PSTN: Public switched telephone network.
32. RAT: Radio alarm transmitter.
33. SLC: Signaling-line circuit.
34. TR: Tamper resistant.
35. UL: (standards) UL Standards & Engagement Inc.; (product categories) UL Solutions, Inc.
36. UL CCN: UL Category Control Number.
37. UPS: Uninterruptible power supply.
38. VoIP: Voice over Internet Protocol.
39. VPN: Virtual private network.
40. VRLA: Valve regulated lead acid; also called "sealed lead acid (SLA)" or "valve regulated sealed lead acid."
41. WAN: Wide area network.
42. WR: Weather resistant.

B. Abbreviations and Acronyms for Electrical Raceway Types:

1. EMT: Electrical metallic tubing.
2. EMT-S: Steel electrical metallic tubing.
3. ERMC-S: Steel electrical rigid metal conduit.

4. ERMC-S-G: Galvanized-steel electrical rigid metal conduit.
5. FMC: Flexible metal conduit.
6. FMC-S: Steel flexible metal conduit.
7. IMC: Steel electrical intermediate metal conduit.
8. LFMC: Liquidtight flexible metal conduit.
9. LFMC-A: Aluminum liquidtight flexible metal conduit.
10. LFMC-S: Steel liquidtight flexible metal conduit.
11. PVC: Rigid PVC conduit.
12. PVC-40: Schedule 40 rigid PVC conduit.
13. PVC-80: Schedule 80 rigid PVC conduit.
14. RGS: See ERMC-S-G.
15. RMC: See ERMC raceway types above.

C. Abbreviations and Acronyms for Electrical Single-Conductor and Multiple-Conductor Cable Types:

1. CI: Circuit integrity cable.
2. FPL: Power-limited fire-alarm cable.
3. FPLP: Power-limited fire-alarm plenum cable.
4. FPLR: Power-limited fire-alarm riser cable.
5. MC-FPL/FPLR/FPLP: Metal-clad cable containing FPL, FPLR, or FPLP.
6. OFC: Conductive optical fiber general-purpose cable.
7. OFCG: Conductive optical fiber general-purpose cable.
8. OFCP: Conductive optical fiber plenum cable.
9. OFCR: Conductive optical fiber riser cable.
10. OFN: Nonconductive optical fiber general-purpose cable.
11. OFNG: Nonconductive optical fiber general-purpose cable.
12. OFNP: Nonconductive optical fiber plenum cable.
13. OFNR: Nonconductive optical fiber riser cable.

D. Definitions:

1. Cable: In accordance with NIST NBS Circular 37 and IEEE standards, in the United States for the purpose of interstate commerce, the definition of "cable" is (1) a conductor with insulation, or a stranded conductor with or without insulation (single-conductor cable); or (2) a combination of conductors insulated from one another (multiple-conductor cable).
2. Conductor: In accordance with NIST NBS Circular 37 and IEEE standards, in the United States for the purpose of interstate commerce, the definition of "conductor" is (1) a wire or combination of wires not insulated from one another, suitable for carrying an electric current; (2) (National Electrical Safety Code) a material, usually in the form of wire, cable, or bar, suitable for carrying an electric current; or (3) (general) a substance or body that allows a current of electricity to pass continuously along it.
3. Conduit: A structure containing one or more duct raceways.
4. Designated Seismic System: An architectural, electrical, or mechanical system and its components for which the component importance factor is greater than 1.0 when determined in accordance with Section 018123 "Facility Seismic and Wind Criteria."
5. Direct Buried: Installed underground without encasement in concrete or other protective material.
6. Duct Bank: An arrangement of conduit providing one or more continuous duct raceways between two points.
7. Duct Raceway: A single enclosed raceway for conductors or cable.
8. Emergency Systems: Those systems legally required and classed as emergency by municipal, state, federal, or other codes, or by any governmental agency having jurisdiction that are designed to ensure continuity of lighting, electrical power, or both, to designated areas and equipment in the event of failure of the normal supply for safety to

human life.

9. Public Switched Telephone Network (PSTN): Analog telephone technology that uses twisted pair cables from a telephone-provider central office for the transmission medium. "PSTN" refers to the telephone network; "POTS" refers to the individual subscriber line.
10. Voice over Internet Protocol (VoIP): Digital telephone packet technology that uses the internet for its transmission medium.
11. Wire: In accordance with NIST NBS Circular 37 and IEEE standards, in the United States for the purpose of interstate commerce, the definition of "wire" is a slender rod or filament of drawn metal. A group of small wires used as a single wire is properly called a "stranded wire." A wire or stranded wire covered with insulation is properly called an "insulated wire" or a "single-conductor cable." Nevertheless, when the context indicates that the wire is insulated, the term "wire" will be understood to include the insulation.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. In addition to information identified in Section 013300 "Submittal Procedures," submit the following:

1. Product Listing: Include copy of unexpired approval letter, on letterhead of qualified electrical testing agency, certifying product's compliance with specified listing criteria.

    a. If listed manufacturer differs from selling manufacturer, indicate relationship between entities on submittal. Clearly indicate which entity warrants product performance and fitness for purpose.
    b. Listing criteria identified in approval letter must match specified listing criteria. UL label indicating approval of equipment's enclosure is not considered approval of equipment for intended application.
    c. Product identification in approval letter must match product branding and model numbers in submittal. Approval letters for discontinued or superseded products are not acceptable for submitted product.

B. Shop Drawings shall be prepared by persons with the following qualifications:

1. Trained and certified by manufacturer in fire-alarm system design.

    a. NICET-certified, fire-alarm technician; Level IV minimum.
    b. Licensed or certified by authorities having jurisdiction.

C. Shop Drawings: Prepare and submit the following:

1. Cover sheet indicating protected premises name and location and Owner information, name of installer, device legend and symbols acceptable to the authorities having jurisdiction, and date of issue and any revision dates.
2. Floor Plans:

    a. Floor or level identification.
    b. Point of compass (indication of north).
    c. Graphic scale.
    d. All walls and doors.
    e. All partitions extending to within 15 percent of the ceiling height.
    f. Room and area descriptions.
    g. Acoustically distinguishable spaces.
    h. Minimum required illumination levels.
    i. System devices/component locations.

j. Locations of the system's primary power disconnecting means.
k. Locations of monitor/control interfaces to other systems.
l. System riser locations.
m. Type and number of system components/devices on each circuit, on each floor or level.
n. Type and quantity of conductors for each circuit.
o. Identification of any ceiling over 10 ft in height where automatic fire detection is being proposed.
p. Details of ceiling geometries, including beams and solid joists, where automatic fire detection is being proposed.
q. Acoustic properties of spaces, where known.
r. Pathway class designations, including the location of any end-of-line supervisory or power devices that are required by the pathway class.
s. Pathway survivability level designations.

3. Wiring Diagrams:

a. System riser diagrams coordinated with the floor plans and indicating the following information:

1) General arrangement of the system in building cross-section.
2) Number of risers.
3) Type and number of circuits in each riser.
4) Type and number of system components/devices on each circuit, on each floor or level.
5) Number of conductors for each circuit.
6) Pathway class designation, including the location of any end-of-line supervisory or power devices that are required by the pathway class.
7) Pathway survivability level designations.

b. Control unit diagrams for all control equipment, power supplies, battery chargers, and annunciators indicating the following information:

1) Identification of control equipment depicted.
2) Location(s) of control equipment.
3) All field wiring terminals and terminal identifications.
4) All circuits connected to field wiring terminals and circuit identifications.
5) All indicators and manual controls.
6) Field connections to supervising station signaling equipment, releasing equipment, and emergency safety control interfaces.

c. Typical fire-alarm component schematic wiring diagrams for all initiating devices, notification appliances, remote indicators, remote test stations, end-of-line and power supervisory devices, and annunciators.

4. Fire-Alarm Input/Output Sequence: Include a narrative description or input/output matrix of operation to describe the fire-alarm system sequence of operation.
5. Details:

a. Component installation details.
b. Custom graphic annunciator layout.

6. Calculations:

a. Battery calculations.

b. Voltage-drop calculations.
c. Speaker circuit calculations.
d. Spare capacity circuit calculations.

D. Field quality-control reports.

1.4 INFORMATIONAL SUBMITTALS

A. Field Reports:

1. Manufacturer's field reports for field quality-control support.
2. Manufacturer's field reports for system startup support.

B. Qualification Statements: For Installer.

1. Provide copies of NICET Level II Fire Alarm certifications for a minimum of two (2) technicians assigned to this project.

C. Sample Warranty: Submittal must include line-item pricing for replacement parts and labor.

1.5 CLOSEOUT SUBMITTALS

A. Warranty documentation.

B. Maintenance service agreement.

C. Software and firmware service agreement.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Spare parts.

B. Special tools.

1.7 REGULATORY AGENCY APPROVALS

A. Contractor shall submit Fire Alarm shop drawings for review to local authority having jurisdiction Fire Department for approval. Contractor shall submit a copy of approved Fire Alarm shop drawings to Architect for record.

1.8 QUALIFICATIONS

A. Fire-Alarm Systems (FAS) Technician Trainee: Having at least six months of experience and possessing active NICET FAS Level I certification. Able to perform limited tasks under direct supervision.

B. Fire-Alarm Systems (FAS) Associate Engineering Technician: Having at least two years of experience and possessing active NICET FAS Level II certification. Able to review drawings, specifications, codes, and standards; to conduct basic installation activities; and to perform basic troubleshooting.

C. Fire-Alarm Systems (FAS) Engineering Technician: Having at least five years of experience and possessing active NICET FAS Level III certification. Able to perform system layout activities, supervise Level I and Level II technicians, provide submittal packages, and interact with authorities having jurisdiction.

D. Fire-Alarm Systems (FAS) Senior Engineering Technician: Having at least 10 years of experience and possessing active NICET FAS Level IV certification. Able to manage multiple projects at once, interpret codes and standards, conduct training, and serve as liaison between authorities having jurisdiction, owners, engineers, and contractors.

E. Inspection and Testing of Fire-Alarm Systems (I&TFAS) Technician I: Possessing active NICET I&TFAS Level I certification. Able to perform periodic inspections and tests of basic fire-alarm systems and prepare related records and reports.

F. Inspection and Testing of Fire-Alarm Systems (I&TFAS) Technician II: Possessing active NICET I&TFAS Level II certification. Able to plan, perform, and coordinate periodic inspections and tests of complex fire-alarm systems (including one or more of suppression interfaces, networked control units, smoke control interfaces, air sampling systems, multi-zone voice evacuation systems, or high-rise applications) and prepare related records and reports.

G. Fire-Alarm Testing Agency: Entity possessing active credentials from qualified electrical testing laboratory recognized by authorities having jurisdiction.

1. On-site fire-alarm testing supervisor must possess active NICET I&TFAS Technician II certification.

1.9 WARRANTY FOR FIRE DETECTION AND ALARM SYSTEMS

A. Special Installer Extended Warranty: Installer warrants that installed fire detection and alarm system performs in accordance with specified requirements and agrees to repair or replace system components or products that fail to perform as specified within extended-warranty period. Warranty must convey to Owner upon acceptance of the Work.

1. Extended-Warranty Period: Two years from date of Substantial Completion; full coverage for labor, materials, and equipment.

B. Special Manufacturer Extended Warranty: Manufacturer warrants that fire detection and alarm system components perform in accordance with specified requirements and agrees to repair or replace system components or products that fail to perform as specified within extended-warranty period. Warranty must convey to Owner upon acceptance of the Work.

1. Initial Extended-Warranty Period: Five years from date of Substantial Completion; full coverage for labor, materials, and equipment.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Products or components listed and labeled in accordance with NFPA 70 or NFPA 72, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.

B. System Description: Noncoded, UL-certified, addressable, system with multiplexed signal transmission and voice-or-horn -and-strobe notification for evacuation.

C. Basis of Design Product: Subject to compliance with requirements, provide product indicated on drawings as manufactured by POTTER ELECTRIC.

D. Acceptable alternate manufacturers to the Basis of Design Product are as follows:

1. NOTIFIER.
2. EDWARDS.
3. SIEMENS.

E. Manufacturers: Subject to compliance with requirements, provide products by the following or equivalent:

1. Potter Electric

F. Source Limitations:

1. Contractor shall provide devices / equipment, wire, & cable that are UL Listed in accordance with the basis of design and specifications.
2. Obtain products from single manufacturer.

G. System Inputs:

1. Existing Fire Alarm System Inputs shall be maintained, unless otherwise noted.
2. Fire-alarm signal initiation must be by one or more of the following devices and systems:

a. Manual fire-alarm boxes.
b. Heat detectors.
c. Smoke detectors.
d. Flame detectors.
e. Duct smoke detectors.
f. Air-sampling smoke-detection system.
g. Carbon monoxide detectors.
h. Combustible gas detectors.
i. Automatic sprinkler system water flow.
j. Preaction system alarm.
k. Fire-extinguishing system operation.
l. Fire standpipe system.
m. Dry-pipe sprinkler system pressure flow switch.
n. Fire pump is running.

3. Supervisory signal initiation must be by one or more of the following devices and actions:

a. Valve supervisory switch.
b. High- or low-air pressure switch of dry-pipe or preaction sprinkler system.
c. Alert and Action signals of air-sampling smoke-detection systems.
d. Duct smoke detectors.
e. Elevator shunt-trip control circuit supervision.
f. Independent fire-detection and fire-suppression systems.
g. Fire pump is running.
h. Fire pump has lost power.
i. Power to the fire pump has phase reversal.
j. Zones or individual devices have been disabled.

k. FACU has lost communication with network.
l. Hose cabinet door is open.
m. Knox box cabinet door is open.

4. System trouble signal initiation must be by one or more of the following devices and actions:

a. Open circuits, shorts, and grounds in designated circuits.
b. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
c. Loss of communication with addressable sensor, input module, relay, control module, remote annunciator, or ethernet module.
d. Loss of primary power at FACU.
e. Ground or single break in internal circuits of FACU.
f. Abnormal AC voltage at FACU.
g. Break in standby battery circuitry.
h. Failure of battery charging.
i. Abnormal position of switch at FACU or remote annunciator.
j. Voice signal amplifier failure.

5. Carbon monoxide alarm signal initiation must be by the following devices and systems:

a. Carbon monoxide detectors.

H. System Outputs:

1. Existing Fire Alarm System Outputs shall be maintained, unless otherwise noted.
2. Fire-alarm signal must initiate the following actions:

a. Continuously operate alarm notification appliances, including voice evacuation notices.
b. Identify alarm and specific initiating device at FACU, connected network control panels, off-premises network control panels, and remote annunciators, including devices made connected by networking of separate fire alarm systems.
c. Transmit alarm signal to remote alarm receiving station.
d. Unlock electric door locks in designated egress paths.
e. Release fire and smoke doors held open by magnetic door holders.
f. Activate voice/alarm communication system.
g. Switch HVAC equipment controls to fire-alarm mode.
h. Activate smoke-control system (smoke management) at firefighters' smoke-control system panel.
i. Activate stairwell and elevator-shaft pressurization systems.
j. Close smoke dampers in air ducts of designated air-conditioning duct systems.
k. Activate preaction system.
l. Recall elevators to designated or alternate recall levels only upon activation of smoke detectors in respective elevator lobbies, machine rooms, or hoistways.
m. Activate elevator power shunt trip only upon activation of associated heat detector.
n. Activate emergency lighting control.
o. Activate emergency shutoffs for gas and fuel supplies, except for shutoffs serving legally required life-safety systems such as emergency generators and fire pumps.
p. Record events in system memory.
q. Indicate device in alarm on graphic annunciator.

3. System supervisory signal must initiate the following actions:

a. Initiate supervisory notification appliances.
b. Identify specific operating device event at FACU, connected network control panels, off-premises network control panels, and remote annunciators, including devices made connected by networking of separate fire alarm systems.
c. After time delay of 200 seconds, transmit trouble or supervisory signal to remote alarm receiving station.
d. Transmit system status to building management system.
e. Display system status on graphic annunciator.

4. Carbon monoxide alarm signal must initiate the following actions:

a. Initiate carbon monoxide notification appliances and sound temporal-4 signal.
b. Identify specific device initiating event at FACU, connected network control panels, off-premises network control panels, and remote annunciators, including devices made connected by networking of separate fire alarm systems.
c. Transmit carbon monoxide alarm signal to remote alarm receiving station.

2.2 FIRE-ALARM SYSTEM CONTROL UNITS

A. Description: A component of the fire-alarm system, provided with primary and secondary power sources, which receives signals from initiating devices or other fire-alarm control units, and processes these signals to determine part or all of the required fire-alarm system output functions.

B. UL UOJZ - Addressable Fire-Alarm System Control Units:

1. Model Number: AFC-1000V.

2. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Electrical Control Units for Fire-Protective Signaling Systems: UL CCN UOJZ, including UL 864 and NFPA 72.

3. Standard Features:

a. Product Reference Standards: Ch. 23 of NFPA 72.
b. **Voice** /alarm communications.
c. Indication of which communication zones have been silenced.
d. Provide selective silencing of alarm notification appliances by building communication zone.
e. Real-time clock for time annotation of events on the event recorder.
f. Communication between the FACU and remote circuit interface panels, annunciators, and displays.
g. The FACU must be listed for connection to a central station signaling system service.
h. Provide non-volatile memory for system database, logic, operating system, and event history.
i. The system must not require manual input to initialize in the event of a complete power-down condition.
j. Alphanumeric display and system controls.
k. Minimum of two Class A or four Class B signaling-line circuits with expansion capability to add circuits.

l. Minimum of two Class A or four Class B notification appliance circuits with expansion capability to add circuits.
m. Synchronization of notification appliance circuits.

2.3 DEDICATED FUNCTION CONTROL UNITS

A. Description: A protected premises fire-alarm control unit specifically listed for supervising a single function, such as releasing service that is part of a fire-suppression system and which provides control outputs to release a fire-suppression agent based on either automatic or manual input.

B. UL SYZV - Conventional Non-Extinguishing and Non-Water-Based Releasing Device Control Unit :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Releasing Device Control Units for Fire-Protective Signaling Systems: UL CCN SYZV, including UL 864 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 23 of NFPA 72.
b. Built-in alarm and trouble relays.
c. Minimum of two Class A or four Class B initiating device circuits.
d. Maintenance alerts.
e. Battery charger supports.

3. Other Available Features Required by Project:

a. Synchronization of notification appliance circuits.

2.4 FIRE-ALARM REMOTE ANNUNCIATORS

A. Description: A unit containing one or more indicator lamps, alphanumeric displays, or other equivalent means in which each indication provides status information about a fire-alarm system device, circuit, condition, or location.

2.5 FIRE-ALARM AUXILIARY POWER SUPPLIES

A. Description: An auxiliary source of low-voltage electrical operating power for fire-alarm system equipment, including the circuits and terminations connecting it to the equipment being powered. Auxiliary power supplies are often referred to as remote power supplies, booster power supplies, or notification appliance power supplies.

B. UL UOXX - Fire-Alarm Auxiliary Power Supplies :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Control Unit Accessories for Fire-Protective Signaling Systems: UL CCN UOXX, including UL 864 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Chs. 10 and 23 of NFPA 72.
b. Minimum of four 24 V(dc) auxiliary power circuits.

3. Other Available Features Required by Project:

a. Synchronization of notification appliance circuits.
b. Addressable-type notification appliance power supply, which connects directly to a signaling-line circuit.

2.6 FIRE-ALARM AUDIO AMPLIFIERS

A. Description: A component of in-building fire emergency voice/alarm communications systems that takes a low-level audio input and amplifies the power output to distribute to fire-alarm loudspeakers. Amplifiers can be an integral component of the fire-alarm control unit or can be remotely located in a separate cabinet within the building.

2.7 FIRE-ALARM TERMINAL CABINETS

A. Description: A cabinet with hinged, lockable cover clearly labeled and intended for termination of fire-alarm conductors at junction points. Screw-type terminal blocks are provided within the terminal cabinet for conductor splices.

2.8 MANUAL FIRE-ALARM BOXES

A. Description: A manually operated device used to initiate a fire-alarm signal. Manual fire-alarm boxes come in both conventional or addressable models and may require a single-action (pull down) or double-action (push in and pull down) to initiate a fire-alarm signal. These initiating devices are sometimes referred to as manual fire-alarm stations, pull stations, or call points.

B. Accessories:

1. Factory-fabricated clear plastic enclosure with battery-operated sounder.
2. Weatherproof protective shield for conventional manual fire-alarm boxes located outdoors.

2.9 HEAT-SENSING FIRE DETECTORS

A. Description: A fire detector that detects either abnormally high temperatures or rate-of-temperature rise, or both.

B. Accessories:

1. Heat detector protective guard, where indicated on the drawings.

2.10 SMOKE-SENSING FIRE DETECTORS

A. Description: A device that detects visible or invisible particles of combustion and initiates an action. Types of smoke-sensing fire detectors include spot-type detectors, air-sampling detectors, projected beam-type detectors, duct detectors, multi-criteria detectors, and video image smoke detectors.

B. Accessories:

1. Smoke detector protective guard, where indicated on the drawings.

C. UL UROX - Duct Smoke Detectors:

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Detectors Designed for Smoke Particles: UL CCN UROX, including UL 268 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to FACU.
c. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
d. Integral Visual-Indicating Light: LED type, indicating detector has operated.
e. Detectors must be four- or two-wire type.
f. Detector address must be accessible from fire-alarm control unit and must be able to identify the detector's location within the system and its sensitivity setting.
g. Operator at FACU, having designated access level, must be able to manually access the following for each detector: primary status, device type, present average value, present sensitivity selected, and sensor range.

2.11 RADIANT ENERGY-SENSING FIRE DETECTORS

A. Description: A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics. Common types of radiant energy-sensing fire detectors include video image flame detectors.

2.12 COMBINATION, MULTI-CRITERIA, AND MULTI-SENSOR DETECTORS

A. Description: A device that contains multiple sensors that separately respond to physical stimulus such as heat, smoke, or fire gases, or employs more than one sensor to sense the same stimulus. This sensor is capable of generating only one alarm signal from the sensor employed in the design either independently or in combination. The sensor output signal is mathematically evaluated to determine when an alarm signal is warranted. The evaluation can be performed either at the detector or at the control unit. This detector can have a single listing that establishes the primary function of the detector, or can have listings for each sensing method employed.

B. UL UROX - Multi-Criteria Detector:

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

    a. Detectors Designed for Smoke Particles: UL CCN UROX, including UL 268 and NFPA 72.

2. Standard Features:

    a. Product Reference Standards: Ch. 17 of NFPA 72.
    b. Field programmable.
    c. Resettable from the control unit.
    d. Removable from the base assembly without the use of tools and without disturbing the wiring connections.
    e. Smoke Sensing Type: Photoelectric.
    f. Heat Sensing Type: Fixed temperature and combination rate-of-rise.

2.13 CARBON MONOXIDE DETECTORS

A. Description: A device that detects the presence of a specific carbon monoxide concentration.

B. UL FTAM - Carbon Monoxide Detectors:

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

    a. Detectors and Sensors Designed to Detect Gases and Vapors: UL CCN FTAM, including UL 2075 and NFPA 72.

2. Standard Features:

    a. Product Reference Standards: Ch. 17 of NFPA 72.
    b. Detector sends trouble alarm when nearing end of life or experiencing power supply problems or internal faults.
    c. Detector sounder base emits Temporal-4 signal.
    d. Testable by introducing test carbon monoxide into sensing cell.

2.14 SPRINKLER WATERFLOW ALARM-INITIATING DEVICES

A. Description: An initiating device used to monitor the flow of water in a wet-pipe or dry-pipe sprinkler system for the purpose of initiating an alarm signal. These devices employ operating mechanisms that include paddle operation, pressure operation, or mechanical operation.

B. UL USQT - Sprinkler Waterflow Alarm-Initiating Device :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

    a. Extinguishing System Attachments: UL CCN USQT, including UL 346 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Activation of the initiating device occurs within 90 seconds of waterflow at the alarm-initiating device when flow occurs that is equal to or greater than that from a single sprinkler of the smallest orifice size installed in the system.
c. Movement of water due to waste, surges, or variable pressure must not initiate an alarm signal.
d. Adjustable time delay.
e. Pressure Range: 20 to 175 psig.
f. Operating Type: Paddle, Pressure, or Mechanically operated, as required.
g. Coded or Non-coded signaling contacts, as required.

2.15 AUDIBLE NOTIFICATION APPLIANCES

A. Description: A fire-alarm system component such as a horn or loudspeaker that provides audible output to alert occupants by the sense of hearing.

B. Accessories:

1. Audible appliance protective guard, where indicated on the drawings.

2.16 VISUAL NOTIFICATION APPLIANCES

A. Description: A fire-alarm system component that provides a visible output to alert occupants by the sense of sight, including visual strobes.

B. Accessories:

1. Visual appliance protective guard, where indicated on the drawings.

2.17 COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCES

A. Description: A fire-alarm system component such as a horn/strobe or loudspeaker/strobe that provides both an audible and a visible output to alert occupants by the sense of hearing and sight.

B. Accessories:

1. Combination audible/visual appliance protective guard, where indicated on the drawings.

2.18 FIREFIGHTERS' TWO-WAY, IN-BUILDING WIRED TELEPHONE COMMUNICATIONS SYSTEM

A. Description: A two-way in-building telephone communications system used by firefighters and emergency response personnel when responding to, investigating, and conducting rescue activities in a fire incident.

2.19 FIRE-ALARM SUPERVISED CONTROL MODULE INTERFACES FOR FIRE SAFETY FUNCTIONS

A. Description: An addressable fire-alarm control module that interfaces to another building system for the purpose of initiating an action for that system based upon activation of a supervisory or alarm condition on the fire-alarm system. The interface between the control module and the other building system or equipment is supervised.

B. UL UOXX - Fire-Alarm Supervised Control Module:

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Control Unit Accessories - Addressable Control Modules: UL CCN UOXX, including UL 864 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Field programmable.
c. Resettable from the control unit.
d. Supervises Class A initiating device circuits.
e. Capable of interfacing with the following systems:

1) Elevator controller.
2) Elevator power shunt-trip.
3) Elevator shunt-trip power monitoring.
4) HVAC line voltage.
5) Building management system.
6) Magnetic door hold-open circuits.
7) High-volume low-speed fans.
8) Door or Shutter release.
9) Electrically locked doors.

2.20 FIRE-ALARM SUPERVISORY SIGNAL-INITIATING DEVICES

A. Description: An initiating device such as a valve supervisory switch, water-level indicator, low-air-pressure switch, or low-temperature switch in which the change of state signals to the fire-alarm / releasing device control unit an off-normal condition and its restoration to normal of a fire-protection or life-safety system; or a need for action in connection with guard tours, fire-suppression systems or equipment, or maintenance features of related systems.

B. UL USQT - Water Temperature Supervisory Signal-Initiating Devices :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Extinguishing System Attachments: UL CCN USQT, including UL 346 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Initiates two separate and distinct signals; one indicating a decrease in water temperature to 40 deg F, and the other indicating its restoration to above 40 deg F.

C. UL USQT - Room Temperature Supervisory Signal-Initiating Devices :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Extinguishing System Attachments: UL CCN USQT, including UL 346 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Initiates two separate and distinct signals; one indicating a decrease in room temperature to 40 deg F, and the other indicating its restoration to above 40 deg F.

D. UL USQT - Fire Extinguisher Supervisory Signal-Initiating Devices :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Extinguishing System Attachments: UL CCN USQT, including UL 346 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Indicates conditions for a specific fire extinguisher to a fire-alarm control unit.

E. UL USQT - Fire Pump Supervisory Signal-Initiating Devices :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. Extinguishing System Attachments: UL CCN USQT, including UL 346 and NFPA 72.

2. Standard Features:

a. Product Reference Standards: Ch. 17 of NFPA 72.
b. Initiates a supervisory signal for any off-normal conditions of a fire pump, including the following:

1) Fire pump running.
2) Fire pump loss of power.
3) Fire pump phase reversal.
4) Fire pump transfer to secondary power.

F. UL UOXX - Generator Supervisory Signal-Initiating Devices :

1. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

    a. System Control Unit Accessories: UL CCN UOXX, including UL 864 and NFPA 72.

2. Standard Features:

    a. Product Reference Standards: Ch. 17 of NFPA 72.
    b. Initiates a supervisory signal upon indication of generator running condition.

2.21 FIRE-ALARM DIGITAL ALARM COMMUNICATOR TRANSMITTERS

A. Description: A fire-alarm system component at the protected premises to which the fire-alarm control unit connects and transmit signals indicating a status change of initiating devices or groups of devices. The DACT seizes the connected cellular signal and ethernet network, dials a preselected number to connect to a DACR, and transmits signals indicating a status change of the initiating devices.

2.22 FIRE-ALARM RADIO ALARM TRANSMITTERS

A. Description: A fire-alarm system component at the protected premises to which the fire-alarm control unit connects and transmit signals indicating a status change of initiating devices or groups of devices. The RAT transmits signals through a dedicated, licensed radio channel to the radio alarm receiver.

2.23 FIRE-ALARM RECORD DOCUMENTATION CABINETS

A. Description: A cabinet clearly labeled and intended for the storage of fire-alarm record documents, including as-built drawings; programming documentation; and inspection, testing, and maintenance documentation.

2.24 PASSIVE GRAPHIC MAPS

A. Description: A printed graphic map showing building floor plans indicating initiating device locations and control equipment locations for use by emergency responders and maintenance personnel.

B. Fire-Alarm Passive Graphic Map:

1. Standard Features:

    a. Product Reference Standards: Ch. 7 of NFPA 72.
    b. Indicates initiating device type, locations, and corresponding addresses.
    c. Indicates control equipment locations.
    d. Mounted in a plexiglass frame adjacent to the FACU.
    e. Legible and sized accordingly.

2.25 FIRE-ALARM CABLES

A. UL HNIR - Power-Limited Fire-Alarm Cable (FPL):

1. Listing Criteria:

a. Power-Limited Fire-Alarm Cable: UL CCN HNIR; including UL 1424 and Article 760 of NFPA 70.
b. Vertical-Tray Flame Test: UL 1685.
c. Limited Smoke "ST1" Marking: UL 1685 or UL 2556.

2. Standard Features:

a. Solid copper conductors with 300 V rated, 75 deg C, color-coded insulation.
b. Minimum Conductor Size: 14 AWG or in accordance with manufacturer's installation instructions & guidelines.

B. UL HNIR - Power-Limited Fire-Alarm Plenum Cable (FPLP):

1. Listing Criteria:

a. Power-Limited Fire-Alarm Cable: UL CCN HNIR; including UL 1424 and Article 760 of NFPA 70.
b. Vertical-Tray Flame Test: UL 1685.
c. Limited Smoke "ST1" Marking: UL 1685 or UL 2556.
d. Plenum Rating: NFPA 262.

2. Standard Features:

a. Solid copper conductors with 300 V rated, 75 deg C, color-coded insulation.
b. Minimum Conductor Size: 14 AWG or in accordance with manufacturer's installation instructions & guidelines.

C. UL HNIR - Power-Limited Fire-Alarm Riser Cable (FPLR):

1. Listing Criteria:

a. Power-Limited Fire-Alarm Cable: UL CCN HNIR; including UL 1424 and Article 760 of NFPA 70.
b. Vertical-Tray Flame Test: UL 1685.
c. Limited Smoke "ST1" Marking: UL 1685 or UL 2556.
d. Riser Rating: UL 1666.

2. Standard Features:

a. Solid copper conductors with 300 V rated, 75 deg C, color-coded insulation.
b. Minimum Conductor Size: 14 AWG or in accordance with manufacturer's installation instructions & guidelines.

2.26 MAINTENANCE MATERIAL ITEMS

A. Spare Parts: Furnish to Owner spare parts, for repairing fire detection and alarm system components, that are packaged with protective covering for storage on-site and identified with labels describing contents. Include the following:

1. Detectors: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.
2. Manual Fire-Alarm Boxes: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.
3. Addressable Input & Output Modules: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.
4. Audible Notification Appliances: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.
5. Visual Notification Appliances: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.
6. Combination Audible/Visual Notification Appliances: 5% (minimum of 1) of quantity indicated on the electrical fire alarm plans.

B. Special Tools: Furnish to Owner proprietary equipment, keys, and software required to operate, maintain, repair, adjust, or implement future changes to fire detection and alarm system, that are packaged with protective covering for storage on-site and identified with labels describing contents. Include the following:

1. Keys for control equipment cabinets.
2. Keys for remote test switches.
3. Wrench for manual fire-alarm boxes.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine field conditions with Installer present for compliance with requirements for fire detection and alarm systems and other conditions affecting performance of the Work.

B. Examine all materials, products, and equipment received for defects or damage.

C. Reject all materials, products, and equipment that show signs of defects or damage.

D. Examine roughing-in for fire detection and alarm system piping to verify actual locations of piping connections before equipment installation.

E. Examine walls, floors, ceilings, and roofs for suitable conditions where fire detection and alarm system components will be installed.

F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SELECTION OF CABLING FOR FIRE ALARM

A. Field Circuits:

1. Comply with fire alarm system manufacturer's installation instructions & guidelines.

3.3 SELECTION OF RACEWAYS FOR FIRE ALARM

A. Identification: At a minimum, all junction box covers for fire-alarm raceways must be identified using the color red.

B. Pathways:

1. Refer to Raceway Application Table (electrical drawing sheet E0.01) for selection of raceways.

3.4 INSTALLATION OF FIRE DETECTION AND ALARM SYSTEMS

A. Comply with manufacturer's published instructions.

B. Reference Standards for Installation: Unless more stringent installation requirements are specified in the Contract Documents or manufacturer's published instructions, comply with the following:

1. Electrical Construction: ICC IBC, ICC IFC, NFPA 1, NFPA 70, and NECA NEIS 1.
2. Commissioning of Electrical Systems: NECA NEIS 90.
3. Commissioning of Active and Passive Fire Protection Features: NFPA 3 and NFPA 4.
4. Fire-Alarm and Premises Security Work: NFPA 72, NFPA 731, NFPA 1225, and NECA NEIS 305.
5. Work in ITE Rooms: NFPA 75.
6. Work in Health Care Facilities: NFPA 99 and Article 517 of NFPA 70.
7. Life-Safety and Means-of-Egress Work: NFPA 101.
8. Emergency and Standby Power Work: NFPA 110, NFPA 111, and NECA NEIS 416.
9. Work in Confined Spaces: NFPA 350.
10. Work in Basements and Other Developed Subterranean Spaces: NFPA 520.
11. Work in Museums, Libraries, Places of Worship, and Historic Structures: NFPA 909 and NFPA 914.
12. Fire-Alarm Circuits and Pathways: Ch. 12 of NFPA 72 and Article 760 of NFPA 70.
13. Fire-Alarm Initiating Devices: Ch. 17 of NFPA 72.
14. Fire-Alarm Notification Appliances: Ch. 18 of NFPA 72.
15. Fire-Alarm Control Equipment: Ch. 23 of NFPA 72.
16. Fire-Alarm Transmitting Equipment: Ch. 23 and Ch. 26 of NFPA 72.
17. Consult Architect for resolution of conflicting requirements.

C. Interfaces with Other Work:

1. Identification: Provide labels for all initiating devices, control equipment cabinets, and associated electrical equipment.

   a. Identify field-installed conductors, interconnecting wiring, and components.
   b. Label initiating devices with unique identification.
   c. Identify source of AC power inside each control equipment cabinet.
   d. Identify circuit disconnecting means at AC power source with red engraved label. Provide approved locking device for circuit disconnecting means.
   e. Label enclosures with engraved metal or laminated-plastic nameplate.
   f. Identify junction box covers using the color red.
   g. Identify raceway using labeling.

3.5 FIELD QUALITY CONTROL OF FIRE DETECTION AND ALARM SYSTEMS

A. Administrant for Fire-Alarm Tests and Inspections:

1. Administer and perform tests and inspections.

B. Tests and Inspections:

1. Perform manufacturer's recommended tests and inspections.
2. Perform system acceptance testing in accordance with Ch. 14 of NFPA 72.
3. Contractor is responsible for completing pre-acceptance testing to verify proper operation of the fire detection and alarm systems. Correct system deficiencies prior to scheduling a final acceptance test.

C. Nonconforming Work:

1. Initiating devices, notification appliances, control equipment, and system accessories will be considered defective if they do not pass tests and inspections.
2. Remove and replace defective units and retest.

D. Field Quality-Control Reports: Collect, assemble, and submit test and inspection reports.

E. Fire-Alarm Testing Agency Services: Engage Fire-Alarm Testing Agency representative to supervise field tests and inspections.

1. Fire-Alarm Testing Agency's Field Reports for Field Quality-Control Support: Prepare and submit report after each visit by Fire-Alarm Testing Agency representative, documenting activities performed at Project site.

3.6 SYSTEM STARTUP

A. Perform startup service.

1. Complete installation and startup checks in accordance with manufacturer's published instructions.
2. Provide power to the FACU and configure internal settings.
3. Test all field wiring prior to connecting field devices and prior to connecting to the FACU. Ensure field wiring is free from ground faults and short circuits.
4. Connect field devices to field wiring.
5. Connect field wiring inside FACU cabinet.
6. Ensure system is normal and free from ground faults, open circuits, or short circuits.
7. Allow system burn-in for 30 days.
8. Correct any issues that occur during the system burn-in period.

B. Fire-Alarm Testing Agency Services: Engage Fire-Alarm Testing Agency representative to supervise system startup.

1. Fire-Alarm Testing Agency's Field Reports for System Startup Support: Prepare and submit report after each visit by Fire-Alarm Testing Agency representative, documenting activities performed at Project site.

3.7 PROTECTION

A. After installation, protect fire detection and alarm system equipment from construction activities. Remove and replace items that are contaminated, defaced, damaged, or otherwise caused to be unfit for use prior to acceptance by Owner.

3.8 MAINTENANCE

A. Maintenance Service Agreement: Beginning at Substantial Completion, verify that maintenance service agreement includes one-year period for full maintenance by skilled employees of manufacturer’s designated service organization. Include preventive maintenance, repair, or replacement of worn or defective components; cleaning; and adjusting as required for proper fire detection and alarm system operation. Verify that parts and supplies are manufacturer's authorized replacement parts and supplies.

END OF SECTION 284600

New Jersey State Department of Health
Division of Occupational and Environmental Health
Environmental Health Service

LETTER OF ASSURANCE
THREE-YEAR REINSPECTION OF SCHOOL BUILDINGS PURSUANT TO AHERA

RESPONSIBLE GOVERNING AUTHORITY

Name of Responsible Governing Authority		Telephone Number
Haddonfield Public Schools		856-429-7510
Street Address		
1 Lincoln Avenue		
Town		**County**
Haddonfield, NJ 08033		Camden
Name of Asbestos Program Manager	**Affiliation**	**Telephone Number**
Mr. Timothy McFerren	Haddonfield Public Schools	856-429-0183

FACILITY

Name of Facility	Telephone Number
Tatem Elementary School	856-429-0902
Building Assessed	**Asb. Mgt. Plan Number (if known)**
Tatem Elementary School	
Street Address	
1 Glover Avenue	
Town	**County**
Haddonfield, NJ 08033	Camden
Date Three-Year Reinspection Occurred	
November 20, 2024	

INSPECTORS/ASSESSORS

	Name	Address	Telephone Number
1	Timothy J. Eberts	80 Fork Bridge Rd. Elmer, NJ 08318	(856) 205-1077
	Affiliation	**State of Accreditation/Acc. No.**	**Signature**
	Epic Environmental Services, LLC	ACC-1222-6-014	
2	**Name**	**Address**	**Telephone Number**
			( )
	Affiliation	**State of Accreditation/Acc. No.**	**Signature**
3	**Name**	**Address**	**Telephone Number**
			( )
	Affiliation	**State of Accreditation/Acc. No.**	**Signature**

Return completed form to:

New Jersey State Department of Health
ATTN: Mr. James A. Brownlee, M.P.H., Director
Environmental Health Service
CN 360
Trenton, NJ 08625-0360

ASB-38
FEB 95

G4491

AHERA
3-Year Re-inspection & Management Plan Update
Information Sheet

Responsible Governing Authority
Haddonfield Public Schools

Telephone Number
856-429-7510

Address
1 Lincoln Avenue, Haddonfield, NJ 08033

Name of Facility
Tatem Elementary School

Telephone Number
856-429-0902

Building Addressed
Tatem Elementary School

Address
1 Glover Avenue, Haddonfield, NJ 08033

Type of Facility
Elementary School

Asbestos Program Manager
Mr. Timothy McFerren

Telephone Number
856-429-0183

Address
1 Lincoln Avenue, Haddonfield, NJ 08033

Date of Re-Inspection
November 20, 2024

Inspectors / Assessors

Name
Timothy J. Eberts

Address
80 Fork Bridge Rd
Elmer, NJ 08318

Telephone Number
856-205-1077

Affiliation
Epic Environmental Services

State of Accreditation/Acc No.
ACC-1222-6-014

Signature

Management Planner

Name
James D. Eberts

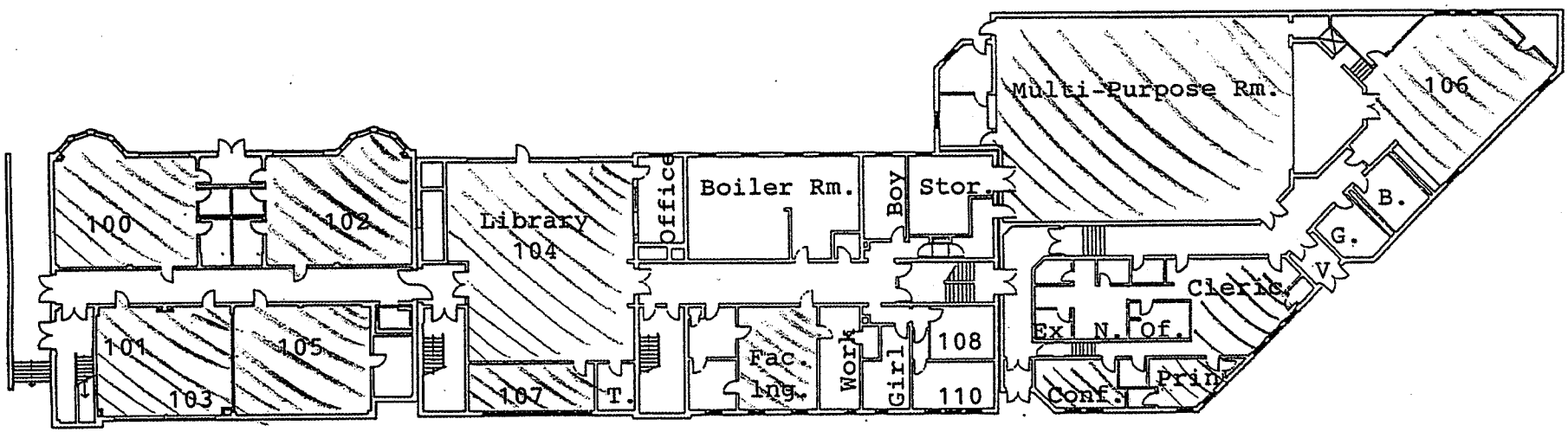
Address
80 Fork Bridge Rd
Elmer, NJ 08318

Telephone Number
856-205-1077

Affiliation
Epic Environmental Services

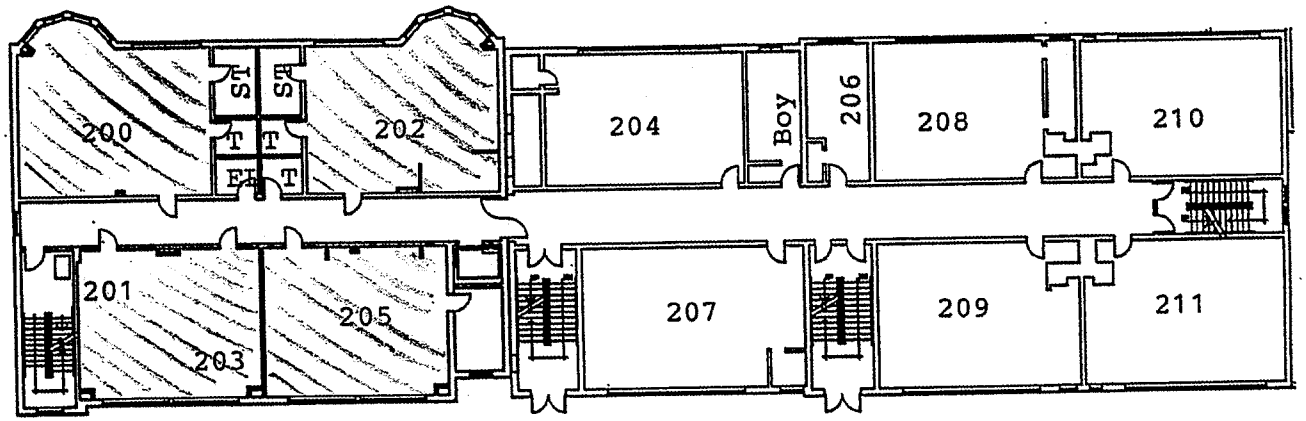
State of Accreditation/Acc No.
ACC-1222-8-006

Signature James D. Eberts



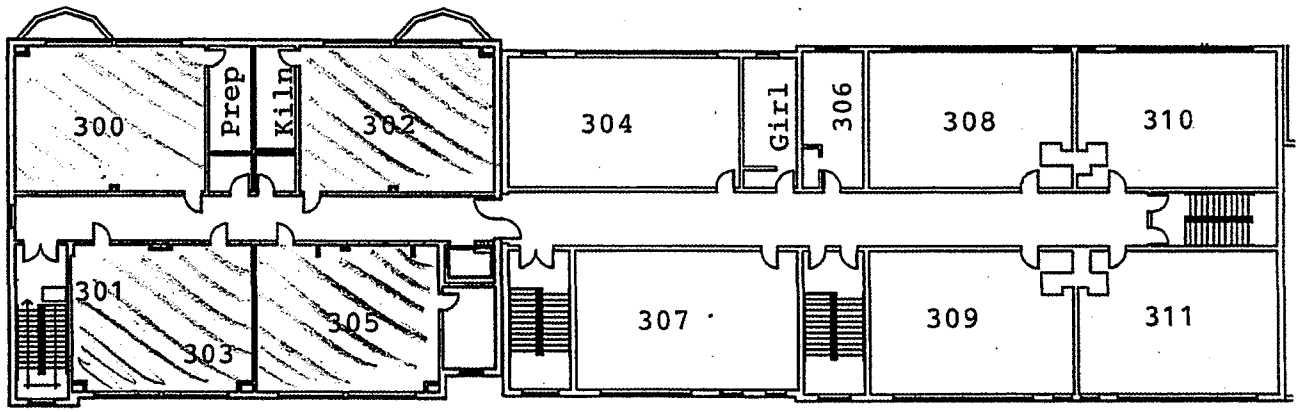
GROUND FLOOR

J. FITHIAN TATEM ELEMENTARY SCHOOL



FIRST FLOOR

J. FITHIAN TATEM ELEMENTARY SCHOOL



SECOND FLOOR

J. FITHIAN TATEM ELEMENTARY SCHOOL

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	See Attached				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
9' Rainbow Streak Floor Tile/Mastic	See Attached		11-A

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained? Yes [ ] No [ ]

Accessibility: 1-Low [ ] 2-Med. [ ] 3-High [ ]

Comments: See Attached

Is there a potential for disturbance of material? Yes [X] No [ ]

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream? Yes [ ] No [x]

Explain:

Degree of Damage:	
Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments:

Signature of Inspector/Assessor

Building Assessed: Tatem Elementary School

Homogeneous ID Number: 11-A

Material Description: 9" Rainbow Streak Floor Tile / Mastic

Location	Amount	Condition	Damage Amount	Accessibility / Response Action / Notes
Room 206	240 sf	No Damage	0	Covered by Floor Tile / Continue O & M Program
Room 208	720 sf	No Damage	0	Covered by 12" Floor Tile / Continue O & M Program
Room 306 and Restroom	720 sf			**REMOVED 7/2017**

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	See Attached				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
9' Brown Floor Tile / Mastic	See Attached		11-B

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High

Comments: See Attached

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments:

Signature of Inspector/Assessor

Building Assessed: Tatem Elementary School

Homogeneous ID Number: 11-B

Material Description: 9" Brown Floor Tile / Mastic

Location	Amount	Condition	Damage Amount	Accessibility / Response Action / Notes
Room 308 - 311				**REMOVED**

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Room 306 and RR				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
9" White Streaked Floor Tile / Mastic	250 sf		11-C

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained? Yes No: [ ] [ ]

Accessibility

1-Low	2-Med.	3-High
x		x

Comments: Under Carpet, Except for 20 sf in Restroom

Is there a potential for disturbance of material? Yes No: [X] [ ]

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream? Yes No: [ ] [x]

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue O & M Program

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Throughout Facility				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Window Slate	500 sf (est)		19

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High
		x

Comments:

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue o & M Program

Signature of Inspector/Assessor

Building Assessed: Tatem Elementary School

Homogeneous ID Number: 19

Material Description: Window Slate

Location	Amount	Condition	Damage Amount	Accessibility / Response Action / Notes
Basement Boy's RR	3 sf			**REMOVED**
Basement Storage Rm	3 sf			**REMOVED**
Room 107	3 sf			**REMOVED**
Faculty Lounge / Workroom	12 sf			**REMOVED**
Basement Girl's RR	3 sf			**REMOVED**
Library & Office	3 sf			**REMOVED**
Room 110	9 sf			**REMOVED**
Room 204				**REMOVED**
Room 206	3 sf			**REMOVED**
Room 207	12 sf			**REMOVED**
1st Floor Boy's RR	3 sf			**REMOVED**
Room 208	12 sf			**REMOVED**
Room 209	12 sf			**REMOVED**
Room 210	12 sf			**REMOVED**
Room 211	12 sf			**REMOVED**
Room 304				**REMOVED**
Room 306	3 sf			**REMOVED**
Room 307	12 sf			**REMOVED**
2nd Floor Girl's RR	3 sf			**REMOVED**
Room 308	12 sf			**REMOVED**
Room 309	12 sf			**REMOVED**
Room 310	12 sf			**REMOVED**
Room 311	12 sf			**REMOVED**

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Basement Restrooms				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
12" Tan Floor Tile / Mastic	300 sf		20

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High
x-Mastic		x-Tile

Comments:

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue O & M Program

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Throughout Facility				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Mastic a/w Spline Ceiling Tile			23

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High
x		

Comments: Spline Ceiling Tile Locations

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue O & M Program

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Throughout Facility				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Chalkboards/Bulletin Boards	2,000 sf (est)		24

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High
		x

Comments:

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments:

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Throughout Facility				x		x

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Mastic a/w Chalkboards/Bull Boards	200 sf (est)		25

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High
x		

Comments:

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments:

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Boiler Room			x		x	

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Boiler Interior Materials	20 sf		26

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High

Comments: INACCESSIBLE

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue O & M Program

Signature of Inspector/Assessor

complies with

B

New Jersey State Department of Health
Asbestos Control Service

Room/Functional Space Inspection

Building Assessed	Room/Func. Space	Date of Construction	Type of Material: Surfacing	Thermal	Misc.	Material: Friable	Non-Friable
Tatem Elementary School	Throughout Facility			x		x	

Description	Square/Linear Footage	% of Area	Homogeneous ID No.
Pipe Insulation			27

Damage Assessment

Type of Damage	Yes	No	Amt. (square/lin. feet)	Comments (Severity, Cause)
Deterioration				
Delamination				
Water				
Physical				
Other				

Extent of Damage	Yes	No
Localized		
Distributed		

Is Dust Debris Present? NO

Location:

Was bulk/surface material obtained?

Yes	No

Accessibility

1-Low	2-Med.	3-High

Comments: Assumed Behind Ceilings and Walls

Is there a potential for disturbance of material?

Yes	No
X	

Explain: Future maintenance and removal

Is material in air plenum or exposed to air stream?

Yes	No
	x

Explain:

Degree of Damage:

Damaged Thermal Sys. Insulation	
Sig. Damaged Thermal Insulation	
Sig. Damaged Friable Surf. ACM	
Damaged Friable Miscell. ACM	
Sig. Damaged Friable Surf. ACM	
ACBM w/potential for Damage	X
ACBM w/potent. For Sig. Damage	
Any Remain. Friable ACBM	

Additional Comments: Continue O & M Program

Signature of Inspector/Assessor

Haddonfield BOE – Tatem Elementary School

AHERA 6-Month Periodic Surveillance

Date of Last 3-Year Re-inspection **November 20, 2024**

Material HID Material Description	Room/ Area Material Location	Amount (SF/LF) Damage Amount (SF/LF)	Accessibility Damage Location	Round 1 Notes	Round 2 Notes	Round 3 Notes	Round 4 Notes	Round 5 Notes
11-A	Room 206	240 sf	Low					
9" Rainbow Streak FT/Mastic	Under Floor Tile	0	n/a					
11-A	Room 208	720 sf	Low					
9" Rainbow Streak FT/Mastic	Under Floor Tile	0	n/a					
11-C	Room 306 and RR	250 sf	REMOVED 7/2017					
9" White Steaked FT/Mastic	Under Carpet / Floor							
19	Basement Boy's RR	3 sf	**REMOVED**					
Window Slate	Window	0						
19	Basement Storage Rm	3 sf	**REMOVED**					
Window Slate	Window	0						
19	Room 107	3 sf	**REMOVED**					
Window Slate	Window	0						
19	Faculty Lounge / Workroom	12 sf	**REMOVED**					
Window Slate	Window	0						
19	Basement Girl's RR	3 sf	**REMOVED**					
Window Slate	Window	0						

Performed by ---------- ---------- ---------- ---------- ----------

Signature ---------- ---------- ---------- ---------- ----------

Round / Date **Round 1/**_____ **Round 2/**_____ **Round 3/**_____ **Round 4/**_____ **Round 5/**_____

Haddonfield BOE – Tatem Elementary School

AHERA 6-Month Periodic Surveillance

Date of Last 3-Year Re-inspection **November 20, 2024**

Material HID Material Description	Room/ Area Material Location	Amount (SF/LF) Damage Amount (SF/LF)	Accessibility Damage Location	Round 1 Notes	Round 2 Notes	Round 3 Notes	Round 4 Notes	Round 5 Notes
19	Library & Office	3 sf	**REMOVED**					
Window Slate	Window	0						
19	Room 110	9 sf	**REMOVED**					
Window Slate	Window	0						
19	Room 206	3 sf	**REMOVED**					
Window Slate	Window							
19	Room 207	12 sf	**REMOVED**					
Window Slate	Window							
19	1st Floor Boy's RR	3 sf	**REMOVED**					
Window Slate	Window							
19	Room 208	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 209	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 210	12 sf	**REMOVED**					
Window Slate	Window							

Performed by ---------- ---------- ---------- ---------- ----------

Signature ---------- ---------- ---------- ---------- ----------

Round / Date **Round 1/_____** **Round 2/_____** **Round 3/_____** **Round 4/_____** **Round 5/_____**

Haddonfield BOE – Tatem Elementary School

AHERA 6-Month Periodic Surveillance

Date of Last 3-Year Re-inspection **November 20, 2024**

Material HID Material Description	Room/ Area Material Location	Amount (SF/LF) Damage Amount (SF/LF)	Accessibility Damage Location	Round 1 Notes	Round 2 Notes	Round 3 Notes	Round 4 Notes	Round 5 Notes
19	Room 211	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 306	3 sf	**REMOVED**					
Window Slate	Window							
19	Room 207	12 sf	**REMOVED**					
Window Slate	Window							
19	2nd Floor Girl's RR	3 sf	**REMOVED**					
Window Slate	Window							
19	Room 308	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 309	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 310	12 sf	**REMOVED**					
Window Slate	Window							
19	Room 311	12 sf	**REMOVED**					
Window Slate	Window							

Performed by ---------- ---------- ---------- ---------- ----------

Signature ---------- ---------- ---------- ---------- ----------

Round / Date **Round 1/**_____ **Round 2/**_____ **Round 3/**_____ **Round 4/**_____ **Round 5/**_____

Haddonfield BOE – Tatem Elementary School

AHERA 6-Month Periodic Surveillance

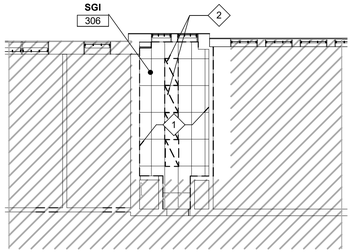
Date of Last 3-Year Re-inspection **November 20, 2024**

Material HID Material Description	Room/ Area Material Location	Amount (SF/LF) Damage Amount (SF/LF)	Accessibility Damage Location	Round 1 Notes	Round 2 Notes	Round 3 Notes	Round 4 Notes	Round 5 Notes
20	Basement Restrooms	300 sf	High					
12" Tan FT/Mastic	Floor	0	0					
26	Boiler Room	20 sf	Inaccessible					
Boiler Interior Materials	Inside Boiler	0	n/a					

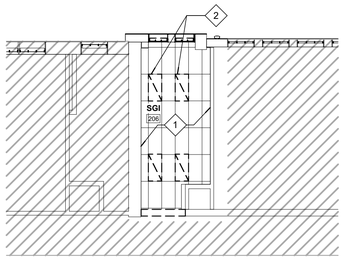
Performed by ---------- ---------- ---------- ---------- ----------

Signature ---------- ---------- ---------- ---------- ----------

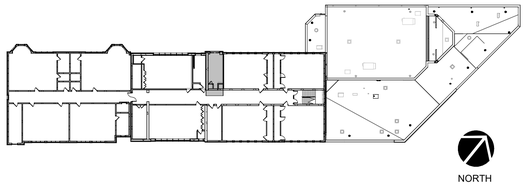
Round / Date **Round 1/_____** **Round 2/_____** **Round 3/_____** **Round 4/_____** **Round 5/_____**



5 A1.03 2nd FLOOR DEMO RCP
3/32" = 1'-0"



2 A1.03 DEMO 1ST FLOOR RCP
3/32" = 1'-0"



4 A1.03 KEY PLAN 2 & 5/A1.03
1" = 50'-0"

DEMOLITION RCP ANNOTATIONS

SYMBOL INDICATES DEMO KEY NOTE

CEILING PLAN DEMOLITION KEYNOTES SCHEDULE

KEY #	DESCRIPTION
1	REMOVE EXISTING CEILING TILE SYSTEM, LIGHTS, AND CEILING MOUNTED ITEMS IN THEIR ENTIRETY AND PREPARE AREA FOR NEW INSTALLATION.
2	REFER TO ELECTRICAL DRAWINGS FOR THE ELECTRICAL & FIRE SAFETY DEMOLITION EXTENT.
3	REMOVE EXISTING HOOD AND ANSUL SYSTEM.
6	REMOVE & RETAIN EXIST. EQUIPMENT FOR RE-INSTALLATION
8	RELOCATE EXISTING MECH. HOT & COLD WATER PIPING FOR NEW DOOR OPENING.
9	REMOVE SECTION OF EXISTING BULKHEAD IN ITS ENTIRETY.
10	REFER TO ELECTRICAL DRAWINGS FOR THE ELECTRICAL & FIRE SAFETY DEMOLITION EXTENT.
11	REMOVE AND SALVAGE EXISTING PROJECTOR, SCREEN, AND SPEAKERS

DEMO PLAN LEGEND

AREA NOT IN SCOPE

DOOR TO BE DEMOLISHED

PARTITION TO BE DEMOLISHED

GENERAL DEMOLITION NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO THOROUGHLY INSPECT THE AREA OF WORK IN ORDER TO VERIFY ACTUAL CONDITIONS AND FULL SCOPE OF DEMOLITION AND REMOVAL WORK REQUIRED. ALL DEMOLITION WORK IS REQUIRED TO BE PERFORMED IN A SEQUENCE SO AS NOT TO DELAY THE WORK OF ANY OTHER TRADE.

2. THE CONTRACTOR SHALL INSPECT ALL EXISTING ITEMS AND SURFACES TO REMAIN AND PROVIDE ADEQUATE PROTECTION FROM DEMOLITION WORK. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEMS AND FINISHES IN KIND TO MATCH EXISTING ADJACENT AREAS AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR IS TO COORDINATE ALL INDICATED DEMOLITION WITH NEW CONSTRUCTION TO ENSURE PROPER LOCATION AND DIMENSIONS OF DEMOLISHED AREAS. INFORM ARCHITECT OF ANY DISCREPANCIES.

4. THE CONTRACTOR SHALL MAINTAIN EXISTING BUILDING UTILITIES IN OPERATION, AND PROTECT AGAINST DAMAGE DURING THE PERFORMANCE OF THE WORK.

5. THE CONTRACTOR SHALL COMPLY WITH ALL OF THE OWNER'S REGULATIONS AS TO THE REQUIREMENTS FOR HANDLING OF MATERIALS, EQUIPMENT, AND DEBRIS TO AVOID CONFLICT AND INTERFERENCE WITH THE OWNER'S OPERATIONS. DEMOLITION MUST BE PERFORMED DURING HOURS SPECIFIED BY THE OWNER, AND ARRANGED TO AVOID INCONVENIENCE TO THE OWNER.

6. THE CONTRACTOR SHALL MAINTAIN CLEAR EGRESS TO ALL CORRIDORS DURING AND AFTER DEMOLITION.

7. THE CONTRACTOR SHALL PROVIDE DUST PROTECTION TO SEPARATE DEMOLITION AREA FROM THE REST OF THE FACILITY. PROVIDE TEMPORARY FILTERS AS REQUIRED TO PREVENT THE SPREAD OF DUST THROUGH THE BUILDING VIA THE RETURN AIR SYSTEM.

8. THE CONTRACTOR IS TO MAINTAIN FIRE RATINGS OF EXISTING RATED FLOOR/CEILING, AND WALL ASSEMBLIES AS REQUIRED BY CODE. PATCH AND REPAIR OPENINGS IN AND/OR PENETRATIONS THROUGH EXISTING FIRE RATED ASSEMBLIES.

9. ALL FIRE PROTECTION SYSTEMS (INCLUDING SPRINKLERS, SMOKE DETECTORS, FIRE PULL STATIONS, ETC.) ARE TO REMAIN ACTIVE DURING AND AFTER DEMOLITION. PLACE SYSTEM ON TEST MODE, DURING MODIFICATIONS W/ APPLICABLE FIRE WATCH IN PLACE AS REQ'D.

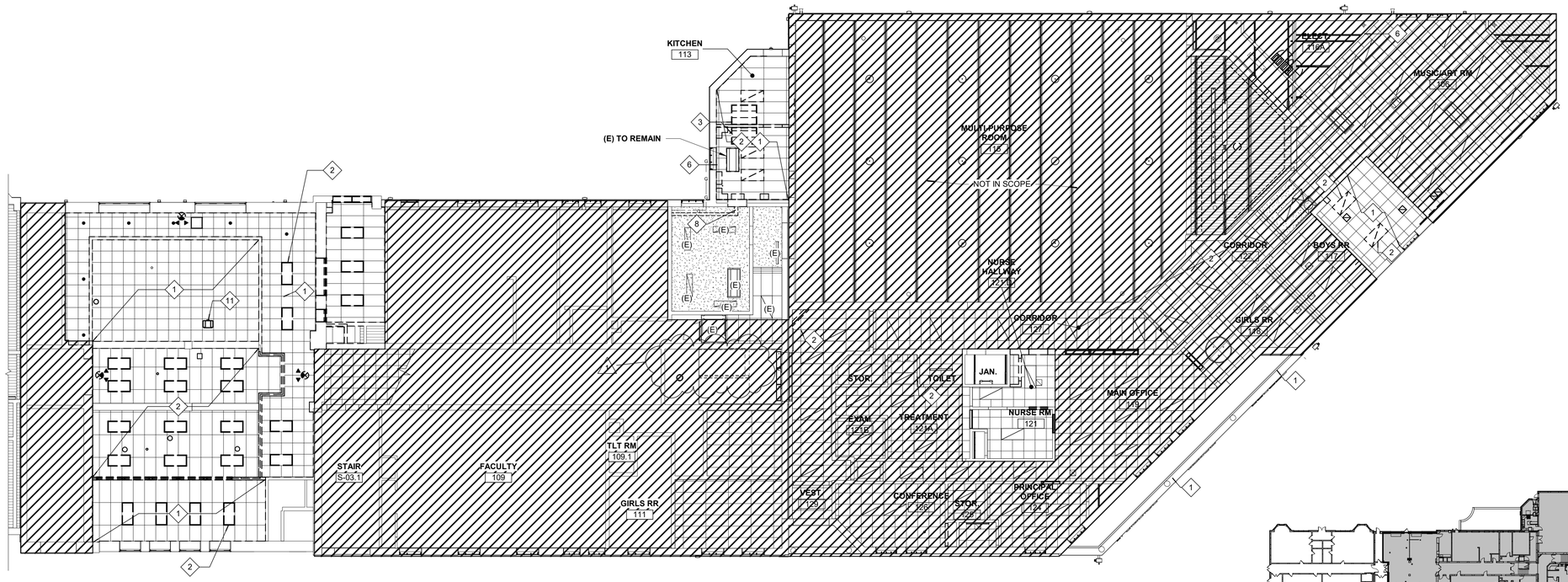
10. ALL AUTOMATIC FIRE ALARM EQUIPMENT (IF APPLICABLE) TO BE SECURED AND PROTECTED PRIOR TO DEMOLITION. ALL DAMAGED EQUIPMENT DURING DEMOLITION ARE TO BE REPLACED AND REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

11. NOTIFY ARCHITECT IF DETERIORATED STRUCTURAL COMPONENTS ARE UNCOVERED DURING DEMOLITION. IF UNCOVERED, ANY PREVIOUSLY HIDDEN STRUCTURAL ELEMENTS ARE TO REMAIN INTACT UNLESS OTHERWISE INSTRUCTED BY ARCHITECT.

12. REMOVE DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS DAILY. PREMISES MUST BE LEFT BROOM CLEAN AND READY FOR NEW CONSTRUCTION.

13. ALL BLINDS ARE TO BE REPLACED WITH NEW BLINDS.

14. AFTER REMOVAL OF WINDOWS, ALL (E) LINTELS WILL BE MECHANICALLY CLEANED AND PREPPED FOR NEW 1 COAT OF PRIMER AND 2 COATS OF PAINT



1 A1.03 DEMO GROUND FLOOR RCP
3/32" = 1'-0"

3 A1.03 KEY PLAN
1" = 50'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY NOT FOR CONSTRUCTION

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

GROUND AND 1ST FLOOR RCP DEMOLITION PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

A1.03

8/27/2026 1:59:19 PM

FLOOR PLAN GENERAL NOTES

1. REFER TO ENLARGED FLOOR PLANS FOR MORE INTERIOR PARTITION TYPE TAGS.
2. UNLESS OTHERWISE NOTED, ALL INTERIOR DIMENSIONS ARE FROM FINISH FACE OF WALL TO FINISH FACE OF WALL.
3. UNLESS OTHERWISE NOTED, EXTERIOR FACE OF THE EXTERIOR CFS STUD SHALL ALIGNED WITH CONCRETE SLAB EDGE.
4. GC TO PROVIDE ALL BUILT-IN CASEWORK, AND MILLWORK (U.O.N.). ALL LOOSE FURNITURE TO BE FURNISHED BY OWNER (N.I.C.), UNLESS OTHERWISE NOTED REFER TO DRAWING A9.03 (PROPOSED FURNITURE PLAN) FOR MORE INFORMATION.
5. SEE DRAWING T0.03 FOR LOCATIONS AND TYPES OF FIRE EXTINGUISHER & FE CABINETS.
6. ALL INTERIOR SIGNAGE (INCLUDING BUT NOT LIMITED TO ROOM NAME, MAXIMUM OCCUPANCY, WAYFINDING, ETC.) TO BE FURNISHED BY OWNER (N.I.C.). SEE DRAWING T0.02 FOR CODE REQUIRED ADA COMPLIANT SIGNAGES, AND PLACARD LOCATIONS.

CONSTRUCTION KEY NOTES

SYMBOL INDICATES CONST. KEY NOTE

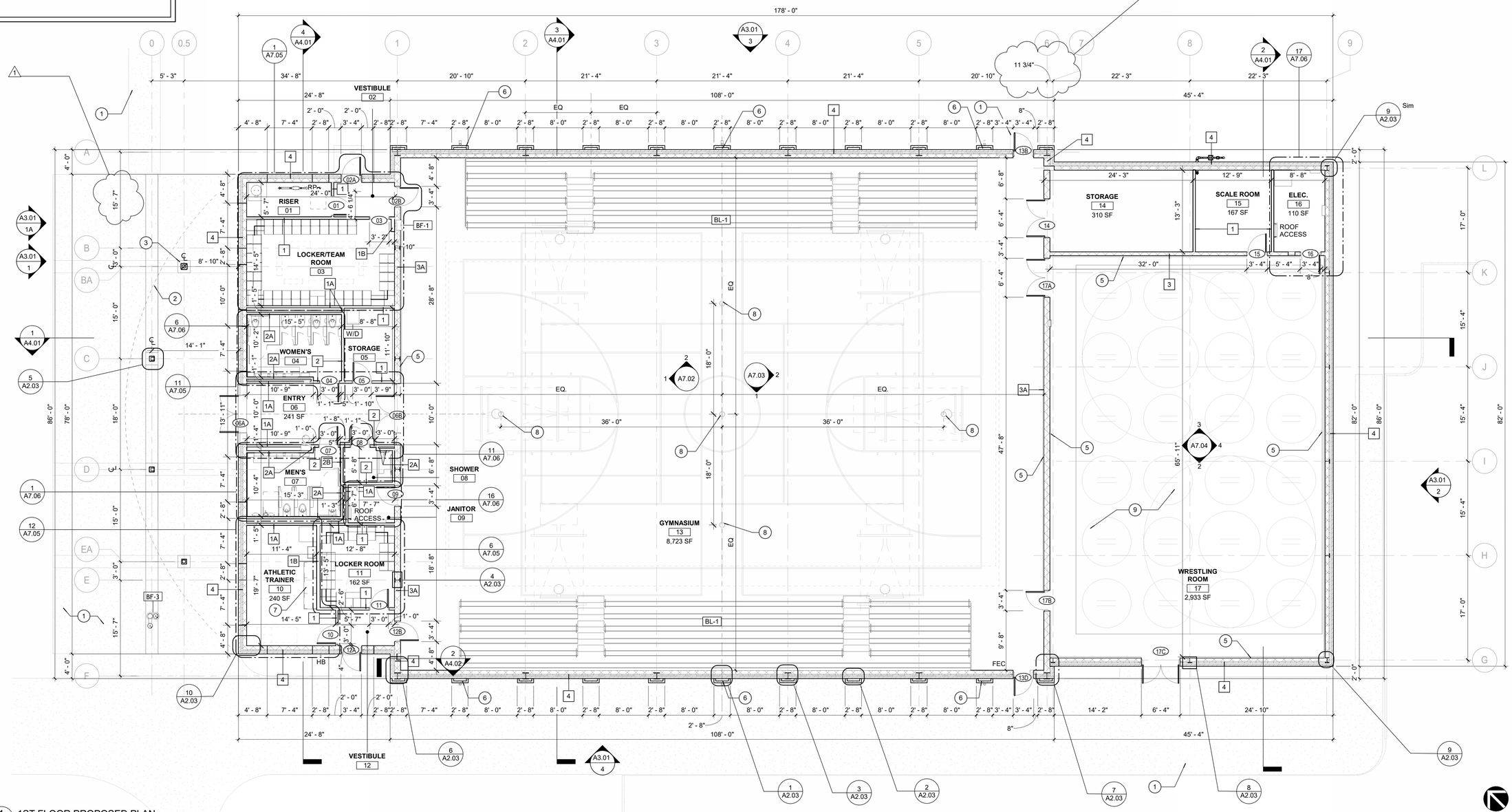
KEY #	DESCRIPTION
1	SEE CIVIL FOR CONC. PATH DESIGN
2	OUTLINE OF ROOF ABOVE
3	COLUMN WITH MASONRY SURROUND, TYP. 1 OF 4 (SEE STRUCTURAL FOR MORE INFO)
5	WALL PADS, OFOI (SEE INTERIOR ELEVATIONS)
6	LOCATIONS OF 3" X 4" DOWNSPOUTS
7	CASEWORK. SEE SHEET A7.05
8	10" DIA.VOLLEYBALL POST HOLE, RECESSED INTO CONCRETE
9	WRESTLING MATS, OFOI

SPECIALTY EQUIPMENT

TYPE	DESCRIPTION
BB-1	CEILING SUSPENDED BACKSTOP (OFOI, CONTRACTOR TO PROVIDE POWER)
BL-1	MOTERIZED BLEACHERS (OFOI, CONTRACTOR TO PROVIDE POWER- SEE ELECTRICAL DRAWINGS)
DP-1	20" X 30" DEDICATED PLAQUE - SEE SPEC
FEC	FIRE EXTINGUISHER CABINET - SEE SPEC
GB-1	18", 24" & 42" ADA GRAB BARS W/ SAFETY GRIP FINISH (BOBRICK DB-6806.99 SERIES)
ICE-E	EXISTING ICE MAKER (OFOI) CONTRACTOR TO PROVIDE HOOK-UP FOR INSTALLATION (SEE ELECTRICAL AND PLUMBING)
LOC-1	18" W TEAM LOCKERS, SLOPED TOP (OFOI, CONTRACTOR TO PROVIDE BLOCKING FOR INSTALLATION)
LOC-2	30" W ADA TEAM LOCKERS, SLOPED TOP, TOP SHELF TO BE NO MORE THAN 54" TALL (OFOI, CONTRACTOR TO PROVIDE BLOCKING FOR INSTALLATION)
M-1	WELDED FRAME STAINLESS STEEL MIRROR - 24"X30"
PT-1	SURFACE MOUNTED PAPER TOWEL ROLL
SB-1	SCORE BOARD (OFOI) CONTRACTOR TO PROVIDE POWER (SEE ELECTRICAL)
SN-1	SANITARY NAPKIN DISPOSAL (OFOI) - PROVIDE AT ALL WOMEN'S TOILETS
SP-1	SURFACE MOUNTED SOAP DISPENSER (OFCI)
TB-1	TACK BOARD 4' X 6'
TP-1	TOILET TISSUE DISPENSER (OFCI)
TS-1	TOILET PARTITIONS - SEE SPEC.
US-1	URINAL SCREEN - SEE SPEC.
W-1	SURFACE MOUNTED WASTE RECEPTACLE - TRIM LINE SERIES BY BOBRICK
W/D	WASHER & DRYER STACKED UNIT (OFOI) CONTRACTOR TO PROVIDE HOOKUP (SEE ELECTRICAL, PLUMBING & MECHANICAL DRAWINGS)
WP-1	24" W 6' H WALL PADS (OFOI)

PLUMBING FIXTURES (SEE PLUMBING DRAWINGS FOR MORE INFORMATION)

TYPE	DESCRIPTION
BF-1	IN WALL BOTTLE FILLING STATION, FILTERED, NON-REFRIDGERATED. - SEE PLUMBING DWGS
BF-2	IN WALL BOTTLE FILLING STATION W/ BUBBLER, FILTERED, NON-REFRIDGERATED. - SEE PLUMBING DWGS
BF-3	OUTDOOR BOTTLE FILLING STATION Q/ BUBBLER & DOG WATER STATION - SEE PLUMBING DWGS
FC-1	ADJUSTIBLE HAND SHOWER - SEE PLUMBING DWGS
HB-1	HOSE BIB - SEE PLUMBING DWGS
SK-1	SLOAN THREE STATION GRADIENT SINK DSG-83000 - SEE PLUMBING DWGS
SK-2	UTILITY SINK - SEE PLUMBING DWGS
SW-1	ADA ROLL IN SHOWER, 62 7/16" X 31 1/4" BY FREEDOM SHOWERS OR EQUAL. PROVIDE SHOWER SEAT, GRAB BARS, & CURTAIN ROD BY FREEDOM SHOWERS OR EQUAL. PROVIDE PAINTED WATERPROOFING MEMBRANE ON CONCRETE FLOOR UNDER SHOWER PAN & 10" UP SHOWER WALL, WITH A SHEET WATERPROOFING MEMBRANE COATING IT TO SUPPORT CONTINUOUS WATERPROOFING. (SEE SPEC)
UR-1	URINAL - SEE PLUMBING DWGS
WC-1	WATER CLOSET - SEE PLUMBING DWGS



1 A2.01 1ST FLOOR PROPOSED PLAN
1/8" = 1'-0"

State Project #: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng/r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JMP
Drawn	RS

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/26	ADDENDUM #1

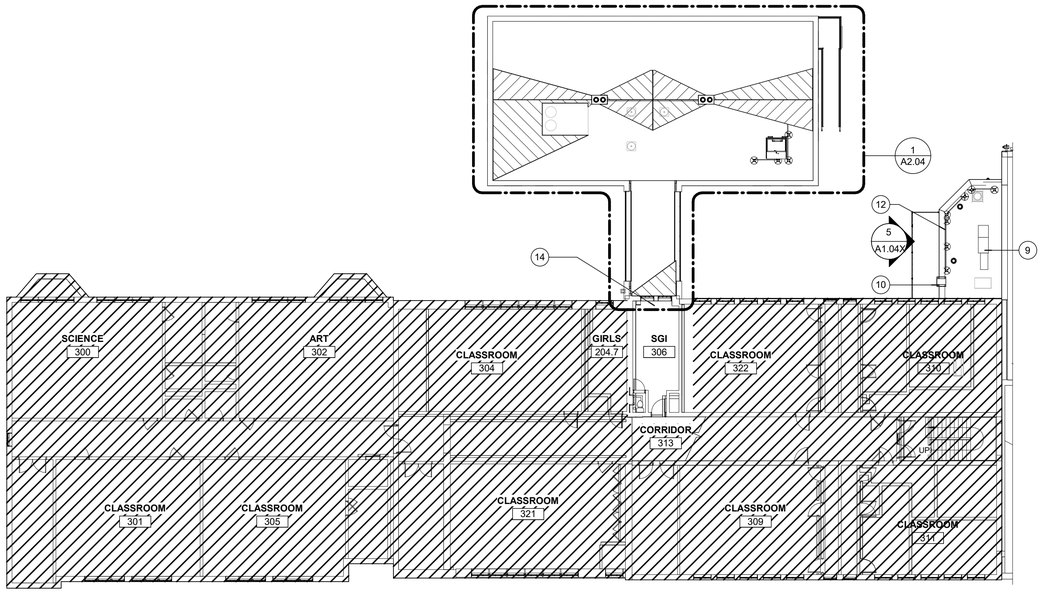
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

FLOOR PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

A2.01

9/3/2026 11:59:48 AM



1 A2.05 SECOND FLOOR PLAN / ADDITION ROOF BELOW
1/16" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. REFER TO ENLARGED FLOOR PLANS FOR MORE INTERIOR PARTITION TYPE TAGS. ALL INTERIOR PARTITIONS
2. UNLESS OTHERWISE NOTED, ALL INTERIOR DIMENSIONS ARE FROM FINISH FACE OF WALL TO FINISH FACE OF WALL.
3. GC TO PROVIDE ALL BUILT-IN CASEWORK, AND MILLWORK (U.O.N.). ALL LOOSE FURNITURE TO BE FURNISHED BY OWNER (N.I.C.), UNLESS OTHERWISE NOTED REFER TO DRAWING A9.01 (PROPOSED FURNITURE PLAN) FOR MORE INFORMATION.
4. SEE DRAWING (T0.03) LIFE SAFTY & EGRESS PLANS FOR LOCATIONS AND TYPES OF FIRE EXTINGUISHER & FE CABINETS.
5. ALL INTERIOR SIGNAGE (INCLUDING BUT NOT LIMITED TO ROOM NAME, MAXIMUM OCCUPANCY, WAYFINDING, ETC.) TO BE FURNISHED BY OWNER (N.I.C.). SEE DRAWING T0.02 FOR CODE REQUIRED ADA COMPLIANT SIGNAGES, AND PLACARD LOCATIONS.

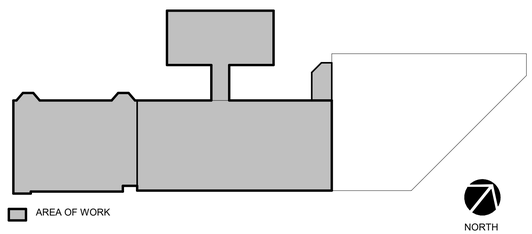
DEMO PLAN LEGEND

AREA NOT IN SCOPE

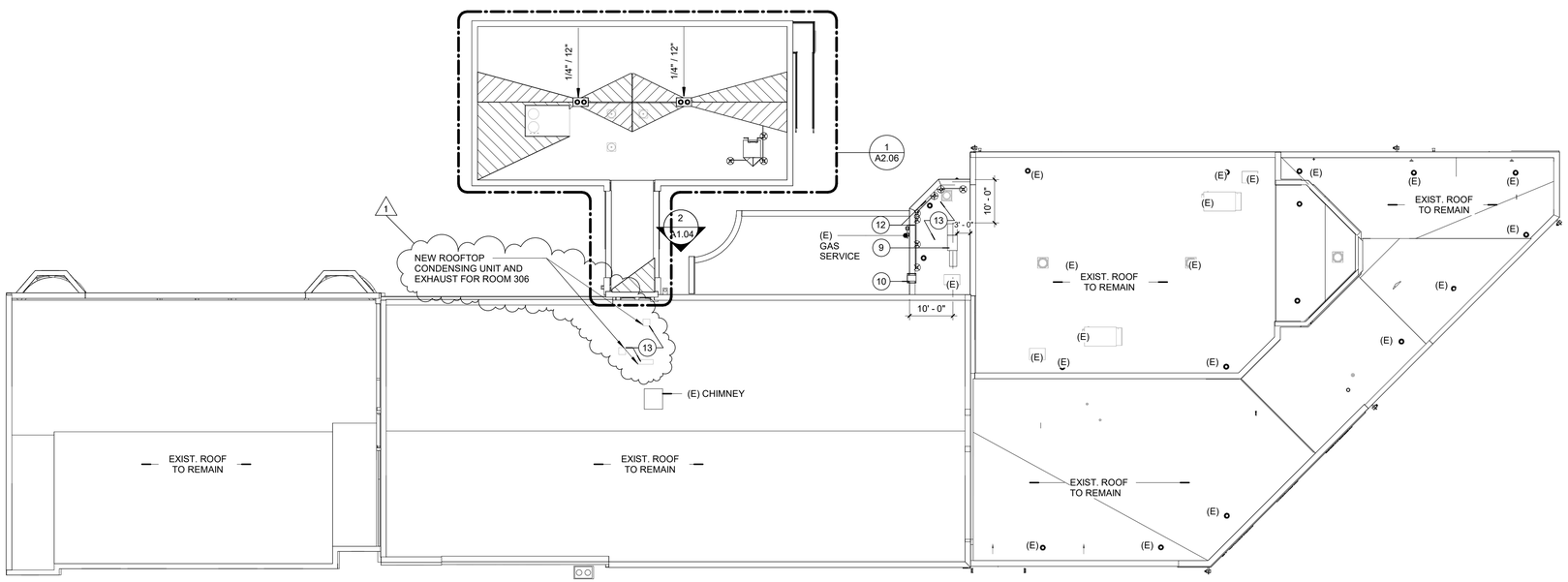
CONSTRUCITON ANNOTATION LEGEND (PLAN)

SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	LOOSE FURNITURE, TYP. (OFOI)
2	FOLDING PARTITON ON TRACK SYSTEM. SEE RCP, ENLARGED DETAILS AND STRUCTURAL FOR SUPPORT DETAILS ON SHEET A4.04.
3	CASEWORK TEACHER'S WARDROBE (SEE CASEWORK DETAIL 8/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
4	CASEWORK TALL CABINET (SEE CASEWORK DETAIL 3/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
5	CONTRACTOR TO VERIFY IN FIELD LOCATION OF NEW WALL, TO INTERSECT A SOLID WALL AND AVOID A WINDOW.
6	ALIGN SURFACE OF NEW WALL WITH EXISTING HALF WALL SURFACE.
7	EXISTING INCOMING GAS SERVICE ENTRY POINT WITH FENCED-IN ENCLOSURE. SEE MEP AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
8	FOOD SERVICE EQUIPMENT - OFCI. SEE A7.03 AND MEP DRAWINGS FOR ADDITIONAL INFORMATION.
9	NEW ROOFTOP MECHANICAL EQUIPMENT AND ALUMINUM GUARDRAIL AT EXISTING ROOF - PATCH ROOF AND PROVIDE ALL REQUIRED CURBS AND FLASHINGS. SEE MEP AND STRUCTURAL DRAWINGS.
10	NEW WALL MOUNTED GALV. STEEL LADDER FOR KITCHEN ROOF ACCESS
11	PROVIDE WINDOW SHADES - TYPICAL AT ALL NEW WINDOWS U.O.N.
12	ALUMINUM SAFETY GUARDRAIL, MIN 42" HT. BOD: KEE SAFETY KEE GUARD GUARDRAIL, NON ROOF PENETRATING.
13	PATCH AND REPAIR EXISTING ROOF SYSTEM AS REQUIRED FOLLOWING ROOFTOP MECHANICAL EQUIPMENT INSTALLATION. SEE MECHANICAL DRAWINGS.
14	PATCH AND REPAIR FLOOR AND WALL FINISHES TO MATCH EXISTING ADJACENT FLOORING AND PAINT FOLLOWING REMOVAL OF EXISTING UNIT VENTILATOR. SEE MECHANICAL DRAWINGS.



1K A2.05 KEY PLAN - SECOND FLR. PLN./ADD. ROOF BELOW
1" = 50'-0"



2 A2.05 ROOF PLAN - OVERALL
1/16" = 1'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title. REGISTERED ARCHITECT License No. NJ21AI02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

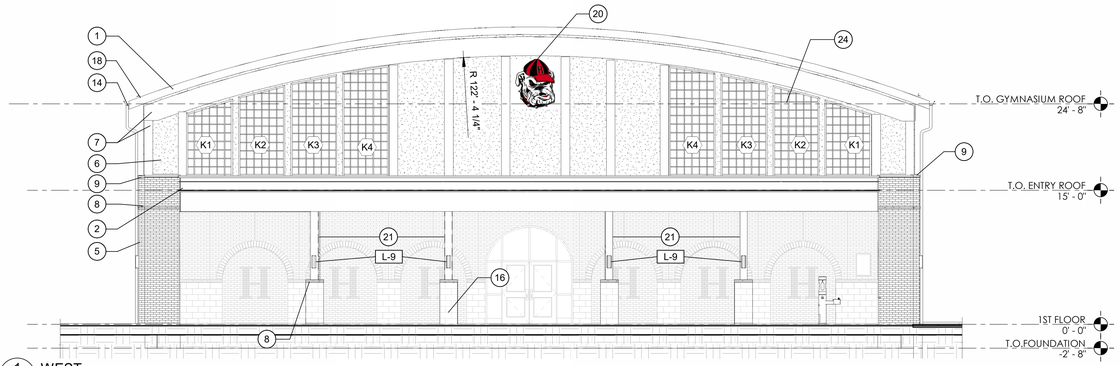
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1015 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

2ND FLOOR AND OVERALL ROOF PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

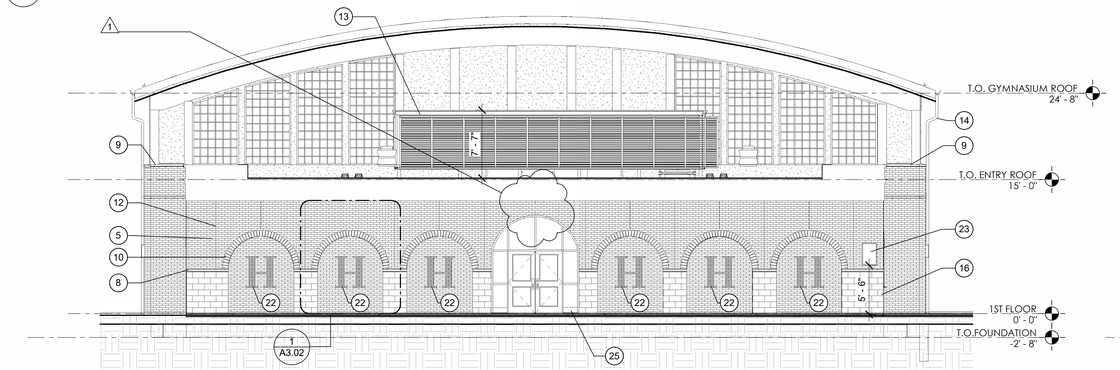
Job No. 2.20277.25.10
File No.

A2.05

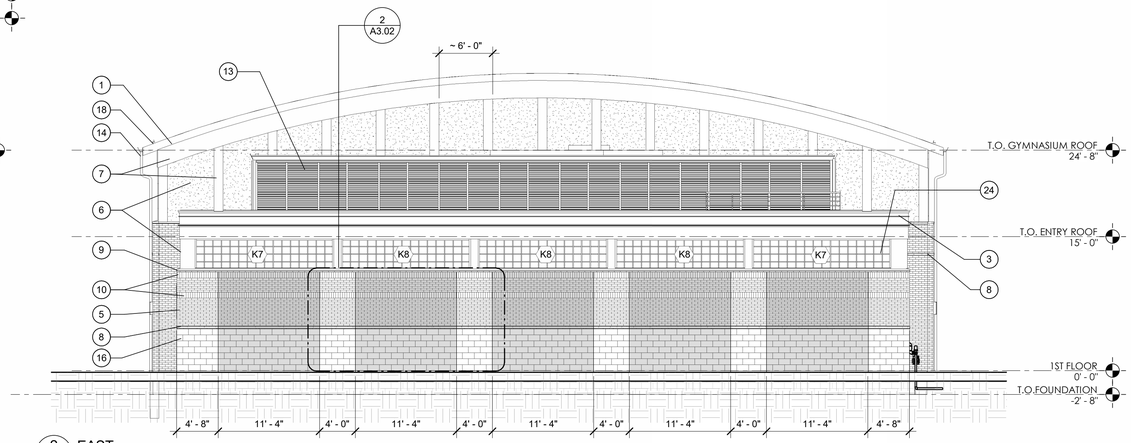
8/27/2026 1:59:57 PM



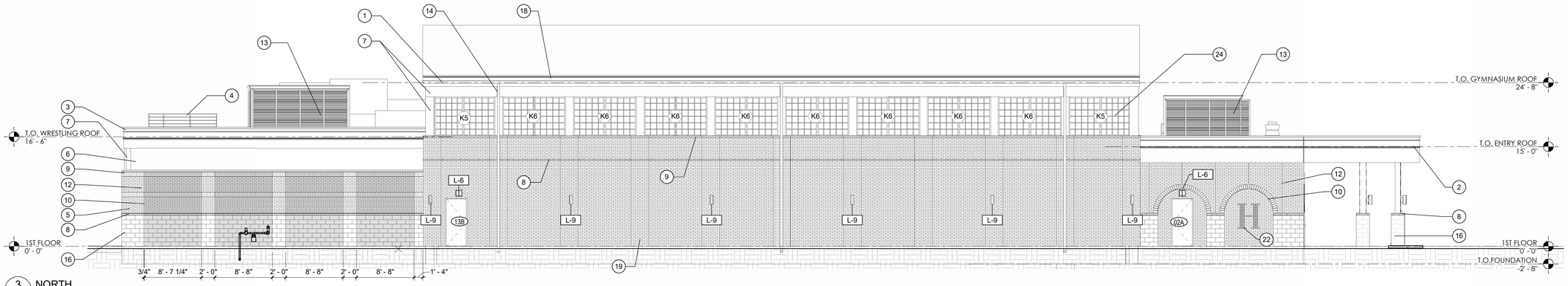
1 WEST
A3.01 1/8" = 1'-0"



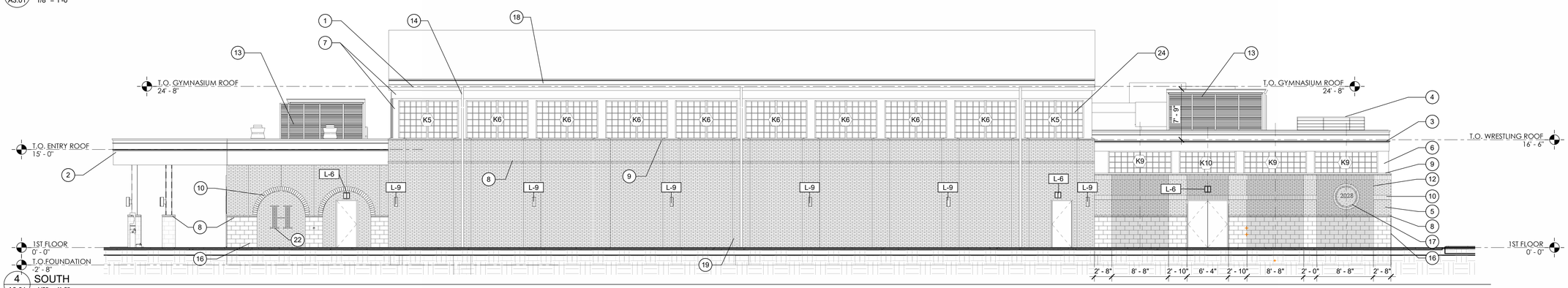
1A WEST CONT.
A3.01 1/8" = 1'-0"



2 EAST
A3.01 1/8" = 1'-0"



3 NORTH
A3.01 1/8" = 1'-0"



4 SOUTH
A3.01 1/8" = 1'-0"

ELEVATION KEY NOTES

SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION	KEY #	DESCRIPTION	KEY #	DESCRIPTION
1	ALUM. COPING (MIN .050 ALUM.), PTD HPFP FINISH W/ CLEATS	9	BREAK METAL 30 DEGREE ANGLE SLOPE	19	BRICK PILASTER, SEE PLAN DETAIL1,2/A2.03
2	CORNICE DETAIL A, SEE DETAIL 2,3/A4.06	10	BRICK SOILDER BAND.	20	RIGIDS FLAT SIGN FABRICATED FROM .125" PAINTED ALUMINUM CUSTOM CUT SHAPE, DIGITALLY PRINTED GRAPHICS WITH UV LAMINATE, PAINTED EDGES TO MATCH SIGN FACE, MOUNTED FLUSH TO THE BUILDING USING CONCEALED MOUNTING HARDWARE, APPROXIMATELY 6'-0"W x 5'-6"H.
3	CORNICE DETAIL B, SEE DETAIL 1/A4.06	12	MASONRY CONTROL JOINT, TYP.		
4	ROOF HATCH SEE DETAIL 7/A2.05	13	ROOFTOP MECHANICAL SCREENS, SEE SPEC.		
5	BRICK MASONRY VENEER, RUNNING BOND - BOWERSTON- HARBOR COLLECTION HARVEST BLEND MODULAR OR APPROVED EQUAL, SEE SPEC.	14	GUTTER & DOWNSPOUT	21	METAL COLUMN TO BE PRIMED AND PAINTED
		16	MASONRY STONE VENEER, FROM DIENER BRICK BY SHOULDICE - TEXTURE 'TAPESTRY, COLOR 'CRYSTAL WHITE' W/ BEVELED EDGES OR APPROVED EQUAL	22	BRICK LAYED IN THE PATTERN OF AN 'H' WITH BOWERSTONE: COLOR 'HERITAGE BLACK' BY DIENER BRICK OR APPROVED EQUAL
6	FIBER CEMENT CLADDING, PAINTED - SEE SPEC.				
7	PVC TRIM, PAINTED	17	48" CAST DATE STONE, FROM DIENER BRICK BY ROCKCAST - COLOR 'CRYSTAL WHITE' OR APPROVED EQUAL	23	DEDICATION PLAQUE -SEE SPEC (ASK OWNER & ARCHITECT FOR FINAL DETAILS)
8	3" STONE BANDING, FROM DIENER BRICK BY SHOULDICE - TEXTURE 'TAPESTRY', COLOR 'CRYSTAL WHITE' OR APPROVED EQUAL			24	FIBERGLASS SANDWICH PANEL SYSTEM (TYP.)
		18	GUTTER & DOWNSPOUT; STORMGUARD		
				25	STOREFRONT FRAMING ENTRY SYSTEM

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JMP
Drawn	RS

JEFFREY POTTER, R.A.
Title, *REGISTERED ARCHITECT* License No. *NJ21A02015400*

Date	Description
9/3/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1015 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

State Project #: 07-1900-X01-24-2000

BUILDING ELEVATIONS
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. *2.20277.25.14*

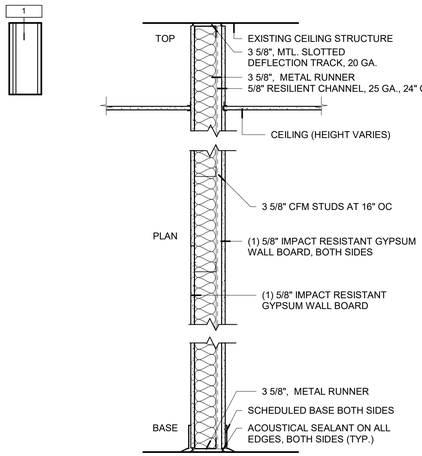
File No.

A3.01

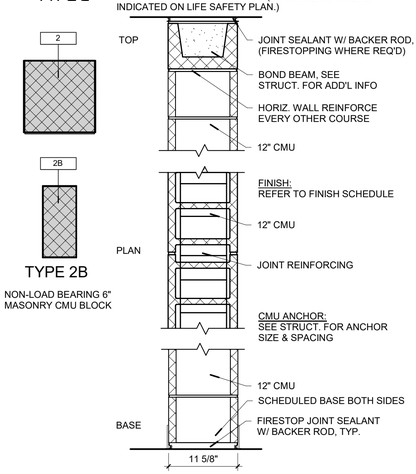
9/3/2026 10:54:49 AM

WALL TYPES INTERIOR

TYPE 1
INTERIOR PARTITION - STEEL STUD-
MIN STC RATING > 51 (REF. **NGC 2016017** OR EQ)

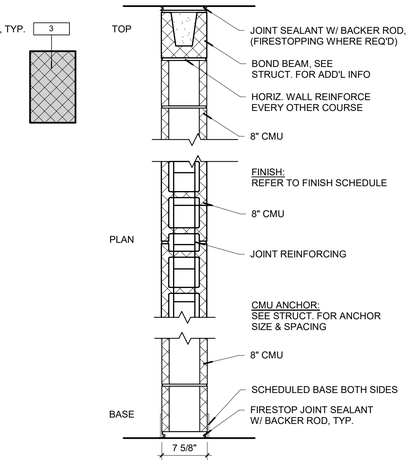


TYPE 2
12" CONCRETE MASONRY UNIT WALL, SEE STRUCTURAL FOR GROUT / REINFORCING REQ'S. STC MINIMUM 50 PER ASTM E90 / NCMA TEK 13-1H. SEE UL #905 (1HR. OR 2HR. WHERE INDICATED ON LIFE SAFETY PLAN.)

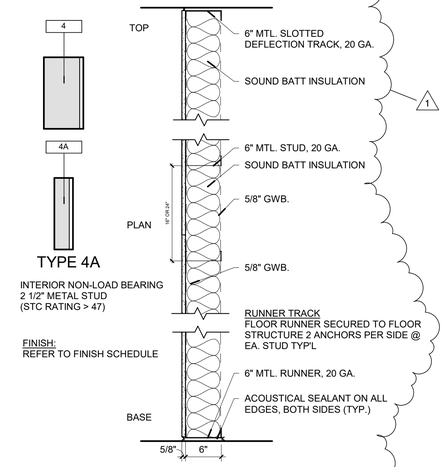


TYPE 2B
NON-LOAD BEARING 6" MASONRY CMU BLOCK

TYPE 3
8" CONCRETE MASONRY UNIT WALL, SEE STRUCTURAL FOR GROUT / REINFORCING REQ'S. STC MINIMUM 50 PER ASTM E90 / NCMA TEK 13-1H. SEE UL #905 (1HR. OR 2HR. WHERE INDICATED ON LIFE SAFETY PLAN.)



TYPE 4
INTERIOR NON-LOAD BEARING 6" METAL STUD

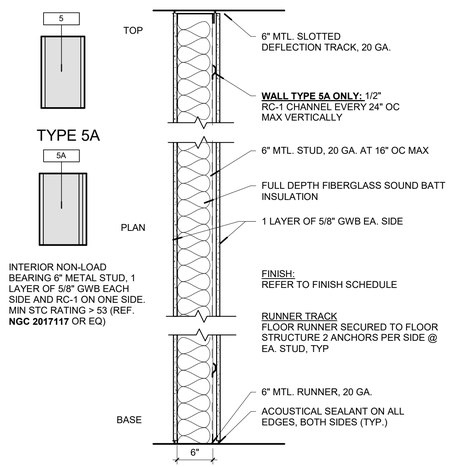


TYPE 4A
INTERIOR NON-LOAD BEARING
2 1/2" METAL STUD
(STC RATING > 47)

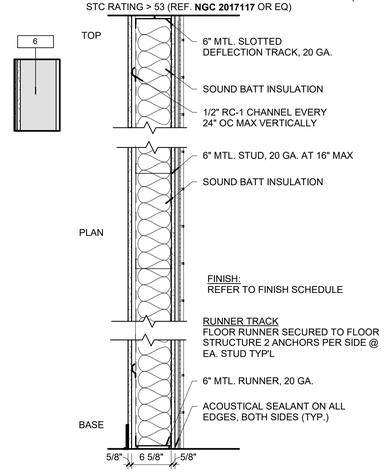
FINISH:
REFER TO FINISH SCHEDULE

TYPE 5
INTERIOR NON-LOAD BEARING 6" METAL STUD
STC RATING > 50 MIN PER ASTM E90 / NCMA TEK 13-1H.

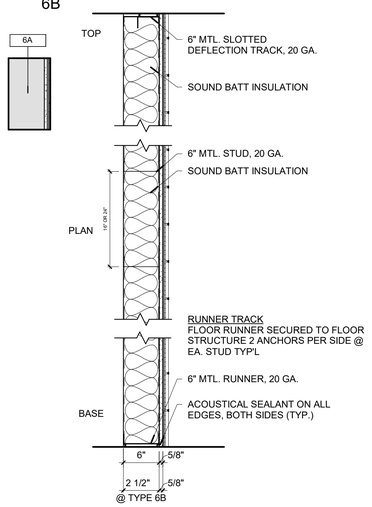
TYPE 5A
INTERIOR NON-LOAD BEARING 6" METAL STUD, 1 LAYER OF 5/8" GWB EACH SIDE AND RC-1 ON ONE SIDE. MIN STC RATING > 53 (REF. **NGC 2017117** OR EQ)



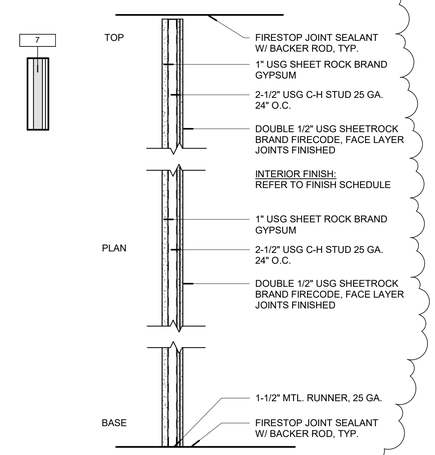
TYPE 6
INTERIOR NON-LOAD BEARING 6" METAL STUD WITH CERAMIC TILE ONE SIDE TO 6" ABOVE CEILING. RC-1 ON ONE SIDE (MIN STC RATING > 53 (REF. **NGC 2017117** OR EQ)



TYPE 6A
6B
INTERIOR NON-LOAD BEARING METAL STUD WITH CERAMIC TILE ONE SIDE TO 6" ABOVE CEILING

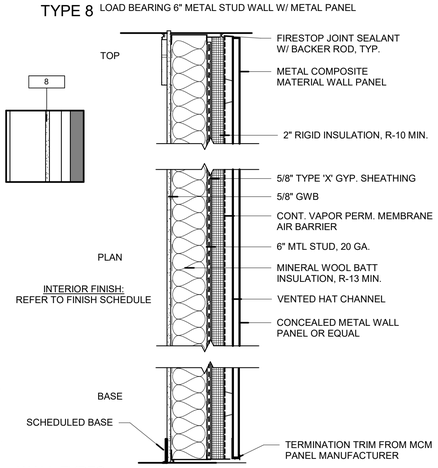


TYPE 7
2-HOUR RATED SHAFT WALL: UL #415B

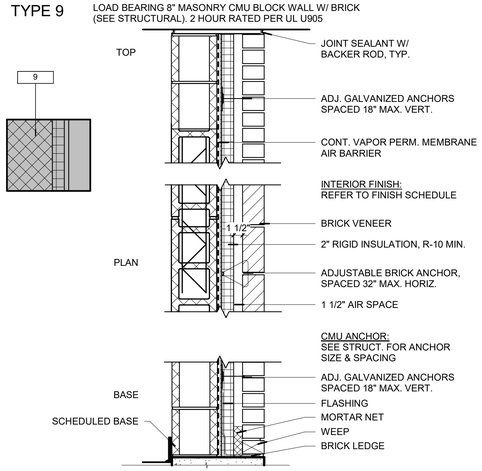


WALL TYPES EXTERIOR

TYPE 8
LOAD BEARING 6" METAL STUD WALL W/ METAL PANEL



TYPE 9
LOAD BEARING 8" MASONRY CMU BLOCK WALL W/ BRICK (SEE STRUCTURAL). 2 HOUR RATED PER UL U905



WALL TYPES
1" = 1'-0"

STC - ANSI S12.60-2002,

ANSI S12.60-2002, "ACOUSTICAL PERFORMANCE CRITERIA, DESIGN REQUIREMENTS AND GUIDELINES FOR SCHOOLS"

STC-45 IF THE ADJACENT SPACE IS A CORRIDOR, STAIRCASE, OFFICE OR CONFERENCE ROOM,

STC-50 IF THE ADJACENT SPACE IS ANOTHER CORE LEARNING SPACE, SPEECH CLINIC, HEALTH CARE ROOM OR OUTDOORS,

STC-53 IF THE ADJACENT SPACE IS A RESTROOM,

STC-60 IF THE ADJACENT SPACE IS A MUSIC ROOM, MECHANICAL EQUIPMENT ROOM, CAFETERIA, GYMNASIUM OR INDOOR SWIMMING POOL.

CLASSROOM DOORS SHOULD BE RATED AS STC-30 OR MORE,
MUSIC ROOM DOORS AS STC-40 OR MORE. ENTRY DOORS ACROSS A CORRIDOR SHOULD BE STAGGERED TO MINIMIZE NOISE TRANSMISSION.

STC RATINGS RANGING FROM 45-60 ARE OUTLINED FOR ASSEMBLIES SEPARATING ANCILLARY SPACES FROM ADJACENT SPACES.
(NOTE: OPEN-PLAN CLASSROOM DESIGNS WILL NOT MEET THE REQUIREMENTS OF THIS STANDARD.)

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title. REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

WALL TYPES
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

A4.00

9/1/2026 10:49:40 AM

REFLECTED CEILING PLAN GENERAL NOTES

1. ALL INDICATED CEILING HEIGHTS ARE FROM TOP OF FINISHED FLOOR.
2. ALL SUSPENDED ACOUSTICAL CEILING TILED AREAS SHALL RECEIVE LAY-IN LED 2X4 FIXTURES, UNLESS OTHERWISE NOTED.
3. COORDINATE GRILLES, REGISTERS, DIFFUSERS, AND EXPOSED DUCTWORK W/ MECHANICAL DRAWINGS.
4. FOLLOW ALL CONTRACT DOCUMENTS. NO VARIANCE WITHOUT OWNER APPROVAL. COORDINATE ALL TRADES TO MAINTAIN INDICATED CEILING HEIGHTS; FIELD VERIFY CONDITIONS.
5. RELOCATE HVAC AS REQUIRED FOR NEW LIGHTING LAYOUT. CENTER LIGHT FIXTURES, EXIT SIGNS, AND CEILING ELEMENTS IN TILES OR ROOMS U.O.N.
6. VERIFY EXISTING SYSTEMS ARE OPERATIONAL UPON COMPLETION. RELOCATE/ADJUST RETURNS AND DIFFUSERS FOR NEW LAYOUT AND REBALANCE SYSTEM.
7. RELOCATE OR PROVIDE NEW LIGHT SWITCHES PER ELECTRICAL DRAWINGS. PATCH WALLS WHERE SWITCHES ARE REMOVED. NEW SWITCHES AND PLATES TO MATCH EXISTING COLOR.
8. PROVIDE FIRESTOPPING AT RATED PENETRATIONS (DUCTS, PIPES, CONDUITS, ETC.) IN WALLS, FLOORS, AND SHAFTS.
9. DIMENSIONS ARE TO CENTERLINES OF FIXTURES U.O.N. FIXTURES TO BE CENTERED IN A.C.T. MODULES UNLESS NOTED OTHERWISE.
10. INSTALL CEILING ANGLES TIGHT TO WALLS, LEVEL AND TRUE. GAPS ≤ 1/8" TO BE CAULKED TO MATCH GRID. SUSPENSION SYSTEM PER MFR. WITH 1/8" IN 12' LEVEL TOLERANCE.
11. REPLACE DAMAGED OR NON-FUNCTIONAL EXISTING LIGHTS. PROVIDE NEW FIXTURES WHERE SHOWN; MATCH EXISTING STYLE AND BE UL-LABELED.
12. PATCH WALLS WHERE DEVICES ARE REMOVED. NO BLANK PLATES PERMITTED.
13. PROVIDE HANGERS AND SEISMIC BRACING PER MFR., CODE, AND STRUCTURAL REQUIREMENTS.
14. INSTALL ACOUSTICAL PANELS WITH CLEAN EDGES, NEAT FIT AT PENETRATIONS, AND PAINTED CUT EDGES TO MATCH PANEL FINISH.
15. CLEAN EXPOSED CEILING SURFACES PER MFR. INSTRUCTIONS; TOUCH UP MINOR FINISH DAMAGE.
16. INSTALL RECEPTACLES AND SWITCHES PER ICC/ANSI 117.1-2017.
17. MATCH FACEPLATES AND DEVICES TO EXISTING COLORS. WALL RECEPTACLES AT 18" A.F.F. TO CENTERLINE U.O.N.; COUNTER OUTLETS AT 48" TO TOP OF FACEPLATE. ORIENT GROUNDING POLE DOWN (VERTICAL) OR LEFT (HORIZONTAL) U.O.N.
18. COORDINATE TELE/DATA LOCATIONS WITH TENANT. PROVIDE BACK BOXES AND PULL STRINGS ONLY.
19. CONFIRM LOCATIONS AND SPECIFICATIONS OF ALL WALL/CEILING EQUIPMENT WITH TENANT PRIOR TO FRAMING. PROVIDE BLOCKING AS REQUIRED.
20. WHERE NEW COLUMNS OCCUR WITHIN EXISTING CEILINGS, CONTRACTOR SHALL SELECTIVELY REMOVE ACOUSTICAL CEILING PANELS AND GRID AS REQUIRED FOR COLUMN LOCATION, AND REINSTALL WITH PROPER PENETRATIONS AND TRIM TO FIT TIGHTLY AROUND NEW COLUMNS.
21. LIGHTING FIXTURE COLOR SELECTIONS SHALL BE WHITE UNLESS OTHERWISE NOTED.

LIGHTING SCHEDULE

TYPE	MANUFACTURER	MODEL	DESCRIPTION	COMMENTS
L-1	ACUITY BRAND LIGHTING	CPX 2X4	CPX LED PANEL 2X4	
L-2	GOTHAM IVO	IV06 -D	IVO 6" ROUND DOWNLIGHT	SHOWER ROOM
L-3	ACUITY BRANDS LIGHTING	CLX L48	CLX LED LINEAR 48" L	BOTTOM OF FIXTURE 9' - 0"
L-4	LUMENWERX	GLOBE	ROUND GLOBE LED PENDANT 12" DIA.	BOTTOM OF FIXTURE 9' - 0"
L-5	GOTHAM IVO	IV06 -D	IVO 6" ROUND DOWNLIGHT	EXTERIOR SOFFIT
L-6	LITHONIA LIGHTING	WDGE1 LED	ABOVE DOOR WALL PACK	EXTERIOR WALL
L-7	LUX DYNAMICS	LUX HIGH LINE	HIGH BAY SUSPENDED LINEAR 48" L	BOTTOM OF FIXTURE VARIES & MATCH BOTTOM OF TRUSS
L-9	LUMINIS	SYP602	INDIRECT-DIRECT CYLIDRICAL WALL SCONCE	BOTTOM OF FIXTURE 7' - 0"

NOTES:

1. CEILING HUNG LIGHTING FIXTURES IN THE MAIN GYM WILL SIT AT THE BOTTOM OF THE CURVED JOISTS, SO THE HEIGHT WILL VARY FIXTURE TO FIXTURE.
2. CEILING HUNG FIXTURES IN THE WRESTLING GYM WILL SIT LEVEL WITH THE BOTTOM OF THE JOISTS.

CEILING LEGEND

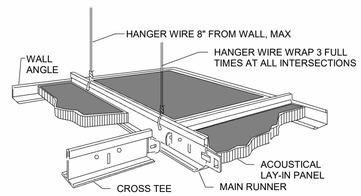
ACT-1 — CEILING TYPE
12' - 0" — CEILING HEIGHT

L1 — LIGHT FIXTURE TYPE - SEE LIGHTING SCHEDULE

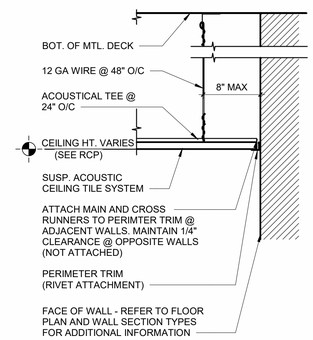
ACOUSTIC CEILING TILE
ACT- 1 2X4 SUSPENDED CEILING GRID SYSTEM WITH SCHOOL ZONE FINE FISSURED CEILING TILES. NRC-0.70
ACT-2 - 2X4 SUSPENDED CEILING GRID SYSTEM WITH CERAMA GUARD FINE FISSURED CEILING TILES. NRC-0.55 (SEE PROJECT SPECIFICATIONS FOR ADD'L INFO)

LINEAR WOOD PANEL CEILING
LWP-1 5 1/4" X 3/4" W/ 3/4" REVEAL; LINEAR WOOD PANELS, ARMSTRONG WOODWORKS LINEAR VENEERED PLANKS IN MAPLE (NMP) OR APPROVED EQUAL (SEE 095000 SPECIFICATIONS FOR ADD'L INFO)

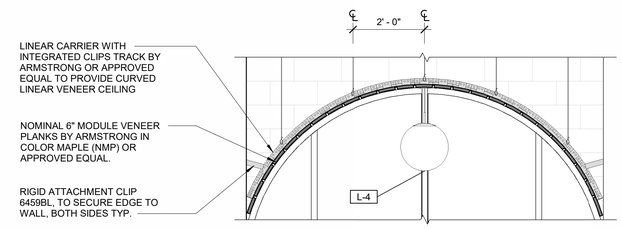
EXTERIOR SOFFIT
SOF-1 BEADED BOARD ON METAL SUSPENSION SYSTEM (SEE PROJECT MANUAL SECTION 07 46 46 FOR ADD'L INFO)

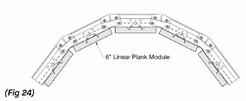


2 A5.01 TYP. SUSP.CEILING DETAIL
N.T.S



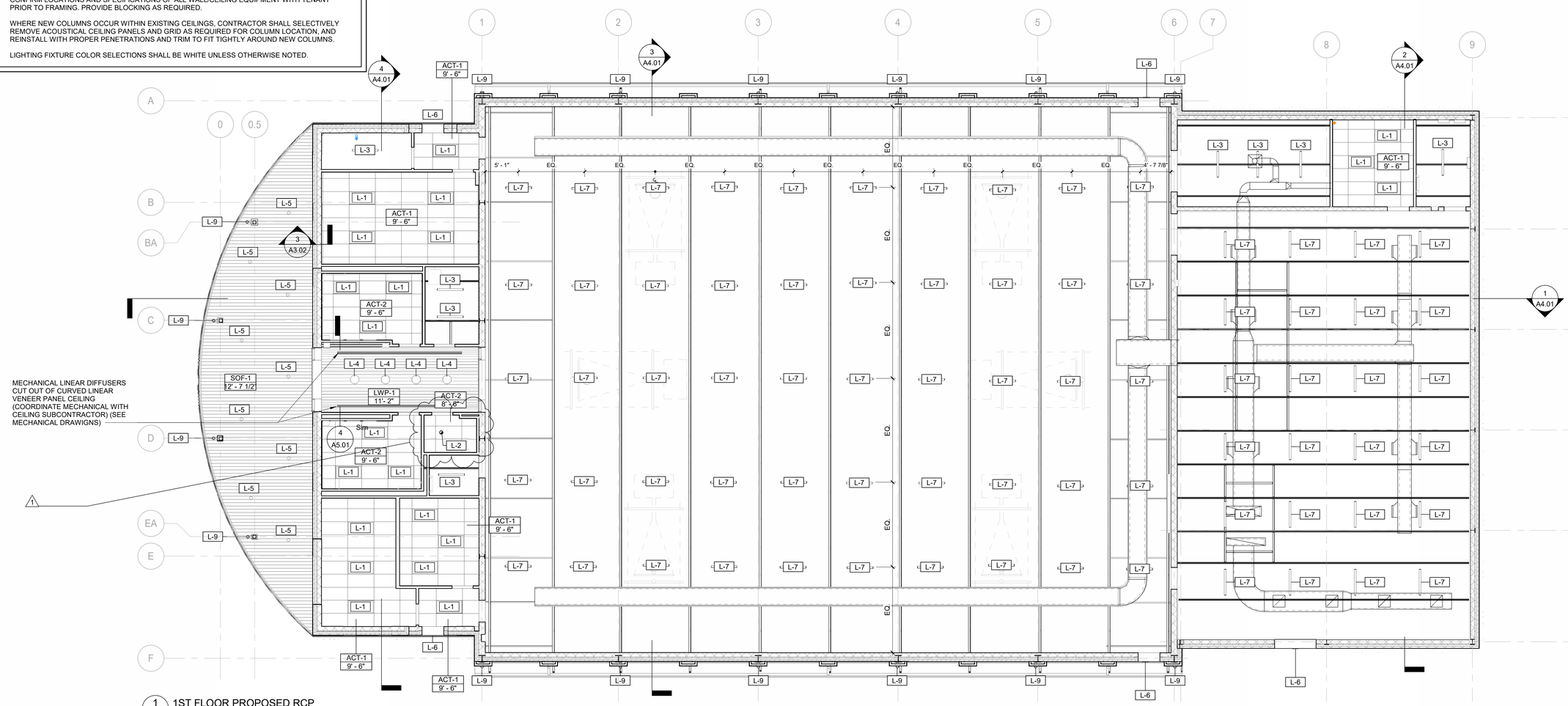
3 A5.01 TYP. SUSP. ACOUSTICAL CLG. EDGE DETAIL
1 1/2" = 1'-0"





(Fig 24)

4 A5.01 BARREL CEILING SYSTEM ENTRY
1/2" = 1'-0"



1 A5.01 1ST FLOOR PROPOSED RCP
1/8" = 1'-0"

State Project #: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JMP
Drawn	RS

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A/02015400

Date	Description
9/3/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

REFLECTED CEILING PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

A5.01

9/3/2026 8:58:27 AM

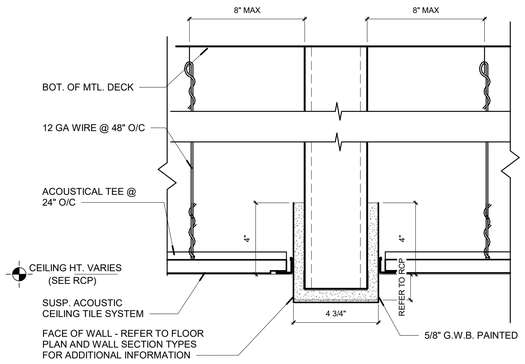
LIGHTING FIXTURE SCHEDULE (SEE ELECTRICAL)

TYPE MARK	MAKE	Model	DESCRIPTION	VOLTAGE	WATTAGE	Lumens	COLOR TEMP.	CRI
A	WILLIAMS	BP-24-L8-8CS-DIM-UNV-30W-3500K	2'X4' TROFFER	120 V	29	3,452 lm	3500 K	+80
B	WILLIAMS	75R-4-L50-835-DIM-UNV	4' LINEAR STRIP	120 V	33	4,867 lm	3500 K	+80
B2	<varies>	LT-22-39-835-AF-(L35)-DIM-UNV	2'X2' TROFFER	<varies>	<varies>	<varies>	<varies>	<varies>
C	WILLIAMS	LRX4-X-20-L8-835-DMA-DIM-UNV	LINEAR FIXTURE	120 V	50	2,050 lm	3500 K	+80
D	WILLIAMS	4DR-TL-L10-827-DIM-UNV-OW-OF-CS	4" Cylinder – Round (4CR)	120 V	25	2,050 lm	3500 K	+80
E	WILLIAMS	4DR-TL-L10-827-DIM-UNV-OW-OF-CS	4" Cylinder – Round (4CR)	120 V	25	2,050 lm	3500 k	+80
F3	BETA-CALCO	MRTP2P03-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	550 lm	3500 K	+80
F4	BETA-CALCO	MRTP2P04-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120V	240	1,240 lm	3500 K	+80
F5	BETA-CALCO	MRTP2P05-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	2,200 lm	3500 K	+80
G	LUMINII	KBL-W-#B-1-HE38LD-35K-SF-X-X-X-X-	1" SECTION FLEX CURABLE COVE LIGHT	120 V	86	465 LM	3500 K	+80
J	WILLIAMS	OSABR4.16/840-AC-FT-DBR-AB-OPTI ONS-DIM-UNV	WILLIAMS LIGHTING - 8" DIA. BOLLARD LIGHTING	120 V	18	1,600 lm	3500 K	+80
V	WILLIAMS	VG1-L30-730-T5-X-X-X-X-X	SURFACE MOUNTED EXTERIOR FIXTURE	120 V	36	550 lm	3500 K	+80
V2	COMPASS	CUSO DB	EXTERIOR WALL MOUNTED FIXTURE WITH BATTERY BACKUP	120 V	4	19,000 lm	3500 K	+80

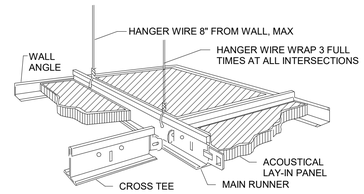
CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	TYPICAL BULKHEAD (SEE DETAIL 3/A5.01)
2	SOFFIT 5/8" GYPSUM WALLBOARD W/ 6" STL. STUD W/ KICKERS 4'-0" O.C.
3	CEILING TO WALL EXPANSION JOINT
4	NOT USED.
5	EXISTING GYPSUM CELING TO REMAIN
6	PAINT EXPOSED MECHANICAL SYSTEM S (DUCTWORK & CONDUIT)
7	EXIST. ROOF HATCH & LADDER TO "ROOF" TO REAMAIN FOR MECH. ACCESS
8	NOT USED.
9	NOT USED.
10	(E) CEILING OPEN CEILING TO REMAIN - RETURN TO EXST. CONDITION AFTER INTATION OF NEW STUCUTRAL COLUMN.
11	(E) RELOCATE EXIST OR PROTECT IN PLACE THE EXIST. STAGE LIGHTS, CUTIANS, SCREEN & PRODUCITON EQUIPMENT TO BE USED IN THE NEW STAGE AREA (SEE ELECT.)
12	ACT CEILING TRANSITION TO GWB CEILING (SEE DETAIL 3/A5.02)
13	ACT CEILING TRANSITION TO GWB CEILING (SEE DETAIL 2/A5.02)
14	(E) RELOCATE EXIST WALL MOUNTED STAGE CURTUAN TO NEW WALL. CUT MAIN ALUM. SUPORT CHANNEL DOWN TO FIT NEW WALL PROFILE.

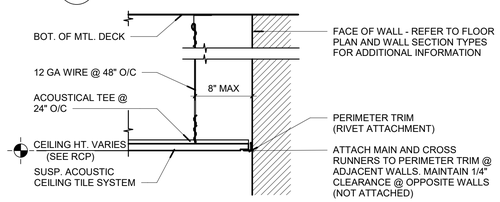


3 A5.01 TYPICAL BULKHEAD DETAIL
3" = 1'-0"



TYPICAL SUSP. CEILING DETAIL

4 A5.01 TYPICAL SUSP. CEILING SYSTEM
12" = 1'-0"



5 A5.01 TYP. SUSP. ACOUSTICAL CLG. EDGE DETAIL
1 1/2" = 1'-0"

CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

GWB-1
5/8" PAINTED GYPSUM WALL BOARD ON METAL SUSPENSION SYSTEM/ ALUM. TRANSITION TRIM

ACT-1 → CEILING TYPE
12' - 0" → CEILING HEIGHT

SUSPENDED ACOUSTIC CEILING TILE
2X4 ACT- 1 'SCHOOL ZONE' BY ARMSTRONG OR APPROVED EQUAL

X — CEILING AND/OR SURFACE MOUNTED EMERGENCY EXIT SIGN

2X2 ACT- 2 'SCHOOL ZONE' BY ARMSTRONG OR APPROVED EQUAL

SUPPLY GRILL / DIFFUSER SEE MECH DWGS.

2X4 ACT- 3 'KITCHEN ZONE' BY ARMSTRONG OR APPROVED EQUAL

NOTE: (X') INDICATES LENGTH OF FIXTURE

A — **A:** 2'X4' LED VOLUMETRIC RECESSED LIGHTING

RETURN GRILL / DIFFUSER SEE MECH DWGS.

B2 — **B2:** 2'X2' LED VOLUMETRIC RECESSED LIGHTING

C — **C:** 8' LINEAR RECESSED

V2 — **V2:** SURFACE MOUNTED EXTERIOR LIGHT FIXTURE

D — **D:** SURFACE MOUNTED DOME

AREA NOT IN SCOPE

F3 F4 F5 — **F3:** 2' DIA. RING LIGHT PENDANT
F4: 3' DIA. RING LIGHT PENDANT
F5: 4' DIA. RING LIGHT PENDANT

G — **G:** LED STRIP LIGHTING

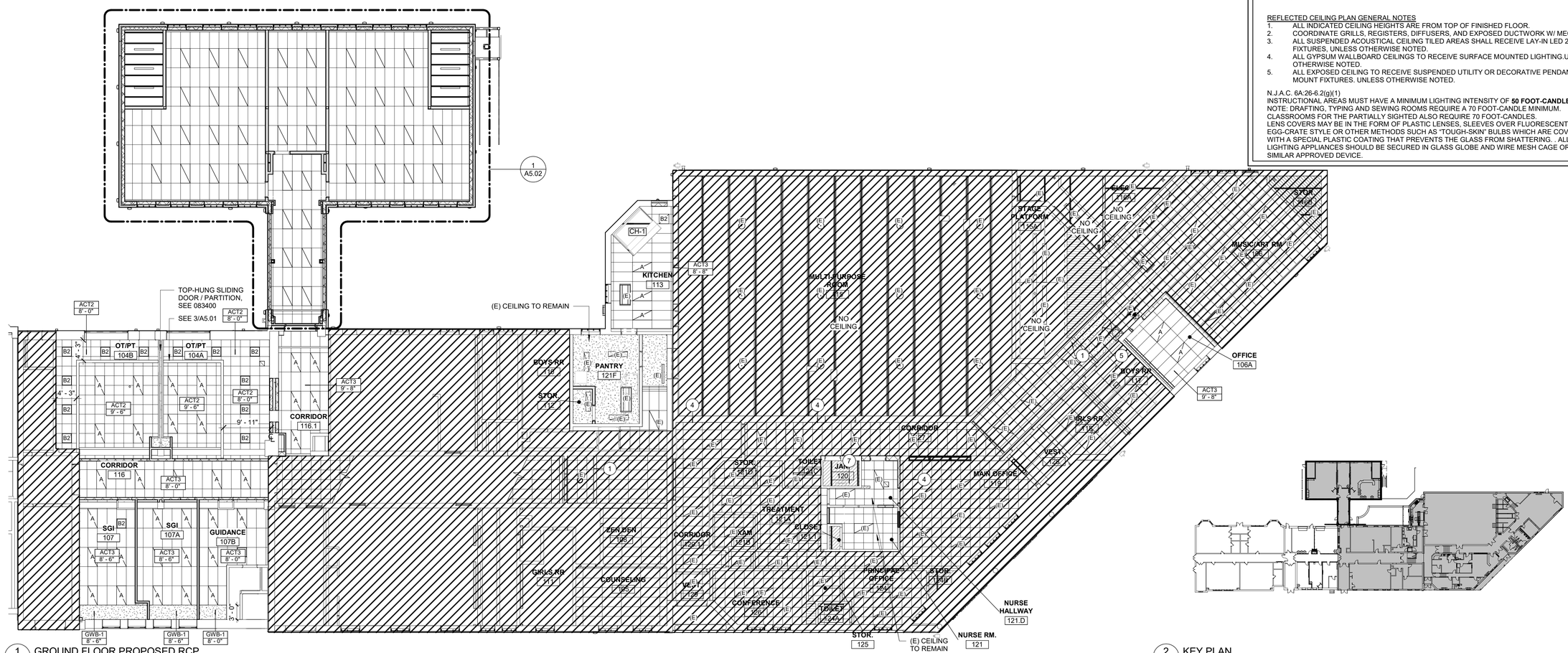
H — **H:** 4' LINEAR SUSPENDED

J — **O:** 8" DIA. 43" HIGH ALUMINUM BOLLARD LIGHTING

V — **V:** SURFACE MOUNTED EXTERIOR LIGHT FIXTURE

REFLECTED CEILING PLAN GENERAL NOTES
1. ALL INDICATED CEILING HEIGHTS ARE FROM TOP OF FINISHED FLOOR.
2. COORDINATE GRILLS, REGISTERS, DIFFUSERS, AND EXPOSED DUCTWORK W/ MECH.
3. ALL SUSPENDED ACOUSTICAL CEILING TILED AREAS SHALL RECEIVE LAY-IN LED 2X4 FIXTURES, UNLESS OTHERWISE NOTED.
4. ALL GYPSUM WALLBOARD CEILINGS TO RECEIVE SURFACE MOUNTED LIGHTING.UNLESS OTHERWISE NOTED.
5. ALL EXPOSED CEILING TO RECEIVE SUSPENDED UTILITY OR DECORATIVE PENDANT MOUNT FIXTURES. UNLESS OTHERWISE NOTED.

N.J.A.C. 6A:26-6.2(g)(1)
INSTRUCTIONAL AREAS MUST HAVE A MINIMUM LIGHTING INTENSITY OF **50 FOOT-CANDLES**.
NOTE: DRAFTING, TYPING AND SEWING ROOMS REQUIRE A 70 FOOT-CANDLE MINIMUM.
CLASSROOMS FOR THE PARTIALLY SIGHTED ALSO REQUIRE 70 FOOT-CANDLES.
LENS COVERS MAY BE IN THE FORM OF PLASTIC LENSES, SLEEVES OVER FLUORESCENT TUBES, EGG-CRATE STYLE OR OTHER METHODS SUCH AS "TOUGH-SKIN" BULBS WHICH ARE COVERED WITH A SPECIAL PLASTIC COATING THAT PREVENTS THE GLASS FROM SHATTERING. . ALL LIGHTING APPLIANCES SHOULD BE SECURED IN GLASS GLOBE AND WIRE MESH CAGE OR A SIMILAR APPROVED DEVICE.



1 A5.01 GROUND FLOOR PROPOSED RCP
3/32" = 1'-0"

2 A5.01 KEY PLAN
1" = 50'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title, REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY NOT FOR CONSTRUCTION

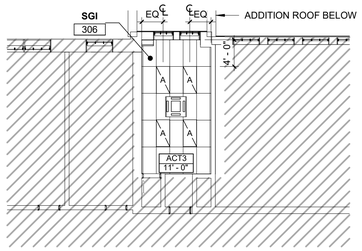
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2700 | f. 201-447-1233

REFLECTED CEILING PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

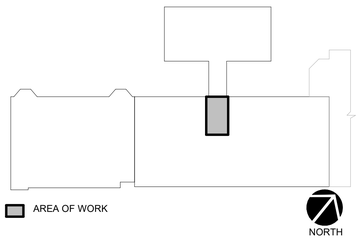
Job No. 2.20277.25.10
File No.

A5.01

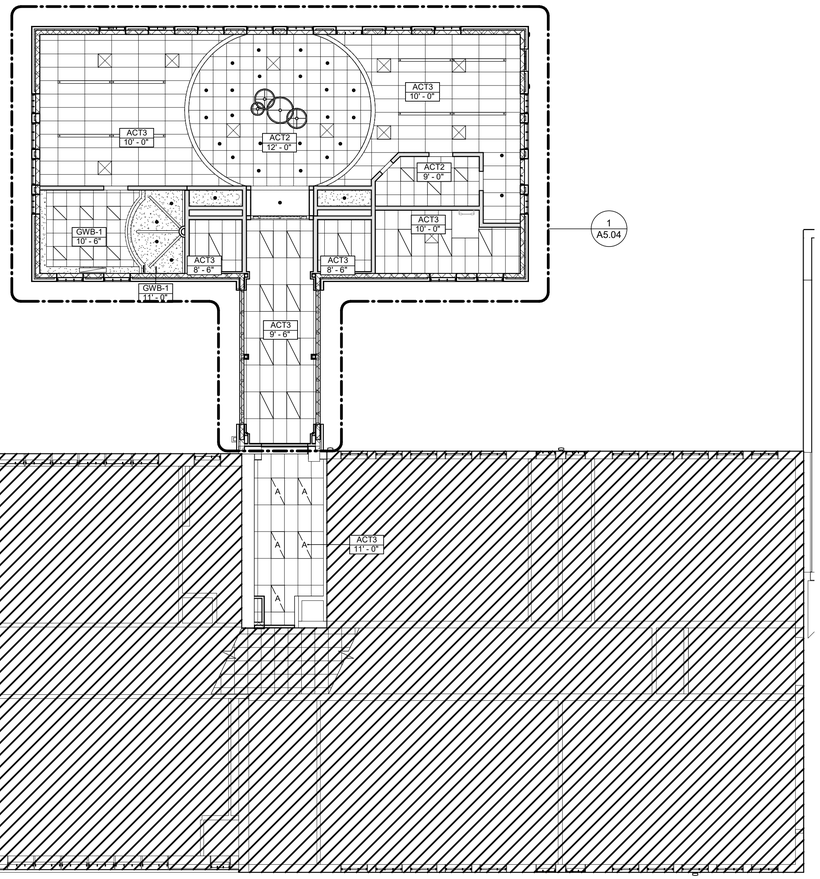
9/4/2026 10:02:16 AM



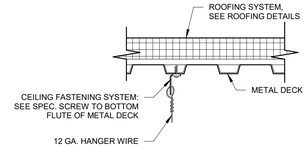
6 A5.03 2nd FLOOR RCP PROPOSED
3/32" = 1'-0"



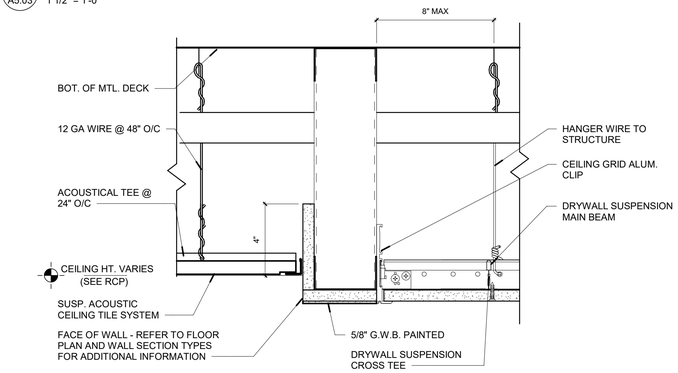
6K A5.03 KEY PLAN - 2ND FLOOR PROPOSED RCP
1" = 50'-0"



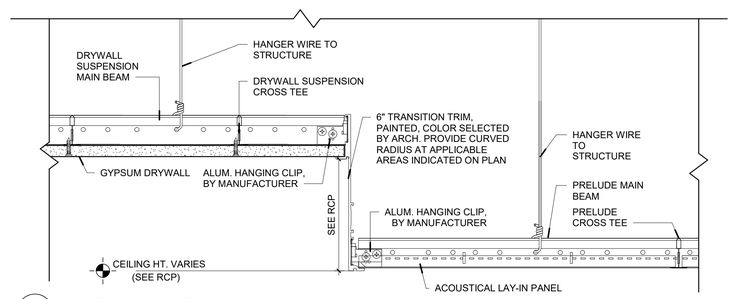
1 A5.03 1ST FLOOR PROPOSED RCP
3/32" = 1'-0"



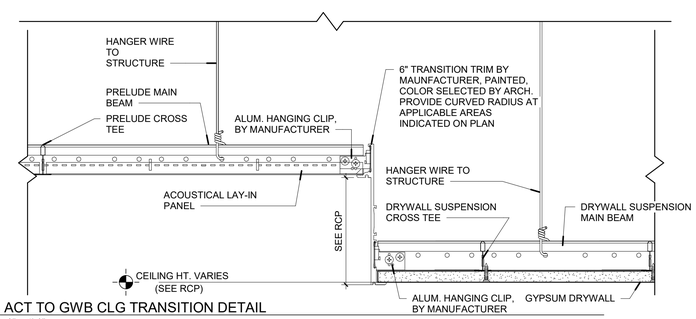
5 A5.03 TYPICAL ACT CLG. FASTENING DETAIL
1 1/2" = 1'-0"



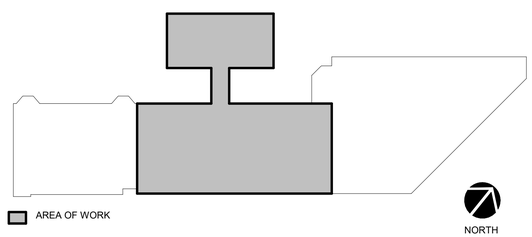
4 A5.03 ACT TO GWB CEILING TRANSITION
3" = 1'-0"



3 A5.03 GWB TO ACT CLG TRANSITION DETAIL
3" = 1'-0"



2 A5.03 ACT TO GWB CLG TRANSITION DETAIL
3" = 1'-0"



1K A5.03 KEY PLAN - 1ST FLOOR PROPOSED RCP
1" = 50'-0"

CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

GWB-1
5/8" PAINTED GYPSUM WALL BOARD ON METAL SUSPENSION SYSTEM/ ALUM. TRANSITION TRIM

SUSPENDED ACOUSTIC CEILING TILE
2X4 ACT- 1 'SCHOOL ZONE' BY ARMSTRONG OR APPROVED EQUAL

2X2 ACT- 2 'SCHOOL ZONE' BY ARMSTRONG OR APPROVED EQUAL

2X4 ACT- 3 'KITCHEN ZONE' BY ARMSTRONG OR APPROVED EQUAL

A — **A:** 2'X4' LED VOLUMETRIC RECESSED LIGHTING

B2 — **B2:** 2'X2' LED VOLUMETRIC RECESSED LIGHTING

C — **C:** 8' LINEAR RECESSED

D — **D:** SURFACE MOUNTED DOME

F3 F4 F5 — **F3:** 2' DIA. RING LIGHT PENDANT
F4: 3' DIA. RING LIGHT PENDANT
F5: 4' DIA. RING LIGHT PENDANT

G — **G:** LED STRIP LIGHTING

H — **H:** 4' LINEAR SUSPENDED

J — **O:** 8" DIA. 43" HIGH ALUMINUM BOLLARD LIGHTING

V — **V:** SURFACE MOUNTED EXTERIOR LIGHT FIXTURE

ACT-1 / 12' - 0" — CEILING TYPE / CEILING HEIGHT

X — CEILING AND/OR SURFACE MOUNTED EMERGENCY EXIT SIGN

SUPPLY GRILL / DIFFUSER SEE MECH DWGS.

NOTE: (X') INDICATES LENGTH OF FIXTURE

RETURN GRILL / DIFFUSER SEE MECH DWGS.

V2 — **V2:** SURFACE MOUNTED EXTERIOR LIGHT FIXTURE

AREA NOT IN SCOPE

REFLECTED CEILING PLAN GENERAL NOTES
1. ALL INDICATED CEILING HEIGHTS ARE FROM TOP OF FINISHED FLOOR.
2. COORDINATE GRILLS, REGISTERS, DIFFUSERS, AND EXPOSED DUCTWORK W/ MECH.
3. ALL SUSPENDED ACOUSTICAL CEILING TILED AREAS SHALL RECEIVE LAY-IN LED 2X4 FIXTURES, UNLESS OTHERWISE NOTED.
4. ALL GYPSUM WALLBOARD CEILINGS TO RECEIVE SURFACE MOUNTED LIGHTING.UNLESS OTHERWISE NOTED.
5. ALL EXPOSED CEILING TO RECEIVE SUSPENDED UTILITY OR DECORATIVE PENDANT MOUNT FIXTURES. UNLESS OTHERWISE NOTED.

N.J.A.C. 6A:26-6.2(g)(1)
INSTRUCTIONAL AREAS MUST HAVE A MINIMUM LIGHTING INTENSITY OF **50 FOOT-CANDLES**.
NOTE: DRAFTING, TYPING AND SEWING ROOMS REQUIRE A 70 FOOT-CANDLE MINIMUM.
CLASSROOMS FOR THE PARTIALLY SIGHTED ALSO REQUIRE 70 FOOT-CANDLES.
LENS COVERS MAY BE IN THE FORM OF PLASTIC LENSES, SLEEVES OVER FLUORESCENT TUBES, EGG-CRATE STYLE OR OTHER METHODS SUCH AS "TOUGH-SKIN" BULBS WHICH ARE COVERED WITH A SPECIAL PLASTIC COATING THAT PREVENTS THE GLASS FROM SHATTERING. . ALL LIGHTING APPLIANCES SHOULD BE SECURED IN GLASS GLOBE AND WIRE MESH CAGE OR A SIMILAR APPROVED DEVICE.

LIGHTING FIXTURE SCHEDULE (SEE ELECTRICAL)

TYPE MARK	MAKE	Model	DESCRIPTION	VOLTAGE	WATTAGE	Lumens	COLOR TEMP.	CRI
A	WILLIAMS	BP-24-LS-8CS-DIM-UNV-30W-3500K	2'X4' TROFFER	120 V	29	3,452 lm	3500 K	+80
B	WILLIAMS	75R-4-L50-835-DIM-UNV	4' LINEAR STRIP	120 V	33	4,867 lm	3500 K	+80
B2	<varies>	LT-22-39-835-AF-(L35)-DIM-UNV	2'X2' TROFFER	<varies>	<varies>	<varies>	<varies>	<varies>
C	WILLIAMS	LRX4-X-20-LB-835-DIM-A-DIM-UNV	LINEAR FIXTURE	120 V	50	2,050 lm	3500 K	+80
D	WILLIAMS	4DR-TL-L10-827-DIM-UNV-OW-OF-CS	4" Cylinder – Round (4CR)	120 V	25	2,050 lm	3500 K	+80
E	WILLIAMS	4DR-TL-L10-827-DIM-UNV-OW-OF-CS	4" Cylinder – Round (4CR)	120 V	25	2,050 lm	3500 k	+80
F3	BETA-CALCO	MRTP2P03-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	550 lm	3500 K	+80
F4	BETA-CALCO	MRTP2P04-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120V	240	1,240 lm	3500 K	+80
F5	BETA-CALCO	MRTP2P05-EEF1-LPF017-LPG017-CR 80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	2,200 lm	3500 K	+80
G	LUMINII	KBL-W-HB-1-HE3BLO-35K-SF-X-X-X-X-	1' SECTION FLEX CURABLE COVE LIGHT	120 V	86	465 LM	3500 K	+80
J	WILLIAMS	OSA8R-L16/840-AC-FT-DBR-AB-OPTI ONS-DIM-UNV	WILLIAMS LIGHTING - 8" DIA. BOLLARD LIGHTING	120 V	18	1,600 lm	3500 K	+80
V	WILLIAMS	VG1-L30-730-T5-X-X-X-X-X	SURFACE MOUNTED EXTERIOR FIXTURE	120 V	36	550 lm	3500 K	+80
V2	COMPASS	CUSO DB	EXTERIOR WALL MOUNTED FIXTURE WITH BATTERY BACKUP	120 V	4	19,000 lm	3500 K	+80

CONSTRUCTION ANNOTATION LEGEND

SYMBOL INDICATES CONST. ANNOTATION

KEY #	DESCRIPTION
1	TYPICAL BULKHEAD (SEE DETAIL 3/A5.01)
2	SOFFIT 5/8" GYPSUM WALLBOARD W/ 6" STL. STUD W/ KICKERS 4'-0" O.C.
3	CEILING TO WALL EXPANSION JOINT
4	NOT USED.
5	EXISTING GYPSUM CELING TO REMAIN
6	PAINT EXPOSED MECHANICAL SYSTEM S (DUCTWORK & CONDUIT)
7	EXIST. ROOF HATCH & LADDER TO "ROOF" TO REAMAIN FOR MECH. ACCESS
8	NOT USED.
9	NOT USED.
10	(E) CEILING OPEN CEILING TO REMAIN - RETURN TO EXST. CONDITION AFTER INTATION OF NEW STUCUTRAL COLUMN.
11	(E) RELOCATE EXIST OR PROTECT IN PLACE THE EXIST. STAGE LIGHTS, CUTIANS, SCREEN & PRODUCITON EQUIPMENT TO BE USED IN THE NEW STAGE AREA (SEE ELECT.)
12	ACT CEILING TRANSITION TO GWB CEILING (SEE DETAIL 3/A5.02)
13	ACT CEILING TRANSITION TO GWB CEILING (SEE DETAIL 2/A5.02)
14	(E) RELOCATE EXIST WALL MOUNTED STAGE CURTUAN TO NEW WALL. CUT MAIN ALUM. SUPORT CHANNEL DOWN TO FIT NEW WALL PROFILE.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-16-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title, REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

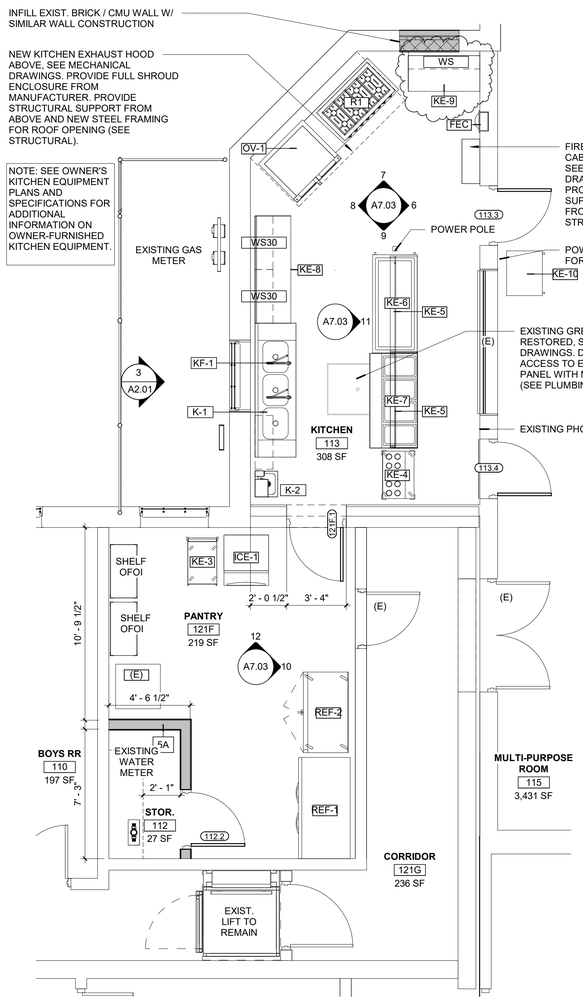
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

REFLECTED CEILING PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

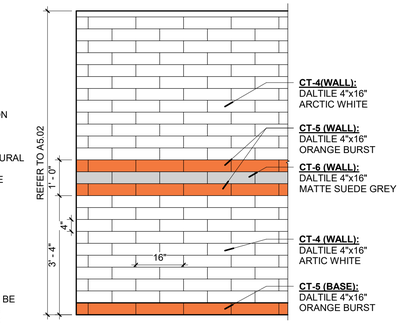
Job No. 2.20277.25.10
File No.

A5.03

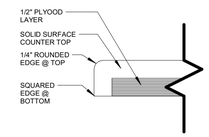
9/4/2026 10:01:52 AM



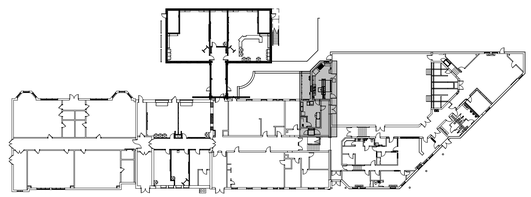
1 A7.03 PROPOSED KITCHEN PLAN
1/4" = 1'-0"



A7.03 TYP. CT WALL PATTERN
1/2" = 1'-0"



5 A7.03 SOLID SURFACE EDGE PROFILE
6" = 1'-0"



2 A7.03 KEY PLAN
1" = 50'-0"

INTERIOR ELEVATION KEYNOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
A	WALL BASE (SEE FINISH SCHEDULE)
B	SOLID SURFACE WINDOW SILL(SEE CASEWORK DETAILS AND SECTION 123661)
C	INTERIOR SIGNAGE (SEE 101423, DOOR SCHEDULE, AND SIGN TYPES)
D	WINDOW ROLLER SHADES (SEE SECTION 122496)
E	PA INTERCOM SPEAKER W/ INTEGRAL CLOCK (SEE ELECTRICAL DRAWINGS)
F	MECH. EQUIPMENT (SEE MECH. DWGS.)
G	WALL MOUNTED TACK BOARD 4'-0", INSTALL 26" AFF. TO BOTTOM OF BOARD. COORDINATE WITH OWNER.
H	WALL MOUNTED SMART BOARD 84": OFOI, INSTALL 26" AFF. TO BOTTOM OF BOARD. COORDINATE WITH OWNER.
I	WHITE MARKERBOARD 6'-0", INSTALL 26" AFF. TO BOTTOM OF BOARD.
J	WALL /FLOOR MOUNTED CASEWORK W/ SOLID DOORS & LOCKS (SEE INTERIOR ELEVATIONS AND DETAILS)
K	EXPANSION JOINT (SEE ENLARGED DETAILS AND SECTIONS 079010 & 079513)
L	SECURITY EQUIPMENT (SEE ELECTRICAL & LOW VOLTAGE DRAWINGS)

SPECIALTY EQUIPMENT CLASSROOMS & COMMON AREAS

MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	TYPE
	<varies>	<varies>	<varies>		
FEC	FIRE EXTINGUISHER CABINET SEMI RECESSED	JL INDUSTRIES OR EQUAL	1026		-
MB-1	12'-0" MARKERBOARD	-			
MB-2	8'-0" MARKERBOARD	-			
MB-3	4'-0" MARKERBOARD	-			
SC-1	SECURITY CAMERA				
T10	Worktable, Enclosed Base	Advance Tabco	EF-SS-308		
TB-1	4'-0" TACK BOARD	-	-	-	
WT-2	Work Table w/ Maple Top	AERO Manufacturing	MTG-3072		
WT-3	Work Table w/ Maple Top	AERO Manufacturing	MTG-3072		

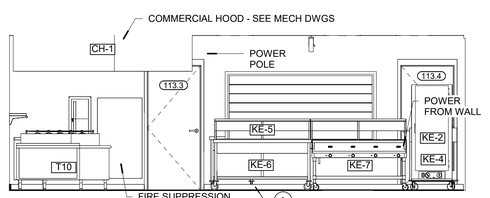
PLAN KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

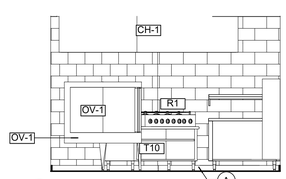
KEY #	DESCRIPTION
1	LOOSE FURNITURE, TYP. (OFOI)
2	FOLDING PARTITON ON TRACK SYSTEM. SEE RCP, ENLARGED DETAILS AND STRUCTURAL FOR SUPPORT DETAILS ON SHEET A4.04.
3	CASEWORK TEACHER'S WARDROBE (SEE CASEWORK DETAIL 8/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
4	CASEWORK TALL CABINET (SEE CASEWORK DETAIL 3/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
5	CONTRACTOR TO VERIFY IN FIELD LOCATION OF NEW WALL, TO INTERSECT A SOLID WALL AND AVOID A WINDOW.
6	ALIGN SURFACE OF NEW WALL WITH EXISTING HALF WALL SURFACE.
7	EXISTING INCOMING GAS SERVICE ENTRY POINT WITH FENCED-IN ENCLOSURE. SEE MEP AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
8	FOOD SERVICE EQUIPMENT - OFCI. SEE A7.03 AND MEP DRAWINGS FOR ADDITIONAL INFORMATION.
9	NEW ROOFTOP MECHANICAL EQUIPMENT AND ALUMINUM GUARDRAIL AT EXISTING ROOF - PATCH ROOF AND PROVIDE ALL REQUIRED CURBS AND FLASHINGS. SEE MEP AND STRUCTURAL DRAWINGS.
10	NEW WALL MOUNTED GALV. STEEL LADDER FOR KITCHEN ROOF ACCESS
11	PROVIDE WINDOW SHADES - TYPICAL AT ALL NEW WINDOWS U.O.N.
12	ALUMINUM SAFETY GUARDRAIL, MIN 42" HT. BOD: KEE SAFETY KEE GUARD GUARDRAIL, NON ROOF PENETRATING.
13	PATCH AND REPAIR EXISTING ROOF SYSTEM AS REQUIRED FOLLOWING ROOFTOP MECHANICAL EQUIPMENT INSTALLATION. SEE MECHANICAL DRAWINGS.
14	PATCH AND REPAIR FLOOR AND WALL FINISHES TO MATCH EXISTING ADJACENT FLOORING AND PAINT FOLLOWING REMOVAL OF EXISTING UNIT VENTILATOR. SEE MECHANICAL DRAWINGS.

FINISH LEGEND

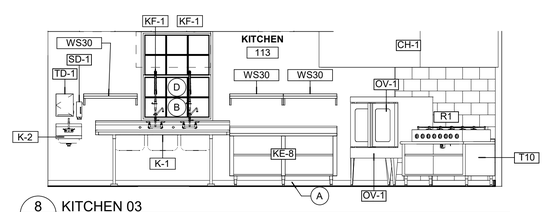
ABBREV.	DESCRIPTION
PT-X	**PAINT (INTERIOR) "SHERWIN WILLIAMS" OR APP. EQ** **ALL COLORS SELECTED BY ARCHITECT** **PT-1:** GREEK VILLA - SW 7551 **PT-2:** MANITOU BLUE - SW 6501 **PT-3:** ECO GREEN - SW 6739 **PT-4:** DANCING GREEN - SW 6716 **PT-5:** OSAGE ORANGE - SW 6890 **PT-6:** BLUSHING - SW 6617 **PT-7:** FLAN - SW 6652 **PT-8:** SUNNY VERANDA - SW 9017 **PT-9:** KALE GREEN - SW 6460 **PT-10:** HAVEN - 6437 **PT-11:** FOUNTAIN - 6787 **PT-12:** GYPSUM CEILING - GREEK VILLA - SW 7551 **PT-13:** EXPOSED CEILING - IRON ORE - SW 7069 **PT-14:** HM METAL FRAME **PT-15:** SIMPLE WHITE - SW 7021 **PT-E:** MATCH EXISTING PAINT SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION
VCT-X	**VINYL COMPOSITE TILE - SEE SPEC.** **VCT-1:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "LEMON YELLOW" **VCT-2:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "BLUE DREAMS" **VCT-3:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "GENTIAN BLUE" **VCT-4:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "BRUSHED SAND" **VCT-5:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "LITTLE GREEN APPLE" **VCT-6:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "GREENERY" **VCT-7:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "ANTIQUE WHITE" **VCT-8:** 'STANDARD EXCELON IMPERIAL TEXTURE' ARMSTRONG FLOORING OR EQUAL; 12"x12", 2.4MM; COLOR "CANTALOUPE"
CPT-X	***CARPET TILES & PLANKS - SEE SPEC.** **CPT-1:** 'MEMORY TILE' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "RADIANT NATURE" **CPT-2:** 'MEMORY TILE' BY SHAW CONTRACT OR EQUAL; 9"x36", 2.5MM; COLOR "WARMTH" **CPT-3:** 'MEMORY TILE' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "GREENERY" **CPT-4:** 'MEMORY TILE' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "RAINSTORM" **CPT-5:** 'GROUNDED ACCENT' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "TURQUOISE" **CPT-6:** 'GROUNDED ACCENT' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "GOLD" **CPT-7:** 'GROUNDED ACCENT' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "FOREST" **CPT-8:** 'ALIGNMENT' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "CONNECTED TURQUOISE" **CPT-9:** 'GROUNDED ACCENT' BY SHAW CONTRACT OR EQUAL; 24"x24", 2.5MM; COLOR "COBALT"
CT-X	***CERAMIC TILE -SEE SPEC.** **CT-1:** 'CENTRAL' BY SHAW CONTRACT OR EQUAL; 12"x24", 8MM; COLOR "REST" **CT-2:** 'LUNAR MANTLE' BY SHAW CONTRACT OR EQUAL; 24"x24", 8MM; COLOR "INK" **CT-3:** 'KEYSTONE' BY DALTILE OR EQUAL; 1"x1", .25"; COLOR "OLIVE BLEND" **CT-4:** 'COLOR WHEEL CLASSIC' BY DALTILE OR EQUAL; 3"X6", 5/16"; COLOR "ARCTIC WHITE" **CT-5:** 'COLOR WHEEL CLASSIC' BY DALTILE OR EQUAL; 3"X6", 5/16"; COLOR "ORANGE BURST" **CT-6:** 'COLOR WHEEL CLASSIC' BY DALTILE OR EQUAL; 3"X6", 5/16"; COLOR "MATTE SUEDE GREY"
EXP-X	**EXP-1:** EXPOSED MTL DECK **EXP-2:** EXPOSED MTL DECK - PAINTED **EXP-3:** EXPOSED, PREFINISHED ARCHITECTURAL ACOUSTIC METAL DECKING - SEE STRUC.
ACT-X	***ACOUSTIC CEILING TILE - SEE A5.01/A5.02 & SPEC.**
FCB FLP	FELT CONTOUR BAFFLE - SEE A5.02 & PROJECT MANUAL SECTION 098413 FELT LINEAR PANEL - SEE A5.02 & PROJECT MANUAL SECTION 098413
RWB-X	***RUBBER WALL BASE -SEE SPEC.** **RWB-1:** SHAW CONTRACT; 4" HIGH, COLOR "EARTHEN" **RWB-2:** SHAW CONTRACT; 4" HIGH, COLOR "NIGHT" **RWB-3:** JOHNSONITE; 4" HIGH, COLOR "GECKO" **RWB-4:** JOHNSONITE; 4" HIGH, COLOR "NAVY BLUE" **RWB-5:** JOHNSONITE; 4" HIGH, COLOR "PEBBLE WG"
PL-X	**PLASTIC LAMINATE** **PL-1:** WILSONART; COLOR "BLOND ECHO"
EPX-X	EPOXY POURED RESINOUS FLOORING W/ INTERGRAL BASE - SEE 096723.
CONC-S	CONCRETE SEALED (SEE 099000 - INTERIOR PAINTING)
UPH-X	**UPH-1:** DESIGN TEX; BEGUILED BY THE WILD, COLOR "MACAW" **UPH-2:** DESIGN TEX; BEGUILED BY THE WILD, COLOR "TAMARIN"
WCV-X	**VINYL WALL COVERING** **WCV-1:** WALLISM; PEEL AND STICK WALLPAPER, PRINT "FOREST WILDLIFE" **WCV-2:** CUSTOM VINYL WALL GRAPHIC, OWNER-PROVIDED IMAGE (SEE 097200)
SS-X	**SS-1:** FORMICA; EVERMORE SOLID SURFACE, COLOR "TUMBLED GLASS"



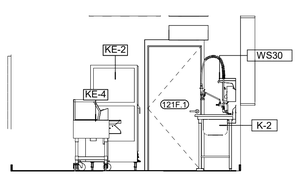
6 A7.03 KITCHEN 01
1/4" = 1'-0"



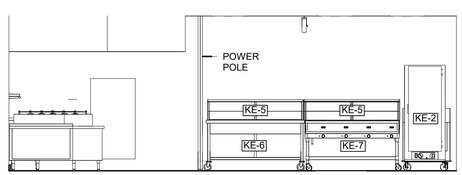
7 A7.03 KITCHEN 02
1/4" = 1'-0"



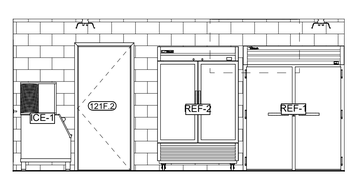
8 A7.03 KITCHEN 03
1/4" = 1'-0"



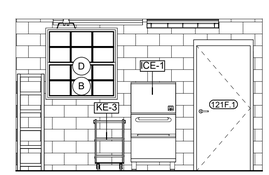
9 A7.03 KITCHEN 04
1/4" = 1'-0"



11 A7.03 KITCHEN SERVICE LINE
1/4" = 1'-0"

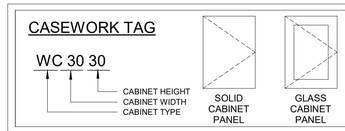


10 A7.03 KITCHEN 05
1/4" = 1'-0"



12 A7.03 PANTRY WALL
1/4" = 1'-0"

CASEWORK TAG



KITCHEN ACCESSORIES LEGEND

MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	TYPE
SD-1	SURFACE MOUNTED SOAP DISPENSER	-	-	PLASTIC	OFCI
TD-1	SURFACE MOUNTED TOWEL DISPENCER	BOBRICK OR EQUAL	B-2860	STAINLESS STEEL	G.C.

FOOD SERVICE PLUMBING EQUIPMENT (SEE PLUMBING)

MARK	DESCRIPTION	MODEL	MANUFACTURER	MATERIAL	COMMENTS
K-1	THREE BOWL SINK 103"W x 27"D 20" X 20" X 14" DEEP BOWLS, 18" DRAINBOARDS ON LEFT & RIGHT	S14-20-3-18	EAGLE OR EQUAL	STAINLESS STEEL	
K-2	HAND SINK WALL 14"	7-PS-60	ADVANCE TABCO OR EQUAL	STAINLESS STEEL	
KF-1	MIXING FAUCET	W/ SINK	ADVANCE TABCO OR EQUAL	STAINLESS STEEL	

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title: REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY NOT FOR CONSTRUCTION

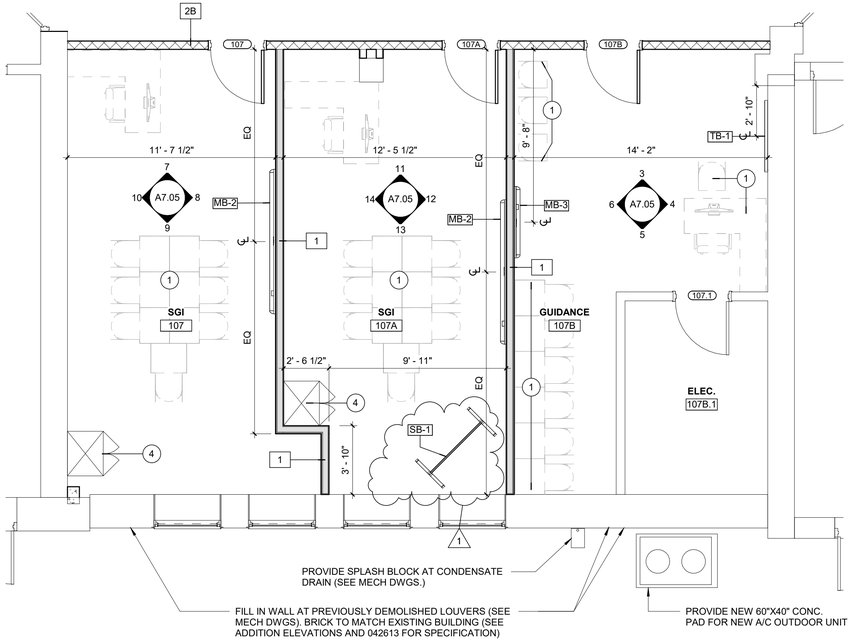
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2700 | f. 201-447-1233

ENLARGED PLANS AND ELEVATIONS - KITCHEN / PANTRY
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

A7.03

8/27/2026 2:00:35 PM



1 A7.05 GROUND FLOOR PROPOSED PLAN - ROOMS 107, 107A & 107B
1/4" = 1'-0"

SPECIALTY EQUIPMENT CLASSROOMS & COMMON AREAS

MARK	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	TYPE
	<varies>	<varies>	<varies>		
FEC	FIRE EXTINGUISHER CABINET SEMI RECESSED	JL INDUSTRIES OR EQUAL	1026		-
MB-1	12'-0" MARKERBOARD	-			
MB-2	8'-0" MARKERBOARD	-			
MB-3	4'-0" MARKERBOARD	-			
SB-1	MOBILE SMART BOARD (OFOI)	-			
SC-1	SECURITY CAMERA				
T10	Worktable, Enclosed Base	Advance Tabco	EF-SS-308		
TB-1	4'-0" TACK BOARD	-	-	-	
WT-2	Work Table w/ Maple Top	AERO Manufacturing	MTG-3072		
WT-3	Work Table w/ Maple Top	AERO Manufacturing	MTG-3072		

INTERIOR ELEVATION KEYNOTES LEGEND

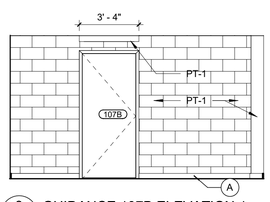
(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
A	WALL BASE (SEE FINISH SCHEDULE)
B	SOLID SURFACE WINDOW SILL(SEE CASEWORK DETAILS AND SECTION 123661)
C	INTERIOR SIGNAGE (SEE 101423, DOOR SCHEDULE, AND SIGN TYPES)
D	WINDOW ROLLER SHADES (SEE SECTION 122496)
E	PA INTERCOM SPEAKER W/ INTEGRAL CLOCK (SEE ELECTRICAL DRAWINGS)
F	MECH. EQUIPMENT (SEE MECH. DWGS.)
G	WALL MOUNTED TACK BOARD 4'-0", INSTALL 26" AFF. TO BOTTOM OF BOARD. COORDINATE WITH OWNER.
H	WALL MOUNTED SMART BOARD 84": OFOI, INSTALL 26" AFF. TO BOTTOM OF BOARD. COORDINATE WITH OWNER.
I	WHITE MARKERBOARD 6'-0", INSTALL 26" AFF. TO BOTTOM OF BOARD.
J	WALL /FLOOR MOUNTED CASEWORK W/ SOLID DOORS & LOCKS (SEE INTERIOR ELEVATIONS AND DETAILS)
K	EXPANSION JOINT (SEE ENLARGED DETAILS AND SECTIONS 079010 & 079513)
L	SECURITY EQUIPMENT (SEE ELECTRICAL & LOW VOLTAGE DRAWINGS)

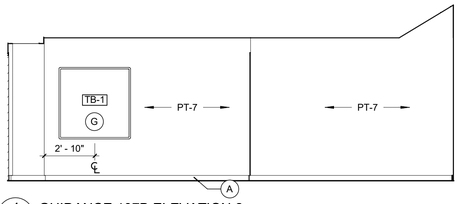
PLAN KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

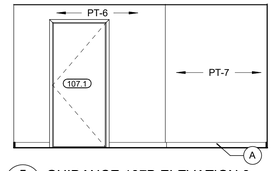
KEY #	DESCRIPTION
1	LOOSE FURNITURE, TYP. (OFOI)
2	FOLDING PARTITON ON TRACK SYSTEM. SEE RCP, ENLARGED DETAILS AND STRUCTURAL FOR SUPPORT DETAILS ON SHEET A4.04.
3	CASEWORK TEACHER'S WARDROBE (SEE CASEWORK DETAIL 8/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
4	CASEWORK TALL CABINET (SEE CASEWORK DETAIL 3/A7.02) IF CASEWORK ENDS AT A WALL, PROVIDE AT LEAST 2" OF FILLER PANEL.
5	CONTRACTOR TO VERIFY IN FIELD LOCATION OF NEW WALL, TO INTERSECT A SOLID WALL AND AVOID A WINDOW.
6	ALIGN SURFACE OF NEW WALL WITH EXISTING HALF WALL SURFACE.
7	EXISTING INCOMING GAS SERVICE ENTRY POINT WITH FENCED-IN ENCLOSURE. SEE MEP AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
8	FOOD SERVICE EQUIPMENT - OFCI. SEE A7.03 AND MEP DRAWINGS FOR ADDITIONAL INFORMATION.
9	NEW ROOFTOP MECHANICAL EQUIPMENT AND ALUMINUM GUARDRAIL AT EXISTING ROOF - PATCH ROOF AND PROVIDE ALL REQUIRED CURBS AND FLASHINGS. SEE MEP AND STRUCTURAL DRAWINGS.
10	NEW WALL MOUNTED GALV. STEEL LADDER FOR KITCHEN ROOF ACCESS
11	PROVIDE WINDOW SHADES - TYPICAL AT ALL NEW WINDOWS U.O.N.
12	ALUMINUM SAFETY GUARDRAIL, MIN 42" HT. BOD: KEE SAFETY KEE GUARD GUARDRAIL, NON ROOF PENETRATING.
13	PATCH AND REPAIR EXISTING ROOF SYSTEM AS REQUIRED FOLLOWING ROOFTOP MECHANICAL EQUIPMENT INSTALLATION. SEE MECHANICAL DRAWINGS.
14	PATCH AND REPAIR FLOOR AND WALL FINISHES TO MATCH EXISTING ADJACENT FLOORING AND PAINT FOLLOWING REMOVAL OF EXISTING UNIT VENTILATOR. SEE MECHANICAL DRAWINGS.



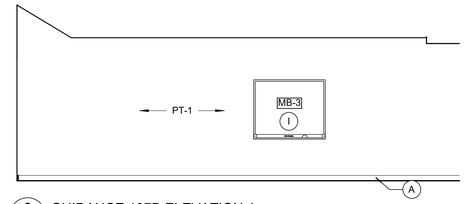
3 A7.05 GUIDANCE 107B ELEVATION 1
1/4" = 1'-0"



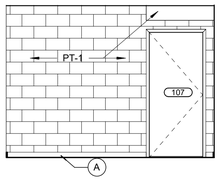
4 A7.05 GUIDANCE 107B ELEVATION 2
1/4" = 1'-0"



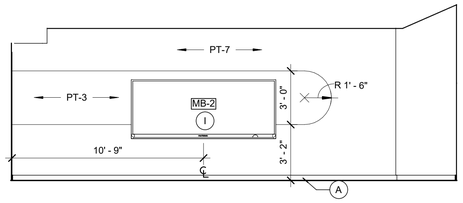
5 A7.05 GUIDANCE 107B ELEVATION 3
1/4" = 1'-0"



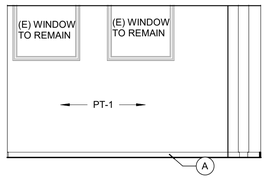
6 A7.05 GUIDANCE 107B ELEVATION 4
1/4" = 1'-0"



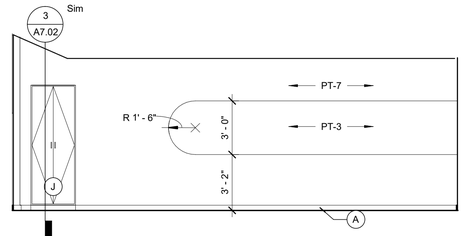
7 A7.05 SGI 107 ELEVATION 1
1/4" = 1'-0"



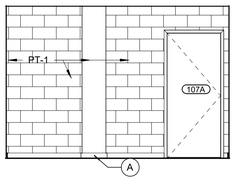
8 A7.05 SGI 107 ELEVATION 2
1/4" = 1'-0"



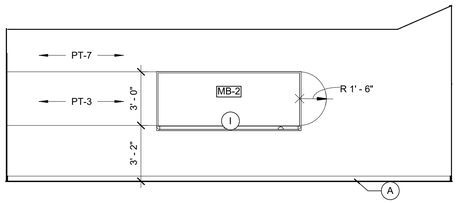
9 A7.05 SGI 107 ELEVATION 3
1/4" = 1'-0"



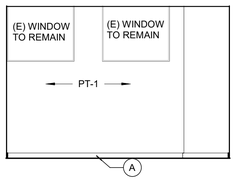
10 A7.05 SGI 107 ELEVATION 4
1/4" = 1'-0"



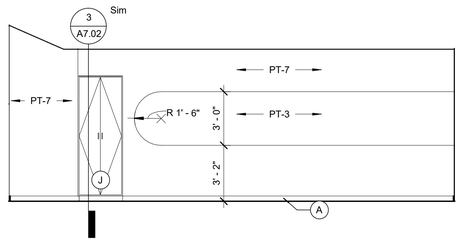
11 A7.05 SGI 107A ELEVATION 1
1/4" = 1'-0"



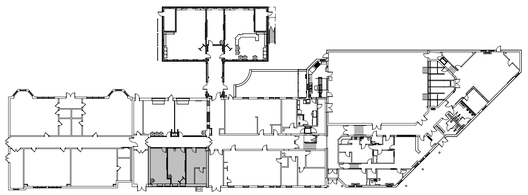
12 A7.05 SGI 107A ELEVATION 2
1/4" = 1'-0"



13 A7.05 SGI 107A ELEVATION 3
1/4" = 1'-0"



14 A7.05 SGI 107A ELEVATION 4
1/4" = 1'-0"



2 A7.05 KEY PLAN
1" = 50'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08-13-2026
Checked	TC
Drawn	TB, KK

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

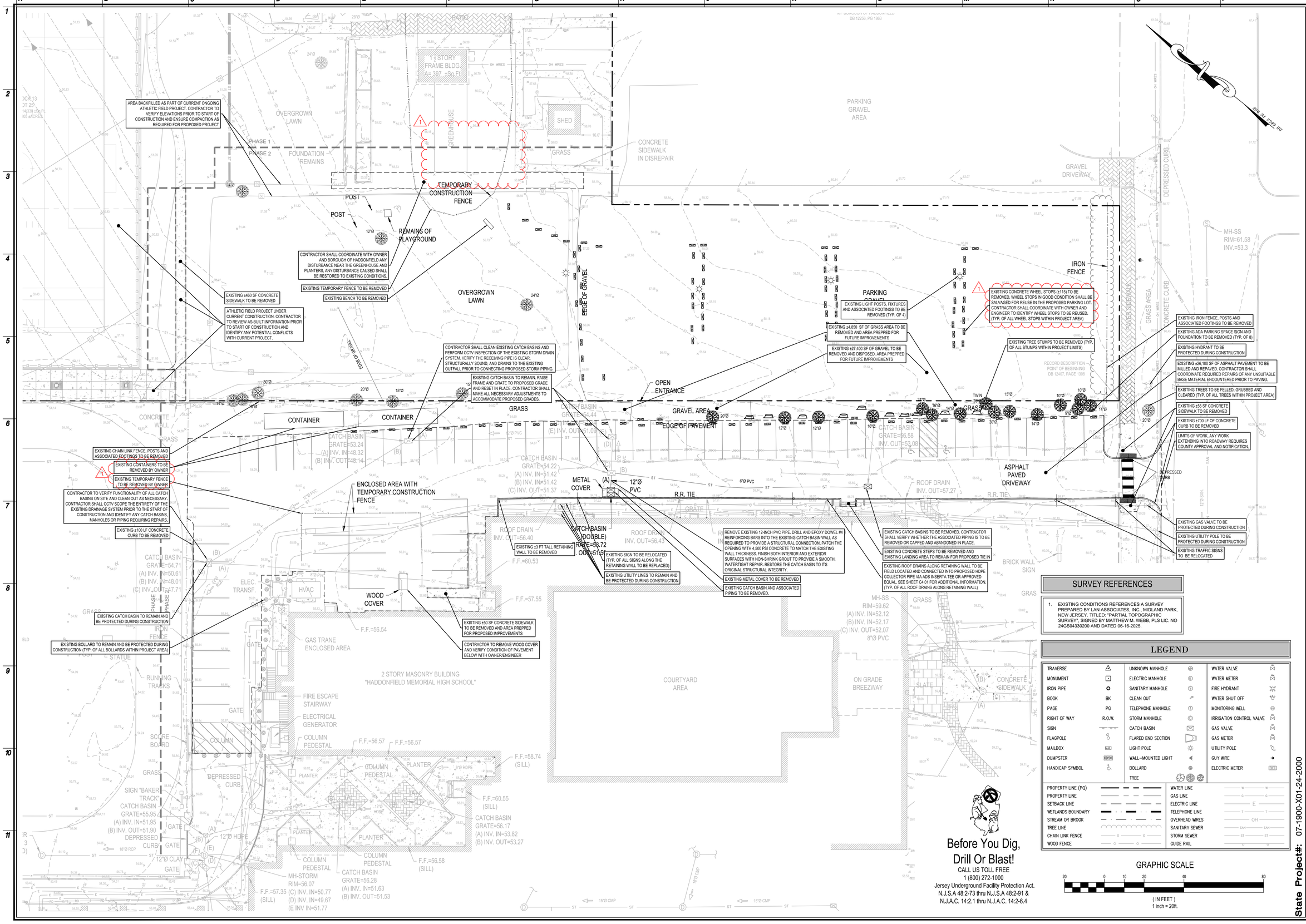
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ENLARGED PLANS AND ELEVATIONS - GUIDANCE AND SGI
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

A7.05

9/4/2026 2:25:04 PM



SURVEY REFERENCES

1. EXISTING CONDITIONS REFERENCES A SURVEY PREPARED BY LAN ASSOCIATES, INC., MIDLAND PARK, NEW JERSEY. TITLED: "PARTIAL TOPOGRAPHIC SURVEY", SIGNED BY MATTHEW M. WEBB, PLS LIC. NO 24GS04330200 AND DATED 06-16-2025.

LEGEND

TRAVERSE		UNKNOWN MANHOLE		WATER VALVE	
MONUMENT		ELECTRIC MANHOLE		WATER METER	
IRON PIPE		SANITARY MANHOLE		FIRE HYDRANT	
BOOK	BK	CLEAN OUT		WATER SHUT OFF	
PAGE	PG	TELEPHONE MANHOLE		MONITORING WELL	
RIGHT OF WAY	R.O.W.	STORM MANHOLE		IRRIGATION CONTROL VALVE	
SIGN		CATCH BASIN		GAS VALVE	
FLAGPOLE		FLARED END SECTION		GAS METER	
MAILBOX		LIGHT POLE		UTILITY POLE	
DUMPSTER		WALL-MOUNTED LIGHT		GUY WIRE	
HANDICAP SYMBOL		BOLLARD		ELECTRIC METER	
		TREE			

PROPERTY LINE (PQ)		WATER LINE	W W
PROPERTY LINE		GAS LINE	G G
SETBACK LINE		ELECTRIC LINE	E
WETLANDS BOUNDARY		TELEPHONE LINE	T T
STREAM OR BROOK		OVERHEAD WIRES	OH
TREE LINE		SANITARY SEWER	SAN SAN
CHAIN LINK FENCE	X X	STORM SEWER	ST ST
WOOD FENCE	O O	GUIDE RAIL	

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
Title PROFESSIONAL ENGINEER
License No. 24GE06050100

Revisions:

08/13/2026 BID SET

09/03/2026 ADDENDUM # 1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED DEMOLITION PLAN

HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

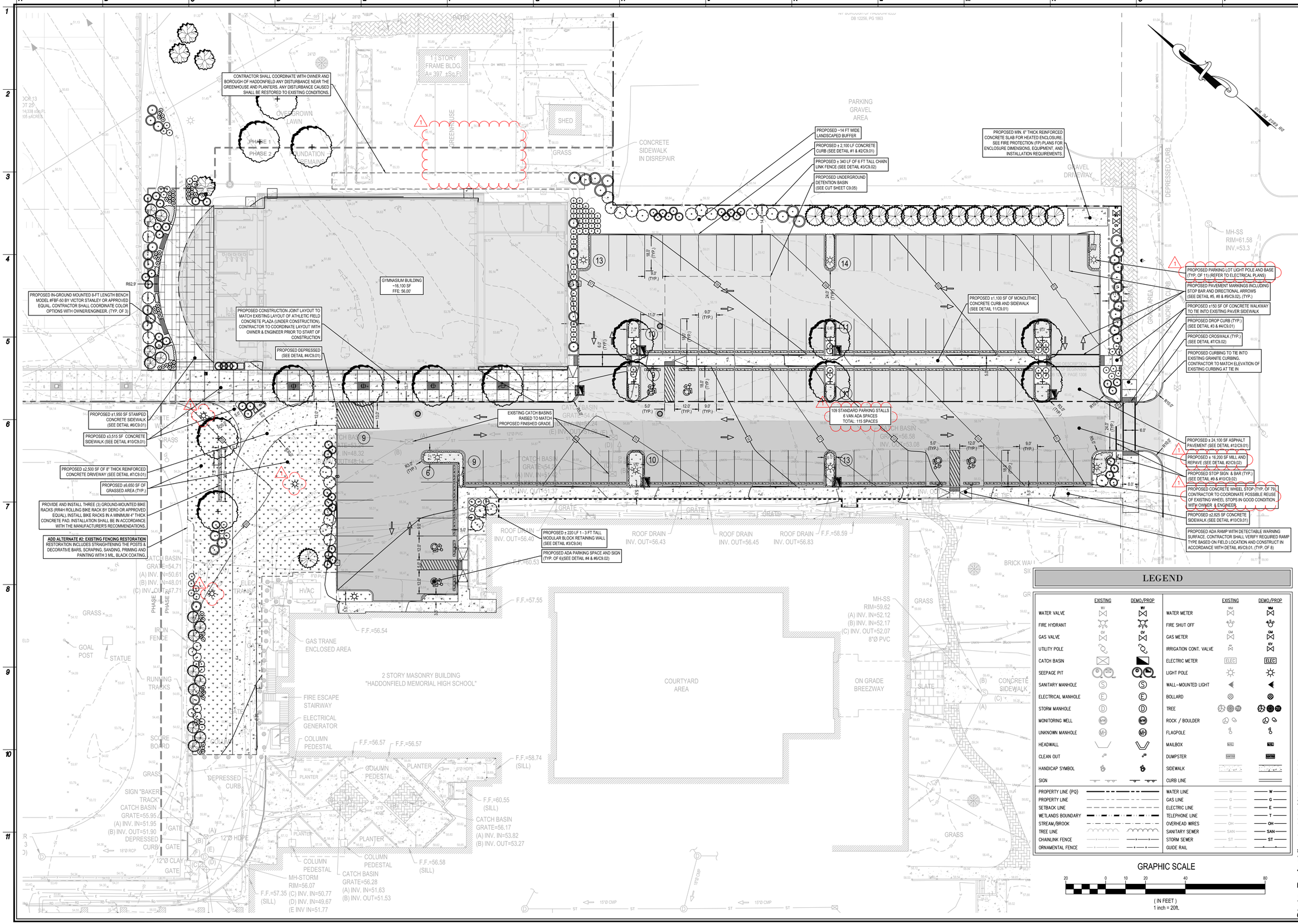
State Project#: 07-1900-X01-24-2000

Job No. 2.20277.25.14

File No. 202772514C1

C1.01

I:\20\000-AE\20200-2209\202772\202772.25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 8/2/2026 4:38:42 PM, _DWG To PDF.pc3



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
License No. 24GE06050100
Title: PROFESSIONAL ENGINEER

Revisions:

08/13/2026 BID SET

09/03/2026
1 ADDENDUM # 1

LEGEND

	EXISTING	DEMO/PROP		EXISTING	DEMO/PROP
WATER VALVE	WV	WV	WATER METER	WM	WM
FIRE HYDRANT			FIRE SHUT OFF		SO
GAS VALVE	GV	GV	GAS METER	GM	GM
UTILITY POLE			IRRIGATION CONT. VALVE	IV	IV
CATCH BASIN			ELECTRIC METER	ELEC	ELEC
SEEPAGE PIT	SP	SP	LIGHT POLE		
SANITARY MANHOLE	S	S	WALL-MOUNTED LIGHT		
ELECTRICAL MANHOLE	E	E	BOLLARD		
STORM MANHOLE	D	D	TREE		
MONITORING WELL	MW	MW	ROCK / BOULDER		
UNKNOWN MANHOLE	MH	MH	FLAGPOLE		
HEADWALL			MAILBOX	MAIL	MAIL
CLEAN OUT	CO	CO	DUMPSTER		
HANDICAP SYMBOL			SIDEWALK		
SIGN			CURB LINE		
PROPERTY LINE (PQ)			WATER LINE	W	W
PROPERTY LINE			GAS LINE	G	G
SETBACK LINE			ELECTRIC LINE	E	E
WETLANDS BOUNDARY			TELEPHONE LINE	T	T
STREAM/BROOK			OVERHEAD WIRES	OH	OH
TREE LINE			SANITARY SEWER	SAN	SAN
CHAINLINK FENCE			STORM SEWER	ST	ST
ORNAMENTAL FENCE			GUIDE RAIL		

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20ft.

State Project#: 07-1900-X01-24-2000

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

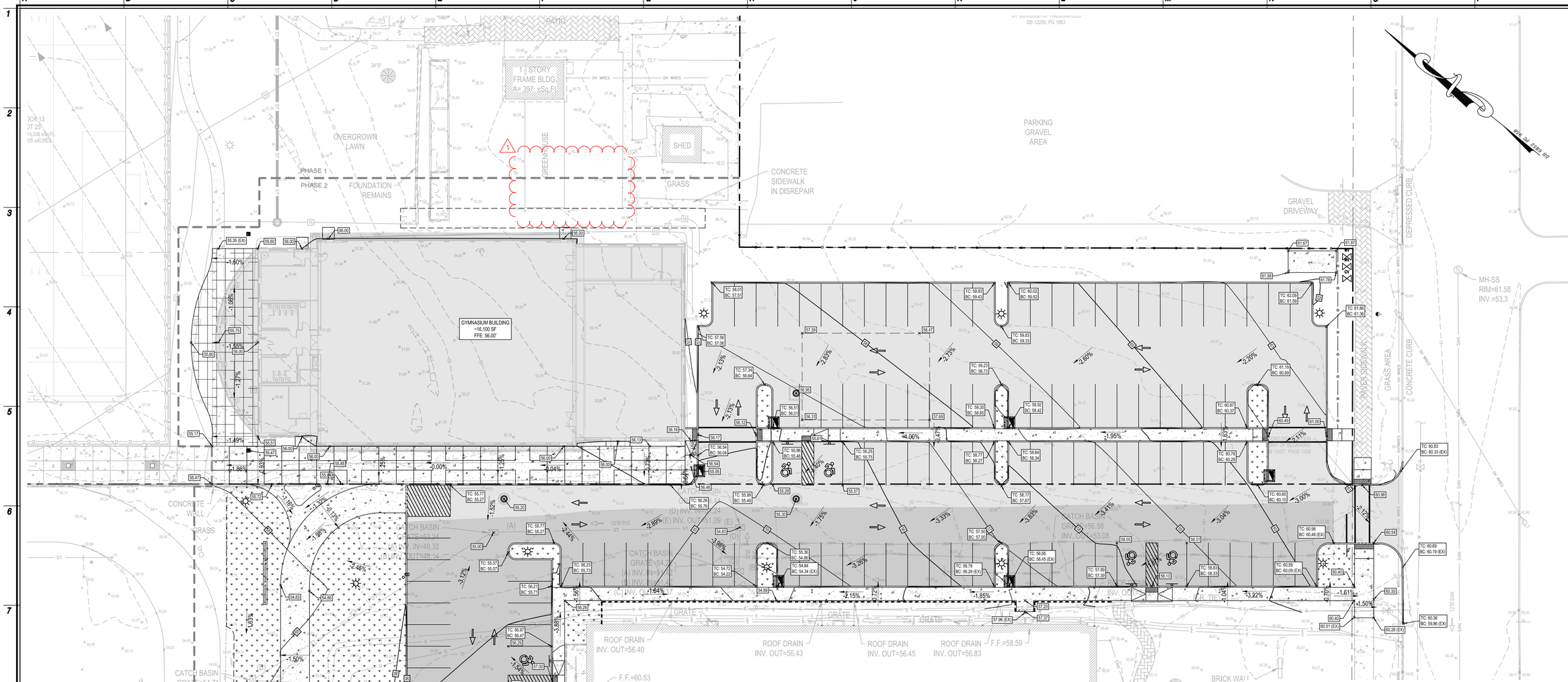
PROPOSED SITE PLAN
HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No. 202772514C1

C2.01

P:\20000-A\20200-20299\20277\20277.25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 9/2/2026 4:38:40 PM, , DWG To PDF.pc3



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
License No. 24GE06050100
Title PROFESSIONAL ENGINEER

Revisions:

08/13/2026 BID SET

1 09/03/2026 ADDENDUM # 1

LEGEND

	EXISTING	DEMO/PROP		EXISTING	DEMO/PROP
WATER VALVE	WV	WV	WATER METER	WM	WM
FIRE HYDRANT			FIRE SHUT OFF		
GAS VALVE	GV	GV	GAS METER	GM	GM
UTILITY POLE			IRRIGATION CONT. VALVE		
CATCH BASIN			ELECTRIC METER	ELEC	ELEC
SEEPAGE PIT			LIGHT POLE		
SANITARY MANHOLE	S	S	WALL-MOUNTED LIGHT		
ELECTRICAL MANHOLE	E	E	BOLLARD		
STORM MANHOLE	D	D	TREE		
MONITORING WELL	MW	MW	ROCK / BOULDER		
UNKNOWN MANHOLE	MH	MH	FLAGPOLE		
HEADWALL			MAILBOX	MBX	MBX
CLEAN OUT			DUMPSTER		
HANDICAP SYMBOL			SIDEWALK		
SIGN			CURB LINE		
PROPERTY LINE (PQ)			WATER LINE	W	W
PROPERTY LINE			GAS LINE	G	G
SETBACK LINE			ELECTRIC LINE	E	E
WETLANDS BOUNDARY			TELEPHONE LINE	T	T
STREAM/BROOK			OVERHEAD WIRES	OH	OH
TREE LINE			SANITARY SEWER	SAN	SAN
CHAINLINK FENCE			STORM SEWER	ST	ST
ORNAMENTAL FENCE			GUIDE RAIL		

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20ft.

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED GRADING PLAN

HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

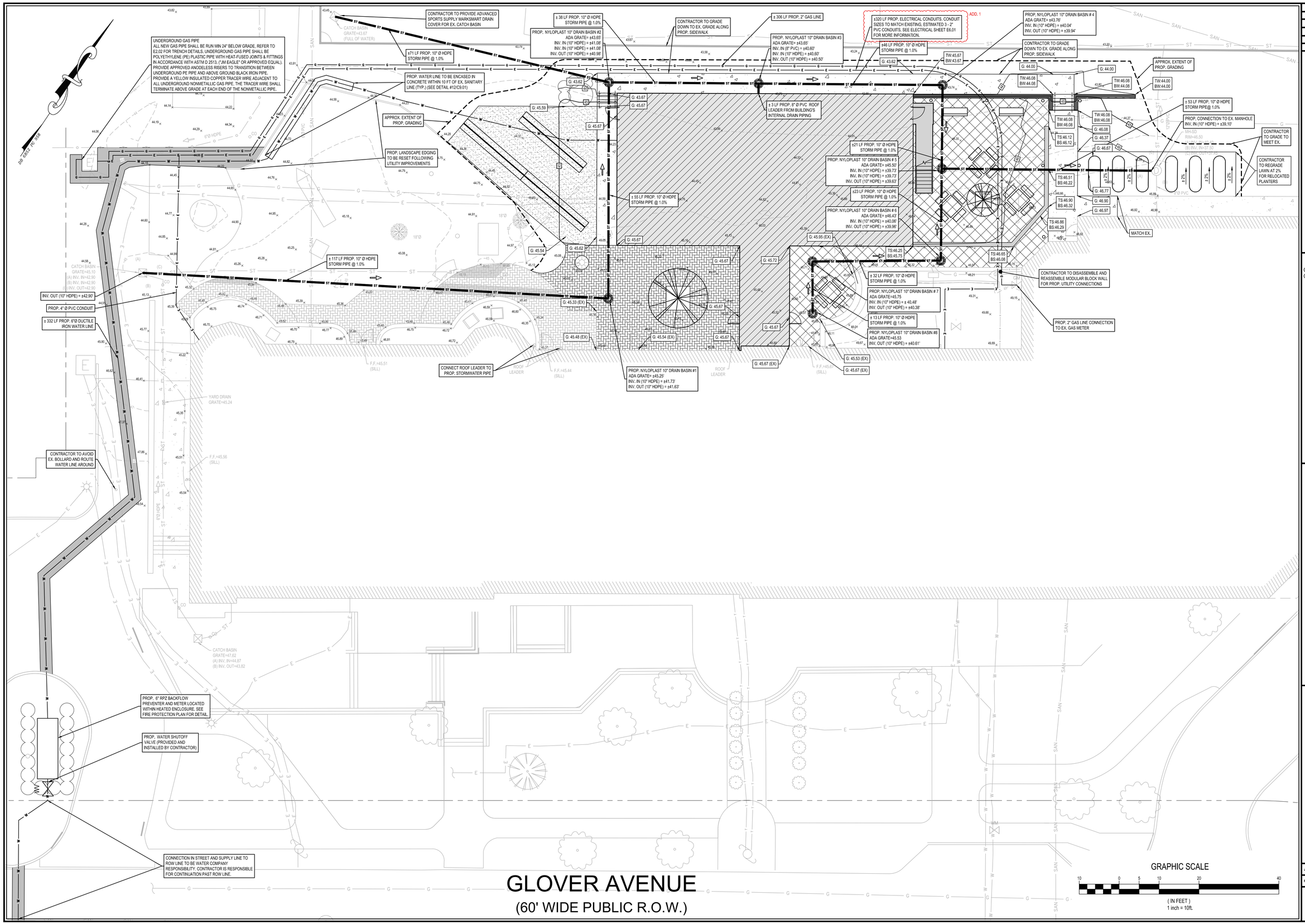
State Project#: 07-1900-X01-24-2000

Job No. 2.20277.25.14

File No. 202772514C1

C3.01

P:\20000-AE\20200-20299\20277\20277.25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 9/2/2026 4:38:42 PM, , DWG To PDF.pc3



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JP
Drawn	PK

JUSTIN J. PROVENCHER, P.E.
Title PROFESSIONAL ENGINEER License No. 24GE05593300

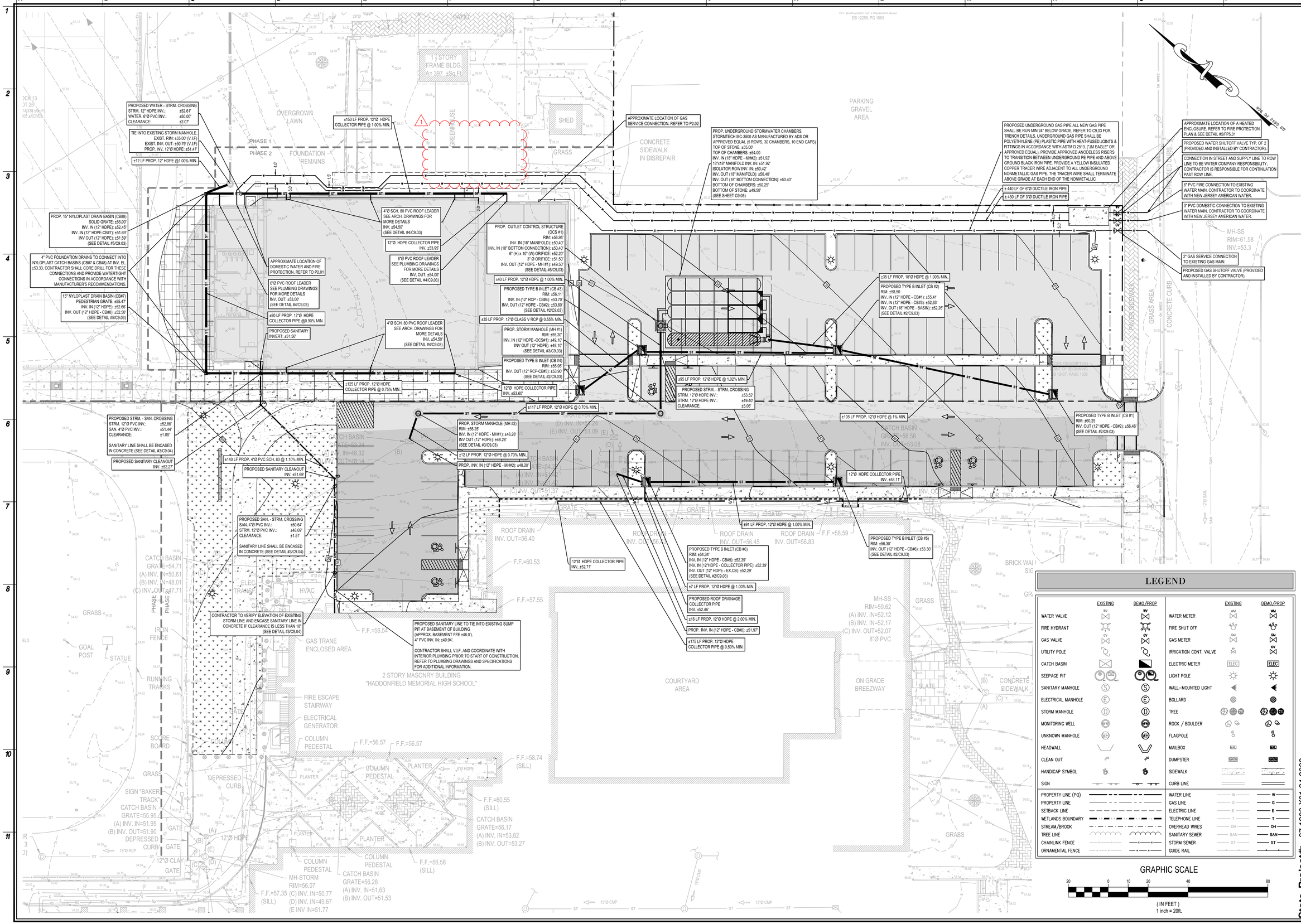
Revisions:
08/13/26 BID SET
09/03/26 ADDENDUM 1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED GRADING & UTILITY PLAN
ALTERATIONS & ADDITIONS TO TATEM J. FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 20277.25.10C1

C3.01



LEGEND

	EXISTING	DEMO/PROP		EXISTING	DEMO/PROP
WATER VALVE	WV	WV	WATER METER	WM	WM
FIRE HYDRANT			FIRE SHUT OFF		
GAS VALVE	GV	GV	GAS METER	GM	GM
UTILITY POLE			IRRIGATION CONT. VALVE		
CATCH BASIN			ELECTRIC METER	ELEC	ELEC
SEEPAGE PIT			LIGHT POLE		
SANITARY MANHOLE	S	S	WALL-MOUNTED LIGHT		
ELECTRICAL MANHOLE	E	E	BOLLARD		
STORM MANHOLE	D	D	TREE		
MONITORING WELL	MW	MW	ROCK / BOULDER		
UNKNOWN MANHOLE	MH	MH	FLAGPOLE		
HEADWALL			MAILBOX	MAIL	MAIL
CLEAN OUT			DUMPSTER		
HANDICAP SYMBOL			SIDEWALK		
SIGN			CURB LINE		
PROPERTY LINE (PQ)			WATER LINE	W	W
PROPERTY LINE			GAS LINE	G	G
SETBACK LINE			ELECTRIC LINE	E	E
WETLANDS BOUNDARY			TELEPHONE LINE	T	T
STREAM/BROOK			OVERHEAD WIRES	OH	OH
TREE LINE			SANITARY SEWER	SAN	SAN
CHAINLINK FENCE			STORM SEWER	ST	ST
ORNAMENTAL FENCE			GUIDE RAIL		

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20ft.

State Project#: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
Title PROFESSIONAL ENGINEER
License No. 24GE06050100

Revisions:

08/13/2026 BID SET

1 09/03/2026 ADDENDUM # 1

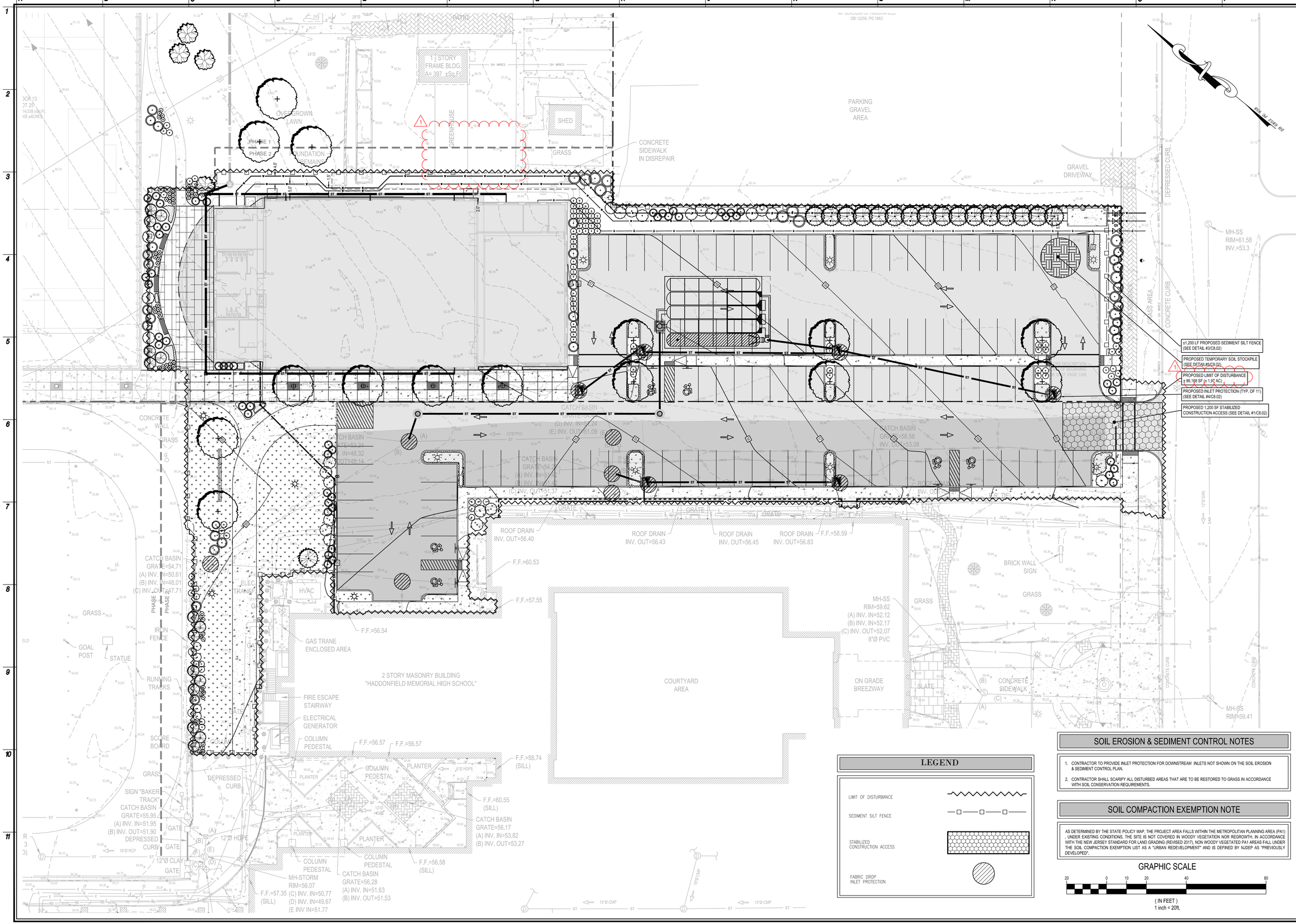
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED UTILITY PLAN
HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No. 202772514C1

C4.01

P:\20000-AE\20200-20299\20277\20277.25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 9/2/2026 4:38:53 PM, , DWG To PDF.pc3



LEGEND

LIMIT OF DISTURBANCE	
SEDIMENT SILT FENCE	
STABILIZED CONSTRUCTION ACCESS	
FABRIC DROP INLET PROTECTION	

SOIL EROSION & SEDIMENT CONTROL NOTES

1. CONTRACTOR TO PROVIDE INLET PROTECTION FOR DOWNSTREAM INLETS NOT SHOWN ON THE SOIL EROSION & SEDIMENT CONTROL PLAN.
2. CONTRACTOR SHALL SCARIFY ALL DISTURBED AREAS THAT ARE TO BE RESTORED TO GRASS IN ACCORDANCE WITH SOIL CONSERVATION REQUIREMENTS.

SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1) , UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH THE NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20ft.

State Project#: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
Title PROFESSIONAL ENGINEER
License No. 24GE06050100

Revisions:

08/13/2026 BID SET

1 09/03/2026 ADDENDUM # 1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED SESC PLAN

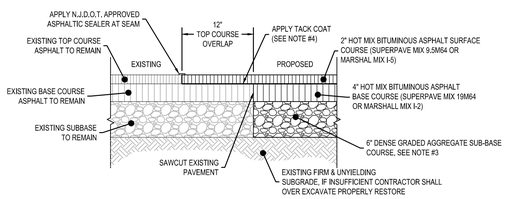
HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No. 202772514C1

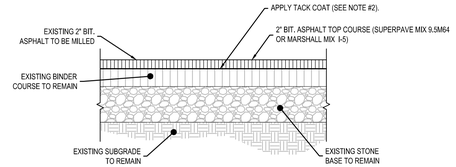
C8.01

1200000-AE\20200-20209\202772\202772\202772514C1.dwg, 8/22/2026 4:38:54 PM, _DWG To PDF.pc3



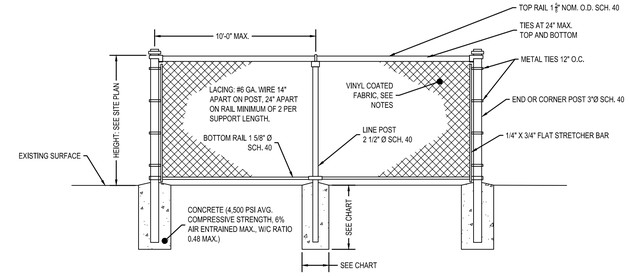
NOTES:
1. REFER TO NJDOT STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO CONFIRM IN THE FIELD ACTUAL DIMENSIONS. THE DIMENSIONS NOTED ARE MINIMUMS FOR NEW WORK. IF EXISTING CONSTRUCTION THICKNESS IS GREATER, THEN NEW CONSTRUCTION SHALL MATCH EXISTING.
3. ALL FILL TO BE COMPACTED TO 95% MODIFY PROCTOR DENSITY AS DETERMINED BY ASTM D1557. SEE SPECIFICATION SECTION 312001.
4. TACK COAT TO BE APPLIED AT A RATE OF 0.10 TO 0.20 GALLONS PER SQUARE YARD IN COMPLIANCE WITH NJDOT SPECIFICATION 401.03.05.
5. POLYMERIZED JOINT ADHESIVE TO BE APPLIED TO CONTACT SURFACES OF CURBS, GUTTERS, MANHOLES OR OTHER SIMILAR STRUCTURES.

1 C9.02 TYP. BITUMINOUS ASPHALT TO MEET EXISTING BITUMINOUS ASPHALT DETAIL
NOT TO SCALE



NOTES:
1. REFER TO NJDOT STANDARDS AND SPECIFICATIONS.
2. TACK COAT TO BE APPLIED AT A RATE OF 0.10 TO 0.20 GALLONS PER SQUARE YARD IN COMPLIANCE WITH NJDOT SPECIFICATION 401.03.05.
3. POLYMERIZED JOINT ADHESIVE TO BE APPLIED TO CONTACT SURFACES OF CURBS, GUTTERS, MANHOLES OR OTHER SIMILAR STRUCTURES.

2 C9.02 MILLING AND RESURFACE EXISTING PAVEMENT
NOT TO SCALE

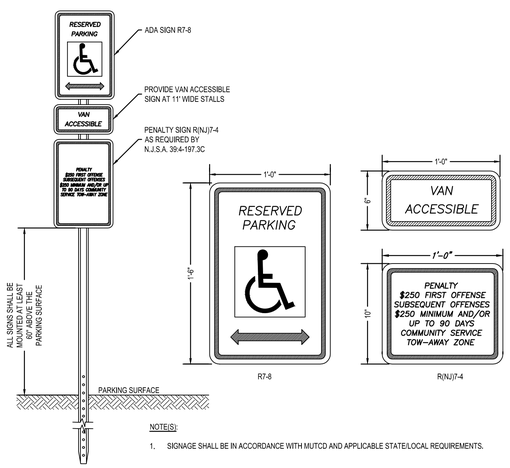


CHAIN LINK FENCE MINIMUM REQUIREMENTS:

FENCE HEIGHT (FT)	TERMINAL POST (DIAMETER, IN)	LINE POST (DIAMETER, IN) (DIAMETER DEPTH)	TERMINAL POST FOUNDATION SIZE (DIAMETER DEPTH)	LINE POST FOUNDATION SIZE
UP TO 4'	3"	2 5/8"	10" X 30"	8" X 24"
4' TO 5'	3"	2 5/8"	10" X 30"	8" X 24"
5' TO 6'	3"	2 5/8"	10" X 30"	8" X 24"
6' TO 8'	3"	2 5/8"	10" X 36"	10" X 36"
8' TO 10'	3 1/2"	2 5/8"	12" X 40"	10" X 40"
10' TO 12'	3 1/2"	2 5/8"	12" X 42"	12" X 42"

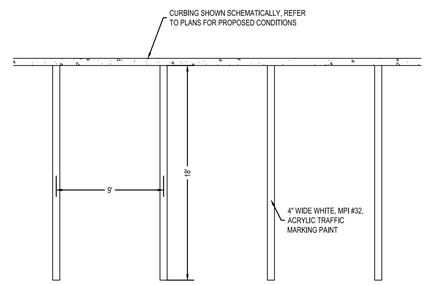
NOTES:
1. PROVIDE & INSTALL GATE WHEN DIRECTED, GATES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DETAILS
2. SIZES SHOWN APPLICABLE ONLY TO FENCE WITH UNRESTRICTED AIRFLOW
3. 10" POST SPACING MAX.
4. POSTS SHALL BE SCH. 40 STEEL PIPE
5. POSTS SHALL BE EMBEDDED TO WITHIN 6" FROM THE BOTTOM OF EACH FOUNDATION.
6. POSTS & HARDWARE SHALL BE VINYL-COATED (COLOR TO BE SELECTED BY THE OWNER)
7. FENCE FABRIC SHALL BE 2"X2" PVC-COATED (FUSED & ADHERED POLY VINYL CHLORIDE) 9 GAUGE CORE.
8. CHAIN-LINK FENCE, FABRIC, POSTS, RAILS, TIES, BANDS, RODS AND OTHER FITTINGS AND HARDWARE TO CONFIRM TO AASHTO M181 FOR TYPES (I OR II), GRADE 1.

3 C9.02 CHAIN LINK FENCE DETAIL
NOT TO SCALE



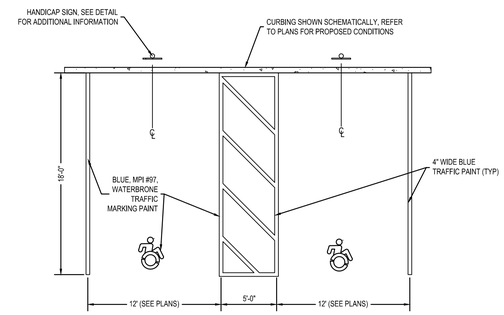
NOTE(S):
1. SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD AND APPLICABLE STATE/LOCAL REQUIREMENTS.

4 C9.02 TYP. ADA SIGNAGE & POST INSTALLATION DETAIL
NOT TO SCALE



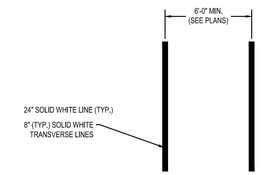
NOTES:
1. PAVEMENT MARKING PAINT SHALL BE WATERBORNE ACRYLIC TRAFFIC PAINT COMPLYING WITH THE MASTER PAINTERS INSTITUTE (MPI) #32 APPROVED PRODUCTS LIST.
2. ACCEPTABLE PRODUCTS INCLUDE SHERWIN WILLIAMS TM5712 (WHITE) AND TM5713 (YELLOW), OR APPROVED EQUAL.
3. APPLY TO CLEAN, DRY, FULLY CURED PAVEMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

5 C9.02 TYP. PARKING STALL DETAIL
NOT TO SCALE



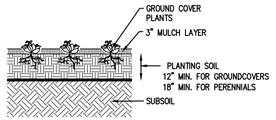
NOTES:
1. PAVEMENT MARKING PAINT SHALL BE WATER BASED, LATEX TYPE TRAFFIC PAINT COMPLYING WITH THE MASTER PAINTERS INSTITUTE (MPI) #97 APPROVED PRODUCTS LIST.
2. ACCEPTABLE PRODUCTS INCLUDE SHERWIN WILLIAMS B97 SERIES (BLUE) OR APPROVED EQUAL.
3. APPLY TO CLEAN, DRY, FULLY CURED PAVEMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

6 C9.02 TYP. ADA PARKING STALL LAYOUT DETAIL
NOT TO SCALE

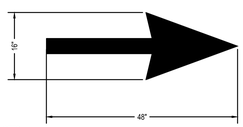


NOTES:
1. CROSSWALK TO COMPLY WITH NJDOT AND MUTCD REGULATIONS.
2. REFER TO PLAN FOR USE OF LADDER OR TRANSVERSE CROSSWALK
3. THERMOPLASTIC STRIPING.

7 C9.02 TYP. HIGH VISIBILITY CROSSWALK - WHITE
NOT TO SCALE



12 C9.02 GROUND COVER PLANTING DETAIL
NOT TO SCALE

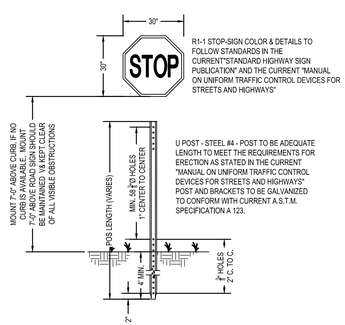


NOTES:
1. THERMOPLASTIC STRIPING.

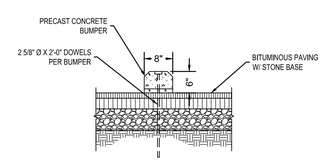
8 C9.02 TYP. STRIPING ARROW
NOT TO SCALE

NOTES:
1. STOP BAR STRIPING TO COMPLY WITH NJDOT AND MUTCD REGULATIONS.
2. THERMOPLASTIC STRIPING.

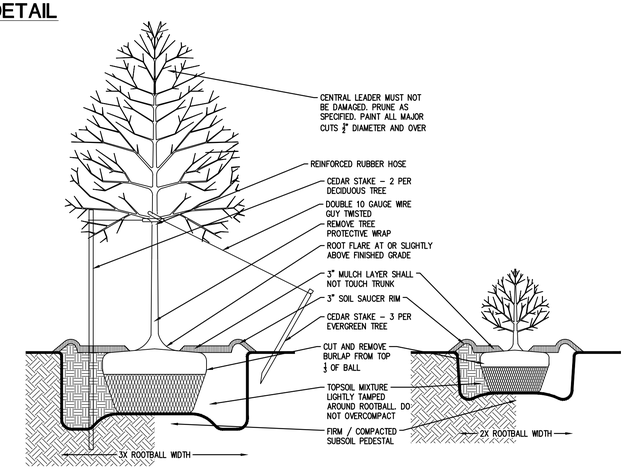
9 C9.02 TYP. STOP BAR LINE - WHITE
NOT TO SCALE



10 C9.02 TYP. STOP SIGN DETAIL
NOT TO SCALE



11 C9.02 PRECAST CONCRETE WHEEL STOP DETAIL
NOT TO SCALE



13 C9.02 PLANTING DETAIL
NOT TO SCALE

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	JLO

ELIO QORRI, P.E.
Title: PROFESSIONAL ENGINEER
License No. 24GE06050100

Revisions:

08/13/2026 BID SET

1 09/03/2026 ADDENDUM # 1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

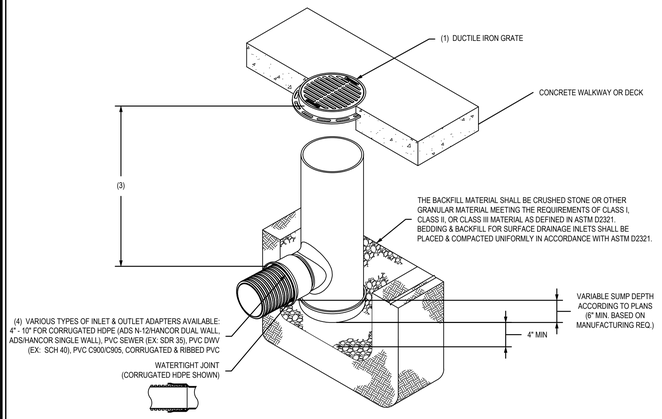
CONSTRUCTION DETAILS
HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

State Project#: 07-1900-X01-24-2000

Job No. 2.20277.25.14
File No. 202772514C1

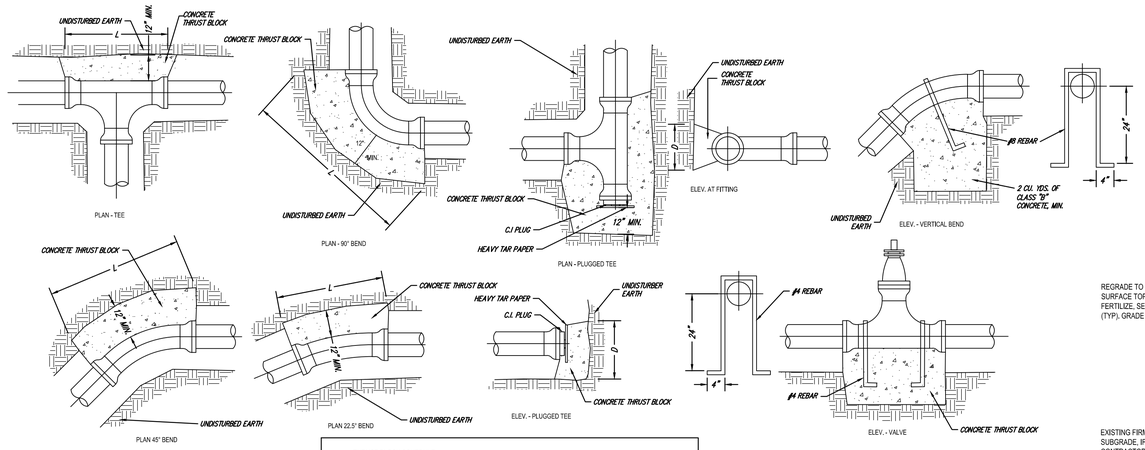
C9.02

P:\20000-AE\20200-20299\202772\202772 25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 9/2/2026 4:38:53 PM, _DWG To PDF.pc3



NOTES:
1. 1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2. 2 - CUSTOM DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
3. STANDARD DRAIN BASIN HAS FIXED ADAPTER LOCATIONS OF 0° & 180°. CUSTOM DRAIN BASIN ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.
4. 4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL) & PVC SEWER (4"-10").

1 C902 TYP. NYLOPLAST 10" DRAIN BASIN DETAIL
NOT TO SCALE

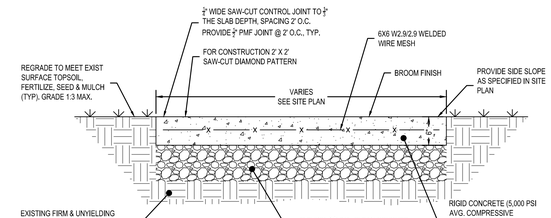


THRUST BLOCK SCHEDULE								
PIPE	TEE OR PLUG		22.5° BEND		45° BEND		90° BEND	
SIZE	L	D	L	D	L	D	L	D
6"	3'-0"	1'-6"	1'-6"	1'-6"	2'-6"	1'-6"	4'-3"	1'-6"
8"	3'-6"	1'-6"	1'-6"	1'-6"	2'-9"	1'-6"	4'-9"	1'-6"
10"	4'-0"	2'-0"	2'-0"	1'-6"	3'-0"	2'-0"	5'-3"	2'-0"
12"		24"-63"	3'-0"	2'-6"	3'-3"	2'-0"	5'-9"	2'-6"

BOX LID FLUSH WITH SURFACE. MUST BE VISIBLE

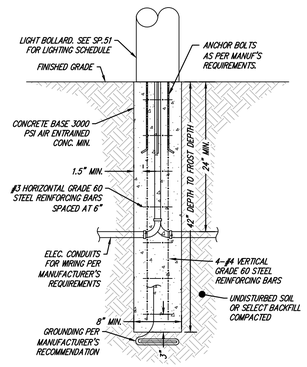
NOTES: (1) CONCRETE SHALL BE CLASS "B" IN SPECIFIED IN THE "NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (1989 EDITION) AS AMENDED. (2) ABOVE SCHEDULE BASED ON AN ALLOWABLE SOIL BEARING OF 3000 P.S.F. AND 150 P.S.I. HYDROSTATIC PRESSURE.

2 C902 THRUST BLOCK DETAILS
NOT TO SCALE

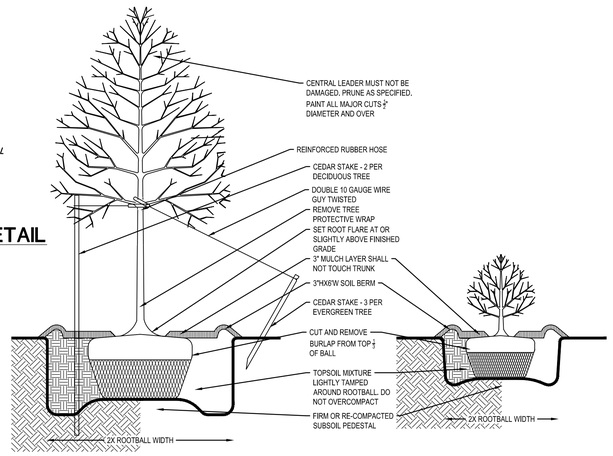


NOTES:
1. AT ALL FIXED VERTICAL SURFACES AND STRUCTURE PROVIDE PMF.
2. ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE I-D IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN ONE GALLON PER 200 SQ. FT.

3 C902 TYP. SAW CUT DIAMOND PATTERN CONCRETE WALKWAY DETAIL
NOT TO SCALE



6 C902 LIGHT BOLLARD BASE DETAIL
NOT TO SCALE

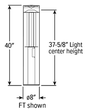


7 C902 PLANTING DETAIL
NOT TO SCALE

8 C902 SECTION B-B DETAIL
NOT TO SCALE

OSA8R LED
8" Aluminum Bollard – Round

Williams



CATALOG #:
Type:
PROJECT:

FEATURES
- Suitable for a variety of low level lighting applications
- Available with flat or dome top
- LEDs provide high-efficacy, good color rendering and a variety of color options
- Round aluminum bollard features a highly reflective bowl reflector with color-matched trim for effective light distribution and pleasing appearance day or night
- Finned, extruded aluminum heat sink for maximum heat dissipation
- Made Right Here® in the USA

SPECIFICATIONS
- HOUSING – Fabricated aluminum, minimum .125" thick.
- HOUSING TOP – Spun aluminum, minimum .125" thick.
- REFLECTOR – Spun aluminum upper and lower reflectors with clear specular finish.
- SHIELDING – UV stabilized clear acrylic cylinder sealed with silicone. Type V distribution.
- FINISH – Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability.
- ELECTRICAL – High quality mid-power LED board. L70 at 50,000 hours. Prewired at factory for easy field installation. Rated -40°F minimum starting temperature.
- MOUNTING – Three-point cast aluminum base. For accurate installation a fullscale mounting template is provided with every bollard and anchor bolt order.
- LISTINGS –
  - cETLus conforms to UL STD 1598 and UL STD 8750; Certified to CAN/CSA STD C22.2 No. 250.0. Suitable for wet locations.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: OSA8R · L16/840 · AC · FT · DBR · AB · OPTIONS · DIM · UNV

ORDERING INFO

SERIES	LUMENS [1]	CRI	CCT	SHIELDING/REFLECTOR	HOUSING TOP
OSA8R	L10 1,000lm	8 80	27 2700K	AC Acrylic lens with bowl reflector	FT Flat top
	L16 1,600lm		30 3000K		DT Dome top
	L22 2,200lm		35 3500K		
			40 4000K		

FINISH OPTIONS [2]		ANCHOR BOLTS [3]		OPTIONS	
WHT	White (RAL #9003)	AB	Anchor bolts [4]	SF	Single fuse [6]
BLK	Black (RAL #9004)	LAB	Less anchor bolts	DF	Double fuse [7]
DBZ	Dark bronze	PAB	Pre-shipped anchor bolts [5]		
DBR	Medium bronze				
GRAY	Standard gray				
GRN	Green (RAL #6005)				
SLV	Satin aluminum (RAL #9006)				
RAL#____	Specify custom color				

DRIVER	VOLTAGE
DIM Dimming driver prewired for 0-10V low voltage applications	120 120V
DRV Driver prewired for non-dimming applications	208 208V
	240 240V
	277 277V
	UNV 120-277V
	347 347V
	480 480V

NOTES
1 Lumen output based on 4000K/80CRI and WHT Finish. Actual lumens may vary +/-5%.
2 See page 2 for FINISH OPTIONS.
3 See page 2 for MOUNTING DETAILS.
4 Three 3/8" x 12" cast-in-galvanized steel anchor J-bolts, shipped with fixture.
5 Three 3/8" x 12" cast-in galvanized steel anchor J-bolts.
6 120V, 277V, or 347V only; must specify voltage.
7 208V, 240V, or 480V only; must specify voltage.

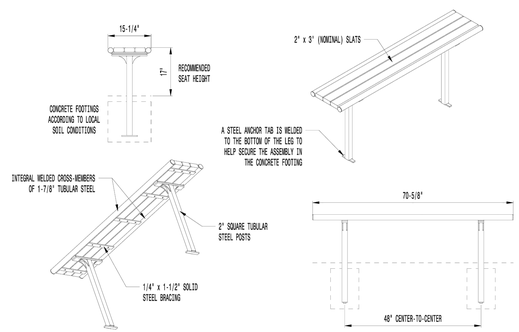
4 C902 TYP. LIGHT BOLLARD DETAIL
NOT TO SCALE

VICTOR STANLEY®
Create a timeless moment.®

P.O. DRAWER 330 · DUNKIRK, MD 20754 USA
TOLL FREE: (800) 368-2573 (USA & CANADA)
TEL (301) 855-8300 · FAX (410) 257-7579
WEB SITE: HTTP://WWW.VICTORSTANLEY.COM

THIS PRODUCT IS COVERED BY THE FOLLOWING U.S. PATENT: D595,973 S

* ALL DIMENSIONS ARE IN INCHES *



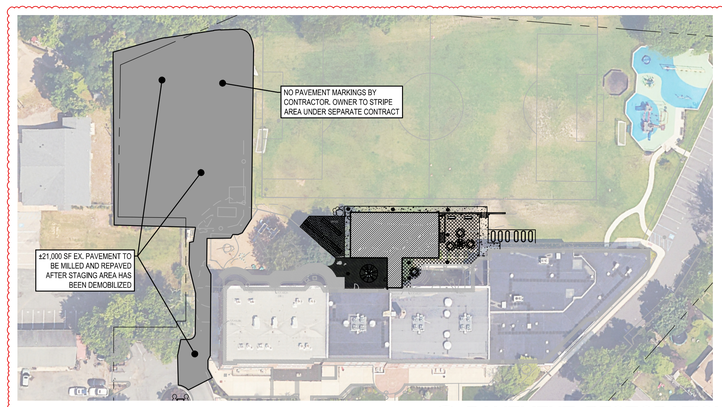
AVAILABLE OPTIONS:
POWDER COATING
10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,
CUSTOM COLORS (INCLUDING THE RAL RANGE)
SLAT TYPES
RECYCLED PLASTIC SLATS (NOT 2nd SITE SYSTEM®)
COLORS: GRAY, MAPLE, CHERRY, AND WALNUT
SEE THE STREETSITES® BENCHES FOR ADDITIONAL SLAT OPTIONS

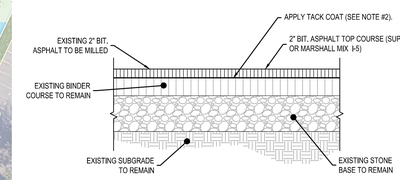
MOUNTING
STANDARD SURFACE AND IN-GROUND (AS SHOWN)
LENGTHS
STANDARD 4'
STANDARD 6' (AS SHOWN)
STANDARD 8'
SECURITY
OPTIONAL SKATEBOARD GUARD

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED IN THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. FOR HIGH SALT /MARITIME CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
5. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
6. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.

5 C902 TYP. BENCH DETAIL
NOT TO SCALE

ADD. 1





NOTES:
1. REFER TO NJDOT STANDARDS AND SPECIFICATIONS.
2. TACK COAT TO BE APPLIED AT A RATE OF 0.10 TO 0.20 GALLONS PER SQUARE YARD IN COMPLIANCE WITH NJDOT SPECIFICATION 401.03.05.
3. POLYMERIZED JOINT ADHESIVE TO BE APPLIED TO CONTACT SURFACES OF CURBS, GUTTERS, MANHOLES OR OTHER SIMILAR STRUCTURES.

MILLING AND RESURFACE EXISTING PAVEMENT

5 C902 PAVEMENT RESTORATION DETAILS
NOT TO SCALE

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JP
Drawn	PK

JUSTIN J. PROVENCHER, P.E.
Title PROFESSIONAL ENGINEER License No. 24GE05659300

Revisions:
08/13/26 BID SET
09/03/26 ADDENDUM 1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | T. 201-447-6400 | F. 201-447-1233

CONSTRUCTION DETAILS (2 OF 2)
ALTERATIONS & ADDITIONS TO TATEM J. FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 20277.25.10C1

C9.02

POWER DEVICES

SYMBOL	DESCRIPTION
	SIMPLEX RECEPTACLE (WALL) - WALL MOUNTED 20A, 120V RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	DUPLEX RECEPTACLE (WALL) - WALL MOUNTED 20A, 120V RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	QUAD RECEPTACLE (WALL) - WALL MOUNTED 20A, 120V RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	NEMA LX-XXR RECEPTACLE (WALL) - WALL MOUNTED NEMA L _-__R RECEPTACLE TO CIRUCIT INDICATED ON PLAN.
	OVERHEAD CORD RECEPTACLE - OVERHEAD CORD TYPE RECEPTACLE. REFER TO DETAIL FOR ADDITIONAL INFORMATION. CORDREEL UNLESS INDICATED AS "F" - FIXED LENGTH.
	DUPLEX RECEPTACLE (CEILING) - CEILING MOUNTED 20A, 120V DUPLEX RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	QUAD RECEPTACLE (CEILING) - CEILING MOUNTED 20A, 120V DUPLEX RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	NEMA LX-XXR RECEPTACLE (CEILING) - CEILING MOUNTED NEMA L _-__R RECEPTACLE TO CIRCUIT INDICATED ON PLAN.
	480Y/277V PANELBOARD - REFER TO PANEL SCHEDULE AND/OR ONE-LINE FOR ADDITIONAL INFORMATION. WHEN SHOWN, DASHED LINES W/ HATCH INDICATE CLEARANCE.
	208Y/120V PANELBOARD - REFER TO PANEL SCHEDULE AND/OR ONE-LINE FOR ADDITIONAL INFORMATION. WHEN SHOWN, DASHED LINES W/ HATCH INDICATE CLEARANCE.
	DISCONNECT SWITCH, NON-FUSIBLE - RATED AS INDICATED ON THE DRAWINGS, (EG. 30/3 INDICATES 30A, 3 POLE). IF NO RATING IS INDICATED, INSTALL A CODE SIZED SWITCH. INSTALL IN A NEMA-1 ENCLOSURE UNLESS NOTED OTHERWISE.
	DISCONNECT SWITCH, FUSIBLE - RATED AS INDICATED ON THE DRAWINGS, (EG. 100/60/3 INDICATES 100A SWITCH, 60A FUSES, 3 POLE). IF NO RATING IS INDICATED, INSTALL A CODE SIZED SWITCH. INSTALL IN A NEMA-1 ENCLOSURE UNLESS NOTED OTHERWISE.
	DISCONNECT SWITCH, NON-FUSIBLE/MOTOR STARTER - WITH OVERLOAD PROTECTION. SWITCH RATED AS INDICATED ON THE DRAWINGS, IF NO RATING IS INDICATED, INSTALL A CODE SIZED SWITCH. INSTALL IN A NEMA-1 ENCLOSURE UNLESS NOTED OTHERWISE.
S	**SNAP SWITCH DISCONNECT** - RATED AS INDICATED ON DRWAING. IF NOT RATING IS INDICATED, INSTALL A CODE SIZED SWITCH. INSTALL IN A NEMA-1 ENCLOSURE UNLESS NOTED OTHERWISE.
J	**JUNCTION/PULL BOX (WALL MOUNTED)** - CONNECT TO CIRCUIT NUMBER INDICATED. CONTRACTOR SHALL SIZE AS PER NEC REQUIREMENTS UNLESS SIZE IS INDICATED ON THE PLAN.
J	**JUNCTION/PULL BOX (CEILING MOUNTED)** - CONNECT TO CIRCUIT NUMBER INDICATED. CONTRACTOR SHALL SIZE AS PER NEC REQUIREMENTS UNLESS SIZE IS INDICATED ON THE PLAN.

DATA DEVICES

SYMBOL	DESCRIPTION
	DATA/TELEPHONE OUTLET - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 1-1/4"C, CONCEALED IN WALL, FOR USE IN PULLING LOW VOLTAGE WIRING. EXTEND CONDUIT 6" ABOVE CEILING SPACE. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.
W	**WIRELESS ACCESS POINT (CEILING MOUNTED)** - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 3/4"C. FOR USE IN PULLING LOW VOLTAGE WIRING. EXTENDED 6" INTO NEAREST ACCESSIBLE CEILING. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.
S	**SPEAKER (CEILING MOUNTED)** - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 3/4"C, FOR USE IN PULLING LOW VOLTAGE WIRING, EXTENDED 6" INTO NEAREST ACCESSIBLE CEILING. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.
C	**CAMERA (CEILING MOUNTED)** - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 3/4"C, FOR USE IN PULLING LOW VOLTAGE WIRING, EXTENDED 6" INTO NEAREST ACCESSIBLE CEILING. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.
FOR SUSPENDED CEILINGS	FURNISH AND INSTALL COMMERCIAL ELECTRIC 21.5 CU. IN. SUSPENDED CEILING BRACE ASSEMBLY, OR APPROVED EQUIVALENT, TO SUPPORT THE DEVICE SPECIFIED. (APPLICABLE TO ALL DATA DEVICES)
S	**SPEAKER (EXTERIOR FACADE MOUNTED)** - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 3/4"C. FOR USE IN PULLING LOW VOLTAGE WIRING, EXTENDED 6" INTO NEAREST INTERIOR ACCESSIBLE CEILING. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.
C	**CAMERA (EXTERIOR FACADE MOUNTED)** - PROVIDE LOW VOLTAGE OUTLET BOX. PROVIDE 3/4"C, FOR USE IN PULLING LOW VOLTAGE WIRING, EXTENDED 6" INTO NEAREST INTERIOR ACCESSIBLE CEILING. PROVIDE PULL STRING AND BUSHING AT CONDUIT END.

LINE TYPE

THROUGHOUT THE DRAWINGS DIFFERENT LINOTYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED AND TO BE INCLUDED AS PART OF NEW WORK. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING (IF) SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, ETC.

EXISTING — — — — DEMOLITION ——— PROPOSED

GENERAL NOTES:
NOT ALL SYMBOLS/ABBREVIATIONS ON THIS DRAWING WILL BE USED ON THIS PROJECT.

1. REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL GENERAL & KEY NOTES.
2. SYMBOL SIZE DOES NOT IMPLY EQUIPMENT SIZE, UON.
3. MOUNTING HEIGHT INDICATED IN DETAIL AND ON DRAWINGS SHALL BE THE DISTANCE MEASURED FROM THE CENTER OR OPERATIONAL PORTION OF DEVICE TO THE FINISHED FLOOR, UON.

LIGHTING FIXTURE SCHEDULE

FIXTURE TAG	MAKE	MODEL	DESCRIPTION	VOLTAGE	WATTAGE	LUMENS	COLOR TEMP.	CRI
A	ZUMA LIGHTING	VIC-75W-LE-UNV-3K-T3-RPA-BK-7PR-SP20-R24	TYPE 3 POLE LIGHT	120-277V	76	13,013 lm	3000 K	70
C	ZUMA LIGHTING	VIC-75W-LE-UNV-3K-T4-RPA-BK-7PR-SP20-R24	TWIN TYPE 4 POLE LIGHT	120-277V	75	13,168 lm	3000 K	70
D	AMERLUX, LLC	DC214FC-3-30-T5-530M-BLK-7P-R24	TYPE 5 POLE LIGHT	120-277V	42	4,724 lm	3000 K	70
L1	LITHONIA LIGHTING	CPX-2X4-4000LM-80CRI-35K-SWL-MIN10-MVOLT-NLTAIR2-APDT	2' x 4' LED	120-277V	37	4,818 lm	3500 K	80
L1EM	LITHONIA LIGHTING	CPX-2X4-4000LM-80CRI-35K-SWL-MIN10-MVOLT-E10W-NLTAIR2-APDT	2' x 4' LED	120-277V	37	4,818 lm	3500 K	80
L2EM	GOTHAM ARCHITECTURAL LIGHTING	IVO6-D-25LM-35K-80CRI-WD-MIN10-MVOLT-NLTAIR2-E10WR-NCH-WL-SH-WMRS-WMR-F	6" DOWNLIGHT LED (SHOWER)	120-277V	21	2,575 lm	3500 K	80
L3	LITHONIA LIGHTING	CLX-L48-4000LM-SEF-FDL-MVOLT-EZ1-35K-80CRI-CS93W-NLTAIR2 RES7PDT-WH	4' LINEAR LED	120-277V	26	3,844 lm	3500 K	80
L3EM	LITHONIA LIGHTING	CLX-L48-4000LM-SEF-FDL-WD-MVOLT-GZ10-35K-80CRI-E10W-CS93W-NLTAIR2 RIO-WH	4' LINEAR LED	120-277V	26	3,844 lm	3500 K	80
L4	LUMENWERX	GLBP-16IN-IRO-SW-80CRI-2300LM-35K-UNV-RD1-1C-FTMW-DMRM-FTMB-BPC##IN	16" GLOBE LED	120-277V	28	2,300 lm	3500 K	80
L4EM	LUMENWERX	GLBP-16IN-IRO-SW-80CRI-2300LM-35K-UNV-RD1-EB-1C-FTMW-DMRM-FTMB-BPC##IN	16" GLOBE LED	120-277V	28	2,300 lm	3500 K	80
L5	GOTHAM ARCHITECTURAL LIGHTING	IVO6-D-20LM-35K-80CRI-WD-MIN10-MVOLT-ZT-NCH-WL-P-AR-LD-F	6" DOWNLIGHT LED (WET)	120-277V	21	1,841 lm	3500 K	80
L5EM	GOTHAM ARCHITECTURAL LIGHTING	IVO6-D-20LM-35K-80CRI-WD-MIN10-MVOLT-ZT-E10WR-NCH-WL-P-AR-LD-F	6" DOWNLIGHT LED (WET)	120-277V	21	1,841 lm	3500 K	80
L6EM	LITHONIA LIGHTING	WDGE2 LED-P2-35K-80CRI-VF-MVOLT-SRM-E20WC-NLTAIR2 PIR-DBLXD	ABOVE DOOR WALL PACK	120-277V	18	2,015 lm	3500 K	80
L7A	LUX DYNAMICS	HIGH-4-835-U10-WP-2Pxx-3/XX-NLTAIR2-WB-GYM	4' LINEAR LED (GYMASIUM)	120-277V	107	12,012 lm	3500 K	80
L7AEM	LUX DYNAMICS	HIGH-4-835-U10-WP-2Pxx-3/XX-NLTAIREM2-WB-GYM	4' LINEAR LED (GYMASIUM)	120-277V	107	12,012 lm	3500 K	80
L7B	LUX DYNAMICS	HIGH-4-10lm-835-U10-WP-2Pxx-3/XX-NLTAIR2-WB-GYM	4' LINEAR LED (WRESTLING)	120-277V	62	7,527 lm	3500 K	80
L7BEM	LUX DYNAMICS	HIGH-4-10lm-835-U10-WP-2Pxx-3/XX-NLTAIREM2-WB-GYM	4' LINEAR LED (WRESTLING)	120-277V	62	7,527 lm	3500 K	80
L9	WAC ARCHITECTURAL	DS-WD05-F-835-B-BK	INDIRECT-DIRECT CYLINDRICAL WALL SCONCE	120-277V	50	4,890 lm	3500 K	80
X1	LITHONIA LIGHTING	LQM-S-W-RG-MVOLT-EL-SD	WALL MOUNTED EXIT SIGN	120-277V	5	-	-	-

LIGHTING FIXTURE SCHEDULE NOTES:

1. CONTRACTOR SHALL COORDINATE FINAL COLORS, FINISHES, & MOUNTING OPTIONS (INCLUDING POWER CORD LENGTHS WHERE APPLICABLE) FOR ALL LIGHTING FIXTURES WITH ARCHITECT, PRIOR TO PURCHASE.
2. CONTRACTOR SHALL PROVIDE NEW TYPE **A**, **C**, & **D** LIGHTING FIXTURES WITH INDICATED POLES. REFER TO ELECTRICAL SITE PLAN (SHEET E3.01) FOR PROPOSED LOCATIONS OF NEW TYPE **A**, **C**, & **E** LIGHTING FIXTURES & ASSOCIATED POLE SPECIFICATIONS FOR EACH TYPE. COORDINATE FINAL LIGHTING FIXTURE POLE FINISHES WITH ARCHITECT, PRIOR TO PURCHASE.
3. CONTRACTOR SHALL PROVIDE ALL NEW TYPE **A**, **C**, & **D** LIGHTING FIXTURES WITH NLIGHT AIR RTLN TWIST-TO-LOCK NODE (MODEL #**RTLN-MVOLT-DSNV-G2**).
4. CONTRACTOR SHALL PROVIDE EACH L7A, L7AEM, L7B, & L7BEM LIGHTING FIXTURE WITH FACTORY INSTALLED NLIGHT AIR RSBOR FIXTURE MOUNT SENSOR (FOR 'L7A' FIXTURES: MODEL #**RSBOR-6-WH-G2** / FOR L7AEM FIXTURES: MODEL #**RSBOR-6-EM-WH-G2** / FOR 'L7B' FIXTURES: MODEL #**RSBOR-10-WH-G2** / FOR L7BEM FIXTURES: MODEL #**RSBOR-10-EM-WH-G2**). COORDINATE EXACT REQUIREMENTS (INCLUDING NECESSARY 'BODY/BRACKET' OF 'RSBOR' DEVICES) WITH LIGHTING CONTROL SYSTEM VENDOR & LIGHTING FIXTURE MANUFACTURER, PRIOR TO PURCHASE.

LIGHTING CONTROL SCHEDULE

SYMBOL	BASIS OF DESIGN MAKE	BASIS OF DESIGN MODEL	DESCRIPTION	SENSOR	VOLT.	NOTE
$	GENERIC	GENERIC	LINE VOLTAGE SNAP SWITCH	NONE	120V/ 277V	-
$K	LEGRAND	1250L	LOW VOLTAGE KEY SWITCH	NONE	LOW VOLT.	4, 6
$M	NLIGHT	RPODLA-MVOLT-WH-G2	WIRELESS CONTROL (LINE VOLTAGE POWERED) MOMENTARY CONTACT SWITCH	NONE	120V/ 277V	5, 6
$D	NLIGHT	RPODLA-DX-MVOLT-WH-G2	WIRELESS CONTROL (LINE VOLTAGE POWERED) DIMMING SWITCH	NONE	120V/ 277V	6
OS	NLIGHT	RCMS-PDT-9-G2	CEILING MOUNTED WIRELESS CONTROL (LOW VOLTAGE POWERED) OCCUPANCY SENSOR & PHOTOSENSOR	PIR/MICROPHONICS & DAY-LIGHT	LOW VOLT.	3
PC	NLIGHT	RSBOR-10-WH-G2	OUTDOOR PHOTOCELL	PIR & DAY-LIGHT	LOW VOLT.	7
RC	NLIGHT	RPP20-D 24V-EFP-G2	LINE VOLTAGE DIMMING POWER PACK / ROOM CONTROLLER	NONE	120V/ 277V	1, 2
ZC	NLIGHT	NECY-MVOLT-BAC-ENC-GFXK	IP / MASTER CONTROLLER & TIME CLOCK	NONE	120V/ 277V	1, 2

LIGHTING CONTROL SCHEDULE NOTES:

1. PROVIDE ROOM CONTROLLER(S)/POWER PACK(S)/RELAY PACK(S)/ZONE CONTROLLER(S)/EMERGENCY SHUNT RELAY(S) WITHIN ACCESSIBLE LOCATION. WHEN IT IS NOT POSSIBLE TO MOUNT ROOM CONTROLLERS ABOVE FINISHED CEILING IN AN ACCESSIBLE LOCATION, PROVIDE ROOM CONTROLLERS IN NEAREST ELECTRICAL ROOM STORAGE ROOM, OR JANITOR'S CLOSET. FIELD COORDINATE FINAL MOUNTING LOCATION WITH OWNER AND ARCHITECT.
2. ROOM CONTROLLER(S)/POWER PACK(S)/RELAY PACK(S)/ZONE CONTROLLER(S)/EMERGENCY SHUNT RELAY(S) WHERE SHOWN ARE DIAGRAMMATIC FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH LIGHTING CONTROL SYSTEM VENDOR AND PROVIDE QUANTITY & TYPE NECESSARY FOR A FULLY FUNCTIONAL, CODE-COMPLIANT INSTALLATION; ENSURE ALL SWITCH ZONES SHOWN ON THE DRAWINGS ARE PROVIDED. PROVIDE WITH **"ER" (UL924 EMERGENCY OPERATION, VIA POWER SENSE LEADS)** OR **"EM" (UL924 EMERGENCY OPERATION, VIA SEPARATE NORMAL POWER SENSING DEVICE)** EMERGENCY OPTION AS NECESSARY; UTILIZE **"EM"** OPTION UNLESS REQUIRED TO UTILIZE **"ER"** OPTION FOR FUNCTIONALITY.
3. SENSOR SHALL BE PROGRAMMED FOR "AUTOMATIC-ON" OPERATION.
4. PROVIDE WITH NLIGHT AIR '**RSI SYSTEM INPUT DEVICE**' (MODEL #: '**RSI SERIES**') LOCATED AT FIELD COORDINATED LOCATION ABOVE ACCESSIBLE CEILING. CONNECT KEY SWITCH TO '**RSI SYSTEM INPUT DEVICE**' WITH NEW 24VDC POWER WIRING, & WIRELESSLY CONNECT '**RSI SYSTEM INPUT DEVICE**' TO NLIGHT AIR SYSTEM / ASSOCIATED FIXTURES TO BE CONTROLLED.
5. WHERE SWITCH IS DESIGNATED "2-POLE" ON ELECTRICAL 1ST FLOOR LIGHTING PLAN (SHEET E5.01), PROVIDE **"2P" (2 POLE)** POLES & SCENES OPTION FOR DESIGNATED SWITCH.
6. CONTRACTOR SHALL COORDINATE FINAL DEVICE & WALL / FACE PLATE COLORS FOR ALL LIGHTING SWITCHES WITH ARCHITECT, PRIOR TO PURCHASE.
7. COORDINATE EXACT REQUIREMENTS (INCLUDING NECESSARY 'BODY/BRACKET' OF 'RSBOR' DEVICES) WITH LIGHTING CONTROL SYSTEM VENDOR, PRIOR TO PURCHASE.
8. WHEN USED, SMALL CASE LETTERS, (I.E.: 'a', 'b', 'c', etc.) DENOTES SWITCHING CONTROL (REFER TO FIXTURES ON PLAN). IF NOT USED, THE COMPONENT CONTROLS ALL FIXTURES IN THE SPACE. THIS NOTE APPLIES TO ALL ITEMS WITHIN SCHEDULE.
9. PROVIDE ANY LOW VOLTAGE WIRING BETWEEN LIGHTING CONTROL COMPONENTS AS REQUIRED. COORDINATE EXACT ROUTING IN FIELD. THIS NOTE APPLIES TO ALL ITEMS WITHIN SCHEDULE.
10. REFER TO ELECTRICAL LIGHTING CONTROL WIRING & CONNECTION DIAGRAMS (SHEET E5.52) FOR TYPICAL LIGHTING CONTROL WIRING DIAGRAMS, ISSUED FOR REFERENCE ONLY. REFER TO MOST CURRENT SET OF MANUFACTURER'S INSTALLATION INSTRUCTIONS, GUIDELINES, & WIRING DIAGRAMS FOR MORE EXACT INFORMATION & REQUIREMENTS. THIS NOTE APPLIES TO ALL ITEMS WITHIN SCHEDULE.

ELECTRICAL GROUNDING REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE A GROUNDING CONDUCTOR FOR ALL BRANCH FEEDERS AND CIRCUITS IN ACCORDANCE WITH THE FOLLOWING CHART:

RATING OR SETTING OF AUTOMATIC OVERCURRENT DEVICE IN CIRCUIT AHEAD OF EQUIPMENT, CONDUIT, ETC., NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL) COPPER	SIZE (AWG OR KCMIL) ALUMINUM OR COPPER-CLAD ALUMINUM*	RATING OR SETTING OF AUTOMATIC OVERCURRENT DEVICE IN CIRCUIT AHEAD OF EQUIPMENT, CONDUIT, ETC., NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL) COPPER	SIZE (AWG OR KCMIL) ALUMINUM OR COPPER-CLAD ALUMINUM*	RATING OR SETTING OF AUTOMATIC OVERCURRENT DEVICE IN CIRCUIT AHEAD OF EQUIPMENT, CONDUIT, ETC., NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL) COPPER	SIZE (AWG OR KCMIL) ALUMINUM OR COPPER-CLAD ALUMINUM*
15	14	12	300	4	2	1600	4/0	350
20	12	10	400	3	1	2000	250	400
30	10	8	500	2	1/0	2500	350	600
40	10	8	600	1	2/0	3000	400	600
60	10	8	800	1/0	3/0	4000	500	800
100	8	6	1000	2/0	4/0	5000	700	1200
200	6	4	1200	3/0	250	6000	800	1200

NOTE: WHERE NECESSARY TO COMPLY WITH NEC 250.4(A)(5) OR (B)(4), THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED LARGER THAN GIVEN IN THE TABLE.
WHERE UNGROUNDED CONDUCTORS ARE INCREASED IN SIZE, EQUIPMENT GROUNDING CONDUCTORS, WHERE INSTALLED, SHALL BE INCREASED IN SIZE PROPORTIONATELY ACCORDING TO THE CIRCULAR MIL AREA OF THE UNGROUNDED CONDUCTORS.
*SEE INSTALLATION RESTRICTION IN NEC 250.120.

ABBREVIATIONS

@	AT	ILL	ILLUMINATION
A	AMPERE	IMC	INTERMEDIATE METAL CONDUIT
AC	ARMORED CABLE	INV	INVERT
AMP	AMPERE	JB	JUNCTION BOX
ABV	ABOVE	JUNC	JUNCTION
AF	AMP FRAME	KVA	KILOVOLT-AMPERE
AFC	ABOVE FINISHED CEILING	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	KWH	KILOWATT-HOUR
AFG	ABOVE FINISHED GRADE	LA	LIGHTNING SURGE ARRESTER
AIC	AMPERE INTERRUPTING CAPACITY	LCP	LIGHTING CONTROL PANEL
AL	ALUMINUM	LIM	LINE ISOLATION MONITOR
ALT	ALTERNATE	LO	LUGS ONLY
AM	AMMETER	LS	LIMIT SWITCH
ANNUN	ANNUNCIATOR	LT	LIGHT
ANT	ANTENNA	LTG	LIGHTING
ARCH	ARCHITECT	LV	LOW VOLTAGE
AS	AMMETER SWITCH	M	MAIN
AT	AMP TRIP	MAX	MAXIMUM
ATC	AUTOMATIC TEMPERATURE CONTROL	MC	MECHANICAL CONTRACTOR
ATS	AUTOMATIC TRANSFER SWITCH	MC	METAL CLAD CABLE
AUX	AUXILIARY	MCB	MAIN CIRCUIT BREAKER
BIL	BASIC IMPULSE LEVEL	MCC	MOTOR CONTROL CENTER
BKBD	BACKBOARD	MCP	MOTOR CIRCUIT PROTECTOR
BKR	BREAKER	ME	MODIFY EXISTING
BMS	BUILDING MANAGEMENT SYSTEM	MFR	MANUFACTURER
C	CONDUIT	MIN	MINIMUM
CDT	CONDUIT	MO	MECHANICALLY OPERATED
CAB	CABINET	MLO	MAIN LUGS ONLY
C/B	CIRCUIT BREAKER	MTD	MOUNTED
CBL	CABLE	MV	MEDIUM VOLTAGE
CC	CASEWORK CONTRACTOR	N	NEUTRAL
CKT	CIRCUIT	NC	NORMALLY CLOSED
CLG	CEILING	NIC	NOT IN CONTRACT
CNBD	COULD NOT BE DETERMINED	NO	NORMALLY OPEN
CONN	CONNECTION	NTS	NOT TO SCALE
CONST	CONSTRUCTION	OC	ON CENTER
CONT	CONTINUOUS	OCB	OIL CIRCUIT BREAKER
CONTR	CONTRACTOR	OCP	OVERCURRENT PROTECTION
CPT	CONTROL POWER TRANSFORMER	OD	OUTSIDE DIMENSION
CT	CURRENT TRANSFORMER	P	POLE
CU	COPPER	PB	PULL BOX
DEMO	DEMOLITION	PC	PLUMBING CONTRACTOR
DC	DIRECT CURRENT	PF	POWER FACTOR
DIA	DIAMETER	PH	PHASE
DIC	DICTATION	ϕ	PHASE
DISC	DISCONNECT	PL	PILOT LIGHT
DIST	DISTRIBUTION	PNL	PANEL
DWG	DRAWING	PRI	PRIMARY
DP	DISTRIBUTION PANEL	PS	PULL STATION
E	EMERGENCY	PSI	POUNDS PER SQUARE INCH
EA	EACH	PT	POTENTIAL TRANSFORMER
EC	ELECTRICAL CONTRACTOR	PWR	POWER
EDP	ELECTRONIC DATA PROCESSING	RCVR	RECEIVER
EGC	EQUIPMENT GROUNDING CONDUCTOR	RE	REMOVE EXISTING
ELEC	ELECTRICAL	REQ	REQUIRED
ELEV	ELEVATOR	RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING	SEC	SECONDARY
ENCL	ENCLOSURE	SLD	SINGLE LINE DIAGRAM
EO	ELECTRICALLY OPERATED	SLV	SLEEVE
ETR	EXISTING TO REMAIN	SPD	SURGE PROTECTIVE DEVICE
ER	EXISTING RELOCATED	SPEC	SPECIFICATION
EQUIP	EQUIPMENT	SS	SUBSTATION
EX/(E)	EXISTING TO REMAIN	ST	SHUNT TRIP
F	FUSED(D)	STD	STANDARD
FA	FIRE ALARM	STR	STARTER
FAA	FIRE ALARM ANNUNCIATOR	SW	SWITCH
FACP	FIRE ALARM CONTROL PANEL	SWBD	SWITCHBOARD
FBO	FURNISHED BY OWNER	SWGR	SWITCHGEAR
FD	FEEDER DUCT	SYS	SYSTEM
FDR	FEEDER	TEL	TELEPHONE
FHC	FIRE HOSE CABINET	TEMP	TEMPERATURE
FI	FILM ILLUMINATOR	TERM	TERMINAL
FL	FLOOR	TP	TRAP PRIMER
FLUOR	FLUORESCENT	TYP	TYPICAL
FS	FLOW SWITCH	U/F	UNFUSED
FUT	FUTURE	UL	UNDERWRITERS' LABORATORY
EGC	EQUIPMENT GROUND CONDUCTOR	UON	UNLESS OTHERWISE NOTED
GA	GAUGE	UV	UNDER VOLTAGE
GC	GENERAL CONTRACTOR	V	VOLT
GFI	GROUND FAULT INTERRUPTER	VERT	VERTICAL
GFP	GROUND FAULT PROTECTION	VM	VOLTMETER
GFSC	GROUND FAULT SENSING RELAY	VS	VOLTMETER SWITCH
GND	GROUND	W	WIRE
GSC	SYSTEM CIRCUIT GROUND CONDUCTOR	W	WATT
HID	HIGH INTENSITY DISCHARGE	WG	WIRE GUARD
HOA	HAND-OFF-AUTOMATIC	WP	WEATHERPROOF
HORIZ	HORIZONTAL	X	EXISTING
HP	HORSEPOWER	XDR	TRANSDUCER
HT	HEIGHT	XFMR	TRANSFORMER
HV	HIGH VOLTAGE	XFR	TRANSFER
HVAC	HEATING, VENTILATING, AIR CONDITIONING	XMTR	TRANSMITTER
ID	INSIDE DIMENSION	XPDR	TRANSPONDER

RACEWAY APPLICATION TABLE

RACEWAY TYPE	APPLICATION
Rigid Steel Conduit	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
I.M.C.	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
E.M.T	Use in every instance except where another material is specified.
Flexible Metal Clad Cables	Lighting and receptacle branch circuits concealed in hollow spaces of building. May not be used in corridors, places of assembly, or where prohibited by Code.
Type MC Flexible Steel	Use in dry areas for connections to lighting fixtures in hung ceilings, connections to equipment installed in removable panels of hung ceilings. At all transformer or equipment raceway connections where sound and vibration isolation is required.
Liquid-Tight Flexible Conduit	Use in areas subject to moisture where flexible steel is unacceptable, at connections to all motors, and all raised floor areas.
Non-Metallic Conduit	1. Schedule 40 - Where raceways are in slab in below grade levels, for raceway duct banks. 2. Schedule 80 - For underground raceways outside of building which are not encased in concrete. Also for secondary conductors of cold cathode lighting systems.
Wireways and Aux Gutters	Where indicated on the Drawings and as otherwise specifically required.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27997500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

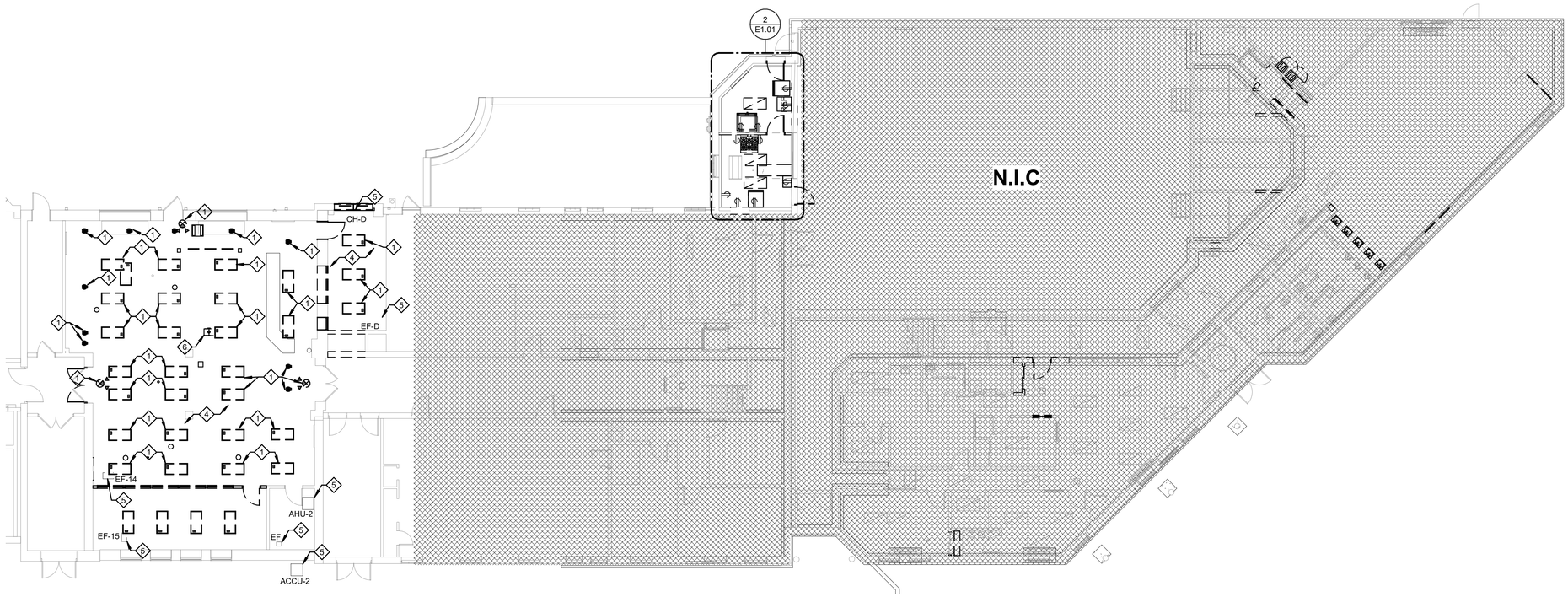
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL LEGEND
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

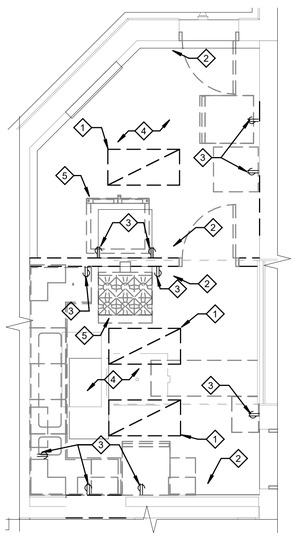
Job No. 2.20277.25.14
File No.

E0.01

9/3/2026 10:20:59 AM



1 E1.01 FIRST FLOOR DEMOLITION PLAN
3/32" = 1'-0"



2 E1.01 KITCHEN DEMOLITION BLOW UP PLAN
1/4" = 1'-0"

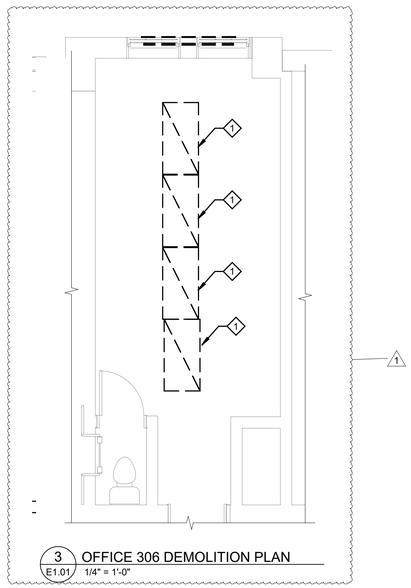
DEMOLITION KEY NOTES LEGEND

SYMBOL INDICATES DEMO KEY NOTE

KEY #	DESCRIPTION
1	REMOVE EXISTING LIGHT FIXTURE AND ALL ASSOCIATED CONTROLS. DISCONNECT FROM WIRING AND REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
2	EXISTING LIGHTING CONTROL DEVICE TO BE REMOVED. DISCONNECT AND REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
3	REMOVE EXISTING RECEPTACLE. CONTRACTOR SHAL BE RESPONSIBLE FOR REMOVAL OF ASSOCIATED ELECTRICAL ITEMS AS REQUIRED. REMOVE EXISTING CONDUCTORS AND CONDUITS BACK TO SOURCE. IF NO OTHER ITEM FED BY BREAKER, THE BREAKER SHALL BE TURNED OFF AND LABED AS SPARE IN A REVISED PRINTED PANEL DIRECTORY.
4	ALL EXISTING FIRE ALARM NOTIFICATION AND INITIATION APPLIANCES WITHIN DEMOLITION AREA (INCLUDING THOSE NOT SHOWN ON PLAN) SHALL BE REMOVED FROM WALLS & CELINGS, COILED UP, AND TEMPORARILY SUPPORTED IN PLACE; REMAINING ACTIVE THROUGHOUT DEMILITION UNTIL THEY ARE REPLACED AS PART OF THE NEW CONSTRUCTION INSTALLATION. MODIFY AND RECONFIGURE EXISTING FIRE ALARM CIRCUIT WIRING AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY.
5	REMOVE EXISTING PIECE OF MECHANICAL EQUIPMENT. REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE. COORDINATE REMOVAL OF EQUIPMENT WITH MECHANICAL DEMOLITION.
6	REMOVE EXISTING PROJECTOR. DISCONNECT AND REMOVE AND ALL ASSOCIATED MOUNTING HARDWARE, CONDUTCORS AND CONDUIT AND REMOVE BACK TO SOURCE.

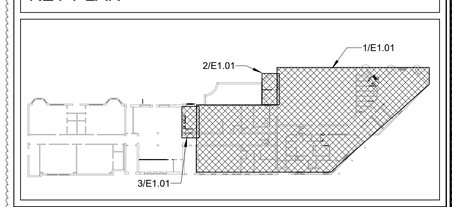
DEMOLITION GENERAL NOTES

1. FOR ALL ITEMS DESIGNATED TO BE REMOVED. REMOVE THE BRANCH CIRCUIT, ASSOCIATED OBSOLETE WIRING, SUPPORTS, AND CONTROLS FOR THE OBSOLETE ITEMS UNLESS NOTED OTHERWISE.
2. PATCH EXISTING GENERAL CONSTRUCTION TO REMAIN TO MATCH THE EXISTING ADJACENT CONSTRUCTION FOR ALL ITEMS DESIGNATED TO BE REMOVED.
3. REMOVE ALL ITEMS FROM THE PREMISES DAILY AND KEEP CONSTRUCTION SITE BROOM SWEPT.
4. UTILIZE EXISTING ELECTRICAL POWER FOR CONSTRUCTION POWER. COORDINATE DEMOLITION TO PROVIDE GFCI RECEPTACLE EVERY 400 SQUARE FEET DURING CONSTRUCTION. IF CONSTRUCTION POWER CAN NOT BE COORDINATED WITH DEMOLITION, PROVIDE TEMPORARY POWER FOR CONSTRUCTION ACTIVITIES.
5. PROVIDE TEMPORARY LIGHTING THROUGHOUT CONSTRUCTION.
6. ENSURE DEMOLITION DOES NOT AFFECT ADJACENT SPACES. THE ADJACENT SPACES WILL REMAIN OCCUPIED THROUGHOUT CONSTRUCTION.



3 E1.01 OFFICE 306 DEMOLITION PLAN
1/4" = 1'-0"

KEY PLAN



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	07/17/26
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title REGISTERED ARCHITECT License No. 21AI02276900

Date	Description
06/12/24	ADDED. #1

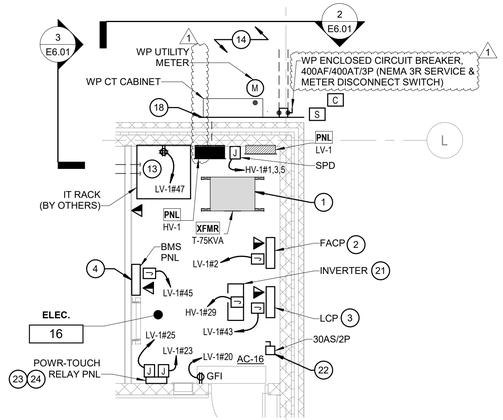
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ELECTRICAL DEMOLITION PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

E1.01

9/4/2026 1:24:02 PM



2 E2.01 ELECTRICAL 1ST FLOOR ENLARGE POWER PLAN - ELEC.
1/4" = 1'-0"

CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

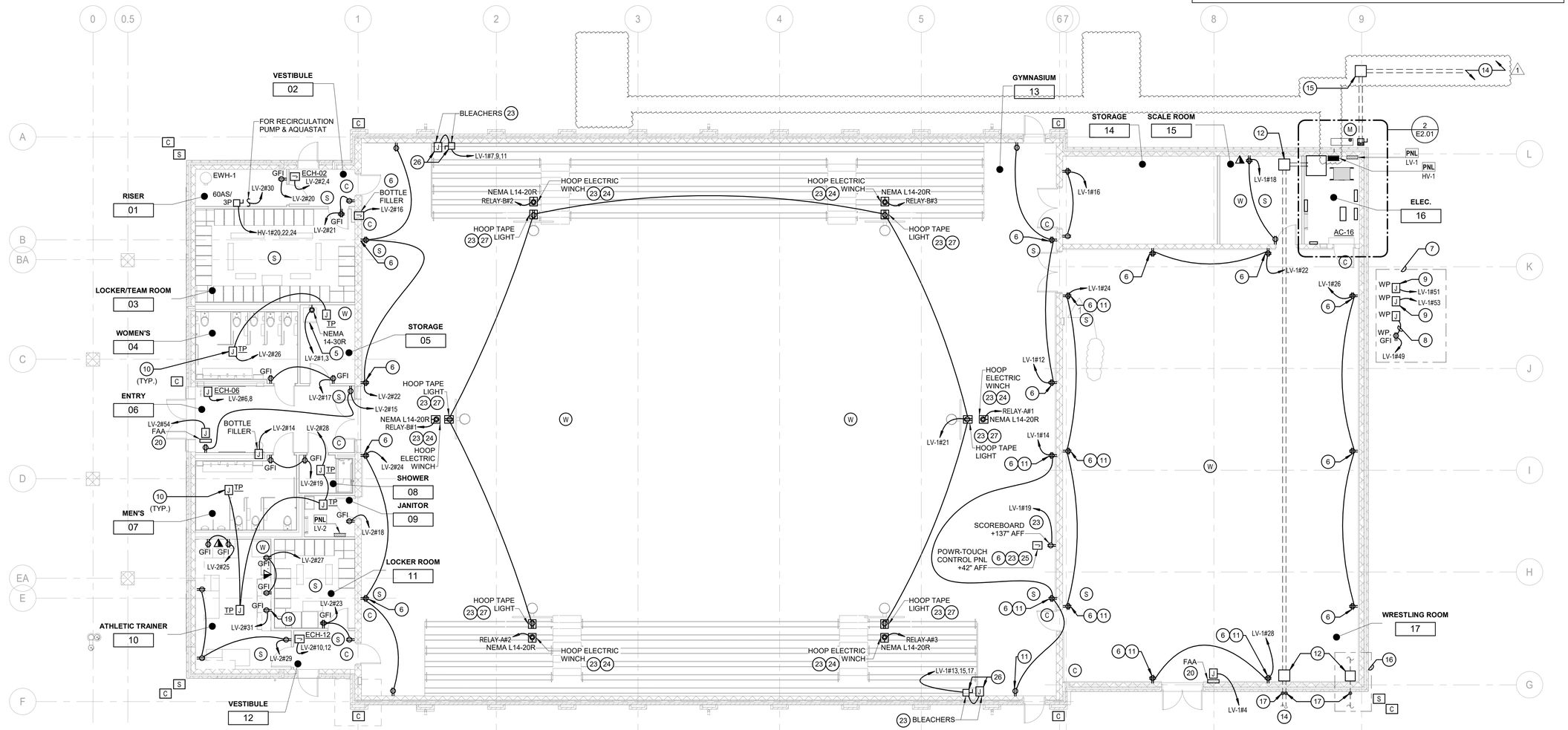
KEY #	DESCRIPTION
1	CONTRACTOR SHALL CEILING-MOUNT NEW TRANSFORMER. PROVIDE MOUNTING SUPPORTS & VIBRATION ISOLATION AS REQUIRED.
2	PROPOSED LOCATION OF NEW FIRE ALARM CONTROL PANEL. REFER TO FIRE ALARM DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
3	PROPOSED LOCATION OF NEW LIGHTING CONTROL PANEL. REFER TO ELECTRICAL LIGHTING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
4	PROPOSED LOCATION OF NEW BUILDING MANAGEMENT SYSTEM PANEL. COORDINATE FINAL LOCATION WITH FIELD CONDITIONS.
5	CONTRACTOR SHALL PROVIDE DRYER ELECTRIC CORD ACCESSORY (MODEL #: WX9X20; 4 PRONG, 6 FT.; NEMA 14-30P; OR EQUIVALENT AS APPROVED), & CONNECT TO DRYER. CORD & PLUG MANUFACTURER SHALL MATCH MANUFACTURER OF ASSOCIATED DRYER. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS & GUIDELINES.
6	CONTRACTOR SHALL COORDINATE WITH PAD MANUFACTURER TO ENSURE OPENINGS ARE PROVIDED WITHIN PADS TO ACCOMMODATE ACCESSIBLE INSTALLATION OF INDICATED OUTLET / EQUIPMENT AT WALL.
7	POWER CIRCUITING REQUIREMENTS FOR NEW EXTERIOR METER VAULT WITH: (2) SLAB HEATERS FOR HEATED ENCLOSURE & MAINTENANCE RECEPTACLE OUTLET. PROVIDE NEW POWER WIRING & CONDUIT, & TRENCH TO PROPOSED LOCATION. REFER TO CIVIL DRAWINGS & ELECTRICAL SITE PLAN (SHEET E3.01) FOR PROPOSED LOCATION, & ELECTRICAL TRENCHING DETAILS (SHEET E7.03) FOR FURTHER INFORMATION & REQUIREMENTS. CONTRACTOR SHALL BE PERMITTED TO PROVIDE (1) SET OF '2#3 + #3EGC + 4#4 + 2#4EGC IN 2"C' FOR TRENCHING PURPOSES.
8	CONTRACTOR SHALL SPLICE CONDUCTORS DOWN TO #12AWG FOR FINAL CONNECTIONS TO MAINTENANCE RECEPTACLE OUTLET.
9	CONTRACTOR SHALL SPLICE CONDUCTORS DOWN TO #10AWG FOR FINAL CONNECTIONS TO METER VAULT HEATER.
10	CONTRACTOR SHALL COORDINATE FINAL TRAP PRIMER LOCATION WITH FIELD CONDITIONS.
11	CONTRACTOR SHALL PROVIDE SPLICE BOX AT CEILING & SPLICE CONDUCTORS DOWN TO #8AWG FOR FINAL CONNECTIONS TO RECEPTACLE OUTLET. CONTRACTOR SHALL BE PERMITTED TO REDUCE WIRING SIZES FURTHER (MINIMUM SIZE #10AWG) ONLY AS NECESSARY TO LAND WIRING ON OUTLET TERMINALS. CONFIRM MAXIMUM WIRING SIZE THAT CAN BE LANDED ON OUTLET TERMINALS, PRIOR TO COMMENCEMENT OF WORK.
12	CONTRACTOR SHALL PROVIDE NEW PULL BOX, SIZED AS NECESSARY.
13	CONTRACTOR SHALL PROVIDE PROTECTIVE GROMMETS ON ENDS OF ALL OPEN CONDUITS.
14	REFER TO ELECTRICAL SITE PLAN (SHEET E3.01) FOR CONTINUATION OF POWER / DATA CONDUIT RACEWAY(S) OUTSIDE BUILDING STRUCTURE.
15	NEW HANDHOLE SHOWN FOR DESIGN INTENT ONLY. REFER TO ELECTRICAL SITE PLAN (SHEET E3.01) FOR FURTHER INFORMATION & REQUIREMENTS ASSOCIATED WITH NEW HANDHOLES AND BOXES TO BE PROVIDED BY CONTRACTOR FOR NEW EXTERIOR UNDERGROUND WIRING / CABLING.
16	FIRE ALARM CONDUIT RACEWAY FROM EXISTING HIGH SCHOOL MAIN BUILDING STRUCTURE, ENTERING NEW HIGH SCHOOL GYM STRUCTURE. REFER TO ELECTRICAL SITE PLAN (SHEET E3.01) & FIRE ALARM 1ST FLOOR PLAN (SHEET FA2.01) FOR FURTHER INFORMATION.
17	CONTRACTOR SHALL ROUTE CONDUIT RACEWAYS FROM TRENCH, RISE UP AT EXTERIOR BUILDING FACADE, & POKE INTO BUILDING AT MAXIMUM ALLOWABLE HEIGHT BENEATH WRESTLING ROOM CEILING. FIELD COORDINATE FINAL PENETRATION LOCATIONS & HEIGHTS.
18	CONTRACTOR SHALL PROVIDE EQUIPMENT SHOWN ON UNISTRUT MOUNTING SUPPORTS, REFER TO DETAIL 7/E7.01 FOR FURTHER INFORMATION & REQUIREMENTS.
19	CONTRACTOR SHALL COORDINATE FINAL RECEPTACLE NEMA TYPE & BRANCH CIRCUIT CHARACTERISTICS WITH ICE MACHINE MANUFACTURER'S INSTALLATION INSTRUCTION & GUIDELINES, PRIOR TO COMMENCEMENT OF WORK.
20	CONTRACTOR SHALL PROVIDE INDICATED NEW BRANCH CIRCUITS & POWER CONNECTIONS AT (1) OF THE (2) FIRE ALARM ANNUNCIATOR (FAA) PROPOSED LOCATIONS DESIGNATED BY THIS KEYNOTE; COORDINATE FINAL LOCATION WITH FIRE MARSHAL, PRIOR TO COMMENCEMENT OF WORK. REFER TO FIRE ALARM DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
21	PROPOSED LOCATION OF NEW EMERGENCY LIGHTING INVERTER. REFER TO ELECTRICAL LIGHTING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
22	INDOOR UNIT (AC-16) POWERED BY THE OUTDOOR UNIT (CU-16). CONTRACTOR SHALL PROVIDE 2#12 + #12EGC IN 3/4"C FROM THE OUTDOOR UNIT TO THE INDICATE DISCONNECT SWITCH & FROM THE DISCONNECT SWITCH TO THE INDOOR UNIT.
23	GYM EQUIPMENT AT THIS LOCATION TO BE PROVIDED BY OWNER; CONTRACTOR SHALL PROVIDE INDICATED ELECTRICAL INSTALLATION. COORDINATE FINAL LOCATIONS & MOUNTING HEIGHTS WITH OWNER, ARCHITECT, & ASSOCIATED EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS & GUIDELINES, PRIOR TO COMMENCEMENT OF WORK.
24	REFER TO RELAY PANEL CIRCUITING NOTES (THIS DWG) FOR FURTHER INFORMATION & REQUIREMENTS.
25	CONTRACTOR SHALL PROVIDE NECESSARY QUANTITY & TYPE OF POWER & COMMUNICATION WIRING WITHIN SEPARATE CONDUIT RACEWAYS (WIRING & CONDUIT SIZED AS NECESSARY), FROM THE POWR-TOUCH CONTROL PNL TO THE POWR-TOUCH RELAY PNL. COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS, SYSTEM VENDOR, & MANUFACTURER'S INSTALLATION INSTRUCTIONS & GUIDELINES, PRIOR TO COMMENCEMENT OF WORK.
26	CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AS INDICATED & CIRCUIT TO BLEACHER CONTROL BOX. PROVIDE WITH ALL NECESSARY JUNCTION BOXES, FIELD WIRING & CONDUIT REQUIRED FOR A FULLY FUNCTIONAL, CODE-COMPLIANT INSTALLATION OF BLEACHERS & ASSOCIATED MOTORS & CONTROLS. COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS, BLEACHER VENDOR, & MANUFACTURER'S INSTALLATION INSTRUCTIONS & GUIDELINES, PRIOR TO COMMENCEMENT OF WORK.
27	CONTRACTOR SHALL PROVIDE TYPE 'SOW' HARD SERVICE CORD CONSISTING OF 2#12 + #12EGC, LENGTHS SIZED AS NECESSARY, TO POWER HOOP TAPE LIGHT POWER SUPPLIES FROM ASSOCIATED NEMA 5-20R CEILING-MOUNTED OUTLETS. PROVIDE HOOP TAPE LIGHT POWER SUPPLY ENDS OF HARD SERVICE CORD WITH NEMA 5-20R CONNECTORS, & CEILING-MOUNTED OUTLET ENDS WITH NEMA 5-20P PLUG. COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS & PROVIDE A SECURE, FASTENED FLEXIBLE CORD INSTALLATION.

GENERAL 1ST FL POWER PLAN NOTES

1. ALL RACEWAYS, CONDUCTORS, & CABLES SHALL BE INSTALLED CONCEALED WITHIN FINISHED WALLS & CEILINGS; EXCEPT FOR CONDUIT RACEWAY RUNS REQUIRED TO BE MOUNTED ONTO OPEN CEILINGS. SURFACE-MOUNTED RACEWAY, INCLUDING CONDUIT, SHALL NOT BE PERMITTED TO RUN ON WALLS.
2. UNLESS OTHERWISE NOTED ON PLAN, RECEPTACLE MOUNTING HEIGHT SHALL BE 18" AFF.
3. ALL RECEPTACLES INSTALLED AS PART OF THIS PROJECT SHALL BE TAMPER-RESISTANT. SEE NEC SECTION 406.12.
4. REFER TO ELECTRICAL DETAILS (E7.00 SERIES SHEETS) FOR FURTHER INFORMATION & REQUIREMENTS.
5. PASS THROUGH GFCI DEVICES SHALL NOT BE PERMITTED.
6. CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATION OF ALL JUNCTION BOXES ASSOCIATED WITH SECURITY, INTERCOM, & TEL/DATA, & CLOCK SYSTEMS WITH CLIENT IT PERSONNEL & FIELD CONDITIONS, PRIOR TO COMMENCEMENT OF WORK. DEVICES SHALL BE WALL-MOUNTED OR CEILING-MOUNTED AS DIRECTED; PROVIDE BACKBOXES AND SUSPENDED CEILING BRACE ASSEMBLIES AS REQUIRED. PROVIDE ALL DEVICES WITH 3/4" EMPTY EMT CDT WITH PULL STRING RUN & EXTENDED TO 6" WITHIN ACCESSIBLE CEILING SPACE. PROVIDE PROTECTIVE GROMMETS ON ENDS OF ALL OPEN CONDUITS.
7. CONTRACTOR SHALL ENSURE ALL NEW ELECTRICAL EQUIPMENT IS PROVIDED WITH NEC CODE-REQUIRED WORKING SPACE & DEDICATED EQUIPMENT SPACE CLEARANCES.
8. CONTRACTOR SHALL PROVIDE MOUNTING SUPPORTS AS NECESSARY FOR ALL NEW ELECTRICAL EQUIPMENT; COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS.
9. CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY, SIZED AS NECESSARY, FOR ALL MECHANICAL / PLUMBING EQUIPMENT CONTROL WIRING / CABLE. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
10. WHERE MECHANICAL / PLUMBING EQUIPMENT IS INDICATED TO BE CONNECTED TO BMS: CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY, SIZED AS NECESSARY, FOR ALL ASSOCIATED BMS WIRING / CABLE. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
11. ALL NEW TRENCHED CONDUIT RACEWAY MINIMUM TRADE SIZE SHALL BE 1-1/2".

RELAY PANEL CIRCUITING NOTES

1. CONTRACTOR SHALL PROVIDE WIRING & CONDUIT FROM HOOP ELECTRIC WINCH 'L14-20R' OUTLETS TO POWR-TOUCH RELAY PANEL AS NOTED:
   - RELAY-A#1, RELAY-A#3, RELAY-B#2, & RELAY-B#3: (3)#6 + #6EGC IN 3/4"C.
   - RELAY-A#2 & RELAY-B#1: (3)#4 + #4EGC IN 3/4"C.
2. CONTRACTOR SHALL PROVIDE SPLICE BOXES ADJACENT TO OUTLETS & RELAY PANEL AS NECESSARY TO SPLICE WIRING TO SIZES THAT CAN BE LANDED ON ASSOCIATED TERMINALS. SPLICES SHALL BE MADE AS CLOSE AS POSSIBLE TO ASSOCIATED EQUIPMENT.
3. FOR WIRING REDUCED IN SIZE AS NECESSARY TO BE LANDED ON TERMINALS, ASSOCIATED CONDUIT SHALL BE PERMITTED TO BE REDUCED IN SIZE AS NECESSARY TO ACCOMMODATE EQUIPMENT / BOX KNOCKOUTS.
4. CONTRACTOR SHALL PROVIDE GROUNDING & BONDING IN ACCORDANCE WITH THE NEW JERSEY UCC ELECTRICAL SUBCODE.



1 E2.01 ELECTRICAL 1ST FLOOR POWER PLAN
1/8" = 1'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title: PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

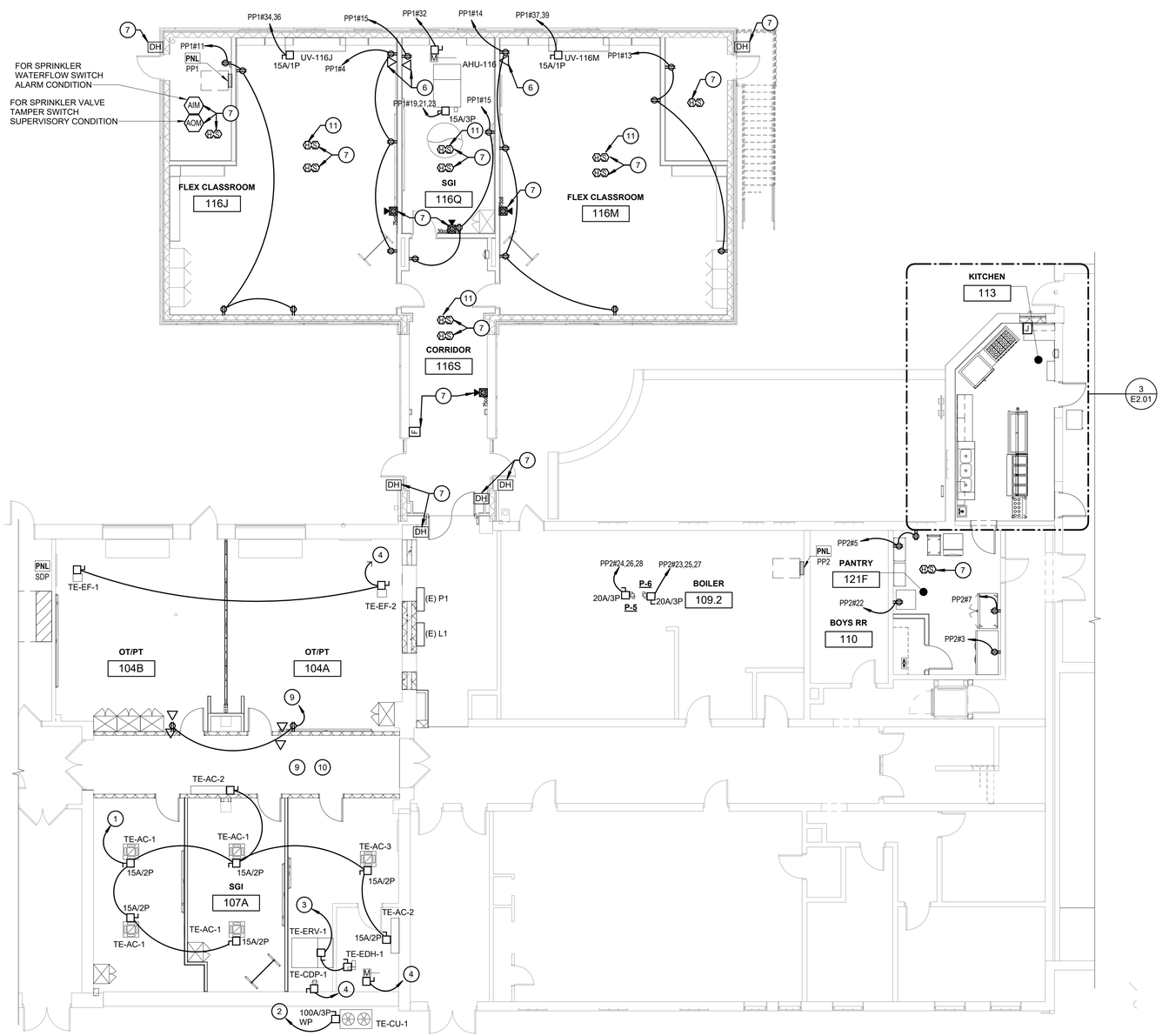
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL 1ST FLOOR POWER PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

E2.01

9/3/2026 10:21:01 AM

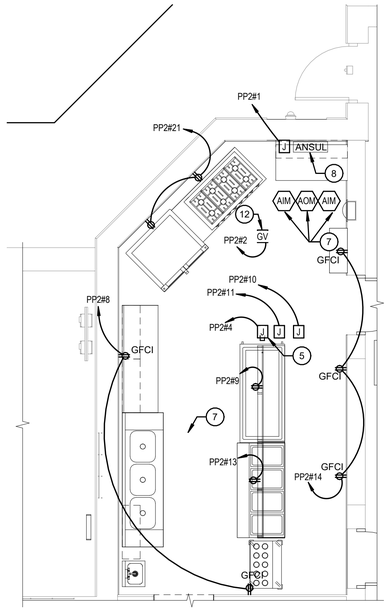


1 E2.01 ADDITION FIRST FLOOR PLAN
1/8" = 1'-0"

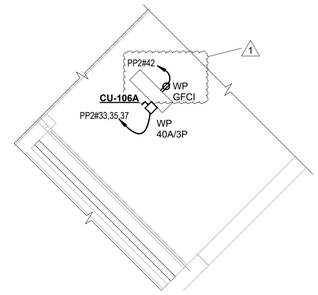
CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

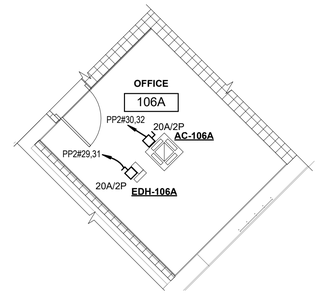
KEY #	DESCRIPTION
1	NEW TE-AC UNITS TO BE FED BY BREAKER SPACE LEFT BEHIND AFTER DEMOLITION OF ACU-2 IN PANEL P1. PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT TO NEW DEVICES, PROVIDING JUNCTION BOXES AS REQUIRED BY NEC. CONTRACTOR TO PROVIDE NEW 15A 2P BREAKER TO FEED NEW DEVICES.
2	NEW TE-CU-1 UNIT TO BE FED BY SPARE 100A 3P BREAKER IN MAIN DISTRIBUTION PANEL MDP1 LOCATED IN MAIN ELECTRICAL ROOM. CONTRACTOR TO PROVIDE (3) #4AWG, #8G IN 1-1/4"C. CONTRACTOR TO PROVIDE ALL JUNCTION BOXES REQUIRED TO MEET NEC REQUIREMENTS.
3	NEW DEVICES TE-ERV-1 AND TE-EDH-1 TO BE CONNECTED TO NEW 20A 2P BREAKER IN EXISTING PANEL P1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE JUNCTION BOXES AS REQUIRED BY NEC.
4	NEW CONDENSATE PUMP, MOTORIZED LOUVER AND EXHAUST FANS TO BE FED BY NEW 20A SINGLE POLE BREAKER IN PANEL P1. CONTRACTOR TO PROVIDE (2) #12AWG, #12G IN 3/4"C BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE ALL JUNCTION BOXES REQUIRED TO MEET NEC REQUIREMENTS.
5	NEW JUNCTION BOX TO POWER NEW POWER POLE. PROVIDE JUNCTION BOX ABOVE FINISHED CEILING.
6	NEW DATA RECEPTACLE. CONTRACTOR TO INSTALL BACK BOX AND EXTEND CONDUIT TO STUB UP ABOVE FINISHED CEILING. FINAL WIRING TO BE COMPLETED BY CLIENT.
7	NEW FIRE ALARM DEVICE. CONTRACTOR TO PROVIDE BACK BOX AND REQUIRED CONDUIT ONLY. FIRE ALARM DEVCIES WILL BE INSTALLED BY SEPERATE CONTRACTOR UNDER SEPEREATE SCOPE. CONTRACTOR TO PROVIDE EMPTY 3/4" CONDUIT AND TERMINATE ABOVE FINISHED CEILING ITH PLASTIC B
8	NEW ANSUL SYSTEM TO BE INSTALLED BY CONTRACTOR. SEE MECHANICAL PLANS FOR DETAILS. PREPARE TO BE CONNECTED TO NEW FIRE ALARM SYSTEM TO BE INSTALLED.
9	NEW RECEPTACLES TO BE FED BY NEW 20A SINGLE POLE BREAKER IN PANEL L1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12 G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL L1. CONTRACTOR TO PROVIDE JUCNTION BOXES AS REQUIRED BY NEC.
10	NEW DEVICES TE-ERV-1 AND TE-EDH-1 TO BE CONNECTED TO NEW 20A 2P BREAKER IN EXISTING PANEL P1. CONTRACTOR TO PROVIDE (2) #12 AWG, #12G IN 3/4" CONDUIT BETWEEN DEVICES AND PANEL P1. CONTRACTOR TO PROVIDE JUNCTION BOXES AS REQUIRED BY NEC.
11	NEW FIRE ALARM DEVICE TO BE PLACED ABOVE FINISHED CEILING
12	ELECTRICA GAS VALVE. REFER TO MECHANICAL DRAWING M6.07 FOR MORE DETAILS.



3 E2.01 KITCHEN BLOW UP PLAN
1/4" = 1'-0"



5 E2.01 OFFICE 106A ROOF PLAN
3/16" = 1'-0"



4 E2.01 OFFICE 106A POWER PLAN
3/16" = 1'-0"

ELECTRICAL POWER PLAN GENERAL NOTES

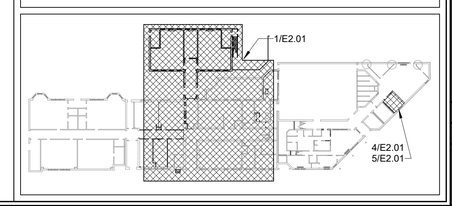
1. CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATION OF ALL JUNCTION BOXES ASSOCIATED WITH SECURITY, INTERCOM, AUDIO/VISUAL, AND CLOCK SYSTEMS. PROVIDE EMPTY CONDUIT WITH PULL STRING ABOVE FINISHED CEILING.
2. ALL RECEPTACLES INSTALLED AS A PART OF THIS PROJECT SHALL BE TAMPERPROOF. SEE NEC SECTION 406.12.
3. ROUTE CONDUIT AND BRANCH CIRCUITS ALONGSIDE REFRIGERANT PIPING WHERE POSSIBLE. WHERE POSSIBLE, RE-USE PENETRATIONS USED BY REFRIGERANT PIPING.
4. UNLESS OTHERWISE NOTED ON PLAN, RECEPTACLE MOUNTING HEIGHT SHALL BE 18" AFF.
5. THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NOT PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL UTILIZATION OR COMMUNICATIONS EQUIPMENT.
6. ALL RECEPTACLES WITHIN KITCHEN AREA SHALL BE GFCI RECEPTACLES OR GFCI PROTECTED AT THE BREAKER.

PROPOPSED FIRE ALARM SYMBOLS

Fire Alarm Notification Devices

SYMBOL	DESCRIPTION
DH	**120VAC MAGNETIC DOOR HOLDER** - PRIOR TO INSTALLATION, CONTRACTOR SHALL SURVEY CONDITIONS AND CONFIRM IF WALL OR FLOOR MOUNTED DEVICE IS MORE PRACTICAL. PROVIDE AND INSTALL UL LISTED BACKBOX AND JUNCTION BOX AS REQUIRED TO FACILITATE INSTALLATION IN EXTERNAL FIRE ALARM SCOPE
ANSUL	**ANSUL SYSTEM** - NEW ANSUL SYSTEM TO BE INSTALLED IN CONJUNCTION WITH NEW KITCHEN. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT SCHEDULING/PHASEING REQUIREMENTS WITH GENERAL & MECHANICAL CONTRACTOR.
	COMBINATION HORN/STROBE - "CD" - MINIMUM CANDELA RATING "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
	HORN ONLY - "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
	WALL MOUNTED STROBE ONLY - "CD" - MINIMUM CANDELA RATING
	CEILING MOUNTED STROBE ONLY - "CD" - MINIMUM CANDELA RATING

KEY PLAN



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	07/17/26
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title REGISTERED ARCHITECT License No. 21AI02276900

Date	Description
06/12/24	ADDED. #1

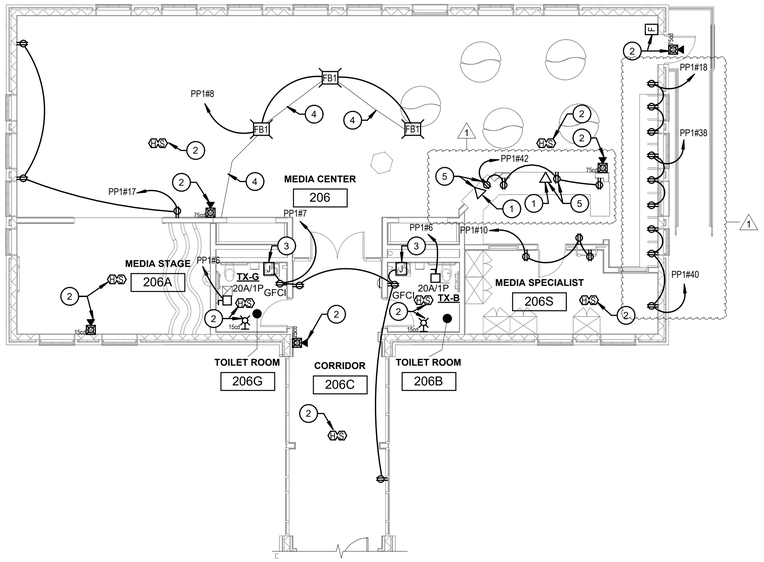
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ELECTRICAL POWER PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

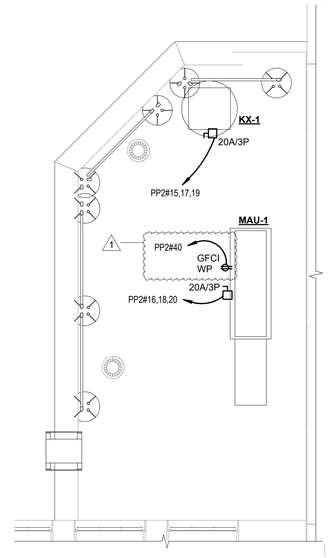
Job No. 2.20277.25.10
File No.

E2.01

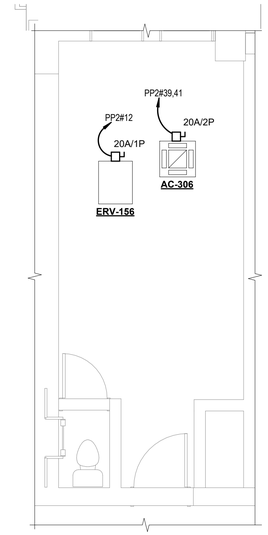
9/4/2026 1:24:17 PM



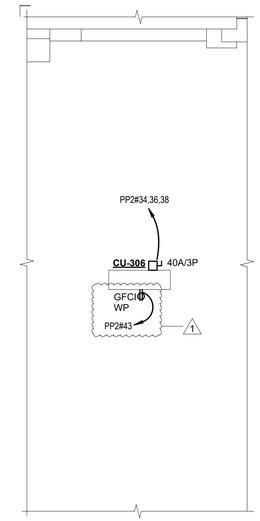
1 E2.02 ADDITION SECOND FLOOR POWER PLAN
1/8" = 1'-0"



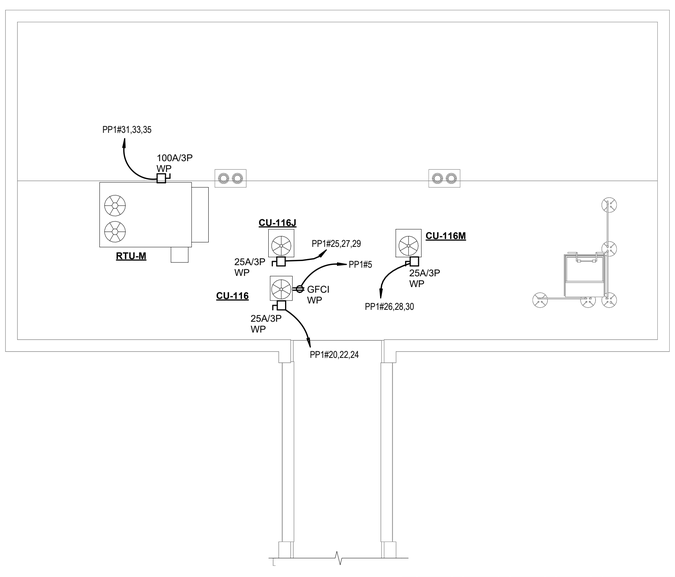
3 E2.02 KITCHEN ROOF PLAN
1/4" = 1'-0"



5 E2.02 OFFICE 306 POWER PLAN
1/4" = 1'-0"



4 E2.02 OFFICE 306 ROOF PLAN
1/4" = 1'-0"



2 E2.02 ADDITION ROOF PLAN
1/8" = 1'-0"

CONSTRUCTION KEY NOTES LEGEND

SYMBOL INDICATES CONST. KEY NOTE

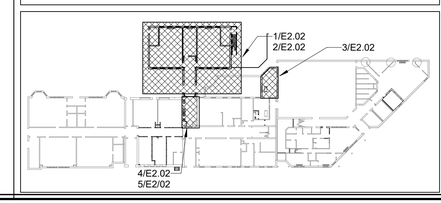
KEY #	DESCRIPTION
1	NEW DATA RECEPTACLE. CONTRACTOR TO INSTALL BACK BOX AND EXTEND CONDUIT TO STUB UP ABOVE FINISHED CEILING. FINAL WIRING TO BE COMPLETED BY CLIENT.
2	NEW FIRE ALARM DEVICE. CONTRACTOR TO PROVIDE BACK BOX AND REQUIRED CONDUIT ONLY. FIRE ALARM DEVCIES WILL BE INSTALLED BY SEPERATE CONTRACTOR UNDER SEPEREATE SCOPE. CONTRACTOR TO PROVIDE EMPTY 3/4" CONDUIT AND TERMINATE ABOVE FINISHED CEILING ITH PLASTIC B
3	POWER FOR HARDWIRED AUTOMATIC FAUCET. CONTRACTOR TO PROVIDE LOW VOLTAGE TRANSFORMER AS NEEDED AND FINALIZE ELECTRICAL CONNECTIONS AS REQUIRED BY MANUFACTURER.
4	PROPOSED CONDUIT ROUTING. CONTRACTOR TO EMBED CONDUIT BETWEEN NEW FLOORBOXES IN NEW CONCRETE SLAB.
5	NEW DEVICE TO BE BELOW DESKTOP, MOUNTED TO CASEWORK. CONTRACTOR TO RUN WIRING DOWN NEW WALLS INTO UNDERSIDE OF CASEWORK TO KEEP LIGHTING HIDDEN.

1

ELECTRICAL POWER PLAN GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATION OF ALL JUNCTION BOXES ASSOCIATED WITH SECURITY, INTERCOM, AUDIO/VISUAL, AND CLOCK SYSTEMS. PROVIDE EMPTY CONDUIT WITH PULL STRING ABOVE FINISHED CEILING.
2. ALL RECEPTACLES INSTALLED AS A PART OF THIS PROJECT SHALL BE TAMPERPROOF. SEE NEC SECTION 406.12.
3. ROUTE CONDUIT AND BRANCH CIRCUITS ALONGSIDE REFRIGERANT PIPING WHERE POSSIBLE. WHERE POSSIBLE, RE-USE PENETRATIONS USED BY REFRIGERANT PIPING.
4. UNLESS OTHERWISE NOTED ON PLAN, RECEPTACLE MOUNTING HEIGHT SHALL BE 18" AFF.
5. THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NOT PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL UTILIZATION OR COMMUNICATIONS EQUIPMENT.
6. ALL RECEPTACLES WITHIN KITCHEN AREA SHALL BE GFCI RECEPTACLES OR GFCI PROTECTED AT THE BREAKER.

KEY PLAN



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/04/26
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title REGISTERED ARCHITECT License No. 21AI02276900

Date	Description
06/12/24	ADDED. #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ELECTRICAL POWER PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

E2.02

9/4/2026 1:24:35 PM

CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS, INCLUDING FINAL LOCATIONS, ASSOCIATED WITH THE NEW UTILITY ELECTRIC SERVICE, PRIOR TO COMMENCEMENT OF WORK. COORDINATE WITH PSE&G & FIELD CONDITIONS.
2	CONTRACTOR SHALL PROVIDE NEW UTILITY POLE RISERS; REFER TO DETAIL 8/E7.01 FOR FURTHER INFORMATION & REQUIREMENTS.
3	CONTRACTOR SHALL COORDINATE WITH FIELD CONDITIONS TO PROVIDE NECESSARY QUANTITY OF UNDERGROUND HANDHOLES REQUIRED TO FACILITATE INSTALLATION.
4	PROPOSED LOCATION OF NEW EXTERIOR METER VAULT WITH: (2) SLAB HEATERS FOR HEATED ENCLOSURE, MAINTENANCE RECEPTACLE OUTLET, & (5) FIRE ALARM MONITORING MODULES. REFER TO ELECTRICAL 1ST FLOOR POWER PLAN (SHEET E2.01) FOR POWER CIRCUITING REQUIREMENTS & FIRE ALARM 1ST FLOOR PLAN (SHEET FA3.01) FOR FURTHER FIRE ALARM REQUIREMENTS. CONTRACTOR SHALL PROVIDE NEW TRENCHED POWER WIRING, FIRE ALARM CABLING, & CONDUITS WITH HANDHOLES & BOXES AS REQUIRED. TRENCH TO INDICATED LOCATION FROM THE ELECTRICAL ROOM.
5	PROPOSED LOCATION OF NEW POLE LIGHT(S). REFER TO ELECTRICAL 1ST FLOOR LIGHTING PLAN (SHEET E5.01) FOR POWER CIRCUITING REQUIREMENTS. CONTRACTOR SHALL PROVIDE NEW TRENCHED POWER WIRING & CONDUIT WITH HANDHOLES & BOXES AS REQUIRED. TRENCH TO INDICATED LOCATIONS FROM THE ELECTRICAL ROOM.
6	REFER TO ELECTRICAL 1ST FLOOR POWER PLAN (SHEET E2.01) FOR CONTINUATION OF POWER / DATA CONDUIT RACEWAY(S) INTO BUILDING STRUCTURE.
7	REFER TO FIRST ALARM 1ST FLOOR PLAN (SHEET FA2.01) FOR CONTINUATION OF FIRE ALARM CONDUIT RACEWAY INTO BUILDING STRUCTURE.
8	CONTRACTOR SHALL ROUTE CONDUIT RACEWAYS FROM TRENCH, RISE UP AT EXTERIOR BUILDING FACADE, & POKE INTO BUILDING AT MAXIMUM ALLOWABLE HEIGHT BENEATH WRESTLING ROOM CEILING. FIELD COORDINATE FINAL PENETRATION LOCATIONS & HEIGHTS.
9	CONTRACTOR SHALL ROUTE CONDUIT RACEWAYS FROM TRENCH, RISE UP AT EXTERIOR BUILDING FACADE, & POKE INTO BUILDING AT MAXIMUM ALLOWABLE HEIGHT INTO THE 1ST FLOOR ROOM SUSPENDED CEILING. FIELD COORDINATE FINAL PENETRATION LOCATIONS & HEIGHTS.

GENERAL SITE PLAN NOTES

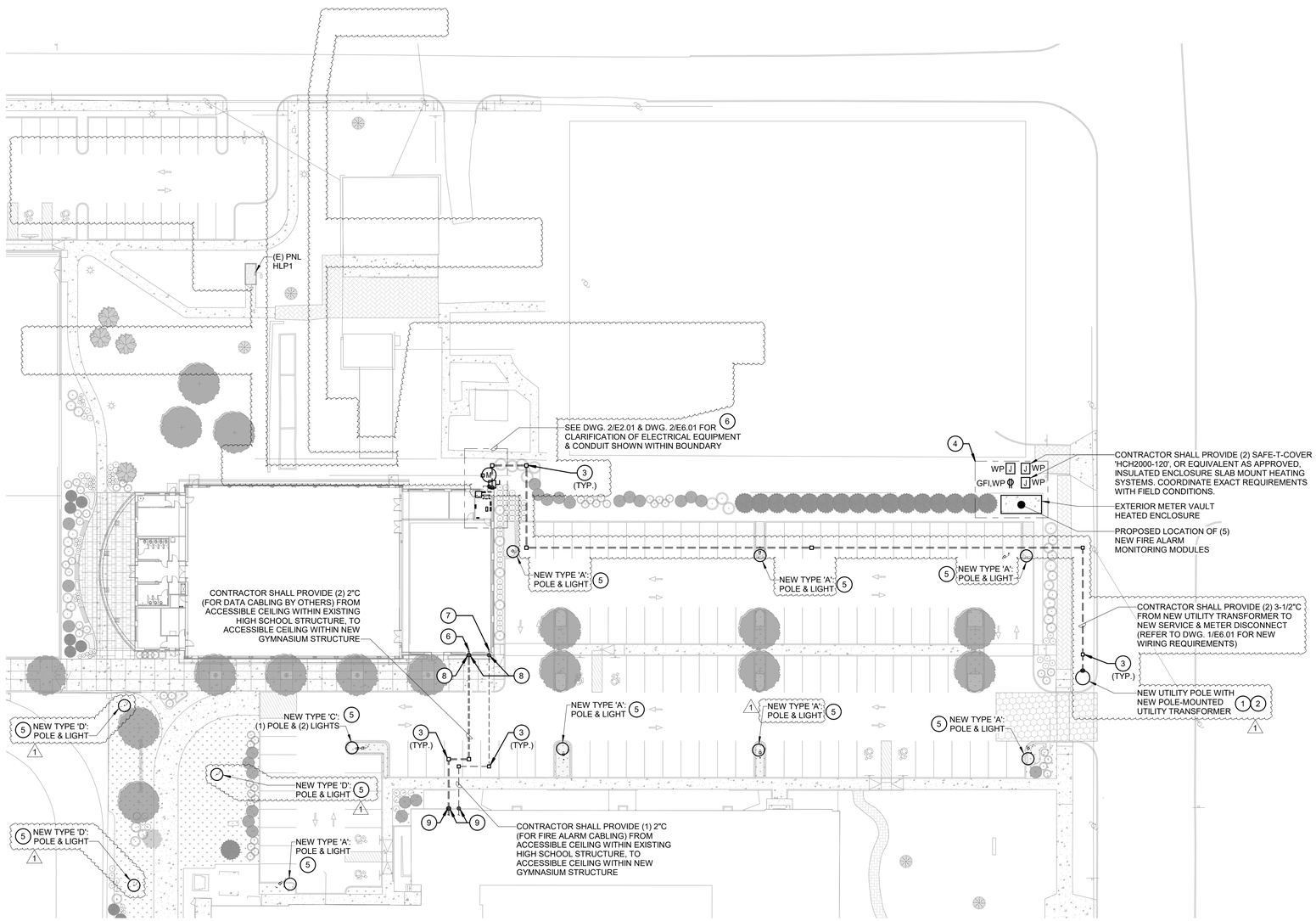
1. ALL RACEWAYS, CONDUCTORS, & CABLES SHALL BE INSTALLED CONCEALED WITHIN FINISHED WALLS & CEILINGS OR TRENCH; EXCEPT FOR CONDUIT RACEWAY RUNS REQUIRED TO BE MOUNTED ONTO OPEN CEILINGS. SURFACE-MOUNTED RACEWAY, INCLUDING CONDUIT, SHALL NOT BE PERMITTED TO RUN ON WALLS.
2. REFER TO ELECTRICAL DETAILS (E7.00 SERIES SHEETS) FOR FURTHER INFORMATION & REQUIREMENTS.
3. REFER TO CIVIL DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS, INCLUDING APPROXIMATE LOCATIONS OF OTHER EXISTING & NEW UNDERGROUND SYSTEMS & UTILITIES. VERIFY EXACT LOCATIONS OF EXISTING UNDERGROUND SYSTEMS & UTILITIES IN FIELD.
4. COORDINATE ALL NEW TRENCHING, INCLUDING FINAL REQUIRED DEPTHS OF NEW CONDUIT, WITH FIELD CONDITIONS, & OTHER EXISTING & NEW UNDERGROUND SYSTEMS & UTILITIES.
5. PROVIDE PULL STRINGS WITHIN ALL NEW DATA CABLING PATHWAYS SHOWN ON THIS DWG.
6. QUANTITY & LOCATION OF NEW HANDHOLES INDICATED ON THIS DRAWING ARE SHOWN FOR DESIGN INTENT ONLY. FOR ALL NEW POWER, DATA, & FIRE ALARM PATHWAYS: PROVIDE QUANTITY OF HANDHOLES & BOXES FOR NEW EXTERIOR UNDERGROUND WIRING / CABLING AT NECESSARY LOCATIONS, & FOR DATA CABLING PATHWAYS, IN ACCORDANCE WITH SPECIFICATION SECTION **260543**. PROVIDE ADDITIONAL PULL POINTS AS NECESSARY FOR INSTALLATION OF ALL NEW WIRING / CABLING BY CONTRACTOR & ALL NEW DATA CABLING BY OTHERS. REFER TO ELECTRICAL HANDHOLE DETAIL 5/E7.02 FOR FURTHER INFORMATION & REQUIREMENTS.
7. CONTRACTOR SHALL ENSURE ALL NEW ELECTRICAL EQUIPMENT IS PROVIDED WITH NEC CODE-REQUIRED WORKING SPACE & DEDICATED EQUIPMENT SPACE CLEARANCES.
8. CONTRACTOR SHALL PROVIDE MOUNTING SUPPORTS AS NECESSARY FOR ALL NEW ELECTRICAL EQUIPMENT; COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS.
9. CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY, SIZED AS NECESSARY, FOR ALL MECHANICAL / PLUMBING EQUIPMENT CONTROL WIRING / CABLE. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
10. WHERE MECHANICAL / PLUMBING EQUIPMENT IS INDICATED TO BE CONNECTED TO BMS: CONTRACTOR SHALL PROVIDE CONDUIT RACEWAY, SIZED AS NECESSARY, FOR ALL ASSOCIATED BMS WIRING / CABLE. REFER TO MECHANICAL & PLUMBING DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
11. ALL NEW TRENCHED CONDUIT RACEWAY MINIMUM TRADE SIZE SHALL BE 1-1/2".

SITE PLAN ELECTRICAL UTILITY NOTES

COORDINATE EXACT REQUIREMENTS WITH THE LATEST EDITION OF THE N.J. **PSE&G** (NEW JERSEY PUBLIC SERVICE ELECTRIC & GAS COMPANY) - **INFORMATION & REQUIREMENTS FOR ELECTRIC SERVICE MANUAL**. REFER TO CHAPTER 10, SECTIONS 22 & 24 FOR FURTHER INFORMATION & REQUIREMENTS ASSOCIATED WITH THE UTILITY TRANSFORMER & ASSOCIATED UTILITY POLE.

SITE PLAN LIGHTING NOTES

1. REFER TO ELECTRICAL LIGHTING FIXTURE SCHEDULE & LIGHTING CONTROL SCHEDULE ON THE ELECTRICAL LEGEND (SHEET E0.01) FOR FURTHER INFORMATION ASSOCIATED WITH NEW LIGHTING FIXTURES & CONTROL EQUIPMENT INDICATED TO BE PROVIDED ON THIS DWG. PROVIDE FIXTURES & EQUIPMENT AS SCHEDULED, OR EQUIVALENTS AS APPROVED.
2. REFER TO ELECTRICAL LIGHTING CONTROL WIRING & CONNECTION DIAGRAMS (SHEET E5.52) FOR TYPICAL LIGHTING CONTROL WIRING DIAGRAMS, ISSUED FOR REFERENCE ONLY. REFER TO MOST CURRENT SET OF MANUFACTURER'S INSTALLATION INSTRUCTIONS, GUIDELINES, & WIRING DIAGRAMS FOR MORE EXACT INFORMATION & REQUIREMENTS.
3. REFER TO ELECTRICAL SITE & LIGHTING PLAN PHOTOMETRICS (SHEET E5.02) & ELECTRICAL LIGHTING NOTES (SHEET E5.51) FOR FURTHER INFORMATION & REQUIREMENTS.
4. PLANS DO NOT SHOW EXACT QUANTITY OF LIGHTING CONTROL SYSTEM POWER PACKS REQUIRED. POWER PACK, RELAY PACKS, OR ROOM CONTROLLERS SHALL BE PROVIDED AS NEEDED TO PROVIDE A COMPLETE LIGHTING CONTROL SYSTEM THAT COMPLIES WITH THE CONTROL REQUIREMENTS BY ASHRAE 90.1.
5. CONTRACTOR SHALL PROVIDE NEW 2.5' CONCRETE PIER AT EACH NEW TYPE **A** & TYPE **C** LIGHT POLE LOCATION & PROVIDE NEW 6" CONCRETE PIER AT EACH NEW TYPE **D** LIGHT POLE LOCATION; MOUNT NEW POLE ONTO NEW PIER. COORDINATE EXACT REQUIREMENTS WITH CIVIL DRAWINGS & FIELD CONDITIONS. REFER TO RAISED LIGHT POLE FOUNDATION DETAIL 3/E7.02 FOR FURTHER INFORMATION & REQUIREMENTS.
6. REFER TO ELECTRICAL 1ST FLOOR LIGHTING PLAN (SHEET E5.01) FOR POWER CIRCUITING REQUIREMENTS ASSOCIATED WITH ALL NEW POLE LIGHTS INDICATED ON THIS DWG.
7. PROVIDE ALL NEW TYPE **A**, **C**, & **D** LIGHTING FIXTURES INDICATED ON THIS DRAWING WITH NEW LIGHTING FIXTURE POLES. POLE SPECIFICATIONS FOR EACH LIGHTING FIXTURE TYPE SHALL BE AS FOLLOWS:
   - FOR NEW TYPE **A** LIGHTING FIXTURES, PROVIDE ZUMA LIGHTING ROUND ALUMINUM POLE - PA SERIES (MODEL #PA-27.5-6R-250-BC1112-S1-BK-VD-R24) OR EQUIVALENT AS APPROVED.
   - FOR NEW TYPE **C** LIGHTING FIXTURES, PROVIDE ZUMA LIGHTING ROUND ALUMINUM POLE - PA SERIES (MODEL #PA-27.5-6R-250-BC1112-D180-BK-VD-R24) OR EQUIVALENT AS APPROVED.
   - FOR NEW TYPE **D** LIGHTING FIXTURES, PROVIDE AMERLUX, LLC DECORATIVE ALUMINUM POLE - APQ20 SERIES (MODEL #APQ23-12-BLK-R24) OR EQUIVALENT AS APPROVED.



1 ELECTRICAL SITE PLAN
E3.01 1" = 30'-0"

THE CONTRACTOR AS PART OF THE BASE BID SHALL EMPLOY SERVICES OF A PRIVATE FIRM TO MARK OUT ALL UNDERGROUND UTILITIES WITHIN 10'-0" OF ALL AREAS TO BE EXCAVATED. (TYPICAL FOR THE ENTIRE SITE)

811 Know what's **below**. **Call** before you dig.
New Jersey Underground Facility Protection Act. N.J.S.A 48:2-73 thru N.J.S.A 48:2-91 & N.J.A.C. 14:2.1 thru N.J.A.C. 14:2-6.4

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2700 | f. 201-447-1233

ELECTRICAL SITE PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No.

E3.01

9/3/2026 10:21:02 AM

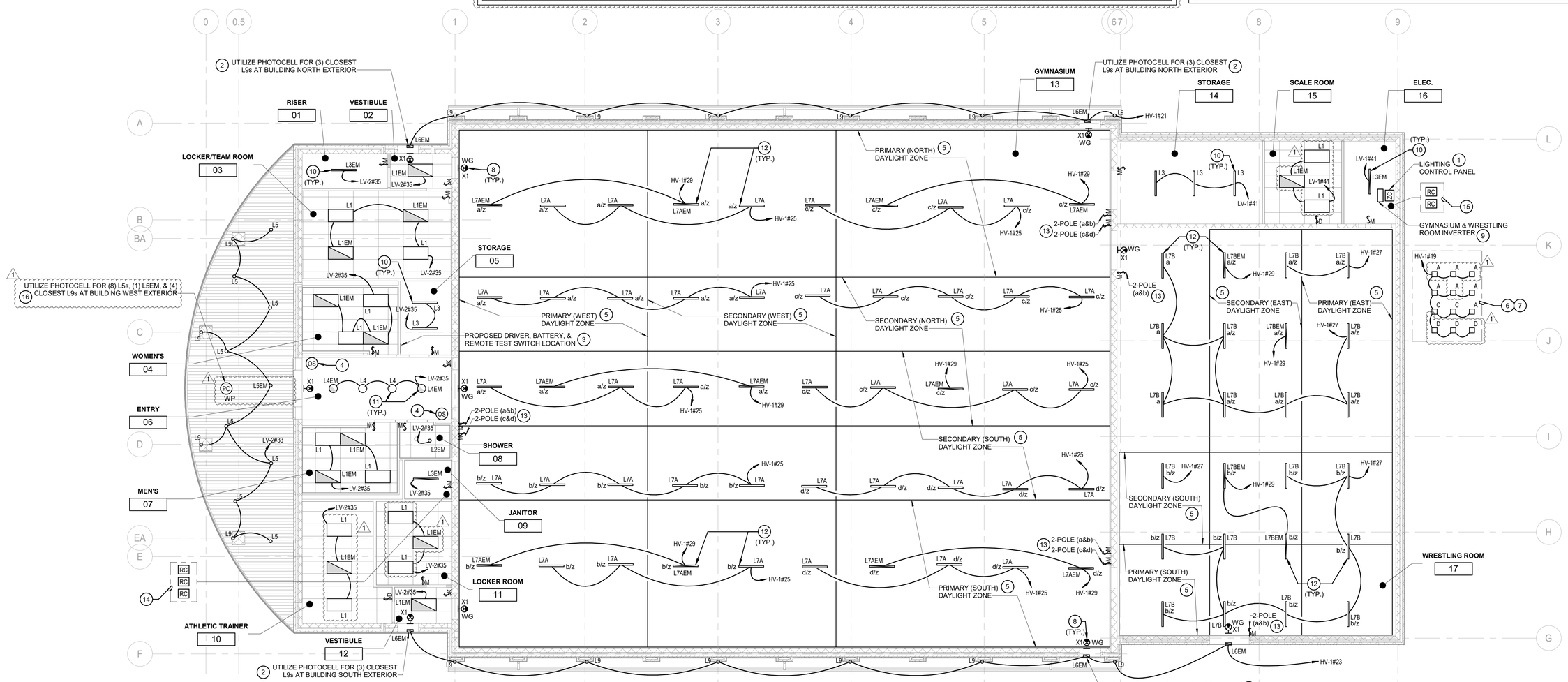
CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	PROPOSED LOCATION OF NEW LIGHTING CONTROL IP / MASTER CONTROLLER & TIME CLOCK. CONTRACTOR SHALL PROVIDE WITH ALL NECESSARY APPURTENANCES & ACCESSORIES FOR A FULLY FUNCTIONAL, CODE-COMPLIANT LIGHTING CONTROL SYSTEM; & MOUNTING SUPPORTS AS NECESSARY. COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS & ENSURE EQUIPMENT IS PROVIDED WITH NEC CODE-REQUIRED WORKING SPACE CLEARANCES. REFER TO ELECTRICAL 1ST FLOOR POWER PLAN (SHEET E2.01) FOR POWER CIRCUITING REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROGRAMMING & CAT6 DATA CABLING WITHIN 1-1/4"C TO CONNECT NEW LCP TO NEW BMS.
2	CONTRACTOR SHALL UTILIZE THE PHOTOCELL INTERGRAL TO EACH INDICATED L6EM LIGHTING FIXTURE TO PROVIDE DAYLIGHT HARVESTING CONTROL IN ACCORDANCE WITH THE LIGHTING CONTROLS NARRATIVE (SHEET E5.51). UTILIZE INDICATED L6EM FOR FIXTURES INDICATED.
3	CONTRACTOR SHALL PROVIDE ALL REMOTE DRIVERS, BATTERIES, & TEST SWITCHES ASSOCIATED WITH NEW 'L3EM, 'L4', 'L4EM' & 'L5EM', AT PROPOSED LOCATION. CONTRACTOR SHALL COORDINATE FINAL ACCESSIBLE LOCATIONS OF EQUIPMENT LISTED WITH OWNER & ARCHITECT, PRIOR TO COMMENCEMENT OF WORK.
4	CONTRACTOR SHALL COORDINATE FINAL MAKE & MODEL OF INDICATED OCCUPANCY SENSOR WITH LIGHTING CONTROL SYSTEM VENDOR, TO BE WALL-MOUNTED.
5	CONTRACTOR SHALL ENSURE LIGHTING FIXTURES WITHIN NORTH, SOUTH, EAST, & WEST; PRIMARY & SECONDARY SIDELIGHTED AREAS (DAYLIGHT ZONES); ARE CAPABLE OF BEING CONTROLLED INDEPENDENTLY. PROVIDE ADDITIONAL LIGHTING CONTROL EQUIPMENT, WIRING, & POWER CIRCUITING AS NECESSARY FOR A FULLY FUNCTIONAL, CODE-COMPLIANT INSTALLATION.
6	POWER CIRCUITING REQUIREMENTS FOR NEW EXTERIOR POLE LIGHTS. PROVIDE NEW POWER WIRING & CONDUIT, & TRENCH TO PROPOSED LOCATIONS. REFER TO CIVIL DRAWINGS & ELECTRICAL SITE PLAN (SHEET E3.01) FOR PROPOSED LOCATIONS, & ELECTRICAL TRENCHING DETAILS (SHEET E7.03) FOR FURTHER INFORMATION & REQUIREMENTS. ALL NEW TRENCHED CONDUIT RACEWAY MINIMUM TRADE SIZE SHALL BE 1-1/2".
7	CONTRACTOR SHALL COORDINATE WITH LIGHTING CONTROL SYSTEM VENDOR TO PROVIDE ALL LIGHTING CONTROL EQUIPMENT, WIRING, & CONDUIT NECESSARY FOR FULLY FUNCTIONAL, CODE-COMPLIANT CONTROL OF PARKING LOT LIGHTING.
8	FOR ALL NEW EXIT SIGNS INDICATED WITHIN THE GYMNASIUM & WRESTLING ROOM SPACES (DESIGNATED WITH "WG" ON THIS DWG), CONTRACTOR SHALL FURNISH EACH WITH NEW LITHONIA LIGHTING "ELA WG1" BACK-MOUNT WIREGUARD ACCESSORY & INSTALL TO PROVIDE PROTECTION FOR EACH DESIGNATED EXIT SIGN.
9	CONTRACTOR SHALL PROVIDE NEW MYERS 'ILLUMINATOR EM' EMERGENCY LIGHTING INVERTER (MODEL #6-EM-3-S-BD2002-2YWT&5YW); CIRCUIT AHEAD OF ALL LIGHTING FIXTURES INDICATED TO BE CONNECTED TO SAME BRANCH CIRCUIT. PROVIDE GYMNASIUM & WRESTLING ROOM EMERGENCY LIGHTING ON SEPARATE, DEDICATED OUTPUT BREAKERS WITHIN INVERTER. RREFER TO ELECTRICAL 1ST FLOOR POWER PLAN (SHEET E2.01) FOR POWER CIRCUITING REQUIREMENTS. COORDINATE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS & GUIDELINES & FIELD CONDITIONS, & PROVIDE MOUNTING SUPPORTS AS NECESSARY; PROVIDE WITH "WALL MOUNT BRACKET" OPTION IF REQUIRED.
10	CONTRACTOR SHALL PROVIDE LIGHTING FIXTURE TYPES: 'L3' & 'L3EM'; WITH POWER CORDS OF SUFFICIENT LENGTHS FOR SPECIFIED MOUNTING HEIGHTS; PROVIDE POWER CORDS BY SAME MANUFACTURER OF ASSOCIATED LIGHTING FIXTURES (ACCESSORY OPTIONS). REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS. IF MINIMUM SELECTABLE POWER CORD LENGTHS IS GREATER THAN NECESSARY, CONTRACTOR SHALL PROVIDE MOUNTING SUPPORTS AS NECESSARY TO ENSURE POWER CORDS ARE HUNG & SUPPORTED ABOVE FIXTURE AT CEILING IN A CODE-COMPLIANT MANNER.
11	CONTRACTOR SHALL PROVIDE LIGHTING FIXTURE TYPES: 'L4' & 'L4EM'; WITH POWER CORDS OF SUFFICIENT LENGTHS FOR SPECIFIED MOUNTING HEIGHTS; PROVIDE POWER CORDS BY SAME MANUFACTURER OF ASSOCIATED LIGHTING FIXTURES (ACCESSORY OPTIONS). REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS. CONTRACTOR SHALL NOTE: SELECTED LIGHTING FIXTURE 'L4' & 'L4EM' CANOPY TYPE SPECIFIES SINGLE WIRING ENTRY ONLY & NO DAISY CHAIN CONNECTIONS ALLOWED.
12	CONTRACTOR SHALL PROVIDE LIGHTING FIXTURE TYPES: 'L7A', 'L7B', L7AEM', & 'L7BEM'; WITH POWER CORDS OF SUFFICIENT LENGTHS FOR SPECIFIED MOUNTING HEIGHTS; PROVIDE POWER CORDS BY SAME MANUFACTURER OF ASSOCIATED LIGHTING FIXTURES (ACCESSORY OPTIONS. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS. IF MINIMUM SELECTABLE POWER CORD LENGTHS IS GREATER THAN NECESSARY, CONTRACTOR SHALL PROVIDE MOUNTING SUPPORTS AS NECESSARY TO ENSURE POWER CORDS ARE HUNG & SUPPORTED ABOVE FIXTURE AT CEILING IN A CODE-COMPLIANT MANNER.
13	CONTRACTOR SHALL PROVIDE SWITCH GROUP WITHIN LOCKABLE AESTHETICALLY PLEASING ENCLOSURE; COORDINATE SIZE REQUIRED WITH LIGHTING CONTROL SYSTEM VENDOR & FIELD CONDITIONS, & ENCLOSURE TYPE & FINAL LOCATION WITH OWNER & ARCHITECT, PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL COORDINATE WITH PAD MANUFACTURER TO ENSURE OPENINGS ARE PROVIDED WITHIN PADS TO ACCOMMODATE ACCESSIBLE INSTALLATION OF INDICATED LIGHT SWITCHES / ENCLOSURE & ASSOCIATED APPURTENANCES AT WALL.
14	PROPOSED LOCATION OF ROOM CONTROLLERS FOR THE FOLLOWING FIXTURES LOCATED: WITHIN ENTRY - 04 [(2) L4s & (2) L4EMs] & AT BUILDING WEST EXTERIOR [(9) L5s & (4) L9s]; FIXTURES TO BE PROVIDED WITH WIRED CONTROL CONNECTION IN LIEU OF WIRELESS. CONTRACTOR SHALL ZONE INDICATED FIXTURES BY INDIVIDUAL FIXTURE TYPE; NORMAL & EMERGENCY FIXTURES OF SAME TYPE SHALL BE ZONED TOGETHER; ENSURE FULLY FUNCTIONAL, CODE-COMPLIANT EMERGENCY EGRESS LIGHTING REQUIREMENTS ARE PROVIDED.
15	PROPOSED LOCATION OF ROOM CONTROLLERS FOR THE FOLLOWING FIXTURES LOCATED: AT BUILDING NORTH EXTERIOR [(6) L9s] & AT BUILDING SOUTH EXTERIOR [(6) L9s]; FIXTURES TO BE PROVIDED WITH WIRED CONTROL CONNECTION IN LIEU OF WIRELESS. CONTRACTOR SHALL ZONE INDICATED FIXTURES BY NORTH & SOUTH.
16	CONTRACTOR SHALL PROVIDE NLIGHT AIR RSBOR OUTDOOR POLE SENSOR MOUNTED WITHIN NEW WP JUNCTION BOX, & UTILIZE THE PHOTOCELL TO PROVIDE DAYLIGHT HARVESTING CONTROL IN ACCORDANCE WITH THE LIGHTING CONTROLS NARRATIVE (SHEET E5.51). COORDINATE EXACT REQUIREMENTS (INCLUDING NECESSARY 'BODY/BRACKET' OF 'RSBOR' DEVICE) WITH LIGHTING CONTROL SYSTEM VENDOR, PRIOR TO PURCHASE.

GENERAL LIGHTING PLAN NOTES

1. ALL RACEWAYS, CONDUCTORS, & CABLES SHALL BE INSTALLED CONCEALED WITHIN FINISHED WALLS & CEILINGS; EXCEPT FOR CONDUIT RACEWAY RUNS REQUIRED TO BE MOUNTED ONTO OPEN CEILINGS. SURFACE-MOUNTED RACEWAY, INCLUDING CONDUIT, SHALL NOT BE PERMITTED TO RUN ON WALLS.
2. ALL EXIT SIGNS & EMERGENCY LIGHTING FIXTURE BATTERY PACKS SHALL BE CIRCUITED FROM THE ADJACENT CIRCUIT SERVING THE GENERAL LIGHTING IN THE AREA. CONNECT AHEAD OF SWITCHING.
3. REFER TO ELECTRICAL LIGHTING FIXTURE SCHEDULE & LIGHTING CONTROL SCHEDULE ON THE ELECTRICAL LEGEND (SHEET E0.01) FOR FURTHER INFORMATION ASSOCIATED WITH NEW LIGHTING FIXTURES & CONTROL EQUIPMENT INDICATED TO BE PROVIDED ON THIS DWG. PROVIDE FIXTURES & EQUIPMENT AS SCHEDULED, OR EQUIVALENTS AS APPROVED.
4. REFER TO ELECTRICAL SITE & LIGHTING PLAN PHOTOMETRICS (SHEET E5.02), ELECTRICAL LIGHTING NOTES (SHEET E5.51), & ELECTRICAL DETAILS (E7.00 SERIES SHEETS) FOR FURTHER INFORMATION & REQUIREMENTS.
5. REFER TO ELECTRICAL LIGHTING CONTROL WIRING & CONNECTION DIAGRAMS (SHEET E5.52) FOR TYPICAL LIGHTING CONTROL WIRING DIAGRAMS, ISSUED FOR REFERENCE ONLY. REFER TO MOST CURRENT SET OF MANUFACTURER'S INSTALLATION INSTRUCTIONS, GUIDELINES, & WIRING DIAGRAMS FOR MORE EXACT INFORMATION & REQUIREMENTS.
6. PLANS DO NOT SHOW EXACT QUANTITY OF POWER PACKS REQUIRED. POWER PACK, RELAY PACKS, OR ROOM CONTROLLERS SHALL BE PROVIDED AS NEEDED TO PROVIDE A COMPLETE LIGHTING CONTROL SYSTEM THAT COMPLIES WITH THE CONTROL REQUIREMENTS BY ASHRAE 90.1.
7. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS OF LIGHTING FIXTURES. FOR SUSPENDED LIGHTING FIXTURES; PROVIDE FIXTURES WITH MOUNTING SUPPORTS / BRACKETS & SUFFICIENT LENGTH OF AIRCRAFT CABLE TO ACHIEVE SPECIFIED MOUNTING HEIGHT; PROVIDE MOUNTING SUPPORTS / BRACKETS & AIRCRAFT CABLES BY SAME MANUFACTURER OF ASSOCIATED LIGHTING FIXTURES (ACCESSORY OPTIONS) WHERE APPLICABLE.
8. ALL EXIT SIGNS & LIGHTING FIXTURES THAT CONTAIN "EM" IN THEIR TAG, ARE SHADED, OR BOTH SHALL BE PROVIDED WITH INTEGRAL EMERGENCY BATTERY PACK OR CONNECTED TO EMERGENCY LIGHTING INVERTER THAT WILL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER. BATTERIES SHALL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER. PROVIDE ADDITIONAL UN-SWITCHED CIRCUIT CONNECTIONS TO LIGHTING FIXTURE BATTERY PACKS AS NECESSARY.
9. PROVIDE NECESSARY QUANTITY OF NLIGHT AIR ADAPTERS (MODEL #: '**NECYD NLTAIR-G2**') FOR A FULLY FUNCTIONAL, CODE-COMPLIANT INSTALLATION OF ALL INTERIOR & EXTERIOR LIGHTING FIXTURES (INCLUDING PARKING LOT POLE LIGHTS). PROVIDE WIRING, CONDUIT, & SUPPLEMENTAL EXTENDER POWER/RELAY PACKS AS NECESSARY (MODEL #'**RPP20-EFP-EXT-G2**' / MODEL #: '**PS 150**' / MODEL #: '**RPP20-24V-EFP-EXT-G2**'; COORDINATE FINAL REQUIREMENTS & MODELS WITH LIGHT CONTROL SYSTEM VENDOR, PRIOR TO PURCHASE). COORDINATE FINAL LOCATIONS WITH ARCHITECT, LIGHTING CONTROL SYSTEM VENDOR, & FIELD CONDITIONS.
10. IN ACCORDANCE WITH NEW JERSEY COMMERCIAL ENERGY CODE SECTION 9.4.1.1(a), CONTRACTOR SHALL COORDINATE WITH LIGHTING CONTROL SYSTEM VENDOR TO PROVIDE WITHIN:
    A. GYMNASIUM: (4) LOCAL PARTIAL LIGHTING CONTROL ZONES.
    B. WRESTLING ROOM: (2) LOCAL PARTIAL LIGHTING CONTROL ZONES.



1 ELECTRICAL 1ST FLOOR LIGHTING PLAN
E5.01 1/8" = 1'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

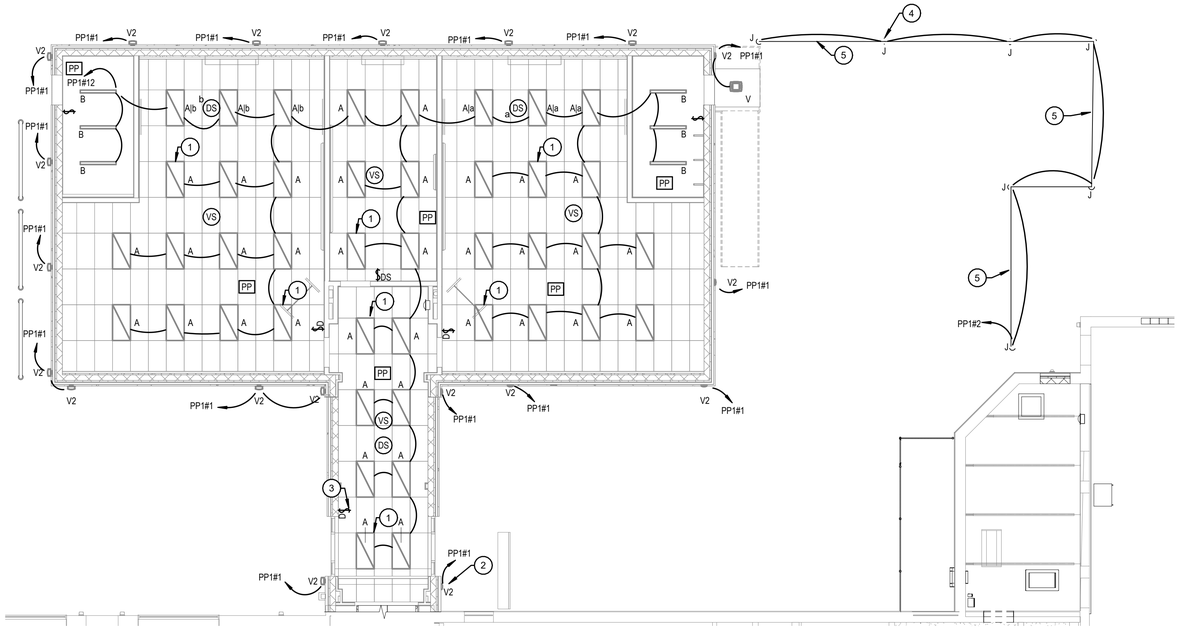
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL 1ST FLOOR LIGHTING PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

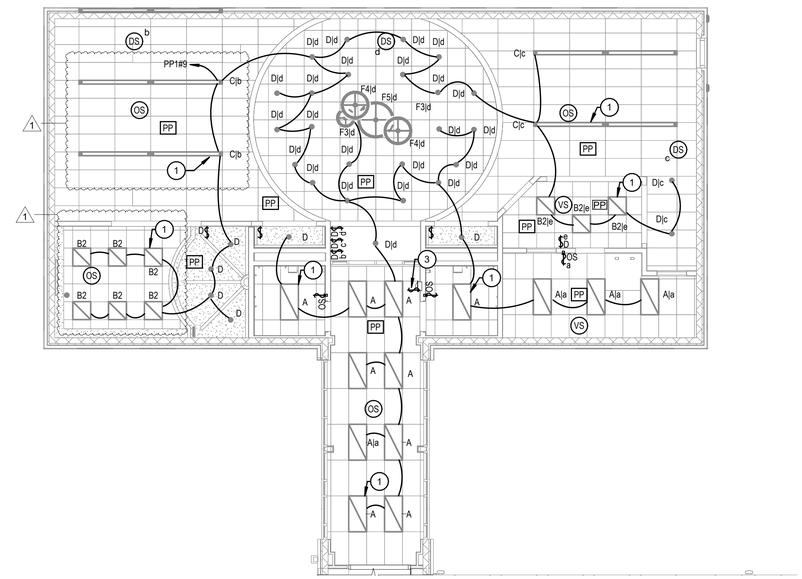
Job No. 2.20277.25.14
File No.

E5.01

9/3/2026 10:21:04 AM



1 E5.01 ADDITION FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



2 E5.01 ADDITION SECOND FLOOR LIGHTING PLAN
1/8" = 1'-0"

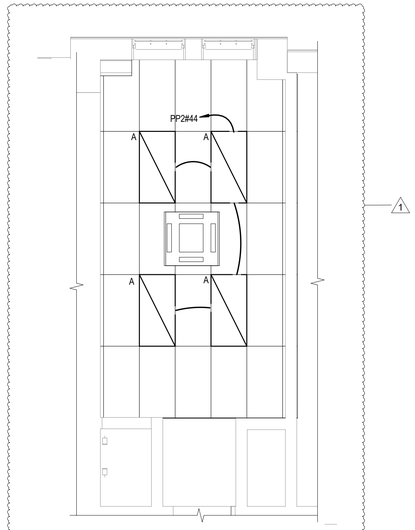
LIGHT FIXTURE SCHEDULE

FIXTURE TAG	MAKE	MODEL	DESCRIPTION	VOLTAGE	WATTAGE	LUMENS	COLOR TEMP.	CRI
A	WILLIAMS	BP-24-LS-8CS-DIM-UNV-30W-3500K	2'x4' TROFFER	120 V	29	3,452 lm	3500 K	<varies>
B	WILLIAMS	75R-4-L50-835-DIM-UNV	4' LINEAR STRIP	120 V	33	4,867 lm	3500 K	+80
B2	WILLIAMS	LT-22-L39-835-AF-(L35)-DIM-UNV	2'X2' TROFFER	120 V	29	3,543 lm	3500 K	<varies>
C	WILLIAMS	LRX4-X-20-L8-835-DMA-DIM-UNV	LINEAR FIXTURE	120 V	50	2,050 lm	3500 K	+80
D	WILLIAMS	4DR-TL-L10-827-DIM-UNV-OW-OF-CS	4.5' SUARE DOWNLIGHT	120 V	25	2,050 lm	3500 K	+80
F3	BETA-CALCO	MRTP2P03-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	550 lm	3500 K	+80
F4	BETA-CALCO	MRTP2P04-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	1,240 lm	3500 K	+80
F5	BETA-CALCO	MRTP2P05-EEF1-LPF017-LPG017-CR80-CTA35-CTB35-X-X-X-X-X-X-X	HANGING FIXTURE	120 V	240	2,200 lm	3500 K	+80
J	WILLIAMS	OSA8R-L16/840-AC-FT-DBR-AB-OPTION S-DIM-UNV	BOLLARD FIXTURE	120 V	18	1,600 lm	3500 K	+80
V	WILLIAMS	VG1-L30-730-T5-X-X-X-X-X	SURFACE MOUNTED EXTERIOR FIXTURE	120 V	36	550 lm	3500 K	+80
V2	COMPASS	CUSO DB	EXTERIOR WALL MOUNTED FIXTURE WITH BATTERY BACKUP	120 V	4	19,000 lm	3500 K	+80

LIGHTING CONTROL SCHEDULE

SYMBOL	BASIS OF DESIGN		DESCRIPTION	SENSOR	VOLT.	NOTE
	MAKE	MODEL				
$	GENERIC	GENERIC	LINE VOLTAGE SNAP SWITCH	NONE.	120V/ 277V	-
$OS	NX CONTROLS	LDHMMTS SERIES	LINE VOLTAGE OCCUPANCY SENSOR SWITCH	PIR/US	120V/ 277V	1
$D	NX CONTROLS	NX-ORLO SERIES	LOW VOLTAGE DIMMING SWITCH	NONE.	LOW VOLT.	3
OS	NX CONTROLS	NXOS-OM SERIES	LOW VOLTAGE OCCUPANCY SENSOR	PIR/US	LOW VOLT.	1,3
VS	NX CONTROLS	NXOS-OM SERIES	LOW VOLTAGE VACANCY SENSOR	PIR/US	LOW VOLT.	2,3
PP	NX CONTROLS	NXRC2	LINE VOLTAGE POWER PACK	NONE.	LOW VOLT.	3

LIGHTING CONTROL SCHEDULE NOTES:
1. SENSOR SHALL BE SET TO AUTOMATIC-ON MODE.
2. SENSOR SHALL BE SET TO MANUAL-ON MODE.
3. PROVIDE WIRING BETWEEN POWER PACK, SWITCHES, OCCUPANCY/VACANCY SENSORS, AND OTHER LIGHTING CONTROL COMPONENTS AS NEEDED.



3 E5.01 OFFICE 306 LIGHTING PLAN
1/4" = 1'-0"

CONSTRUCTION KEY NOTES LEGEND

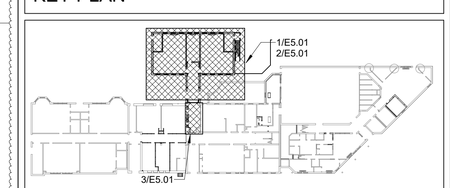
SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	NEW LIGHTING DEVICES TO BE INCLUEDED WITH EMERGENCY BATTERY BACKUP.
2	NEW OUTDOOR LIGHT FIXTURE 'E' FIXTURE INCLUDES INTEGRATED PHOTOCELL. TYP. FOR ALL "E" FIXTURES.
3	SNAP SWITCH TO BE KEYED TYPE TO PREVENT TAMPERING
4	NEW EXTERIOR LIGHTING BOLLARD (TYP.) BOLLARD TO BE FED BY UNDERGROUND CONDUIT FROM PANEL PP1. COORDINATE INSTALLATION WITH ARCITECHTURE AND CIVIL PLANS
5	PROPOSED CONDUIT ROUTING (TYP.). PATCH PER DETAIL 3/E6.01.

LIGHTING GENERAL NOTES

1. PLANS DO NOT SHOW EXACT QUANTITY OF POWER PACKS REQUIRED. POWER PACKS, RELAY PACKS OR ROOM CONTROLLERS SHALL BE PROVIDED AS NEEDED TO PROVIDE A COMPLETE LIGHTING CONTROL SYSTEM THAT COMPLIES WITH THE CONTROL REQUIREMENTS SET BY ASHREA 90.1
2. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS OF LIGHTING FIXTURES. FOR SUSPENDED LIGHTING FIXTURES, PROVIDE ENOUGH LENGTH OF AIRCRAFT CABLE TO ACHIEVE SPECIFIED MOUNTING HEIGHT.
3. ALL LIGHTING FIXTURES THAT HAVE THE TAG "EM" SHALL BE PROVIDED WITH INTEGRAL BATTERY BACK-UP POWER. BATTERIES SHALL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER.
4. ALL EXIT SIGNS SHALL BE CIRCUITED FROM THE ADJACENT CIRCUIT SERVING THE GENERAL LIGHTING AREA.
5. THE ANGLE AT WHICH A CIRCUITRY SYMBOL MEETS ANOTHER SYMBOL HAS NO PARTICULAR SIGNIFICANCE UNLESS OTHERWISE NOTED. CIRCUITS NORMALLY MEET ONE ANOTHER AT A JUNCTION BOX, PULL BOX, OR PIECE OF ELECTRICAL UTILIZATION OR COMMUNICATIONS EQUIPMENT.
6. ALL CLASSROOMS AND LIBRARY SPACES TO BE CONTROLLED WITH MANUAL-ON TYPE OCCUPANCY SENSORS.

KEY PLAN



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	05/27/26
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title REGISTERED ARCHITECT License No. 21AI02276900

Date	Description
06/12/24	ADDED. #1

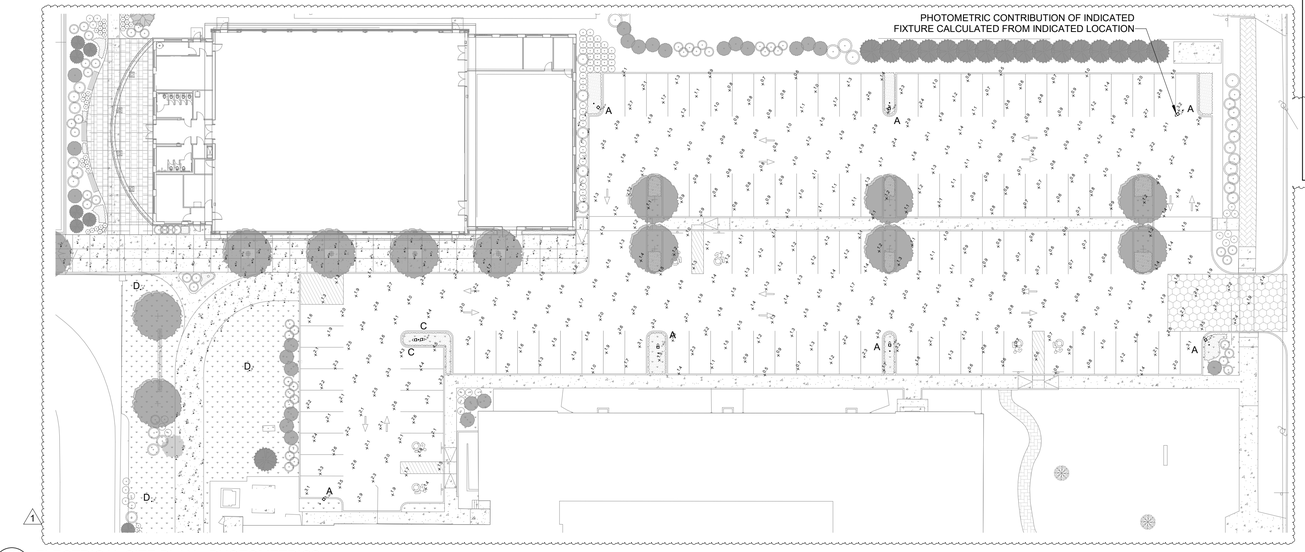
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ELECTRICAL LIGHTING PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

E5.01

9/4/2026 1:24:48 PM



2 E5.02 ELECTRICAL SITE PLAN - PHOTOMETRICS
1" = 30'-0"

SITE PLAN PHOTOMETRIC NOTES

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
LOWER LOT SOUTH WEST	+	1.6 fc	4.5 fc	0.5 fc	9.0:1	3.2:1
NEW WALKWAY	+	1.0 fc	2.0 fc	0.1 fc	20.0:1	10.0:1
UPPER LOT NORTH	+	1.2 fc	3.4 fc	0.1 fc	34.0:1	12.0:1
WALKWAY CONCESSION	+	0.9 fc	3.3 fc	0.1 fc	33.0:1	9.0:1

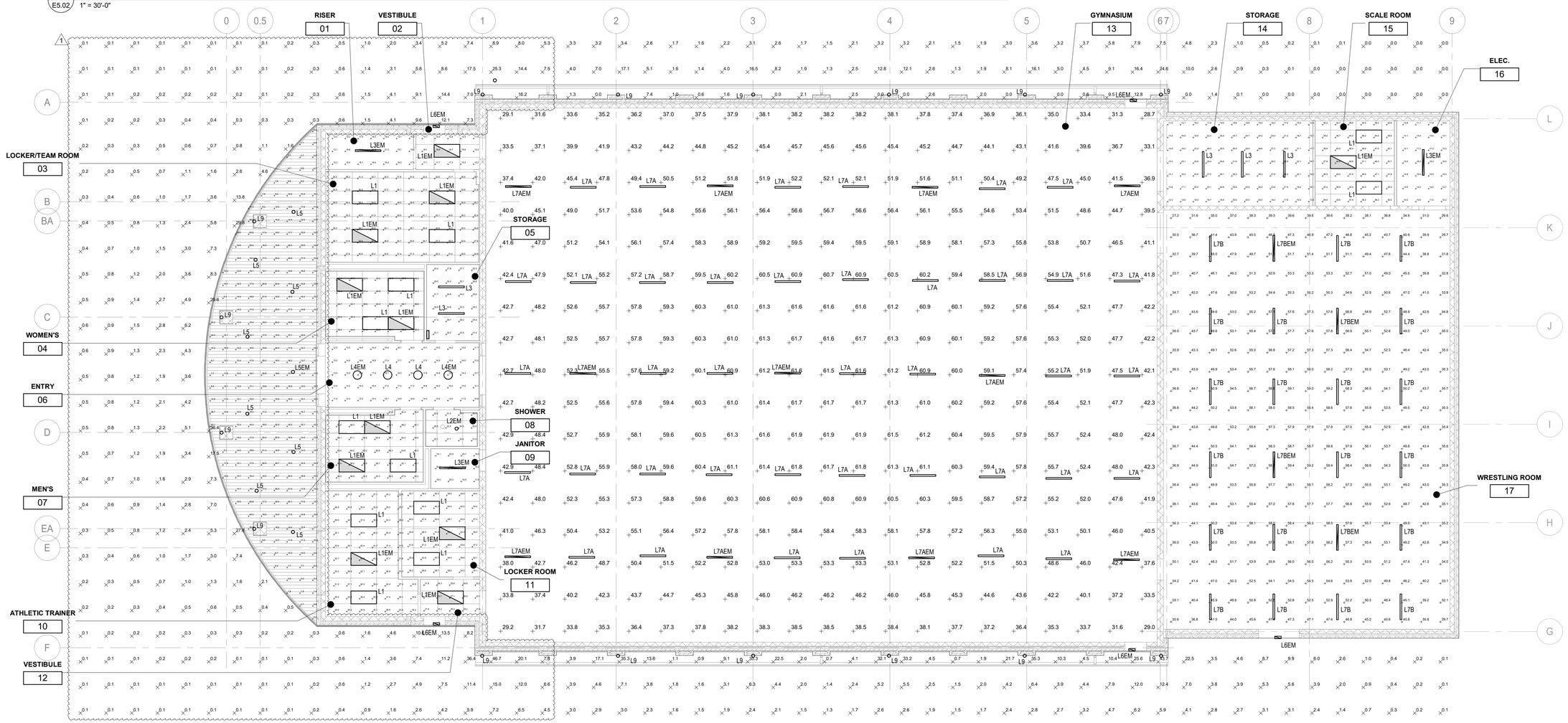
1ST FLOOR LIGHTING PLAN PHOTOMETRIC NOTES

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Athletic Trainer 10	+	32.4 fc	42.9 fc	14.9 fc	2.9:1	2.2:1
Elec. 16	+	14.0 fc	18.3 fc	10.0 fc	1.8:1	1.4:1
Entry 06	+	15.0 fc	18.3 fc	10.8 fc	1.7:1	1.4:1
Entry Under Canopy	+	15.2 fc	43.6 fc	0.2 fc	218.0:1	76.0:1
Exterior	×	2.1 fc	46.7 fc	0.0 fc	N/A	N/A
Gymnasium 13 (Calc at 3' AFF)	+	50.7 fc	61.9 fc	28.7 fc	2.2:1	1.8:1
Janitor 09	+	19.8 fc	21.9 fc	17.6 fc	1.2:1	1.1:1
Locker Room 11	+	41.5 fc	51.2 fc	30.1 fc	1.7:1	1.4:1
Locker/Team Room 03	+	34.4 fc	42.1 fc	24.0 fc	1.8:1	1.4:1
Men's 07	+	53.2 fc	64.6 fc	35.4 fc	1.8:1	1.5:1
Riser 01/Vestibule 02	+	16.3 fc	21.3 fc	10.4 fc	2.0:1	1.6:1
Scale Room 15	+	41.3 fc	51.1 fc	29.6 fc	1.7:1	1.4:1
Shower 08	+	30.2 fc	34.3 fc	22.2 fc	1.5:1	1.4:1
Storage 05	+	28.8 fc	34.8 fc	21.4 fc	1.6:1	1.3:1
Storage 14	+	21.6 fc	31.7 fc	11.9 fc	2.7:1	1.8:1
Vestibule 12	+	24.0 fc	27.1 fc	21.6 fc	1.3:1	1.1:1
Women's 04	+	54.2 fc	64.6 fc	38.2 fc	1.7:1	1.4:1
Wrestling Room 17 (Calc at 3' AFF)	+	48.5 fc	59.4 fc	26.6 fc	2.2:1	1.8:1

GENERAL PHOTOMETRICS PLAN NOTES

1. NEW LIGHTING FIXTURES SHALL PROVIDE FOOTCANDLES TO MATCH WITHIN 5% OF LEVELS INDICATED ON THIS DWG.
2. FIXTURES LOCATED AS SHOWN, REFER TO ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHTS & REQUIREMENTS.
3. CALCULATIONS TAKEN AT FLOOR, WITH THE EXCEPTION OF GYMNASIUM & WRESTLING ROOM WHICH HAVE CALCULATIONS TAKEN AT 3' AFF.
4. CALCULATIONS CREATED USING AVAILABLE DESIGN CRITERIA AND MAY VARY WITH ACTUAL FIELD CONDITIONS.
5. REFER TO ELECTRICAL SITE PLAN (E3.01), ELECTRICAL 1ST FLOOR LIGHTING PLAN (SHEET E5.01), & ARCHITECTURAL DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS.
6. REFLECTANCE UTILIZED ARE AS FOLLOWS (80/50/20):
   A. CEILING: 80%
   B. WALL: 50%
   C. FLOOR: 20%



1 E5.02 ELECTRICAL 1ST FLOOR LIGHTING PLAN - PHOTOMETRICS
1/8" = 1'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE0490110O

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

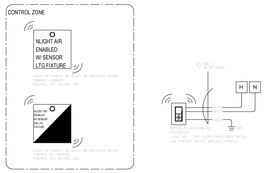
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL SITE & LIGHTING PLAN
PHOTOMETRICS
NEW HOPKINS G YMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

E5.02

9/3/2026 10:21:06 AM



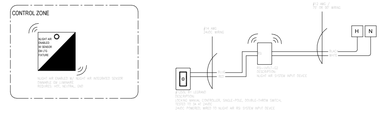
TYPICAL ATHLETIC TRAINER & SCALE ROOM USING nLIGHT AIR ENABLED FIXTURES

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. OCCUPANCY SENSOR PROVIDES AUTOMATIC ON/OFF OF LIGHTS/LOAD BASED ON ROOM OCCUPANCY. USE DEFAULT TIME DELAY FOR OCCUPANCY SENSORS WHERE NOT SPECIFIED WITHIN THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. SWITCH PROVIDES MANUAL OVERRIDE OF THE LIGHTS: ON/OFF/RAISE/LOWER.

nLIGHT SYSTEM NOTE:
1. PROVIDE LIGHTING CONTROL EQUIPMENT PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ONSITE SYSTEM STARTUP, PROGRAMMING, AND END USER TRAINING SHALL BE PERFORMED BY FACTORY AUTHORIZED TECHNICIAN/REPRESENTATIVE. CONTRACTOR SHALL INCLUDE THIS SERVICE LINE ITEM IN THEIR SCOPE.



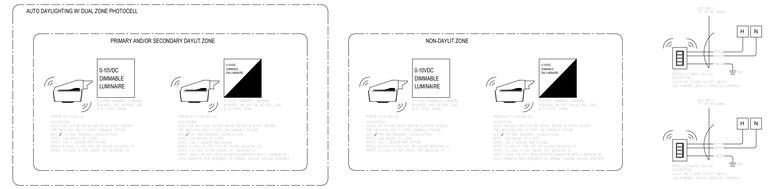
TYPICAL VESTIBULE USING nLIGHT AIR ENABLED FIXTURES

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. OCCUPANCY SENSOR PROVIDES AUTOMATIC ON/OFF OF LIGHTS/LOAD BASED ON ROOM OCCUPANCY. USE DEFAULT TIME DELAY FOR OCCUPANCY SENSORS WHERE NOT SPECIFIED WITHIN THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. SWITCH PROVIDES MANUAL OVERRIDE OF THE LIGHTS: ON/OFF/RAISE/LOWER.

nLIGHT SYSTEM NOTE:
1. PROVIDE LIGHTING CONTROL EQUIPMENT PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ONSITE SYSTEM STARTUP, PROGRAMMING, AND END USER TRAINING SHALL BE PERFORMED BY FACTORY AUTHORIZED TECHNICIAN/REPRESENTATIVE. CONTRACTOR SHALL INCLUDE THIS SERVICE LINE ITEM IN THEIR SCOPE.



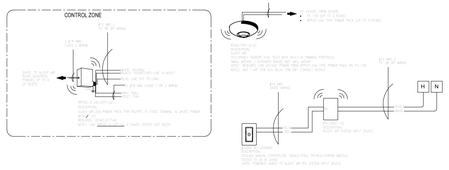
TYPICAL GYMNASIUM & WRESTLING ROOM WITH DAYLIGHTING USING nLIGHT AIR FIXTURE INSTALLED SENSOR WITH NORMAL & EM SOURCE (GENERATOR/INVERTER)

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. OCCUPANCY SENSOR PROVIDES AUTOMATIC ON/OFF OF LIGHTS/LOAD BASED ON ROOM OCCUPANCY. USE DEFAULT TIME DELAY FOR OCCUPANCY SENSOR WHERE NOT SPECIFIED WITHIN THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. SWITCH PROVIDES MANUAL OVERRIDE OF THE LIGHTS: ON/OFF/RAISE/LOWER.
3. WHERE REQUIRED, PHOTOCELL SHALL AUTOMATICALLY REDUCE GENERAL LIGHTING IN THE DAYLIT ZONE BASED ON DAYLIGHT TO MAINTAIN DESIGN ILLUMINANCE.
4. POWER INTERRUPTION > 30ms AT FIXTURES WITH RSBOR-EM-G2 SENSORS FORCES EMERGENCY STATE FOR 90 MINUTES. STAY ON AT HIGH END TRIM LEVEL AND IGNORE WIRELESS CONTROL COMMANDS.

nLIGHT SYSTEM NOTE:
1. PROVIDE OCCUPANCY SENSOR CONTROL PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ONSITE SYSTEM STARTUP, PROGRAMMING, AND END USER TRAINING SHALL BE PERFORMED BY FACTORY AUTHORIZED TECHNICIAN/REPRESENTATIVE. CONTRACTOR SHALL INCLUDE THIS SERVICE LINE ITEM IN THEIR SCOPE.
3. NLIGHT AIR **RSBOR-SERIES** SENSOR SHALL BE FACTORY INSTALLED AND PREWIRED TO LUMINARE. SENSOR SHALL NOT BE PERMITTED TO BE FIELD INSTALLED BY EC.



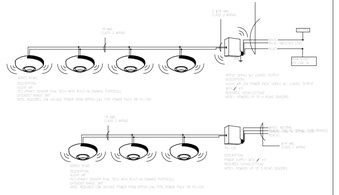
TYPICAL ENTRY USING nLIGHT AIR POWER PACK

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. OCCUPANCY SENSOR PROVIDES AUTOMATIC ON/OFF OF LIGHTS/LOAD BASED ON ROOM OCCUPANCY. USE DEFAULT TIME DELAY FOR OCCUPANCY SENSORS WHERE NOT SPECIFIED WITHIN THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. SWITCH PROVIDES MANUAL OVERRIDE OF THE LIGHTS: ON/OFF/RAISE/LOWER.

nLIGHT SYSTEM NOTE:
1. PROVIDE LIGHTING CONTROL EQUIPMENT PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ONSITE SYSTEM STARTUP, PROGRAMMING, AND END USER TRAINING SHALL BE PERFORMED BY FACTORY AUTHORIZED TECHNICIAN/REPRESENTATIVE. CONTRACTOR SHALL INCLUDE THIS SERVICE LINE ITEM IN THEIR SCOPE.
3. ALL NLIGHT AIR RPP20 POWER/RELAY PACKS SHALL BE PROVIDED WITH EXTERNAL FAULT PROTECTION: (ADD " -EFP") .



TYPICAL 24VDC DEVICE POWER WIRING DIAGRAMS

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

nLIGHT SYSTEM NOTE:
1. PROVIDE NECESSARY QUANTITY OF RPP20 SERIES W/ +24VDC OUTPUT OR PS-150 DEVICES TO POWER SERIES ROMS SENSORS

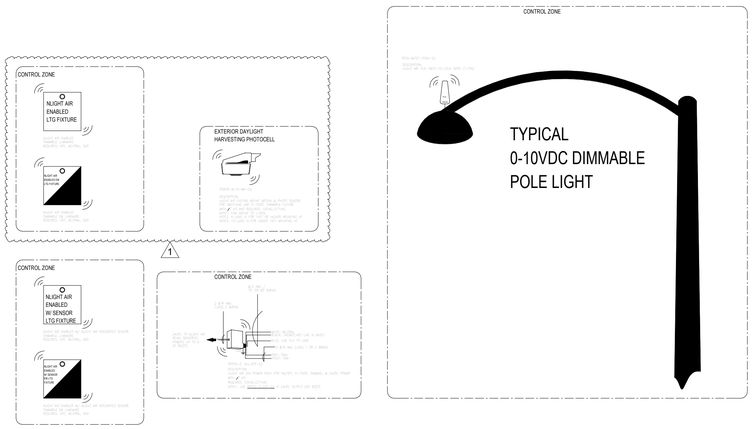
TYPICAL LOCKER/TEAM ROOM, LOCKER ROOM, STORAGE, MEN'S, & WOMEN'S USING nLIGHT AIR ENABLED FIXTURES

NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. OCCUPANCY SENSOR PROVIDES AUTOMATIC ON/OFF OF LIGHTS/LOAD BASED ON ROOM OCCUPANCY. USE DEFAULT TIME DELAY FOR OCCUPANCY SENSORS WHERE NOT SPECIFIED WITHIN THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. SWITCH PROVIDES MANUAL OVERRIDE OF THE LIGHTS: ON/OFF/RAISE/LOWER.

nLIGHT SYSTEM NOTE:
1. PROVIDE LIGHTING CONTROL EQUIPMENT PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ONSITE SYSTEM STARTUP, PROGRAMMING, AND END USER TRAINING SHALL BE PERFORMED BY FACTORY AUTHORIZED TECHNICIAN/REPRESENTATIVE. CONTRACTOR SHALL INCLUDE THIS SERVICE LINE ITEM IN THEIR SCOPE.



TYPICAL EXTERIOR AREA USING nLIGHT AIR ENABLED FIXTURES WITH SUPPLEMENTAL nLIGHT AIR POWER PACKS AS REQUIRED

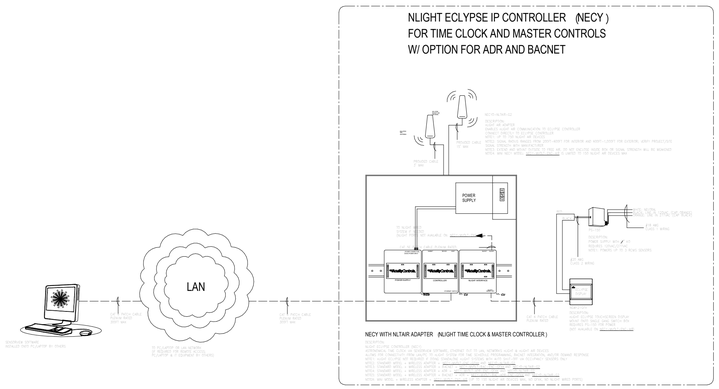
NTS

REFER TO PLANS FOR TYPES AND QUANTITIES

SEQUENCE OF OPERATION:
1. EXTERIOR LIGHTING SHALL BE PROVIDED WITH TIME CLOCK CONTROL IN ACCORDANCE WITH THE LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. PHOTOCELLS SHALL AUTOMATICALLY REDUCE LIGHTING BASED ON DAYLIGHT TO MAINTAIN DESIGN ILLUMINANCE.

nLIGHT SYSTEM NOTE:
1. PROVIDE LIGHTING CONTROL EQUIPMENT PROGRAMMING IN ACCORDANCE WITH LIGHTING CONTROLS NARRATIVE ON SHEET E5.51.
2. ALL NLIGHT AIR RPP20 POWER/RELAY PACKS SHALL BE PROVIDED WITH EXTERNAL FAULT PROTECTION: (ADD " -EFP") .

nLIGHT BACKBONE SYSTEM



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL LIGHTING CONTROL WIRING & CONNECTION DIAGRAMS

NEW HOPKINS GYMNASIUM

HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No.

E5.52

9/3/2026 10:21:06 AM

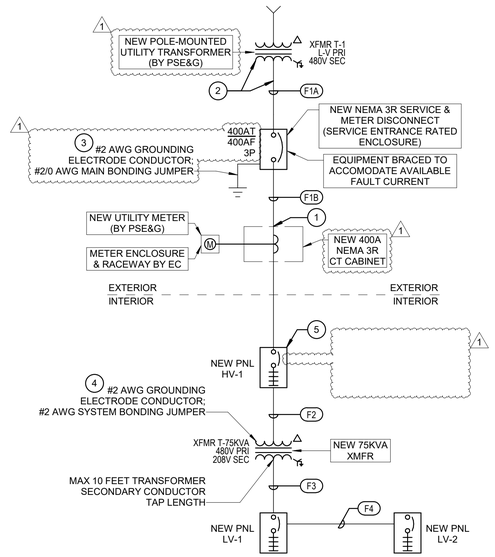
SINGLE LINE

SYMBOL	DESCRIPTION
300AT 400AF 1P	**CIRCUIT BREAKER -** LOW VOLTAGE, THERMAL MAGNETIC "AT" - TRIP SETTING ; "AF" - FRAME SIZE "#P" - No. OF POLES (3-POLE UNLESS NOTED OTHERWISE)
	TRANSFORMER - LOW VOLTAGE, DRY-TYPE WITH COPPER WINDINGS. REFER TO XFMR SCHEDULE FOR ADDITIONAL REQUIREMENTS.
XFMR T-1 480V PRI 208V SEC	**TRANSFORMER TAG-** REFER TO TRANSFORMER SCHEDULE FOR MORE INFORMATION.
	ENCLOSURE
	TROUGH - CODE SIZED WIRING TROUGH
_A - _Y/_V- 3ϕ - 4W - _ kAIC	**EQUIPMENT BUS & RATING DATA**
	UTILITY METER
	PANELBOARD - MAIN BREAKER OR MAIN LUG AS INDICATED.

CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	GROUND CONDUCTOR IS NOT ALLOWED TO BE RUN INSIDE OF CT CABINET PER PSE&G REQUIREMENTS. CONTRACTOR SHALL ROUTE GROUND WIRE ON THE OUTSIDE OF CT CABINET AND REFER TO PSE&G'S INSTALLATION MANUAL FOR ANY ADDITIONAL REQUIREMENTS.
2	REFER TO CIVIL PLANS FOR PROPOSED SERVICE ENTRANCE CONDUCTORS TRENCHING LOCATIONS; REFER TO TRENCHING DETAILS (SHEET E7.03) FOR FURTHER INFORMATION & REQUIREMENTS.
3	REFER TO SERVICE ENTRANCE GROUNDING DETAIL (SHEET E7.01) FOR FURTHER INFORMATION & REQUIREMENTS.
4	REFER TO SERVICE ENTRANCE GROUNDING DETAIL & TRANSFORMER WIRING DETAIL (SHEET E7.01) FOR FURTHER INFORMATION & REQUIREMENTS.
5	PROVIDE PANELBOARD WITH INTEGRAL TYPE 2 SPD. REFER TO SPECFICATIONS FOR FUTHER INFORMATION & REQUIREMENTS.



1 E6.01 SINGLE LINE
NOT TO SCALE

SCHEDULE OF PANELBOARDS

TAG	LOCATION	VOLTAGE (L-L)	PHASE + WIRE	MAINS TYPE	MCB/MLO RATING	ENCLOSURE	MOUNTING	FED FROM	TOTAL CIRCUITS	NOTES
HV-1	ELEC. 16	480 V	3Ø-4W	MCB	400 A	NEMA 1	SURFACE	SERVICE DISCONNECT	54	SEE BELOW
LV-1	ELEC. 16	208 V	3Ø-4W	MCB	300 A	NEMA 1	SURFACE	T-75KVA	54	SEE BELOW
LV-2	JANITOR 09	208 V	3Ø-4W	MCB	125 A	NEMA 1	SURFACE	LV-1	54	SEE BELOW
(E) HLP1	FIELD	480 V	3Ø-4W	MCB	200 A	NEMA 3R	SURFACE	ETR SERVICE	42	SEE BELOW

PANELBOARD GENERAL NOTES

1. ALL BUSSING SHALL BE COPPER OR ALUMINUM.
2. PROVIDE GFCI BREAKERS AS INDICATED ON PLAN & PANEL SCHEDULES.

SCHEDULE OF TRANSFORMERS

TAG	LOCATION	KVA RATING	VOLTAGE	ENCLOSURE	MOUNTING	FED FROM	GEC SIZE	NOTES
T-75KVA	ELEC. 16	75.0 kVA	480V-208Y/120V	NEMA 1	CEILING	HV-1	#2 AWG	SEE BELOW

TRANSFORMER GENERAL NOTES

1. PROVIDE TWO 2.5% TAPS ABOVE AND TWO 2.5% TAPS BELOW NORMAL FULL CAPACITY.
2. 150° RISE INSULATION.
3. WINDINGS SHALL BE COPPER OR ALUMINUM.

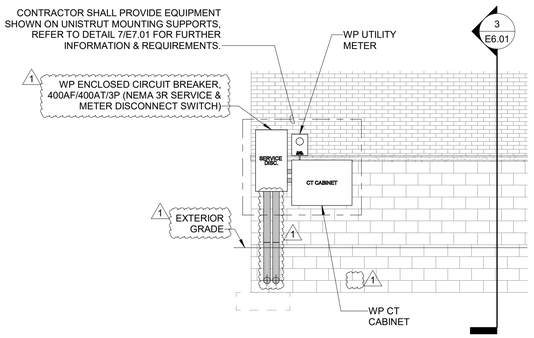
FEEDER KEY NOTES LEGEND

(#) SYMBOL INDICATES FEEDER KEY NOTE

TAG	# OF SETS	CURRENT + NEUTRAL CONDUCTORS	GROUND CONDUCTOR SIZE	RACEWAY SIZE
F1A	2	(4) 400 kCMIL	#2/0	4" C.
F1B	2	(4) #3/0	#3	2-1/2" C.
F2	1	(3) #1	#6	1-1/2" C.
F3	1	(4) 350 kCMIL	#2	3" C.
F4	1	(4) #2/0	#4	2" C.

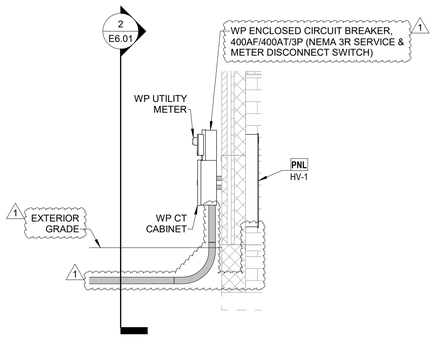
FEEDER KEY NOTES LEGEND GENERAL NOTES

1. ALL CONDUCTORS SHALL BE COPPER.
2. AMPACITIES ARE CALCULATED BASED ON 60° TERMINATIONS FOR EQUIPMENT RATED 100A OR LESS.
3. AMPACITIES ARE CALCULATED BASED ON 75° FOR EQUIPMENT RATED FOR MORE THAN 100A.



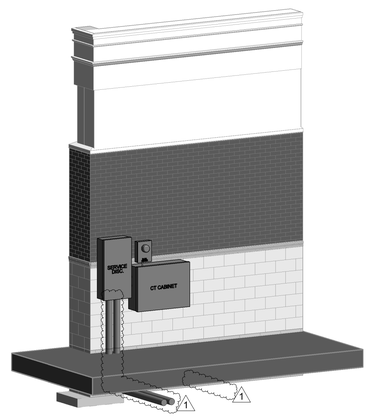
2 E6.01 ELECTRICAL SERVICE ENTRANCE SECTION 1
1/4" = 1'-0"

CONTRACTOR SHALL REFER TO ELECTRICAL SITE PLAN & CIVIL DRAWINGS FOR OTHER NEW TRENCHED CONDUIT, & OTHER NEW & EXISTING UNDERGROUND SYSTEMS & UTILITIES TO BE PROVIDED WITHIN THIS AREA



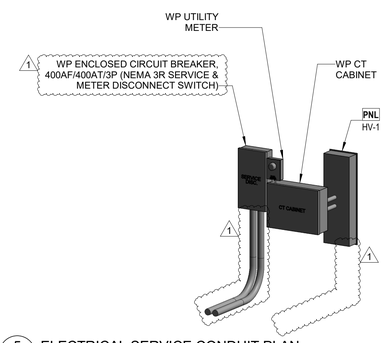
3 E6.01 ELECTRICAL SERVICE ENTRANCE SECTION 2
1/4" = 1'-0"

CONTRACTOR SHALL REFER TO ELECTRICAL SITE PLAN & CIVIL DRAWINGS FOR OTHER NEW TRENCHED CONDUIT, & OTHER NEW & EXISTING UNDERGROUND SYSTEMS & UTILITIES TO BE PROVIDED WITHIN THIS AREA



4 E6.01 ELECTRICAL SERVICE ISOMETRIC
NOT TO SCALE

CONTRACTOR SHALL REFER TO ELECTRICAL SITE PLAN & CIVIL DRAWINGS FOR OTHER NEW TRENCHED CONDUIT, & OTHER NEW & EXISTING UNDERGROUND SYSTEMS & UTILITIES TO BE PROVIDED WITHIN THIS AREA



5 E6.01 ELECTRICAL SERVICE CONDUIT PLAN
NOT TO SCALE

CONTRACTOR SHALL REFER TO ELECTRICAL SITE PLAN & CIVIL DRAWINGS FOR OTHER NEW TRENCHED CONDUIT, & OTHER NEW & EXISTING UNDERGROUND SYSTEMS & UTILITIES TO BE PROVIDED WITHIN THIS AREA

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL SINGLE LINE
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

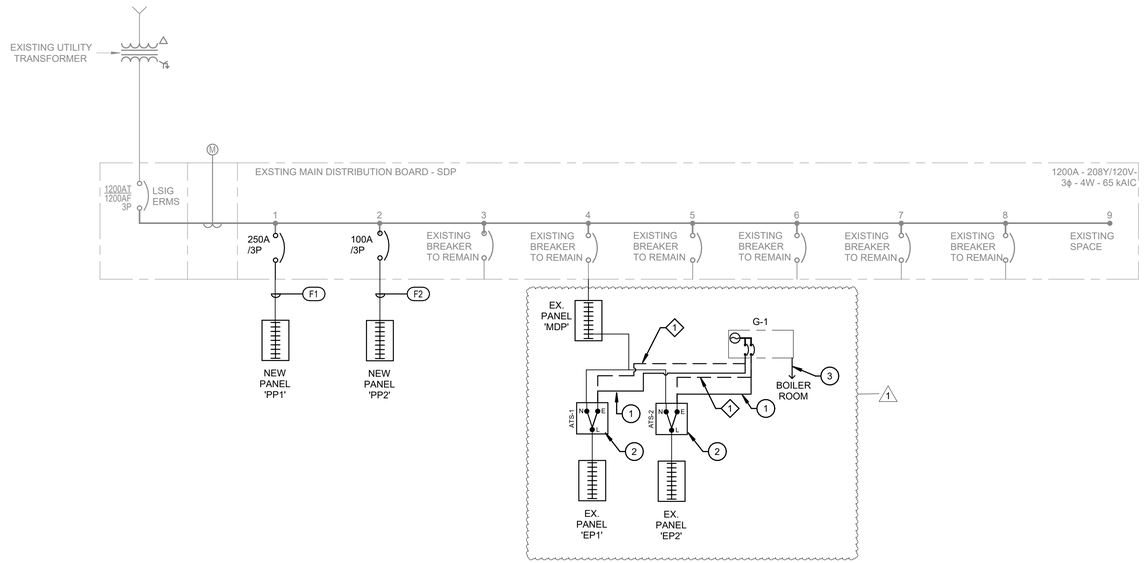
Job No. 2.20277.25.14
File No.

E6.01

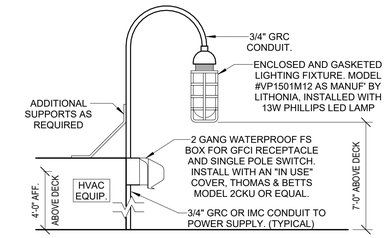
9/3/2026 10:21:07 AM

Single Line

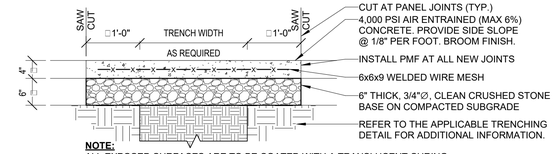
SYMBOL	DESCRIPTION
300AT 400AF 1P	**CIRCUIT BREAKER -** LOW VOLTAGE, THERMAL MAGNETIC "AT" - TRIP SETTING ; "AF" - FRAME SIZE "#P" - No. OF POLES (3-POLE UNLESS NOTED OTHERWISE)
300AT 400AF 1P	**FUSED DISCONNECT SWITCH -** "AF" - SWITCH AMPERAGE RATING; "AS" - FUSE AMP SIZE "#P" - No. OF POLES (3-POLE UNLESS NOTED OTHERWISE)
400A	**DISCONNECT SWITCH -** "A" - SWITCH AMPERAGE RATING
	TRANSFORMER - LOW VOLTAGE, DRY-TYPE WITH COPPER WINDINGS. REFER TO XFMR SCHEDULE FOR ADDITIONAL REQUIREMENTS.
XFMR T-1 480V PRI 208V SEC	**TRANSFORMER TAG-** REFER TO TRANSFORMER SCHEDULE FOR MORE INFORMATION.
	ENCLOSURE
	TROUGH - CODE SIZED WIRING TROUGH
_A - _Y/_V- 3ϕ - 4W - _ kAIC	**EQUIPMENT BUS & RATING DATA**
M	**UTILITY METER**
	PANELBOARD - MAIN BREAKER OR MAIN LUG AS INDICATED.
	GENERATOR
ATS-# N E L	**AUTOMATIC TRANSFER SWITCH -** "#" INDICATES ATS NUMBER



1 E6.01 SINGLE LINE
NOT TO SCALE



2 E6.01 HVAC ROOF RECEPTACLE/LIGHT DETAIL
12" = 1'-0"



NOTE:
ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE I-D IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN 1 GAL. PER 200 SQ.FT.

CONCRETE

3 E6.01 TRENCHING SURFACE TREATMENT
12" = 1'-0"

FEEDER KEY NOTES LEGEND

(#) SYMBOL INDICATES FEEDER KEY NOTE

TAG	# OF SETS	CURRENT + NEUTRAL CONDUCTORS	GROUND CONDUCTOR SIZE	RACEWAY SIZE
F1	1	(4) 300 KCMIL	#4 AWG	2-1/2" C.
F2	1	(4) 3/0 AWG	#6 AWG	2" C.

SCHEDULE OF PANELBOARDS

TAG	LOCATION	VOLTAGE (L-L)	PHASE + WIRE	MAINS TYPE	MCB/MLO RATING	ENCLOSURE	MOUNTING	FED FROM	TOTAL CIRCUITS	NOTES
PP1	UTILITY / STORAGE 116R	208 V	3Ø-4W	MLO	250 A	NEMA 1	SURFACE	SDP	54	1,2
PP2	BOILER 109.2	208 V	3Ø-4W	MLO	150 A	NEMA 1	SURFACE	SDP	54	1,2
SDP	STOR. 104.2		3Ø-4W	MCB	800 A	NEMA 1	FLOOR			

PANELBOARD GENERAL NOTES

1. ALL BUSSING SHALL BE COPPER.
2. PROVIDE GFCI BREAKERS AS INDICATED ON PLAN.

CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	CONDUCTOR BETWEEN EXISTING GENERATOR 'G-1' AND EXISTING AUTOMATIC TRANSFER SYSTEM 'ATS-1' TO BE REPLACED. ORIGINAL FEEDER TO BE DISCONNECTED AND ABAONDONED IN PLACE. CONTRACTOR TO RUN NEW CONDUIT AS SHOWN ON CIVIL DRAWING C3.01, SEE 3/E6.01 AND 6/E6.02 FOR DETAILS ON TRENCHING AND PATCHING. CONTRACTOR TO PROVIDE NEW CONDUIT, CONDUCTORS, ALL REQUIRED FITTINGS AND JUNCTION BOXES REQUIRED TO COMPLETE SCOPE OF WORK AND MEET NEC REQUIREMENTS. CONTRACTOR TO MATCH EXISTING WIRE AND CONDUIT SIZE FOR ALL CONDUIT RUNS. CONTRACTOR TO FIELD VERIFY WIRE AND CONDUIT SIZE. ALL NEW WIRING SHALL BE COPPER.
2	ATS LOCATED IN EXISTING BOILER ROOM
3	NEW 3/4" CONDUIT TO CONTAIN NEW CONTROLS REQUIRED BETWEEN ATS DEVICES AND GENERATOR. CONTRACTOR TO PROVIDE CONDUIT, CONDUCTORS, AND FITTINGS AS REQUIRED TO ENSURE FUNCTIONALITY OF EXISTING GENERATORS AND ATS DEVICES.

DEMOLITION KEY NOTES LEGEND

(#) SYMBOL INDICATES DEMO KEY NOTE

KEY #	DESCRIPTION
1	EXISTING CONDUIT AND CONDUCTORS TO BE DISCONNECTED AND ABANDONDED IN PLACE. PREPARE GENERATOR AND ATS DEVICES TO BE RE-FED BY NEW CONDCUTORS AND CONDUIT.

EXISTING PANELBOARD NAME: PP2

LOCATION	BOILER 109.2	**VOLTAGE:** 208Y/120V	**A.I.C RATING** 22
FED FROM:	SDP	**PHASES:** 3	**MAIN TYPE** MLO
MOUNTING:	SURFACE	**WIRES:** 4	**MIN. MCB/MLO RATING:** 150 A
ENCLOSURE RATING:	NEMA 1	**C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELTY.**	

CKT	LOAD NAME	C/G/R			TRIP/POLE		A		B		C		POLE/TRIP	C/G/R				LOAD NAME	CKT
1	ANSUL CABINET	(2) #12 AWG	#12 AWG	3/4"	20 A	1	180	180					1	20 A	3/4"	#12 AWG	(2) #12 AWG	ELECTRICAL GAS VALVE	2
3	FRIDGE	(2) #12 AWG	#12 AWG	3/4"	20 A	1			900	1,000			1	20 A	3/4"	#12 AWG	(2) #12 AWG	KITCHEN POWER POLE	4
5	PANTRY RECEPT	(2) #12 AWG	#12 AWG	3/4"	20 A	1					1,800	180	1	20 A	3/4"	#12 AWG	(2) #12 AWG	MECHANICAL RECPT	6
7	FREEZER	(2) #12 AWG	#12 AWG	3/4"	20 A	1	180	360					1	20 A	3/4"	#12 AWG	(2) #12 AWG	KITCHEN RECEPTACLES	8
9	KITCHEN RECEPTACLES	(2) #12 AWG	#12 AWG	3/4"	20 A	1			180	180			1	20 A	3/4"	#12 AWG	(2) #12 AWG	KITCHEN POWER POLE	10
11	KITCHEN POWER POLE	(2) #12 AWG	#12 AWG	3/4"	20 A	1					180	115	1	20 A	3/4"	#12 AWG	(2) #12 AWG	ERV-156	12
13	KITCHEN RECEPTACLES	(2) #12 AWG	#12 AWG	3/4"	20 A	1	180	540					1	20 A	3/4"	#12 AWG	(2) #12 AWG	KITCHEN RECEPTACLES	14
15									1,033	1,296									16
17	KX-1	(3)#12 AWG	#12 AWG	3/4"	20 A	3					1,033	1,296	3	15 A	3/4"	#12 AWG	(3)#12 AWG	MUA-1	18
19							1,033	1,296											20
21	KITCHEN RECEPTACLES	(2) #12 AWG	#12 AWG	3/4"	20 A	1			360	180			1	20 A	3/4"	#12 AWG	(2) #12 AWG	FRIDGE	22
23											833	833							24
25	PUMP P-6	(3) #12 AWG	#12 AWG	3/4"	20 A	3	833	833					3	20 A	3/4"	#12 AWG	(3) #12 AWG	PUMP P-5	26
27									833	833									28
29	EDH-106A	(2) #12 AWG	#12 AWG	3/4"	20 A	2					1,000	150	2	20 A	3/4"	#12 AWG	(2) #12 AWG	AC-106A	30
31							1,000	150											32
33									2,880	2,880									34
35	CU-106A	(3) #8 AWG	#10 AWG	3/4"	40 A	3					2,880	2,880	3	40 A	3/4"	#10 AWG	(3) #8 AWG	CU-306	36
37							2,880	2,880											38
39	AC-306	(2) #12 AWG	#12 AWG	3/4"	20 A	2			150	180			1	20 A	3/4"	#12 AWG	(2) #12 AWG	MUA SERVICE RECPT	40
41											150	180	1	20 A	3/4"	#12 AWG	(2) #12 AWG	CU-106A RECPT	42
43	CU-306 RECPT	(2) #12 AWG	#12 AWG	3/4"	20 A	1	180	116					1	20 A	3/4"	#12 AWG	(2) #12 AWG	OFFICE 306 LIGHTING	44
45	SPARE				20 A	1			0	0			1	20 A				SPARE	46
47	SPARE				20 A	1					0	0	1	20 A				SPARE	48
49	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	50
51	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	52
53	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	54
					TOTAL LOAD (VA PER PHASE):		12,822 VA		12,886 VA		13,511 VA								
					TOTAL LOAD (VA):		39,219 VA												
					TOTAL AMPS (A PER PHASE):		107 A		107 A		113 A								
					TOTAL AMPS (A):		109 A												

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	EST. DEMAND (VA)	TOTALS	
LAN_LIGHTING	116	100.00%	116		
Other	31,983	100.00%	31,983	**TOTAL CONN. LOAD (VA):**	39,219
LAN_EQUIPMENT	1,000	100.00%	1,000	**TOTAL EST. DEMAND (VA):**	39,219
LAN_RECETAPCLES	5,940	100.00%	5,940	**TOTAL CONN. CURRENT (A):**	109 A
EQUIPMENT	180	100.00%	180	**TOTAL EST. CURRENT (A):**	109 A

EXISTING PANELBOARD NAME: PP1

LOCATION	UTILITY / STORAGE 116R	**VOLTAGE:** 208Y/120V	**A.I.C RATING** 22
FED FROM:	SDP	**PHASES:** 3	**MAIN TYPE** MLO
MOUNTING:	SURFACE	**WIRES:** 4	**MIN. MCB/MLO RATING:** 250 A
ENCLOSURE RATING:	NEMA 1	**C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELTY.**	

CKT	LOAD NAME	C/G/R			TRIP/POLE		A		B		C		POLE/TRIP	C/G/R				LOAD NAME	CKT
1	OUTDOOR LIGHTS	#12	#12	3/4"	20 A	1	112	126					1	20 A	3/4"	#12	(2)#12	BOLLARD LIGHTING	2
3	PREPARED SPACE				--	1			--	540			1	20 A	3/4"	#12	(2)#12	116J RECPTS	4
5	MECH RECPT	(2)#12	#12	3/4"	20 A	1					180	240	1	20 A	3/4"	#12	(2)#12	EXHAUST FAN	6
7	MEDIA CENTER 206 RECPTS	(2)#12	#12	3/4"	20 A	1	1,080	1,080					1	20 A	3/4"	#12	(2)#12	MEDIA CENTER FLOOR...	8
9	2ND FLOOR ADD LIGHTS	(2)#12	#12	3/4"	20 A	1			1,851	540			1	20 A	3/4"	#12	(2)#12	MEDIA CENTER 206 RECPTS	10
11	116J RECPTS	(2)#12	#12	3/4"	20 A	1					720	1,416	1	20 A	3/4"	#12	(2)#12	FIRST FLOOR ADD LIGHTING	12
13	116M RECPT	(2)#12	#12	3/4"	20 A	1	540	720					1	20 A	3/4"	#12	(2)#12	116M RECPT	14
15	116Q RECPTS	(2)#12	#12	3/4"	20 A	1			720	0			1	20 A				SPARE	16
17	MEDIA CENTER 206 RECPTS	(2)#12	#12	3/4"	20 A	1					540	540	1	20 A	3/4"	#12	(2)#12	LIBRARY WORKSTATIONS	18
19							300	1,956											20
21	AHU-116	(3) #12	#12	3/4"	15 A	3			300	1,956			3	25 A	3/4"	#10	(3)#10	CU-116	22
23											300	1,956							24
25							1,956	1,956											26
27	CU-116J	(3)#10	#10	3/4"	25 A	3			1,956	1,956			3	25 A	3/4"	#10	(3)#10	CU-116M	28
29											1,956	1,956							30
31							9,607	150					1	20 A	3/4"	#12	(2)#12	LOUVER	32
33	RTU-M	(3)#1	#8	1/1/4"	100 A	3			9,607	520			2	15 A	3/4"	#12	(2)#12	UV-116J	34
35											9,607	520							36
37	UV-116M	(2)#12	#12	3/4"	15 A	2	520	540					1	20 A	3/4"	#12	(2)#12	LIBRARY WORKSTATIONS	38
39									520	540			1	20 A	3/4"	#12	(2)#12	LIBRARY WORKSTATIONS	40
41	SPARE				20 A	1					0	720	1	20 A	3/4"	#12	(2)#12	LIBRARY DESK	42
43	SPARE				20 A	1	0	0					1	20 A				SPARE	44
45	SPARE				20 A	1			0	0			1	20 A				SPARE	46
47	SPARE				20 A	1					0	--	1	--				PREPARED SPACE	48
49	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	50
51	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	52
53	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	54
					TOTAL LOAD (VA PER PHASE):		20,643 VA		21,006 VA		20,651 VA								
					TOTAL LOAD (VA):		62,300 VA												
					TOTAL AMPS (A PER PHASE):		172 A		175 A		172 A								
					TOTAL AMPS (A):		173 A												

LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	EST. DEMAND (VA)	TOTALS	
LAN_LIGHTING	3,505	100.00%	3,505		
Other	49,795	100.00%	49,795	**TOTAL CONN. LOAD (VA):**	62,300
LAN_EQUIPMENT	360	100.00%	360	**TOTAL EST. DEMAND (VA):**	62,300
LAN_RECETAPCLES	8,640	100.00%	8,640	**TOTAL CONN. CURRENT (A):**	173 A
				TOTAL EST. CURRENT (A):	173 A

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	07/03/24
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title: REGISTERED ARCHITECT License No. 21A/02276900

Date	Description
06/12/24	ADDED. #1

Engineering, Planning, Architecture, Surveying Inc.
LAN ASSOCIATES
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ELECTRICAL SINGLE LINE
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

E6.01

9/4/2026 1:24:52 PM

NEW PANELBOARD NAME: HV-1

LOCATION	ELEC. 16	VOLTAGE: 480Y/277V	A.I.C RATING 22kAIC (1)
FED FROM:	SERVICE DISCONNECT	PHASES: 3	MAIN TYPE MCB
MOUNTING:	SURFACE	WIRES: 4	MIN. MCB/MLO RATING: 400 A (1)
ENCLOSURE RATING:	NEMA 1	C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELY.	

CKT	LOAD NAME	C/G/R			TRIP/POLE		A		B		C		POLE/TRIP		C/G/R			LOAD NAME	CKT
1	SURGE SUPPRESSION DEVICE	4#10	#10	3/4"C	30 A	3	263	35,456					3	150 A	3#1	#6G	1-1/2"C	RTU-G (ROOF - EAST)	2
3									263	35,456									4
5											263	35,456							6
7	PREPARED SPACE				--	1	--	11,911					3	50 A	3#6	#10G	1"C	RTU-W (ROOF - EAST)	8
9	PREPARED SPACE				--	1			--	11,911									10
11	PREPARED SPACE				--	1					--	11,911							12
13	PNL LV-1 (THRU 75KVA XFMR)	SSL	SSL	SSL	125 A	3	20,548	9,501					3	45 A	3#8	#10G	3/4"C	DOAS-L (ROOF - WEST)	14
15									21,644	9,501									16
17											21,818	9,501							18
19	PARKING LOT POLE LTG	2#12	#12G	3/4"C	20 A	1	805	8,000					3	40 A	3#8	#10G	3/4"C	EWH-1 (RISER 01)	20
21	NORTH EXTERIOR LTG	2#12	#12G	3/4"C	20 A	1			335	8,000									22
23	SOUTH EXTERIOR LTG	2#12	#12G	3/4"C	20 A	1					353	8,000							24
25	GYM NORMAL LTG	2#12	#12G	3/4"C	20 A	1	4,171	0					1	20 A				SPARE	26
27	WRESTLING NORMAL LTG	2#12	#12G	3/4"C	20 A	1			1,241	0			1	20 A				SPARE	28
29	GYM EM LTG	2#12	#12G	3/4"C	20 A	1					1,425	0	1	20 A				SPARE	30
31	SPARE				20 A	1	0	--					1	--				PREPARED SPACE	32
33	SPARE				20 A	1			0	--			1	--				PREPARED SPACE	34
35	SPARE				20 A	1					0	--	1	--				PREPARED SPACE	36
37	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	38
39	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	40
41	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	42
43	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	44
45	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	46
47	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	48
49	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	50
51	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	52
53	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	54
					TOTAL LOAD (VA PER PHASE):		90,655 VA		88,352 VA		88,727 VA								
					TOTAL LOAD (VA):		267,734 VA												
					TOTAL AMPS (A PER PHASE):		327 A		319 A		321 A								
					TOTAL AMPS (A):		322 A												

----ABBREVIATIONS----
SSL: SEE ELECTRICAL SINGLE LINE (SHEET E6.01)

LOAD CLASSIFICATIONS	CONNECTED LOAD (VA)	DEMAND FACTOR	EST. DEMAND (VA)	TOTALS	
HVAC	189,179	100.00%	189,179		
LIGHTING	10,296	100.00%	10,296	TOTAL CONN. LOAD (VA):	267,734
EQUIPMENT	54,590	100.00%	54,590	TOTAL EST. DEMAND (VA):	265,899
RECEPTACLES	13,670	86.58%	11,835	TOTAL CONN. CURRENT (A):	322 A
				TOTAL EST. CURRENT (A):	320 A

NEW PANELBOARD NAME: LV-1

LOCATION	ELEC. 16	VOLTAGE: 208Y/120V		A.I.C RATING	10kAIC
FED FROM:	T-75KVA	PHASES: 3		MAIN TYPE	MCB
MOUNTING:	SURFACE	WIRES: 4		MIN. MCB/MLO RATING:	300 A
ENCLOSURE RATING:	NEMA 1	C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELY.			

CKT	LOAD NAME	C/G/R			TRIP/POLE		A		B		C		POLE/TRIP		C/G/R			LOAD NAME	CKT
1	PNL LV-2	SSL	SSL	SSL	150 A	3	9,938	600					1	20 A	2#12	#12G	3/4"C	FIRE ALARM CIRCUIT (FACP)	2
3									10,262	600			1	20 A	2#12	#12G	3/4"C	FIRE ALARM CIRCUIT (FAA)	4
5											7,684	350	1	20 A	2#10	#10G	3/4"C	CU-16 OUTLET	6
7	BLEACHER CONTROL PANEL (NORTH)	4#10	#10G	3/4"C	15 A	3	1,440	350					1	20 A	2#8	#8G	3/4"C	RTU-G OUTLET	8
9									1,440	350			1	20 A	2#8	#8G	3/4"C	RTU-W OUTLET	10
11											1,440	900	1	20 A	2#8	#8G	3/4"C	GYM NE OUTLETS	12
13	BLEACHER CONTROL PANEL (SOUTH)	4#10	#10G	3/4"C	15 A	3	1,440	900					1	20 A	2#6	#6G	3/4"C	GYM SE OUTLETS	14
15									1,440	540			1	20 A	2#10	#10G	3/4"C	STOR OUTLETS	16
17											1,440	540	1	20 A	2#10	#10G	3/4"C	SCALE RM OUTLETS	18
19	GYM SCOREBOARD OUTLET	2#12	#12G	3/4"C	20 A	1	240	180					1	20 A	2#12	#12G	3/4"C	ELEC OUTLET	20
21	HOOP TAPE LIGHTS	2#12	#12G	3/4"C	20 A	1			1,080	720			1	20 A	2#10	#10G	3/4"C	WRESTLING N OUTLETS	22
23	GYM RELAY BANK A	2#6	#6G	1"C	30 A	1					3,600	1,080	1	20 A	2#6	#6G	3/4"C	WRESTLING W OUTLETS	24
25	GYM RELAY BANK B	2#6	#6G	1"C	30 A	1	3,600	1,080					1	20 A	2#8	#8G	3/4"C	WRESTLING E OUTLETS	26
27	SPARE				20 A	1			0	720			1	20 A	2#6	#6G	3/4"C	WRESTLING S OUTLETS	28
29	SPARE				20 A	1					0	0	1	20 A				SPARE	30
31	SPARE				20 A	1	0	0					1	20 A				SPARE	32
33	PREPARED SPACE				--	1			--	0			1	20 A				SPARE	34
35	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	36
37	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	38
39	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	40
41	EAST ROOM LTG	2#12	#12G	3/4"C	20 A	1					212	--	1	--				PREPARED SPACE	42
43	LIGHTING CONTROL PANEL	2#12	#12G	3/4"C	20 A	1	600	--					1	--				PREPARED SPACE	44
45	BMS PANEL	2#12	#12G	3/4"C	20 A	1			100	--			1	--				PREPARED SPACE	46
47	IT RACK	2#12	#12G	3/4"C	20 A	1					180	--	1	--				PREPARED SPACE	48
49	METER VAULT OUTLET	2#3	#3G	1-1/4"C	20 A	1	180	--					1	--				PREPARED SPACE	50
51	METER VAULT HEATER #1	2#4	#4G	1-1/4"C	25 A	1			2,000	2,392			2	35 A	2#10	#10G	3/4"C	CU-16 (ROOF - EAST) & AC-16 (ELEC.)	52
53	METER VAULT HEATER #2	2#4	#4G	1-1/4"C	25 A	1					2,000	2,392							54
					TOTAL LOAD (VA PER PHASE):		20,548 VA		21,644 VA		21,818 VA								
					TOTAL LOAD (VA):		64,010 VA												
					TOTAL AMPS (A PER PHASE):		171 A		182 A		183 A								
					TOTAL AMPS (A):		178 A												

----ABBREVIATIONS----
SSL: SEE ELECTRICAL SINGLE LINE (SHEET E6.01)

LOAD CLASSIFICATIONS	CONNECTED LOAD (VA)	DEMAND FACTOR	EST. DEMAND (VA)	TOTALS	
HVAC	18,574	100.00%	18,574		
LIGHTING	1,965	100.00%	1,965	TOTAL CONN. LOAD (VA):	64,010
EQUIPMENT	29,800	100.00%	29,800	TOTAL EST. DEMAND (VA):	62,175
RECEPTACLES	13,670	86.58%	11,835	TOTAL CONN. CURRENT (A):	178 A
				TOTAL EST. CURRENT (A):	173 A

NEW PANELBOARD NAME: LV-2

LOCATION	JANITOR 09	VOLTAGE: 208Y/120V		A.I.C RATING	10kAIC
FED FROM:	LV-1	PHASES: 3		MAIN TYPE	MCB
MOUNTING:	SURFACE	WIRES: 4		MIN. MCB/MLO RATING:	125 A
ENCLOSURE RATING:	NEMA 1	C/G/R REFERS TO SIZE OF CURRENT-CARRYING CONDUCTORS, GROUND, AND RACEWAY, RESPECTIVELY.			

CKT	LOAD NAME	C/G/R			TRIP/POLE		A		B		C		POLE/TRIP		C/G/R			LOAD NAME	CKT
1	STORAGE WASHER/DRYER	2#8	#8G	3/4"C	30 A	2	3,120	1,500					2	20 A	2#12	#12G	3/4"C	ECH-02 (VESTIBULE)	2
3									3,120	1,500									4
5	TX-G (ROOF)	2#12	#12G	3/4"C	15 A	2					198	1,500	2	20 A	2#12	#12G	3/4"C	ECH-06 (ENTRY)	6
7							198	1,500											8
9	TX-B (ROOF)	2#12	#12G	3/4"C	15 A	2			198	1,500			2	20 A	2#12	#12G	3/4"C	ECH-12 (VESTIBULE)	10
11											198	1,500							12
13	DOAS-L OUTLET	2#10	#10G	3/4"C	20 A	1	350	1,200					1	20 A	2#12	#12G	3/4"C	ENTRY WATER FOUNTAIN	14
15	ENTRY OUTLETS	2#10	#10G	3/4"C	20 A	1			360	1,200			1	20 A	2#12	#12G	3/4"C	GYM WATER FOUNTAIN	16
17	STOR&WOMEN OUTLETS	2#10	#10G	3/4"C	20 A	1					360	180	1	20 A	2#12	#12G	3/4"C	JANITOR OUTLET	18
19	SHWR&MEN OUTLETS	2#12	#12G	3/4"C	20 A	1	360	250					1	20 A	2#8	#8G	3/4"C	RISER OUTLET	20
21	LOCK&VEST 2/3 OUTLETS	2#10	#10G	3/4"C	20 A	1			540	900			1	20 A	2#8	#8G	3/4"C	GYM NW OUTLETS	22
23	LOCK&VEST 11/12 OUTLETS	2#12	#12G	3/4"C	20 A	1					540	900	1	20 A	2#10	#10G	3/4"C	GYM SW OUTLETS	24
25	TRAINER CTR 1 OUTLETS	2#12	#12G	3/4"C	20 A	1	360	100					1	20 A	2#12	#12G	3/4"C	TRAP PRIMERS (NORTH)	26
27	TRAINER CTR 2 OUTLETS	2#12	#12G	3/4"C	20 A	1			360	200			1	20 A	2#12	#12G	3/4"C	TRAP PRIMERS (SOUTH)	28
29	TRAINER CONV OUTLETS	2#10	#10G	3/4"C	20 A	1					540	200	1	20 A	2#12	#12G	3/4"C	RECIRC PUMP & AQUASTAT	30
31	TRAINER ICE OUTLET	2#12	#12G	3/4"C	20 A	1	1,000	0					1	20 A				SPARE	32
33	WEST EXTERIOR LTG	2#12	#12G	3/4"C	20 A	1			385	0			1	20 A				SPARE	34
35	WEST INTERIOR LTG	2#12	#12G	3/4"C	20 A	1					969	0	1	20 A				SPARE	36
37	SPARE				20 A	1	0	--					1	--				PREPARED SPACE	38
39	SPARE				20 A	1			0	--			1	--				PREPARED SPACE	40
41	SPARE				20 A	1					0	--	1	--				PREPARED SPACE	42
43	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	44
45	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	46
47	PREPARED SPACE				--	1					--	--	1	--				PREPARED SPACE	48
49	PREPARED SPACE				--	1	--	--					1	--				PREPARED SPACE	50
51	PREPARED SPACE				--	1			--	--			1	--				PREPARED SPACE	52
53	PREPARED SPACE				--	1					--	600	1	20 A	2#12	#12G	3/4"C	FIRE ALARM CIRCUIT (FAA)	54
					TOTAL LOAD (VA PER PHASE):		9,938 VA		10,262 VA		7,684 VA								
					TOTAL LOAD (VA):		27,883 VA												
					TOTAL AMPS (A PER PHASE):		86 A		88 A		64 A								
					TOTAL AMPS (A):		77 A												

LOAD CLASSIFICATIONS	CONNECTED LOAD (VA)	DEMAND FACTOR	EST. DEMAND (VA)	TOTALS	
HVAC	9,790	100.00%	9,790		
LIGHTING	1,453	100.00%	1,453	TOTAL CONN. LOAD (VA):	27,883
EQUIPMENT	10,740	100.00%	10,740	TOTAL EST. DEMAND (VA):	27,883
RECEPTACLES	5,900	100.00%	5,900	TOTAL CONN. CURRENT (A):	77 A
				TOTAL EST. CURRENT (A):	77 A

CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	CONTRACTOR SHALL PROVIDE ALL FIRE ALARM BRANCH CIRCUITS WITH RED LOCKABLE BRANCH CIRCUIT BREAKERS IN ACCORDANCE WITH NJ FIRE ALARM CODE SECTIONS 10.6.5.2.3 & 10.6.5.4. ASSOCIATED CIRCUIT SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT" IN ACCORDANCE WITH NJ UCC ELECTRICAL SUBCODE 760.41(B).
2	CONTRACTOR SHALL PROVIDE INDICATED NEW RED LOCKABLE BRANCH CIRCUIT BREAKER, WIRING, & CONDUIT FOR (1) OF THE (2) FIRE ALARM ANNUNCIATOR BRANCH CIRCUITS DESIGNATED BY THIS KEYNOTE. PROPOSED LOCATIONS ARE DESIGNATED ON SHEETS E2.01 & FA2.01; COORDINATE FINAL LOCATION WITH FIRE MARSHAL, PRIOR TO COMMENCEMENT OF WORK. REFER TO FIRE ALARM DRAWINGS FOR FURTHER INFORMATION & REQUIREMENTS. FOR BRANCH CIRCUIT NOT TO BE PROVIDED, PROVIDE PREPARED SPACE IN LIEU OF RED LOCKABLE BREAKER.
3	CONTRACTOR SHALL PROVIDE 20A-1P GFI CIRCUIT BREAKER FOR INDICATED BRANCH CIRCUIT.
4	CONTRACTOR SHALL PROVIDE 30A-2P GFI CIRCUIT BREAKER FOR INDICATED BRANCH CIRCUIT.
5	CONTRACTOR SHALL COORDINATE FINAL RECEPTACLE NEMA TYPE & BRANCH CIRCUIT CHARACTERISTICS WITH ICE MACHINE MANUFACTURER'S INSTALLATION INSTRUCTION & GUIDELINES, PRIOR TO COMMENCEMENT OF WORK.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

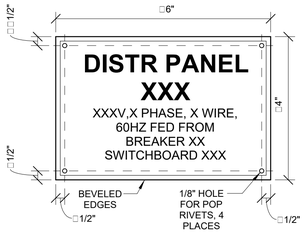
ELECTRICAL PANEL SCHEDULES
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

E6.02

9/3/2026 10:21:08 AM

NAMEPLATE/LABELING REQUIREMENTS



REQUIRED DATA

FIRST LINE: EQUIPMENT DESIGNATION
SECOND LINE: VOLTAGE, PHASE, No. OF WIRE, FREQUENCY
THIRD AND FOURTH LINES: POWER SOURCE AND BREAKER
"XXX": BASED ON FINAL SHOP DRAWING AND INSTALLED EQUIPMENT CIRCUIT NUMBER
TRANSFORMERS: INCLUDE LINE INDICATING "FEEDS TO"

LETTER SIZE & SPACING

TOP ROW: 1" LETTERS
OTHER ROWS: 1/2" LETTERS
BETWEEN ROWS: 1/4" LETTERS BETWEEN 1ST & 2ND, 1/8" FOR OTHER ROWS

NOTES

LETTERING SHALL BE WHITE ON A BLACK BACKGROUND
FOR TRANSFORMERS, INCLUDE PRI & SEC VOLTAGES, PRI AND SEC CONNECTIONS (E.G., DELTA, WYE, ETC.) AND EQUIPMENT SERVING.

GENERAL LABELING REQ.:

ENGRAVED PLASTIC NAMEPLATES AND SIGNS: ENGRAVING STOCK, MELAMINE PLASTIC LAMINATE, MINIMUM 1/16" THICK FOR SIGNS UP TO 20 SQ. IN. AND 1/8" THICK FOR LARGER SIZES. ENGRAVED LEGEND WITH WHITE LETTERS ON BLACK FACE FOR NORMAL POWER, WHITE LETTERS ON RED FACE FOR EMERGENCY POWER. PUNCHED OR DRILLED FOR MECHANICAL FASTENERS. TEXT AT 1/2" HIGH LETTERING.

NAMEPLATES SHALL ADEQUATELY DESCRIBE THE FUNCTION OF THE PARTICULAR EQUIPMENT INVOLVED. WHERE NAMEPLATES ARE DETAILED ON THE DRAWINGS, INSCRIPTION AND SIZE OF LETTERS SHALL BE AS SHOWN AND SHOP DRAWING SUBMITTED FOR APPROVAL. NAMEPLATES FOR PANELBOARDS AND SWITCHBOARDS SHALL INCLUDE THE PANEL DESIGNATION, VOLTAGE, PHASE AND WIRE. THE NEXT ITEM SHALL BE PANEL NAME. IN ADDITION, DESCRIBE WHERE THE PANEL IS FED FROM. FOR EXAMPLE,

PANEL 1LA, 120/208V, 3PH, 4W
PP1 PANEL
FED FROM MDP

THE SERVICE DISCONNECT SHALL BE LABELED AS THE "SERVICE DISCONNECT," PER NEC 230.70(B).

PER NEC 110.24(A) THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED SHALL BE LEGIBLY MARKED ON THE SERVICE EQUIPMENT. EXAMPLE: MAXIMUM AVAILABLE FAULT CURRENT: 34,000 SYMMETRICAL RMS AMPERES DATE 12/1/11.

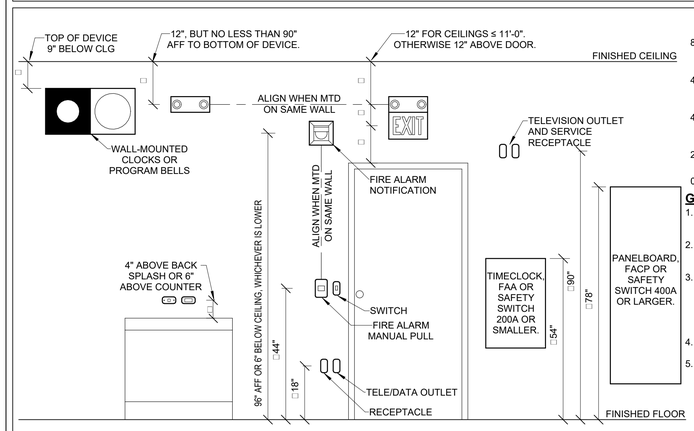
PER NEC 110.16, "FLASH PROTECTION. SWITCHBOARDS, PANEL BOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, TRANSFER SWITCHES AND MOTOR CONTROL CENTERS IN OTHER THAN DWELLING OCCUPANCIES, WHICH ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED, SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT." THE NEC LABELING REQUIREMENTS APPLY TO ANY ELECTRICAL EQUIPMENT INSTALLED OR MODIFIED AFTER 2002. WARNING LABEL SHALL COMPLY WITH ANSI Z535.4, WHICH SPECIFIES COLORS AND SIGNAL WORDS TO BE USED.

PER NEC 408.4(A), EVERY CIRCUIT AND CIRCUIT IDENTIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OF USE.

PER NEC 700.7(B) AND NEC 701.7, FURNISH AND INSTALL WARNING LABEL THAT WARNS OF A SHOCK HAZARD IF THE GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS TYPE OF EQUIPMENT IS REMOVED WHILE ALTERNATE ENERGY SOURCES ARE ENERGIZED.

1 NAMEPLATE/LABELING REQUIREMENTS
E6.02 NOT TO SCALE

DEVICE MOUNTING HEIGHTS

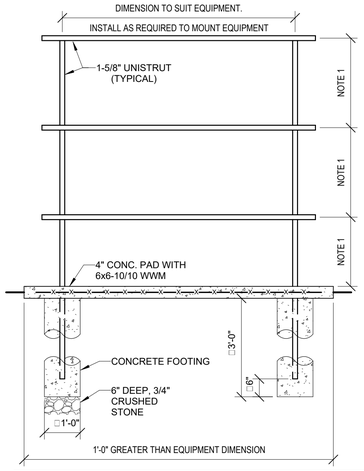


8'-6" PENDANT-HUNG INDUSTRIAL AND STRIP LIGHTING FIXTURES
4'-6" WALL-MOUNTED TELEPHONES AND PAY STATIONS (3'-6" AT HANDICAP LOCATIONS)
4'-0" WALL-MOUNTED WIREMOLD
2'-0" ELECTRICAL RECEPTACLES WITHIN MECHANICAL SPACES, ELECTRICAL AND ELEVATOR ROOMS.
0'-0" FINISHED FLOOR

GENERAL NOTES:

1. Mounting heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to nearest block or brick coursing.
2. The mounting heights shall be adhered to unless specifically noted or detailed otherwise on the drawings or specifications.
3. A "CTR" designation beside a device indicates device mounted above counter or casework. Refer to architectural and casework details for actual elevation. Receptacles above counters shall be horizontally mounted 6" above counter or 4" above backsplash. Coordinate exact location in field.
4. A "+" symbol beside a device indicates the mounting height above finished floor.
5. All devices indicated to be installed at different mounting heights and located within one stud space from each other shall align vertically on the same side of the stud.

2 DEVICE MOUNTING HEIGHTS
E6.02 NOT TO SCALE

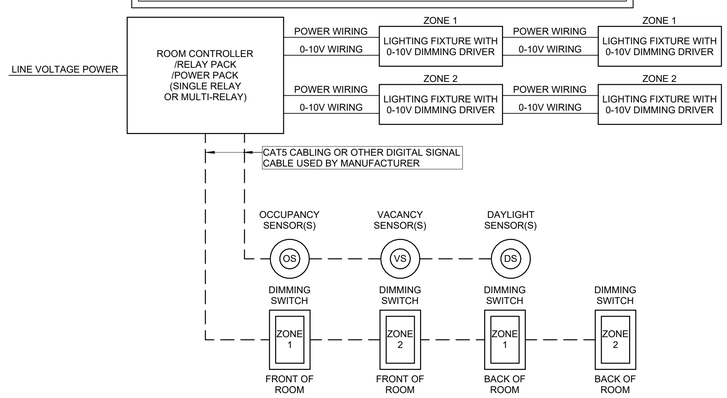


NOTES:
1. DIMENSION AND QUANTITY OF CROSS MEMBERS AS REQUIRED TO MOUNT EQUIPMENT.

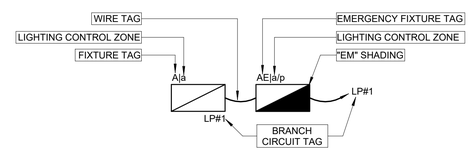
3 EQUIPMENT MOUNTING DETAIL (SLOTTED METAL)
E6.02 NOT TO SCALE

LIGHTING CONTROL DEVICES

1. DETAIL IS INTENDED TO BE DIAGRAMMATIC OF TYPICAL STAND ALONE LOW-VOLTAGE LIGHTING CONTROL TOPOLOGY; CONTRACTOR TO COORDINATE WITH LIGHTING CONTROL MANUFACTURER FOR EXACT SYSTEM TOPOLOGY.
2. ALL SWITCHES SHALL BE ENGRAVED WITH THEIR FUNCTIONS.
3. ADDITIONAL RELAYS (AND ZONES) FOR PRIMARY AND SECONDARY SIDELIGHTED ZONES MAY BE REQUIRED AS NEEDED BASED ON ROOM REQUIREMENTS.
4. CONTRACTOR SHALL PROVIDE ANY COMMISSIONING DEVICES (SUCH AS BLUETOOTH DONGLE OR OTHER ACCESSORIES) AS REQUIRED TO FULLY COMMISSION SYSTEM BASED ON SEQUENCE OF OPERATION.

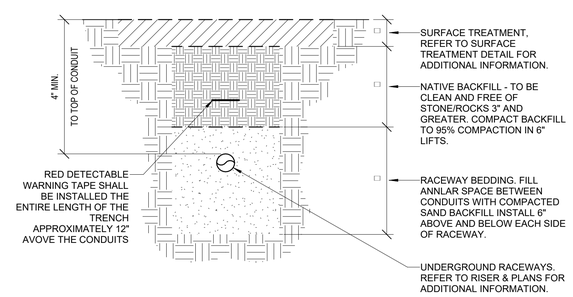


4 TYPICAL LIGHTING CONTROL DETAIL
E6.02 NOT TO SCALE



1. CONTROL ZONE TAGS:
   a,b,c... - SWITCH ZONE TAG - LOWER CASE DESIGNATION
   a/p,b/p,c/p... - DAYLIGHT RESPONSIVE CONTROL PRIMARY ZONE TAG
   a/s,b/s,c/s... - DAYLIGHT RESPONSIVE CONTROL SECONDARY ZONE TAG
2. DAYLIGHT RESPONSIVE CONTROL ZONES, BOTH PRIMARY AND SECONDARY, SHALL BE SWITCHED WITH FIXTURES WITH THE SAME ZONE TAG DESIGNATION IN ADDITION TO AUTOMATIC DIMMING/SHUTOFF FROM DAYLIGHT SENSOR
3. EMERGENCY FIXTURE MARKED WITH AN "E" IN THE FIXTURE TAG, ARE SHADED, OR BOTH SHALL BE PROVIDED WITH INTEGRAL EMERGENCY BATTERY PACK THAT WILL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER. PROVIDE UN-SWITCHED CIRCUIT TO LIGHTING FIXTURES AS NEEDED.
4. BRANCH CIRCUIT MAY BE SHOWN WITH WIRE TAGS OR BRANCH CIRCUIT TAGS ON DRAWINGS. WIRE TAGS BETWEEN FIXTURES DO NOT REPRESENT ROUTING OF BRANCH CIRCUITRY; CONTRACTOR SHALL FIELD COORDINATE EXACT BRANCH CIRCUITRY ROUTING.

5 TYPICAL LIGHTING DESIGNATIONS
E6.02 NOT TO SCALE



6 CONDUIT TRENCHING DETAIL
E6.02 12" = 1'-0"

1

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	12/12/25
Checked	EM
Drawn	PK

THOMAS WIGHARD, R.A.
Title REGISTERED ARCHITECT License No. 21AI02276900

Date	Description
06/12/24	ADDED. #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-5400 | f. 201-447-1233

TYPICAL LIGHTING CONTROL DETAILS
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEM. SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

E6.02

9/4/2026 1:24:55 PM

ARC FLASH LABEL REQUIREMENTS

ALL EQUIPMENT WHERE THE RISK OF ARC FLASH EXISTS, i.e.,: SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, MOTOR CONTROL CENTERS, DISCONNECT SWITCHES, HVAC EQUIPMENT, ETC., SHALL BE FIELD MARKED WITH LABELS PER NFPA 70E FOR MINIMUM PPE REQUIREMENTS.

⚠ DANGER

Arc Flash Hazard
Appropriate PPE Required

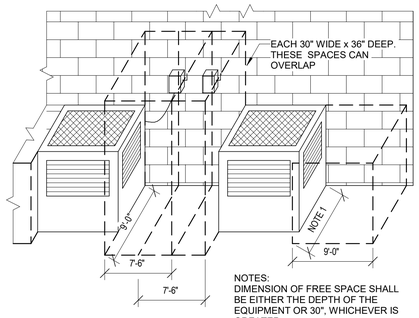
Do not operate controls or open covers without appropriate personal protection equipment.
Failure to comply may result in injury or death!

Refer to NFPA 70E for minimum PPE requirements.

3-1/2"

LABEL BASED ON BRADY CATALOG No. 99453 (www.bradyid.com)
5"

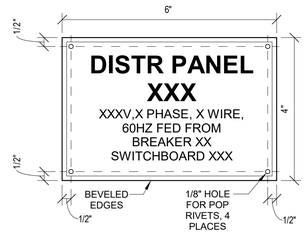
1 ARC FLASH LABEL DETAIL
E7.01 NOT TO SCALE



NOTES:
DIMENSION OF FREE SPACE SHALL BE EITHER THE DEPTH OF THE EQUIPMENT OR 30", WHICHEVER IS GREATER.

2 ELECTRICAL EQUIPMENT FREE SPACE DETAIL
E7.01 NOT TO SCALE

NAMEPLATE/LABELING REQUIREMENTS



REQUIRED DATA

FIRST LINE: EQUIPMENT DESIGNATION
SECOND LINE: VOLTAGE, PHASE, No. OF WIRE, FREQUENCY
THIRD AND FOURTH LINES: POWER SOURCE AND BREAKER
"XXX": BASED ON FINAL SHOP DRAWING AND INSTALLED EQUIPMENT CIRCUIT NUMBER
TRANSFORMERS: INCLUDE LINE INDICATING "FEEDS TO"

LETTER SIZE & SPACING

TOP ROW: 1" LETTERS
OTHER ROWS: 1/2" LETTERS
BETWEEN ROWS: 1/4" LETTERS BETWEEN 1ST & 2ND, 1/8" FOR OTHER ROWS

NOTES

LETTERING SHALL BE WHITE ON A BLACK BACKGROUND FOR TRANSFORMERS, INCLUDE PRI & SEC VOLTAGES, PRI AND SEC CONNECTIONS (E.G., DELTA, WYE, ETC.) AND EQUIPMENT SERVING.

GENERAL LABELING REQ.:

ENGRAVED PLASTIC NAMEPLATES AND SIGNS: ENGRAVING STOCK, MELAMINE PLASTIC LAMINATE, MINIMUM 1/16" THICK FOR SIGNS UP TO 20 SQ. IN. AND 1/8" THICK FOR LARGER SIZES. ENGRAVED LEGEND WITH WHITE LETTERS ON BLACK FACE FOR NORMAL POWER, WHITE LETTERS ON RED FACE FOR EMERGENCY POWER. PUNCHED OR DRILLED FOR MECHANICAL FASTENERS. TEXT AT 1/2" HIGH LETTERING.

NAMEPLATES SHALL ADEQUATELY DESCRIBE THE FUNCTION OF THE PARTICULAR EQUIPMENT INVOLVED. WHERE NAMEPLATES ARE DETAILED ON THE DRAWINGS, INSCRIPTION AND SIZE OF LETTERS SHALL BE AS SHOWN AND SHOP DRAWING SUBMITTED FOR APPROVAL. NAMEPLATES FOR PANELBOARDS AND SWITCHBOARDS SHALL INCLUDE THE PANEL DESIGNATION, VOLTAGE, PHASE AND WIRE. THE NEXT ITEM SHALL BE PANEL NAME. IN ADDITION, DESCRIBE WHERE THE PANEL IS FED FROM. FOR EXAMPLE,

PANEL 1LA, 120/208V, 3PH, 4W
PP1 PANEL
FED FROM MDP

THE SERVICE DISCONNECT SHALL BE LABELED AS THE "SERVICE DISCONNECT," PER NEC 230.70(B).

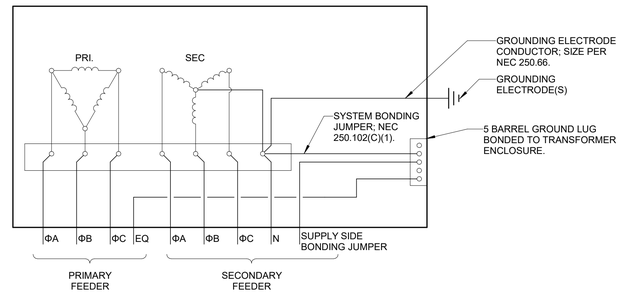
PER NEC 110.24(A) THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED SHALL BE LEGIBLY MARKED ON THE SERVICE EQUIPMENT. EXAMPLE: MAXIMUM AVAILABLE FAULT CURRENT: 34,000 SYMMETRICAL RMS AMPERES DATE 12/1/11.

PER NEC 110.16, "FLASH PROTECTION. SWITCHBOARDS, PANEL BOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, TRANSFER SWITCHES AND MOTOR CONTROL CENTERS IN OTHER THAN DWELLING OCCUPANCIES, WHICH ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED, SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT." THE NEC LABELING REQUIREMENTS APPLY TO ANY ELECTRICAL EQUIPMENT INSTALLED OR MODIFIED AFTER 2002. WARNING LABEL SHALL COMPLY WITH ANSI Z535.4, WHICH SPECIFIES COLORS AND SIGNAL WORDS TO BE USED.

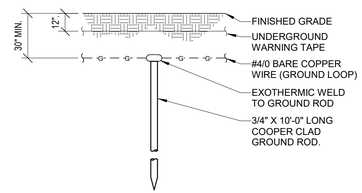
PER NEC 408.4(A), EVERY CIRCUIT AND CIRCUIT IDENTIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OF USE.

PER NEC 700.7(B) AND NEC 701.7, FURNISH AND INSTALL WARNING LABEL THAT WARNS OF A SHOCK HAZARD IF THE GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS TYPE OF EQUIPMENT IS REMOVED WHILE ALTERNATE ENERGY SOURCES ARE ENERGIZED.

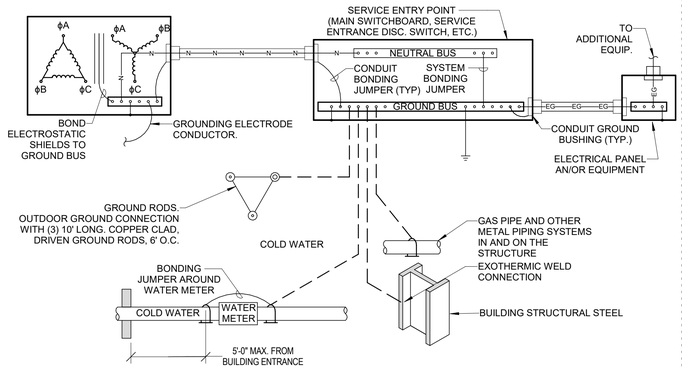
3 NAMEPLATE/LABELING REQUIREMENTS
E7.01 NOT TO SCALE



4 TRANSFORMER WIRING DETAIL
E7.01 NOT TO SCALE



5 GROUND ROD AND CONDUCTOR DETAIL
E7.01 NOT TO SCALE



6 SERVICE ENTRANCE GROUNDING DETAIL
E7.01 NOT TO SCALE

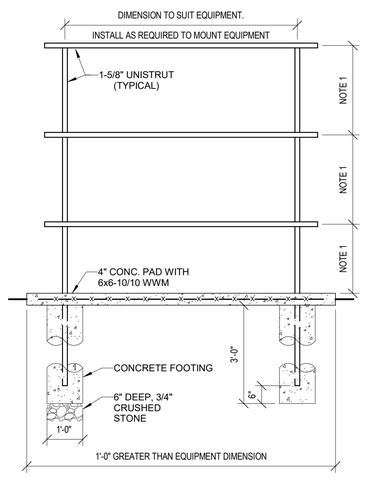
DETAIL LEGEND AND NOTES

DETAIL SYMBOL LEGEND:

- SYSTEM GROUNDING ELECTRODE CONDUCTOR
- EG — EQUIPMENT GROUND CONDUCTOR
- N — SYSTEM NEUTRAL
- BUS BAR

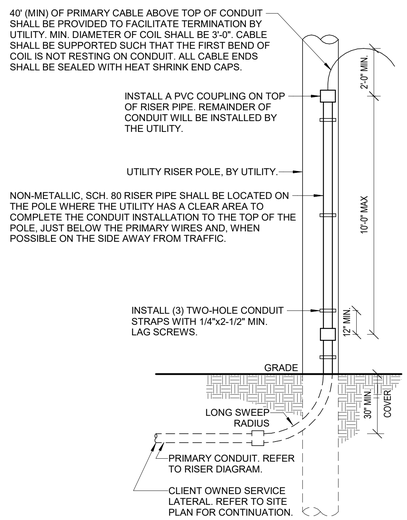
DETAIL GENERAL NOTES:

1. PROVIDE GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
2. PROVIDE ALL GROUNDING ELECTRODES REQUIRED BY NEC 250.50 AND GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NEC 250.50, 250.68, AND 250.64.
3. PROVIDE GROUNDING ELECTRODE CONDUCTORS THAT ARE SIZED BASED ON NEC 250.66.
4. PROVIDE AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE / SUPPLY-SIDE FEEDER CONDUIT. BOND TO GROUND BUS USING A CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.102(C)(1) USING THE SERVICE ENTRANCE / SUPPLY-SIDE FEEDER PHASE CONDUCTOR SIZE.
5. PROVIDE AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC LOAD-SIDE FEEDER CONDUIT. BOND TO GROUND BUS USING A CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.122 USING THE ASSOCOATED FEEDER OR BRANCH CIRCUIT OVERCURRENT DEVICE SIZE.
6. PROVIDE BONDING JUMPERS (SIZED AS NECESSARY) AND BOND HOT AND COLD WATER PIPING SYSTEMS.
7. CONCRETE-ENCASED ELECTRODE: PROVIDE MIN. 20 FT. OF #4 AWG BARE COPPER OR 1/2-IN. DIA. REBAR ENCASED IN MIN. 2 IN. OF CONCRETE AND IN DIRECT CONTACT WITH EARTH. CONNECT TO BUILDING GROUNDING ELECTRODE SYSTEM WITH GROUNDING ELECTRODE CONDUCTOR. PROVIDE LISTED CONNECTIONS PER NEC 250.52(A)(3) AND 250.50.
8. CONCRETE-ENCASED ELECTRODE: PROVIDE MINIMUM #4 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM CONCRETE-ENCASED ELECTRODE TO SYSTEM BONDING POINT. BOND TO ALL AVAILABLE GROUNDING ELECTRODES IN ACCORDANCE WITH NEC 250.50 AND 250.66.



NOTES:
1. DIMENSION AND QUANTITY OF CROSS MEMBERS AS REQUIRED TO MOUNT EQUIPMENT.

7 EQUIPMENT MOUNTING DETAIL (SLOTTED METAL)
E7.01 NOT TO SCALE



8 UTILITY POLE RISER DETAIL
E7.01 NOT TO SCALE

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

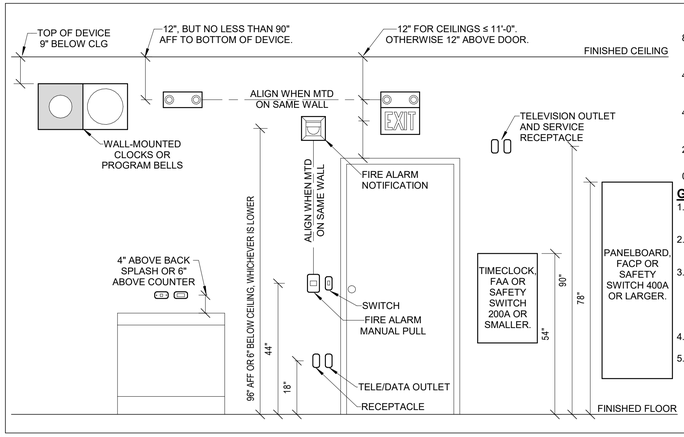
ELECTRICAL DETAILS I
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

E7.01

9/3/2026 10:21:08 AM

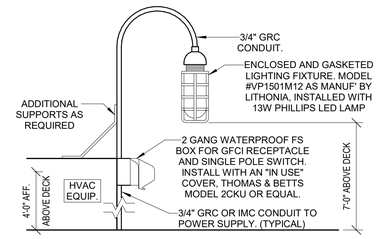
DEVICE MOUNTING HEIGHTS



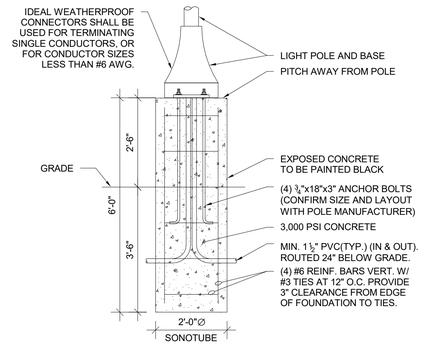
GENERAL NOTES:

1. Mounting heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to nearest block or brick coursing.
2. The mounting heights shall be adhered to unless specifically noted or detailed otherwise on the drawings or specifications.
3. A "CTR" designation beside a device indicates device mounted above counter or casework. Refer to architectural and casework details for actual elevation. Receptacles above counters shall be horizontally mounted 6" above counter or 4" above backsplash. Coordinate exact location in field.
4. A "+" symbol beside a device indicates the mounting height above finished floor.
5. All devices indicated to be installed at different mounting heights and located within one stud space from each other shall align vertically on the same side of the stud.

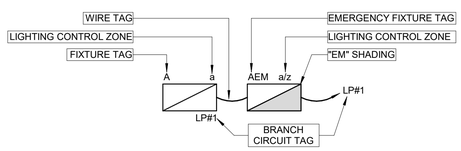
1 E7.02 DEVICE MOUNTING HEIGHTS
NOT TO SCALE



2 E7.02 HVAC ROOF RECEPTACLE/LIGHT DETAIL
NOT TO SCALE



3 E7.02 RAISED LIGHT POLE FOUNDATION DETAIL
NOT TO SCALE

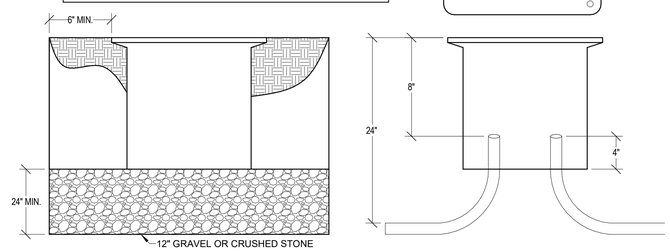


1. CONTROL ZONE TAGS:
   a,b,c... - SWITCH ZONE TAG - LOWER CASE DESIGNATION
   a/z,b/z,c/z... - DAYLIGHT RESPONSIVE CONTROL (PRIMARY / SECONDARY ZONE IN ACCORDANCE WITH BOUNDARIES INDICATED ON DWG.
2. DAYLIGHT RESPONSIVE CONTROL ZONES, BOTH PRIMARY AND SECONDARY, SHALL BE SWITCHED WITH FIXTURES WITH THE SAME ZONE TAG DESIGNATION IN ADDITION TO AUTOMATIC DIMMING/SHUTOFF FROM DAYLIGHT SENSOR
3. EMERGENCY FIXTURE MARKED WITH AN "EM" IN THE FIXTURE TAG, ARE SHADED, OR BOTH SHALL BE PROVIDED WITH INTEGRAL EMERGENCY BATTERY PACK OR CONNECTED TO EMERGENCY LIGHTING INVERTER THAT WILL PROVIDE 90 MINUTES OF ILLUMINATION UPON LOSS OF POWER. PROVIDE ADDITIONAL UN-SWITCHED CIRCUIT CONNECTIONS TO LIGHTING FIXTURE BATTERY PACKS AS NEEDED.
4. BRANCH CIRCUIT MAY BE SHOWN WITH WIRE TAGS OR BRANCH CIRCUIT TAGS ON DRAWINGS. WIRE TAGS BETWEEN FIXTURES DO NOT REPRESENT ROUTING OF BRANCH CIRCUITRY; CONTRACTOR SHALL FIELD COORDINATE EXACT BRANCH CIRCUITRY ROUTING.

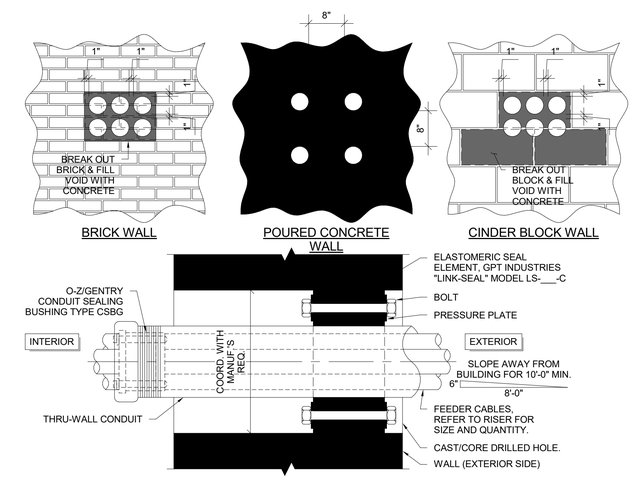
4 E7.02 TYPICAL LIGHTING DESIGNATIONS
NOT TO SCALE

NOTE:

1. QUAZITE BOX TO BE CONSTRUCTED OF POLYMER CONCRETE. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ENGINEER'S APPROVAL.
2. BOX LID TO BE LEGIBLY MARKED "ELECTRIC"
3. LID TO BE OF SAME CONSTRUCTION AS BOX AND SHALL COME WITH 2 STAINLESS STEEL 3/8-16" x 1-1/2" HEX HEAD BOLTS.
4. CONTRACTOR SHALL PROVIDE A MINIMUM OF 24" OF STONE BENEATH QUAZITE BOX TO AVOID BUILD OF WATER IN ENCLOSURE.
5. TIER 15 LOAD RATING.
6. CONDUITS MUST MAINTAIN A 12" SEPERATION FROM OTHER CONDUITS (ELECTRICAL, GAS, ETC.).
7. DIMENSIONS OF BOX SHALL BE AS REQUIRED BY NEC UNLESS NOTED OTHERWISE.
8. WIRING ENTRIES INTO HANDHOLDS ARE REQUIRED TO EXTEND INTO, BUT NOT MECHANICALLY CONNECTED TO THE HANDHOLE ENCLOSURE.
9. UNITS SHALL BE DESIGNED FOR FLUSH BURIAL AND HAVE OPEN BOTTOM. INSTALL HANDHOLDS AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING CONDUITS TO MAXIMUM BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES. THE CONTRACTOR SHALL COORDINATE THE LAYOUT AND INSTALLATION OF THE HANDHOLE WITH FINAL ARRANGEMENTS OF SITE GRADING AND SURFACE FEATURES AS DETERMINED IN THE FIELD.
10. SET HANDHOLE SO THE COVER SURFACE WILL BE FLUSH WITH THE FINISHED GRADE IN ADJACENT AREAS.



5 E7.02 ELECTRICAL HANDHOLE DETAIL
NOT TO SCALE



6 E7.02 ELECTRICAL THRU-WALL CONDUIT SEAL
NOT TO SCALE

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL DETAILS II
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

E7.02

9/3/2026 10:21:08 AM

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ELECTRICAL DETAILS IV

NEW HOPKINS GYMNASIUM

HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No.

E7.04

9/3/2026 10:21:09 AM

FIRE ALARM GENERAL NOTES & REQUIREMENTS

CIRCUIT AND RACEWAY
1. RACEWAY LAYOUT SHALL CONSIST OF A VERTICAL RISER OF TERMINAL CABINETS LOCATED ON EACH FLOOR. LARGER BUILDINGS AND BUILDINGS WITH TWO OR MORE WINGS MAY REQUIRE MULTIPLE RISERS AND TERMINAL CABINETS PER FLOOR. THE CONTRACTOR IS REQUIRED TO INSTALL AT LEAST TWO LATERAL BRANCH LINES PER FLOOR ORIGINATING FROM EACH TERMINAL CABINET.
2. RACEWAY FILL SHALL BE LESS THAN 40%. RACEWAY CAPACITY BETWEEN CONTROL PANELS AND TERMINAL CABINETS SHALL BE SUFFICIENTLY SIZED TO ACCEPT ADDITIONAL CIRCUITS IN THE FUTURE. THE CONTRACTOR IS REQUIRED TO INSTALL A MINIMUM SIZE THAT WOULD ACCOMMODATE FUTURE WORK.
3. CIRCUITS SHALL BE LAID OUT TO SERVE A SPECIFIC GEOGRAPHICAL AREA (ZONE) PER FLOOR. COORDINATE FIRE ALARM ZONES WITH SMOKE COMPARTMENTS AND/OR SPRINKLER ZONES.
4. FIELD LOCATED TRANSPONDERS AND POWER SUPPLY PANELS MAY BE USED. ACCESS MUST BE PROVIDED FOR TESTING AND MAINTENANCE REQUIREMENTS.
5. ALL DEVICES SHALL BE PROPERLY FASTENED AND SECURED. CONTRACTOR SHALL VERIFY THAT EXISTING JUNCTION BOXES BEING REUSED ARE PROPERLY SECURED PRIOR TO INSTALLATION OF THE NEW DEVICES.
6. A COMPLETE WIRING DIAGRAM AND ROUTING SCHEME SHALL BE SUBMITTED TO THE ARCHITECT BY THE CONTRACTOR FOR APPROVAL PRIOR TO THE INSTALLATION.
7. ALL WIRING SHALL BE CONTINUOUS WITHOUT SPLICES BETWEEN DEVICES.
8. FOLLOW POLARITY OF ALL DEVICES.
9. REFER TO WIRE SIZE SELECTION CHART, RISER DIAGRAM AND MANUF.'S PUBLISHED DOCUMENTATION FOR POWER REQUIREMENTS.
10. ALL WIRING AND CONDUITS INSTALLED UNDER METAL-CORRUGATED SHEET ROOF DECKING SHALL BE INSTALLED AND SUPPORTED SO THERE IS NOT LESS THAN 1-1/2" MEASURED FROM THE LOWEST SURFACE OF THE ROOF DECKING TO THE TOP OF THE CABLE, RACEWAY, OR BOX.

LABELING AND IDENTIFICATION
1. CIRCUIT DISCONNECTING MEANS FOR ALL 120VAC PORTIONS OF THE SYSTEM SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT."
2. THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL PANEL.
3. ALL NEW JUNCTION BOXES, OUTLET BOXES, AND ASSOCIATED COVER PLATES INSTALLED AS PART OF THIS FIRE ALARM SYSTEM SHALL BE PAINTED RED.
4. PER NFPA 70, NEC 760-10, "FIRE ALARM CIRCUITS SHALL BE IDENTIFIED AT TERMINAL AND JUNCTION LOCATIONS IN A MANNER THAT WILL PREVENT UNINTENTIONAL INTERFERENCE WITH SIGNALING CIRCUIT DURING TESTING AND SERVICING".

DEVICE LAYOUT
1. THE DEVICE LAYOUT ON THE DRAWINGS IS SCHEMATIC AND SHALL CONFORM TO THE FOLLOWING SPACINGS. HOWEVER, THE DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE LOCATION DEPICTED ON THE PLAN. ADJUSTMENT OF SMOKE DETECTOR LOCATION OF MORE THAN 5'-0" WILL REQUIRE APPROVAL OF ARCHITECT.
   a. CORRIDOR DETECTION SHALL BE SPACED 35 - 40 FEET ON CENTER. COORDINATE DETECTOR LOCATIONS WITH CEILING DIFFUSERS. NONE MAY BE CLOSER THAN 3 FEET.
   b. SMOKE DETECTORS SHALL BE INSTALLED IN ALL ELEVATOR LOBBIES.
   c. IN ALL AREAS, THE DETECTOR SHALL BE INSTALLED AT THE HIGHEST POINT AT THE LOCATION SHOWN ON THE PLANS.
   d. IN ROOMS WITH SMOKE DETECTORS, ALL AREAS OF THE CEILING MUST BE WITHIN 21' OF A DETECTOR. CONTRACTOR SHALL BE AWARE OF EXACT PLACEMENT WITHIN THE ROOM.
   e. VISUAL NOTIFICATION MUST BE IN COMPLIANCE WITH NFPA 72. SYNCHRONIZE VISUAL NOTIFICATION DEVICES WHEN MULTIPLE DEVICES ARE IN THE LINE OF SIGHT. THE PREFERRED METHOD IS TO SYNCHRONIZE THE CIRCUIT AT THE INDIVIDUAL FLOOR TERMINAL CABINET.
   f. VISUAL NOTIFICATION PLACEMENT – WHILE THE PLAN LOCATIONS ARE SCHEMATIC, THE CONTRACTOR SHALL INSTALL THE DEVICES UTILIZING THE FOLLOWING CRITERIA:
      WALL MOUNTED
      - CORRIDOR STROBES - 15CD AND LOCATED NO MORE THAN 15'-0" FROM THE END OF THE CORRIDOR AND 100'-0" BETWEEN DEVICES.
      - 15CD – MAX. 10'-0" FROM THE FURTHEST ADJACENT WALL AND 20'-0" FROM THE FURTHEST OPPOSITE WALL.
      - 30CD – MAX. 14'-0" FROM THE FURTHEST ADJACENT WALL AND 28'-0" FROM THE FURTHEST OPPOSITE WALL.
      - 75CD – MAX. 22'-6" FROM THE FURTHEST ADJACENT WALL AND 50'-0" FROM THE FURTHEST OPPOSITE WALL.

      CEILING MOUNTED (10' MOUNTING HEIGHT)
      - CORRIDOR STROBES - 15CD AND LOCATED NO MORE THAN 15'-0" FROM THE END OF THE CORRIDOR AND 100'-0" BETWEEN DEVICES.
      - 15CD – MAX. 10'-0" FROM THE FURTHEST WALL.
      - 30CD – MAX. 15'-0" FROM THE FURTHEST WALL.
      - 75CD – MAX. 22-0" FROM THE FURTHEST WALL.
2. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72. THE OPERATION OF ANY AUTOMATIC FIRE DETECTOR, SPRINKLER WATERFLOW DEVICE OR MANUAL FIRE ALARM BOX SHALL AUTOMATICALLY SOUND AN ALERT TONE FOLLOWED BY VOICE INSTRUCTIONS GIVING APPROVED INFORMATION AND DIRECTIONS FOR A GENERAL OR STAGED EVACUATION IN ACCORDANCE WITH THE BUILDING'S FIRE SAFETY AND EVACUATION PLANS. AT A MINIMUM, INDIVIDUAL PAGING ZONES SHALL BE PROVIDED AS FOLLOWS:
   a. ALL CALL
   b. EACH FLOOR.

NOTIFICATION OUTPUT
1. UPON OPERATION OF A FIRE ALARM INITIATING DEVICE, THE FIRE ALARM SYSTEM WILL:
   a. NOTIFY OCCUPANTS BY ACTIVATING A TEMPORAL THREE ALARM SIGNAL AND
   b. ACTIVATE THE VISIBLE APPLIANCES (STROBES).
2. SUBSEQUENT ACTIVATIONS OF INITIATING DEVICES WILL NOT INITIATE ANY NEW ALARM OUTPUTS, BUT WILL APPEAR AT THE FIRE ALARM CONTROL UNIT AND PRINTER.
3. HORN/STROBES SHALL UTILIZE A TEMPORAL THREE SIGNAL.
4. SPEAKER/STROBES SHALL UTILIZE A TONE FOLLOWED BY A PRE-RECORDED MESSAGE.
5. PROVIDE THE ABILITY TO SILENCE AUDIBLE SIGNALS WHILE VISUAL STROBE SIGNAL CONTINUE SYNCHRONIZED FLASHING.

SPARE CAPACITY
1. THE QUANTITY OF SLC, AMPLIFIERS, AND NAC'S SHALL BE DETERMINED BY THE CONTRACTOR. ACTIVE CAPACITY SHALL NOT EXCEED 80% OF THE CIRCUIT CONSIDERING BOTH CIRCUIT AND PANEL LIMITATIONS. THIS INCLUDES DEVICE COUNT, CIRCUIT LENGTH, VOLTAGE DROP, AND PANEL CAPACITY. OTHER SPARE CAPACITY SHOULD BE AS PER SPECIFICATION.

SPARES
1. UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE AN ALLOWANCE FOR A MINIMUM OF 5% ADDITIONAL ALARM INITIATING DEVICES TO BE INSTALLED AS TO PROVIDE ADEQUATE COVERAGE DUE TO OBSTRUCTIONS, DUCTWORK, PIPING ETC. INSTALLED DURING CONSTRUCTION, WHICH MAY ALTER THE ORIGINAL DESIGN.

AUXILIARY CONTROLS
1. COORDINATE AUXILIARY CONTROLS FOR FANS, DAMPERS, FIRE SPRINKLERS, AND DOOR CONTROL. INCLUDE ALL NECESSARY COMPONENTS AND RELAYS TO MAKE AN OPERATIONAL SYSTEM.
2. INCLUDE INTERFACE WITH ALL NECESSARY FIRE SPRINKLER COMPONENTS, WATER FLOW DEVICES AND VALVE SUPERVISION.
3. COORDINATE INTERFACE WITH ALL STAGE DIMMING PANELS TO BRING UP THE "HOUSE LIGHTS" UPON OPERATION OF A FIRE ALARM INITIATING DEVICE. INCLUDE ALL NECESSARY COMPONENTS AND RELAYS TO MAKE AN OPERATIONAL SYSTEM.
4. PROVIDE ADDRESSABLE MONITORING MODULES OR CONTROL MODULES FOR THE FUNCTIONS LISTED BELOW:
   a. SUPPRESSION
      - WET FIRE SPRINKLER MONITORING
      - DRY PIPE MONITORING PRESSURE ALARM VALVE
      - OUTSIDE FIRE SPRINKLER PIV MONITORING
   b. SMOKE MANAGEMENT
      - SIGNAL HVAC FAN SHUTDOWN
      - ATC SYSTEM FOR FAN CONTROL
   c. SECURITY
      - MONITOR KNOX BOX TO OPEN DOOR ACTIVITY

120VAC CIRCUITS
1. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ALL 120VAC CIRCUITS THAT ARE REQUIRED TO SUPPORT THE OPERATION OF THE FIRE ALARM SYSTEM. COORDINATE THE REQUIREMENTS WITH THE FIRE ALARM VENDOR & APPROVED SHOP DRAWINGS. PROVIDE POWER FROM CLOSEST AVAILABLE PANEL.
2. CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT", AND SHALL INCLUDE A CIRCUIT BREAKER LOCK TO KEEP THE BREAKER LOCKED IN THE "ON" POSITION.
3. THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL PANEL.
4. BRANCH CIRCUITS SUPPLYING THE FIRE ALARM EQUIPMENT(S) SHALL SUPPLY NO OTHER LOADS.

FIRE ALARM GENERAL NOTES & REQUIREMENTS (CONT.)

TELEPHONE AND COMMUNICATION WIRING
1. PROVIDE TWO (2) SEPARATE CONDUITS FOR COMMUNICATION WIRING.
2. ALL TELEPHONE/OFFSITE PREMISES SIGNALING WIRE SHALL BE INSTALLED NEW FROM NEW FACP LOCATION TO TELEPHONE BLOCK.

SITE CONDITION
1. THE CONTRACTOR IS ADVISED THAT THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL DETAILS
2. THE CONTRACTOR IS EXPECTED TO PROVIDE ALL MISCELLANEOUS PARTS AND LABOR REQUIRED TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER OR GC TO DEFINE AREAS WHERE THE INSTALLER CAN STORE TOOLS, EQUIPMENT AND OTHER MATERIALS FOR THIS PROJECT.
4. THE BUILDING IS TO BE KEPT CLEAN AND NEAT AT ALL TIMES. CONSTRUCTION DEBRIS SHALL BE REMOVED DAILY.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SECURITY OF ALL ITEMS STORED IN THIS AREA.

SUBMITTALS
1. SIGNED & SEALED FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO SYSTEM INSTALLATION, AND SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL OF THE FOLLOWING WHERE APPLICABLE TO THE SYSTEM BEING INSTALLED. REFER TO SPECIFICATIONS FOR AN ADDITIONAL LISTING OF ALL SUBMITTAL REQUIREMENTS.
   a. A FLOOR PLAN THAT MEDICATES THE USE OF ALL ROOMS.
   b. LOCATIONS OF ALARM-INITIATING DEVICES.
   c. LOCATIONS OF ALARM NOTIFICATION APPLIANCES, INCLUDING CANDELA RATINGS FOR VISIBLE ALARM NOTIFICATION APPLIANCES.
   d. EMERGENCY VOICE/ALARM PAGING ZONES.
   e. DESIGN MINIMUM AUDIBILITY LEVEL FOR OCCUPANT NOTIFICATION.
   f. LOCATION OF FIRE ALARM CONTROL UNIT, TRANSPONDERS AND NOTIFICATION POWER SUPPLIES.
   g. ANNUNCIATORS.
   h. POWER CONNECTION.
   i. BATTERY CALCULATIONS.
   j. CONDUCTOR TYPE AND SIZES.
   k. VOLTAGE DROP CALCULATIONS.
   l. MANUFACTURERS' DATA SHEETS INDICATING MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT DEVICES AND MATERIALS.
   m. DETAILS OF CEILING HEIGHT AND CONSTRUCTION.
   n. THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
   o. CLASSIFICATION OF THE SUPERVISING STATION.
   p. DETAILS OF THE TELEPHONE CONNECTION(S). DETAILS ON TYPE OF TELEPHONE SERVICE ARE REQUIRED TO DETERMINE CAPABILITY OF SIGNAL TRANSMISSION TO MONITORING POINT IN THE EVENT OF A POWER FAILURE. VOIP SERVICE, FIBER OPTIC SERVICE AND OTHER MEANS OF TELEPHONE SERVICE HAVE DIFFERENT CAPABILITIES OF MAINTAINING CAPABILITY OF TRANSMITTING SIGNALS IF THERE IS A POWER FAILURE. ONSITE GENERATORS MAY OR MAY NOT PROVIDE ABILITY FOR SIGNAL TRANSMISSION.
   q. COMPLETE SEQUENCE OF OPERATIONS MATRIX DETAILING ALL INPUTS AND OUTPUTS.
   r. SHOP DRAWINGS FOR THE FIRE ALARM SYSTEM SHALL BE SUBMITTED WITH THE CERTIFICATION OF A NICET LEVEL IV FIRE ALARM TECHNICIAN CERTIFYING THEY ARE IN COMPLIANCE WITH BOTH THE CONSTRUCTION DOCUMENTS AND THE CURRENT FIRE ALARM CODE.
2. IF DEVICE ADDRESSES ARE NOT ASSIGNED BY THE FACP, BOTH FLOOR PLANS AND RISER DIAGRAM SHALL INCLUDE DEVICE ADDRESSES AND WIRE/CABLE ROUTING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

CLOSEOUT DOCUMENTS
1. BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT STATING THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND SHOP DRAWINGS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS AND THE APPROPRIATE NFPA REQUIREMENTS.
2. "AS-BUILT" DOCUMENTS COMPLYING WITH NFPA 72-2019 SECTIONS 7.5. THE AS-BUILT RISER AND FLOOR PLANS SHALL BE SUBMITTED PDF, CAD, AND HARD COPY FORMAT.
3. "AS-BUILT" FLOOR PLANS AND RISER DIAGRAM SHALL INCLUDING DEVICE ADDRESSES AND WIRE ROUTING.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

DUCT DETECTORS
1. THE LOCATION OF ALL DETECTORS IN AIR DUCT SYSTEMS SHALL BE PERMANENTLY AND CLEARLY IDENTIFIED AND RECORDED AT THE MAIN FIRE ALARM CONTROL PANEL IN COMPLIANCE WITH NFPA 72 AND NFPA 90A.
2. ALL DUCT DETECTORS SHALL BE PROVIDED WITH A REMOTE TEST STATION IN AN AREA ADJACENT TO THE DEVICE AND APPROVED BY THE OWNER.

HVAC
1. MOTOR SHUTDOWN: OPERATING FANS IN AIR HANDLING SYSTEMS AND EXHAUST SYSTEMS, SERVING MULTIPLE SPACES, ASSEMBLY SPACES OR CORRIDORS, HAVING FAN CAPACITIES OF GREATER THAN 2000 CFM, SHALL BE INTERCONNECTED TO THE FIRE ALARM SYSTEM TO SHUT DOWN SUCH MOTORS WHEN THE FIRE ALARM IS ACTIVATED. TIE MOTORS INTO OUPUT RELAY OF THE LOCAL DUCT DETECTOR.
2. PROVIDE & INSTALL RELAYS AT ALL GAS FIRED HVAC UNITS FOR SHUTDOWN ON AN ALARM CONDITION.

DEVICE PROTECTION
1. ALL SMOKE AND HEAT DETECTORS, HORN STROBES, STROBES, AND MANUAL PULL STATIONS SUBJECT TO PHYSICAL DAMAGE (I.E, GYMNASIUMS, WRESTLING ROOMS, ETC.) SHALL BE INSTALLED WITH VANDAL RESISTANT GUARDS. GUARDS SHALL BE PROVIDED AND INSTALLED EVEN IF NOT INDICATED ON THE PLANS.

SPECIAL PROGRAMMING
1. A "DRILL" SWITCH SHALL BE PROGRAMMED TO ALLOW FOR THE OWNER TO PERFORM FIRE DRILLS WITH A SINGLE BUTTON PUSH THAT WILL ONLY SOUND THE NOTIFICATION APPLIANCES WITHOUT SHUTTING MAGNETIC DOOR HOLDERS, SHUTTING DOWN HVAC EQUIPMENT, RECALLING THE ELEVATOR, ETC.

REMOTE INDICATORS
1. PROVIDE REMOTE LED INDICATORS FOR ALL CONCEALED FIRE ALARM DEVICES SUCH AS DUCT SMOKE DETECTORS, ABOVE CEILING DETECTORS, MONITORING/CONTROL MODULES, ETC. LED INDICATORS FOR DEVICES MOUNTED ABOVE SUSPENDED CEILINGS SHALL BE MOUNTED BELOW THEIR ASSOCIATED DEVICE. LABEL INDICATOR (TYPED LABEL) TO INDICATE DEVICE SERVED.

FIRE ALARM SYSTEM MANUFACTURER NOTES

1. THE HADDONFIELD BOARD OF EDUCATION DISTRICT INTENT IS TO STANDARDIZE THEIR FIRE ALARM SYSTEM MANUFACTURER DISTRICT-WIDE.
2. THE FIRE ALARM SYSTEM MANUFACTURER SHALL BE: **POTTER ELECTRIC**, IN ACCORDANCE WITH DISTRICT INTENT.
3. NEW MODEL FIRE ALARM CONTROL PANEL (FACP) MODEL # SHALL BE: **AFC-1000V**; CONTRACTOR SHALL PROVIDE NEW **POTTER ELECTRIC** FIRE ALARM APPLIANCES, DEVICES, EQUIPMENT, & APPURTENANCES THAT ARE COMPATIBLE & UL-LISTED FOR USE WITH THE NEW FACP & ASSOCIATED FIRE ALARM SYSTEM.

1

GENERAL PROJECT REQUIREMENTS

PROJECT INFORMATION:
1. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT WHEN THE WORDS "OWNER" OR "CLIENT" ARE USED IN THESE DRAWINGS THEY ARE INTERCHANGEABLE AND ALL REFER TO THE HADDONFIELD BOARD OF EDUCATION.
2. WHEREVER IN THE DOCUMENTS THE WORD "UTILITY" IS STATED, PUBLIC SERVICE ELECTRIC & GAS COMPANY (PSE&G) IS IMPLIED.
3. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT WHEN THE WORDS "ARCHITECT", "ENGINEER", OR "A/E" ARE USED IN THESE DRAWINGS THEY ARE INTERCHANGEABLE AN ALL REFER TO LAN ASSOCIATES, ENGINEERING, PLANNING, ARCHITECTURE SURVEYING ("LAN").
4. UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT THERE IS ONLY ONE CONTRACTOR FOR THIS PROJECT. WHEN THE WORD "CONTRACTOR" IS USED IT REFERS TO THE CONTRACTOR AWARDED THE BID.
5. WHERE ANY DEVICE OR PART OF EQUIPMENT IS REFERRED TO IN THESE DRAWINGS IN THE SINGULAR NUMBER (E.G., "THE SWITCH", "THE RECEPTACLE"), THIS REFERENCE SHALL BE DEEMED TO APPLY TO AS MANY SUCH DEVICES AS ARE REQUIRED TO COMPLETE THE INSTALLATION AS SHOWN ON THE DRAWINGS.
6. HEALTH, SAFETY AND CRITICAL OPERATING EQUIPMENT SHALL NOT BE COMPROMISED WITHOUT OWNER'S AUTHORIZATION. SCHEDULE SHUTDOWN DURING OFF HOURS AND IMPLEMENT AND MAINTAIN A TEMPORARY OPERATIONAL PLAN.

CODE & STANDARDS COMPLIANCE:
1. CODE COMPLIANCE IS MANDATORY. NOTHING IN THESE DRAWINGS AND SPECIFICATIONS PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS. WHEN DIFFERENCES IN UTILITY SPECIFICATIONS OR STANDARDS, GOVERNMENTAL ORDINANCES OR CODES OCCUR, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN THE INSTALLATION.
2. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENTLY ENFORCED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), FIRE ALARM CODE (NFPA 72), NATIONAL ELECTRICAL SAFETY CODE (NESC), AMERICAN ELECTRICIANS' HANDBOOK, INTERNATIONAL BUILDING CODE (IBC), AMERICANS WITH DISABILITIES ACT (ADA), NFPA 55 & 99 AND NEC STANDARD OF INSTALLATION. WHEREVER IN THE DOCUMENTS THE WORD "CODE" IS STATED, THE MORE STRINGENT OF THE ABOVE REFERENCED CODES IS IMPLIED.
3. ALL CONTRACTOR SUPPLIED MATERIALS/EQUIPMENT SHALL BE NEW AND UL LISTED OR APPROVED BY ANOTHER NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
4. THE CONTRACTOR SHALL PAY FOR AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION. PERMIT AND INSPECTIONS SHALL BE INCLUDE IN THE BASE BID AND SHALL NOT BE CAUSE FOR AN EXTRA.
5. CONTRACTOR SHALL CONFIRM TO ALL SAFETY RULES AND OTHER REGULATIONS, ETC. PERTAINING TO CONSTRUCTION WORK ON THE CLIENT'S PREMISES. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL RULES AND REGULATIONS HAVE BEEN MET AND COORDINATE THIS WORK WITH RESPONSIBLE CLIENT'S PERSONNEL.
6. ALL EQUIPMENT AND RACEWAYS PERMANENTLY ATTACHED TO STRUCTURES, INCLUDING SUPPORTING STRUCTURES AND ATTACHMENTS TO NON-BUILDING STRUCTURES, SHALL BE ANCHORED FOR SEISMIC LOADING TO RESIST A HORIZONTAL FORCE ACTION IN ANY DIRECTION. CONTRACTOR SHALL PROVIDE SEISMIC RESTRAINTS FOR ALL CONDUITS LARGER THAN 2½" TRADE DIAMETER. PROVIDE SWAY BRACES FOR CONDUIT AND EQUIPMENT SUSPENDED FROM THE OVERHEAD. PROVIDE ANCHOR BOLTS FOR FLOOR AND WALL MOUNTED EQUIPMENT. THE INSTALLATION SHALL MEET THE REQUIREMENTS OF INTERNATIONAL BUILDING CODE (IBC) SECTIONS 1614 AND 1621 AS THEY APPLY TO ELECTRICAL EQUIPMENT FOR EARTHQUAKE LOADS.
7. CONTRACTOR SHALL REVIEW CODE COMPLIANCE DRAWINGS AND IDENTIFY ALL PENETRATIONS THROUGH FIRE/SMOKE PARTITIONS, FLOOR AND ROOFS. PATCH COMPROMISED PARTITIONS TO MATCH FIRE/SMOKE RESISTANCE RATING AS STATED ON CODE COMPLIANCE DRAWINGS.

GENERAL PROCEDURES:
1. ALL EQUIPMENT SHALL BE AS INDICATED OR AS APPROVED BY THE ENGINEER/ARCHITECT.
2. THE COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF THE SUBSTITUTIONS SHALL BE BY THE CONTRACTOR AND DIFFERENCES SHALL BE ENUMERATED WITH THE SUBMITTAL.
3. OBTAIN SHOP DRAWINGS AND WIRING DIAGRAMS FOR THE PROPER INSTALLATION OF RELATED WORK.
4. THE CONTRACTOR SHALL REMOVE AND REINSTALL CEILING SYSTEMS AS REQUIRED FOR THE INSTALLATION OF NEW WORK AND REPLACE IN KIND, ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF DEBRIS GENERATED BY HIS WORK AND WORKERS AT THE END OF EACH WORKING DAY AND FOR GENERAL GOOD HOUSEKEEPING BY HIS WORKERS. CONTRACTOR SHALL PROVIDE REQUIRED REFUSE CONTAINERS.

SITE CONDITIONS/DRAWING COORDINATION:
1. THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE WORK TO BE PERFORMED. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTIONS, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. PRIOR TO BIDDING AND/OR STARTING WORK THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SCHEDULE SITE VISIT WITH CLIENT'S REPRESENTATIVES. ADDITIONALLY, THE CONTRACTOR SHALL FIELD VERIFY ALL SITE DIMENSIONS AND ROOM LAYOUTS. SUBMISSION OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK, AND THE BID PRICE. NO CLAIMS OR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.
2. THE CLIENT WILL OCCUPY THE SITE AND EXISTING BUILDINGS DURING THE ENTIRE CONSTRUCTION PERIOD. COOPERATE WITH THE CLIENT DURING CONSTRUCTION OPERATIONS TO AVOID ANY CONFLICTS. PERFORM THE WORK SO AS NOT TO INTERFERE WITH THE CLIENT'S OPERATIONS. SCHEDULE ALL POWER OUTAGES WITH CLIENT'S APPROVAL FOR OVERTIME ON SUNDAYS AND HOLIDAYS AT NO ADDITIONAL COST TO THE CLIENT.
3. EXISTING PROJECT CONDITIONS INDICATED ARE BASED ON FIELD OBSERVATIONS; EXISTING DESIGN/CONSTRUCTION DOCUMENTS AND EXISTING RECORD DOCUMENTS AND ARE INTENDED TO INDICATE THE SCOPE OF THE WORK AFFECTED BY THIS PROJECT.
4. DRAWINGS SHALL NOT BE SCALED. DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF THE WORK. ALTHOUGH SIZE AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY INFORMATION ON THE PROJECT SITE.
5. THE CONTRACTOR SHALL MAKE HIS OWN TAKEOFF ON ALL QUANTITIES. IT SHALL BE HIS RESPONSIBILITY, AT HIS COST, TO INCLUDE ALL EQUIPMENT AND MATERIAL IN ORDER TO COMPLY WITH THE INTENT OF THE DRAWINGS.
6. THE CONTRACT DRAWINGS DEPICT THE APPROXIMATE LOCATION OF ALL REQUIRED EQUIPMENT AND IF SHOWN, THE DIAGRAMMATIC ARRANGEMENT OF PIPING, RACEWAYS, CONDUITS, ETC, HEREIN AFTER REFERRED TO AS "CONDUIT." CONDUIT RUNS, IF SHOWN, HAVE BEEN DEPICTED WITH THE INTENTION OF MOST CLEARLY INDICATING THE PROPOSED ROUTING. ACTUAL RUNS MAY DIFFER IF KEPT WITHIN THE REQUIREMENTS AND PROVISIONS OF THESE SPECIFICATIONS, AND PROVIDING THAT THAT ALL MODIFICATIONS HAVE BEEN SHOWN IN THE SHOP DRAWINGS. CONTRACTOR RESPONSIBLE TO DETERMINE CONDUIT RUNS AND "CLEAR" PIPING, DUCTWORK, ACCESS DOORS, AND OTHER OBSTRUCTIONS AS APPLICABLE. CONTRACTOR SHALL COORDINATE CONDUIT WITH WORK OF OTHER TRADES AND ALTER WHERE NECESSARY TO AVOID INTERFERENCE. SUBMIT FOR APPROVAL, PRIOR TO SCALED INSTALLATION DRAWINGS SHOWING PRECISE LOCATION OF ALL NEW EQUIPMENT/DEVICES TO BE INSTALLED AND INDICATING CIRCUITRY. SHOP DRAWINGS SHALL INCLUDE ALL WIRING, PULL BOXES, JUNCTION BOXES, FITTINGS, WIRING DEVICES AND DIMENSIONED CLEARANCES FROM THE STRUCTURE AND EQUIPMENT. COORDINATE SHOP DRAWINGS WITH OTHER TRADES PRIOR TO SUBMISSION.
7. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR THE INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. WHERE CONFLICTS EXIST, PROVIDE IN THE BID PROPOSAL THE COSTLIER ALTERNATIVE.

INSTALLATION:
1. CONTRACTOR SHALL SUPPLY ALL LABOR, CABLES, CONDUIT BOXES, FITTINGS, WIRING MATERIALS, HARDWARE, SUPPORTS, AND MISCELLANEOUS ITEMS FOR A COMPLETE ELECTRICAL INSTALLATION AND CONNECTION OF THE ELECTRICAL WORK REQUIRED, EXCEPT THAT THE PROVISION FOR OWNER SUPPLIED EQUIPMENT SHALL BE ONLY BE COMPLETED TO THE POINT INDICATED ELSEWHERE ON THE DRAWINGS.
2. ALL CABLES, NOT WITHIN CONDUIT (EX., MC TYPE, FIRE ALARM, PA), ROUTED WITHIN THE CEILING CAVITY MUST BE SECURED USING BRIDLE RINGS, J-HOOKS, OR OTHER APPROPRIATE MEANS. THE CABLE MUST NOT LAY ON DROPPED CEILING PANELS, BE FASTENED TO EXISTING ELECTRICAL CONDUITS, STEAM PIPES, SPRINKLER PIPES, INSULATED PIPES, OR BE ROUTED IN SUCH A FASHION AS TO OBSTRUCT ACCESS HATCHES, DOORS, UTILITY ACCESS PANELS, MECHANICAL SERVICE WORK AREAS OR FITTINGS AND SHALL NOT BE ROUTED THROUGH FIRE DOORS, VENTILATING SHAFTS, OR GRATES.
   a. UNLESS OTHERWISE PROVIDED, MC CABLES SHALL BE SECURED AT INTERVALS NOT EXCEEDING 6". CABLES CONTAINING FOUR OR FEWER CONDUCTORS SIZED NO LARGER THAN 10 AWG SHALL BE SECURED WITHIN 12" OF EVERY BOX, CABINET, FITTING, OR OTHER CABLE TERMINATION.
   b. TYPE MC CABLE SHALL BE PERMITTED TO BE UNSUPPORTED WHERE THE CABLE: (A) IS FISHED BETWEEN ACCESS POINTS THROUGH CONCEALED SPACES IN FINISHED BUILDINGS OR STRUCTURES AND SUPPORTING IS IMPRACTICAL; OR (B) IS NOT MORE THAN 6' IN LENGTH FROM THE LAST POINT OF CABLE SUPPORT TO THE POINT OF CONNECTION TO LUMINAIRES OR OTHER ELECTRICAL EQUIPMENT AND THE CABLE AND POINT OF CONNECTION ARE WITHIN AN ACCESSIBLE CEILING. TYPE MC CABLE FITTINGS SHALL BE PERMITTED AS A MEANS OF CABLE SUPPORT.
3. ALL CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE INDEPENDENTLY SUPPORTED AND BRACED INDEPENDENTLY OF THE CEILING.
4. ALL NEW WIRING IS TO BE RUN CONCEALED WHEREVER POSSIBLE. ALL CONDUCTORS SHALL BE IN A SURFACE MOUNTED METALLIC RACEWAY IN PUBLIC SPACES OR METALLIC CONDUIT IN UTILITY LOCATIONS WHEN NOT ROUTED CONCEALED IN THE CEILING/WALL CAVITIES. ANY LOCATIONS THAT DO NOT HAVE ACCESSIBLE OR DROPPED CEILINGS WILL REQUIRE THE USE OF SURFACE MOUNTED METALLIC RACEWAYS. PROVIDE PULL-BOXES (SIZE PER CODE) AND LOCATE IN CONDUIT RUNS AS REQUIRED. NO EXPOSED CABLE MAY BE INSTALL

PROPOSED FIRE ALARM SYMBOL LEGEND

SYMBOL LEGEND IS APPLICABLE FOR ALL PROPOSED FIRE ALARM DRAWINGS

NOTIFICATION APPLIANCES

SYMBOL	DESCRIPTION
60cd	COMBINATION SPEAKER/STROBE "CD" - MINIMUM CANDELA RATING "W" - MINIMUM TAP SETTING (WATTS), CAN BE ADJUSTED LOWER IN FIELD AS REQUIRED TO MEET AUDIBILITY REQUIREMENTS. "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
SPK	SPEAKER ONLY "W" - MINIMUM TAP SETTING (WATTS), CAN BE ADJUSTED LOWER IN FIELD AS REQUIRED TO MEET AUDIBILITY REQUIREMENTS. "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
60cd	COMBINATION HORN/STROBE "CD" - MINIMUM CANDELA RATING "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
60cd	WALL MOUNTED STROBE "CD" - MINIMUM CANDELA RATING
60cd	CEILING MOUNTED STROBE "CD" - MINIMUM CANDELA RATING
	NOTE: ALL SURFACE MOUNTED NOTIFICATION APPLIANCES SHALL BE MOUNTED ON THE MANUFACTURER'S SURFACE MOUNT RED BACK BOX.

INITIATING DEVICES

SYMBOL	DESCRIPTION
S	PHOTOELECTRIC SMOKE DETECTOR
A H	HEAT DETECTOR - COMBO ROR/FIXED TEMPERATURE "A" - MOUNTED ABOVE THE SUSPENDED CEILING. PROVIDE WITH REMOTE LED INDICATOR MOUNTED BELOW DEVICE ONTO SUSPENDED CEILING. "F" - FIXED TEMPERATURE ONLY (135° UNLESS NOTED OTHERWISE ON THE PLAN).
F	MANUAL PULL STATION WITH LEXAN GUARD WITH AN INTEGRAL HORN. MOUNT PULL STATION ON MANUFACTURER'S SURFACE MOUNT RED BACKBOX WHEN SURFACE MOUNTED.
S	DUCT SMOKE DETECTOR (RETURN SIDE OF UNIT, UNLESS OTHERWISE NOTED TO BE SUPPLY SIDE) WITH INTEGRAL RELAY FOR HVAC SHUTDOWN REQUIREMENTS.
RTS	DUCT DETECTOR REMOTE TEST STATION WITH INDICATOR LIGHT. LOCATION SHALL BE IN AN ACCESSIBLE LOCATION AND AS PER THE OWNER'S AUTHORIZED REPRESENTATIVE.
CO	CARBON MONOXIDE DETECTOR WITH INTEGRAL HORN
	NOTE: ALL CEILING SURFACE MOUNTED DEVICES SHALL BE MOUNTED ON A ROUND WIREMOLD BACK BOX WITH A DIAMETER GREATER THAN THE DEVICE BASE.

PROPOSED FIRE ALARM SYMBOL LEGEND (CONT.)

CONTROL DEVICES

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL ("FACP") (PROVIDE 20A, 120VAC CIRCUIT.)
FAA	FIRE ALARM ANNUNCIATOR (TEXTUAL BASED ANNUNCIATOR) - CONFIRM LOCATION WITH FIRE MARSHAL. PROVIDE A NEW RED LOCKABLE 1P, 20A BREAKER W/ 3/4"C W/ (2) #12 & (1) #12 GND IN CLOSEST AVAILABLE PANEL.
MIC	MICROPHONE - CONNECT TO FIRE ALARM CONTROL PANEL / ANNUNCIATOR
AMP	AMPLIFIER - CONTRACTOR SHALL DETERMINE QUANTITY REQUIRED AND BEST PHYSICAL LOCATION ON THE PLAN. DO NOT LOAD MORE THAN 80%. CONFIRM LOCATION WITH OWNER'S AUTHORIZED REPRESENTATIVE. PROVIDE A NEW RED LOCKABLE 1P, 20A BREAKER W/ 3/4"C W/ (2) #12 & (1) #12 GND IN CLOSEST AVAILABLE PANEL & DESIGNATE AS "FIRE ALARM CIRCUIT".
NAC	NOTIFICATION CIRCUIT POWER BOOSTER (120VAC) - CONTRACTOR SHALL DETERMINE QUANTITY REQUIRED AND BEST PHYSICAL LOCATION ON THE PLAN. DO NOT LOAD MORE THAN 80%. CONFIRM LOCATION WITH OWNER'S AUTHORIZED REPRESENTATIVE. PROVIDE A NEW RED LOCKABLE 1P, 20A BREAKER W/ 3/4"C W/ (2) #12 & (1) #12 GND IN CLOSEST AVAILABLE PANEL.

INTERFACE DEVICES

SYMBOL	DESCRIPTION
AIM	ADDRESSABLE INPUT / MONITORING MODULE TO MONITOR SYSTEM INDICATED.
AOM	ADDRESSABLE OUTPUT / CONTROL MODULE TO CONTROL SYSTEM INDICATED.

PROPOSED FIRE ALARM SYMBOL LEGEND (CONT.)

NOMENCLATURE

SYMBOL	DESCRIPTION
WG	WIRE GUARD.
WP	WEATHERPROOF.
CO	CARBON MONOXIDE.

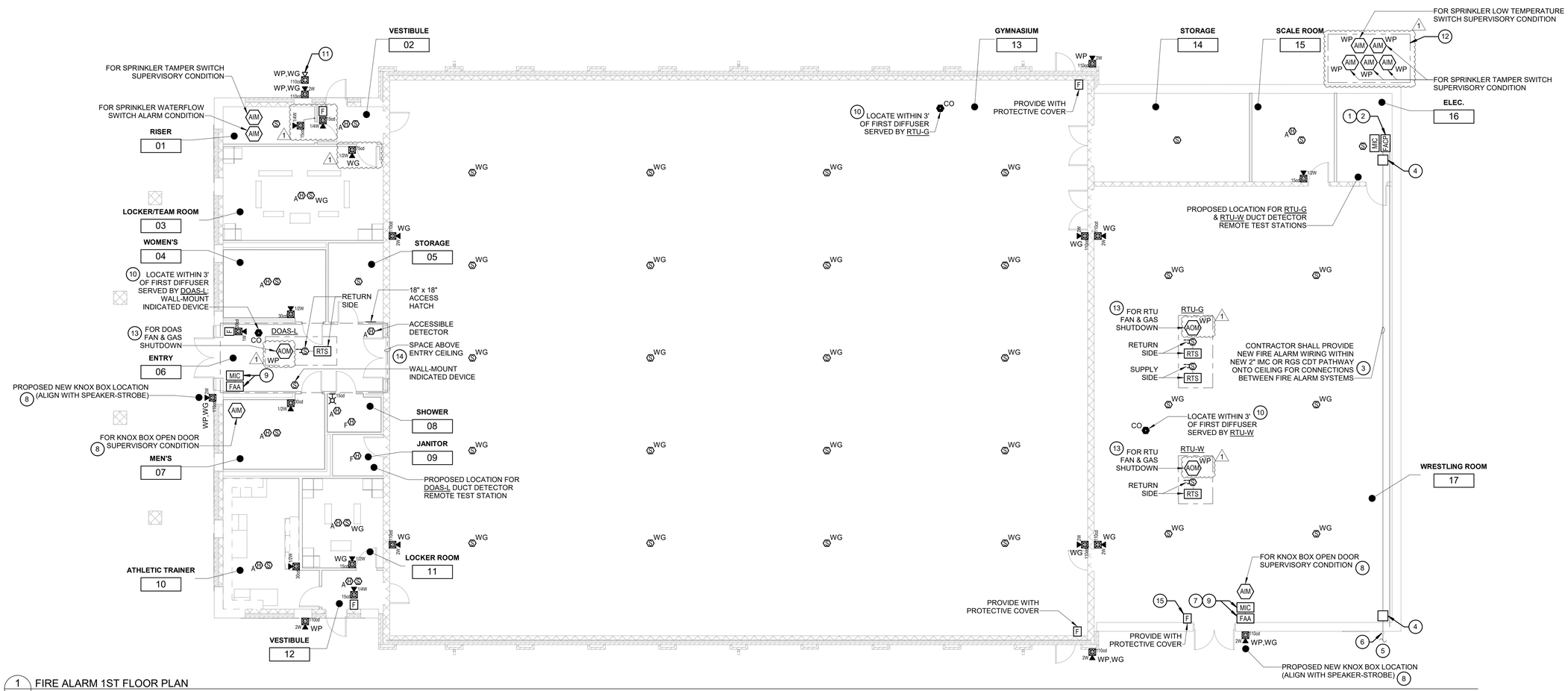
GENERAL NOTES

1. ALL INITIATING DEVICES AND NOTIFICATION APPLIANCES SUBJECT TO PHYSICAL DAMAGE SHALL BE INSTALLED WITH WIRE GUARDS. (I.E., IN GYMNASIUMS, LOCKER ROOMS, EXTERIOR LOCATIONS, ETC.)
2. WHEN IN AN INDIVIDUAL ROOM AND INDICATED AS CEILING MOUNTED, ALL DEVICES SHALL BE PLACED AS CLOSE AS PRACTICAL TO THE CENTER OF THE SPACE UNLESS INDICATED OTHERWISE.

CONSTRUCTION KEY NOTES LEGEND

(#) SYMBOL INDICATES CONST. KEY NOTE

KEY #	DESCRIPTION
1	PROPOSED LOCATION OF NEW FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL PROVIDE MOUNTING SUPPORTS AS NECESSARY; COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS & ENSURE EQUIPMENT IS PROVIDED WITH NEC CODE-REQUIRED WORKING SPACE CLEARANCES. REFER TO ELECTRICAL 1ST FLOOR POWER PLAN (SHEET E2.01) FOR POWER CIRCUITING REQUIREMENTS.
2	CONTRACTOR SHALL COORDINATE WITH FIRE ALARM SYSTEM VENDORS TO NETWORK NEW FACP / FIRE ALARM SYSTEM TO BE PROVIDED WITHIN THIS STRUCTURE, WITH EXISTING FACP / FIRE ALARM SYSTEM LOCATED WITHIN THE EXISTING HIGH SCHOOL STRUCTURE; COORDINATE WITH BOTH NEW BUILDING & EXISTING BUILDING FIRE ALARM SYSTEM VENDORS. PROVIDE ALL NECESSARY FIRE ALARM WIRING, CABLING, APPURTENANCES, & PROGRAMMING REQUIRED TO INTERFACE THE (2) FIRE ALARM SYSTEMS. PROVIDE FULLY INTEGRATED: ADDRESSABLE CONDITION & SIGNAL REPORTING, VOICE EVACUATION, & FIRE DRILL FUNCTIONALITY; BETWEEN THE (2) FIRE ALARM SYSTEMS. ALLOW TO PROVIDE 650' OF FIBER OBTIC CABLE, 400' OF NECESSARY MOUNTING SUPPORTS TO RUN WIRING/CABLE CONCEALED ABOVE EXISTING SUSPENDED CEILING SYSTEM WITHIN EXISTING HIGH SCHOOL STRUCTURE, & 20' OF SURFACE MOUNTED METALLIC RACEWAY TO RUN WIRING/CABLE WITHIN BUILDING INTERIOR FROM EXISTING SUSPENDED CEILING SYSTEM TO EXISTING FACP; VERIFY REQUIRED LENGTH & TYPE OF NECESSARY WIRING/CABLE, EXISTING FACP LOCATION, & COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS, PRIOR TO PURCHASES & COMMENCEMENT OF WORK.
3	CONTRACTOR SHALL PROVIDE NEW 2"C PATHWAY BETWEEN THE NEW FACP WITHIN THE NEW HIGH SCHOOL GYM STRUCTURE, & THE EXISTING FACP WITHIN THE EXISTING HIGH SCHOOL MAIN BUILDING STRUCTURE, FOR NEW FIRE ALARM WIRING / CABLING.
4	CONTRACTOR SHALL PROVIDE NEW PULL BOX, SIZED AS NECESSARY.
5	REFER TO ELECTRICAL SITE PLAN (SHEET E3.01) FOR CONTINUATION OF FIRE ALARM CONDUIT RACEWAY OUTSIDE BUILDING STRUCTURE.
6	CONTRACTOR SHALL ROUTE CONDUIT RACEWAY FROM TRENCH, RISE UP AT EXTERIOR BUILDING FACADE, & POKE INTO BUILDING AT MAXIMUM ALLOWABLE HEIGHT BENEATH WRESTLING ROOM CEILING. FIELD COORDINATE FINAL PENETRATION LOCATION & HEIGHT.
7	CONTRACTOR SHALL COORDINATE WITH PAD MANUFACTURER TO ENSURE OPENING IS PROVIDED WITHIN PADS TO ACCOMODATE ACCESSIBLE INSTALLATION OF INDICATED FIRE ALARM ANNUNCIATOR & MICROPHONE AT WALL IF NECESSARY. CONFIRM WITH FIRE MARSHAL IF EQUIPMENT IS REQUIRED TO BE PROVIDED AT THIS LOCATION, PRIOR TO PURCHASE OF MAT. IF EQUIPMENT ISN'T TO BE PROVIDED AT THIS LOCATION, OPENING SHALL NOT BE PROVIDED.
8	CONTRACTOR SHALL PROVIDE INDICATED NEW KNOX BOX & ASSOCIATED OPEN DOOR MONITORING MODULE AT (1) OF THE (2) PROPOSED LOCATIONS DESIGNATED BY THIS KEYNOTE; COORDINATE FINAL LOCATION WITH FIRE MARSHAL, PRIOR TO COMMENCEMENT OF WORK.
9	CONTRACTOR SHALL PROVIDE INDICATED NEW FIRE ALARM ANNUNCIATOR & MICROPHONE AT (1) OF THE (2) PROPOSED LOCATIONS DESIGNATED BY THIS KEYNOTE; COORDINATE FINAL LOCATIONS WITH FIRE MARSHAL, PRIOR TO COMMENCEMENT OF WORK. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION & POWER CIRCUITING REQUIREMENTS.
10	CONTRACTOR SHALL PROVIDE CARBON MONOXIDE DETECTOR WITHIN 3' OF FIRST DIFFUSER SERVED BY NEW RTU / DOAS. INDICATED LOCATION SHOWN FOR REFERENCE ONLY. COORDINATE WITH FIELD CONDITIONS FOR FINAL LOCATION, TO BE DETERMINED BY EXACT FIRST DIFFUSER & ASSOCIATED ROOM OR SPACE SERVED.
11	INDICATED WEATHERPROOF HORN/STROBE TO ACTIVATE UPON WATERFLOW ALARM CONDITION. CONTRACTOR SHALL COORDINATE WITH FA SYSTEM VENDOR TO PROVIDE ALL NECESSARY WIRING, CONDUIT, & PROGRAMMING. PROVIDE ADDITIONAL APPURTENANCES / MODULES AS NECESSARY.
12	FIRE ALARM REQUIREMENTS FOR NEW EXTERIOR METER VAULT WITH: (5) FIRE ALARM MONITORING MODULES. PROVIDE NEW FIRE ALARM WIRING / CABLING & 1-1/2" CONDUIT, & TRENCH TO PROPOSED LOCATION. REFER TO CIVIL DRAWINGS & ELECTRICAL SITE PLAN (SHEET E3.01) FOR PROPOSED LOCATION, & ELECTRICAL TRENCHING DETAILS (SHEET E7.03) FOR FURTHER INFORMATION & REQUIREMENTS.
13	CONTRACTOR SHALL COORDINATE WITH FIRE ALARM SYSTEM & MECHANICAL SYSTEM INSTALLERS, & ENSURE NEW DUCT DETECTOR & HVAC SHUTDOWN CONTROL MODULE ARE PROVIDED AT AN ACCESSIBLE LOCATION.
14	NOTE: THE SPACE ABOVE THE ENTRY CEILING SHALL BE CONSIDERED INACCESSIBLE. CONTRACTOR SHALL COORDINATE FINAL LOCATION & REQUIREMENTS ASSOCIATED WITH THE 'DOAS-L' DUCT DETECTOR & HVAC SHUTDOWN CONTROL MODULE WITH FIRE ALARM SYSTEM VENDOR, 'DOAS-L' VENDOR, & FIELD CONDITIONS. IF FIRE ALARM SYSTEM DUCT DETECTOR IS UNABLE TO BE INSTALLED AT A CODE-COMPLIANT, ACCESSIBLE LOCATION, CONTRACTOR SHALL ENSURE 'DOAS-L' IS PROVIDED WITH FACTORY INSTALLED DUCT DETECTOR ACCESSIBLE FROM WITHIN THE MECHANICAL EQUIPMENT AT THE ROOF, & PROVIDE FIRE ALARM SYSTEM MONITORING MODULE WITH CONNECTION TO DUCT DETECTOR FOR CONDITION MONITORING; COORDINATE EXACT REQUIREMENTS WITH FIELD CONDITIONS PRIOR TO PURCHASES & COMMENCEMENT OF WORK. PROPOSED LOCATION OF MONITORING MODULE (IF REQUIRED) SHALL BE WITHIN JANITOR - 09; COORDINATE FINAL INTERIOR LOCATION WITH OWNER & ARCHITECT FOR APPROVAL.
15	CONTRACTOR SHALL COORDINATE WITH PAD MANUFACTURER TO ENSURE OPENINGS ARE PROVIDED WITHIN PADS TO ACCOMMODATE ACCESSIBLE INSTALLATION OF INDICATED FIRE ALARM EQUIPMENT & ASSOCIATED APPURTENANCES AT WALL.



1 FIRE ALARM 1ST FLOOR PLAN
FA2.01 1/8" = 1'-0"

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	08/13/2026
Checked	EM
Drawn	AB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER License No. NJ24GE04901100

Date	Description
08/13/26	BID SET
09/03/26	ADDENDUM #1

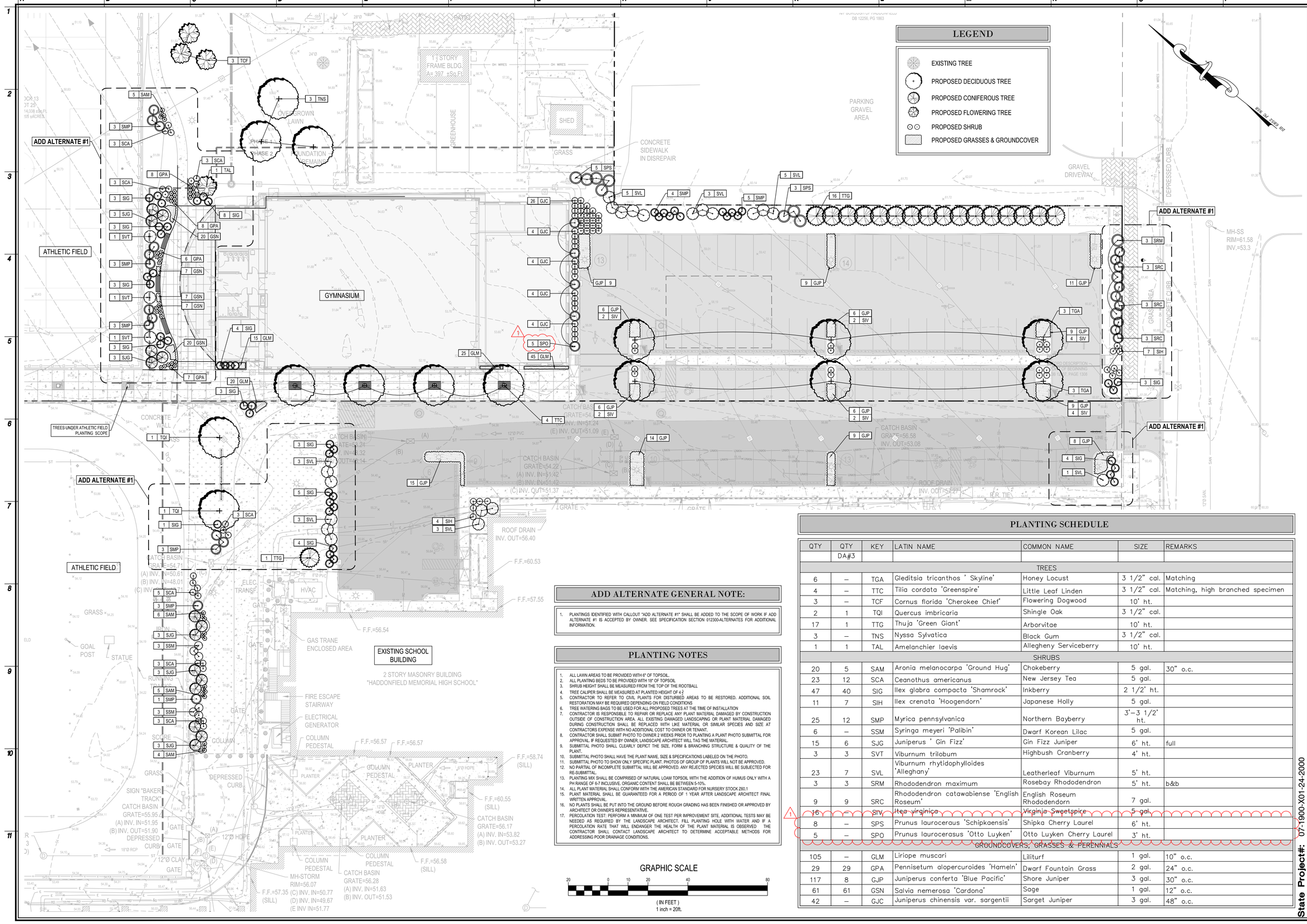
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

FIRE ALARM 1ST FLOOR PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

FA2.01

9/3/2026 10:21:10 AM



ADD ALTERNATE GENERAL NOTE:

1. PLANTINGS IDENTIFIED WITH CALLOUT "ADD ALTERNATE #1" SHALL BE ADDED TO THE SCOPE OF WORK IF ADD ALTERNATE #1 IS ACCEPTED BY OWNER. SEE SPECIFICATION SECTION 012300-ALTERNATES FOR ADDITIONAL INFORMATION.

PLANTING NOTES

1. ALL LAWN AREAS TO BE PROVIDED WITH 6" OF TOPSOIL.
2. ALL PLANTING BEDS TO BE PROVIDED WITH 18" OF TOPSOIL
3. SHRUB HEIGHT SHALL BE MEASURED FROM THE TOP OF THE ROOTBALL
4. TREE CALIPER SHALL BE MEASURED AT PLANTED HEIGHT OF 4 ½
5. CONTRACTOR TO REFER TO CIVIL PLANTS FOR DISTURBED AREAS TO BE RESTORED. ADDITIONAL SOIL RESTORATION MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS
6. TREE WATERING BAGS TO BE USED FOR ALL PROPOSED TREES AT THE TIME OF INSTALLATION
7. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE ANY PLANT MATERIAL DAMAGED BY CONSTRUCTION OUTSIDE OF CONSTRUCTION AREA. ALL EXISTING DAMAGED LANDSCAPING OR PLANT MATERIAL DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIAL OR SIMILAR SPECIES AND SIZE AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO OWNER OR TENANT.
8. CONTRACTOR SHALL SUBMIT PHOTO TO OWNER 2 WEEKS PRIOR TO PLANTING A PLANT PHOTO SUBMITTAL FOR APPROVAL, IF REQUESTED BY OWNER, LANDSCAPE ARCHITECT WILL TAG THE MATERIAL.
9. SUBMITTAL PHOTO SHALL CLEARLY DEPICT THE SIZE, FORM & BRANCHING STRUCTURE & QUALITY OF THE PLANT.
10. SUBMITTAL PHOTO SHALL HAVE THE PLANT NAME, SIZE & SPECIFICATIONS LABELED ON THE PHOTO.
11. SUBMITTAL PHOTO TO SHOW ONLY SPECIFIC PLANT. PHOTOS OF GROUP OF PLANTS WILL NOT BE APPROVED.
12. NO PARTIAL OF INCOMPLETE SUBMITTAL WILL BE APPROVED. ANY REJECTED SPECIES WILL BE SUBJECTED FOR RE-SUBMITTAL.
13. PLANTING MIX SHALL BE COMPRISED OF NATURAL LOAM TOPSOIL WITH THE ADDITION OF HUMUS ONLY WITH A PH RANGE OF 6-7 INCLUSIVE. ORGANIC CONTENT SHALL BE BETWEEN 5-10%.
14. ALL PLANT MATERIAL SHALL CONFORM WITH THE AMERICAN STANDARD FOR NURSERY STOCK Z60.1
15. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR AFTER LANDSCAPE ARCHITECT FINAL WRITTEN APPROVAL.
16. NO PLANTS SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED OR APPROVED BY ARCHITECT OR OWNER'S REPRESENTATIVE.
17. PERCOLATION TEST: PERFORM A MINIMUM OF ONE TEST PER IMPROVEMENT SITE, ADDITIONAL TESTS MAY BE NEEDED AS REQUIRED BY THE LANDSCAPE ARCHITECT. FILL PLANTING HOLE WITH WATER AND IF A PERCOLATION RATE THAT WILL ENDANGER THE HEALTH OF THE PLANT MATERIAL IS OBSERVED THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DETERMINE ACCEPTABLE METHODS FOR ADDRESSING POOR DRAINAGE CONDITIONS.

PLANTING SCHEDULE

QTY	QTY	KEY	LATIN NAME	COMMON NAME	SIZE	REMARKS
	DA#3					
			TREES			
6	–	TGA	Gleditsia tricanthos ' Skyline'	Honey Locust	3 1/2" cal.	Matching
4	–	TTC	Tilia cordata 'Greenspire'	Little Leaf Linden	3 1/2" cal.	Matching, high branched specimen
3	–	TCF	Cornus florida 'Cherokee Chief'	Flowering Dogwood	10' ht.	
2	1	TQI	Quercus imbricaria	Shingle Oak	3 1/2" cal.	
17	1	TTG	Thuja 'Green Giant'	Arborvitae	10' ht.	
3	–	TNS	Nyssa Sylvatica	Black Gum	3 1/2" cal.	
1	1	TAL	Amelanchier laevis	Allegheny Serviceberry	10' ht.	
			SHRUBS			
20	5	SAM	Aronia melanocarpa 'Ground Hug'	Chokeberry	5 gal.	30" o.c.
23	12	SCA	Ceanothus americanus	New Jersey Tea	5 gal.	
47	40	SIG	Ilex glabra compacta 'Shamrock'	Inkberry	2 1/2' ht.	
11	7	SIH	Ilex crenata 'Hoogendorn'	Japanese Holly	5 gal.	
25	12	SMP	Myrica pennsylvanica	Northern Bayberry	3'–3 1/2' ht.	
6	–	SSM	Syringa meyeri 'Palibin'	Dwarf Korean Lilac	5 gal.	
15	6	SJG	Juniperus ' Gin Fizz'	Gin Fizz Juniper	6' ht.	full
3	3	SVT	Viburnum trilobum	Highbush Cranberry	4' ht.	
23	7	SVL	Viburnum rhytidophylloides 'Alleghany'	Leatherleaf Viburnum	5' ht.	
3	3	SRM	Rhododendron maximum	Rosebay Rhododendron	5' ht.	b&b
9	9	SRC	Rhododendron catawabiense 'English Roseum'	English Roseum Rhododendorn	7 gal.	
16	–	SIV	Itea virginica	Virginia Sweetspire	5 gal.	
8	–	SPS	Prunus laurocerasus 'Schipkaensis'	Shipka Cherry Laurel	6' ht.	
5	–	SPO	Prunus laurocerasus 'Otto Luyken'	Otto Luyken Cherry Laurel	3' ht.	
			GROUNDCOVERS, GRASSES & PERENNIALS			
105	–	GLM	Liriope muscari	Liliturf	1 gal.	10" o.c.
29	29	GPA	Pennisetum alopercuroides 'Hameln'	Dwarf Fountain Grass	2 gal.	24" o.c.
117	8	GJP	Juniperus conferta 'Blue Pacific'	Shore Juniper	3 gal.	30" o.c.
61	61	GSN	Salvia nemerosa 'Cardona'	Sage	1 gal.	12" o.c.
42	–	GJC	Juniperus chinensis var. sargentii	Sarget Juniper	3 gal.	48" o.c.

State Project#: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	06/05/26
Checked	EQ
Drawn	OV

ELIO QORRI, P.E.
Title PROFESSIONAL ENGINEER
License No. 24GE06050100

Revisions:

08/13/2026 BID SET

1 09/03/2026 ADDENDUM # 1

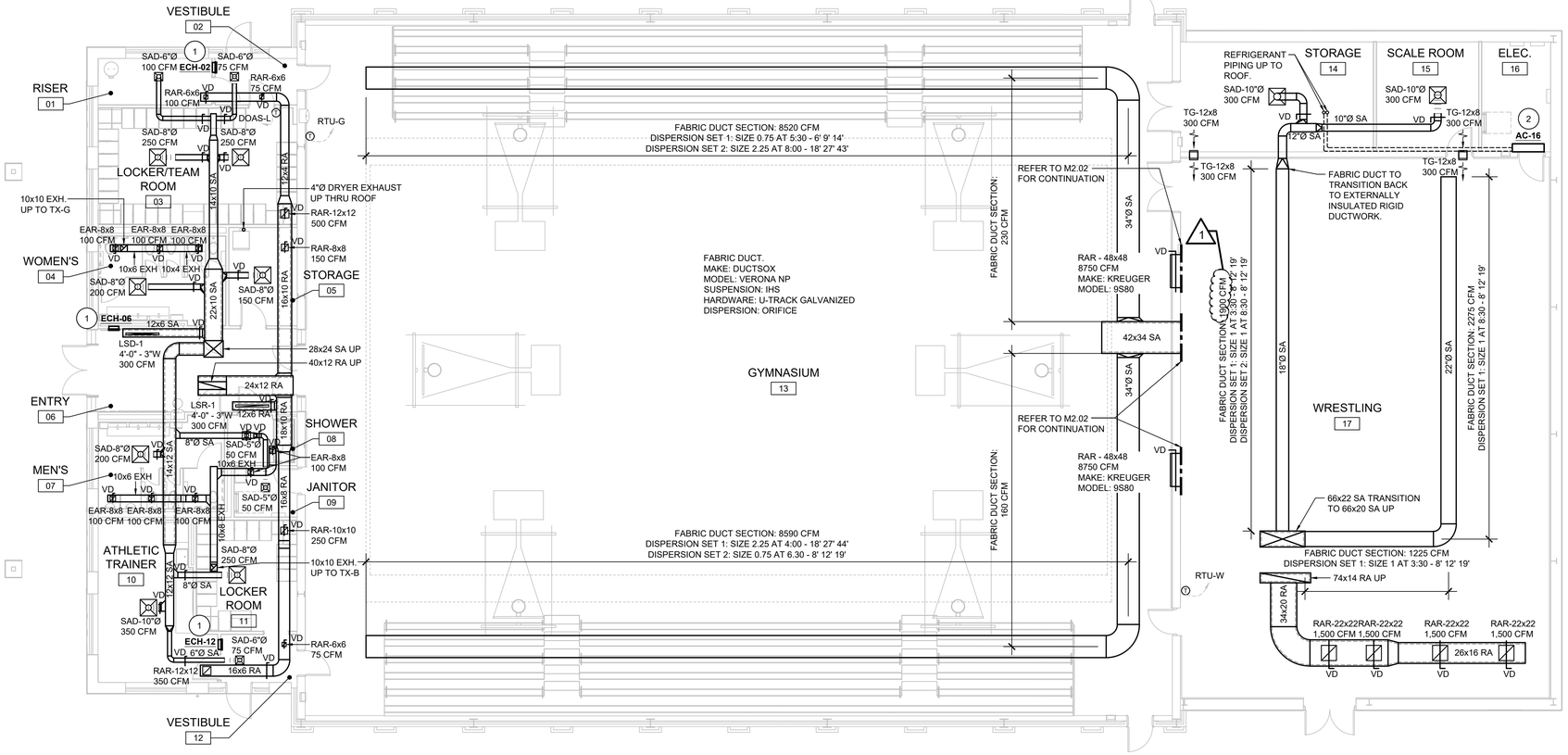
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

PROPOSED LANDSCAPING PLAN
HOPKINS PARCEL NEW GYMNASIUM
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No. 202772514C1

L1.01

P:\20000-A\E20200-20299\20277\20277.25.14 Hopkins Parcel Gym\Cad\Dwgs\202772514C1.dwg, 9/2/2026 4:39:04 PM, , DWG To PDF.pc3



1 M2.01 FIRST FLOOR PROPOSED MECHANICAL PLAN

1/8" = 1'-0"

PROJECT NORTH

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
3. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
4. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
5. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
6. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
7. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON M0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
2. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
3. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW WALL RECESSED ELECTRIC CABINET UNIT HEATER WITH SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED UNIT MOUNTED THERMOSTAT, SUPPORTS, BRACKETS, ELECTRICALS, CONTROLS, ETC.
2. PROVIDE AND INSTALL NEW REFRIGERANT PIPING. COMPLETE WITH INSULATION, ROOF SUPPORTS, EXTERIOR WALL PENETRATIONS. REFRIGERANT PIPING SIZES TO MATCH EXISTING (VIF).
3. PROVIDE AND INSTALL NEW WALL MOUNTED AC UNIT OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ASSOCIATED WALL BRACKETS, SUPPORTS, PIPING, ELECTRICALS, WALL MOUNTED THERMOSTAT IN A TAMPER PROOF ENCLOSURE, CONTROLS, ETC. INTERLOCK AC UNIT WITH ASSOCIATED CONDENSING UNIT.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	07/16/26
Checked	TW
Drawn	MNB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:

1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

FIRST FLOOR PLAN
HOPKINS PARCEL ATHLETIC FIELD IMPROVEMENTS
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, N.J. 08033

Job No. 2.20277.25.14
File No. 202772514M201

M2.01

1 M2.02 ROOF PROPOSED MECHANICAL PLAN

1/8" = 1'-0"

NORTH

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
3. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
4. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
5. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
6. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
7. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON M0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
2. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
3. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW (DX COOLING / GAS HEATING) PACKAGED ROOFTOP UNIT OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED DUCTWORK, GAS PIPING, MIN. 24" HIGH VIBRATION ISOLATION CURB, ELECTRICALS, CONTROLS, ETC. FOR A FULLY OPERABLE SYSTEM.
2. PROVIDE AND INSTALL NEW (DX COOLING / GAS HEATING) PACKAGED DEDICATED OUTDOOR AIR SYSTEM WITH ENERGY RECOVERY OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED DUCTWORK, GAS PIPING, MIN. 24" HIGH VIBRATION ISOLATION CURB, ELECTRICALS, CONTROLS, ETC. FOR A FULLY OPERABLE SYSTEM.
3. PROVIDE AND INSTALL NEW OUTDOOR CONDENSING UNIT OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ASSOCIATED 18" HIGH ROOF SUPPORTS, ROOF RAILS, REFRIGERANT PIPING, ELECTRICALS, CONTROLS, ETC. INTERLOCK AC UNIT WITH ASSOCIATED INDOOR UNIT.
4. PROVIDE AND INSTALL NEW REFRIGERANT PIPING. COMPLETE WITH INSULATION, ROOF SUPPORTS (MIRO INDUSTRIES OR APPROVED EQUAL), ROOF PENETRATIONS THROUGH PIPE PORTAL. REFRIGERANT PIPING SIZES SHALL BE COORDINATED WITH MFR GUIDELINES BASED ON THE TOTAL EQUIVALENT RUN.
5. PROVIDE AND INSTALL NEW EXHAUST FAN OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED DUCTWORK, MIN. 18" HIGH ALUMINUM CANTED ROOF CURB, ELECTRICALS, CONTROLS, ETC. FOR A FULLY OPERABLE SYSTEM.
6. NEW OUTDOOR AIR DUCTWORK INSULATED AS INDICATED ON HVAC MATERIALS SCHEDULE / DWG. M0.01.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	07/16/26
Checked	TW
Drawn	MNB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:

1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
445 Godwin Ave Ste 9, Midland Park, NJ 07432 | t. 201-447-6400 | f. 201-447-1233

ROOF PLAN

HOPKINS PARCEL ATHLETIC FIELD IMPROVEMENTS
HADDONFIELD BOARD OF EDUCATION
425 KINGS HIGHWAY EAST
HADDONFIELD, N.J. 08033

Job No. 2.20277.25.14

File No. 202772514M201

M2.02

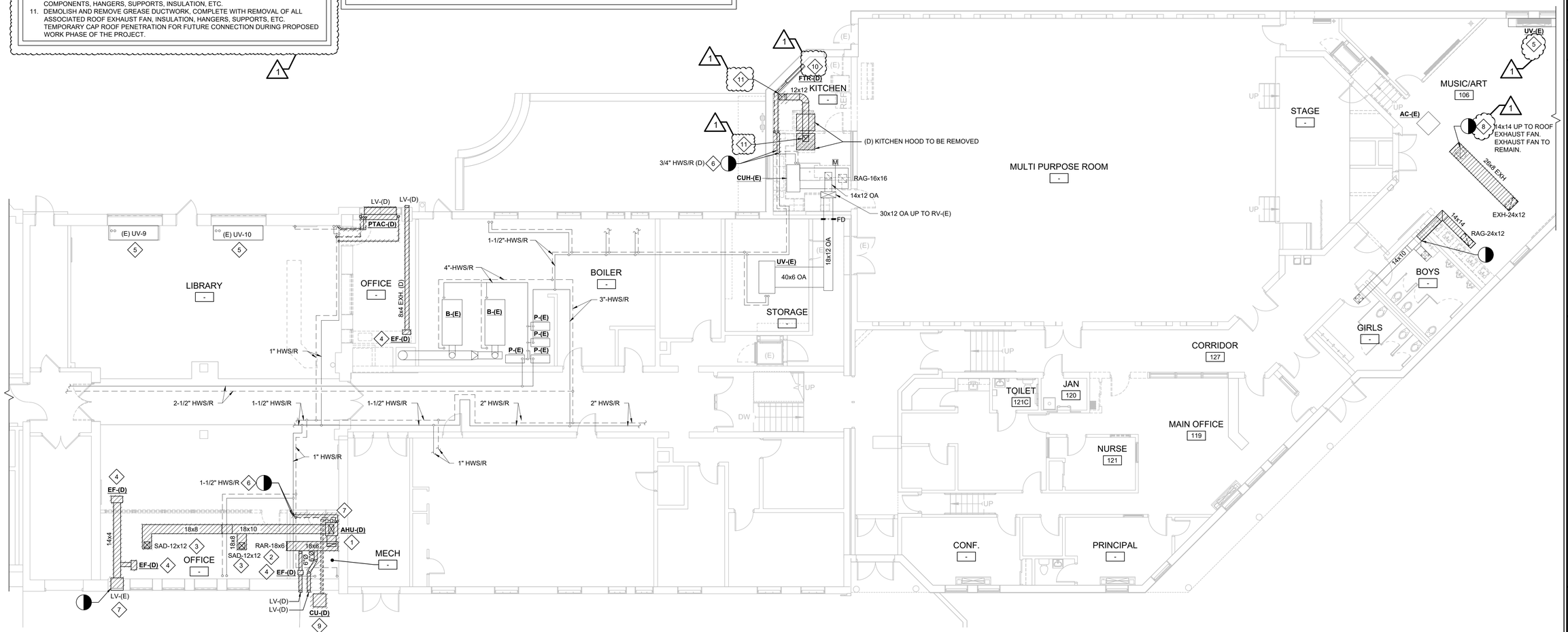
DEMOLITION KEY NOTES

SYMBOL INDICATES DEMOLITION KEY NOTE

1. DEMOLISH AND REMOVE EXISTING FLOOR MOUNTED AIR HANDLING UNIT COMPLETE WITH ALL DUCTWORK, DIFFUSERS, REGISTERS, ASSOCIATED HOT WATER COIL, HOT WATER SUPPLY AND RETURN PIPING, REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, INSULATION, CONTROLS, ELECTRICAL, ETC.
2. REMOVE EXISTING RAR COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC. PATCH WALL TO MATCH EXISTING.
3. REMOVE EXISTING SAD COMPLETE WITH ALL DUCTWORK, SUPPORTS, INSULATION, ETC.
4. REMOVE EXISTING CEILING EXHAUST FAN COMPLETE WITH ALL EXHAUST DUCTWORK, SUPPORTS, ELECTRICAL, CONTROLS, INSULATION, ETC.
5. EXISTING UV TO REMAIN COMPLETE WITH ALL STEAM SUPPLY AND CONDENSATE RETURN PIPING, INSULATION, ELECTRICAL, CONTROLS, ETC.
6. DEMOLISH AND REMOVE HOT WATER SUPPLY AND RETURN PIPING UP TO POINT SHOWN. COMPLETE WITH REMOVAL OF ALL ASSOCIATED PIPE INSULATION, VALVES, FITTINGS, COMPONENTS, HANGERS, ETC.
7. EXISTING LOUVER SHALL REMAIN TO BE REUSED DURING PROPOSED WORK PHASE OF THE PROJECT.
8. EXISTING EXHAUST FAN TO REMAIN COMPLETE WITH ALL DUCTWORK, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
9. DEMOLISH AND REMOVE GRADE MOUNTED CONDENSING UNIT. COMPLETE WITH REMOVAL OF ALL REFRIGERANT PIPING AND INTERCONNECTED WIRING, SUPPORTS, ELECTRICAL, CONTROLS, ETC.
10. DEMOLISH AND REMOVE FINNED TUBE ELEMENTS UP TO POINT SHOWN. COMPLETE WITH REMOVAL OF ALL ASSOCIATED COVERS, BACK PLATES, VALVES, FITTINGS, COMPONENTS, HANGERS, SUPPORTS, INSULATION, ETC.
11. DEMOLISH AND REMOVE GREASE DUCTWORK, COMPLETE WITH REMOVAL OF ALL ASSOCIATED ROOF EXHAUST FAN, INSULATION, HANGERS, SUPPORTS, ETC. TEMPORARY CAP ROOF PENETRATION FOR FUTURE CONNECTION DURING PROPOSED WORK PHASE OF THE PROJECT.

MECHANICAL DEMOLITION PLAN NOTES

1. SIZES & LOCATIONS OF EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. HVAC/MECH. EQUIPMENT, DUCTWORK, PIPING, VALVES, ETC. ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
3. PATCH ALL OPENINGS ON WALLS & CEILINGS & FLOORS AFTER EXIST. EQUIPMENT, DUCTWORK, PIPING, CONDUIT & WIREMOLD, ETC. ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS TO MAINTAIN FIRE RATING & PAINT TO MATCH EXISTING.
4. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL DEMOLITION IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. **CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXIST. HOT WATER PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.**
6. **COORDINATE WORK ON HOT WATER PIPING SYSTEM TO ENSURE THAT SYSTEM TO REMAIN ACTIVE AND MAINTAINED DURING THE ENTIRE CONSTRUCTION PROCESS.**
7. ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DRAWINGS SHALL BE REMOVED. PATCH WALLS & SOFFIT, ETC. & PAINT TO MATCH EXISTING.
8. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

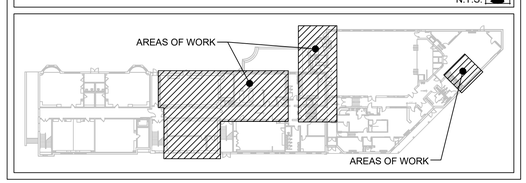


1 M1.01 PARTIAL FIRST FLOOR MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"

GROUND FLOOR KEYPLAN

N.T.S.



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:

8/13/26 BID SET

1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

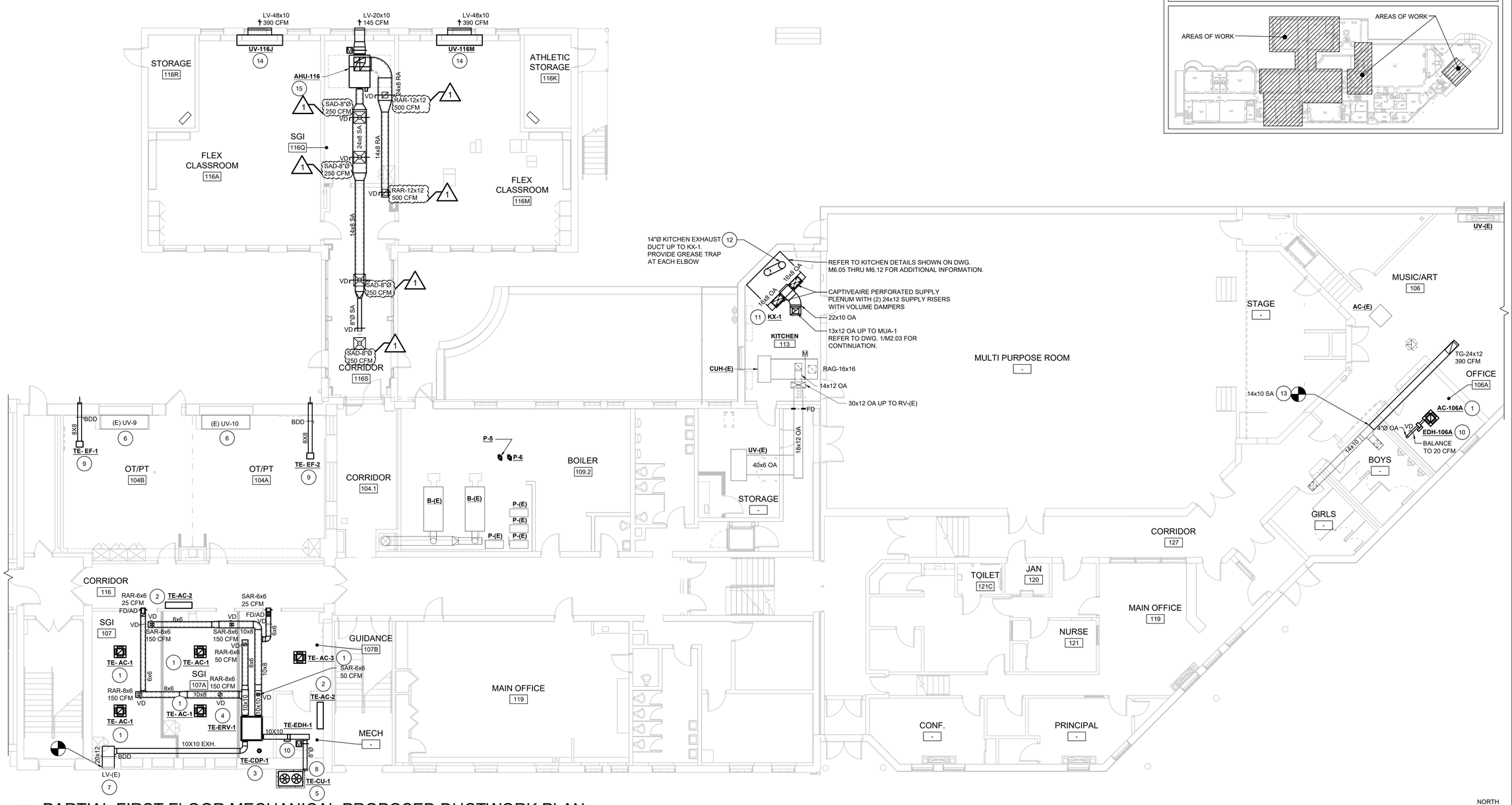
FIRST FLOOR MECHANICAL DEMOLITION PLAN

ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

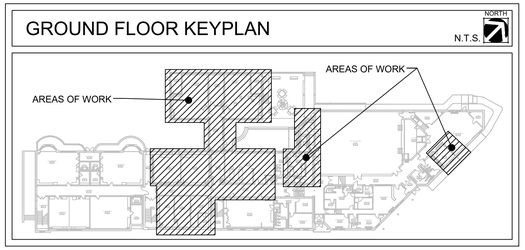
File No. 202772510M10

M1.01



1 M2.01 PARTIAL FIRST FLOOR MECHANICAL PROPOSED DUCTWORK PLAN

1/8" = 1'-0"



PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. FURNISH AND INSTALL NEW CEILING CASSETTE INDOOR DUCTLESS SPLIT AC HEAT PUMP UNIT.
2. FURNISH AND INSTALL NEW WALL MOUNTED INDOOR DUCTLESS SPLIT AC HEAT PUMP UNIT.
3. PROVIDE NEW CONDENSATE DRAIN PUMP (ASPEN PUMPS OR APPROVED EQUAL). REFER TO 1/M3.01 FOR ADDITIONAL INFORMATION.
4. FURNISH AND INSTALL NEW ERV COMPLETE WITH INSULATED SUPPLY/RETURN/OUTSIDE AIR/EXHAUST DUCTWORK, FLEXIBLE CONNECTIONS, ELECTRICAL, CONTROLS, SUPPORTS, ETC. PROVIDE A DRAIN PAN BELOW THE UNIT. REFER TO 1/M3.01 FOR ADDITIONAL INFORMATION. PROVIDE MOTORIZED DAMPER IN AIR INTAKE DUCTWORK AND BACKDRAFT DAMPER ON EXHAUST DUCTWORK.
5. FURNISH AND INSTALL NEW AIR COOLED CONDENSING UNIT ON 18" HIGH STAND ON A 6" HIGH CONCRETE PAD. COMPLETE WITH ALL REFRIGERANT PIPING AND INTERCONNECTED WIRING, INSULATION, SUPPORTS, ELECTRICAL, CONCRETE PAD, CONTROLS, ETC. ANCHOR UNIT TO WITHSTAND 125 MPH WINDS. REFER TO 1/M3.01 FOR ADDITIONAL INFORMATION
6. EXISTING UV COMPLETE WITH ALL SUPPORTS, LOUVER, HOT WATER SUPPLY AND RETURN PIPING, CONTROLS, ELECTRICAL, ETC. TO REMAIN. **RE-BALANCE OUTSIDE AIR CFM TO 180 CFM.**
7. EXISTING LOUVER TO REMAIN AND BE REUSED FOR EXHAUST AIR FROM THE NEW ERV.
8. FURNISH AND INSTALL NEW VENT FOR FRESH AIR INTAKE (X VENT BOX MAKE, MODEL: 8SEB-BR). CONNECT BACK TO THE NEW ERV COMPLETE WITH DUCTWORK, BACKDRAFT DAMPER, MOTORIZED DAMPER, ETC.
9. FURNISH AND INSTALL NEW CEILING MOUNTED EXHAUST FAN COMPLETE WITH ALL DUCTWORK, SUPPORTS, ELECTRICAL, CONTROLS, ETC. SEE SCHEDULE FOR MORE INFORMATION. INTERLOCK WITH EXISTING UVs. TERMINATE TO SIDE WALL VENT (X VENT BOX MAKE, MODEL 8SEB-BR) AS SHOWN.
10. PROVIDE NEW ELECTRIC DUCT HEATER SCHEDULED IN OUTSIDE AIR DUCTWORK COMPLETE WITH ALL ELECTRICAL, CONTROLS, SUPPORTS, ETC. INTERLOCK WITH RESPECTIVE UNIT.
11. PROVIDE AND INSTALL NEW KITCHEN HOOD SCHEDULED. COMPLETE WITH NEW PERFORATED SUPPLY PLENUM WITH TWO RISERS OF SIZES INDICATED ON THE PLAN. PROVIDE STAINLESS STEEL SHROUD AROUND THE PREMITER OF THE HOOD AND THE PERFORATED SUPPLY PLENUM TO EXTEND 2" ABOVE THE CEILING.
12. KITCHEN EXHAUST DUCT SHALL BE 16 GA. BLACK IRON ALL WELDED CONSTRUCTION. PROVIDE WITH A 1.5" Ø CAPPED BOTTOM GREASE DRAIN.
13. PROVIDE AND INSTALL NEW SUPPLY AIR DUCTWORK AND CONNECT AT POINT SHOWN. COMPLETE WITH ALL ASSOCIATED INSULATION/LINING, HANGERS, SUPPORTS, ETC.
14. PROVIDE AND INSTALL NEW FLOOR MOUNTED UNIT VENTILATOR (DX COOLING/HOT WATER HEATING) OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED DUCTWORK, OAI LOUVERS, DAMPERS, PIPING, VALVES, FITTINGS/COMPONENTS, ELECTRICALS, CONTROLS, ETC. REFER TO 1/M3.01 FOR ADDITIONAL INFORMATION.
15. PROVIDE AND INSTALL NEW CEILING CONCEALED AIR HANDLING UNIT (DX COOLING/HOT WATER HEATING) OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED DUCTWORK, OAI LOUVER, DAMPERS, PIPING, VALVES, FITTINGS/COMPONENTS, FLEX CONNECTIONS, ELECTRICALS, CONTROLS, ETC. REFER TO 1/M3.01 FOR ADDITIONAL INFORMATION.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON T0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:

8/13/26 BID SET

1 ADDENDUM #1

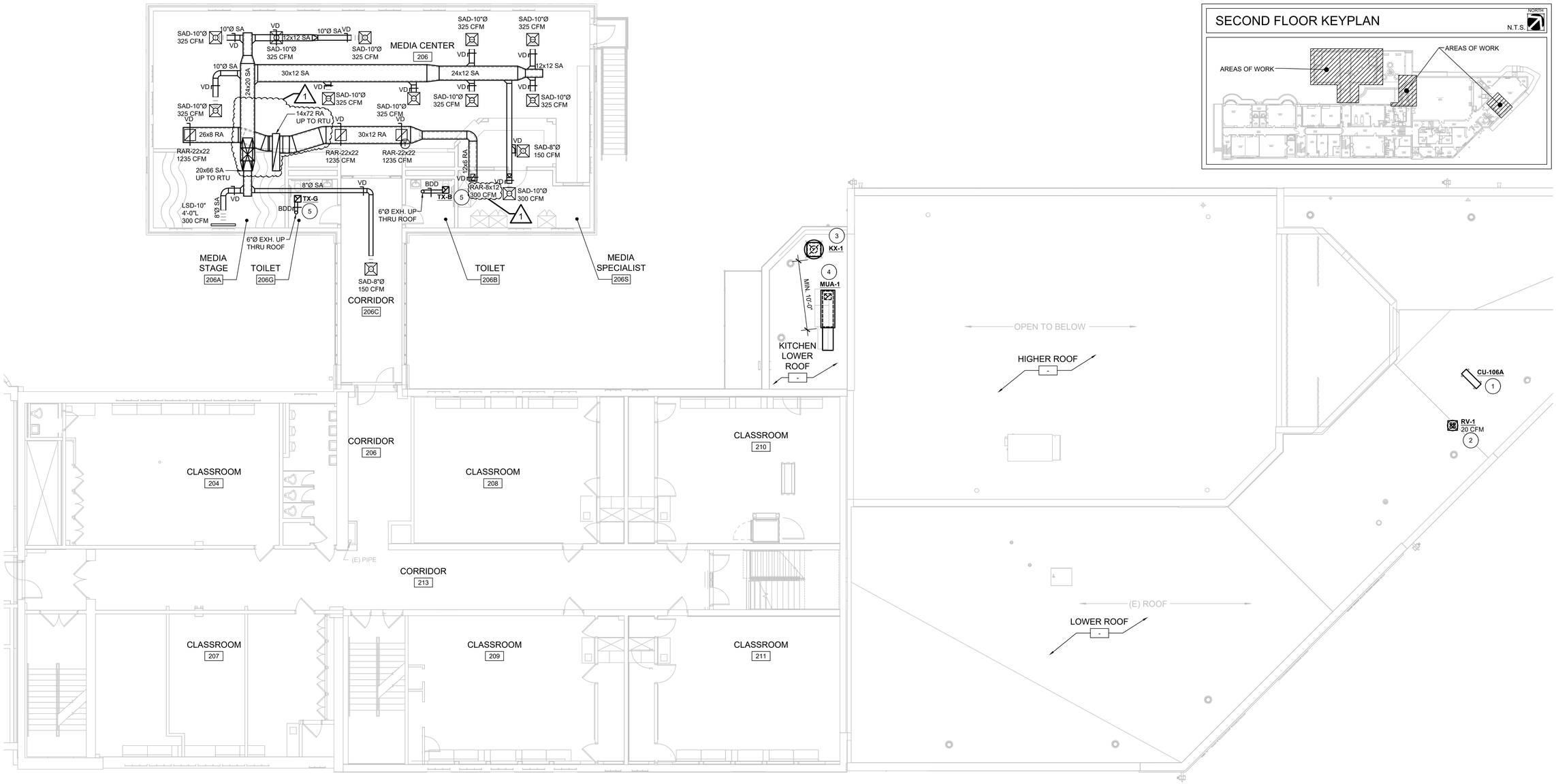
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

PARTIAL FIRST FLOOR DUCTWORK PLAN
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10

File No. 202772510M201

M2.01



1 M2.02 PARTIAL SECOND FLOOR / LOWER ROOF MECHANICAL PROPOSED DUCTWORK PLAN

1/8" = 1'-0"

PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW AIR COOLED CONDENSING UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ROOF RAILS, REFRIGERANT PIPING, CONTROLS, ELECTRICALS, ETC. INTERLOCK WITH RESPECTIVE INDOOR UNIT. REFER TO 1/M3.02 FOR ADDITIONAL INFORMATION.
2. PROVIDE AND INSTALL NEW ROOF VENT GREENHECK MAKE, MODEL GRSI-6. COMPLETE WITH A NEW 18" HIGH CANTED ROOF CURB, DUCTWORK, ETC.
3. PROVIDE AND INSTALL NEW KITCHEN EXHAUST FAN OF CAPACITIES SCHEDULED. REFER TO DETAILS ON M6.05 THRU M6.12 FOR ADDITIONAL INFORMATION.
4. PROVIDE AND INSTALL NEW ROOF TOP MAKE UP AIR UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ASSOCIATED CURB, DUCTWORK, CONTROLS, ELECTRICAL, ETC. PROVIDE WITH MIN. 20"H ROOF CURB. REFER TO DETAILS ON M6.05 THRU M6.12 FOR ADDITIONAL INFORMATION.
5. PROVIDE AND INSTALL NEW EXHAUST FAN OF CAPACITIES SCHEDULED. COMPLETE WITH VIBRATION ISOLATION HANGERS, DECORATIVE GRILLE, BACK DRAFT DAMPER, DUCTWORK, CONTROLS, ELECTRICALS, ETC.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON T0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

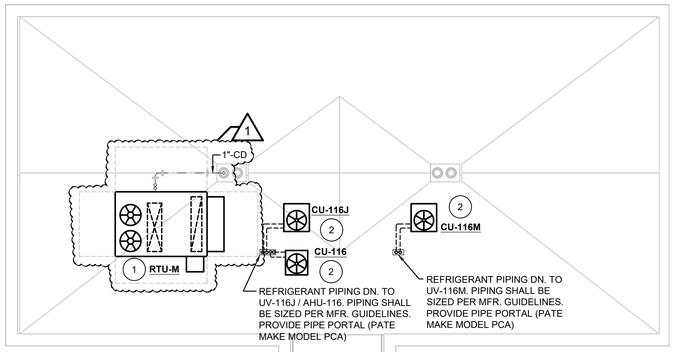
Revisions:
8/13/26 BID SET
1 ADDENDUM #1

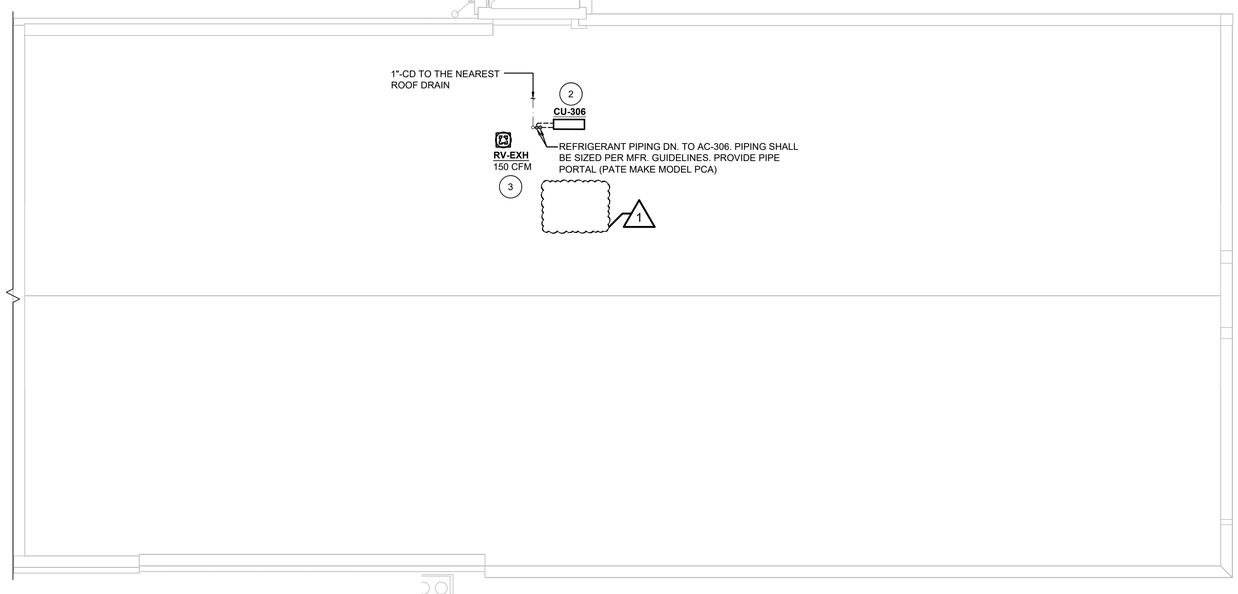
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

PARTIAL SECOND FLOOR DUCTWORK PLAN
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M201

M2.02

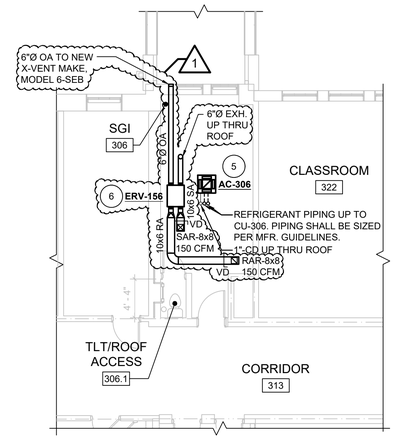




1 / M2.03 PARTIAL ROOF PROPOSED MECHANICAL PLAN

1/8" = 1'-0"

NORTH



2 / M2.03 PARTIAL THIRD FLOOR MECHANICAL PROPOSED PLAN

1/8" = 1'-0"

NORTH

PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW ROOF TOP UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ASSOCIATED DUCTWORK, PIPING, VALVES, FITTINGS, COMPONENTS, INSULATION, LINING, CONTROLS, ELECTRICAL, ETC. PROVIDE WITH MIN. 24"H VIBRATION ISOLATION ROOF CURB. REFER TO DETAILS ON DWGS. M6.03/M6.04 FOR ADDITIONAL INFORMATION.
2. PROVIDE AND INSTALL NEW AIR COOLED CONDENSING UNIT OF CAPACITIES SCHEDULED. COMPLETE WITH ROOF RAILS, REFRIGERANT PIPING, CONTROLS, ELECTRICALS, ETC.
3. PROVIDE AND INSTALL NEW ROOF VENT GREENHECK MAKE, MODEL GRSR-6.COMPLETE WITH A NEW 18" HIGH CANTED ROOF CURB, DUCTWORK, ETC.
4. DELETED.
5. PROVIDE AND INSTALL NEW INDOOR CEILING CASSETTE UNIT COMPLETE WITH REFRIGERANT PIPING, CONDENSATE DRAIN PIPING, INSULATION, CONTROLS, POWER CONNECTIONS, AND ALL REQUIRED ACCESSORIES FOR A COMPLETE AND OPERATIONAL SYSTEM.
6. PROVIDE AND INSTALL NEW SUSPENDED ENERGY RECOVERY UNIT SCHEDULED. COMPLETE WITH ASSOCIATED DUCTWORK, FLEX CONNECTIONS, VIBRATION ISOLATION HANGERS, ELECTRICALS, CONTROLS, ETC. ERV SHALL BE INTERLOCKED WITH AC-306 OPERATION.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

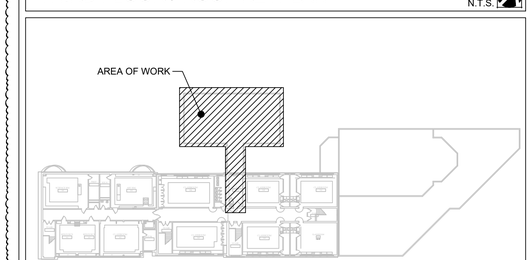
MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON T0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

THIRD FLOOR / ROOF KEYPLAN

N.T.S.

NORTH



NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

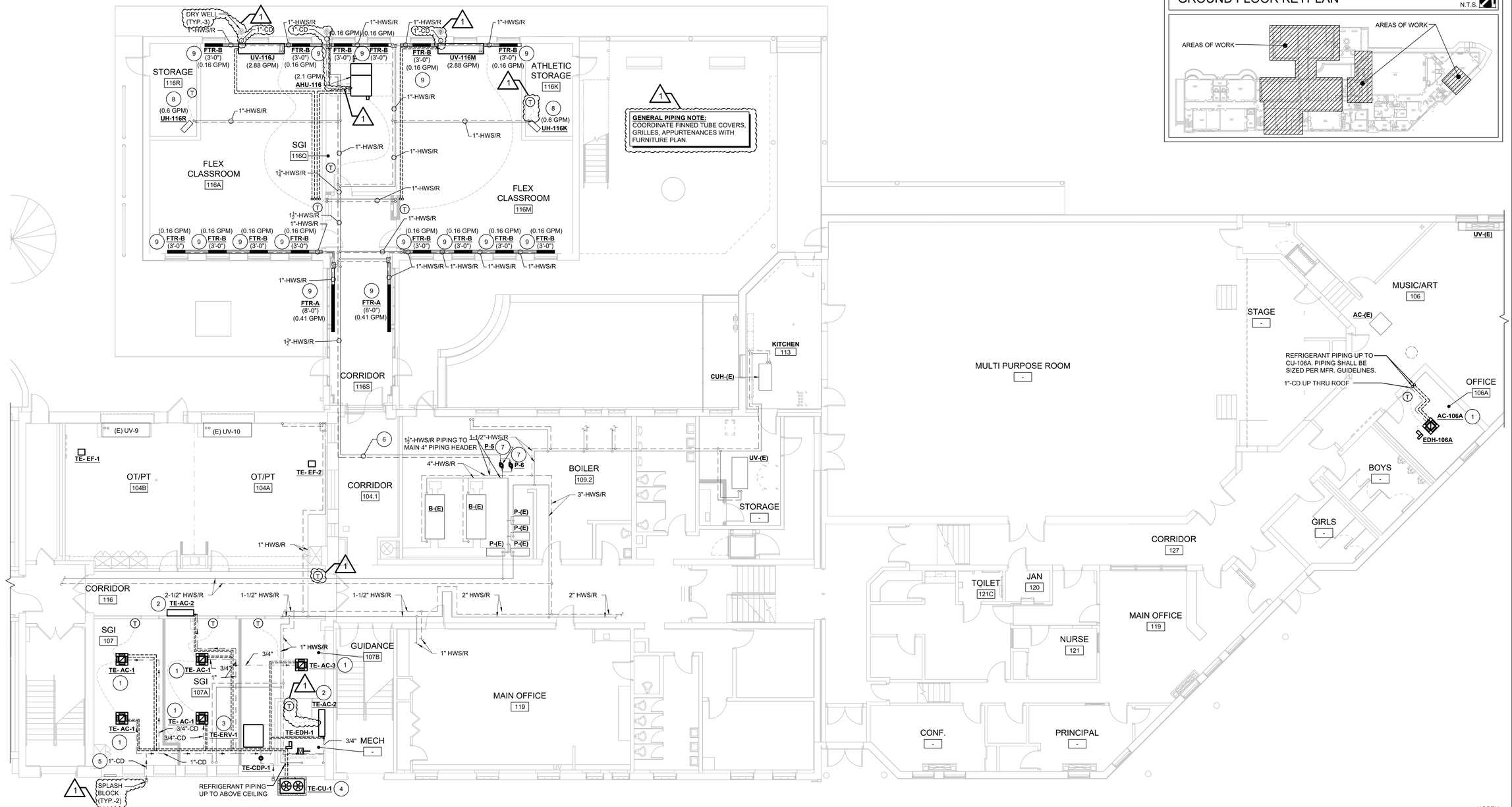
Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 ▌t. 856-375-2701

PARTIAL THIRD FLOOR AND ROOF PLAN
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

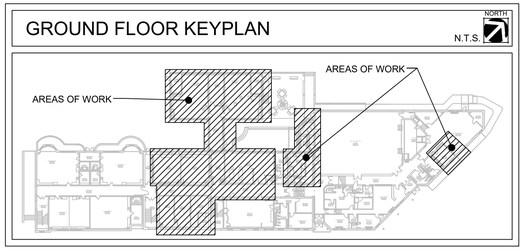
Job No. 2.20277.25.10
File No. 2027725 10M201

M2.03



1 M3.01 PARTIAL FIRST FLOOR MECHANICAL PROPOSED PIPING PLAN

1/8" = 1'-0"



PROPOSED KEY NOTES

SYMBOL INDICATES PROPOSED KEY NOTE

1. FURNISH AND INSTALL NEW REFRIGERANT PIPING AND INTERCONNECTED WIRING FROM CEILING CASSETTE AC UNIT TO ACCU ON GRADE OUTSIDE. VERIFY ACTUAL REFRIGERANT PIPE SIZES WITH MANUFACTURER BASED ON ACTUAL PIPING RUN AND ACCORDINGLY PROVIDE. PROVIDE NEW CONDENSATE DRAIN PUMP (ASPEN PUMPS OR APPROVED EQUAL). PROVIDE A SLOPE OF 1/8" (TO MAX 1/12") PER FOOT TOWARDS THE SPLASHBLOCK. PROVIDE CHECK VALVE AT UNIT DRAIN PIPING CONNECTION.
2. FURNISH AND INSTALL NEW REFRIGERANT PIPING AND INTERCONNECTED WIRING FROM WALL MOUNTED AC UNIT TO ACCU ON GRADE OUTSIDE. VERIFY ACTUAL REFRIGERANT PIPE SIZES WITH MANUFACTURER BASED ON ACTUAL PIPING RUN AND ACCORDINGLY PROVIDE. ALL EXPOSED PIPING AND CONDUITS SHALL BE CONCEALED IN NEW MIN. 18 GAGE PAINTED METAL PIPE ENCLOSURES, COLOR TO BE SELECTED BY OWNER. PROVIDE NEW CONDENSATE DRAIN PUMP (ASPEN PUMPS OR APPROVED EQUAL). PROVIDE A SLOPE OF 1/8" (TO MAX 1/12") PER FOOT TOWARDS THE SPLASHBLOCK. PROVIDE CHECK VALVE AT UNIT DRAIN PIPING CONNECTION.
3. PROVIDE A DRAIN PAN BELOW THE UNIT AND PROVIDE CONDENSATE DRAIN PUMP, CDP-1 AND PIPING TO A SPLASHBLOCK ON GRADE AS SHOWN.
4. FURNISH AND INSTALL NEW REFRIGERANT PIPING AND INTERCONNECTED WIRING, INSULATION, SUPPORTS, ELECTRICAL, CONCRETE PAD, CONTROLS, ETC. ASSOCIATED WITH NEW VRF AIR COOLED CONDENSING UNIT.
5. FURNISH AND INSTALL NEW CONDENSATE DRAIN PIPING FROM INDOOR AC UNITS TO SPLASHBLOCK ON GRADE OUTSIDE. PROVIDE A SLOPE OF 1/8" (TO MAX 1/12") PER FOOT TOWARDS THE SPLASHBLOCK.
6. PROVIDE AND INSTALL NEW HWS/R PIPING OF SIZES INDICATED ON THE PLANS. COMPLETE WITH ALL ASSOCIATED INSULATION, HANGERS/SUPPORTS, VALVES, FITTINGS, COMPONENTS, ETC. RUN VERTICAL EXPOSED HOT WATER PIPING IN STERLING MADE, MODEL PCV PIPE COVER, OR APPROVED EQUAL.
7. PROVIDE AND INSTALL NEW INLINE HOT WATER PUMPS SCHEDULED. COMPLETE WITH ALL ASSOCIATED HOT WATER PIPING, VALVES, FITTINGS, COMPONENTS, HANGERS/SUPPORTS, INSULATION, ETC. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
8. PROVIDE AND INSTALL NEW HOT WATER UNIT HEATER OF SIZES AND CAPACITIES SCHEDULED. COMPLETE WITH ALL ASSOCIATED HOT WATER PIPING, VALVES, FITTINGS, COMPONENTS, INSULATION, CONTROLS, HANGERS, ETC.
9. PROVIDE AND INSTALL NEW FINNED TUBE RADIATION SCHEDULED. COMPLETE WITH ALL ASSOCIATED WALL BRACKETS, BACK PLATES, PIPE COVERS, VALVES, FITTINGS, COMPONENTS, INSULATION, ETC. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON M0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

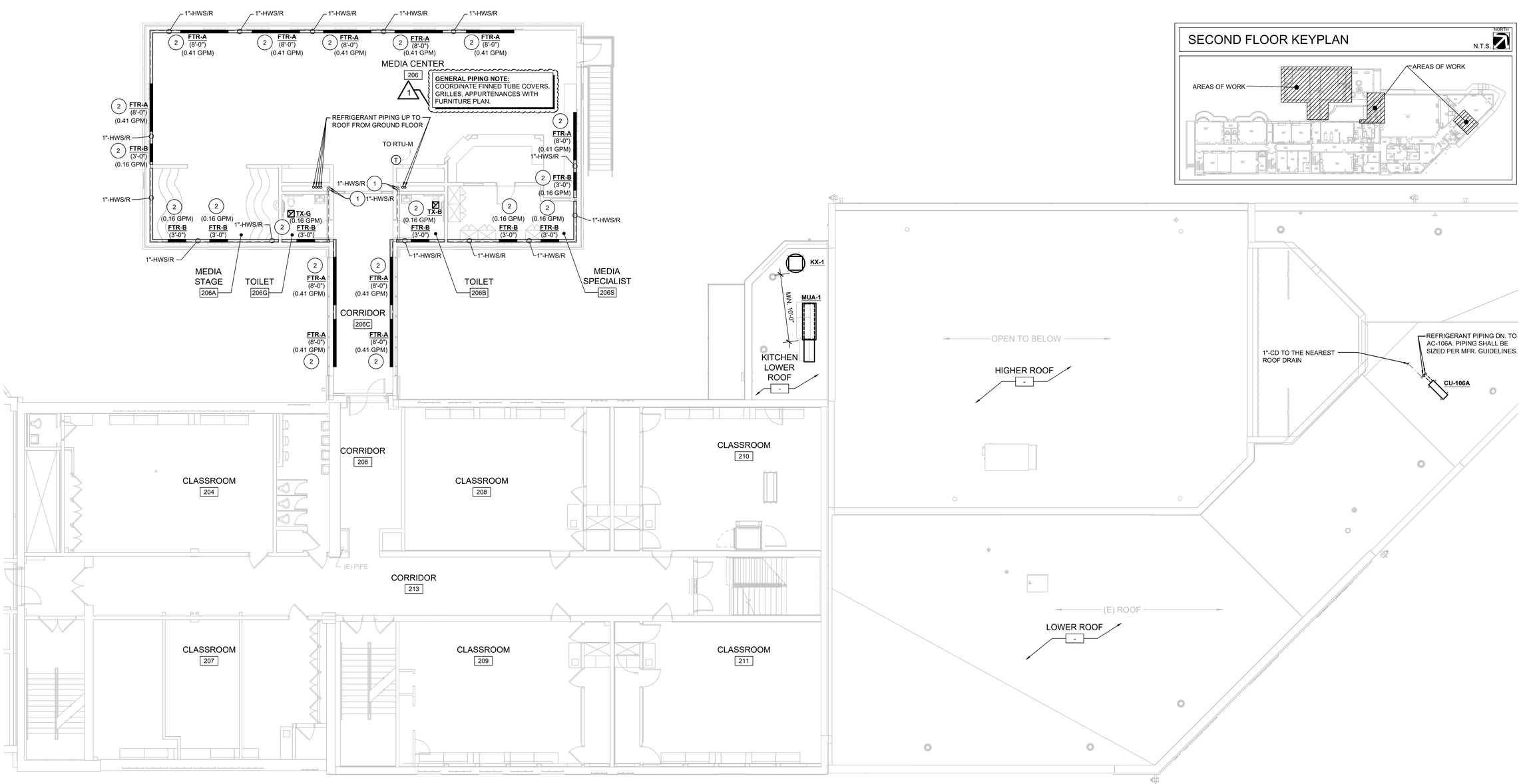
Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

PARTIAL FIRST FLOOR PIPING PLAN
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M201

M3.01



SECOND FLOOR KEYPLAN

N.T.S.

1 M3.02 PARTIAL SECOND FLOOR MECHANICAL PROPOSED PIPING PLAN

1/8" = 1'-0"

PROPOSED KEY NOTES

(#) SYMBOL INDICATES PROPOSED KEY NOTE

1. PROVIDE AND INSTALL NEW HWS/R PIPING OF SIZES INDICATED ON THE PLANS. COMPLETE WITH ALL ASSOCIATED INSULATION, HANGERS/SUPPORTS, VALVES, FITTINGS, COMPONENTS, ETC. RUN VERTICAL EXPOSED HOT WATER PIPING IN STERLING MADE, MODEL PCV PIPE COVER, OR APPROVED EQUAL.
2. PROVIDE AND INSTALL NEW FINNED TUBE RADIATION SCHEDULED. COMPLETE WITH ALL ASSOCIATED WALL BRACKETS, BACK PLATES, PIPE COVERS, VALVES, FITTINGS, COMPONENTS, INSULATION, ETC. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR THE CUTTING OF ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE & DUCT PENETRATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM & COMMUNICATION DEVICES TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. CHECK AND VERIFY EXACT LOCATIONS IN FIELD.
3. FOR EXISTING TO REMAIN CEILING AREAS AS INDICATED ON THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.
4. CONTRACTOR TO PATCH FLOORS & WALLS WHERE EXISTING THERMOSTAT & PNEUMATIC TUBING IS BEING REMOVED W/ NON-SHRINK GROUT. PAINT TO MATCH EXISTING.
5. CONTRACTOR IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING ETC. FOR ALL PIPE CONDUIT, ETC. PENETRATIONS. SEAL OPENING WITH 3HRS FIRE BARRIER CAULK.
6. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
7. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTORS SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
8. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS PRIOR TO COMMENCING WORK. UPON COMPLETION OF WORK THE CONTRACTOR SHALL SECURE CERTIFICATE OF OCCUPANCY.
9. CONTRACTORS SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
10. DOWN-TIME FOR THE TIE-IN OR SWITCHOVER SHALL BE KEPT TO A MINIMUM. COORDINATE SCHEDULE WITH THE OWNER.

MECHANICAL CONSTRUCTION PLAN NOTES

1. EXIST. CEILING SYSTEM, GRIDS, CEILING TILES, GYP. BOARD, ETC. IN SOME AREAS WILL BE REMOVED & REPLACED. WHERE APPLICABLE, CONTRACTOR IS REQUIRED TO REMOVE EXIST. CEILING SYSTEM, GRIDS, TILES, GYP. BOARD, LIGHT FIXTURES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK, PIPING, ETC. RESTORE CEILING SYSTEM TO MATCH EXISTING. REMOVE ALL DAMAGED ITEMS & REPLACE WITH NEW. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR AREAS WITH NEW CEILING.
2. SAWCUT & CORE DRILL EXIST. WALLS/FLOORS/CLG./ROOF FOR NEW DUCTWORK/PIPING/CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL NEW DUCTWORK & PIPING SHALL BE INSTALLED CONCEALED ABOVE CLG., UNLESS OTHERWISE NOTED. NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AND/OR INTERNALLY LINED ACCORDING TO THE HVAC MATERIALS NOTES ON M0.01. PROVIDE FIBERGLASS INSULATION ON NEW PIPING, VALVES, ETC. REFER TO HVAC MATERIAL NOTES FOR INSULATION THICKNESS. PROVIDE PIPE IDENTIFICATIONS & FLOW ARROWS ON PIPE INSULATION.
4. ALL NEW DDC WIRING BY THE CONTROL'S SUBCONTRACTOR SHALL BE INSTALLED CONCEALED ABOVE EXIST. CLG. ALL NEW EXPOSED DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN EMT TUBING AND PAINTED TO MATCH EXISTING WALL COLOR.
5. CONTRACTOR IS REQUIRED TO PROPERLY PROTECT EXIST. FLOORS, WALLS, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE CONTRACTOR. REMOVE PROTECTIONS AFTER ALL WORK IS COMPLETE & VACUUM CLEAN ALL AREAS TO BE FREE OF DUST & DEBRIS.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

PARTIAL SECOND FLOOR PIPING PLAN
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M20

M3.02

PACKAGED ROOFTOP GAS HEATING / DX COOLING UNIT SCHEDULE

(**TRANE** AS STANDARD)

TAG	AREA SERVED	SUPPLY FAN VFD	SUPPLY CFM	MINIMUM OUTSIDE AIR (CFM)	GAS HEATING						DX COOLING								SUPPLY FAN DATA						POWER EXHAUST FAN DATA					FILTER EFFICIENCY	ELECTRICAL DATA	MCA	MOP	EER	DIMENSIONS (L x W x H) (IN.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
					INPUT (MBH)	OUTPUT (MBH)	# OF STAGES	EAT (°F)	LAT (°F)	MIN GAS PRESSURE	COOLING TMBH	COOLING SMBH	REFRIGERANT	COOLING STAGES	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	QTY	EXT. S.P.	TOTAL S.P.	B.H.P.	M.H.P.	FLA	FAN	TYPE	EXT. S.P.	B.H.P.	M.H.P.		V - Ph - Hz								
RTU-M 1	MEDIA CENTER	YES	4,150	1,165	250	202.5	MODULATING	49.5	94	7 - 14	150.2	107.7	R-454B	2	80.9	67.4	57.7	55.9	2	1.25	1.46	1.83	3	8.8	YES	DIRECT	-	-	-	30% MERV 13	208 - 3 - 60	80	100	12.6	$123\frac{1}{4}$" x $86\frac{3}{4}$" x $58\frac{1}{4}$"	2,755	YHK150A3S0H	TRANE	SEE NOTES BELOW

NOTES:
1. PROVIDE HINGED ACCESS DOORS.
2. PROVIDE VFD ON SUPPLY FAN.
3. PROVIDE WITH POWER EXHAUST.
4. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
5. PROVIDE OUTDOOR AIR WEATHERHOOD
6. PROVIDE COMPARATIVE ENTHALPY ECONOMIZER. (1)
7. PROVIDE MODULATING GAS FURNACE WITH A MIN. TURNDOWN RATIO OF 10:1.
8. PROVIDE MODULATING HOT GAS REHEAT.
9. PROVIDE UNITS WITH A VARIABLE SPEED DIRECT-DRIVE, HERMETIC, SCROLL-TYPE COMPRESSORS WITH A VFD.
10. UNIT SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION.
11. PROVIDE FACTORY WIRED CONTROLLER WITH BACNET GATEWAY FOR INTEGRATION INTO BMS.
12. PROVIDE DISCONNECT SWITCH; MOTORIZED DAMPERS; FACTORY WIRED GFI CONVENIENCE OUTLET, OTHERWISE FIELD WIRED GFI CONVENIENCE OUTLET; 24" HIGH VIBRATION ISOLATION ROOF ADABTER CURB, VFD'S, HIGH EFFICIENCY PREMIUM MOTORS.
13. ALL RTU'S SHALL BE PROVIDED WITH BOTTOM DISCHARGE AND RETURN.
14. **DELETED.** (1)
15. PROVIDE RETURN AIR SMOKE DETECTOR.
16. UNIT SHALL BE PROVIDED W/ S.S. FLUE VENT EXTENSION KIT.
17. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO THE EXISTING CM3 BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.

INDOOR AIR HANDLING UNIT SCHEDULE

(TRANE AS STANDARD)

TAG	AREA SERVED	SUPPLY CFM	MINIMUM OUTSIDE AIR (CFM)	HOT WATER HEATING COIL							DX COOLING						SUPPLY FAN DATA					FILTER (TYPE)	ELECTRICAL DATA				DIMENSIONS (L x W x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
				CAPACITY (MBH)	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	WPDB (Ft H_2O)	FLOW RATE GPM	COOLING TMBH	COOLING SMBH	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	E.S.P. (In H_2O)	T.S.P. (In H_2O)	B.H.P.	M.H.P.	ECM		V - Ph - Hz	FLA	MCA	MOP					
AHU-116	SGI 116Q (1)	1,000	165	42	59.9	98.6	180	140	1.47	2.1	33.42	25.13	77.9	65	55	53.9	0.5	1.22	0.493	1	YES	PLEATED MERV 13	208 - 3 - 60	2	2.5	15	64.87 x 42 x 17	299.5	BCHE036	TRANE	SEE NOTES BELOW

NOTES:
1. PROVIDE HINGED ACCESS DOORS.
2. PROVIDE VFD's ON ALL SUPPLY AIR FANS. VFD's SHALL BE FACTORY INSTALLED AND WIRED.
3. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
4. UNIT SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION.
5. ALL NEW AHU's TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3 CONTROLS" BMS.
6. INTERNAL AND EXTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE EXTERNAL COMPONENTS. REFER TO ATC DIAGRAMS AND SPECIFICATIONS.
7. REFER TO ELECTRICAL PLANS FOR DETAILS ON EQUIPMENT POWER.
8. ELECTRICAL CONTRACTOR TO PROVIDE DUCT SMOKE DETECTORS IN RETURN AIR DUCT MAINS FOR ALL AHU'S.
9. INTERLOCK ALL AHU's WITH FIRE ALARM SYSTEM. AHU's TO BE SHUT DOWN WHEN FIRE ALARM SYSTEM INITIATES.
10. PROVIDE CONDENSATE DRAIN PUMP FOR EACH UNIT, LITTLE GIANT MAKE, MODEL VCMA-20. THE CONDENSATE DRAIN PUMPS REQUIRE A SEPARATE POWER FEED.

ADDITIONAL REMARKS:
HORIZONTAL SUSPENDED AIR HANDLING UNITS. PROVIDE INTERNAL SPRING VIBRATION ISOLATORS ON THE FAN SECTION, EQUIPMENT SUPPORTS. PROVIDE 2-WAY MODULATING CONTROL VALVES, DISCONNECT SWITCH, WALL MOUNTED THERMOSTAT, DOUBLE WALL CONSTRUCTION WITH PERFORATED INNER WALL FOR FAN SECTION, ACCESS DOORS, HIGH EFFICIENCY MOTORS.

UNIT VENTILATOR SCHEDULE

(TRANE AS STANDARD)

TAG	AREA SERVED	SUPPLY CFM	MIN. O.A. CFM	HOT WATER HEATING COIL							DX COOLING						FILTER (TYPE)	ELECTRICAL DATA	MCA	MOP	DIMENSIONS (L x W x H) (IN.)	APPROX. WEIGHT (LBS.)	MODEL	MFG.
				CAPACITY (MBH)	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	WPDB (Ft H_2O)	FLOW RATE (GPM)	TMBH	SMBH	EADB (° F)	EAWB (° F)	LADB (° F)	LAWB (° F)		V - PH - HZ						
UV-116J	CLASSROOM 116J	1,250	360	40.6	49.8	101.9	180	140	4.33	2.88	40.6	26.5	80.8	67.3	57.1	54.3	1" MERV 13	208 - 1 - 60	5	15	81 x $21\frac{1}{2}$ x 30	405	VUVE12510AANDJA0B00EACB0300020C420600Y031	TRANE
UV-116M	CLASSROOM 116M	1,250	360	40.6	49.8	101.9	180	140	4.33	2.88	40.6	26.5	80.8	67.3	57.1	54.3	1" MERV 13	208 - 1 - 60	5	15	81 x $21\frac{1}{2}$ x 30	405	VUVE12510AANDJA0B00EACB0300020C420600Y031	TRANE

NOTES:
1. PROVIDE ECM FANS.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
3. UNIT SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION.
4. PROVIDE OA DUCTWORK CONNECTION WITH MOTORIZED DAMPER.
5. PROVIDE 2-WAY MODULATING CONTROL VALVE AND DELUXE PIPING PACKAGE.
6. ALL NEW UV'S TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3 CONTROLS" BMS.
7. INTERNAL AND EXTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE EXTERNAL COMPONENTS. REFER TO ATC DIAGRAMS AND SPECIFICATIONS.
8. INTERLOCK ALL UV's WITH FIRE ALARM SYSTEM. UV's TO BE SHUT DOWN WHEN FIRE ALARM SYSTEM INITIATES.
9. PROVIDE WALL SLEEVE AND LOUVER. LOUVER COLOR PER OWNER.
10. PROVIDE INTERNAL SPRING VIBRATION ISOLATORS ON THE FAN SECTION.
11. AIR FLOW CONFIGURATION IS TOP SUPPLY, FRONT RETURN, BACK OUTSIDE AIR.

OUTDOOR AIR-COOLED CONDENSING UNIT SCHEDULE

(**TRANE** AS STANDARD)

TAG	LOCATION	AREAS SERVED	UNIT SERVED	COOLING (TMBH)	AMBIENT TEMP (°F)	SUCTION TEMP (°F)	ELECTRICAL DATA V - Ph - Hz	COND. FAN NO. / FLA	MCA	MOP	SEER	DIMENSIONS (L x W x H) (IN.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
CU-116J	ROOF	CLASSROOM 116J	UV-116J	42	95	45	208 - 3 - 60	1 / 1.05	16.3	25	14	$37\frac{7}{8}$ x $34\frac{1}{4}$ x $37\frac{1}{8}$	246	5TTA4042A3000A	TRANE	SEE NOTES BELOW
CU-116M	ROOF	CLASSROOM 116M	UV-116M	42	95	45	208 - 3 - 60	1 / 1.05	16.3	25	14	$37\frac{7}{8}$ x $34\frac{1}{4}$ x $37\frac{1}{8}$	246	5TTA4042A3000A	TRANE	SEE NOTES BELOW
CU-116	ROOF	SGI 116Q	UV-116	36 (1)	95	45	208 - 3 - 60	1 / 0.64	16.6	25	14	$32\frac{3}{8}$ x $29\frac{3}{4}$ x $32\frac{3}{4}$	183	5TTA4036A3000A	TRANE	SEE NOTES BELOW

NOTES:
PROVIDE WITH 12" HIGH PATE EQUIPMENT ROOF SUPPORT, APR VALVE (RAWAL MAKE), INTERLOCK WITH RESPECTIVE UNIT.

HOT WATER UNIT HEATER SCHEDULE

(STERLING AS STANDARD)

TAG	LOCATION	CFM	HEATING (MBH)	EWT (F)	LWT (F)	GPM	WATTS	FLA	ELECTRIC DATA Volt-Ph-Hz	DIMENSIONS (W x H x D) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
UH-116K	ATHLETIC STORAGE	350	11.7	180	140	0.6	16	0.8	115 - 1 -60	$14\frac{5}{8}$ x 15 x $9\frac{3}{8}$	26	HS-018B	STERLING	SEE NOTES BELOW
UH-116R	UTILITY STORAGE	350	11.7	180	140	0.6	16	0.8	115 - 1 -60	$14\frac{5}{8}$ x 15 x $9\frac{3}{8}$	26	HS-018B	STERLING	SEE NOTES BELOW

NOTES:
CEILING HUNG UNIT HEATER. PROVIDE HANGERS/ SUPPORTS. ATC CONTRACTOR TO PROVIDE WITH TWO WAY CONTROL VALVE AND THERMOSTAT. COORDINATE WITH GENERAL CONTRACTOR.

MINI-SPLIT OUTDOOR AIR-COOLED CONDENSING UNIT SCHEDULE

(TRANE-MITSUBISHI AS STANDARD)

TAG NO.	UNIT SERVED	UNIT LOCATION	AMBIENT DB/WB (°F)	NOMINAL COOLING (MBH)	NOMINAL HEATING (MBH)	COND. FAN		ELECTRICAL DATA			DIMENSIONS (L x W x H) (IN)	APPROX. WEIGHT (LBS)	SEER	MODEL	MANUFACTURER	REMARKS
						NO.	WATTS	VOLT/PH/HZ	MCA	MOP						
CU-106A	AC-106A	ROOF	95/75	24	28	2	74	208 / 1 / 60	24	39	32 x 12 x 22	92	22.8	PUZAK24NLHZ	MITSUBISHI	SEE NOTES BELOW
CU-306	AC-306	ROOF	95/75	24	28	2	74	208 / 1 / 60	24	39	32 x 12 x 22	92	22.8	PUZAK24NLHZ	MITSUBISHI	SEE NOTES BELOW

NOTES:
1. PROVIDE NEW ACCUS WITH MIN. 24" HIGH EQUIPMENT STANDS ON ROOF RAILS.
2. INTERLOCK W/ RESPECTIVE ACs FOR OPERATION.
3. PROVIDE A NEW CONVENIENCE LIGHT & GFCI OUTLET PER CONDENSING UNIT, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. PROVIDE TWO-YEARS PARTS & LABOR WARRANTY FROM THE MANUFACTURER.

TOILET EXHAUST FAN SCHEDULE

(**PANASONIC** AS STANDARD)

TAG	LOCATION	AREA SERVED	CFM	STATIC PRESSURE LOSS (IN)	ELECTRICAL DATA				DIMENSIONS (LxWxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
					AMPS	WATTS	RPM	V / Ph / Hz					
TX-G	TOILET 206G	TOILET 206G	100	0.5	0.39	20.3	1,250	120 / 1 / 60	13 x 13 x $7\frac{1}{2}$	10	FV-1115VK3	PANASONIC	SEE NOTES BELOW
TX-B	TOILET 206B	TOILET 206B	100	0.5	0.39	20.3	1,250	120 / 1 / 60	13 x 13 x $7\frac{1}{2}$	10	FV-1115VK3	PANASONIC	SEE NOTES BELOW

NOTES:
PROVIDE BACKDRAFT DAMPER, VIBRATION ISOLATION HANGERS, DECORATIVE GRILLE, 6" EXHAUST DUCTWORK TO ROOF VENT AS INDICATED ON PLANS, AND DISCONNECT SWITCH. TIE NEW FAN INTO THE SAME GANG AS LIGHT SWITCH.

INDOOR AIR CONDITIONING / HEAT PUMP UNIT SCHEDULE

(MITSUBISHI AS STANDARD OR APPROVED EQUAL)

TAG	UNIT TYPE	AIRFLOW (MAX CFM)	SUPPLY FAN (WATTS)	COOLING				HEATING TMBH	REFRIG TYPE	PIPE CONNECTIONS			ELECTRICAL DATA			DIMENSIONS W x D x H (Inches)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
				TMBH	SMBH	EADB	EAWB			RS	RL	COND.	V / Ph / Hz	MCA	MOP					
AC-106A	CEILING CASSETTE	810	120	24.5	19.8	77	64	N/A	R-454B	TBD	TBD	$\frac{3}{8}$"	208 / 1 / 60	1	-	$37\frac{13}{32}$ x $37\frac{13}{32}$ x $11\frac{29}{32}$	82	PLA-AE24NL	MITSUBISHI	SEE NOTES BELOW
AC-306	CEILING CASSETTE	810	120	24.5	19.8	77	64	N/A	R-454B	TBD	TBD	$\frac{3}{8}$"	208 / 1 / 60	1	-	$37\frac{13}{32}$ x $37\frac{13}{32}$ x $11\frac{29}{32}$	82	PLA-AE24NL	MITSUBISHI	SEE NOTES BELOW

NOTES:
1. PROVIDE W/ WALL-MOUNTED THERMOSTAT FOR ALL INDOOR UNITS. NEW AC UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.
2. ALL CEILING-CASSETTE UNIT SHALL BE PROVIDED WITH CEILING MOUNTING BRACKETS, WASHABLE CEILING DECORATION PANELS, INTERNAL CONDENSATE LIFT MECHANISM & CONDENSATE PUMP WITH RESERVOIR SENSOR & ALARM CONTACT (BLUEDIAMOND MEGABLUE CONDENSATE PUMP WITH MAX HEAD OF 66.5 FT OR EQUAL, POWERED BY AC UNIT).
3. PROVIDE W/ PROPER REFRIGERANT CHARGE FOR ALL UNITS.
4. NEW CONDENSING UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.
5. **INDOOR UNIT POWERED BY THE OUTDOOR UNIT.** REFER TO DWG. FOR ASSOCIATED ACCUs. REFER TO SPEC. SECTION FOR ADDITIONAL INFORMATION.

HOT WATER FINNED TUBE RADIATION SCHEDULE

(STERLING AS STANDARD)

TAG	QUANTITY	LOCATION	ACTIVE LENGTH	BTU / HR-FT	FINS/FT	HEATING (BTUH)	EWT (F)	LWT (F)	GPM	DIMENSIONS (L x D) (Ft-In.)	MODEL	MANUFACTURER	NOTES
FTR-A	13	REFER TO PLANS	8'	1,020	40	8,160	180	140	0.41	8' x 4-1/4"	JVB-AR24	STERLING	SEE NOTES BELOW
FTR-B	22	REFER TO PLANS	3'	1,020	40	3,060	180	140	0.16	3' x 4-1/4"	JVB-AR24	STERLING	SEE NOTES BELOW

NOTES:
WALL MOUNTED, PROVIDE WITH TWO WAY THERMOSTATIC DANFOSS CONTROL VALVE, CIRCUIT BALANCING VALVE, BACK PLATE, HORIZONTAL/VERTICAL PIPE COVERS FOR ALL EXPOSED PIPING, AND AN ACCESS DOOR. INTERLOCK WITH ROOM THERMOSTAT.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	MB
Drawn	AK

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

MECHANICAL SCHEDULES
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M601

M6.01

EXHAUST FAN SCHEDULE

(GREENHECK AS STANDARD)

TAG	LOCATION	UNIT SERVED	CFM	STATIC PRESSURE LOSS (IN)	ELECTRICAL DATA				DIMENSIONS (LxWxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
					FLA	BHP	RPM	V / Ph / Hz					
TE-EF-1	OT/PT 104	UV-9	180	0.33	0.46	0.03	900	115 / 1 / 60	14 x 12 x 11	24	SP-A200	GREENHECK	SEE NOTES BELOW
TE-EF-2	OT/PT 104	UV-10	180	0.33	0.46	0.03	900	115 / 1 / 60	14 x 12 x 11	24	SP-A200	GREENHECK	SEE NOTES BELOW

NOTES:
USE AS RELIEF FOR UVs, PROVIDE HANGING VIBRATION ISOLATORS, FLEXIBLE CONNECTIONS, SIDE WALL VENT (X VENT BOX MAKE, MODEL: 8SEB-BR), BACKDRAFT DAMPER, AND DISCONNECT SWITCH. INTERLOCK WITH RESPECTIVE UVs AND TIE NEW FAN INTO EXISTING "CM3" BMS.

ELECTRIC DUCT HEATER SCHEDULE

(RAYWALL AS STANDARD)

TAG	LOCATION	UNIT SERVED	SUPPLY CFM	OUTPUT (BTUH)	kW	EAT (°F)	LAT (°F)	DIMENSIONS (WxH) (In.)	MODEL	ELECTRICAL	MANUFACTERER	NOTES
TE-EDH-1	MECH	TE-ERV-1	385	6.8	2	0	14	10x10	HF SERIES	208 / 1 / 60	RAYWALL	SEE NOTES BELOW
EDH-106A	OFFICE 106A	AC-106A	20	3.4	1	0	14	6x6	HF SERIES	208 / 1 / 60	RAYWALL	SEE NOTES BELOW

1

NOTES:
PROVIDE TRANSITION DUCTWORK BEFORE AND AFTER THE COIL. PROVIDE DISCONNECT SWITCH, DUCTSTAT, AND AN AIRFLOW PROVING SWITCH. INTERLOCK WITH RESPECTIVE UNIT. ELECTRIC HEATER SHALL RUN WHEN RESPECTIVE UNIT IS ENERGIZED AND THE OA TEMPERATURE IS BELOW 35°F.

ENERGY RECOVERY VENTILATOR SCHEDULE

(MITSUBISHI AS STANDARD)

TAG	AREA SERVED	OUTSIDE AIR (CFM)	EXHAUST AIR (CFM)	HEAT EXCHANGER						E.S.P. (In H_2O)	FILTER (TYPE)	ELECTRICAL DATA			DIMENSIONS (W x L x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
				SUMMER		WINTER		RECOVERED COOLING	RECOVERED HEATING			MCA	MOP	V - Ph - Hz					
				EADB (°F)	RADB (°F)	EAT (°F)	RAT (°F)												
TE-ERV-1	SGI 107 & 107A, COUNSELING 107B, ELEC 107.1, & CORRIDOR 106	385	385	95	70	14	75	51%	64%	1	MERV-8	5.1	15	208/230 - 1 - 60	$41\frac{3}{8}$ x $51\frac{5}{16}$ x $15\frac{13}{16}$	110	LGH-F470RVX2-E	MITSUBISHI	SEE NOTE(S) BELOW

NOTES:
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.
2. PROVIDE WITH DRAIN PAN BENEATH UNIT, CONDENSATE PUMP, TE-CDP-1, AND CONDENSATE DRAIN PIPING.
3. NEW ERV UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.
4. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
5. **PROVIDE WITH OUTDOOR AIR DUCT HEATER, TE-EDH-1.**

CONDENSATE DRAIN PUMP SCHEDULE

(LITTLE GIANT AS STANDARD)

TAG	LOCATION	UNIT SERVED	QUANTITY	PERFORMANCE (GPH @ HEAD)		SHUT OFF	ELECTRICAL DATA				DIMENSIONS (LxWxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
				10'	20'	FEET	HP	AMPS	WATTS	V / Ph / Hz					
TE-CDP-1	ELEC 107.1	TE-ERV-1	1	48	0	17	1 / 30	0.5	75	230 / 1 / 60	10-1/2 x 5-1/8 x 7-1/8	6.5	VCMA-20ULST	LITTLE GIANT	SEE NOTES BELOW

NOTES:
CONTRACTOR SHALL PROVIDE AND INSTALL ALL NEW CONDENSATE DRAIN PUMPS. PROVIDE CHECK VALVE ON PUMP DISCHARGE PIPING

ENERGY RECOVERY VENTILATOR SCHEDULE

(**FANTECH** AS STANDARD)

UNIT No.	AREAS SERVED	MANUFACTURER	MODEL	MAX SA (CFM)	MAX EXHAUST AIR (CFM)	ENERGY RECOVERY WHEEL				FAN DATA		APPROX. UNIT WT. (LBS)	UNIT DIMENSIONS (LxWxH) (IN.)	ELECTRICAL	NOTES
						COOLING EADB/EAWB (°F)	HEATING EAT (°F)	EFFICIENCY		EXT. S.P."	WATTS			V/PH/HZ	
								SENSIBLE	TOTAL						
ERV-156	SGI 156	INTELLI-BALANCE	FV-15ESC1	150	150	95/78	-13	72	67	0.5	115	53	$28\frac{3}{8}$ x $22\frac{3}{8}$ x 10	120/1/60	SEE NOTES

NOTES:
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.

VENTILATION INDEX

ROOM NAME	UNIT SERVING	FLOOR AREA (Sq Ft)	MAX OCCUPANTS	REQUIRED OA CFM/SqFt	REQUIRED OA for SPACE	REQUIRED OA per PERSON	OA For OCCUPANTS	MIN OA REQUIRED	ZONE AIR DISTRIBUTION EFFECTIVENESS	MIN OA REQUIRED	DESIGN	
											OA (CFM)	EXH. (CFM)
OFFICE 106A	AC-106A	167	1	0.06	10	5	5	15	0.8	19	20	-
SGI 107	ERV-1	296	8	0.12	36	10	80	116	0.8	145	150	-
SGI 107A	ERV-1	300	8	0.12	36	10	80	116	0.8	145	150	-
COUNSELING 107B	ERV-1	205	5	0.06	13	5	25	38	0.8	48	50	-
CORRIDOR 106	ERV-1	170	-	0.06	18	-	-	18	0.8	23	25	-
ELECTRIC 107.1	ERV-1	527	-	0.06	5	5	-	5	0.8	7	10	-
OT-PT	UV-(E)	1045	16	0.12	125	10	160	285	1.0	285	360	-
CORRIDOR 116S	AHU-116	375	-	0.06	23	-	-	23	0.8	28	30	-
SGI 116Q	AHU-116	299	8	0.12	36	10	80	116	0.8	145	150	-
FLEXIBLE CLASSROOM 116J	UV-116J	879	25	0.12	105	10	250	355	1	355	360	-
FLEXIBLE CLASSROOM 116M	UV-116M	900	25	0.12	108	10	250	358	1	358	360	-
MEDIA CENTER 206	RTU-M	2020	65	0.12	242	10	270	892	0.8	1,115	1,115	-
MEDIA SPECIALIST 206S	RTU-M	150	1	0.06	9	5	5	14	0.8	18	20	-
CORRIDOR 206C	RTU-M	375	-	0.06	23	-	-	23	0.8	28	30	-
SGI 306	ERV-306	230	8	0.12	27	10	80	107	0.8	134	135	-

OUTDOOR AIR-COOLED VRF CONDENSING UNIT SCHEDULE

(MITSUBISHI AS STANDARD)

TAG	SCHOOL	LOCATION	UNITS SERVED	COOLING (TMBH)	HEATING (MBH)	ELECTRICAL DATA V - Ph - Hz	MCA	MOCP	EER	SEER	IEER	APPROX. UNIT DIMENSIONS (L x D x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
TE-CU-1	TATEM ELEMENTARY	ON GRADE	TE-AC-1,2,3 UNITS	96	108	208 - 3 - 60	60 / 60	100 / 100	12.5	-	23.3	49-1/4 x 29-3/8 x 71-5/8	653	TUHYH0963AMM0AN	MITSUBISHI	SEE NOTES BELOW

NOTES:
1. INSTALL NEW CUs ON NEW 18" HIGH STANDS ON GRADE. PROVIDE CONCRETE PAD THAT EXTENDS 6" PAST THE STAND ON ALL SIDES. ANCHOR ACCUs TO WITHSTAND 125 MPH WINDS.
2. INTERLOCK WITH RESPECTIVE MECHANICAL EQUIPMENT FOR OPERATION.
3. ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL NEMA 3R DISCONNECT AND GFI CONVENIENCE OUTLET. REFER TO ELECTRICAL DRAWINGS.
4. NEW CONDENSING UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.
5. **ALL SYSTEMS UTILIZING REFRIGERANT OTHER THAN R410A SHALL BE PROVIDED WITH FACTORY INSTALLED AND WIRED REFRIGERANT LEAK DETECTORS.**

INDOOR VRF DUCTLESS AIR-CONDITIONING / HEAT PUMP UNIT SCHEDULE

(MITSUBISHI AS STANDARD)

TAG	QTY.	TYPE	UNIT SERVED	COOLING (BTUH)	HEATING (BTUH)	ELECTRICAL DATA			CFM L / M / H	APPROX. UNIT DIMENSIONS (L x D x H) (In.)	APPROX. WEIGHT (Lbs)	MODEL	MANUFACTURER	REFRIGERANT TYPE	NOTES
						V / Ph / Hz	MCA	MOP							
TE-AC-1	4	4-WAY CASSETTE	TE-CU-1	12,000	13,500	208-230 / 1 / 60	0.39	15	494 / 530 / 565	33-3/32 x 33-3/32 x 10-3/16	46	PLFY-EP12NEMU1-E.TH	MITSUBISHI	R-32	SEE NOTES BELOW
TE-AC-2	2	WALL MOUNTED	TE-CU-1	12,000	13,500	208-230 / 1 / 60	0.24	15	152 / 191 / 244 / 297	30-7/16 x 9-11/32 x 11-25/32	24.5	PFKY-P12NLMU-ER1.TH	MITSUBISHI	R-32	SEE NOTES BELOW
TE-AC-3	1	4-WAY CASSETTE	TE-CU-1	24,000	27,000	208-230 / 1 / 60	0.54	15	636 / 671 / 742 / 812	33-3/32 x 33-3/32 x 11-3/4	55	PLFY-EP24NEMU1-E.TH	MITSUBISHI	R-32	SEE NOTES BELOW

NOTES:
1. REFER TO FLOOR PLANS FOR LOCATIONS OF EACH TYPE OF AC UNIT.
2. INTERLOCK EACH INDOOR UNIT WITH RESPECTIVE ACCU.
3. THE CONTROL OF ALL INDOOR DUCTLESS SPLIT AC HEAT PUMP UNITS SHALL BE FROM THE CENTRAL MITSUBISHI CONTROLLER.
4. ALL CEILING-CASSETTE UNIT SHALL BE PROVIDED WITH CEILING MOUNTING BRACKETS, WASHABLE CEILING DECORATION PANELS, INTERNAL CONDENSATE LIFT MECHANISM & CONDENSATE PUMP WITH RESERVOIR SENSOR & ALARM CONTACT (BLUEDIAMOND MEGABLUE CONDENSATE PUMP WITH MAX HEAD OF 66.5 FT OR EQUAL, POWERED BY AC UNIT).
5. ALL WALL-MOUNTED UNITS SHALL BE PROVIDED WITH WALL-MOUNTING PLATE & CONDENSATE PUMP WITH RESERVOIR SENSOR & ALARM CONTACT (BLUEDIAMOND MEGABLUE CONDENSATE PUMP WITH MAX HEAD OF 66.5 FT OR EQUAL, POWERED BY AC UNIT).
6. PROVIDE PROPER REFRIGERANT FOR ALL UNITS. INTERLOCK WITH RESPECTIVE ACCU.
7. PROVIDE TWO-YEARS PARTS & LABOR WARRANTY FROM THE MANUFACTURER.
8. NEW AC UNITS TO BE PROVIDED WITH NEW DDC CONTROLS BY ATC CONTRACTOR AND TIE INTO THE EXISTING "CM3" BMS.
9. **ALL SYSTEMS UTILIZING REFRIGERANT OTHER THAN R410A SHALL BE PROVIDED WITH FACTORY INSTALLED AND WIRED REFRIGERANT LEAK DETECTORS.**

PUMP SCHEDULE

(BELL & GOSSETT AS STANDARD)

TAG	LOCATION	PRIMARY / STAND BY	FLUID TYPE	RPM	FLOW RATE (GPM)	PRESSURE HEAD (Ft.)	IMPELLER DIA (In.)	EFFICIENCY (%)	BHP AT DUTY POINT	ELECTRICAL DATA		DIMENSIONS (LxW) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
										HP	V / Ph / Hz					
P-5	BOILER ROOM	PRIMARY	HOT WATER	3,600	22	56	4.125	49.9	0.62	2	208 / 3 / 60	11 x 9 x 17.5	66	E-90 / 1.25AAB	BELL & GOSSETT	SEE NOTES BELOW
P-6	BOILER ROOM	STAND BY	HOT WATER	3,600	22	56	4.125	49.9	0.62	2	208 / 3 / 60	11 x 9 x 17.5	66	E-90 / 1.25AAB	BELL & GOSSETT	SEE NOTES BELOW

NOTES:
1. MECHANICAL CONTRACTOR SHALL FURNISH & INSTALL VIBRATION ISOLATION HANGERS AND PROPER SUPPORTS FOR THE NEW HOT WATER PUMPS.
2. IN-LINE 1.5" ANSI FLANGE CONNECTIONS 125.
3. PROVIDE PREMIUM EFFICIENCY MOTORS SUITABLE FOR VFD OPERATION.
4. PROVIDE ONE (1) VFD FOR EACH PUMP WITH AUTOMATIC & MANUAL BYPASS IN NEMA ENCLOSURE.
5. MINIMUM PUMP FLOW RATE SHALL BE 30% OF MAXIMUM FLOW.
6. PROVIDE TRIPLE DUTY VALVE , ETC. REFER TO STANDARD DETAILS FOR ADDITIONAL REQUIREMENTS.
7. PROVIDE AUTOMATIC PUMP BYPASS LINE WITH MODULATING CONTROL VALVE AND DIFFERENTIAL PRESSURE (DP) SENSOR ACROSS SYSTEM SUPPLY AND RETURN MAINS. BYPASS SHALL MAINTAIN MINIMUM PUMP FLOW REQUIREMENTS AND PROVIDE STABLE VFD OPERATION. DP SENSOR SHALL BE INTEGRATED WITH VFD CONTROL SEQUENCE.
8. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL FIELD MOUNT & WIRE ALL NEW CONTROLS. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT, AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO THE EXISTING (CM3) BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MNB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

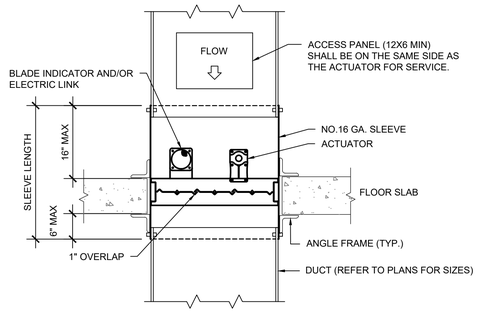
Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

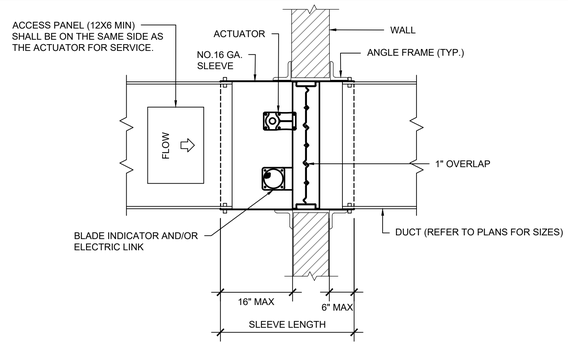
MECHANICAL SCHEDULES
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 20277251OM601

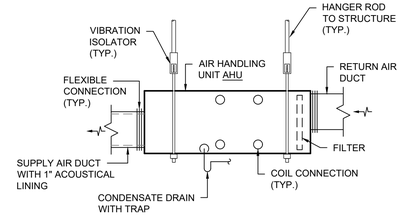
M6.02



1 COMBINATION FIRE-SMOKE DAMPER FLOOR SLAB DETAIL
N.T.S.

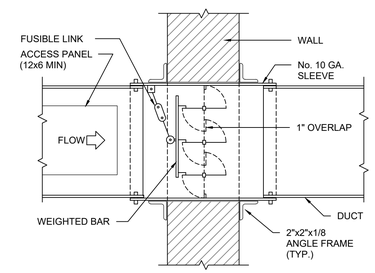


2 COMBINATION FIRE-SMOKE DAMPER IN-WALL DETAIL
N.T.S.

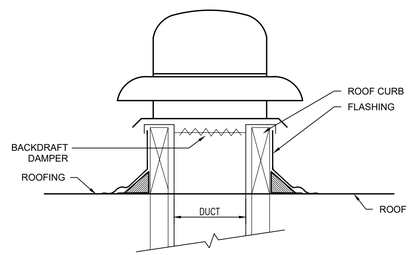


3 SUSPENDED AIR HANDLING UNIT DETAIL
N.T.S.

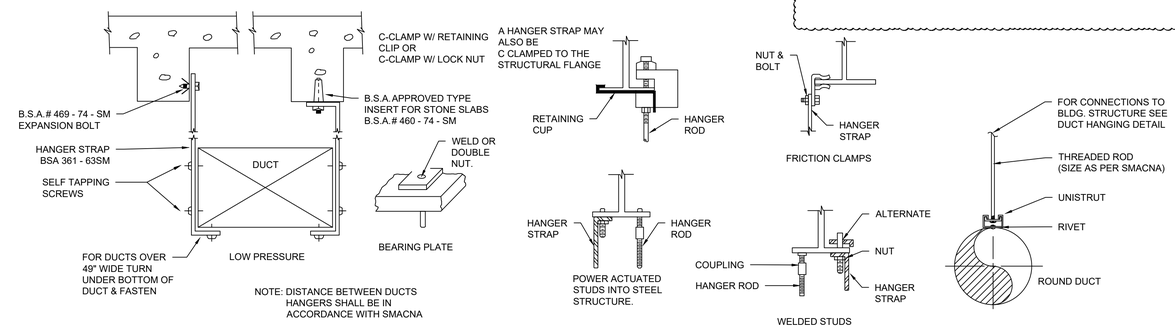
1



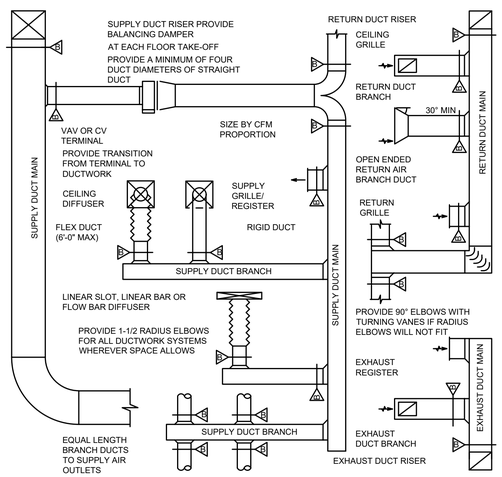
5 FIRE DAMPER IN WALL DETAIL
N.T.S.



6 ROOF EXHAUST FAN DETAIL
N.T.S.



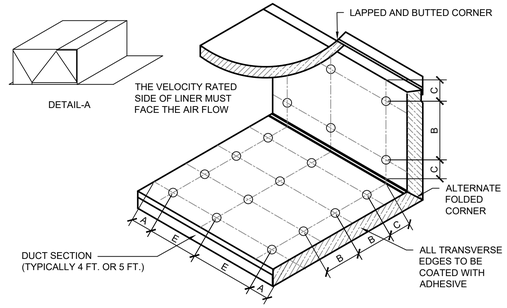
7 DUCT HANGING DETAILS
N.T.S.



General Notes

1. REFER TO HVAC FLOOR PLANS FOR DUCT SIZES
2. REFER TO SCHEDULES FOR GRILLES, REGISTERS, DIFFUSERS AND TERMINAL SIZES AND TYPES
3. PROVIDE A MANUAL TYPE CABLE OPERATED BALANCING DAMPER FOR EACH SUPPLY OUTLET AND RETURN INLET
4. ALL DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED
5. FLEX DUCT WILL NOT BE ALLOWED ON RETURN OR EXHAUST DUCTWORK SYSTEMS
6. PROVIDE 12' AIR CUSHION AT THE END OF EACH SUPPLY MAIN AND BRANCH DUCT
7. INDIVIDUAL BRANCH BALANCING DAMPERS NOT REQUIRED FOR SUPPLY OR EXHAUST REGISTERS
8. VOLUME DAMPER

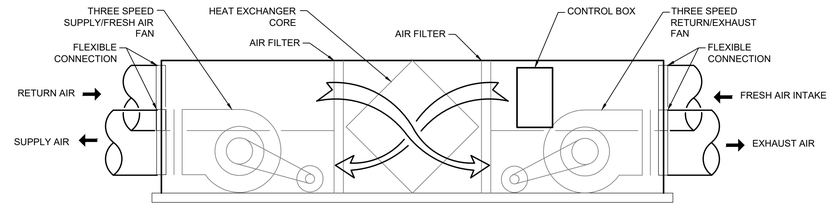
11 DUCT CONNECTION DETAILS
N.T.S.



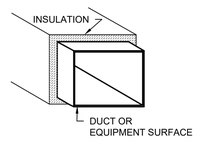
VELOCITY*	DIMENSIONS			
	A	B	C	E
0-2500 FPM	3"	12"	4"	12"

LINER SHALL BE ADHERED TO THE DUCT WITH 90% MIN. AREA COVERAGE OF ADHESIVE

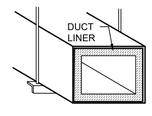
9 FLEXIBLE DUCT LINER INSULATION DETAIL
N.T.S.



10 LOW PROFILE ENERGY RECOVERY VENTILATOR DETAIL
N.T.S.

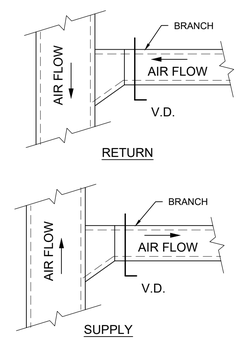


EXTERNAL DUCT INSULATION: BLANKET TYPE, LIGHT DENSITY, FIBERGLASS INSULATION WITH REINFORCED ALUMINUM FOIL VAPOR BARRIER FACING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

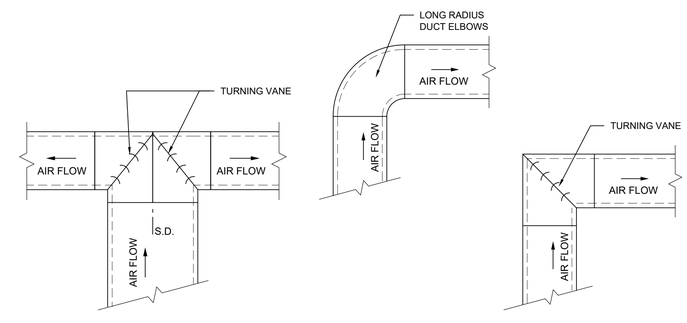


DUCT LINER: FIBERGLASS ACOUSTIC DUCT LINER, COATED WITH IAQ LINER.REFER TO SPECIFICATIONS FOR MORE INFORMATION.

12 DUCT INSULATION DETAILS
N.T.S.



13 DUCT / DIFFUSER TAKE-OFF DETAIL
N.T.S.



14 DUCT TURN DETAIL
N.T.S.

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:
8/13/26 BID SET
1 ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

MECHANICAL DETAILS
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M60

M6.03

DIAGRAM SYMBOL LEGEND	
DISPLAY	DESCRIPTION
	POWER WIRE
	CONTROL WIRE
	REF. PIPE

CONT.No	PAGE

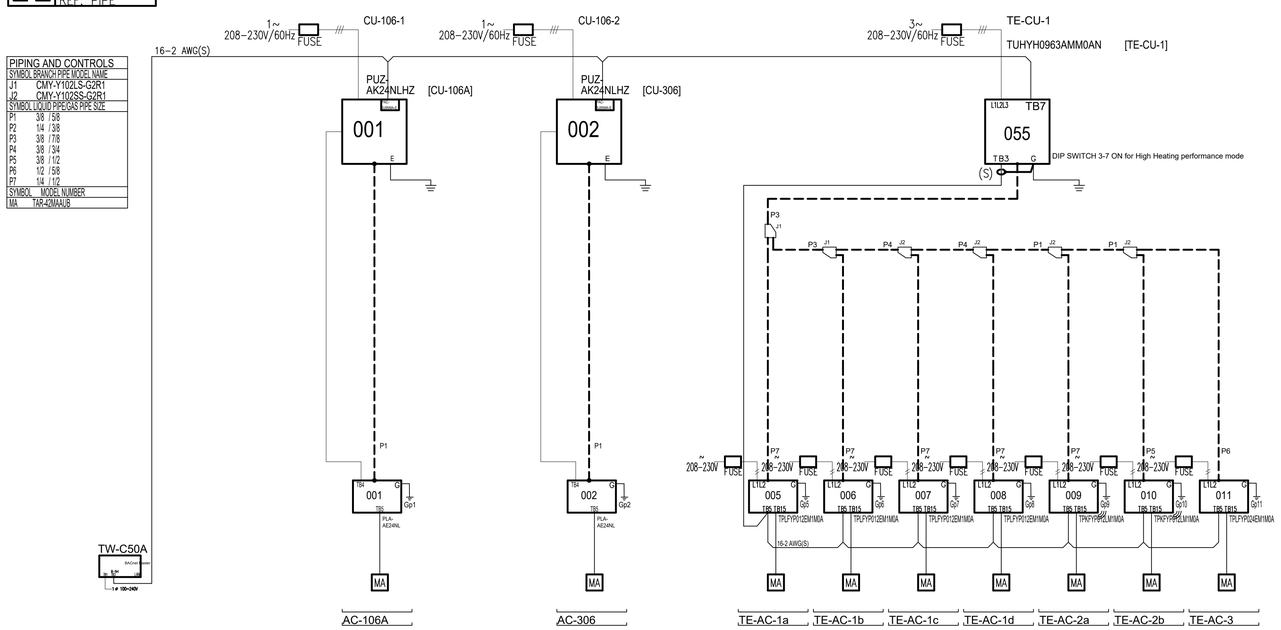
CITY MULTI
SYSTEM SCHEMATIC DWG.

This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor.

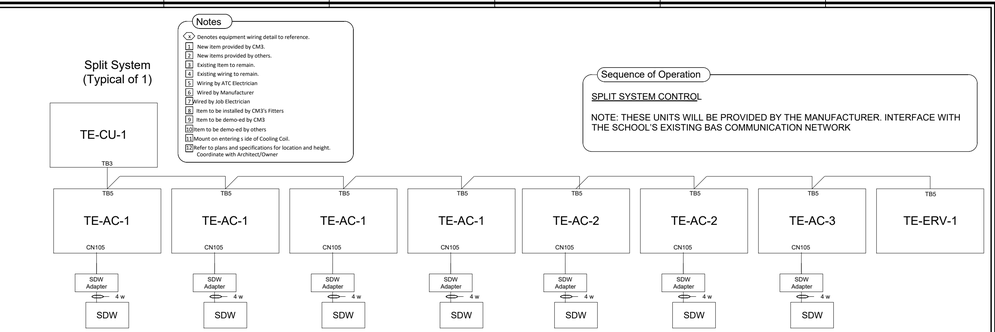
Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.

1.25mm²(16 AWG) : 1.25mm²(16 AWG) or more. 0.75mm²(20 AWG) : between 0.5mm²(24 AWG) and 0.75mm²(20 AWG).

PIPING AND CONTROLS	
SYMBOL BRANCH PIPE MODEL NAME	
J1	CMY-Y102LS-G2R1
J2	CMY-Y102SS-G2R1
SYMBOL LIQUID PIPE/GAS PIPE SIZE	
P1	3/8 / 5/8
P2	1/4 / 3/8
P3	3/8 / 7/8
P4	3/8 / 3/4
P5	3/8 / 1/2
P6	1/2 / 5/8
P7	1/4 / 1/2
SYMBOL	MODEL NUMBER
MA	TAR-20MAAUS



1 VRF AND MINISPLITS PIPING / WIRING DIAGRAMS
N.T.S.



Notes

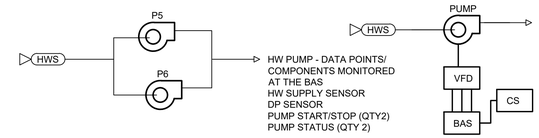
1. Denotes equipment wiring detail to reference.
2. New item provided by CM3.
3. New items provided by others.
4. Existing item to remain.
5. Existing wiring to remain.
6. Wiring by ATC Electrician
7. Wired by Manufacturer
8. Wired by Job Electrician
9. Item to be installed by CM3's Fitters
10. Item to be demo-ed by CM3
11. Item to be demo-ed by others
12. Mount on entering s ide of Cooling Coil.
13. Refer to plans and specifications for location and height. Coordinate with Architect/Owner

Sequence of Operation

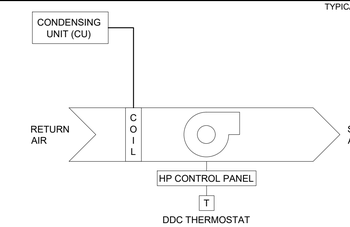
SPLIT SYSTEM CONTROL

NOTE: THESE UNITS WILL BE PROVIDED BY THE MANUFACTURER. INTERFACE WITH THE SCHOOL'S EXISTING BAS COMMUNICATION NETWORK

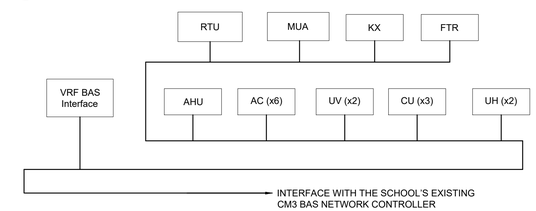
2 VRF SYSTEM NETWORK WIRING DIAGRAM
N.T.S.
TYPICAL FOR 1



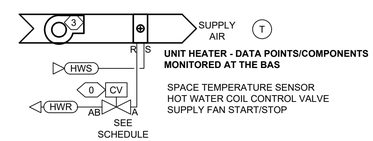
3 PUMP CONTROL DIAGRAM
N.T.S.



4 HEAT PUMP CONTROL DIAGRAM
N.T.S.



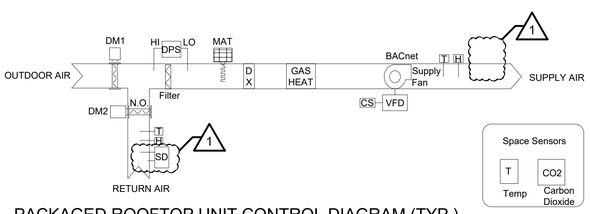
5 BAS NETWORK DIAGRAM
N.T.S.



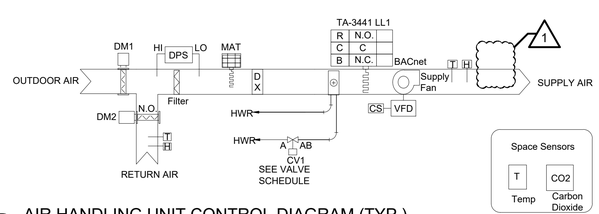
UNIT HEATER - DATA POINTS/COMPONENTS MONITORED AT THE BAS

SPACE TEMPERATURE SENSOR
HOT WATER COIL CONTROL VALVE
SUPPLY FAN START/STOP

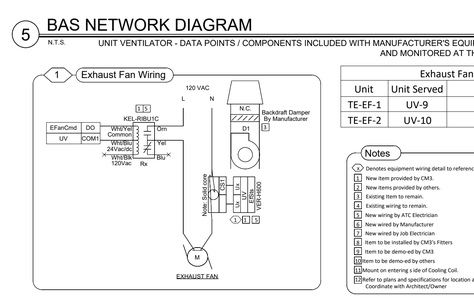
6 UNIT HEATER CONTROL DIAGRAM
N.T.S.



7 PACKAGED ROOFTOP UNIT CONTROL DIAGRAM (TYP.)
N.T.S.



8 AIR HANDLING UNIT CONTROL DIAGRAM (TYP.)
N.T.S.



Notes

1. Denotes equipment wiring detail to reference.
2. New item provided by CM3.
3. New items provided by others.
4. Existing item to remain.
5. Existing wiring to remain.
6. Wiring by ATC Electrician
7. New wired by Manufacturer
8. New wired by Job Electrician
9. Item to be installed by CM3's Fitters
10. Item to be demo-ed by CM3
11. Item to be demo-ed by others
12. Mount on entering s ide of Cooling Coil.
13. Refer to plans and specifications for location and height. Coordinate with Architect/Owner

Sequence of Operation

SPLIT SYSTEM CONTROL

NOTE: THESE UNITS WILL BE PROVIDED BY THE MANUFACTURER. INTERFACE WITH THE SCHOOL'S EXISTING BAS COMMUNICATION NETWORK

5 BAS NETWORK DIAGRAM
N.T.S.

UNIT VENTILATOR - DATA POINTS / COMPONENTS INCLUDED WITH MANUFACTURER'S EQUIPMENT AND MONITORED AT THE BAS

Exhaust Fans		
Unit	Unit Served	Location
TE-EF-1	UV-9	OP/PT 104
TE-EF-2	UV-10	OP/PT 104

Notes

1. Denotes equipment wiring detail to reference.
2. New item provided by CM3.
3. New items provided by others.
4. Existing item to remain.
5. Existing wiring to remain.
6. New wiring by ATC Electrician
7. New wired by Manufacturer
8. New wired by Job Electrician
9. Item to be installed by CM3's Fitters
10. Item to be demo-ed by CM3
11. Item to be demo-ed by others
12. Mount on entering s ide of Cooling Coil.
13. Refer to plans and specifications for location and height. Coordinate with Architect/Owner

Bill of Material

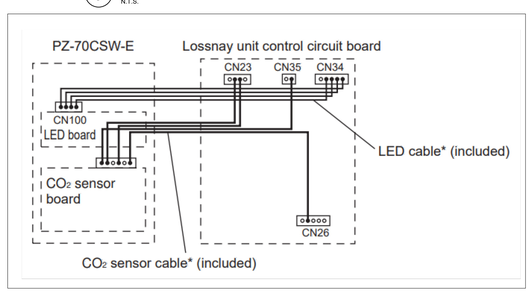
Exhaust Fan Device	Qty Part Number	Description	Vendor
Electrical			
CS1	2 VER-H600	CURRENT SW N.O. FIXED TRIP	Schneider Electric
Rx	2 KEL-RIBU1C	SPDT PILOT RELAY UNIVERSAL	Schneider Electric

Sequence of Operation

EXHAUST FAN SEQUENCE OF OPERATIONS

1. Ventilation Fans – Exhaust to operate when called by interlock unit ventilator.

9 EXHAUST FAN CONTROLS DIAGRAM
N.T.S.
TYPICAL FOR 2



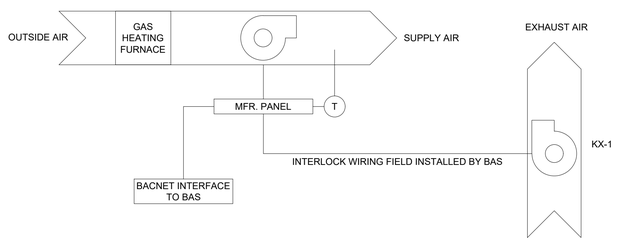
Notes

1. Denotes equipment wiring detail to reference.
2. New item provided by CM3.
3. New items provided by others.
4. Existing item to remain.
5. Existing wiring to remain.
6. New wiring by ATC Electrician
7. New wired by Job Electrician
8. Item to be installed by CM3's Fitters
9. Item to be demo-ed by CM3
10. Item to be demo-ed by others
11. Mount on entering s ide of Cooling Coil.
12. Refer to plans and specifications for location and height. Coordinate with Architect/Owner

Sequence of Operation

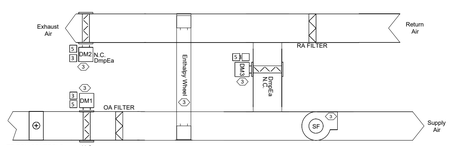
ERV CONTROL

NOTE: These units will be provided by the Manufacturer and will be stand alone controlled by remote control wall sensor.



10 KITCHEN MAKE UP AIR UNIT / KITCHEN EXHAUST FAN CONTROL DIAGRAM
N.T.S.

Note: Field Verify. New ERVs with presumed factory packaged controls. Integrate if possible via MSTP is possible, if no MSTP integration is available, utilize new MSTP controller in existing location reusing sensors and output devices as applicable.



Field Verify Unit Flow Diagram and necessity of all sensors shown above. No Equipment information present at time of submission.

11 TE-ERV-1 CONTROLS DIAGRAM
N.T.S.
TYPICAL FOR 1

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/26
Checked	TW
Drawn	MNB

THOMAS WIGHARD, P.E.
Title PROFESSIONAL ENGINEER
License No. NJ24GE04901100

Revisions:
8/13/26 BID SET
1 ADDENDUM #1

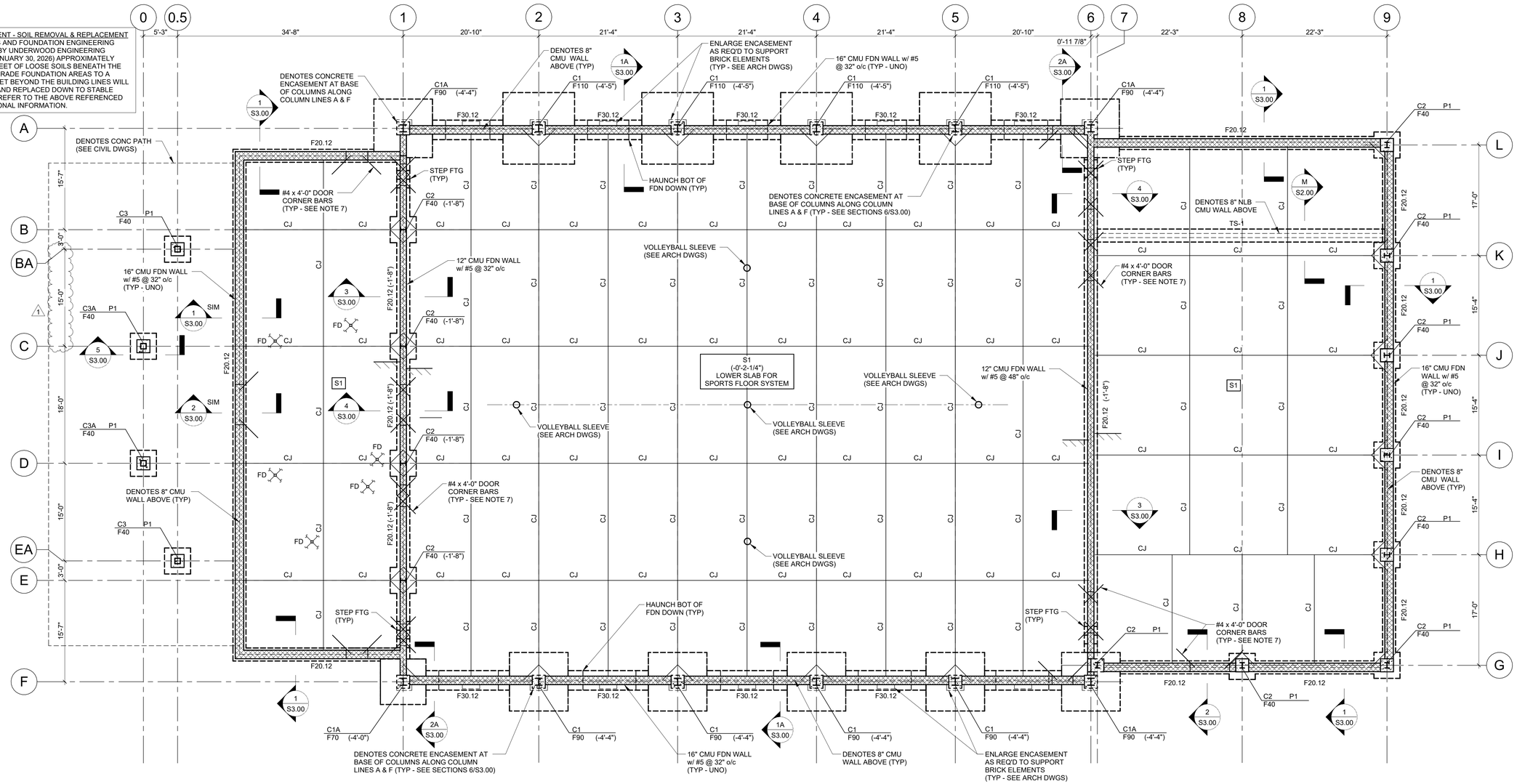
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road, Suite 11, Voorhees, NJ 08043 | t. 856-375-2701

MECHANICAL CONTROL DIAGRAMS
ADDITION & ALTERATION TO TATEM J FITHIAN ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No. 202772510M601

M6.14

GROUND IMPROVEMENT - SOIL REMOVAL & REPLACEMENT
BASED ON THE SOILS AND FOUNDATION ENGINEERING REPORT PREPARED BY UNDERWOOD ENGINEERING COMPANY (DATED JANUARY 30, 2026) APPROXIMATELY TWO (2) TO FIVE (5) FEET OF LOOSE SOILS BENEATH THE SLAB-ON-GRADE SUBRADE FOUNDATION AREAS TO A WIDTH OF FIVE (5) FEET BEYOND THE BUILDING LINES WILL NEED TO REMOVED AND REPLACED DOWN TO STABLE NATURAL GROUND. REFER TO THE ABOVE REFERENCED REPORT FOR ADDITIONAL INFORMATION.



PLAN NORTH

FOUNDATION PLAN

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

1. FINISHED FLOOR ELEVATION = SEE ARCH DWGS = DATUM EL 0'-0".
2. S1 — DENOTES 4" CONCRETE SLAB w/ 6x6-W1.4xW1.4 WWF OVER 10 MIL VAPOR BARRIER OVER 4" COMPACTED CRUSHED STONE ON COMPACTED GRADE.
3. BOTTOM OF FOOTING ELEVATION TO BE -3'-8" (COORD w/ CIVIL & ARCH DWGS) BELOW EXTERIOR GRADE ELEVATION UNLESS NOTED THUS (-#'-#") ON PLAN.
4. TOP OF PIER ELEVATION TO BE -0'-8" BELOW FINISHED FLOOR ELEVATION UNLESS NOTED THUS [-#'-#"] ON PLAN.
5. HATCH DENOTES EXTENT OF CMU WALLS. SEE PLANS FOR WALL THICKNESS AND SECTIONS, DETAILS AND STRUCTURAL NOTES FOR REINFORCING AND ADDTIONAL REQUIREMENTS.
6. "CJ" — DENOTES SLAB CONTROL JOINT. PROVIDE CONTROL JOINTS AT COLUMN CENTERLINES AND AT 15'-0" o/c MAX IN EACH DIRECTION. LIMIT PANEL TO MAX 2:1 ASPECT RATIO AND TO MAX PANEL AREA OF 225 SQ FT.
7. PROVIDE #4 BAR x 4'-0" LONG AT MID-DEPTH OF SLAB AT ALL CORNERS AND DOOR LOCATIONS. COORDINATE DOOR LOCATIONS w/ ARCHITECTURAL DRAWINGS.
8. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
9. SEE DWG S0.00 FOR ADDITIONAL STRUCTURAL NOTES.
10. SEE DWG S2.00 FOR TYPICAL FOUNDATION SECTIONS, DETAILS, AND ADDITIONAL INFORMATION.
11. COORDINATE SIZE AND LOCATION OF ALL WALL OPENINGS AND/OR SLEEVES WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TYPICAL DETAILS ON S2.00.
12. SEE THIS DRAWING FOR FOUNDATION, PIER, COLUMN SCHEDULES.
13. "TS" — DENOTES THICKENED SLAB BELOW ALL NON-LOAD BEARING CMU WALLS. COORDINATE LOCATIONS WITH ARCH DRAWINGS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
14. "FD" — DENOTES FLOOR DRAIN - SLOPE SLAB TO FLOOR DRAIN. SEE ARCH DWGS FOR SLOPE REQUIREMENTS AND PLUMBING DRAWINGS FOR LOCATIONS.

CONTRACTOR NOTE PER NJUCC BULLETIN NO. 02-2 : THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE NEED TO USE FOUNDATION REBAR AS A GROUNDING ELECTRODE SYSTEM AND SHALL BE RESPONSIBLE FOR INSTALLING THE BONDING CLAMP PRIOR TO PLACEMENT OF THE CONCRETE.

FOOTING SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
F20.12	2'-0" x 1'-0" CONT	(3) #4 BOT LONG WAY #4 @ 12" o/c BOT SHORT WAY	
F30.12	3'-0" x 1'-0" CONT	(5) #4 BOT LONG WAY #4 @ 12" o/c BOT SHORT WAY	
F30	3'-0" x 3'-0" x 1'-0"	(5) #4 BOT EA WAY	
F40	4'-0" x 4'-0" x 1'-0"	(6) #4 BOT EA WAY	
F50	5'-0" x 5'-0" x 1'-0"	(5) #5 BOT EA WAY	
F70	7'-0" x 7'-0" x 1'-4"	(7) #5 EA WAY (TOP & BOT)	
F90	9'-0" x 9'-0" x 1'-8"	(8) #6 EA WAY (TOP & BOT)	
F110	11'-0" x 11'-0" x 1'-9"	(9) #7 EA WAY (TOP & BOT)	

FOOTING SCHEDULE NOTES:
1. ALL FOUNDATIONS HAVE BEEN DESIGNED USING AN ALLOWABLE BEARING PRESSURE OF 2,000 PSF.
2. SEE DWG S0.00 FOR ADDITIONAL CONCRETE AND FOUNDATION NOTES AND REQUIREMENTS.

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR RODS	REMARKS
C1	W12x96	1 1/2" x 32" x 2'-4"	(6) 1 1/2" DIA (15" EMBED)	SEE 7/S3.00 FOR COL BASE REINF
C1A	W12x96	1 1/2" x 32" x 2'-4"	(6) 1 1/4" DIA (11" EMBED)	SEE 7/S3.00 FOR COL BASE REINF
C2	W10x33	3/4" x 14" x 1'-4"	(4) 3/4" DIA (9" EMBED)	
C3	HSS10x10x1/4	1/2" x 16" x 1'-4"	(4) 3/4" DIA (9" EMBED)	
C3A	HSS10x10x1/4	3/4" x 16" x 1'-4"	(4) 3/4" DIA (16" EMBED)	

COLUMN SCHEDULE NOTES:
1. SEE DWG S2.00 FOR BASE PLATE AND ANCHOR ROD DETAILS.
2. ALL ANCHOR RODS SHALL BE ASTM F1554 (GRADE 36) UNLESS NOTED OTHERWISE.
3. ALL BASE PLATES SHALL BE A36 (GRADE 36) UNLESS NOTED OTHERWISE.
4. SEE DWG S0.00 FOR ADDITIONAL STEEL NOTES AND REQUIREMENTS.

PIER SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
P1	24" x 24"	(8) #8 VERT & #4 TIES @ 12" o/c	

PIER SCHEDULE NOTES:
1. SEE DWG S2.00 TYPICAL PIER DETAILS.
2. SEE DWG S0.00 FOR ADDITIONAL CONCRETE NOTES AND REQUIREMENTS.

THICKENED SLAB SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
TS-1	2'-0" x 1'-0" CONT	(3) #4 BOT LONG WAY #4 @ 12" o/c BOT SHORT WAY	

THICKENED SLAB SCHEDULE NOTES:
1. ALL THICKENED SLABS HAVE BEEN DESIGNED USING AN ALLOWABLE BEARING PRESSURE OF 2,000 PSF.
2. SEE DWG S0.00 FOR ADDITIONAL CONCRETE AND FOUNDATION NOTES AND REQUIREMENTS.

VARANO TOVINSKY LLC
STRUCTURAL ENGINEERS
PROJECT #171.02
101 LAUREL ROAD
VOORHEES, NJ 08043
(856) 783-2160

ANTHONY J. VARANO
NJ PE No. 24GE05086900

NJ Certificate of Authorization	
Eng'r. Nos.	24GA28347700
Arch. Nos.	21AC00012400
Date	09/03/26
Checked	AV
Drawn	WP, AD

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

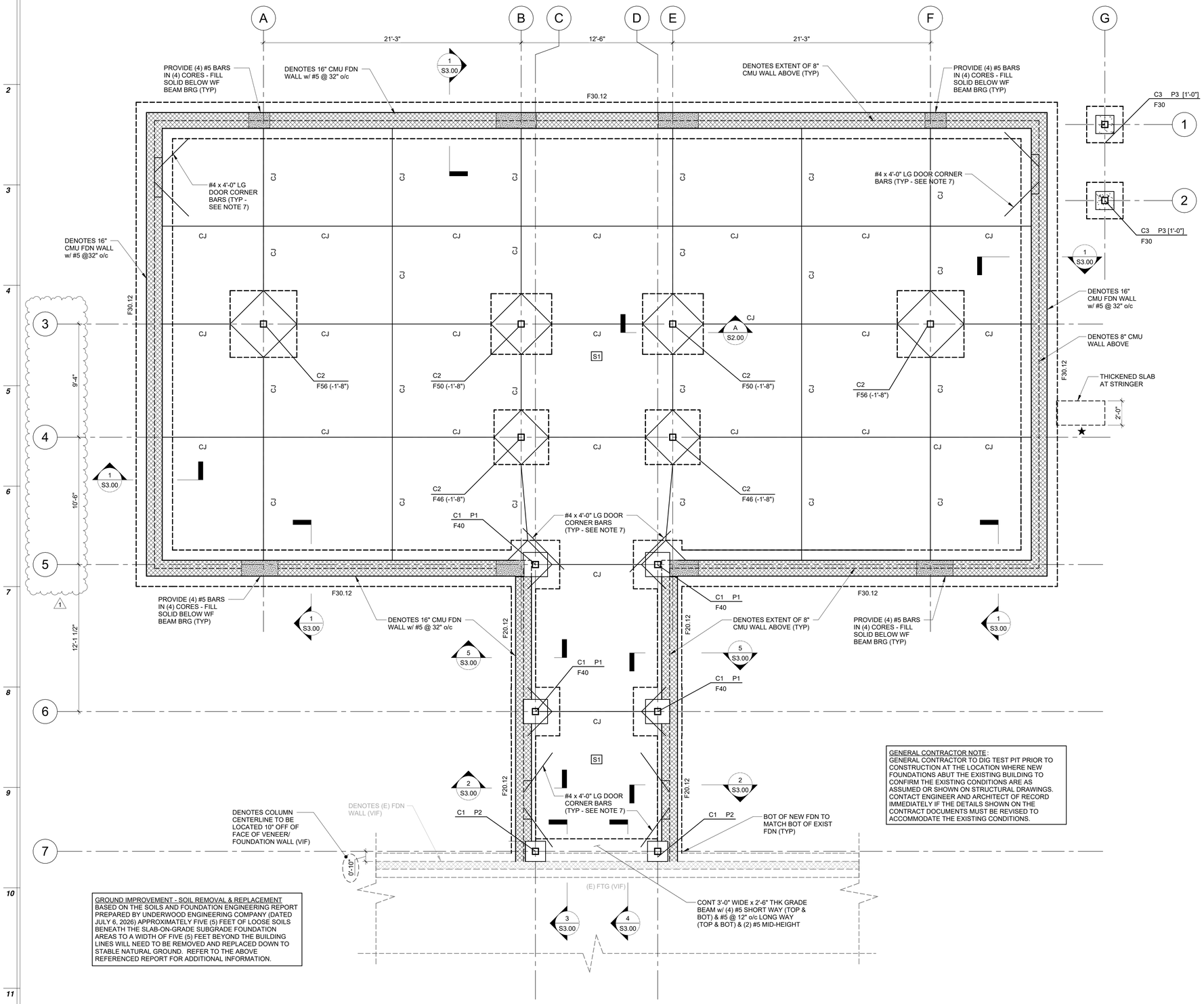
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

FOUNDATION PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

S1.00

9/3/2026 12:55:25 PM



GROUND IMPROVEMENT - SOIL REMOVAL & REPLACEMENT
BASED ON THE SOILS AND FOUNDATION ENGINEERING REPORT PREPARED BY UNDERWOOD ENGINEERING COMPANY (DATED JULY 6, 2026) APPROXIMATELY FIVE (5) FEET OF LOOSE SOILS BENEATH THE SLAB-ON-GRADE SUBGRADE FOUNDATION AREAS TO A WIDTH OF FIVE (5) FEET BEYOND THE BUILDING LINES WILL NEED TO BE REMOVED AND REPLACED DOWN TO STABLE NATURAL GROUND. REFER TO THE ABOVE REFERENCED REPORT FOR ADDITIONAL INFORMATION.

GENERAL CONTRACTOR NOTE:
GENERAL CONTRACTOR TO DIG TEST PIT PRIOR TO CONSTRUCTION AT THE LOCATION WHERE NEW FOUNDATIONS ABUT THE EXISTING BUILDING TO CONFIRM THE EXISTING CONDITIONS ARE AS ASSUMED OR SHOWN ON STRUCTURAL DRAWINGS. CONTACT ENGINEER AND ARCHITECT OF RECORD IMMEDIATELY IF THE DETAILS SHOWN ON THE CONTRACT DOCUMENTS MUST BE REVISED TO ACCOMMODATE THE EXISTING CONDITIONS.

PLAN NORTH

FOUNDATION PLAN

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

1. FINISHED FLOOR ELEVATION = SEE ARCH DWGS = DATUM EL 0'-0".
2. S1 DENOTES 4" CONCRETE SLAB w/ 6x6-W1.4xW1.4 WWF OVER 10 MIL VAPOR BARRIER OVER 4" COMPACTED CRUSHED STONE ON COMPACTED GRADE.
3. BOTTOM OF FOOTING ELEVATION TO BE -3'-8" (COORD w/ CIVIL & ARCH DWGS) BELOW EXTERIOR GRADE ELEVATION UNLESS NOTED THUS (-#'-#") ON PLAN.
4. TOP OF PIER ELEVATION TO BE -0'-8" BELOW FINISHED FLOOR ELEVATION UNLESS NOTED THUS [-#'-#"] ON PLAN.
5. HATCH DENOTES EXTENT OF CMU WALLS. SEE PLANS FOR WALL THICKNESS AND SECTIONS, DETAILS AND STRUCTURAL NOTES FOR REINFORCING AND ADDTIONAL REQUIREMENTS.
6. "CJ" DENOTES SLAB CONTROL JOINT. PROVIDE CONTROL JOINTS AT COLUMN CENTERLINES AND AT 15'-0" o/c MAX IN EACH DIRECTION. LIMIT PANEL TO MAX 2:1 ASPECT RATIO AND TO MAX PANEL AREA OF 225 SQ FT.
7. PROVIDE #4 BAR x 4'-0" LONG AT MID-DEPTH OF SLAB AT ALL CORNERS AND DOOR LOCATIONS. COORDINATE DOOR LOCATIONS w/ ARCHITECTURAL DRAWINGS.
8. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
9. SEE DWG S0.00 FOR ADDITIONAL STRUCTURAL NOTES.
10. SEE DWG S2.00 FOR TYPICAL FOUNDATION SECTIONS, DETAILS, AND ADDITIONAL INFORMATION.
11. COORDINATE SIZE AND LOCATION OF ALL WALL OPENINGS AND/OR SLEEVES WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TYPICAL DETAILS ON S2.00.
12. SEE THIS DRAWING FOR FOUNDATION, PIER, COLUMN SCHEDULES.
13. ★ DENOTES THICKENED SLAB BELOW STAIR STRINGERS AND NON-LOAD BEARING CMU WALLS. SEE ARCH DWGS FOR ALL LOCATIONS & SEE DETAIL Q/S2.0 FOR MORE INFORMATION.
14. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF ANY NEW WORK.
15. (VIF) DENOTES TO VERIFY IN THE FIELD.

CONTRACTOR NOTE PER NJUCC BULLETIN NO. 02-2:
THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE NEED TO USE FOUNDATION REBAR AS A GROUNDING ELECTRODE SYSTEM AND SHALL BE RESPONSIBLE FOR INSTALLING THE BONDING CLAMP PRIOR TO PLACEMENT OF THE CONCRETE.

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR RODS	REMARKS
C1	HSS6x6x5/8	3/4"x12"x1'-0"	(4) 3/4" DIA (9" EMBED)	
C2	HSS6x6x5/16	3/4"x12"x1'-0"	(4) 3/4" DIA (9" EMBED)	
C3	HSS4x4x5/16	3/4"x10"x0'-10"	(4) 3/4" DIA (9" EMBED)	ALL EXTERIOR STAIR FRAMING TO BE HOT DIP GALVANIZED

COLUMN SCHEDULE NOTES:
1. SEE DWG S2.00 FOR BASE PLATE AND ANCHOR ROD DETAILS.
2. ALL ANCHOR RODS SHALL BE ASTM F1554 (GRADE 36) UNLESS NOTED OTHERWISE.
3. ALL BASE PLATES SHALL BE A36 (GRADE 36) UNLESS NOTED OTHERWISE.
4. SEE DWG S0.00 FOR ADDITIONAL STEEL NOTES AND REQUIREMENTS.

PIER SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
P1	24" x 24"	(8) #8 VERT & #4 TIES @ 12" o/c	
P2	20" x 20"	(6) #8 VERT & #4 TIES @ 12" o/c	
P3	16" x 16"	(7) #7 VERT & #3 TIES @ 12" o/c	

PIER SCHEDULE NOTES:
1. SEE DWG S2.00 TYPICAL PIER DETAILS.
2. SEE DWG S0.00 FOR ADDITIONAL CONCRETE NOTES AND REQUIREMENTS.

FOOTING SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
F30.12	3'-0" x 1'-0" CONT	(5) #4 BOT LONG WAY #4 @ 12" o/c BOT SHORT WAY	
F30	3'-0" x 3'-0" x 1'-0"	(5) #4 BOT EA WAY	
F40	4'-0" x 4'-0" x 1'-0"	(6) #4 BOT EA WAY	
F46	4'-6" x 4'-6" x 1'-0"	(6) #4 BOT EA WAY	
F50	5'-0" x 5'-0" x 1'-0"	(5) #5 BOT EA WAY	
F56	5'-6" x 5'-6" x 1'-0"	(5) #5 BOT EA WAY	

FOOTING SCHEDULE NOTES:
1. ALL FOUNDATIONS HAVE BEEN DESIGNED USING AN ALLOWABLE BEARING PRESSURE OF 2,000 PSF PER THE GEOTECHNICAL REPORT REFERENCED ON DWG S0.00.
2. SEE DWG S0.00 FOR ADDITIONAL CONCRETE AND FOUNDATION NOTES AND REQUIREMENTS.

VARANO TOVINSKY LLC
STRUCTURAL ENGINEERS
PROJECT #171.03
101 LAUREL ROAD
VOORHEES, NJ 08043
(856) 783-2160

ANTHONY J. VARANO
NJ PE No. 24GE05086900

NJ Certificate of Authorization	
Eng'r. Nos.	24GA28347700
Arch. Nos.	21AC00012400
Date	09/03/26
Checked	AV
Drawn	WP/AD

JEFFREY POTTER, R.A.
Title: REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

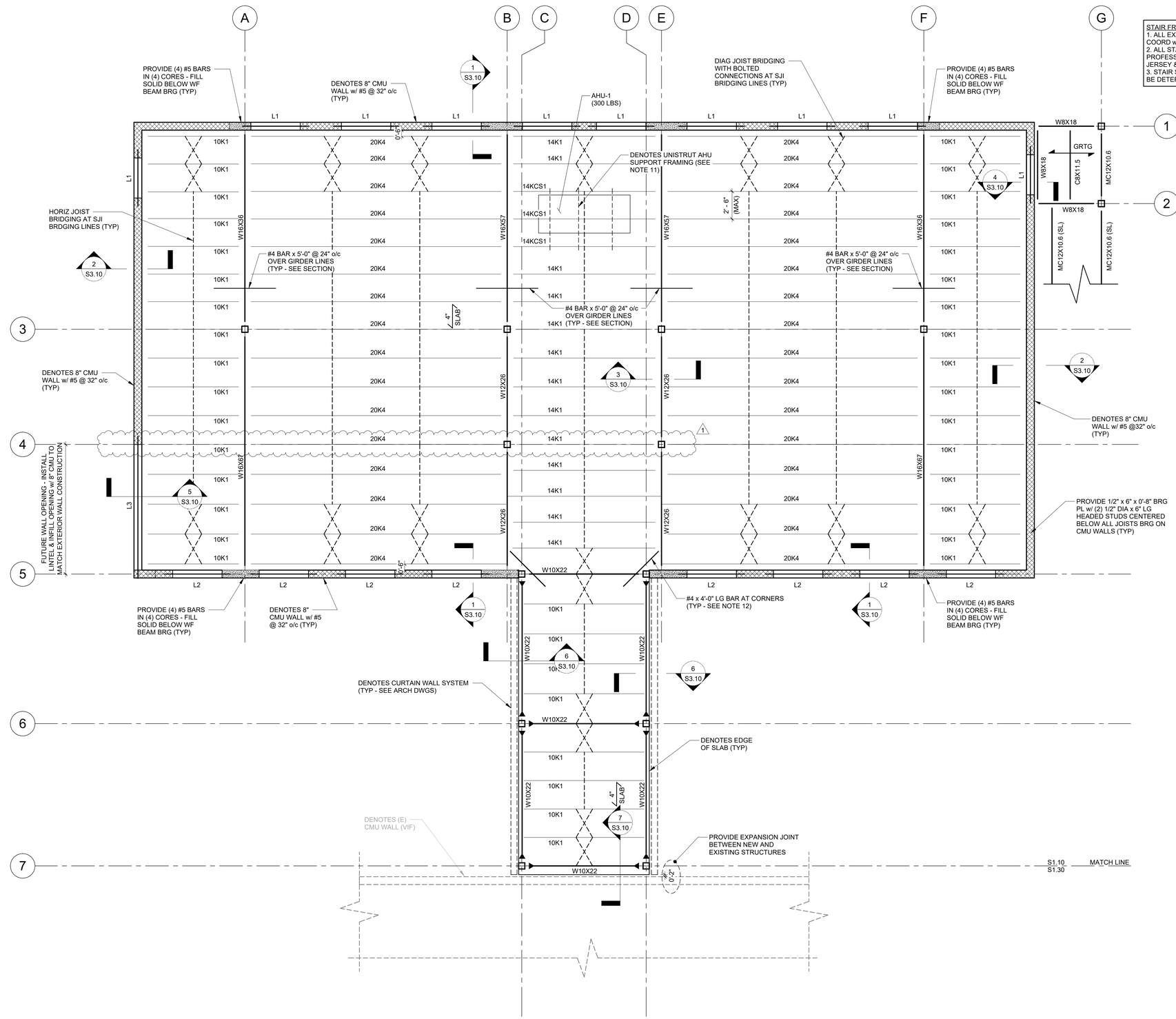
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

FOUNDATION PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE. HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

S1.00

9/3/2026 12:27:45 PM



STAIR FRAMING NOTES:
1. ALL EXTERIOR STEEL FRAMING TO BE HOT-DIP GALVANIZED - COORD w/ ARCH DWGS FOR ADDITIONAL COATING REQUIREMENTS.
2. ALL STAIR & RAILING FRAMING TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY & RETAINED BY THE CONTRACTOR.
3. STAIR SIZES SHOWN ARE THE MINIMUM - FINAL DESIGN/SIZES TO BE DETERMINED BY ENGINEER RETAINED BY THE CONTRACTOR.

PLAN NORTH

FIRST FLOOR FRAMING PLAN

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

1. TOP OF STEEL ELEVATION = (-0'-6 1/2") BELOW TOP OF SLAB.
2. DENOTES EXTENT OF CMU WALLS. SEE PLANS FOR WALL THICKNESS & REQUIRED VERTICAL REINFORCING. GROUT ALL CORES WITH VERTICAL REINFORCING SOLID w/ 3,000 PSI GROUT. SEE TYPICAL SECTIONS & DETAILS AND STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
3. 4" SLAB — DENOTES SPAN OF 3-1/2 INCH NORMAL WEIGHT CONCRETE SLAB ON 9/16" - 26 GAUGE (COMPOSITE OR FORM) GALVANIZED METAL DECK, (TOTAL SLAB THICKNESS = 4"), REINFORCED WITH 6x6-W2.9x2.9 WWF. ATTACH FLOOR DECK TO SUPPORTING STRUCTURE USING 5/8" DIA PUDDLE WELDS IN 30/4 PATTERN. PROVIDE 16 GAUGE WELD WASHERS w/ 5/8" DIA HOLE AT ALL WELDS.
4. DENOTES BEAM TO COLUMN MOMENT CONNECTIONS. SEE DETAILS ON S2.10.
5. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
6. SEE DRAWING S0.00 & S0.01 FOR ADDITIONAL STRUCTURAL NOTES.
7. SEE DRAWINGS S3.10 FOR TYPICAL GIRT FRAMING SECTIONS, DETAILS, AND ADDITIONAL INFORMATION.
8. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF ANY NEW WORK.
9. ALL JOISTS ARE TO BE EQUALLY SPACED BETWEEN SUPPORTING MEMBERS UNLESS NOTED OTHERWISE ON PLAN.
10. (VIF) DENOTES TO VERIFY IN THE FIELD.
11. CONTRACTOR TO PROVIDE UNISTRUT FRAMING AS REQUIRED FOR THE SUPPORT OF HVAC UNIT. ALL UNISTRUT FRAMING TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY AND RETAINED BY THE CONTRACTOR.
12. PROVIDE #4 BAR x 4'-0" LONG AT MID-DEPTH OF SLAB AT ALL CORNERS AND DOOR LOCATIONS. COORDINATE DOOR LOCATIONS w/ ARCHITECTURAL DRAWINGS.
13. GRTG — DENOTES SPAN OF GALV STEEL CMW-4 CLOSE MESH ADA GRATING w/ 1-1/2" x 3/16" THICK BAR & 11/16" o/c SPACING RECT BAR & RECT CROSS BARS FLUSH TOP @ 4" o/c. CONNECT TO STEEL FRAMING w/ HILTI X-FMC CONNECTORS @ 2'-0" o/c.

LINTEL SCHEDULE

MARK	SIZE	REMARKS
L1	8" x 8" CMU BOND BEAM w/ (1) #5 CONT	
L2	W8x31 + 1/4" PL (GALV)	
L3	W8x31 + 1/4" PL (GALV)	

LINTEL SCHEDULE NOTES:
1. SEE DWG S2.00 FOR TYPICAL DETAILS.
2. ALL LINTELS TO HAVE A MINIMUM 8" BEARING EA END.
3. GROUT MINIMUM AREA OF 16" x 16" AT LINTEL BEARING SOLID w/ 3,000 PSI UNLESS NOTED OTHERWISE IN PLANS OR SECTIONS & DETAILS.
4. PROVIDE BEARING PLATE AT STEEL LINTEL BEARING PER MASONRY NOTES ON DWG S0.00.
5. ALL STEEL USED FOR LINTELS SHALL BE HOT-DIP GALVANIZED.
6. SEE TYPICAL DETAILS FOR ADDITIONAL LINTEL CONSTRUCTION REQUIREMENTS.

VARANO TOVINSKY LLC
STRUCTURAL ENGINEERS
PROJECT #171.03
101 LAUREL ROAD
VOORHEES, NJ 08043
(856) 783-2160

ANTHONY J. VARANO
NJ PE No. 24GE05086900

NJ Certificate of Authorization	
Eng'r. Nos.	24GA28347700
Arch. Nos.	21AC00012400
Date	09/03/26
Checked	AV
Drawn	WP/AD

JEFFREY POTTER, R.A.
Title: REGISTERED ARCHITECT License No. NJ21AI02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

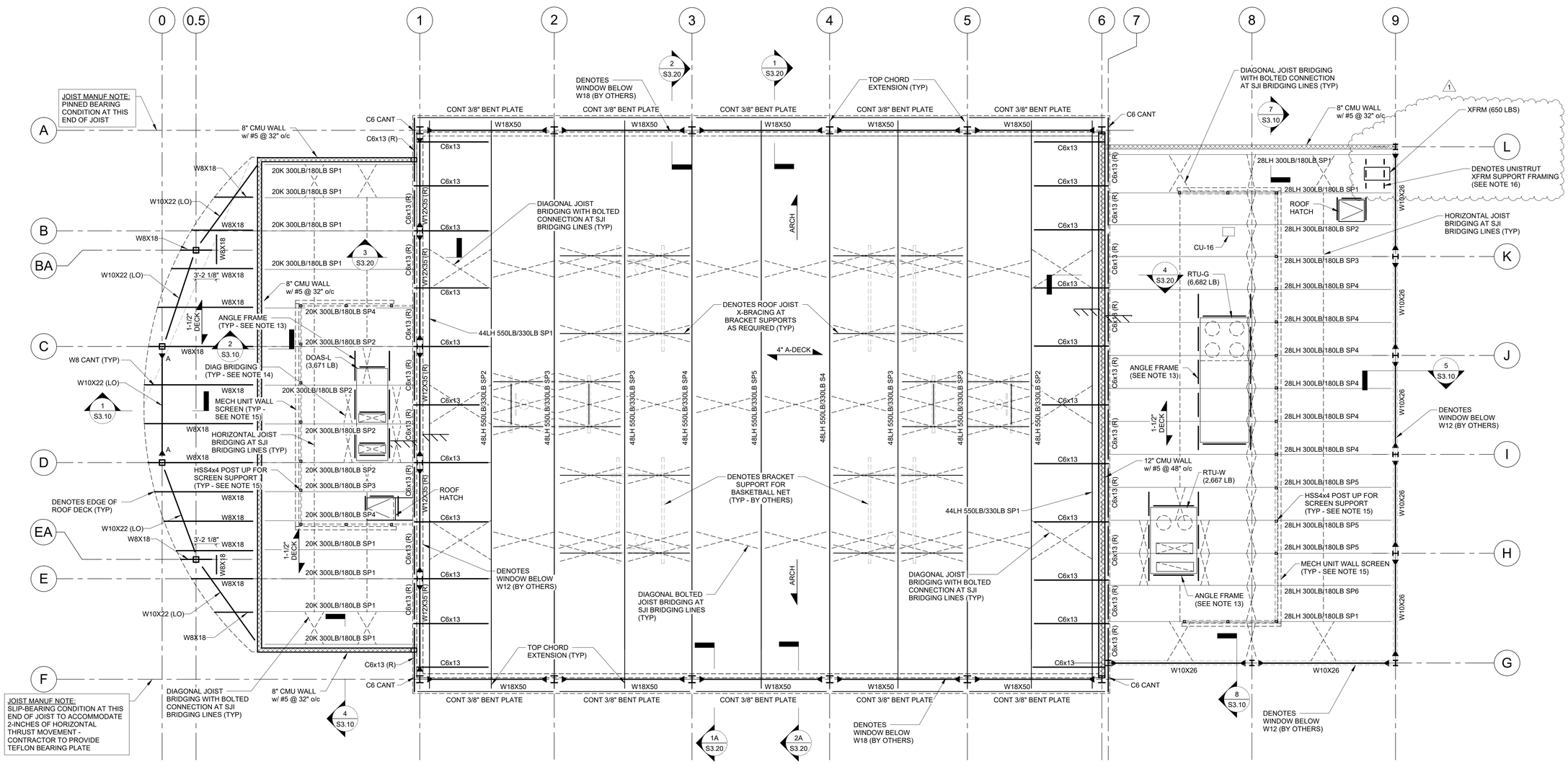
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2700 | f. 201-447-1233

FIRST FLOOR FRAMING PLAN
ALTERATIONS & ADDITIONS TO J. FITHIAN TATEM ELEMENTARY SCHOOL
HADDONFIELD BOARD OF EDUCATION
1 GLOVER AVE, HADDONFIELD, NJ 08033

Job No. 2.20277.25.10
File No.

S1.10

9/3/2026 12:28:24 PM



PLAN NORTH

ROOF FRAMING PLAN

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

1. TOP OF STEEL ELEVATION = VARIES (SEE ARCH DWGS)
2. DENOTES WF BEAM TO WF COLUMN MOMENT CONNECTIONS. SEE DETAILS ON S2.10.
3. ARCH — DENOTES ARCHED ROOF. SEE ARCHITECTURAL DRAWINGS FOR RADIUS REQUIREMENTS.
4. 1-1/2" DECK — DENOTES SPAN OF 1 1/2" - 22 GAUGE TYPE "B" GALVANIZED METAL ROOF DECK. ATTACH ROOF DECK TO SUPPORTING STRUCTURE USING 5/8" ∅ PUDDLE WELDS IN 36/4 PATTERN. DECK TO BE CONTINUOUS OVER (3) SPANS MINIMUM.
5. 4" A-DECK — DENOTES SPAN OF TORIS 4A (20 GA) ACOUSTICAL ROOF DECK SYSTEM AS MANUFACTURED BY EPIC METALS, RANKIN, PA. DECK TO BE GALVANIZED AND PAINTED PER ARCHITECTURAL REQUIREMENTS. ATTACH ROOF DECK TO ALL SUPPORTING STRUCTURAL MEMBERS USING 3/4" DIA PUDDLE WELDS AT A NOMINAL SPACING OF 8" o/c OR LESS AS INDICATED ON THE MANUFACTURERS ERECTION DRAWINGS. SIDE LAPS & PERIMETER EDGES OF THE BUILDING SHALL BE FASTENED BY WELDS OR SCREWS AT A SPACING OF 36" o/c OR LESS AS INDICATED ON THE MANUFACTURERS ERECTION DRAWINGS. DECK TO BE CONTINUOUS OVER (3) SPANS MINIMUM.
6. DENOTES EXTENT OF CMU WALLS. SEE PLANS FOR WALL THICKNESS AND SECTIONS, DETAILS, AND STRUCTURAL NOTES FOR REINFORCING AND ADDITIONAL REQUIREMENTS.
7. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
8. SEE DRAWING S2.10 FOR PRE-ENGINEERED WOOD ROOF TRUSS PROFILE AND NOTES.
9. SEE DRAWING S0.00 & S0.01 FOR ADDITIONAL STRUCTURAL NOTES.
10. SEE DRAWING S3.20 FOR TYPICAL ROOF FRAMING SECTIONS, DETAILS AND ADDITIONAL INFORMATION.
11. (R) DENOTES ROLLED STEEL BEAMS. BEAMS FRAME FLUSH TOP UNLESS NOTED OTHERWISE. SEE PLANS FOR TOP OF STEEL ELEVATIONS.
12. COORDINATE SIZE & LOCATION OF ALL WALL OPENINGS AND/OR SLEEVES WITH ARCHITECTURAL MECHANICAL, ELECTRICAL, & PLUMBING DRAWINGS & TYPICAL DETAILS ON S2.00.
13. PROVIDE ANGLE FRAME BELOW ALL RTU CURBS & AROUND ALL ROOF PENETRATIONS. SEE TYPICAL DETAILS.
14. TERMINATE JOIST BRIDGING AT ALL ROOF PENETRATIONS. PROVIDE DIAGONAL JOIST BRIDGING WITH BOLTED CONNECTIONS ON EACH SIDE OF OPENING.
15. MECHANICAL SCREEN WALLS TO BE POST SUPPORTED - SEE DETAILS ON S2.20.
16. CONTRACTOR TO PROVIDE UNISTRUT FRAMING AS REQ'D FOR THE SUPPORT OF TRANSFORMER. ALL UNISTRUT FRAMING TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY AND RETAINED BY THE CONTRACTOR. (1)

VARANO TOVINSKY LLC
STRUCTURAL ENGINEERS
PROJECT #171.02
101 LAUREL ROAD
VOORHEES, NJ 08043
(856) 783-2160

ANTHONY J. VARANO
NJ PE No. 24GE05086900

NJ Certificate of Authorization	
Eng'r. Nos.	24GA28347700
Arch. Nos.	21AC00012400
Date	09/03/26
Checked	AV
Drawn	WP, AD

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21A02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

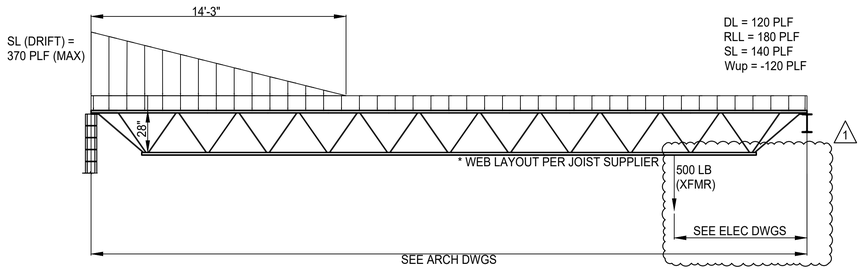
LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

ROOF FRAMING PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14
File No.

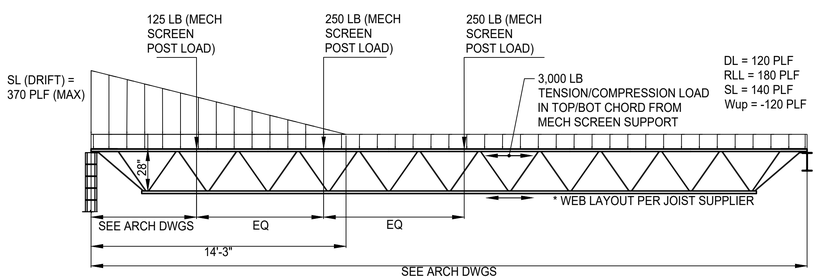
S1.20

9/3/2026 12:31:12 PM



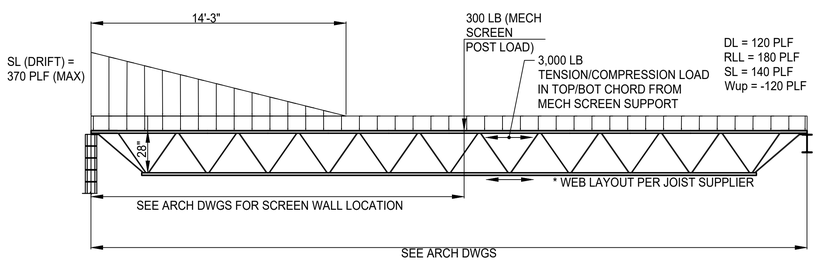
28LH300/180 SP1

SCALE: NOT TO SCALE



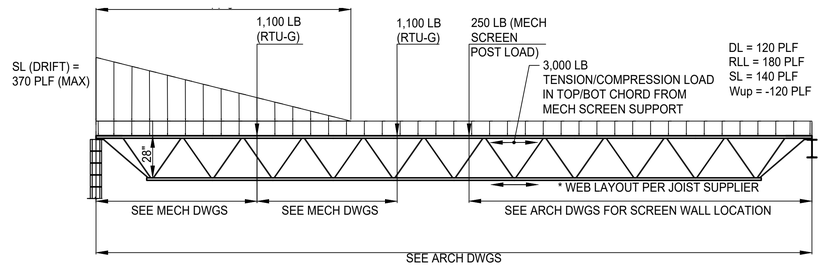
28LH300/180 SP2

SCALE: NOT TO SCALE



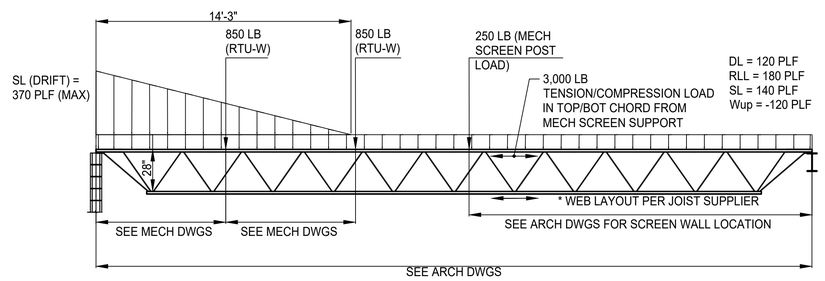
28LH300/180 SP3

SCALE: NOT TO SCALE



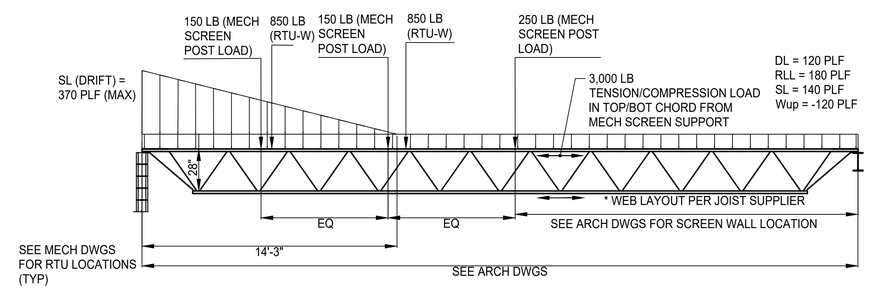
28LH300/180 SP4

SCALE: NOT TO SCALE



28LH300/180 SP5

SCALE: NOT TO SCALE



28LH300/180 SP6

SCALE: NOT TO SCALE

WRESTING ROOF JOISTS NOTES:

1. MECHANICAL SCREEN AND RTU LOCATIONS TO BE COORDINATED WITH MECH DWGS.
2. WEB LAYOUT PER JOIST SUPPLIER - FINAL LAYOUT TO BE APPROVED BY ARCHITECT.
3. ALL LOADS ARE SERVICE LEVEL UNFACTORED LOADS.
4. BRIDGING LOCATIONS SHOWN ON PLAN ARE BASED ON LH SERIES JOISTS. FINAL BRIDGING LOCATIONS SHALL BE DETAILED BY THE JOIST SUPPLIER - ADDITIONAL ROWS OF BRIDGING MAY BE REQUIRED.

VARANO TOVINSKY LLC
STRUCTURAL ENGINEERS
PROJECT #171.02
101 LAUREL ROAD
VOORHEES, NJ 08043
(856) 783-2160

ANTHONY J. VARANO
NJ PE No. 24GE05086900

NJ Certificate of Authorization	
Eng'r. Nos.	24GA28347700
Arch. Nos.	21AC00012400
Date	09/03/26
Checked	AV
Drawn	WP/AD

JEFFREY POTTER, R.A.
Title: REGISTERED ARCHITECT License No. NJ21AI02015400

Date	Description
9/3/2026	ADDENDUM #1

PRELIMINARY
NOT FOR CONSTRUCTION

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

WRESTLING ROOF JOISTS

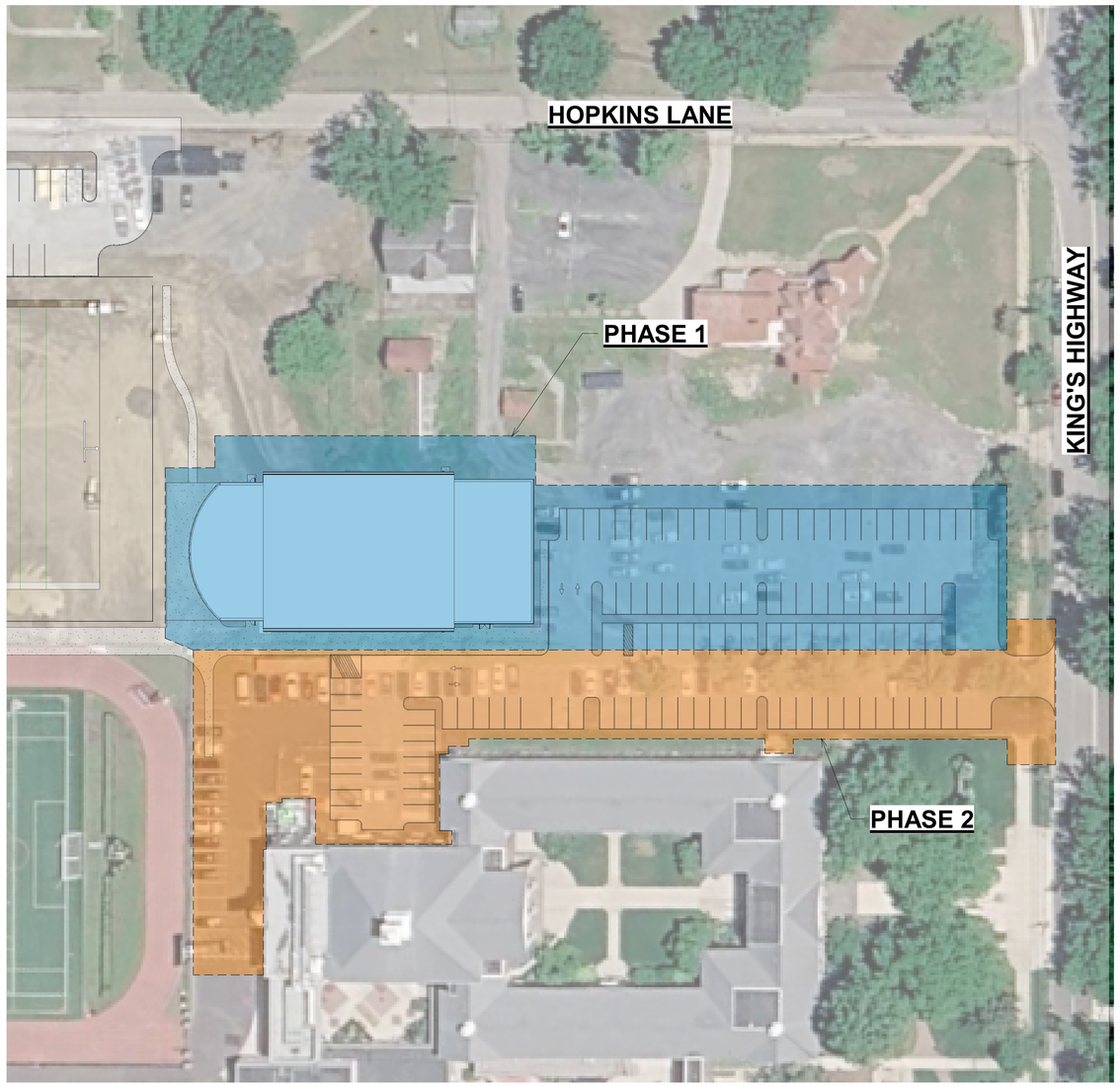
NEW HOPKINS GYMNASIUM

HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

File No. File No.

S4.00



1 T0.04 STAGING PLAN
1" = 40'-0"

PHASING NARRATIVE

SEE PROJECT MANUAL - SECTION 011000 (NHG) FOR ADDITIONAL INFORMATION

PHASE 1 - NOTICE TO PROCEED THRU SUBSTANTIAL COMPLETION

- ALL WORK ASSOCIATED W/ BUILDING MAY PROCEED.
- CONTRACTOR SHALL ACCESS AREA OFF KINGS HIGHWAY.
- CONTRACTOR TO PROVIDE TEMPORARY FENCING WHERE REQUIRED TO SEPARATE WORK AREA.
- SANITARY & FIBER INFRASTRUCTURE INSTALLATION MAY BE INSTALLED HOWEVER MUST BE CAREFULLY COORDINATED WITH OWNER AS NOT TO INTERRUPT OPERATIONS.

PHASE 2 - JUNE 18TH, 2027 SUBSTANTIAL COMPLETION

- EXISTING PAVED PARKING AREAS TO REMAIN OPERATIONAL FOR DURATION OF 2026-2027 SCHOOL YEAR.
- OWNER TO VACATE ALL AREAS. CONTRACTOR SHALL HAVE ACCESS TO ENTIRE PROJECT SITE AREA.
- OWNER MUST BE ABLE TO SERVICE EXISTING CHILLERS & UTILITIES AND ACCESS ADJACENT EXISTING HIGH SCHOOL BOILER ROOM AT ALL TIMES DURING CONSTRUCTION.
- MODIFY TEMPORARY FENCE FROM PHASE 1 WORK AS REQUIRED TO ACCOMMODATE PHASE II WORK.

1

State Project #: 07-1900-X01-24-2000

NJ Certificate of Authorization	
Eng'r. Nos.	24GA27937500
Arch. Nos.	21AC00012400
Date	8/13/2026
Checked	JMP
Drawn	RS

JEFFREY POTTER, R.A.
Title REGISTERED ARCHITECT License No. NJ21AI02015400

Date	Description
9/3/26	ADDENDUM #1

LAN ASSOCIATES
Engineering, Planning, Architecture, Surveying Inc.
1018 Laurel Oak Road Ste 11, Voorhees, NJ 08043 | t. 856-375-2701 | f. 201-447-1233

STAGING PLAN
NEW HOPKINS GYMNASIUM
HADDONFIELD BOE
HADDONFIELD MEMORIAL HIGH SCHOOL
401 KINGS HWY E, HADDONFIELD, NJ 08033

Job No. 2.20277.25.14

Dwg No. T0.04

9/3/2026 8:58:24 AM