ADDENDUM NO. 2

August 4, 2022

Silver Creek High School Additions & Renovations
557 Renz Avenue
Sellersburg, IN 47172

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated July 8, 2022, by CSO Architects. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2-2, Specification Section 00 31 00 – Bid Form, and Attached CSO Addendum No. 2 Dated August 4, 2022, Consisting of 38 Pages, Specification Sections: 096400 – Stage Flooring, 110600 – Stage Rigging Systems, 260561 – Stage Lighting Systems, 274116.61 – Integrated AV Systems for Theater, Addendum Drawings: C403, C303, A414, A421, UD201, U101, U201, FP001, P104, P105, P106, P108, P109, P202, P203, P204, P205, P206, P208, P209, P210, P401, P402, P501, P503, P504, P505, P507, P601, MD105, MD106, M101, M102, M401, M402, M501, ED102, E101, E102, E103, E104, E105, E106, E107, E108, E109, E110, E111, E201, E202, E203, E204, E205, E206, E207, E208, E209, E210, E211, E212, E213, E215, E216, E217, E218, E219, E220, E222, E223, E224, E225, E301, E302, E303, E304, E305, E307, E308, E309, E310, E311, E403, E404, E405, E408, E501, E503, E601, E602, E603, E604, E605, E606, E607, E608, E609.

A. SPECIFICATION SECTION 00 31 00 –BID FORM

1. Updated Bid Form attached herein.

B. SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY

1. Paragraph 3.03 Bid Categories

A. Bid Category No. 1 – General Trades

Add The following Clarifications:

15. Provide 064000-B wood rail at indicated stairwell locations.
16. Provide all selective architectural demolition. Bid Category 10 and 11 to provide selective demolition for their divisions work.

H. Bid Category No. 9 – Fire Protection

Remove The following Clarification:

2. Provide selective demolition and re-work of fire protection system in existing areas to accommodate new layouts. Provide cutting and capping of existing system to separate it from portions of building to be demolished, while maintaining a functioning system in the building to remain.

J. Bid Category No. 10 – Plumbing & HVAC

Add The following Clarification:

7. Provide selective demolition for this divisions work.

K. Bid Category No. 11 – Electrical & Technology

Add The following Clarification:

6. Provide selective demolition for this divisions work.

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013)
(Amended for SCSC)

Silver Creek High School Additions & Renovations

(Silver Creek School Corporation)
(Clark County, Indiana)

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year):_____

BIDDER (Firm) _____

Address _____ P.O. Box _____

City/State/Zip _____

Telephone Number: _____ Email Address: _____

Person to contact regarding this Bid_____

Pursuant to notices given, the undersigned offers to furnish labor and/or materials necessary to complete the public works project of:

_____
Insert Category No. (s) and Name(s)

Of public works project, ***Silver Creek High School Additions & Renovations***, in accordance with Plans and Specifications prepared by ***CSO Architects***, 8831 Keystone Crossing, Indianapolis, IN 46240 follows:

BASE BID

For the sum of _____
(Sum in words)

_____DOLLARS ($_____)
(Sum in figures)

The undersigned acknowledges receipt of the following Addenda:
Receipt of Addenda No. (s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO_____

Has visited the jobsite YES _____ NO_____

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent Of the schedule can be met. YES _____ NO_____

Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6. YES _____ NO_____

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:
DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit bases, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 – Concession and Restroom Building

Change the Base Bid the sum of_____
(sum in words)

_____ DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 2 – Ticket Booth

Change the Base Bid the sum of_____
(sum in words)

_____ DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 3 – Water Main Extension

Change the Base Bid the sum of_____
(sum in words)

_____ DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 4 – Donor Paver Plaza

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 5 – Retaining Wall

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 6 – Courtyards

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

PART II
(For projects of $150,000 or more – IC 36-1-12-4)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)

2. Please list the names and addresses of all subcontractors (i.e. persons or firms outside your own firm who have performed part of the work) that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and addresses of each subcontractor, equipment to be used by the subcontractor, and whether you will required a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed Project? Any equipment used by subcontractors may also be required to be listed by the governmental unit.

5. Have you into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which corroborate the process listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of Bidder's financial statement is mandatory. Any Bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the Contract must be specific enough in detail so that said governing body can make a proper determination of the Bidder's capability for completing the Project if awarded.

SECTION IV CONTRACTOR NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such contract.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT

Dated at _____this _____ day of _____, 20

_____
(Name of Organization)

By
_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named
_____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____,
_____
(Title)

_____
Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 31 00

ADDENDUM

CSO
ARCHITECTURE · INTERIOR DESIGN

ADDENDUM NO: 2

PROJECT: Silver Creek High School Addition and Renovations Package

PROJECT NO: 2021026 DATE: August 4, 2022 BY: Brent Hite

This Addendum is issued in accordance with the provisions of "The General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This Addendum includes:

Addendum Pages:
1-37

Attached Documents:
09 64 00 – STAGE FLOORING
11 06 00 – STAGE RIGGING SYSTEMS
26 05 61 – STAGE LIGHTING SYSTEMS
27 41 16.61 – INTEGRATED AV SYSTEMS FOR THEATER

Attached Drawing Sheets:
C403, C303, A414, A421, UD201, U101, U201, FP001, P104, P105, P106, P108, P109, P202, P203, P204, P205, P206, P208, P209, P210, P401, P402, P501, P503, P504, P505, P507, P601, MD105, MD106, M101, M102, M401, M402, M501, ED102, E101, E102, E103, E104, E105, E106, E107, E108, E109, E110, E111, E201, E202, E203, E204, E205, E206, E207, E208, E209, E210, E211, E212, E213, E215, E216, E217, E218, E219, E220, E222, E223, E224, E225, E301, E302, E303, E304, E305, E307, E308, E309, E310, E311, E403, E404, E405, E408, E501, E503, E601, E602, E603, E604, E605, E606, E607, E608, E609

PART 0 - GENERAL INFORMATION

0.1 NOT USED

PART 1 - BIDDING REQUIREMENTS

1.1 NOT USED

PART 2 - SPECIFICATIONS

2.1 06 42 19 – PLASTIC-LAMINATE-FACED WOOD PANELING

A. Revise section 2.04B as follows:

'B. Panel Thickness: **1/2 or** 3/4 inches.'

B. Add section 2.04B1a as follows:

8831 Keystone Crossing, Indianapolis, IN 46240 | 317.848.7800 | csoinc.net

'a. Note: All details were developed assuming 3/4" panel thickness. If contractor elects to use 1/2" panel, sub framing indicated shall be increased to meet overall dimensional requirements indicated in drawings. This shall be clearly indicated in shop drawings submitted to architect for review.'

2.2 07 42 13 – FORMED METAL WALL PANELS

A. Replace 'Flush Profile" in section 2.02B with "**Reveal Joint".**

2.3 07 42 43 – METAL COMPOSITE MATERIAL WALL PANELS

A. Add section 2.02A1j as follows:

"j. Fairview Architectural, Vitrabond FR.

B. Add section 2.05A1h as follows:

"h. 'Arrowhead Flex System' by Fairview Architectural.

2.4 07 95 00 – EXPANSION CONTROL

A. Add section 2.03A6 as follows:

"7. EMS, Inc."

B. Add section 2.04A7 as follows:

"7. EMS, Inc."

2.5 08 34 73.10 – SLIDING SOUND CONTROL DOORS

A. Remove section in its entirety – not used.

2.6 08 41 13 – ALUMINUM FRAMED ENTRANCES AND STOREFRONTS

A. Add section 2.01A3i as follows:

"i. Manko Window Systems."

B. Add section 2.05Bh as follows:

"h. Manko Window Systems."

2.7 08 44 00 – GLAZED ALUMINUM CURTAIN WALLS

A. Add section 2.03A9 as follows:

"9. Manko Window Systems"

2.8 08 80 00 – DOOR HARDWARE

A. Add the following hardware sets for Outbuildings included in Concessions/Restroom Building Alternate:

ATHLETICS BUILDINGS

HARDWARE GROUP NO. A01

For use on Door #(s):
005 007

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	DEADLOCK, CLASSROOM	48H-7-R	626	BES
1	EA	PUSH PLATE	8200 4" X 16"	630	IVE
1	EA	PULL PLATE	8303 10" 4" X 16"	630	IVE
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS20/WS20X	626	IVE
1	EA	RAIN DRIP	11A (BOTTOM EXTERIOR DOOR FACE)	A	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR BOTTOM, INSWING HMD	381A	A	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER

(continues on following page)

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HARDWARE GROUP NO. A02

For use on Door #(s):
001A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	MORTISE LOCK, ENTRY	45H-7-T-15H	626	BES
1	EA	LOCK GUARD	LG10	630	IVE
1	EA	SURFACE CLOSER (W/ SPRING STOP & HO)	4040XP SHCUSH	689	LCN
1	EA	RAIN DRIP	142AA (EXTERIOR FRAME HEAD)	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER

HARDWARE GROUP NO. A03

For use on Door #(s):
004

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	MORTISE LOCK, ENTRY (W/ OCC IND)	45H-7-T-15H-VIN	626	BES
1	EA	LOCK GUARD	LG10	630	IVE
1	EA	SURFACE CLOSER (W/ SPRING STOP & HO)	4040XP SHCUSH	689	LCN
1	EA	RAIN DRIP	142AA (EXTERIOR FRAME HEAD	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER

(continues on following page)

HARDWARE GROUP NO. A04

For use on Door #(s):
002

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	MORTISE LOCK, ENTRY	45H-7-T-15H	626	BES
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	WALL STOP/HOLDER	WS20/WS20X	626	IVE
1	EA	RAIN DRIP	11A (BOTTOM EXTERIOR DOOR FACE)	A	ZER
1	EA	RAIN DRIP	142AA (EXTERIOR FRAME HEAD)	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR BOTTOM, INSWING HMD	381A	A	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER

HARDWARE GROUP NO. A05

For use on Door #(s):
006

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	STOREROOM LOCK	L9080BDC 06A	626	SCH
1	EA	PERMANENT CORE (SFIC EVEREST)	80-037 EV29 R	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

(continues on following page)

HARDWARE GROUP NO. A06

For use on Door #(s):
003 008

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	MORTISE LOCK, STOREROOM	45H-7-D-15H	626	BES
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	WALL STOP/HOLDER	WS20/WS20X	626	IVE
1	EA	RAIN DRIP	11A (BOTTOM EXTERIOR DOOR FACE)	A	ZER
1	EA	RAIN DRIP	142AA (EXTERIOR FRAME HEAD)	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR BOTTOM, INSWING HMD	381A	A	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER

HARDWARE GROUP NO. A07

For use on Door #(s):
D100

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	SET	CONST LATCHING BOLT (HM)	FB51P	630	IVE
1	EA	MORTISE LOCK, STOREROOM	45H-7-D-15H	626	BES
2	EA	OH STOP & HOLDER	90F	630	GLY
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	ASTRAGAL, OVERLAP	383AA	AA	ZER

HARDWARE GROUP NO. A08

For use on Door #(s):
116

Provide each OPENING with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR

ALL HARDWARE BY DOOR MANUFACTURER/SUPPLIER.

(continues on following page)

2.9 09 64 43 – STAGE FLOORING

A. Insert section in its entirety.

2.10 09 66 23 – PRE-CAST TERRAZZO FLORING

A. Add section 2.01F as follows:

"F. Victory Surfaces, LLC."

2.11 09 66 25 – TERRAZZO FLOORING - VITRIFICATION

A. Add section 2.01A4 as follows:

"4. Victory Surfaces, LLC."

2.12 10 14 23 – PANEL SIGNAGE

A. Remove section 2.07 ACRYLIC RECORD BOARDS in its entirety.

B. Revise section 3.03A1 to read as follows:

1. Material: Back-painted acrylic on acrylic backup sheet, see drawings for more information.

2.13 11 06 00 – STAGE RIGGING SYSTEM

A. Insert section in its entirety.

2.14 11 66 23 – GYMNASIUM EQUIPMENT

A. Remove section 2.05D in its entirety.

2.15 12 32 16 – MANUFACTURED PLASTIC LAMINATE FACED CASEWORK

A. Euronique Inc. and Midwest Cabinet Solutions are approved to provide manufactured plastic laminate casework per architect's review.

2.16 12 61 00 – FIXED AUDIENCE SEATING

A. Add section 2.11d as follows:

'd. Davis Furniture Company – Convention T 35" Back.'

Note: Specified fabric is required for all listed manufacturers.

2.17 14 24 00 – HYDRAULIC ELEVATORS

A. Revise section 2.03B13 to **3,500H** lbs. in lieu of 5,000H lbs. indicated.

2.18 26 05 61 – STAGE LIGHTING SYSTEMS

A. Insert section in its entirety.

2.19 27 41 16.61 – INTEGRATED AV SYSTEMS FOR THEATER

A. Insert section in its entirety.

2.20 23 33 00 – DUCTWORK ACCESSORIES

A. Portoff added as acceptable manufacturer of volume control dampers.

B. Portoff added as acceptable manufacturer of fire dampers.

C. Portoff added as acceptable manufacturer of backdraft dampers.

D. Portoff added as acceptable manufacturer of duct access doors.

2.21 23 36 00 – AIR TERMINAL UNITS

A. Metalaire added as acceptable manufacturer of Air Terminal Units.

B. Warren added as acceptable manufacturer of Air Terminal Units.

2.22 23 65 13.16 - CLOSED-CIRCUIT, FORCED-DRAFT COOLING TOWERS

A. Part 1.08 C: Delete FM Global listing requirement.

B. Part 2.05 A.9: Delete paragraph.

C. Part 2.06: Delete paragraph B.

D. Part 2.09 A: Revise materials to be galvanized or stainless steel. Copper not acceptable.

E. Part 2.12 B.7: Delete section.

F. Part 2.12 C.8: Delete paragraph.

G. Part 2.14 B 7.c: Delete paragraph.

H. Part 2.17 A: Delete section.

2.23 27 51 23 – INTERCOM AND CLOCK SYSTEM

A. Change 2.10, A to read, “Call switches shall be ECS-6, call only type.”

2.24 27 60 00 – SOUND SYSTEMS

A. Add the following sentence to the end of 2.02, B, 1, "Acceptable manufacturer is Fulcrum Acoustic GX1200."

2.25 28 14 00 – ACCESS CONTROL SYSTEM

A. Add the following as 2.01, A, 2, "Security Contractor of record for Silver Creek Schools is ECT Services Inc., Patrick Fisher, pfisher@ectservices.com, 502-424-2916"

2.26 28 16 00 – INTRUSION DETECTION SYSTEM

A. Add the following as 2.01, A, 3, "Security Contractor of record for Silver Creek Schools is ECT Services Inc., Patrick Fisher, pfisher@ectservices.com, 502-424-2916"

PART 3 - DRAWINGS

CIVIL

3.1 C101 – DEMOLITION PLAN

A. Add drawing scale 1" = 100'-0".

3.2 C102 – DEMOLITION PLAN

A. Add drawing scale 1" = 40'-0".

3.3 C103 – DEMOLITION PLAN

A. Add drawing scale 1" = 40'-0".

3.4 C104 – DEMOLITION PLAN

A. Add drawing scale 1" = 40'-0".

3.5 C105 – DEMOLITION PLAN

A. Add drawing scale 1" = 40'-0".

3.6 C403 – DRAINAGE PLAN

A. Revised roof drain size from 8" to 12" to match Plumbing Plans for Auditorium addition.

3.7 C503 – UTILITY PLAN

A. Revised sanitary lateral connections to match Plumbing Plans at the north end of the High School.

B. Revised coordination notes for combination fire/domestic water pit and connecting pipes.

C. Added concrete bollards for water vault and hydrant protection

D. Revised length of water main connection around Auditorium

STRUCTURAL

3.8 S203J – ROOF & CATWALK FRAMING PLAN – UNIT J

A. Revise top of steel elevation of W36x256 beam along grid JE to +27'-8".

3.9 S722 – FRAMING SECTIONS & DETAILS

A. 8/S722: Revise top of bond beam elevation above W36x256 beam to +28'-8".

ARCHITECTURAL

3.10 A201 THRU A219.5 - FLOOR PLANS

A. Revise plan note #6 to read PREFINISHED ALUMINUM SUNCREEN ATTACHED TO STOREFRONT VERTICALS - SEE SPECIFICATON 10 70 00 AND DETAIL 3/A401.

B. Revise plan note #27 to read PLASTIC LAMINATE SHELF AND CLOTHES ROD, SEE 22/A614 AND SPECIFICATION 10 57 00.

3.11 A208 – FIRST FLOOR PLAN – UNIT H

A. STORAGE H108D Add plan note #27 to shelving shown on plan North and West wall of room.

B. Revise Door H109 to have 130' swing in lieu of 90' shown.

3.12 A209 – FIRST FLOOR PLAN – UNIT J

A. COSTUME J119B Add plan note #27 to shelving shown on plan North, East and West walls.

B. COSTUME STORAGE J120 Add plan note #27 to shelving shown on plan South, East and West walls.

C. COSTUME J121B Add plan note #27 to shelving shown on plan South, East and West walls.

3.13 A400 SERIES DRAWINGS – KEYNOTE LEGEND

A. Revise keynote 08 41 13-D ALUMINUM SUN SHADE to 10 70 00-A EXTERIOR SUN CONTROL DEVICE.

3.14 A411 – WALL SECTIONS

A. 1/A411 WALL SECTION – BAND EAST revise section as shown on enlarged detail 4/A421 attached with this Addendum. Sheet A411 not re-issued with this addendum.

B. 2/A411 WALL SECTION – BAND SOUTH revise section as shown on enlarged detail 7/A421 attached with this Addendum. Sheet A411 not re-issued with this addendum.

3.15 A414 – WALL SECTIONS AND DETAILS

A. Replace detail 5/A414 PROSCENIUM WALL DETAIL with 5/A414 PROSCENIUM WALL – HEAD DETAIL as shown on attached sheet A414.

3.16 A421 – ENLARGED SECTION DETAILS

A. Revise detail 4/A421 WALL TO ROOF EXPANSION JOINT DETAIL as shown on attached sheet A421.

B. Revise detail 7/A421 WALL TO WALL EXPANSION JOINT as shown on attached sheet A421.

3.17 A600 – CASEWORK SCHEDULES

A. Add comment to COUNTER TOPS AND ACCESSORIES item SR2 to read PROVIDE EKENA MILLWORK MODEL# BKTM02X12X07HSCRS SHELF BRACKET WITH 12" PLASTIC LAMINATE SHELF

3.18 A501 DOOR SCHEDULE

A. Revise Doors C106, D102, D122, D145, and D152 to have elevation **D1**.

B. Revise Door C102-1 Door Material to **ETR**.

C. Revise Door C111-3 Door Material to **HM**.

3.19 A502 DOOR SCHEDULE

A. Revise Door E100-1, H109, and H118 to have elevation **D1**.

B. Revise Door H103 Door Material to **HM**.

3.20 A503 – DOOR SCHEDULE AND FRAME ELEVATIONS

A. Revise Door D202 to have elevation **D1**.

B. The following frame elevations are aluminum: F15, F17,

3.21 A506 – FRAME ELEVATIONS

A. Add hollow metal frame designation to frame F45.

3.22 A601 – INTERIOR ELEVATIONS

A. 1/A601:

1. Text with leaders to edges of TS1 & WC3 added to read as follows:

a. **J-TRIM PERIMETER, SEE 3/A900**

B. 2/A601:

1. Text with leaders to edges of TS1 & WC3 added to read as follows:

a. **J-TRIM PERIMETER, SEE 3/A900**

C. 5/A601:

1. Text added to end of dimensional signage callout to read as follows:

a. **NOTE: CENTERED ON WIDTH OF WALL, TYP.**

2. "CL" centerline indication added to monitor height dimension.

D. 6/A601:

1. Missing "H" added to "ATHLETICS" dimensional signage text, font size changed from 9"h to 7"h, & associated overall signage height adjusted accordingly.

2. Text added to end of dimensional signage callout to read as follows:

a. **NOTE: CENTERED ON WIDTH OF WALL, TYP**.

3.23 A602 – INTERIOR ELEVATIONS – BAND ROOM

A. 1/A602: Keyed Finish Note F13 added to curtain tags CR1.

B. 2/A602: Keyed Finish Note F13 added to curtain tags CR1.

3.24 A604 – INTERIOR ELEVATIONS – AUDITORIUM

A. 1/A604: "**TYP**." added to panel finish tags & grain direction arrows.

B. 2/A604: "**TYP**." added to panel finish tags & grain direction arrows.

3.25 A606 – INTERIOR ELEVATIONS – STUDENT UNION

A. 5/A606: Note with leader pointing to edge of finish WC3 added to read as follows:

1. **J-TRIM AT PERIMETER, TYP**.

3.26 A607 – INTERIOR ELEVATIONS – MAIN ENTRY

A. 1/A607:

1. All finish tags WP6 changed to WP8

2. All finish tags WP7 changed to WP9

B. 7/A607: Note with leader pointing to edge of finish WC3 added to read as follows:

1. **J-TRIM AT PERIMETER, TYP**.

C. 8/ A607: Note with leader pointing to edge of finish WC3 added to read as follows:

1. **J-TRIM AT PERIMETER, TYP**.

D. 9/ A607: Note with leader pointing to edge of finish WC3 added to read as follows:

1. **J-TRIM AT PERIMETER, TYP**.

3.27 A611 – CASEWORK ELEVATIONS

1. 17/A611 CASEWORK ELEVATION – BREAKROOM E137 Revise casework tag CT2 to CT4.

3.28 A613 – CASEWORK ELEVATIONS

A. 1/A613 CASEWORK ELEVATION – WORK ROOM D108 Revise casework tag CT2 to CT4.

B. 2/A613 CASEWORK ELEVATION – PUBLICATIONS D114A Revise casework tag CT2 to CT4.

C. 3/A613 CASEWORK ELEVATION – WORK ROOM D128 Revise casework tag CT2 to CT4.

D. 14/A613 CASEWORK ELEVATION – FACS G116 Revise casework tag CT2 to CT4.

E. 16/A613 CASEWORK ELEVATION – STORAGE G119 Revise casework tag CT2 to CT4.

3.29 A616 – CASEWORK ELEVATIONS

A. 6/A616 CASEWORK ELEVATION DRESSING ROOM J121 Revise casework tag CT4 to CT2.

3.30 A800 – FINISH LEGEND & NOTES

A. General Finish Note 23 added to read as follows:

1. **ACADEMIC LOCKERS IN ALL CORRIDORS MUST MATCH FINISH P3**.

B. Keyed Finish Note F54 revised to read as follows:

1. **C2 PLANK EDGE TO ALIGN WITH EDGE OF STEP, TYP**.

C. Keyed Finish Note F56 referenced elevation corrected to **7/A800**.

D. Text added to end of "NOTE" section of finish LVT5 to read as follows:

1. PLANK TO RUN NORTH/SOUTH**, UNLESS PATTERN ON SHEETS INDICATE OTHERWISE**

E. "NOTE" section added to finish LVT6 to read as follows:

1. **NOTE: LVT TO ALWAYS BE CENTERED WITHIN EXTENTS OF FINISH APPLICATION IN A MANNR THAT REDUCES SMALL CUT PIECES**.

F. 3/A800: Finish tag WT9 added to clearly identify the tile coursing between two WT10 coursings.

3.31 A801 – FIRST FLOOR FINISH PLAN – UNIT A

A. Keyed Finish Note F38 added at Laundry A127.

B. Finish tag WP10 changed to WP11 at Lobby A101 North wall.

C. Finish tags WP3, WP4, & WP5 removed from & Keyed Finish Note F63 added to main feature wall at Lobby A101 Northwest wall.

3.32 A804 – FIRST FLOOR FINISH PLAN – UNIT D

A. Keyed Finish Note F38 added at Science Classroom D142.

B. Casework finish tag PL1 removed from Stacks D138.

3.33 A806 – FIRST FLOOR FINISH PLAN – UNIT F

A. Keyed Finish Note F38 added at Vending F108.

B. Casework finish tag PL1 changed to PL7.

C. Arrows added to finishes at ramp to ensure understanding that finishes are applied to entire length of ramp, not just landing.

3.34 A809 – FIRST FLOOR FINISH PLAN – UNIT J

A. Additional finish direction arrows added to C2 to ensure understanding that all carpet on floor runs the same direction, U.N.O.

B. Keyed Finish Note F54 added to C2 on stairs to indicated plank direction.

3.35 A900 – EQUIPMENT SCHEDULE AND DETAILS

A. Fill in schedule for HD2 as follows

HD2 | MUSIC LIBRARY SYSTEM – SHEET MUSIC STORAGE | 12 32 19 | WENGER CORPORATION | - | - | CONTRACTOR | CONTRACTOR.

3.36 A901 thru A919 EQUIPMENT PLAN NOTES

A. Revise equipment plan note #12 to read ¼" HARDBOARD PEGBOARD ON WALL ABOVE COUNTERTOP. PEGBOARD TO BE MOUNTED TO ¾" FURRING STRIPS WITH HARDWOOD TRIM (06 40 00) AROUND PERIMETER.

3.37 A904 – FIRST FLOOR EQUIPMENT PLAN – UNIT D

A. Alcove at end of SMALL GROUP D110 & D118 Add casework centered in alcove consisting of base cabinets B35, B37 and B35 with equal FP1 fillers each side and a CT3 counter at each location.

B. MAKER SPACE D141 Add elevation marker 10/A613 to plan South wall of room.

C. BOOK STORAGE D140 Add elevation marker 4/A613 to plan South wall of room.

3.38 A908 – FIRST FLOOR EQUIPMENT PLAN – UNIT H

A. MUSIC LIBRARY H106 Revise equipment tag HD1 to HD2.

B. EDIT H113B Add elevation marker 19/A613 to plan west wall of room.

3.39 A914 – SECOND FLOOR EQUIPMENT PLAN – UNIIT D

A. Alcove at end of SMALL GROUP D210 & D218 Add casework centered in alcove consisting of base cabinets B35, B37 and B35 with equal FP1 fillers each side and a CT3 counter at each location.

3.40 A921 – SIGNAGE

A. Revise 'Signage General Note' number 6 to read as follows:

'6. Provide painted acrylic back covers to match sign at all locations signs are mounted on glass."

B. Revise note on POST AND PANEL DIRECTIONAL SITE SIGNAGE, SIGN 1, SIDE A to read as follows:

'2.5" Helvetica medium font (white) die-cut vinyl letters.'

MEP SITE PLAN

3.41 UD201 – ELECTRICAL SITE DEMOLITION PLAN:

A. Keynotes 4, 5 added to sheet.

3.42 U101 – PLUMBING SITE PLAN

A. Keynote 7 shall read, "NEW COMBINATION DOMESTIC WATER, FIRE PROTECTION SERVICES VAULT. REFER TO CIVIL DRAWINGS. VAULT PROVIDED BY UTILITY COMPANY. COORDINATE ALL REQUIREMENTS BETWEEN CIVIL ENGINEER AND UTILITY COMPANY PRIOR TO INSTALLATION."

B. Removed keynote 12.

C. Added new sanitary and existing storm piping.

D. Removed pipe adjacent to kitchen grease trap.

E. Revised inverts coming from unit H.

F. Added a detail for the combination fire service / domestic water service vault. Vault to be furnished and installed under this contract.

3.43 U201 – ELECTRICAL SITE PLAN:

A. Keynotes 16, 17, 18, 19, 20 added to sheet.

B. OL6 fixtures changed to OL5 fixtures.

C. Added power and fire alarm circuit to fire suppression vault.

FIRE SUPRESSION

3.44 FP001 – FIRE PROTECTION LEGEND & GENERAL NOTES

A. Fire Protection Vault Detail omitted from drawing.

B. Fire Protection Zone Riser detail revised. Refer to drawing FP001 for more information.

PLUMBING

3.45 PD104 – FIRST FLOOR DEMOLITION – UNIT D – PLUMBING

A. Added keynote 7 to north wall of courtyard. Keynote 7 states "DEMOLISH EXISTING HOSE BIBB AND DOMESTIC WATER LINE BACK TO MAIN AND CAP".

3.46 PD105 – FIRST FLOOR DEMOLITION – UNIT E – PLUMBING

A. Added keynote 12 to south wall of courtyard. Keynote 12 states "DEMOLISH EXISTING HOWE BIBB AND COMESTIC WATER LINE BACK TO MAIN AND CAP".

B. Revised keynote 2 to include: "DEMOLISH HYDRONIC FILL ASSEMBLY AND NATURAL GAS PIPING SERVING WATER HEATERS AND BOILERS".

3.47 P102 – FIRST FLOOR – UNIT B – SANITARY

A. Revised 1" vent line in bathroom B123. Accurate vent sizing shown on sanitary sewer riser on sheet P503.

3.48 P103 – FIRST FLOOR – UNIT C – SANITARY

A. Revised sink in room C104A to be S1A.

3.49 P104 – FIRST FLOOR – UNIT D – SANITARY

A. Revised sinks in rooms D127, D130, D142, and D148 to be S1A.

B. Revised sink in room D128 to be S3A.

3.50 P105 – FIRST FLOOR – UNIT E – SANITARY

A. Removed sanitary drain for mop basin in room E117A. Mop basin not to be installed.

B. Revised sink tags in rooms E117, E110, E110A, E106, E104, and E137A.

C. Revised water closet tag in E137A and mop basin drain in E102.

D. Revised clean out tags in room E110.

E. Revised vent piping in room E110A.

3.51 P106 – FIRST FLOOR – UNIT F – SANITARY

A. Revised sanitary line running between grease and acid waste lines at exterior of building. Sanitary line will tie-in to grease line after grease trap and prior to connection with existing site sanitary line.

B. Revised sink tag.

3.52 P108 – FIRST FLOOR – UNIT H – SANITARY

A. Revised existing storm line running through plan east side of building. Revised tie-in points for new storm pipe connecting to existing storm pipe.

B. Revised demolition of existing storm line running from restroom H114.

C. Removed underslab linetype from storm pipe running through Walk-In Cooler H120B.

D. Added underslab linetype to 4" sanitary pipe feeding Laundry H129.

3.53 P109 – FIRST FLOOR – UNIT J – SANITARY

A. Added floor drain in room J128.

B. Added floor drain tags in J125 and J123.

3.54 P201 – FIRST FLOOR – UNIT A – DOMESTIC WATER

A. Added new exterior wall hydrant in near A128A and CW piping to nearest domestic CW main.

3.55 P202 – FIRST FLOOR – UNIT B – DOMESTIC WATER

A. Updated plumbing fixture labels.

B. Added ETP's with CW connections.

3.56 P203 – FIRST FLOOR – UNIT C – DOMESTIC WATER

A. Removed domestic piping to Biomed C104 tables.

B. Revised sink labels.

C. Added trap primer and CW connection.

D. Added wall hydrant to north exterior wall and connected CW piping to nearest domestic CW main.

3.57 P204 – FIRST FLOOR – UNIT D – DOMESTIC WATER

A. Added new exterior wall hydrantS in courtyard D146 and south exterior wall. CW piping to nearest domestic CW main.

B. Updated sink labels.

C. Added ETP's and CW connections.

3.58 P205 – FIRST FLOOR – UNIT E – DOMESTIC WATER

A. Added new exterior wall hydrant in courtyard E108 and north exterior wall. CW piping to nearest domestic CW main.

B. Updated sink labels.

C. ETP and TP added with CW connections.

3.59 P206 – FIRST FLOOR – UNIT F – DOMESTIC WATER

A. Added new exterior wall hydrant near F108 and CW piping to nearest domestic CW main.

B. Added trap primer and CW connection.

3.60 P208 – FIRST FLOOR – UNIT H – DOMESTIC WATER

A. Added new exterior wall hydrant in courtyard E108 and CW piping to nearest domestic CW main.

B. Added new exterior wall hydrant near room H120F and CW piping to nearest domestic main.

C. Added keynote 2.

D. Adjusted domestic piping in Women H121 and Men H123 to properly serve fixtures.

E. Added ETP and CW connection.

3.61 P209 – FIRST FLOOR – UNIT J – DOMESTIC WATER

A. Added keynotes 2, 3, 4, and 5.

B. Added back flow preventer at domestic water service entry.

C. Revised domestic water building entry location in room J130.

D. Updated sink label.

E. Routed CW and HW to meet sink.

F. Added ETP and CW connection.

3.62 P210 – SECOND FLOOR – UNIT D – DOMESTIC WATER

A. Added ETP's and associated CW connections on floor below.

3.63 P401 – ENLARGED KITCHEN PLAN

A. Added tag notes added for WC2A and L2A in room R/R E132.

B. Added drains to enlarged sanitary sewer plan.

C. Added general note B regarding kitchen equipment information.

3.64 P402 – ENLARGED KITCHEN PLAN

A. Added pipe sizes to enlarged sanitary sewer and domestic water floor plans.

B. Added drains to enlarged sanitary sewer plan.

C. Added general note B regarding kitchen equipment information.

D. Revised sanitary grease line size near plan east wall from 2" to 4".

3.65 P501 – PLUMBING DETAILS

A. Added domestic water service entrance detail.

3.66 P503 – PLUMBING RISERS

A. Revised sanitary lines in rooms A111 and A104 to avoid structural conflicts.

B. Removed drain for mop basin on sanitary line in room E117.

3.67 P504 – PLUMBING RISERS

A. Revised sanitary line in bathroom D104 to avoid structural conflicts.

B. Revised equipment tags.

3.68 P505 – PLUMBING RISERS

A. Revised equipment tags and sanitary pipe routing in kitchen.

3.69 P506 – PLUMBING RISERS

A. Revised riser to accurately show floor drain location in room J200.

3.70 P507 – PLUMBING RISERS

A. Revised sink tags. Sink in room C104A revised to be S1A. Sink tag revision in unit F shown on P106.

3.71 P601 – PLUMBING SCHEDULES

A. Revised domestic water heater schedule. Added MCA rating of 6.8 and MOCP rating of 15 for DWH-1.

B. Revised domestic hot water recirculation pump schedule. Pumps RCP-1, 2, and 3 are all located in mechanical room E138 and have 1" inlet/outlet connections.

C. Revised expansion tank schedule. Expansion tank ET-1 located in mechanical room E138.

D. Revised plumbing fixture schedule for urinals U1/U1A. Trim revised to show new flush valve model number and associated power kit. Trim section includes: "Flush Valve: American Standard 606B.101.002" and "Power Kit: PK00.HAC"

E. Added FPWH1 to plumbing fixture schedule.

MECHANICAL

3.72 M002 – MECHANICAL LEGEND

A. All instances of the term cooling tower are to be changed to fluid cooler.

3.73 MD101 – FIRST FLOOR DEMOLITION – UNIT A – MECHANICAL

A. Existing fan coil in vestibule tagged with Keynote 3 shall remain. Keynote 3 removed.

B. Keynote 10 added stating "EXISTING UNIT TO REMAIN."

C. Keynote 10 applied to unit in plan northeast vestibule.

3.74 MD102 – FIRST FLOOR DEMOLITION – UNIT B – MECHANICAL

A. Existing fan coil units in gym vestibule tagged with Keynote 3 shall remain. Keynote 3 removed.

B. Keynote 6 shall read, "EXISTING UNIT TO REMAIN."

C. Keynote 4 removed from units in plan east lobby. Replace with Keynote 6.

3.75 MD103 – FIRST FLOOR DEMOLITION – UNIT C – MECHANICAL

A. Keynote 7 added stating "EXISTING UNIT TO REMAIN."

B. Keynote 3 removed from unit in plan east corridor. Replaced with Keynote 7.

3.76 MD105 – FIRST FLOOR DEMOLITION – UNIT E – MECHANICAL

A. Keynote tags added on floorplan clarifying demolition scope. See plan for additional information.

B. Boilers added to existing boiler room to clarify extent of demolition. Hydronic water lines added to existing boiler room and corridor connecting to plan unit F.

3.77 MD106 – FIRST FLOOR DEMOLITION – UNIT F – MECHANICAL

A. Instance of Keynote 2 within existing concession room to be removed.

B. Keynote 3 shall read, "EXISTING AIR DEVICES, ASSOCIATED DUCTWORK, AND CONTROLS TO REMAIN."

C. Hydronic piping and existing to remain radiant ceiling panels added in corridor.

3.78 MD111 – OVERALL ROOF DEMOLITION - MECHANICAL

A. Keynote 7 added to RTU-200-11. RTU-200-11 no longer existing to remain.

3.79 M101 – FIRST FLOOR – UNIT A – HVAC

A. Corridor A126C to be served by RTU-100-1. See drawing for revised duct layout.

B. Exhaust grille E-3 in Lobby A101 to be balanced to 250 cfm.

3.80 M102 – FIRST FLOOR – UNIT B – HVAC

A. Sizes added to supply and exhaust ducts in locker room area for clarity. See drawings for more information.

B. Keynote 3 shall read, "PROVIDE NEW ALUMINUM SUPPLY AND EXHAUST AIR DUCTWORK, TAPS AND SIDEWALL DIFFUSERS / GRILLES. DUCTWORK TAPS AND DIFFUSERS TO BE FIELD PAINTED."

3.81 M108 – FIRST FLOOR – UNIT H – HVAC

A. Refer to washer / dryer in Culinary H120. 4"Ø dryer vent added serving dryer. Note added specifying dryer vent to be routed to dryer vent curb on roof.

3.82 M109 – FIRST FLOOR – UNIT J – HVAC

A. Refer to room J124 Restroom: instance of Keynote 5 shown in space to be Keynote 3.

B. EH-3 added to Vestibule J112.

C. Keynote 15 added stating, "ELECTRIC CEILING HEATER. MOUNT IN CEILING GRID."

D. Keynote 15 applied to EH-3 in Vestibule J112.

3.83 M110 – SECOND FLOOR – UNIT B – HVAC

A. ERV-6A and ERV-6B are to be renamed ERV-4A and ERV-4B respectively to match schedule.

3.84 M201 – FIRST FLOOR – UNIT A – MECHANICAL PIPING

A. Thermostat located in A109 IDF to be tagged EF-26.

3.85 M401 – ENLARGED MECHANICAL ROOM PLANS

A. Previously depicted sanitary pipes have been removed from view to avoid confusion.

B. CWS/HWS Piping relabeled for clarity.

C. Match lines hidden for clarity.

D. HP-1A renamed HP-2X.

E. HP-2AD renamed HP-2Y.

F. HP-1C renamed HP-5B.

G. HP-1B renamed HP-1J.

H. Refer to supply diffusers S-6 serving Mechanical Expansion J128: diffusers to be balanced to 250 CFM.

3.86 M402 – ENLARGED MECHANICAL ROOM PLANS

A. Mechanical room D135 revised to provide outside air connections for HP-1D and HP-5A. See revised sheet for duct route and airflow requirements.

B. Mechanical room D228 updated to show revised outside air and exhaust connection sizes for DOAS-2.

C. Mechanical room D228 updated to show VFD-RF1 serving RF-1.

D. Mechanical room D228 updated to show VFD-RF2 serving RF-2.

3.87 M501 – MECHANICAL DETAILS

A. Refer to schematic: CWS/HWS Piping relabeled for clarity.

3.88 M601 – MECHANICAL SHCEDULES:

A. Refer to Dedicated Outdoor Air System (WSHP) Schedule: DOAS-1 reselected, and additional performance data provided for both units. Both units to be provided with modulating hot gas reheat. DOAS-2 shall allow split WSHP and ERV if required to meet spec. Equipment provider to be responsible for meeting static pressure requirements in schedule. Any additional electrical modifications required to split unit to be covered by equipment provider and coordinated with electrical contractor. See below for updated data.

MARK	MANUFACTURER	MODEL	NOMINAL TONNAGE	CAPACITY MODULATION	ESP (IN H20)	OUTSIDE AIR (CFM)	EXHAUST AIR (CFM)	FLUID FLOW (GPM)	COOLING CAPACITIES						
									WPD (FT H20)	LWT (°F)	LAT		TOTAL (MBH)	SENSIBLE (MBH)	EER AT DESIGN CONDITIONS
											LDB (°F)	LWB (°F)			
DOAS-1	AAON	M2-H-026	26	2-STAGE	2.00	12,000	12,000	150	10.9	94.0	53.0	52.0	942.9	525.2	11.8
DOAS-2	AAON	SB-003	3	2-STAGE	1.75	950	850	11	6.6	95.0	53.2	51.7	41.1	29.2	13.1

MARK	HEATING CAPACITIES					HOT GAS REHEAT				ELECTRICAL		
	HEATING AIRFLOW (CFM)	LWT (°F)	LDB (°F)	TOTAL (MBH)	COP AT DESIGN CONDITIONS	AIRFLOW (CFM)	EAT DB/WB (°F)	LAT DB/WB (°F)	TOTAL CAPACITY (MBH)	V/Ø/Hz	MCA	MOCP
DOAS-1	12000	52.4	101.6	738.67	4.2	12,000	53.0/52.0	70.0/58.0	220.0	460/3/60	123.0	125
DOAS-2	950	66.1	112.3	58.9	9.9	950.0	53.0/52.0	70.0/58.0	24.0	460/3/60	11.0	15

MARK	ENERGY RECOVERY													REMARKS
	TYPE	WINTER						SUMMER						
		AMBIENT		SUPPLY		RETURN		AMBIENT		SUPPLY		RETURN		
		EDB (F)	EWB (F)	LDB (F)	LWB (F)	EDB (F)	EWB (F)	EDB (F)	EWB (F)	LDB (F)	LWB (F)	EDB (F)	EWB (F)	
DOAS-1	WHEEL	0.0	-1.0	42.0	37.0	70.0	58.0	95.0	78.0	82.3	68.2	75.0	62.0	ALL
DOAS-2	WHEEL	0.0	-1.0	43.0	38.0	70.0	58.0	95.0	78.0	80.2	66.0	75.0	62.0	ALL

B. Refer to Heat Pump Unit Schedule: HP-1J added to schedule.

C. Refer to Heat Pump Unit Schedule: HP-2X added to schedule.

D. Refer to Heat Pump Unit Schedule: HP-2Y added to schedule.

E. Refer to Heat Pump Unit Schedule: HP-5B added to schedule.

F. Refer to Electric Heater Schedule: Oulette added as acceptable manufacturer.

G. Refer to Pump Schedule: Remark 6 omitted.

3.89 M603 – MECHANICAL SHCEDULES:

A. Refer to Exhaust Fan Schedule: Fan added serving E124 IDF. EF-28 in schedule changed to EF-28A and EF-28B. EF-28B serving E124 IDF. See sheet M105 for location on roof. Coordinate penetration and roof repair scope with roofing contractor.

B. Refer to VFD Schedule: Add VFD-RF1 and VFD-RF1 to existing schedule. See revised schedule below.

VFD SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	LOCATION	ENCLOSURE	ELECTRICAL			REMARKS
						HP	V / Ø / Hz	BYPASS	
VFD-P1,P2,P3	ABB	ACH580	HEAT PUMP LOOP	CENTRAL PLANT	NEMA 12	7.5	480/3/60	NO	ALL
VFD-P6,P7	ABB	ACH580	FLUID COOLER PUMPS	CENTRAL PLANT	NEMA 12	5	480/3/60	NO	ALL
VFD-P8,P9	ABB	ACH580	HEATING LOOP	CENTRAL PLANT	NEMA 12	2	480/3/60	NO	ALL
VFD-RF1	ABB	ACH580	AHU-1 RETURN	MECHANICAL D228	NEMA 12	1.5	480/3/60	NO	ALL
VFD-RF2	ABB	ACH580	AHU-2 RETURN	MECHANICAL D228	NEMA 12	2	480/3/60	NO	ALL

REMARKS:
1. VFD SHALL INCLUDE COMMUNICATION PORT FOR COMMUNICATION TO BUILDING MANAGEMENT SYSTEM. COORDINATE WITH TCC. REFER TO CONTROL SPECIFICATIONS FOR POINT LIST REQUIREMENTS
2. PROVIDE WITH INTEGRAL, LOCKABLE, NON-FUSED DISCONNECT SWITCH.
3. VFD TO BE MOUNTED ON VERTICAL UNISTRUT. VERIFY ALL VFD LOCATIONS AND MOUNTING METHODS WITH ENGINEER PRIOR TO INSTALLATION.
4. VFD TO BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
5. PROVIDE FILTER MATERIAL ON VFD FAN INLET DURING CONSTRUCTION.
OTHER ACCEPTABLE MANUFACTURERS: DANFOSS, YASKAWA. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

C. Refer to Gravity Hood Schedule: PennBarry added as acceptable manufacturer.

D. Refer to Air Separator Schedule: Wessels added as acceptable manufacturer.

E. Refer to Expansion Tank Schedule: Wessels added as acceptable manufacturer.

F. Refer to Air Device Schedule: Portoff to be included as acceptable manufacturer of louvers.

3.90 M701 – Mechanical Points List

A. Refer to Destratification Fan points list: Sequence of Operation omitted.

B. Refer to General Exhaust Fan points list: Sequence of Operation omitted.

ELECTRICAL

3.91 ED102 - FIRST FLOOR DEMOLITION – UNIT B – ELECTRICAL:

A. SHEET NOTES: Added note 16, to demolish existing goal controls.

B. Added goal control switches to gymnasium.

C. SHEET NOTES: Added note 17.

D. SHEET NOTES: Added note 18.

E. Added existing stairwell fixtures.

F. Added existing storage lighting.

3.92 ED104 – FIRST FLOOR DEMOLITION – UNIT D – ELECTRICAL:

A. SHEET NOTES: Change sheet note 4 to "EXISTING MDF RACK AND EQUIPMENT TO REMAIN IN PLACE AND FUNCTIONAL UNTIL NEW NETWORK BACKBONE CABLING IS INSTALLED AND FUNCTIONAL. UTILIZE NEW EXTERIOR UNDERGROUND PATHWAY TO ROUTE FIBER OPTIC CABLES AROUND AREA OF DEMOLITION AND NEW CONSTRUCTION. ONCE NEW CABLING IS INSTALLED AND FUNCTIONAL, MDF RACK AND EQUIPMENT IS TO BE REMOVED AND TURNED OVER TO OWNER."

B. Remove "EXISTING MDF ROOM & FA PANEL" TEXT.

3.93 ED107 – FIRST FLOOR – UNIT G – ELECTRICAL:

A. Changed light fixture in IDF room from 'DEMO' to 'EXISTING TO REMAIN'.

3.94 E101 – FIRST FLOOR LIGHTING PLAN- UNIT A

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Power packs added in various rooms.

D. Emergency relays added in various rooms

E. Switches added in various rooms.

F. Switch type changed in various rooms.

G. Junction box and homerun added to Lobby A101.

H. Rooms A118A and A120A changed to line voltage.

I. Ceiling mounted occupancy sensors added in various rooms.

J. Room A125 added to scope of work.

K. Various fixtures added to Unit A emergency circuit.

L. Homerun added for Unit A emergency circuit in Office A124.

M. Keynote 3 added to sheet.

3.95 E102 – FIRST FLOOR LIGHTING PLAN- UNIT B

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Power packs added in various rooms.

D. Emergency relays added in various rooms

E. Keynote 3 added to existing gym lights.

F. Corner fixtures added to showers B113B, B114B, B123A, B124A.

G. Storage B124C and Custodial B128A changed to line voltage.

H. Ceiling mounted occupancy sensors added to Storage B132 and B131.

I. Switches added to various rooms.

J. Homeruns added to Corridor B115, B129.

K. Emergency homerun added to corridor B129.

L. Fixtures replacing existing in Stairwells B106, B116, B120, B130.

M. Fixtures replacing existing in Storage B107, B119.

3.96 E103 – FIRST FLOOR LIGHTING PLAN- UNIT C

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Existing exterior lights added.

D. Keynote 1 added to sheet.

E. Keynote 2 added to sheet.

F. Occupancy sensor added to Vestibule C100.

G. Switch added to Vestibule C100.

H. Junction boxes added to Corridor C106.

I. Homerun added to Corridor C106.

3.97 E104 – FIRST FLOOR LIGHTING PLAN- UNIT D

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Junction boxes added to Student Union D139.

D. Power Packs added and removed from Flex room D102A and D122A.

E. Occupancy sensors added various rooms.

F. Switches added to various rooms.

G. Switches removed from various rooms.

H. Keynotes 3, 4, 5, 6, 7, 8 added to sheet.

I. Emergency homerun added to Courtyard D146.

J. Emergency homerun added to exterior.

3.98 E105 – FIRST FLOOR LIGHTING PLAN- UNIT E

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Added grow light (Type S), circuit, and switch in Science Lab E110.

D. Track Light added to Art 2-D E103.

E. Switches added to rooms E103 and E111.

F. Junction boxes added to Student Union room E111.

G. Low voltage homerun added to Student Union room E111.

H. Keynotes 5 and 6 added to sheet.

3.99 E106 – FIRST FLOOR LIGHTING PLAN- UNIT F

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

3.100 E107 – FIRST FLOOR LIGHTING PLAN- UNIT G

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Ceiling mounted occupancy sensors added to rooms G101 and vestibule off Corridor G117.

D. RoomG102A added to existing scope of work.

E. Keynote 2 added to sheet.

F. Exterior light added.

3.101 E108 – FIRST FLOOR LIGHTING PLAN- UNIT H

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Switch type changed in rooms B108B and B108C.

D. Switches removed in rooms H123 and H124.

E. Switches added to various rooms.

F. Connection for studio light added to room H117.

G. Switches added to Choir room H108.

H. Power pack and Emergency relay removed from room H100.

I. Ceiling mounted occupancy sensor added to Vestibule H100.

J. Exterior fixtures added outside of Vestibule H100.

K. Keynotes 3, 4, and 5 added to sheet.

3.102 E109 – FIRST FLOOR LIGHTING PLAN- UNIT J

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. Switches added to various rooms.

D. Type D1 fixtures added to Auditorium J106.

E. Fixtures added to Vestibule J112 and Corridor J131.

F. Ceiling mounted occupancy sensor added to Vestibule J112.

G. Junction boxes added to Corridor J131.

H. Power pack added to Corridor J131.

I. Emergency relay added to Corridor J131.

J. Contactor added to Main Building Storage Room J130.

K. Exterior emergency circuit added.

L. Keynotes 8, 9, 10, 11, 12, 13 added to sheet.

M. X1 fixture added to Stage J108.

N. Rooms J119B and 127A changed to line voltage.

3.103 E110 – SECOND FLOOR LIGHTING PLAN- UNIT B

A. Normal and emergency circuiting reorganized.

B. Lighting control tags added to all rooms.

C. New fixtures swapped for existing fixtures in various rooms.

D. Keynote 1 added to sheet.

E. Power pack and Emergency relay added to room B200.

F. X1 Fixture added to room B200.

G. New fixtures added in place of existing fixtures in various rooms.

3.104 E111 – SECOND FLOOR LIGHTING PLAN- UNIT D

A. Control Tags added to all rooms.

B. Rooms D224 and D225 changed to line voltage.

C. Zone 'c' added to Flex room D202A.

D. Zone 'b' added to Flex room D222A.

E. Switches added to rooms D202A, D220, D222A.

F. Homerun to contactor added to Exterior emergency relay.

3.105 E201 - FIRST FLOOR - UNIT A - POWER:

A. Trainer A128: Revised receptacle circuits.

B. Principle A110: Added Duplex Receptacle, revised circuits.

C. Clinic A120: Undercounter Ice machine labeled.

D. Reception A104: Added Receptacles

3.106 E202 - FIRST FLOOR - UNIT B - POWER:

A. SHEET KEYNOTES: Revised note 5, added Note 10, 11 and 12.

B. Main Gymnasium B117: Added Goal controller.

C. Boys Locker Room B123: Provide combination GFCI receptacle with USB port.

D. Corridor B133: Added receptacles to LCD Displays.

E. Custodial B112: Provided power to Electrical Trap Primer (ETP-1).

F. Custodial B128A: Provided power to Electrical Trap Primer (ETP-1).

3.107 E203 - FIRST FLOOR - UNIT C - POWER:

A. SHEET KEYNOTES: Added Note 14, 15, 16, 17.

B. Biomed C104: Added Dishwasher circuit, trench floor for lab tables, Emergency Stops for fume hood, Fume Hood power.

3.108 E204 - FIRST FLOOR - UNIT D - POWER:

A. SHEET KEYNOTES: Added Note 12

B. SGR NICHE: Added Duplex for LCD monitor.

C. Science Classroom D130: Shift Counter Receptacle.

D. Corridor D133: Added (2) Duplex receptacles with USB ports.

E. Maker Space D141: Added Garage Door power.

F. Mechanical D135: Provided power to Electrical Trap Primer (ETP-1).

G. Mechanical D112: Provided power to Electrical Trap Primer (ETP-1).

3.109 E205 - FIRST FLOOR - UNIT E - POWER:

A. SHEET KEYNOTES: Added note 20, 21, 22,23 revised note 10.

B. Art 2-D E103: Added Quad receptacle at teachers' desk, moved (2) circuits to panel NL1E10.

C. Kiln E101A: Added receptacles for Kilns and recircuited.

D. Board Room E121: Added power to floor box, Note 22.

E. Student Union E111: Added convenience receptacles.

F. Corridor E100: Added receptacle for LCD Display.

G. Men E105: Provided power to Electrical Trap Primer (ETP-1).

3.110 E206 - FIRST FLOOR - UNIT F - POWER:

A. SHEET KEYNOTES: Added note 8.

B. Auxiliary Gymnasium F103: Added power for bleachers.

3.111 E208 - FIRST FLOOR - UNIT H - POWER:

A. SHEET KEYNOTES: Added note 8.

B. Band H102: Added power to garage door H102-3.

C. Men H123 (CHASE): Provided power to Electrical Trap Primer (ETP-1).

3.112 E209 - FIRST FLOOR - UNIT J - POWER:

A. Lobby H101: changed LCD Display Receptacle mounting height to +60" AFF

B. Corridor J131: Provided Keyed Switches and power to Garage Door H101.

3.113 E210 - SECOND FLOOR - UNIT B - POWER:

A. General Notes: Added B.

B. SHEET KEYNOTES: Revised Note1 and 2, Added Note 3 and 4.

C. Seating Level B200: Provided power to Mechanical Equipment ERV-4A, ERV-4B and HP-4A.

D. Added Mechanical Equipment IDU-05.

E. Main Gymnasium B117: Reconnect existing circuit to new goal winch.

3.114 E212 - SECOND FLOOR - UNIT J - POWER:

A. SHEET KEYNOTES: Added KEYNOTE 6.

B. Mechanical Room J200: Provided power to Electrical Trap Primer (ETP-1).

3.115 E213 - PARTIAL ROOF PLAN SOUTH - POWER:

A. SHEET KEYNOTES: Added KEYNOTE 8.

B. Roof: Mechanical Equipment DOAS-3, DOAS-4, Added Note 8.

C. Roof: Mechanical Equipment EF-28B.

D. Roof: Mechanical Equipment EF-5.

3.116 E214 - PARTIAL ROOF PLAN SOUTH - POWER:

A. Roof: Mechanical Equipment EF-10A, Added Note 3.

3.117 E215 - FIRST FLOOR - UNIT A - MECHANICAL POWER:

A. SHEET KEYNOTES: Added KEYNOTE 4.

B. Lobby A101: Mechanical Equipment DF-01, DF-02, Added Note 4.

3.118 E216 - FIRST FLOOR - UNIT B - MECHANICAL POWER:

A. SHEET KEYNOTES: Added note 1 and 2.

B. Mechanical Equipment HP-6A and HP-6B revised feeder size.

C. Boy's locker restroom B123B: Provide power to automatic plumbing fixtures.

D. Boy's athletic restroom B124B: Provide power to automatic plumbing fixtures.

E. Women's restroom B126: Provide power to automatic plumbing fixtures.

F. Men's restroom B127: Provide power to automatic plumbing fixtures.

G. Men's restroom B109: Provide power to automatic plumbing fixtures.

H. Women's restroom B110: Provide power to automatic plumbing fixtures.

I. Women's locker restroom B114A: Provide power to automatic plumbing fixtures.

J. Girl's athletic restroom B113A: Provide power to automatic plumbing fixtures.

3.119 E217 - FIRST FLOOR - UNIT C - MECHANICAL POWER:

A. SHEET KEYNOTES: Added note 1

B. PLTW C108: Powered Auto sink.

C. PLTW C109: Powered Auto sink.

3.120 E218 - FIRST FLOOR - UNIT D - MECHANICAL POWER:

A. SHEET KEYNOTES: Revised KEYNOTE 2, added notes 4 and 5.

B. Student Union D139: Mechanical Equipment DF-03, DF-03 and DF-05, Added Note 1.

C. Men D104: Provide power to automatic plumbing fixtures.

D. Women D126: Provide power to automatic plumbing fixtures.

3.121 E219 - FIRST FLOOR - UNIT E - MECHANICAL POWER:

A. SHEET KEYNOTES: Revised KEYNOTE 2, added 3,4 and 5.

B. Student Union E111: Mechanical Equipment DF-06, DF-07 and DF-08, Added Note 1.

C. Mechanical E139: Sump pump SP-3A and SP-3B, provided power.

D. Women E107: Provide power to automatic plumbing fixtures.

E. Men E105: Provide power to automatic plumbing fixtures.

3.122 E220 - FIRST FLOOR - UNIT F - MECHANICAL POWER:

A. SHEET KEYNOTES: Added NOTE 2,3 AND 4.

B. Women F106: Provide power to automatic plumbing fixtures.

C. Men F107: Provide power to automatic plumbing fixtures.

D. Vending F108: Powered Auto sink.

3.123 E223 – FIRST FLOOR - UNIT J - MECHANICAL POWER:

A. SHEET KEYNOTES: Added NOTE 3,4 and 5.

B. Mechanical Room J128: Heat pumps were renamed.

C. Men J125: Provide power to automatic plumbing fixtures.

D. Women J123: Provide power to automatic plumbing fixtures.

E. Restroom J121A: Provide power to automatic plumbing fixtures.

F. Restroom J119A: Provide power to automatic plumbing fixtures.

3.124 E224 - SECOND FLOOR - UNIT D - MECHANICAL POWER:

A. General Notes: Revised B.

B. Mechanical Room D212: revised Heat Pump circuits from 208V-1PH. to 208V-3PH.

C. Mechanical Room D216: revised Heat Pump circuits from 208V-1PH. to 208V-3PH.

D. Mechanical Equipment RF-1 and RF-2, deleted, shown on first floor.

3.125 E225 - SECOND FLOOR - UNIT J - MECHANICAL POWER:

A. General Notes: Revised B.

B. SHEET KEYNOTES: Added KEYNOTE 1.

C. Mechanical Room J200: tagged units CU-4 and AHU-4.

D. Added Mechanical Equipment DF-09, provided powered.

E. Changed shading on Key plan to Area "J".

3.126 E301 – FIRST FLOOR – UNIT A – SYSTEMS:

A. SHEET KEYNOTES: Added KEYNOTE 8, 9, and 10.

B. Added speaker strobe fire alarm notification device to Corridor A123.

C. Added strobe fire alarm notification device to restroom A126B.

D. Added speaker strobe fire alarm notification device to Waiting A102.

E. Added speaker strobe fire alarm notification device and pull box fire alarm initiation device to Lobby A101.

F. Added Duct-type smoke detector to return air duct on units RTU-100-1 and RTU-100-3 on roof.

G. Removed pull box fire alarm initiation device from vestibule A100.

3.127 E302 – FIRST FLOOR – UNIT B – SYSTEMS:

A. SHEET KEYNOTES: Added note 4.

B. Added duct-type smoke detector to return air duct on HP-6A and HP-6B.

3.128 E303 – FIRST FLOOR – UNIT C – SYSTEMS:

A. SHEET KEYNOTES: Added note 6.

B. Added duct-type smoke detector to return air ducts on units RTU-100-5 and RTU-200-2.

3.129 E304 – FIRST FLOOR – UNIT D – SYSTEMS:

A. SHEET KEYNOTE: Added note 7.

B. Added duct-type smoke detector to return air duct on units RTU-200-5, RTU-200-1, RTU-100-7, HP-2A, HP-2B, HP-1E, HP-1F, HP-2C, HP-2D, HP-2E, HP-2L, HP-2K, HP-2I, HP-2J, HP-2F, HP-2H, and HP-2G.

C. Removed various symbols shared between Unit A and Unit D. NOTE: Symbols are still visible on sheet E301.

3.130 E305 – FIRST FLOOR – UNIT E – SYSTEMS:

A. SHEET KEYNOTES: Added note 6.

B. Added duct-type smoke detector to return air duct on units RTU-300-5, RTU-300-6, RTU-300-7, RTU-300-3, and RTU-200-4.

C. Moved Multimedia and Data location for teacher station in Art 2-D E103.

3.131 E307 – FIRST FLOOR – UNIT G – SYSTEMS:

A. SHEET KEYNOTES: Added note 7.

B. Added duct-type smoke detector to return air duct on units RTU-100-8 and RTU-100-9.

3.132 E308 – FIRST FLOOR – UNIT H – SYSTEMS:

A. SHEET KEYNOTES: Added note 7 and 8.

B. Added duct- type smoke detector to return air duct on units AHU-3, RTU-300-8, and RTU-300-9.

C. Added duct-type smoke detector to supply air duct in unit AHU-3.

D. Removed fire alarm smoke detector initiation device from DISHWASH H120A.

E. Added 2 data drops at teacher location in CULINARY H120.

3.133 E309 – FIRST FLOOR – UNIT J – SYSTEMS:

A. Added two data drops on plan left wall for DDC panel in Mechanical Expansion J128.

3.134 E310 – SECOND FLOOR – UNIT B – SYSTEMS:

A. SHEET KEYNOTES: Added note 2

B. Added duct-type smoke detector to in return air ducts to units RTU-1G, RTU-2G, RTU-3G, and RTU-4G.

3.135 E311 – SECOND FLOOR – UNIT D – SYSTEMS:

A. SHEET KEYNOTES: Added note 4.

B. Added duct-type smoke detector in return air duct to units AHU-1 and AHU-2.

3.136 E312 – SECOND FLOOR – UNIT J – SYSTEMS:

A. SHEET KEYNOTES: Added notes 2 and 3.

B. Added duct-type smoke detector in return air duct to unit AHU-4.

C. Added duct-type smoke detector in supply air duct to unit AHU-4.

3.137 E403 - ENLARGED POWER/SYSTEMS PLANS:

A. ENLARGED VIEW - EXIST. IDF - (IDF G102A): Revised circuits

B. ENLARGED VIEW - IDF-1D (IDF RM. D106): Revised circuits

3.138 E404 - ENLARGED ELECTRICAL ROOMS:

A. Electrical Room H124: Added panel NL1H3

3.139 E408 - ENLARGED ELECTRICAL PLANS:

A. SHEET KEYNOTES: Revised Note 5.

B. Elev. EL-1: Added Sump pump SP-2.

C. Elev. EL-2: Added Sump pump SP-1.

3.140 E501 – LIGHT FIXTURE SCHEDULE

A. Added light fixture Types S, T, OL7, OL8, TC, U, and U2

B. Added equals for Types K1, K2, OL4, P, TA, TA2, TB, TF, TG, and TH

3.141 E503 – ELECTRICAL DETAILS:

A. Changed the "TYPICAL LOW VOLTAGE CABLE DISTRIBUTION" to include cable tray.

3.142 E601 – POWER ONE-LINE DIAGRAM – DEMOLITION:

A. Existing Panel (NH1) & (NL1) to remain, feeder removed and Note 6 added.

3.143 E602 – POWER ONE-LINE DIAGRAM – NEW WORK:

A. SHEET KEYNOTES: Added note 25.

B. Panel NL1J3 increase to 225A MCB.

C. Added panel NL1H3

D. Added Mechanical equipment FC-1A and FC-1B to 70A/3P spare breaker in Distribution Panel MDPH(MDP).

E. Panel NL1D6 increase to 400A MCB.

F. Panel NL2D3 increase to 400A MCB.

G. Added Mechanical equipment CU-3, CU-4, AHU-3 and AHU-4 to Distribution Panel MSB.

H. Existing Panel NH1B2 (NH1) & NL1B1 (NL1) to remain and new feeder provided.

3.144 E603 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.145 E604 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.146 E605 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.147 E606 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.148 E606 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.149 E607 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.150 E608 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

3.151 E609 – ELECTRICAL PANEL SCHEDULES:

A. UPDATED AND CURRENT PANEL SCHEDULES.

PART 4 - OTHER ITEMS

4.1 NOT USED

PART 5 - QUESTIONS AND ANSWERS

5.1 Q: Our understanding is the Silver Creek has an existing Stentofon campus-wide intercom system in place. Are the door intercoms to be Stentofon and will they be tying into the existing system?

A: Door intercoms will be owner provided, contractor installed.

5.2 Q: Specification 10 70 00 - Exterior Sun Control Devices calls out a Construction Specialties Vertical Sunshade. When reviewing the plans, we are only able to locate one detail that identifies where the sunshade is to be located. However, based off of the rending, it appears that maybe more than 1 sunshade is to be provided. Please confirm the number of SunShades to be provided?

A: See sheet A204, sunshades are indicated by plan note 6.

5.3 Q: Will a floor plan and message schedule with quantities be provided or is that contractor responsibility?

A: No additional signage information will be provided, contractors should determine quantities and schedule based on provided information to review in shop drawing process.

5.4 Q: We could not locate locations of panel signs on site drawings, please advise.

A: Provide (1) sign of each type indicated in documents, final location to be coordinate with architect/owner in field if not indicated.

5.5 Q: Are all frames not indicated to be HM on sheets A503-A506 to be aluminum?

A: Yes, all HM frames are specifically indicated. All other frames shall be aluminum storefront or curtainwall as detailed or scheduled.

END ADDENDUM #2

SECTION 09 64 43 - STAGE FLOORING SYSTEM

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

A. The general provisions of Contract, including General and Supplementary Conditions and General Requirements, apply to work specified in this Section.

1.02 DESCRIPTION OF WORK

A. Work of this section includes all labor, materials, and services to provide a complete flooring system as specified herein.

B. Submissions of shop drawings.

C. Delivery to the job site.

D. Section Includes:

1. Finished 3 3/8” sprung (resilient) wood flooring system.
2. Perimeter base as defined by the architectural drawings and finish schedule.
3. Wood to concrete transition thresholds.
4. Wood nosing and fascia as defined by the drawings

1.03 QUALITY ASSURANCE

A. Manufacturer’s Qualifications: Not less than 5 years experience in the actual production of specified products.

B. Installer’s Qualifications: Firm experienced in installation of systems similar in complexity to those required for this Project, plus the following.

1. Not less than 3 years experience with systems.
2. Successfully completed not less than 5 comparable scale projects using this system.

C. Product/Material Qualifications:

1. Lumber standards: Conform to PS 20
2. Plywood sheet materials: Conform to PS 1.
    1. Mark material with grade stamp of the American Plywood Association (APA).

1.04 REFERENCES

A. APA – The Engineered Wood Association (APA):

1. APA J20: Product Guide, Grades and Specifications

B. American National Standards Institute (ANSI):

1. ANSI/AHA A135.4-1982 (R1988): Standard for Basic Hardboard

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

1. ASTM D4397-91: Standard Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
2. ASTM D4442-92: Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials.
3. ASTM D4444-92: Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters.

D. American Wood Preservers' Bureau (AWPB):

1. AWPB LP-2-88: Softwood Lumber, Timber and Plywood Pressure Treated With Waterborne Preservations for Above Ground Use.

E. U.S. Department of Commerce Product Standards (PS):

1. PS 1-83: Construction and Industrial Plywood.
2. PS 20-94: American Softwood Lumber Standards
3. PS 58-73: Basic Hardwood.

1.05 SUBMITTALS

A. Shop drawings indicating assembly detail, nosing detail, plywood joint layout and sleeper orientation.

B. Product Data: Manufacturer's specifications and technical data for the following:

1. Sub floor.
2. Finish Floor.
3. Resilient Pads.
4. Vapor barrier.
5. Vapor barrier joint tape.
6. Builders felt.
7. Fasteners.
8. Expansion joint cover.
9. Wall base.

C. Provide samples of the following:

1. Finish Floor – 12" x 12". Qty. 4.
2. Resilient Pads – 3" x 3". Qty. 4.

1.06 DELIVERY, STORAGE AND HANDLING

A. Packing and Shipping: Deliver products in original unopened packaging with legible manufacturer's identification.

1. Deliver wood materials to Project Site 7 days prior to beginning installation.

B. Storage and Protection: Comply with manufacturer's recommendations.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Sleepers: Conforming to PS 20; 16 percent maximum moisture content; surfaced 4 sides (S4S).

1. Species: Douglas Fir, Pine, or Hemlock; kiln dried.
2. Size: Nominal 2"x4" by 8 feet long.
3. Preservative Treatment: AWPB LP-2; waterborne salt preservative.
   a. After treatment, lumber shall be kiln dried to a maximum 16% moisture content.
   b. Treatment shall be "Wolmanized" made by Koppers or approved equal.

B. Sub floor: 4'x8', APA-EXT plywood, Exterior Exposure.

1. Species: Douglas Fir or Hemlock.
2. Thickness: ¾ inch.

C. Finish Floor: Tempered Plyron Industrial Panel.

1. Species: Tempered hardboard laminated to Douglas Fir/Hemlock plywood. Hardboard laminated with waterproof glue bond and meets APA PS 1-07 specifications.
2. Thickness: ¾ inch.
3. Manufacturer: Olympic Panel Products, 204 East Railroad Ave., Shelton, WA (800) 782-7265.

D. Hardwood Edging:

1. Grade: AWI Grade II, for transparent finish.
   a. Species: Natural Oak, plain sawn.
2. Moisture content: 6 to 8 percent
3. Finish: Field finish as required by the Architect.

2.02 ACCESSORIES

A. Resilient Pads: 3 inch by 2 inch by 3/8 inch thick fluted pads.

1. Permacushion Waffle Pads by Robbins Flooring Systems.
2. Staple waffle pads to underside of 2”x4” wood sleepers on 12” centers along the length of the sleeper.

B. Polyethylene Sheet vapor Barrier: ASTM D4397, conforming to the following.

1. Continuous application between concrete slab and resilient pads.
2. Thickness: 6 mil.
3. Permeance rating: Not more than 0.1 perms.
4. Overlap joints as recommended by the manufacturer.

C. Vapor Barrier Joint Tape: Polypropylene self-adhering type; 2 ½ inches wide.

1. Acceptable manufacturers:
   a. 3M Contractor Products.
   b. Comparable products of other manufacturers.

D. Construction Felt: Located between ¾” plywood subfloor and Plyron Finish floot.

1. 15 lb. black construction felt.
2. Do not overlap joints.

E. Wall Base:

1. Provide as defined by the Architectural Drawings and finish schedule.

F. Fasteners:

1. Sub floor: 2 inch barbed cleats
2. Finish flooring: Corrosive resistant countersunk screws with “Phillips” type heads on 16” centers in both directions.

G. Finish: Painted finish – Flat Black – ROSCO #6055

1. Solvent: Water
2. Binder Type: Acrylic polymer
3. Dilution: Use Tough Prime undiluted for most applications. When applying by brush, it may be necessary to dilute with water to achieve the proper viscosity.
4. Surface Preparation: Surfaces should be clean, dry and free from dirt and grease. If painting over an existing paint finish, remove any loose material with a brush. When painting over solvent based finishes, or high gloss surfaces, use fine sandpaper or steel wool to give the surface more tooth. Be sure to remove all sanding dust for best adhesion.
5. Application: Stir contents before use. Do not shake. Apply by brush, roller, or spray gun. Apply in even, uniform coats, using a good quality brush or roller. Use overlapping strokes, keeping a wet edge. Change roller direction often to avoid patterns and streaking. Do not apply a heavy coat. To build up a more durable finish, apply several thin coats, allowing each to dry thoroughly between applications.
6. Film Thickness: 3 mil. Dry Film
7. Coverage: Approximately 300 sq. ft. per gallon (28 sq. m. per 3.79L), depending on application method and substrate.
8. Avg. Dry Time: AT 75°F (24°C) Dries to the touch in 30-45 minutes. Can be re-coated in 1-2 hours.
9. Clean-Up: Soap and water.
10. Shelf Life: Minimum 24 months.
11. Packaging: 1 Gallon and 5 Gallon (3.79L and 18.95L).
12. Do not apply when surface or air temperatures are below 50°F (10°C). Keep from freezing. Avoid prolonged contact with skin or breathing of spray. Do not take internally. Use adequate ventilation. KEEP OUT OF REACH OF CHILDREN.
13. Manufacturer:
    a. Rosco Laboratories Inc.
       52 Harbor View
       Stamford, CT
       USA, 06902
       (800) 767-2669

PART 3 – EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper and timely completion.
   1. Measure moisture of surfaces using an electronic moisture meter in accordance with ASTM D4444.
   2. Ensure floors are smooth and flat with maximum variation of 3/16 inch in 10 feet, non-accumulative.
   3. Ensure concrete floors are dry (maximum moisture content of 7 percent), and do not exhibit negative alkalinity, carbonization, or dusting.
   4. Ensure that environmental requirements specified in this Section have been maintained.
   5. Do not proceed until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Close off area to traffic where Work of this section is in progress, until floor is complete.

B. Surface Preparation:

1. Remove sub-floor ridges and bumps.

2. Fill low spots, cracks, joints, holes, and other defects with sub-floor fillers.

a. Apply, trowel, and float filler to leave smooth, flat, hard surface.

3.03 INSTALLATION

A. Comply with manufacturer's instructions.

B. Installation of Vapor Barrier:

1. Install directly over concrete floor slabs.

2. Lap joints 6 inches and seal with vapor barrier tape.

3. Protect vapor barrier during placement of wood sleepers and sub floor.

4. Repair punctures and tears with vapor barrier tape.

5. Apply vapor barrier as recommended by the Manufacturer.

C. Installation of Sleepers:

1. Attach resilient pads to sleepers 12" on center along length of sleeper.

2. Install sleepers end to end, parallel with stage "proscenium wall" (running the width of the stage). Sleepers to be spaced 12 inches on center with ¼ inch spacing between ends, and joints staggered 24 inches.

3. Provide 1/2 inch expansion void at perimeter and at vertical obstructions.

D. Installation of Sub floor:

1. Install sub floor with long dimension 90 degrees (perpendicular) to sleepers. Subfloor long dimension to run the depth of the stage.

2. Stagger end joints 2 feet.

3. Maintain ¼ inch space between all joints.

4. Provide 1/2 inch expansion void at perimeter and at vertical obstructions.

5. Secure to sleepers with fasteners spaced 12 inches on center.

E. Installation of Construction Felt:

1. Install construction felt perpendicular to subfloor (parallel with finish floor). Felt edges shall be butted flush (do not overlap) and stapled along the edges. Cut felt flush with plywood subfloor at perimeter.

2. Staple felt to subfloor. Staples must be flush. Hammer staples flush as required.

F. Installation of Finish Flooring (Plyron):

1. Install flooring perpendicular to sub flooring. Finish flooring shall run the width of the stage (parallel with sleepers). Stagger the seams of the finish floor sheets to with the subfloor plywood seams to fully overlap seams.

2. Provide 1/2 inch expansion void at perimeter and at vertical obstructions.

3. Installation to comply with flooring manufacturer's instructions and recommendations.

3.04 FINISH

A Dilution: Use Tough Prime undiluted for most applications. When applying by brush, it may be necessary to dilute with water to achieve the proper viscosity.

B Surface Preparation: Surfaces should be clean, dry and free from dirt and grease. If painting over an existing paint finish, remove any loose material with a brush. When painting over solvent based finishes, or high gloss surfaces, use fine sandpaper or steel wool to give the surface more tooth. Be sure to remove all sanding dust for best adhesion.

C Application: Stir contents before use. Do not shake. Apply by brush, roller, or spray gun. Apply in even, uniform coats, using a good quality brush or roller. Use overlapping strokes, keeping a wet edge. Change roller direction often to avoid patterns and streaking. Do not apply a heavy coat. To build up a more durable finish, apply several thin coats, allowing each to dry thoroughly between applications

D Prime Coat: 2 Coats of ROSCO #6055 Tough Prime as recommended by the manufacturer. Coverage 3 mils thickness.

E Top Coat: 1 Coat of ROSCO #6055 Tough Prime.

3.05 PROTECTION

A. Do not allow traffic on finished floors for less than 96 hours after application of final finish coat.

B. Protect completed wood flooring during remainder of construction period with heavy kraft paper or other suitable covering so that flooring finish will be without damage or deterioration at tome of acceptance

END OF SECTION 09 64 43

SECTION 11 06 00 - STAGE RIGGING EQUIPMENT

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. Provision and installation of all equipment as required for complete and fully operational systems. Where equipment, components, materials, hardware and/or services have been omitted from the drawings and specifications, but are required for fully functional systems, they shall be assumed to be included and shall be provided without claim for change to the Contract price.

B. Field verification of dimensions, conditions, and obstructions at the job site. Field coordination with other trades and General Contractor.

C. Submission of shop drawings.

D. Delivery, unloading, unpacking and removal of all related packaging and debris form the job site.

E. Inspection, alignment, and final adjustment of completed installation, demonstration for approval and instruction for operating personnel.

F. The System shall basically be comprised of the following:

1. Dead hung linesets
2. Dead hung lighting electrics linesets (including raceway installation)
3. Motorized front of house lighting pipe with double batten and connection of wire management pantograph – provide with integral steel backbone
4. Motor control panels and motor starter cabinets
5. Dead hung traveler track linesets
6. Curtain track systems complete with all necessary components
7. Stage Draperies per Drapery Schedule
8. Miscellaneous kindorf support channels and hardware as required for complete installation of the systems described herein

1.3 RELATED WORK

A. Related work specified under other sections of the specifications:

1. Structural support steel
2. Electrical Systems
3. Theater Electrical Systems

1.4 QUALITY ASSURANCE

A. Work shall be done by people skilled in this trade in strict accordance with the requirements and/or specification of the manufacturers of the material being used.

B. Qualifications:

1. This Contractor shall have been an authorized representative of the manufacturers of the specified equipment and systems for a minimum of five years. This representative shall exercise engineering supervision over the complete installation. Contractor shall have been involved in stage rigging and drapery system installations for a period of ten years or more

and shall have completed at least ten installations of this type and scope. The Architect shall be the final judge of suitability of experience.

2. This Contractor shall maintain and operate his own shops and fabricate or assemble all components with the exception of standard hardware, materials and equipment.

3. The Architect shall have the right to inspect any previous equipment or systems as furnished or installed by this Contractor. In addition, the right is reserved by the Architect to reject a Contractor who has failed in any respect to comply with every provision of any previous contract.

C. A single Contractor who shall be responsible for the proper installation, functioning and compatibility of system equipment shall supply equipment, including required modification. No sub-contracting of work shall be permissible.

D. The safety parameters set forth herein are intended to reflect safeguards and precautions related not only to normal use of the equipment under ideal operating and lading conditions but, additionally, to anticipate equipment misuse, human error and misjudgment.

E. Pursuant to the above and as “a condition precedent” for minimizing product liability claims before they occur, each bidder by signature affixed to his proposal form as an essential contract requirement attests as follows, reflecting mandates of the Consumer Product Safety Commission:

1. He has not on previous stage rigging work under his contractual responsibility within the preceding ten-year period substituted case iron component for supporting or carrying static or dynamic overhead loads under stresses of tensions and/or impact where malleable iron or steel was specified for such components. The load-bearing components includes but are not limited to arbor top or bottom members and hook clamps for attaching loft or head blocks to the rigging steel.

2. He has reported all such breach of contract infractions as listed above to the Consumer Product Safety Commission as required by the Act (Public Law 92-573) and has either replaced or remodeled such work or reimbursed the Owner(s) in suitable amount for allowing such replacement or remodeling being done by others and all as approved by the Commission.

1.5 REFERENCES

A. Regulatory Agencies:

1. American Institute of Architects
2. American Institute of Steel Construction
3. American Institute of Timber Construction
4. American National Standards Institute
5. American Welding Society
6. Associated Wire Rope Fabricators
7. Construction Specification Institute
8. Iron Casting Society
9. National Electrical Manufacturers Association
10. National Fire Protection Association
11. Underwriter’s Laboratories
12. United States Institute of Theatre Technology

13. Occupational Safety and Health Act of 1970

14. Additional applicable codes, standards, regulations and guidelines shall be adhered to in both spirit and letter of intent.

1.6 INTERFACE WITH ADJACENT SYSTEMS

A. The systems described in this section shall in no way damage or adversely effect architectural or structural systems, components or construction.

B. Rigging system installation shall be coordinated with the requirement of all adjacent and intersecting systems, including but not limited to: Electrical Systems, Sound, Video and Intercommunications Systems, Stage Lighting, Flooring and Mechanical Systems.

C. Notwithstanding the detailed information contained in this Specification, it is the responsibility of this Contractor to supply working overall systems. This Contractor shall be responsible, prior to bidding, for verifying the completeness of the parts list, the correctness of the type numbers and the overall suitability of the systems to meet the purposes of the Contract Documents.

D. Provide all additional components or auxiliary steel needed in order to meet the requirement stated above. Even if not specifically mentioned herein or on the Drawings, this contractor without claim for additional payment shall supply additional components and auxiliary steel.

E. The Contractor shall in no way be relieved of the primary responsibility to provide a safe, fully functional system.

1.7 SUBMITTALS

A. Shop Drawings:

1. Submit shop drawings and samples for approval prior to fabrication. Site dimensions and conditions affecting the Work shall be verified prior to commencement of Shop Drawings.

2. Shop drawings shall be made in conformity with the best modern practice and all design shall reflect a requirement for minimizing institutional maintenance.

3. Submit electronic shop drawings to the Architect for approval. All drawings shall be produced on AutoCAD or compatible system to ensure legibility and quality of submission. Obtain approval of the drawings prior to proceeding with manufacture and fabrication. Shop and field connections of auxiliary steel items shall be clearly distinguished and complete information on connections to other work shall be given. Complete shop drawings shall include:

a. Mechanical assembly drawings (1/2” = 1’ minimum)

b. Mechanical detail drawings. (1” = 1’ minimum)

c. Component equipment drawings. (1” = 1’ minimum)

d. General arrangement plans and diagrams. (1/4” = 1’ minimum)

e. Miscellaneous Details and Assembly Drawings. (as necessary)

f. Component equipment drawings shall be Manufacturer’s approval drawings or catalogs cuts showing weight, dimensions and capacities of mechanical components.

g. Erection plans and diagrams shall give relative locations of various members and overall dimensions with reference to the preliminary drawings including auxiliary structure.

h. Miscellaneous details and assembly drawings shall give lengths, widths and sizes of all members, connection details, location, type and size of bolts, rivets, welds, and other connections together with materials to be used.

4. Examination of on Shop Drawings by the Architect shall not be construed as a guarantee of correctness of conditions but shall only reflect a review of their general conformance with the intent of the Contract Documents.

B. As-Builts and Manuals:

1. Within thirty days of the Acceptance Tests, this Contractor shall furnish the following:

a. Four copies of a layout of the systems giving the essentials of the installation and their maximum load limitations.

b. Four copies of a complete instruction, operations and maintenance book, including all layouts, sizes and technical descriptions of components. These books shall be durable plastic, 3-ring binder. Drawings excepted, all sheet sizes shall be 8-1/2" x 11".

c. Four copies of as-built and installed shop drawings. AutoCAD copies of general arrangement, elevations and connection details shall be provided on disk to Owner as part of the As-built drawing submission.

1.8 SUBSTITUTIONS

A. Requests for equipment substitutions shall be made in accordance with Section 012500.

1.9 TRAINING AND SERVICE

A. This Contractor shall provide (2) two-hour training sessions for the Owner and Owners representatives. Training session shall cover operational procedures, safety systems, control systems, maintenance of system and troubleshooting. The training session shall be held within (14) days after substantial completion of system installation at a mutually agreeable time to Owner and Contractor. The 2nd training session shall be at a time mutually agreeable with the Owner and Contractor.

PART 2 – PRODUCTS

2.1 MANUFACTURERS AND CONTRACTORS

A. Rigging systems shall be comprised of components that are the products of one of the following Stage Rigging manufacturers:

1. JR Clancy, Syracuse, NY (800) 836-1885
2. H&H Specialties, South El Monte, CA
3. Texas Scenic / Pook Diemont & Ohl, Inc., Bronx, NY (718) 402-2677
4. Tiffin Scenic Studios, Tiffin, OH (419) 447-1546
5. Electronic Theater Controls, Middleton, WI (608) 831-4116

B. Rigging systems shall be installed by one of the following Stage Rigging Contractors:

1. Beck Studios, Milford, OH (513) 831-6650
2. Texas Scenic / Pook Diemont & Ohl, Inc., Bronx, NY (718) 402-2677
3. Vincent Lighting Systems, Erlanger, KY (800) 922-5356
4. Tiffin Scenic Studios, Tiffin, OH (419) 447-1546
5. Wenger/JR Clancy, Owatonna, MN (507) 455-4100

C. Curtain tracks, machines and related components shall be manufactured by:

1. H&H Specialties, South El Monte, CA
2. ADC, Allentown, PA

D. Fabrics shall be manufactured/supplied by:

1. DeBall of America, New York, NY
2. KM Mills, Greenville, SC
3. Rosebrand, New York, NY

E. Draperies shall be fabricated by:

1. Stage Decorations, Greensboro, NC
2. Rosebrand, New York, NY
3. Tiffin Scenic Studios, Tiffin, OH

2.2 MATERIALS and COMPONENTS

A. General: Items, materials and equipment shall be new and undamaged. Assemblies, cable components, connections, equipment, hardware and linkages employed in supporting, in whole or in part, overhead loads shall be rated and designed for that application.

B. Rolled Steel Plates, Shapes and Bars: Domestic Steel ASTM A-36-74 unless otherwise noted.

C. Shackles: Shackles shall be appropriately sized for the intended application. Shackles shall be forged steel with alloy steel pins. Shackles shall be heat treated and tempered. Pins shall be provided with a locking cotter pin to prevent the bolt from loosening. The bolt pin shall be sized to ensure the bearing surface of the bolt is on its shaft. Shackles shall meet or exceed the latest requirement of Federal Specification RR-C-27lb.

D. Turnbuckles: Turnbuckles shall be sized appropriately for the cable construction and diameter of the cable with which they are employed. Turnbuckles shall be Jaw-Jaw type unless otherwise noted in the Contract Documents. Jaw ends shall be furnished with round pins and cotter keys. Turnbuckles shall be dropped forged carbon steel with a galvanized finish. Turnbuckles shall meet or exceed the latest requirement of Federal specification FF-T-79lb Type 1, Form 1, Class 8.

E. Chain: 1/4” Grade 30 Proof Coil Chain, working load limit 1,250 lbs.

F. Wire Rope: Cables shall be oil free and preformed 7x19 steel core galvanized aircraft cables. Cable size shall be ¼” diameter unless indicated elsewhere. Breaking strength shall conform to the latest revision of Federal Specification MIL-W-83420.

G. Thimbles, Wire Rope: Wire rope thimbles shall be sized appropriately for the cable construction and diameter of the cable with which they are employed. Thimbles shall be hot dipped galvanized carbon steel. Thimbles shall meet or exceed the latest requirements of Federal Specification FF-T-276b, Type III.

H. Formed Steel Batten Clamps: 12 gauge 1 ½” formed steel plate with (2) bolt holes for 3/8” hex bolts and (1) top mount hole for ½” connection hardware.

I. Compression Sleeves: Compression sleeves shall be sized appropriately for the cable construction and diameter of the cable with which they are employed. Sleeves shall be oval for cable connections and cylindrical for stop sleeves. Sleeves shall be copper. After application sleeves shall meet or exceed the latest requirements of Military Specification MIL-W-83420.

J. Curtain Face Fabric - IFR Synthetic Velour:

1. Minimum 25-ounce, 100% Polyester Inherently Flame Resistant synthetic “velour”. Fabric shall be as supplied by JL de Ball or KM Mills.
2. House Curtains and Valances: Standard Color to be determined by the Architect
3. Masking legs and Borders: Black.

K. Curtain Lining: (House Curtain and Valances Only)

1. PD Cloth, 100% Polyester Trevira CS, 72” wide as supplied by Janis. Color: Black.

L. Cyclorama Fabric:

1. 100% flame retardant seamless Muslin as supplied by Rosebrand or equal. Color: White.

M. Tie Line and Grommets:

1. Grommets shall be #4 brass type, maximum 12” on center.
2. Tie lines shall be black #4 braided line, 36” long. Provide opposite color tie line at center grommet.

N. Jute Webbing:

1. Webbing is to be 12 lb., 3-1/2” wide jute type.

O. ASSEMBLIES

1. Pipe Battens: Typical pipe battens shall be in length as defined by the drawings and assembled from nominal 1 ½” schedule 40 steel pipe. Electric linesets shall be Double Batten assemblies as indicated on the drawings. All batten fabrications shall be identical. Nominal pipe lengths shall be cut to 21’-0” exact lengths prior to drilling for internal splices. Battens shall be assembled with splices in locations as indicated by the drawings. Batten splice bolt pattern shall permit the full interchangeability of one pipe to another. Battens shall be internally spliced with 18” long mechanical tubing and bolted to batten pipe with (4) 3/8” diameter hex bolts at 90-degree rotation and low profile locking nut. Each batten shall be provided with (2) bright yellow, 4” long vinyl safety end caps.
2. Dead-hung Batten Pipe Assemblies: See drawings for hanging assembly details. Coordinate work with building structure. Provide additional steel where required to hang dead-hung batten pipes.
3. House, Midstage, Upstage Bi-part Curtain Tracks: Track shall be 14 gauge galvanized steel, roll-formed to 2-5/8" wide X 2-3/4" high channel with continuous slot in bottom. Provide unspliced in lengths up to 26'. Track shall be hung from nominal 1 ½” schedule 40 pipe batten with 11 gauge formed steel track hangers spaced 5’-0” on center (maximum). Provide 3' overlap at center, rigidly separated by two overlap clamps. Install end stop with cord support at each track end. Where lengths exceed 26', connect tracks with 12" long, two-piece splicing clamp of 12 gauge steel. Provide single carriers, spaced on 12" centers, constructed of two neoprene-tired ball bearing wheels fastened parallel to black Super Tough nylon carrier body. Supply with heavy-duty hook, swivel eye and trim chain for attachment of curtain. Install rear fold guide and two round neoprene bumpers between each carrier to fold curtain at offstage edges and minimize noise. Master carriers shall be 4-wheel neoprene-tired ball bearing assemblies with bodies formed from 11 gauge steel. Connect to operating line with two-formed steel cord clamps attached to each body. Supply each master carrier with two heavy-duty hooks, swivel eyes and trim chains for attachment of leading edge of curtain. Single and double end pulleys shall clamp securely to the underside of the track channel and shall be equipped with 8" diameter Nylatron GS sheaves grooved for 3/8"d drive line. Install two 5/8" sealed precision ball bearings in each sheave. Lock shaft to side plate on head end with 3/16" keeper pin to prevent rotation and install fine-threaded nylon insert lock nut. Operating line shall be 3/8" diameter, black polyester jacket braided over solid polyester core. Provide detachable floor block with detachable floor block mounting plate recessed in stage floor for all curtain tracks. Locate curtain track floor block on stage-left side.
    a. Provide Model 418P as manufactured by H&H Specialties, Inc. or equal. See drawings and schedule for track lengths.

4. House Curtain and Valance Curtain Panels: The house curtain and valance curtain shall be fabricated in two panels (valance is a single panel; not two panels) in sizes indicated by the drapery schedule. Panels shall be fabricated in 50% fullness. Panels shall be lined. Lining shall be provided in 50% fullness. Fabric shall be provided as KM IFR (or equal) color to be determined by architect. Lining shall be black. Curtain shall be box pleated with all seams vertical and hidden in pleats. Fabric nap shall be run “down”. The top of each panel shall be finished with jute webbing, sewn over the pleats with stitching top and bottom. Provide grommets at 12” o.c. for the length of the webbing with spring clips for connection to track carrier chains. Grommets shall not break stitching. Provide two grommets at the on stage end of each panel spaced 3 ½” apart for connection to a master carrier. Provide one additional grommet at the offstage end of each panel. Provide a “half fabric width” turn back at both ends of each panel. Lining shall be sewn to the main curtain panels in 50% fullness. Lining shall stop at the edge of the fabric width turn back at the ends (fabric turn back shall be exposed to view from the rear). Provide a minimum 6” bottom hem with a separate canvas pocket filled with continuous #8 plated and vinyl-coated (to prevent any contact of metal with water) jack chain sewn in. Lining shall have a 4” bottom hem and stop 6” above bottom of the house curtain panel.

5. Midstage and Upstage Curtain Panels: The upstage curtain shall be fabricated in two panels in size indicated by the drapery schedule. Panels shall be fabricated flat (0% fullness). Panels shall not be lined. Fabric shall be provided in black. Fabric nap shall be run “up”. The top of each panel shall be finished with jute webbing, sewn over the pleats with stitching top and bottom. Provide grommets at 12” o.c. for the length of the webbing spring clips for connection to track carrier chains. Grommets shall not break stitching. Provide two grommets at the on stage end of each panel spaced 3 ½” apart for connection to a master carrier. Provide one additional grommet at the offstage end of each panel. Provide a “half fabric width” turn back at both ends of each panel. Provide a minimum 6” bottom hem with a separate canvas pocket filled with continuous #8 plated and vinyl-coated (to prevent any contact of metal with water) jack chain sewn in.

6. Masking Legs and Border Curtain Panels: Masking curtain panels shall be finished in sizes as indicated by the drapery schedule. Panels shall be fabricated in 0% fullness. Panels shall not be lined. Fabric shall be provided in black. Curtains shall be box pleated with all seams vertical and hidden in pleats. Fabric nap shall be run “up” for all masking curtains. Top of each panel shall be finished with jute webbing, sewn over the pleats with stitching top and bottom. Provide grommets at 12” o.c. for the length of the webbing with spring clips for connection to track carrier chains. Provide 2” side hems. Provide 6” bottom hems with a separate canvas pocket for 3/4” diameter bottom pipe. Provide pipe in lengths as required by curtain width. Pipes shall be provided with the requisite number of couples including 1 at each end. Pipes shall extend 1/2” beyond each side of the curtains finished width. Pipes shall be thoroughly cleaned to remove oil. Pipes shall be checked to remove all burrs to prevent tearing of curtain pipe pocket during installation

7. Cyclorama Curtain: The cotton muslin cyclorama curtain shall be provided seamless in size indicated by the drapery schedule. Panel shall be sewn flat. Color shall be White. The curtain shall be provided with heavy jute webbing along the top with grommets at 12” o.c. Provide WHITE tie line for each grommet. Grommets shall not break stitching. Provide 2” wide side hems with double fabric foldback. Provide 6” bottom hems with a separate canvas pocket for 1” diameter bottom pipe. Provide nominal ¾” diameter threaded and coupled black iron pipe for cyclorama bottom pipe. Pipes shall be provided with the requisite number of couples including 1 at each end. Pipes shall extend 1/2” beyond each side of the curtains finished width. Pipes shall be thoroughly cleaned to remove oil. Pipes shall be checked to remove all burrs to prevent tearing of curtain pipe pocket during installation.

8. Curtain Labelling: Provide a sewn in drapery label in the top right-hand corner of each finished stage curtain. Label each panel with size, material type and installation date.

P. Liftline Termination: Typical lineset liftlines shall terminate at the batten with batten clamps and shackle. Electrics and Traveler Track lineset liftlines shall terminate with 3/8”x6” jaw/jaw turnbuckles to formed electric batten clamp (supplied by lighting contractor). Installation of electrics lineset, including the electric raceway (supplied by lighting contractor) shall be by this Contractor. See drawing details.

Q. Lineshaft Winch Assemby – Front of House Lineset: Provide and install the winch assembly as indicated on the drawings. Winch assembly shall be capable of lifting 1200 pounds live load. Dead load shall not exceed 750 pounds. Lineshaft winch assembly shall be provided with integral steel frame, primary and secondary brake and (5) drums grooved for ¼” wire rope. Winch assembly shall be fixed speed 30 feet per minute. Winch drums shall be capable of accepting 25 ft of cable travel plus 3 dead wraps. Liftlines shall be ¼” 7x19 GAC, terminated at the pipe batten with 6” Jaw/Jaw turnbuckle and formed double batten clamp (see drawings). Provide double pipe batten as indicated by the drawings. Winch assemblies shall be secured to the building steel with integral back-to-back steel backbone and miscellaneous steel framing as required by field conditions. Backbone and support framing shall be of sufficient size and length to connect to existing building structure. Backbone steel shall be engineered, manufactured, and installed by the Rigging Contractor. Winch drum housing shall be black. Rigging contractor shall attach the pantograph wire management system to the top rigging pipe batten as required.

R. Winch Control Panel and Starter: Provide a wall mounted control panel for FOH winch control (at the stage floor. Provide starter cabinet at the winch assembly).

1. Control panel shall be provided with engraved labeling.
2. Control panel shall utilize “Deadman” control buttons with “UP”, “DOWN”, as well as a locking/twist-release mushroom E-STOP. Panel shall be provided with maintained two-position key switch with OFF and ON modes. Key shall be removable ONLY when the switch is in the OFF position.
3. Panel shall be provided with a green indicator light, which denotes the control station is energized, and the system ready. When the control station is in the off position, the indicator light shall not illuminate. When an operational failure has occurred, such as over-travel limit, the green indicator light shall not illuminate.
4. See drawings for winch control labeling and layout.
5. Turning the key to OFF and back on again shall reset the system.
6. System shall be controlled with a handheld controller which plugs into the control panel and is provided with a 25 ft. umbilical cable as required. Provide with rotary 4-element limit switch and Position Encoders as required to position the hoist battens at low trim, high trim, overtravel low, overtravel high and 1 “PLAY” position. Play position shall be determined by the Owner and shall be repeatable and reprogrammable.
7. Starter cabinet shall be provided at the motor assembly. Starter shall be provided with a 12 ft. brake motor and limit switch “connection tail” with quick connect plugs. Starter panel shall be surface mounted, oil tight enclosure with continuous hinge.

PART 3 – EXECUTION

3.1 INSPECTION

A. Examine all work prepared by others to receive work of this Section and report defects affecting installation to the Owner’s Representative for correction. Commencement of the work shall be construed as complete acceptance of preparatory work by others. The sphere of inspection shall include but not be limited to:

1. Assurance all mounting surfaces are ready to accept the Work.

2. Verification of flatness, plumb and level of mounting conditions.

3. Inspection of all components of the Work to insure no damage has occurred during shipping or storage.

3.2 PREPARATION

A. The Contractor shall verify field measurement at the site prior to installation and modify the system accordingly.

B. The Contractor shall coordinate the Work with related trades and the Owner's Representative. This shall include the preparation of schedules and coordination of equipment delivery and storage.

C. Storage at the site shall be coordinated with the Owner's Representative and shall insure the materials and components are undamaged. Any material stored at the site shall be protected from damage by the work.

D. Appropriate signage shall be furnished during overhead work to caution of personnel working above.

3.3 INSTALLATION AND ERECTION

A. The installation workmanship shall provide straight, plumb, true and aligned components throughout. All connections shall be tight fitting with a minimum safety factor of eight and all arranged in an orderly manner. The mechanical installation shall possess the necessary properties to withstand stresses of tension, compression, flexure, shear, and torsion which may be anticipated being imposed on one or more of the components; and shall be related to 1) safety, 2) ease of operation, 3) quietness of operation, and 4) service life. The standards of quality and design covering the equipment and fabrication plus the installation technique required are established on this basis. The decision of the Architect in determining the acceptability of equipment items, installation technique and workmanship shall be final.

B. This Contractor shall conform to the best trade practices, fabricating and installing all items in accordance with manufacturer's recommendation and Architect direction, and shall coordinated with trades doing adjoining work.

C. During the course of his work, this Contractor shall daily remove to collection points at the job site, all loose trash and scrap materials. At the completion of his work, he shall leave all related work areas broom clean.

D. Installation shall be complete with all members and materials, and all blots, nuts, washers, clips, fittings, supports, or other items required for attaching all equipment specified to the existing construction.

E. This contractor shall do all required cutting, drilling, tapping and fitting to properly install and secure his work in place. Cutting or drilling existing structural or finishing work shall have the prior approval of the Architect.

F. The mechanical fabrication and workmanship shall incorporate neat and mechanically acceptable practices such as clean drilled and punched holes without flash, hard smooth finish for all sheared machines, and cut edges, and proper fit of components and contiguous parts without irregularity where marching is intended. Welding shall meet qualifications of A.I.S.C. manual and shall be without spatter and other evidence of poor practice. All moving parts shall have specified tolerance, shaft sizes, bearings, mounting, connections, and accessories coordinated into the work in a manner acceptable to the Architect. No wood construction or equipment shall be incorporated into the work excepting as may be set forth in the Specifications.

G. The fabrication of all equipment shall incorporate only new and unused materials. This includes all metal components in various shapes required such as plate, bar, rod, castings, structural,

stampings, forgings, clamps, bolts, bearings, chain, pipe, sleeves, slips, cable and all other accessories not mentioned.

H. The installation costs included in this proposal shall be based upon the use of experienced riggers.

I. It shall be part of this scope of work to install, adjust and demonstrate operation of all stage curtains. Adjustment shall include leveling, cleaning and repair if necessary.

3.4 SYSTEM CONSTRUCTION/RIGGING

A. General:

1. Maintain trims indicated by the contract documents.

2. Pipe battens shall be aligned along both ends when in the trim position.

3. Anchoring to the building shall be made by use of epoxy anchors, thru bolting, machine bolts and shields or other approved anchor in lieu of lag bolts or toggle bolts. Connection to gypsum wallboard ONLY is not permitted. Where structural connections are made directly to hollow concrete block, provide thru-bolt connection with backing plate as required.

3.5 SIGNAGE AND PAINTING

A. Provide the following signage and painting details:

1. At the down stage right wall, provide a clear plastic encapsulated framed sign 24”x 36” indicating:

a. Dead-hung pipe loading capacity.

b. Front of house stage electric loading capacity

c. Stage Batten layout with numerical identification and spacing from plaster line.

3.6 INSPECTION AND TESTING

A. The Architect or his appointed representative, following receipt in writing or notification from this Contractor that the installation is completed shall make final inspection. If inspection reveals any detail of construction, fabrication, or installation not in strict accord with the specification and contract requirements, approval shall be withheld and Contractor shall be given thirty days to replace the rejected items with those conforming to specification requirements. In addition to the final inspection of various equipment components the Architect shall have the right of inspection during the course of the installation, and he shall be allowed access to materials at the side for eventual incorporation in the work. Preliminary inspection shall not be constructed as eliminating the possible rejection of various components during the final inspection detailed above.

B. The completed installation of the stage rigging system shall be tested and operated for the approval of the Architect or his representative by the Rigging Contractor prior to approval.

C. Final tests and inspections are approved when:

1. Punchlist items complete.

2. Submittal of three copies of warranty.

3. Submittal of record drawings and flame test certificates.

END OF SECTION 11 06 00

SECTION 26 05 61 – STAGE LIGHTING SYSTEMS

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. Supply of all stage lighting devices, equipment and components as required for a complete and operational system. Installation of all equipment, devices and permanently installed equipment is by the Electrical Contractor. Setup of all loose equipment (e.g. lighting control console, video monitors, printers, etc.) is by this Contractor. All 120vac and control device wire terminations shall be by the Electrical Contractor.

B. Provision and installation of all conduits, wire, DMX control wiring, back boxes, junction boxes, pull boxes and terminal boxes as required by the drawings and specifications is by the Electrical Contractor.

C. Configure lighting control network, including programming of managed switch as required to maximize transmission rate for devices transmitting data at different rates.

D. Programming of control console, architectural lighting master / entry stations and lighting network devices shall be provided by a Factory certified technician. Programming will include having a lighting board operator on site to establish “stage lighting looks” and save them to the console and preset stations. Programming shall be as defined by the Theater Consultant and the Owner.

E. Provide of a functional graphical MAGIC SHEET in the console with the proposed “Rep Plot” fully detailed and integrated.

F. Field verification of dimensions, conditions and obstructions at the job site.

F. Submissions of shop drawings for all components, equipment, materials, systems and interconnection of the same.

G. Pre-assembly and shop wiring of the lighting network control rack shall be by this Manufacturer/Contractor prior to delivery to site. Deliver completed rack to site for installation and field wiring terminations by the Electrical Contractor.

H. Coordination of manufacturing and installation of all systems supplied herein. Field inspection and supervision of installation work provided by the Electrical Contractor.

I. System inspection, turn-on, commissioning and final adjustment.

J. Delivery, assembly, installation, focusing and gelling as required of all stage lighting fixtures. Work shall be conducted by individuals trained and skilled in Stage Lighting hanging and focusing.

K. Owner training as outlined by these specifications.

L. Systems operations and maintenance manuals.

M. System warranty as defined by these specifications.

N. The lighting system shall basically be comprised of the following:

1. Theater lighting dimming and control systems
2. Theater lighting circuit distribution systems.
3. Emergency transfer equipment.
4. Stage lighting fixtures including installation, focusing and programming.

5. Portable and loose equipment as specified.

1.3 QUALITY ASSURANCE

A. Work shall be done by people skilled in this trade in strict accordance with the requirements and/or specification of the manufacturers of the material being used.

B. Qualifications:

1. The lighting systems integrator shall be a Factory approved and warranted service center for all of the equipment supplied. Field engineers and service technicians shall be factory trained and qualified for all on-site and in-shop engineering services required. The Systems Integrator shall be a dealer of all manufacturers of the proposed equipment. Integrator must be a warranted service center for all of the equipment supplied. The manufacturer shall have been engaged in the production of entertainment and theatrical lighting and control systems for a minimum of ten (10) years.

2. The manufacturer shall have completed a minimum of ten (10) system installations of similar or larger size.

3. The manufacturer shall be capable of providing a factory trained field engineer to the job site within 24 hours of a service call. They shall maintain a 24-hour emergency service phone line. A call to the emergency line shall result in an engineer responding within 30 minutes from the time of call.

4. Field engineers and service technicians shall be factory trained and qualified for all on-site and in-shop engineering services required.

5. Specified Stage Lighting Manufacturers: (Systems are based on products manufactured by ETC, however Strand Lighting is an approved manufacturer).

a. ETC
3030 Laura Lane
Middleton, WI 53562
(608) 831-4116

b. SSRC
2172-A River Road
Greer, SC 29650
(864) 848-9770

c. Union Connector
300 Babylon Turnpike
Roosevelt, NY 11575
(516) 623-7461

d. Pathway Connectivity
480C 36 Avenue SE
Calgary ABT25 W4
(403) 243-8110

e. Middle Atlantic Products Inc.
North Corporate Drive
Riverdale, NJ 07457
(973) 839-8821

f. City Theatrical
475 Barell Ave.
Carlstadt, NJ 07072
(800) 230-9497

6. The Lighting Systems shall be provided by one of the following pre-approved Lighting System Integrators:

   a. Vincent Lighting Systems
   (859) 525-2000

   b. Beck Studios
   (513) 831-6650

   c. Barbizon Lighting
   (212) 586-1620

   d. 4-Wall Lighting
   (201) 329-9878

   e. Indianapolis Stage
   (317) 635-9430

   f. Integrated Theater Systems, Ltd.
   (412) 441-8000

   g. Scenic Solutions
   (888) 866-5062

1.4 REFERENCES

A. Regulatory Agencies:

1. Electronics Industries Association
2. National Electrical Code
3. National Electrical Manufacturers Association
4. National Fire Protection Association
5. Underwriter's Laboratories
6. Occupational Safety and Health Act of 1970
7. Additional applicable codes, standards, regulations and guidelines shall be adhered to in both spirit and letter of intent.

1.5 SUBMITTALS

A. Shop Drawings

1. Submit field coordinated shop drawings for approval prior to installation. Shop drawings shall indicate all box locations, mounting heights, pull box and junction box locations, conduit routing and conduit wire fill. Site dimensions and conditions affecting the Work shall be verified prior to commencement of Shop Drawings.
2. Shop drawings shall be wholly coordinated with other work of the Electrical Contractor.
3. Shop drawings shall be made in conformity with the best modern practice and all design shall reflect a requirement for minimizing institutional maintenance.
4. All drawings shall be produced on AutoCAD or compatible system to ensure legibility and quality of submission. Obtain approval of the drawings prior to proceeding with manufacture and fabrication. Complete shop drawings shall include:

   a. General arrangement plans and diagrams indicating location of each device, component and equipment item. (1/4" = 1'-0" minimum)

   b. Component installation details. (1" = 1'-0" minimum)

c. Manufacturer's component equipment drawings

d. Manufacturer's catalogs cuts showing weight, dimensions and capacities of mechanical components.

e. Power and control riser diagrams indicating wire and cable routing for all lighting devices.

B. As-Builts:

1. Submit in accordance with the General Conditions.

2. Four copies of as-built and installed shop drawings. AutoCAD copies of general arrangement, elevations and connection details shall be provided on disk as part of the As-built drawing submission.

1.6 WARRANTY, SERVICE AND TRAINING

A. The Contractor shall warrant systems to be free of defective components, faulty workmanship or improper installation/adjustment for a period of one (1) year from the date of Owner's final acceptance.

B. The field supervisor and project manager for this Contractor shall be present at the Systems turn-on, checkout and testing and Owner training session. The Contractor shall make necessary repairs and advise on field installation nuances at time of training. Failure to attend these meetings may result in delay of final approval of overall system.

C. Programming of the systems with the Theater Consultant and the Owner's representatives shall include control console setup and channel assignments (including assignment for interface with the house lighting systems), definition of preset / entry station functions and programming of the various presets (including house lights and various stage lighting "looks"), and assignment/setup of all lighting network locations and Gateways as required. Programming session requires a qualified lighting board operator to be on site and operating the console throughout the session. Modifications to the program assignments may be made as part of other training sessions. Provide a detailed and operational Magic Sheet.

D. Training shall consist of (4x) four-hour sessions (16 hours total) at times mutually agreeable to the Owner and this Contractor. The training session shall occur no later than (7) days after final inspection and approval of the system. Training shall include programming of the architectural control systems and associated preset stations as directed by the user group and theater consultant.

E. This Contractor shall provide one half-yearly visit to the site for checking and adjusting of equipment. The visit shall occur six months after the system has been accepted and shall be at a time mutually agreeable to the Owner and this Contractor. Visit can coincide with training session if mutually agreeable with Owner.

F. For the first (30) days after final acceptance of the system, the Contractor shall be required to answer all service calls within twenty-four hours of a request being made. After the (30) day period, the Contractor shall meet all requirements established by the one (1) year warranty.

1.7 SUBSTITUTIONS

A. Requests for substitutions and/or alternate manufacturers for the specified equipment, components and/or accessories shall be made in writing prior to bid. Requests shall provide detailed description of the substituted item, effect the substitution will have on the overall system, benefits of substitution over the specified product and any cost advantages to the substitution. Requests for substitution shall be made minimum (14) days prior to bid. Review of proposed substitution by the Consultant, Architect or Owner shall not be construed as acceptance of the substitution.

PART 2 – PRODUCTS

2.1 GENERAL

A. Where equipment, components or wiring systems have been omitted from the specifications or drawings, but are necessary for the operation of the system, they shall be provided by this Contractor without claim for additional payment or time.

B. Where the specified control cables differ from the Manufacturer's recommended cable and are required for a fully operational system, it shall be the responsibility of this Contractor to bring this discrepancy to the attention of the Architect and Consultant prior to bid.

C. Items, materials and equipment shall be new and undamaged. Uniform materials shall be used throughout. All steelwork shall be cleaned, primed with rust inhibitor and painted with epoxy resin or baked enamel finish. This Contractor shall replace or repair all damaged equipment. All touch-up paint shall match the manufacturer's color identically.

D. The mechanical fabrication and workmanship shall incorporate best practices for good fit and finish. There shall not be any burrs or sharp edges to cause a hazard to operating personnel.

2.2 EQUIPMENT

A. Major Equipment List: The preferred manufacturer has been selected and specified herein. Acceptable Alternate Manufacturers include STRAND LIGHTING AND ENTERTAINMENT TECHNOLIGIES. Substituted equipment must meet the specifications of the selected manufacturer and all its operational requirements.

THEATER EQUIPMENT

ITEM	MFGR	MODEL	QUANTITY
Stage Lighting Dimmer	ETC	Sensor SR3-48	2
Stage Dimmer Modules	ETC	D20 (dual 2.4kW) (350 ms)	56
Stage Relay Modules	ETC	R20 (dual 2.kW)	28
Electronic Low Voltage Modules	ETC	ELV10AF (dual 1.2kW)	1
Airflow Modules	ETC	AFM	11
Thru Power Modules	ETC	TR20AF (TURNOVER to Owner)	6
Vibration Isolation Pads	ETC	Pads - NDB-Red	8
Electronics Modules	ETC	CEM3	2
Locking Door Panels	ETC	Sensor3 SR48	2
Internal Bussing Kit	ETC	Bussing Kit	1
Control Console	ETC	Ion XE 20-2K-US (2048 Parameters)	1
Motorized Fader Wing	ETC	EOS 20 MFW	1
Keyboard	ETC	As Required	1
Mouse	ETC	As Required	1
Console Dust Cover	ETC	Ion XE + EOS 20 Fader Wing	1
Touchscreen LCD Monitor	Planar	PCT2265 22" LCD-TFT	2
Video Monitor Connectors	ETC	10 ft.	2
Power Cables	ETC	10 ft. – As Required	Lot

Network Cables	ETC	Cat. 5 RJ45 – 25’ Long	1
(Network Cables, Power Cords, Accessories and Other Cabling As Required to Provide a Fully Functioning Control System)			
Console Mounted light	ETC	18” Gooseneck	1
Free Standing Worklights	Lit-lite	18” Gooseneck w/Dimmer	1
Weighted Base	Lit-lite	As Required	1
Wireless Access Point	EnGenius	EAP 1750H	1
Network Cable	ETC	5 ft. Ethernet Cable for WAP	1
iRFR APP	Apple Store	Remote Focus APP for iPad	1
Ethernet Control Rack	Custom		1
Control Rack	Mid. Atl.	DWR-21-17PD	1
Locking Plexiglass Door	Mid. Atl.	DWR-21 Series with Locks	1
Cable Lacing Bars	Mid. Atl.	LACE as Required	Lot
Power Strip	Mid. Atl.	PD-1020J (10 outlets)	1
Rack Blanks	Mid. Atl.	PBL Series	Lot
Brush Grommet	Mid. Atl.	BR1 – 1 RU Brush Grommet	1
Lighting Control Enclosure	ETC	Unison Ern2-RM-120	1
Lighting Control Processor	ETC	P-ACP2	1
Arch. Control Power Module	ETC	P-SPM	1
Ethernet Switch w/PoE	Linksys	Smart Switch LGS326P – 10/100 PoE	1
Ethernet Patch Panel	Hubbell	24 Port Cat 5e Patch Panel	1
Cable Management Blank	ETC	2 RU Cable Mgmt.	1
Ethernet Patch Cables	Custom	Cat. 5 UTP cable - 12”	Lot
DMX Repeater/Opto Splitter	Pathway	9014 – 1 IN x 8 OUT – Rear Connect	1
DMX Em. Bypass Controller	ETC	DEBC-6	1
Em. Bypass Detection Kit	ETC	EBDK	1
UPS – Power Supply	Tripp Lite	1000VA/700W 2U UPS	1
UPS Rack Mtd. Kit	Powerware	As Required	1
7” Portable Touchscreen	ETC	Paradigm P-TS7-PE (Net Connect)	1
7” Wall Mount Touchscreen	ETC	Paradigm P-TS7-4 (Rack Mount)	1
Rack Mount for Device C3	Custom	Plate to Rack Mount Station C3	1
Entry Station w/ Lockout	Unison	U11K01 1 Button/ 1 Key Lock	6
Circuit Distribution Boxes	Custom	See Drawings	Lot
Net Receptacle Panels	Custom	See Drawings	Lot
Emergency Transfer Switch	ETC	ELTS2-1-D-120-8 CCT. – See Dwgs.	1
2 Port Net 3 Gateway	ETC	N3T2G-2F Pipe Mount (Permanent)	2

Gateway Hanging Kit	ETC	400CC - C-Clamp	2
2 Port Net 3 Gateway	ETC	N3T2G-2F Portable Pipe Mount	7
Gateway Hanging Kit	ETC	400CC - C-Clamp	7
Network Cables	ETC	Cat. 5 RJ45 – 5’ Long	7
Connector Strip Raceways	Custom	See Drawings	6
Cable Management Pantograph	ETC	Cable Mgmt. Pantograph (16 ccts)	1
Pantograph Mounting Hardware	ETC	Mounting Hardware for Pipe Mount	Lot
Pantograph Flat Cable	ETC	Flat Cable Assembly (16 ccts)	1
In Line Connect. Strip Brckt. (Note: 1 bracket at each lift line + 1 brackets between each lift line)	ETC	#21 Single Pipe Brackets	65
In Line Connect. Strip Brckt. (Note: 1 bracket at each lift line + 1 brackets between each lift line) (Pantograph attached to top pipe batten with hardware supplied by this Contractor)	ETC	#22 Double Pipe Brackets	9

2.3 STAGE LIGHTING 120VAC DISTRIBUTION EQUIPMENT

A. This system shall include all 120vac wiring devices for the connection of portable stage lighting fixtures. Devices shall be provided as defined by the drawings. Devices shall be constructed of black aluminum in thickness required by structural and NEC requirements.

B. Provision and installation of all stage lighting electrical devices as defined by the device schedules and drawings shall be the responsibility of the Electrical Contractor. All materials must comply with the NEC. All electrical equipment and materials shall have the listing of the Underwriter’s Laboratories, Inc. and shall bear the labels attesting to UL listing.

C. All devices shall be provided with provided prewired with 125 degree XLP high temperature wire to molded barrier terminal blocks. Terminal blocks shall be sized to accept #10 THHN conductors.

D. All devices shall be appropriately labeled with permanently attached lamacoid circuit numbers. Where custom panels are specified they shall be silk screened or finished as defined by the drawings.

E. Where components, support devices and other materials have been omitted from the specifications and drawings, but are necessary for the operation of the system, they shall be provided without additional cost to the Owner.

2.4 STAGE DIMMER RACK

A. The auditorium stage lighting dimmer rack shall be the Sensor Installation Rack as manufactured by Electronic Theatre Controls, Inc., or equal. The fully digital dimmer rack shall consist of up to 48 dimmer module spaces. Sensor rack systems shall be UL Listed and CSA Approved and shall be so labeled when delivered to job site.

B. The dimmer modules shall be the Sensor dimmer modules as manufactured by Electronic Theatre Controls, Inc., or equal. Sensor dimmer modules shall be designed for dependable, economical service in theatrical and video applications.

C. Provide with internal bussing kit.

2.5 ETHERNET CONTROL RACK

A. The external control processor shall be the Unison External Processing Rack (ER-4) as manufactured by Electronic Theatre Controls, Inc.

B. The Ethernet control rack shall be custom assembled as required by the system description. Rack shall be fully enclosed TIA/EIA compliant assembly. Rack shall be equipped with vibration isolation pads.

C. All rack assemblies shall be UL and ETL listed. All components shall be factory assembled and wired. Field assembly and wiring is not acceptable. Racks shall be protected prior to delivery to site. Racks shall be protected prior to delivery to site. Racks shall be lockable.

D. Networks shall be designed as UTP starred systems with control nodes located throughout facility. The system shall be fully software programmable and reconfigurable. All network wiring shall be accomplished with Category 5 cable.

2.6 STAGE LIGHTING CONSOLE AND ACCESSORIES

A. The lighting control console shall be a microprocessor-based system specifically designed to provide fully integrated control of LEDs, conventional and moving lights. The console shall be equipped with at least (4) DMX universes of control. The console shall be networkable with at least 4 other consoles. The console shall include (4) rotary encoders for moving light parameter control and be preprogrammed with a variety of moving light effects. The console shall be the Ion as manufactured by Electronic Theatre Controls, Inc., or equal.

2.7 ARCHITECTURAL LIGHTING CONTROL DEVICES

A. After the lighting control devices have be fully programmed, it shall be the responsibility of this contractor to fully “Label” each of the presets and slider buttons as defined by the Owner / Theater Consultant. Labeling shall be with “brady” label maker.

2.8 STAGE LIGHTING FIXTURES AND ACCESSORIES

A. Work associated with stage lighting fixtures includes delivery, assembly, bench focusing, installation, focusing, gelling and console programming of all fixtures.

B. All light fixtures shall be provided with the following:

1. Powercon connector installed on a 36”, three wire Teflon lead encased in black fiberglass tubing.
2. (1) Lamp installed, 10% spares. Lamps as specified per fixture.
3. Malleable iron C-Clamp.
4. One (1) wire rope safety cable with spring clip.

C. THEATER - Provide the following fixtures, accessories and effects equipment:

26 – ETC Source 4 (10) Ellipsoidal Colorsource Deep Blue LED Spotlights (CSSPOT-DB) Model 410 Lens Tube. (Black)

18 – ETC Source 4 (19) Ellipsoidal Colorsource Deep Blue LED Spotlights (CSSPOT-DB) Model 419 Lens Tube. (Black)

12 – ETC Source 4 (26) Ellipsoidal Colorsource Deep Blue LED Spotlights (CSSPOT-DB) Model 426 Lens Tube. (Black)

36 – ETC Source 4 (36) Ellipsoidal Colorsource Deep Blue LED Spotlights (CSSPOT-DB) Model 436 Lens Tube. (Black)

20 – ETC ColorSource LED PARs Deep Blue (CSPAR-DB) - Black unit. With soft focus diffuser, pattern holder & PowerCON cable. Apollo Get-A-Grip Black. Provide Narrow, Medium and Wide Round Diffusers in Frame –Black. Install the MEDIUM diffuser.

8 – Elation Seven Batten 72 LED Strips provided with Pipe Mounting Trunnions and C-Clamps as required. Provide with Gel/Frost Filter for each fixture. Provide with Powercon Connectors.

2 – Lycian Superstar 1.2 model 1275. Lamp 1200HB metal halide. Provide with (5) colors of Gel installed in each followspot. (Sky Blue, Bastard Amber, No Color Pink, Green, Lavender)

14 – Altman 99-DMX Terminator

25 – SSRC WL-LED-100 work light ***hardwired*** to the Connector Strip. Provide with safety cable. Black. Supply to Electrical Contractor for hardwired connection to connector strip pigtails.

4– Source 4 B-Size Pattern Holders – ETC #400PHB

8– Source 4 Drop-in Iris Kits – ETC #400RS

4 – Single side arms 12" long with sliding tee – Altman #509-12-1

35 – 5' long DPA-A Powercon to Edison Type SO Adaptor Cables.

8 – 5' long DPA-B Powercon to 2P+G Type SO Adaptor Cables.

42 – 8' long Powercon cable jumper cables.

16 - 15' long Powercon cable jumper cables.

8 - 25' long Powercon cable jumper cables.

78 – 5' long DMX 5-pin M/F jumper cables.

16 – 15' long DMX 5-pin M/R jumper cables.

200 Yards Black Tie Line – Rosebrand or equal.

(Contractor Note: If the fixture packages is changed to Conventional Fixtures as a Value Engineering effort, then the cable package will have to be modified).

PART 3 – EXECUTION

3.1 PREPARATION

A. Examine all Work prepared by others to receive Work of this Section and report defects affecting installation to the Consultant. Commencement of Work shall be construed as complete acceptance of preparatory Work. The sphere of inspection shall include but not be limited to:

1. Coordination of device locations with other trades and Work provided by others.
2. Coordination of all box sizes and conduit routing.
3. Assurance all mounting surfaces are ready to accept the Work.
4. Verification of flatness, plumb and level of mounting conditions.
5. Inspection of all components of the Work supplied by others to ensure no damage has occurred during shipping or storage.

B. Examine the site and review the contract drawings to become familiar with the work. Field verify all dimensions at the site prior to installation and advise the Consultant of all system modifications required by field conditions.

C. Coordinate the Work with related trades. This shall include the preparation of schedules and coordination of equipment delivery and storage.

D. Appropriate signage shall be furnished during overhead Work to caution of personnel working above.

E. All stage lighting fixtures shall be delivered to the job site, assembled, lamped, installed, circuited, gelled and focused as directed by the owner, theater consultant and the lighting plot. Provide all labor and materials as required to accomplish this work. Hang and focus will include PROGRAMMING of LED and other Intelligent Lighting. Magic sheets in the control consoles

shall be developed by the Lighting Integrator and shall be part of the initial setup and programming. House lighting and Stage Lighting SCENES for the preset stations will be created by the Lighting Integrator as part of the turnover and system programming.

3.2 WORKMANSHIP

A. The installation of all Work shall be neat. All equipment shall be plumb and square. All cables shall be neatly bundled with plastic tie wraps as required.

B. Surface mounted devices shall be provided with an integral backbox/enclosure by this Contractor. The enclosure shall be designed such that the receptacle faceplate does not overhang the edges of the enclosure. In all surface mounted cases, the faceplates and back box enclosure shall be flush along the outside edges and provided by this Contractor.

C. Work that is damaged or improperly installed will be removed and replaced. Materials and labor required for such repairs shall be provided without claim for payment.

D. Terminations shall be accomplished with appropriate connectors. Provide strain-relief at connectors where required.

3.3 INSPECTION AND TESTING

A. The Consultant following receipt in writing or notification from this Contractor that the installation is completed shall make final inspection.

B. If inspection reveals any detail of construction, fabrication, or installation not in strict accord with the specification and contract requirements, approval shall be withheld, and the Contractor shall be given thirty days to repair the rejected items as required. In addition to the final inspection of components the Consultant shall have the right of inspection during the course of the installation and shall be allowed access to materials at the side for eventual incorporation in the Work. Preliminary inspection shall not be construed as eliminating the possible rejection of various components during the final inspection detailed above.

C. The completed installation of the system shall be tested and operated for the approval of the Consultant.

D. This Contractor’s field supervisor and project manager must be on site during the system turn on, check-out and testing and Owner training.

E. The following condition must be met before final approval can be granted:

1. Final tests and inspections are approved.
2. Punch list items complete.
3. Submittal of three copies of warranty.
4. Submittal of record drawings and instruction manuals.
5. Owner training completed.

END OF SECTION 26 05 61

SECTION 27 41 16.61 - INTEGRATED AV SYSTEMS FOR THEATER

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. Provision of all sound reinforcement equipment, components, hardware and accessories as required for a fully operational and functional system. Furnish any additional items, not specifically mentioned herein, as necessary for a complete system, without claim for additional payment.

B. Provision and installation of all conduits, recessed back boxes, pull boxes and junction boxes as required is by the Electrical Contractor. Coordinate the work of the section with the project Electrical Contractor. Specialty back boxes and floor boxes provided by the AV Contractor and installed by the EC. All AV Equipment Racks supplied and installed by the AV Contractor.

C. Provision, permanent labeling, installation and termination of all AV Signal wire and cable related to the AV systems. All cable homeruns shall be without splices, continuous from the origin device to the homerun destination.

D. Field installation and wiring of all equipment racks.

E. Field installation of all major equipment items including speakers, racks, consoles, projectors, etc.

F. Provision and installation of signal wiring within equipment racks and between loose equipment and equipment racks, including all multi-cable audio snakes as required.

G. Provision and installation of all speaker systems, including all mounting brackets, rigging hardware and support assemblies. Installation of Projectors and all AV equipment items as required for a complete and operational system.

H. Submission of shop drawings for review prior to fabrication.

I. Field verification of dimensions and conditions.

J. Programming of DSP’s, Integrated Control Systems, Video Switchers, Mixing Consoles and all other control devices. Inspection, testing, alignment, and final adjustment of completed installations.

K. Demonstration for approval and instruction of owner for operating personnel.

L. System warranty.

M. The Systems shall be basically comprised of the following:

1. Theater AV Systems.

2. Loose equipment as specified.

1.3 QUALITY ASSURANCE

A. Work shall be performed by labor skilled in Professional Audio System installation and within strict accordance to the requirements and/or specifications of the manufacturers of the material being used.

B. The equipment specified herein has been selected for its operational, functional, maintenance and/or aesthetic suitability for the Project.

C. All equipment shall be new and undamaged. All materials shall conform to applicable provisions of Underwriters Laboratories and the American Standards Associations.

D. All work shall conform to the latest federal, state and city electrical safety codes or other authorities having jurisdiction. Where conflicts between codes exist, the most stringent code or regulation shall apply.

E. Qualifications:

1. This Contractor shall be an authorized representative for the specified manufacturers. This Contractor shall provide all services related to the work and shall exercise engineering supervision over the completed installation. This Contractor shall have been involved with the execution of professional sound system installations for a period of ten years or more and shall have completed at least five major sound installations of this type and scope.

2. This Contractor shall maintain and operate his own shops and fabricate or assemble all components with the exception of standard hardware, materials and equipment. The Contractor shall have experience with the specified Digital Sound Processor and programming of digital remote control devices.

3. This Contractor without claim for additional payment shall supply additional components needed for a fully operational and complete system.

4. The following sound system Contractors are recommended to bid this project (or equal contractors are acceptable):

a. ICB Audio, Cincinnati, OH 513-242-7400

b. Radiant Technologies, Sharonville, OH (800) 348-4008

c. LIVE! Technologies, Columbus, OH (614) 278-7777

d. American Sound, Covington, KY (859) 261-9024

e. Emerge Workplace Technologies, Cincinnati, OH (513) 554-8737

1.4 REFERENCES

A. Regulatory Agencies:

1. Electronics Industries Association

2. National Electrical Code

3. National Electrical Manufacturers Association

4. National Fire Protection Association

5. Underwriter’s Laboratories

6. Occupational Safety and Health Act of 1970

7. Additional applicable codes, standards, regulations and guidelines shall be adhered to in both spirit and letter of intent.

1.5 SUBMITTALS

A. Shop Drawings

1. Submit field coordinated shop drawings for approval prior to installation. Shop drawings shall indicate all box locations, mounting heights, pull box and junction box locations, conduit routing and conduit wire fill. Site dimensions and conditions affecting the Work shall be verified prior to commencement of Shop Drawings.

2. Shop drawings shall be made in conformity with the best modern practice and all design shall reflect a requirement for minimizing institutional maintenance.

3. Submit electronic (PDF) shop drawings. All drawings shall be produced on AutoCAD Version 2016 or compatible system to ensure legibility and quality of submission. Obtain approval of the drawings prior to proceeding with manufacture and fabrication. Complete shop drawings shall include:

   f. General arrangement plans and diagrams. (1/4" = 1' minimum)

   g. Miscellaneous Installation Details and Assembly Drawings. (as necessary)

   h. Provide a binder with a complete written list of all components and model numbers to be provided by SSC accompanied by manufacturer's cut sheets that indicate major dimensions, specifications and finishes of all equipment and accessories.

   i. Wiring and interconnection diagrams of system components including notation of type and manufacturer of all items including equipment make and model number, cable types and numbers, connector types (scale as required).

   e. Furniture and equipment rack layouts in plan and elevation. Include all control room equipment items.

   f. Patch panel and signal routing layouts with legend and wiring details (scale as required).

   g. Functional diagram(s) and point-point risers indicating cable types and quantities. Riser diagram or pull sheet to include cable identification numbering scheme that matches functional diagram.

   h. Suspension and attachment arrangement for all equipment including, but not limited, to left and right speakers and subwoofer speakers. Loudspeaker mounting drawing shall indicate hanging details, mounting hardware and rigging (including isolation scheme if applicable) and orientation of loudspeakers as required.

   i. Receptacle plate details showing engraved or silk screened legends, connector type and finish.

B. As-Builts:

1. Submit in accordance with the General Conditions.

2. Four copies of as-built and installed shop drawings. AutoCAD copies of general arrangement, elevations and connection details shall be provided on disk as part of the As-built drawing submission.

1.6 WARRANTY, SERVICE AND TRAINING

A. The Contractor shall warrant systems to be free of defective components, faulty workmanship or improper installation/adjustment for a period of one year from the date of Owner's final acceptance.

B. The field supervisor and project manager for this Contractor and the Audio Sub-Contractor shall be present at the Systems turn-on, checkout and testing and Owner training sessions. The Contractor shall make necessary repairs and advise on field installation nuances at time of training. Failure to attend these meetings may result in delay of final approval of overall system.

C. Training shall consist of (4x) four-hour sessions at a time mutually agreeable to the Owner and this Contractor. The first training session shall occur no later than (7) days after final

inspection and approval of the system. The second training session shall occur no later than (30) days after final inspection and approval of the system.

D. This Contractor shall provide one half-yearly visit to the site for checking and adjusting of equipment. The visit shall occur six months after the system has been accepted and shall be arranged to be at a time mutually agreeable to the Owner and this Contractor. Visit can coincide with a training session if mutually agreeable with Owner.

E. For the first (30) days after final acceptance of the system, the Contractor shall be required to answer all service calls within twenty-four hours of a request being made. After the (30) day period, the Contractor shall meet all requirements established by the one-year warranty.

1.7 SUBSTITUTIONS

A. Requests for substitutions and/or alternate manufacturers for the specified sound equipment, components and/or accessories shall be made in writing prior to bid. Requests shall provide detailed description of the substituted item, effect the substitution will have on the overall system, benefits of substitution over the specified product and any cost advantages to the substitution. Requests for substitution shall be made minimum (14) days prior to bid. Review of proposed substitution by the Consultant, Architect or Owner shall not be construed as acceptance of the substitution.

B. The Consultant reserves the right to substitute a new product that may have become available following the issuance of the Contract Documents. Such substitutions shall be made prior to final review of the equipment list.

1.8 CONTROL SYSTEM PROGRAMMING

A. The Crestron Integrated Control System shall have the following operational parameters:

There are (2) Modes for Audio/Video Playback:

1. Presentation/Lecture Mode (Lectures, Classes, Community Events);

2. Live Performance Mode (Theater, Music Ensembles, Orchestras, Bands, Choral Groups);

All "Presentation Mode" operations will be controlled from the Stage Crestron Touchpanel and/or through the Crestron APP on the iPad).

LIVE Mode operations will be controlled from the control booth portable Crestron Control touchpanel with the Yamaha QL5 Console as the audio control surface.

When the system is in "standby", the Silver Creek High School Logo will serve as the Background with a Large "POWER SYSTEM ON" displayed on the page;

When activated the POWER SYSTEM ON powers the Amps, DSP, Crestron Processor and all Equipment in the Stage AV Equipment Rack (EE3). This “Power ON” triggers the power sequencer system to turn the equipment on and off in the proper sequence;

The next screen option is to choose either Presentation Mode or Live Performance Mode. Select One.

In **PRESENTATION/LECTURE MODE** the system functions as indicated below:

The first screen after selecting Presentation Mode should be (2) buttons:

1. Presentation - Audio Only; 2. Presentation - With Video;

If 1. Presentation - Audio Only is selected then audio playback from the Denon Media Player (Bluetooth via phone or the CD player, SD drive, etc) is available, (4) (mics 1-4) of the (12) wireless mics are available and the floor pocket #2 microphone input (17) is available but none of the Video Inputs, Projector or Blu-Ray video playback are available.
There should be a separate MASTER VOLUME control on the right side of the touchscreen at all times.

If 2. Presentation - With Video is selected ALL of the same Audio Devices are available, but also the video devices. The screen is lowered, the projector is turned on and any/all video inputs can be used. A video source selection screen should be available on the touchpanel after Presentation Mode - With Video is selected. The following inputs are available:

1. The Yamaha QL5 Console is NOT used in Presentation mode;

2. Four of the Wireless mics (mics 1 thru 4) and the Microphone Input #17 in the Floor Pocket #2 for use by a Presenter (with selection of source/mic and volume control for each input at the crestron touchpanel);

3. Audio Playback is available through the Stage Rack Media Player with volume control on the touchpanel – Audio playback can also be accomplished by plugging a 3.5mm cable to the DM-TX200 input device in the floor pocket #2 and the Stage Rack DM-TX200.

4. Video Presentation from the DM-TX200 input device in floor pocket #2 and the Stage Rack are available sources;

5. Video Presentation: Screen Lowers/Projector Powers Up/Down - separate operation at touchpanel - there should be separate buttons to raise/lower the screen manually and turn on/off the projector manually;

6. The House Mix Blu-Ray Player operates as part of this Presentation Mode and all control functions (including volume control) should be available on the touchpanel and on the iPad APP for this device;

7. The PTZ camera control should be available as a separate page and should be available in Presentation Mode;

8. All control functions on the Touchpanel should appear on the iPad via the Crestron APP;

In **LIVE PERFORMANCE MODE** the system functions as indicated below:

In LIVE mode the same -Audio Only and -With Video buttons appear on the first screen and activate the associated devices as required. There should be an option to power on the projector and lower the screen manually on subsequent screens should they choose to ADD video to any LIVE mode performance.

1. All Audio Functions are controlled thru the Yamaha QL5 mixing console - All wireless and hardwired mics, inputs, outputs, etc. are available.... This is for Live audio mixing;

2. Audio playback is controlled thru the console via a PC or other input device connected directly to the console or connected to the console via the pcDi. Volume control of the video programming is via the Console;

3. The Blu-Ray Player is still controlled thru the touchpanel and iPad or directly at the Blu-ray player;

4. The floor pocket mounted DM-TX-200 is available as a video input source, plus the stage rack and house mix rack DM-TX-200 devices are available as inputs. Volume control for these devices is thru the Mixing console;

5. All Video functions (screen up and down, projector on/off, source selection, etc) are controlled thru the Touchpanel and iPad. In this LIVE mode all Audio functions are controlled thru the console;

6. The PTZ camera control should be available on the Touch Screen in both Presentation and LIVE mode. Preview of the PTZ is on the House Mix video monitor. Routing of the PTZ is via the touchscreen, DMPS switcher and Kramer matrix switcher.

A "TURN SYSTEM OFF" should always be available on EACH screen - Sequentially Powers down all equipment and reverts to the Silver Creek High School GUI "standby" screen.

PART 2 – PRODUCTS

2.1 GENERAL

A. Where equipment, components, support devices, anchoring systems or wiring systems have been omitted from the specifications or drawings, but are necessary for the operation of the system, they shall be provided and installed by this Contractor without claim for additional payment or time.

B. Items, materials and equipment shall be new and undamaged. Uniform materials shall be used throughout. All steelwork shall be cleaned, primed with rust inhibitor and painted with epoxy resin or baked enamel finish. This Contractor shall repair damage to factory finishes. All touch-up paint shall match the manufacturer’s color identically.

C. The mechanical fabrication and workmanship shall incorporate best practices for good fit and finish. There shall not be any burrs or sharp edges to cause a hazard nor shall there be corners accessible to personnel.

2.2 MANUFACTURERS

A. The sound and intercom systems shall be comprised of components that are of professional quality. See Major Equipment List for manufacturers and equipment model numbers.

2.3 PERFORMANCE REQUIREMENTS

A. Sound System:

1. Certain overall performance requirements of the sound system shall be checked by measurement. Each system as designed meets the following requirements based upon available data and the manufacturer's published specifications. The Contractor shall be responsible for use of the equipment specified in the manner specified, and each component's conformance with its manufacturer's specifications.

2. Overall system frequency response shall be +/- 3 dB, 250-8,000 Hz when measured in 1/3 octave bands at any seat. Frequency response shall be measured using a 1/3 octave Real Time Analyzer.

3. Residual noise and hum shall be below the masking noise levels produced by the air conditioning system, for an overall signal-to-noise ratio of 68 dB for the entire system.

4. Overall System Electronics Characteristics:

a. Frequency Response: 20-20,000Hz +/-0.5 dB

b. Signal to Noise: Better than -75 dB

c. Distortion: 0.1 % THD maximum

d. OPL (Operating Level): +4 dBM

B. Intercommunications System:

1. Station to station signal-to-noise ratio should be 70dB or better, channel separation better than 45 dB, equivalent input noise 110 dB or better.

2.4 SIGNAL WIRE CABLE SPECIFICATION

A. Cable quantities shall be as required by the systems. Substitutions of specified cable types are not acceptable without approval by the Consultant. Cable quantities shall be determined by the contractor as required by the functional diagrams and conduit riser diagrams on the drawings. All cables including multi-cable snakes shall be provided, labeled and installed by this Contractor. Substitutions of specified cable types are not acceptable.

1. All cable shall be as manufactured by Belden Wire and Cable, unless otherwise noted. See drawings for specified wire types.

2.5 SYSTEM EQUIPMENT

A. Microphone System and Accessories:

1. Outputs of all microphones shall be 150-250 ohms, balanced with respect to ground. The term "sensitivity" as used herein for microphones and expressed in dBm (dB referenced to .001 W) is the microphones available electrical input power level, when driven by a sound pressure of 10 dynes/cm2.

2. Microphone System Installation and Accessories:

a. Single line microphone connectors shall be Neutrik NC3MP-BAG series or approved alternate.

3. Cable in conduit indicated on the drawings for interconnection between system receptacles shall be provided by this contractor. Audio Contractor shall verify appropriateness of system cable and interconnection and shall coordinate numbering scheme of all cable pulled in conduit. Coordinate conduit routing requirements and any changes to the conduit riser diagrams with the Electrical Contractor.

4. Microphone extension cables shall be supplied as specified herein. Each flexible extension cable shall be fitted at one end with a Neutrik NC3MX-B connector, the other end shall be fitted with a Neutrik NC3FX-B connector. Flexible cables shall be Canare L-4E6S.

5. Provide installation of a fixed microphone for the Assistive Listening system as directed in the field by the Consultant. Suspension arrangement shall provide fixed orientation.

B. Rack-Mounted Control and Amplification Equipment:

1. Permanent rack shall be constructed of 12 gage steel top and bottom and 16 gage sides. Panel mounting channels shall be provided with holes on E.I.A. spacing. Dimensions shall be 22" wide by 26" deep by the height necessary to accommodate the specified equipment or as shown on the drawings.

2. All unused rack panel spaces shall be filled with blank solid panels or ventilating panels. Provide all accessories indicated on the drawings.

3. All racks shall have black baked enamel finish.

4. Rack mounted equipment shall be provided with security covers where indicated in the equipment list to avoid tampering with preset levels. If manufacturer does not provide suitable security covers for a specified device, Contractor shall provide alternate such as Middle Atlantic SF series.

5. All rack mounted equipment shall utilize security screws such as Middle Atlantic H-T.

6. All internal rack wiring of microphone and line level cable shall be Belden #8451.

C. Loudspeakers and Associated Equipment:

1. All loudspeakers shall be phased together.

2. Each portable loudspeaker shall have two male connectors, wired in parallel, mounted in the rear. These connectors shall be polarized Neutrik NC4MC connectors.

3. Portable loudspeaker cables shall be provided as described in the equipment list. They shall consist of jacketed #12 AWG conductors with phasing code. At each end, the cords shall terminate in a Neutrik NC4FC connector.

4. Design of the suspension arrangement, exact mounting details and aiming shall be indicated on the shop drawing submitted to the Consultant for review prior to installation. Provide detailed RIGGING details showing all hardware, connections to building and speaker hanging assembly.

E. Receptacle Plates

1. Receptacle plates shall be provided as indicated on the drawings. Coordinate exact size and orientation with back box sizes. This Contractor shall provide surface mounted receptacle devices (speaker, microphone and line level) with an integral backbox/enclosure (see drawings for more information). The enclosure shall be designed such that the receptacle faceplate does not overhang the edges of the enclosure. In all surface mounted cases, the faceplates and back box enclosure shall be flush along the outside edges.

2. Finish for wall mounted receptacle plates shall be 1/8" thick anodized black aluminum with engraved white lettering.

F. MAJOR EQUIPMENT ITEMS

Qty	Model	MFG Name	Description
1	iPad Pro 10.5 Display WiFi Only	Apple	Tablet – WiFi Only
4	Pro45	Audio-Technica	Choral Microphone
2	BH-B116A1B12	Bittree	HD/SDI Patch Panel 1x16 BNC
1	XD234 Standard Player	Brightsign	Digital Media Player
1	YA-J9214	BTX	3.5mm Stereo Cable 5'
2	HDMM10	BTX	HDMI Cable 10 ft.
1	YD-VGAA10	BTX	VGA w/ Audio Cable 10'
1	Thread Adaptor for Hanging Microphone from Catwalk – Connects to Matthew Telescoping Hanger and Rode NT4 Stereo Mic	Camvate	Double Head Stud 3/8” to 5/8”
1	VCMU	Chief	Projector Mounting Plate

1	CMS-009	Chief	9” Extension Column
1	Custom Wall Mount Bracket	Chief	Wall Mount Bracket - Custom
3	LSM-1U	Chief	Video Display Wall Mount
3	FCAV1U	Chief	Display Pull Out Accessory
1	MS-702	ClearCom	2 Ch. Intercom Master Station
1	RM-702	ClearCom	2 Ch. Intercom Remote Station
9	KB-701 – with Panel Mic	ClearCom	1 Ch. Loudspeaker Station
4	RS-702	ClearCom	2 Ch. Belt Pack
4	CC-26K	ClearCom	Single Lightweight Ear Headset
4	YC-36	ClearCom	2 channel Beltpack Adaptor
1	CZ11513 4-up HME DX210 System w/ HS15 Headsets	ClearCom	Wireless Intercom System
Lot	Custom Plates	Custom	Plates per drawings
2	DM-TX-200-C-2G	Crestron	Digital Media Input Device
1	Rack Mount Kit for DM-TX-200	Crestron	2 RU Rack Kit
1	DMPS3-4K-350-C	Crestron	Video Switcher Control Processor
2	TSW-760-B-S	Crestron	Touchpanel Control
1	TSW560/760-RMK-1	Creston	Rack Mount Kit
1	TSW-760-TTK-B-S	Crestron	Tabletop Kit for Touchpanel
1	DM-RMC-4KZ-Scaler C	Crestron	Scaler
1	PW-4880U	Crestron	Power Supply over DM
1	MP-WP152 + Rack Plate	Crestron	HDMI Input with Rack Mtd Plate
4	HD-TXC-101-C-E	Crestron	HDMI Transmitter (1 wall + 1 Surface Mount + 2 Turnover)
5	HD-RXC-101-C-E	Crestron	HDMI Receiver (3 Surface + 2 Turnover)
1	PTC-280-4K	Datavideo	4K Pan/Tilt/Zoom Camera
1	WM-1	Datavideo	Camera Wall Mount Bracket
1	Ultra Sharp 27	Dell	27” Video Conferencing Monitor
1	Paragon V - 276” Diagonal, 16:10 Aspect Ratio, (147”x234”) (120” Black Drop) Mount to face of Proscenium wall	Draper	Motorized Projection Screen w/Wireless Control and RS232 Interface Device
2	DN500-CB	Denon	Media Player with Bluetooth
1	DN-500BD	Denon	Blu-Ray Player
4	FL1200	FSR	Floor Box with Insert Plates
1	FL1500	FSR	Floor Box with Insert Plates

3	PWB-253	FSR	Video Wall Box with Insert Plates
1	G-Pro-4U-19	Gator	4RU Molded Rack (Portable)
1	VS44-DT	Kramer	4x4 Matrix Switcher w/HD Base T
1	LT-800-72	Listen Tech	FM Transmitter
1	LA-326	Listen Tech	Rack Mount Kit
1	LA122	Listen Tech	Universal Antenna Kit
30	LR-5200-72	Listen Tech	Wireless Receivers
30	LA-401	Listen Tech	Single Ear Bud
8	LA-430	Listen Tech	Neck Loop
3	LA-380	Listen Tech	Power Charger Case (12 unit)
30	LA-362	Listen Tech	Rechargeable Batteries
1	RL-10-D	Littlite	Rack Mounted Light
8	200LVC-DSB	Lowell	Volume control – 200w
1	ACSPR-SEQ-6-2009	Lowell	Power with Remote Control (EE3)
1	ACS-2014 RPC-HW Strip	Lowell	Power Strip (EE3)
4	RPC-20-CD	Lowell	Standalone RPC (EE3)
3	RPC-4 CD	Lowell	1 cct. Power Strip w/Cord (EE1,EE2)
2	RPSB2-MR	Lowell	Momentary Switch Module (EE1+EE2)
1	B429722	Matthews	Lightweight Telescoping Hangers 2 to 4 feet with Pipe Clamp (hanging Rode Stereo Mic from Catwalk)
2	SR-40-28	Middle Atlantic	Equipment Rack w/ LVFD40 Door (EE2 and EE3)
Lot	D2	Middle Atlantic	2RU Rack Drawer
Lot	EB, Vents, etc	Middle Atlantic	Rack Blank and Vent Plates
1	SSL	Middle Atlantic	Pull Out Shelf (EE2)
1	L2 Series	Middle Atlantic	Lectern – Finish TBD by Arch.
Lot	Custom Speaker Cables	ProCo	Length Required with Neutrik Speak-On Connectors from SA1, SA2 & SA3 to loudspeakers and subwoofers
4	AQ50	ProCo	50' Microphone Cable (Choral Mics)
12	AQ25	ProCo	25' Microphone Cable (Icom +)
12	AQ10	ProCo	10' Microphone Cable (Icom + Stereo Hanging Mic)
2	AQ5	ProCo	5' Microphone Cable (pcDI)
2	Custom Speaker Cables	ProCo	25’ Neutrik Speakon Cables

2	Custom Speaker Cables	ProCo	10’ Neutrik Speakon Cables
2	Custom Network Cables	ProCo	25’ Ethercon Cat5e Net Cables
2	Custom Network Cables	ProCo	10’ Ethercon Cat5e Net Cables
1	PT-RZ16K-WUXGA	Panasonic	Projector – (16,000 ANSI Lumens, DLP Chip)
1	ET-D75LE30 Zoom	Panasonic	Projector Lens (72’-6”” Throw - Image= (16:10) (276” Diagonal)
4	CX-Q 4K4	QSC	Amplifier 4 Channel – 8 Ohm
1	CX-Q 8K4	QSC	Amplifier 4 Ch./ 70v
16	WL2082i	QSC	Left/Right Array Loudspeakers
2	WL118sw	QSC	Subwoofers
4	FB2082-i	QSC	Speaker Rigging Fly Frame
2	EB2081-i	QSC	Speaker Rigging Extension Bar
2	PB2082-i	QSC	Speaker Rigging Pull Back Bar
Lot	Custom	QSC - Misc.	Rigging Hardware & Install as Required + Kindorf Frame Support
1	Q-Sys Core 110f	QSC	Digital Network Audio Processor
20	AD-C6T-WH	QSC	70v Ceiling Mtd. Loudspeaker
6	S67 with Yoke Mtd Brkt - Black	QSC	70v Wall Speakers with Yoke Mtd
2	NS26-300+ PoE Switch	QSC	Network Switch – 24 Port (EE1&EE2)
1	NS10-125+ PoE Switch	QSC	Network Switch – 8 Port (EE2)
1	ST-RX2	RDL	Audio Relay – MUTE for Fire Alarm
1	House Mix Console Desk	R&R Cases	Locking QL5 Mixing Console Desk – HMB Standard Design – See Drawings
1	Work Box 5 Drawer	R&R Cases	HMB Standard – 5D-WB-466810-HMB Standard Workbox
1	Castered Speaker Case	R&R Cases	2x Tannoy VX8 – HMB Standard
1	NT4	Rode	Stereo Microphone
1	R901-R610-U500	Ruckus	Wireless Access Point
3	Q65R Smart 4K	Samsung	65” 4K Smart Video Display
1	MX418/C	Shure	Gooseneck Lectern Mic
2	SM58A	Shure	Vocal Microphone
2	Beta 87C	Shure	Vocal Microphone
2	SM-57	Shure	Instrument Microphone
2	SM-81	Shure	Instrument Microphone
2	UA-820	Shure	1/2 Wave Antenna

1	UA845SWB	Shure	Antenna Distribution System
3	ULX-D4Q	Shure	Wireless Quad Channel System
12	ULXD1	Shure	Wireless Transmitter – Body Pack
4	ULXD2	Shure	Wireless Transmitter – Handheld Beta 58A
4	WL183	Shure	Omnidirectional Lav. Microphone
12	MX153T/O	Shure	Omnidirectional Headset Microphone (Tan)
1	MDR-7509	Sony	Headphones
2	VX-8	Tannoy	Passive Monitor Speakers
1	Smart 1000RM1U	Tripplite	UPS (EE3)
2	N252-012	Tripplite	Network Patch Panels (EE1&EE2)
1	As required - Custom	Whirlwind	Fan Out Multicable Snake to TF5
1	Director II	Whirlwind	Direct Boxes
4	Pro-T	Ultimate Support	Quarter Turn Mic Stand
4	Pro-T-T	Ultimate Support	Quarter Turn Mic Stand with Boom
2	Pro-T-Short-T	Ultimate Support	Quarter Turn Mic Stand with Boom - Short
1	QL5	Yamaha	Digital Mixing Console
2	MY4-AD	Yamaha	Dante Input Card
1	QL Editor	Yamaha	Control Software
1	Stage Mix APP	Yamaha	Remote Control APP
2	Rio1608-D	Yamaha	Digital I/O Dante - 1 portable unit mounted in the Gator Case; 1 permanently rack mounted in stage rack EE2)

PART 3 – EXECUTION

3.1 INSPECTION

A. Examine all Work prepared by others to receive Work of this Section and report defects affecting installation to the Consultant. Commencement of Work shall be construed as complete acceptance of preparatory Work. The sphere of inspection shall include but not be limited to:

1. Coordination of device locations with other trades and Work provided by others.
2. Coordination of all box sizes and conduit routing.
3. Assurance all mounting surfaces are ready to accept the Work.
4. Verification of flatness, plumb and level of mounting conditions.
5. Inspection of all components of the Work supplied by others to insure no damage has occurred during shipping or storage.

3.2 PREPARATION

A. Examine the site and review the contract drawings to become familiar with the work. Field verify all dimensions at the site prior to installation and advise the Consultant of all system modifications required by field conditions.

B. Coordinate the Work with related trades. This shall include the preparation of schedules and coordination of equipment delivery and storage.

C. Appropriate signage shall be furnished during overhead Work to caution of personnel working above.

3.3 INSTALLATION

A. The audio location drawings indicate the origins and destinations for all audio cables. The method of cable routing described in those documents indicates the maximum number of conduit runs required to install the audio systems.

B. All signal wiring shall be run CONTINUOUS, without splices from audio device to homerun destination.

C. The actual diameter and path of each conduit run shall be confirmed by the Audio Contractor and coordinated with the Electrical Contractor in accordance with field conditions.

D. All wire and cable shall be installed in EMT unless specifically indicated otherwise on the drawings or herein. All work shall comply with the National Electrical Code.

E. Should the Electrical Contractor choose to combine cable runs from individual terminations into a common conduit, then they must conform to the wire grouping, conduit fill, and conduit separation requirements listed in this section.

F. Under no circumstances shall the conduit be utilized as a ground. Grounds shall be sized as per NEC and shall be run continuous from terminals at the plug device to ground buss in the dimmer rack.

3.4 WORKMANSHIP

A. The installation of all Work shall be neat. All boxes, equipment, etc. shall be plumb and square. All cables shall be neatly bundled with plastic tie wraps as required. Service loops shall be fastened to insides of the racks.

B. Cable bundles within the racks shall be separated so that mic, line and speaker cables are always kept away from each other.

C. Surface mounted receptacle devices (speaker, microphone and line level) shall be provided with an integral backbox/enclosure. The enclosure shall be designed such that the receptacle faceplate does not overhang the edges of the enclosure. In all surface mounted cases, the faceplates and backbox enclosure shall be flush along the outside edges.

D. Work that is damaged or improperly installed will be removed and replaced. It shall be the responsibility of this Contractor to patch, repair and/or replace any damage to any architectural or mechanical system, which may be damaged during the course of the system installation. Materials and labor required for such repairs shall be provided without claim for payment.

E. Terminations shall be accomplished with appropriate connectors. Provide strain-relief at connectors where required.

F. Speaker mounting shall be provided by this contractor. All hardware associated with rigging system shall be load rated for overhead lifting. All hardware shall be fabricated of forged malleable steel – no cast iron components will be acceptable. Rigging components and hardware and shall be painted as required by the Architect. Provide a minimum of (4) wire rope support points per line array speaker cluster. Provide mounting frame at the top to accept the wire rope

cable hangers. Provide ALL MISCELLANEOUS KINDORF OR UNISTRUT SUPPORT FRAMES ABOVE THE CEILING AS REQUIRED BY THE SPEAKER MOUNTING. Coordinate locations with the architectural drawings and ceiling grommets provided by the GC.

G. All equipment except portable equipment shall be held firmly in place. This shall include loudspeakers, cables, control equipment, rack equipment, etc. Mountings shall be rigid. Fastenings and supports shall be adequate to support their loads with a safety factor of at least five.

H. All switches, jacks, outlets, cables, etc., shall be clearly, logically and permanently marked during installation. All cables shall be marked with standard alphanumeric markers at each end. These marker codes shall be identical to those noted on the shop drawings.

I. The Contractor shall take such precautions as are necessary to prevent and guard against electromagnetic/electrostatic/radio frequency interference.

J. Care shall be exercised in wiring, so as to avoid damage to the cables and to the equipment. Between racks, cabinets, consoles or modules all cables shall be well supported and shall be neatly laced and dressed. All joints and connections shall be made with rosin-core solder or with mechanical connectors approved by the Consultant. Between racks, cabinets, consoles or modules, all cable shall terminate in terminal connectors, strips, blocks or boards.

K. All audio wiring shall be executed in strict adherence to standard broadcast practices as detailed in “Sound System Engineering, Second Edition” by Don and Carolyn Davis.

L. All power and high voltage level circuits shall be run on the right side of the rack or cabinet as viewed from the rear. All other circuits shall be run on the left side as viewed from the rear.

M. Microphone and 600-ohm line conduits shall be mechanically and electrically connected to receptacle boxes. Microphone line shields shall be grounded only at the end that terminates at the equipment rack(s) and shall be grounded only to the common ground of the equipment rack. All audio grounds in the equipment rack(s) shall be electrically grounded to the isolated ground buss bar mounted in each rack. Buss bar in each rack then shall be grounded to a single point at the isolated ground panel buss bar by means of a minimum AWG #4 insulated conductor. The grounding conductor conduit shall be totally electrically isolated from the equipment racks and from the isolated ground panel by means of plastic bushings or other similar approved means.

N. The total resistance of the ground system from the equipment racks to the common building ground shall not exceed .1 ohm.

O. Other shields shall be grounded only at the power amplifier inputs or the console outputs, and shall be terminated at the "floating" end with "wedge on" collars, or with plastic tape. Continuity of shield shall be preserved at connecting points.

P. Provide a framed functional diagram for system equipment that reflects the final as-built systems where directed in the field by Consultant.

Q. Equipment racks shall be pre-wired in the Audio Sub-Contractor's shop and thoroughly tested for proper signal flow and equipment function prior to delivery of racks to the job site.

R. Between racks, cabinets, remote receptacles, all speaker level cable shall terminate in terminal strips.

S. Patch panels shall be wired so all signal sources (outputs from equipment), shall be connected to the top row. Any efficient combination of top and bottom rows shall be used for multiples.

T. Drawings are diagrammatic and indicate general arrangement of systems and work included. Follow drawings in laying out work and check drawings of other trades relating to work to verify spaces in which work will be installed. Maintain headroom and space conditions to all points.

U. Final location of all equipment shall be as shown on approved shop drawings, or as located in the field by the Architect.

3.5 INSPECTION AND TESTING

A. The Consultant shall make final inspection, following receipt in writing or notification from this Contractor that the installation is completed.

B. If inspection reveals any detail of construction, fabrication, or installation not in strict accord with the specification and contract requirements, approval shall be withheld and the Contractor shall be given thirty days to repair the rejected items as required. In addition to the final inspection of components the Consultant shall have the right of inspection during the course of the installation, and shall be allowed access to materials at the side for eventual incorporation in the Work. Preliminary inspection shall not be constructed as eliminating the possible rejection of various components during the final inspection detailed above.

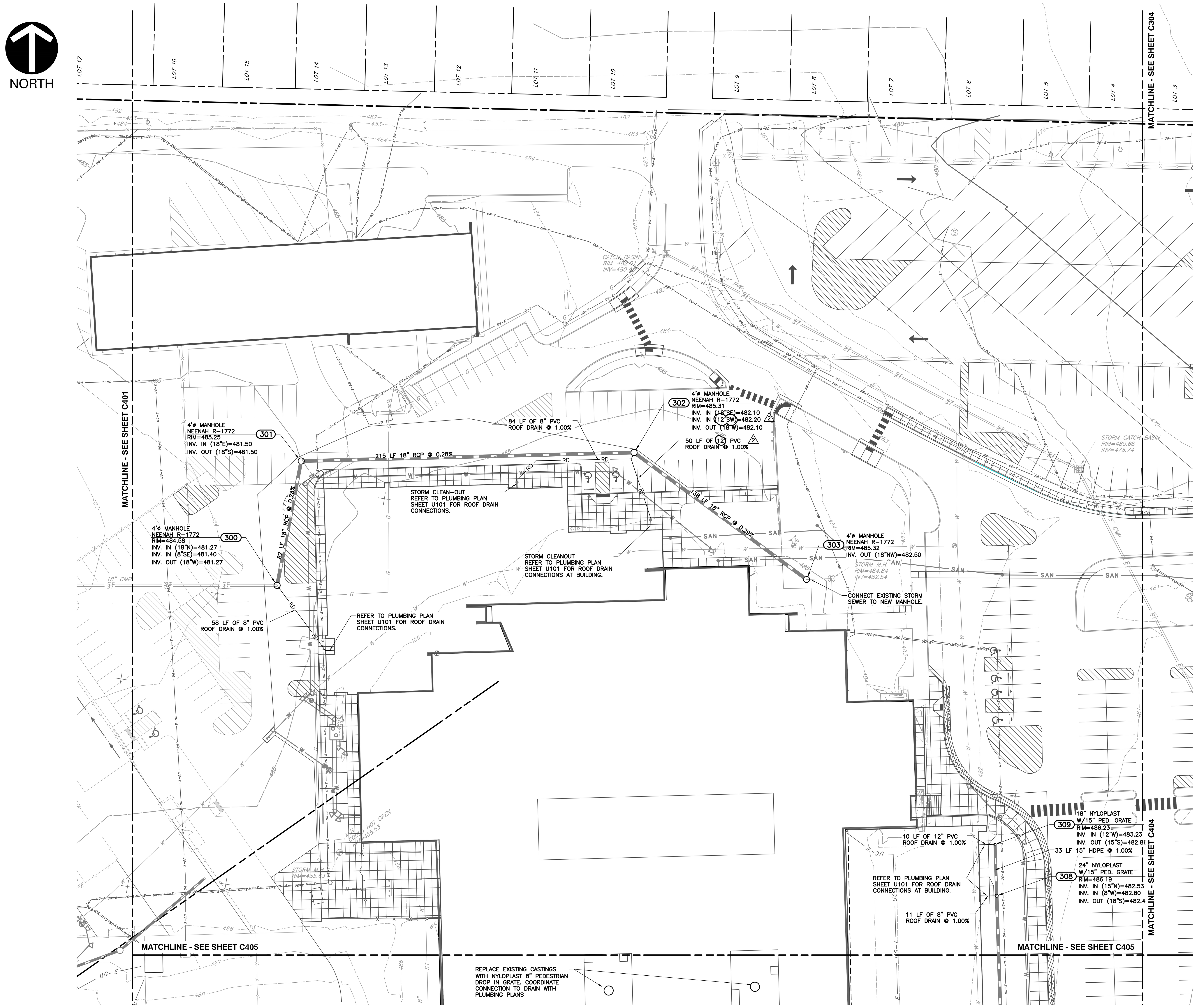
C. The completed installation of the system shall be tested and operated for the approval of the Consultant.

D. This Contractor's field supervisor and project manager must be on site during the system turn on, check-out and testing and Owner training.

E. The following condition must be met before final approval can be granted:

1. Final tests and inspections are approved.
2. Punch list items complete.
3. Submittal of three copies of warranty.
4. Submittal of record drawings and instruction manuals.
5. Owner training completed.

END OF SECTION 27 41 16.61



REFERENCE

1. RETRACEMENT & TOPOGRAPHIC SURVEY COMPLETED BY HART'S SURVEYING & ENGINEERING, LLC. PROJECT NUMBER: 19-128-05; DATED: JULY 22, 2021

NOTE: SURVEY DOES NOT INCLUDE ALL UNDERGROUND UTILITY INFORMATION. CONTRACTOR TO NOTIFY ENGINEER AND LANDSCAPE ARCHITECT IF UNMARKED UTILITY IS UNCOVERED

GENERAL GRADING NOTES:

1. CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION CONTROL MEASURES PREPARED FOR THIS PROJECT.
2. EARTHWORK SHALL INCLUDE CLEARING AND GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, MASS GRADING, EXCAVATION, FILLING, UNDER CUT AND REPLACEMENT, IF REQUIRED, AND COMPACTION.
3. CONTRACTOR TO REFILL UNDERCUT AREAS WITH SUITABLE MATERIAL AND COMPACT AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. PLACE TOPSOIL OVER THE SUBGRADE OF UNPAVED, DISTURBED AREAS TO A DEPTH INDICATED ON THE LANDSCAPE PLANS (6" MINIMUM). PAVEMENT SLOPES ACROSS ACCESSIBLE PARKING STALLS AND ADJOINING ACCESS AISLES SHALL BE MAXIMUM 2%.
5. ALL SLOPES SHALL BE 3:1 (HORIZONTAL:VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE.
6. ALL AREAS NOT PAVED SHALL BE STABILIZED IN ACCORDANCE WITH THE EROSION CONTROL PLAN, UNLESS NOTED OTHERWISE.
7. ALL EXCESS SOIL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
8. DRAINAGE SYSTEMS SHALL BE INSPECTED DURING CONSTRUCTION BY A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR. WITHIN 30 DAYS AFTER COMPLETION OF ON AND OFF-SITE DRAINAGE FACILITIES, THE REGISTERED PROFESSIONAL SHALL CERTIFY IN WRITING THE COMPLIANCE OF THE DRAINAGE FACILITIES PER LOCAL REQUIREMENTS.
9. CONTRACTOR SHALL PERPETUATE ALL DRAINS AND TILES ENCOUNTERED DURING CONSTRUCTION. COORDINATE WITH ENGINEER OF RECORD REGARDING THE CONNECTION TO THE PROPOSED STORM SEWER SYSTEM.
10. STORM STRUCTURES RECEIVING SUB-SURFACE DRAINS (SSD) SHALL HAVE BOTH CONNECTIONS CORE DRILLED. T OR Y BLIND CONNECTIONS ARE NOT ALLOWED.

GRADING LEGEND:

800 — PROPOSED INDEX CONTOUR
798 — PROPOSED INTERMEDIATE CONTOUR
PROPOSED DRAINAGE SWALE
PROPOSED GRADE BREAK
PROPOSED STORM SEWER LINE
PROPOSED UNDERDRAIN
PROPOSED SPOT ELEVATION
PROPOSED CURB SPOT ELEVATION; TOP OF CURB ON TOP, GUTTER ELEVATION ON BOTTOM

ABBREVIATIONS:
TC = TOP OF CURB
BC = BOTTOM OF CURB
TW = TOP OF WALL
BW = BOTTOM OF WALL
TR = TOP OF RAMP
BR = BOTTOM OF RAMP
ME = MATCH EXISTING

SCALE IN FEET
0 30' 60'

SILVER CREEK
SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

Civil & Environmental Consultants, Inc.

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 RENZ AVE, SELLERSBURG, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:
2 ADDENDUM 2 08-04-2022

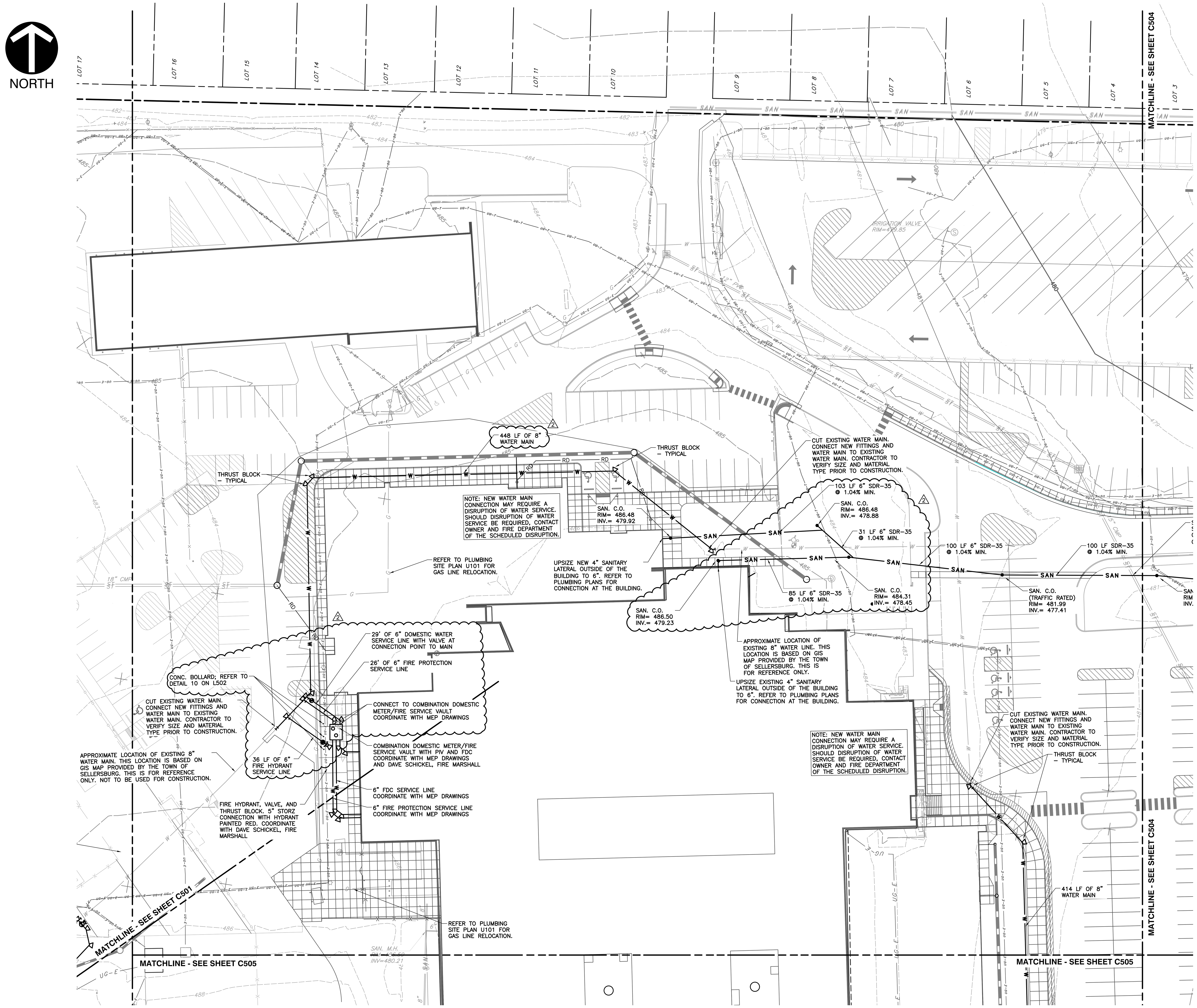
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	JCB	DRAFT

DRAWING TITLE:
DRAINAGE PLAN

CERTIFIED BY:
NICHOLAS P. JUSTICE
REGISTERED
No. PE11800753
STATE OF INDIANA
PROFESSIONAL ENGINEER
08/04/2022

DRAWING NUMBER
C403

PROJECT NUMBER
2021026



REFERENCE

1. RETRACEMENT & TOPOGRAPHIC SURVEY COMPLETED BY HART'S SURVEYING & ENGINEERING, LLC. PROJECT NUMBER: 19-128-05; DATED: JULY 22, 2021

NOTE: SURVEY DOES NOT INCLUDE ALL UNDERGROUND UTILITY INFORMATION. CONTRACTOR TO NOTIFY ENGINEER AND LANDSCAPE ARCHITECT IF UNMARKED UTILITY IS UNCOVERED

GENERAL UTILITY NOTES:

1. THE UTILITIES INDICATED ON THESE PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THE SITE. THE LOCATION AND SIZE OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, IMPLIED, OR NOT INDICATED ON THESE PLANS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING, WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR, AT HIS EXPENSE WITH THE PERMISSION OF THE OWNER.
3. BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR.
4. WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED AND NOTIFICATION GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
5. FOR CLARITY OF THESE DRAWINGS, PIPES MAY NOT BE DRAWN TO SCALE OR EXACTLY LOCATED.
6. ALL NEW WATER LINES SHALL HAVE A MINIMUM OF 54 INCHES OF COVER.
7. MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN NEW WATER AND SANITARY SEWER LINES. IF 18 INCHES OF CLEARANCE IS NOT PROVIDED THEN THE SEWER MUST BE CONSTRUCTED OF WATER WORKS GRADE DUCTILE IRON PIPE WITH MECHANICAL JOINTS WITHIN TEN FEET OF THE WATER LINE.
8. NEW 6" AND 8" SANITARY LATERALS SHALL BE SDR-35, SCHEDULE 80 OR SCHEDULE 40 PVC PIPE CONFORMING TO ASTM D2241, AND SHALL MEET THE DEFLECTION STANDARDS OF ASTM D-3303.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES MENTIONED ABOVE UNLESS OTHERWISE NOTED IN THE CONTRACT OR SPECIFICATIONS. ALL ASSOCIATED BONDING REQUIREMENTS AND COSTS ARE INCIDENTAL TO THE CONTRACT.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND ELEVATIONS DURING THE ENTIRE CONSTRUCTION SCHEDULE. IF ANY DISCREPANCIES ARE FOUND IN THESE ENGINEERING PLANS FROM ACTUAL FIELD DIMENSIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
11. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
12. CONTRACTOR IS RESPONSIBLE FOR ELECTRIC, TELEPHONE, AND CABLE CONDUITS AND TRENCHING. COORDINATE WITH THE LOCAL UTILITY PROVIDERS AND MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR SIZES AND QUANTITIES.
13. WATER AND FIRE SERVICE SIZES AND CONNECTION LOCATIONS SHALL BE COORDINATED WITH THE MECHANICAL, ELECTRICAL AND PLUMBING PLANS.

UTILITY LEGEND:

Symbol	Description
(storm line)	PROPOSED STORM SEWER LINE
— SAN —	PROPOSED SANITARY LINE
— E —	PROPOSED ELECTRIC LINE
— T —	PROPOSED TELEPHONE LINE
— FO —	PROPOSED FIBER OPTIC LINE
— G —	PROPOSED GAS LINE
— W —	PROPOSED WATER LINE
(dashed double line)	PROPOSED CONDUIT
(symbols)	PROPOSED WALL MOUNTED FDC, HYDRANT, WALL PIV, WATER VALVE
(symbols)	PROPOSED SANITARY MANHOLE, CLEAN OUT
(symbol)	PROPOSED ELECTRIC TRANSFORMER

NOTE:

THE EXISTING WATER MAIN AND SANITARY UTILITIES ARE APPROXIMATED FROM GIS PROVIDED BY THE TOWN OF SELLERSBURG AND ARE FOR REFERENCE USE ONLY. LOCATIONS OF THE PROPOSED WATER MAINS, SERVICE LINES, FIRE PROTECTION LINES, AND RELEVANT EQUIPMENT ARE PROVIDED FOR PLANNING USE ONLY. FINAL SPECIFICATIONS AND LOCATIONS ARE DEPENDANT UPON SUPPLEMENTAL SURVEY INFORMATION AND COORDINATION WITH THE UTILITY PROVIDERS.

SCALE IN FEET
0 30' 60'

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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REVISIONS:

2	ADDENDUM 2	08-04-2022

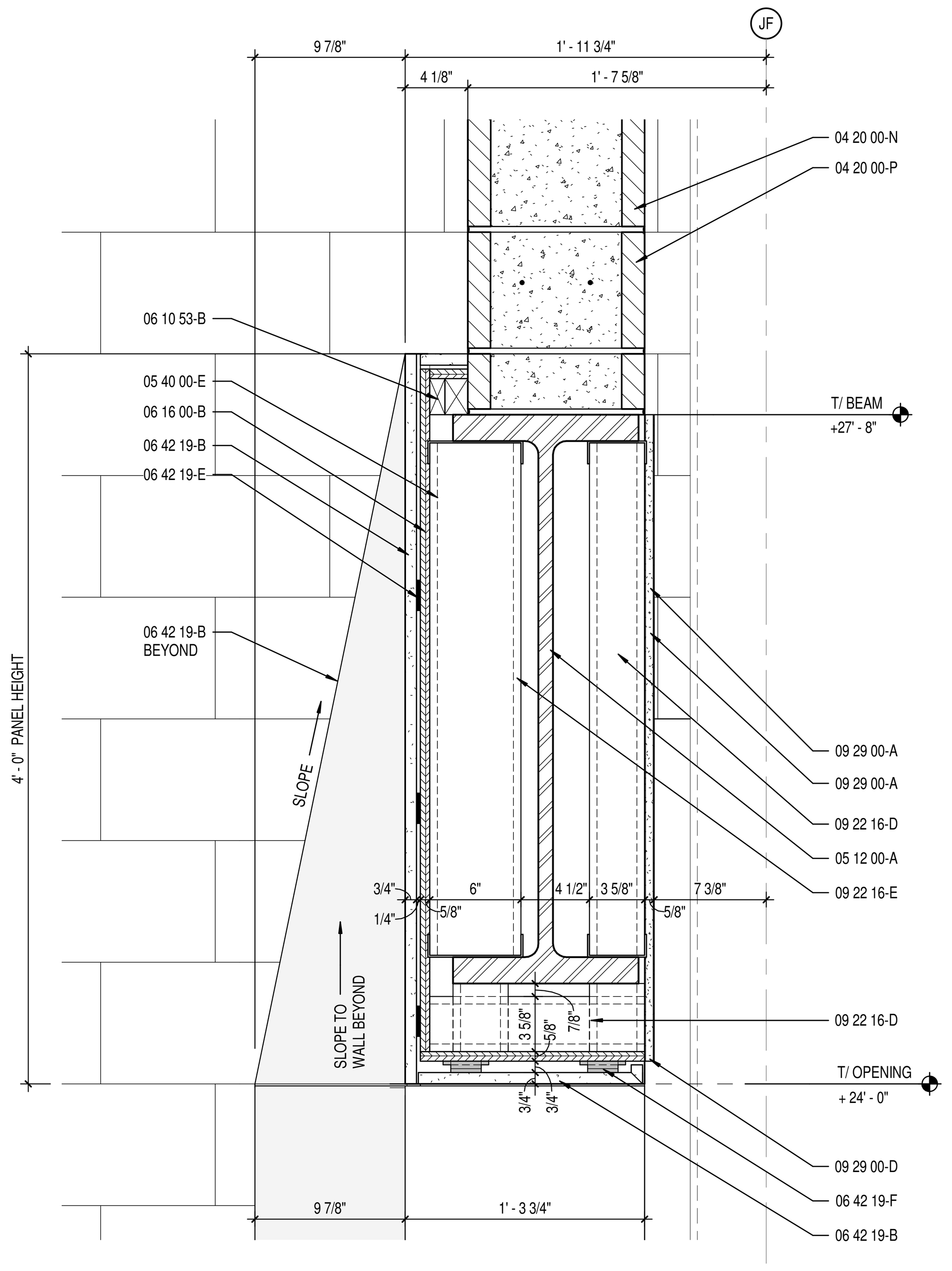
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	JCB	DRAFT

DRAWING TITLE:
UTILITY PLAN

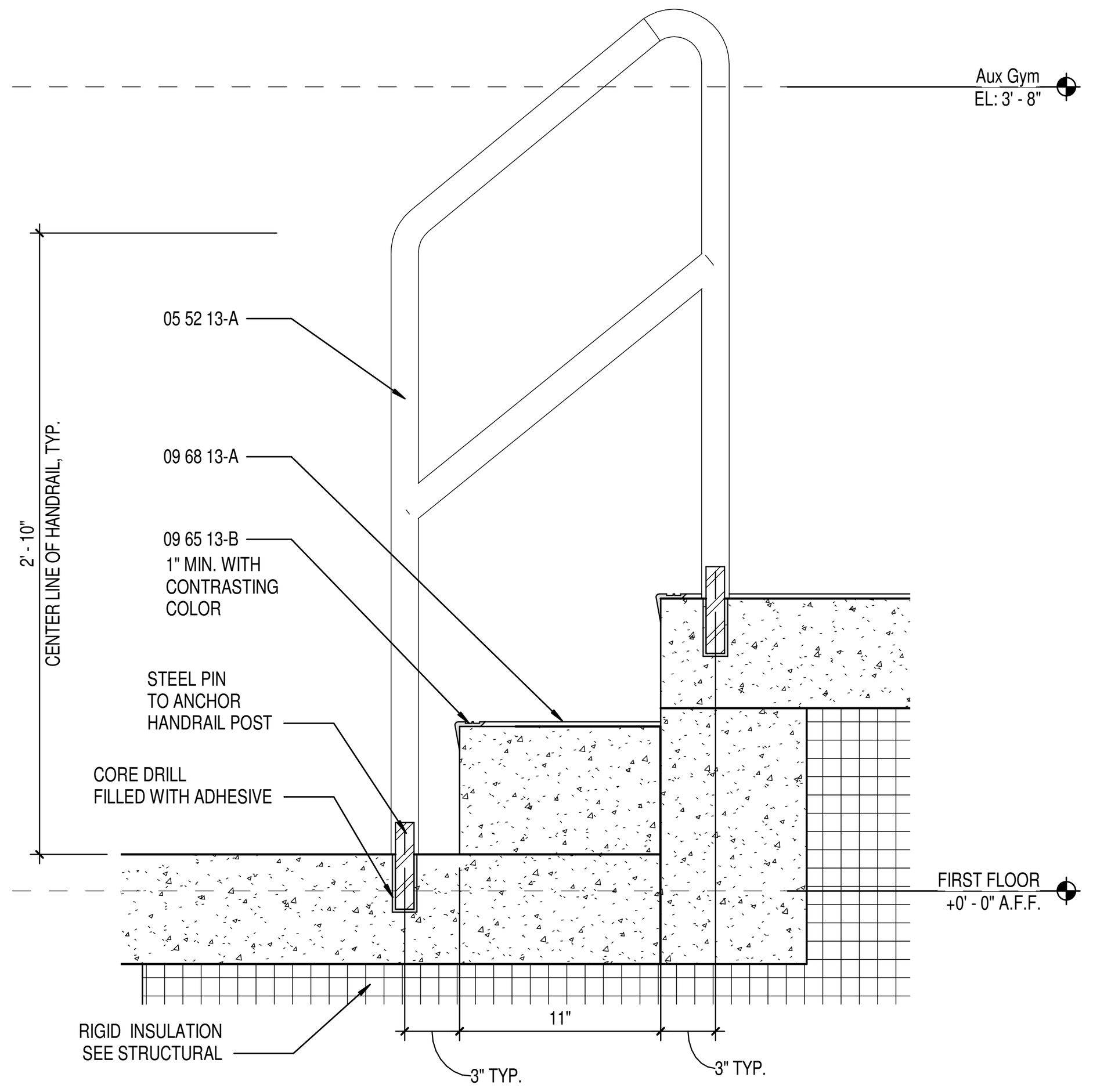
CERTIFIED BY:
NICHOLAS P. JUSTICE REGISTERED No. PE11800753 STATE OF INDIANA PROFESSIONAL ENGINEER
08/04/2022

DRAWING NUMBER
C503

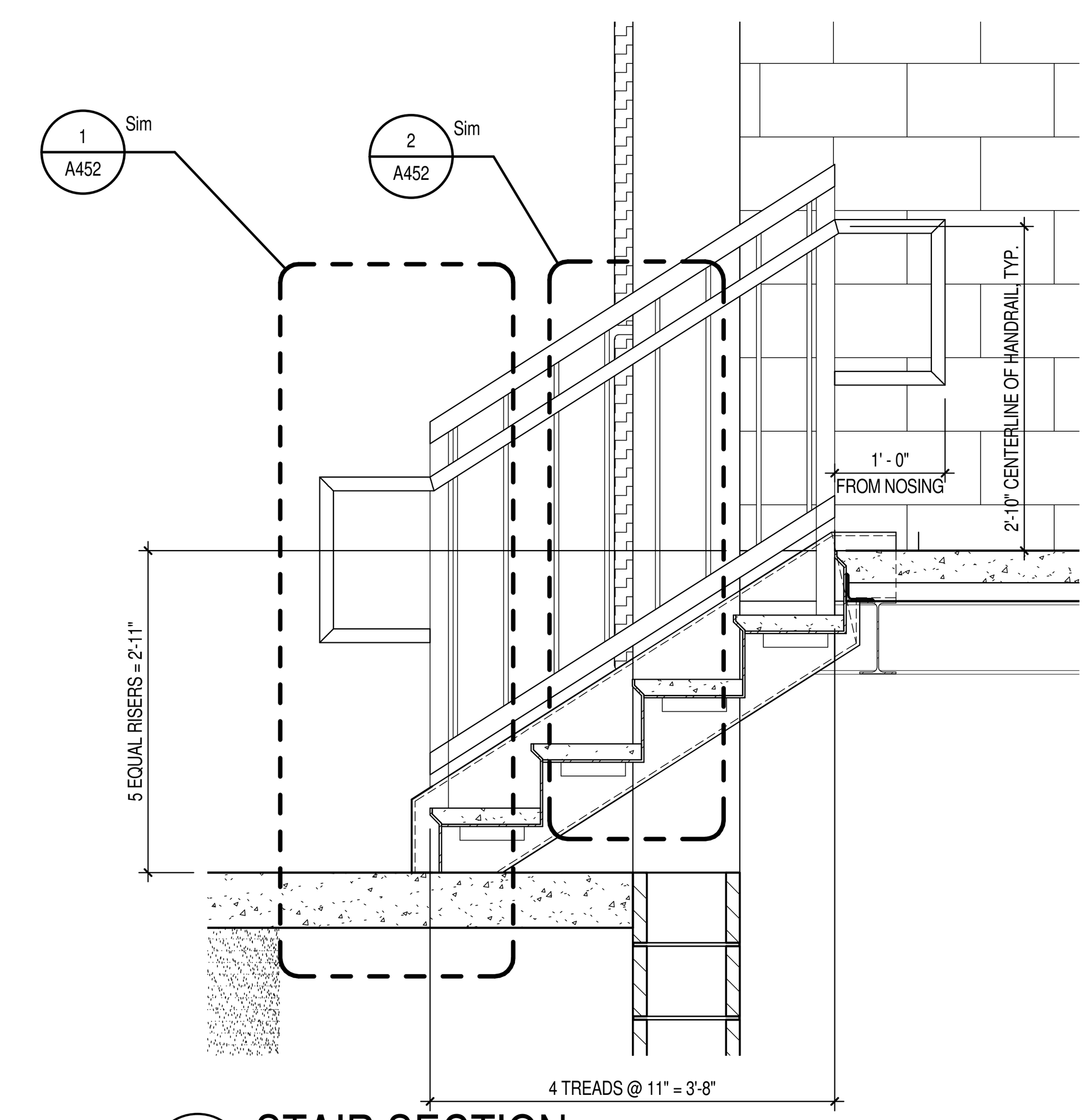
PROJECT NUMBER
2021026



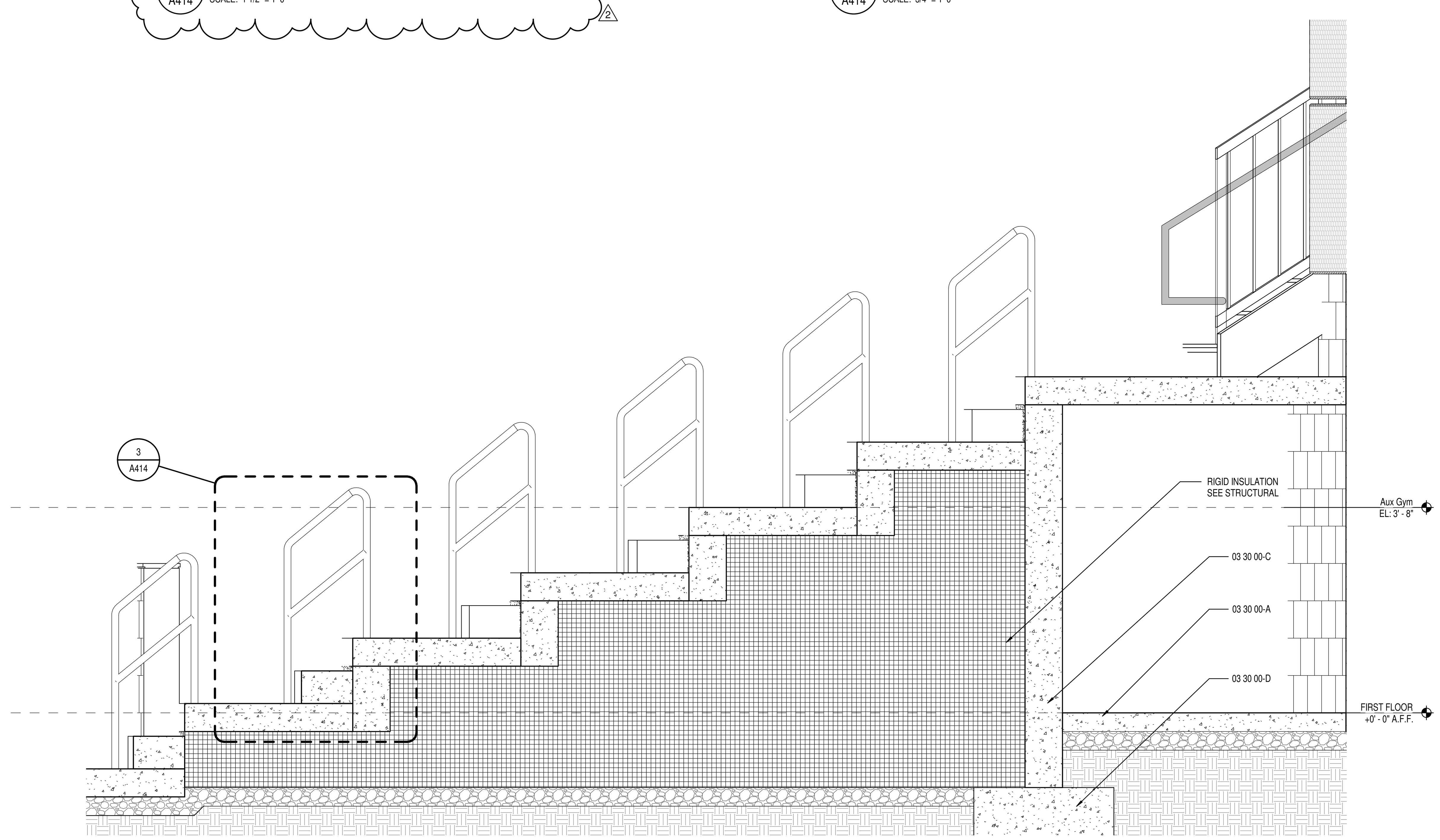
5 A414 PROSCENIUM WALL - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



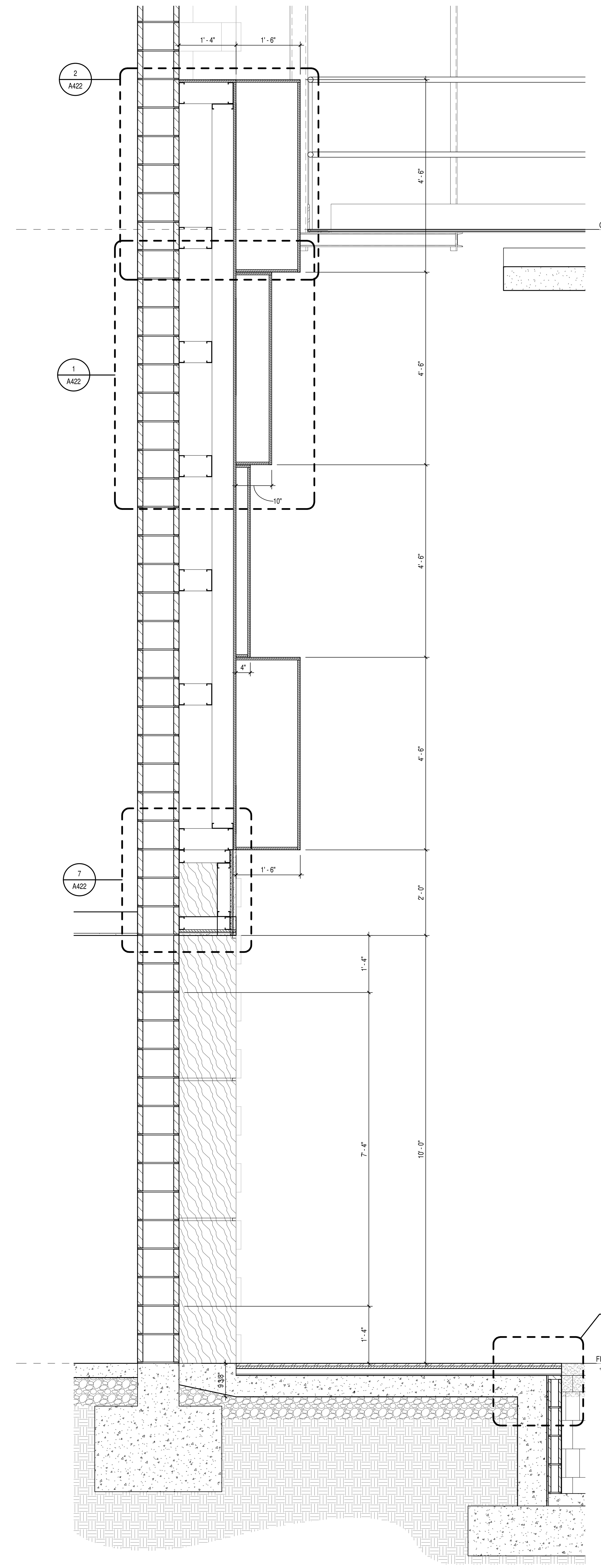
3 A414 HANDRAIL DETAIL
SCALE: 1 1/2" = 1'-0"



4 A414 STAIR SECTION
SCALE: 3/4" = 1'-0"



2 A414 WALL SECTION AT RAISED SEATING
SCALE: 3/4" = 1'-0"



1 A414 WALL SECTION AT AUDITORIUM SIDE WALL-N1
SCALE: 3/4" = 1'-0"

KEYNOTE LEGEND

03 30 00-A	CONCRETE SLAB OVER VAPOR BARRIER ON DRAINAGE FILL. SEE STRUCTURAL
03 30 00-B	CONCRETE SLAB ON METAL DECK- SEE STRUCTURAL
03 30 00-C	CONCRETE FOUNDATION- SEE STRUCTURAL
03 30 00-D	CONCRETE FOOTING- SEE STRUCTURAL
03 30 00-E	CONSTRUCTION JOINT
03 30 00-F	1/2" EXPANSION MATERIAL
04 20 00-A	GROUT SOLID
04 20 00-B	JOINT REINFORCEMENT AT 16" O.C. VERTICALLY
04 20 00-C	ADJUSTIBLE MASONRY VENEER ANCHOR AT 16" O.C. VERTICALLY
04 20 00-D	THROUGH WALL FLASHING W/ STAINLESS STEEL DRIP EDGE
04 20 00-E	WEEP HOLES AT 16" O.C.
04 20 00-F	VENTS AT 4'-0" O.C.
04 20 00-G	CAVITY DRAINAGE MATERIAL
04 20 00-H	FACE BRICK
04 20 00-J	4" CONCRETE MASONRY UNIT
04 20 00-K	6" CONCRETE MASONRY UNIT
04 20 00-L	8" CONCRETE MASONRY UNIT
04 20 00-M	10" CONCRETE MASONRY UNIT
04 20 00-N	12" CONCRETE MASONRY UNIT
04 20 00-P	BOND BEAM MASONRY UNIT
04 20 00-R	DECORATIVE CONCRETE MASONRY UNIT - SEE DETAILS FOR SIZE
04 20 00-S	BULLNOSE CONCRETE MASONRY UNIT
05 12 00-A	STRUCTURAL STEEL FRAMING MEMBER- SEE STRUCTURAL
05 12 00-B	STEEL ANGLE- SEE STRUCTURAL
05 12 00-D	STEEL BENT PLATE- SEE STRUCTURAL
05 21 00-A	STEEL JOIST- SEE STRUCTURAL
05 31 00-A	METAL ROOF DECKING- SEE STRUCTURAL
05 31 00-B	METAL FLOOR DECKING- SEE STRUCTURAL
05 40 00-A	7/8" FURRING (HAT) CHANNEL (16 GA. MIN.)
05 40 00-C	2 1/2" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-D	3 5/8" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-E	6" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-F	8" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-G	CLIP ANGLE
05 40 00-H	METAL STUD KICKERS AS REQUIRED
05 40 00-J	10" GALVANIZED STEEL STUD (16 GA. MIN.)
05 50 00-E	PRE-MANUFACTURED ALUMINUM ACCESS LADDER
05 50 00-F	PRE-MANUFACTURED ALUMINUM SHIPS LADDER
05 51 00-A	CONCRETE FILLED METAL PAN TREAD AND RISER
05 51 00-B	STAIR METAL STRINGER- TUBE STEEL
05 51 00-C	CONCRETE FILLED METAL PAN STAIR LANDING
05 51 00-D	CLIP ANGLE
05 51 00-E	METAL PAN TREAD AND RISER
05 51 00-F	CLOSURE PLATE
05 51 00-G	LANDING PAN/PLATE
05 52 13-A	1-1/4" I.D. CLEAR ANODIZED ALUMINUM HANDRAIL
05 52 13-B	2" PAINTED METAL TUBE GUARDRAIL SYSTEM. SEE STAIR SECTIONS AND DETAILS
05 52 13-C	5/8" X 2" PAINTED STEEL BAR STOCK
05 52 13-D	1/2" SQUARE PAINTED STEEL BAR STOCK
05 52 13-E	3/4" SQUARE STEEL RAILING SUPPORT
05 73 00-A	42" HIGH GLASS GUARDRAIL SYSTEM
05 73 00-B	WOOD CAP RAIL
05 73 00-C	BASE SHOE FOR GLASS RAILING SYSTEM
05 73 00-D	1 1/4" I.D. CLEAR ANNODIZED ALUMNIUM HANDRAIL (PROVIDE BRACKETS @ VERTICAL PANEL JOINTS)
06 10 53-A	1X WOOD BLOCKING
06 10 53-B	2X WOOD BLOCKING
06 16 00-A	3/4" EXTERIOR GRADE PLYWOOD
06 16 00-B	5/8" EXTERIOR GRADE PLYWOOD
06 16 43-A	5/8" EXTERIOR GYPSUM SHEATHING
06 40 00-A	1/2" ALUMINUM MILLWORK REVEAL TRIM - COLOR: BLACK
06 40 00-B	WOOD RAIL - SEE DRAWINGS FOR PROFILE
06 40 00-C	ALUMINUM TRIM/REVEAL 1/4" POST
06 40 00-D	1/2" ALUMINUM MILLWORK REVEAL F TRIM - COLOR: BLACK
06 40 00-E	3/4" WOOD CAP AND TRIM
06 40 00-F	ALUMINUM TRIM/REVEAL L ANGLE - COLOR: BLACK
06 40 00-G	PLASTIC LAMINATE ON 3/4" PARTICLE BOARD
06 40 00-H	1X HARDWOOD TRIM - COLOR TO MATCH ADJACENT FINISHES
06 40 00-J	MICROPERFORATED PLASTIC LAMINATED ON 3/4" PARTICLE BOARD
06 42 19-A	NOT USED
06 42 19-B	3/4" PLASTIC LAMINATE FACED WOOD PANEL
06 42 19-C	ALUMINUM OUTSIDE CORNER TRIM. SEE DETAILS FOR PROFILE
06 42 19-D	ALUMINUM EDGE TRIM
06 42 19-E	1/4" ALUMINUM Z-CLIP
06 42 19-F	INTERLOCKING OVERHEAD CEILING CLIP
07 21 00-A	SLAB PERIMETER RIGID INSULATION (R-15 FOR 24" HORIZONTAL R-10 TO TOP OF FOOTING OR 48" MAX VERTICAL)
07 21 00-C	3" CAVITY WALL EXTRUDED POLYSTYRENE INSULATION (R-16.8)
07 21 00-D	MINERAL WOOL BATT INSULATION FULL THICKNESS
07 21 00-E	THERMALLY BROKEN Z-CLIPS @ 16" O.C. VERTICALLY
07 24 15-A	DIRECT APPLIED FINISH SYSTEM (DAFS)- UN-INSULATED SOFFIT
07 25 00-A	WEATHER RESISTIVE BARRIERS- BUILDING WRAP
07 27 26-A	FLUID APPLIED MEMBRANE AIR BARRIER
07 42 13-A	PRE-FINISHED CONCEALED FASTENER METAL WALL PANEL
07 42 13-C	BRAKE METAL FLASHING
07 42 13-D	BRAKE METAL TRIM
07 42 13-E	METAL HAT CHANNEL (16 GA. MIN.) - SEE SECTIONS FOR DEPTH
07 42 43-A	COMPOSITE METAL WALL/SOFFIT PANEL
07 42 43-B	BRAKE METAL TRIM/FLASHING - COLOR AS SELECTED BY ARCHITECT
07 42 43-C	METAL HAT CHANNEL (16 GA. MIN.) - SEE SECTIONS FOR DEPTH
07 42 43-D	ACM TRIM - RETURN TO BRAKE METAL FLASHING
07 54 19-A	POLYVINYL-CHLORIDE (PVC) MEMBRANE ROOFING SYSTEM
07 54 19-B	MEMBRANE ROOFING - EXTEND OVER AND ATTACH TO FRONT FACE OF PARAPET
07 54 19-C	1/2" COVER BOARD
07 54 19-E	2 LAYERS OF 2" POLYISO INSULATION BOARD (R-26)
07 54 19-F	2" POLYISO INSULATION BOARD (R-13)
07 54 19-G	INSULATED ROOF CURB
07 62 00-A	TERMINATION BAR
07 71 00-A	MANUFACTURED COPING
07 71 00-B	MANUFACTURED DRIP EDGE
07 71 00-D	MANUFACTURED COUNTERFLASHING SYSTEM
07 71 29-A	ALUMINUM ROOF EXPANSION JOINT ASSEMBLY
07 72 00-A	ROOF HATCH
07 92 00-A	SEALANT
07 92 00-B	SEALANT EACH SIDE, TYPICAL
07 92 00-C	BACKER ROD AND SEALANT
07 92 00-D	BACKER ROD AND SEALANT EACH SIDE, TYPICAL
07 95 00-A	EXPANSION JOINT COVER
07 95 00-B	EXTERIOR WALL EXPANSION JOINT SYSTEM
08 11 13-A	HOLLOW METAL DOOR/BORROWED LIGHT FRAME
08 33 13-A	OVERHEAD COILING COUNTER DOOR
08 33 23-A	OVERHEAD COILING DOOR
08 33 23-B	OVERHEAD COILING DOOR - INSULATED
08 41 13-A	4 1/2" ALUMINUM-FRAMED STOREFRONT
08 41 13-B	WIDE STYLE ALUMINUM ENTRANCE DOOR
08 41 13-C	ALUMINUM BRAKE METAL TO MATCH STOREFRONT FRAME
08 41 13-E	ALUMINUM FLUSH DOOR
08 41 13-F	EXTRUDED ALUMINUM ADJUSTABLE PARTITION CLOSURE
08 41 13-G	WALL END CAP
08 44 13-A	7" DEEP ALUMINUM CURTAINWALL SYSTEM
08 44 13-C	ALUMINUM BREAKMETAL TO MATCH CURTAINWALL FRAME
08 80 00-A	GLAZING - SEE SCHEDULE/ELEVATIONS
09 22 16-A	7/8" FURRING CHANNEL
09 22 16-C	2 1/2" STEEL STUD
09 22 16-D	3 5/8" STEEL STUD
09 22 16-E	6" STEEL STUD
09 22 16-F	METAL STUD KICKERS AS REQUIRED
09 22 16-G	1 5/8" STEEL STUD
09 22 16-H	DRYWALL GRID FRAMING SYSTEM
09 29 00-A	5/8" GYPSUM WALL BOARD (SEE SPECS FOR TYPE)
09 29 00-B	SOUND ATTENUATION INSULATION
09 29 00-C	SUSPENDED GYPSUM BOARD CEILING ASSEMBLY
09 29 00-D	METAL J- MOULD
09 51 13-A	ACOUSTICAL CEILING SUSPENSION ASSEMBLY
09 51 13-B	DECORATIVE ACOUSTICAL CEILING EDGE TRIM
09 51 13-C	METAL EDGE TRANSITION TRIM
09 64 53-A	3/4" TEMPERED PLYRON FLOORING
09 64 53-B	3/4" FR PLYWOOD
09 64 53-C	NOM. 2X4 SLEEPERS ON 12" O.C.
09 64 53-D	3/8" NEOPRENE RUBBER PAD
09 64 53-E	RUBBER VENT-COVE BASE MOLDING
09 65 13-A	RESILIENT BASE
09 65 13-B	STAIR NOSING
09 66 23-A	PRECAST EPOXY-RESIN TERRAZZO TREAD AND RISER
09 66 23-B	1/2" EPOXY ABRASIVE STRIPS
09 66 23-C	EPOXY SETTING BED
09 66 23-D	PRECAST EPOXY-RESIN TERRAZZO LANDING PANEL
09 68 13-A	TILE CARPETING
09 84 33-B	SOUND DIFFUSING PANEL- SEE EQUIPMENT SCHEDULE
10 26 23-A	DECORATIVE PROTECTION PANELS
10 26 23-B	ALUMINUM END CAP - COLOR AS SELECTED BY ARCHITECT
10 26 23-C	ALUMINUM OUTSIDE CORNER TRIM - COLOR AS SELECTED BY ARCHITECT
10 70 00-A	EXTERIOR SUN CONTROL DEVICE
11 61 45-A	ACOUSTICAL CURTAINS
11 62 43-A	PIPE GRID
12 32 16-B	PLASTIC LAMINATE SHELVING AND CLOTHES ROD
12 35 50-A	PLASTIC LAMINATE MUSIC CASEWORK- SEE EQUIPMENT SCHEDULE
12 36 61-A	SOLID SURFACE MATERIAL WINDOW STOOLS
12 36 63-A	SOLID SURFACE COUNTERTOPS
14 24 00-C	ELEVATOR DOOR AND FRAME
14 24 00-E	ELEVATOR SILL
31 20 00-A	FINISH GRADE- SEE CIVIL SHEETS
31 20 00-B	COMPACTED EARTH
31 20 00-C	DRAINING GRANULAR FILL
32 13 13-A	SIDEWALK- SEE CIVIL SHEETS
32 13 13-B	CONCRETE PAVING- SEE CIVIL SHEETS

SILVER CREEK SCHOOL CORPORATION

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ADDITION AND RENOVATIONS
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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

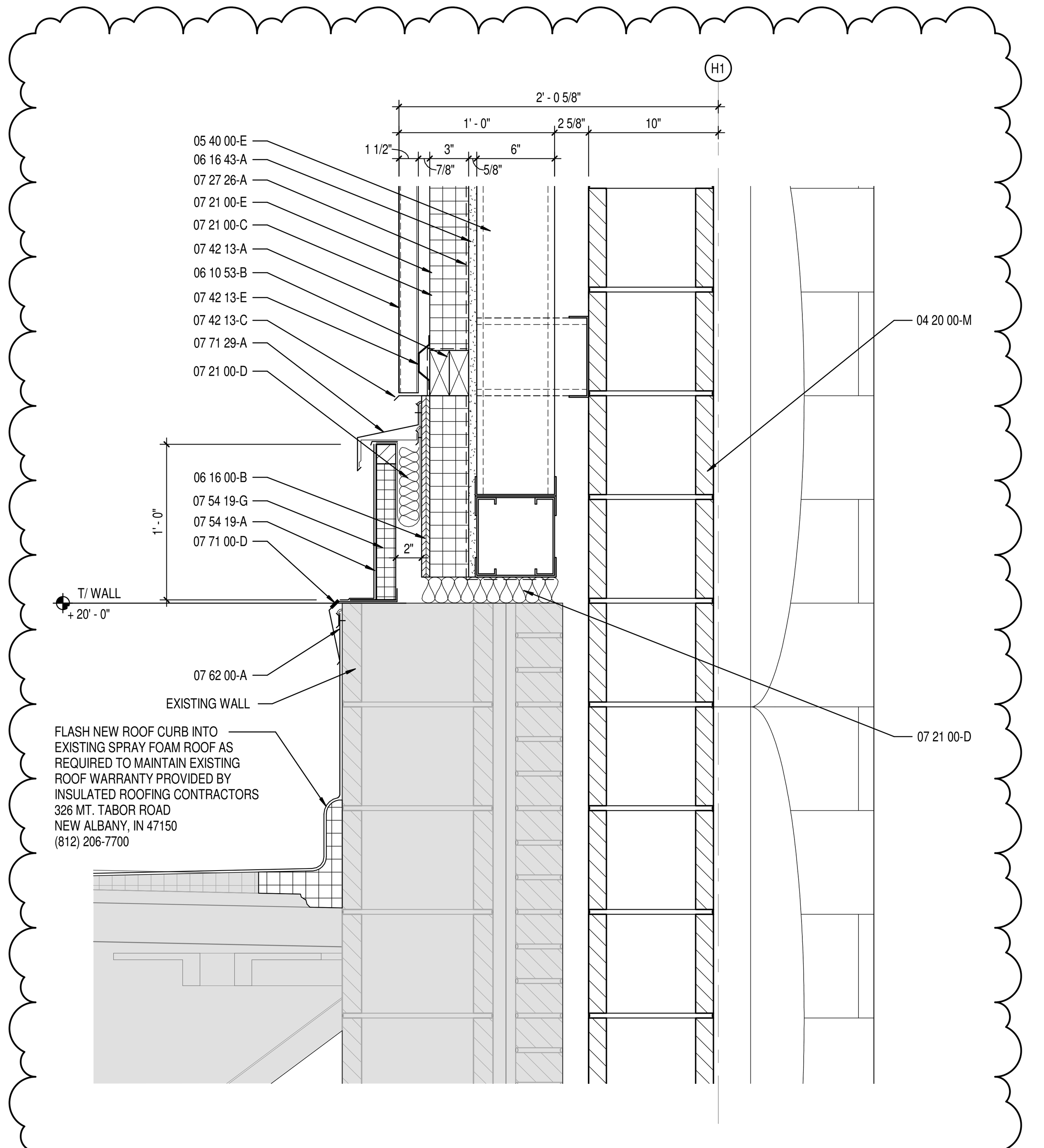
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	Author	Checker

DRAWING TITLE:
WALL SECTIONS AND DETAILS

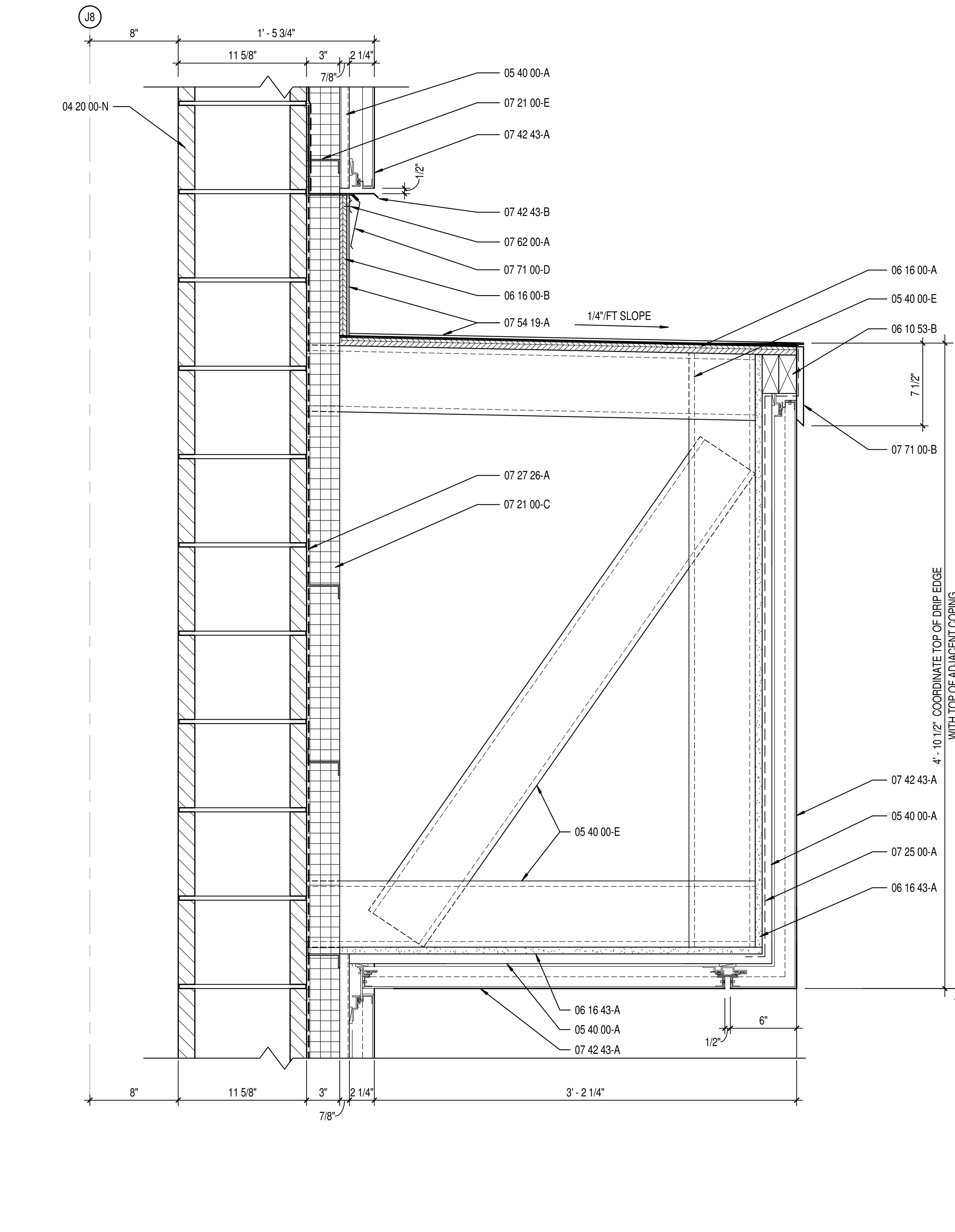
CERTIFIED BY:
JAMES ROBERT FUNK REGISTERED No. AR00900003 STATE OF INDIANA ARCHITECT

DRAWING NUMBER
A414

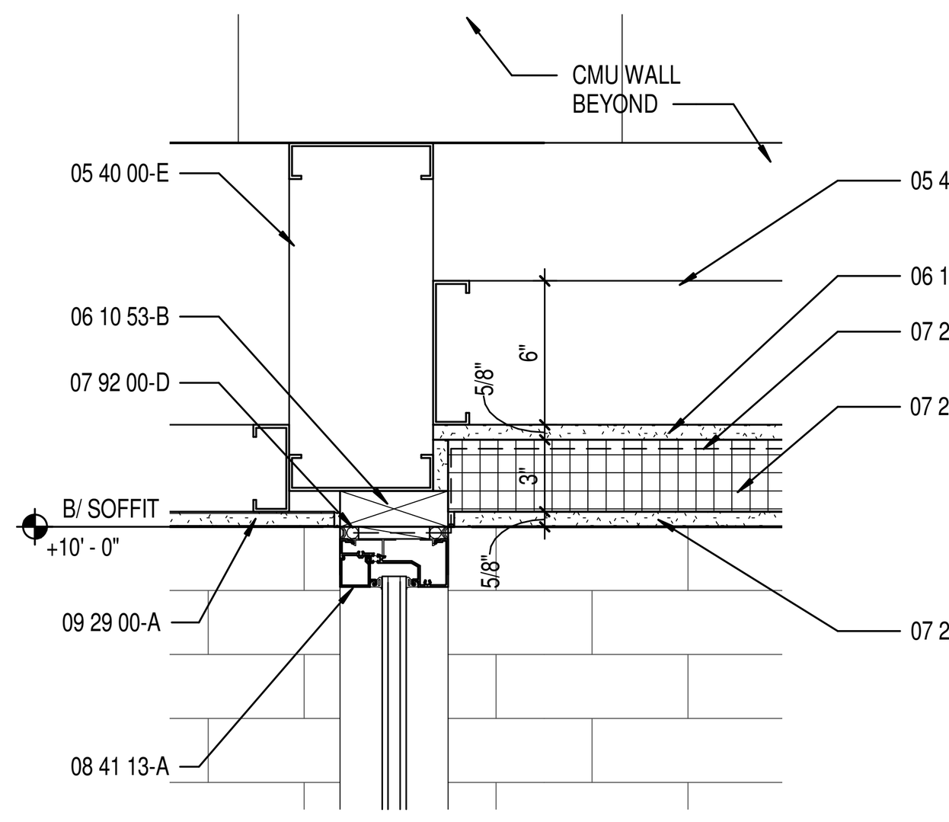
PROJECT NUMBER
2021026



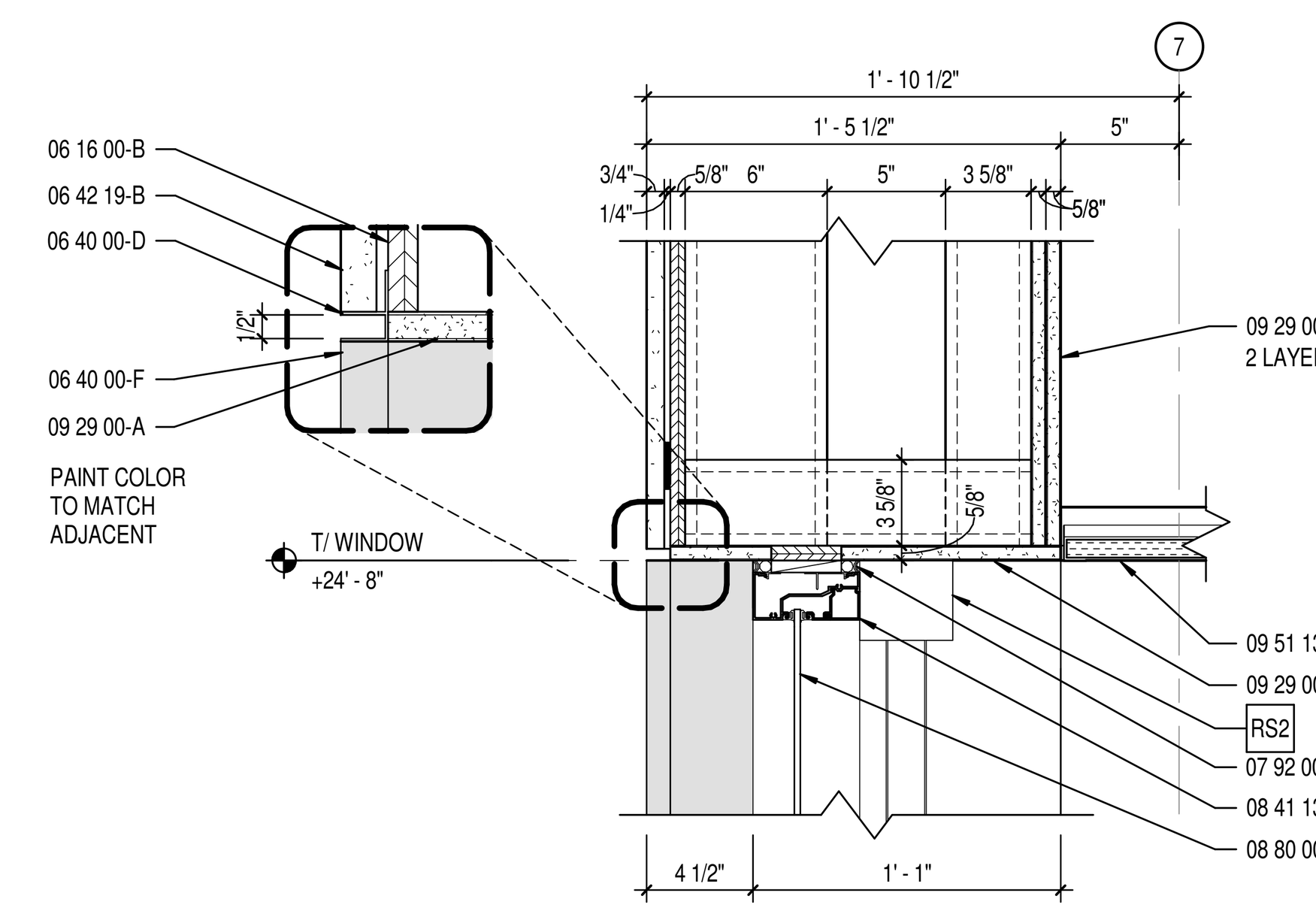
7 A421 **WALL TO WALL EXPANSION JOINT**
SCALE: 1 1/2" = 1'-0"



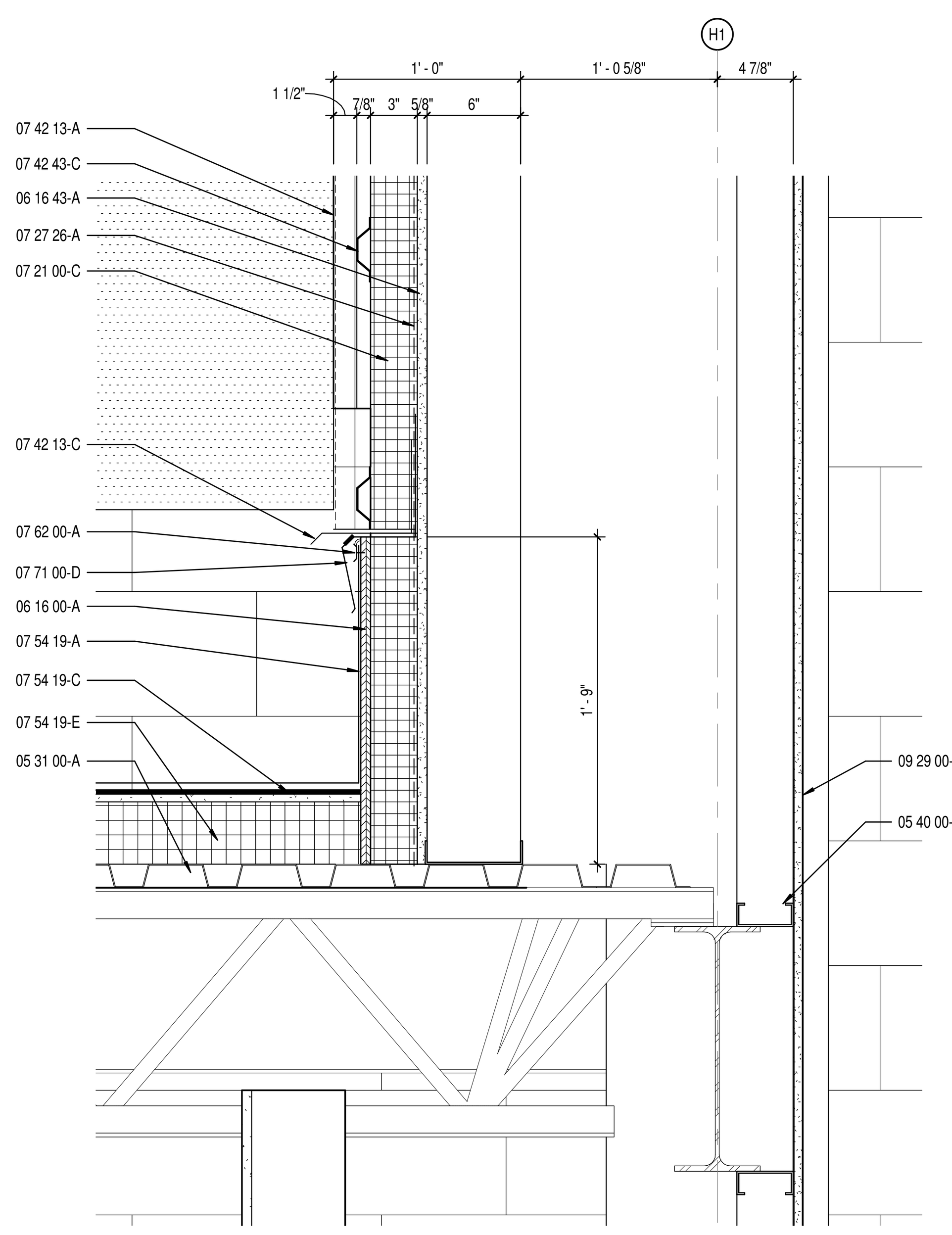
5 A421 **ENLARGED ROOF DETAIL AT AUDITORIUM NORTH**
SCALE: 1 1/2" = 1'-0"



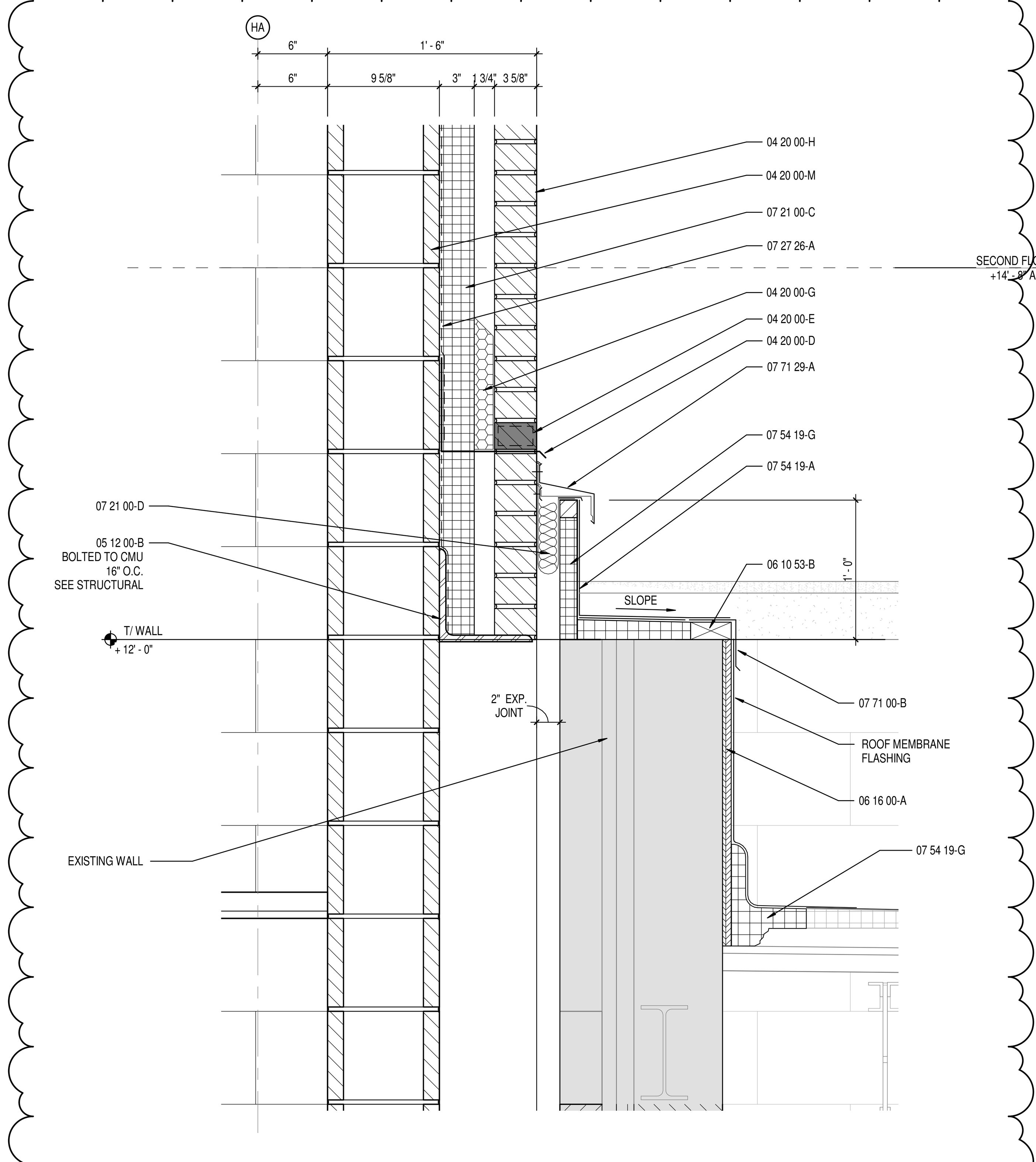
3 A421 **HEAD DETAIL - AUDITORIUM WEST ENTRANCE**
SCALE: 1 1/2" = 1'-0"



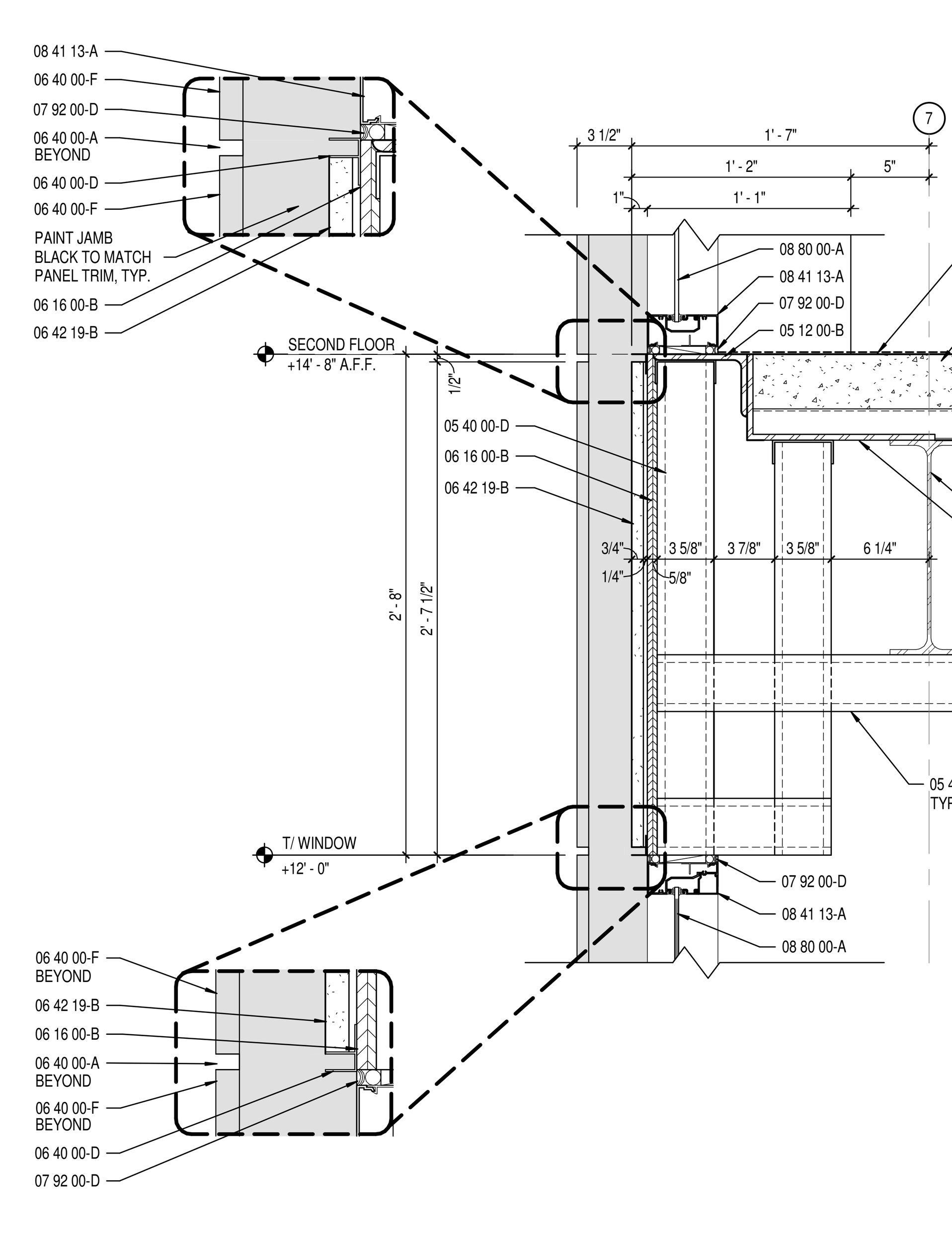
2 A421 **ENLARGED SECTION DETAIL**
SCALE: 1 1/2" = 1'-0"



6 A421 **WALL SECTION - AUDITORIUM LOBBY SOUTH - Callout 1**
SCALE: 1 1/2" = 1'-0"



4 A421 **WALL TO ROOF EXPANSION JOINT DETAIL**
SCALE: 1 1/2" = 1'-0"



1 A421 **ENLARGED SECTION DETAIL**
SCALE: 1 1/2" = 1'-0"

KEYNOTE LEGEND

03 30 00-A	CONCRETE SLAB OVER VAPOR BARRIER ON DRAINAGE FILL. SEE STRUCTURAL
03 30 00-B	CONCRETE SLAB ON METAL DECK- SEE STRUCTURAL
03 30 00-C	CONCRETE FOUNDATION- SEE STRUCTURAL
03 30 00-D	CONCRETE FOOTING- SEE STRUCTURAL
03 30 00-E	CONSTRUCTION JOINT
03 30 00-F	1/2" EXPANSION MATERIAL
04 20 00-A	GROUT SOLID
04 20 00-B	JOINT REINFORCEMENT AT 16" O.C. VERTICALLY
04 20 00-C	ADJUSTIBLE MASONRY VENEER ANCHOR AT 16" O.C. VERTICALLY
04 20 00-D	THROUGH WALL FLASHING W/ STAINLESS STEEL DRIP EDGE
04 20 00-E	WEEP HOLES AT 16" O.C.
04 20 00-F	VENTS AT 4'-0" O.C.
04 20 00-G	CAVITY DRAINAGE MATERIAL
04 20 00-H	FACE BRICK
04 20 00-J	4" CONCRETE MASONRY UNIT
04 20 00-K	6" CONCRETE MASONRY UNIT
04 20 00-L	8" CONCRETE MASONRY UNIT
04 20 00-M	10" CONCRETE MASONRY UNIT
04 20 00-N	12" CONCRETE MASONRY UNIT
04 20 00-P	BOND BEAM MASONRY UNIT
04 20 00-R	DECORATIVE CONCRETE MASONRY UNIT - SEE DETAILS FOR SIZE
04 20 00-S	BULLNOSE CONCRETE MASONRY UNIT
05 12 00-A	STRUCTURAL STEEL FRAMING MEMBER- SEE STRUCTURAL
05 12 00-B	STEEL ANGLE- SEE STRUCTURAL
05 12 00-D	STEEL BENT PLATE- SEE STRUCTURAL
05 21 00-A	STEEL JOIST- SEE STRUCTURAL
05 31 00-A	METAL ROOF DECKING- SEE STRUCTURAL
05 31 00-B	METAL FLOOR DECKING- SEE STRUCTURAL
05 40 00-A	7/8" FURRING (HAT) CHANNEL (16 GA. MIN.)
05 40 00-C	2 1/2" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-D	3 5/8" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-E	6" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-F	8" GALVANIZED STEEL STUD (16 GA. MIN.)
05 40 00-G	CLIP ANGLE
05 40 00-H	METAL STUD KICKERS AS REQUIRED
05 40 00-J	10" GALVANIZED STEEL STUD (16 GA. MIN.)
05 50 00-E	PRE-MANUFACTURED ALUMINUM ACCESS LADDER
05 50 00-F	PRE-MANUFACTURED ALUMINUM SHIPS LADDER
05 51 00-A	CONCRETE FILLED METAL PAN TREAD AND RISER
05 51 00-B	STAIR METAL STRINGER- TUBE STEEL
05 51 00-C	CONCRETE FILLED METAL PAN STAIR LANDING
05 51 00-D	CLIP ANGLE
05 51 00-E	METAL PAN TREAD AND RISER
05 51 00-F	CLOSURE PLATE
05 51 00-G	LANDING PAN/PLATE
05 52 13-A	1-1/4" I.D. CLEAR ANODIZED ALUMINUM HANDRAIL
05 52 13-B	2" PAINTED METAL TUBE GUARDRAIL SYSTEM. SEE STAIR SECTIONS AND DETAILS
05 52 13-C	5/8" X 2" PAINTED STEEL BAR STOCK
05 52 13-D	1/2" SQUARE PAINTED STEEL BAR STOCK
05 52 13-E	3/4" SQUARE STEEL RAILING SUPPORT
05 73 00-A	42" HIGH GLASS GUARDRAIL SYSTEM
05 73 00-B	WOOD CAP RAIL
05 73 00-C	BASE SHOE FOR GLASS RAILING SYSTEM
05 73 00-D	1 1/4" I.D. CLEAR ANNODIZED ALUMNIUM HANDRAIL (PROVIDE BRACKETS @ VERTICAL PANEL JOINTS)
06 10 53-A	1X WOOD BLOCKING
06 10 53-B	2X WOOD BLOCKING
06 16 00-A	3/4" EXTERIOR GRADE PLYWOOD
06 16 00-B	5/8" EXTERIOR GRADE PLYWOOD
06 16 43-A	5/8" EXTERIOR GYPSUM SHEATHING
06 40 00-A	1/2" ALUMINUM MILLWORK REVEAL TRIM - COLOR: BLACK
06 40 00-B	WOOD RAIL - SEE DRAWINGS FOR PROFILE
06 40 00-C	ALUMINUM TRIM/REVEAL 1/4" POST
06 40 00-D	1/2" ALUMINUM MILLWORK REVEAL F TRIM - COLOR: BLACK
06 40 00-E	3/4" WOOD CAP AND TRIM
06 40 00-F	ALUMINUM TRIM/REVEAL L ANGLE - COLOR: BLACK
06 40 00-G	PLASTIC LAMINATE ON 3/4" PARTICLE BOARD
06 40 00-H	1X HARDWOOD TRIM - COLOR TO MATCH ADJACENT FINISHES
06 40 00-J	MICROPERFORATED PLASTIC LAMINATED ON 3/4" PARTICLE BOARD
06 42 19-A	NOT USED
06 42 19-B	3/4" PLASTIC LAMINATE FACED WOOD PANEL
06 42 19-C	ALUMINUM OUTSIDE CORNER TRIM. SEE DETAILS FOR PROFILE
06 42 19-D	ALUMINUM EDGE TRIM
06 42 19-E	1/4" ALUMINUM Z-CLIP
06 42 19-F	INTERLOCKING OVERHEAD CEILING CLIP
07 21 00-A	SLAB PERIMETER RIGID INSULATION (R-15 FOR 24" HORIZONTAL R-10 TO TOP OF FOOTING OR 48" MAX VERTICAL)
07 21 00-C	3" CAVITY WALL EXTRUDED POLYSTYRENE INSULATION (R-16.8)
07 21 00-D	MINERAL WOOL BATT INSULATION FULL THICKNESS
07 21 00-E	THERMALLY BROKEN Z-CLIPS @ 16" O.C. VERTICALLY
07 24 15-A	DIRECT APPLIED FINISH SYSTEM (DAFS)- UN-INSULATED SOFFIT
07 25 00-A	WEATHER RESISTIVE BARRIERS- BUILDING WRAP
07 27 26-A	FLUID APPLIED MEMBRANE AIR BARRIER
07 42 13-A	PRE-FINISHED CONCEALED FASTENER METAL WALL PANEL
07 42 13-C	BRAKE METAL FLASHING
07 42 13-D	BRAKE METAL TRIM
07 42 13-E	METAL HAT CHANNEL (16 GA. MIN.) - SEE SECTIONS FOR DEPTH
07 42 43-A	COMPOSITE METAL WALL/SOFFIT PANEL
07 42 43-B	BRAKE METAL TRIM/FLASHING - COLOR AS SELECTED BY ARCHITECT
07 42 43-C	METAL HAT CHANNEL (16 GA. MIN.) - SEE SECTIONS FOR DEPTH
07 42 43-D	ACM TRIM - RETURN TO BRAKE METAL FLASHING
07 54 19-A	POLYVINYL-CHLORIDE (PVC) MEMBRANE ROOFING SYSTEM
07 54 19-B	MEMBRANE ROOFING - EXTEND OVER AND ATTACH TO FRONT FACE OF PARAPET
07 54 19-C	1/2" COVER BOARD
07 54 19-E	2 LAYERS OF 2" POLYISO INSULATION BOARD (R-26)
07 54 19-F	2" POLYISO INSULATION BOARD (R-13)
07 54 19-G	INSULATED ROOF CURB
07 62 00-A	TERMINATION BAR
07 71 00-A	MANUFACTURED COPING
07 71 00-B	MANUFACTURED DRIP EDGE
07 71 00-D	MANUFACTURED COUNTERFLASHING SYSTEM
07 71 29-A	ALUMINUM ROOF EXPANSION JOINT ASSEMBLY
07 72 00-A	ROOF HATCH
07 92 00-A	SEALANT
07 92 00-B	SEALANT EACH SIDE, TYPICAL
07 92 00-C	BACKER ROD AND SEALANT
07 92 00-D	BACKER ROD AND SEALANT EACH SIDE, TYPICAL
07 95 00-A	EXPANSION JOINT COVER
07 95 00-B	EXTERIOR WALL EXPANSION JOINT SYSTEM
08 11 13-A	HOLLOW METAL DOOR/BORROWED LIGHT FRAME
08 33 13-A	OVERHEAD COILING COUNTER DOOR
08 33 23-A	OVERHEAD COILING DOOR
08 33 23-B	OVERHEAD COILING DOOR - INSULATED
08 41 13-A	4 1/2" ALUMINUM-FRAMED STOREFRONT
08 41 13-B	WIDE STYLE ALUMINUM ENTRANCE DOOR
08 41 13-C	ALUMINUM BRAKE METAL TO MATCH STOREFRONT FRAME
08 41 13-D	ALUMINUM SUN SHADE
08 41 13-E	ALUMINUM FLUSH DOOR
08 41 13-F	EXTRUDED ALUMINUM ADJUSTABLE PARTITION CLOSURE
08 41 13-G	WALL END CAP
08 44 13-A	7" DEEP ALUMINUM CURTAINWALL SYSTEM
08 44 13-C	ALUMINUM BREAKMETAL TO MATCH CURTAINWALL FRAME
08 80 00-A	GLAZING - SEE SCHEDULE/ELEVATIONS
09 22 16-A	7/8" FURRING CHANNEL
09 22 16-C	2 1/2" STEEL STUD
09 22 16-D	3 5/8" STEEL STUD
09 22 16-E	6" STEEL STUD
09 22 16-F	METAL STUD KICKERS AS REQUIRED
09 22 16-G	1 5/8" STEEL STUD
09 22 16-H	DRYWALL GRID FRAMING SYSTEM
09 29 00-A	5/8" GYPSUM WALL BOARD (SEE SPECS FOR TYPE)
09 29 00-B	SOUND ATTENUATION INSULATION
09 29 00-C	SUSPENDED GYPSUM BOARD CEILING ASSEMBLY
09 29 00-D	METAL J- MOULD
09 51 13-A	ACOUSTICAL CEILING SUSPENSION ASSEMBLY
09 51 13-B	DECORATIVE ACOUSTICAL CEILING EDGE TRIM
09 51 13-C	METAL EDGE TRANSITION TRIM
09 64 53-A	3/4" TEMPERED PLYRON FLOORING
09 64 53-B	3/4" FR PLYWOOD
09 64 53-C	NOM. 2X4 SLEEPERS ON 12" O.C.
09 64 53-D	3/8" NEOPRENE RUBBER PAD
09 64 53-E	RUBBER VENT-COVE BASE MOLDING
09 65 13-A	RESILIENT BASE
09 65 13-B	STAIR NOSING
09 66 23-A	PRECAST EPOXY-RESIN TERRAZZO TREAD AND RISER
09 66 23-B	1/2" EPOXY ABRASIVE STRIPS
09 66 23-C	EPOXY SETTING BED
09 66 23-D	PRECAST EPOXY-RESIN TERRAZZO LANDING PANEL
09 68 13-A	TILE CARPETING
09 84 33-B	SOUND DIFFUSING PANEL- SEE EQUIPMENT SCHEDULE
10 26 23-A	DECORATIVE PROTECTION PANELS
10 26 23-B	ALUMINUM END CAP - COLOR AS SELECTED BY ARCHITECT
10 26 23-C	ALUMINUM OUTSIDE CORNER TRIM - COLOR AS SELECTED BY ARCHITECT
11 61 45-A	ACOUSTICAL CURTAINS
11 62 43-A	PIPE GRID
12 32 16-B	PLASTIC LAMINATE SHELVING AND CLOTHES ROD
12 35 50-A	PLASTIC LAMINATE MUSIC CASEWORK- SEE EQUIPMENT SCHEDULE
12 36 61-A	SOLID SURFACE MATERIAL WINDOW STOOLS
12 36 63-A	SOLID SURFACE COUNTERTOPS
14 24 00-C	ELEVATOR DOOR AND FRAME
14 24 00-E	ELEVATOR SILL
31 20 00-A	FINISH GRADE- SEE CIVIL SHEETS
31 20 00-B	COMPACTED EARTH
31 20 00-C	DRAINING GRANULAR FILL
32 13 13-A	SIDEWALK- SEE CIVIL SHEETS
32 13 13-B	CONCRETE PAVING- SEE CIVIL SHEETS

SILVER CREEK
SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 RENZ AVE, SELLERSBURG, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:
2 ADDENDUM #2 08-04-2022

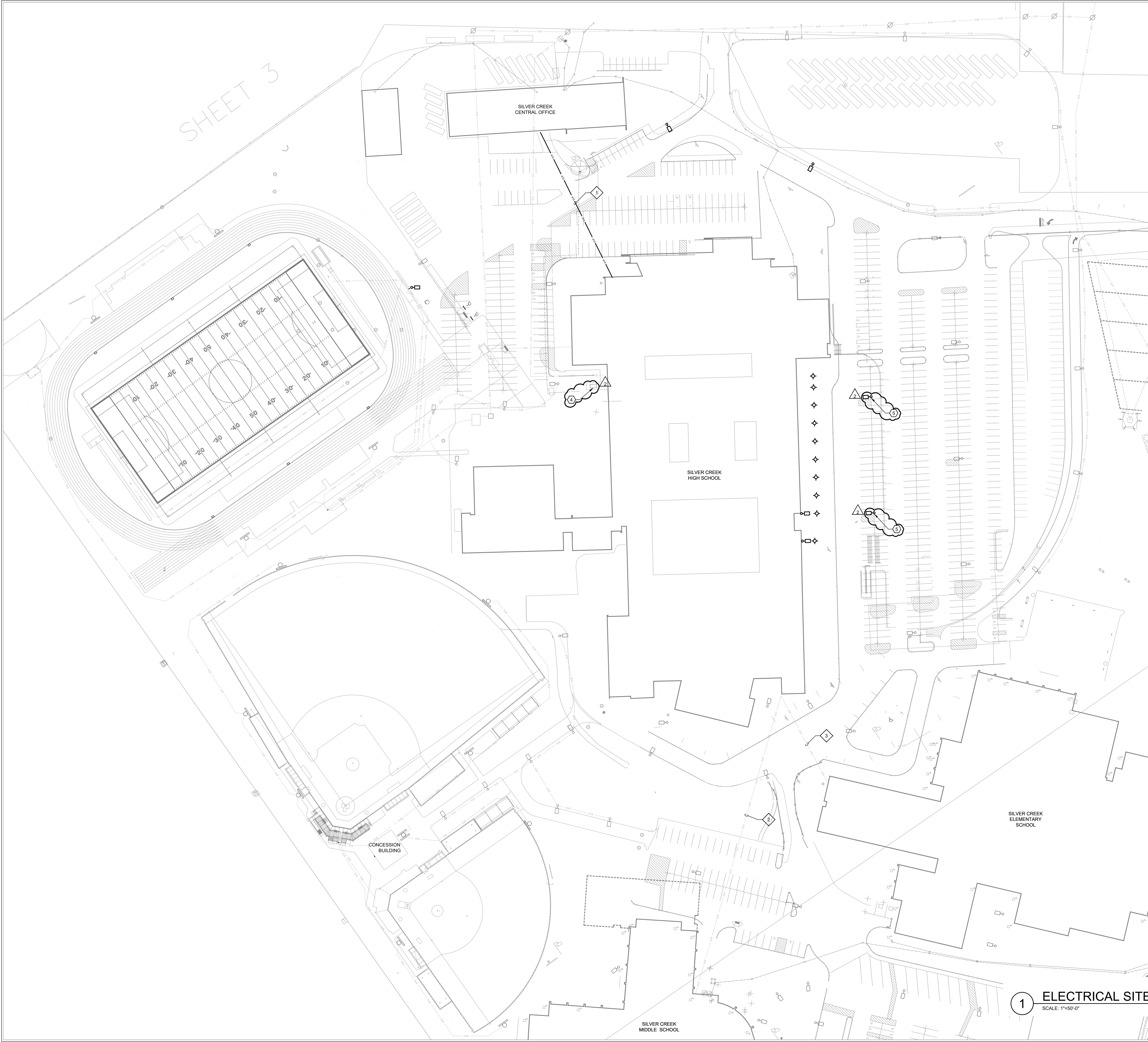
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	JSW	BCH

DRAWING TITLE:
ENLARGED SECTION DETAILS

CERTIFIED BY:
JAMES ROBERT FUNK
REGISTERED
No. AR00900003
STATE OF INDIANA
ARCHITECT

DRAWING NUMBER
A421

PROJECT NUMBER
2021026



GENERAL NOTES:

A. REFER TO SHEET E002 FOR GENERAL NOTES.

◇ SHEET KEYNOTES:

1. EXISTING FIBER FROM THE CENTRAL OFFICE SERVER ROOM TO THE HIGH SCHOOL MDF SHALL BE REMOVED COMPLETELY BACK TO SOURCE ONCE NEW FIBER IS IN PLACE AND READY TO BE USED.
2. EXISTING FIBER FROM THE HIGH SCHOOL MDF TO THE MIDDLE SCHOOL MDF SHALL BE REMOVED COMPLETELY BACK TO SOURCE ONCE NEW FIBER PATHWAY HAS BEEN INSTALLED AND IS READY FOR OPERATION.
3. REUSE EXISTING FIBER SERVICE PATHWAY TO INSTALL NEW CABLING FROM THE HIGH SCHOOL MDF TO ELEMENTARY SCHOOL MDF. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM AND INTERCONNECTION PLANS FOR ADDITIONAL REQUIREMENTS.
4. EXISTING GENERATOR TO BE DEMOLISHED AND REPLACED. REFER TO NEW WORK.
5. AFTER REMOVAL OF POLE, SET INGRADE JUNCTION BOX AND CONNECT CIRCUITRY TO KEEP DOWN STREAM FIXTURES FUNCTIONAL.

1 ELECTRICAL SITE DEMOLITION PLAN

SCALE: 1"=50'-0"

0 50' 100'

PLAN NORTH

SILVER CREEK
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Lexington - Louisville - Charleston
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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:

ELECTRICAL SITE DEMOLITION PLAN

CERTIFIED BY:

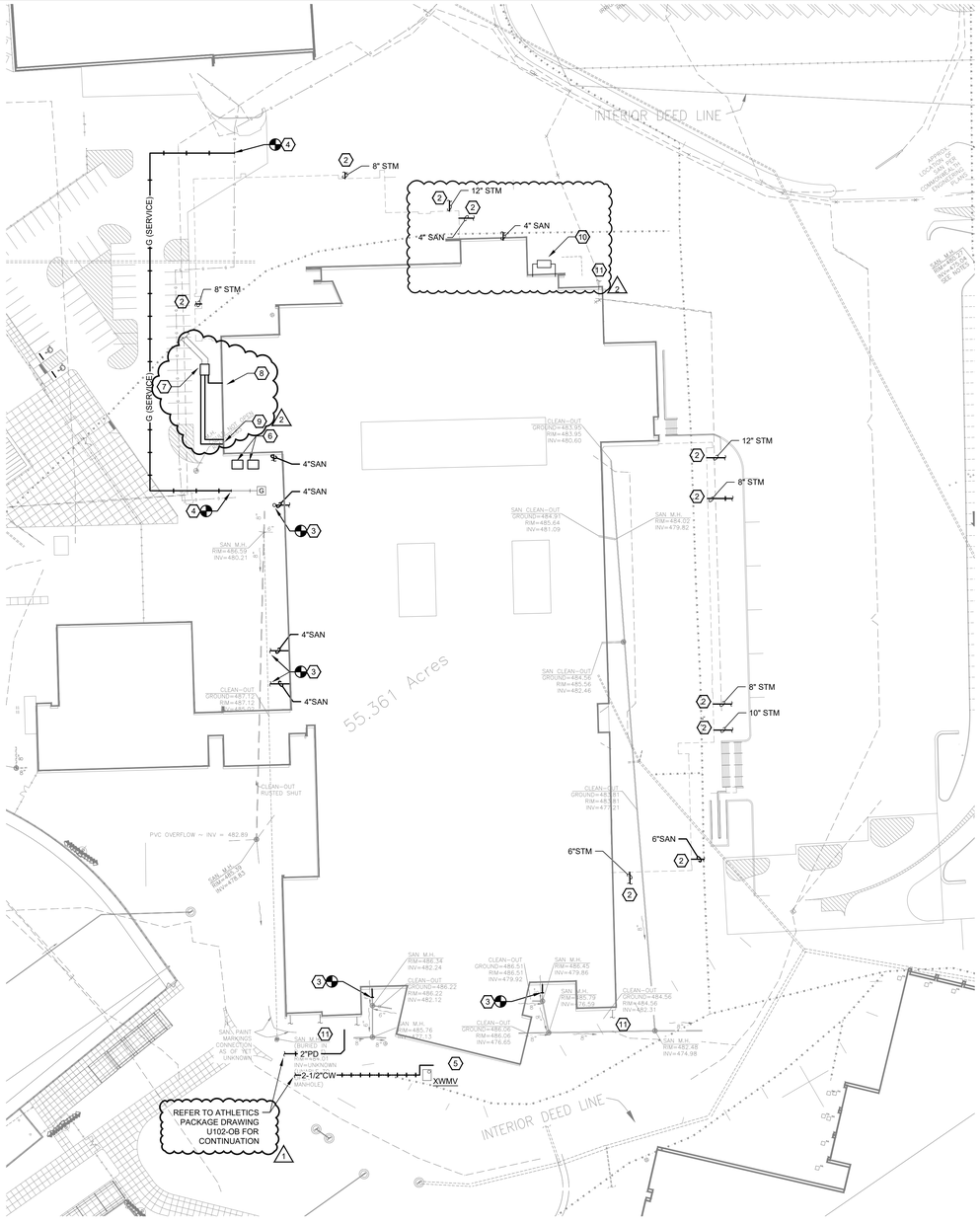
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

UD201

PROJECT NUMBER

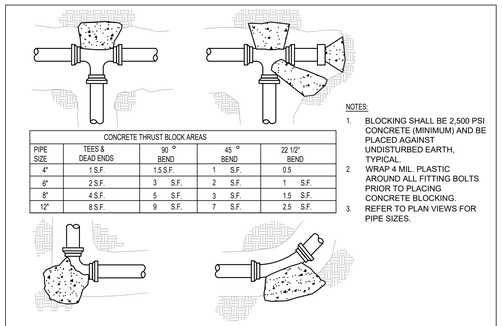
2021026



1 PLUMBING SITE PLAN

SCALE: 1"=50'-0"

0 50' 100'



CONCRETE THRUST BLOCK AREAS							
PIPE SIZE	TEES & DEAD ENDS	90 ° BEND		45 ° BEND		22 1/2° BEND	
4"	1 S.F.	1.5 S.F.		1 S.F.		0.5	
6"	2 S.F.	3	S.F.	2	S.F.	1	S.F.
8"	4 S.F.	5	S.F.	3	S.F.	1.5	S.F.
12"	8 S.F.	9	S.F.	7	S.F.	2.5	S.F.

NOTES:

1. BLOCKING SHALL BE 2,500 PSI CONCRETE (MINIMUM) AND BE PLACED AGAINST UNDISTURBED EARTH, TYPICAL.
2. WRAP 4 MIL. PLASTIC AROUND ALL FITTING BOLTS PRIOR TO PLACING CONCRETE BLOCKING.
3. REFER TO PLAN VIEWS FOR PIPE SIZES.

WATER MAIN THRUST BLOCK DETAILS

NOT TO SCALE

SHEET KEYNOTES:

1. PROVIDE NEW FIRE PROTECTION VAULT PER DETAIL ON SHEET FP001. COORDINATE FINAL VAULT LOCATION WITH FIRE MARSHAL PRIOR TO CONSTRUCTION.
2. EXTEND NEW STORM/SANITARY PIPING 5'-0" FROM BUILDING AND CONNECT TO SITE PIPING. REFER TO CIVIL DRAWING AND COORDINATE CONNECTIONS.
3. EXTEND PIPING 5'-0" PAST BUILDING AND CONNECT NEW PIPING TO EXISTING PIPING IN THIS AREA. FIELD VERIFY SIZE, DEPTH, AND MATERIAL OF EXISTING PIPING PRIOR TO CONNECTION. PROVIDE TRANSITION, ADAPTOR, ETC. AS REQUIRED. PROVIDE NEW BIDIRECTIONAL CLEANOUT AT ALL RECONNECTIONS TO EXISTING SAN / STM PIPING.
4. EXISTING NATURAL GAS SERVICE PIPING SHALL BE OFFSET AS INDICATED. CONTRACTOR SHALL CLOSELY COORDINATE RECONNECTION SCOPE WITH NATURAL GAS UTILITY COMPANY TO VERIFY REQUIRED SCOPE PRIOR TO CONSTRUCTION. MODIFICATIONS SHALL NOT BE MADE TO EXISTING GAS SERVICE LINE WITHOUT WRITTEN APPROVAL FROM THE NATURAL GAS UTILITY COMPANY.
5. CW PIPING AT EXISTING WATER METER VAULT TO NEW CONCESSION BUILDING UNDER SEPARATE BID PACKAGE.
6. MECHANICAL EQUIPMENT SHOWN FOR REFERENCE ONLY. NO PLUMBING SCOPE ASSOCIATED.
7. NEW COMBINATION DOMESTIC WATER, FIRE SERVICE VAULT. REFER TO DETAIL ON THIS DRAWING. 2
8. DOMESTIC WATER ENTRY. REFER TO DRAWING P209.
9. NEW FIRE PROTECTION ENTRY AND FIRE DEPARTMENT CONNECTION PIPING. ALL PIPING TO BE MINIMUM BURY DEPTH OF 48" TO TOP OF PIPE. REFER TO FP DRAWINGS FOR CONTINUATION. 2
10. NEW GREASE TRAP. REFER TO DRAWING P107 FOR MORE INFORMATION.
11. EXISTING STORM PIPING TO REMAIN. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF SITE PIPING.
12. EXISTING SAN PIPING TO REMAIN. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF SITE PIPING.

GENERAL NOTES:

A. REFER TO SHEETS P001 FOR GENERAL NOTES.

B. COORDINATE ALL REQUIRED SCOPE TO DEMOLISH, ABANDON, DISCONNECT, OR REUSE EXISTING UTILITY CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANIES, SITE DEMOLITION CONTRACTOR, AND THE OWNER PRIOR TO THE START OF DEMOLITION. REFER TO NEW WORK DRAWINGS FOR REQUIRED UTILITY SCOPE.

C. ALL EXISTING PUBLIC AND PRIVATE UTILITIES ARE SHOWN FOR BIDDING AND COORDINATION PURPOSES ONLY. THE CONTRACTOR SHALL PROCURE THE SERVICES OF A PRIVATE UTILITY LOCATING FIRM TO LOCATE AND DOCUMENT ALL EXISTING UNDERGROUND UTILITIES IN THE PROJECT AREA AND ANY SPECIFICS FOR UTILITY TIE-INS THAT EXTEND BEYOND THE PROJECT AREA. UTILITIES SHALL BE LOCATED, MARKED, AND DOCUMENTED PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. THE DOCUMENTATION SHALL INCLUDE SPECIFIC INFORMATION FOR EACH UTILITY SUCH AS LOCATION, DEPTH (AS APPROPRIATE), SIZE, MATERIAL, STRUCTURES, METERS, VALVES, ETC. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS BETWEEN THE EXISTING UTILITIES AND THE NEW SCOPE OF WORK.

D. B.U.D. BEFORE YOU DIG PHONE 1-800-752-6007. THE UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE FROM SITE SURVEYS, RECORD DRAWINGS AND FROM VISUAL SITE INSPECTIONS. UTILITY LOCATIONS ARE APPROXIMATE AND THERE MAY BE OTHER UNDERGROUND UTILITIES IN THE AREA. CONTACT ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY EXCAVATION.

E. IF ANY CHARTED, UNCHARTED OR MISLOCATED UTILITY SERVICE IS INTERRUPTED, THE CONTRACTOR WILL WORK CONTINUOUSLY TO RESTORE SERVICE TO THE SATISFACTION OF THE OWNER/ARCHITECT.

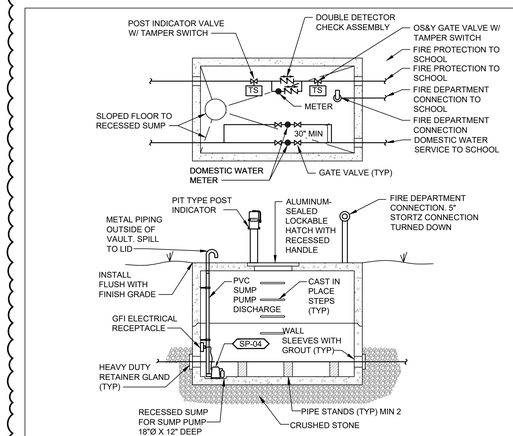
F. CONTRACTOR SHALL COORDINATE INSPECTIONS WITH THE APPROPRIATE UTILITY COMPANIES AND PROVIDE A MINIMUM NOTICE OF 48 HOURS PRIOR TO REQUESTED INSPECTION.

G. EXISTING UNDERGROUND PIPING MAY BE ABANDONED IN PLACE ONLY ONLY AS DIRECTED BY THE OWNER.

H. TRENCHES SHALL BE INSPECTED BY ENGINEER / OWNER PRIOR TO INSTALLATION OF PIPING AND BACKFILL. CONTACT ENGINEER TO SCHEDULE INSPECTION AND PROVIDE PHOTOGRAPHS AS REQUESTED.

I. PAVEMENT, CURBING, STRIPING, ETC. SHALL BE CUT, PATCHED, AND REPAIRED AS REQUIRED FOR WORK.

J. WHERE GREEN SPACES AND LANDSCAPING ARE DISTURBED, FINISH GRADE, SEED, STRAW, AND REPAIR LANDSCAPE TO BEFORE WORK CONDITIONS.



VAULT GENERAL NOTES

1. ANY AND ALL REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTIONS SHALL TAKE PRECEDENCE.
2. PRODUCT BASIS OF DESIGN:
   POST INDICATOR VALVE - NIBCO #F-609
   INDICATOR POST - NIBCO #NIP-1AJ
   FIRE PROTECTION GATE VALVE - NIBCO #F-607-OTS
   FIRE PROTECTION CHECK VALVE - NIBCO #F-608-W
   DOMESTIC WATER GATE VALVE - NIBCO #T-113
   DOUBLE DETECTOR CHECK ASSEMBLY - ZURN WILKINS #350ADA
   STRAINER - NIBCO #T-221/222-B
   DOMESTIC WATER METER - BADGER METER - RECORDALL COMPOUND SERIES
   HEAVY DUTY RETAINER GLAND - STAR PIPE PRODUCTS - SERIES 600

   ALL SUBMITTED PRODUCTS MUST MEET THE SAME STANDARDS AND SPECIFICATIONS AS PRODUCT BASIS OF DESIGN.
3. FIRE PROTECTION PIPING INSIDE VAULT SHALL BE DUCTILE IRON. DOMESTIC WATER PIPING INSIDE VAULT SHALL BE TYPE L COPPER.
4. CONCRETE VAULT SHALL BE 3,500 PSI AND IN ACCORDANCE WITH ASTM C857, C858, C891 AND C1037.
5. COORDINATE FIRE DEPARTMENT CONNECTION TYPE WITH LOCAL FIRE DEPARTMENT.
6. ALL FITTINGS AND VALVES MUST BE A MINIMUM OF 18" FROM VAULT WALL.
7. SP-4 SHALL BE WEIL MODEL 1412, 1/2 HP, 115V/1PH/60HZ, 50GPM, 15 FT HEAD.

COMBINATION FIRE PROTECTION & DOMESTIC WATER VAULT DETAIL

NOT TO SCALE

GAS LOAD SCHEDULE

EQUIPMENT	LOCATION	TOTAL GAS LOAD MBH	INLET PRESSURE IN WC	REMARKS
KITCHEN EQUIPMENT	KITCHEN	500	4 - 14	3
SCIENCE ROOMS	BUILDING	500	4 - 14	3
DOMESTIC WATER HEATER (DWH-1)	EXISTING BOILER ROOM	650	4 - 14	3
MAKE-UP AIR UNIT (MAU-1)	KITCHEN ROOF	400	5 - 14	1,3
BOILERS (B-1, B-2, B-3, B-4)	MECHANICAL J128	4500	4 - 14	1,3
EMERGENCY GENERATOR	EXTERIOR	1202	7 - 11	2, 3
	TOTAL GAS LOAD	7752	MBH	

REMARKS:
1. REFER TO MECHANICAL DRAWINGS FOR DETAILS.
2. REFER TO ELECTRICAL DRAWINGS FOR EMERGENCY GENERATOR DETAILS.
3. PROVIDE GAS CONNECTION PER DETAIL ON SHEET P501.

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

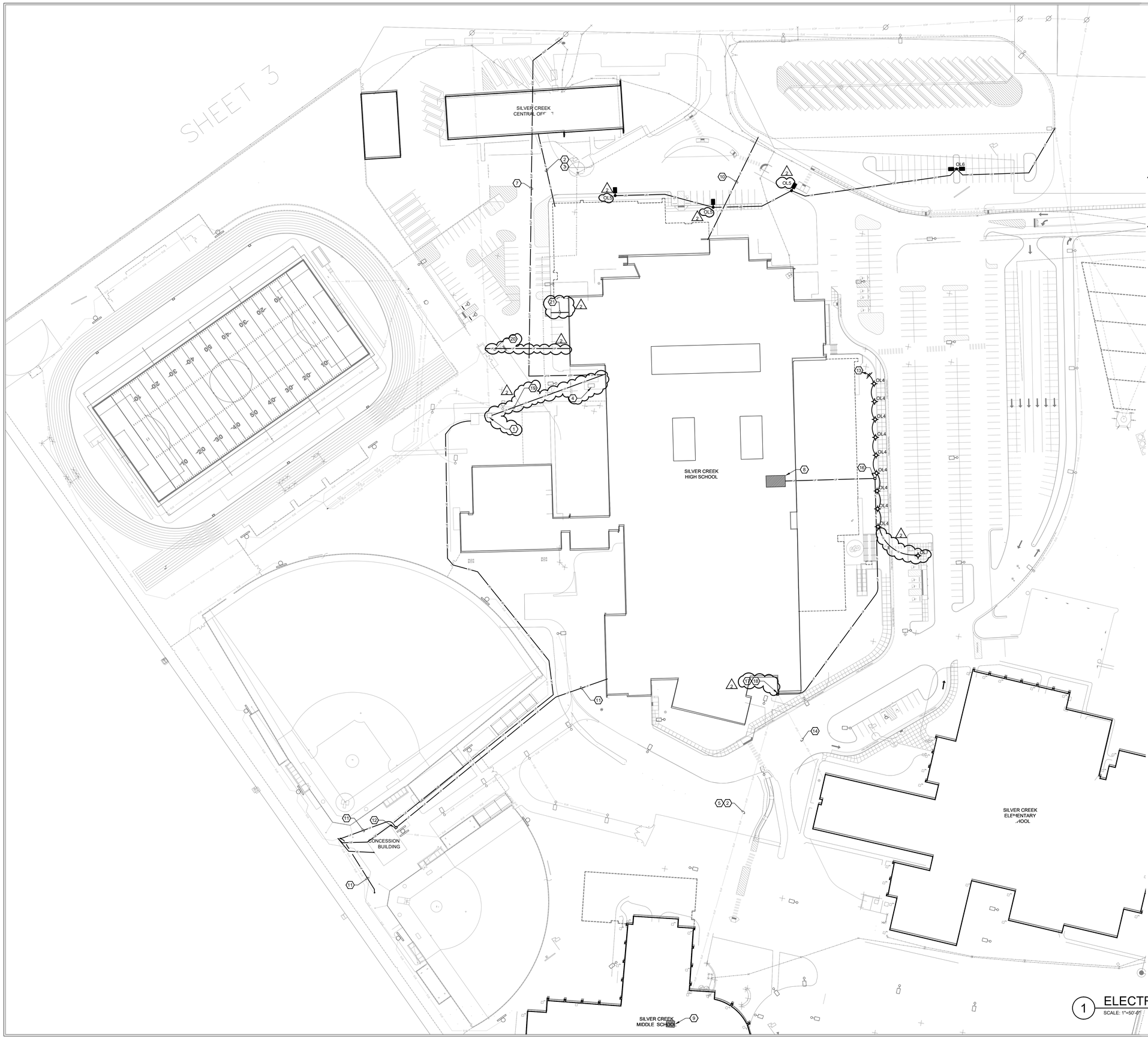
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
PLUMBING SITE PLAN

CERTIFIED BY:
NICHOLAS C. MORAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
U101

PROJECT NUMBER
2021026



GENERAL NOTES:

A. REFER TO SHEET E002 FOR GENERAL NOTES.

SHEET KEYNOTES:

1. EXISTING UTILITY PAD MOUNTED TRANSFORMER.
2. UTILIZE EXISTING PATHWAY.
3. PROVIDE NEW FIBER SERVICE CABLING FROM THE CENTRAL OFFICE SERVER ROOM TO THE HIGH SCHOOL MDF. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM, SPECIFICATIONS, AND INTERCONNECTION PLANS FOR ADDITIONAL REQUIREMENTS.
4. PROVIDE NEW GENERATOR. REFER TO SPECIFICATIONS.
5. PROVIDE NEW FIBER SERVICE CABLING FROM THE HIGH SCHOOL MDF TO MIDDLE SCHOOL MDF. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM, SPECIFICATIONS, AND INTERCONNECTION PLANS FOR ADDITIONAL REQUIREMENTS.
6. REUSE EXISTING FIBER SERVICE PATHWAY TO INSTALL NEW CABLING FROM THE HIGH SCHOOL MDF TO ELEMENTARY SCHOOL MDF. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM, SPECIFICATIONS, AND INTERCONNECTION PLANS FOR ADDITIONAL REQUIREMENTS.
7. EXISTING UNDERGROUND TELEPHONE SERVICE CABLING SHALL BE REMOVED COMPLETELY BACK TO SOURCE. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
8. APPROXIMATE LOCATION OF NEW HIGH SCHOOL MDF D132.
9. APPROXIMATE LOCATION OF EXISTING MIDDLE SCHOOL MDF.
10. PROVIDE ONE (1) 4" PVC CONDUIT UNDERGROUND FROM EXISTING UTILITY PULL BOX TO NEW ADDITION OF HIGH SCHOOL. TURN UP INSIDE WALL, TRANSITION TO EMT CONDUIT WHERE EXISTING GRADE, AND ROUTE TO NEW MDF LOCATION IN UNIT D. REFER TO FLOOR PLANS FOR EXACT LOCATION.
11. PROVIDE ONE (1) 2" CONCRETE ENCASED SCHEDULE 40 PVC CONDUIT WITH INNERDUCT FOR UNDERGROUND FIBER OPTIC CABLING. PROVIDE PULL BOXES AS REQUIRED. COORDINATE QUANTITY AND TYPE OF CABLING WITH OWNER. REFER TO ATHLETIC BUILDING FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
12. UNDER BASE BID, PROVIDE INGRADE QUAZITE PC 13"X24" BOX WITH TIER 5 COVER FOR FIBER OPTIC CABLE ROUTING. FOR CONCESSIONS BUILDING ALTERNATE, DEDUCT INGRADE BOX AND ROUTE CONDUIT DIRECTLY TO CONCESSION BUILDING ROOM MECH 006 AND FROM THIS ROOM TO BASEBALL PRESS BOX.
13. ROUTE CIRCUIT THROUGH EXTERIOR LIGHTING CONTROL CONTACTOR.
14. PROVIDE NEW FIBER SERVICE CABLING FROM THE HIGH SCHOOL MDF TO ELEMENTARY SCHOOL MDF. REFER TO LOW-VOLTAGE ONE-LINE DIAGRAM, SPECIFICATIONS, AND INTERCONNECTION PLANS FOR ADDITIONAL REQUIREMENTS.
15. PROVIDE INGRADE PULLBOX FOR FIBER OPTIC CABLE ROUTING. REFER TO RACEWAY, BOXES, AND CABLING SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
16. PROVIDE INGRADE PULLBOX FOR FIBER OPTIC CABLING.
17. INTERCEPT EXISTING UNDERGROUND FIBER PATHWAYS TO ELEMENTARY AND PRIMARY SCHOOLS.
18. PROVIDE UNSWITCHED POWER TO FLAGPOLE LIGHT.
19. PROVIDE NEW UNDERGROUND SECONDARY SERVICE. REFER TO ONE LINE DIAGRAM.
20. APPROXIMATE LOCATION OF NEW TICKET BOOTH. REFER TO ATHLETIC BUILDING FLOOR PLANS FOR ADDITIONAL REQUIREMENTS. ALL WORK IN THIS BUILDING SHALL BE BID AS PART OF TICKET BOOTH ALTERNATE.
21. PROVIDE CONNECTION FROM SUPERVISORY SWITCHES AT FIRE PROTECTION VAULT AND PIV TO BUILDING FIRE ALARM SYSTEM. PROVIDE GFCI RECEPTACLE WITH WEATHERPROOF COVER IN VAULT WITH 2#10, 1#10G, 1" CONDUIT BURIED A MINIMUM OF 30" UNDERGROUND TO PANEL NL1E6, CIRCUIT 5. ALL UNDERGROUND WIRING TO BE RATED FOR DIRECT BURIAL, INSTALLED IN 1"C WITH SURGE SUPPRESSION LOOP ISOLATORS AT BUILDING ENTRANCE.

1 ELECTRICAL SITE PLAN
SCALE: 1"=50'-0" (0, 50', 100')

PLAN NORTH

SILVER CREEK SCHOOL CORPORATION

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SHROUT TATE WILSON
ARCHITECTURAL, MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of building construction proposed for the project.
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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

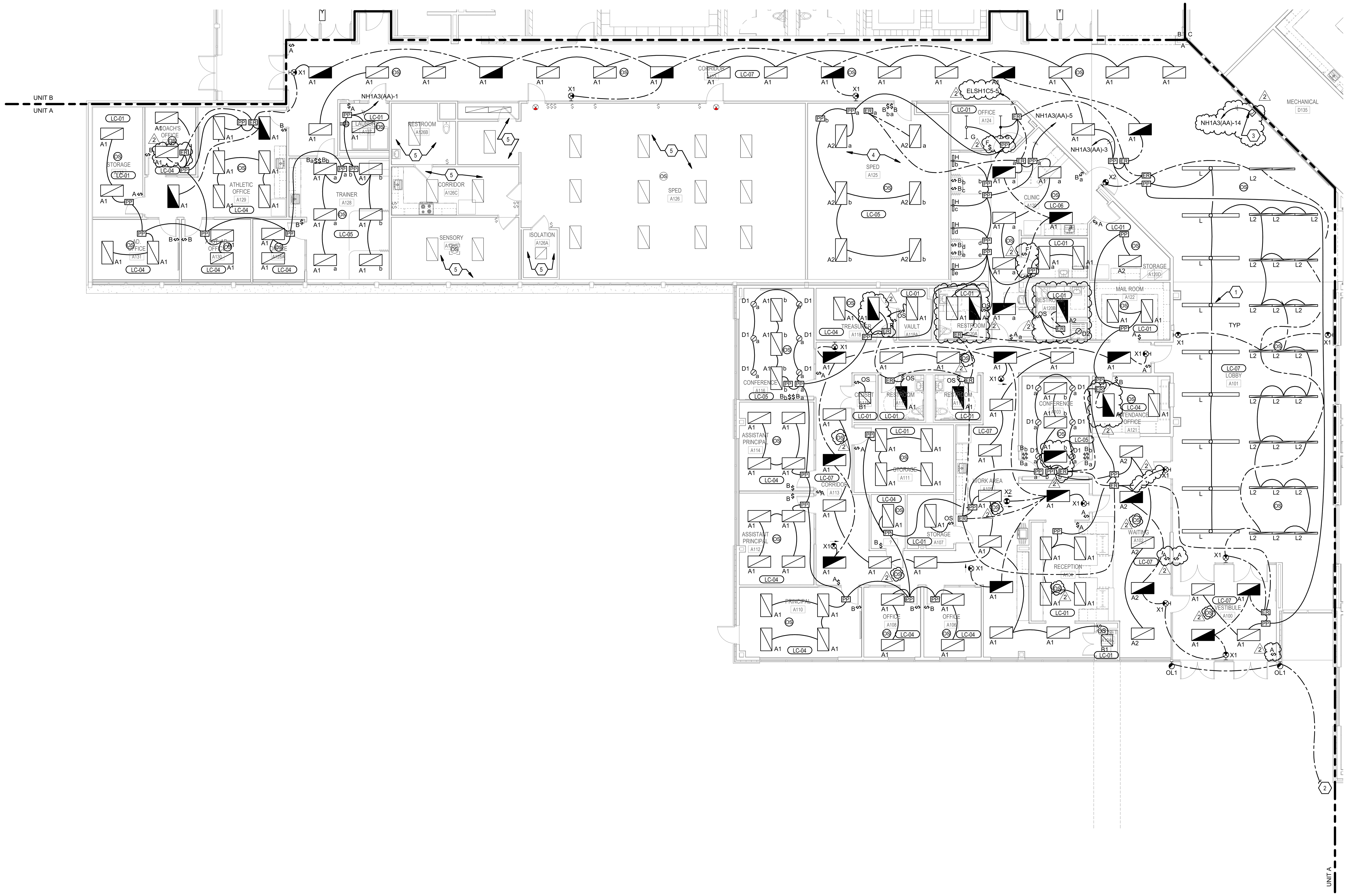
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:
ELECTRICAL SITE PLAN

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
U201

PROJECT NUMBER
2021026



1 FIRST FLOOR - UNIT A - LIGHTING

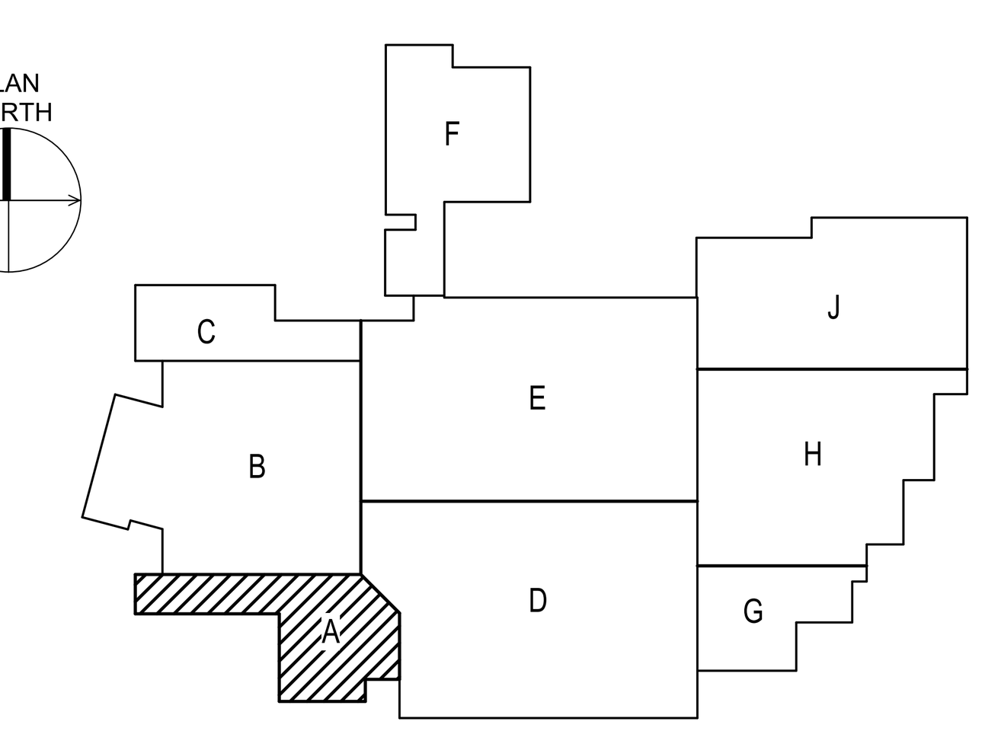
SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE NEW LIGHT FIXTURES IN CEILING CLOUDS AS INDICATED. COORDINATE MOUNTING REQUIREMENTS AND FINAL LOCATIONS WITH ARCHITECT.
2. REFER TO UNIT D FOR CONTINUATION.
3. PROVIDE POWER CONNECTION FOR ILLUMINATED LOGO. VERIFY HEIGHT AND VOLTAGE WITH LIGHTED LOGO PRIOR TO ROUGH-IN.
4. INSTALL FIXTURES IN THIS AREA IN SAME LOCATION AS DEMOLISHED FIXTURES. SEE FIRST FLOOR DEMOLITION - UNIT A - ELECTRICAL FOR FURTHER LOCATION OF DEMOLISHED FIXTURES.
5. CONNECT FIXTURES IN THIS AREA TO EXISTING LIGHTING BRANCH CIRCUIT SERVING THIS AREA. PRE-DEMOLITION LIGHTING CONTROLS FUNCTION SHALL BE MAINTAINED.



KEYPLAN

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT A - LIGHTING

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER
E101

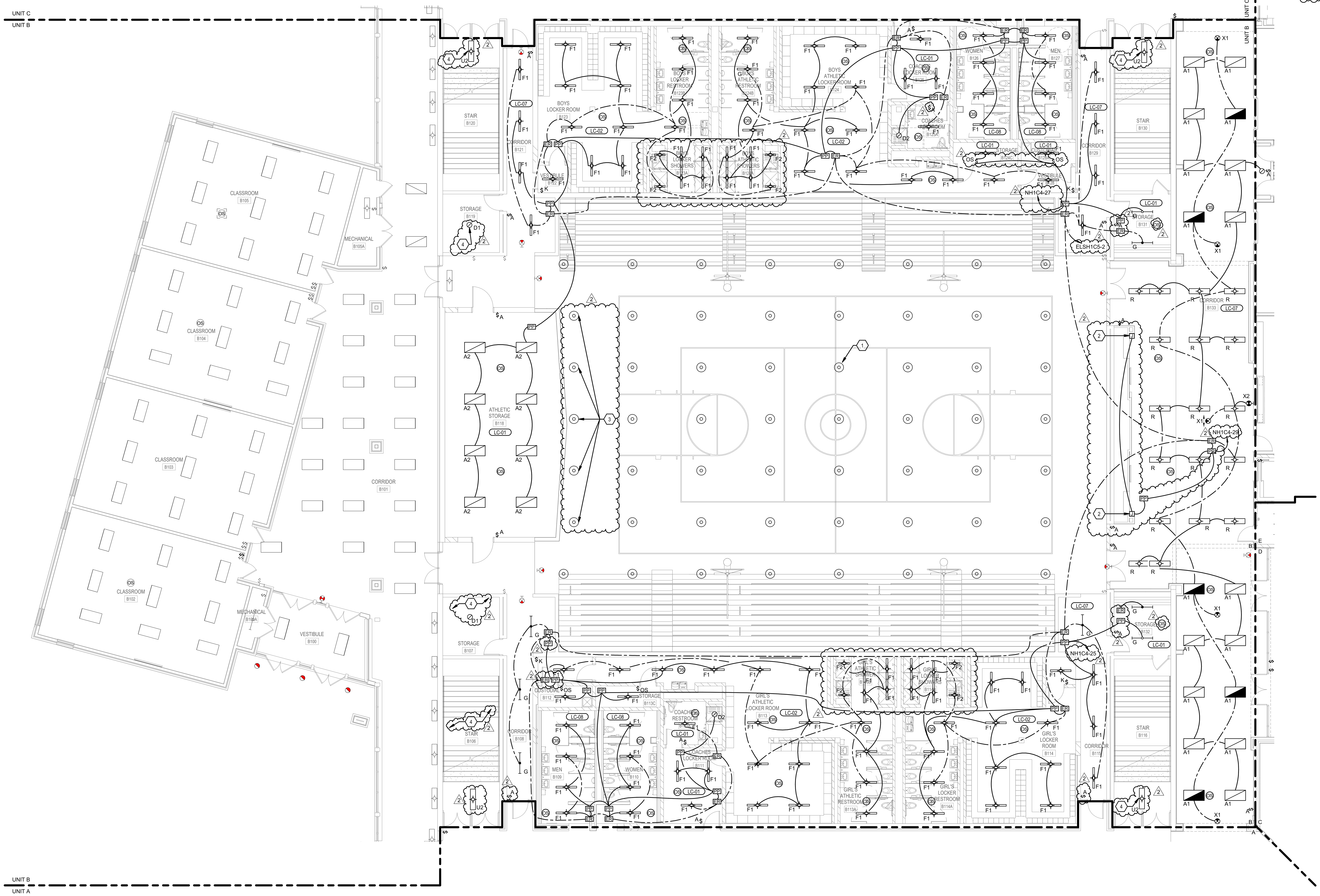
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

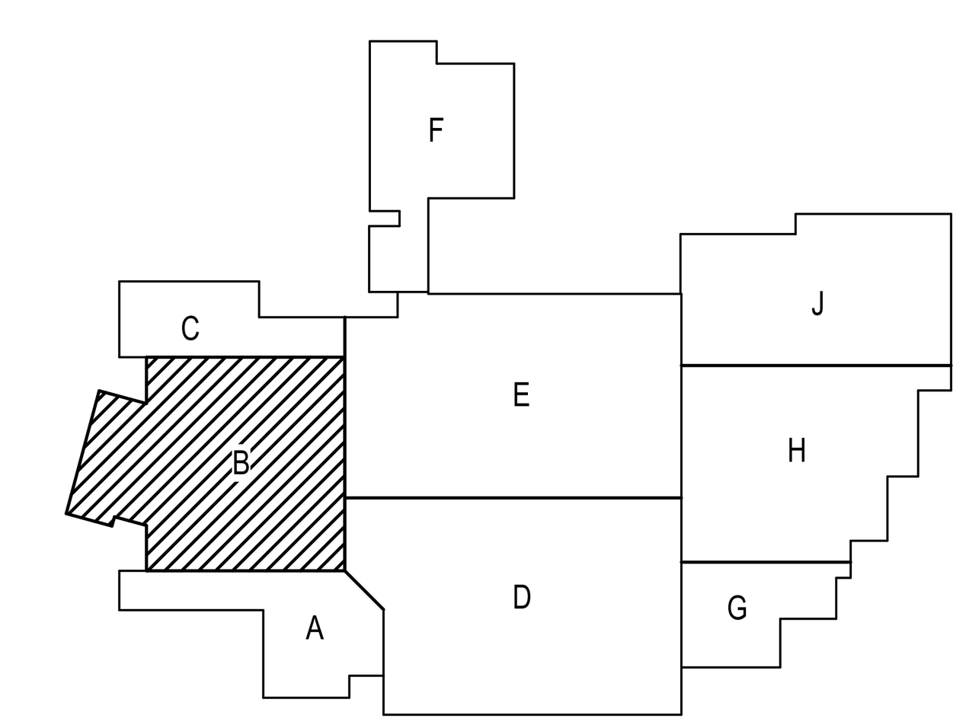
1. EXISTING LIGHT FIXTURES FOR GYMNASIUM TO REMAIN. FIELD VERIFY EXISTING QUANTITIES, LAYOUT, AND CONTROLS. MAINTAIN EXISTING LIGHTING CONTROLS. COORDINATE EXACT REQUIREMENTS AND FINAL LAYOUT WITH OWNER PRIOR TO INSTALLATION.
2. PROVIDE CONNECTION TO DISPLAY CASE LIGHTING.
3. EXISTING FIXTURES TO BE REPOSITIONED UNDAMAGED TO AVOID CONFLICT WITH NEW WALL. (2)
4. INTERCEPT AND EXTEND EXISTING RACEWAYS, WIRING, BOXES, ETC. TO NEW LIGHT FIXTURES AS REQUIRED. (2)



1 FIRST FLOOR - UNIT B - LIGHTING

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

PLAN NORTH



KEYPLAN

NORTH

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ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT B - LIGHTING

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

E102

PROJECT NUMBER

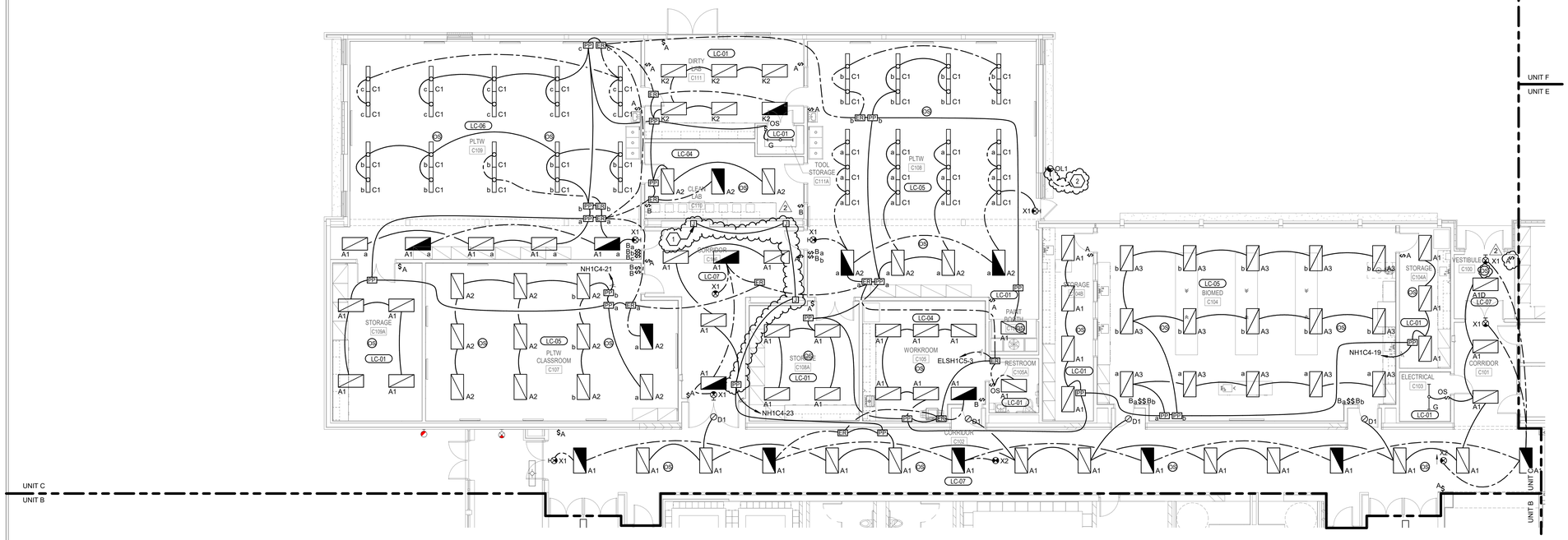
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE POWER CONNECTION TO DISPLAY CASE LIGHTING
2. REFER TO FLOOR PLAN - UNIT F - LIGHTING FOR CONTINUATION.

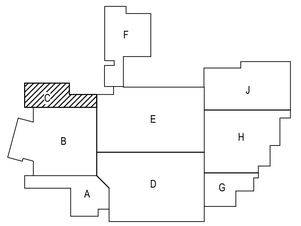


1 FIRST FLOOR - UNIT C - LIGHTING

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

PLAN NORTH

0 4' 8' 16'



KEYPLAN NORTH

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
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ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT C - LIGHTING

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E103

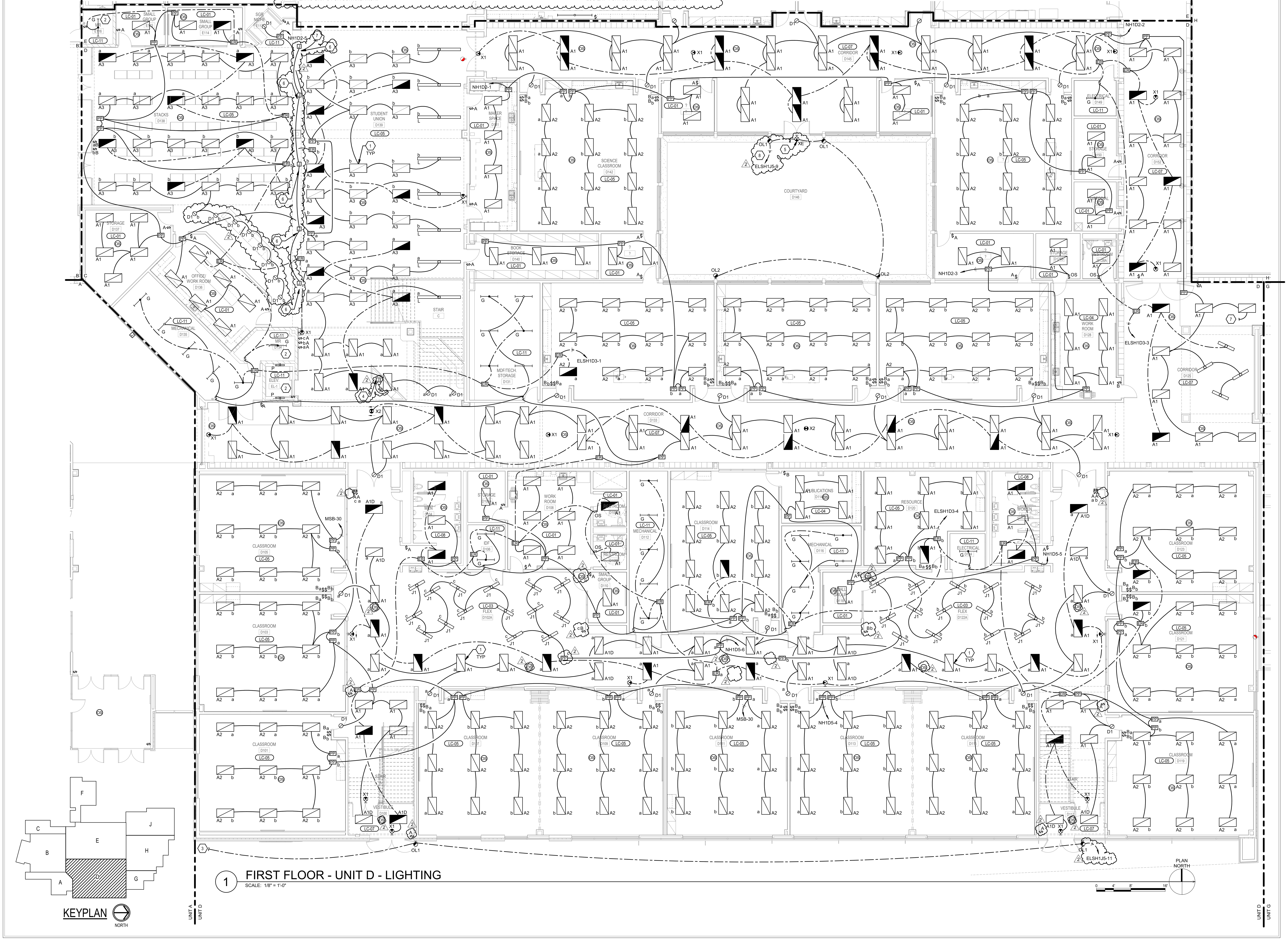
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE NEW LIGHT FIXTURES IN CEILING CLOUDS AS INDICATED. COORDINATE MOUNTING REQUIREMENTS AND FINAL LOCATIONS WITH ARCHITECT.
2. REFER TO ENLARGED ELEVATOR PLANS ON SHEET E408 FOR WORK IN THIS ROOM AND ADDITIONAL INFORMATION.
3. REFER TO UNIT G FOR CONTINUATION.
4. PROVIDE CONNECTION TO DISPLAY CASE LIGHTING
5. PROVIDE ONLY UNDER COURTYARD ALTERNATE BID
6. PROVIDE POWER CONNECTION TO DECORATIVE WALL LIGHTING. COORDINATE EXACT LOCATION WITH MANUFACTURER.
7. REFER TO UNIT E FOR CONTINUATION
8. ROUTE EXTERIOR LIGHTING CIRCUIT THROUGH EXTERIOR LIGHTING CONTROL CONTACTOR "LCC-EXT" LOCATED IN MAIN CUST/ BUILDING STOR. J130. LIGHT FIXTURE SHALL TURN ON AUTOMATICALLY UPON LOSS OF UTILITY POWER. REFER TO THE EXTERIOR LIGHTING CONTROL DIAGRAM - "LCC-EXT" FOR ADDITIONAL REQUIREMENTS.



1 FIRST FLOOR - UNIT D - LIGHTING

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

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PROJECT:

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ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	IME	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT D - LIGHTING

CERTIFIED BY:

ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER 07/07/22

DRAWING NUMBER

E104

PROJECT NUMBER

2021026

GENERAL NOTES

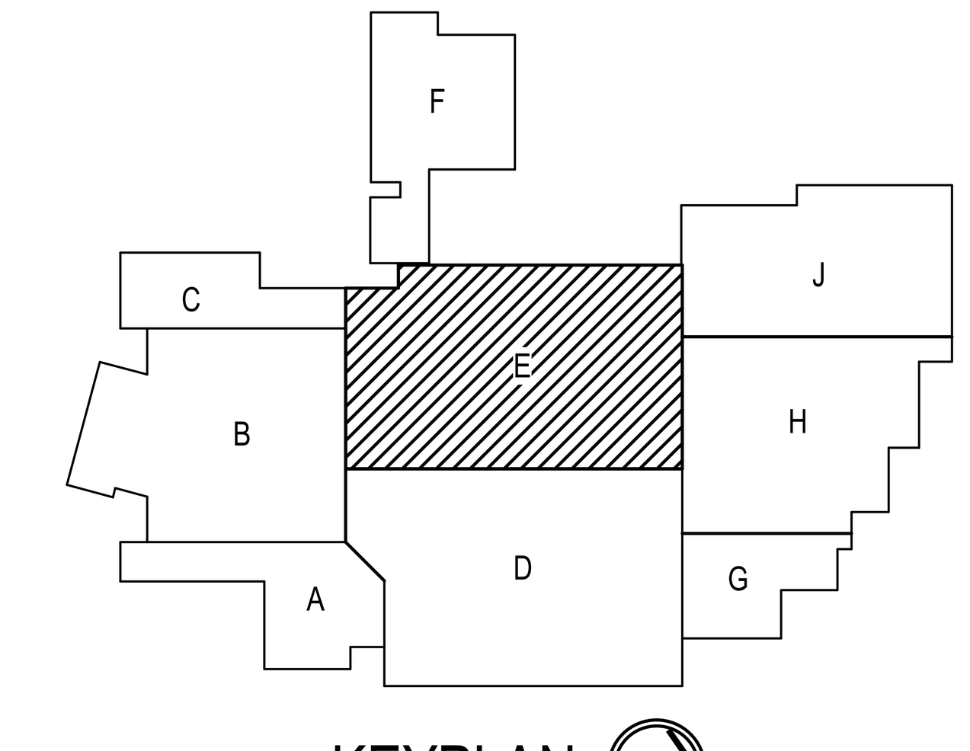
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

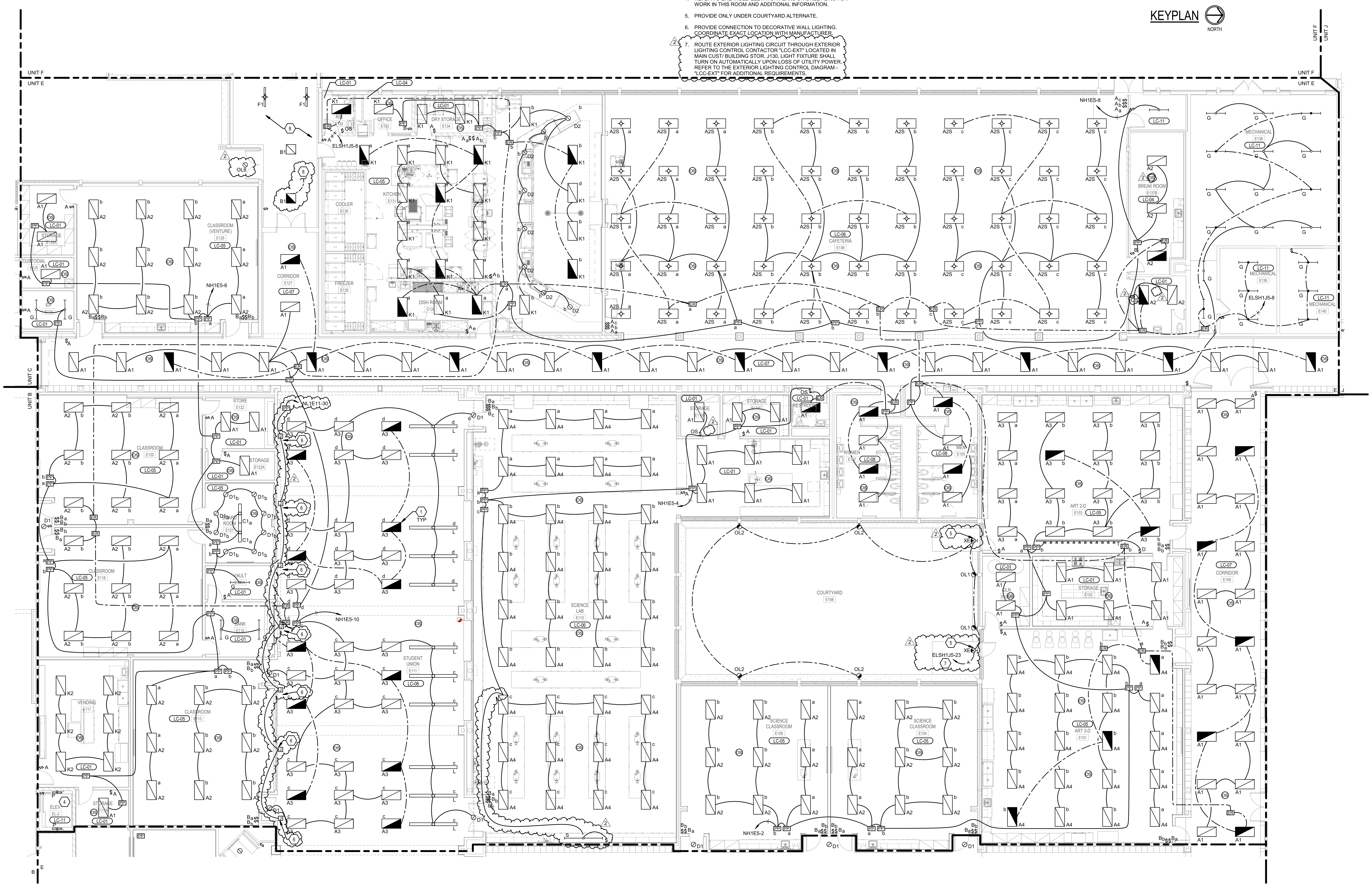
1. PROVIDE NEW LIGHT FIXTURES IN CEILING CLOUDS AS INDICATED. COORDINATE MOUNTING REQUIREMENTS AND FINAL LOCATIONS WITH ARCHITECT.
2. REPLACE ALL LIGHT FIXTURES IN AREA INDICATED ONE FOR ONE WITH NEW LED LIGHT FIXTURES. PROVIDE NEW LIGHTING CONTROLS AS REQUIRED. FINAL FIXTURE SELECTION AND CONTROLS TO BE PROVIDED AFTER DD SUBMISSION.
3. REPLACE ALL LIGHT FIXTURES IN AREA INDICATED ONE FOR ONE WITH NEW LED LIGHT FIXTURES. MAINTAIN EXISTING LIGHTING CONTROLS. DISCONNECT AND RECONNECT TO EXISTING LIGHTING CIRCUIT. FINAL FIXTURE SELECTION TO BE PROVIDED AFTER DD SUBMISSION.
4. REFER TO ENLARGED ELEVATOR PLANS ON SHEET E408 FOR WORK IN THIS ROOM AND ADDITIONAL INFORMATION.
5. PROVIDE ONLY UNDER COURTYARD ALTERNATE.
6. PROVIDE CONNECTION TO DECORATIVE WALL LIGHTING. COORDINATE EXACT LOCATION WITH MANUFACTURER.
7. ROUTE EXTERIOR LIGHTING CIRCUIT THROUGH EXTERIOR LIGHTING CONTROL CONTACTOR "LCC-EXT" LOCATED IN MAIN CUST/ BUILDING STOR. J130. LIGHT FIXTURE SHALL TURN ON AUTOMATICALLY UPON LOSS OF UTILITY POWER. REFER TO THE EXTERIOR LIGHTING CONTROL DIAGRAM - "LCC-EXT" FOR ADDITIONAL REQUIREMENTS.

SHEET KEYNOTES

8. REFER TO FIRST FLOOR - UNIT F - LIGHTING FOR LIGHTING REQUIREMENTS IN THIS AREA.
9. REFER TO FIRST FLOOR - UNIT F - LIGHTING FOR CONTINUATION



KEYPLAN



1 FIRST FLOOR - UNIT E - LIGHTING

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

PLAN NORTH

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PROJECT:

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT E - LIGHTING

CERTIFIED BY:

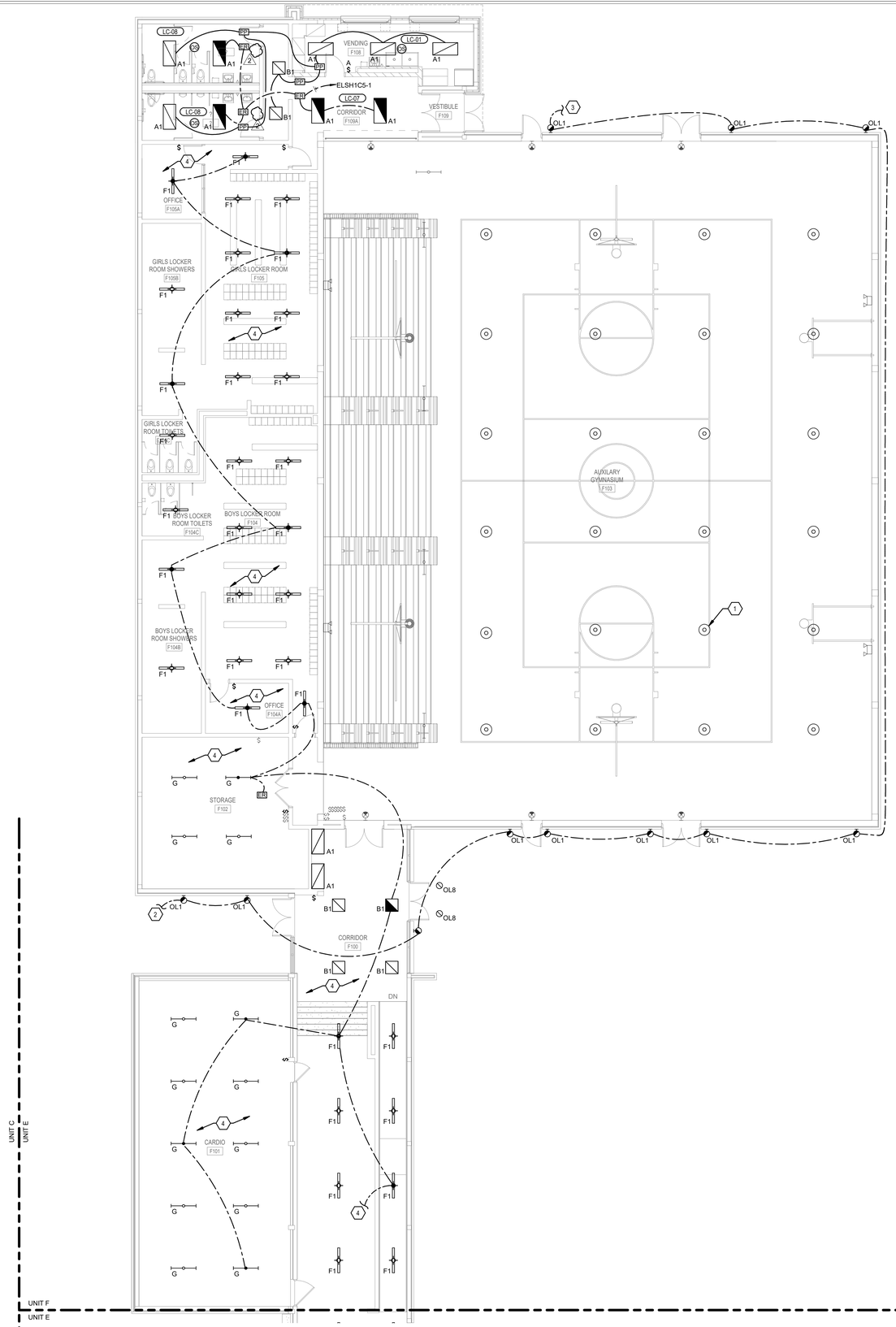
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

E105

PROJECT NUMBER

2021026



1 FIRST FLOOR - UNIT F - LIGHTING

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

PLAN NORTH

0 4' 8' 16'

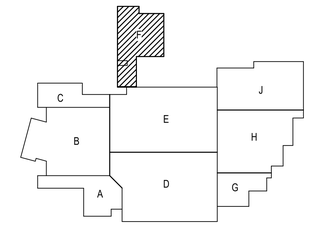
GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

2

1. EXISTING LIGHT FIXTURES FOR GYMNASIUM TO REMAIN. FIELD VERIFY EXISTING QUANTITIES, LAYOUT, AND CONTROLS. MAINTAIN EXISTING LIGHTING CONTROLS. COORDINATE EXACT REQUIREMENTS AND FINAL LAYOUT WITH OWNER PRIOR TO INSTALLATION.
2. REFER TO FIRST FLOOR - UNIT C - LIGHTING FOR CONTINUATION.
3. REFER TO FIRST FLOOR - UNIT J - LIGHTING FOR CONTINUATION.
4. CONNECT FIXTURES IN THIS AREA TO EXISTING LIGHTING BRANCH CIRCUIT SERVING THIS AREA. PRE-DEMOLITION LIGHTING CONTROLS FUNCTION SHALL BE MAINTAINED, UNLESS OTHERWISE DETAILED.
5. REFER TO FIRST FLOOR - UNIT E - LIGHTING FOR CONTINUATION



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of construction and materials to be employed.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the construction contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
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ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT F - LIGHTING

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF
INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

E106

PROJECT NUMBER

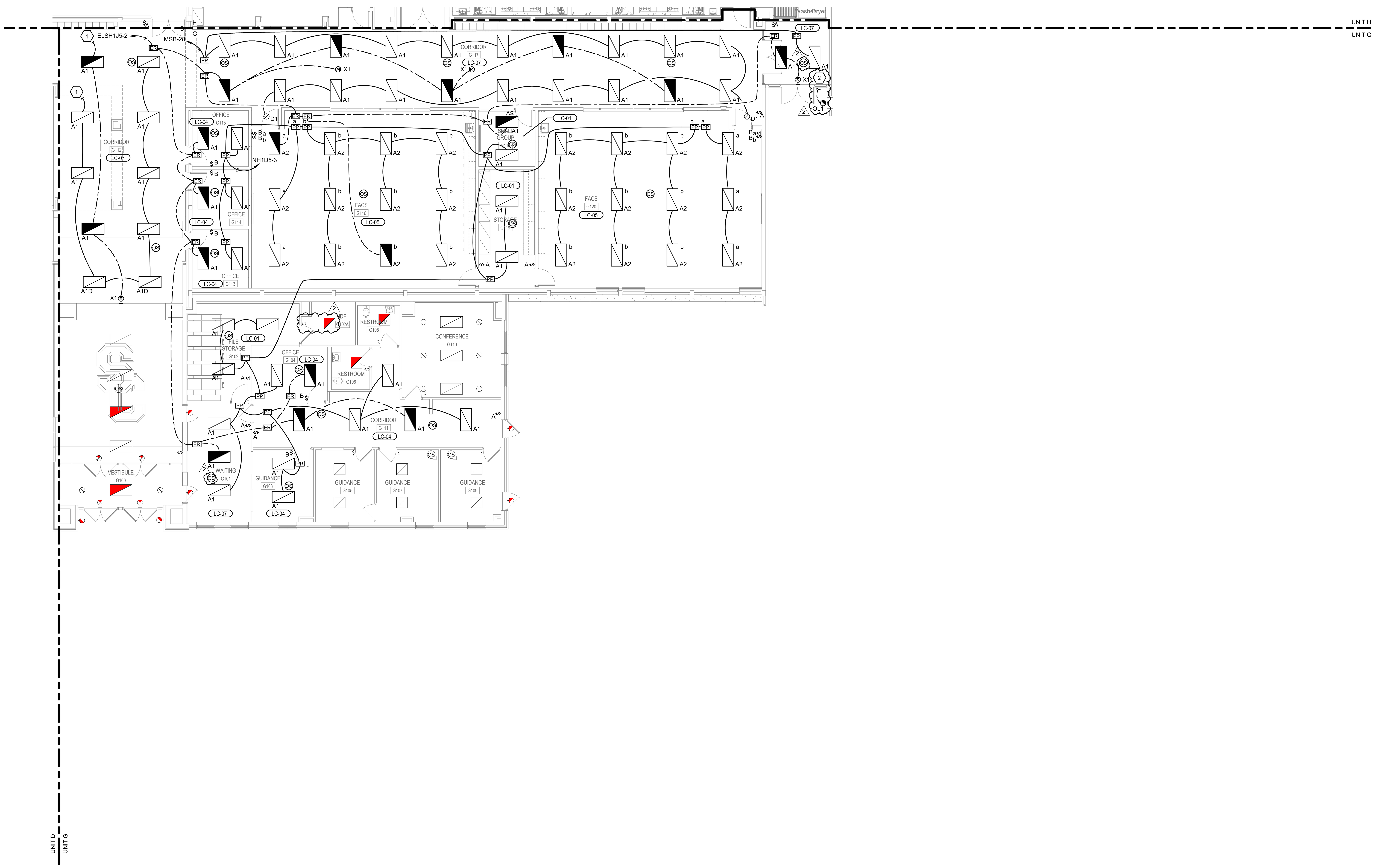
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

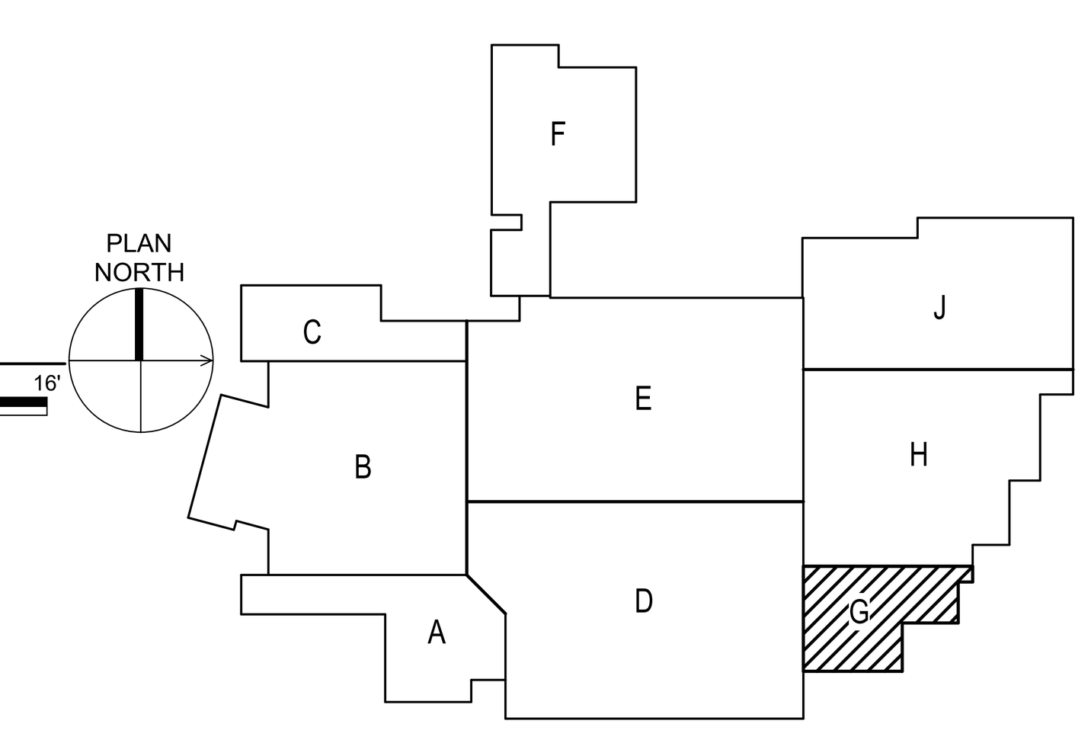
1. REFER TO FIRST FLOOR - UNIT D - LIGHTING FOR CONTINUATION
2. REFER TO FIRST FLOOR - UNIT H - LIGHTING FOR EMERGENCY LIGHTING CONTINUATION.



1 FIRST FLOOR - UNIT G - LIGHTING

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

PLAN NORTH



KEYPLAN

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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ISSUE DATE	DRAWN BY	CHECKED BY
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DRAWING TITLE:
FIRST FLOOR - UNIT G - LIGHTING

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E107

PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. COORDINATE FINAL LOCATIONS OF ALL FIXTURES IN AREA INDICATED WITH ACCOUSTICAL CEILING PANELS. COORDINATE EXACT REQUIREMENTS AND FINAL LOCATIONS WITH ARCHITECT.
2. REFER TO FIRST FLOOR - UNIT J - LIGHTING FOR CONTINUATION.
3. PROVIDE POWER TO LIGHT BAR FOR OWNER FURNISHED PRODUCTION LIGHTS.
4. REFER TO FIRST FLOOR - UNIT G - LIGHTING FOR CONTINUATION
5. ROUTE EXTERIOR LIGHTING CIRCUIT THROUGH EXTERIOR LIGHTING CONTROL CONTACTOR "LCC-EXT" LOCATED IN MAIN CUST/ BUILDING STOR. J130. LIGHT FIXTURE SHALL TURN ON AUTOMATICALLY UPON LOSS OF UTILITY POWER. REFER TO THE EXTERIOR LIGHTING CONTROL DIAGRAM - "LCC-EXT" FOR ADDITIONAL REQUIREMENTS.

UNIT J
UNIT H
UNIT G

1 FIRST FLOOR - UNIT H - LIGHTING
SCALE: 1/8" = 1'-0"

PLAN NORTH
0 4' 8' 16'

KEYPLAN
NORTH

SILVER CREEK SCHOOL CORPORATION

CSO
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317.848.7800 | csoinc.net

SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for the satisfactory performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT H - LIGHTING

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/2022

DRAWING NUMBER
E108

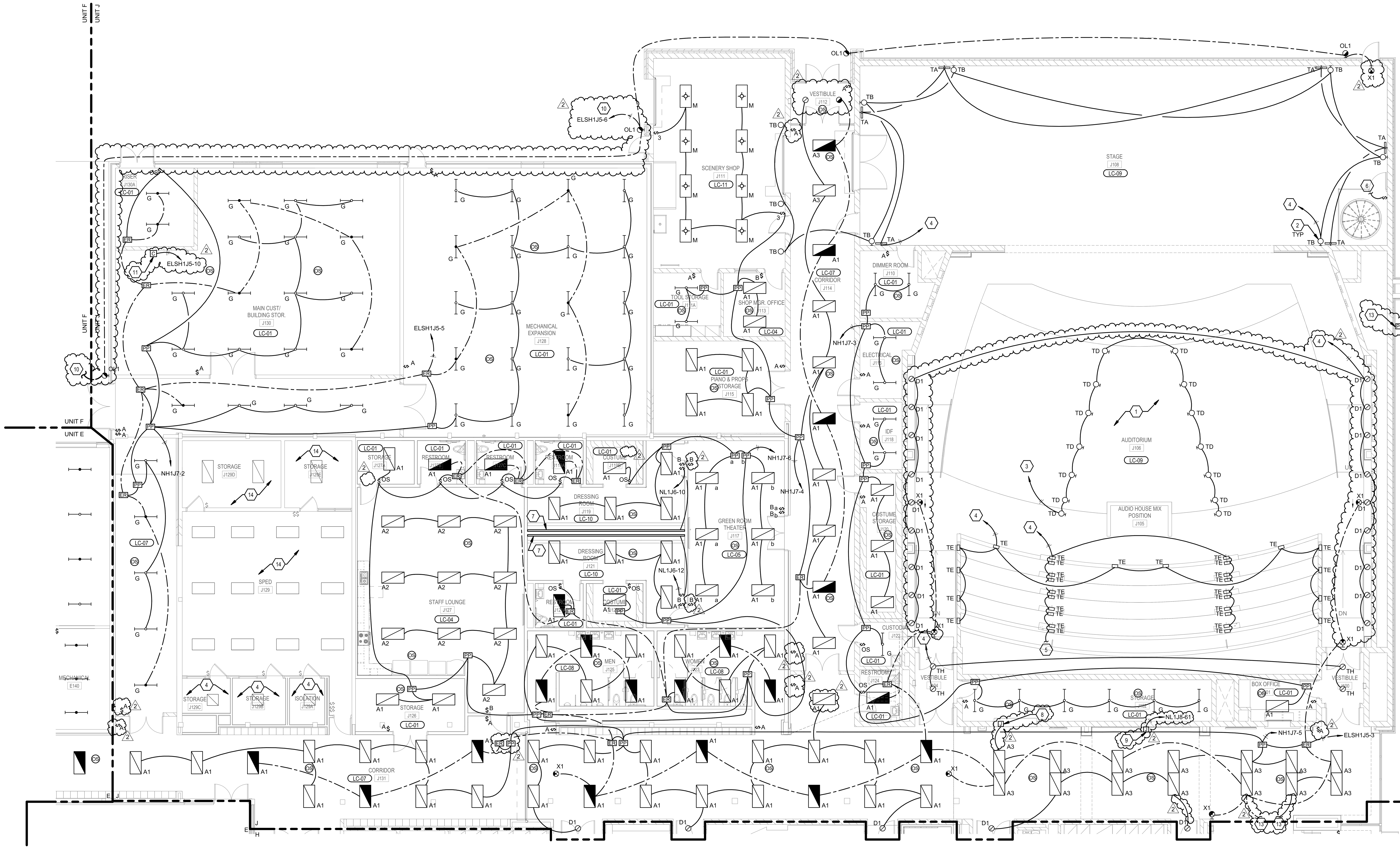
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

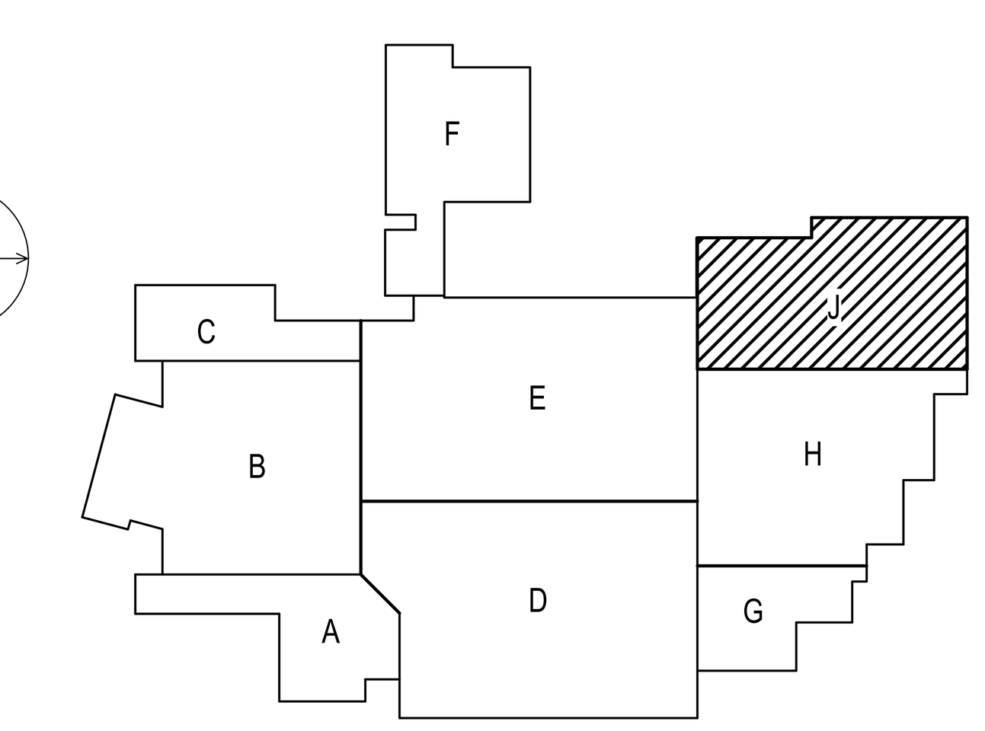
1. REFER TO THEATRICAL DRAWINGS FOR LIGHT FIXTURE LOCATIONS AND CONTROLS IN AUDITORIUM AND ASSOCIATED AREAS.
2. APPROXIMATE LOCATION OF THEATRICAL LIGHT FIXTURES. REFER TO THEATRICAL DRAWINGS FOR EXACT LOCATIONS, MOUNTING STYLES, AND ADDITIONAL REQUIREMENTS.
3. PROVIDE CONNECTION TO AISLE LIGHTING TRANSFORMER. REFER TO SHEET E404 FOR ADDITIONAL INFORMATION.
4. PROVIDE CONNECTION TO STAGE DIMMING RACK.
5. CONTINUE LIGHTING CIRCUIT TO STEP LIGHTS ABOVE. REFER TO SHEET E112.
6. CONTINUE LIGHTING CIRCUIT TO TA FIXTURES ABOVE.
7. WALL MOUNTED MIRROR LIGHT, TYPE TC. REFER TO DETAIL ON E502 FOR ADDITIONAL INFORMATION.
8. PROVIDE POWER CONNECTION TO DISPLAY CASE LIGHTING.
9. PROVIDE POWER CONNCETION TO SIGNAGE. COORDINATE EXACT LOCATION WITH SIGNAGE PROVIDER.
10. ROUTE EXTERIOR LIGHTING CIRCUIT THROUGH EXTERIOR LIGHTING CONTROL CONTACTOR "LCC-EXT" LOCATED IN MAIN CUST/ BUILDING STOR. J130. LIGHT FIXTURE SHALL TURN ON AUTOMATICALLY UPON LOSS OF UTILITY POWER. REFER TO THE EXTERIOR LIGHTING CONTROL DIAGRAM - "LCC-EXT" FOR ADDITIONAL REQUIREMENTS.
11. PROVIDE EXTERIOR LIGHTING CONTROL CONTACTOR. REFER TO DETAIL.
12. REFER TO FIRST FLOOR - UNIT F - LIGHTING FOR CONTINUATION.
13. CONTRACTOR SHALL FIELD VERIFY LOCATION OF PHOTOCELL PRIOR TO INSTALLATION. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM - "LCC-EXT" DETAIL FOR ADDITIONAL REQUIREMENTS.
14. CONNECT TO EXISTING LIGHTING BRANCH CIRCUIT SERVING THIS AREA. PRE-DEMOLITION LIGHTING CONTROLS FUNCTION SHALL BE MAINTAINED.



1 FIRST FLOOR - UNIT J - LIGHTING

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

PLAN NORTH



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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1	ADDENDUM 1	07-28-2022
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DRAWING TITLE:

FIRST FLOOR - UNIT J - LIGHTING

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E109

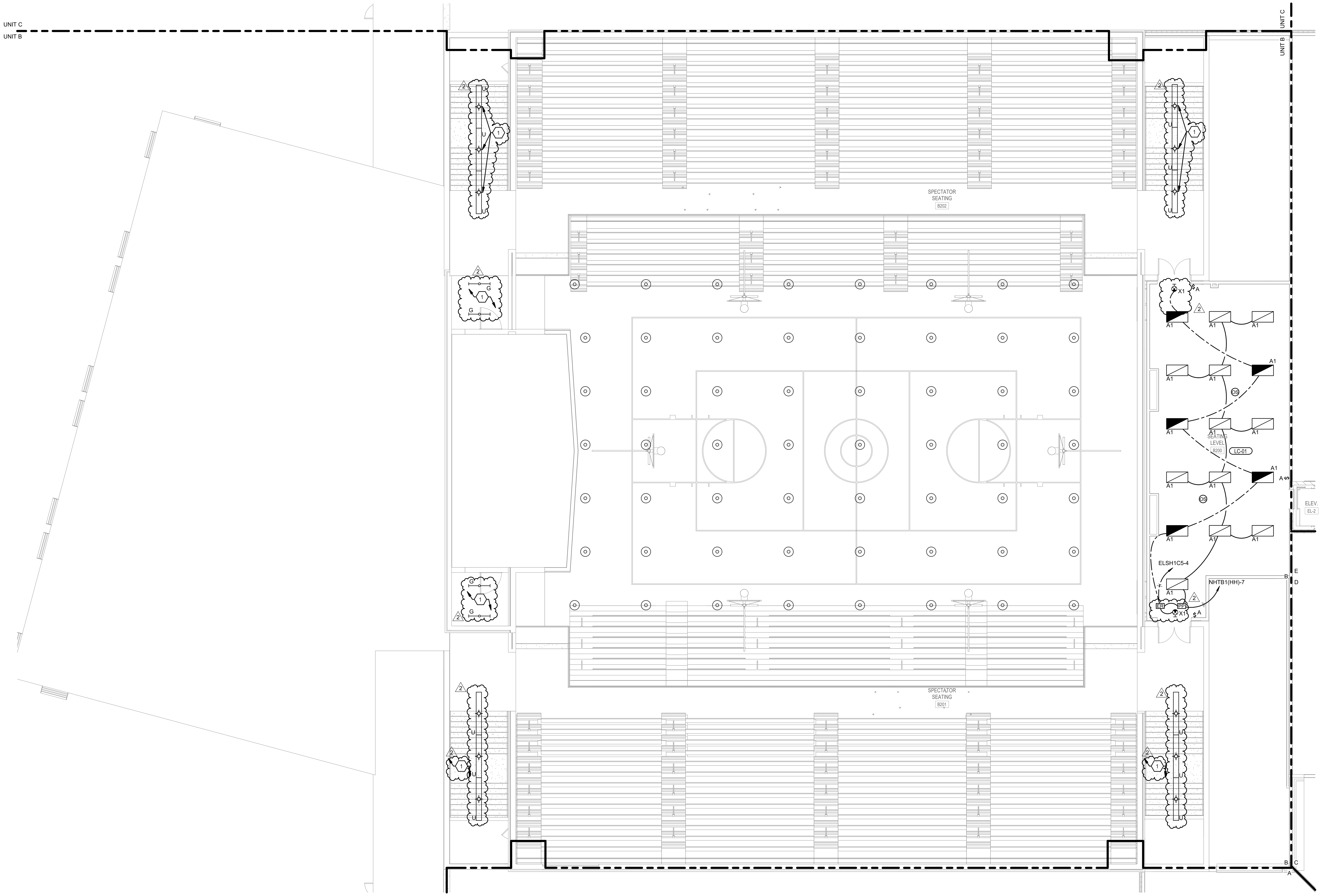
PROJECT NUMBER
2021026

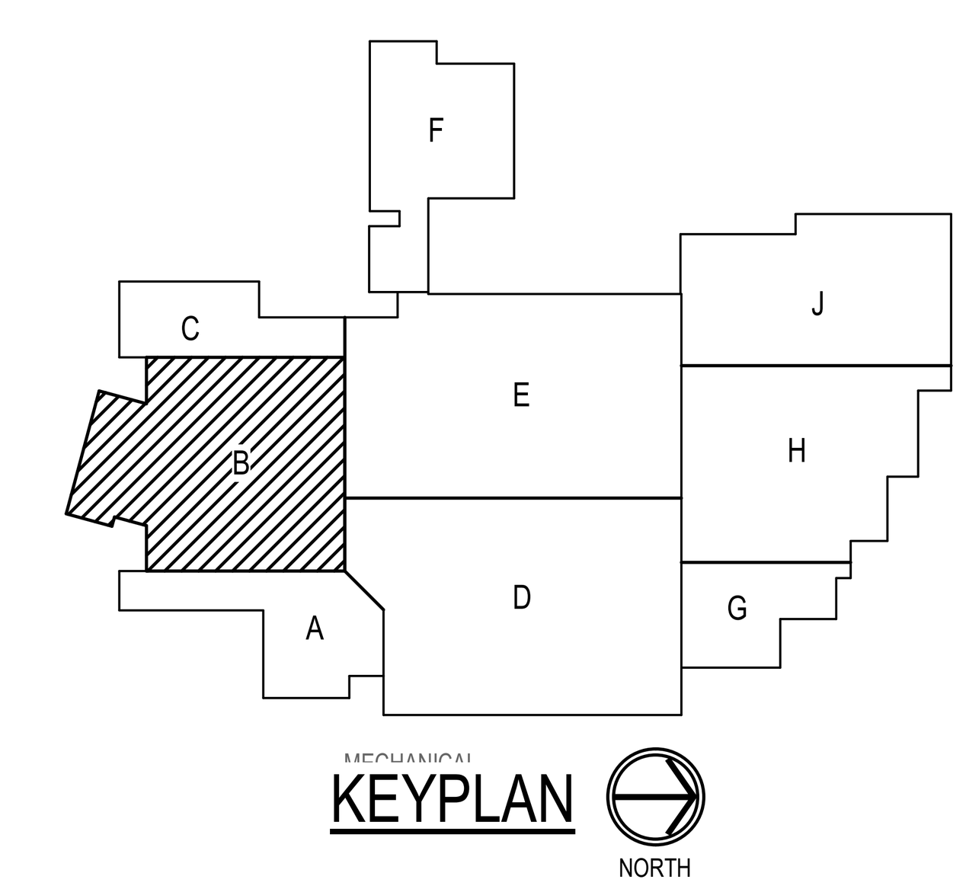
GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. INTERCEPT AND EXTEND EXISTING RACEWAYS, WIRING, BOXES, ETC. TO NEW LIGHT FIXTURES AS REQUIRED.





1 SECOND FLOOR - UNIT B - LIGHTING

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

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PROJECT:
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ADDITION AND RENOVATIONS
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SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT B - LIGHTING

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E110

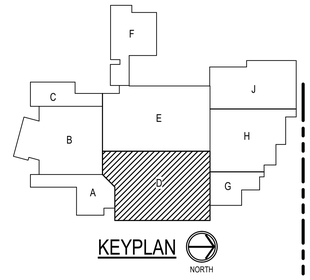
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

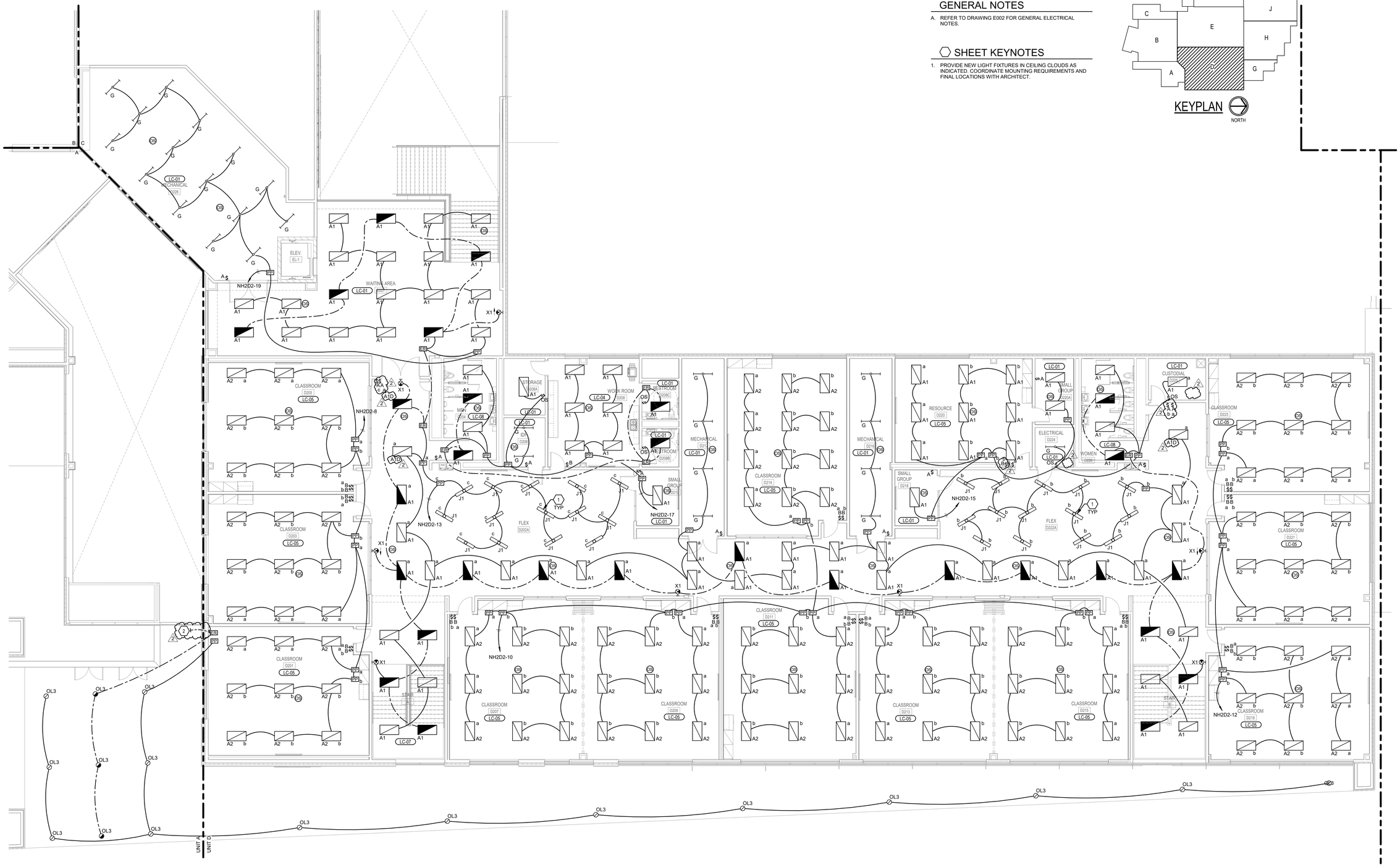
SHEET KEYNOTES

1. PROVIDE NEW LIGHT FIXTURES IN CEILING CLOUDS AS INDICATED. COORDINATE MOUNTING REQUIREMENTS AND FINAL LOCATIONS WITH ARCHITECT.



KEYPLAN

NORTH



1 SECOND FLOOR - UNIT D - LIGHTING

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

PLAN NORTH

0 4' 8' 16'

SILVER CREEK SCHOOL CORPORATION

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required to the complete scheme and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RDB

DRAWING TITLE:

SECOND FLOOR - UNIT D - LIGHTING

CERTIFIED BY:

ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER

07/07/22

DRAWING NUMBER

E111

PROJECT NUMBER

2021026

GENERAL NOTES

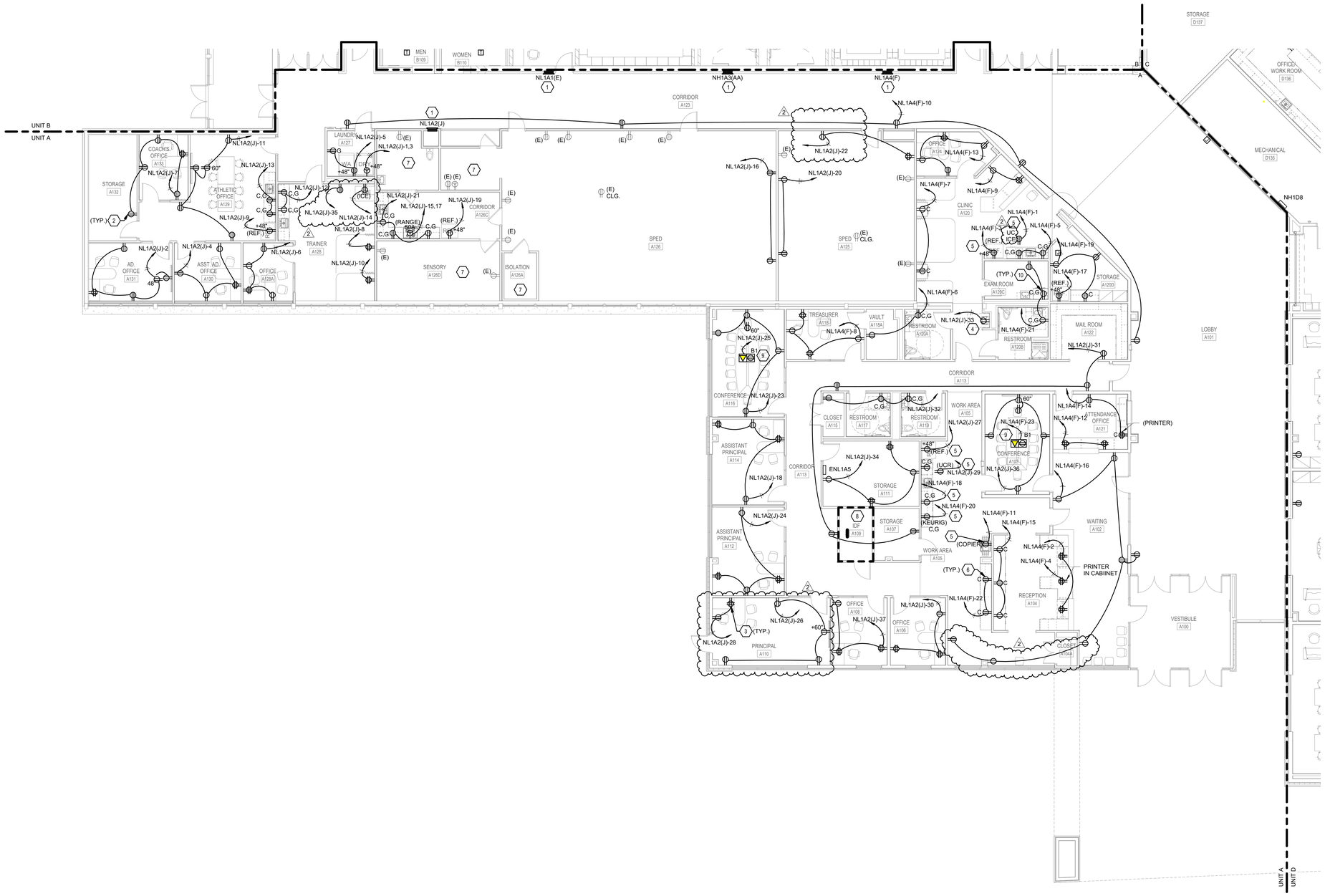
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT A - MECHANICAL POWER PLAN ON SHEET E215 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

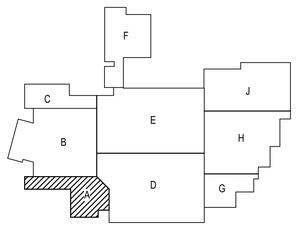
1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER AND RENAMED. PROVIDE NEW NAMEPLATE AS SHOWN. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. SOME PANELS WILL HAVE AN INCREASE IN BREAKER QUANTITY. REFER TO POWER ONE-LINE DIAGRAMS AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE A NEW 120V, 120A DUPLEX RECEPTACLE.
3. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. PROVIDE A NEW DEDICATED RECEPTACLE FOR EQUIPMENT SHOWN.
6. PROVIDE A NEW 120V, 20A, COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
7. EXISTING POWER DEVICES TO REMAIN IN THIS ROOM UNLESS NOTED OTHERWISE.
8. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
9. REFER TO FLOOR BOX SCHEDULE ON SHEET E504 FOR ADDITIONAL INFORMATION.
10. PROVIDE A NEW 120V, 20A, GFI DUPLEX RECEPTACLE MOUNTED AT COUNTER HEIGHT. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.



1 FIRST FLOOR - UNIT A - POWER
SCALE: 1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'



KEYPLAN NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, and the approximate location and size of the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
The Contractor shall furnish all general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT A - POWER

CERTIFIED BY:
ROBERT D. BOTTOS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E201

PROJECT NUMBER
2021026

GENERAL NOTES

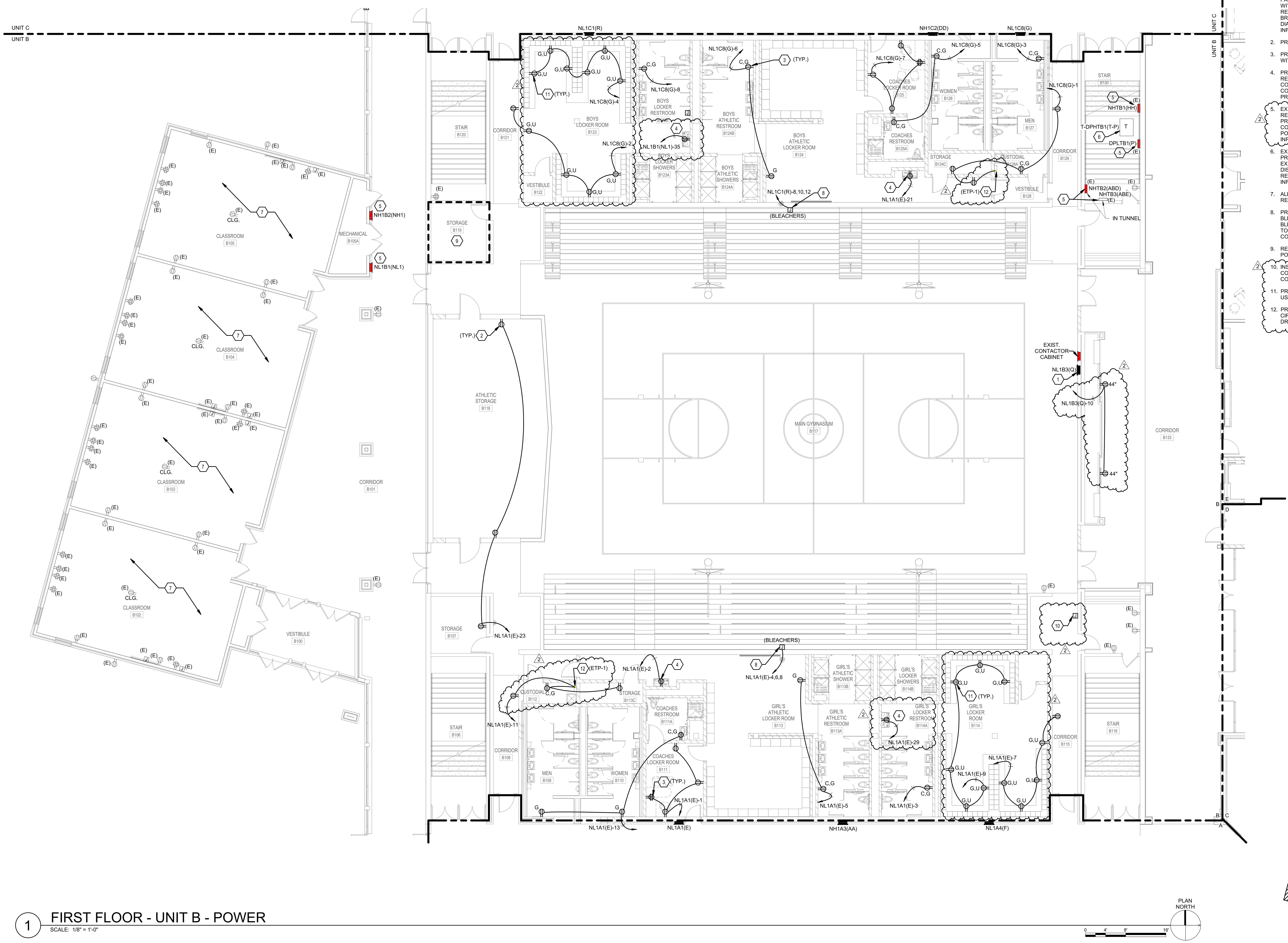
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT B - MECHANICAL POWER PLAN ON SHEET E216 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

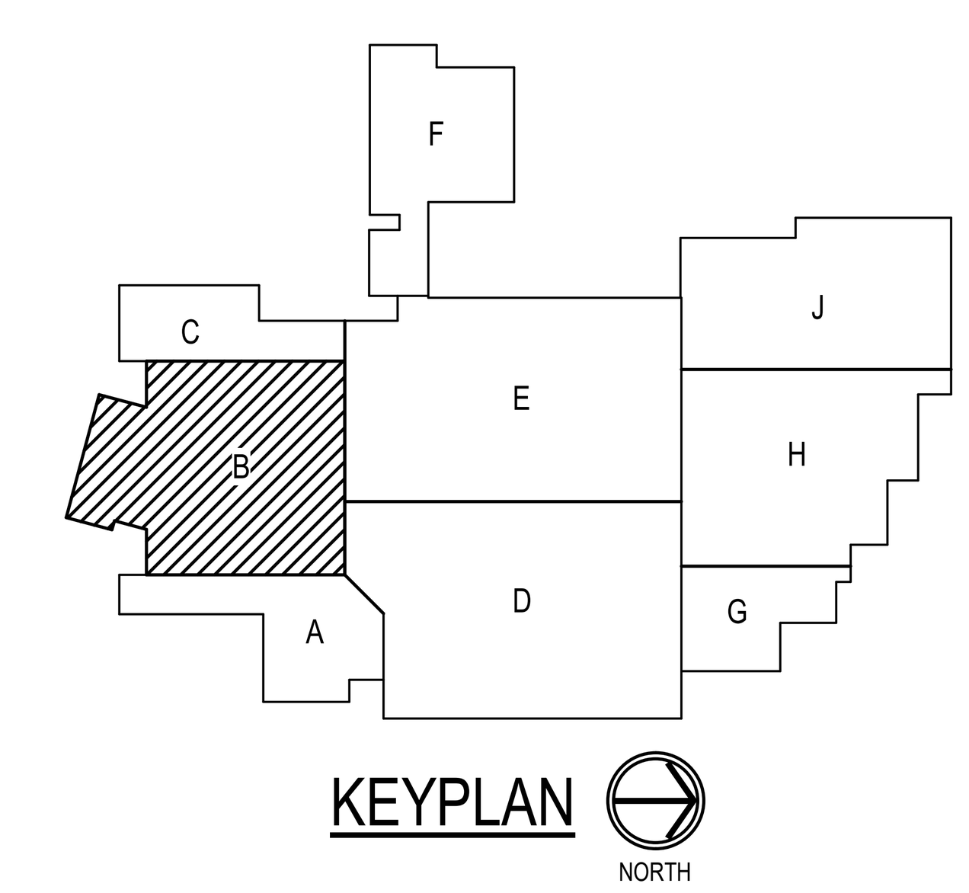
1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER AND RENAMED. PROVIDE NEW NAMEPLATE AS SHOWN. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. SOME PANELS WILL HAVE AN INCREASE IN BREAKER QUANTITY. REFER TO POWER ONE-LINE DIAGRAMS AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE A NEW 120V, 20A DUPLEX RECEPTACLE.
3. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. EXISTING ELECTRICAL PANEL TO REMAIN AND TO BE RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. PROVIDE NEW FEEDER TO DISTRIBUTION PANEL AND COORDINATE ROUTING WITH ALL DISCIPLINES. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
6. EXISTING TRANSFORMER TO REMAIN AND TO BE RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
7. ALL EXISTING ELECTRICAL DEVICES IN THIS ROOM /AREA TO REMAIN UNLESS OTHERWISE NOTED.
8. PROVIDE A 208V-3PH CIRCUIT FOR NEW TELESCOPING BLEACHERS. COORDINATE POWER FEED LOCATION WITH BLEACHER MANUFACTURER SPECIFICATIONS. BLEACHERS TO BE CONTROLLED VIA WIRELESS HANDHELD REMOTE CONTROL EQUAL TO HUSSEY SEATING MAXAM.
9. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
10. INSTALL GOAL CONTROLLER AND MANUFACTURE REQUIRED CONTROL CABLE TO ALL GOALS. UTILIZE EXISTING BOX AND CONDUIT LEFT OPEN FROM DEMOLITION.
11. PROVIDE A COMBINATION GFCI DUPLEX RECEPTACLE WITH USB PORT.
12. PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER. CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



FIRST FLOOR - UNIT B - POWER

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

KEYPLAN



SILVER CREEK SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT B - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/08/22

DRAWING NUMBER
E202

PROJECT NUMBER
2021026

GENERAL NOTES

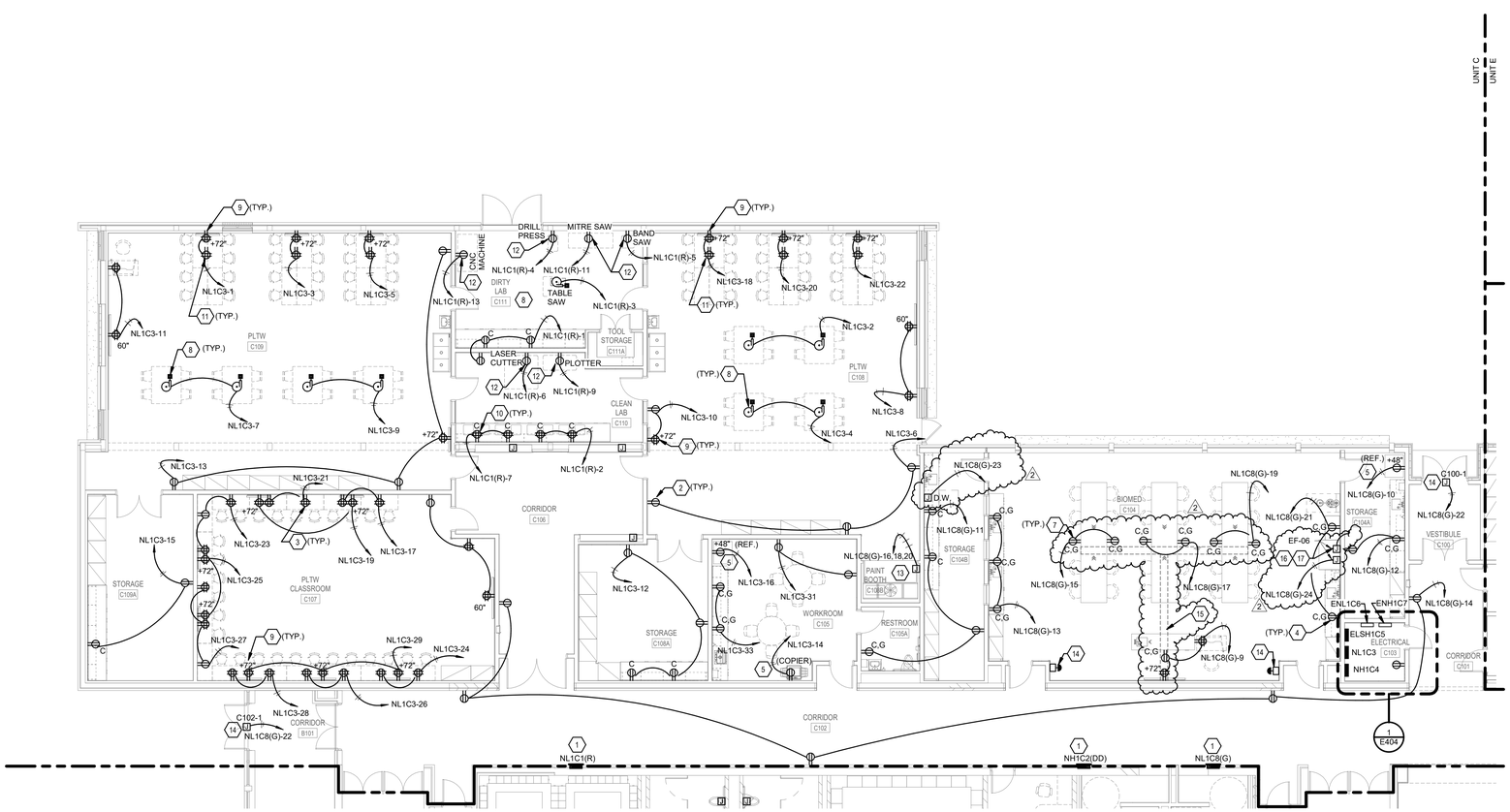
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT C - MECHANICAL POWER PLAN ON SHEET E217 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER AND RENAMED. PROVIDE NEW NAMEPLATE AS SHOWN. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. SOME PANELS WILL HAVE AN INCREASE IN BREAKER QUANTITY. REFER TO POWER ONE-LINE DIAGRAMS AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE A NEW 120V, 20A DUPLEX RECEPTACLE.
3. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
4. PROVIDE A NEW GFI COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
5. PROVIDE A NEW DEDICATED RECEPTACLE.
6. PROVIDE A NEW COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
7. PROVIDE CONNECTION TO GFI RECEPTACLES FURNISHED WITH CASEWORK. ROUTE CIRCUIT FOR PENINSULA STATIONS THROUGH CASEWORK. COORDINATE ROUGH-IN LOCATION WITH CASEWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
8. PROVIDE CORD REEL MOUNTED ON CEILING STRUCTURE. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN.
9. PROVIDE A NEW 120V, 20A DUPLEX RECEPTACLE FOR LCD MONITOR. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN.
10. PROVIDE A NEW DEDICATED 120V, 20A QUAD RECEPTACLE PER TWO 3D PRINTERS. REFER TO 3D PRINTERS MANUFACTURER SPECIFICATIONS FOR NEMA REQUIRMENTS. COORDINATE ROUGH-IN LOCATION WITH CASEWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
11. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE FROM WALL TO TABLES FOR THROUGH TABLE CABLE MANAGEMENT TO POWER COMPUTERS. COORDINATE ROUGH-IN LOCATION WITH CASEWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
12. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR MACHINES. REFER TO MANUFACTURER SPECIFICATIONS FOR NEMA AND POWER REQUIRMENTS.
13. PROVIDE A 208V-3PH., JUNCTION BOX AND ROUGH-IN POWER FOR PAINT BOOTH POWER. REFER TO MANUFACTURER SPECIFICATIONS FOR NEMA AND POWER REQUIRMENTS.
14. PROVIDE EMERGENCY PUSHBUTTON WITH GUARD AND CONNECTION TO SHUNT TRIP BREAKERS FEEDING PANELS SUPPLYING POWER TO FUME HOOD.
15. TRENCH FLOOR FOR POWER TO LAB TABLES. COODINATE WITH FURNITURE PLANS PRIOR TO ROUGH-IN.
16. PROVIDE POWER CONNECTION FOR FUME HOOD LIGHTS IN EXHAUST FAN.
17. EXTEND CIRCUIT TO EXHAUST FAN ON ROOF. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.

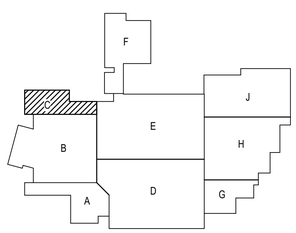


1 FIRST FLOOR - UNIT C - POWER

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

PLAN NORTH

0 4' 8' 16'



KEYPLAN NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT C - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E203

PROJECT NUMBER
2021026

SHEET KEYNOTES

11. PROVIDE A 120V, 20A, WEATHER PROOF GFCI DUPLEX RECEPTACLE WTH OUTDOOR COVER FOR COURTYARD USE.
12. PROVIDE A 120V, 20A DEDICATED CIRCUIT FOR GARAGE DOOR. COORDINATE POWER REQUIREMENTS WITH DOOR HARDWARE AND ARCHITECTRUAL DRAWINGS PRIOR TO INSTALL.
13. ~~PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER.~~ CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

7. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
8. PROVIDE A NEW 20A DUPLEX RECEPTACLE FOR LCD MONITOR. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN.
9. REFER TO ENLARGED FLOOR PLAN ON SHEET E408.
10. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

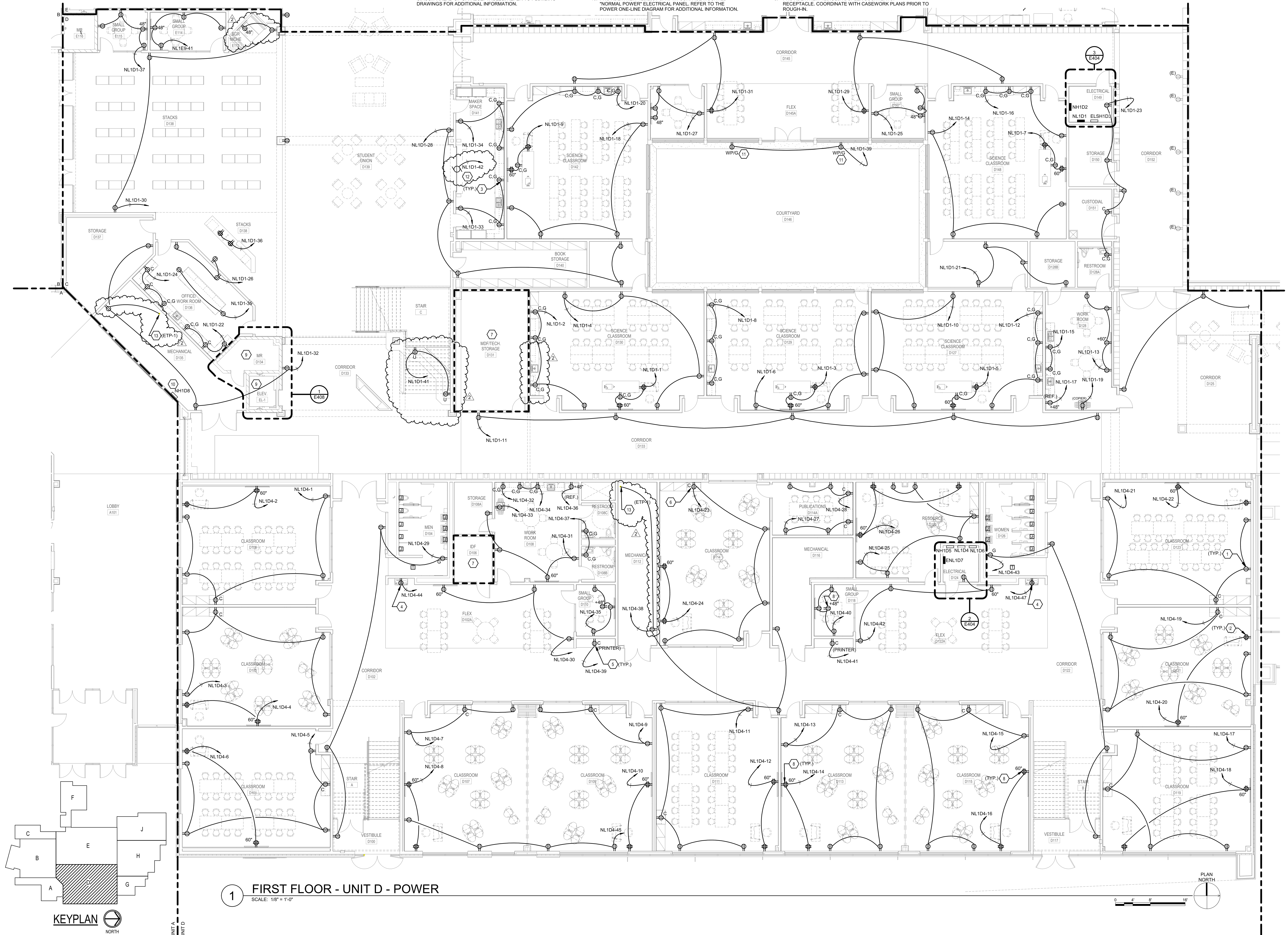
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. PROVIDE A NEW DEDICATED RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
6. PROVIDE A NEW 120V, 20A DUPLEX COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.

SHEET KEYNOTES

1. PROVIDE A NEW 120V, 20A DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. PROVIDE A NEW GFI COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.
B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.
C. REFER TO FIRST FLOOR - UNIT D - MECHANICAL POWER PLAN ON SHEET E218 FOR POWER TO MECHANICAL EQUIPMENT.



1 FIRST FLOOR - UNIT D - POWER

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

PLAN NORTH

KEYPLAN

NORTH

UNIT A
UNIT D

SILVER CREEK SCHOOL CORPORATION

CSO

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Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT D - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E204

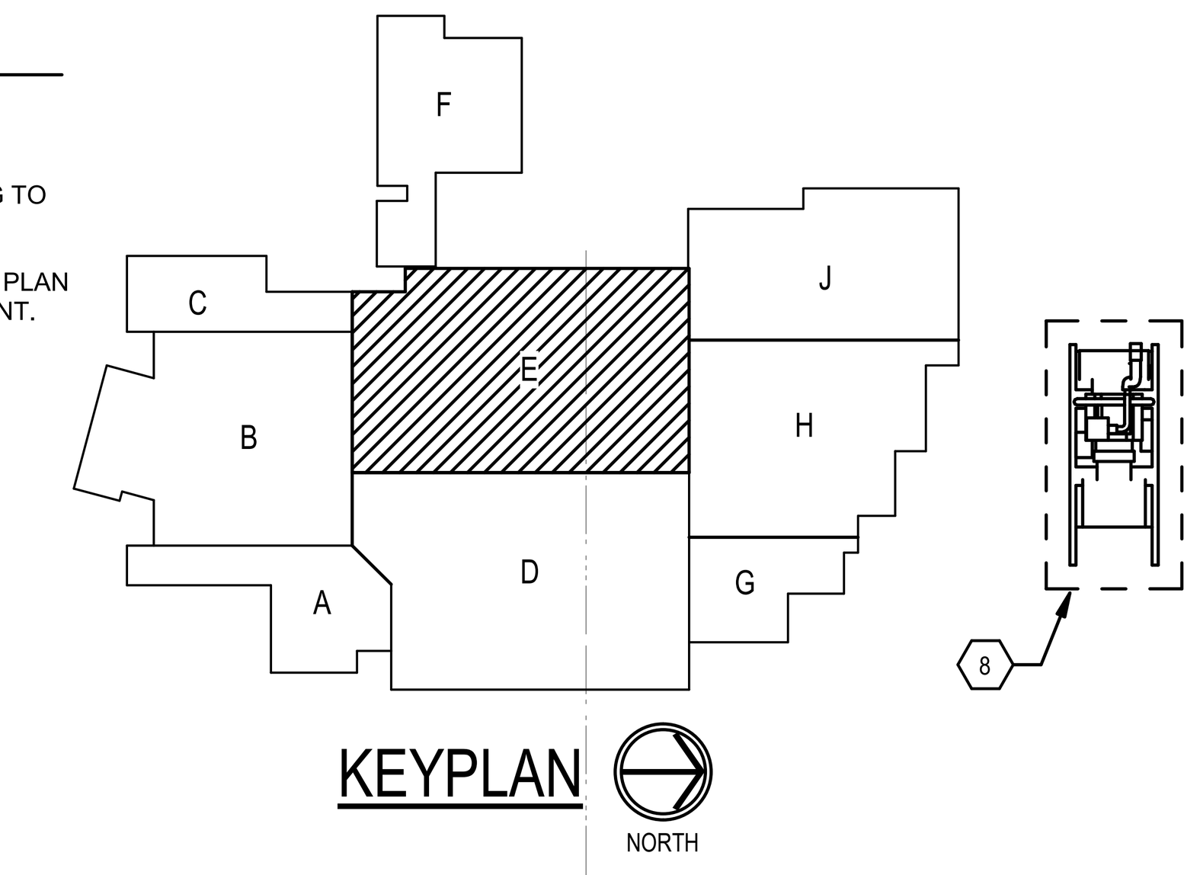
PROJECT NUMBER
2021026

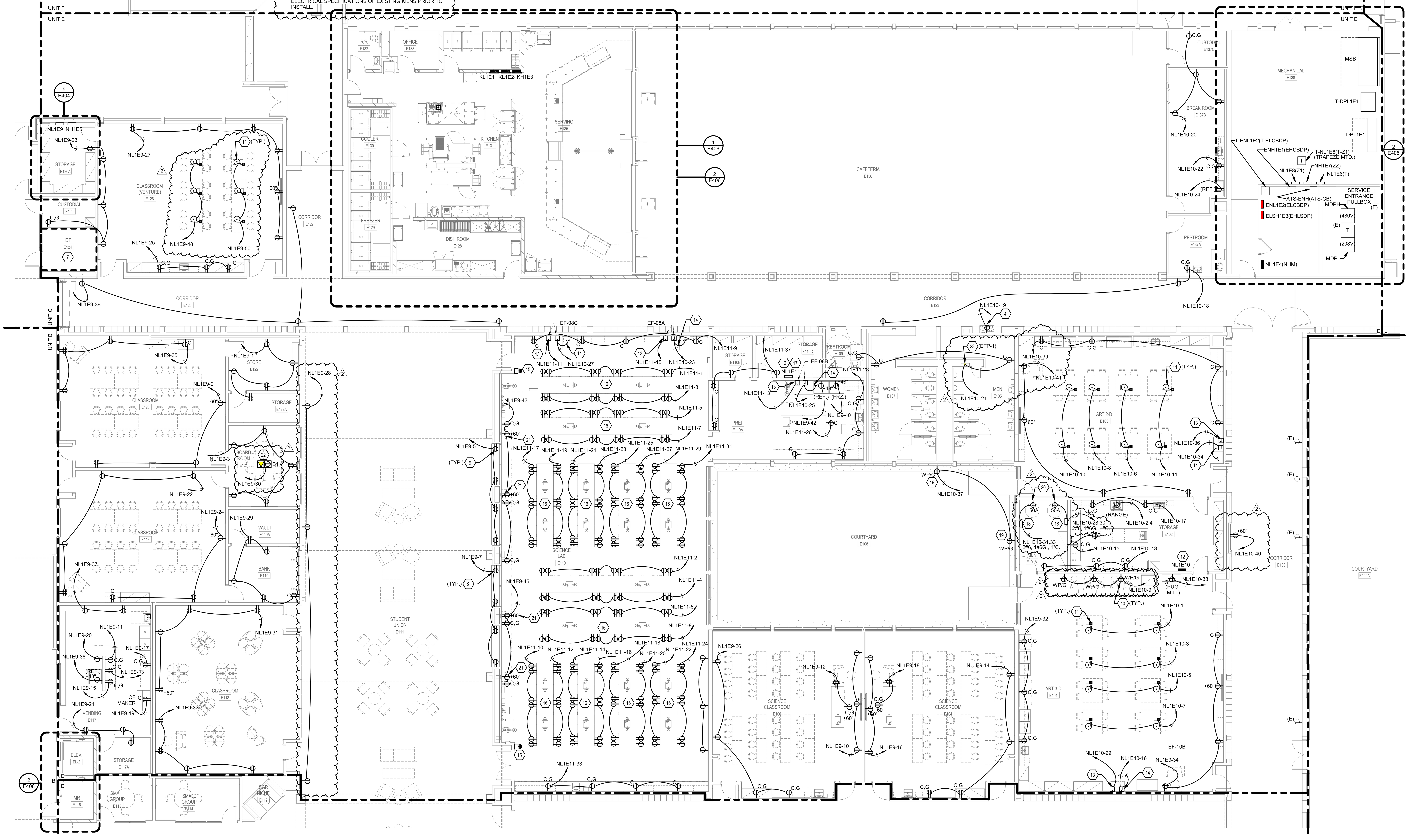
SHEET KEYNOTES

1. PROVIDE A NEW 20A, 120V DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. PROVIDE A NEW 120V, 20A GFI DUPLEX RECEPTACLE MOUNTED AT COUNTER HEIGHT. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. PROVIDE A DEDICATED RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
6. PROVIDE A NEW 120V, 20A COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
7. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
8. PROVIDE A NEW PAD MOUNTED GENERATOR PACKAGE. REFER TO THE POWER ONE-LINE DIAGRAM ON SHEET E602 AND ELECTRICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. PROVIDE A NEW 20A, 120V CONVIENCE DUPLEX RECEPTACLE AND MOUNT 18" A.F.F. TO SIDE OF BENCH AREA. REFER TO ARCHITECTURAL DRAWINGS FOR BENCH DETAILS.
10. PROVIDE A NEW 120V, 20A WEATHER PROOF, GFI QUAD RECEPTACLE FOR POTTERY WHEELS. (2)
11. PROVIDE CORD REEL MOUNTED ON CEILING STRUCTURE. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN.
12. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
13. PROVIDE POWER CONNECTION FOR FUME HOOD LIGHTS IN EXHAUST FAN.
14. EXTEND CIRCUIT TO EXHAUST FAN ON ROOF. REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
15. PROVIDE A RED EMERGENCY POWER OFF WITH RED MUSHROOM HEAD PUSHBUTTON WITH GUARD AT EACH DOOR TO DISCONNECT POWER CIRCUITS AND GAS SOLENOID VALVES. ROUTE ALL RECEPTACLE CIRCUITS IN THIS ROOM THROUGH CONTACTOR LOCATED ABOVE PANELBOARD.
16. E.C. TO PROVIDE RECESSED DUPLEX RECEPTACLES HORIZONTAL MOUNTED IN FACE OF LAB TABLES. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
17. PROVIDE CONTACTOR IN NEMA 1 ENCLOSURE FOR PANEL NL1E11 FEEDER CONTROLLED BY EPO PUSHBUTTON STATIONS IN ROOM, SEE ONE-LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
18. PROVIDE A 208V-3PH., 60AMP FUSED DISCONNECT FOR KILN POWER. COORDINATE POWER REQUIREMENTS AND PROVIDED FUSES PER MANUFACTURER SPECIFICATIONS.
19. PROVIDE A 120V, 20A, WEATHER PROOF GFCI DUPLEX RECEPTACLE WTH OUTDOOR COVER FOR COURTYARD USE.
20. PROVIDE A 208V-1PH. NEMA 6-50 RECEPTACLE FOR EXISTING KILNS. FIELD VERIFY NEMA CONFIGURATION AND ELECTRICAL SPECIFICATIONS OF EXISTING KILNS PRIOR TO INSTALL. (2)
21. PROVIDE A 120V, 20A DUPLEX RECEPTACLE FOR GOGGLE CABINET. (2)
22. REFER TO FLOOR BOX SCHEDULE ON SHEET E504 FOR ADDITIONAL INFORMATION.
23. PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER. CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.
B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.
C. REFER TO FIRST FLOOR - UNIT E - MECHANICAL POWER PLAN ON SHEET E219 FOR POWER TO MECHANICAL EQUIPMENT.





1 FIRST FLOOR - UNIT E - POWER

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

PLAN NORTH

0 4' 8' 16'

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

2	ADDENDUM 2	08-04-2022

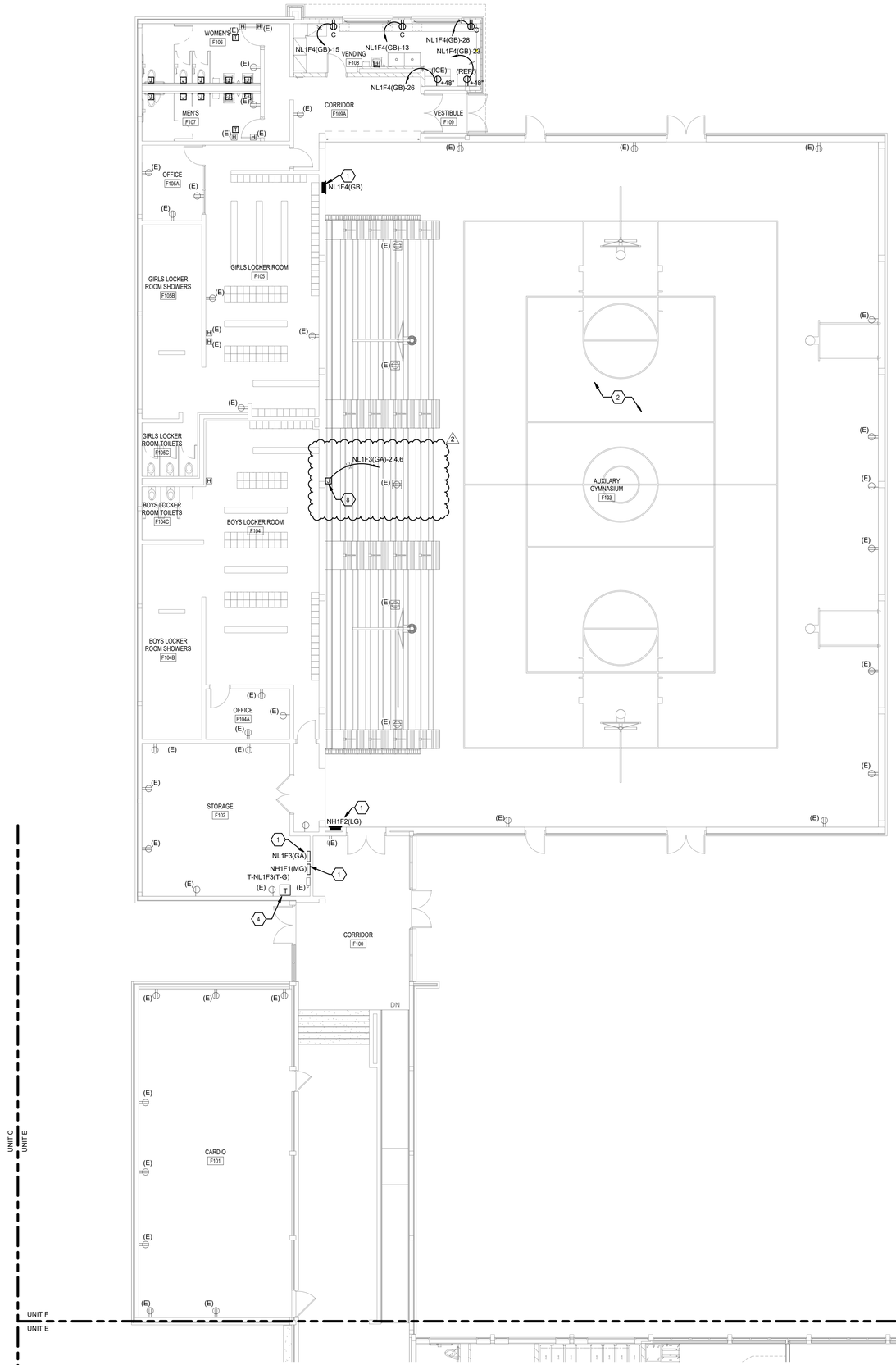
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT E - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E205

PROJECT NUMBER
2021026



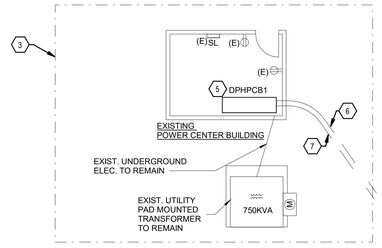
1 FIRST FLOOR - UNIT F - POWER
SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

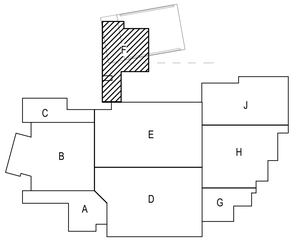
B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT F - MECHANICAL POWER PLAN ON SHEET E220 FOR POWER TO MECHANICAL EQUIPMENT.



SHEET KEYNOTES

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER AND RENAMED. PROVIDE NEW NAMEPLATE AS SHOWN. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. SOME PANELS WILL HAVE AN INCREASE IN BREAKER QUANTITY. REFER TO POWER ONE-LINE DIAGRAMS AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. ALL EXISTING ELECTRICAL DEVICES AND EQUIPMENT TO REMAIN IN THIS ROOM / AREA UNLESS NOTED OTHERWISE.
3. REFER TO THE ELECTRICAL POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION IN THIS AREA.
4. PROVIDE A NEW FLOOR MOUNTED TRANSFORMER. REFER TO POWER ONE-LINE DIAGRAM FOR CONNECTION TO PANELS.
5. PROVIDE A NEW FLOOR MOUNTED 277/480V-3PH.-4W DISTRIBUTION PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
6. PROVIDE NEW UNDERGROUND ELECTRIC TO THE NEW DISTRIBUTION PANEL "MSB" WITHIN EXISTING HIGH SCHOOL. REFER TO POWER ONE-LINE DIAGRAM AND SITE PLAN FOR ADDITIONAL INFORMATION.
7. PROVIDE NEW UNDERGROUND ELECTRIC FROM THE NEW DISTRIBUTION PANEL "MSB" TO THE EXISTING "POWER CENTER BUILDING" TO BACKFEED THE NEW DISTRIBUTION PANEL "DPHPCB1". REFER TO POWER ONE-LINE DIAGRAM AND SITE PLAN FOR ADDITIONAL INFORMATION.
8. PROVIDE A 208V-3PH CIRCUIT FOR NEW TELESCOPING BLEACHERS. COORDINATE POWER FEED LOCATION WITH BLEACHER MANUFACTURER SPECIFICATIONS. BLEACHERS TO BE CONTROLLED VIA WIRELESS HANDHELD REMOTE CONTROL EQUAL TO HUSSEY SEATING MAXAM.



KEYPLAN
NORTH

PLAN NORTH

0 4' 8' 16'

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of construction and materials to be employed.
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REVISIONS:

2	ADDENDUM 2	08-04-2022

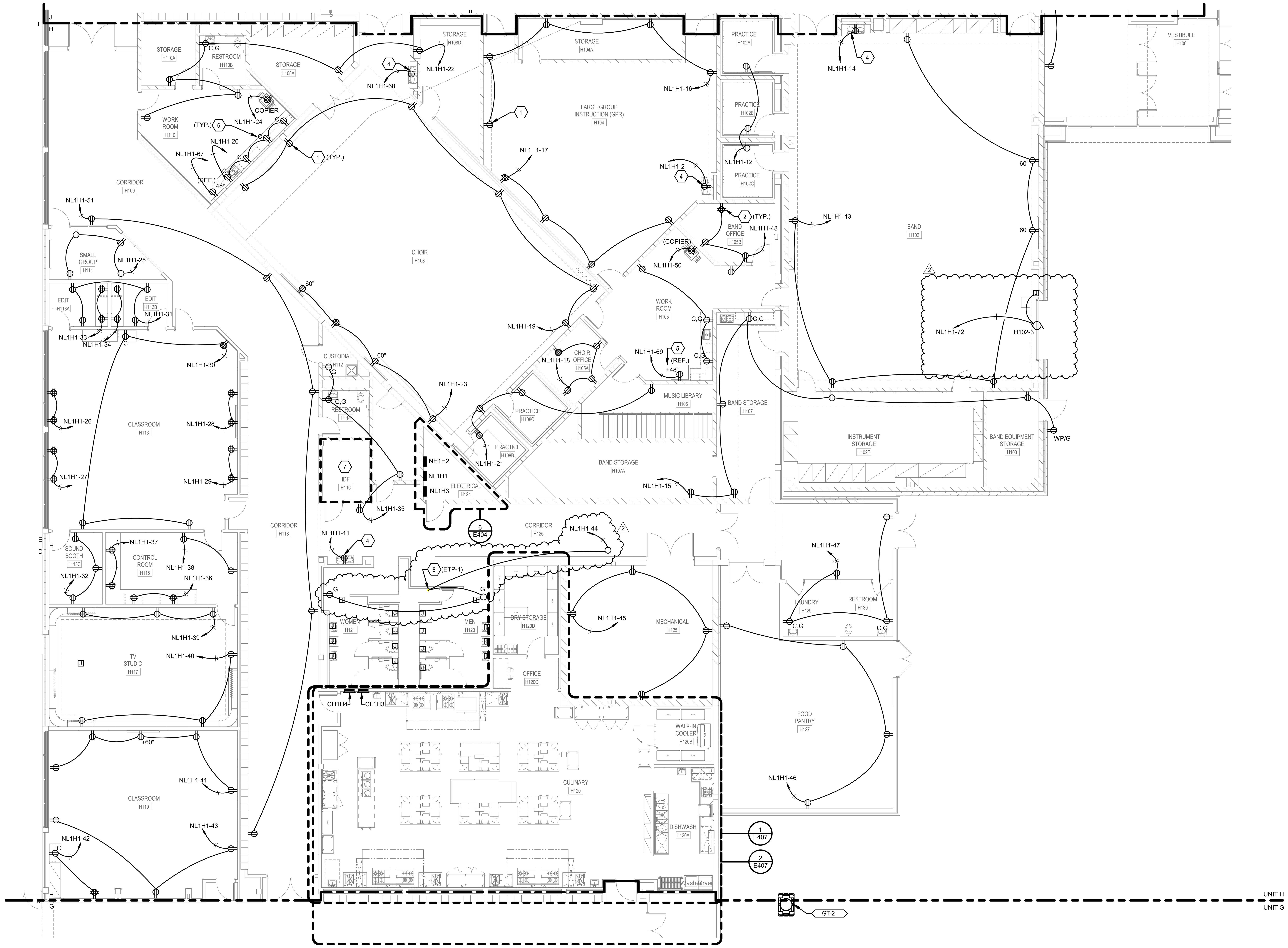
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT F - POWER

CERTIFIED BY:
ROBERT D. BOTTOM
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E206

PROJECT NUMBER
2021026



1 FIRST FLOOR - UNIT H -POWER

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

PLAN NORTH

GENERAL NOTES

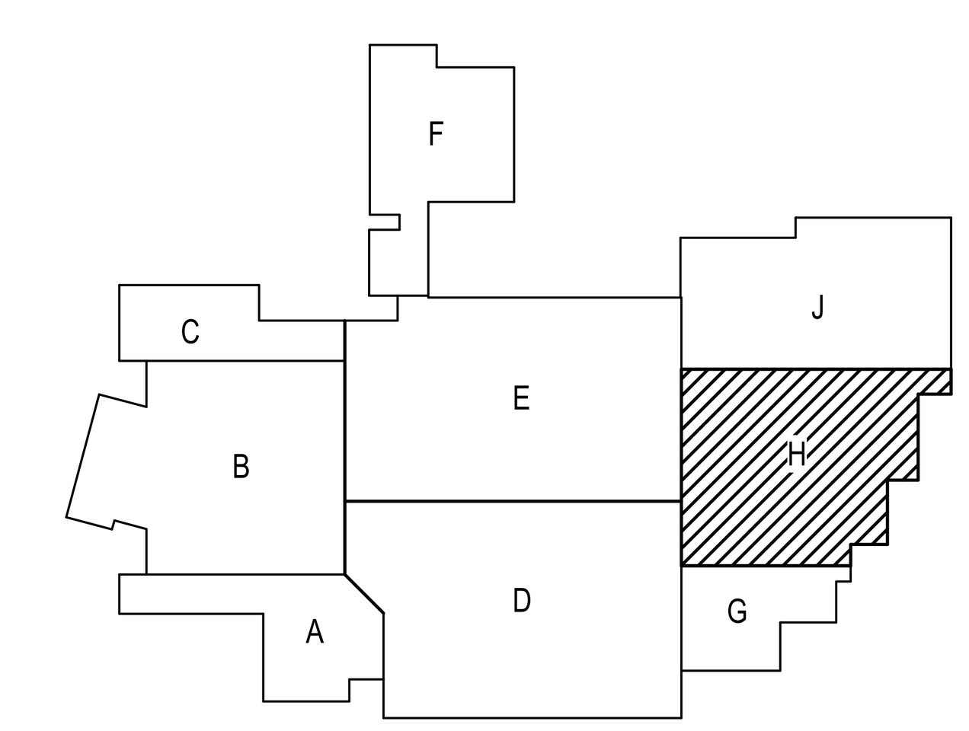
A. REFER TO DRAWING E002 FOR ADDITONAL GENERAL ELECTRICAL NOTES.

B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT H - MECHANICAL POWER PLAN ON SHEET E222 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

1. PROVIDE A NEW 120V, 120A DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 120A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. PROVIDE A NEW 120V, 120A GFI COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. PROVIDE A DEDICATED RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
6. PROVIDE A NEW 120V, 120A COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
7. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
8. PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER. CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

2	ADDENDUM 2	08-04-2022

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DRAWING TITLE:

FIRST FLOOR - UNIT H - POWER

CERTIFIED BY:

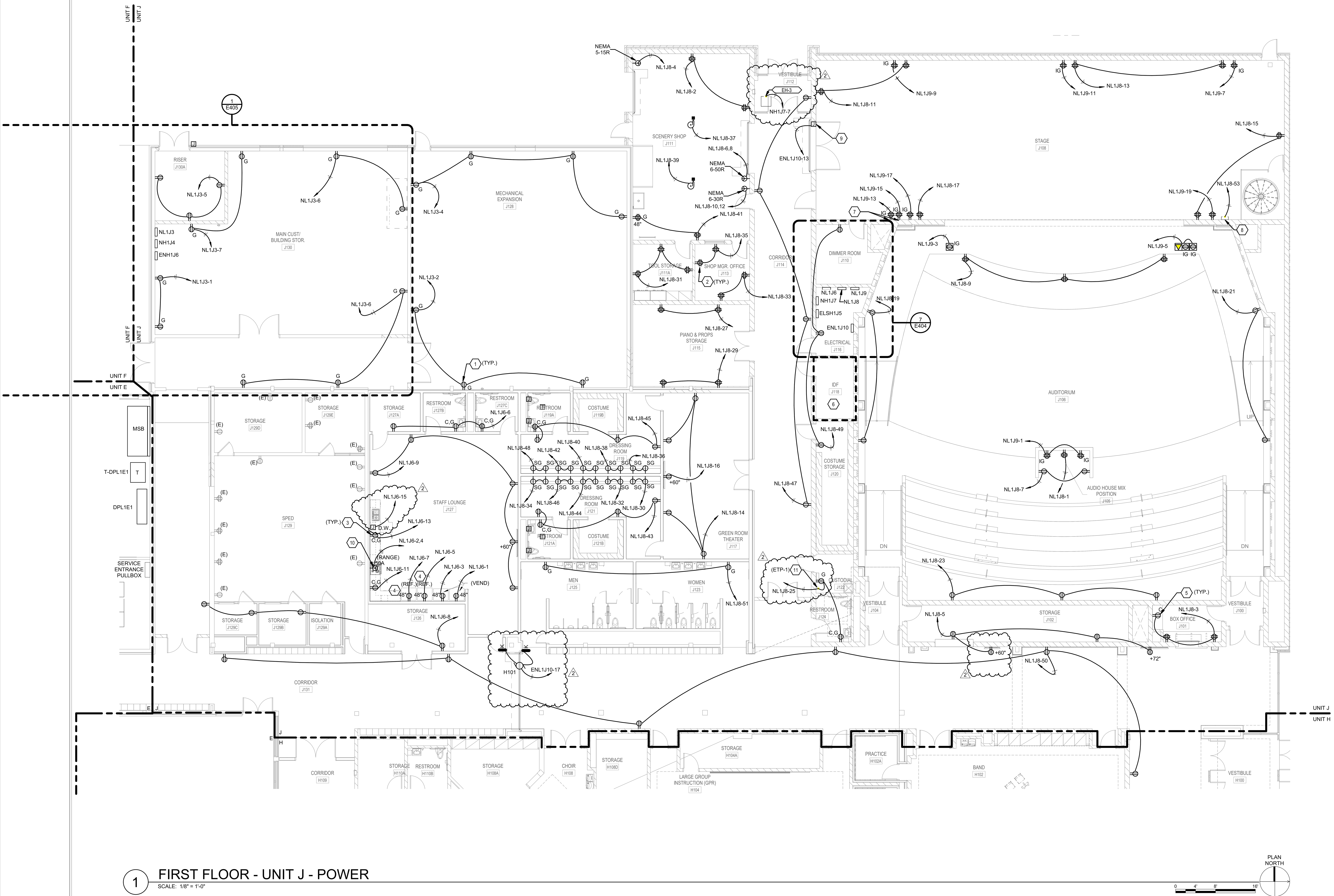
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

E208

PROJECT NUMBER

2021026



1 FIRST FLOOR - UNIT J - POWER

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

GENERAL NOTES

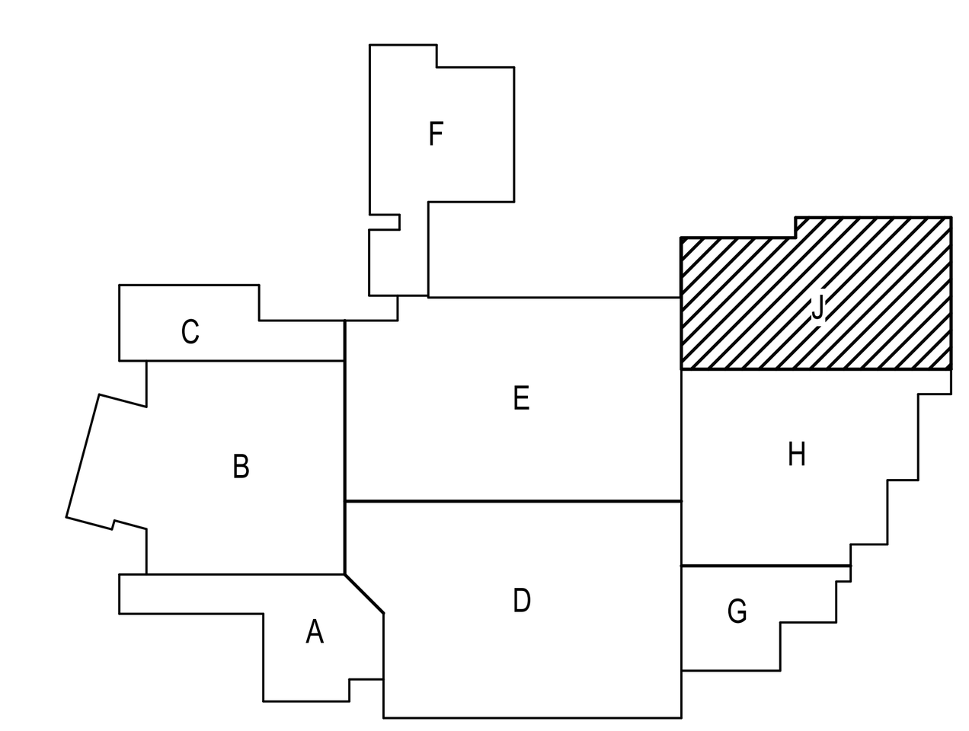
A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. ALL ELECTRICAL ITEMS LABELED WITH (E) ARE EXISTING TO REMAIN.

C. REFER TO FIRST FLOOR - UNIT J - MECHANICAL POWER PLAN ON SHEET E223 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

1. PROVIDE A NEW 120V, 120A DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 120A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. PROVIDE A NEW 120V, 120A GFI COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
4. PROVIDE A DEDICATED RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
5. PROVIDE A NEW 120V, 20A COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
6. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.
7. MOUNT QUAD RECEPTACLES TO INSIDE OF AV RACK, 48" AFF TO CENTER.
8. PROVIDE 120V POWER CONNECTION TO RIGGING MOTOR CONTROL PANEL.
9. PROVIDE JUNCTION BOX AND 120V POWER CONNECTION TO MOTORIZED DOOR. COORDINATE EXACT MOUNTING LOCATION AND POWER REQUIREMENT WITH DOOR CONTRACTOR.
10. PROVIDE A 208V-1PH, 50A RECEPTACLE FOR RANGE. REFER TO MANUFACTURER SPECIFICATIONS FOR NEMA RATING.
11. PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER, CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
12. EQUIPMENT PROVIDED WITH FACTORY INSTALLED DISCONNECT, PROVIDE A 277V/1PH. CIRCUIT AS SHOWN.



KEYPLAN

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT J - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E209

PROJECT NUMBER
2021026

GENERAL NOTES

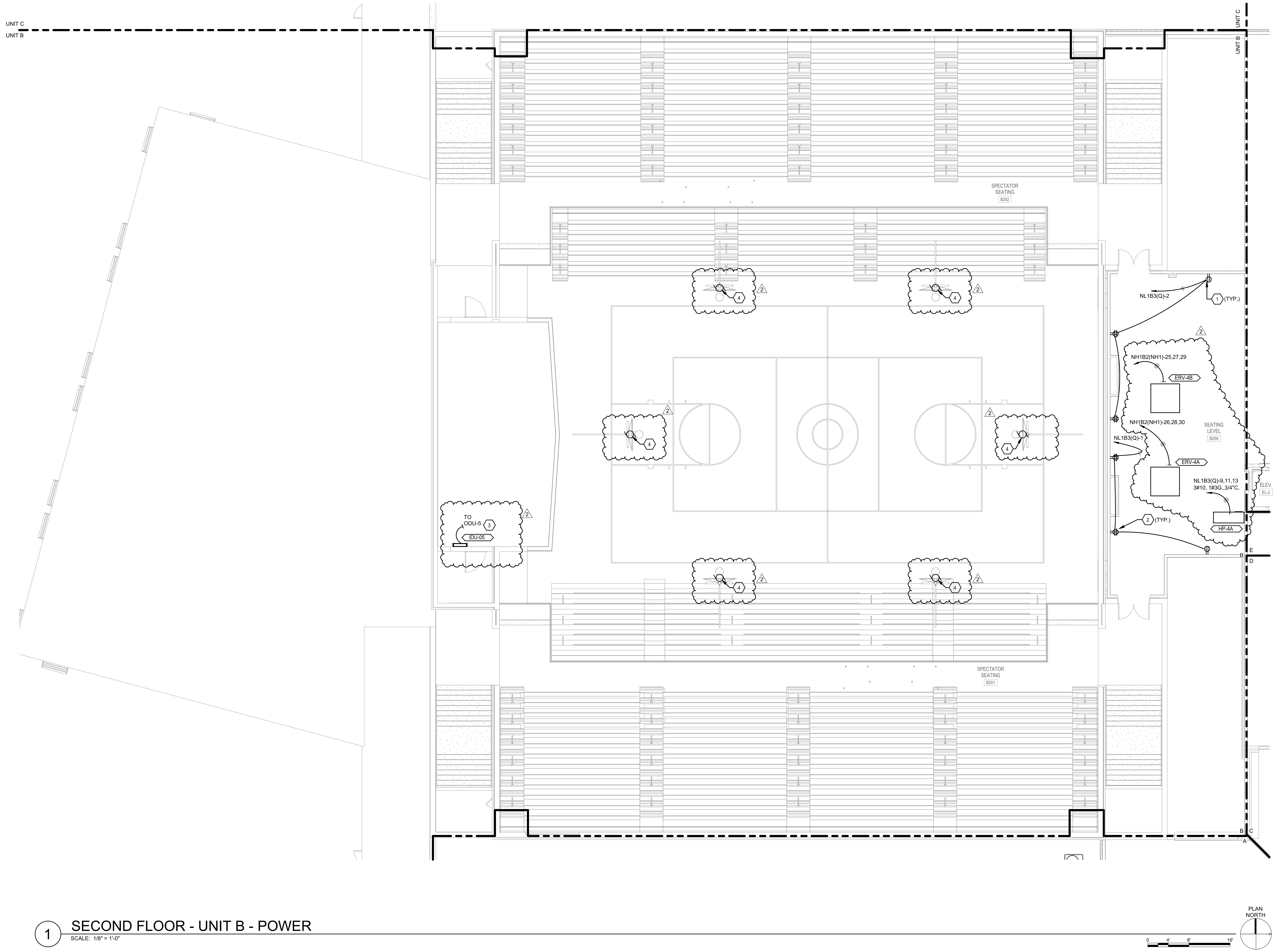
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

2 B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

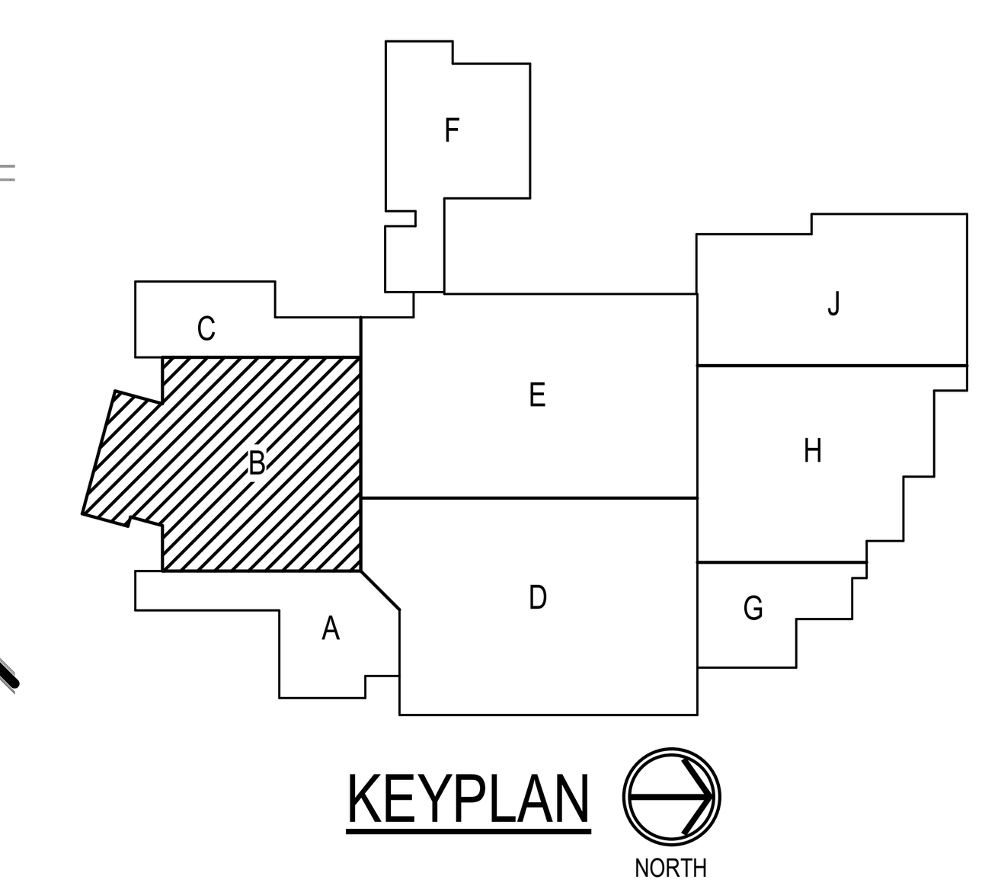
2

1. PROVIDE A NEW 120V, 20A DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. INDOOR UNIT POWERED FROM ASSOCIATED OUTDOOR UNIT ON ROOF. REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
4. RECONNECT EXISTING CIRCUIT TO NEW GOAL WINCH.



1 SECOND FLOOR - UNIT B - POWER

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



KEYPLAN

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

2	ADDENDUM 2	08-04-2022

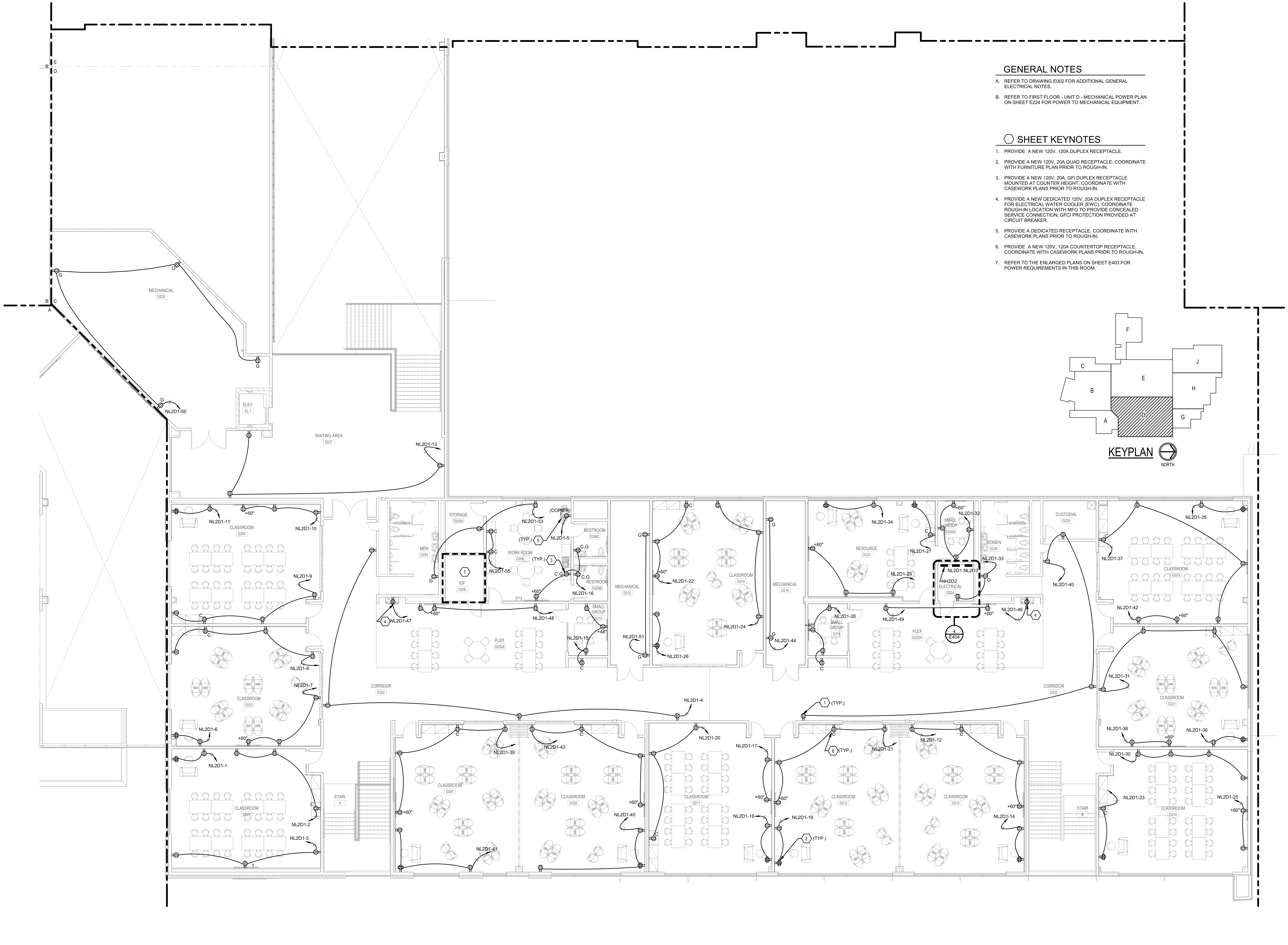
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT B - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E210

PROJECT NUMBER
2021026



1 SECOND FLOOR - UNIT D - POWER

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

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. REFER TO FIRST FLOOR - UNIT D - MECHANICAL POWER PLAN ON SHEET E224 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

1. PROVIDE A NEW 120V, 120A DUPLEX RECEPTACLE.
2. PROVIDE A NEW 120V, 20A QUAD RECEPTACLE. COORDINATE WITH FURNITURE PLAN PRIOR TO ROUGH-IN.
3. PROVIDE A NEW 120V, 20A, GFI DUPLEX RECEPTACLE MOUNTED AT COUNTER HEIGHT. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
4. PROVIDE A NEW DEDICATED 120V, 20A DUPLEX RECEPTACLE FOR ELECTRICAL WATER COOLER (EWC). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION; GFCI PROTECTION PROVIDED AT CIRCUIT BREAKER.
5. PROVIDE A DEDICATED RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
6. PROVIDE A NEW 120V, 120A COUNTERTOP RECEPTACLE. COORDINATE WITH CASEWORK PLANS PRIOR TO ROUGH-IN.
7. REFER TO THE ENLARGED PLANS ON SHEET E403 FOR POWER REQUIREMENTS IN THIS ROOM.

KEYPLAN

SILVER CREEK SCHOOL CORPORATION

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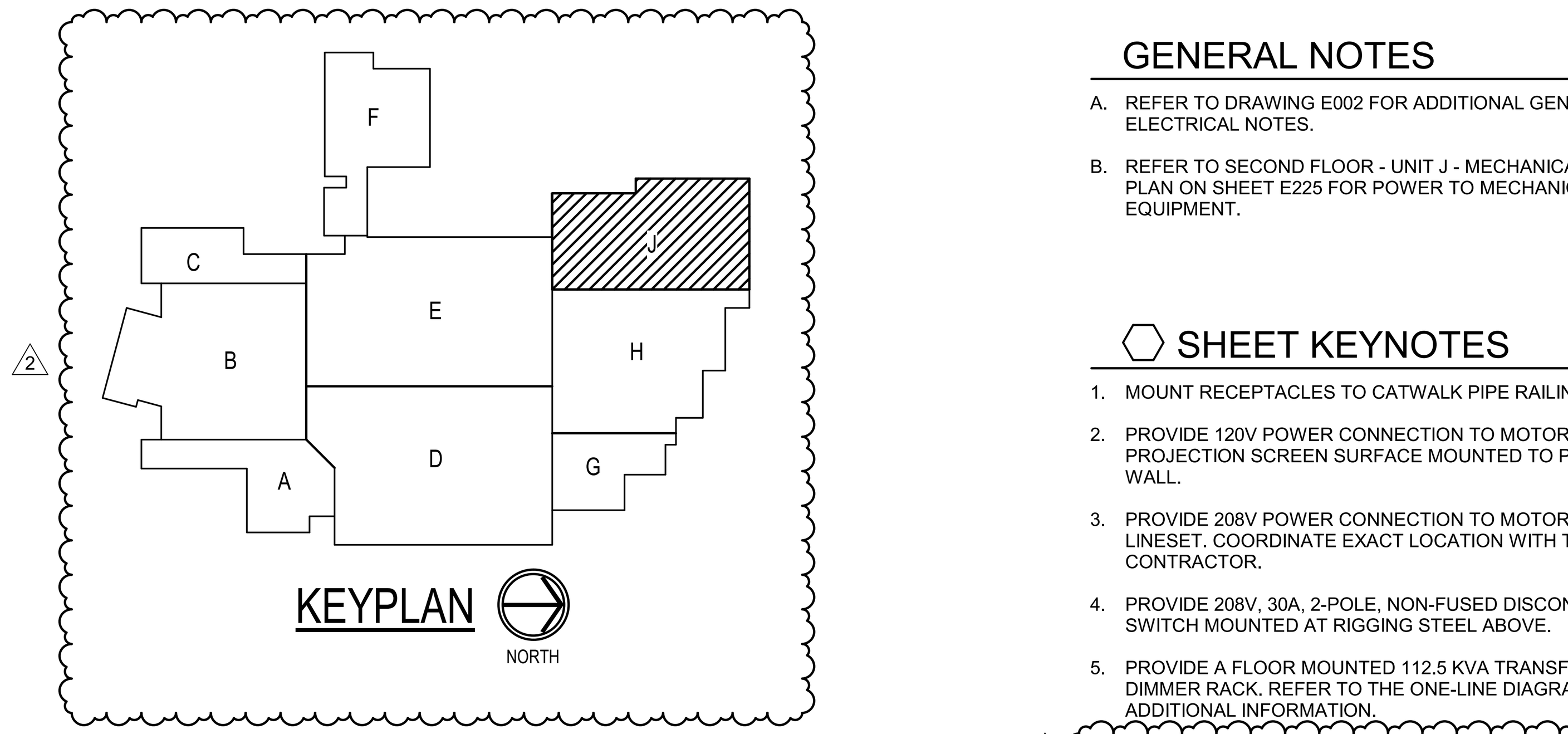
07-08-2022	CMB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT D - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E211

PROJECT NUMBER
2021026



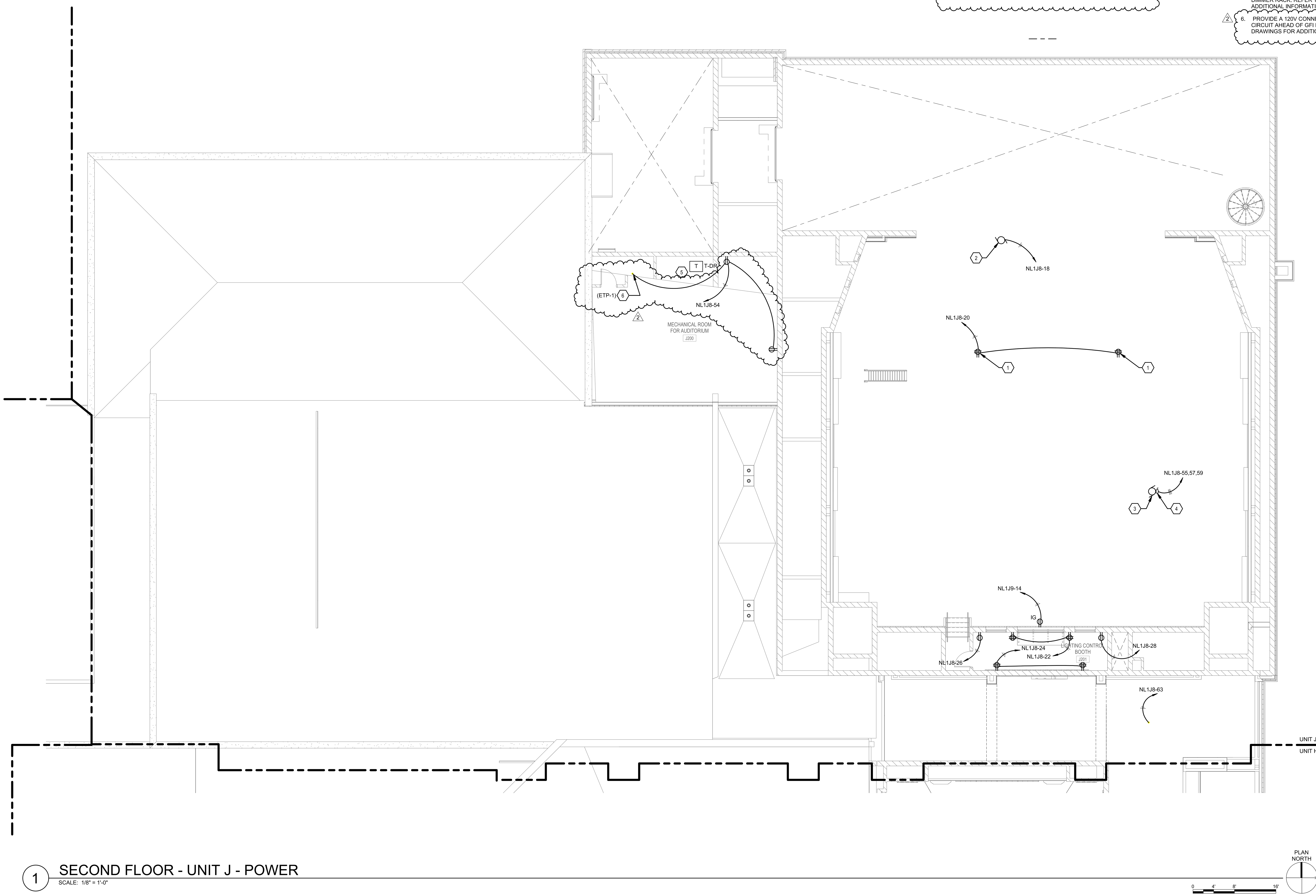
GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. REFER TO SECOND FLOOR - UNIT J - MECHANICAL POWER PLAN ON SHEET E225 FOR POWER TO MECHANICAL EQUIPMENT.

SHEET KEYNOTES

1. MOUNT RECEPTACLES TO CATWALK PIPE RAILING AT 42" AFF.
2. PROVIDE 120V POWER CONNECTION TO MOTORIZED PROJECTION SCREEN SURFACE MOUNTED TO PROSCENIUM WALL.
3. PROVIDE 208V POWER CONNECTION TO MOTORIZED LINESET. COORDINATE EXACT LOCATION WITH THEATER CONTRACTOR.
4. PROVIDE 208V, 30A, 2-POLE, NON-FUSED DISCONNECT SWITCH MOUNTED AT RIGGING STEEL ABOVE.
5. PROVIDE A FLOOR MOUNTED 112.5 KVA TRANSFORMER FOR DIMMER RACK. REFER TO THE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
6. PROVIDE A 120V CONNECTION TO ELECTRIC TRAP PRIMER. CIRCUIT AHEAD OF GFI RECEPTACLES. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 SECOND FLOOR - UNIT J - POWER
SCALE: 1/8" = 1'-0"

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT J - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER
E212

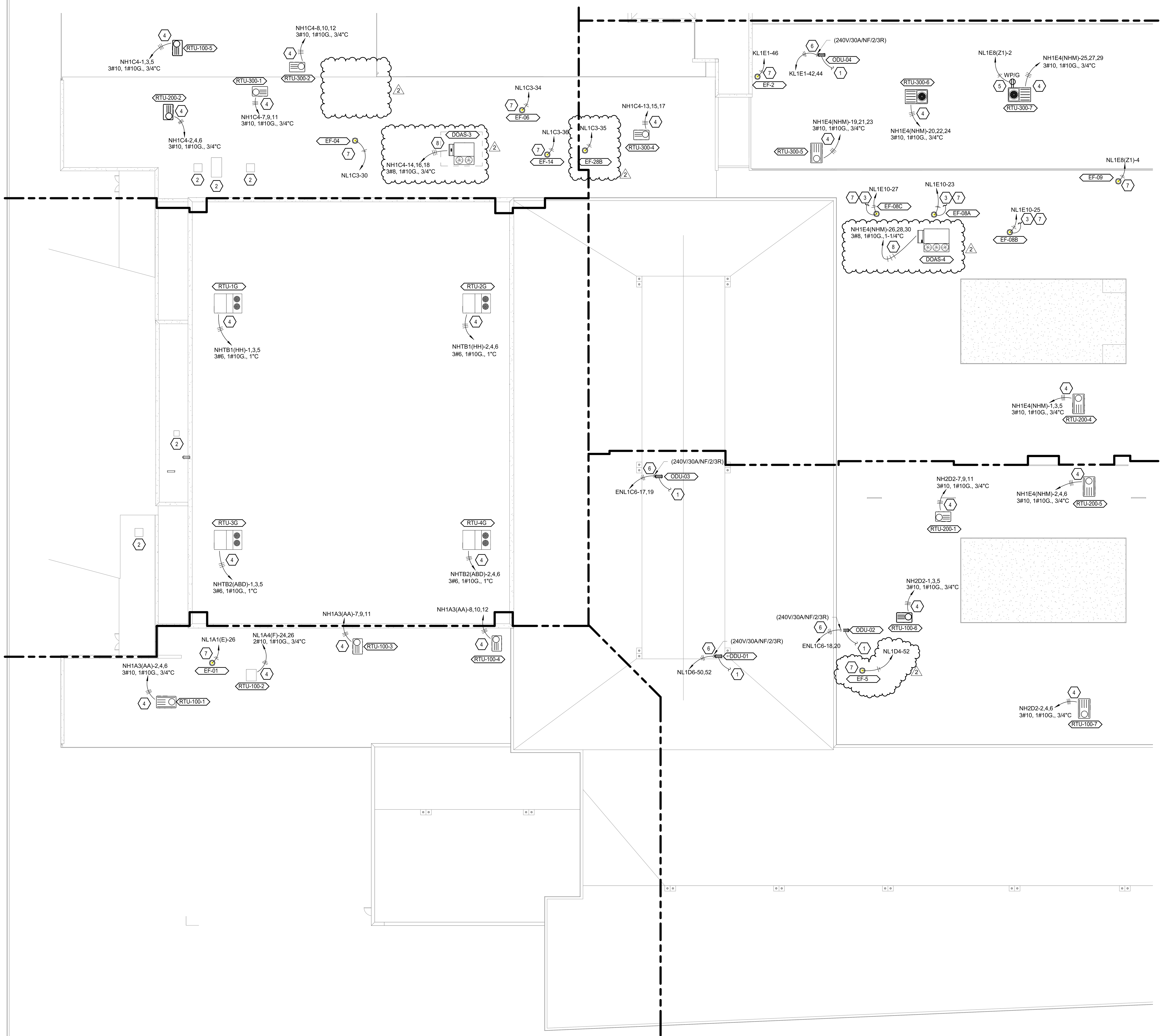
PROJECT NUMBER
2021026

GENERAL NOTES

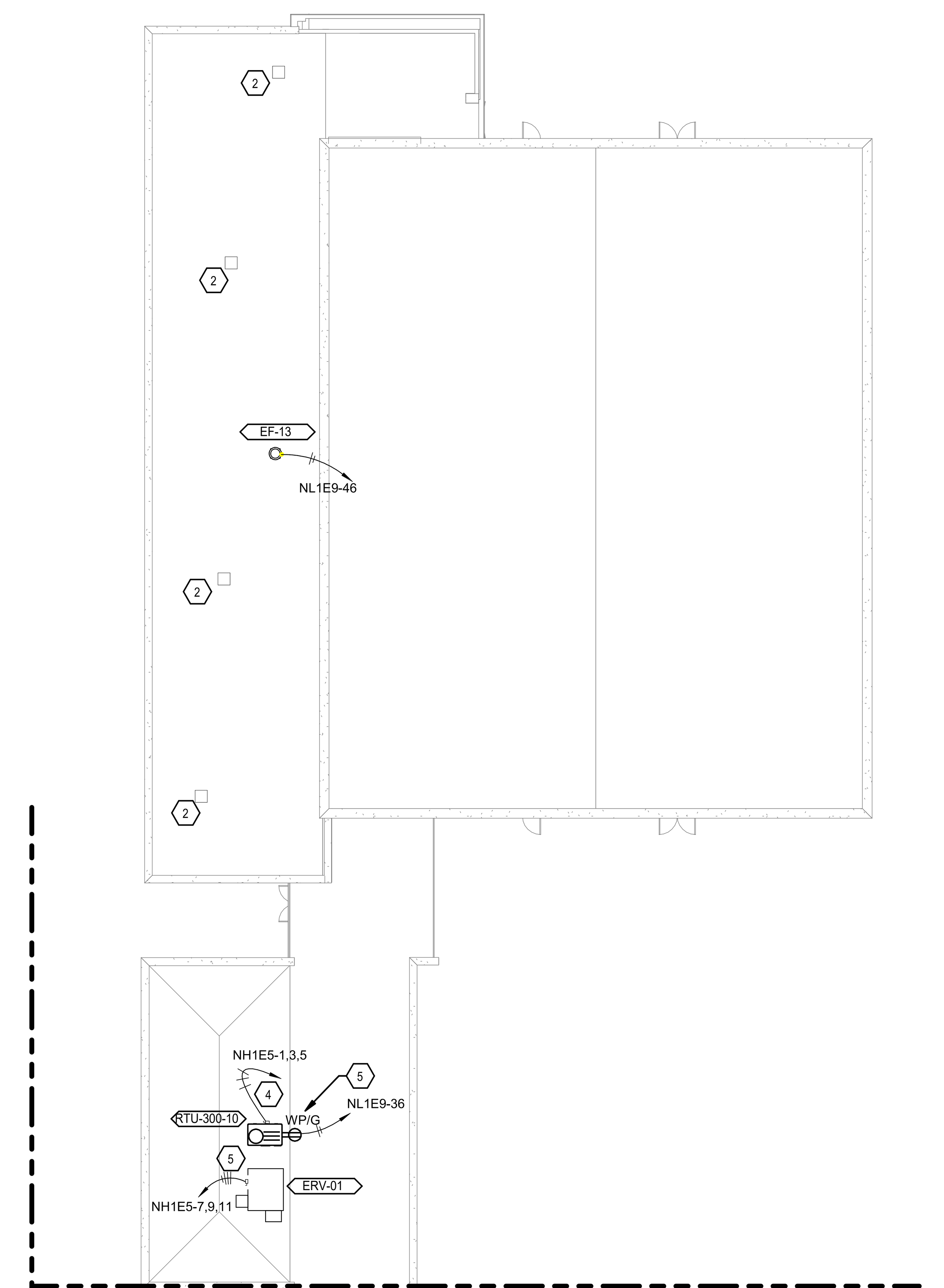
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

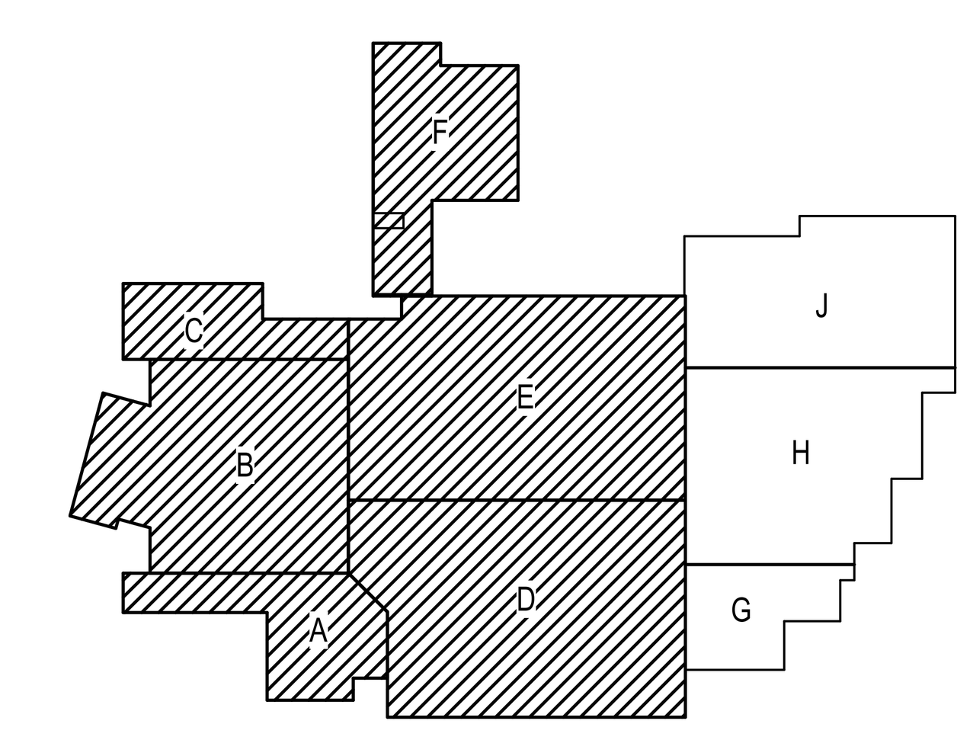
1. PROVIDE MANUFACTURER REQUIRED CABLING IN 3/4" CONDUIT FROM OUTDOOR UNIT "ODU-X" TO CORRESPONDING INDOOR UNIT "IDU-X". REFER TO MECHANICAL POWER PLANS FOR EXACT LOCATION OF INDOOR UNIT. INDOOR UNIT IS POWERED AND CONTROLLED BY OUTDOOR UNIT.
2. EXISTING CIRCUIT FOR EQUIPMENT TO REMAIN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. ROUTE CIRCUIT TO ASSOCIATED FUME HOOD IN SCIENCE LABS, SEE SHEET E205.
4. EXISTING UNIT MOUNTED DISCONNECT TO REMAIN, PROVIDE NEW CIRCUIT AS SHOWN.
5. PROVIDE A WEATHER PROOF / GFI DUPLEX RECEPTACLE AND CONNECT TO CIRCUIT SHOWN.
6. PROVIDE A NON-FUSED DISCONNECT, AS SHOWN, IN NEMA 3R ENCLOSURE, MOUNT TO EQUIPMENT SHOWN AND CIRCUIT AND SHOWN.
7. EXHAUST FAN PROVIDED WITH INTEGRAL FACTORY DISCONNECT, PROVIDE CIRCUIT AS SHOWN.
8. (2) PROVIDED WITH FACTORY INSTALLED DISCONNECT, PROVIDE NEW CIRCUIT AS SHOWN.



1 PARTIAL ROOF PLAN SOUTH - POWER
SCALE: 1/16" = 1'-0"



2 PARTIAL ROOF PLAN SOUTH - AREA F - POWER
SCALE: 1/16" = 1'-0"



KEYPLAN

NORTH

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557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
PARTIAL ROOF PLAN SOUTH - POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER 07/07/22

DRAWING NUMBER
E213

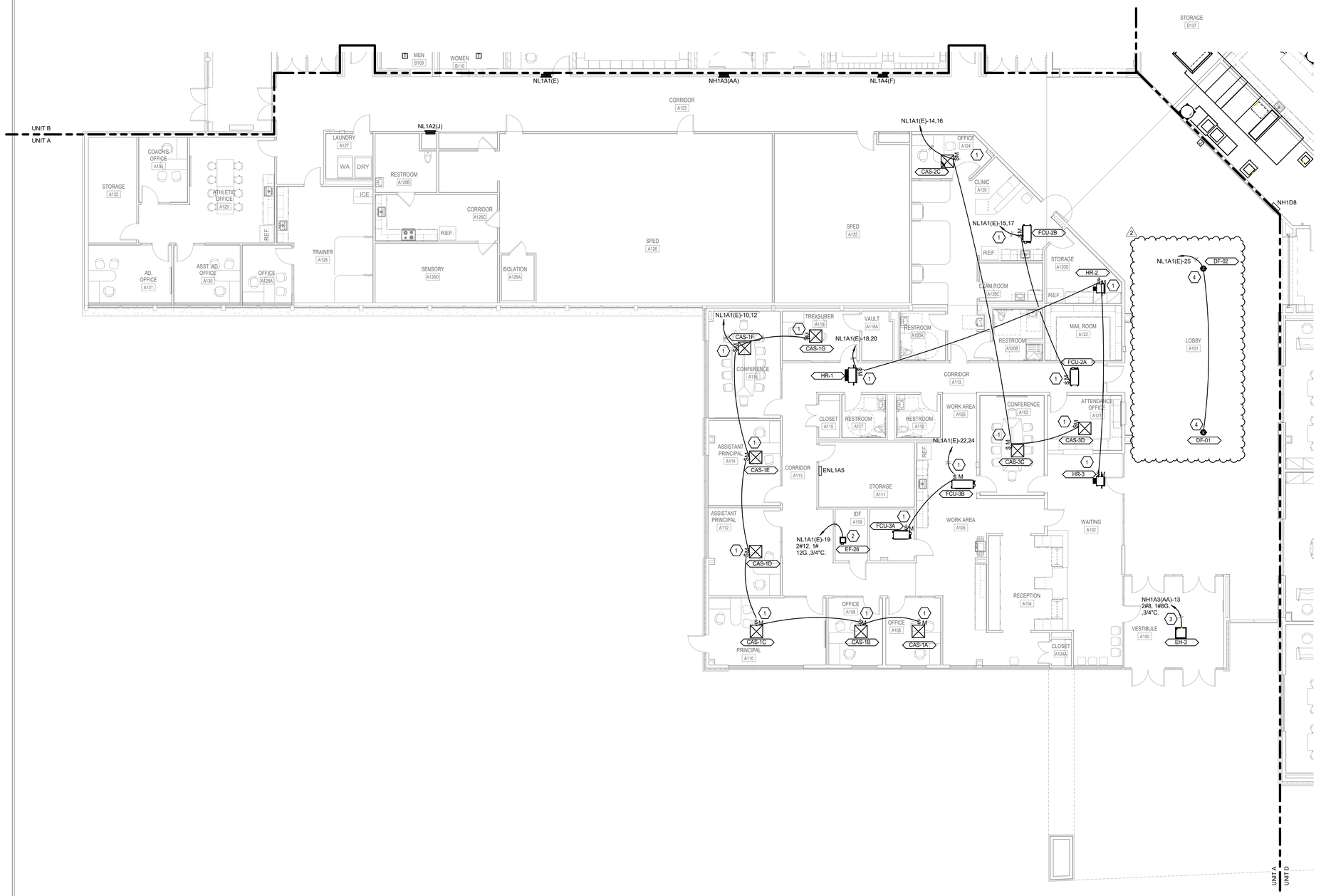
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

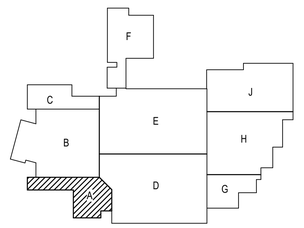
1. PROVIDE A 208V/2P MOTOR RATED SWITCH TO EQUIPMENT AND CIRCUIT AS SHOWN PER MANUFACTURER SPECIFICATIONS. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
2. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECT, PROVIDE A 120V CIRCUIT AS SHOWN.
3. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECT, PROVIDE A 277V CIRCUIT AS SHOWN.
4. E.C. TO PROVIDE A 20A, 120V, MOTOR RATED DISCONNECT ABOVE ACCESSIBLE CEILING AND CONNECT TO CIRCUIT SHOWN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.



1 FIRST FLOOR - UNIT A - MECHANICAL POWER
SCALE: 1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'



KEYPLAN NORTH

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, and the approximate location and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
The Trade Contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT A - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E215

PROJECT NUMBER
2021026

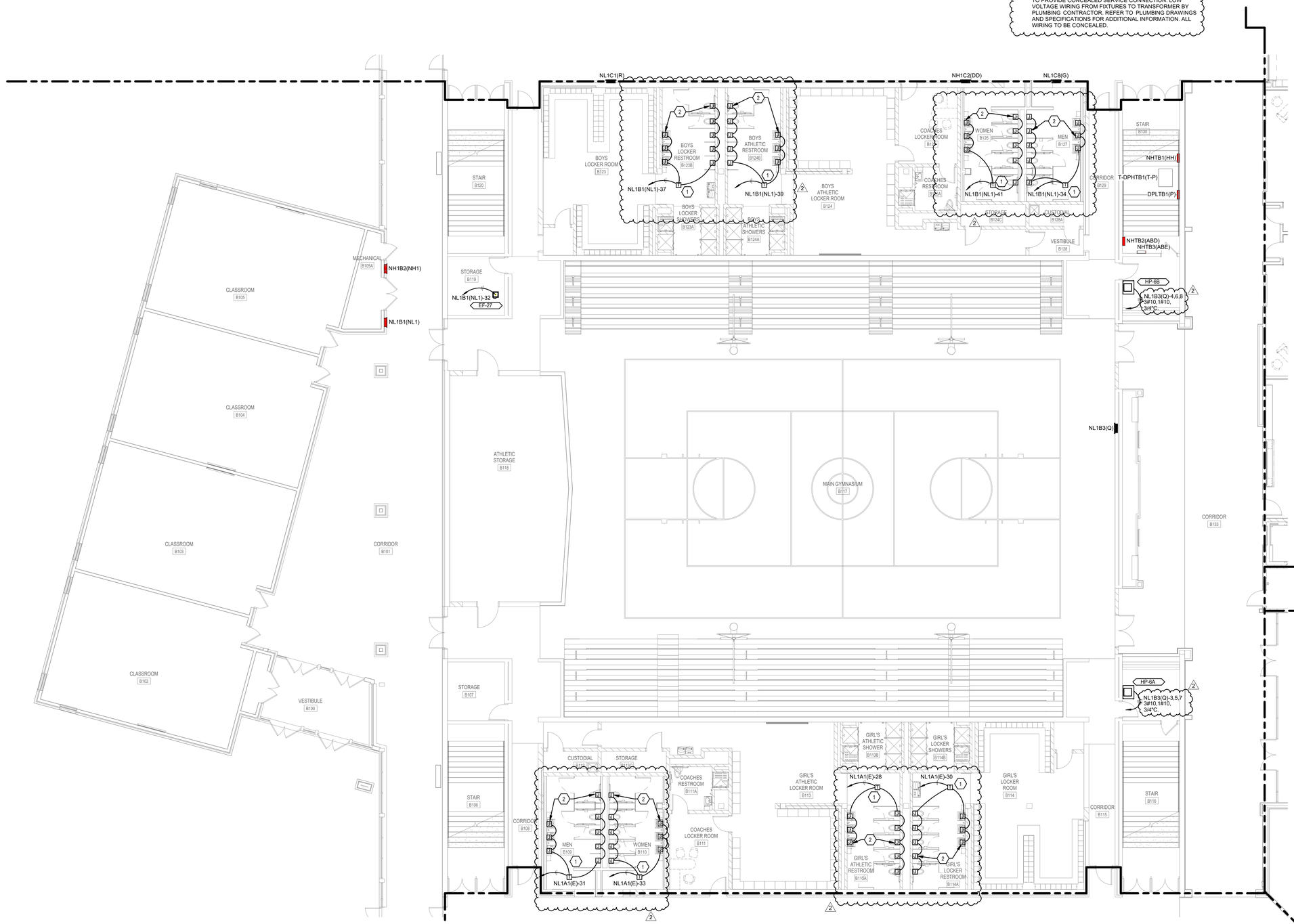
SHEET KEYNOTES

1. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.
2. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



1 FIRST FLOOR - UNIT B - MECHANICAL POWER

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

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings and specifications are intended to describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT B - MECHANICAL POWER

CERTIFIED BY:

ROBERT D. BOTTOMS REGISTERED No. PE1900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

E216

PROJECT NUMBER

2021026

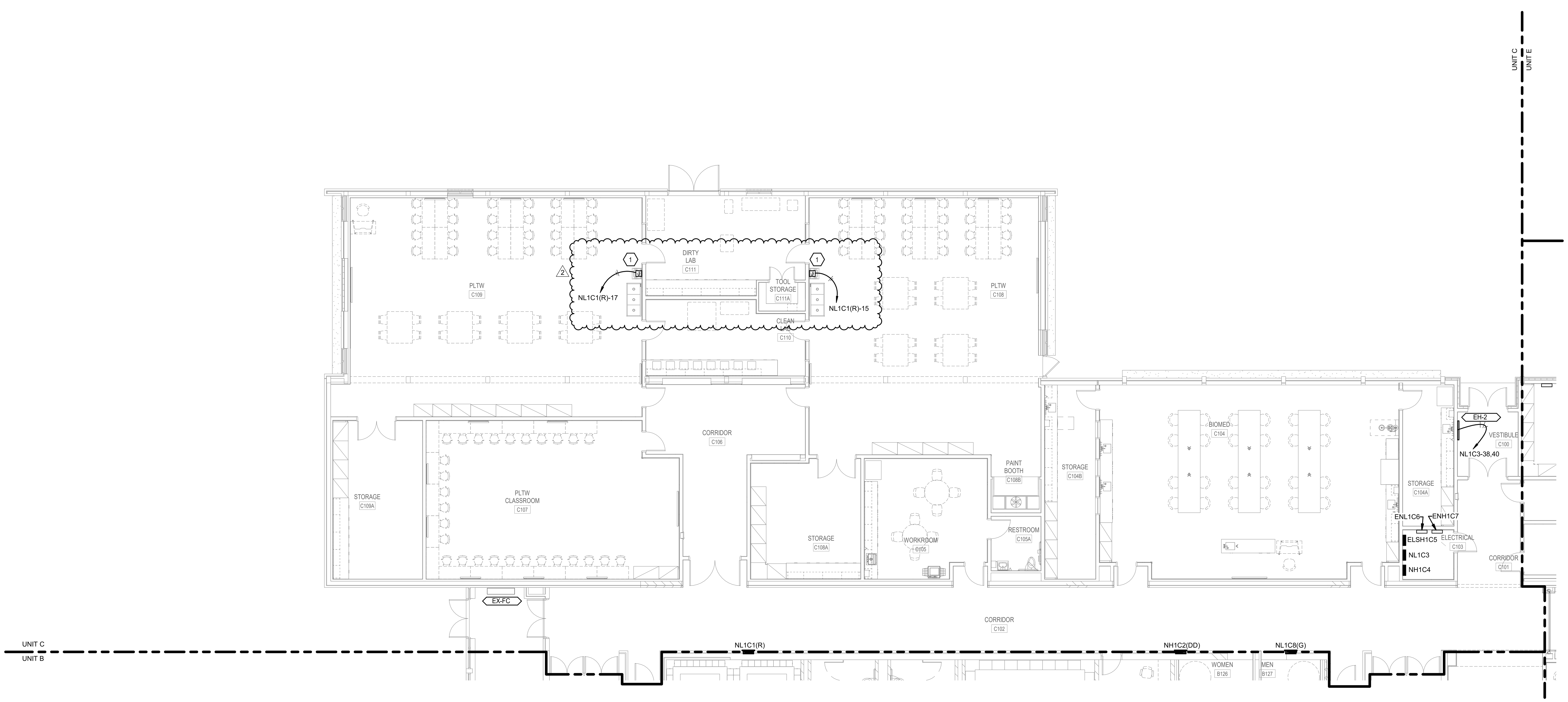
GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

2 SHEET KEYNOTES

1. PROVIDE A RECESSED JUNCTION BOX AND 120V CONNECTION FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.

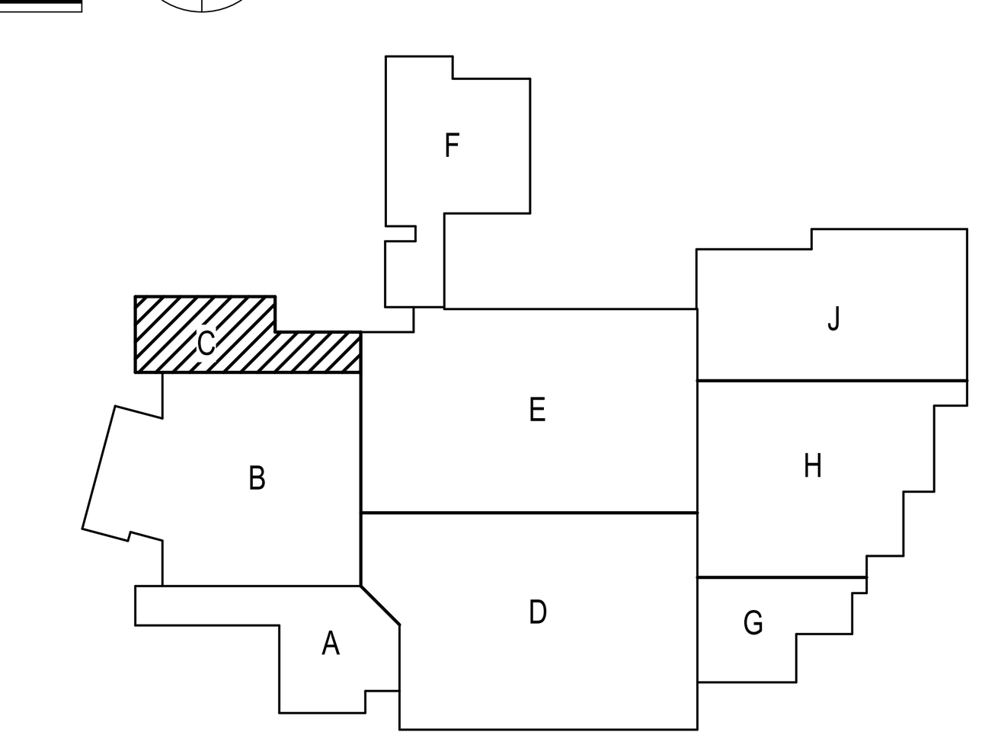


1 FIRST FLOOR - UNIT C - MECHANICAL POWER

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

PLAN NORTH

0 4' 8' 16'



KEYPLAN

NORTH

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PROJECT:

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ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT C - MECHANICAL POWER

CERTIFIED BY:

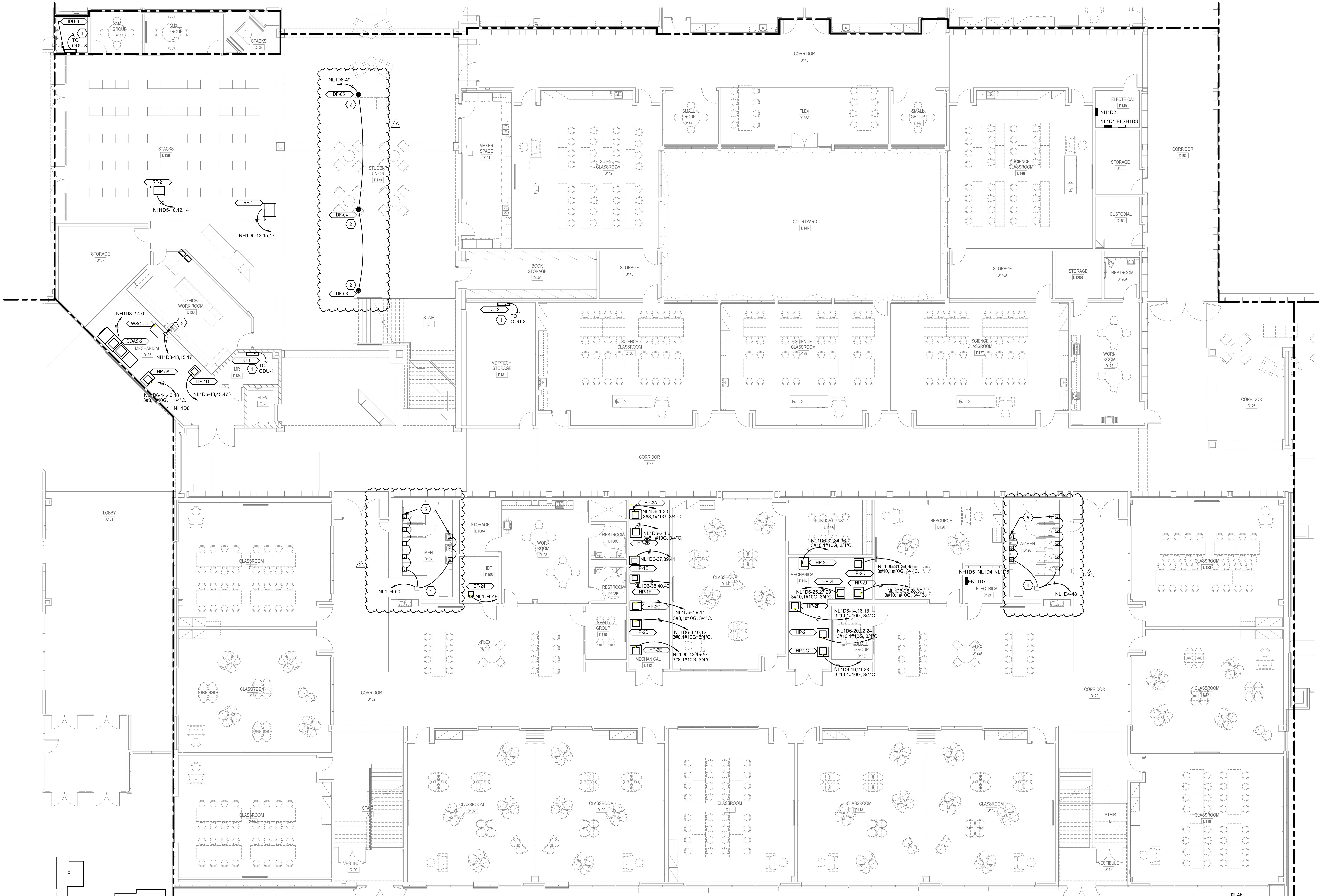
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

E217

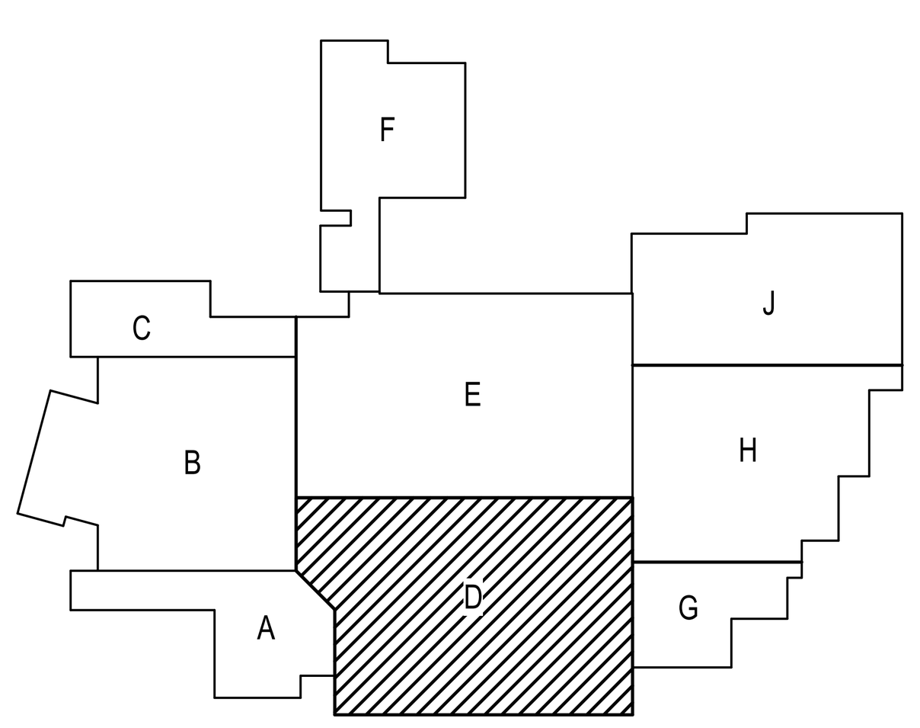
PROJECT NUMBER

2021026



1 FIRST FLOOR - UNIT D - MECHANICAL POWER

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



KEYPLAN

NORTH

SHEET KEYNOTES

4. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.

5. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.

SHEET KEYNOTES

1. INDOOR UNIT POWERED FROM ASSOCIATED OUTDOOR UNIT ON ROOF. REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
2. E.C. TO PROVIDE A 20A, 120V, MOTOR RATED DISCONNECT ABOVE ACCESSIBLE CEILING AND CONNECT TO CIRCUIT SHOWN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. PROVIDE A 480V, 30A NON-FUSED DISCONNECT FOR MECHANICAL EQUIPMENT. PROVIDE CIRCUIT AS SHOWN.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT D - MECHANICAL POWER

CERTIFIED BY:

ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER 07/07/22

DRAWING NUMBER

E218

PROJECT NUMBER

2021026

SHEET KEYNOTES

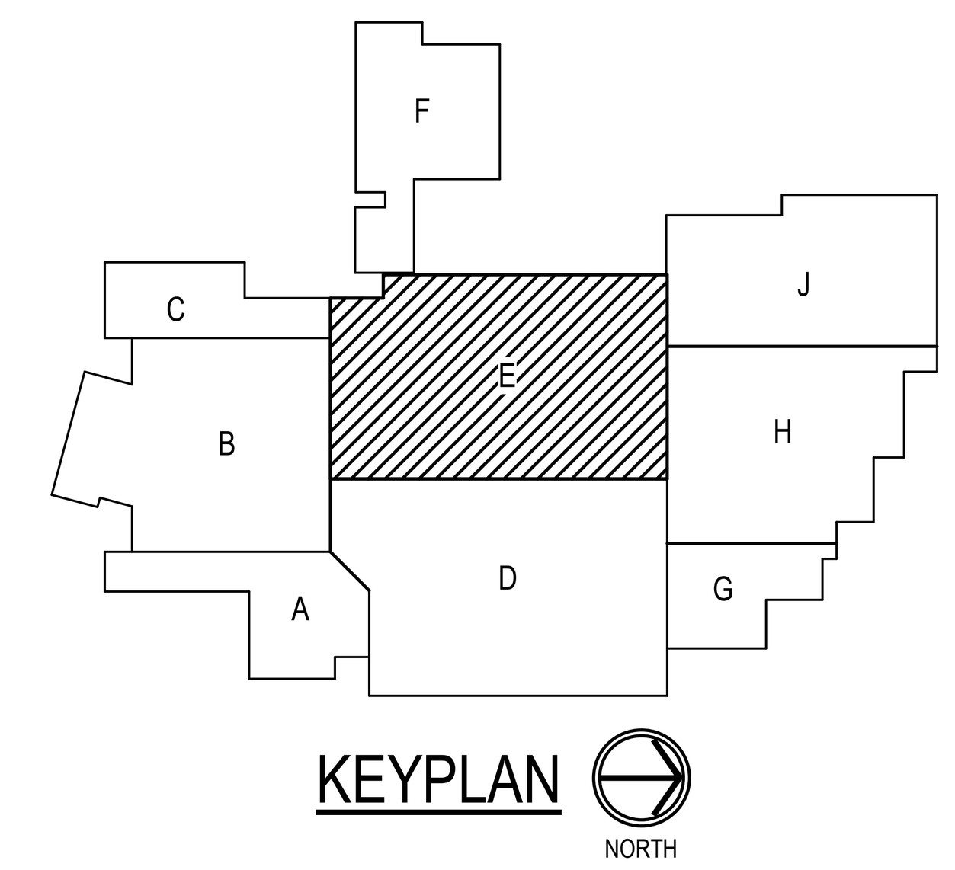
4. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.
5. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.
6. PROVIDE A RECESSED JUNCTION BOX AND 120V CONNECTION FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION, ALL WIRING TO BE CONCEALED.

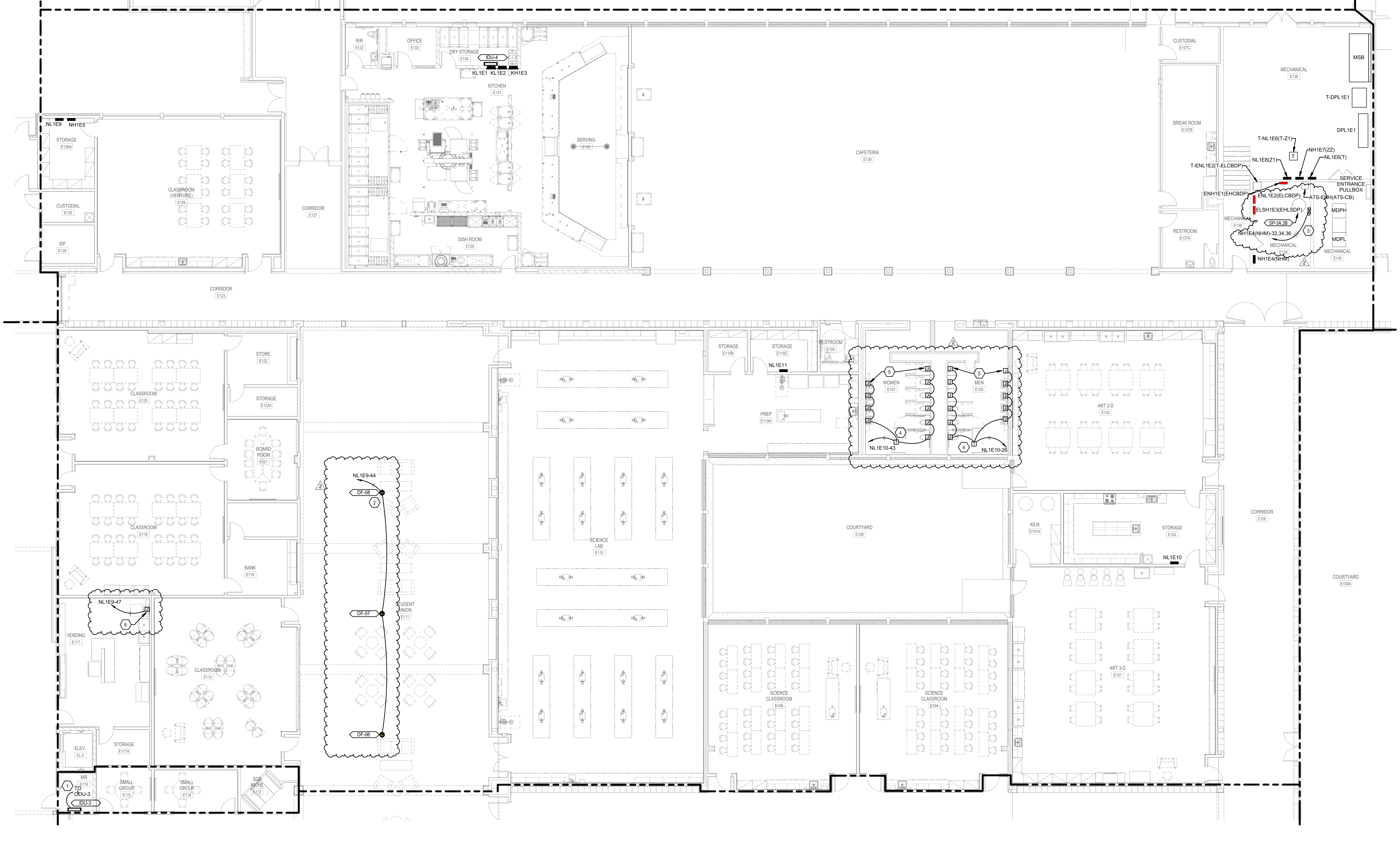
SHEET KEYNOTES

1. INDOOR UNIT POWERED FROM ASSOCIATED OUTDOOR UNIT ON ROOF. REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.
2. E.C. TO PROVIDE A 20A, 120V, MOTOR RATED DISCONNECT ABOVE ACCESSIBLE CEILING AND CONNECT TO CIRCUIT SHOWN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. NEW SUMP PUMP SP-3A AND SP-3B ARE PROVIDED WITH FACTORY DISCONNECT / MOTOR STARTER / POWER CORD ACCESSORY SHIPPED LOOSE FOR FIELD. INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR. NEW SUMP PUMPS ARE LOCATED IN UNDERPASS IN AN EXISTING SUMP PIT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.
B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.





1 FIRST FLOOR - UNIT E - MECHANICAL POWER

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

PLAN NORTH

0 4' 8' 16'

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

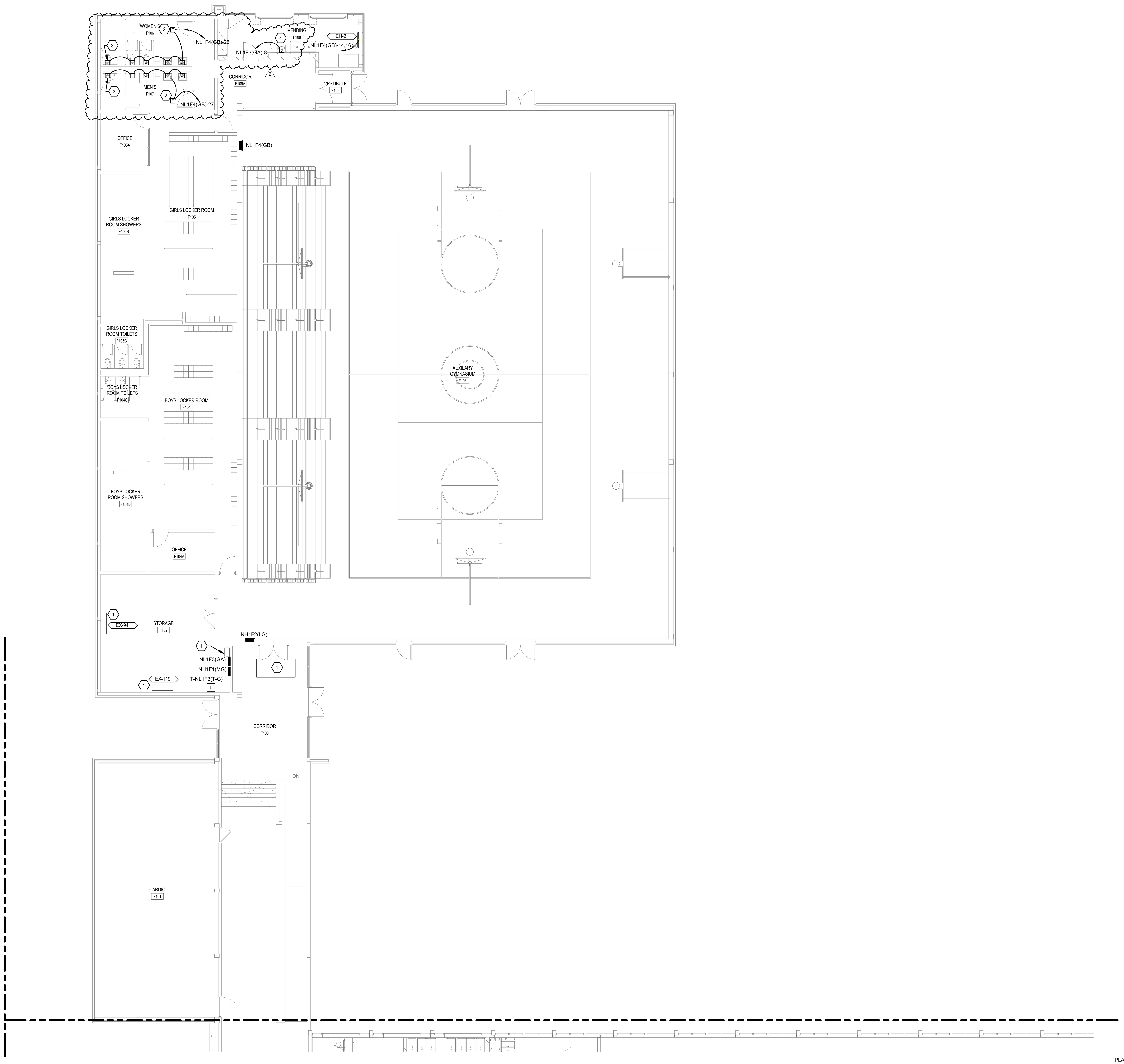
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT E - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E219

PROJECT NUMBER
2021026



1 FIRST FLOOR - UNIT F - MECHANICAL POWER

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

PLAN NORTH

GENERAL NOTES

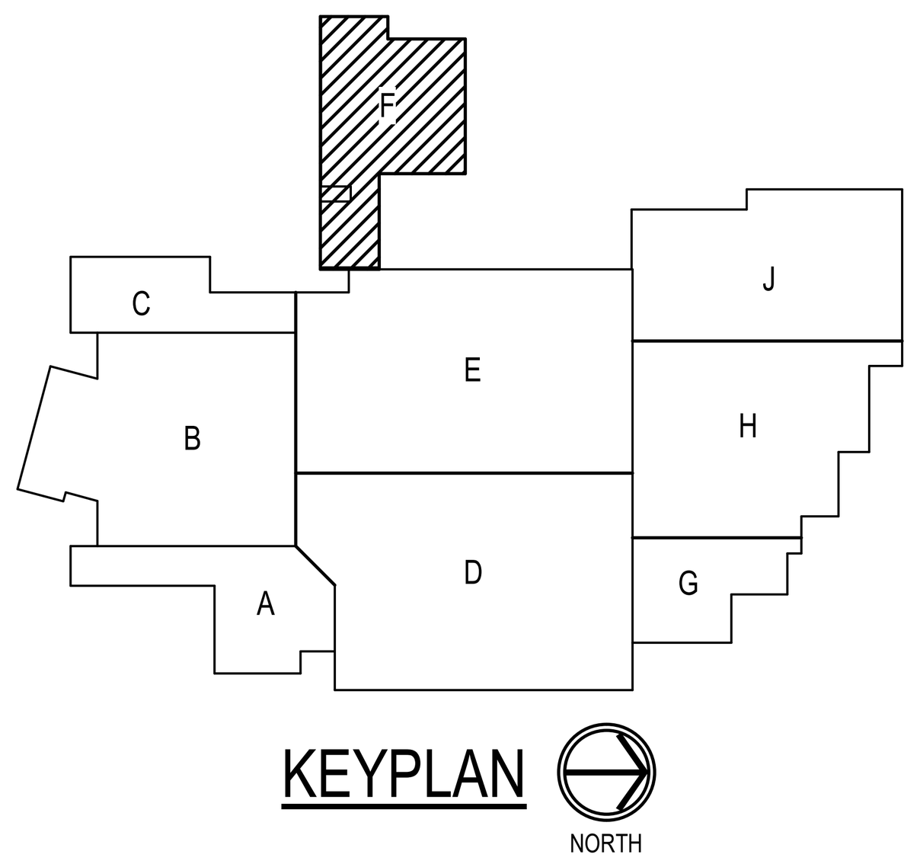
A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

1. EXISTING CIRCUIT FOR EQUIPMENT TO REMAIN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.
3. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.
4. PROVIDE A RECESSED JUNCTION BOX AND 120V CONNECTION FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION, ALL WIRING TO BE CONCEALED.

KEYPLAN



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ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT F - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E220

PROJECT NUMBER
2021026

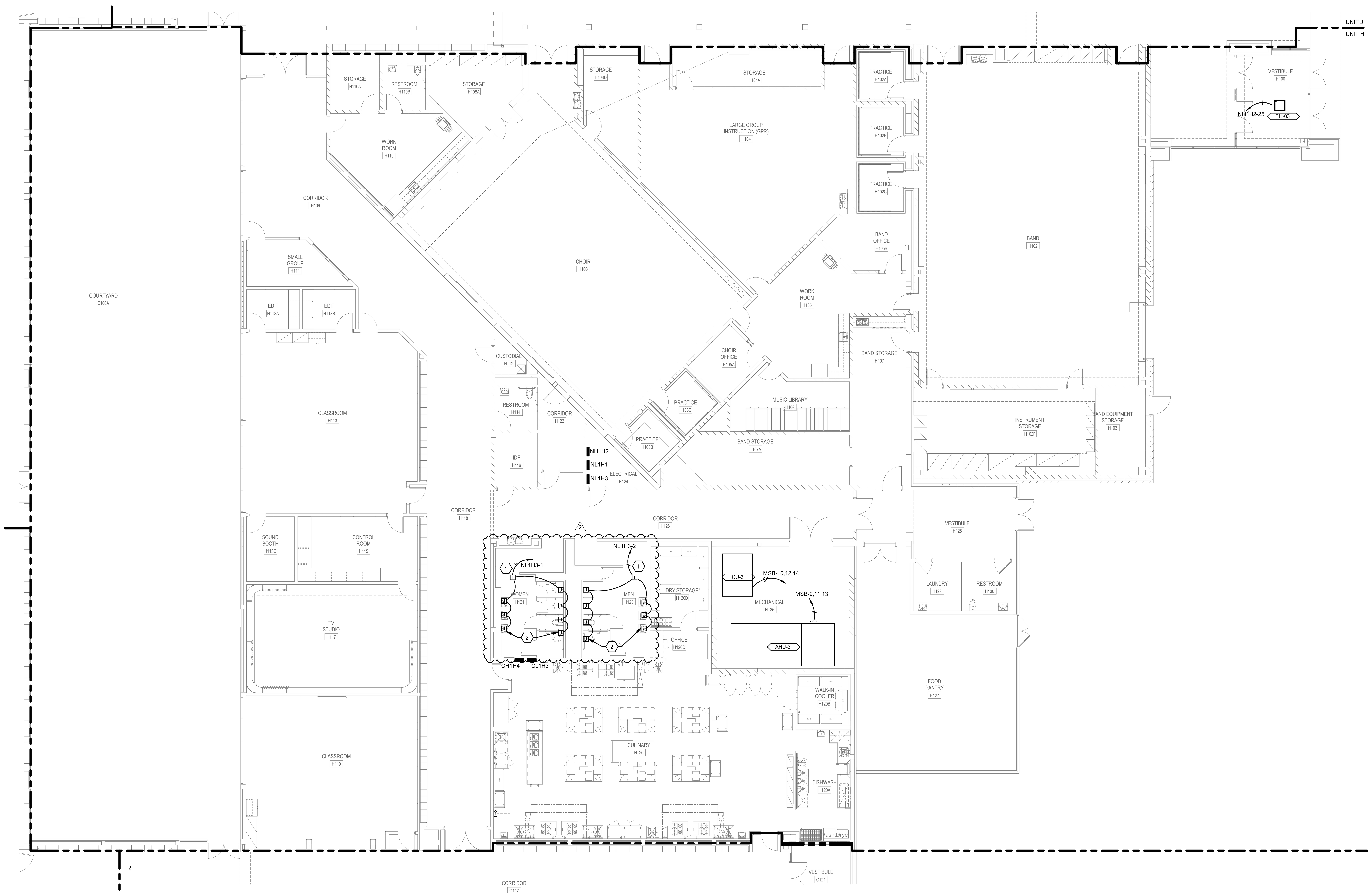
SHEET KEYNOTES

1. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.
2. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

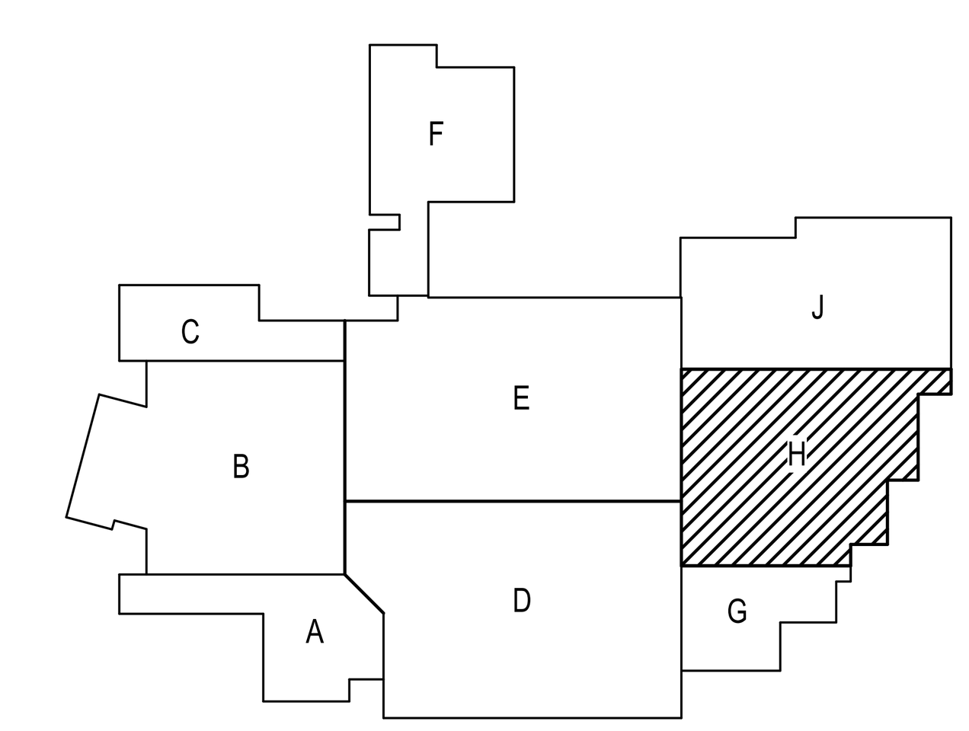


1 FIRST FLOOR - UNIT H -MECHANICAL POWER

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

0 4' 8' 16'

PLAN NORTH



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

CSO

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Lexington - Louisville - Charleston

www.stweng.com

PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT H - MECHANICAL POWER

CERTIFIED BY:

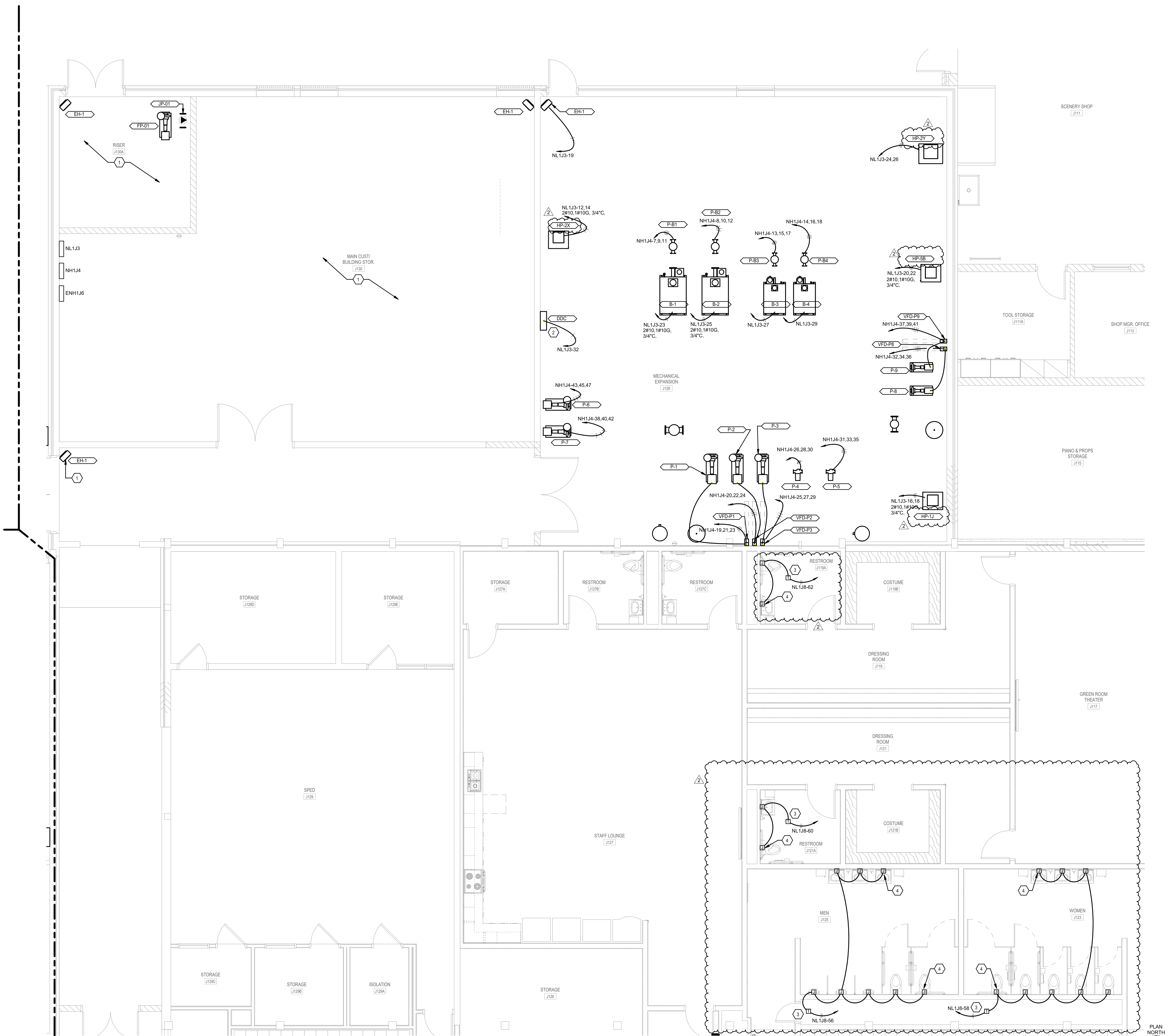
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

E222

PROJECT NUMBER

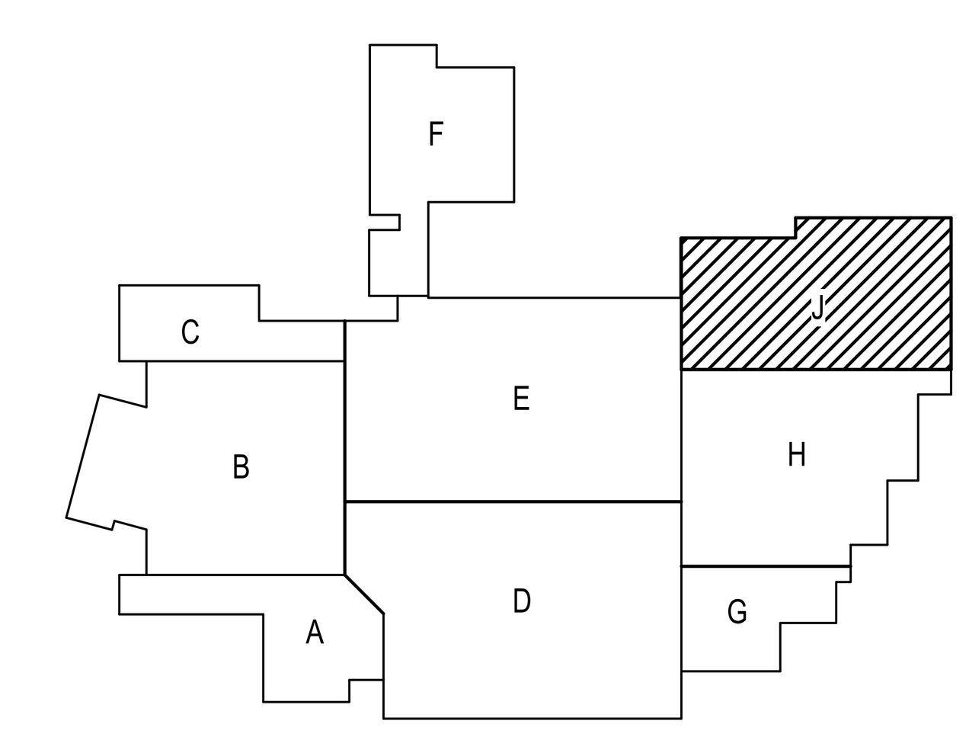
2021026



1 FIRST FLOOR - UNIT J - MECHANICAL POWER

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

PLAN NORTH



KEYPLAN

NORTH

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

1. REFER TO SHEET E405 FOR ENLARGED PLAN OF THIS ROOM.
2. PROVIDE A 120V, 20A CIRCUIT AND DATA FOR THE DDC CONTROL PANEL. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. PROVIDE POWER TO THE 120VAC/24VAC TRANSFORMER (PROVIDED BY PLUMBING CONTRACTOR) TO POWER AUTOMATIC WATERCLOSETS, URINALS OR SINKS. TRANSFORMER TO BE MOUNTED ABOVE ACCESSIBLE CEILING OR WALL MOUNTED IN SPACE WITHIN 50'-0" OF AUTOMATIC PLUMBING FIXTURES. COORDINATE LOCATION IN FIELD WITH PLUMBING CONTRACTOR.
4. PROVIDE A RECESSED JUNCTION BOX FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). COORDINATE ROUGH-IN LOCATION WITH MFG TO PROVIDE CONCEALED SERVICE CONNECTION. LOW VOLTAGE WIRING FROM FIXTURES TO TRANSFORMER BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WIRING TO BE CONCEALED.
5. PROVIDE A RECESSED JUNCTION BOX AND 120V CONNECTION FOR AUTOMATIC PLUMBING FIXTURES (USE TEMPLATE PROVIDED FOR EXACT PLACEMENT). REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION, ALL WIRING TO BE CONCEALED.

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

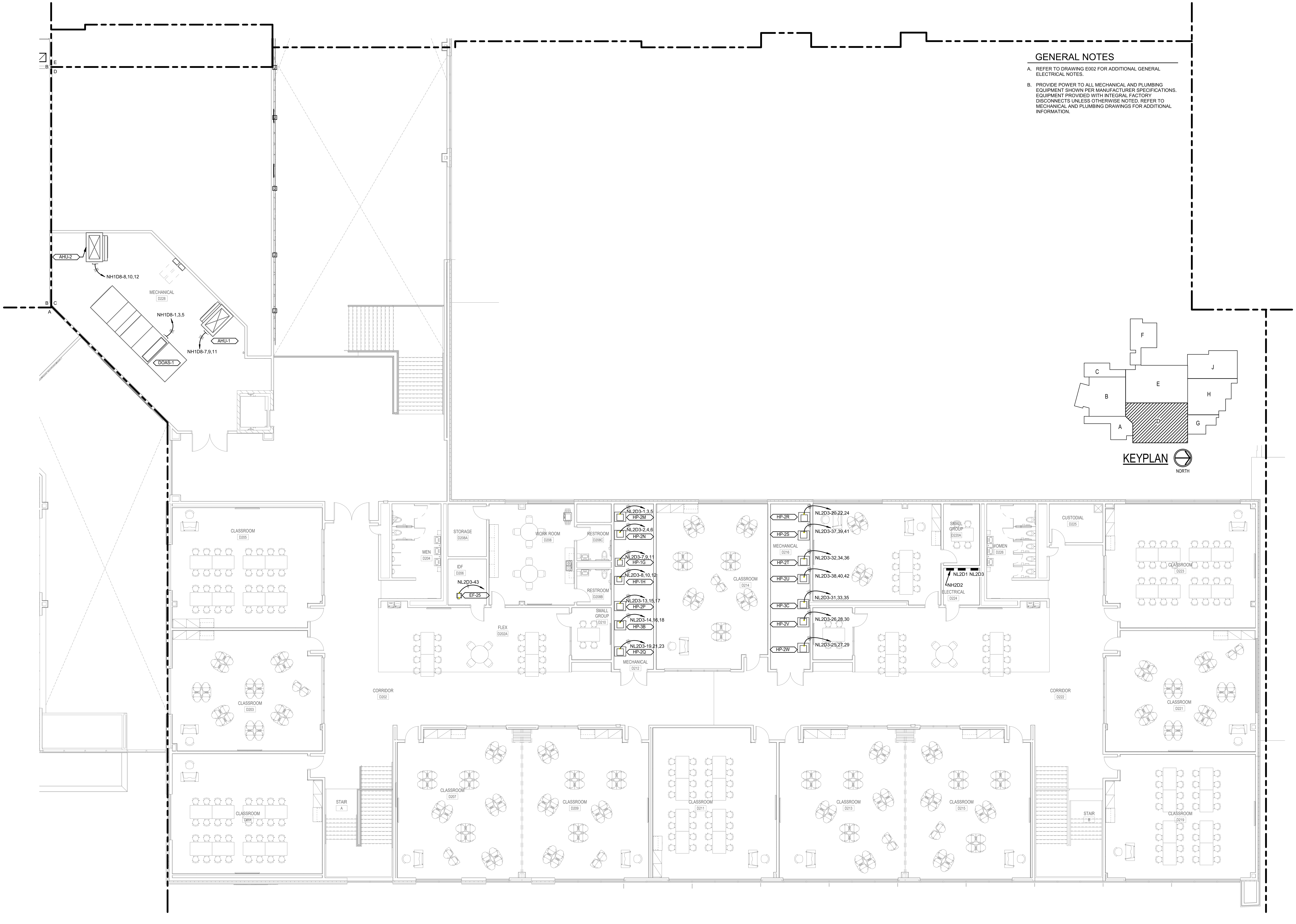
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT J - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER
E223

PROJECT NUMBER
2021026



GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

1 SECOND FLOOR - UNIT D - MECHANICAL POWER

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

PLAN NORTH

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM 1	07-28-2022

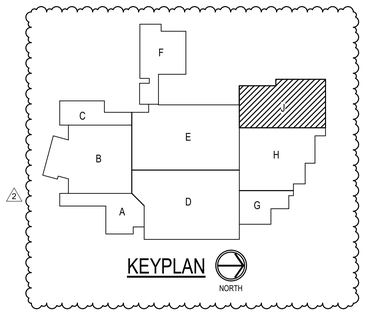
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT D - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E224

PROJECT NUMBER
2021026



GENERAL NOTES

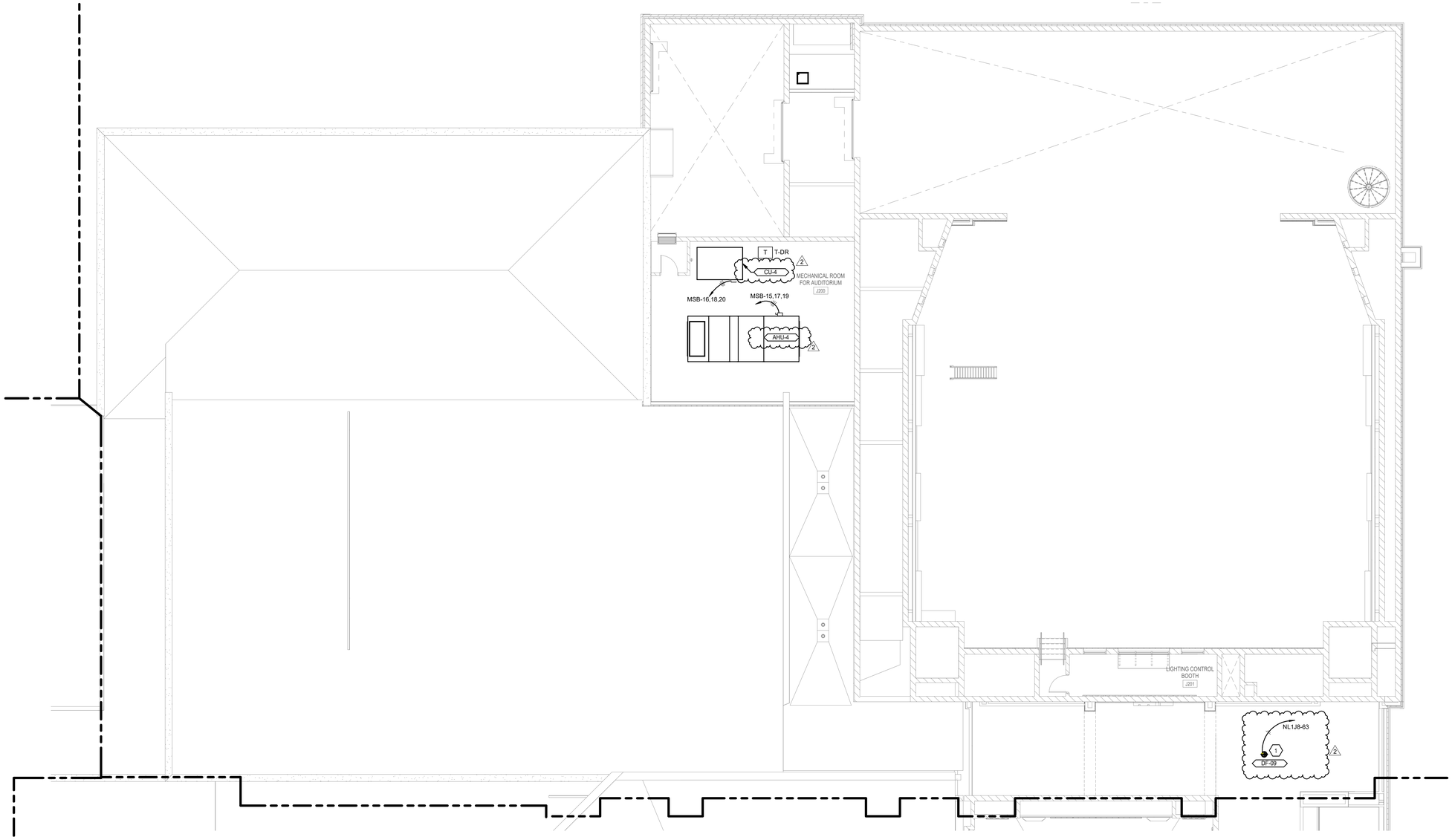
A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

2 B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. EQUIPMENT PROVIDED WITH INTEGRAL FACTORY DISCONNECTS UNLESS OTHERWISE NOTED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

2

1. E.C. TO PROVIDE A 20A, 120V, MOTOR RATED DISCONNECT ABOVE ACCESSIBLE CEILING AND CONNECT TO CIRCUIT SHOWN. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.



1 SECOND FLOOR - UNIT J - MECHANICAL POWER

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

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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The drawings and specifications are intended to describe all work required for full performance and completion of the requirements of the Contract.
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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT J - MECHANICAL POWER

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E225

PROJECT NUMBER
2021026

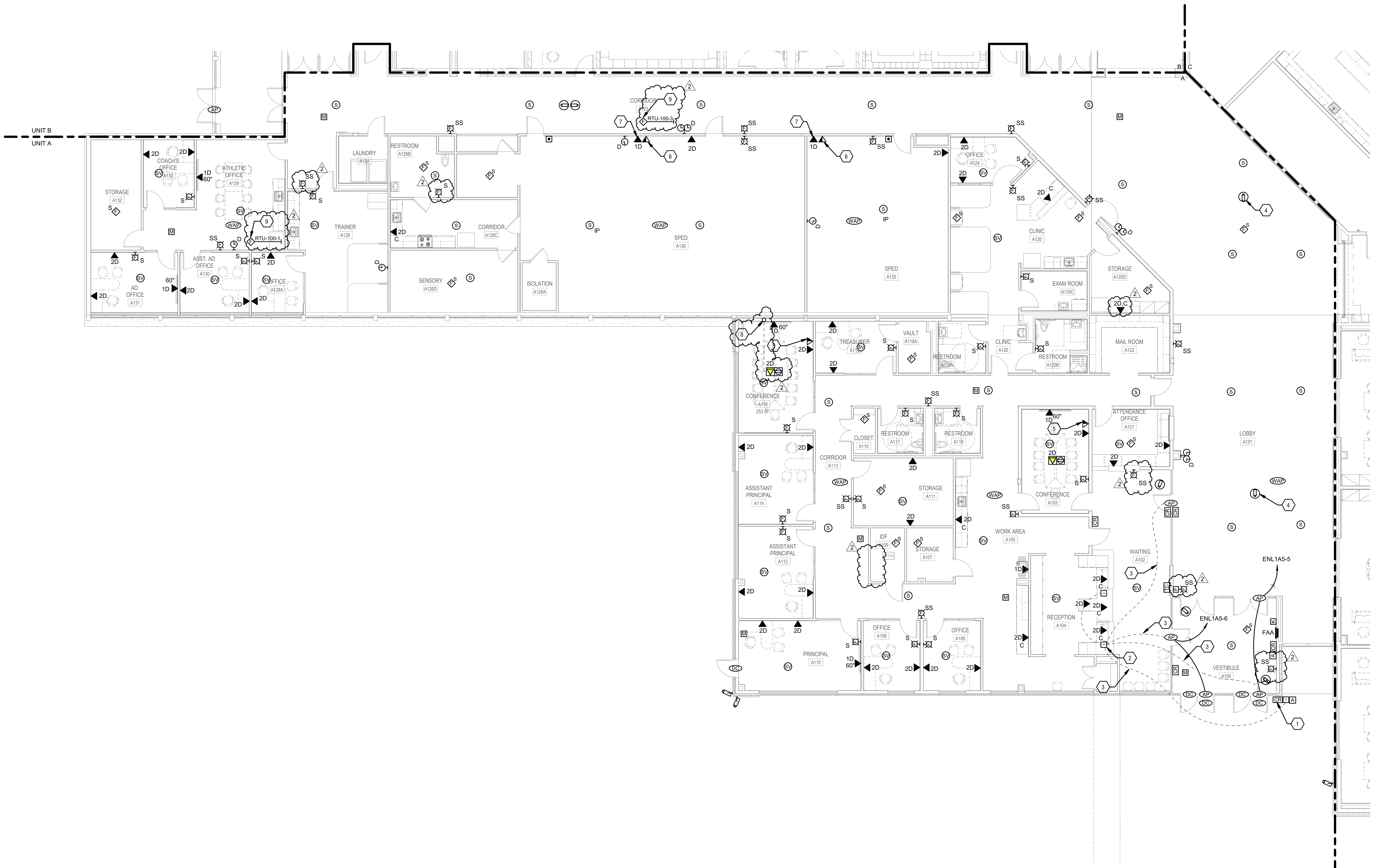
GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE CONNECTION TO OWNER PROVIDED, CONTRACTOR INSTALLED ALGO 8028V DOOR STATION WITH TWO-WAY COMMUNICATION. CONNECT TO MASTER STATION AT RECEPTION DESK PER MANUFACTURER'S INSTRUCTION.
2. PROVIDE ALGO MASTER STATION WITH TWO-WAY COMMUNICATION AND DOOR RELEASE BUTTON. CONNECT TO DOOR POWER SUPPLY AS REQUIRED TO PROVIDE REMOTE RELEASE OF EXTERIOR DOOR.
3. PROVIDE CONNECTION BETWEEN REMOTE DOOR RELEASE PUSH BUTTON AND DOOR POWER SUPPLY. PROVIDE CABLING PER MANUFACTURER'S INSTRUCTIONS.
4. PROVIDE CATAGORY 6A CABLE WITH MALE RJ45 CONNECTOR TO OWNER PROVIDED 360 DEGREE VIEW CEILING MOUNTED CAMERA.
5. PROVIDE 4K HDMI CABLE BETWEEN INPUT STATION AND DISPLAY. REFER TO SPECIFICATIONS.
6. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
7. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. EXCESS CABLE TO TO BE COILED AND SUPPORTED ABOVE CEILING.
8. PROVIDE 1-1/2" CONDUIT FROM FLOOR BOX TO ACCESSIBLE SPACE ABOVE CEILING.
9. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR-DUCT BEFORE ANY DUCT BRANCHES.

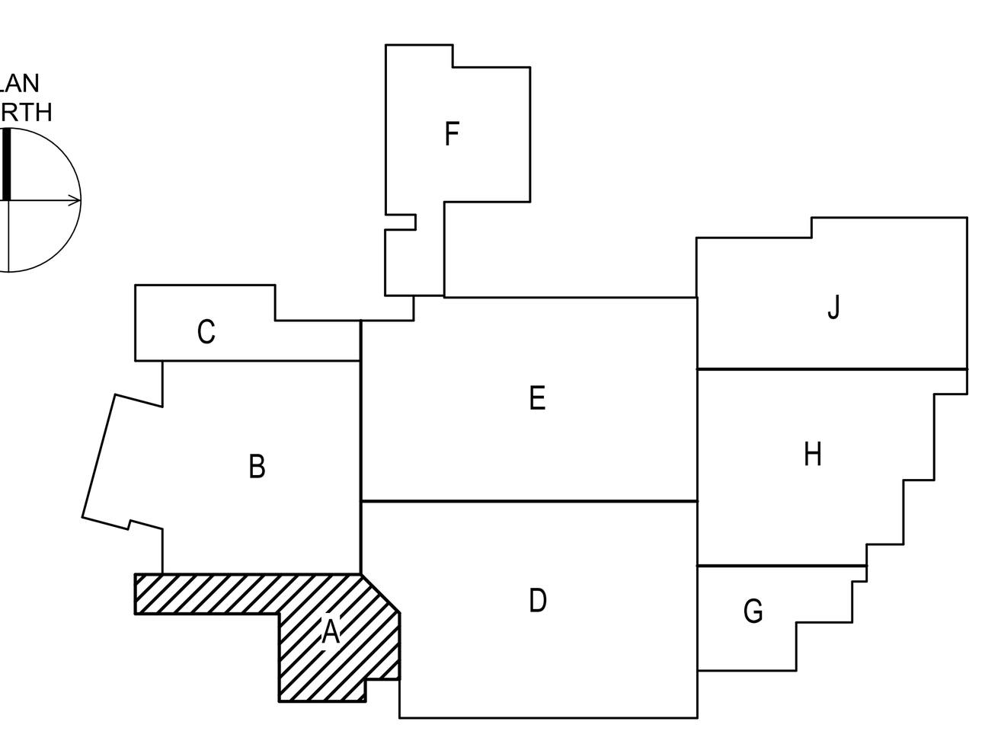
2



1 FIRST FLOOR - UNIT A - SYSTEMS

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

PLAN NORTH



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT A - SYSTEMS

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

07/07/22

DRAWING NUMBER

E301

PROJECT NUMBER

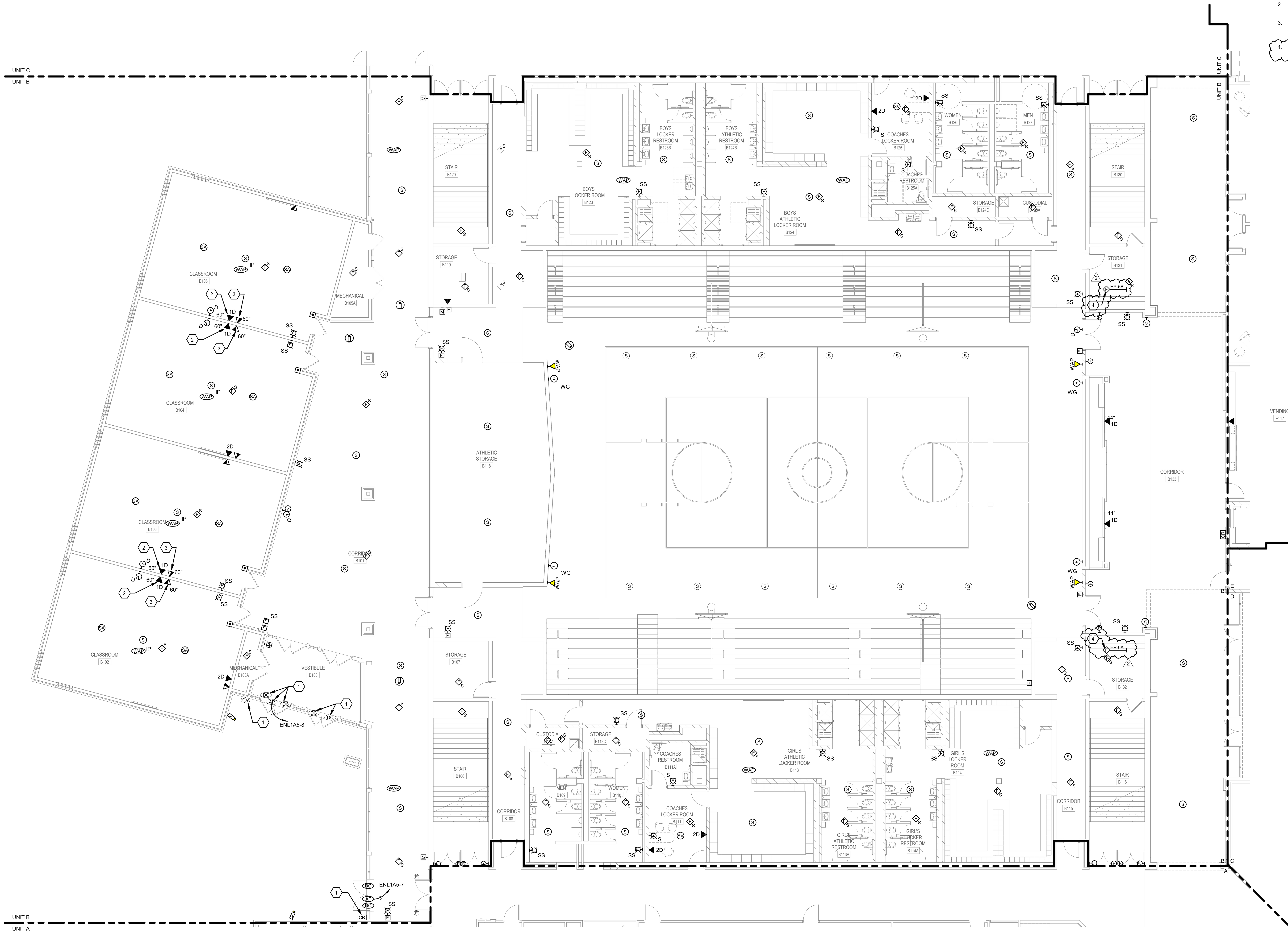
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

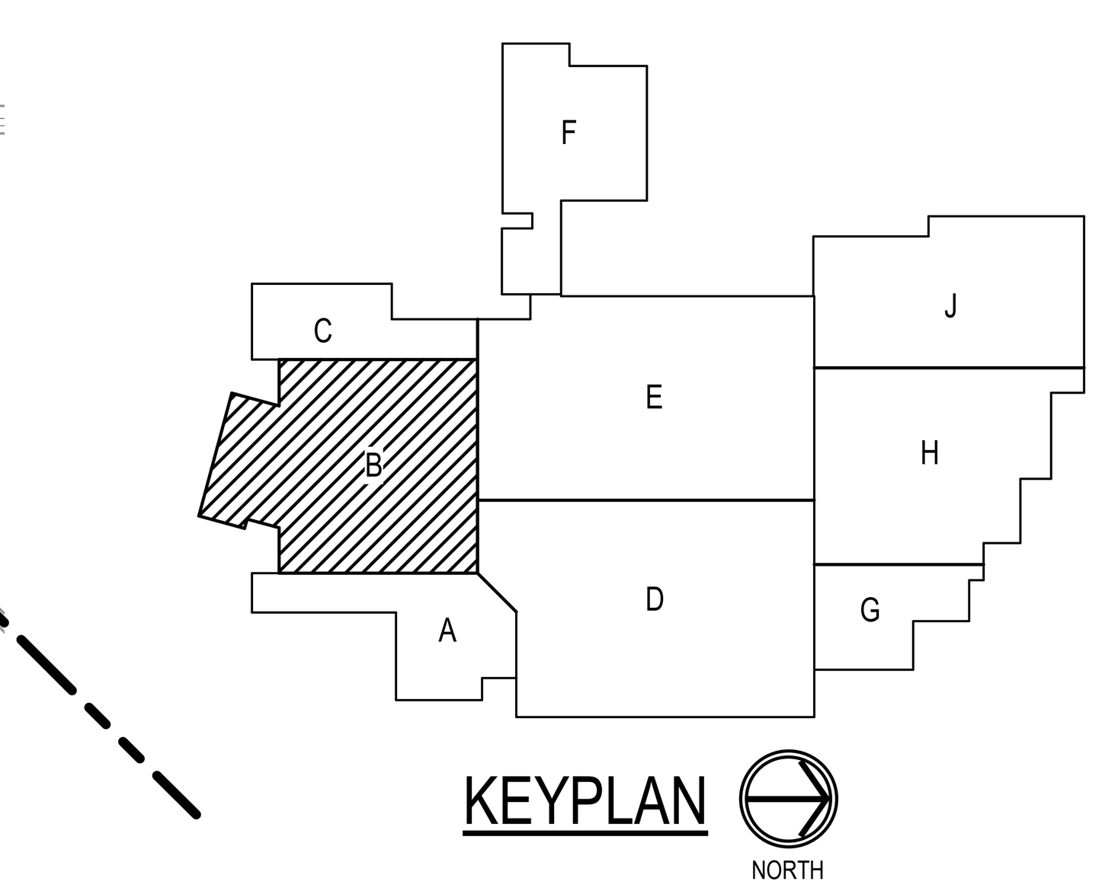
SHEET KEYNOTES

1. NEW CABLING TO BE PROVIDED BETWEEN EXISTING ACCESS CONTROL SYSTEM AND NEW ACCESS CONTROL HEADEND EQUIPMENT. REFER TO SHEET E401.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. EXCESS CABLE TO TO BE COILED AND SUPPORTED ABOVE CEILING.
4. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCHES. (2)



1 FIRST FLOOR - UNIT B - SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH



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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

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ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT B - SYSTEMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E302

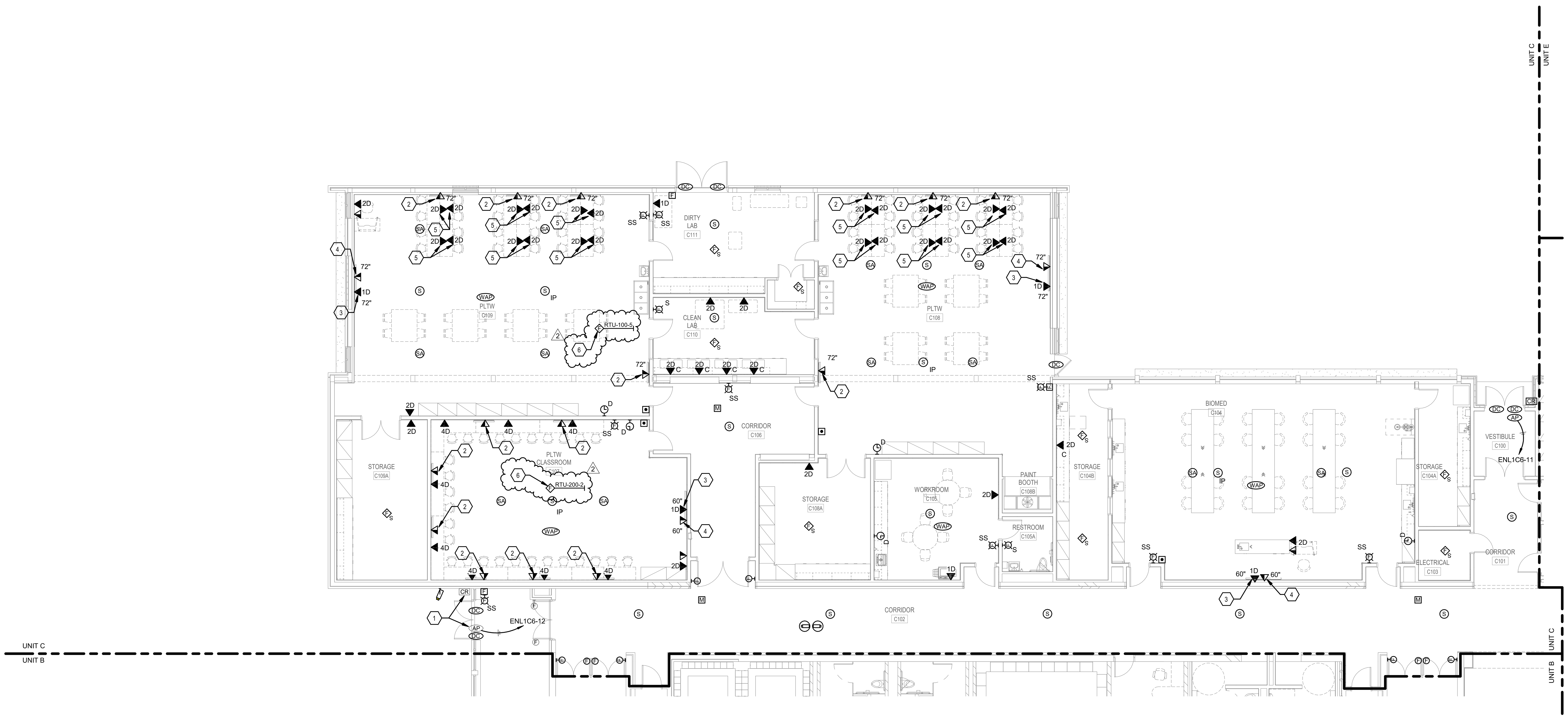
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

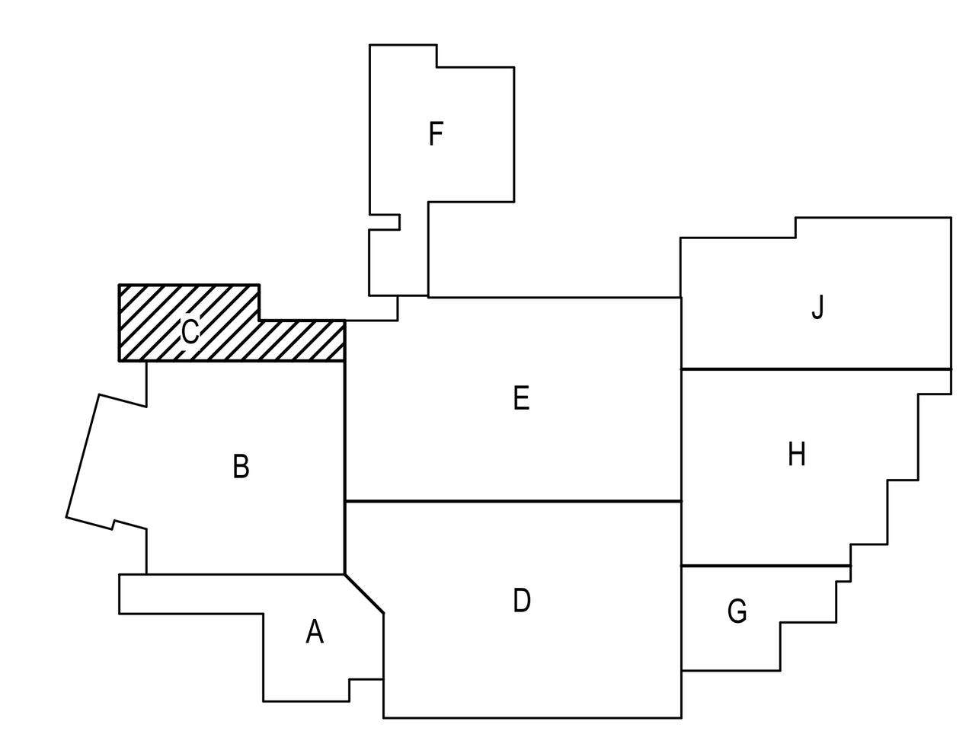
SHEET KEYNOTES

1. PROVIDE NEW PLENUM RATED CABLING BETWEEN EXISTING ACCESS CONTROL SYSTEM AND NEW ACCESS CONTROL HEADEND EQUIPMENT. REFER TO SHEET E401.
2. PROVIDE HDMI JACK MOUNTED BEHIND DISPLAY BETWEEN DISPLAY AND TEACHER STATION. ALL DISPLAYS ARE TO BE SYNCHRONIZED TO TEACHER DISPLAY. COORDINATE EXACT HEIGHT WITH CASEWORK DETAILS.
3. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E5XX.
4. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
5. ROUTE CAT6A CABLING FROM WALL THROUGH TABLE CABLE MANAGEMENT. COORDINATE EXACT LOCATIONS WITH APPROVED TABLE SHOP DRAWINGS.
6. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCHES. (2)



1 FIRST FLOOR - UNIT C - SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT C - SYSTEMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E303

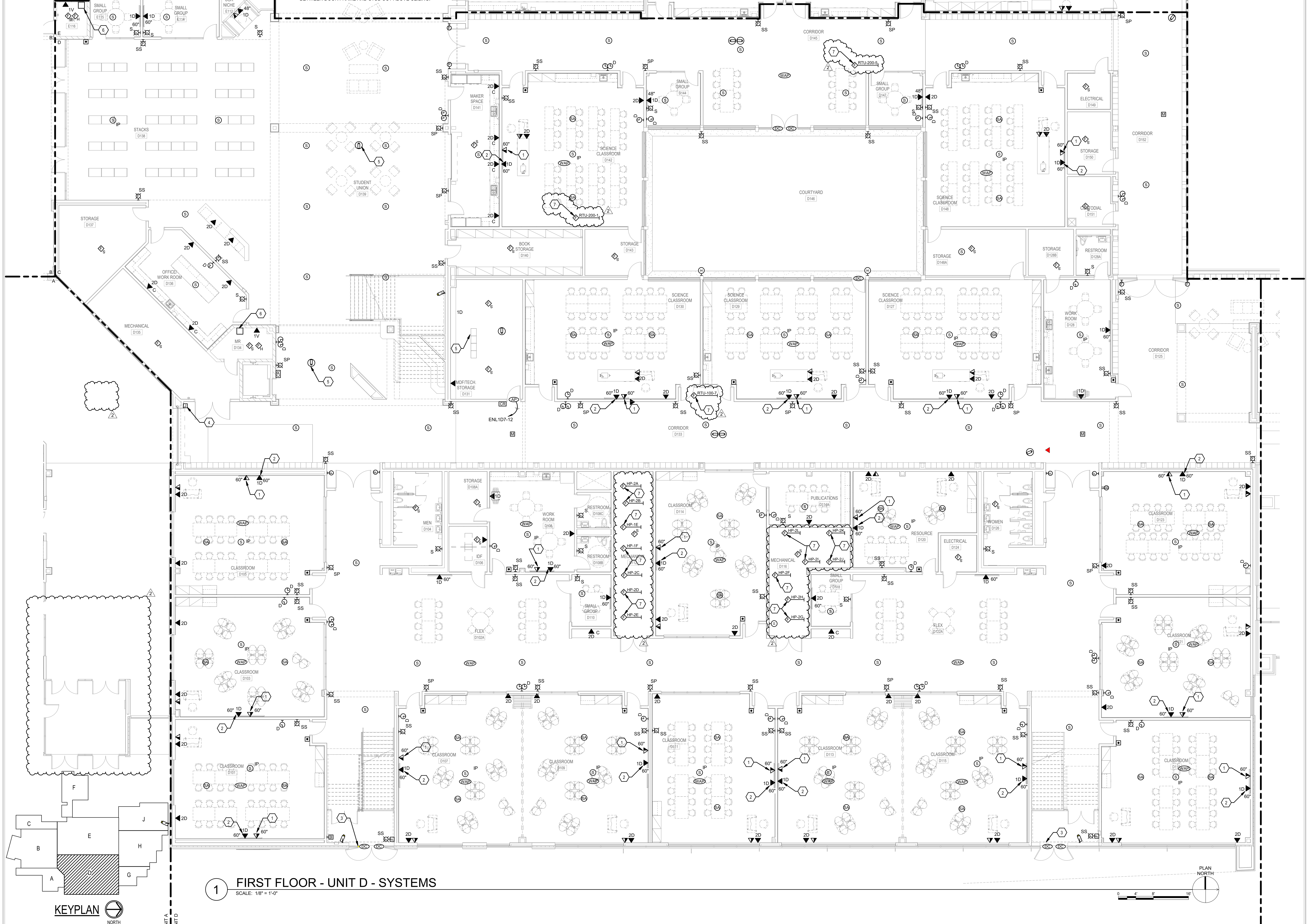
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. PROVIDE CONDUIT PATHWAY FOR LOW-VOLTAGE CABLING BETWEEN DOOR FRAME AND STUB OUT ABOVE CEILING.
4. PROVIDE JUCTION BOX ROUGH-IN AND PATHWAY FOR PUSH BUTTON CONNECTED TO ROLL UP DOOR MOTOR.
5. PROVIDE CATAGORY 6A CABLE WITH MALE RJ45 CONNECTOR TO OWNER PROVIDED 360 DEGREE VIEW CEILING MOUNTED CAMERA.
6. PROVIDE CONTROL RELAY MODULES AND MONITORING MODULES FOR ELEVATOR RECALL.
7. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCHES. (2)



1 FIRST FLOOR - UNIT D - SYSTEMS

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

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT D - SYSTEMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E304

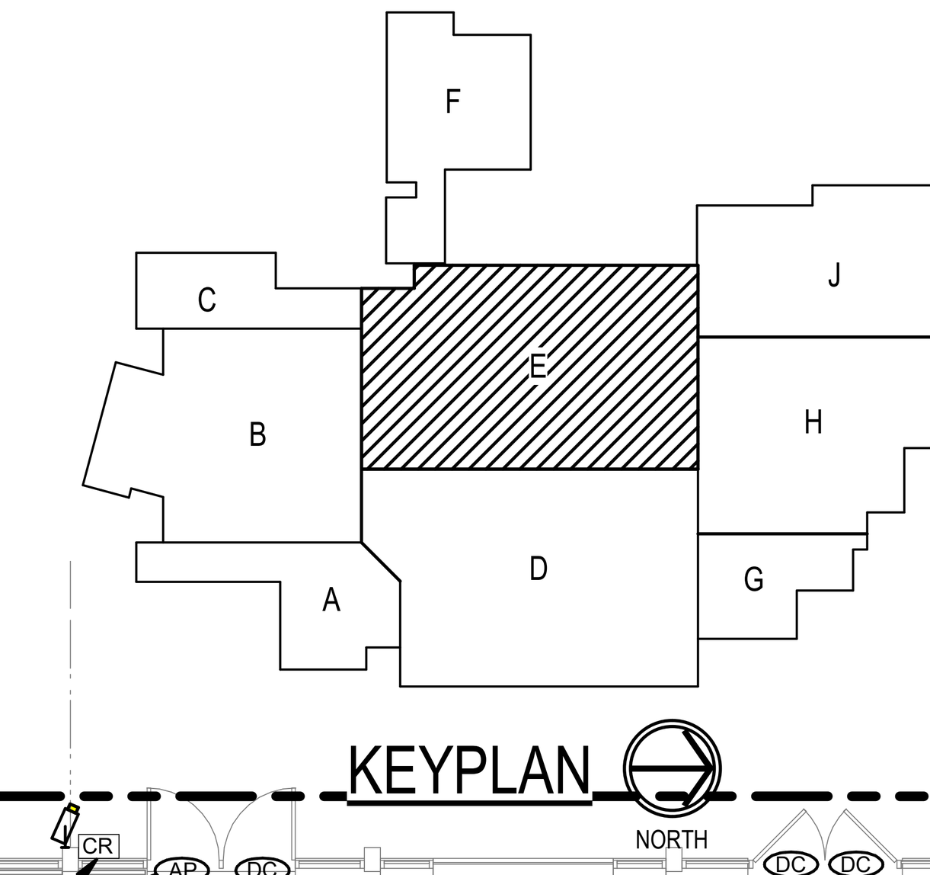
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. PROVIDE NEW CABLING BETWEEN EXISTING ACCESS CONTROL SYSTEM AND NEW ACCESS CONTROL HEADEND EQUIPMENT. REFER TO SHEET E401.
4. PROVIDE CATAGORY 6A CABLE WITH MALE RJ45 CONNECTOR TO OWNER PROVIDED 360 DEGREE VIEW CEILING MOUNTED CAMERA.
5. PROVIDE 4K HDMI CABLE BETWEEN INPUT STATION AND DISPLAY. REFER TO SPECIFICATIONS.
6. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCH.



1 FIRST FLOOR - UNIT E - SYSTEMS

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

PLAN NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT E - SYSTEMS

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER

E305

PROJECT NUMBER

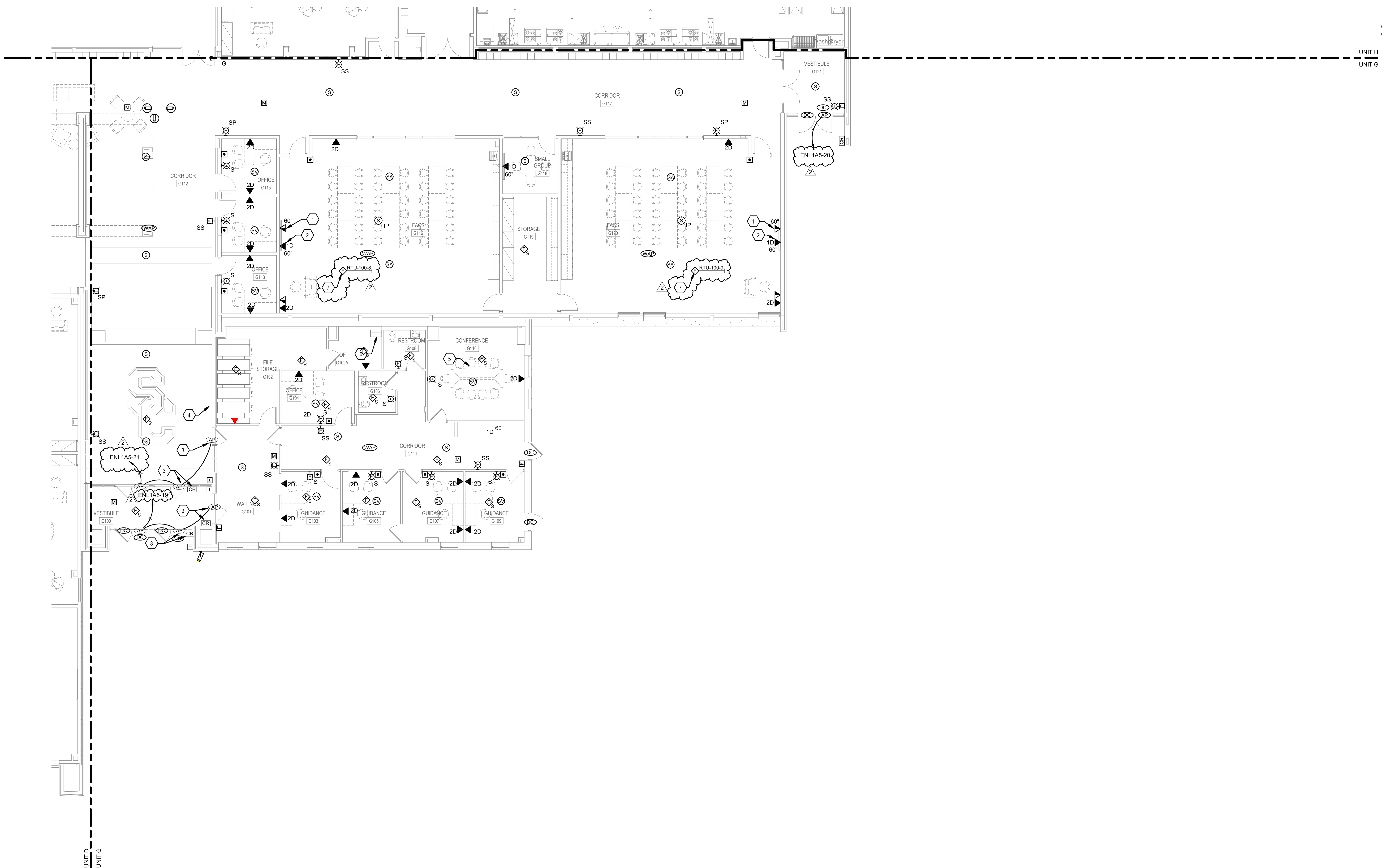
2021026

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

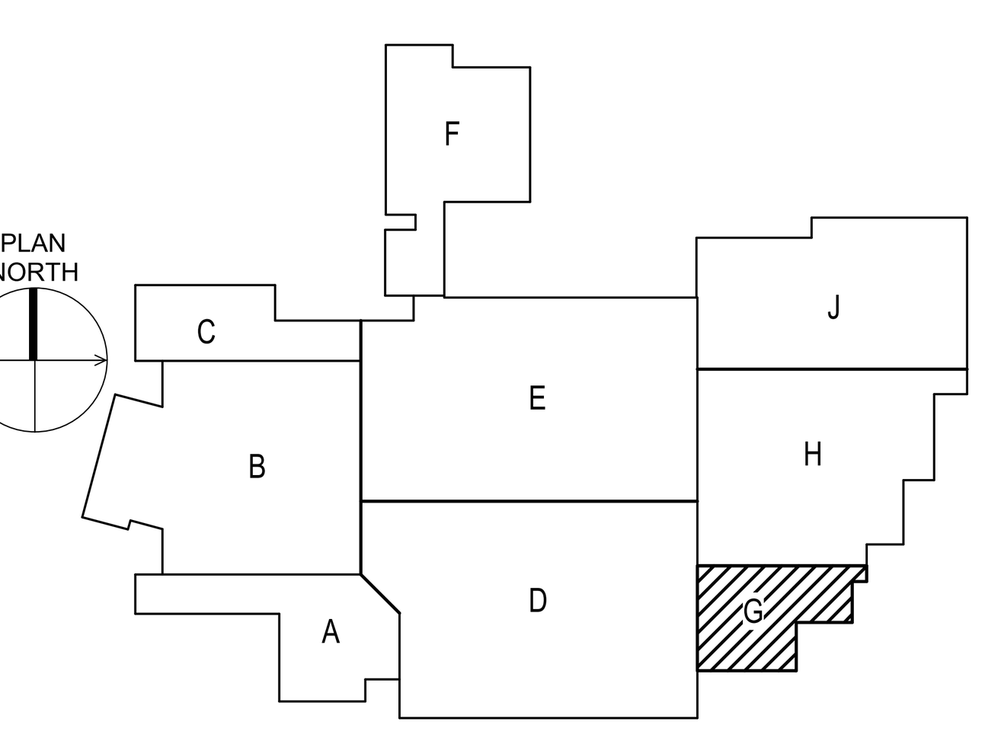
SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. NEW CABLING TO BE PROVIDED BETWEEN EXISTING ACCESS CONTROL SYSTEM AND NEW ACCESS CONTROL HEADEND EQUIPMENT. REFER TO SHEET E401.
4. UTILIZE RECOVERED TIME CLOCK AND PROVIDE NEW CABLING TO HEADEND EQUIPMENT.
5. PROVIDE 4 CATAGORY 6A CABLING TO EXISTING COMBO FLOORBOX.
6. PROVIDE NEW MULTIMODE FIBER BETWEEN NEW MDF AND IDF. REFER TO LOW-VOLTAGE CABLING ONE-LINE DIAGRAM DETAIL ON SHEET E504 FOR ADDITIONAL INFORMATION.
7. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCHES.



1 FIRST FLOOR - UNIT G - SYSTEMS

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



KEYPLAN

SILVER CREEK SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

SHROUT TATE WILSON MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT G - SYSTEMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
E307

PROJECT NUMBER
2021026

1 FIRST FLOOR - UNIT H - SYSTEMS

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

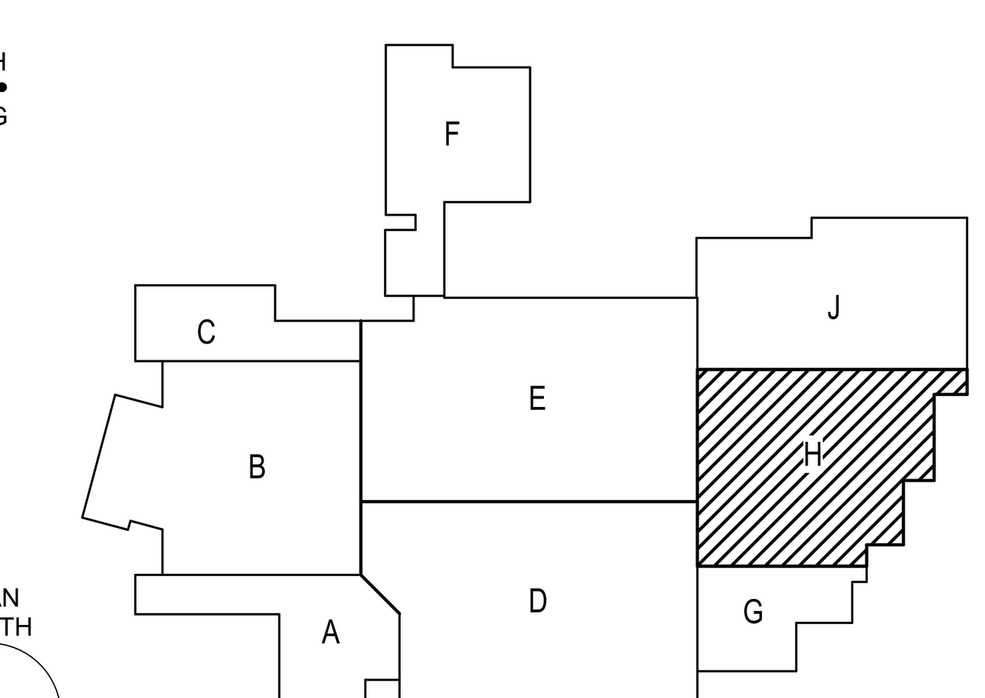
GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. PROVIDE CATAGORY 6A CABLE WITH MALE RJ45 CONNECTOR TO OWNER PROVIDED 360 DEGREE VIEW CEILING MOUNTED CAMERA.
4. PROVIDE RECESSED CEILING MOUNTED DOCUMENT CAMERA, MOUNTED DIRECTLY ABOVE TEACHING COUNTER. CORDINATE EXACT LOCATION WITH CASEWORK CONTRACTOR. REFER TO CULINARY CLASSROOM AUDIO/VISUAL SYSTEM DETAIL AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. PROVIDE A/V RACK WITH RACK MOUNTED 24-PORT RJ45 PATCH PANEL REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. PROVIDE RACK MOUNTED BNC STANDOFF PANEL WITH 16 RECEPTACLES, CANARE 161U-BJRK OR EQUIVALENT. PROVIDE TWO(2) 24-PORT XLR FEMALE AND 8-PORT XLR MALE PATCH PANEL, PP-XLR-24F8M OR EQUIVALENT.
6. PROVIDE 6"X6" RECESSED A/V BOX WITH 4 SINGLE GANG FACEPLATES. CONNECT A/V BOX TO A/V CONTROL RACK IN TV PRODUCTION ROOM H115. REFER TO SHEET E308. A/V BOX REQUIREMENTS AS FOLLOWS: PROVIDE SINGLE GANG FACEPLATE WITH 1 MALE XLR 3-PIN AND 1 FEMALE XLR 3-PIN. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE RJ45 CONNECTORS. PROVIDE TWO(2) CATAGORY 6A CABLE IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH FEMALE BNC CONNECTOR. PROVIDE HD-SDI CABLE, WEST PENN 819 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE XLR 3-PIN CONNECTORS. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3.4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. TERMINATE ALL CABLING IN A/V CONTROL RACK WITH APPROPRIATE CONNECTORS ASSOCIATED WITH RACK.
7. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCHES.
8. PROVIDE DUCT-TYPE SMOKE DETECTOR IN SUPPLY AIR DUCT BEFORE ANY DUCT BRANCHES.

2



KEYPLAN

NORTH

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SCHOOL CORPORATION

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Lexington - Louisville - Charleston
www.stweng.com

PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:

FIRST FLOOR - UNIT H - SYSTEMS

CERTIFIED BY:

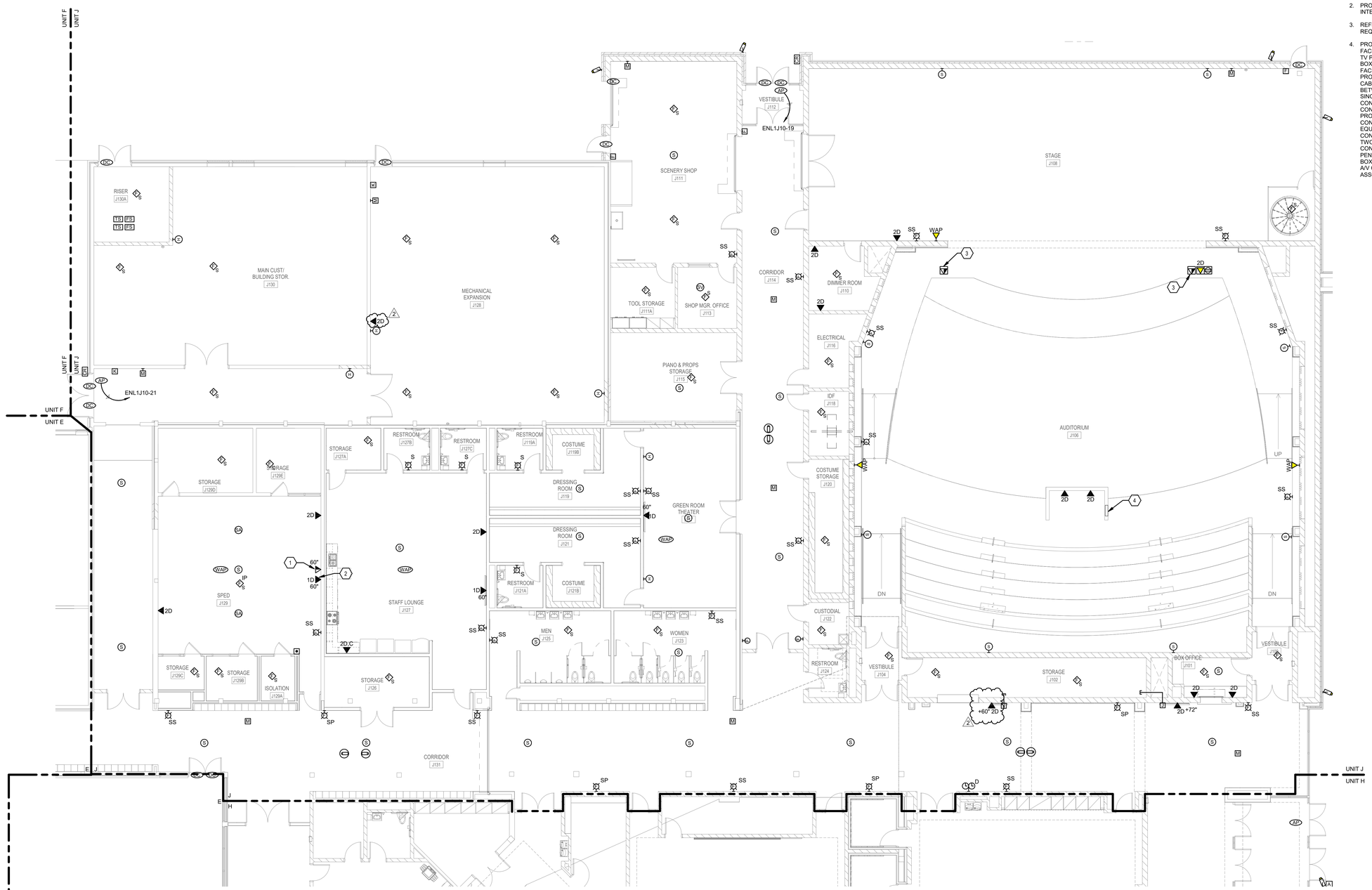
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

E308

PROJECT NUMBER

2021026



GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

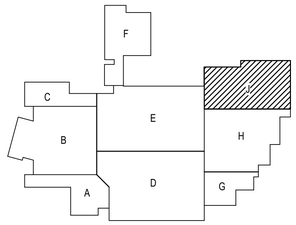
SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E504.
3. REFER TO THEATRICAL DRAWINGS FOR FLOOR POCKET REQUIREMENTS.
4. PROVIDE 6"X6" RECESSED A/V BOX WITH 4 SINGLE GANG FACEPLATES. CONNECT A/V BOX TO A/V CONTROL RACK IN TV PRODUCTION ROOM H115. REFER TO SHEET E308. A/V BOX REQUIREMENTS AS FOLLOWS: PROVIDE SINGLE GANG FACEPLATE WITH 1 MALE XLR 3-PIN AND 1 FEMALE XLR 3-PIN. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE RJ45 CONNECTORS. PROVIDE TWO(2) CATAGORY 6A CABLE IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH FEMALE BNC CONNECTOR. PROVIDE HD-SDI CABLE, WEST PENN 819 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE XLR 3-PIN CONNECTORS. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. TERMINATE ALL CABLING IN A/V CONTROL RACK WITH APPROPRIATE CONNECTORS ASSOCIATED WITH RACK.

1 FIRST FLOOR - UNIT J - SYSTEMS
SCALE: 1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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317.848.7600 | csoinc.net

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Lexington - Louisville - Charleston
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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

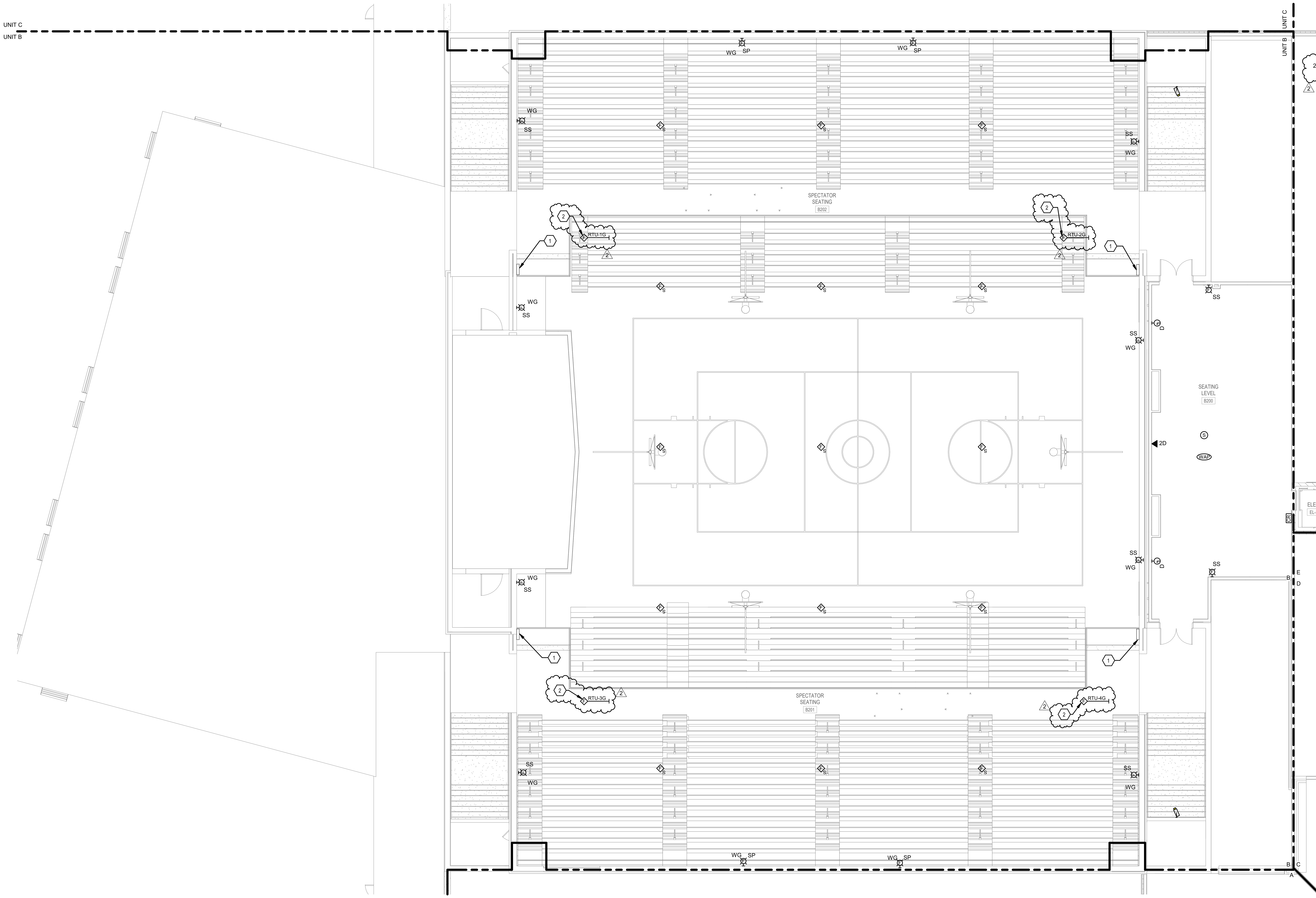
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
FIRST FLOOR - UNIT J - SYSTEMS

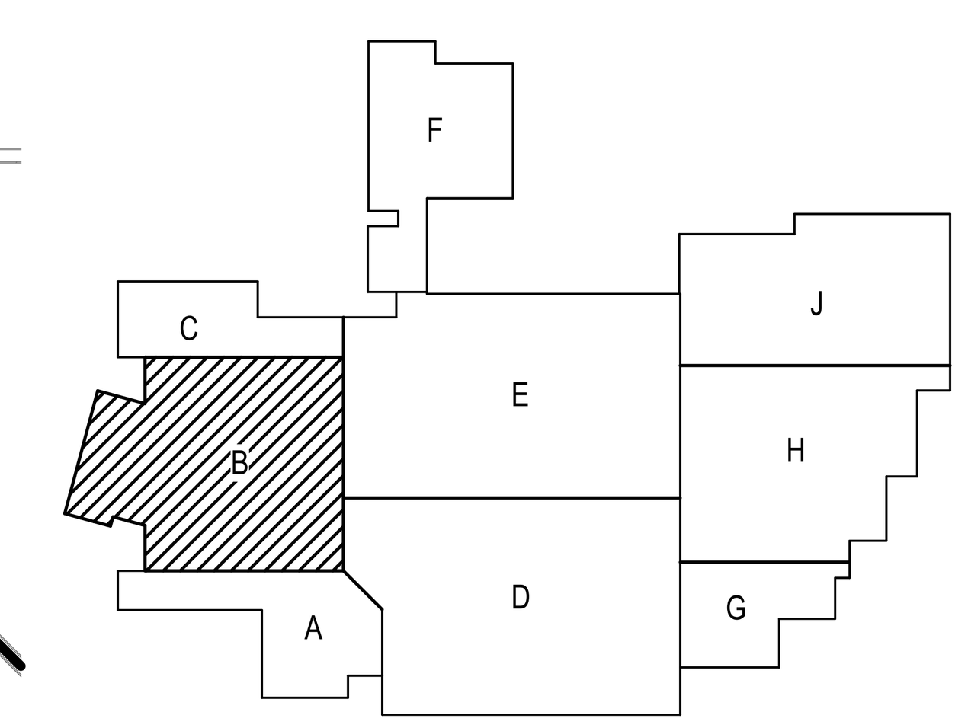
CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E309

PROJECT NUMBER
2021026



1 SECOND FLOOR - UNIT B - SYSTEMS
SCALE: 1/8" = 1'-0"



KEYPLAN

NORTH

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE 6"X6" SURFACE MOUNTED A/V BOX WITH 4 SINGLE GANG FACEPLATES. CONNECT A/V BOX TO A/V CONTROL RACK IN TV PRODUCTION ROOM H115. REFER TO SHEET E308. A/V BOX REQUIREMENTS AS FOLLOWS: PROVIDE SINGLE GANG FACEPLATE WITH 1 MALE XLR 3-PIN AND 1 FEMALE XLR 3-PIN. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE RJ45 CONNECTORS. PROVIDE TWO(2) CATAGORY 6A CABLE IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH FEMALE BNC CONNECTOR. PROVIDE HD-SDI CABLE, WEST PENN 819 OR EQUIVALENT, IN 3/4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. PROVIDE SINGLE GANG FACEPLATE WITH TWO(2) FEMALE XLR 3-PIN CONNECTORS. PROVIDE TWO(2) 2-CONDUCTOR STRANDED SHIELDED AUDIO CABLE, WEST PENN 292 OR EQUIVALENT, IN 3.4" CONDUIT BETWEEN A/V BOX AND A/V CONTROL RACK. TERMINATE ALL CABLING IN A/V CONTROL RACK WITH APPROPRIATE CONNECTORS ASSOCIATED WITH RACK.
2. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY BRANCHES.

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
SECOND FLOOR - UNIT B - SYSTEMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E310

PROJECT NUMBER
2021026

GENERAL NOTES

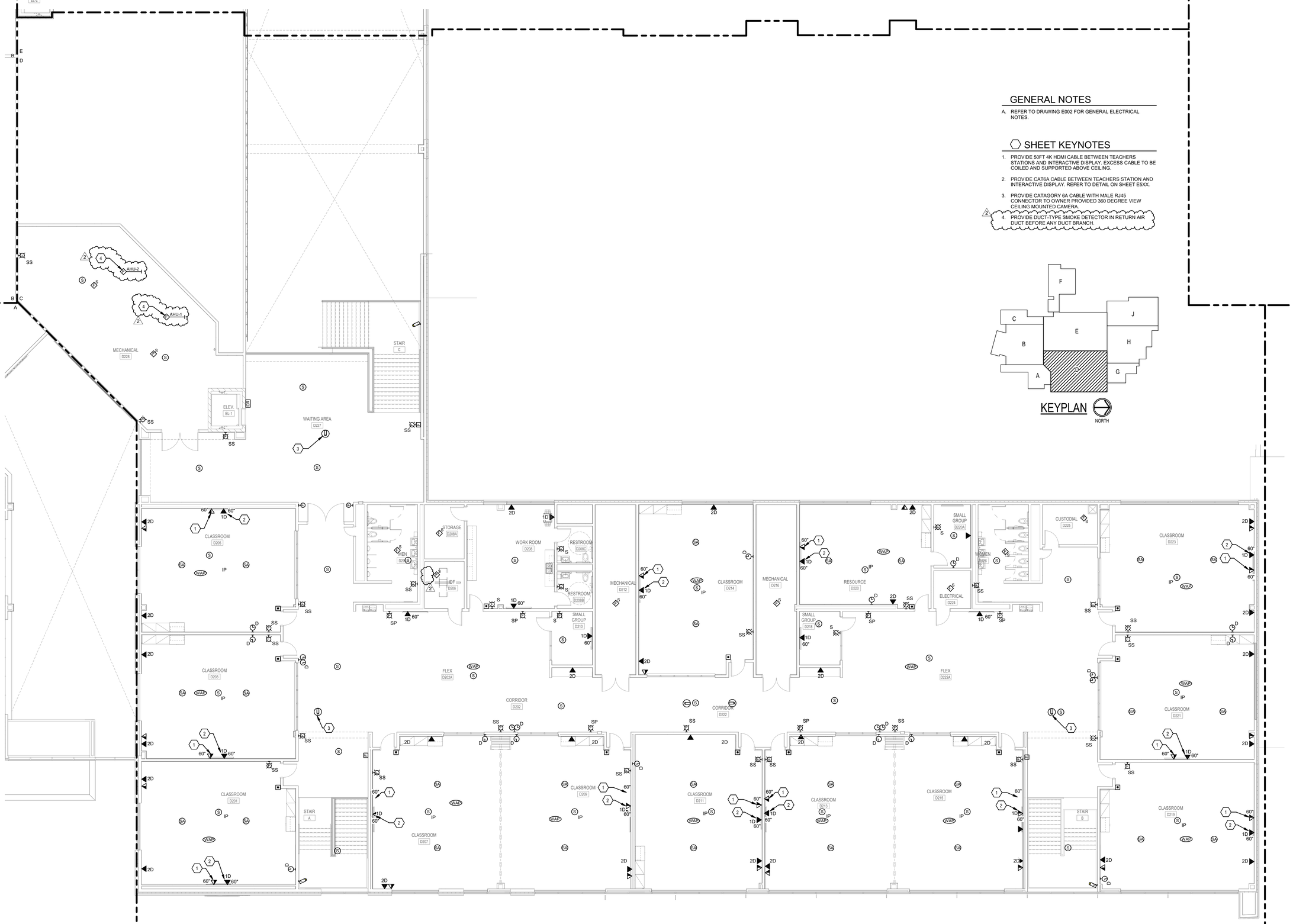
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE 50FT 4K HDMI CABLE BETWEEN TEACHERS STATIONS AND INTERACTIVE DISPLAY. EXCESS CABLE TO BE COILED AND SUPPORTED ABOVE CEILING.
2. PROVIDE CAT6A CABLE BETWEEN TEACHERS STATION AND INTERACTIVE DISPLAY. REFER TO DETAIL ON SHEET E5XX.
3. PROVIDE CATAGORY 6A CABLE WITH MALE RJ45 CONNECTOR TO OWNER PROVIDED 360 DEGREE VIEW CEILING MOUNTED CAMERA.
4. PROVIDE DUCT-TYPE SMOKE DETECTOR IN RETURN AIR DUCT BEFORE ANY DUCT BRANCH.

KEYPLAN

NORTH



1 SECOND FLOOR - UNIT D - SYSTEMS

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

PLAN NORTH

0 4' 8' 16'

SILVER CREEK SCHOOL CORPORATION

CSO

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:

SECOND FLOOR - UNIT D - SYSTEMS

CERTIFIED BY:

ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

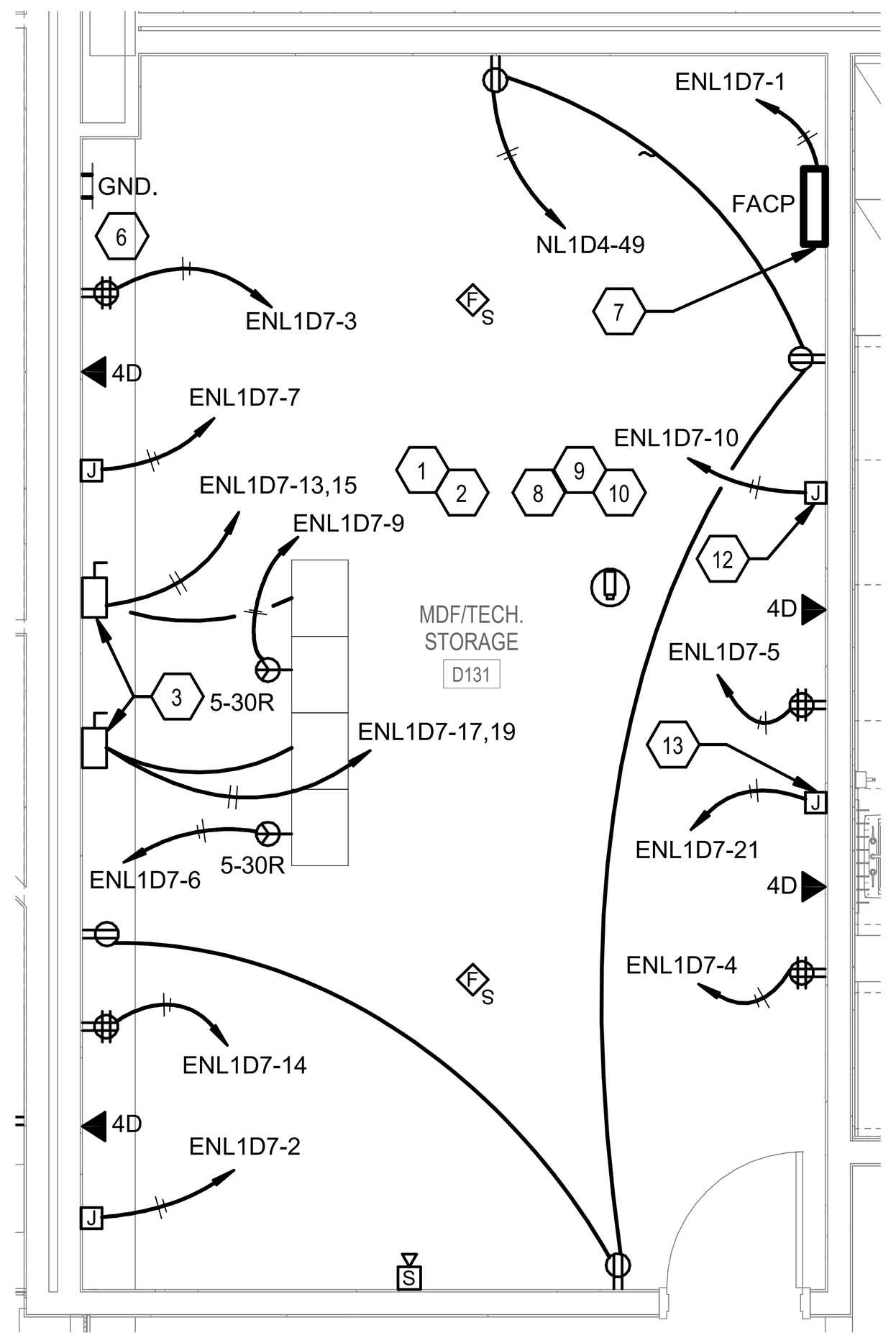
07/07/2022

DRAWING NUMBER

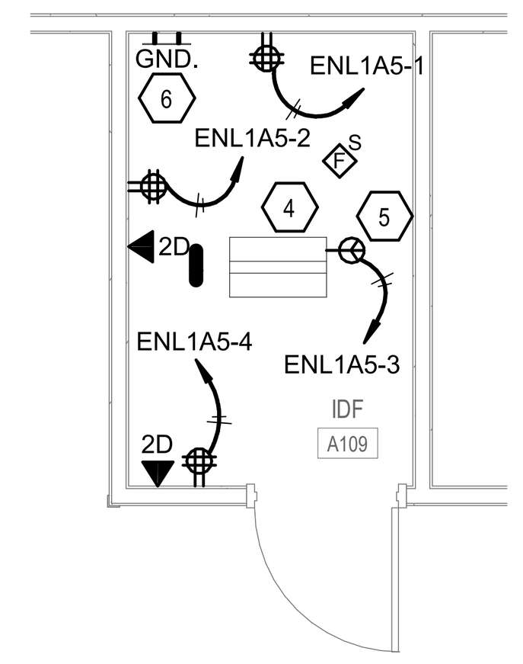
E311

PROJECT NUMBER

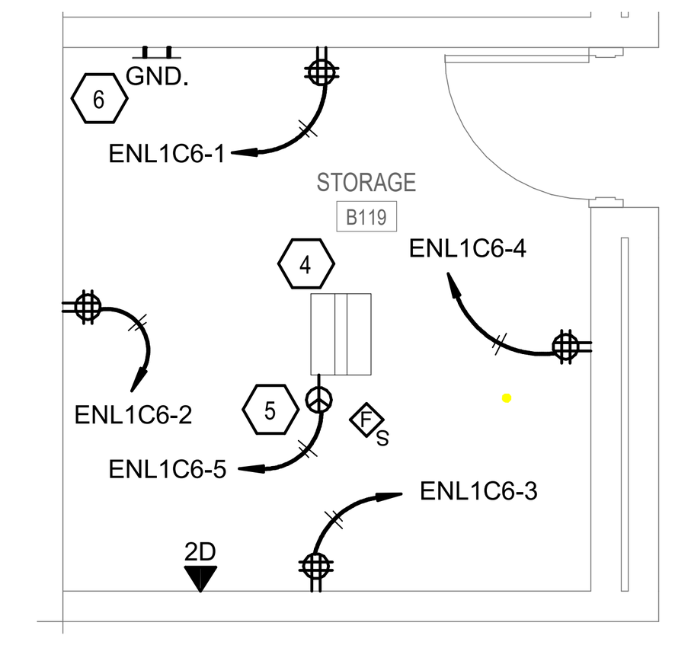
2021026



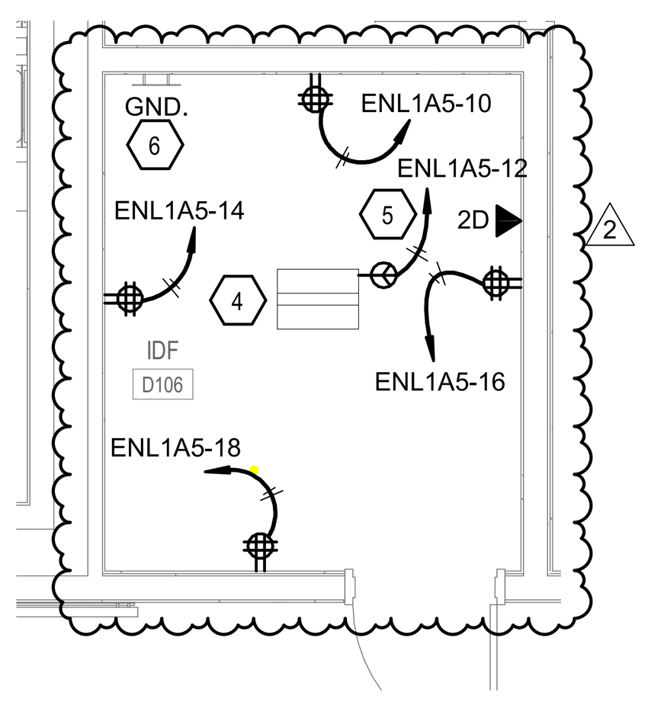
1 ENLARGED VIEW - MDF (MDF RM. D132)
SCALE: 1/4" = 1'-0"
PLAN NORTH



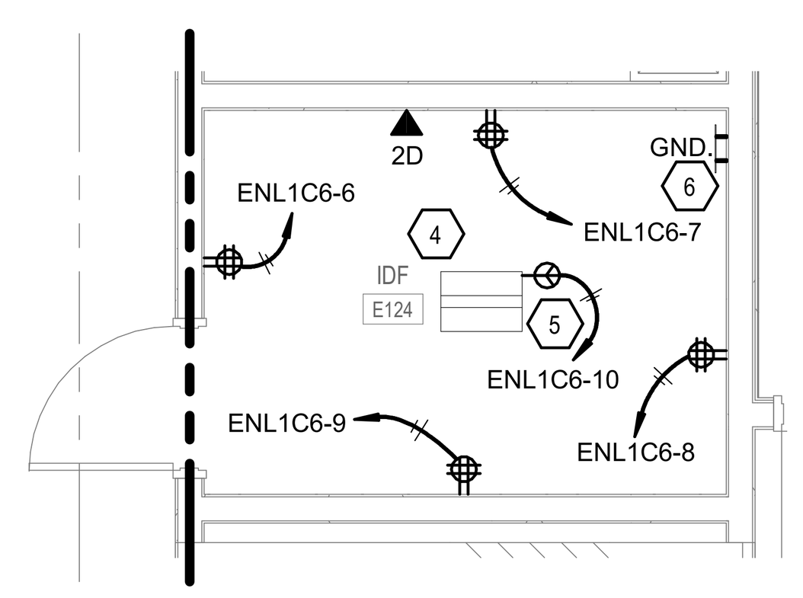
2 ENLARGED VIEW - IDF-1A (IDF RM. A109)
SCALE: 1/4" = 1'-0"
PLAN NORTH



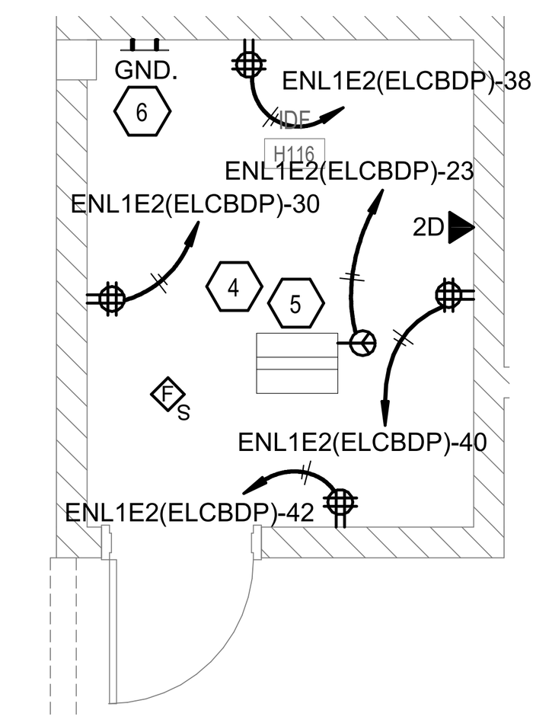
3 ENLARGED VIEW - IDF-1B (STORAGE RM. B119)
SCALE: 1/4" = 1'-0"
PLAN NORTH



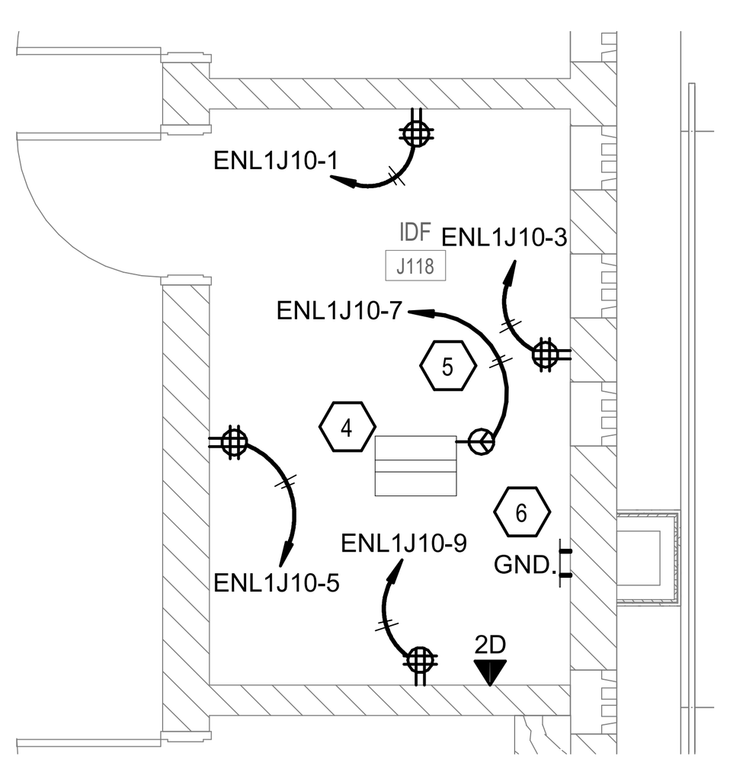
4 ENLARGED VIEW - IDF-1D (IDF RM. D106)
SCALE: 1/4" = 1'-0"
PLAN NORTH



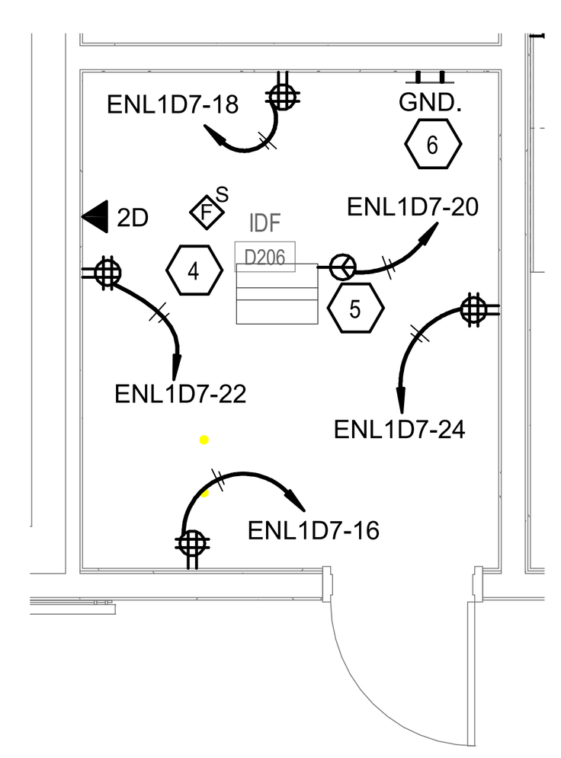
5 ENLARGED VIEW - IDF-1E (IDF RM. E124)
SCALE: 1/4" = 1'-0"
PLAN NORTH



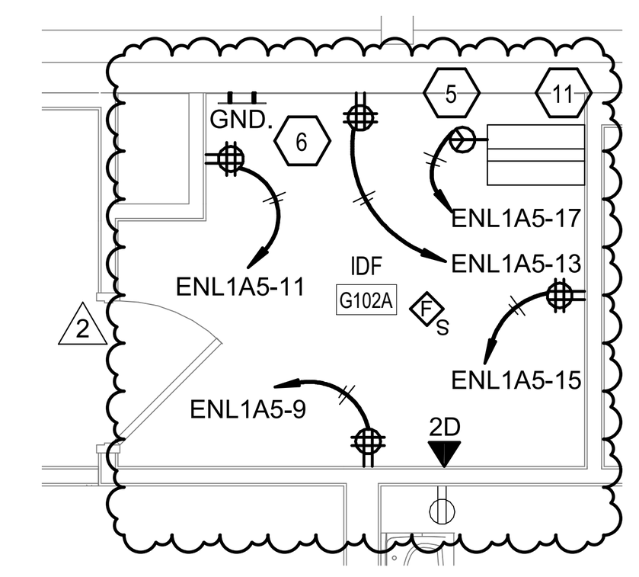
6 ENLARGED VIEW - IDF-1H (IDF RM. H126)
SCALE: 1/4" = 1'-0"
PLAN NORTH



7 ENLARGED VIEW - IDF-1J (IDF RM. J118)
SCALE: 1/4" = 1'-0"
PLAN NORTH



8 ENLARGED VIEW - IDF-2D (IDF RM. D206)
SCALE: 1/4" = 1'-0"
PLAN NORTH



9 ENLARGED VIEW - EXIST. IDF - (IDF G102A)
SCALE: 1/4" = 1'-0"
PLAN NORTH

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE NEW ONE (1) 4-POST DATA RACK, DEDICATED FOR FUTURE OWNER FURNISHED CAMPUS NETWORK HEAD-END EQUIPMENT.
2. PROVIDE NEW THREE (3) 2-POST DATA RACK.
3. PROVIDE NEW, TWO (2) 208V, 60A, 1-PHASE, FUSIBLE DISCONNECT SWITCHES FUSED AT 60 AMPS FOR OWNER FURISHED 10KW UPS UNITS. PROVIDE EACH UPS WITH A DEDICATED 208V/3PH NON-ESSENTIAL EMERGENCY CIRCUIT WITH (4) #8, (1) #10 GND., IN 3/4"C.
4. PROVIDE NEW 2-POST DATA RACK RACK.
5. PROVIDE NEW, ONE (1) NEMA L5-30R RECEPTACLE WITH A DEDICATED 120V/1PH NON-ESSENTIAL EMERGENCY CIRCUIT WITH (2) #10, (1) #10 GND., 3/4"C. COORDINATE FINAL NEMA CONFIGURATION, LOCATION AND EXACT REQUIREMENTS WITH OWNER FURNISHED EQUIPMENT.
6. PROVIDE NEW TELECOM GROUNDING / BONDING BUSBAR. REFER TO GROUNDING DETAILS ON SHEET E503 FOR ADDITIONAL INFORMATION.
7. PROVIDE NEW FIRE ALARM CONTROL PANEL. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
8. PROVIDE NEW ACCESS CONTROLS HEADEND. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. PROVIDE NEW IP-BASED NTERCOM AND MASTER CLOCK HEADEND. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
10. PROVIDE NEW INTRUSTION DETECTION HEADEND. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
11. EXISTING IDF TO REMAIN. PROVIDE NEW FIBER CONNECTION TO THE MDF. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
12. JUNCTION BOX RESERVED FOR NEW ACCESS CONTROLS HEADEND EQUIPMENT.
13. JUNCTION BOX RESERVED FOR NEW INTRUSTION DETECTION HEADEND EQUIPMENT.

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REVISIONS:

2	ADDENDUM 2	08-04-2022

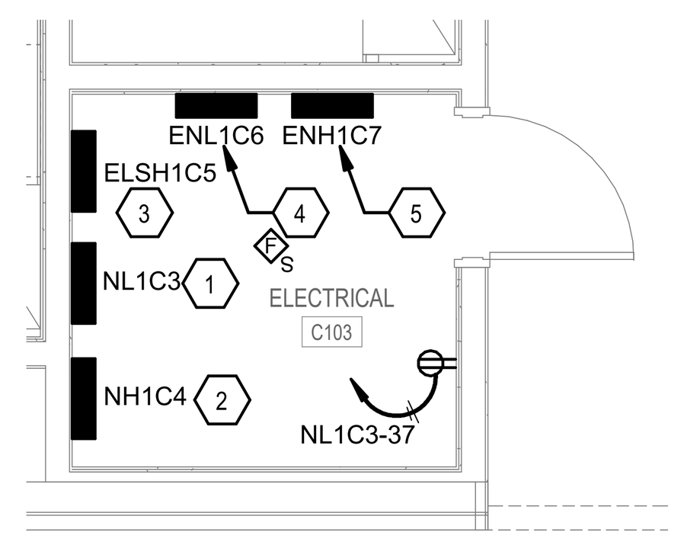
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	WAB	RDB

DRAWING TITLE:
ENLARGED POWER/SYSTEMS PLANS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

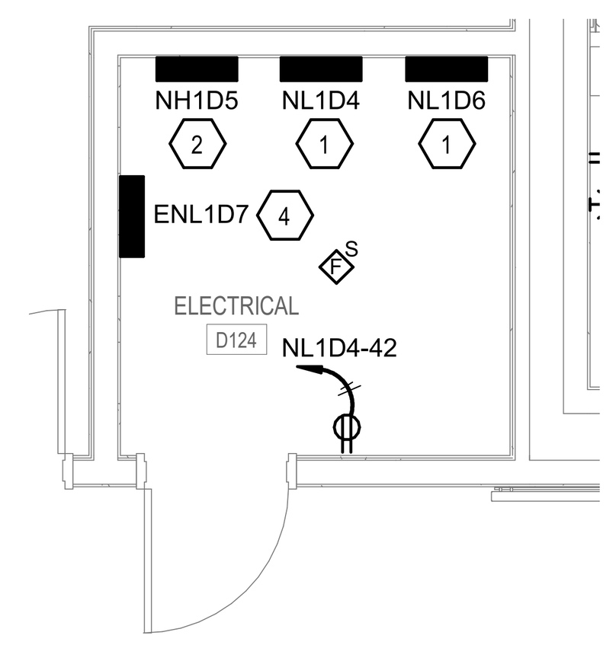
DRAWING NUMBER
E403

PROJECT NUMBER
2021026



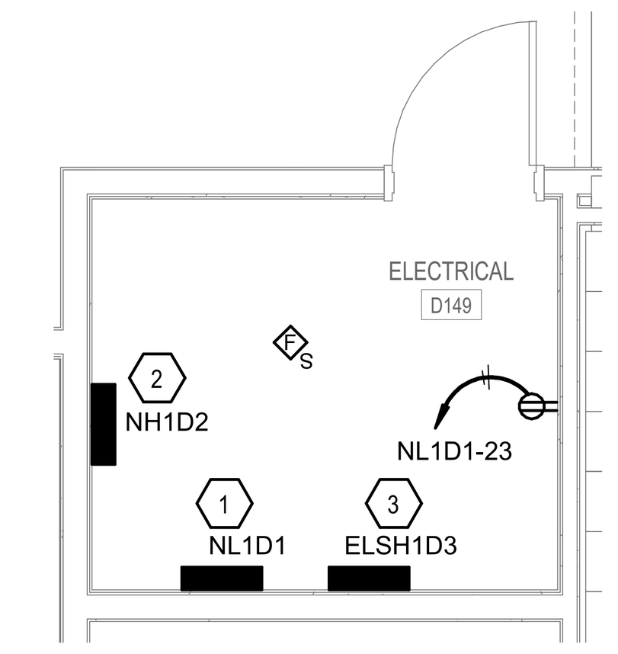
1 ENLARGED ELECTRICAL ROOM C103
SCALE: 1/4" = 1'-0"

PLAN NORTH



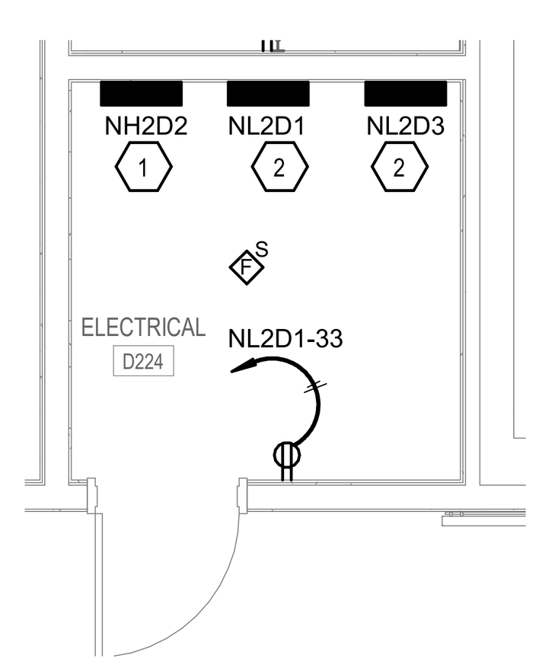
2 ENLARGED VIEW - ELECTRICAL ROOM D124
SCALE: 1/4" = 1'-0"

PLAN NORTH



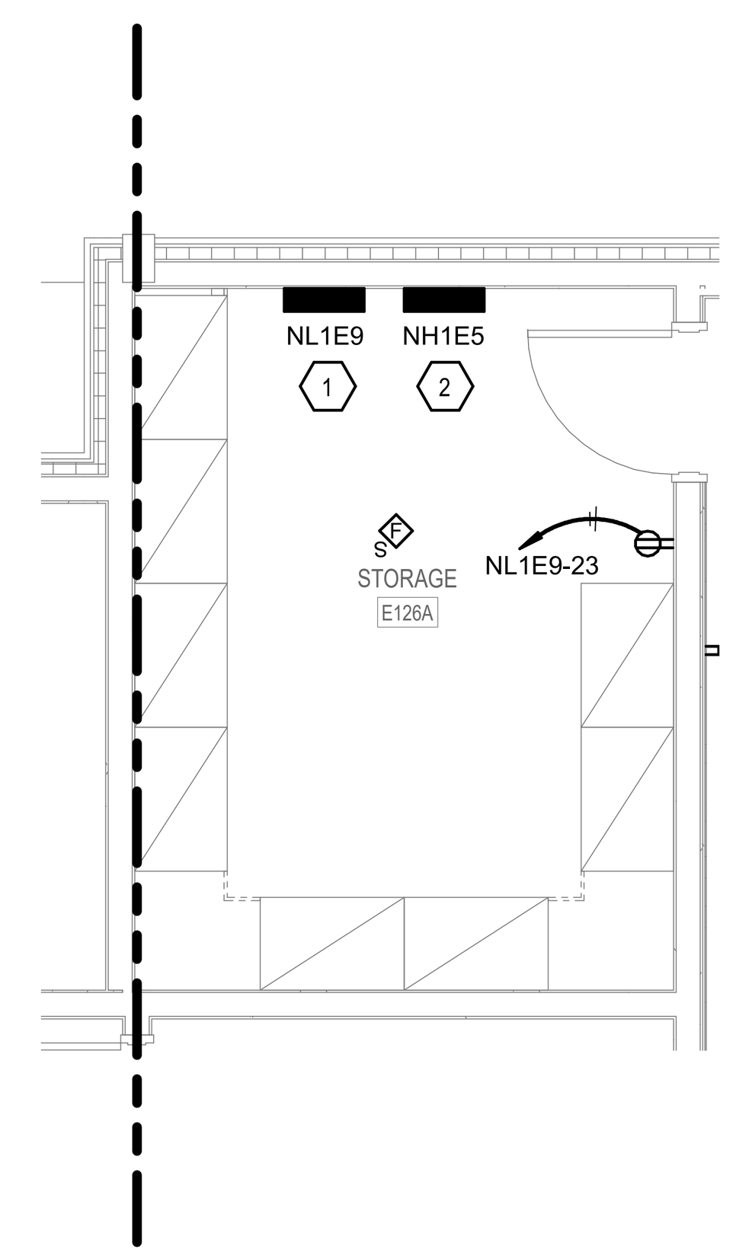
3 ENLARGED VIEW - ELECTRICAL ROOM D149
SCALE: 1/4" = 1'-0"

PLAN NORTH



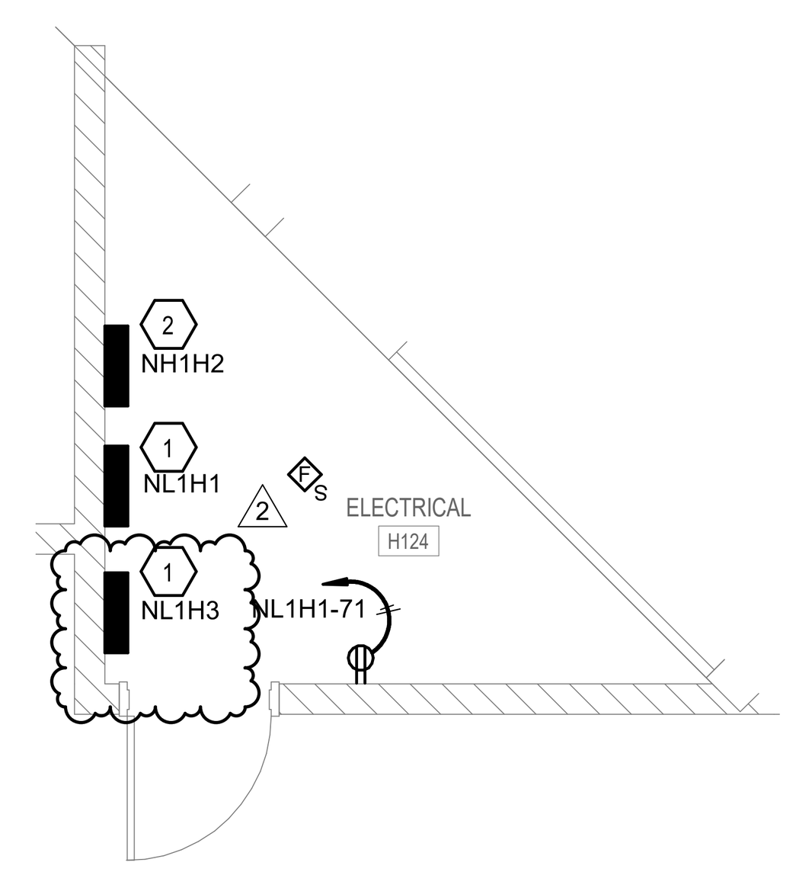
4 ENLARGED VIEW - ELECTRICAL ROOM D224
SCALE: 1/4" = 1'-0"

PLAN NORTH



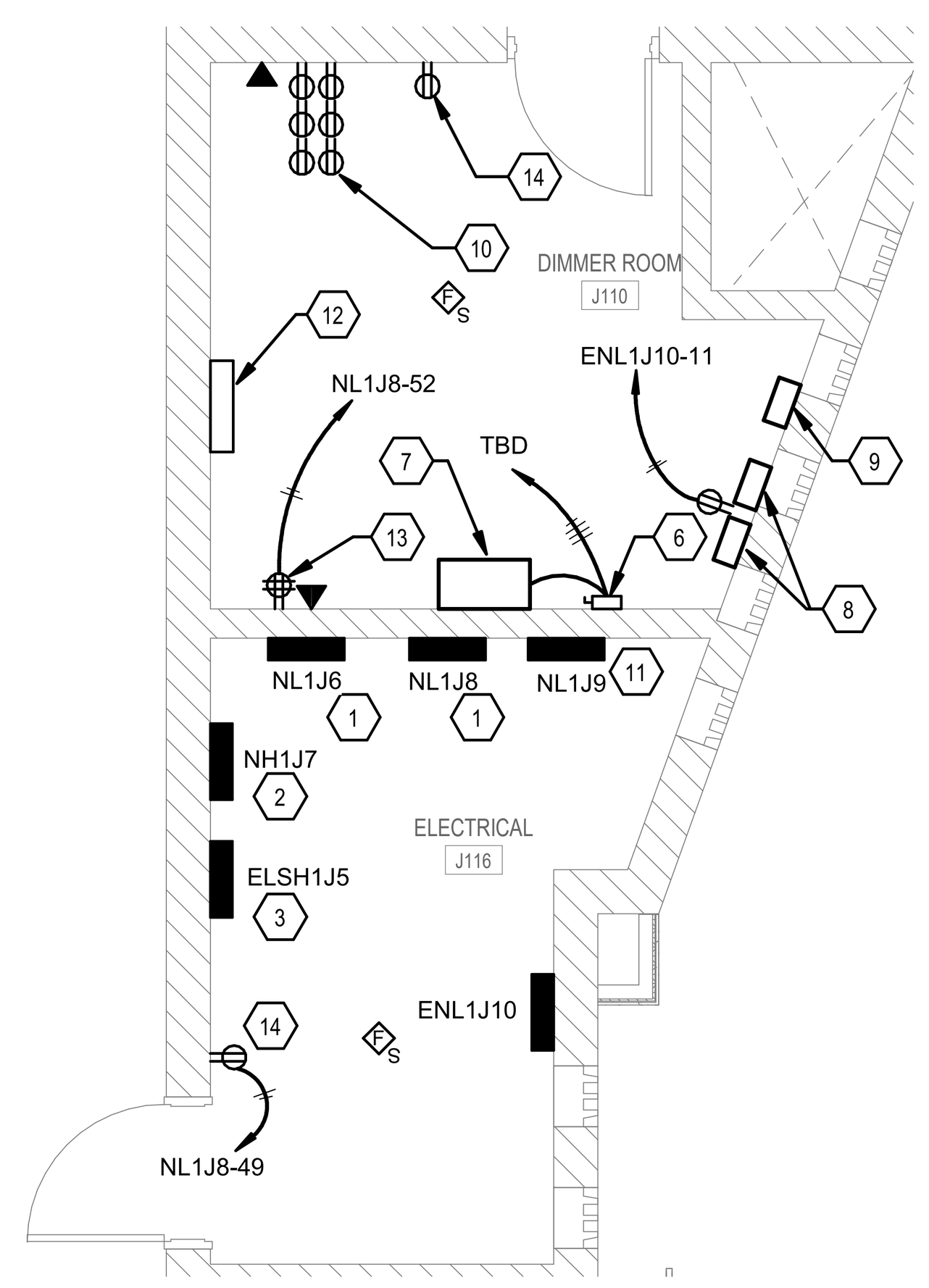
5 ENLARGED VIEW - ELECTRICAL / STORAGE E126A
SCALE: 1/4" = 1'-0"

PLAN NORTH



6 ENLARGED VIEW - ELECTRICAL ROOM H124
SCALE: 1/4" = 1'-0"

PLAN NORTH



7 ENLARGED VIEW - ELECTRICAL ROOM J116
SCALE: 1/4" = 1'-0"

PLAN NORTH

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
2. PROVIDE A NEW 277/480V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
3. PROVIDE A NEW 277/480V-3PH.-4W SURFACE MOUNTED "LIFE SAFETY" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
4. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "EMERGENCY NON-ESSENTIAL" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
5. PROVIDE A NEW 277/480V-3PH.-4W SURFACE MOUNTED "EMERGENCY NON-ESSENTIAL" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
6. PROVIDE 120/208V, 400A, 3P DISCONNECT SWITCH IN NEMA 1 ENCLOSURE FOR CONNECTION TO STAGE DIMMING RACK (SDR).
7. STAGE LIGHTING DIMMER RACKS TO BE SUPPLIED BY THE THEATER LIGHTING CONTRACTOR. REFER TO THEATHRICAL DRAWINGS.
8. EMERGENCY BYPASS DETECTION KIT AND DMX BYPASS CONTROLLER. REFER TO THEATRICAL DRAWINGS.
9. TRANSFORMERS FOR CONNECTION TO SEAT MOUNTED AISLE LIGHTS. REFER TO THEATRICAL DRAWINGS.
10. PROVIDE SIX (6) DEDICATED CIRCUITS TO ISOLATED GROUND DUPLEX RECEPTACLES FOR CONNECTION TO POWER DISTRIBUTION INSIDE OF AMP RACK. UTILIZE EVEN POLES 2-12 IN ISOLATED GROUND PANEL NL1J9. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
11. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL WITH ISOLATED GROUND FOR AUDIO EQUIPMENT. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
12. PROVIDE EIGHT(8) 120V DEDICATED EMERGENCY CIRCUITS FROM EMERGENCY PANEL ENL1J10. UTILIZE EVEN POLES 2-16 IN PANEL ENL1J10. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
13. DEDICATED RECEPTACLE FOR CONNECTION TO THEATER LIGHTING NETWORK CONTROL RACK.
14. REFER TO SHEET E209 FOR POWER OCNNECTION TO RECEPTACLE.

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ENLARGED ELECTRICAL ROOMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E404

PROJECT NUMBER
2021026

SHEET KEYNOTES

21. PROVIDE DISCONNECT SWITCH AND CONNECTION TO DRY PIPE RISER AIR COMPRESSOR.

22. EXISTING FLOOR MOUNTED 45 KVA TRANSFORMER TO BE TRAPEZE MOUNTED TO THIS APPROXIMATE LOCATION. PROVIDE NEW NAMEPLATE AND RENAME AS SHOWN. REFER TO DEMOLITION PLAN ON SHEET ED105 FOR PRIOR LOCATION. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL NFORMATION.

23. PROVIDE A 120V CONNECTION TO EQUIPMENT. UNIT PROVIDED WITH A FACTORY INSTALLED DISCONNECT.

24. PROVIDE A 20A, 120V MOTOR RATED SWITCH AND CONNECT TO EQUIPMENT SHOWN.

25. PROVIDE A 120V, 20A CIRCUIT AND DATA FOR THE DDC CONTROL PANEL. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

26. PROVIDE A 208V-1PH. CIRCUIT TO HEAT TRACE CONTROL PANEL. PER MECHANICAL DRAWINGS, ALL EXTERIOR PIPING SHALL HAVE ELECTRIC HEAT TRACE. HEAT TRACE EQUAL TO RAYCHEM #XL-TRACE, APPROX., 8 WATTS/FOOT, SELF REGULATING PIPE FREEZE PROTECTION AND END SEAL KIT. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

27. PROVIDE A 480V-3PH. SINGLE POINT CONNECTION TO FLUID COOLER FACTORY INSTALLED CONTROL PANEL. COORDINATE POWER AND CONTROL REQUIREMENTS PER MANUFATURERS SPECIFICATIONS AND MECHANICAL DRAWINGS. REFER TO POWER ONE-LINE DIAGRAM ON SHEET E602 FOR ADDITIONAL INFORMATION.

28. NEW PAD MOUNTED GENERATOR. REFER TO ELECTRICAL SPECIFICATIONS AND POWER ONE-LINE DIAGRAM ON SHEET E602 FOR ADDITIONAL INFORMATION.

2 29. PROVIDE ROUGH-IN AND 120V POWER FOR FIRE PUMP ALARM BELL.

SHEET KEYNOTES

11. PROVIDE A NEW 120/208V-3PH.-4W FLOOR MOUNTED "NORMAL POWER" ELECTRICAL DISTRIBUTION PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

12. PROVIDE A NEW UNDERGROUND ELECTRIC TO THE NEW DISTRIBUTION PANEL "MSB". REFER TO POWER ONE-LINE DIAGRAM AND SITE PLAN FOR ADDITIONAL INFORMATION.

13. PROVIDE A NEW UNDERGROUND ELECTRIC FROM THE NEW DISTRIBUTION PANEL "MSB" TO THE EXISTING "POWER CENTER BUILDING" TO BACKFEED THE NEW DISTRIBUTION PANEL "DPHPCB1". REFER TO POWER ONE-LINE DIAGRAM AND SITE PLAN FOR ADDITIONAL INFORMATION.

14. PROVIDE CONNECTION TO FIRE PUMP AND FIRE PUMP CONTROLLER FROM EMERGENCY GENERATOR AND UTILITY TRANSFORMER, SEE ONE-LINE DIAGRAM. COORDINATE CONDUIT STUB UP LOCATION AND TERMINATION REQUIREMENTS WITH SUPPLIER.

15. PROVIDE CONNECTION TO JOCKEY PUMP AND PUMP CONTROLLER. COORDINATE TERMINATION REQUIREMENTS WITH SUPPLIER.

16. UNDERGROUND SECONDARY TO FIRE PUMP CONTROLLER, SEE POWER ONE-LINE DIAGRAM ON SHEET E602.

17. PROVIDE AN UNDERGROUND FEEDER FROM GENERATOR TO FIRE PUMP CONTROLLER, SEE POWER ONE-LINE DIAGRAM.

18. PROVIDE 3/4"C WITH ENGINE START CONTROL WIRING TO GENERATOR CONTROL PANEL.

19. PROVIDE CONNECTION FROM FIRE PUMP ALARM AND SUPERVISORY SIGNALS TO BUILDING FIRE ALARM PANEL INCLUDING BUT NOT LIMITED TO:
    - PUMP RUNNING
    - PHASE/POWER LOSS
    - PHASE REVERSAL
    - PUMP CONNECTED TO EMERGENCY GENERATOR

20. PROVIDE CONNECTION TO BUILDING FIRE ALARM FROM FLOW AND/OR SUPERVISORY SWITCHES AT FIRE SUPPRESSION SYSTEM VALVES, COORDINATE QUANTITY AND LOCATION WITH INSTALLER. TYPICAL.

SHEET KEYNOTES

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER AND RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

2. EXISTING TRANSFORMER TO REMAIN AND TO BE RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

3. EXISTING PANEL TO REMAIN AND TO BE RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

4. EXISTING A.T.S. TO REMAIN AND TO BE RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. REFER TO POWER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

5. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND WITH BASE BID MANUFACTURER, RELOCATE AND RENAMED, PROVIDE NEW NAMEPLATE AS SHOWN. REROUTE EXISTING CONDUITS TO NEW LOCATION AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. REFER TO DEMOLITION PLAN FOR PRIOR LOCATION IN THIS ROOM.

6. PROVIDE A NEW 120/208V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

7. PROVIDE A NEW 277/480V-3PH.-4W SURFACE MOUNTED "NORMAL POWER" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

8. PROVIDE A NEW 277/480V-3PH.-4W SURFACE MOUNTED "EMERGENCY NON-ESSENTIAL" ELECTRICAL PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

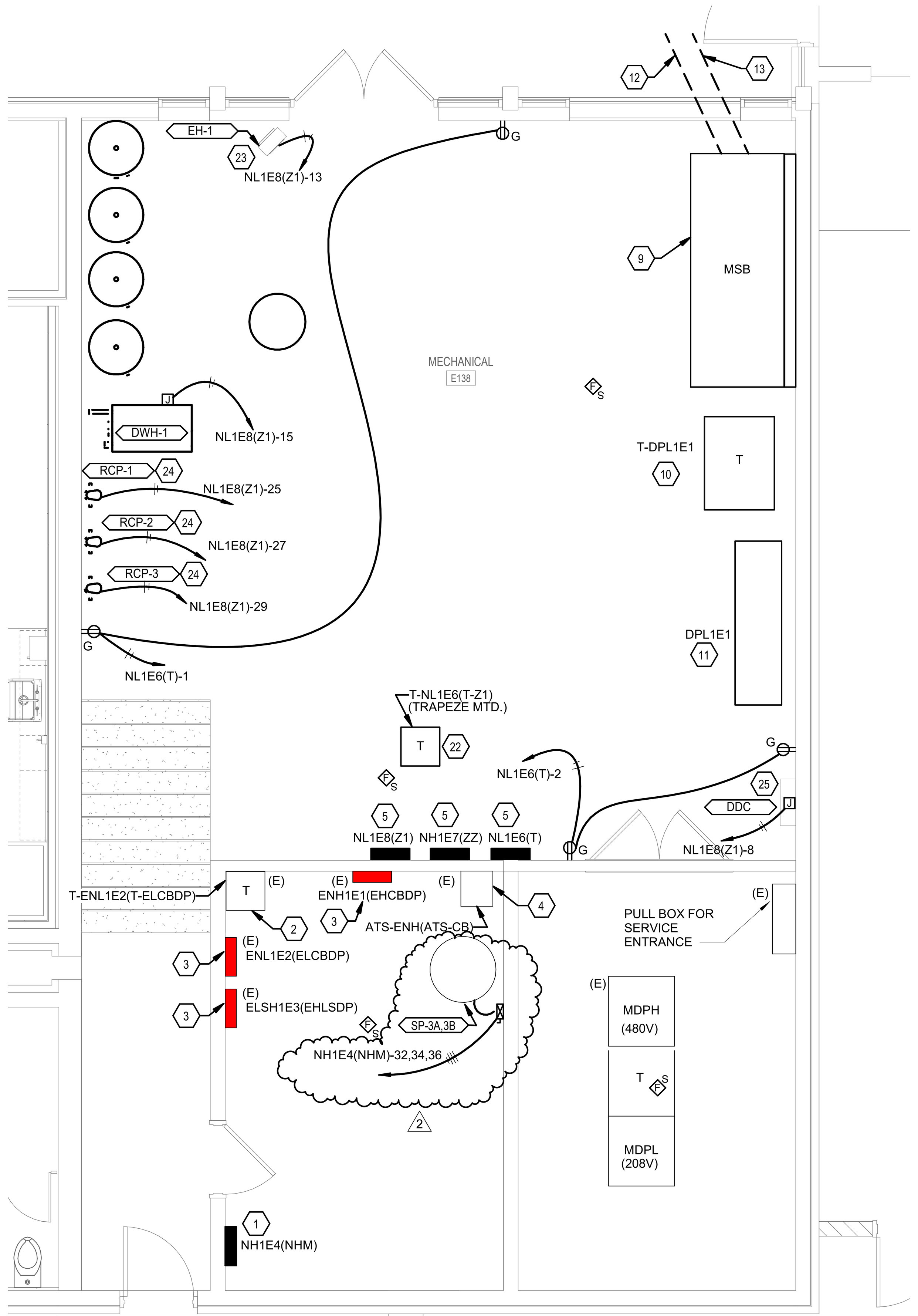
9. PROVIDE A NEW 277/480V-3PH.-4W FLOOR MOUNTED "NORMAL POWER" ELECTRICAL MAIN DISTRIBUTION PANEL. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

10. PROVIDE A NEW FLOOR MOUNTED TRANSFORMER. REFER TO THE POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION. GENERATOR CONTROL PANEL.

GENERAL NOTES

A. REFER TO DRAWING E002 FOR ADDITIONAL GENERAL ELECTRICAL NOTES.

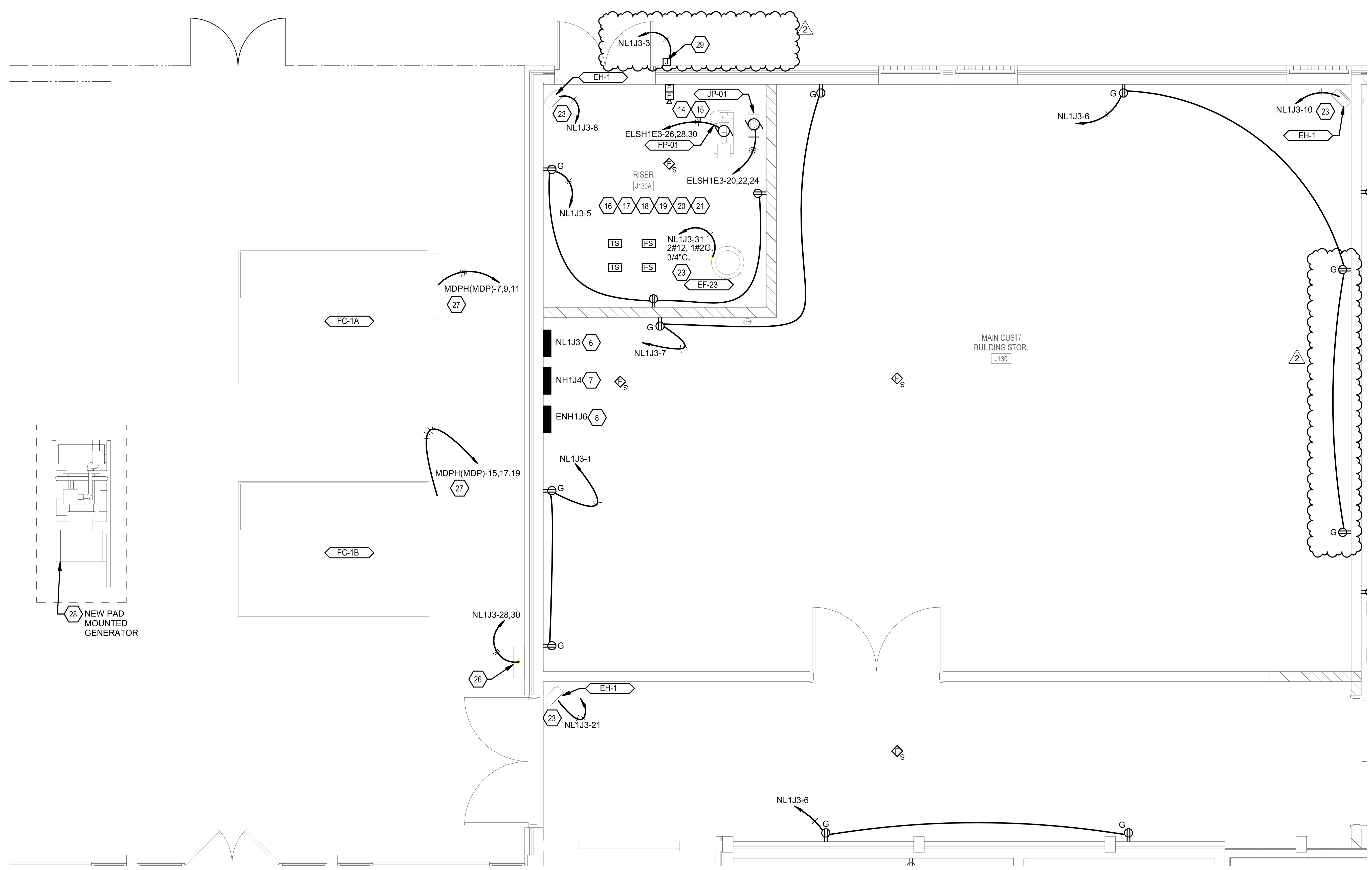
B. PROVIDE POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN PER MANUFACTURER SPECIFICATIONS. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.



2 ENLARGED VIEW - MECHANICAL E138

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

PLAN NORTH



1 ENLARGED VIEW - MAIN CUST/BUILDING STORAGE J130

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

PLAN NORTH

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM 1	07-28-2022
2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ENLARGED ELECTRICAL ROOMS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E405

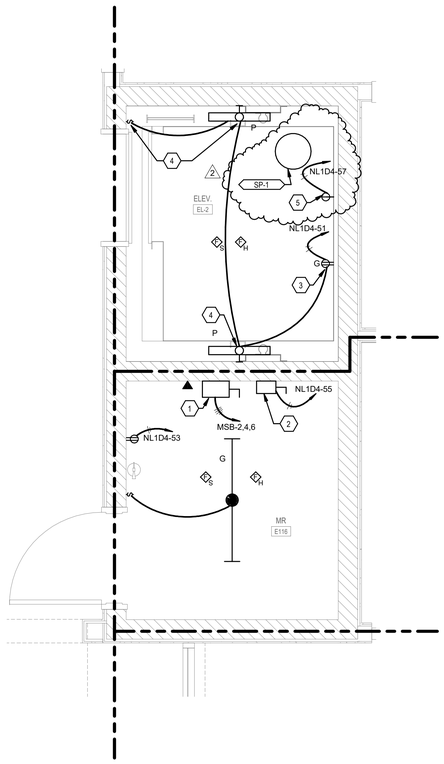
PROJECT NUMBER
2021026

GENERAL NOTES

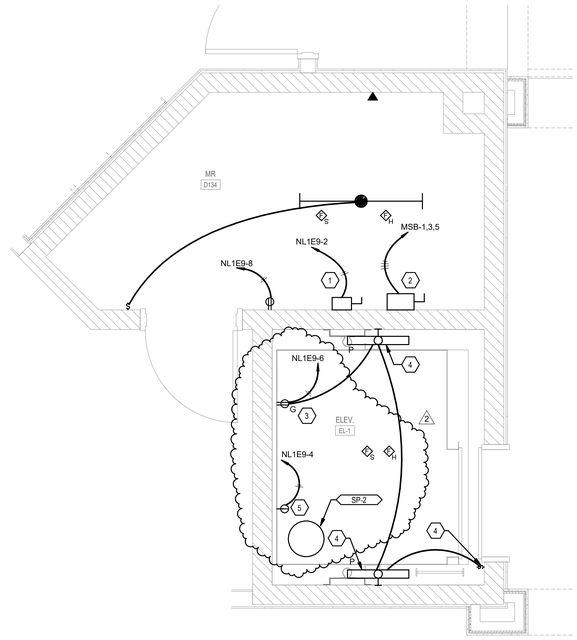
A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. E.C. TO PROVIDE A DEDICATED 120V/20A/1P CIRCUIT TO A LOCKING FUSED DISCONNECT SWITCH FOR ELEVATOR CAB LIGHTING.
2. E.C. TO PROVIDE A 100A, 208V-3PH. LOCKING FUSED DISCONNECT SWITCH FOR MAIN ELEVATOR POWER. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
3. PROVIDE A 120V, 20A GFI DUPLEX RECEPTACLE AT 54" A.F.F. (FOR MAINTENANCE) ON A SIDE WALL .
4. PROVIDE A (TYPE P) 120V, NEMA 4 LINEAR LED LIGHTS MOUNTED AT 54" A.F.F. PROVIDE A TOGGLE SWITCH ADJACENT TO ELEVATOR PIT LADDER.
5. PROVIDE ONE SINGLE (NOT DUPLEX) 120V NON-GFI RECEPTACLE FOR SUMP PUMP. LOCATE RECEPTACLE ON SIDE WALL MOUNTED APPROX. 54" A.F.F. ABOVE PIT FLOOR TO CENTER OF JUNCTION BOX. LOCATE RECEPTACLE AS CLOSE AS POSSIBLE TO THE SUMP PUMP. VERIFY SUMP PUMP LOCATION IN FIELD PRIOR TO RECEPTACLE INSTALL.



2 ENLARGED ELEVATOR RM. EL-2
SCALE: 1/2" = 1'-0"



1 ENLARGED ELEVATOR RM. EL-1
SCALE: 1/2" = 1'-0"

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SCOPE DRAWINGS:
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REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ENLARGED ELECTRICAL PLANS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF
INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E408

PROJECT NUMBER
2021026

LIGHT FIXTURE SCHEDULE

FIXTURE TYPE	DESCRIPTION	LAMP	CRI	DIMMING	COLOR TEMP	LUMENS	WATTAGE	VOLTAGE	MOUNTING TYPE	MANUFACTURER - MODEL NUMBER	NOTES
A1	2'x4' GRID LED RECESSED, FROSTED LENSED, TROFFER WITH DIE FORMED COLD ROLLED STEEL HOUSING, WITH FLUSH ALUMINUM DOOR FRAME, INTEGRAL T-BAR CLIPS, #12 PATTERN ACRYLIC 0.125" THICK SHIELDING, AND 100-10% DIMMABLE 0-10V LED DRIVER	LED	>80	0-10V, @10%	4000K	3922	30	MVOLT	RECESSED	LITHONIA 2GTL 4 40L FW A12125 GZ10 LP835 COOPER EQUAL; COLUMBIA EQUAL;	-
A1D	SAME AS TYPE 'A1' WITH DRYWALL GRID ADAPTER	LED	>80	0-10V, @10%	4000K	3922	30	MVOLT	RECESSED DRYWALL	LITHONIA 2GTL 4 40L FW A12125 GZ10 LP835 w/ DGA24 COOPER EQUAL; COLUMBIA EQUAL;	-
A2	SAME AS TYPE 'A1' WITH HIGHER LUMEN PACKAGE	LED	>80	0-10V, @10%	4000K	6218	49	MVOLT	RECESSED	LITHONIA 2GTL 4 60L FW A12125 GZ10 LP835 COOPER EQUAL; COLUMBIA EQUAL;	-
A2S	SAME AS "A2" WITH SURFACE MOUNTING KIT	LED	>80	0-10V, @10%	4000K	6218	49	MVOLT	SURFACE	LITHONIA 2GTL 4 60L FW A12125 GZ10 LP835 /SMKSH; COOPER EQUAL; COLUMBIA EQUAL;	-
A3	SAME AS TYPE 'A1' WITH HIGHER LUMEN PACKAGE	LED	>80	0-10V, @10%	4000K	7351	53	MVOLT	RECESSED GRID	LITHONIA 2GTL 4 72L FW A12125 GZ10 LP835 COOPER EQUAL; COLUMBIA EQUAL;	-
A4	SAME AS TYPE 'A1' WITH HIGHER LUMEN PACKAGE	LED	>80	0-10V, @10%	4000K	10663	83	MVOLT	RECESSED GRID	LITHONIA 2GTL 4 100L FW A12125 GZ10 LP835 COOPER EQUAL; COLUMBIA EQUAL;	-
B1	2'x2' GRID LED RECESSED, FROSTED LENSED, TROFFER WITH DIE FORMED COLD ROLLED STEEL HOUSING, WITH FLUSH ALUMINUM DOOR FRAME, INTEGRAL T-BAR CLIPS, #12 PATTERN ACRYLIC 0.125" THICK SHIELDING, AND 100-10% DIMMABLE 0-10V LED DRIVER	LED	>80	0-10V, @10%	4000K	3833	34	MVOLT	RECESSED	LITHONIA 2GTL 2 40L FW A12125 GZ10 LP835 COOPER EQUAL; COLUMBIA EQUAL;	-
B2	SAME AS TYPE 'B1' WITH DRYWALL GRID ADAPTER	LED	>80	0-10V, @10%	4000K	3833	34	MVOLT	RECESSED DRYWALL	LITHONIA 2GTL 2 40L FW A12125 GZ10 LP835 w/ DGA22 COOPER EQUAL; COLUMBIA EQUAL;	-
C1	8' LINEAR INDIRECT/DIRECT (37% UP/63% DOWN) LED PENDANT WITH EXTRUDED ALUMINUM HOUSING, FORMED STEEL REFLECTOR, AND 100-1% DIMMABLE 0-10V LED DRIVER	LED	>80	0-10V, @1%	4000K	4103 / 2473	54	MVOLT	PENDANT	MARK S4LID LLP 8FT MSL4 80CRI 35K 1000LMF I80CRI I35K I3600LMF MIN1 SCT MVOLT WHT ZT F1/36A SQCY WHTCY WRCD COOPER EQUAL; COLUMBIA EQUAL;	-
D1	6" DIAMETER ROUND RECESSED LED DOWNLIGHT WITH GALVANIZED STEEL HOUSING, SEMI-SPECULAR DIFFUSER FINISH, AND 100-10% DIMMABLE 0-10V LED DRIVER	LED	>80	0-10V, @10%	4000K	2006	20	MVOLT	RECESSED	GOTHAM EVO6 35/20 AR MD LSS MVOLT GZ10 COOPER EQUAL; COLUMBIA EQUAL;	-
D2	SAME AS TYPE 'D1' BUT WET LOCATION RATED	LED	>80	0-10V, @10%	4000K	656	8	MVOLT	RECESSED	GOTHAM EVO6SH 35/07 DFF SMO MVOLT EZ10 COOPER EQUAL; COLUMBIA EQUAL;	-
F1	SURFACE MOUNTED LENSED STRIP LIGHT, DAMP LOCATION RATED	LED	>80	0-10V, @10%	4000K	4576	35	MVOLT	SURFACE	LITHONIA CLX L48 5000LM SEF FDL MVOLT GZ10 35K 80CRI WH	-
F2	CORNER MOUNTED, IP65 RATED SHOWER FIXTURE	LED	>80	-	4000K	500	15	MVOLT	SURFACE	LUMINAIRE LED VISION VCM8 2FT NODIM 20RV OP CUST; FAIL SAFE EQUAL; KENALL EQUAL;	-
G	4'-0" NARROW CHANNEL SURFACE MOUNTED LED STRIP LIGHT	LED	>80	0-10V, @10%	4000K	4576	35	MVOLT		LITHONIA ZL1N; METALUX SNLED; COLUMBIA LCL;	-
H	WALL-MOUNTED LED FIXTURE FOR PATIENT BED	LED	>80	0-10V, @10%	4000K	8145	78	MVOLT	WALL	ARCHER LED HPW336 2U2D LV CC; COOPER EQUAL; HUBBELL EQUAL;	-
J1	4'-0" LINEAR DOWNLIGHT - PENDANT DIRECT	LED	>80	0-10V, @1%	4000K	3824	47	MVOLT	PENDANT	AXIS ZEN ZELED SLO 100 950 MSO 4 C; COOPER EQUAL; HUBBELL EQUAL;	-
K1	2'x4' GRID LED RECESSED, CLEAR INVERTED LENSED, TROFFER WITH DIE FORMED COLD ROLLED STEEL HOUSING, FULL LENGTH DIE-FORMED STIFFENERS, UNIBODY ENDPLATE, ALUMINUM DOOR FRAME, #12 PATTERN ACRYLIC 0.125" THICK SHIELDING, ELECTRONIC NON-DIMMING DRIVER, CLOSED CELL GASKET ON HOUSING FLANGE, AND UL LISTED FOR WET LOCATION.	LED	>80	-	4000K	6400	48	MVOLT	RECESSED GRID	FAIL-SAFE GRW 24 4 FA LD4 64 35 A12125 UNV EDC1 GSK/GRD INV; LITHONIA 2WRTL EQUAL; COLUMBIA EQUAL;	-
K2	SAME AS TYPE 'K1' WITH LOWER LUMEN PACKAGE	LED	>80	-	4000K	4800	37	MVOLT	RECESSED GRID	FAIL-SAFE GRW 24 4 FA LD4 48 35 A12125 UNV EDC1 GSK/GRD INV; LITHONIA 2WRTL EQUAL; COOPER EQUAL;	-
L	4" x 10' PENDANT LINEAR FIXTURE WITH FLUSH LENS	LED	>80	0-10V, @10%	4000K	9243	103	MVOLT	PENDANT	MARK SL4D 4; COOPER EQUAL; HUBBELL EQUAL;	-
L2	4" x 4' RECESSED LINEAR FIXTURE WITH FLUSH LENS	LED	>80	0-10V, @10%	4000K	3697	41	MVOLT	RECESSED GRID	MARK SL4L 4; COOPER EQUAL; HUBBELL EQUAL;	-
M	HIGH BAY LED TROFFER, ACRYLIC FROSTED LENSED, WITH STEEL CHANNEL AND ENDCAPS, WIREGUARDS, AND 100-10% DIMMABLE 0-10V LED DRIVER	LED	>80	0-10V, @10%	4000K	24044	138	MVOLT	SURFACE	LITHONIA IBG 24000LM SEF AFL GND MVOLT GZ10 35K 80CRI MB WGIBG24 COOPER EQUAL; COLUMBIA EQUAL;	-
N20	20'-0" SURFACE MOUNTED LINEAR, 1-5/16" WIDTH WITH SPOTLESS LENS. MOUNT TO BOTTOM OF FRAMING	LED	>80	0-10V, @1%	4000K	8,380	70	MVOLT	SURFACE	AXIS STSLF-SO-400; COOPER EQUAL; HUBBELL EQUAL;	-
N36	36'-0" SURFACE MOUNTED LINEAR, 1-5/16" WIDTH WITH SPOTLESS LENS. MOUNT TO BOTTOM OF FRAMING	LED	>80	0-10V, @1%	4000K	15,084	126	MVOLT	SURFACE	AXIS STSL-SO-400; COOPER EQUAL; HUBBELL EQUAL;	-
OL1	EXTERIOR SCONCE	LED	>80	-	4000K	3675	35	MVOLT	WALL	WAC DS-WE06 SERIES; LITHONIA EQUAL; COLUMBIA EQUAL;	-
OL2	EXTERIOR WALLPACK	LED	>80	-	4000K	4667	40	MVOLT	WALL	LITHONIA WSQ-LED SERIES COOPER EQUAL; COLUMBIA EQUAL;	-
OL3	6" DIAMETER ROUND RECESSED LED DOWNLIGHT, WET LOCATION RATED	LED	>80	-	4000K	1709	30	MVOLT	RECESSED	GOTHAM EVO6SH; COOPER EQUAL; COLUMBIA EQUAL	-
OL4	BOLLARD LIGHT	LED	>80	-	4000K	424	40	MVOLT	IN GRADE BASE	HELIO SERIES 600; HESS AMERICA EQUAL; TARGETTI EQUAL;	-
OL5	LED CUTOFF LUMINAIRE WITH MINIMUM .188" THICK FINNED CAST ALUMINUM HOUSING, CAST ALUMINUM ARM ASSEMBLY HOUSES ELECTRICAL COMPARTMENT, INTEGRATED CAST ALUMINUM HINGED DRIVER DOOR, LED ARRAYED ON A METAL CORE PCB PANEL, INJECTION MOLDED H12 ACRYLIC REFRACTORS RETAINED BY AN ALUMINUM FRAME, FIELD ROTATABLE TYPE 3 DISRIBUTION, ONE LUMINAIRE TO BE MOUNTED TO 25'-0" STRAIGHT SQUARE STEEL POLE.	LED	>67	-	4000K	22,000	174	MVOLT	POLE	USA RZR LED PLED III 80LED 700MA NW 1 SSS30 DM28 MS-F211/PC GE EQUAL LSI EQUAL MCGRAW EDISON EQUAL	-
OL6	SAME AS 'OL6' WITH DUAL HEAD 180 DEGREE MOUNTING	LED	>67	-	4000K	44,000	348	MVOLT	POLE	USA RZR LED PLED III 80LED 700MA NW 1 SSS30 DM28 MS-F211/PC GE EQUAL LSI EQUAL MCGRAW EDISON EQUAL	-
OL7	RING LIGHT FOR FLAG POLE	LED	>80	-	5000K	9500	90	MVOLT	POLE	POLELED O2 WITH MEAN WELL HLG-150H DRIVER; KIRLIN EQUAL; HUBBELL EQUAL;	-
OL8	13" DIAMETER X 1" DEEP SURFACE MOUNTED, WET LOCATION	LED	>80	-	4000K	1300	15	MVOLT	SURFACE	JUNO JSF 13IN 13LM; METALUX EQUAL; COLUMBIA EQUAL;	-
P	ELEVATOR PIT LIGHT	LED	>80	-	4000K	2000	17	MVOLT	WALL	COOPER 2VT2 LDN 2 DR UNV L835 CD1 WL U; LITHONIA DMW2 EQUAL; COLUMBIA EQUAL;	-
R	4'-0" SURFACE MOUNT LINEAR DIRECT WITH STEP LENS	LED	>80	0-10V, @10%	4000K	3200	28	MVOLT	SURFACE	AXIS BEAM 4 TB4SLED; COOPER EQUAL; HUBBELL EQUAL;	-
S	8'-0" PENDANT MOUNTED LED GROWLIGHT	LED	>80	-	4000K	4576	344	MVOLT	PENDANT	VERJURE VPS 3 FRSP ACL CNPQD AC120; COOPER EQUAL; HUBBELL EQUAL;	-
T	SURFACE MOUNTED COMMERCIAL 2-CIRCUIT TRACK WITH INTEGRAL DIMMABLE LED DRIVERS, FIVE (5) T25S NARROW FLOOD HEADS, AND FIVE(5) T25S SPOT TRACK HEADS WITH ADAPTERS REQUIRED FOR LENGTH SHOWN ON PLAN	LED	-	0-10V	4000K	-	110	277	SURFACE	JUNO HTEK 18FT WHITE; CONTECH EQUAL; HALO EQUAL	3
TA	SURFACE/CHAIN MOUNTED CHANNEL	LED	>80	0-10V, @1%	4000K	-	0	120	SURFACE/CHAIN	PHILLIPS FSS4-55L-840-UNV-DIM-BK/FFWG4; LITHONIA CLX EQUAL; COOPER EQUAL;	2
TA2	SURFACE/CHAIN MOUNTED CHANNEL	LED	>80	0-10V, @10%	4000K	-	0	120	SURFACE/CHAIN	PHILLIPS FSS4-55L-840-UNV-DIM-BK/FFWG4; LITHONIA CLX EQUAL; COOPER EQUAL;	2
TB	SURFACE MOUNTED BULLET DOWNLIGHT	LED	>80	-	4000K	-	0	120	SURFACE	VISTA-WR-3260-B-LEDMR16-4.5W-BL WITH SURFACE MOUNTED WALL BOX; HYDREL PALM EQUAL; HUBBELL EQUAL;	3
TC	DRESSING ROOM MIRROR LIGHT. SATIN ALUM. FINISH. PROVIDE WITH LAMP WIRE GUARD.	G25	>80	-	4000K	3675	25	120	WALL, SEE ELEVATION	TIVIOLI AC-WB-12-SA; LITHONIA EQUAL; COLUMBIA EQUAL;	-
TD	AISLE LIGHT	LED	>80	-	4000K	-	0	120	SURFACE	IRWIN SEATING CONCEALED AISLE LIGHT INTEGRATED 12V LED AISLE LIGHTING	1
TE	WALL/STEP MOUNTED STEP LIGHT	LED	-	-	3000K	-	0	12	WALL/STEP	COLE L150H-BLK; - -	3
TG	PENDANT MOUNTED DOWNLIGHT	LED	-	-	3000K	-	0	120	PENDANT	PORTFOLIO-LSR8B-DMX-MB, EC8B-5070-90278LB-W-3-H-P836 MC-DMX; GOTHAM EVO6PC EQUAL; HUBBELL EQUAL;	3
TH	CEILING RECESSED DOWNLIGHT	LED	-	-	3000K	-	100	120	RECESSED	LED/DMX CONTROL; METEOR RS6N 100W 308C DMX WD	3
TJ	PIPE MOUNTED LED WORKLIGHT	LED	>80	-	3000K	14,000	1200	120	PIPE	SSRC WL LED	3
U	1'x8' SURFACE MOUNTED FIXTURE	LED	>80	-	4000K	8000	74	MVOLT	SURFACE	FOCAL POINT FSM4LS BW 1000LF 40K 1C SM; NEORAY EQUAL; FINELITE EQUAL;	-
U2	1'X4' SURFACE MOUNTED FIXTURE	LED	>80	-	4000K	2500	22	MVOLT	SURFACE	FOCAL POINT FSM4LS BW 675LF 40K 1C SM; NEORAY EQUAL; FINELITE EQUAL;	-
X1	SURFACE MOUNT LED STENCIL-FACE EXIT SIGN	LED	-	-	-	-	5	MVOLT	UNIVERSAL	LITHONIA LES; DUALITE EQUAL; SURELITE EQUAL;	-
X2	SAME AS "X1" EXCEPT PENDANT MOUNTED AND MOUNTED TO PLATE	LED	-	-	-	-	5	MVOLT	PENDANT	LITHONIA LES; DUALITE EQUAL; SURELITE EQUAL;	-
XE	VANDAL RESISTANT SURFACE MOUNT LED STENCIL-FACE EXIT SIGN	LED	-	-	-	-	3	MVOLT	UNIVERSAL	LITHONIA LVS; SURELITE LIX SERIES; EMERGILITE EQUAL;	-

NOTES

1. ARCHITECT TO SELECT FINISH IN SUBMITTAL PHASE.
2. PROVIDE WITH WHITE FINISH.
3. PROVIDE WITH BLACK FINISH.
4. PROVIDE WITH SATIN ALUMINUM FINISH.
5. REFER TO HMB DRAWINGS LIGHT FIXTURE SCHEDULED FOR ADDITIONAL RQUIREMENTS.

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings are not intended to show or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	RDB	RDB

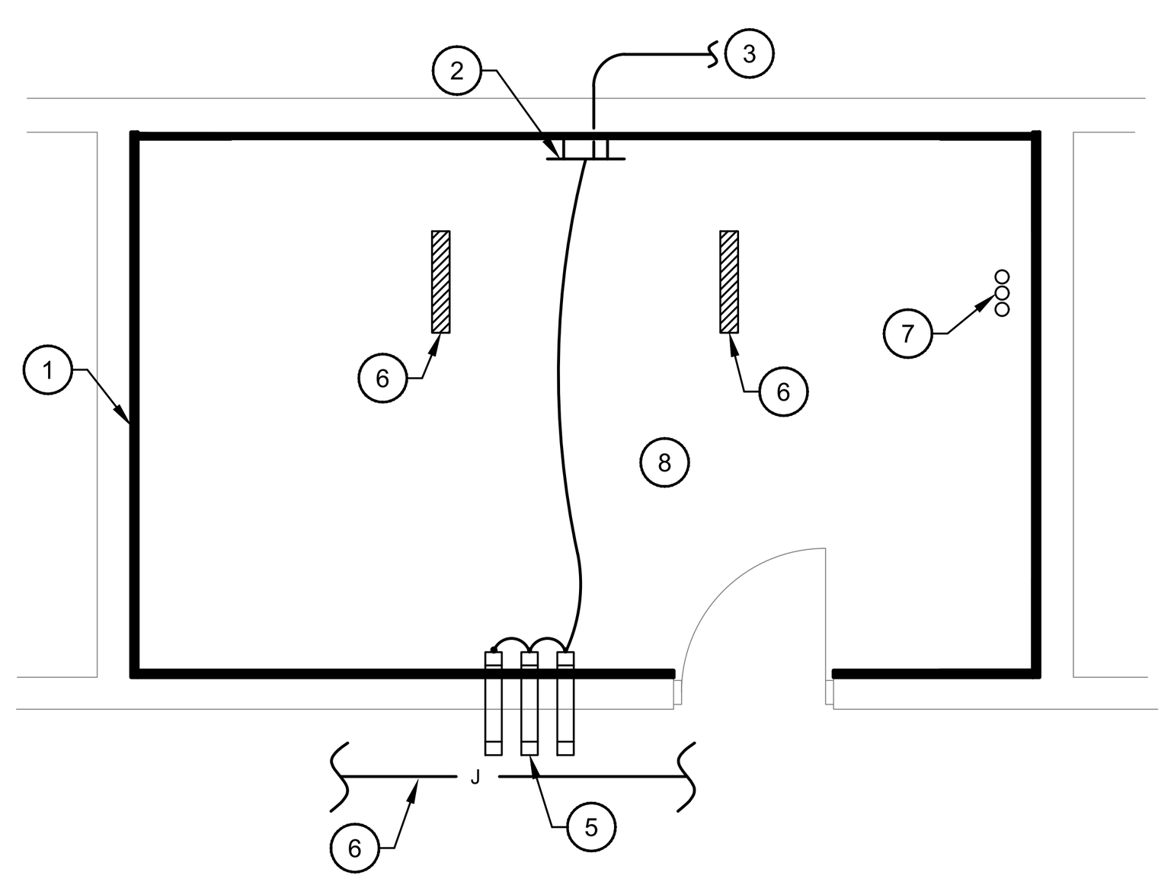
DRAWING TITLE:
LIGHT FIXTURE SCHEDULE

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

2

DRAWING NUMBER
E501

PROJECT NUMBER
2021026

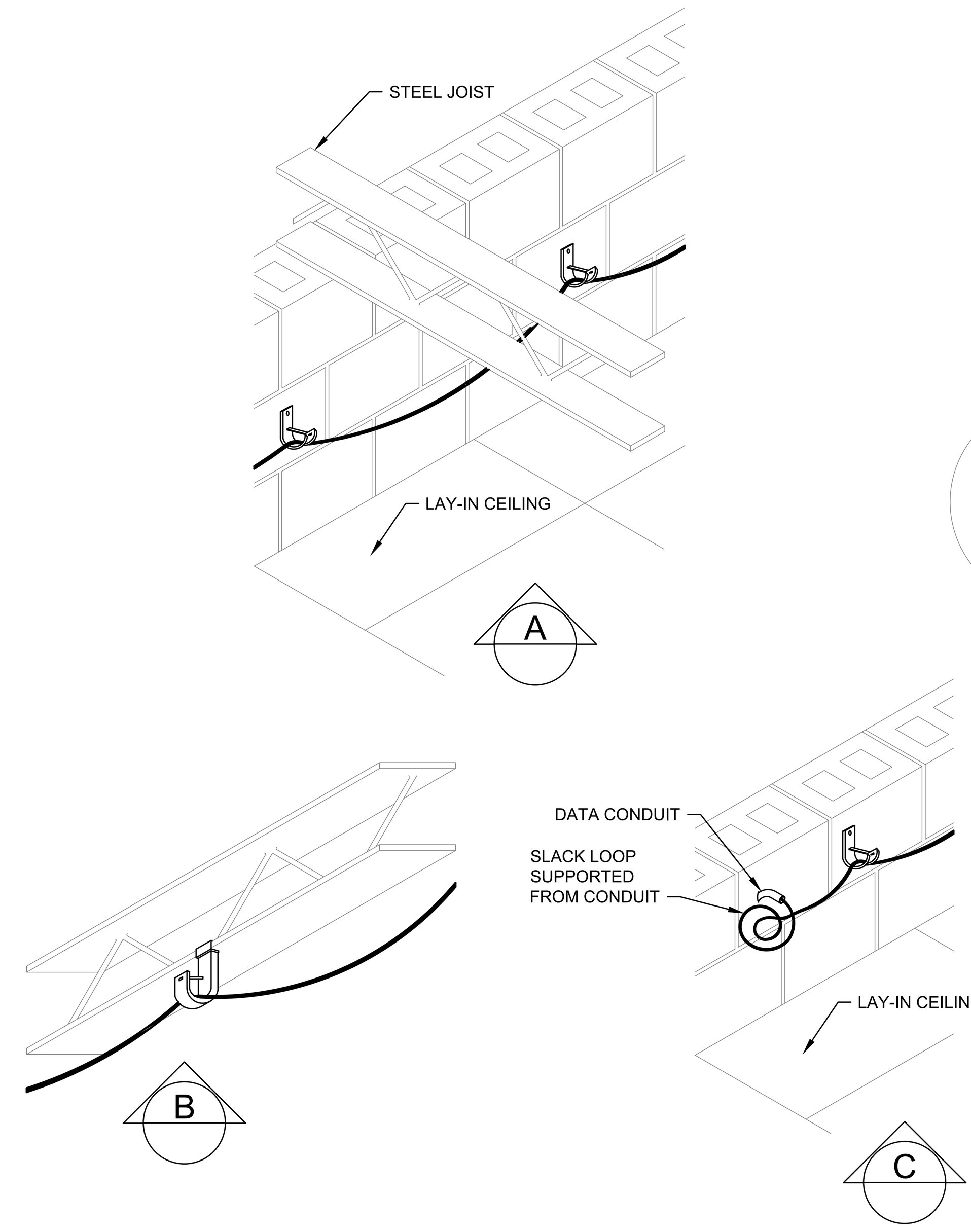


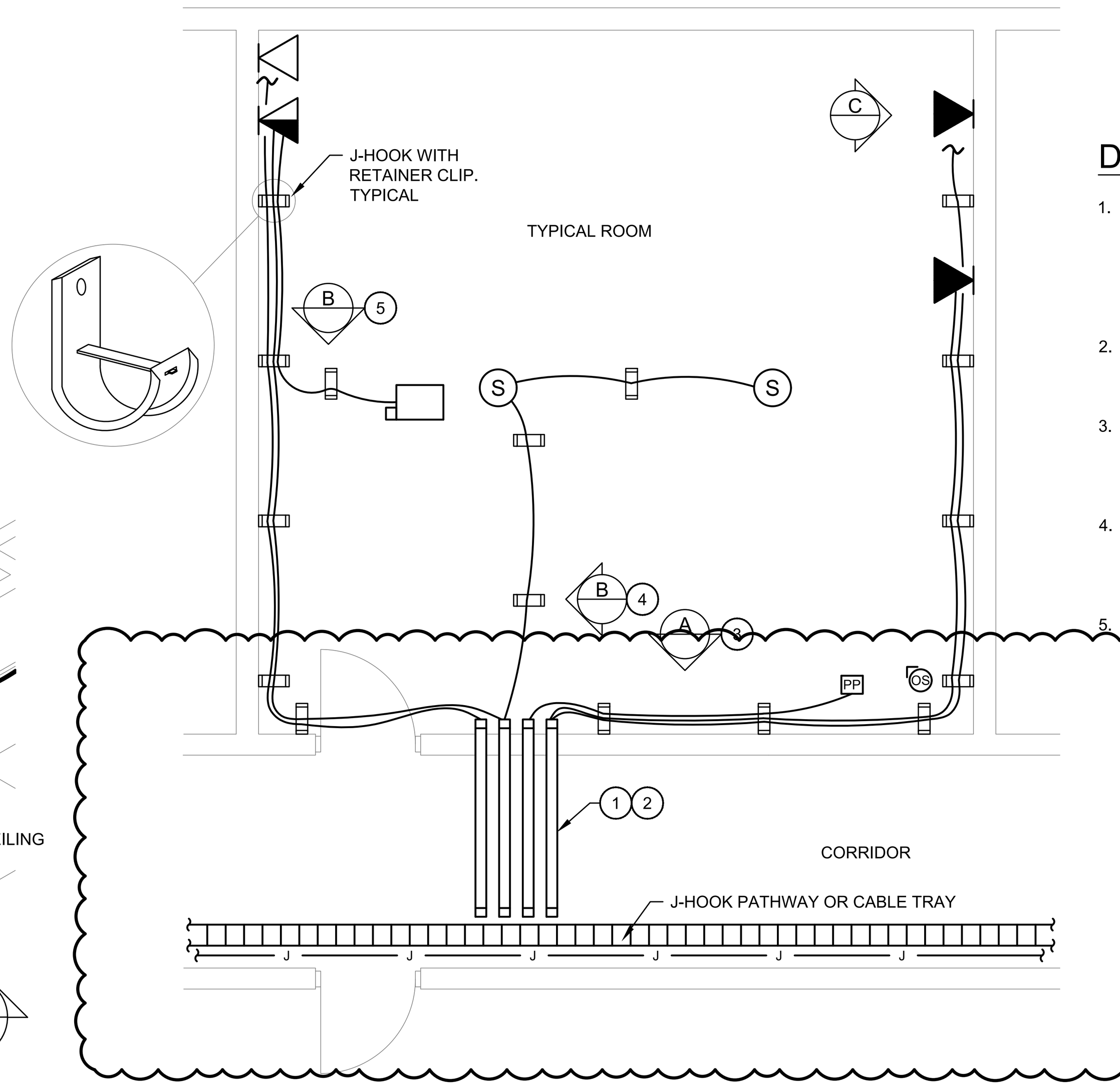
DETAIL NOTES

1. INSTALL 3/4 INCH THICK, FIRE RETARDANT PLYWOOD AROUND THE PERIMETER WALLS.
2. INSTALL COPPER GROUNDING BUSBAR ADJACENT TO THE COMMUNICATION RACK(S). BUSBAR SHALL BE A MINIMUM OF 1/4 INCH THICK BY 4 INCHES WIDE BY 20 INCHES LONG.
3. INSTALL A #4 MINIMUM INSULATED GROUNDING CONDUCTOR IN CONDUIT TO THE ELECTRICAL SERVICE GROUNDING SYSTEM.
4. COMMUNICATION RACK SHOWN FOR REFERENCE ONLY. REFER TO THE FLOOR PLAN FOR THE EXACT LOCATION AND QUANTITY OF RACKS TO BE INSTALLED BY OWNER.
5. INSTALL 3 INCH EMT CONDUIT SLEEVES WITH INSULATED GROUNDING BUSHINGS ON THE CLOSET SIDE AND NON-GROUNDING INSULATED BUSHINGS ON THE OPPOSITE SIDE. INSTALL SLEEVES BETWEEN THE COMMUNICATIONS CLOSET AND J-HOOK PATHWAYS. REFER TO THE FLOOR PLANS FOR J-HOOK PATHWAY LOCATIONS. INSTALL QUANTITY OF CONDUITS AS INDICATED ON PLANS.
6. J-HOOK PATHWAY. REFER TO THE FLOOR PLANS FOR LOCATION.
7. INSTALL COMMUNICATION SERVICE ENTRANCE CONDUITS. INSTALL CONDUITS TO 4 INCHES ABOVE FINISHED FLOOR. REFER TO THE FLOOR PLANS FOR THE SERVICE ENTRANCE LOCATION, QUANTITY, AND SIZE OF CONDUITS.
8. THIS DETAIL DESCRIBES THE GENERAL CONSTRUCTION REQUIREMENTS FOR ALL COMMUNICATION CLOSETS. REFER TO THE FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.

TYPICAL COMMUNICATION CLOSET CONSTRUCTION DETAIL

NOT TO SCALE



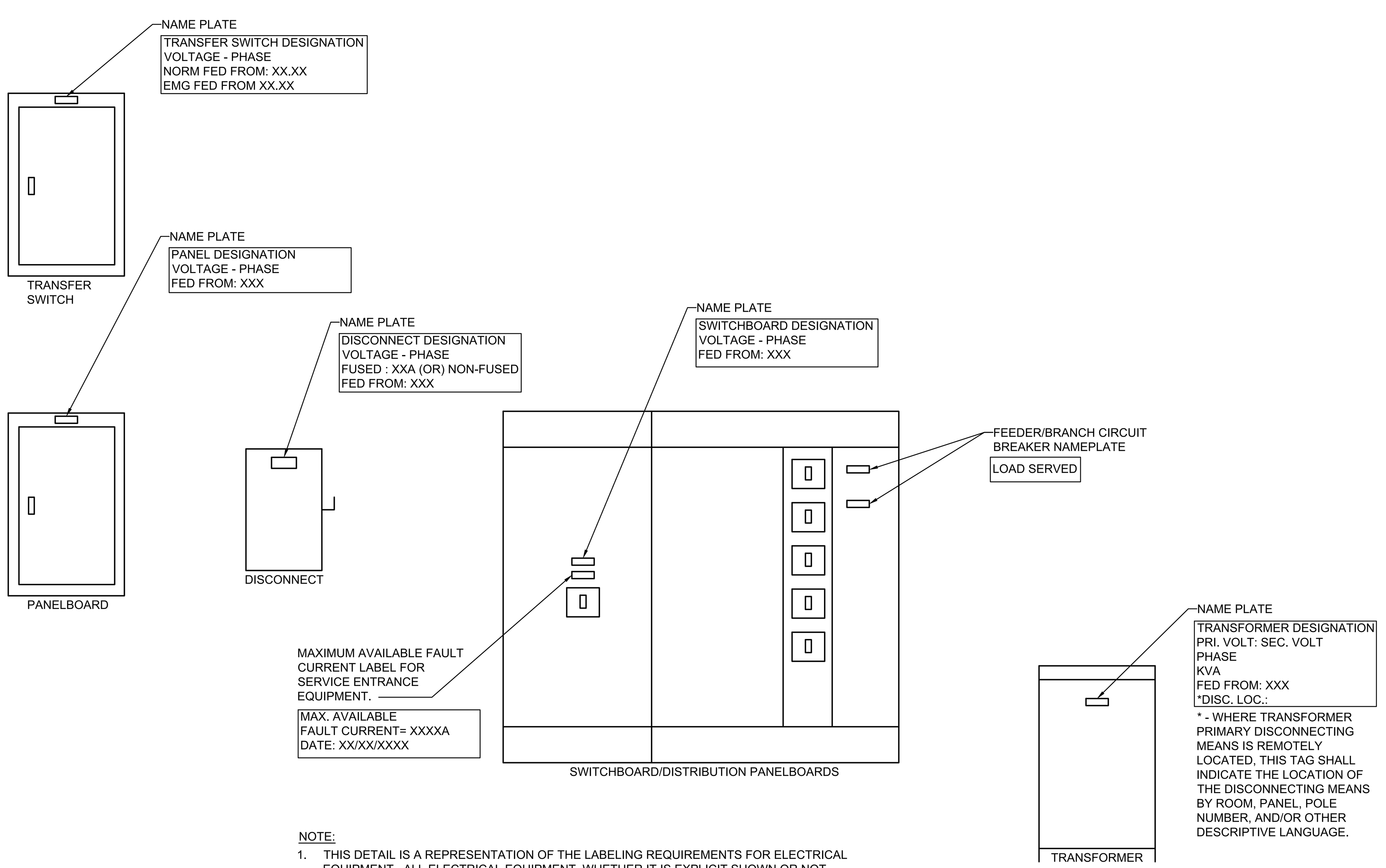


DETAIL NOTES

1. EXTEND CONDUIT SLEEVES FROM J-HOOK PATHWAY TO ROOM. PROVIDE A MINIMUM OF 1-INCH CONDUITS WITH A MINIMUM QUANTITY OF ONE PER VOICE/DATA OUTLET LOCATED IN THE ROOM. INSTALL AN ADDITIONAL ONE INCH CONDUIT FOR OTHER LOW VOLTAGE CABLING TO BE INSTALLED TO THE ROOM. FEWER LARGER CONDUITS SLEEVES MAY BE INSTALLED, BUT 40% FILL RATIO MUST BE MAINTAINED.
2. INSTALL ALL LOW VOLTAGE CABLES IN CONDUIT FROM THE J-HOOK PATHWAY TO THE ROOM. THIS INCLUDES VOICE/DATA, INTERCOM, LIGHTING CONTROLS, TELEVISION, ETC.
3. INSTALL J-HOOKS AROUND PERIMETER OF WALL TO OUTLETS AS SHOWN. MOUNT J-HOOKS BELOW THE STRUCTURAL JOISTS AND ABOVE THE CEILING. J-HOOKS SHALL BE INSTALLED NO MORE THAN 5 FEET ON CENTER (TYPICAL).
4. WHEN LOW VOLTAGE DEVICES ARE LOCATED AWAY FROM THE PERIMETER WALL, J-HOOKS SHALL BE MOUNTED TO THE BOTTOM OF THE STRUCTURAL JOISTS AND EXTEND TO THE DEVICE LOCATIONS AS SHOWN.
5. SUPPORT A/V CABLING FROM THE MULTI-MEDIA OUTLET TO THE A/V COMPONENTS IN J-HOOKS.

TYPICAL LOW VOLTAGE CABLE DISTRIBUTION

NOT TO SCALE

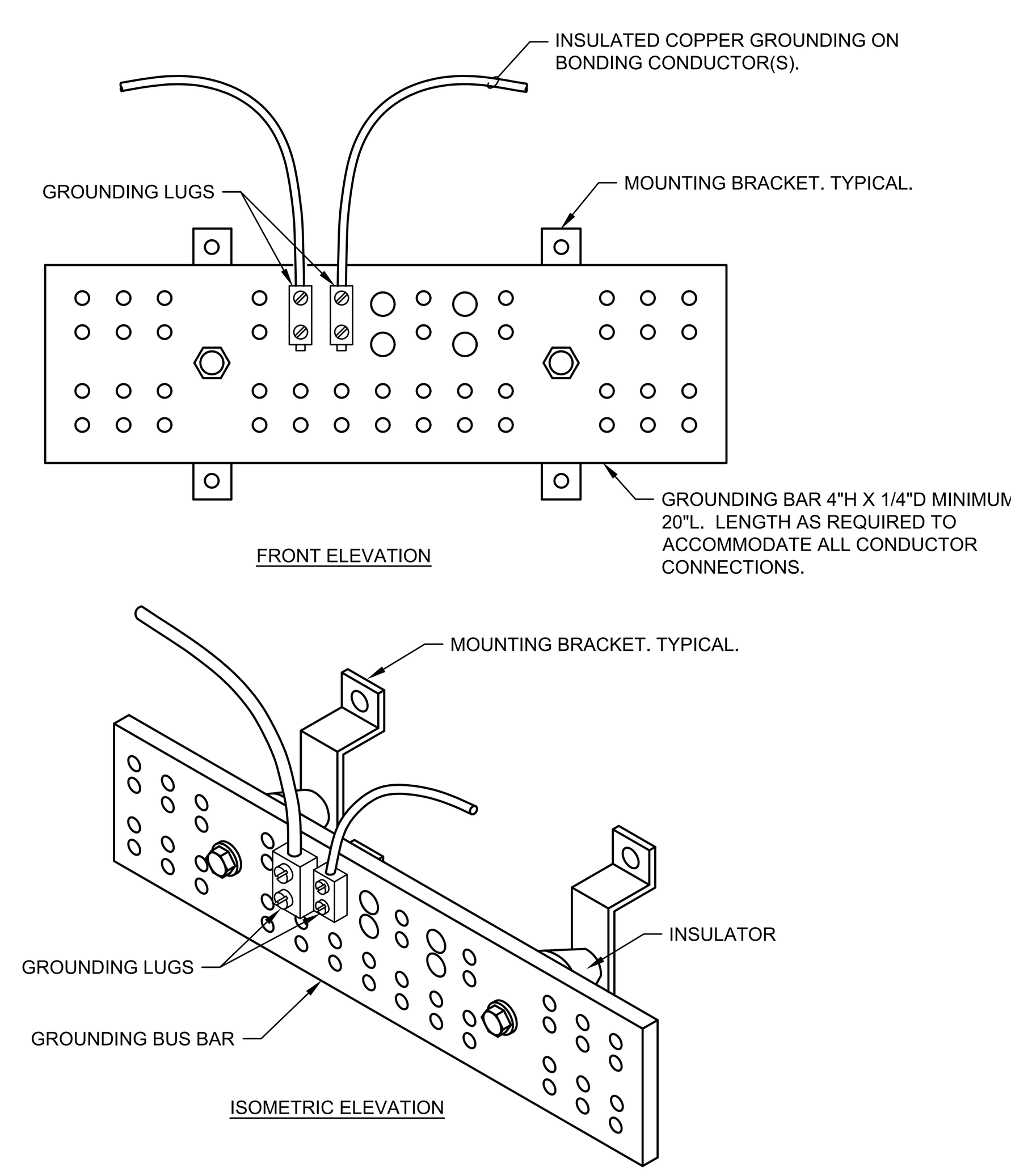


NOTE:

1. THIS DETAIL IS A REPRESENTATION OF THE LABELING REQUIREMENTS FOR ELECTRICAL EQUIPMENT. ALL ELECTRICAL EQUIPMENT, WHETHER IT IS EXPLICIT SHOWN OR NOT, SHALL BE LABELED IN A SIMILAR MANNER.
2. ALL LABELS SHALL BE ENGRAVED LAMINATED ACRYLIC. THE EQUIPMENT DESIGNATION SHALL HAVE A MINIMUM TEXT HEIGHT OF 3/8". THE REMAINING TEXT SHALL HAVE A MINIMUM HEIGHT OF 1/8".
3. LABELS FOR EQUIPMENT CONNECTED TO THE NORMAL POWER SYSTEM SHALL BE BLACK WITH WHITE TEXT. LABELS FOR EQUIPMENT CONNECTED TO THE EMERGENCY POWER SYSTEM SHALL BE RED WITH WHITE TEXT.
4. NAMEPLATES FOR EQUIPMENT LOCATED IN THE INTERIOR OF THE BUILDING SHALL BE ATTACHED WITH 3M SELF-ADHESIVES. EQUIPMENT INSTALLED AT EXTERIOR OF THE BUILDING SHALL BE ATTACHED WITH SCREWS AND THE LABEL SHALL HAVE PRE-PUNCHED OR PREDRILLED HOLES.

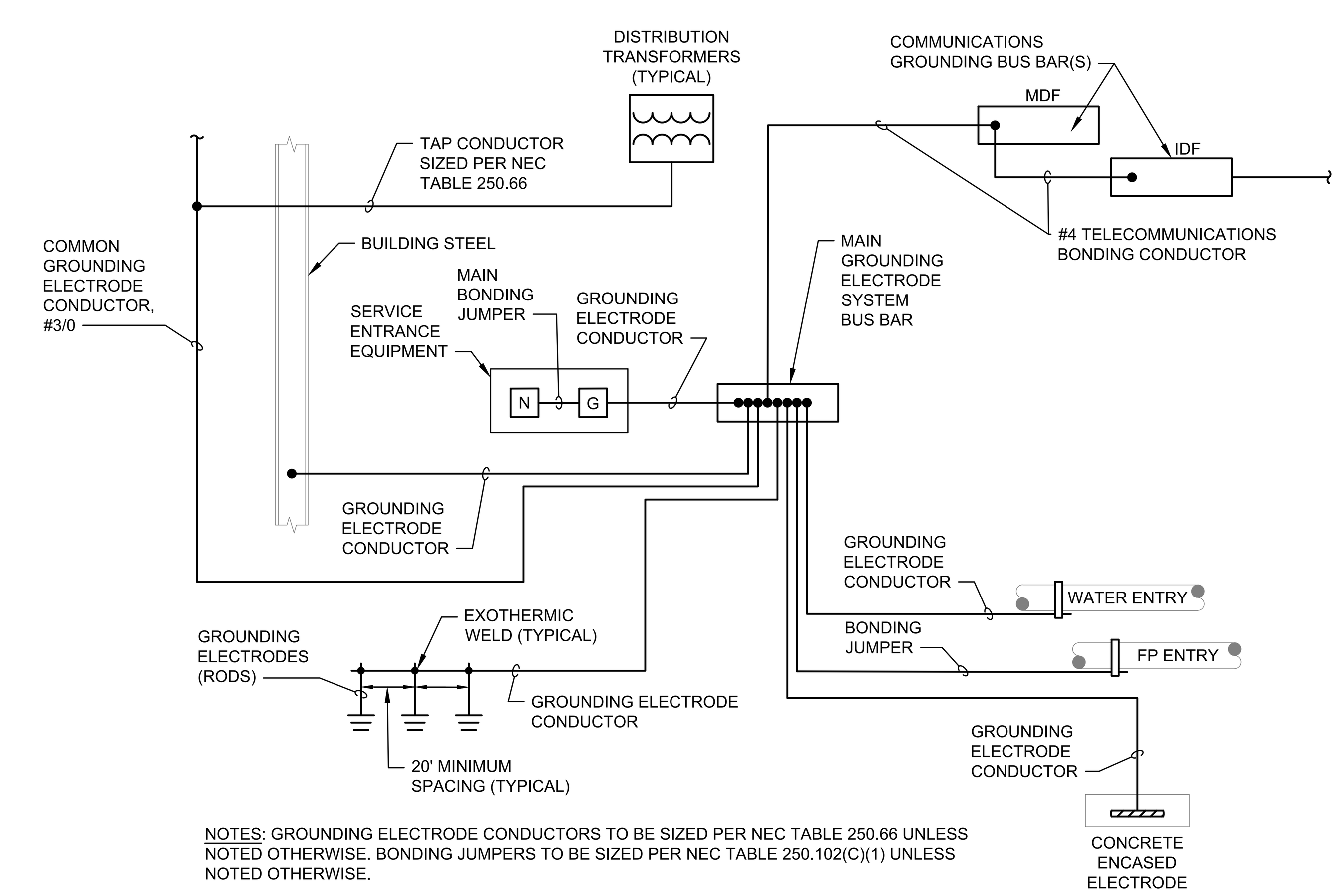
ELECTRICAL EQUIPMENT IDENTIFICATION

NOT TO SCALE



GROUNDING BUS BAR DETAIL

NOT TO SCALE



NOTES: GROUNDING ELECTRODE CONDUCTORS TO BE SIZED PER NEC TABLE 250.66 UNLESS NOTED OTHERWISE. BONDING JUMPERS TO BE SIZED PER NEC TABLE 250.102(C)(1) UNLESS NOTED OTHERWISE.

ELECTRICAL SYSTEM GROUNDING DETAIL

NOT TO SCALE

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SILVER CREEK HIGH SCHOOL
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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	ZSD	RMB

DRAWING TITLE:
ELECTRICAL DETAILS

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
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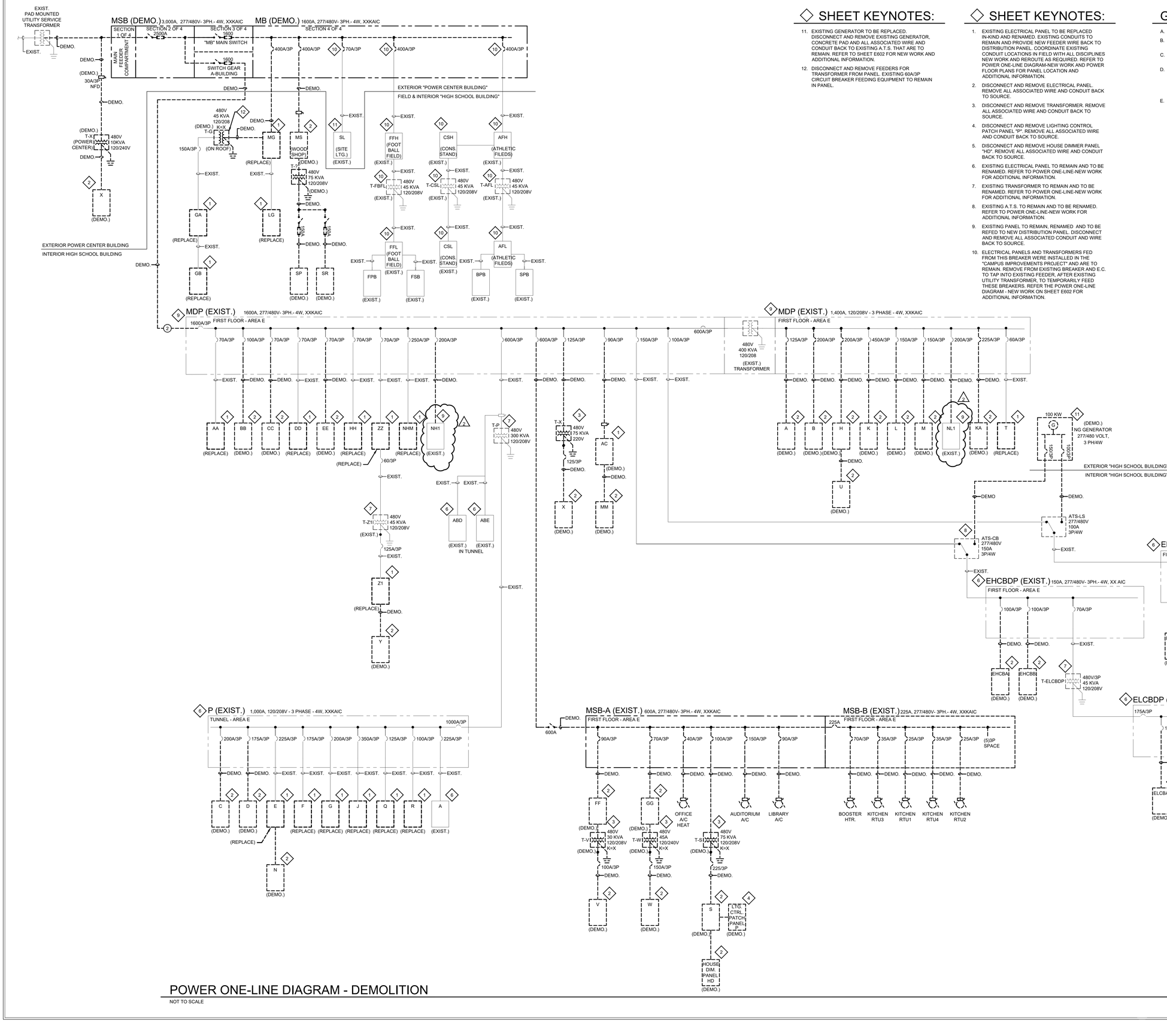

SHEET KEYNOTES:

11. EXISTING GENERATOR TO BE REPLACED. DISCONNECT AND REMOVE EXISTING GENERATOR, CONCRETE PAD AND ALL ASSOCIATED WIRE AND CONDUIT BACK TO EXISTING A.T.S. THAT ARE TO REMAIN. REFER TO SHEET E602 FOR NEW WORK AND ADDITIONAL INFORMATION.
12. DISCONNECT AND REMOVE FEEDERS FOR TRANSFORMER FROM PANEL. EXISTING 60A/3P CIRCUIT BREAKER FEEDING EQUIPMENT TO REMAIN IN PANEL.

SHEET KEYNOTES:

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND AND RENAMED. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. REFER TO POWER ONE-LINE DIAGRAM-NEW WORK AND POWER FLOOR PLANS FOR PANEL LOCATION AND ADDITIONAL INFORMATION.
2. DISCONNECT AND REMOVE ELECTRICAL PANEL. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
3. DISCONNECT AND REMOVE TRANSFORMER. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
4. DISCONNECT AND REMOVE LIGHTING CONTROL PATCH PANEL "P". REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
5. DISCONNECT AND REMOVE HOUSE DIMMER PANEL "HD". REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
6. EXISTING ELECTRICAL PANEL TO REMAIN AND TO BE RENAMED. REFER TO POWER ONE-LINE-NEW WORK FOR ADDITIONAL INFORMATION.
7. EXISTING TRANSFORMER TO REMAIN AND TO BE RENAMED. REFER TO POWER ONE-LINE-NEW WORK FOR ADDITIONAL INFORMATION.
8. EXISTING A.T.S. TO REMAIN AND TO BE RENAMED. REFER TO POWER ONE-LINE-NEW WORK FOR ADDITIONAL INFORMATION.
9. EXISTING PANEL TO REMAIN, RENAMED AND TO BE REFED TO NEW DISTRIBUTION PANEL. DISCONNECT AND REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE.
10. ELECTRICAL PANELS AND TRANSFORMERS FED FROM THIS BREAKER WERE INSTALLED IN THE "CAMPUS IMPROVEMENTS PROJECT" AND ARE TO REMAIN. REMOVE FROM EXISTING BREAKER AND E.C. TO TAP INTO EXISTING FEEDER, AFTER EXISTING UTILITY TRANSFORMER, TO TEMPORARILY FEED THESE BREAKERS. REFER THE POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E602 FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

A. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.
B. ELECTRICAL ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN.
C. ELECTRICAL ITEMS SHOWN BOLD AND DASHED ARE TO BE REMOVED UNLESS OTHERWISE NOTED.
D. EXISTING POWER ONE-LINE DIAGRAM IS FROM EXISTING CONSTRUCTION DOCUMENT DRAWINGS AND FOR REFERENCE ONLY. EXISTING CONDITIONS TO BE FIELD VERIFY AS REQUIRED FOR ANY MODIFICATIONS.
E. EXISTING PANELS ARE TO BE RENAMED. REFER TO POWER ONE-LINE DIAGRAM-NEW WORK FOR ADDITIONAL INFORMATION.

POWER ONE-LINE DIAGRAM - DEMOLITION

NOT TO SCALE

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1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

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POWER ONE-LINE DIAGRAM - DEMOLITION

CERTIFIED BY:
ROBERT D. BOTTOM REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E601

PROJECT NUMBER
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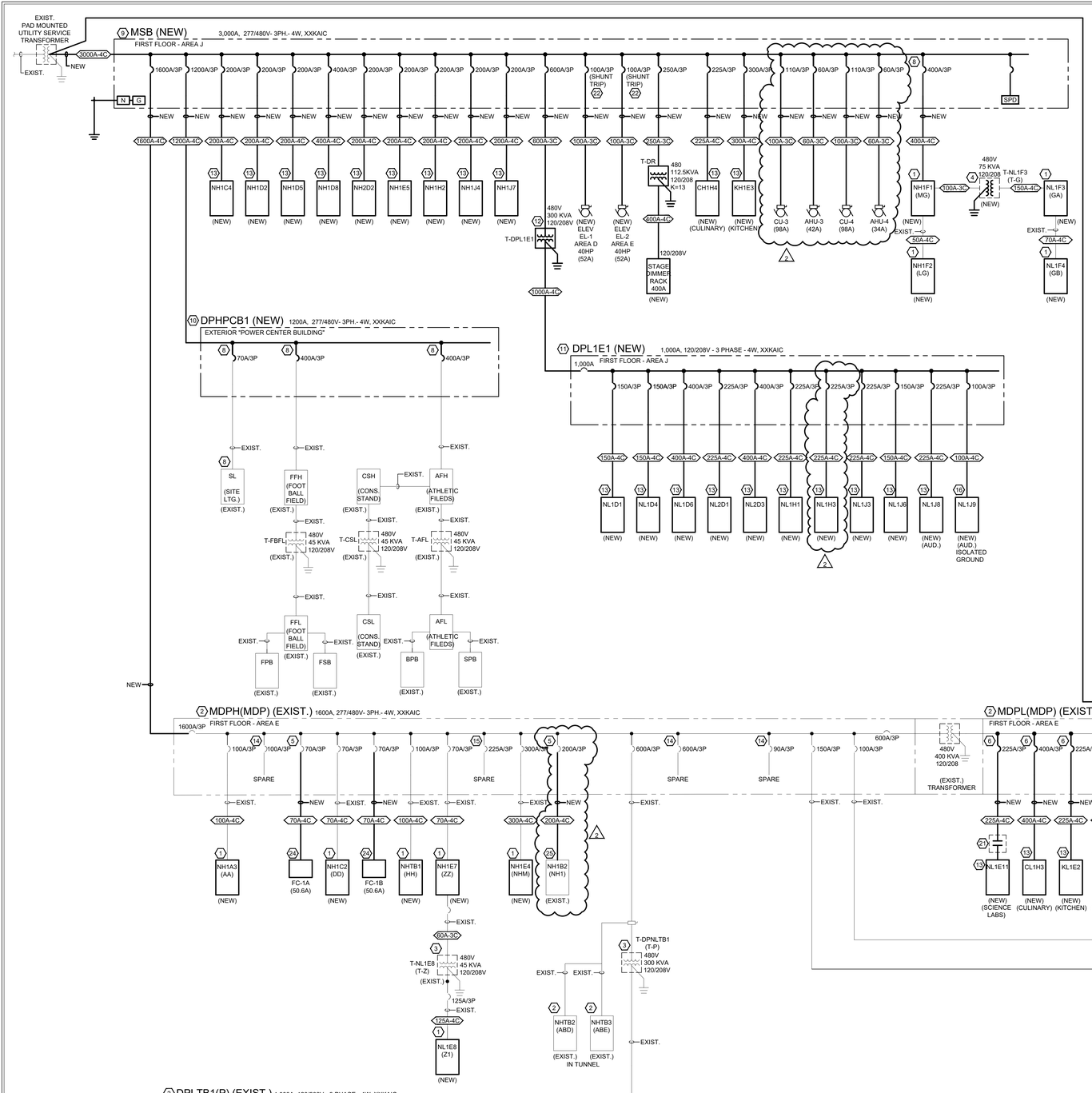

ONE-LINE FEEDER SCHEDULE

TAG	CONDUIT AND CONDUCTOR SIZE	NOTES
	THREE PHASE, FOUR WIRE	
15A-4C	4#12, 1#12G, IN 3/4"C.	
20A-4C	4#12, 1#12G, IN 3/4"C.	
25A-4C	4#10, 1#10G, IN 3/4"C.	
30A-4C	4#10, 1#10G, IN 3/4"C.	
35A-4C	4#8, 1#10G, IN 3/4"C.	
40A-4C	4#8, 1#10G, IN 3/4"C.	
45A-4C	4#6, 1#10G, IN 1"C.	
50A-4C	4#6, 1#10G, IN 1"C.	
60A-4C	4#4, 1#10G, IN 1-1/4"C.	
70A-4C	4#4, 1#8G, IN 1-1/4"C.	
80A-4C	4#3, 1#8G, IN 1-1/4"C.	
90A-4C	4#2, 1#8G, IN 1-1/4"C.	
100A-4C	4#1, 1#6G, IN 1-1/2"C.	
110A-4C	4#1, 1#6G, IN 1-1/2"C.	
125A-4C	4#1/0, 1#6G, IN 1-1/2"C.	
150A-4C	4#1/0, 1#6G, IN 1-1/2"C.	
175A-4C	4#2/0, 1#6G, IN 2"C.	
200A-4C	4#3/0, 1#6G, IN 2"C.	
225A-4C	4#4/0, 1#4G, IN 2-1/2"C.	
250-4C	4#250, 1#4G, IN 2-1/2"C.	
300A-4C	4#350, 1#4G, IN 2-1/2"C.	
350A-4C	4#500, 1#3G, IN 3"C.	
400A-4C	(2 SETS) 4#3/0, 1#3G, IN 2"C	
450A-4C	(2 SETS) 4#4/0, 1#2G, IN 2-1/2"C	
500A-4C	(2 SETS) 4#250, 1#2G, IN 2-1/2"C	
600A-4C	(2 SETS) 4#350, 1#1G, IN 2-1/2"C	
700A-4C	(2 SETS) 4#500, 1#1/0G, IN 3"C	
800A-4C	(3 SETS) 4#300, 1#1/0G, IN 2-1/2"C	
1000A-4C	(3 SETS) 4#400, 1#2/0G, IN 3"C	
1200A-4C	(4 SETS) 4#350, 1#3/0G, IN 3"C	
1600A-4C	(5 SETS) 4#400, 1#4/0G, IN 3"C	
2000A-4C	(6 SETS) 4#400, 1#250G, IN 3"C	
2500A-4C	(7 SETS) 4#500, 1#350G, IN 3"C	
3000A-4C	(8 SETS) 4#500, 1#400G, IN 3"C	
4000A-4C	(10 SETS) 4#600, 1#500G, IN 3-1/2"C	
	THREE PHASE, THREE WIRE	
15A-3C	3#12, 1#12G, IN 3/4"C.	
20A-3C	3#12, 1#12G, IN 3/4"C.	
25A-3C	3#10, 1#10G, IN 3/4"C.	
30A-3C	3#10, 1#10G, IN 3/4"C.	
35A-3C	3#8, 1#10G, IN 3/4"C.	
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50A-3C	3#6, 1#10G, IN 3/4"C.	
60A-3C	3#4, 1#10G, IN 1"C.	
70A-3C	3#4, 1#8G, IN 1"C.	
80A-3C	3#3, 1#8G, IN 1"C.	
90A-3C	3#2, 1#8G, IN 1-1/4"C.	
100A-3C	3#1, 1#6G, IN 1-1/4"C.	
110A-3C	3#1, 1#6G, IN 1-1/4"C.	
125A-3C	3#1/0, 1#6G, IN 1-1/2"C.	
150A-3C	3#1/0, 1#6G, IN 1-1/2"C.	
175A-3C	3#2/0, 1#6G, IN 1-1/2"C.	
200A-3C	3#3/0, 1#6G, IN 2"C.	
225A-3C	3#4/0, 1#4G, IN 2"C.	
250A-3C	3#250, 1#4G, IN 2"C.	
300A-3C	3#350, 1#4G, IN 2-1/2"C.	
350A-3C	3#500, 1#3G, IN 2-1/2"C.	
400A-3C	(2 SETS) 3#3/0, 1#3G, IN 2"C	
450A-3C	(2 SETS) 3#4/0, 1#2G, IN 2"C	
500A-3C	(2 SETS) 3#250, 1#2G, IN 2"C	
600A-3C	(2 SETS) 3#350, 1#1G, IN 2-1/2"C	
700A-3C	(2 SETS) 3#500, 1#1/0G, IN 2-1/2"C	
800A-3C	(3 SETS) 3#300, 1#1/0G, IN 2-1/2"C	
1000A-3C	(3 SETS) 3#400, 1#2/0G, IN 2-1/2"C	
1200A-3C	(4 SETS) 3#350, 1#3/0G, IN 2-1/2"C	
1600A-3C	(5 SETS) 3#400, 1#4/0G, IN 2-1/2"C	
2000A-3C	(6 SETS) 3#400, 1#250G, IN 2-1/2"C	
2500A-3C	(7 SETS) 3#500, 1#350G, IN 3"C	
3000A-3C	(8 SETS) 3#500, 1#400G, IN 3"C	
4000A-3C	(10 SETS) 3#600, 1#500G, IN 3"C	

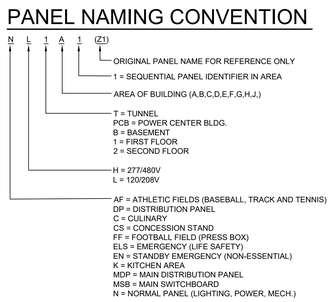
LEGEND:
G = GROUND, C = CONDUIT, N = NEUTRAL, F = FIRE RATED,
S = SEPARATELY DERIVED SYSTEM, U = UTILITY SERVICE

NOTES:
1. ALL CONDUCTORS SHALL BE COPPER

SHEET KEYNOTES:

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND AND RENAMED. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. SOME PANELS WILL HAVE AN INCREASE IN BREAKER QUANTITY. REFER TO POWER FLOOR PLANS FOR PANEL LOCATION AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. EXISTING ELECTRICAL PANEL TO REMAIN AND TO BE RENAMED, PROVIDE NEW LABEL.
3. EXISTING TRANSFORMER TO REMAIN AND TO BE RENAMED, PROVIDE NEW LABEL.
4. PROVIDE A NEW FLOOR MOUNTED TRANSFORMER AND CONNECT TO PANELS SHOWN. THIS TRANSFORMER REPLACES SUPPLY TRANSFORMER LOCATED ON ROOF.
5. UTILIZE EXISTING BREAKER THAT BECAME SPARE FROM DEMOLITION.
6. PROVIDE NEW BREAKER IN EXISTING DISTRIBUTION PANEL, MATCH EXISTING MANUFACTURER AND TYPE.
7. PROVIDE NEW ELECTRICAL PANEL,CONDUIT AND WIRE TO BREAKER SHOWN. REFEED EXISTING CIRCUITS THAT ARE TO REMAIN FROM PANELS THAT WERE REMOVED.
8. PROVIDE NEW BREAKER, CONDUIT AND WIRE TO REFEED PANELS PREVIOUSLY FED FROM EXISTING PANEL "MSB", LOCATED IN THE "POWER CENTER BLDG.", THAT IS TO BE REMOVED.
9. PROVIDE NEW MAIN SWITCHBOARD AND CONNECT TO EXISTING UTILITY TRANSFORMER.
10. PROVIDE NEW 480V DISTRIBUTION PANEL AND CONNECT TO NEW MAIN SWITCHBOARD.
11. PROVIDE NEW 208V DISTRIBUTION PANEL AND CONNECT TO NEW TRANSFORMER.
12. PROVIDE NEW FLOOR MOUNTED TRANSFORMER.
13. PROVIDE NEW ELECTRICAL PANEL, CONDUIT AND WIRE TO DISTRIBUTION PANEL.
14. EXISTING BREAKERS BECAME SPARE FROM DEMOLITION.
15. ELECTRICAL PANELS AND TRANSFORMERS FED FROM THIS BREAKER WERE INSTALLED IN THE "CAMPUS IMPROVEMENTS PROJECT" AND ARE TO REMAIN. REMOVE FROM EXISTING BREAKER AND E.C. TO TAP INTO EXISTING FEEDER. AFTER EXISTING UTILITY TRANSFORMER, TO TEMPORARILY FEED THESE BREAKERS, REFER THE POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E602 FOR ADDITIONAL INFORMATION.
16. PROVIDE NEW ELECTRICAL PANEL WITH ISOLATED GROUND FOR AUDIO EQUIPMENT. PROVIDE CONDUIT AND WIRE TO DISTRIBUTION PANEL.
17. REFER TO PANEL SCHEDULE FOR ADDITIONAL BREAKERS / CIRCUIT INFORMATION.
18. PROVIDE NEW NATURAL GAS GENERATOR AND CONCRETE PAD. PROVIDE NEW FEEDERS TO EXISTING AND NEW EQUIPMENT AS SHOWN..
19. EXISTING AUTOMATIC TRANSFER SWITCH A.T.S. TO REMAIN. PROVIDE NEW FEEDERS TO NEW EXTERIOR GENERATOR.
20. NEW PACKAGED FIRE PUMP & CONTROLLER RATED WITH INTEGRAL A.T.S. (SECTION 213113).
21. 225A/3P NEMA 3R ENCLOSED CONTACTOR INTERLOCK WITH EPO PUSHBUTTONS AS INDICATED ON PLAN.
22. PROVIDE BREAKER WITH SHUNT TRIP OPERATOR AND INTERLOCK WITH FIRE ALARM SYSTEM FOR ACTIVATION BY HEAT DETECTORS IN ELEVATOR SHAFT AND/OR EQUIPMENT ROOM. SHUNT TRIP POWER SHALL BE SUPERVISED BY FIRE ALARM SYSTEM.
23. ROUTE UNDERGROUND FROM TRANSFORMER TO FIRE PUMP ATS/CONTROLLER.
24. PROVIDE A 480V/3PH. SINGLE-POINT CONNECTION TO FACTORY INSTALLED CONTROL PANEL FOR THE NEW FLUID COOLER UNIT.
25. EXISTING ELECTRICAL PANEL TO REMAIN AND TO BE RENAMED, PROVIDE NEW LABEL. PROVIDE NEW FEEDER FROM EXISTING PANEL TO BREAKER IN DISTRIBUTION PANEL SHOWN.

PANEL NAMING CONVENTION



GENERAL NOTES:

A. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.

B. ELECTRICAL ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN.

C. ELECTRICAL ITEMS SHOWN BOLD ARE NEW RUNLESS OTHERWISE NOTED.

D. EXISTING POWER ONE-LINE DIAGRAM IS FROM EXISTING CONSTRUCTION DOCUMENT DRAWINGS AND FOR REFERENCE ONLY. EXISTING CONDITIONS TO BE FIELD VERIFY AS REQUIRED FOR ANY MODIFICATIONS.

E. ORIGINAL PANEL NAME SHOWN IN PARENTHESES FOR REFERENCE ONLY.

POWER ONE-LINE DIAGRAM - NEW WORK

NOT TO SCALE

SILVER CREEK SCHOOL CORPORATION

SCSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stwengs.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings include the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings and specifications together describe all work required for full performance and completion of the requirements of the Contract.
The work to be performed in general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
POWER ONE-LINE DIAGRAM - NEW WORK

CERTIFIED BY:
ROBERT D. BOTTORFF REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E602

PROJECT NUMBER
2021026

CH1H4

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	225 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	3		(101.2) MAU (ROOF)	1.9	0.0		SPARE		1	20	2
3	--	--		--		1.9	0.0	SPARE		1	20	4
5	--	--		--			1.9	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0 SPARE		1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0 SPARE		1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0 SPARE		1	20	42
				PHASE TOTALS:	1.9	1.9	1.9	TOTAL:		5.7 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	5736 VA	100.00%	5736 VA		
				Total Conn. Load:	5736 VA
				Total Est. Demand:	5736 VA
				Total Conn.:	7 A
				Total Est. Demand:	7 A

CL1H3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	72	400 A	MCB		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	2		(114.1) EXHAUST (ROOF)	0.7	1.9		REC: DRY STORAGE H120D		1	20	2
3	--	--		--		0.7	0.4	REC: OFFICE H120C DESK		1	20	4
5	20	1		(114) CONVENIENCE OUTLET			1.8	0.2 (129) CONVENIENCE OUTLET		1	20	6
7	--	--	S	*(CKT.5) SHUNT-TRIP*	0.0	0.2		(129) CONVENIENCE OUTLET		1	20	8
9	20	1		(114) CONVENIENCE OUTLET		1.9	0.0	(81) DRYER		2	20	10
11	--	--	S	*(CKT.9) SHUNT-TRIP*			0.0	0.0 --		--	--	12
13	20	1		(114) CONVENIENCE OUTLET	1.9	1.2		(28) WASHER		1	20	14
15	--	--	S	*(CKT.13) SHUNT-TRIP*		0.0	1.6	(103) INDUCTION RANGE		2	20	16
17	20	1		(115) CONVENIENCE OUTLET			1.9	1.6 --		--	--	18
19	20	1		(112) CONVENIENCE OUTLET	1.9	1.6		(103) INDUCTION RANGE		2	20	20
21	20	1		(109) CONVENIENCE OUTLET		1.9	1.6	--		--	--	22
23	--	--	S	*(CKT.21) SHUNT-TRIP*			0.0	1.6 (103) INDUCTION RANGE		2	20	24
25	20	1		(109) CONVENIENCE OUTLET	1.9	1.6		--		--	--	26
27	--	--	S	*(CKT.27) SHUNT-TRIP*		0.0	0.4	(95) TEACHER DEMO. TABLE		1	20	28
29	20	1		(110) CONVENIENCE OUTLET			1.9	3.6 CULINARY CONV. OUTLET		1	20	30
31	20	1		(106) REACH-IN REFRIG.	0.8	1.9		(99) CONVENIENCE OUTLET		1	20	32
33	20	2		(109.1) EXHAUST (ROOF)		0.7	1.9	(101) CONVENIENCE OUTLET		1	20	34
35	--	--		--			0.7	0.0 *(CKT.34) SHUNT-TRIP*	S	--	--	36
37	20	1		(117) CONVENIENCE OUTLET	1.9	1.9		*(101) CONVENIENCE...*		1	20	38
39	20	1		(130) CLG. CORD REEL		1.9	0.0	*(CKT.38) SHUNT-TRIP*	S	--	--	40
41	20	1		(93) CONVENIENCE OUTLET			0.2	1.9 (104) CONVENIENCE OUTLET		1	20	42
43	20	3		(82) DISPOSER	0.4	0.4		(73) DISPOSER		3	20	44
45	--	--		--		0.4	0.4	--		--	--	46
47	--	--		--			0.4	0.4 --		--	--	48
49	20	2		(101.1) EXHAUST (ROOF)	0.7	18.0		(77) VENTLESS...		3	70	50
51	--	--		--		0.7	18.0	--		--	--	52
53	20	1		(125) CONVENIENCE OUTLET			0.2	18.0 --		--	--	54
55	20	1		(125) CONVENIENCE OUTLET	0.2	1.9		(130) CLG. CORD REEL		1	20	56
57	20	1		(125) CONVENIENCE OUTLET		0.2	0.2	(125) CONVENIENCE OUTLET		1	20	58
59	20	1		(130) CLG. CORD REEL			1.9	0.2 (125) CONVENIENCE OUTLET		1	20	60
61	20	1		(125) CONVENIENCE OUTLET	0.2	1.9		(130) CLG. CORD REEL		1	20	62
63	20	1		(125) CONVENIENCE OUTLET		0.2	0.2	(125) CONVENIENCE OUTLET		1	20	64
65	20	1		(130) CLG. CORD REEL			1.9	1.9 (130) CLG. CORD REEL		1	20	66
67	20	1		SPARE	0.0	0.0		SPARE		1	20	68
69	20	1		SPARE		0.0	0.0	SPARE		1	20	70
71	20	1		SPARE			0.0	0.0 SPARE		1	20	72
				PHASE TOTALS:	43.3	33.4	40.4	TOTAL:		117.1 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	15888 VA	100.00%	15888 VA		
Power	66101 VA	100.00%	66101 VA	**Total Conn. Load:**	117148 VA
Receptacle	35159 VA	64.22%	22580 VA	**Total Est. Demand:**	104569 VA
				Total Conn.:	325 A
				Total Est. Demand:	290 A

ELSH1C5

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	24	60 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		EMERG. LIGHTING:	0.7	1.8		EMERG. LIGHTING: UNIT B		1	20	2
3	20	1		EMERG. LIGHTING: UNIT C			1.5	0.2 EMERG. LIGHTING: B200		1	20	4
5	20	1		EMERG. LIGHTING: UNIT F				1.3 0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
				PHASE TOTALS:	2.5	1.6	1.3	TOTAL:		5.5 kVA		

NOTES:
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2.

ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	5476 VA	125.00%	6844 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	5476 VA
				Total Est. Demand:	6844 VA
				Total Conn.:	7 A
				Total Est. Demand:	8 A

ELSH1D3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	24	60 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		EMERG. LTG: STUDENT...	1.2	0.9		EMERG. LTG:		1	20	2
3	20	1		EMERG. LTG: CORR D145		0.0	1.4	EMERG. LTG: FLEX		1	20	4
5	20	1		SPARE			0.0	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
				PHASE TOTALS:	2.1	1.4	0.0	TOTAL:		3.4 kVA		

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	3432 VA	125.00%	4290 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	3432 VA
				Total Est. Demand:	4290 VA
				Total Conn.:	4 A
				Total Est. Demand:	5 A

ELSH1E3(EHLSDP)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	30	125 A	MLO	18,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.0		SPARE		1	20	2
3	20	1		SPARE		0.0	0.0	SPARE		1	20	4
5	20	1		SPARE			0.0	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	60	3		EQUIP: ELSH1C5 (NEW)	2.5	2.1		EQUIP: ELSH1D3 (NEW)		3	60	14
15	--	--		--		1.6	1.4	--		--	--	16
17	--	--		--			1.3	0.0 --		--	--	18
19	60	3		EQUIP: ELSH1J5 (NEW)	4.3	0.5		JOCKEY PUMP J130A RISER		3	15	20
21	--	--		--		3.2	0.5	--		--	--	22
23	--	--		--			1.1	0.5 --		--	--	24
25	--	--		SPACE	0.0	7.5		FIRE PUMP J130A RISER		3	150	26
27	--	--		SPACE		0.0	7.5	--		--	--	28
29	--	--		SPACE			0.0	7.5 --		--	--	30
				PHASE TOTALS:	16.8	14.1	10.4	TOTAL:		41.3 kVA		

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	16459 VA	125.00%	20573 VA		
Other	1025 VA	100.00%	1025 VA	**Total Conn. Load:**	41344 VA
Power	23860 VA	100.00%	23860 VA	**Total Est. Demand:**	45458 VA
				Total Conn.:	50 A
				Total Est. Demand:	55 A

ELSH1J5

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	24	60 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		EMERG. LTG: MECH J200	0.1	0.5		EMERG. LTG: AREA G		1	20	2
3	20	1		EMERG. LTG: AREA J			0.9	1.8 EMERG. LTG: UNIT H		1	20	4
5	20	1		EMERG. LTG: MECH J128,130				0.5 0.6 EMERG. LTG: EXTR WEST		1	20	6
7	20	1		EMERG. LTG: EXTR NORTH	0.2	3.3		EMERG. LTG: UNIT E		1	20	8
9	20	1		EMERG. LTG: CRTYRD D146			0.2	0.3 LTG: CONTACTOR		1	20	10
11	20	1		EMERG. LTG: EXTR EAST				0.1 0.0 SPARE		1	20	12
13						0.0		SPARE		1	20	14
15	20	1		SPARE			0.0	0.0 SPARE		1	20	16
17	20	1		SPARE				0.0 0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE			0.0	0.0 SPARE		1	20	22
23	20	1		SPARE				0.0 0.0 SPARE		1	20	24
				PHASE TOTALS:	4.3	3.2	1.1	TOTAL:		8.6 kVA		

NOTES:
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ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	7551 VA	125.00%	9439 VA		
Other	1025 VA	100.00%	1025 VA	**Total Conn. Load:**	8576 VA
				Total Est. Demand:	10464 VA
				Total Conn.:	10 A
				Total Est. Demand:	13 A

ENH1C7

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	30	100 A	MLO	18,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.0		SPARE		1	20	2
3	20	1		SPARE		0.0	0.0	SPARE		1	20	4
5	20	1		SPARE			0.0	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0 SPARE		1	20	30
				PHASE TOTALS:	0.0	0.0	0.0	TOTAL:		0.0 kVA		

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

ENH1E1(EHCBDP)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	225 A	MCB	18,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.0		SPARE		1	20	2
3	20	1		SPARE		0.0	0.0	SPARE		1	20	4
5	20	1		SPARE			0.0	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0 SPARE		1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0 SPARE		1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0 SPARE		1	20	42
				PHASE TOTALS:	0.0	0.0	0.0	TOTAL:		0.0 kVA		

NOTES:
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2.

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

ENH1J6

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	30	100 A	MLO	18,000	RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.0		SPARE		1	20	2
3	20	1		SPARE		0.0	0.0	SPARE		1	20	4
5	20	1		SPARE			0.0	0.0 SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0 SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0 SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0 SPARE		1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0 SPARE		1	20	30
				PHASE TOTALS:	0.0	0.0	0.0	TOTAL:		0.0 kVA		

NOTES:
1.
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ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

GENERAL NOTES

A. REFER TO ELECTRICAL POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E601 FOR ADDITIONAL INFORMATION.

B. ALL PANELS SHALL HAVE TYPED AND COMPLETED DIRECTORIES INDICATING EQUIPMENT OR DEVICE SERVED, ROOM NUMBER OR NAME (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT OR DEVICE LOCATION. HAND WRITTEN DIRECTORIES WILL "NOT" BE ACCEPTED.

C. EXISTING KNOWN CIRCUITS THAT ARE TO REMAIN ARE LABELED AS SUCH AND SHALL BE RECONNECTED TO PANEL THAT WAS REPLACED IN KIND.

D. EXISTING CIRCUITS THAT ARE TO REMAIN AFTER DEMOLITION AND FIELD VERIFIED, SHALL UTILIZE SPARE CIRCUIT BREAKERS AND BE CONNECTED TO NEAREST ELECTRICAL PANEL AVAILABLE AND DIRECTORY TO BE UPDATED.

ELECTRICAL PANEL SCHEDULES		
CH1H4	CL1H3	ELSH1C5
ELSH1D3	ELSH1E3 (EHCBDP)	ELSH1J5
ENH1C7	ENH1E1 (EHCBDP)	ENH1J6

SILVER CREEK SCHOOL CORPORATION

CSO ARCHITECTS
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7600 | csoinc.net

SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.shrwng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of construction and materials to be used.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
Only the following general scope indicated or described, the trade contractor must furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ELECTRICAL PANEL SCHEDULES

CERTIFIED BY:
ROBERT D. BOTTOM
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E603

PROJECT NUMBER
2021026

ENL1C6

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	100 A	MLO	10,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: IDF B119	0.4	0.4					RECPT.: IDF B119		1	20	2
3	20	1		REC: IDF B119			0.4	0.4			RECPT.: IDF B119		1	20	4
5	20	1		RACK RECPT.: B119					0.0	0.4	REC: IDF E124		1	20	6
7	20	1		REC: IDF E124	0.4	0.4					REC: IDF E124		1	20	8
9	20	1		REC: IDF E124			0.4	3.0			RACK REC: IDF E124		1	30	10
11	20	1		DOOR ACCESS POINT C100					0.1	0.1	DOOR ACCESS POINT C102		1	20	12
13	20	1		DOOR ACCESS POINT E127	0.1	0.1					DOOR ACCESS POINT F100		1	20	14
15	20	1		DOOR ACCESS POINT F109			0.2	0.2			DOOR ACCESS POINT F109		1	20	16
17	30	2		EQUIP: ODU-03 (ON ROOF)					1.0	1.0	EQUIP: ODU-02 (ON ROOF)		2	30	18
19	--	--		--	1.0	1.0					--		--	--	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	3.8		4.6		2.7		TOTAL:	11.0 kVA			

NOTES:
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2.

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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	960 VA	100.00%	960 VA		
Power	3000 VA	100.00%	3000 VA	**Total Conn. Load:**	11000 VA
Receptacle	2880 VA	100.00%	2880 VA	**Total Est. Demand:**	11000 VA
Non-Continuous	4160 VA	100.00%	4160 VA	**Total Conn.:**	31 A
				Total Est. Demand:	31 A

ENL1D7

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	100 A	MLO		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		FIRE ALARM CONTROL...	0.5	0.5					JUNCTION BOX D131		1	20	2
3	20	1		REC: MDF D132			0.4	0.4			REC: MDF D132		1	20	4
5	20	1		REC: MDF D132					0.4	3.0	RACK REC: MDF D132		1	30	6
7	20	1		JUNCTION BOX D131	0.5	0.0					SPARE		1	20	8
9	30	1		RACK REC: MDF D132			3.0	0.5			ACCESS CNTRL HEADEND		1	20	10
11										0.1	DOOR POWER MDF		1	20	12
13	60	2		UPS DISC.: MDF D132	5.6	0.4					REC: MDF D132		1	20	14
15	--	--		--			5.6	0.4			REC: IDF D206		1	20	16
17	60	2		UPS DISC.: MDF D132					5.6	0.4	REC: IDF D206		1	20	18
19	--	--		--	5.6	3.0					RACK REC: IDF D206		1	20	20
21	20	1		INTRUSION DETECTION...			0.5	0.4			REC: IDF D206		1	20	22
23	20	1		SPARE					0.0	0.4	REC: IDF D206		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	16.1		11.1		9.8		TOTAL:	37.0 kVA			

NOTES:
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2.

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	620 VA	100.00%	620 VA		
Power	33464 VA	100.00%	33464 VA	**Total Conn. Load:**	36964 VA
Receptacle	2880 VA	100.00%	2880 VA	**Total Est. Demand:**	36964 VA
				Total Conn.:	103 A
				Total Est. Demand:	103 A

ENL1E2(ELCBDP)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	175 A	MCB	10,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		EQUIP: ANSUL SYSTEM...	0.5	0.5					EQUIP: ANSUL CTRL CAB.		1	20	2
3	20	1		EQUIP: ANSUL CTRL CAB.			0.5	0.5			EQUIP: ANSUL CTRL CAB.		1	20	4
5	20	2		EQUIP: COOLER BLOWER...					0.7	2.4	EQUIP: COOLER COND. UNIT		3	20	6
7	--	--		--	0.7	2.4					--		--	--	8
9	30	3		EQUIP: FREEZER BLOWER...			5.0	2.4			--		--	--	10
11	--	--		--					5.0	0.3	EQUIP: BLOWER...		2	20	12
13	--	--		--	5.0	0.3					--		--	--	14
15	20	1		EQUIP: WALK-IN FREEZER			1.9	1.9			EQUIP: WALK-IN FREEZER		1	20	16
17	20	1		EQUIP: COOLER BLOWER...					0.2	0.0	EQUIP: COOLER BLOWER...		1	20	18
19	20	1		EQUIP: WALK-IN COOLER	1.9	1.2					EQUIP: REACH-IN FREEZER		1	20	20
21	20	1		EQUIP: REACH-IN REFRIG.			0.6	0.2			EQUIP: U.C. REFRIGERATOR		1	20	22
23	30	1		RACK REC: IDF H116					3.0	0.2	EQUIP: U.C. FREEZER		1	20	24
25						0.8					EQUIP: MILK COOLER		1	20	26
27	20	1		SPARE			0.0	0.8			EQUIP: MILK COOLER		1	20	28
29	100	3		PANEL ENL1C6 (NEW)					3.8	0.4	REC: IDF H116		1	20	30
31	--	--		--	4.6	16.1					PANEL ENL1D7 (NEW)		3	100	32
33	--	--		--			2.7	11.1			--		--	--	34
35	20	1		SPARE					0.0	9.8	--		--	--	36
37	20	1		DOOR ACCESS POINT E136	0.1	0.4					REC: IDF H116		1	20	38
39	20	1		DOOR ACCESS POINT H128			0.2	0.4			REC: IDF H116		1	20	40
41	20	1		SPARE					0.0	0.4	REC: IDF H116		1	20	42
				PHASE TOTALS:	34.4		28.2		26.1		TOTAL:	86.7 kVA			

NOTES:
1. BREAKER BECOMES SPARE FROM DEMOLITION
2.

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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	3396 VA	100.00%	3396 VA		
Power	68187 VA	100.00%	68187 VA	**Total Conn. Load:**	86711 VA
Receptacle	10968 VA	95.59%	10484 VA	**Total Est. Demand:**	86227 VA
Non-Continuous	4160 VA	100.00%	4160 VA	**Total Conn.:**	241 A
				Total Est. Demand:	239 A

ENL1J10

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	100 A	MLO	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: IDF J118	0.4	0.5					REC: EMERGENCY LTG.		1	20	2
3	20	1		REC: IDF J118			0.4	0.5			REC: EMERGENCY LTG.		1	20	4
5	20	1		REC: IDF J118					0.4	0.5	REC: EMERGENCY LTG.		1	20	6
7	20	1		RACK REC: IDF J118	3.0	0.5					REC: EMERGENCY LTG.		1	20	8
9	20	1		REC: IDF J118			0.4	0.5			REC: EMERGENCY LTG.		1	20	10
11	20	1		REC: EM. DETECTION KIT					0.2	0.5	REC: EMERGENCY LTG.		1	20	12
13	20	1		REC: MOTORIZED DOOR...	0.5	0.5					REC: EMERGENCY LTG.		1	20	14
15	20	1		DOOR ACCESS POINT H100			0.4	0.5			REC: EMERGENCY LTG.		1	20	16
17	20	1		GARAGE DOOR H110 - J131					2.2	0.0	SPARE		1	20	18
19	20	1		DOOR CONTROLS J112-1	0.1	0.0					SPARE		1	20	20
21	20	1		DOOR CONTROLS J130-2			0.1	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	5.5		2.7		3.8		TOTAL:	12.0 kVA			

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	1640 VA	100.00%	1640 VA		
Power	4700 VA	100.00%	4700 VA	**Total Conn. Load:**	11960 VA
Receptacle	1620 VA	100.00%	1620 VA	**Total Est. Demand:**	11960 VA
Spare	4000 VA	100.00%	4000 VA	**Total Conn.:**	33 A
				Total Est. Demand:	33 A

KL1E1

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	54	275 A	MCB		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	30	2		EQUIP: HOT WATER...	2.5	1.1					REC: OFFICE 314		1	20	2
3	--	--		--			2.5	1.9			REC. HEATED DRAIN TAPE	G	1	20	4
5	20	3		EQUIP: DISPOSER					0.4	1.9	REC: WORKTABLE	G	1	20	6
7	--	--		--	0.4	1.9					REC: HEATED DRAIN TAPE		1	20	8
9	--	--		--			0.4	1.9			REC: WORKTABLE		1	20	10
11	35	2		EQUIP: COMMERCIAL...					2.9	0.4	REC: WORKTABLE		1	20	12
13	--	--		--	2.9	0.9					EQUIP: DISH MACH. COND....		1	20	14
15	20	1		EQUIP: KITCHEN EXHAUST...			1.9	1.9			EQUIP: PLANETARY MIXER		1	20	16
17	20	1		EQUIP: KITCHEN EXHAUST...					1.9	0.8	EQUIP: PASS-THRU HEAT...	G	2	20	18
19	20	1		EQUIP: ICE MAKER W/BIN...	0.8	0.8					--	G	--	--	20
21	20	1		REC: DRY STOR, KITCHEN			0.5	0.5			EQUIP: PASS-THRU REFRIG.	G	1	20	22
23	125	3		EQUIP: EXIST. COMBI OVEN					4.5	0.5	REC: WORKTABLE		1	20	24
25	--	--		--	4.5	0.2					REC: WORKTABLE	G	1	20	26
27	--	--		--			4.5	0.8			EQUIP: PASS-THRU HEAT...		2	20	28
29	20	1		REC: FUTURE ICE CREAM...					1.9	0.8	--		--	--	30
31	20	1		REC: FUTURE ICE CREAM...	1.9	0.5					EQUIP: PASS-THRU REFRIG.	G	1	20	32
33	20	1		REC: FUTURE ICE CREAM...			1.9	1.2			EQUIP: WASHER		1	20	34
35	20	1		SPARE					0.0	2.5	EQUIP: DRYER		2	30	36
37	20	1		SPARE	0.0	2.5					--		--	--	38
39	20	1		SPARE			0.0	1.0			EQUIP: CONDENSATE FAN		1	20	40
41	20	1		SPARE					0.0	1.0	EQUIP. ODU-04/IDU-04		2	15	42
43	20	1		SPARE	0.0	1.0					--		--	--	44
45	20	1		SPARE			0.0	1.2			EQUIP: EF-24 (ON ROOF)		1	20	46
47	20	1		SPARE					0.0	0.0	SPARE		1	20	48
49	20	1		SPARE	0.0	0.0					SPARE		1	20	50
51	20	1		SPARE			0.0	0.0			SPARE		1	20	52
53	20	1		SPARE					0.0	0.0	SPARE		1	20	54
				PHASE TOTALS:	21.9		22.2		19.5		TOTAL:	63.6 kVA			

NOTES:
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ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	1200 VA	125.00%	1500 VA		
Other	6176 VA	100.00%	6176 VA	**Total Conn. Load:**	63621 VA
Power	34073 VA	100.00%	34073 VA	**Total Est. Demand:**	58835 VA
Receptacle	20172 VA	74.79%	15086 VA	**Total Conn.:**	177 A
Non-Continuous	2000 VA	100.00%	2000 VA	**Total Est. Demand:**	163 A

KL1E2

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	225 A	MCB		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.4					EQUIP: DISPOSER		3	20	2
3	20	1	G	EQUIP: REACHI-IN REFRIG.			0.5	0.4			--		--	--	4
5	20	1		SPARE					0.0	0.4	--		--	--	6
7	20	1	G	EQUIP: REACH-IN REFRIG.	0.5	1.2					EQUIP: SELF-SERVE REFRIG.	G	2	20	8
9	20	2	G	EQUIP: SELF-SERVE REFRIG.			1.2	1.2			--		--	--	10
11	--	--		--					1.2	1.2	EQUIP: SELF-SERVE REFRIG.	G	2	20	12
13	20	1	G	EQUIP: SERVING COUNTER	1.9	1.2					--		--	--	14
15	20	1	G	EQUIP: SERVING COUNTER			1.9	0.5			EQUIP: DROP IN FROST TOP	G	1	20	16
17	20	1	G	EQUIP: SERVING COUNTER					1.9	0.7	EQUIP: SELF-SERVE BREA...	G	1	20	18
19	20	1	G	EQUIP: SERVING COUNTER	1.9	0.5					EQUIP: DROP IN FROST TOP	G	1	20	20
21	20	1	G	EQUIP: SERVING COUNTER			1.9	0.7			EQUIP: SELF-SERVE BREA...	G	1	20	22
23	20	1	G	EQUIP: SERVING COUNTER					1.9	1.7	EQUIP: DROP-IN HOT WELL	G	1	20	24
25	20	1	G	EQUIP: SERVING COUNTER	1.9	1.7					EQUIP: DROP-IN HOT WELL	G	1	20	26
27	20	1	G	EQUIP: SERVING COUNTER			1.9	1.9			EQUIP: POINT OF SALE	G	1	20	28
29	20	1	G	EQUIP: HEATED SHELF...					0.8	1.9	EQUIP: POINT OF SALE	G	1	20	30
31	20	1	G	EQUIP: SELF-SERVE BREA...	1.9	0.0					SPARE		1	20	32
33	20	1	G	EQUIP: HEATED SHELF...			0.8	0.0			SPARE		1	20	34
35	20	1	G	EQUIP: HEATED FOOD...					1.9	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	13.1		12.9		13.7		TOTAL:	39.8 kVA			

NOTES:
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2.

ABBREVIATIONS:
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S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	19675 VA	100.00%	19675 VA		
Receptacle	20112 VA	74.86%	15056 VA	**Total Conn. Load:**	39787 VA
				Total Est. Demand:	34731 VA
				Total Conn.:	110 A
				Total Est. Demand:	96 A

KH1E3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	300 A	MCB		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	40	3		(17.1) EXH. FAN & (17.2) MUA	3.0	7.7					EQUIP: DISHWASHER	G	3	40	2
3	--	--		--			3.0	7.7			--		--	--	4
5	--	--		--					3.0	7.7	--		--	--	6
7	20	1		SPARE	0.0	11.1					EQUIP: BOOSTER HEATER	G	3	50	8
9	20	1		SPARE			0.0	11.1			--		--	--	10
11	20	1		SPARE					0.0	11.1	--		--	--	12
13	30	3		EQUIP: CONVECTION OVEN	6.1	6.2					EQUIP: FUTURE COMBI	G	3	35	14
15	--	--		--			6.1	6.2			--		--	--	16
17	--	--		--					6.1	6.2	--		--	--	18
19	--	--	S	EQUIP: SHUNT TRIP	0.0	0.0					EQUIP: SHUNT TRIP	S	--	--	20
21	60	3		EQUIP: COMBI OVEN			12.5	6.2			EQUIP: TILTING SKILLET		3	25	22
23	--	--		--					12.5	6.2	--		--	--	24
25	--	--		--	12.5	6.2					--		--	--	26
27	--	--	S	EQUIP: SHUNT TRIP			0.0	0.0			EQUIP: SHUNT TRIP	S	--	--	28
29	35	3		EQUIP: FUTURE COMBI...					6.2	0.0	SPARE		1	20	30
31	--	--		--	6.2	0.0					SPARE		1	20	32
33	--	--		--			6.2	0.0			SPARE		1	20	34
35	--	--	S	EQUIP: SHUNT TRIP					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	59.1		59.1		59.1		TOTAL:	177.2 kVA			

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	2826 VA	100.00%	2826 VA		
Power	174376 VA	100.00%	174376 VA	**Total Conn. Load:**	177202 VA
				Total Est. Demand:	177202 VA
				Total Conn.:	213 A
				Total Est. Demand:	213 A

GENERAL NOTES

A. REFER TO ELECTRICAL POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E601 FOR ADDITIONAL INFORMATION.

B. ALL PANELS SHALL HAVE TYPED AND COMPLETED DIRECTORIES INDICATING EQUIPMENT OR DEVICE SERVED, ROOM NUMBER OR NAME (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT OR DEVICE LOCATION. HAND WRITTEN DIRECTORIES WILL "NOT" BE ACCEPTED.

C. EXISTING KNOWN CIRCUITS THAT ARE TO REMAIN ARE LABELED AS SUCH AND SHALL BE RECONNECTED TO PANEL THAT WAS REPLACED IN KIND.

D. EXISTING CIRCUITS THAT ARE TO REMAIN AFTER DEMOLITION AND FIELD VERIFIED, SHALL UTILIZE SPARE CIRCUIT BREAKERS AND BE CONNECTED TO NEAREST ELECTRICAL PANEL AVAILABLE AND DIRECTORY TO BE UPDATED.

2

ELECTRICAL PANEL SCHEDULES		
ENL1C6	ENL1D7	ENL1E2 (ELCBDP)
ENL1J10	KL1E1	KL1E2
KH1E3		

SILVER CREEK
SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ELECTRICAL PANEL SCHEDULES

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/08/22

DRAWING NUMBER
E604

PROJECT NUMBER
2021026

NH1A3(AA)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	18	100 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		LIGHTING: A137-A131, CORR.	0.6	5.5					EQUIP: RTU-100-1		3	25	2
3	20	1		LIGHTING: LOBBY			2.2	5.5			--		--	--	4
5	20	1		LIGHTING: ADMIN SUITE					2.4	5.5	--		--	--	6
7	20	3		EQUIP: RTU-100-3	3.9	3.0					EQUIP: RTU-100-4		3	15	8
9	--	--		--			3.9	3.0			--		--	--	10
11	--	--		--					3.9	3.0	--		--	--	12
13	20	1		EQUIP: EH-03-VEST. A100	3.7	0.5					LIGHTING: LOGO		1	20	14
15	20	1		SPARE			0.0	0.0			SPARE		1	20	16
17	20	1		SPARE					0.0	0.0	SPARE		1	20	18
				PHASE TOTALS:	17.3		14.7		14.9		TOTAL:		46.9 kVA		

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	37395 VA	125.00%	46744 VA		
Heating	3740 VA	100.00%	3740 VA	Total Conn. Load:	46933 VA
Lighting	5298 VA	125.00%	6623 VA	Total Est. Demand:	57606 VA
Other	0 VA	0.00%	0 VA	Total Conn.:	56 A
Power	500 VA	100.00%	500 VA	Total Est. Demand:	69 A

NH1B2(NH1)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		LIGHTING: CLASSROOM	3.1	3.5					LIGHTING: CORRIDOR		1	20	2
3	70	3		EQUIP: OAU-1			14.6	3.0			EQUIP: UH-1		1	20	4
5	--	--		--					14.6	3.0	EQUIP: UH-1		1	20	6
7	--	--		--	14.6	1.7					EQUIP: UH-2		3	20	8
9	20	1		EQUIP: UH-1			3.0	1.7			--		--	--	10
11	20	1		EQUIP: UH-1					3.0	1.7	--		--	--	12
13	20	1		EQUIP: UH-1	3.0	1.7					EQUIP: UH-2		3	20	14
15	20	1		EQUIP: UH-1			3.0	1.7			--		--	--	16
17	30	3		EQUIP: HP-2					6.0	1.7	--		--	--	18
19	--	--		--	6.0	5.3					EQUIP: HP-3		3	30	20
21	--	--		--			6.0	5.3			--		--	--	22
23	20	1		LIGHTING: SITE					0.8	5.3	--		--	--	24
25	15	3		EQUIP: ERV-4B	2.8	2.4					EQUIP: ERV-4A		3	15	26
27	--	--		--			2.8	2.4			--		--	--	28
29	--	--		--					2.8	2.4	--		--	--	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	44.1		43.5		41.3		TOTAL:		128.8 kVA		

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Spare	113300 VA	100.00%	113300 VA		
Non-Continuous	15546 VA	100.00%	15546 VA	Total Conn. Load:	128846 VA
				Total Est. Demand:	128846 VA
				Total Conn.:	155 A
				Total Est. Demand:	155 A

NH1C2(DD)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	18	70 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		SPARE	0.0	0.0					SPARE		1	20	2
3	20	1		SPARE			0.0	0.0			SPARE		1	20	4
5	20	1		SPARE					0.0	0.0	SPARE		1	20	6
7	20	1		SPARE	0.0	0.0					SPARE		1	20	8
9	20	1		SPARE			0.0	0.0			SPARE		1	20	10
11	20	1		SPARE					0.0	0.0	SPARE		1	20	12
13	20	1		SPARE	0.0	0.0					SPARE		1	20	14
15	20	1		SPARE			0.0	0.0			SPARE		1	20	16
17	20	1		SPARE					0.0	0.0	SPARE		1	20	18
				PHASE TOTALS:	0.0		0.0		0.0		TOTAL:		0.0 kVA		

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

NH1D8

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	400 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	125	3		EQUIP: DOAS-1 D228	34.1	3.0					EQUIP: DOAS-2 D135		3	15	2
3	--	--		--			34.1	3.0			--		--	--	4
5	--	--		--					34.1	3.0	--		--	--	6
7	70	3		EQUIP: AHU-1 D228	15.5	15.8					EQUIP: AHU-2 D228		3	70	8
9	--	--		--			15.5	15.8			--		--	--	10
11	--	--		--					15.5	15.8	--		--	--	12
13	25	3		EQUIP: WSCU-1 D135	4.6	0.0					SPARE		1	20	14
15	--	--		--			4.6	0.0			SPARE		1	20	16
17	--	--		--					4.6	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	73.0		73.0		73.0		TOTAL:		219.1 kVA		

NOTES:
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ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	219147 VA	125.00%	273934 VA		
				Total Conn. Load:	219147 VA
				Total Est. Demand:	273934 VA
				Total Conn.:	264 A
				Total Est. Demand:	329 A

NH1D2

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		LTG: CRTYARD D145 WEST	1.5	1.9					LTG: D145 CORR.		1	20	2
3	20	1		LTG: CRTYARD D145 EAST			2.2	0.0			SPARE		1	20	4
5	20	1		LTG: STACKS, STU UNI					3.4	0.0	SPARE		1	20	6
7	20	1		SPARE	0.0	0.0					SPARE		1	20	8
9	20	1		SPARE			0.0	0.0			SPARE		1	20	10
11	20	1		SPARE					0.0	0.0	SPARE		1	20	12
13	20	1		SPARE	0.0	0.0					SPARE		1	20	14
15	20	1		SPARE			0.0	0.0			SPARE		1	20	16
17	20	1		SPARE					0.0	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	3.5		2.2		3.4		TOTAL:		9.1 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	9070 VA	125.00%	11338 VA		
Other	0 VA	0.00%	0 VA	Total Conn. Load:	9070 VA
				Total Est. Demand:	11338 VA
				Total Conn.:	11 A
				Total Est. Demand:	14 A

NH1D5

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1															2
3	20	1		LTG: MAIN ENTRANCE			1.6	2.2			LTG: NE ROOMS		1	20	4
5	20	1		LTG: D114 CLASSROOM					1.4	2.1	LTG: FLEX AREA		1	20	6
7	15	3		EQUIP: RTU-300-3	2.8	1.1					LTG: COR D133		1	20	8
9	--	--		--			2.8	0.8			EQUIP.: RF-1 - STACKS D138		3	15	10
11	--	--		--					2.8	0.8	--		--	--	12
13	15	3		EQUIP.: RF-1 - STACKS D138	0.8	0.8					--		--	--	14
15	--	--		--			0.8	0.0			SPARE		1	20	16
17	--	--		--					0.8	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	5.5		8.2		7.9		TOTAL:		21.7 kVA		

NOTES:
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2.

ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	8310 VA	125.00%	10388 VA		
Lighting	8385 VA	125.00%	10481 VA	Total Conn. Load:	21681 VA
Other	0 VA	0.00%	0 VA	Total Est. Demand:	25855 VA
Non-Continuous	4986 VA	100.00%	4986 VA	Total Conn.:	26 A
				Total Est. Demand:	31 A

NH1D8

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	400 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	125	3		EQUIP: DOAS-1 D228	34.1	3.0					EQUIP: DOAS-2 D135		3	15	2
3	--	--		--			34.1	3.0			--		--	--	4
5	--	--		--					34.1	3.0	--		--	--	6
7	70	3		EQUIP: AHU-1 D228	15.5	15.8					EQUIP: AHU-2 D228		3	70	8
9	--	--		--			15.5	15.8			--		--	--	10
11	--	--		--					15.5	15.8	--		--	--	12
13	25	3		EQUIP: WSCU-1 D135	4.6	0.0					SPARE		1	20	14
15	--	--		--			4.6	0.0			SPARE		1	20	16
17	--	--		--					4.6	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	73.0		73.0		73.0		TOTAL:		219.1 kVA		

NOTES:
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2.

ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	219147 VA	125.00%	273934 VA		
				Total Conn. Load:	219147 VA
				Total Est. Demand:	273934 VA
				Total Conn.:	264 A
				Total Est. Demand:	329 A

NH1E4(NHM)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	300 A	MLO	25,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	25	3		EQUIP: RTU-200-4	5.5	5.5					EQUIP: RTU-200-5		3	25	2
3	--	--		--			5.5	5.5			--		--	--	4
5	--	--		--					5.5	5.5	--		--	--	6
7	25	3		EQUIP: RTU-200-6	5.5	2.8					EQUIP: RTU-200-7		3	15	8
9	--	--		--			5.5	2.8			--		--	--	10
11	--	--		--					5.5	2.8	--		--	--	12
13	15	3		EQUIP: RTU-200-8	2.8	2.8					EQUIP: RTU-200-9		3	15	14
15	--	--		--			2.8	2.8			--		--	--	16
17	--	--		--					2.8	2.8	--		--	--	18
19	25	3		EQUIP: RTU-300-5	4.7	6.1					EQUIP: RTU-300-6		3	25	20
21	--	--		--			4.7	6.1			--		--	--	22
23	--	--		--					4.7	6.1	--		--	--	24
25	25	3		EQUIP: RTU-300-7	6.1	7.8					EQUIP: DOAS-4		3	40	26
27	--	--		--			6.1	7.8			--		--	--	28
29	--	--		--					6.1	7.8	--		--	--	30
31	--	--		SPA CE	0.0	1.9					EQUIP. SP-3A, SP-3B-RM....		3	15	32
33	--	--		SPA CE			0.0	1.9			--		--	--	34
35	--	--		SPA CE					0.0	1.9	--		--	--	36
37	--	--		SPA CE	0.0	0.0					SPA CE		--	--	38
39	--	--		SPA CE			0.0	0.0			SPA CE		--	--	40
41	--	--		SPA CE					0.0	0.0	SPA CE		--	--	42
				PHASE TOTALS:	51.5		51.5		51.5		TOTAL:		154.4 kVA		

NOTES:
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ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	148722 VA	125.00%	185903 VA		
Other	5654 VA	100.00%	5654 VA	Total Conn. Load:	154376 VA
				Total Est. Demand:	191557 VA
				Total Conn.:	186 A
				Total Est. Demand:	230 A

NH1E5

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	3		EQUIP: RTU-300-10	2.8	3.4					LIGHTING: NORTH ROOMS		1	20	2
3	--	--		--			2.8	3.3			LIGHTING: E110 SCI LAB		1	20	4
5	--	--		--					2.8	2.6	LIGHTING: SOUTH ROOMS		1	20	6
7	20	3		EQUIP: ERV-01, ROOF	0.8	2.9					LIGHTING: CAFETERIA		1	20	8
9	--	--		--			0.8	3.4			LIGHTING: E111, CORR		1	20	10
11	--	--		--					0.8	0.0	SPARE		1	20	12
13	20	1		SPARE	0.0	0.0					SPARE		1	20	14
15	20	1		SPARE			0.0	0.0			SPARE		1	20	16
17	20	1		SPARE					0.0	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0					SPARE		1	20	26
27	20	1		SPARE			0.0	0.0			SPARE		1	20	28
29	20	1		SPARE					0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0					SPARE		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	9.9		10.4		6.2		TOTAL:		26.4 kVA		

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	10803 VA	125.00%	13504 VA		
Lighting	15631 VA	125.00%	19539 VA	Total Conn. Load:	26434 VA
Other	0 VA	0.00%	0 VA	Total Est. Demand:	33043 VA
				Total Conn.:	32 A
				Total Est. Demand:	40 A

GENERAL NOTES

A. REFER TO ELECTRICAL POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E601 FOR ADDITIONAL INFORMATION.

B. ALL PANELS SHALL HAVE TYPED AND COMPLETED DIRECTORIES INDICATING EQUIPMENT OR DEVICE SERVED, ROOM NUMBER OR NAME (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT OR DEVICE LOCATION. HAND WRITTEN DIRECTORIES WILL "NOT" BE ACCEPTED.

C. EXISTING KNOWN CIRCUITS THAT ARE TO REMAIN ARE LABELED AS SUCH AND SHALL BE RECONNECTED TO PANEL THAT WAS REPLACED IN KIND.

D. EXISTING CIRCUITS THAT ARE TO REMAIN AFTER DEMOLITION AND FIELD VERIFIED, SHALL UTILIZE SPARE CIRCUIT BREAKERS AND BE CONNECTED TO NEAREST ELECTRICAL PANEL AVAILABLE AND DIRECTORY TO BE UPDATED.

2

ELECTRICAL PANEL SCHEDULES		
NH1A3(AA)	NH1B2(NH1)	NH1C2(DD)
NH1C4	NH1D2	NH1D5
NH1D8	NH1E4(NHM)	NH1E5

SILVER CREEK
SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
317.848.7800 | csoinc.net

SHROUT TATE WILSON
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Lexington - Louisville - Charleston
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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	CMB	RDB

DRAWING TITLE:
ELECTRICAL PANEL SCHEDULES

CERTIFIED BY:
ROBERT D. BOTTOMS
REGISTERED
No. PE11900450
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
E605

PROJECT NUMBER
2021026

NH1F1(MG)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	30	250 A	MCB	18,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	3		PANEL NH1F2 (LG)	0.0	0.0		SPARE		3	60	2
3	--	--		--		0.0	0.0	--		--	--	4
5	--	--		--			0.0	0.0	--	--	--	6
7	15	3		EXIST.	0.0	0.0		EXIST.		3	15	8
9	--	--		--		0.0	0.0	--		--	--	10
11	--	--		--			0.0	0.0	--	--	--	12
13	40	3		EXIST.	0.0	0.0		EXIST.		3	40	14
15	--	--		--		0.0	0.0	--		--	--	16
17	--	--		--			0.0	0.0	--	--	--	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	Spare	1	20	24
25	20	1		SPARE	0.0	25.0		T-NL1F3 (T-G)		3	100	26
27	20	1		SPARE		0.0	25.0	--		--	--	28
29	20	1		SPARE			0.0	25.0	--	--	--	30
				PHASE TOTALS:	25.0		25.0		TOTAL:	75.0 kVA		

NOTES:
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2.

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Spare	75000 VA	100.00%	75000 VA		
				Total Conn. Load:	75000 VA
				Total Est. Demand:	75000 VA
				Total Conn.:	90 A
				Total Est. Demand:	90 A

NH1F2(LG)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	30	50 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	15	1		EXIST. EMERG. LTG. GYM	0.0	0.0		EXIST. LTG. GYM		1	15	2
3	15	1		EXIST. LTG. GYM		0.0	0.0	EXIST. LTG. GYM		1	15	4
5	15	1		EXIST. LTG. GYM			0.0	0.0	EXIST. LTG. GYM		1	15	6
7	15	1		EXIST. LTG. GYM	0.0	0.0		EXIST. LTG. GYM		1	15	8
9	15	1		EXIST. LTG. GYM		0.0	0.0	EXIST. LTG. GYM		1	15	10
11	15	1		EXIST. LTG. GYM			0.0	0.0	EXIST. LTG. GYM		1	15	12
13	15	1		EXIST. EXTERIOR WALL LTG.	0.0	0.0		SPARE		1	15	14
15	15	1		EXIST. LTG. GYM		0.0	0.0	EXIST. LTG. GYM		1	15	16
17	15	1		SPARE			0.0	0.0	SPARE		1	15	18
19	--	--		SPACE	0.0	0.0		SPACE		--	--	20
21	--	--		SPACE		0.0	0.0	SPACE		--	--	22
23	--	--		SPACE			0.0	0.0	SPACE	--	--	24
25	--	--		SPACE	0.0	0.0		SPACE		--	--	26
27	--	--		SPACE		0.0	0.0	SPACE		--	--	28
29	--	--		SPACE			0.0	0.0	Space	--	--	30
				PHASE TOTALS:	0.0		0.0		TOTAL:	0.0 kVA		

NOTES:
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ABBREVIATIONS:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

NH1H2

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	3		EQUIP: RTU-100-8	3.9	3.9		EQUIP: RTU-100-9		3	20	2
3	--	--		--		3.9	3.9	--		--	--	4
5	--	--		--			3.9	3.9	--	--	--	6
7	25	3		EQUIP: RTU-300-8	5.5	5.5		EQUIP: RTU-300-9		3	25	8
9	--	--		--		5.5	5.5	--		--	--	10
11	--	--		--			5.5	5.5	--	--	--	12
13	15	3		EQUIP: RTU-300-11	2.8	0.0		SPARE		3	20	14
15	--	--		--		2.8	0.0	--		--	--	16
17	--	--		--			2.8	0.0	--	--	--	18
19	20	1		LIGHTING: EAST ROOMS	2.3	0.0		SPARE		1	20	20
21	20	1		LIGHTING: CORR. AND...		1.4	0.0	SPARE		1	20	22
23	20	1		LIGHTING: CHOIR AND BAND			3.5	0.0	SPARE	1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE	1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE	1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE	1	20	42
				PHASE TOTALS:	23.9		23.0	25.2	TOTAL:	72.1 kVA		

NOTES:
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2.

ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	64818 VA	125.00%	81023 VA		
Lighting	7318 VA	125.00%	9148 VA	**Total Conn. Load:**	72136 VA
Other	0 VA	0.00%	0 VA	**Total Est. Demand:**	90170 VA
Power	0 VA	0.00%	0 VA	**Total Conn.:**	87 A
				Total Est. Demand:	108 A

NH1J4

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	72	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	15	3		EQUIP: RTU-300-15	2.8	5.5		EQUIP:...		3	25	2
3	--	--		--		2.8	5.5	--		--	--	4
5	--	--		--			2.8	5.5	--	--	--	6
7	15	3		EQUIP: P-B1 - J128 MECH.	0.9	0.9		EQUIP: P-B2 - J128 MECH.		3	15	8
9	--	--		--		0.9	0.9	--		--	--	10
11	--	--		--			0.9	0.9	--	--	--	12
13	15	3		EQUIP: P-B3 - J128 MECH.	0.6	0.6		EQUIP: P-B4 - J128 MECH.		3	15	14
15	--	--		--		0.6	0.6	--		--	--	16
17	--	--		--			0.6	0.6	--	--	--	18
19	20	3		EQUIP: P-1 - J128 MECH.	3.0	3.0		EQUIP: P-2 - J128 MECH.		3	20	20
21	--	--		--		3.0	3.0	--		--	--	22
23	--	--		--			3.0	3.0	--	--	--	24
25	20	3		EQUIP: P-3 - J128 MECH.	3.0	1.3		EQUIP: P-4 - J128 MECH.		3	15	26
27	--	--		--		3.0	1.3	--		--	--	28
29	--	--		--			3.0	1.3	--	--	--	30
31	15	3		EQUIP: P-5 - J128 MECH.	1.3	0.9		EQUIP: P-8 - J128 MECH.		3	20	32
33	--	--		--		1.3	0.9	--		--	--	34
35	--	--		--			1.3	0.9	--	--	--	36
37	15	3		EQUIP: P-9 - J128 MECH.	0.9	2.1		EQUIP: P-7 - J128 MECH.		3	15	38
39	--	--		--		0.9	2.1	--		--	--	40
41	--	--		--			0.9	2.1	--	--	--	42
43	15	3		EQUIP: P-6 - J128 MECH.	2.1	0.0		SPARE		1	20	44
45	--	--		--		2.1	0.0	SPARE		1	20	46
47	--	--		--			2.1	0.0	SPARE	1	20	48
49	20	1		SPARE	0.0	0.0		SPARE		1	20	50
51	20	1		SPARE		0.0	0.0	SPACE		--	--	52
53	20	1		SPARE			0.0	0.0	SPACE	--	--	54
55	20	1		SPARE	0.0	0.0		SPACE		--	--	56
57	20	1		SPARE		0.0	0.0	SPACE		--	--	58
59	--	--		SPACE			0.0	0.0	SPACE	--	--	60
61	--	--		SPACE	0.0	0.0		SPACE		--	--	62
63	--	--		SPACE		0.0	0.0	SPACE		--	--	64
65	--	--		SPACE			0.0	0.0	SPACE	--	--	66
67	--	--		SPACE	0.0	0.0		SPACE		--	--	68
69	--	--		SPACE		0.0	0.0	SPACE		--	--	70
71	--	--		SPACE			0.0	0.0	SPACE	--	--	72
				PHASE TOTALS:	29.3		29.3	29.3	TOTAL:	87.8 kVA		

NOTES:
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2.

ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	24930 VA	125.00%	31163 VA		
Non-Continuous	62844 VA	100.00%	62844 VA	**Total Conn. Load:**	87774 VA
				Total Est. Demand:	94007 VA
				Total Conn.:	106 A
				Total Est. Demand:	113 A

NH1J7

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		LTS: MECH J200	0.3	1.1		LTS: MECH J128,130		1	20	2
3	20	1		LTS: J110, 116-124, 101,102		0.6	1.6	LTS: J111-J115		1	20	4
5	20	1		LTS: LOBBY H101, J131			1.3	1.2	LTS: J117-J127		1	20	6
7	20	1		EQUIP: EH-3 VEST. J112	3.7	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0	SPARE	1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE	1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	SPARE	1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE	1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE	1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE	1	20	42
				PHASE TOTALS:	5.1		2.1	2.5	TOTAL:	9.8 kVA		

NOTES:
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ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	6027 VA	125.00%	7534 VA		
Other	3740 VA	100.00%	3740 VA	**Total Conn. Load:**	9767 VA
				Total Est. Demand:	11274 VA
				Total Conn.:	12 A
				Total Est. Demand:	14 A

NH1D2

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	200 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		LTG: CRTYARD D145 WEST	1.5	1.9		LTG: D145 CORR.		1	20	2
3	20	1		LTG: CRTYARD D145 EAST		2.2	0.0	SPARE		1	20	4
5	20	1		LTG: STACKS, STU UNI			3.4	0.0	SPARE	1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0	SPARE	1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE	1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	SPARE	1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE	1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE	1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE	1	20	42
				PHASE TOTALS:	3.5		2.2	3.4	TOTAL:	9.1 kVA		

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Lighting	9070 VA	125.00%	11338 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	9070 VA
				Total Est. Demand:	11338 VA
				Total Conn.:	11 A
				Total Est. Demand:	14 A

NHTB1(HH)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	100 A	MLO		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	50	3		EQUIP: RTU-1G	11.6	11.6		EQUIP: RTU-2G		3	50	2
3	--	--		--		11.6	11.6	--		--	--	4
5	--	--		--			11.6	11.6	--	--	--	6
7	20	1		LTS: B200	0.3	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0	SPARE	1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE	1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	SPARE	1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE	1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE	1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE	1	20	42
				PHASE TOTALS:	23.6		23.3	23.3	TOTAL:	70.1 kVA		

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	69756 VA	125.00%	87195 VA		
Lighting	330 VA	125.00%	413 VA	**Total Conn. Load:**	70086 VA
				Total Est. Demand:	87608 VA
				Total Conn.:	84 A
				Total Est. Demand:	105 A

NHTB2(ABD)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	225 A	MCB	35,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	50	3		EQUIP: RTU-3G	11.6	11.6		EQUIP: RTU-4G		3	50	2
3	--	--		--		11.6	11.6	--		--	--	4
5	--	--		--			11.6	11.6	--	--	--	6
7	60	3		EXISTING	0.0	0.0		EXISTING		3	60	8
9	--	--		--		0.0	0.0	--		--	--	10
11	--	--		--			0.0	0.0	--	--	--	12
13	20	3		EXISTING	0.0	0.0		EXISTING		3	20	14
15	--	--		--		0.0	0.0	--		--	--	16
17	--	--		--			0.0	0.0	--	--	--	18
19	20	3		EXISTING	0.0	0.0		EXISTING		3	20	20
21	--	--		--		0.0	0.0	--		--	--	22
23	--	--		--			0.0	0.0	--	--	--	24
25	20	3		EXISTING	0.0	0.0		EXISTING		3	20	26
27	--	--		--		0.0	0.0	--		--	--	28
29	--	--		--			0.0	0.0	--	--	--	30
31	20	3		EXISTING	0.0	0.0		EXISTING		3	20	32
33	--	--		--		0.0	0.0	--		--	--	34
35	--	--		--			0.0	0.0	--	--	--	36
37	20	3		EXISTING	0.0	0.0		EXISTING		3	20	38
39	--	--		--		0.0	0.0	--		--	--	40
41	--	--		--			0.0	0.0	--	--	--	42
				PHASE TOTALS:	23.3		23.3	23.3	TOTAL:	69.8 kVA		

NOTES:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	69756 VA	125.00%	87195 VA		
				Total Conn. Load:	69756 VA
				Total Est. Demand:	87195 VA
				Total Conn.:	84 A
				Total Est. Demand:	105 A

NHTB3(ABE)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	42	70 A	MLO	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	50	3		SPARE	0.0	0.0		SPARE		3	15	2
3	--	--		--		0.0	0.0	--		--	--	4
5	--	--		--			0.0	0.0	--	--	--	6
7	15	3		EXISTING	0.0	0.0		SPARE		3	15	8
9	--	--		--		0.0	0.0	--		--	--	10
11	--	--		--			0.0	0.0	--	--	--	12
13	15	3		EXISTING	0.0	0.0		SPARE		3	15	14
15	--	--		--		0.0	0.0	--		--	--	16
17	--	--		--			0.0	0.0	--	--	--	18
19	20	3		SPARE	0.0	0.0		EXISTING		3	20	20
21	--	--		--		0.0	0.0	--		--	--	22
23	--	--		--			0.0	0.0	--	--	--	24
25	20	3		EXISTING	0.0	0.0		EXISTING		3	20	26
27	--	--		--		0.0	0.0	--		--	--	28
29	--	--		--			0.0	0.0	--	--	--	30
31	20	3		SPARE	0.0	0.0		EXISTING		3	20	32
33	--	--		--		0.0	0.0	--		--	--	34
35	--	--		--			0.0	0.0	--	--	--	36
37	70	3		MAIN BREAKER	0.0	0.0		SPACE		--	--	38
39	--	--		--		0.0	0.0	SPACE		--	--	40
41	--	--		--			0.0	0.0	SPACE	--	--	42
				PHASE TOTALS:	0.0		0.0	0.0	TOTAL:	0.0 kVA		

NOTES:
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ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

GENERAL NOTES

A. REFER TO ELECTRICAL POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E601 FOR ADDITIONAL INFORMATION.

B. ALL PANELS SHALL HAVE TYPED AND COMPLETED DIRECTORIES INDICATING EQUIPMENT OR DEVICE SERVED, ROOM NUMBER OR NAME (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT OR DEVICE LOCATION. HAND WRITTEN DIRECTORIES WILL "NOT" BE ACCEPTED.

C. EXISTING KNOWN CIRCUITS THAT ARE TO REMAIN ARE LABELED AS SUCH AND SHALL BE RECONNECTED TO PANEL THAT WAS REPLACED IN KIND.

D. EXISTING CIRCUITS THAT ARE TO REMAIN AFTER DEMOLITION AND FIELD VERIFIED, SHALL UT

NL1A1(E)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	225 A	MLO	65,000	RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: COACHES LKR RM....	0.9	0.9		EWC: GIRLS LKR. RM. B113	G	1	20	2
3	20	1		REC: GIRLS RR B114A		0.2	1.8	BLEACHERS B117		3	20	4
5	20	1		REC: GIRLS RR B113A			0.4	1.8	--		--	6
7	20	1		REC: GIRLS LOCKER RM....	0.9	1.8			--		--	8
9	20	1		REC: GIRLS LOCKER RM....		1.1	1.0		EQUIP: CAS 1 A-G		2	15	10
11	20	1		REC: GIRLS RR B113A			0.7	1.0	--		--	--	12
13	20	1		REC: GIRLS RR B113A	0.5	0.3			EQUIP: CAS 2C,3C,3D		2	15	14
15	15	2		EQUIP: FCU 15,17		1.2	0.3		--		--	--	16
17	--	--		--			1.2	0.2	EQUIP: HR 1,2,3		2	15	18
19	15	1		EF-26: IDF A109	0.5	0.2			--		--	--	20
21	20	1		REC.: BOYS LOCKER RM....		0.9	1.2		EQUIP: FCU 3A,3B		2	15	22
23	20	1		REC.: STORAGE B107, B118			0.5	1.2	--		--	--	24
25	20	1		EQUIP:DF-01,DF-02-LOBBY...	0.1	0.5			EQUIP: EF-01 (ON ROOF)		1	15	26
27	20	1		SPARE		0.0	0.4		EWC -GIRLS RR B113A		1	20	28
29	20	1	G	EWC -GIRLS LOCKER B114A			0.9	0.4	EWC -GIRLS LOCKER B114A		1	20	30
31	20	1		EWC -MENS RR B109	0.4	0.0			SPARE		1	20	32
33	20	1		EWC -WOMEN RR B110		0.4	0.0		SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0			SPARE		1	20	38
39	20	1		SPARE		0.0	0.0		SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	7.0	8.5	8.4		TOTAL:	23.9 kVA			

NOTES:
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ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	9158 VA	100.00%	9158 VA		
Power	7003 VA	100.00%	7003 VA	**Total Conn. Load:**	23901 VA
Receptacle	7740 VA	100.00%	7740 VA	**Total Est. Demand:**	23901 VA
				Total Conn.:	66 A
				Total Est. Demand:	66 A

NL1A2(J)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208	4 WIRE	72	350 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	30	2		EQUIP: DRYER A127	2.5	1.1		REC: A131		1	20	2
3	--	--		--		2.5	0.9	REC: A130		1	20	4
5	20	1		EQUIP: WASHER A127			1.4	0.9	REC: A128A		1	20	6
7	20	1		REC: A132, A133	1.1	0.4		REC: A128 TREATMT BED		1	20	8
9	20	1		EQUIP: REFRIG. A129		1.2	0.4	REC: A128 TREATMT BED		1	20	10
11	20	1		REC: A129			0.9	0.4	REC: A128 COUNTER		1	20	12
13	20	1		REC: COUNTER A129	0.2	1.4			REC: ICE MACHINE A128		1	20	14
15	50	2		EQUIP: RANGE A126C		2.5	0.4		REC: A126		1	20	16
17	--	--		--			2.5	1.1	REC: A114		1	20	18
19	20	1		EQUIP: REFRIG. A126C	1.2	0.4			REC: A125		1	20	20
21	20	1		REC: COUNTER A126C		0.5	0.5		REC: A125		1	20	22
23	20	1		REC: A116			0.9	1.1	REC: A112		1	20	24
25	20	1		FLOOR BOX - A116 CONF.	0.7	0.7			REC: A110		1	20	26
27	20	1		EQUIP: REFRIG. A105		1.2	0.5		REC: A110		1	20	28
29	20	1		EQUIP: UCR A105			1.2	0.9	REC: A106		1	20	30
31	20	1		REC: A113, A122,	0.9	0.5			REC: A115, A117, A119		1	20	32
33	20	1		EQUIP: REFRIG. A120		0.9	1.1		REC: A111		1	20	34
35	20	1		REC: A128			0.2	0.9	REC: A103		1	20	36
37	20	1		REC: A108	0.9								38
39	20	1		SPARE		0.0	0.0		SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE		1	20	42
43	20	1		SPARE	0.0	0.0			SPARE		1	20	44
45	20	1		SPARE		0.0	0.0		SPARE		1	20	46
47	20	1		SPARE			0.0	0.0	SPARE		1	20	48
49	20	1		SPARE	0.0	0.0			SPARE		1	20	50
51	20	1		SPARE		0.0	0.0		SPARE		1	20	52
53	20	1		SPARE			0.0	0.0	SPARE		1	20	54
55	20	1		SPARE	0.0	0.0			SPARE		1	20	56
57	20	1		SPARE		0.0	0.0		SPARE		1	20	58
59	20	1		SPARE			0.0	0.0	SPARE		1	20	60
61	20	1		SPARE	0.0	0.0			SPARE		1	20	62
63	20	1		SPARE		0.0	0.0		SPARE		1	20	64
65	20	1		SPARE			0.0	0.0	SPARE		1	20	66
67	20	1		SPARE	0.0	0.0			SPARE		1	20	68
69	20	1		SPARE		0.0	0.0		SPARE		1	20	70
71	20	1		SPARE			0.0	0.0	SPARE		1	20	72
				PHASE TOTALS:	12.0	12.6	12.3		TOTAL:	36.9 kVA			

NOTES:
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ABBREVIATIONS:
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S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	9984 VA	100.00%	9984 VA		
Receptacle	26880 VA	68.60%	18440 VA	**Total Conn. Load:**	36864 VA
				Total Est. Demand:	28424 VA
				Total Conn.:	102 A
				Total Est. Demand:	79 A

NL1A4(F)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	175 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		EQUIP: UC ICE - A120	1.2	0.7		REC: A104		1	20	2
3	20	1		EQUIP: REFRIG. - A120			1.2	0.4	EQUIP: PRINTER A104		1	20	4
5	20	1		REC: COUNTER A120				0.4	0.4	REC: A118A, A120A		1	20	6
7	20	1		REC: A120	0.4	1.1			REC: A118		1	20	8
9	20	1		REC: A120			0.5	0.9	REC: A101, A123,		1	20	10
11	20	1		EQUIP: COPIER - A105				1.8	0.7	REC: A121		1	20	12
13	20	1		REC: A124	0.9	0.5			REC: A121		1	20	14
15	20	1		REC: COUNTER A104			0.5	1.3	REC: A102		1	20	16
17	20	1		EQUIP: REFRIG. A120D				1.2	0.2	REC: COUNTER A105		1	20	18
19	20	1		REC: A120D	0.5	1.2			REC: KEURIG A105		1	20	20
21	20	1		REC: A120B, A120C			0.5	0.4	REC: COUNTER A105		1	20	22
23	20	1		REC: FLOOR BOX A103				0.7	1.9	EQUIP. RTU-100-2	2	25	24
25	20	1		SPARE	0.0	1.9			--		--	--	26
27	20	1		SPARE			0.0	0.0	SPARE		1	20	28
29	20	1		SPARE				0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0			SPARE		1	20	32
33	20	1		SPARE			0.0	0.0	SPARE		1	20	34
35									0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0			SPARE		1	20	38
39	20	1		SPARE			0.0	0.0	SPARE		1	20	40
41	20	1		SPARE				0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	8.4	5.7	7.2		TOTAL:	21.4 kVA			

NOTES:
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ABBREVIATIONS:
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S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Receptacle	17580 VA	78.44%	13790 VA		
Non-Continuous	3800 VA	100.00%	3800 VA	**Total Conn. Load:**	21380 VA
				Total Est. Demand:	17590 VA
				Total Conn.:	59 A
				Total Est. Demand:	49 A

2

GENERAL NOTES

A. REFER TO ELECTRICAL POWER ONE-LINE DIAGRAM - NEW WORK ON SHEET E601 FOR ADDITIONAL INFORMATION.

B. ALL PANELS SHALL HAVE TYPED AND COMPLETED DIRECTORIES INDICATING EQUIPMENT OR DEVICE SERVED, ROOM NUMBER OR NAME (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT OR DEVICE LOCATION. HAND WRITTEN DIRECTORIES WILL "NOT" BE ACCEPTED.

C. EXISTING KNOWN CIRCUITS THAT ARE TO REMAIN ARE LABELED AS SUCH AND SHALL BE RECONNECTED TO PANEL THAT WAS REPLACED IN KIND.

D. EXISTING CIRCUITS THAT ARE TO REMAIN AFTER DEMOLITION AND FIELD VERIFIED, SHALL UTILIZE SPARE CIRCUIT BREAKERS AND BE CONNECTED TO NEAREST ELECTRICAL PANEL AVAILABLE AND DIRECTORY TO BE UPDATED.

NL1B1(NL1)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	200 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: COMMONS	0.6	0.4		REC: IDF		1	20	2
3	20	1		REC: EXTERIOR		0.6	0.4	REC: IDF		1	20	4
5	20	1		REC: CLASSROOM 101			0.8	0.8	REC: CLASSROOM 102		1	20	6
7	20	1		REC: CLASSROOM 101	0.6	0.6			REC: CLASSROOM 102		1	20	8
9	20	1		REC: CLASSROOM 101		0.8	0.8		REC: CLASSROOM 102		1	20	10
11	20	1		REC: CLASSROOM 101			0.8	0.8	REC: CLASSROOM 102		1	20	12
13	20	1		REC: CLASSROOM 103	0.8	0.8			REC: CLASSROOM 104		1	20	14
15	20	1		REC: CLASSROOM 103		0.6	0.6		REC: CLASSROOM 104		1	20	16
17	20	1		REC: CLASSROOM 103			0.8	0.8	REC: CLASSROOM 104		1	20	18
19	20	1		REC: CLASSROOM 103	0.8	0.8			REC: CLASSROOM 104		1	20	20
21	20	1		EQUIP: AUTO DOOR		1.2	4.2		EQUIP: AHU-2 - ALTERNATE		2	50	22
23	50	2		EQUIP: AHU-1A			4.2	4.2	--		--	--	24
25	--	--		--	4.2	4.2			EQUIP: AHU-1B		2	50	26
27	60	2		EQUIP: HP-1A		3.6	4.2		--		--	--	28
29	--	--		--			3.6	0.1	LIGHTING CONTROL: EXT		1	20	30
31	60	2		EQUIP: HP-1B	3.6	0.0			EQUIP.: EF-27-STORAGE...		1	20	32
33	--	--		--		3.6	0.4		AUTO PLUMB. FIX'S. RR B127		1	20	34
35	20	1	G	EWC -BOY'S LOCKER B123B			0.2	0.0	SPARE		1	20	36
37	20	1		AUTO PLUMB. FIX'S. B123B	0.4	0.0			SPARE		1	20	38
39	20	1		AUTO PLUMB. FIX'S. B124B		0.4	0.0		SPARE		1	20	40
41	20	1		AUTO PLUMB. FIX'S. RR B126			0.4	0.0	SPARE		1	20	42
				S	17.8	21.4	17.5		TOTAL:	56.7 kVA			

NOTES:
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ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	0 VA	0.00%	0 VA		
Power	1600 VA	100.00%	1600 VA	**Total Conn. Load:**	56680 VA
Receptacle	180 VA	100.00%	180 VA	**Total Est. Demand:**	56680 VA
Spare	54900 VA	100.00%	54900 VA	**Total Conn.:**	157 A
				Total Est. Demand:	157 A

NL1B3(Q)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	36	125 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: SEATING LEVEL B200	0.9	0.9		REC: SEATING LEVEL B200		1	20	2
3	30	3		EQUIP.: HP-6A - IN TUNNEL		2.0	2.0	EQUIP.: HP-6B IN TUNNEL		3	30	4
5	--	--		--			2.0	2.0	--		--	--	6
7	--	--		--	2.0	2.0			--		--	--	8
9	30	3		EQUIP.: HP-4A SEATING B200		2.2	0.4		REC:		1	20	10
11	--	--		--			2.2	0.0	SPARE		1	20	12
13	--	--		--	2.2	0.0			SPARE		1	20	14
15	20	1		SPARE		0.0	0.0		SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0			SPARE		1	20	20
21	20	1		SPARE		0.0	0.0		SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0			SPARE		1	20	26
27	20	1		SPARE		0.0	0.0		SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0			SPARE		1	20	32
33	20	1		SPARE		0.0	0.0		SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE		1	20	36
				PHASE TOTALS:	8.0	6.6	6.2		TOTAL:	20.7 kVA			

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	18587 VA	100.00%	18587 VA		
Receptacle	2160 VA	100.00%	2160 VA	**Total Conn. Load:**	20747 VA
				Total Est. Demand:	20747 VA
				Total Conn.:	58 A
				Total Est. Demand:	58 A

NL1C1(R)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	30	100 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: COUNTER C111	0.5	1.3		REC: 3D PRINTERS C110		1	20	2
3	20	1		REC: TABLE SAW REEL C111			0.7	1.2	REC: DRILL PRESS C111		1	20	4
5	20	1		REC: BAND SAW C111				1.0	1.0	REC: LASER CUTTER C110		1	20	6
7	20	1		REC: 3D PRINTERS C110	1.3	1.8				BLEACHERS B117	3	20	8
9	20	1		REC: PLOTTER C110			1.2	1.8		--	--	--	10
11	20	1		REC: LASER CUTTER C111				1.0	1.8	--	--	--	12
13	20	1		REC: CNC MACHINE C111	1.2	0.0				SPARE	1	20	14
15	20	1		EQUIP: AUTO. SINK - C108			0.5	0.0		SPARE	1	20	16
17	20	1		EQUIP: AUTO. SINK - C109				0.5					18
19	20	1		SPARE	0.0	0.0				SPARE	1	20	20
21	20	1		SPARE		0.0	0.0			SPARE	1	20	22
23	20	1		SPARE			0.0	0.0		SPARE	1	20	24
25	20	1		SPARE	0.0	0.0				SPARE	1	20	26
27	20	1		SPARE		0.0	0.0			SPARE	1	20	28
29	20	1		SPARE			0.0	0.0		SPARE	1	20	30
				PHASE TOTALS:	6.1	5.4	5.3		TOTAL:	16.9 kVA			

NOTES:
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ABBREVIATIONS:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	6403 VA	100.00%	6403 VA		
Receptacle	10452 VA	97.84%	10226 VA	**Total Conn. Load:**	16855 VA
				Total Est. Demand:	16629 VA
				Total Conn.:	47 A
				Total Est. Demand:	46 A

NL1C3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	150 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: TABLE/TV PLTW C109	0.8	1.4		REC: CORD REEL C108		1	20	2
3	20	1		REC: TABLE/TV PLTW C109		0.8	1.4	REC: CORD REEL C108		1	20	4
5	20	1		REC: TABLE/TV PLTW C109			0.8	0.5	REC: GENERAL PLTW C108		1	20	6
7	20	1		REC: CORD REEL PLTW C109	1.4	0.8			REC: TEACHER STATION...		1	20	8
9	20	1		REC: CORD REEL PLTW C109		1.4	0.9		REC: GENERAL PLTW C108		1	20	10
11	20	1		REC: TEACHER STATION			0.8	0.7	REC: STORAGE C108A		1	20	12
13	20	1		REC: GEN PLTW C109	0.9	0.2			EQUIP: COPIER C105		1	20	14
15	20	1		REC: STORAGE C109A		0.4	1.2		REC: REFRIG. C105	G	1	20	16
17	20	1		REC: STUDENT STATION...			0.7	0.8	REC: TABLE/TV PLTW C108		1	20	18
19	20	1		REC: STUDENT DISPLAYS...	0.8	0.8			REC: TABLE/TV PLTW C108		1	20	20
21	20	1		REC: STUDENT STATION...		0.7	0.8		REC: TABLE/TV PLTW C108		1	20	22
23	20	1		REC: STUDENT STATION...			0.9	0.7	REC: STUDENT STATION...		1	20	24
25	20	1		REC: STUDENT DISPLAYS...	0.8	0.7			REC: STUDENT STATION...		1	20	26
27	20	1		REC: STUDENT STATION...		0.9	0.7		REC: STUDENT STATION...		1	20	28
29	20	1		REC: STUDENT DISPLAYS...			1.2	0.5	EQUIP: EF-04 (ON ROOF)		1	15	30
31	20	1		REC: COUNTER C105	0.4	0.0			SPARE		1	20	32
33	20	1		REC: C105		0.4	0.3		EQUIP: EF-06 (ON ROOF)		1	15	34
35	20	1		EQUIP: EF-28B (ON ROOF)			0.2	0.2	EQUIP: EF-14 (ON ROOF)		1	15	36
37	20	1		REC: C103 ELECTRICAL RM.	0.2	1.2			EQUIP: EH-2 VEST. C100		2	20	38
39	20	1		SPARE		0.0	1.2		--		--	--	40
41	20	1		SPARE			0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	10.4	11.1	7.9		TOTAL:	29.4 kVA			

NOTES:
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ABBREVIATIONS:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	1152 VA	125.00%	1440 VA		
Power	2496 VA	100.00%	2496 VA	**Total Conn. Load:**	29428 VA
Receptacle	25780 VA	69.39%	17890 VA	**Total Est. Demand:**	21826 VA
				Total Conn.:	82 A
				Total Est. Demand:	61 A

NL1C8(G)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	200 A	MLO		RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: B124C, B128A, B129	0.9	0.9		REC: BOYS LOCKER RM....		1	20	2
3	20	1		REC: MEN B127		0.2	1.1	REC: BOYS LOCKER RM....		1	20	4
5	20	1		REC: WOMEN B126			0.4	0.4	REC: BOYS RESTROOM...		1	20	6
7	20	1		REC: COACHES LKR....	0.9	0.2			REC: BOYS LOCKER...		1	20	8
9	20	1		REC: TEACHER STATION...		0.9	1.2		REC: REFRIG C104A		1	20	10
11	20	1		REC: STORAGE C104B,...			0.7	0.4	REC: STORAGE C104A		1	20	12
13	20	1		REC: LAB COUNTER C104	0.5	0.9			REC: CORRIDOR C101,C102		1	20	14
15	20	1		REC: LAB TABLE C104		0.4	0.5		PAINT BOOTH: C108B		3	20	16
17	20	1		REC: LAB TABLE C104	0.4			0.4	0.5	--	--	--	18
19	20	1		REC: LAB TABLE C104		0.4	0.5			--	--	--	20
21	20	1		REC: LAB COUNTER C104			0.4	0.5		DOOR CTRLS: C100-1,C102-1	1	20	22
23	20	1		DISHWASHER C104B				1.0	0.5	FUME HOOD EF06 C104	1	20	24
25						0.0				SHUNT-TRIP BREAKER (24)	--	--	26
27	20	1		SPARE			0.0	0.0		SPARE	1	20	28
29	20	1		SPARE				0.0	0.0	SPARE	1	20	30
31	20	1		SPARE	0.0	0.0				SPARE	1	20	32
33	20	1		SPARE		0.0	0.0			SPARE	1	20	34
35	20	1		SPARE			0.0	0.0		SPARE	1	20	36
37	20	1		SPARE	0.0	0.0				SPARE	1	20	38
39	20	1		SPARE		0.0	0.0			SPARE	1	20	40
41	20	1		SPARE			0.0	0.0		SPARE	1	20	42
				PHASE TOTALS:	5.2	5.1	4.1		TOTAL:	14.4 kVA			

NOTES:
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ABBREVIATIONS:
G - G

NL1D4

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	72	150 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: GENERAL D105	0.9	0.8		REC: TEACH STATION D105		1	20	2
3	20	1		REC: GENERAL D103		0.9	0.8	REC: TEACH STATION D103		1	20	4
5	20	1		REC: GENERAL D101			0.9	0.8	REC: TEACH STATION D101		1	20	6
7	20	1		REC: GENERAL D107	0.5	0.8		REC: TEACH STATION D107		1	20	8
9	20	1		REC: GENERAL D109		0.5	0.8	REC: TEACH STATION D109		1	20	10
11	20	1		REC: GENERAL D111			0.9	0.8	REC: TEACH STATION D111		1	20	12
13	20	1		REC: GENERAL D113	0.9	0.8		REC: TEACH STATION D113		1	20	14
15	20	1		REC: GENERAL D115		0.9	0.8	REC: TEACH STATION D115		1	20	16
17	20	1		REC: GENERAL D119			0.9	0.8	REC: TEACH STATION D119		1	20	18
19	20	1		REC: GENERAL D121	0.9	0.8		REC: TEACH STATION D121		1	20	20
21	20	1		REC: GENERAL D123		0.9	0.8	REC: TEACH STATION D123		1	20	22
23	20	1		REC: GENERAL D114			0.9	0.8	REC: TEACH STATION D114		1	20	24
25	20	1		REC: GENERAL D120	1.1	1.1		REC: TEACH STATIONS 120		1	20	26
27	20	1		REC: PUBLICATIONS D114A		0.5	0.5	REC: PUBLICATIONS D114A		1	20	28
29	20	1		REC: CORRIDOR D102/D104			0.7	0.9	REC: FLEX D102A		1	20	30
31	20	1		REC: WORKROOM D108	0.7	0.2		REC: COUNTER D108		1	20	32
33	20	1		REC: COPIER D108		1.2	0.4	REC: COUNTER D108		1	20	34
35	20	1		REC: SMALL GROUP D110			1.0	1.2	REC: REFRIG D108		1	20	36
37	20	1		REC: RR D108B,D108C	0.4	0.7		REC: MECH/CORR UNIT D		1	20	38
39	20	1		REC: CORRIDOR PRINTER		0.5	1.0	REC: SMALL GROUP D118		1	20	40
41	20	1		REC: CORRIDOR PRINTER			0.5	1.0	REC: FLEX D122A/D124		1	20	42
43	20	1		REC: CORRIDOR D122/D126	0.7	0.9		EWC - FLEX D102A	G	1	20	44
45	20	1		REC: CLASSRM. D109		0.7	0.7	EQUIP. EF-24 - IDF D106		1	20	46
47	20	1	G	EWC - FLEX D122A			0.9	0.4	AUTO PLUMB. FIX'S. WRR...		1	20	48
49	20	1		REC: MDF D132	0.7	0.4		AUTO PLUMB. FIX'S. MRR...			1	20	50
51	20	1		ELEV. EL-2 REC. & PIT...		0.2	0.3	EQUIP: EF-05 (ON ROOF)			1	15	52
53	20	1		REC: EL-2 E116 ELEV. EQ....			0.2	0.0	SPARE		1	20	54
55	20	1		ELEVATOR EL-2 CAB. LTS.	1.5	0.0		SPARE			1	20	56
57	20	1		ELEV. EL-2 SUMP PUMP SP-1		1.2	0.0	SPARE			1	20	58
59	20	1		SPARE			0.0	0.0	SPARE		1	20	60
61	20	1		SPARE	0.0	0.0		SPARE			1	20	62
63	20	1		SPARE		0.0	0.0	SPARE			1	20	64
65	20	1		SPARE			0.0	0.0	SPARE		1	20	66
67	20	1		SPARE	0.0	0.0		SPARE			1	20	68
69	20	1		SPARE		0.0	0.0	SPARE			1	20	70
71	20	1		SPARE			0.0	0.0	SPARE		1	20	72
				PHASE TOTALS:	14.7	13.6	13.5	TOTAL:	41.8 kVA				

NOTES:
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ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	336 VA	125.00%	420 VA		
Other	914 VA	100.00%	914 VA	**Total Conn. Load:**	41810 VA
Power	2300 VA	100.00%	2300 VA	**Total Est. Demand:**	27764 VA
Receptacle	38260 VA	63.07%	24130 VA	**Total Conn.:**	116 A
				Total Est. Demand:	77 A

NH1E7(ZZ)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
277/480V	4 WIRE	48	70 A	MLO		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	15	3		EXIST.	0.0	0.0		EXIST.		3	15	2
3	--	--		--		0.0	0.0	--		--	--	4
5	--	--		--			0.0	0.0	--		--	--	6
7	15	3		EXIST.	0.0	0.0		EXIST.		3	15	8
9	--	--		--		0.0	0.0	--		--	--	10
11	--	--		--			0.0	0.0	--		--	--	12
13	15	3		EXIST.	0.0	0.0		EXIST.		3	15	14
15	--	--		--		0.0	0.0	--		--	--	16
17	--	--		--			0.0	0.0	--		--	--	18
19	15	3		EXIST.	0.0	0.0		EXIST.		3	15	20
21	--	--		--		0.0	0.0	--		--	--	22
23	--	--		--			0.0	0.0	--		--	--	24
25	15	3		EXIST.	0.0	0.0		EXIST.		3	15	26
27	--	--		--		0.0	0.0	--		--	--	28
29	--	--		--			0.0	0.0	--		--	--	30
31	15	3		EXIST.	0.0	0.0		EXIST.		3	15	32
33	--	--		--		0.0	0.0	--		--	--	34
35	--	--		--			0.0	0.0	--		--	--	36
37	15	3		EXIST.	0.0	0.0		EXIST.		3	15	38
39	--	--		--		0.0	0.0	--		--	--	40
41	--	--		--			0.0	0.0	--		--	--	42
43	15	3		EXIST.	0.0	0.0		EXIST.		3	15	44
45	--	--		--		0.0	0.0	--		--	--	46
47	--	--		--			0.0	0.0	--		--	--	48
				PHASE TOTALS:	0.0	0.0	0.0	TOTAL:	0.0 kVA				

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

NL1F3(GA)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	150 A	MCB		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	70	3		NL1F4(GB)	4.9	1.8		BLEACHERS AUX. GYM F103		3	20	2
3	--	--		--		3.9	1.8	--		--	--	4
5	--	--		--			4.3	1.8	--		--	--	6
7	20	1		SPARE	0.0	0.1		REC:		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0	SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE		1	20	18
19	20	1		SPARE	0.0	0.0		SPARE		1	20	20
21	20	1		SPARE		0.0	0.0	SPARE		1	20	22
23	20	1		SPARE			0.0	0.0	SPARE		1	20	24
25	20	1		SPARE	0.0	0.0		SPARE		1	20	26
27	20	1		SPARE		0.0	0.0	SPARE		1	20	28
29	20	1		SPARE			0.0	0.0	SPARE		1	20	30
31	20	1		SPARE	0.0	0.0		SPARE		1	20	32
33	20	1		SPARE		0.0	0.0	SPARE		1	20	34
35	20	1		SPARE			0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0		SPARE		1	20	38
39	20	1		SPARE		0.0	0.0	SPARE		1	20	40
41	20	1		SPARE			0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	6.7	5.7	6.1	TOTAL:	18.5 kVA				

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	8449 VA	100.00%	8449 VA		
Receptacle	2940 VA	100.00%	2940 VA	**Total Conn. Load:**	18469 VA
Spare	7080 VA	100.00%	7080 VA	**Total Est. Demand:**	18469 VA
				Total Conn.:	51 A
				Total Est. Demand:	51 A

NL1D6

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	54	400 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	30	3		EQUIP: HP-2A: MECH D112	2.2	2.2		EQUIP: HP-2B: MECH D112		3	30	2
3	--	--		--		2.2	2.2	--		--	--	4
5	--	--		--			2.2	2.2	--		--	--	6
7	30	3		EQUIP: HP-2C: MECH D112	2.2	2.2		EQUIP: HP-2D: MECH D112		3	30	8
9	--	--		--		2.2	2.2	--		--	--	10
11	--	--		--			2.2	2.2	--		--	--	12
13	30	3		EQUIP: HP-2E: MECH D112	2.2	2.2		EQUIP: HP-2F: MECH D116		3	30	14
15	--	--		--		2.2	2.2	--		--	--	16
17	--	--		--			2.2	2.2	--		--	--	18
19	30	3		EQUIP: HP-2G: MECH D116	2.2	2.2		EQUIP: HP-2H: MECH D116		3	30	20
21	--	--		--		2.2	2.2	--		--	--	22
23	--	--		--			2.2	2.2	--		--	--	24
25	30	3		EQUIP: HP-2I: MECH D116	2.2	2.2		EQUIP: HP-2J: MECH D116		3	30	26
27	--	--		--		2.2	2.2	--		--	--	28
29	--	--		--			2.2	2.2	--		--	--	30
31	30	3		EQUIP: HP-2K: MECH D116	2.2	2.2		EQUIP: HP-2L: MECH D116		3	30	32
33	--	--		--		2.2	2.2	--		--	--	34
35	--	--		--			2.2	2.2	--		--	--	36
37	15	3		EQUIP: HP-1E: MECH D112	1.4	1.4		EQUIP: HP-1F: MECH D112		3	15	38
39	--	--		--		1.4	1.4	--		--	--	40
41	--	--		--			1.4	1.4	--		--	--	42
43	15	3		EQUIP: HP-1D: MECH D135	1.4	3.3		EQUIP: HP-5A: MECH D135		3	40	44
45	--	--		--		1.4	3.3	--		--	--	46
47	--	--		--			1.4	3.3	--		--	--	48
49	20	1		EQUIP:DF-03,DF-04,DF-05-D...	0.2	1.0		EQUIP: ODU-01 (ON ROOF)		2	30	50
51							1.0	--		--	--	52
53	20	1		SPARE			0.0	0.0	SPARE		1	20	54
				PHASE TOTALS:	35.4	35.2	34.1	TOTAL:	104.7 kVA				

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Heating	102422 VA	100.00%	102422 VA		
Other	210 VA	100.00%	210 VA	**Total Conn. Load:**	104712 VA
Non-Continuous	2080 VA	100.00%	2080 VA	**Total Est. Demand:**	104712 VA
				Total Conn.:	291 A
				Total Est. Demand:	291 A

NL1E8(Z1)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	30	125 A	MLO		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	25	2		EQUIP.: RTU-200-10 (ROOF)	1.9	0.2		REC: RTU OVER KITCHEN		1	20	2
3	--	--		--		1.9	0.8	EQUIP: EF-09 (ON ROOF)		1	15	4
5	30	2		EQUIP.: RTU-300-13 (ROOF)			2.2	0.7	EQUIP: EF-25 (ON ROOF)		1	15	6
7	--	--		--	2.2	0.5		DDC CTRL. PNL.: MECH....		1	20	8
9	20	2		EQUIP.: RTU-300-14 (ROOF)		2.2	0.7	EQUIP: EF-28 (ROOF)		1	15	10
11	--	--		--			2.2	0.0	SPARE		1	20	12
13	20	1		EH-1 - MECHANICAL E138	0.7	0.0		SPARE		1	20	14
15	20	1		DWH-1 - MECHANICAL E138		0.5	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE		1	20	18
19	20	3		EXIST. SOUTHWORTH LIFT	1.0	0.0		SPARE		1	20	20
21	--	--		--		1.0	0.0	SPARE		1	20	22
23	--	--		--			1.0	0.0	SPACE	--	--	24
25	15	1		RCP-1: MECH. E138	0.5	0.0		SPACE		--	--	26
27	15	1		RCP-2: MECH. E138		0.5	0.0	SPACE		--	--	28
29	15	1		RCP-3: MECH. E138			0.5	0.0	SPACE	--	--	30
				PHASE TOTALS:	7.1	7.6	6.6	TOTAL:	21.3 kVA				

NOTES:
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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	13438 VA	125.00%	16798 VA		
Other	2952 VA	100.00%	2952 VA	**Total Conn. Load:**	21302 VA
Power	1732 VA	100.00%	1732 VA	**Total Est. Demand:**	24662 VA
Receptacle	180 VA	100.00%	180 VA	**Total Conn.:**	59 A
Spare	3000 VA	100.00%	3000 VA	**Total Est. Demand:**	68 A

NL1E10

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	54	250 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC.: CORD REEL E101	1.4	4.2		RANGE: STORAGE E102		2	50	2
3	20	1		REC.: CORD REEL E101		1.4	4.2	--		--	--	4
5	20	1		REC.: CORD REEL E101			1.4	1.4	REC: CORD WHEEL E103		1	20	6
7	20	1		REC.: CORD REEL E101	1.4	1.4		REC: CORD WHEEL E103		1	20	8
9	20	1		REC: POTTERY WHEELS		1.5	1.4	REC: CORD WHEEL E103		1	20	10
11	20	1		REC.: CORD WHEEL E101			1.4	0.3	EQUIP: EF-07 (ON ROOF)		1	20	12
13	20	1		REC: E102 STORAGE	0.5	1.2		EQUIP: EF-10A (ON ROOF)		1	20	14
15	20	1		REC: E102 STORAGE		0.5	0.8	EQUIP: EF-10B (ON ROOF)		1	20	16
17	20	1		REC.: E102 STORAGE			0.2	0.5	REC: E137A RR, CORR.		1	20	18
19	20	1	G	REC: EWC E123	0.9	1.7		REC: COUNTER E137B...		1	20	20
21	20	1		REC.:E105,E107,E109,ETP-1...		0.4	1.2	REC: COUNTER E137B		1	20	22
23	15	1		EQUIP: EF-08A (ON ROOF)			0.5	1.2	REFRIG. E137B		1	20	24
25	15	1		EQUIP: EF-08B (ON ROOF)	1.5	0.6		AUTO PLUMB. FIX'S. RR E105			1	20	26
27	15	1		EQUIP: EF-08C (ON ROOF)		1.0	5.8	KILN - E101A		2	60	28
29	20	1		EQUIP.: FUME HOOD LTS....			1.0	5.8	--		--	--	30
31	60	2		KILN - E101A	5.8	0.0		SPARE		1	20	32
33	--	--		--		5.8	0.5	EQUIP: E.F. (ON ROOF)		1	20	34
35	20	1		SPARE			0.0	1.0	FUME HOOD: E.F. E103		1	20	36
37	20	1		REC: WP/GFI COURTYD E108	0.4	0.4		PUG MILL: E101 ART3D		1	20	38
39	20	1		REC: E103 ART 3D		0.7	0.2	REC: LCD - CORR. E100		1	20	40
41	20	1		REC: E103 ART 3D			0.9	0.0	SPARE		1	20	42
43	20	1		AUTO PLUMB. FIX'S. RR E107	0.5	0.0		SPARE			1	20	44
45	20	1		SPARE		0.0	0.0	SPARE			1	20	46
47	20	1		SPARE			0.0	0.0	SPARE		1	20	48
49	20	1		SPARE	0.0	0.0		SPARE			1	20	50
51	20	1		SPARE		0.0	0.0	SPARE			1	20	52
53	20	1		SPARE			0.0	0.0	SPARE		1	20	54
				PHASE TOTALS:	21.8	25.4	15.7	TOTAL:	62.9 kVA				

NOTES:
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	3240 VA	125.00%	4050 VA		
Other	23220 VA	100.00%	23220 VA	**Total Conn. Load:**	62890 VA
Power	13870 VA	100.00%	13870 VA	**Total Est. Demand:**	57420 VA
Receptacle	22560 VA	72.16%	16280 VA	**Total Conn.:**	175 A
				Total Est. Demand:	159 A

NL1E6(T)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	18	60 A	MLO		SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: MECH. E138	0.4	0.4		REC: MECH. E138		1	20	2
3	20	1		SPARE		0.0	0.0	SPARE		1	20	4
5	20	1		SPARE			0.0	0.0	SPARE		1	20	6
7	20	1		SPARE	0.0	0.0		SPARE		1	20	8
9	20	1		SPARE		0.0	0.0	SPARE		1	20	10
11	20	1		SPARE			0.0	0.0	SPARE		1	20	12
13	20	1		SPARE	0.0	0.0		SPARE		1	20	14
15	20	1		SPARE		0.0	0.0	SPARE		1	20	16
17	20	1		SPARE			0.0	0.0	SPARE		1	20	18
				PHASE TOTALS:	0.7	0.0	0.0	TOTAL:	0.7 kVA				

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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Receptacle	720 VA	100.00%	720 VA		
				Total Conn. Load:	720 VA
				Total Est. Demand:	720 VA
				Total Conn.:	2 A
				Total Est. Demand:	2 A

NL1E9

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	54	150 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A	B	C	LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: E122 STORE	0.9	1.5		ELEVATOR EL-1 CAB. LTS.		1	20	2
3	20	1		REC: E121 BOARDRM.		0.9	1.2	ELEV. EL-1 SUMP PUMP SP-2		1	20	4
5	20	1		REC: E111 STUDENT UN.			0.7	0.2	ELEV. EL-1 REC. & PIT...		1	20	6
7	20	1		REC: E111 STUDENT UN.	0.7	0.2		REC: EL-1 ELEV. EQ. RM.		1	20	8
9	20	1		REC: E120 CLASSRM.		0.5	0.9	REC: E106 SCIENCE RM.		1	20	10
11	20	1		REC: COUNTER E117			0.2	0.5	REC: E106 SCIENCE RM.		1	20	12
13	20	1		REC: COUNTER E117	0.2	0.7		REC: E104 SCIENCE RM.		1	20	14
15	20	1		REC: COUNTER E117		0.2	0.9	REC: E104 SCIENCE RM.		1	20	16
17	20	1		REC: COUNTER E117			0.2	0.5	REC: E104 SCIENCE RM.		1	20	18
19	20	1		EQUIP: ICE MAKER E117	1.0	1.0		EQUIP: WARM. DRAWER...		1	20	20
21	20	1		REC: E117 VENDING		0.5	0.9	REC: E118 CLASSRM.		1	20	22
23	20	1		REC: E126 CLASSRM.			1.2	0.5	REC: E118 CLASSRM.		1	20	24
25	20	1		REC: E126 CLASSRM.	0.5	0.7		REC: E106 SCIENCE RM.		1	20	26
27	20	1		REC: E126 CLASSRM.			1.1	0.5	REC: STUDENT UNION E111		1	20	28
29	20	1		REC: E119 CLASSRM.				0.9	0.2	FLOOR REC. Board Rm.E121		1	20	30
31	20	1		REC: E113 CLASSRM.	1.0	0.5		REC: E101 ART 3D		1	20	32
33	20	1		REC: E113 CLASSRM.		0.9	1.2	REC: E101 ART 3D		1	20	34
35	20	1		REC: E120 CLASSRM.			0.9	0.2	REC: RTU-300-10 (ROOF)		1	20	36
37	20	1		REC: E117 VENDING	0.4	1.2		EQUIP: REFRIG. E117...		1	20	38
39	20	1		REC: CORR. E123, E127			0.7	1.2	EQUIP: FREEZER E110A Prep		1	20	40
41	20	1		REC: E114 SMALL GROUP				0.7	1.2	EQUIP: REFRIG. E110A Prep		1	20	42
43	20	1		REC: E110 SCIENCE LAB	0.9	0.2		EQUIP:.DF-06,DF-07,DF-08-...		1	20	44
45	20	1		REC: E110 SCIENCE LAB		0.7	0.7	EQUIP.: EF-13-ROOF		1	20	46
47	20	1		AUTO SINK E117			0.1	2.2	REC: CORD WHEEL E126		1	20	48
49	20	1		SPARE	0.0	2.2		REC: CORD WHEEL E126			1	20	50
51							0.0		SPARE		1	20	52
53	20	1		SPARE			0.0	0.0	SPARE		1

NL1G1(A)

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	225 A	MLO	22,000	RECESSED

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	2		EQUIP.: EH-2 VESTIBULE...	1.2	0.0					EXIST. REC: NURSE		1	20	2
3	--	--		--			1.2	0.0			EXIST. REC: NURSE		1	20	4
5	25	2		EXIST. HP-1					0.0	0.0	EXIST. REC:		1	20	6
7	--	--		--	0.0	0.0					EXIST. REC: CONFERENCE		1	20	8
9	50	2		EXIST. AC-2			0.0	0.0			EXIST. REC:		1	20	10
11	--	--		--					0.0	0.0	EXIST. EQUIP. REFRIG.	G	1	20	12
13	35	2		EXIST. HP-2	0.0	0.0					EXIST. REC: BREAK		1	20	14
15	--	--		--			0.0	0.0			EXIST. EQUIP. MICRO.		1	20	16
17	50	2		EXIST. AC-3					0.0	0.0	EXIST. REC: CORR.		1	20	18
19	--	--		--	0.0	0.0					EXIST. REC PRINCIPAL		1	20	20
21	25	2		EXIST. HP-3			0.0	0.0			EXIST. REC: ASSIST.PRINC.		1	20	22
23	--	--		--					0.0	0.0	EXIST. REC: ATTENDANCE		1	20	24
25	20	1		REC: G104 OFFICE	1.1	0.0					EXIST. REC: ATTENDANCE		1	20	26
27	20	1		REC: G102, G103			0.7	0.0			EXIST. EQUIP. PRINTER		1	20	28
29	20	1		EQUIP.: EF-22 - IDF RM....					0.7	0.0	EXIST. REC: RECEPTION		1	20	30
31	20	1		SPARE	0.0	0.0					EXIST. REC: RECEPTION		1	20	32
33	20	1		SPARE			0.0	0.0			EXIST. REC: RECEPTION		1	20	34
35	20	1		SPARE					0.0	0.0	EXIST. REC: CONFERENCE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	2.3		2.0		0.7		TOTAL:		5.0 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	3196 VA	100.00%	3196 VA		
Receptacle	1800 VA	100.00%	1800 VA	Total Conn. Load:	4996 VA
				Total Est. Demand:	4996 VA
				Total Conn.:	14 A
				Total Est. Demand:	14 A

NL1J3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	150 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: MAIN BLDG STOR. J130	0.4	0.5					REC: MECH. J128		1	20	2
3	20	1		FIRE PUMP ALARM BELL			0.5	0.7			REC: MECH. J128		1	20	4
5	20	1		REC: RISER J130A					0.5	0.9	REC: MAIN BLDG STOR. J130		1	20	6
7	20	1		REC: MAIN BLDG STOR. J130	0.4	0.7					EQUIP: EH-1 - J130A RISER		1	20	8
9	15	1		EQUIP: EF-20 (ON ROOF)			0.5	0.7			EQUIP: EH-1 - J130A RISER		1	20	10
11	15	1		EQUIP: EF-21 (ON ROOF)					0.5	2.2	EQUIP; HP2X - J128 MECH.		2	30	12
13	15	1		EQUIP: EF-22 (ON ROOF)	0.8	2.2					--		--	--	14
15	15	1		EQUIP: EF-23 (ON ROOF)			0.5	5.1			EQUIP; HP1J - J128 MECH.		2	30	16
17	20	1		EQUIP: EF-27 (ON ROOF)					0.5	5.1	--		--	--	18
19	20	1		EQUIP: EH-1 - J128 MECH.	0.7	5.1					EQUIP; HP5B - J128 MECH.		2	30	20
21	20	1		EQUIP: EH-1 CORRIDOR			0.7	5.1			--		--	--	22
23	25	1		EQUIP: B-1 - J128 MECH.					2.4	6.4	EQUIP; HP2Y - J128 MECH.		2	35	24
25	25	1		EQUIP: B-2 - J128 MECH.	2.4	6.4					--		--	--	26
27	20	1		EQUIP: B-3 - J128 MECH.			1.2	1.9			HEAT TRACE CTRL. PANEL		2	20	28
29	20	1		EQUIP: B-4 - J128 MECH.					1.2	0.0	--		--	--	30
31	20	1		EQUIP: EF-23 - J130A RISER	0.0	0.0					DDC CTRL PANEL - J128...		1	20	32
33	20	1		SPARE			0.0	0.0			SPARE		1	20	34
35	20	1		SPARE					0.0	0.0	SPARE		1	20	36
37	20	1		SPARE	0.0	0.0					SPARE		1	20	38
39	20	1		SPARE			0.0	0.0			SPARE		1	20	40
41	20	1		SPARE					0.0	0.0	SPARE		1	20	42
				PHASE TOTALS:	19.6		17.0		19.7		TOTAL:		56.3 kVA		

NOTES:
1.
2.

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Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	2616 VA	125.00%	3270 VA		
Other	1920 VA	100.00%	1920 VA	Total Conn. Load:	56284 VA
Power	3428 VA	100.00%	3428 VA	Total Est. Demand:	56938 VA
Receptacle	3420 VA	100.00%	3420 VA	Total Conn.:	156 A
Non-Continuous	44900 VA	100.00%	44900 VA	Total Est. Demand:	158 A

NL2D1

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	72	225 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: D201 Classroom	0.5	0.5					REC: D201 Classroom		1	20	2
3	20	1		REC: D201 Classroom			0.9	0.7			REC: D202 Corridor		1	20	4
5	20	1		COPIER: D208					1.0	0.5	REC: D203 Classroom		1	20	6
7	20	1		REC: D203 Classroom	0.9	0.7					REC: D203 Classroom		1	20	8
9	20	1		REC: D205 Classroom			0.7	0.9			REC: D205 Classroom		1	20	10
11	20	1		REC: D205 Classroom					0.5	1.0	REC: D215 Classroom		1	20	12
13	20	1		REC: D227 WAITING	0.5	0.5					REC: D215 Classroom		1	20	14
15	20	1		REC: D210 Small Group			1.0	1.0			REC: D208 Workroom		1	20	16
17	20	1		REC: D211 Classroom					0.7	0.5	REC: D211 Classroom		1	20	18
19	20	1		REC: D213 Classroom	0.5	0.5					REC: D211 Classroom		1	20	20
21	20	1		REC: D213 Classroom			1.0	0.9			REC: D214 Classroom		1	20	22
23	20	1		REC: D219 Classroom					0.5	0.5	REC: D214 Classroom		1	20	24
25	20	1		REC: D219 Classroom	0.7	0.5					REC: D214 Classroom		1	20	26
27	20	1		REC: D220 Resource			0.5	1.0			REC: D218 Small Group		1	20	28
29	20	1		REC: D220 Resource					0.9	0.7	REC: D219 Classroom		1	20	30
31	20	1		REC: D221 Classroom	0.7	0.7					REC: D220A Small Group		1	20	32
33	20	1		REC: D222A Flex			0.4	0.5			REC: D220 Resource		1	20	34
35	20	1		REC: D223 Classroom					0.5	0.5	REC: D221 Classroom		1	20	36
37	20	1		REC: D223 Classroom	0.7	0.7					REC: D221 Classroom		1	20	38
39	20	1		REC: D207 Classroom			1.0	0.7			REC: D222 Corridor		1	20	40
41	20	1		REC: D207 Classroom					0.7	0.7	REC: D223 Classroom		1	20	42
43	20	1		REC: D209 Classroom	1.0	0.4					REC: D216 MECHANICAL		1	20	44
45	20	1		REC: D209 Classroom			0.7	0.9			EWC: D222A FLEX	G	1	20	46
47	20	1	G	EWC: D202A FLEX					0.9	0.5	REC: D222A FLEX		1	20	48
49	20	1		REC: D202A FLEX	0.4	0.7					REC: D228 MECHANICAL		1	20	50
51	20	1		REC: D212 MECHANICAL			0.4	0.0			SPARE		1	20	52
53	20	1		REC: D204, D208, D208A					0.5	0.0	SPARE		1	20	54
55	20	1		REC. D208	0.4	0.0					SPARE		1	20	56
57	20	1		SPARE			0.0	0.0			SPARE		1	20	58
59	20	1		SPARE					0.0	0.0	SPARE		1	20	60
61	20	1		SPARE	0.0	0.0					SPARE		1	20	62
63	20	1		SPARE			0.0	0.0			SPARE		1	20	64
65	20	1		SPARE					0.0	0.0	SPARE		1	20	66
67	20	1		SPARE	0.0	0.0					SPARE		1	20	68
69	20	1		SPARE			0.0	0.0			SPARE		1	20	70
71	20	1		SPARE					0.0	0.0	SPARE		1	20	72
				PHASE TOTALS:	11.7		13.4		11.5		TOTAL:		36.5 kVA		

NOTES:
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2.

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Receptacle	36540 VA	63.68%	23270 VA		
				Total Conn. Load:	36540 VA
				Total Est. Demand:	23270 VA
				Total Conn.:	101 A
				Total Est. Demand:	65 A

NL1H1

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	72	225 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: FACS EXTERIOR	0.5	0.9					EWC - CORR. H126	G	1	20	2
3	20	1		REC: G113 OFFICE			0.7	0.7			REC: G114 OFFICE		1	20	4
5	20	1		REC: G115 OFFICE					0.7	0.5	REC: G116 FACS		1	20	6
7	20	1		REC: G116 FACS	1.3	0.9					REC: G118-G119		1	20	8
9	20	1		REC: G120 FACS			0.5	0.9			REC: G120 FACS		1	20	10
11	20	1	G	EWC - CORR. H126					0.9	0.5	REC: H102B, H102C		1	20	12
13	20	1		REC: H102 BAND	1.3	0.9					EWC - BAND H102	G	1	20	14
15	20	1		REC: H102,H107 STORAGE			1.3	0.9			REC: H104 INSTRUCTION		1	20	16
17	20	1		REC: H104 LARGE...					0.9	0.9	REC: H105A CHOIR OFFICE		1	20	18
19	20	1		REC: H108 CHOIR	1.1	0.2					REC: H110 WORK RM.		1	20	20
21	20	1		REC: H108B,H108C...			0.7	1.1			REC: H108/110 RR, STORAGE		1	20	22
23	20	1		REC: H108 CHOIR					0.9	0.4	EQUIP.: COPIER H110 WOR...		1	20	24
25	20	1		REC: H111 SMALL GROUP	0.7	0.7					REC: H113 CLASS RM.		1	20	26
27	20	1		REC: H113 CLASSROOM			0.7	0.7			REC: H113 CLASS RM.		1	20	28
29	20	1		REC: H113 CLASSROOM					0.7	0.9	REC: H113 CLASS RM.		1	20	30
31	20	1		REC: H113A-113B EDIT	0.7	0.5					REC: H113C SOUND...		1	20	32
33	20	1		REC: H113A EDIT QUAD			0.7	0.7			REC: H113B EDIT QUAD		1	20	34
35	20	1		REC: H114,H116 RR, IDF					0.7	0.7	REC: H115 CONTROL ROOM		1	20	36
37	20	1		REC: H115 CONTROL ROOM	0.7	0.4					REC: H115 CONTROL ROOM		1	20	38
39	20	1		REC: H117 TV STUDIO			0.5	0.5			REC: H117 TV STUDIO		1	20	40
41	20	1		REC: H119 CLASSROOM					1.2	0.5	REC: H119 CLASSROOM		1	20	42
43	20	1		REC: H119 CLASSROOM	0.5	0.7					REC: H121,H123 RR		1	20	44
45	20	1		REC: H125 MECHANICAL			0.7	0.7			REC: H127 FOOD PANTRY		1	20	46
47	20	1		REC: H129,H130 RR AND...					0.7	0.9	REC: H UNKNOWN ROOM		1	20	48
49	20	1		REC: H UNKNOWN ROOM	0.5	0.4					COPIER WORKROOM H105		1	20	50
51	20	1		REC: UNIT H CORRIDOR			0.9	2.2			EQUIP.: RTU-200-3 (ROOF)		2	30	52
53	15	1		EQUIP: EF-15 (ON ROOF)					0.5	2.2	--		--	--	54
55	15	1		EQUIP: EF-16 (ON ROOF)	0.5	1.9					EQUIP.: RTU-200-11 (ROOF)		2	25	56
57	15	1		EQUIP: EF-17 (ON ROOF)			0.5	1.9			--		--	--	58
59	15	1		EQUIP: EF-18 (ON ROOF)					0.5	0.7	EQUIP: ODU-9A (ROOF)		2	15	60
61	15	1		EQUIP: EF-19 (ON ROOF)	0.5	0.7					--		--	--	62
63	15	2		EQUIP: ODU-9B (ROOF)			0.7	1.2			EQUIP: ODU-9C (ROOF)		2	15	64
65	--	--		--					0.7	1.2	--		--	--	66
67	20	1		EQUIP: REFRIG. - H110...	0.2	0.9					EWC - CHOIR H108	G	1	20	68
69	20	1		EQUIP: REFRIG.- H105...			1.2	0.5			LIGHTING: H117 LIGHT BAR		1	20	70
71	20	1		REC: H124 ELECTRICAL RM.					0.2	0.8	GARAGE DOOR - H102-3		1	20	72
				PHASE TOTALS:	17.6		21.4		19.0		TOTAL:		58.0 kVA		

NOTES:
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2.

ABBREVIATIONS:
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E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
HVAC	10517 VA	125.00%	13146 VA		
Other	180 VA	100.00%	180 VA	Total Conn. Load:	57968 VA
Power	1300 VA	100.00%	1300 VA	Total Est. Demand:	45277 VA
Receptacle	40640 VA	62.30%	25320 VA	Total Conn.:	161 A
Non-Continuous	5331 VA	100.00%	5331 VA	Total Est. Demand:	126 A

NL1J9

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	24	100 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		REC: HOUSE MIX POSITION	0.7	0.8					REC: AMP RACK		1	20	2
3	20	1		REC: STAGE FLOOR			0.2	0.8			REC: AMP RACK		1	20	4
5	20	1		REC: BACKSTAGE					0.4	0.8	REC: AMP RACK		1	20	6
7	20	1		REC: BACKSTAGE	0.4	0.8					REC: AMP RACK		1	20	8
9	20	1		REC: BACKSTAGE			0.4	0.8			REC: AMP RACK		1	20	10
11	20	1		REC: BACKSTAGE					0.4	0.8	REC: AMP RACK		1	20	12
13	20	1		REC: AV RACK	0.4	0.5					REC: PROJECTOR		1	20	14
15	20	1		REC: AV RACK			0.4	0.0			SPARE		1	20	16
17	20	1		REC: BACKSTAGE					0.4	0.0	SPARE		1	20	18
19	20	1		REC: BACKSTAGE	0.4	0.0					SPARE		1	20	20
21	20	1		SPARE			0.0	0.0			SPARE		1	20	22
23	20	1		SPARE					0.0	0.0	SPARE		1	20	24
				PHASE TOTALS:	3.9		2.5		2.7		TOTAL:		9.1 kVA		

NOTES:
1. **THIS PANEL TO HAVE AN "ISOLATED GROUND" FOR AUDIO EQUIPMENT.**

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MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Other	360 VA	100.00%	360 VA		
Receptacle	8720 VA	100.00%	8720 VA	Total Conn. Load:	9080 VA
				Total Est. Demand:	9080 VA
				Total Conn.:	25 A
				Total Est. Demand:	25 A

NL2D3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	54	400 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	30	3		EQUIP: HP-2M - D212	2.2	2.2					EQUIP: HP-2N - D212		3	30	2
3	--	--		--			2.2	2.2			--		--	--	4
5	--	--		--					2.2	2.2	--		--	--	6
7	15	3		EQUIP: HP-1G - D212	1.4	1.4					EQUIP: HP-1H - D212		3	15	8
9	--	--		--			1.4	1.4			--		--	--	10
11	--	--		--					1.4	1.4	--		--	--	12
13	30	3		EQUIP: HP-2P - D212	2.2	2.7					EQUIP: HP-3B - D212		3	35	14
15	--	--		--			2.2	2.7			--		--	--	16
17	--	--		--					2.2	2.7	--		--	--	18
19	30	3		EQUIP: HP-2Q - D212	2.2	2.2					EQUIP: HP-2R - D216		3	30	20
21	--	--		--			2.2	2.2			--		--	--	22
23	--	--		--					2.2	2.2	--		--	--	24
25	30	3		EQUIP: HP-2W - D216	2.2	2.2					EQUIP: HP-2V - D216		3	30	26
27	--	--		--			2.2	2.2			--		--	--	28
29	--	--		--					2.2	2.2	--		--	--	30
31	35	3		EQUIP: HP-3C - D216	2.7	2.2					EQUIP: HP-2T - D216		3	30	32
33	--	--		--			2.7	2.2			--		--	--	34
35	--	--		--					2.7	2.2	--		--	--	36
37	30	3		EQUIP: HP-2S - D216	2.2	2.2					EQUIP: HP-2U - D216		3	30	38
39	--	--		--			2.2	2.2			--		--	--	40
41	--	--		--					2.2	2.2	--		--	--	42
43	20	1		EQUIP. EF-25 - IDF - D206	0.7	0.0					SPARE		1	20	44
45	20	1		SPARE			0.0	0.0			SPARE		1	20	46
47	20	1		SPARE					0.0	0.0	SPARE		1	20	48
49	20	1		SPARE	0.0	0.0					SPARE		1	20	50
51	20	1		SPARE			0.0	0.0			SPARE		1	20	52
53	20	1		SPARE					0.0	0.0	SPARE		1	20	54
				PHASE TOTALS:	31.1		30.4		30.4		TOTAL:		92.0 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Heating	91292 VA	100.00%	91292 VA		
Other	700 VA	100.00%	700 VA	Total Conn. Load:	91992 VA
				Total Est. Demand:	91992 VA
				Total Conn.:	255 A
				Total Est. Demand:	255 A

NL1H3

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	225 A	MCB	22,000	SURFACE

POLE NO.	TRIP	P	TYPE	LOAD SERVED	A		B		C		LOAD SERVED	TYPE	P	TRIP	POLE NO.
1	20	1		AUTO PLUMB. FIX'S. RR H121	0.4	0.4					AUTO PLUMB. FIX'S. RR H122		1	20	2
3	20	1		Spare			0.0	0.0			Spare		1	20	4
5	20	1		Spare					0.0	0.0	Spare		1	20	6
7	20	1		Spare	0.0	0.0					Spare		1	20	8
9	20	1		Spare			0.0	0.0			Spare		1	20	10
11	20	1		Spare					0.0	0.0	Spare		1	20	12
13	20	1		Spare	0.0	0.0					Spare		1	20	14
15	20	1		Spare			0.0	0.0			Spare		1	20	16
17	20	1		Spare					0.0	0.0	Spare		1	20	18
19	20	1		Spare	0.0	0.0					Spare		1	20	20
21	20	1		Spare			0.0	0.0			Spare		1	20	22
23	20	1		Spare					0.0	0.0	Spare		1	20	24
25	20	1		Spare	0.0	0.0					Spare		1	20	26
27	20	1		Spare			0.0	0.0			Spare		1	20	28
29	20	1		Spare					0.0	0.0	Spare		1	20	30
31	20	1		Spare	0.0	0.0					Spare		1	20	32
33	20	1		Spare			0.0	0.0			Spare		1	20	34
35	20	1		Spare					0.0	0.0	Spare		1	20	36
37	20	1		Spare	0.0	0.0					Spare		1	20	38
39	20	1		Spare			0.0	0.0			Spare		1	20	40
41	20	1		Spare					0.0	0.0	Spare		1	20	42
				PHASE TOTALS:	0.7		0.0		0.0		TOTAL:		0.7 kVA		

NOTES:
1.
2.

ABBREVIATIONS:
G - GFCI BREAKER; A - AFCI BREAKER; L - LOCKOUT BREAKER
S - SHUNT TRIP BREAKER; C - COMBINATION GFCI/AFCI BREAKER
E - ELECTRONIC ADJUSTABLE TRIP BREAKER
MCB - MAIN CIRCUIT BREAKER; MLO - MAIN LUG ONLY

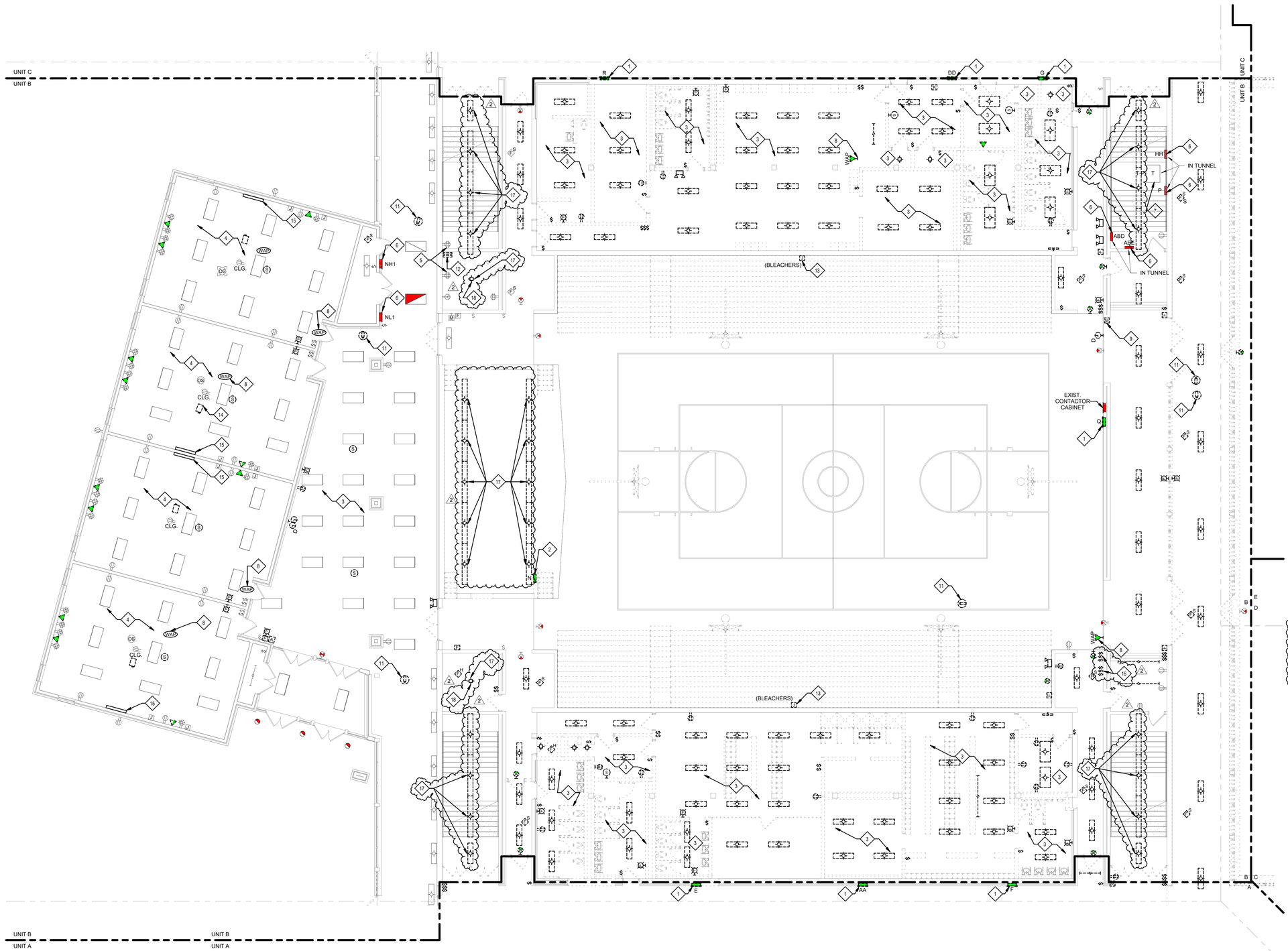
Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals	
Power	700 VA	100.00%	700 VA		
				Total Conn. Load:	700 VA
				Total Est. Demand:	700 VA
				Total Conn.:	2 A
				Total Est. Demand:	2 A

NL1J6

BRANCH CIRCUIT PANELBOARD

VOLTAGE	3 PHASE	POLES	MAIN AMPS	MAIN TYPE	A. I. RATING	MOUNTING
120/208V	4 WIRE	42	150 A	MCB	22,000	SURFACE

| POLE NO. | TRIP | P | TYPE | LOAD SERVED | A | | B | | C | | LOAD SERVED | TYPE | P | TRIP | POLE NO. |
|---|---|---|---|---|---

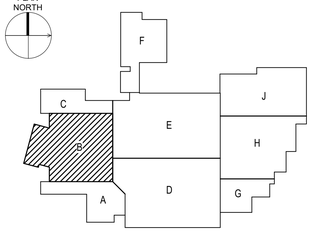


1 FIRST FLOOR DEMOLITION - UNIT B - ELECTRICAL

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

0 4' 8' 16'

PLAN NORTH



KEYPLAN NORTH

GENERAL NOTES

A. REFER TO DRAWING E002 FOR GENERAL ELECTRICAL NOTES.

SHEET KEYNOTES

1. EXISTING ELECTRICAL PANEL TO BE REPLACED IN-KIND AND RENAMED. EXISTING CONDUITS TO REMAIN AND PROVIDE NEW FEEDER WIRE BACK TO DISTRIBUTION PANEL. COORDINATE EXISTING CONDUIT LOCATIONS IN FIELD WITH ALL DISCIPLINES NEW WORK AND REROUTE AS REQUIRED. REFER TO POWER ONE-LINE DIAGRAMS AND POWER FLOOR PLANS FOR PANEL LOCATION AND ADDITIONAL INFORMATION.
2. DISCONNECT AND REMOVE ELECTRICAL PANEL. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
3. POWER: DISCONNECT AND REMOVE ALL ELECTRICAL POWER DEVICES ON WALLS OR CEILINGS (RECEPTACLES, JUNCTION BOXES, DISCONNECTS, PANELS ETC.) IN THIS ROOM/AREA UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX THAT REMAINS IN USE.

   LIGHTING AND CONTROLS: DISCONNECT AND REMOVE ALL LIGHTS, LIGHTING CONTROLS AND DEVICES IN THIS ROOM/ AREA UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX THAT REMAINS IN USE.

   SYSTEMS: DISCONNECT AND REMOVE ALL SYSTEMS DEVICES (WALL AND CEILING) IN THIS ROOM / AREA UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX THAT REMAINS IN USE.
4. ALL EXISTING POWER DEVICES TO REMAIN IN THIS ROOM UNLESS NOTED OTHERWISE.

   LIGHTING: ALL EXISTING LIGHTING AND CONTROLS TO REMAIN IN THIS ROOM UNLESS NOTED OTHERWISE.

   SYSTEMS: DISCONNECT AND REMOVE ALL SYSTEMS DEVICES (WALL AND CEILING) IN THIS ROOM / AREA UNLESS NOTED OTHERWISE. REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX THAT REMAINS IN USE.
5. EXISTING RECEPTACLE TO REMAIN.
6. EXISTING PANEL TO REMAIN AND TO BE RENAMED. REFER TO THE ONE-LINE DIAGRAMS AND POWER FLOOR PLANS FOR ADDITIONAL INFORMATION.
7. EXISTING TRANSFORMER TO REMAIN AND TO BE RENAMED. REFER TO THE ONE-LINE DIAGRAMS AND POWER FLOOR PLANS FOR ADDITIONAL INFORMATION.
8. EXISTING WIRELESS ACCESS POINT AND MOUNTING HARDWARE TO BE REMOVED AND TURNED OVER TO OWNER. ALL ASSOCIATED CABLING TO BE DEMOLISHED BACK TO SOURCE.
9. EXISTING INTRUSION DETECTION MOTION DETECTOR TO BE REMOVED AND TURNED OVER TO OWNER.
10. GYMNASIUM SOUND SYSTEM AND ASSOCIATED CABLING TO BE PROTECTED AND RETAINED DURING DEMOLITION PHASE. TYPICAL.
11. EXISTING SECURITY CAMERA TO BE REMOVED AND TURNED OVER TO OWNER.
12. EXISTING IDF RACK TO BE PROTECTED DURING THE DEMOLITION PHASE. RACK TO BE RENAMED DURING NEW CONTRUCTION PHASE.
13. EXISTING BLEACHERS TO BE REMOVED AND REPLACED. DISCONNECT AND REMOVE ALL ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE.
14. REMOVE EXISTING PROJECTOR AND TURN OVER EXISTING EQUIPMENT AND ALL ASSOCIATED MOUNTING HARDWARE AND CABLING UNDAMAGED TO OWNER. REMOVE ALL EXISTING RACEWAYS, BOXES, ETC. COMPLETELY BACK TO SOURCE.
15. EXISTING SMARTBOARD TO BE REMOVED AND TURNED OVER TO OWNER.
16. DEMOLISH EXISTING GOAL CONTROLS.
17. REMOVE FIXTURE. EXISTING RACEWAYS, WIRING, BOXES, ETC. SHALL REMAIN. SEE FIRST FLOOR - UNIT B - LIGHTING FOR FURTHER REQUIREMENTS.
18. DEMOLISH SIMILAR EXISTING FIXTURE IN ROOM ABOVE. SEE SEE SECOND FLOOR PLAN - UNIT B - LIGHTING FOR FURTHER REQUIREMENTS.

SILVER CREEK SCHOOL CORPORATION

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SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for the successful purchase and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM 2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	IME	RDB

DRAWING TITLE:
FIRST FLOOR DEMOLITION - UNIT B - ELECTRICAL

CERTIFIED BY:
ROBERT D. BOTTOMS REGISTERED No. PE11900450 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
ED102

PROJECT NUMBER
2021026

FIRE PROTECTION LEGEND

FIRE PROTECTION SYMBOLS

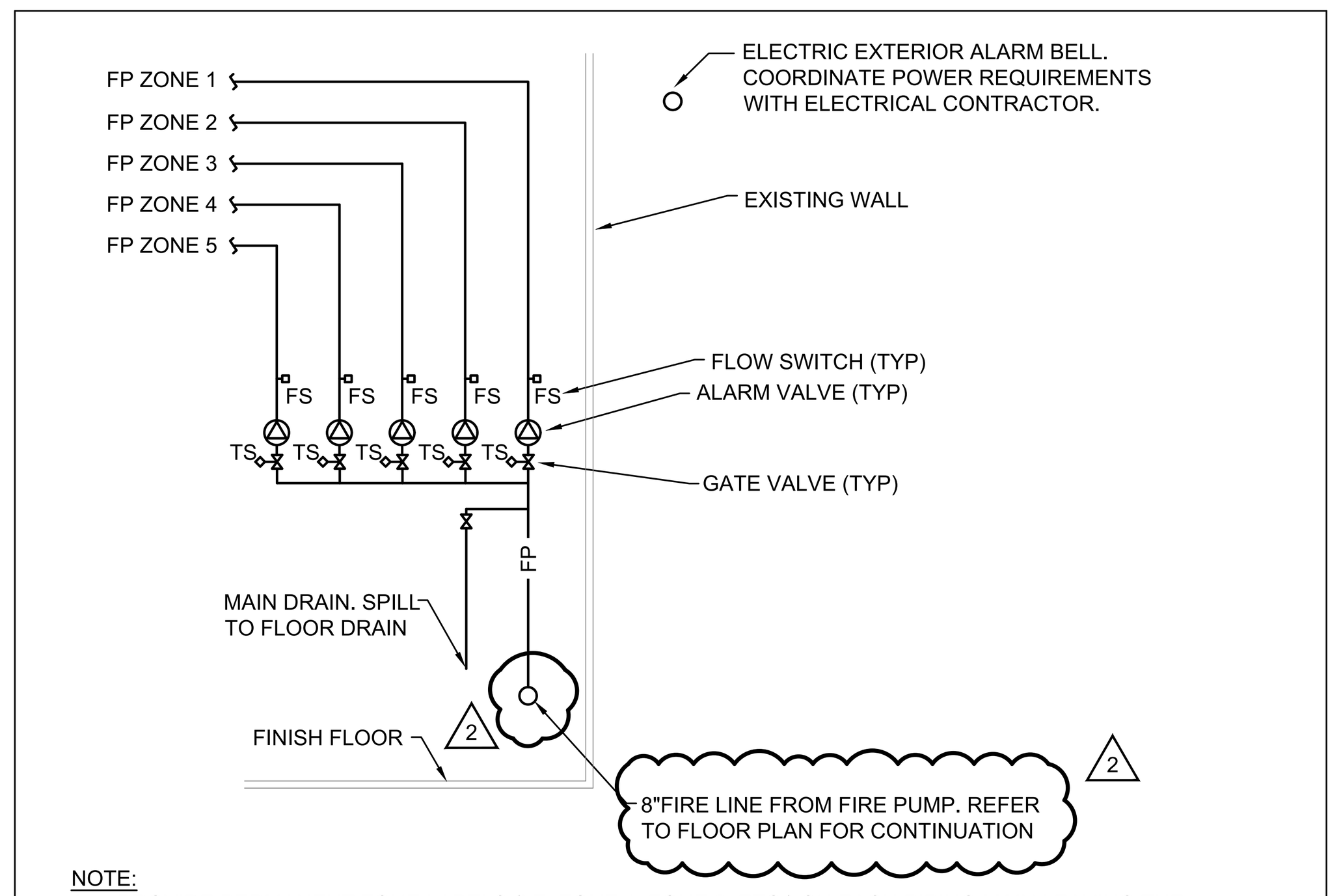
SYMBOL	DESCRIPTION
	PIPE DOWN
	PIPE UP
	TEE DOWN
	TEE UP
	CONTINUATION
	CAP
FS	FLOW SWITCH
TS	TAMPER SWITCH ON VALVE
TB	THRUST BLOCK
FS TS	FIRE PROTECTION RISER
	FIRE DEPARTMENT CONNECTION (DOUBLE)
	FIRE HYDRANT
XX	SHEET NOTE
XX	DEMOLITION NOTE
	CONNECT NEW TO EXISTING
	EXTENT OF DEMOLITION

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
FS	FLOW SWITCH
GPM	GALLONS PER MINUTE
I.E.	INVERT ELEVATION
MIN	MINIMUM
PSI	POUNDS PER SQUARE INCH
TB	THRUST BLOCK
TS	TAMPER SWITCH

FIRE PROTECTION LINETYPES

SYMBOL	DESCRIPTION
FP	FIRE PROTECTION PIPE



NOTE:
1. PROVIDE PERMANENT ZONE LABELS (I.E. ZONE 1, ZONE 2, ETC.) ON EACH PIPING MAIN LEAVING THE RISER. LABELS SHALL BE PROVIDED AT RISER AND ON THE INTERVAL INDICATED IN THE FIRE PROTECTION SPECIFICATIONS. ALL SPRINKLER SYSTEM COMPONENTS, SUCH AS ALARM VALVES, FLOW SWITCHES, ISOLATION VALVES, TAMPER SWITCHES, DRAIN VALVES, ETC., SHALL BE PROVIDED WITH A PERMANENT LABEL REFERENCING THEIR RESPECTIVE ZONE. COORDINATE LABELING WITH FIRE ALARM CONTRACTOR.

FIRE PROTECTION ZONE RISER DETAIL (2)

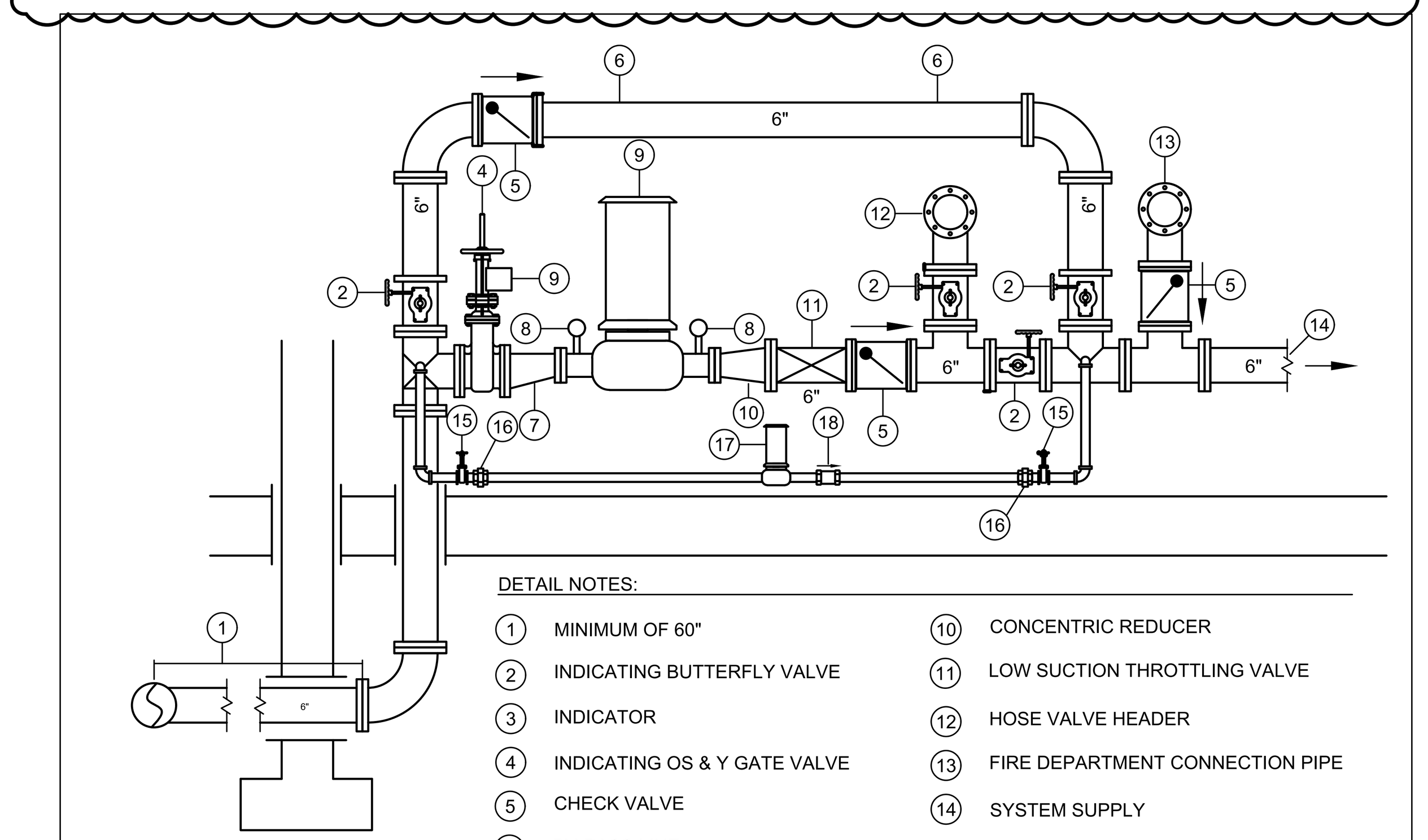
NOT TO SCALE

FIRE/JOCKEY PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	RATED CAPACITY			ELECTRICAL					REMARKS
				GPM	SUCTION PSI	DEVELOPED PSI	HP	RPM	V / Ø / Hz	MCA	MOCP	
FP-01	PATTERSON	4x3 VIP	SEE PLANS	300.0	10	65	20	3,520	460/3/60	23.70	150	1 - 29, 35 - 40
JP-01	PATTERSON	CR SERIES	SEE PLANS	5.0	---	83	1	3,450	460/3/60	1.70	15	30 - 40

REMARKS:
1. VERTICAL TURBINE
1. PUMP SHALL BE RATED FOR 150% FLOW AT 65% OF RATED PRESSURE
2. PUMP SHUT OFF PRESSURE SHALL NOT EXCEED 140 % OF RATED PRESSURE
4. U.L. AND FACTORY MUTAL APPROVED
5. NFPA 20 COMPLIANT, CURRENT EDITION
6. COMPLETE WITH COUPLING, COUPLING GUARD, AND MOTOR
7. COUNTERCLOCKWISE PUMP ROTATION
8. PUMP DISCHARGE FLANGE RATED FOR 175 POUNDS
9. FACTORY PERFORMANCE TEST
10. FACTORY TEST OF DISCHARGE HEAD AND BOWL ASSEMBLY
11. MOTOR SHALL BE HIGH THRUST TYPE, OPEN DRIP PROOF WITH 1.15 SERVICE FACTOR
12. MOTOR SHALL BE RATED FOR SOFT-START STARTING
13. FIRE PUMP CONTROLLER SHALL BE TORNATECH GPS+GPU, UL/FM LABLED COMBINATION MANUAL AND AUTOMATIC TYPE DESIGNED FOR SOFT-START STARTING
14. FIRE PUMP CONTROLLER ENCLOSURE SHALL BE NEMA TYPE 2
15. FIRE PUMP CONTROLLER SHALL BE UL/FM APPROVED
16. FIRE PUMP CONTROLLER WITHSTAND RATING SHALL NOT BE LESS THAN 100,000 AMPS RMS AT 480 VOLTS
17. FUSED DEVICES ARE NOT ACCEPTABLE
18. CONTROLLER MANUFACTURER WARRANTY SHALL INCLUDE ALL PARTS AND LABOR FOR POWER CIRCUIT COMPONENTS, ISOLATING SWITCH, CIRCUIT BREAKER, CURRENT SENSING MODULE, MOTOR CONTACTORS, AND PCL ASSEMBLY
19. THE CONTROLLER SHALL INCLUDE A MOTOR RATED COMBINATION ISOLATING DISCONNECT SWITCH/CIRCUIT BREAKER, MECHANICALLY INTERLOCKED AND OPERATED WITH A SINGLE, EXTERNALLY MOUNTED HANDLE
20. CONTROLLER CANNOT BE OPENED WITH HANDLE IN "ON" POSITION
21. MINIMUM RUN RUN PERIOD OF 10 MINUTES
22. CONTROLLER SHALL BE PROVIDED WITH TERMINALS FOR FIELD CONVERSION FROM AUTOMATIC TO MANUAL SHUTDOWN
23. FIRE PUMP CONTROLLER SHALL HAVE EXTERNALLY MOUNTED INDIVIDUAL VISIBLE INDICATORS FOR POWER AVAILABLE, LOW PRESSURE, LOCAL START, REMOTE START, DELUGE VALVE OPE PHASE FAILURE, PHASE REVERSAL, INTERLOCK ON, PUMP RUNNING, AND RUN TIMER ON
24. THRE FIRE PUMP CONTROLLER SHALL BE FURNISHED WITH DUPLICATE, INDIVIDUAL PHASE FAILURE, PHASE REVERSAL, AND PUMP OPERATING ALARM CONTACTS
25. TWO (2") INCH AUTOMATIC AIR RELEASE VALVE
27. FOUR (4") INCH LIQUID FILLED DISCHARGE PRESSURE GAUGE
28. FOUR (4") INCH OUTSIDE HOSE VALVE HEADER (125/250LB.)
29. THREE 2-1/2" HOSE VALVES WITH CAPS AND CHAINS
30. JOCKEY PUMP SHALL BE CENTRIFUGAL CLOSE COUPLED TYPE, WITH MECHANICAL SEALS, C.I. SUCTION/DISCHARGE, AND S.S. IMPELLER, SHAFT AND WETTED PARTS
31. VERTICAL OPEN DRIP PROOF MOTOR
32. JOCKEY PUMP CONTROLLER SHALL BE TORNATECH COMPLETE WITH FUSIBLE LINK DISCONNECT, HAND-OFF-AUTO SELECTOR SWITCH, AND PRESSURE SWITCH
33. JOCKEY PUMP CONTROLLER SHALL BE RATED FOR JOCKEY PUMP MOTOR
34. MINIMUM JOCKEY PUMP CONTROLLER ENCLOSURE RATING SHALL BE NEMA TYPE 2, DRIPTIGHT
35. FACTORY TRAINED REPRESENTATIVE ON JOB SITE TO CHECK INSTALLATION, FIELD ACCEPTANCE TESTING, START-UP, AND OWNER TRAINING
36. FIRE PUMP MANUFACTURER SHALL BE RESPONSIBLE FOR INSURING THE FIRE PUMP AND JOCKEY UNIT IS PROPERLY COORDINATED AND INSTALLED
37. ALL EQUIPMENT REQUIRED TO COMPRISE THE FIRE PUMP SHALL BE SUPPLIED BY THE FIRE PUMP MANUFACTURER
38. FIRE PUMP MANUFACTURER SHALL BE RESPONSIBLE FOR INSURING PROPER FUCTION OF THE FIRE PUMP, MOTOR, BASE PLATE, CONTROL EQUIPMENT, AND ALL REQUIRED ACCESSORIES REQUIRED FOR OPERATION AS INTENDED
39. THE FIRE PUMP MANUFACTURER SHALL PROVIDE NOTORIZED CERTIFICATE OF COMPLIANCE THAT ALL COMPONENTS OF THE FIRE PUMP UNIT WERE SUPPLIED BY THE FIRE PUMP MANUFACTURER AND ACKNOWLEDGE THEIR RESPONSIBILITY FOR PROPER FUNTION OF THE FIRE PUMP UNIT
40. OTHER ACCEPTABLE MANUFACTURERES INCLUDE: BELL & GOSSETT, GRUNDFOS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2

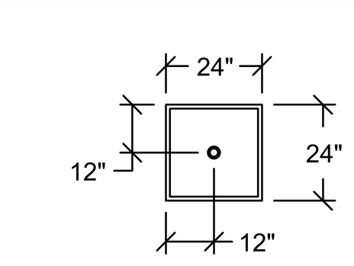


DETAIL NOTES:

1. MINIMUM OF 60"
2. INDICATING BUTTERFLY VALVE
3. INDICATOR
4. INDICATING OS & Y GATE VALVE
5. CHECK VALVE
6. BY-PASS LINE
7. ECCENTRIC REDUCER
8. COMPOUND GAUGE
9. FIRE PUMP
10. CONCENTRIC REDUCER
11. LOW SUCTION THROTTLING VALVE
12. HOSE VALVE HEADER
13. FIRE DEPARTMENT CONNECTION PIPE
14. SYSTEM SUPPLY
15. GATE VALVE
16. UNION
17. JOCKEY PUMP
17. CHECK VALVE

FIRE PUMP DETAIL

NOT TO SCALE



HEAD PLACEMENT IN ACOUSTICAL TILE

NOT TO SCALE

GENERAL NOTES:

A. REFER TO SPECIFICATIONS AND THE CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION.

B. ALL FIRE-SUPPRESSION WORK SHALL BE PERFORMED BY A LICENSED FIRE-SUPPRESSION CONTRACTOR WITH A MINIMUM OF 5 YEARS EXPERIENCE DESIGN AND ERECTING FIRE-SUPPRESSION SYSTEMS.

C. PROVIDE A NEW COMPLETE FIRE-SUPPRESSION SYSTEM INCLUDING MODIFICATIONS TO EXISTING WORK, NEW PIPING AND ACCESSORIES, AND TESTING AS REQUIRED TO MEET ALL PROVISIONS OF THE INDIANA BUILDING CODE AND ALL APPLICABLE NFPA CODES. THE BUILDING SHALL BE 100% COVERED BY A NEW WET-TYPE FIRE PROTECTION SYSTEM.

C.A. ALL EXISTING SPRINKLER PIPING, HEADS, VALVES, ETC SHALL BE COMPLETELY REMOVED UNDER THIS PROJECT.

C.B. ALL AREAS NOT SHOWN TO BE SPRINKLERED BUT REQUIRED TO BE SPRINKLERED PER NFPA-13 SHALL BE SPRINKLERED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND AS PART OF THE DELEGATED DESIGN AND INSTALLATION PROCESS.

D. THE FIRE-SUPPRESSION CONTRACTOR SHALL HYDRAULICALLY DESIGN AND SIZE THE MAIN SERVICE AND SPRINKLER SYSTEM TO FULLY PROTECT THE ENTIRE BUILDING IN COMPLIANCE WITH THE APPLICABLE INDIANA BUILDING CODES, NFPA-13, NFPA-14, NFPA-20, NFPA-24, AND LOCAL CODES. THE FIRE-SUPPRESSION CONTRACTOR SHALL PROVIDE AND SUBMIT DRAWINGS AND HYDRAULIC CALCULATIONS TO THE MECHANICAL ENGINEER FOR REVIEW AND THE STATE FOR CODE APPROVAL.

E. FIRE-SUPPRESSION CONTRACTOR SHALL OBTAIN A COPY OF THE ENTIRE SET OF CONTRACT DOCUMENTS AND SHALL COORDINATE ROUTING AND INSTALLATION WITH ALL OTHER DISCIPLINES AND TRADES INCLUDING BUT NOT LIMITED TO CIVIL, ARCHITECTURAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL IN THE LAY-OUT OF SPRINKLER PIPING AND HEADS.

E.A. SPRINKLER PIPING SHALL BE HELD AS HIGH AS POSSIBLE. ROUTE TIGHT TO STRUCTURE.

E.B. FIRE PROTECTION CONTRACTOR SHALL COORDINATE PIPE ROUTING PATHS WITH NEW DUCTWORK. DUCTWORK SHALL BE INSTALLED PRIOR TO SPRINKLER PIPING AND HEADS.

E.C. DO NOT MOUNT SPRINKLER HEADS OR HANG PIPING SO AS TO BLOCK ACCESS TO HVAC OR ELECTRICAL EQUIPMENT.

E.D. DO NOT ROUTE PIPING DIRECTLY ABOVE LIGHT FIXTURES OR TIGHT TO CEILING GRID. MAINTAIN A MINIMUM OF 6" CLEAR ABOVE THESE ITEMS TO MAINTAIN ACCESS.

E.E. DO NOT ROUTE PIPING DIRECTLY BELOW VAV BOXES, EXHAUST FANS, AND OTHER SUSPENDED HVAC EQUIPMENT.

E.F. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS / SWITCHGEAR OR THE NEC REQUIRED CLEARANCE IN FRONT OF THESE ELECTRICAL ITEMS. COORDINATE ADDITIONAL REQUIREMENTS WITH NEC.

E.G. DO NOT ROUTE SPRINKLER PIPING THROUGH UNHEATED SPACES.

E.H. PROVIDE SPRINKLER PIPING BELOW LARGE DUCTS AND OTHER SUSPENDED EQUIPMENT (<4'-0" WIDE) IN MECHANICAL ROOMS

E.I. FIRE-SUPPRESSION CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL FIRE-SUPPRESSION WORK WITH THE GENERAL CONTRACTOR AND ACCOMMODATE CONSTRUCTION PHASING REQUIREMENTS AND ALL OTHER TRADES AS REQUIRED.

F. CENTER SPRINKLER HEADS (EACH WAY) IN CEILING TILES. REFER TO FIRE-SUPPRESSION DETAILS FOR CLARIFICATION. REFER TO ARCHITECTURAL FOR FINAL REFLECTED CEILING PLANS TO CLARIFY CEILING TYPES AND CEILING GRIDS. COORDINATE HEAD LOCATIONS WITH LIGHTING AND AIR DEVICES.

G. INSTALL CAPPED DRAIN VALVES AND ANY AND ALL ADDITIONAL DRAIN VALVES AS REQUIRED TO COMPLETELY DRAIN THE FIRE-SUPPRESSION SYSTEM. INSTALL ALL REQUIRED DRAIN PIPING TO FLOW TEST POINTS. DISCHARGE ALL DRAIN PIPING TO OUTDOORS OR TO AN APPROVED LOCATION. PROVIDE LISTED AIR RELEASE FOR ALL TRAPPED RUNS OF FIRE-SUPPRESSION PIPING.

H. ALL FIRE-SUPPRESSION COMPONENTS INCLUDING BUT NOT LIMITED TO VALVES, PIPE, FITTINGS, CONTROL SYSTEMS, AND TRIM SHALL BE UL AND/OR FM LISTED FOR FIRE SERVICE AS REQUIRED BY THE INDIANA BUILDING CODES AND/OR THE AUTHORITY HAVING JURISDICTION.

I. PROVIDE GUARDS AND/OR SPECIAL HEADS AS REQUIRED FOR A COMPLETE AND FUNCTIONAL DESIGN AND INSTALLATION AND AS REQUIRED TO COMPLY WITH NFPA-13. PROVIDE HIGH TEMPERATURE HEADS FOR AREAS NEAR SPACE HEATING OUTLETS AND EQUIPMENT AS REQUIRED.

J. NEW OPENINGS FOR FIRE-SUPPRESSION ITEMS SHALL BE CUT, SLEEVED, ETC. BY THE FIRE-SUPPRESSION CONTRACTOR. ALL OPENINGS SHALL BE CORE DRILLED OR SAW-CUT. NO "HAMMER DRILLING" WILL BE ALLOWED.

K. INSTALL FIRE / SMOKE STOPPING FOR ALL FIRE-SUPPRESSION PIPING PENETRATIONS THRU FIRE/SMOKE RATED ASSEMBLIES INCLUDING BUT NOT LIMITED TO PARTITIONS, WALLS, AND SLABS. ALL PENETRATION INSTALLATIONS SHALL BE CONSTRUCTED PER AN APPROVED UL AND/OR FM LISTED PENETRATION ASSEMBLY. THE FIRE-SUPPRESSION CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS FOR SPRINKLER PIPING WITH THE GENERAL CONTRACTOR AND OTHER TRADES AS REQUIRED FOR A COMPLETE INSTALLATION.

L. ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SPRINKLER PIPING IN MECHANICAL ROOMS SHALL BE PAINTED RED.

M. RATED WALLS: PROVIDE FLEXIBLE SPRINKLER PIPING IN ALL 2-HR RATED WALL PENETRATIONS. PROVIDE FLEX COUPLINGS ON EACH SIDE OF THE WALL. REFER TO ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.

N. SPRINKLER HEAD TYPES:

N.F. CERTAIN AREAS ON THE DRAWINGS MAY ILLUSTRATE A SPRINKLER HEAD TYPE AND/OR LOCATION. THE INTENT WITH THIS SCENARIO IS TO ILLUSTRATE CONCEPTUAL REQUIREMENTS. ANY ADDITIONAL HEADS THAT MAY BE REQUIRED TO COMPLY WITH NFPA-13 IS THE RESPONSIBILITY OF THE FIRE-SUPPRESSION CONTRACTOR.

N.G. COORDINATE HEAD TYPES WITH ARCHITECTURAL CEILING TYPES.

N.H. SPRINKLER HEADS SHALL BE FED IN A RETURN BEND ARRANGEMENT.

N.I. UNLESS NOTED OTHERWISE, ALL SPRINKLER HEADS IN AREAS WITH CEILINGS SHALL BE SEMI-RECESSED WHITE ESCUTCHEONS.

N.J. OPEN CEILING AREAS SHALL BE COVERED WITH UPRIGHT, SIDEWALL, OR PENDANT HEADS.

N.K. LOWER CEILING AREAS, SUCH AS SOFFITS AND BULKHEADS, SHALL BE CONCEALED / FULLY RECESSED TYPE WITH WHITE COVER PLATES

O. COORDINATION DRAWINGS: REFER TO SPECIFICATION 22 01 00 FOR COORDINATION DRAWING REQUIREMENTS.

WATER FLOW TEST RESULTS	
STATIC PRESSURE:	55 PSI
RESIDUAL PRESSURE:	40 PSI
FLOW:	978 GPM
FLOW TEST DATE:	4/27/2022
FLOW TEST TIME:	11:30 AM

FLOW TEST RESULTS PROVIDED BY: DALMATION FIRE

THE FIRE SUPPRESSION CONTRACTOR SHALL CONDUCT HIS OWN FLOW TEST FOR USE IN SHOP DRAWING / HYDRAULIC CALCULATIONS. THE TEST SHALL BE FULLY COORDINATED WITH THE OWNER, UTILITY COMPANY AND WITNESSED BY ARCHITECT / ENGINEER.

FIRE PROTECTION SYSTEM COVERAGE AREA CALCULATIONS	
FIRST FLOOR ZONE 1	43,370 SF
FIRST FLOOR ZONE 2	38,415 SF
FIRST FLOOR ZONE 3	48,000 SF
FIRST FLOOR ZONE 4	48,215 SF
FIRST FLOOR ZONE 5	43,790 SF
TOTAL:	221,790 SF

UTILITY CONTACT INFORMATION	
DOMESTIC WATER COMPANY: SELLERSBURG WATER CONTACT: BILL RIGDON	PHONE: (502) 396-9978 EMAIL: BRIGDON@SELLERSBURG.ORG
PROJECT AREA FIRE MARSHAL FIRE DEPARTMENT: SELLERSBURG VOLUNTEER FIRE DEPARTMENT CONTACT: DAVE SCHICKEL	PHONE: (812) 246-7231 EMAIL: DSHICKEL@TTFPD.ORG

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	BMS	JAT

DRAWING TITLE:
FIRE PROTECTION LEGEND & GENERAL NOTES

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
FP001

PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

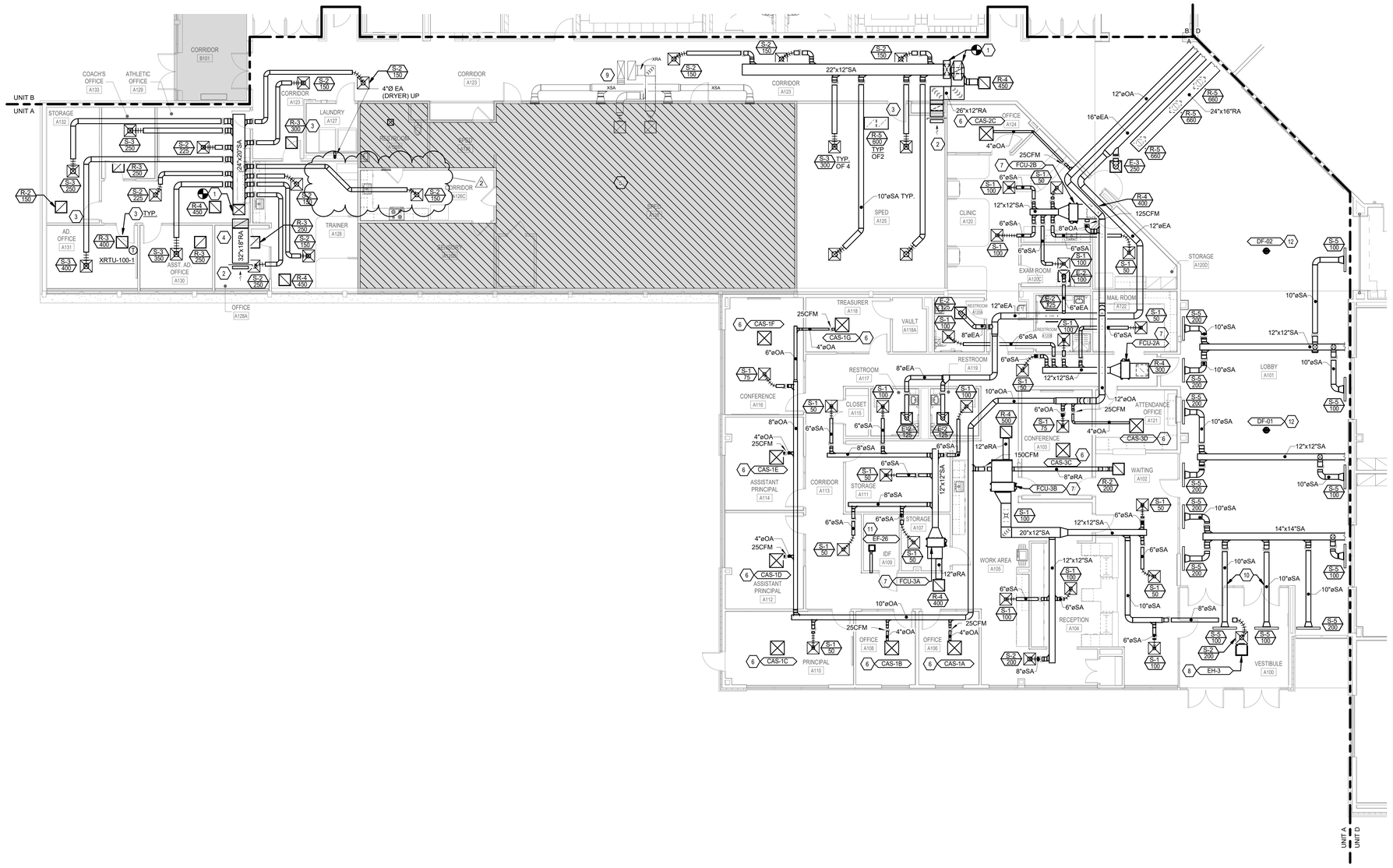
B. REFER TO THE ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

C. REFER TO THE AIR DEVICE SCHEDULE FOR TYPICAL MANUFACTURER AND MODEL FOR DIFFUSERS AND GRILLES

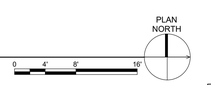
D. REFER TO THE EQUIPMENT SCHEDULES FOR NEW AND EXISTING TO REMAIN EQUIPMENT.

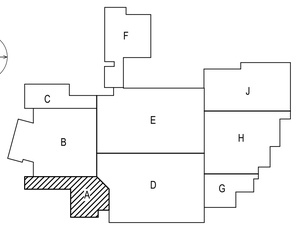
SHEET KEYNOTES

1. PROVIDE NEW SUPPLY AND RETURN DUCTWORK FROM EXISTING ROOFTOP UNIT ABOVE.
2. PROVIDE 1/4" WOVEN WIRE MESH ON OPEN END OF DUCT.
3. RELIEF GRILLE OPEN TO ABOVE CEILING PLENUM. PROVIDE GRILLE CANOPY PER DETAIL.
4. RETURN AIR DUCT SMOKE DETECTOR TO BE FURNISHED AND INSTALLED BY FIRE ALARM CONTRACTOR. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INSTALLATION LOCATION WITH FIRE ALARM CONTRACTOR AND PROVIDING ALL REQUIRED DUCT / SHEET METAL COMPONENTS AND MAKING ALL NECESSARY MODIFICATIONS TO DUCTWORK FOR A COMPLETE INSTALLATION PER THE SMOKE DETECTOR MANUFACTURER'S REQUIREMENTS
5. NO ABOVE CEILING MECHANICAL SCOPE IN HATCHED AREA. ALL EXISTING DUCTWORK, DIFFUSERS, DAMPERS, ETC. ARE EXISTING TO REMAIN. ENSURE CLEAN SPACE UPON PROJECT COMPLETION.
6. NEW VRF INDOOR CASSETTE UNIT MOUNTED WITHIN CEILING GRID. INSTALL PER DETAIL.
7. NEW VRF INDOOR FAN COIL UNIT MOUNTED ABOVE CEILING GRID. INSTALL PER DETAIL.
8. ELECTRIC CEILING HEATER. MOUNT IN CEILING GRID.
9. EXISTING DUCTWORK, HANGERS, ETC. TO REMAIN.
10. DUCTWORK AND ASSOCIATED DIFFUSERS MOUNTED HIGH IN LOBBY AREA SEPARATE FROM VESTIBULE.
11. THERMOSTAT CONTROLLED EXHAUST FAN TO BE SUPPORTED BY STRUCTURE ABOVE. FAN TO DISCHARGE TO ABOVE CEILING PLENUM OF CORRIDOR. PROVIDE 1/4" WOVEN WIRE MESH ON OPEN END OF DUCT.
12. DESTRATIFICATION FAN TO BE INSTALLED IN CEILING. PROVIDE WITH PLENUM-RATED PLUG CORD AND COORDINATE CONNECTION ABOVE CEILING WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.



1 FIRST FLOOR - UNIT A - HVAC
SCALE: 1/8" = 1'-0"





KEYPLAN NORTH

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of construction and materials to be employed.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the mechanical systems.
On the basis of the general scope indicated or described the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
FIRST FLOOR - UNIT A - HVAC

CERTIFIED BY:
NICHOLAS S. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
M101

PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

B. REFER TO THE ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN INFORMATION.

C. REFER TO THE AIR DEVICE SCHEDULE FOR TYPICAL MANUFACTURER AND MODEL FOR DIFFUSERS AND GRILLES.

D. REFER TO THE EQUIPMENT SCHEDULES FOR NEW AND EXISTING TO REMAIN EQUIPMENT.

SHEET KEYNOTES

1. VESTIBULE TO BE CONDITIONED VIA EXISTING CEILING MOUNTED ELECTRIC HEATER.
2. NO ABOVE CEILING MECHANICAL SCOPE IN HATCHED AREA. ALL EXISTING DUCTWORK, DIFFUSERS, DAMPERS, CONTROLS, ETC. EXISTING TO REMAIN. ENSURE CLEAN SPACE UPON PROJECT COMPLETION.
3. PROVIDE NEW ALUMINUM SUPPLY AND EXHAUST AIR DUCTWORK, TAPS AND SIDEWALL DIFFUSERS / GRILLES. DUCTWORK, TAPS, AND DIFFUSERS TO BE FIELD PAINTED.
4. FOLD DUCTWORK TIGHT TO EXISTING CEILING. ENSURE MINIMUM CLEARANCE OF 7'6" AFF IN WALKWAYS.
5. COORDINATE DUCT PENETRATIONS WITH STRUCTURAL SLAB REINFORCEMENT SCHEDULE.
6. EXHAUST AIR DUCTWORK TO BE OFFSET BEHIND CASEWORK. COORDINATE FINAL DISTANCE FROM SUPPLY DUCTWORK WITH SECOND FLOOR SLAB PENETRATIONS. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
7. THERMOSTAT CONTROLLED EXHAUST FAN TO BE SUPPORTED BY STRUCTURE ABOVE. FAN TO DISCHARGE TO GYMNASIUM SPACE THROUGH NEW WALL MOUNTED GRILLE 8' AFF.

EXISTING HVAC EQUIPMENT, DUCTWORK, ETC SHALL REMAIN IN THIS AREA

KEYPLAN

1 FIRST FLOOR - UNIT B - HVAC
SCALE: 1/8" = 1'-0"

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PROJECT:
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ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, and the general arrangement and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
All work, whether of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

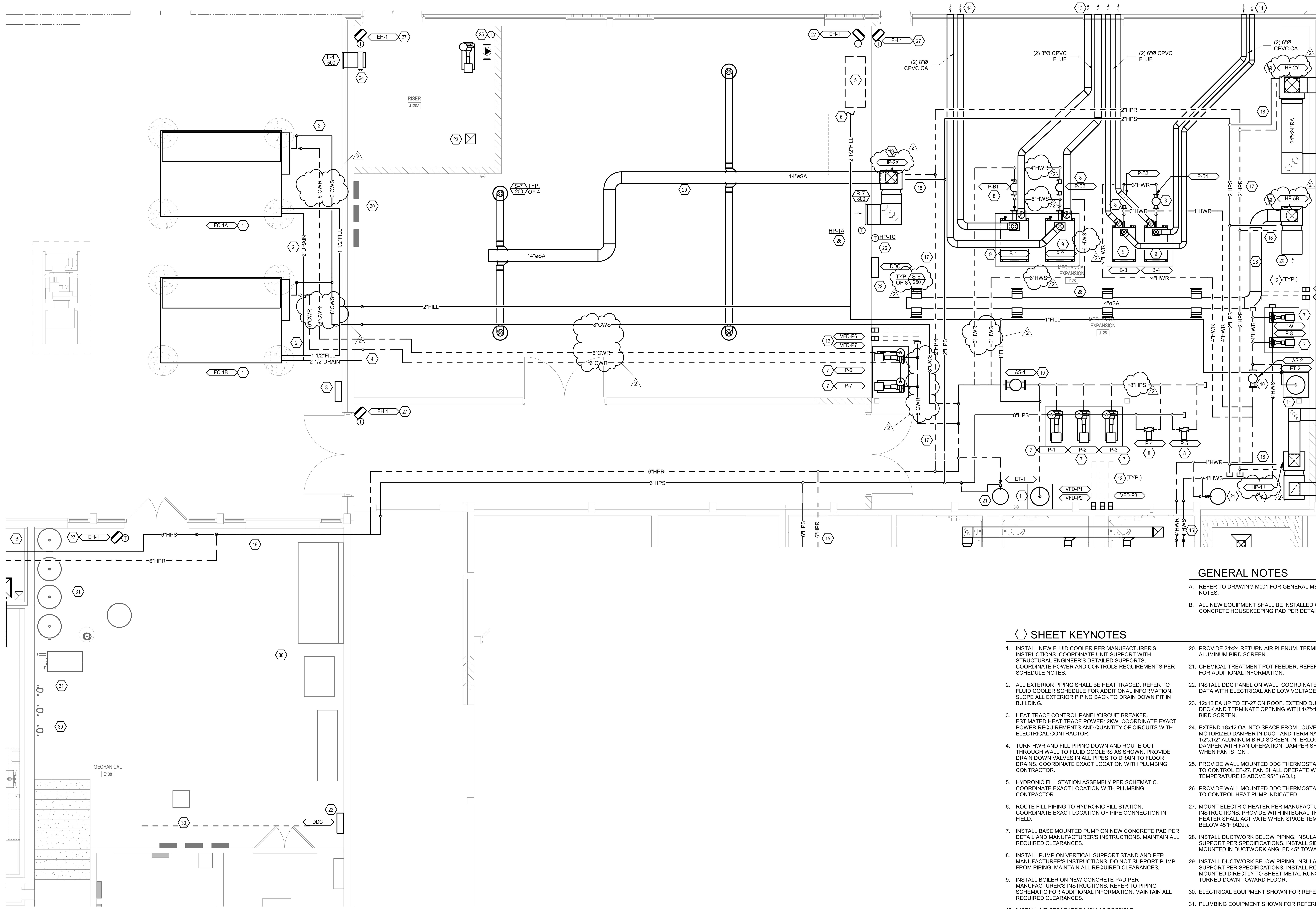
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
FIRST FLOOR - UNIT B - HVAC

CERTIFIED BY:
NICHOLAS C. MOORE
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
M102

PROJECT NUMBER
2021026



1 ENLARGED MECHANICAL ROOM PLAN

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

GENERAL NOTES

A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

B. ALL NEW EQUIPMENT SHALL BE INSTALLED ON A MINIMUM 4" CONCRETE HOUSEKEEPING PAD PER DETAIL.

SHEET KEYNOTES

1. INSTALL NEW FLUID COOLER PER MANUFACTURER'S INSTRUCTIONS. COORDINATE UNIT SUPPORT WITH STRUCTURAL ENGINEER'S DETAILED SUPPORTS. COORDINATE POWER AND CONTROLS REQUIREMENTS PER SCHEDULE NOTES.
2. ALL EXTERIOR PIPING SHALL BE HEAT TRACED. REFER TO FLUID COOLER SCHEDULE FOR ADDITIONAL INFORMATION. SLOPE ALL EXTERIOR PIPING BACK TO DRAIN DOWN PIT IN BUILDING.
3. HEAT TRACE CONTROL PANEL/CIRCUIT BREAKER. ESTIMATED HEAT TRACE POWER: 2KW. COORDINATE EXACT POWER REQUIREMENTS AND QUANTITY OF CIRCUITS WITH ELECTRICAL CONTRACTOR.
4. TURN HWR AND FILL PIPING DOWN AND ROUTE OUT THROUGH WALL TO FLUID COOLERS AS SHOWN. PROVIDE DRAIN DOWN VALVES IN ALL PIPES TO DRAIN TO FLOOR DRAINS. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
5. HYDRONIC FILL STATION ASSEMBLY PER SCHEMATIC. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
6. ROUTE FILL PIPING TO HYDRONIC FILL STATION. COORDINATE EXACT LOCATION OF PIPE CONNECTION IN FIELD.
7. INSTALL BASE MOUNTED PUMP ON NEW CONCRETE PAD PER DETAIL AND MANUFACTURER'S INSTRUCTIONS. MAINTAIN ALL REQUIRED CLEARANCES.
8. INSTALL PUMP ON VERTICAL SUPPORT STAND AND PER MANUFACTURER'S INSTRUCTIONS. DO NOT SUPPORT PUMP FROM PIPING. MAINTAIN ALL REQUIRED CLEARANCES.
9. INSTALL BOILER ON NEW CONCRETE PAD PER MANUFACTURER'S INSTRUCTIONS. REFER TO PIPING SCHEMATIC FOR ADDITIONAL INFORMATION. MAINTAIN ALL REQUIRED CLEARANCES.
10. INSTALL AIR SEPARATOR HIGH AS POSSIBLE.
11. INSTALL EXPANSION TANK ON NEW CONCRETE PAD.
12. MOUNT VFD ON WALL PER MANUFACTURER'S INSTRUCTIONS. MAINTAIN ALL MANUFACTURER AND NEC REQUIRED CLEARANCES
13. ROUTE (2) 8"Ø AND (2) 6"Ø FLUE PIPES THROUGH EXTERIOR WALL. TERMINATE PER MANUFACTURER'S REQUIREMENTS. PIPING SHALL BE CPVC.
14. ROUTE COMBUSTION AIR PIPES, SIZED AS INDICATED, THROUGH EXTERIOR WALL. TERMINATE PER MANUFACTURER'S REQUIREMENTS. PIPING SHALL BE CPVC.
15. REFER TO FLOOR PLANS FOR PIPING CONTINUATION.
16. HOLD HPS/HPR PIPING STACKED TIGHT TO WALL. COORDINATE WITH ELECTRICAL AND PLUMBING EQUIPMENT. DO NOT ROUTE PIPING OVER ELECTRICAL EQUIPMENT.
17. ROUTE HPS/HPR PIPING AS INDICATED. HOLD PIPING HIGH AS POSSIBLE.
18. ROUTE PIPING TO HEAT PUMP AND CONNECT PER DETAIL. REFER TO HEAT PUMP SCHEDULE FOR RUNOUT PIPE SIZE.
19. INSTALL VERTICAL HEAT PUMP PER DETAIL. REFER TO FLOOR PLANS FOR DUCTWORK CONTINUATION AS REQUIRED.
20. PROVIDE 24x24 RETURN AIR PLENUM. TERMINATE WITH ALUMINUM BIRD SCREEN.
21. CHEMICAL TREATMENT POT FEEDER. REFER TO SCHEMATIC FOR ADDITIONAL INFORMATION.
22. INSTALL DDC PANEL ON WALL. COORDINATE POWER AND DATA WITH ELECTRICAL AND LOW VOLTAGE CONTRACTORS.
23. 12x12 EA UP TO EF-27 ON ROOF. EXTEND DUCT 18" BELOW DECK AND TERMINATE OPENING WITH 1/2"x1/2" ALUMINUM BIRD SCREEN.
24. EXTEND 18x12 OA INTO SPACE FROM LOUVER. PROVIDE MOTORIZED DAMPER IN DUCT AND TERMINATE DUCT WITH 1/2"x1/2" ALUMINUM BIRD SCREEN. INTERLOCK MOTORIZED DAMPER WITH FAN OPERATION. DAMPER SHALL BE OPEN WHEN FAN IS "ON".
25. PROVIDE WALL MOUNTED DDC THERMOSTAT. THERMOSTAT TO CONTROL EF-27. FAN SHALL OPERATE WHEN TEMPERATURE IS ABOVE 95°F (ADJ.).
26. PROVIDE WALL MOUNTED DDC THERMOSTAT. THERMOSTAT TO CONTROL HEAT PUMP INDICATED.
27. MOUNT ELECTRIC HEATER PER MANUFACTURER'S INSTRUCTIONS. PROVIDE WITH INTEGRAL THERMOSTAT. HEATER SHALL ACTIVATE WHEN SPACE TEMPERATURE IS BELOW 45°F (ADJ.).
28. INSTALL DUCTWORK BELOW PIPING. INSULATE AND SUPPORT PER SPECIFICATIONS. INSTALL SIDEWALL GRILLES MOUNTED IN DUCTWORK ANGLED 45° TOWARD FLOOR.
29. INSTALL DUCTWORK BELOW PIPING. INSULATE AND SUPPORT PER SPECIFICATIONS. INSTALL ROUND DIFFUSERS MOUNTED DIRECTLY TO SHEET METAL RUNOUT DUCTWORK TURNED DOWN TOWARD FLOOR.
30. ELECTRICAL EQUIPMENT SHOWN FOR REFERENCE ONLY.
31. PLUMBING EQUIPMENT SHOWN FOR REFERENCE ONLY.

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
ENLARGED MECHANICAL ROOM PLANS

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
M401

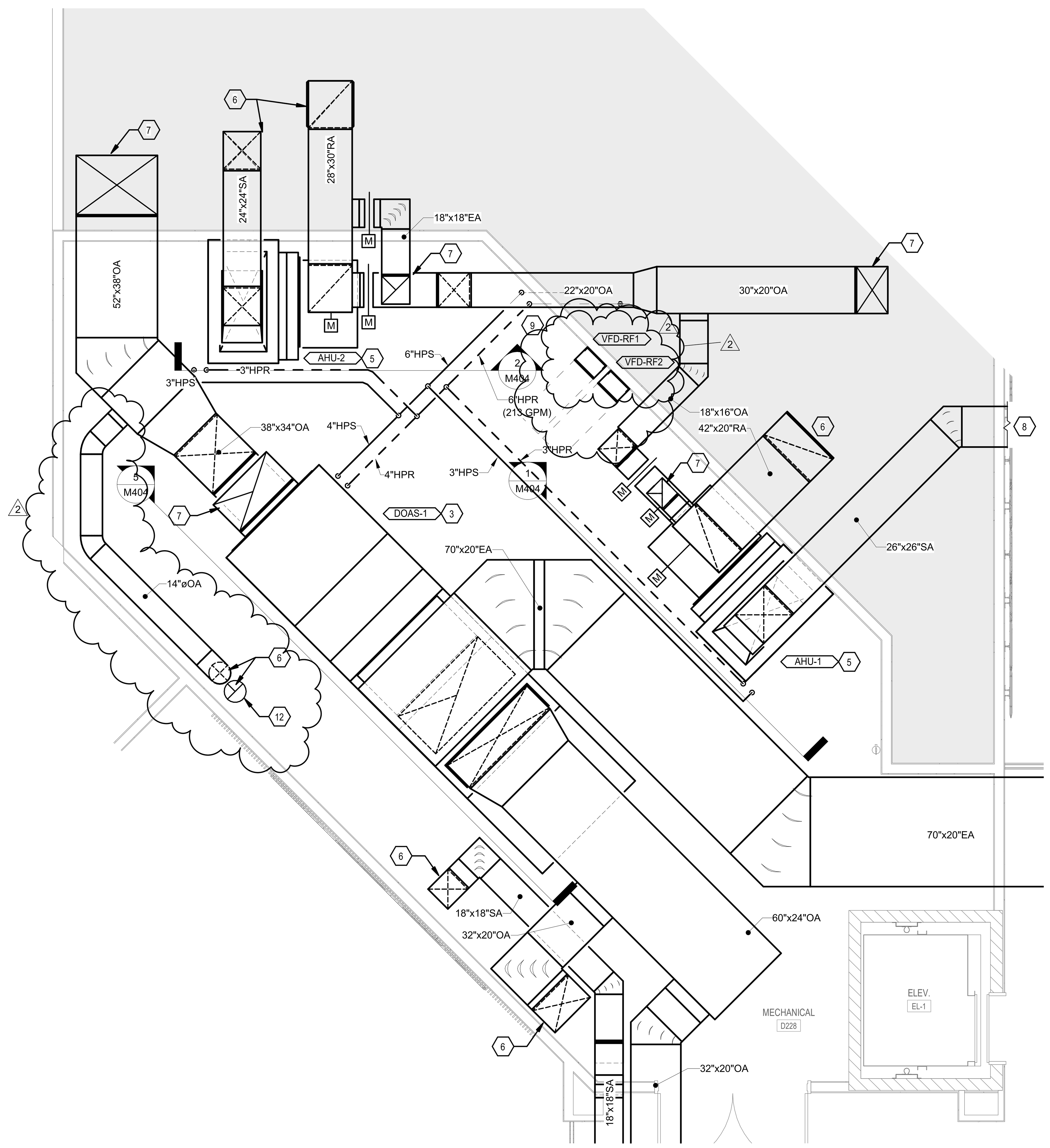
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

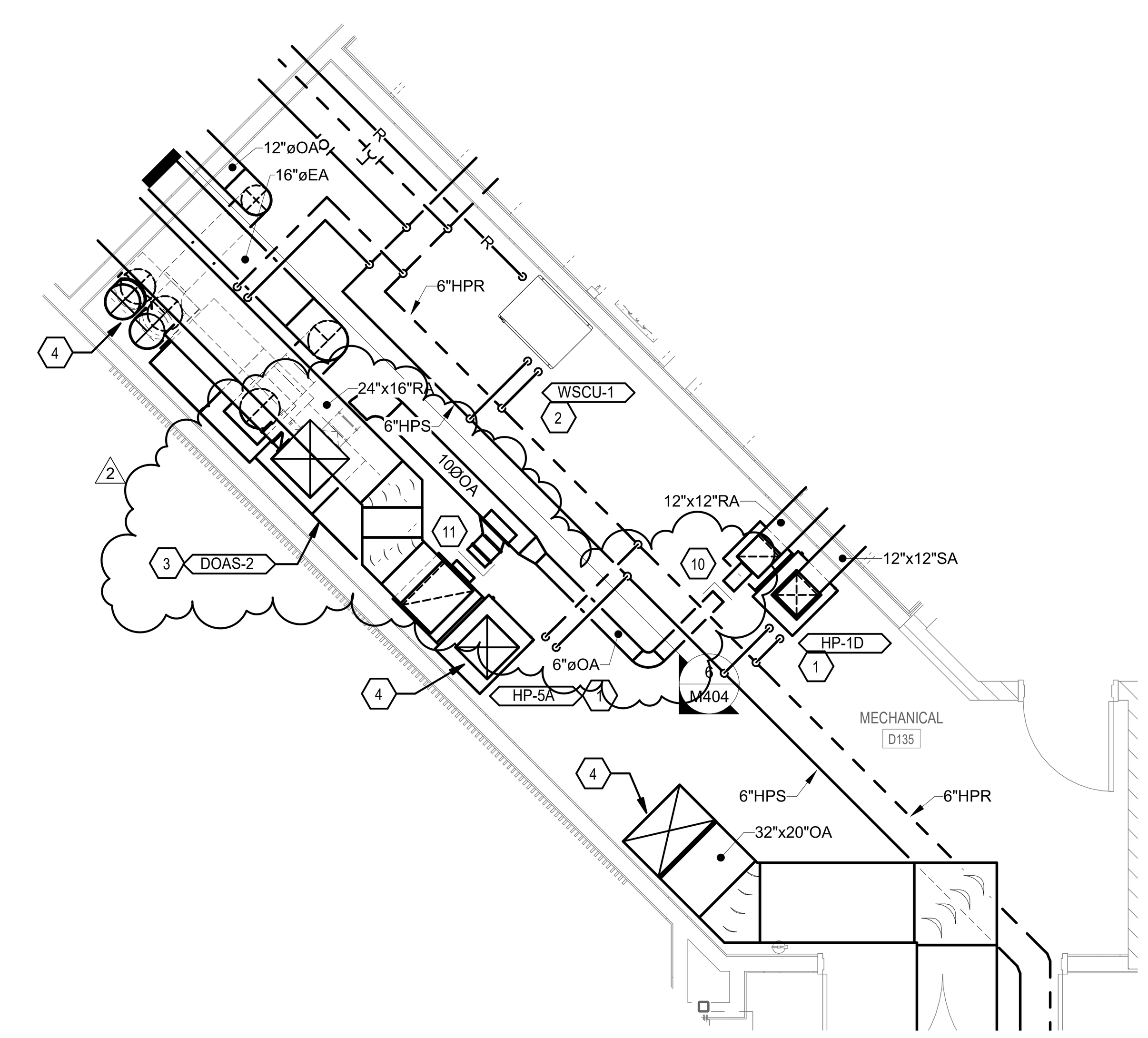
SHEET KEYNOTES

1. PROVIDE A VERTICAL WATER SOURCE HEAT PUMP. UNIT SHALL BE MOUNTED ON 4" CONCRETE HOUSEKEEPING PAD. PROVIDE ALL REQUIRED DUCT, HYDRONIC PIPING, AND CONDENSATE DRAIN PIPING CONNECTIONS. ROUTE CONDENSATE DRAIN PIPING TO NEAREST FLOOR DRAIN. COORDINATE WITH PLUMBING CONTRACTOR. REFER TO SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE WATER COOLED VRF CONDENSING UNIT. UNIT TO BE MOUNTED ON 4" CONCRETE HOUSKEEPING PAD. PROVIDE ALL REQUIRED REFRIGERANT AND HYDRNONIC PIPING CONNECTIONS. REFER TO SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS.
3. PROVIDE WATER COOLED DEDICATED OUTSIDE AIR UNIT. UNIT UNIT SHALL BE MOUNTED ON 4" CONCRETE HOUSEKEEPING PAD. PROVIDE ALL REQUIRED DUCT, HYDRONIC PIPING, AND CONDENSATE DRAIN PIPING CONNECTIONS. ROUTE CONDENSATE DRAIN PIPING TO NEAREST FLOOR DRAIN. COORDINATE WITH PLUMBING CONTRACTOR. REFER TO SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS.
4. DUCTWORK UP TO MECHANICAL ROOM D228. SEE CONTINUATION THIS SHEET.
5. PROVIDE WATER COOLED AIR HANDLING UNIT. UNIT SHALL BE MOUNTED ON 4" CONCRETE HOUSEKEEPING PAD. PROVIDE ALL REQUIRED DUCT, HYDRONIC PIPING, AND CONDENSATE DRAIN PIPING CONNECTIONS. ROUTE CONDENSATE DRAIN PIPING TO NEAREST FLOOR DRAIN. COORDINATE WITH PLUMBING CONTRACTOR. REFER TO SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS.
6. DUCTWORK DOWN TO FIRST FLOOR.
7. DUCTWORK UP TO ROOF. SEE ROOF PLAN.
8. DUCTWORK OVER TO SERVE STUDENT UNION. SEE CONTINATION ON SHEET M105.
9. 6"HPS AND 6"HPR THROUGH MECHANICAL ROOM WALL AND UP TO MECHANICAL ROOM D228 CEILING. 6"HPS AND 6"HPR ALSO DOWN TO MECHANICAL ROOM D135 BELOW.
10. OUTSIDE AIR DAMPER BALANCED TO 40 CFM.
11. OUTSIDE AIR DAMPER BALANCED TO 270 CFM.
12. 14"Ø EXHAUST DUCT UP TO RELIEF HOOD ON ROOF.



2 ENLARGED PLAN - D228 MECHANICAL ROOM

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



1 ENLARGED PLAN - D135 MECHANICAL ROOM

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

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

2	ADDENDUM #2	08-04-2022

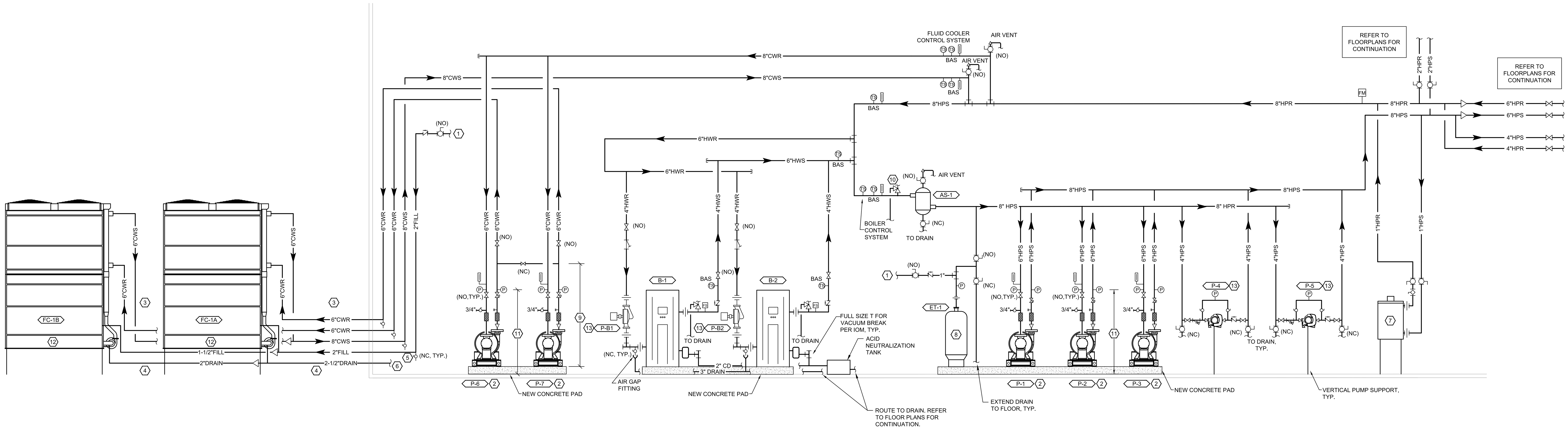
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
ENLARGED MECHANICAL ROOM PLANS

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
M402

PROJECT NUMBER
2021026



HEAT PUMP LOOP PIPING SCHEMATIC

NOT TO SCALE

2

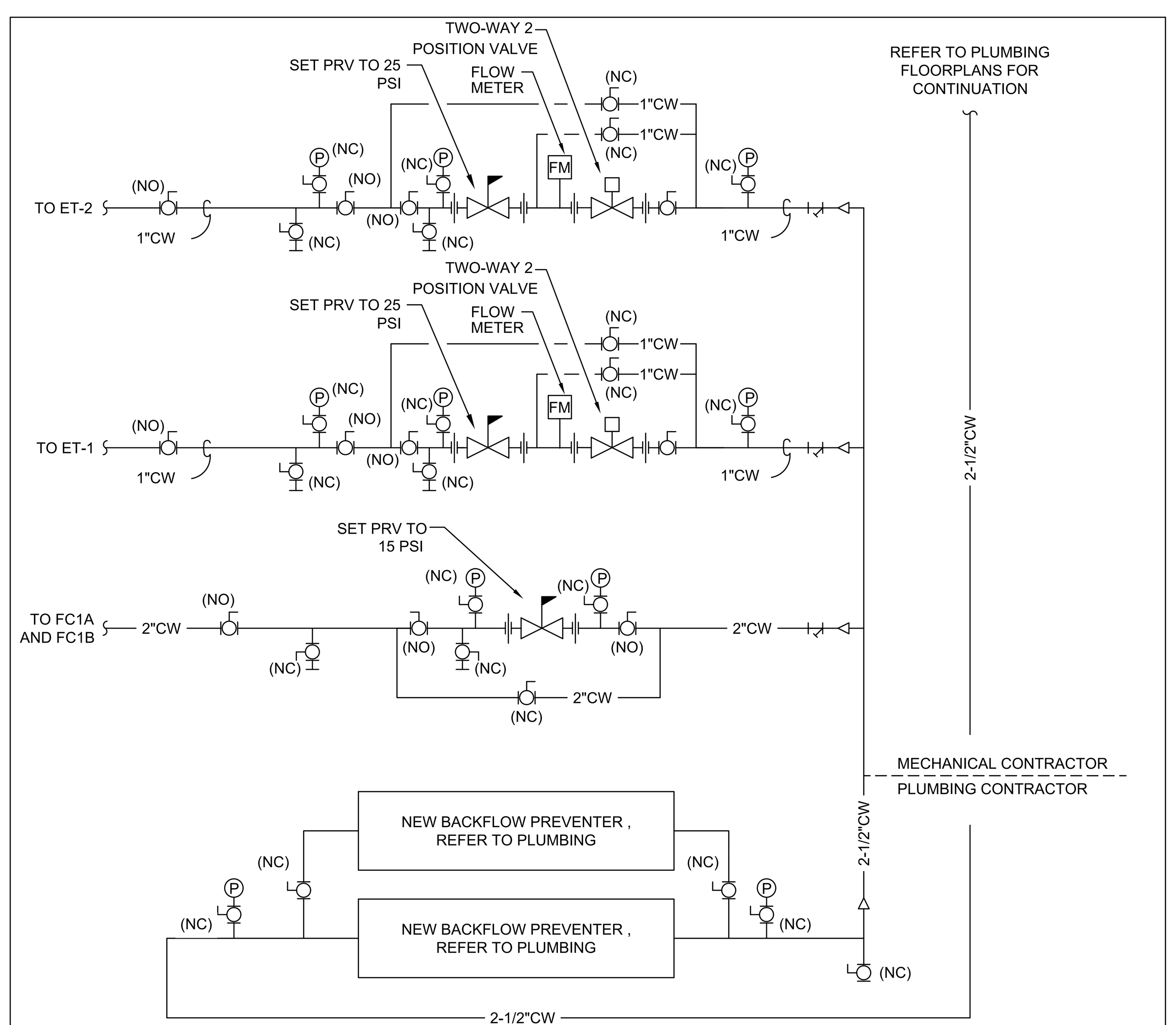
GENERAL NOTES:

A. MECHANICAL SCOPE TO BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR.

B. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

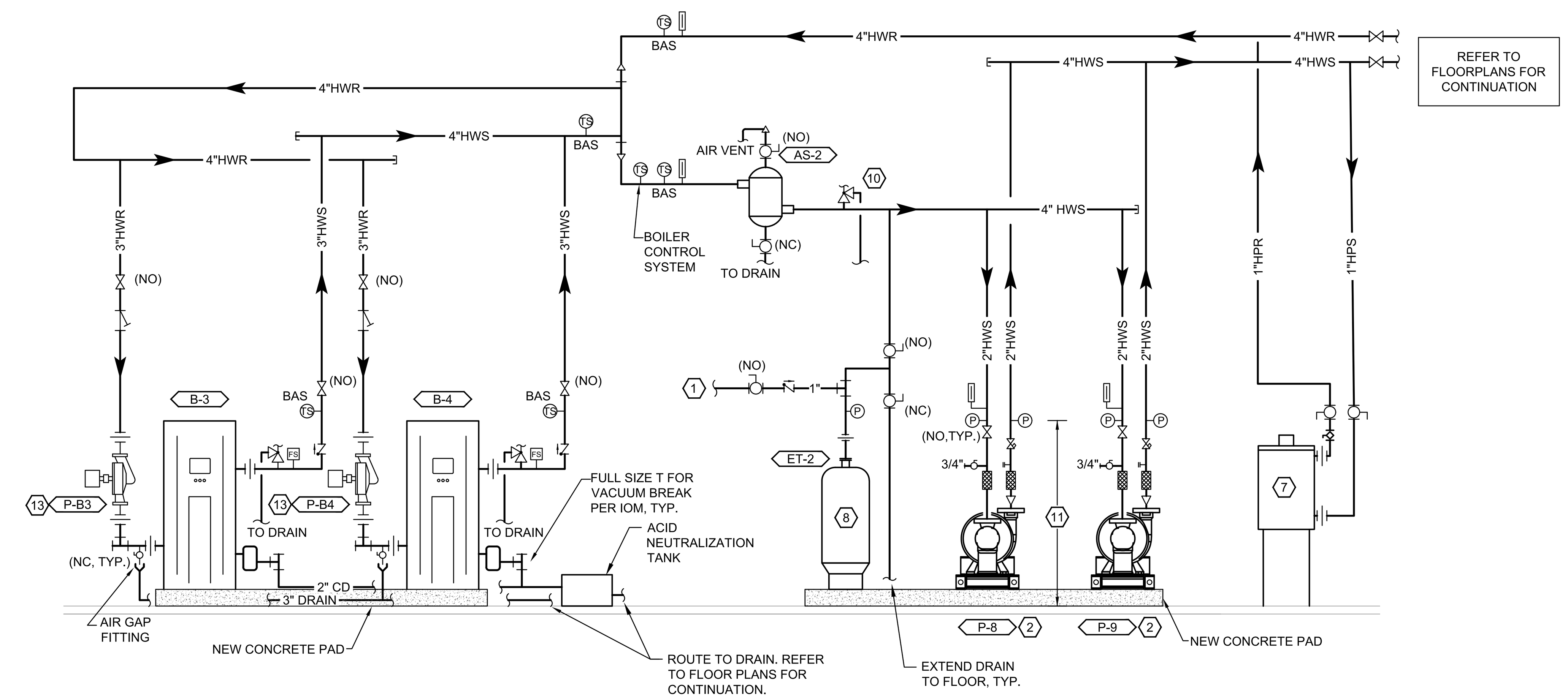
⬡ SHEET KEYNOTES:

1. REFER TO HYDRONIC / CONDENSER WATER FILL CONNECTION DETAIL FOR CONTINUATION.
2. MAINTAIN A MINIMUM 30" OF STRAIGHT PIPE UPSTREAM OF PUMP INLET.
3. ALL EXTERIOR PIPING SHALL BE HEAT TRACED. REFER TO SCHEDULE AND FLOOR PLANS FOR ADDITIONAL INFORMATION. HEAT TRACE, INSULATION, AND EXTERIOR JACKET SHALL COVER ALL PIPING, VALVES, FITTINGS, ETC.
4. SLOPE ALL EXTERIOR PIPING BACK TO BUILDING. INSTALL ALL PIPING SUCH THAT PIPING IS DRAINABLE THROUGH PIPING OR UNIT.
5. PROVIDE DRAIN DOWN VALVES AT BOTTOM OF PIPE RISERS. COORDINATE TERMINATION OF PIPING WITH LOCATION OF FLOOR DRAINS.
6. ROUTE FLUID COOLER DRAIN PIPING THROUGH WALL AND SPILL INTO FLOOR DRAIN.
7. GRISWOLD WATER SYSTEMS MODEL DB-5. PROVIDE WITH MOUNTING LEGS AND BOTTOM DRAIN PORT, STAINLESS STRAINER BASKET WITH 25 MICRON CARTRIDGE FILTER ASSEMBLY, AND BOX OF 25 SPARE REPLACEMENT CARTRIDGE FILTERS.
8. PRESSURE TO BE SET TO 25 PSI WITH TANK COMPLETELY BLED OFF.
9. MAINTAIN A MINIMUM OF 7'-0" CLEARANCE ON ALL PUMP DROPS.
10. SET PRESSURE RELIEF VALVE TO 50 PSI. SPILL DISCHARGE TO NEAREST FLOOR DRAIN.
11. INSTALL ALL THERMOMETERS, PRESSURE GAGES, ETC. AT 6'-0" OR HIGHER ON PUMP DROPS.
12. FLUID COOLERS TO BE SUPPORTED BY NEW CONCRETE AND STEEL SUPPORT SYSTEM. REFER TO STRUCTURAL DRAWING FOR MORE INFORMATION.
13. DO NOT SUPPORT INLINE PUMPS FROM CONNECTED PIPING.



HYDRONIC / CONDENSER WATER FILL CONNECTION DETAIL

NOT TO SCALE



HOT WATER PIPING SCHEMATIC

NOT TO SCALE

2

SILVER CREEK SCHOOL CORPORATION

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Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

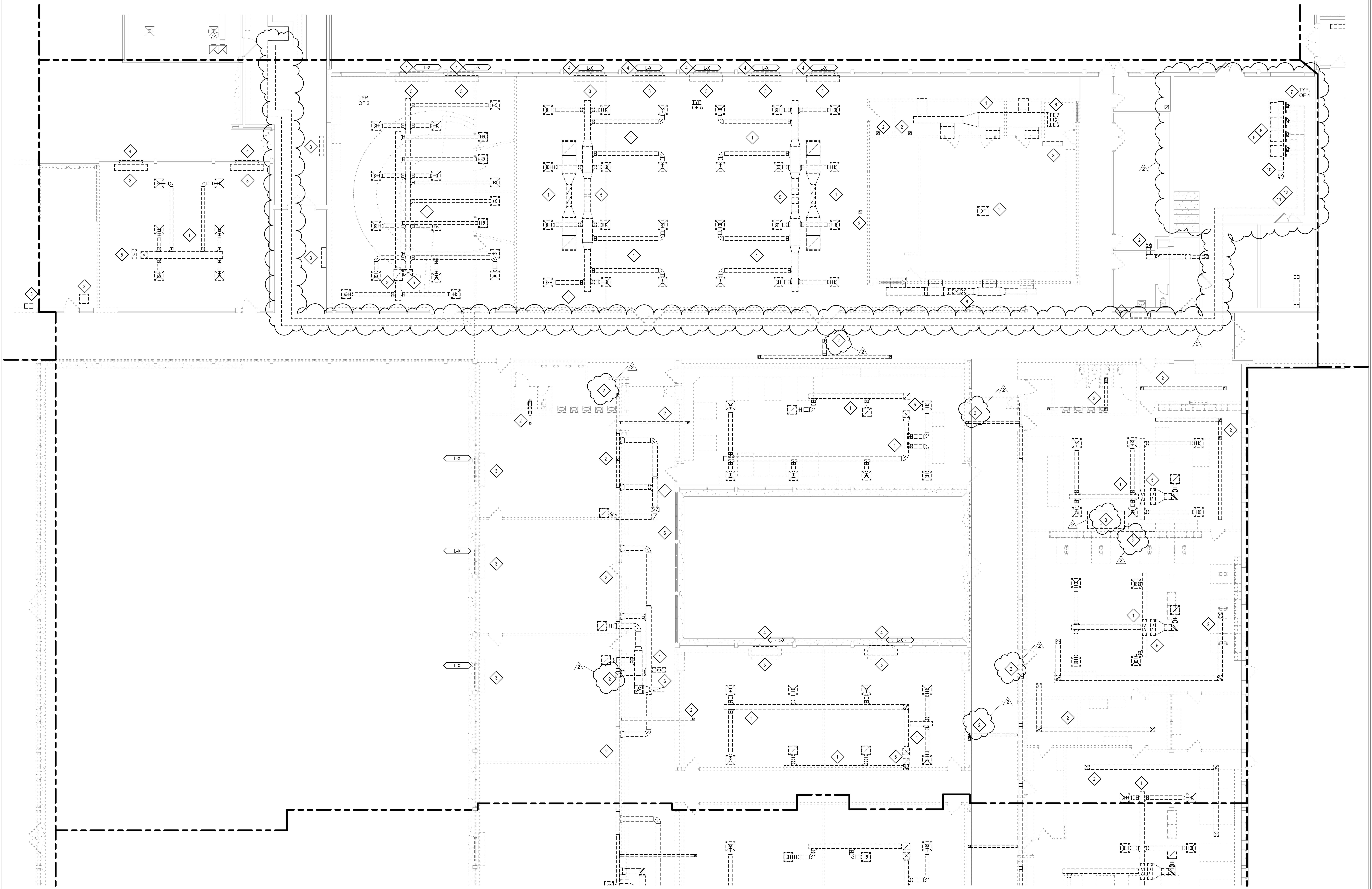
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
MECHANICAL SCHEMATICS

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
M501

PROJECT NUMBER
2021026



1 FIRST FLOOR DEMOLITION - UNIT E - MECHANICAL

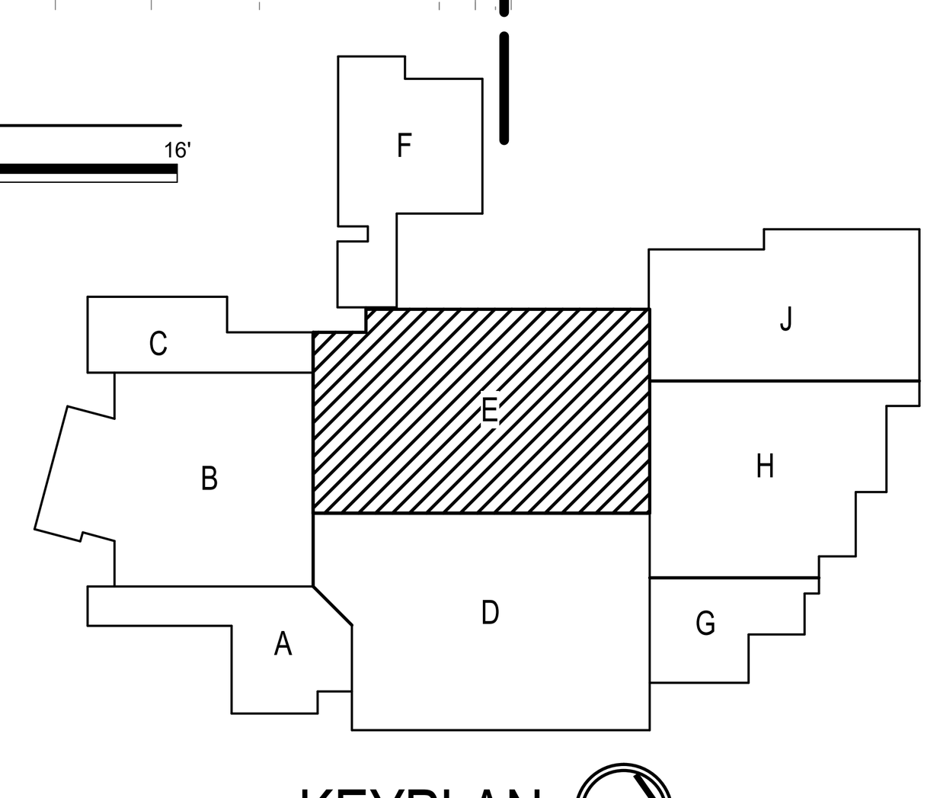
SCALE: 1/8" = 1'-0"

GENERAL NOTES

A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

SHEET KEYNOTES

1. DEMOLISH EXISTING DUCTWORK AND ALL ASSOCIATED AIR DEVICES AND DUCT HANGERS COMPLETE. DUCT IN INACCESSIBLE CHASES IS TO BE ABANDONED. PATCH AND REPAIR ALL WALL PENETRATIONS, INCLUDING CHASE WALL PENETRATIONS, WITH A SHEET METAL PLATE SEALED WITH ACOUSTICAL CAULK. WHERE BOTH SIDES OF WALL ARE ACCESSIBLE, PROVIDE SHEET METAL ON BOTH SIDES OF WALL.
2. EXISTING EXHAUST FAN ON ROOF ABOVE TO BE DEMOLISHED. DEMOLISH EXHAUST GRILLE, ASSOCIATED DUCTWORK, AND CONTROLS COMPLETE. EXISTING ROOF PENETRATION TO BE PATCHED AND SEALED.
3. DEMOLISH EXISTING FAN COIL UNIT / UNIT VENTILATOR / UNIT HEATER AND ALL ASSOCIATED DUCTWORK, PIPING, CONTROLS, AND SUPPORTS COMPLETE. COORDINATE FLOOR / WALL PATCH AND REPAIR SCOPE WITH ARCHITECT, GENERAL TRADES CONTRACTOR AND NEW WORK DOCUMENTS PRIOR TO DEMOLITION.
4. EXISTING DUCT / PIPE ROUTED THROUGH WALL / FLOOR TO BE DEMOLISHED COMPLETE. EXISTING LOUVER ON EXTERIOR WALL SHALL REMAIN. CLEAN LOUVER AND PROVIDE (2) COATS OF UV-RESISTANT PAINT. PAINT COLOR TO BE SELECTED BY ARCHITECT. PROVIDE INSULATED SHEET METAL INFILL PANEL TO FILL OPENING AND SEAL WEATHER-TIGHT. COORDINATE REQUIRED SCOPE WITH GENERAL TRADES CONTRACTOR.
5. DEMOLISH DUCTWORK BACK TO EXISTING ROOF PENETRATION. EXISTING ROOF PENETRATION TO BE REUSED. ENSURE WEATHERTIGHT SEAL AROUND ROOF PENETRATION. SEE NEW WORK PLANS FOR FUTURE SCOPE.
6. DEMOLISH DUCTWORK BACK TO EXISTING ROOF PENETRATION. REMOVE EXISTING CURB AND ALL ASSOCIATED HARDWARE / SUPPORTS. PROVIDE AND INSTALL PERMANENT WEATHERTIGHT CAP OVER EXISTING ROOF PENETRATION.
7. DEMOLISH EXISITNG BOILER AND ALL ASSOCIATED PIPING, CONTROLS, AND SUPPORTS COMPLETE.
8. DEMOLISH EXISTING CONCRETE PAD COMPLETE AND REPAIR FLOOR TO SMOOTH/LEVEL FINISH FREE OF TRIP HAZARDS.
9. DEMOLISH EXISTING BOILER COMBUSTION AIR INTAKE DUCTWORK AND ALL ASSOCIATED CONTROLS. EXISTING LOUVER SHALL REMAIN. PROVIDE INSULATED SHEET METAL PANEL TO SEAL OPENING WEATHER-TIGHT.
10. DEMOLISH EXISTING FLUE DUCTWORK COMPLETE. SEAL PENETRATION WITH INSULATED SHEET METAL PLATE WEATHER-TIGHT.
11. DEMOLISH EXISTISTING HYDRONIC FILL ASSEMBLY AND ALL ASSOCIATED PIPING AND SUPPORTS COMPLETE. REFER TO PLUMBING DRAWINGS FOR DOMESTIC WATER PIPING DEMOLITION SCOPE.
12. DEMOLISH EXISTING HYDRONIC EQUIPMENT AND ALL ASSOCIATED PIPING, PUMPS, AND SUPPORTS COMPLETE.



KEYPLAN

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SILVER CREEK SCHOOL CORPORATION

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

2	ADDENDUM #2	08-04-2022

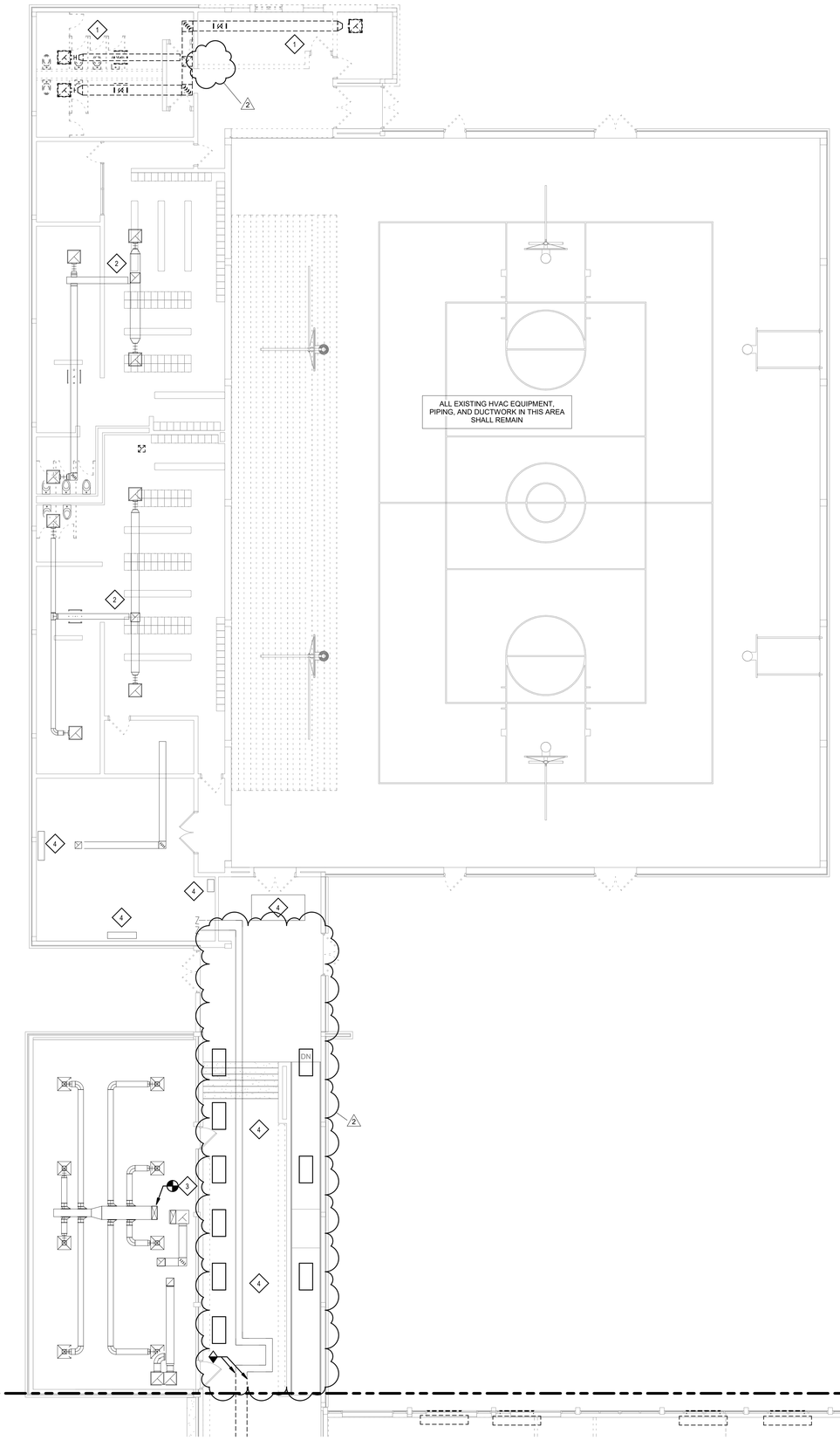
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
FIRST FLOOR DEMOLITION - UNIT E - MECHANICAL

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
MD105

PROJECT NUMBER
2021026



GENERAL NOTES

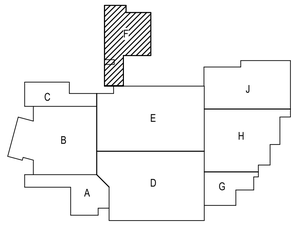
A. REFER TO DRAWING M001 FOR GENERAL MECHANICAL NOTES.

◇ SHEET KEYNOTES

1. DEMOLISH EXISTING DUCTWORK AND ALL ASSOCIATED AIR DEVICES AND DUCT HANGERS COMPLETE. DUCT IN INACCESSIBLE CHASES IS TO BE ABANDONED. PATCH AND REPAIR ALL WALL PENETRATIONS, INCLUDING CHASE WALL PENETRATIONS, WITH A SHEET METAL PLATE SEALED WITH ACOUSTICAL CAULK. WHERE BOTH SIDES OF WALL ARE ACCESSIBLE, PROVIDE SHEET METAL ON BOTH SIDES OF WALL.
2. EXISTING EXHAUST FAN ON ROOF ABOVE TO REMAIN. EXISTING EXHAUST GRILLES, ASSOCIATED DUCTWORK, AND CONTROLS TO REMAIN.
3. EXISTING AIR DEVICES, ASSOCIATED DUCTWORK, AND CONTROLS TO REMAIN.
4. EXISTING EQUIPMENT TO REMAIN. ENSURE EQUIPMENT IS PROTECTED AND IS OPERATIONAL AFTER PROJECT COMPLETION.

1 FIRST FLOOR DEMOLITION - UNIT F - MECHANICAL
SCALE: 1/8" = 1'-0"

0 4" 8" 16"



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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	JAT

DRAWING TITLE:
FIRST FLOOR DEMOLITION - UNIT F - MECHANICAL

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
MD106

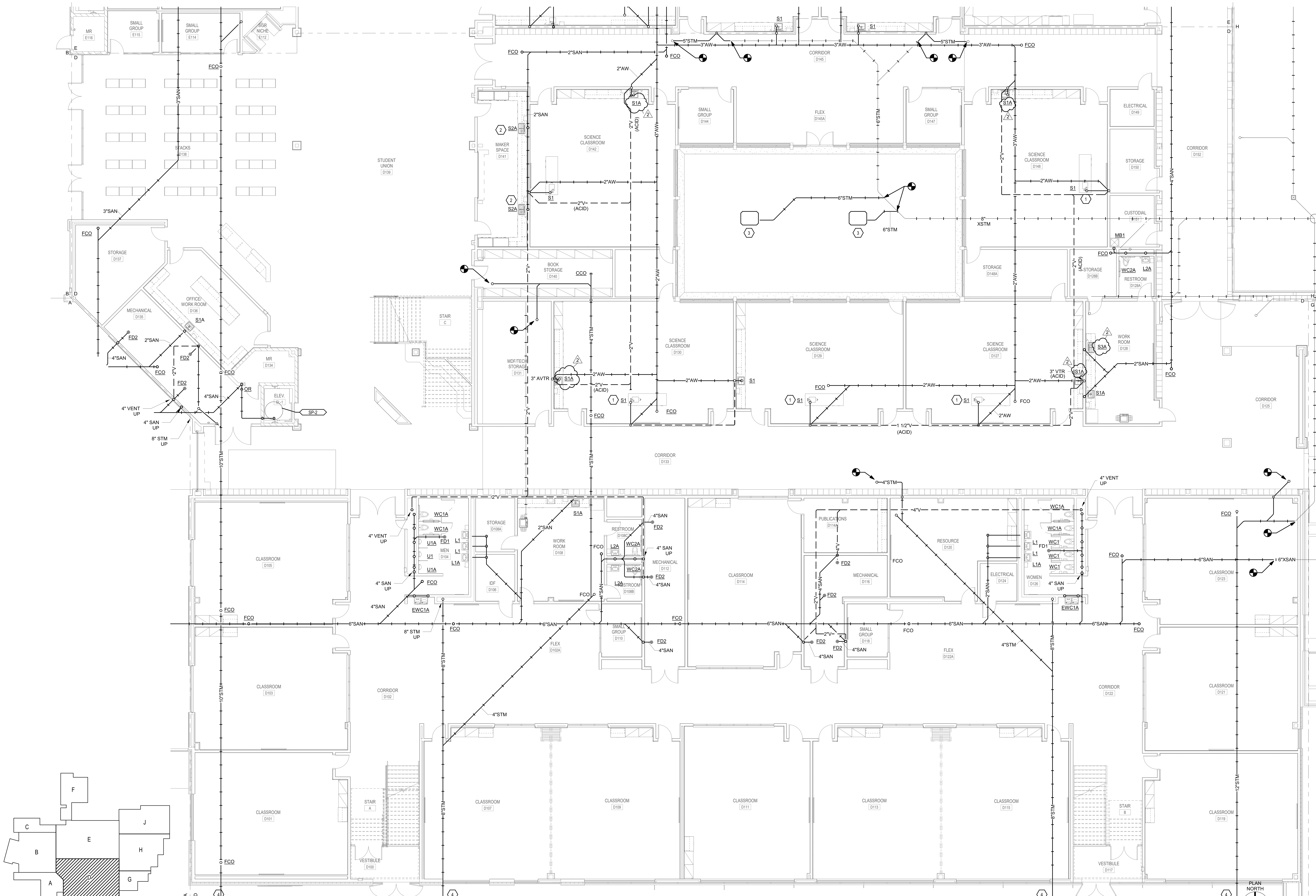
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. ISLAND VENTED FIXTURE.
2. PROVIDE PLASTER TRAP.
3. CONNECT NEW STORM PIPING TO NEW CATCH BASIN PROVIDED BY OTHERS. REFER TO ARCH/CIVIL DRAWINGS FOR CATCH BASIN DETAILS. COURTYARD SCOPE TO BE PART OF ALTERNATE #6.
4. REFER TO DRAWING U101 FOR CONTINUATION OF SITE PIPING.



KEYPLAN

NORTH

1 FIRST FLOOR - UNIT D - SANITARY SEWER

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

PLAN NORTH

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PROJECT:

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT D - SANITARY SEWER

CERTIFIED BY:

NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

P104

PROJECT NUMBER

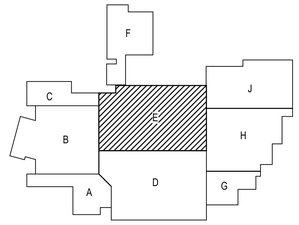
2021026

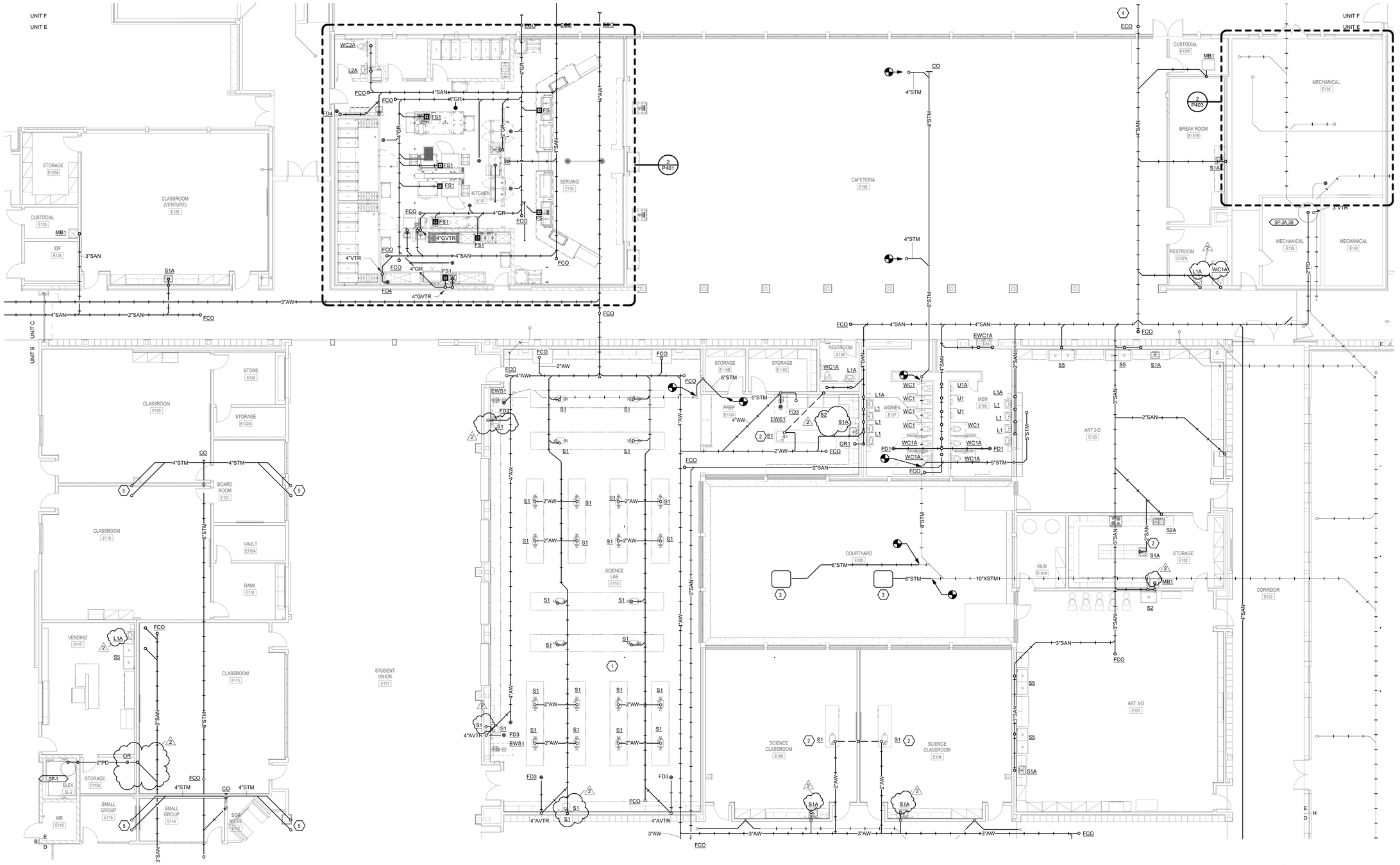
GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. COMBINATION WASTE AND VENT DRAIN SYSTEM.
2. ISLAND VENTED FIXTURE.
3. CONNECT NEW STORM PIPING TO NEW CATCH BASIN PROVIDED BY OTHERS. REFER TO ARCH/CIVIL DRAWINGS FOR CATCH BASIN DETAILS. COURTYARD SCOPE TO BE PART OF ALTERNATE #6.
4. REFER TO DRAWING U101 FOR CONTINUATION OF SITE PIPING.
5. MAIN AND OVERFLOW CONNECTIONS FROM NEW ROOF DRAINS.





1 FIRST FLOOR - UNIT E - SANITARY SEWER

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

PLAN NORTH

0 4' 8' 16'

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

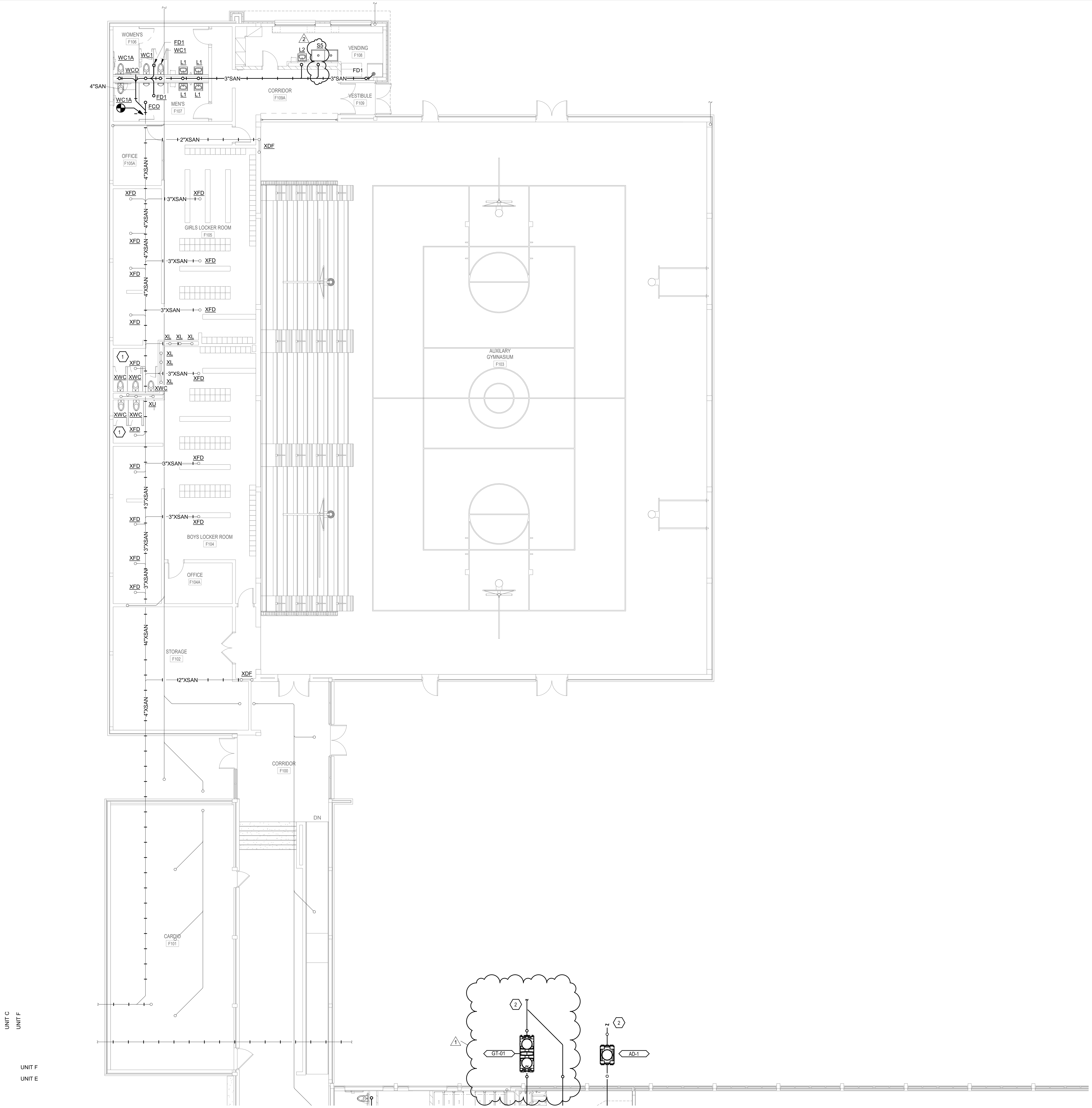
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT E - SANITARY SEWER

CERTIFIED BY:
NICHOLAS C. MORAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/4/2022

DRAWING NUMBER
P105
1

PROJECT NUMBER
2021026



1 FIRST FLOOR - UNIT F - SANITARY SEWER

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

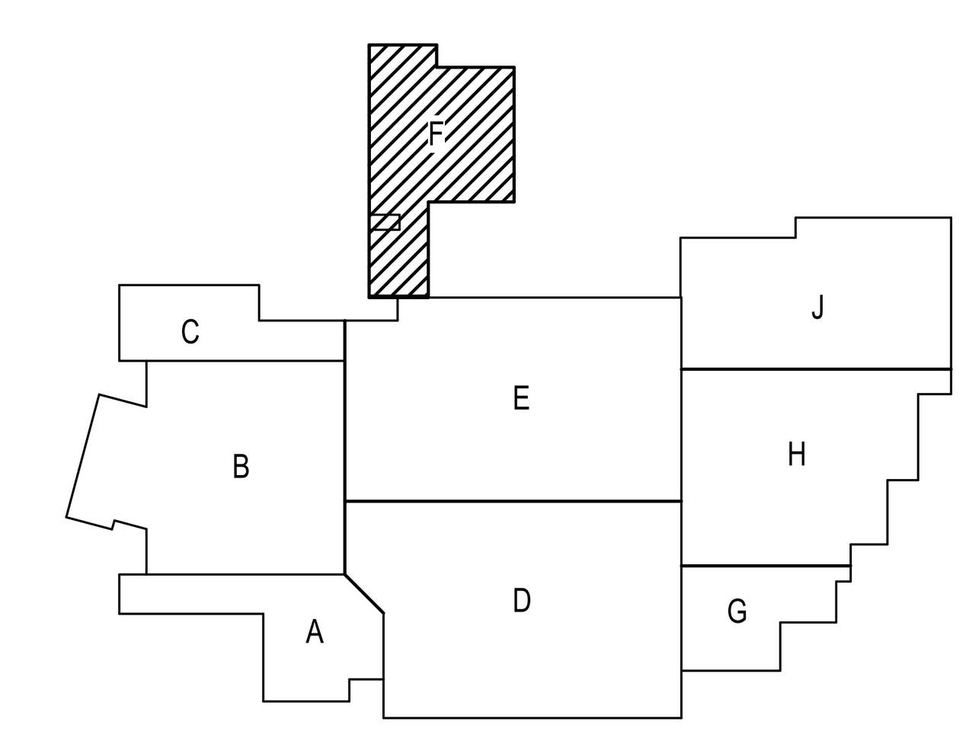
PLAN NORTH

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. NO WORK IN THIS SPACE.
2. REFER TO DRAWING U101 FOR CONTINUATION OF SITE PIPING.



KEYPLAN

NORTH

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT F - SANITARY SEWER

CERTIFIED BY:

NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

P106

PROJECT NUMBER

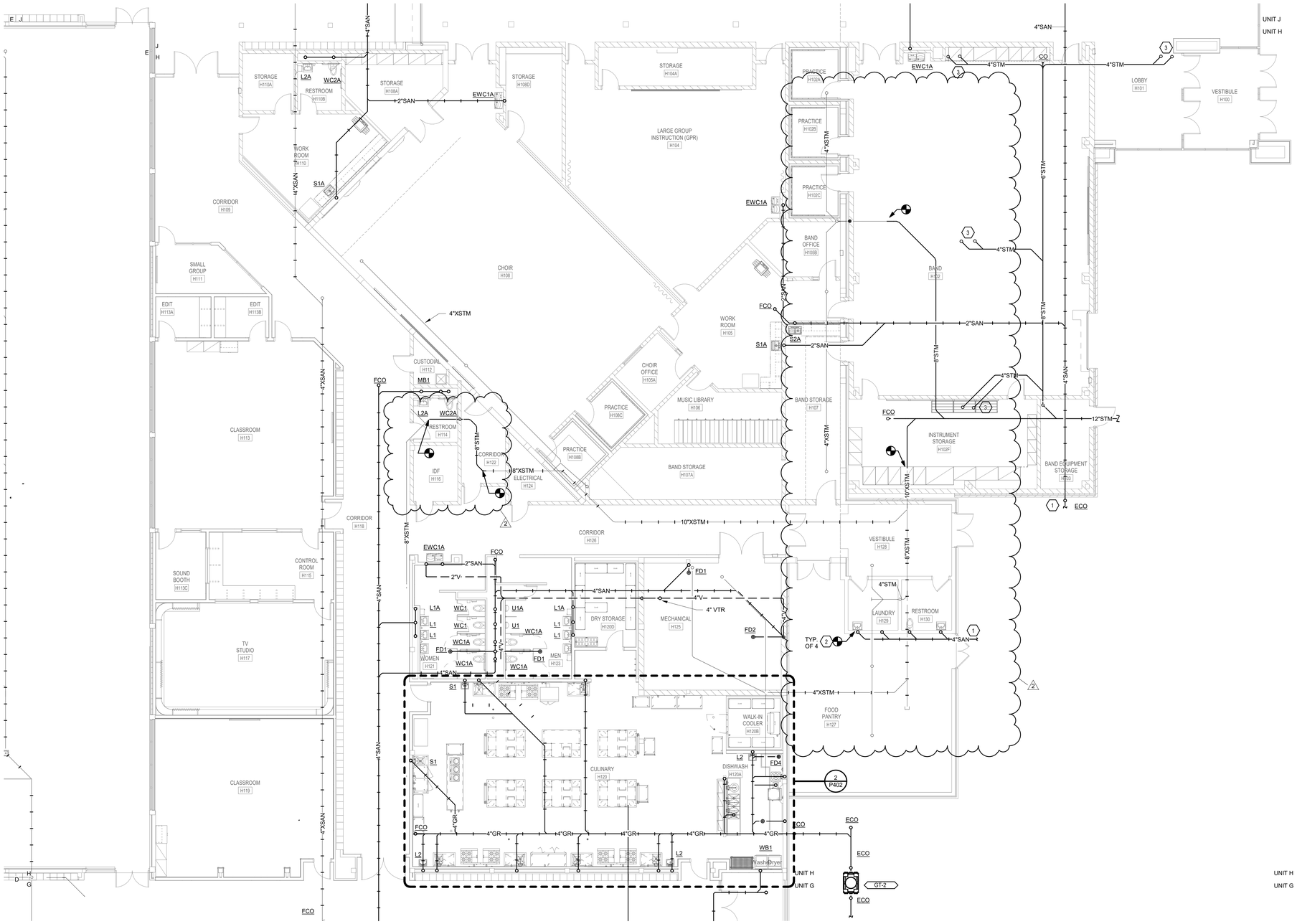
2021026

GENERAL NOTES

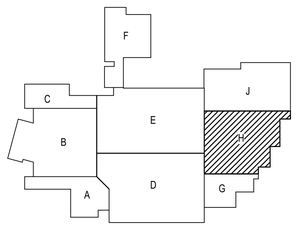
A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. REFER TO DRAWING U101 FOR CONTINUATION.
2. CONNECT NEW SANITARY PIPE TO EXISTING FIXTURE PIPE ROUGH IN.
3. MAIN AND OVERFLOW CONNECTIONS FROM NEW ROOF DRAINS.



1 FIRST FLOOR - UNIT H - SANITARY SEWER
SCALE: 1/8" = 1'-0"



KEYPLAN NORTH

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PROJECT:
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ADDITION AND RENOVATIONS
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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT H - SANITARY SEWER

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/27/22

DRAWING NUMBER
P108
1

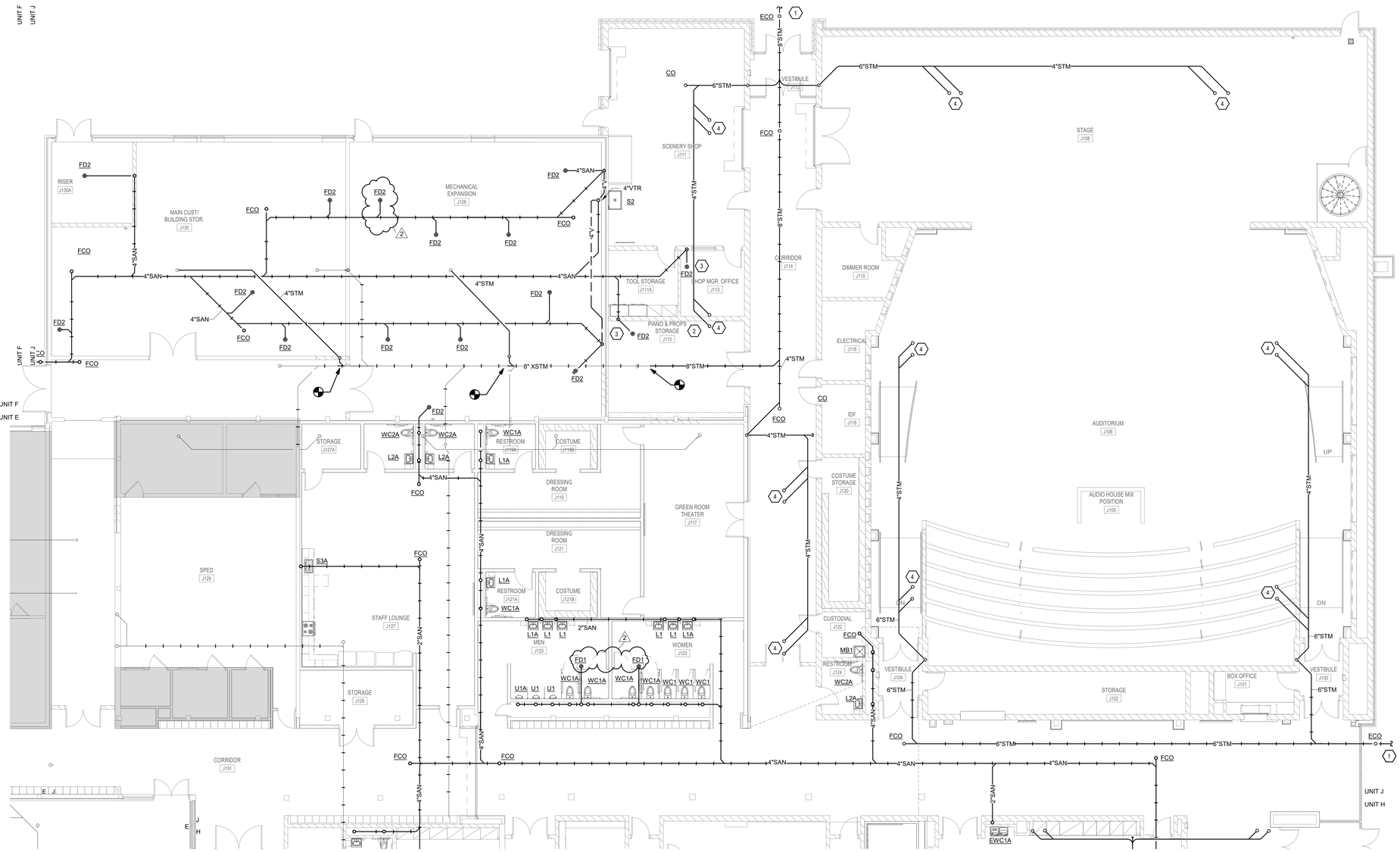
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET NOTES

1. REFER TO DRAWING U101 FOR CONTINUATION OF SITE PIPING.
2. ROOF DRAINS LOCATED ON HIGH ROOF ABOVE EQUIPMENT PLATFORM. ROUTE STORM PIPING AS HIGH AS POSSIBLE.
3. FLOOR DRAINS ON EQUIPMENT PLATFORM ABOVE.
4. MAIN AND OVERFLOW CONNECTIONS FROM NEW ROOF DRAINS.

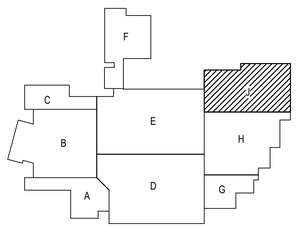


1 FIRST FLOOR - UNIT J - SANITARY SEWER

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

PLAN NORTH

0 4' 8' 16'



KEYPLAN NORTH

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PROJECT:

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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT J - SANITARY SEWER

CERTIFIED BY:

NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

8/4/22

DRAWING NUMBER

P109

PROJECT NUMBER

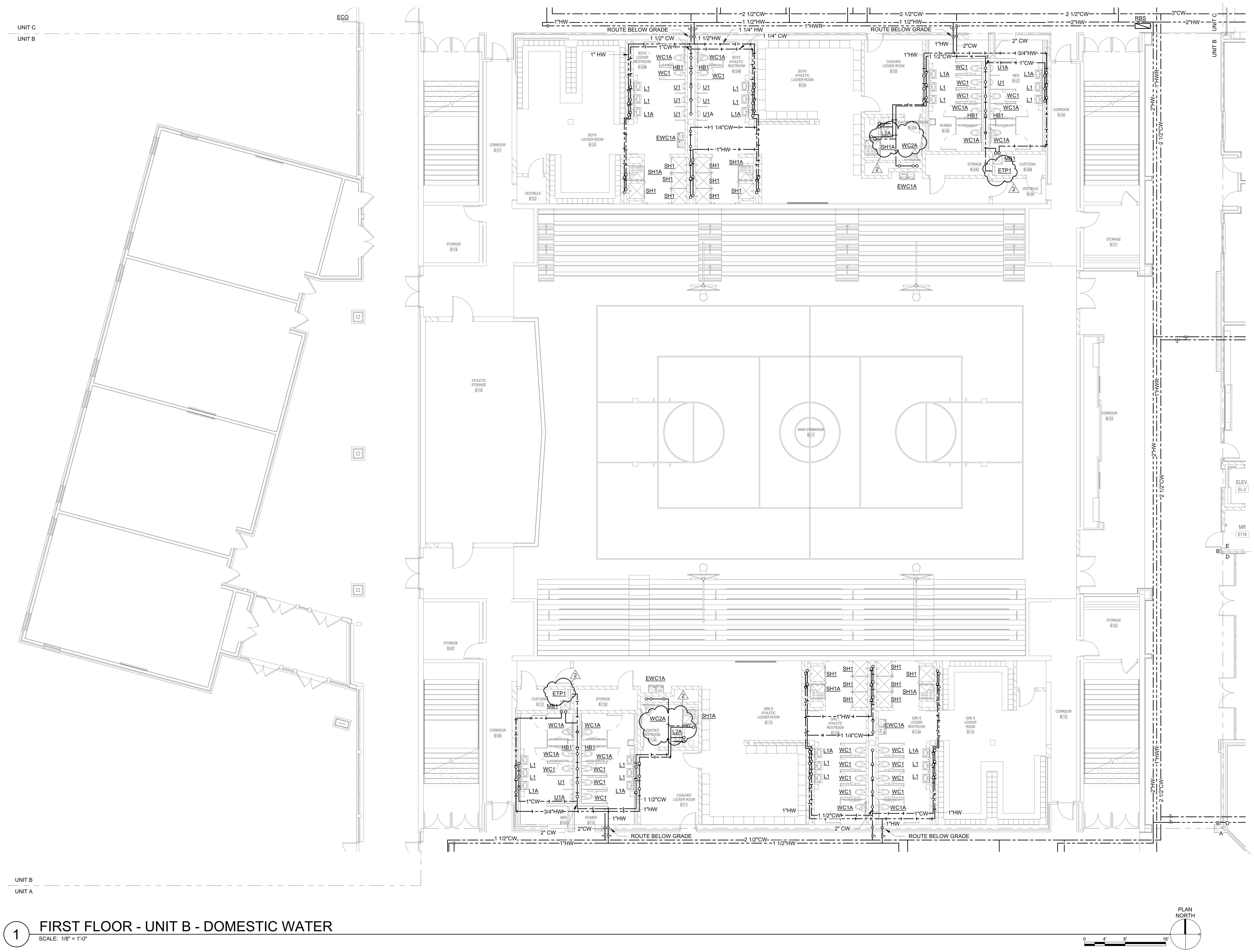
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

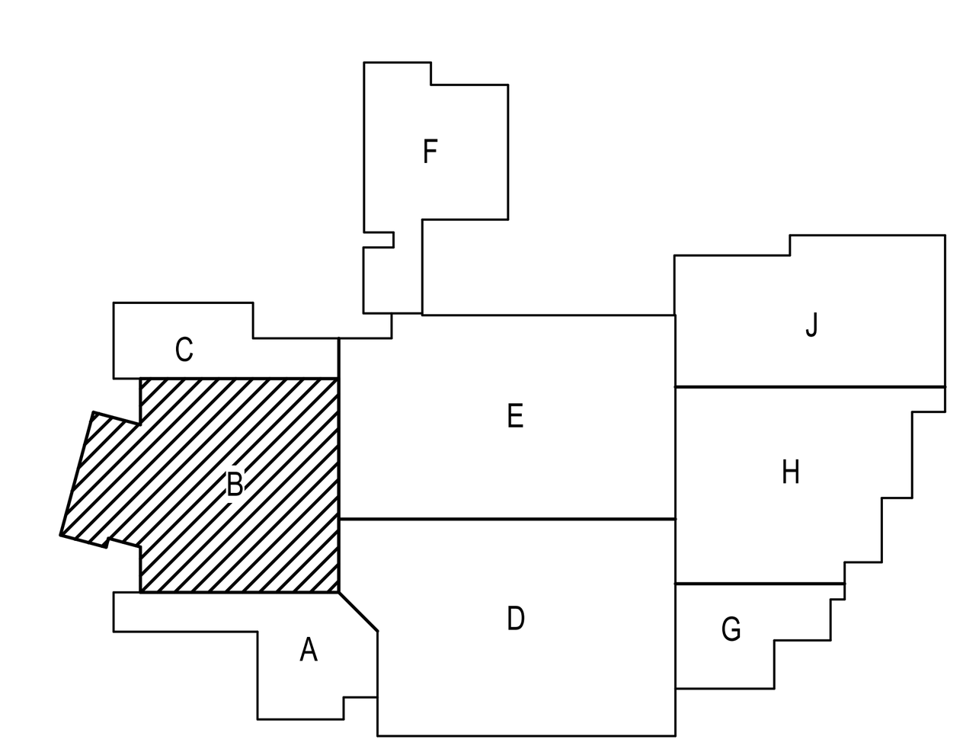
SHEET KEYNOTES

1. SHEET NOTES



1 FIRST FLOOR - UNIT B - DOMESTIC WATER

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



KEYPLAN

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PROJECT:
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SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT B - DOMESTIC WATER

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER
P202

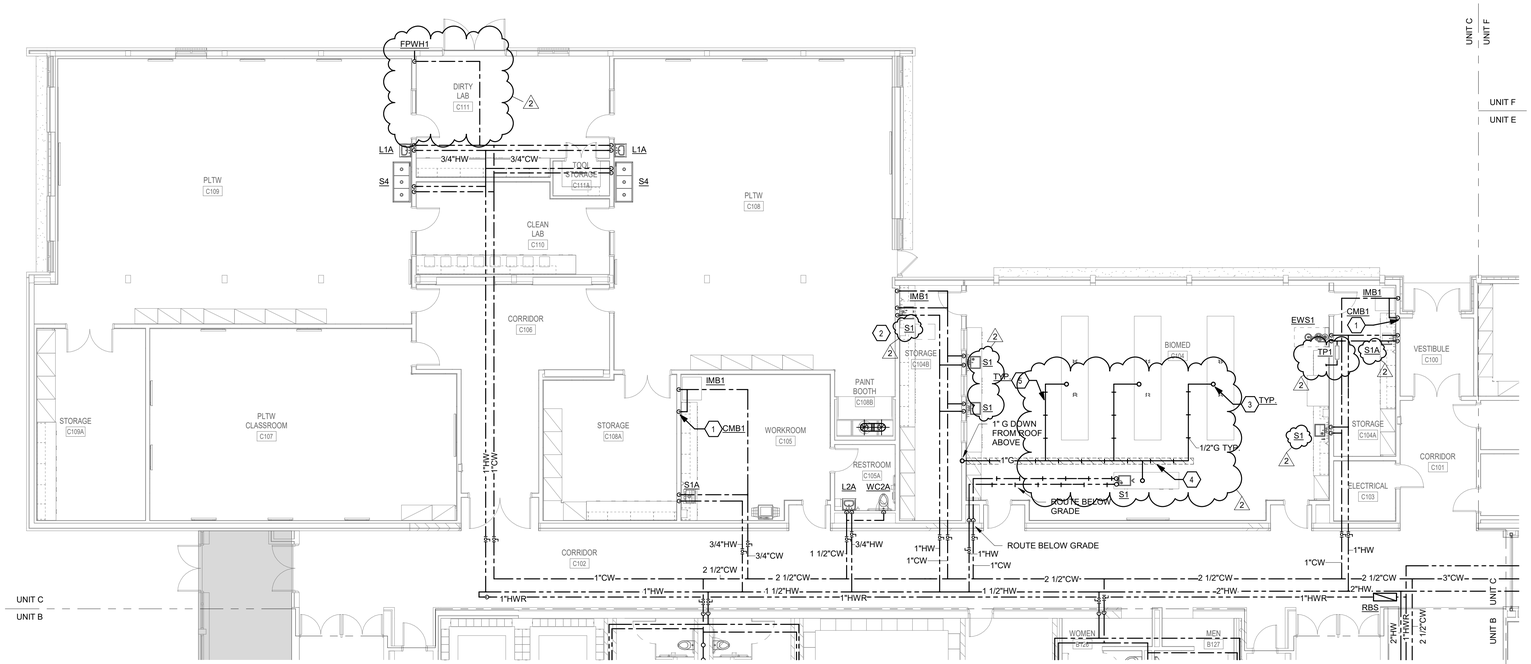
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. COORDINATE FINAL LOCATION OF COFFEE MAKER BOX OUTLET WITH FINAL LOCATION OF COFFEE MAKER PRIOR TO ROUGH IN.
2. ROUTE 3/4" HW TO DISHWASHER.
3. ROUTE GAS INTO VENTILATED CASEWORK CHASE.
4. ROUTE 1" GAS MAIN IN ACCESSIBLE TRENCH.
5. UNDERSLAB GAS RUNNOUTS TO BE SLEEVED AND VENTED.

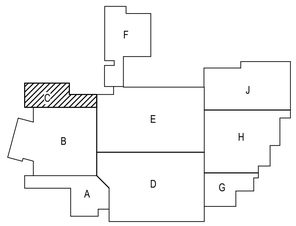


1 FIRST FLOOR - UNIT C - DOMESTIC WATER

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

PLAN NORTH

0 4' 8' 16'



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

CSO
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317.848.7800 | csoinc.net

SHROUT TATE WILSON
MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, and the arrangement of spaces and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.

To the extent of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT C - DOMESTIC WATER

CERTIFIED BY:

NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

8/04/22

DRAWING NUMBER

P203

PROJECT NUMBER

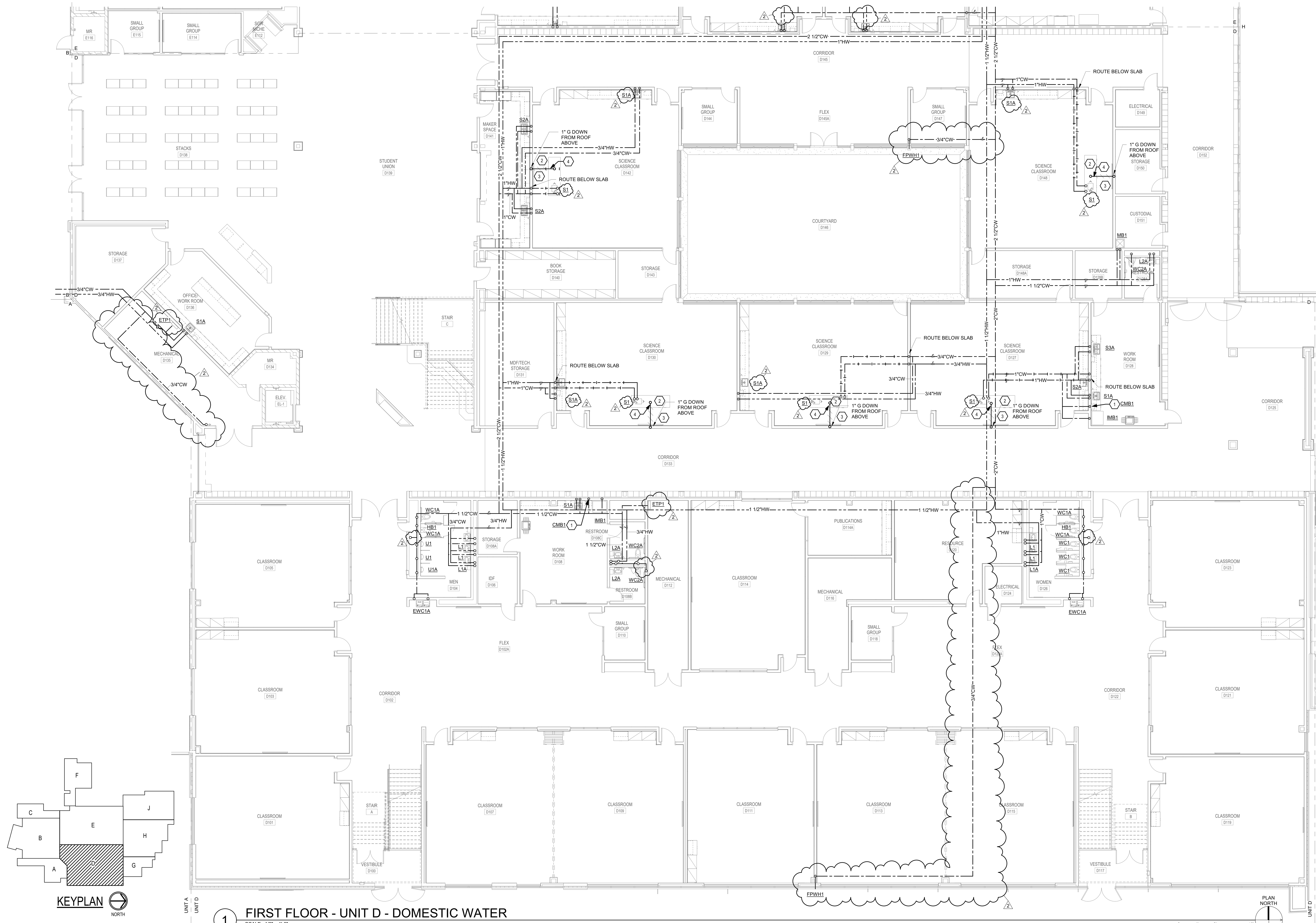
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. COORDINATE FINAL LOCATION OF COFFEE MAKER BOX OUTLET WITH FINAL LOCATION OF COFFEE MAKER PRIOR TO ROUGH IN.
2. ROUTE GAS INTO VENTILATED CASEWORK CHASE.
3. ROUTE 1" GAS MAIN IN ACCESSIBLE TRENCH.
4. UNDERSLAB GAS RUNNOUTS TO BE SLEEVED AND VENTED.



1 FIRST FLOOR - UNIT D - DOMESTIC WATER

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

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Lexington - Louisville - Charleston

www.stweng.com

PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT D - DOMESTIC WATER

CERTIFIED BY:

NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER

P204

PROJECT NUMBER

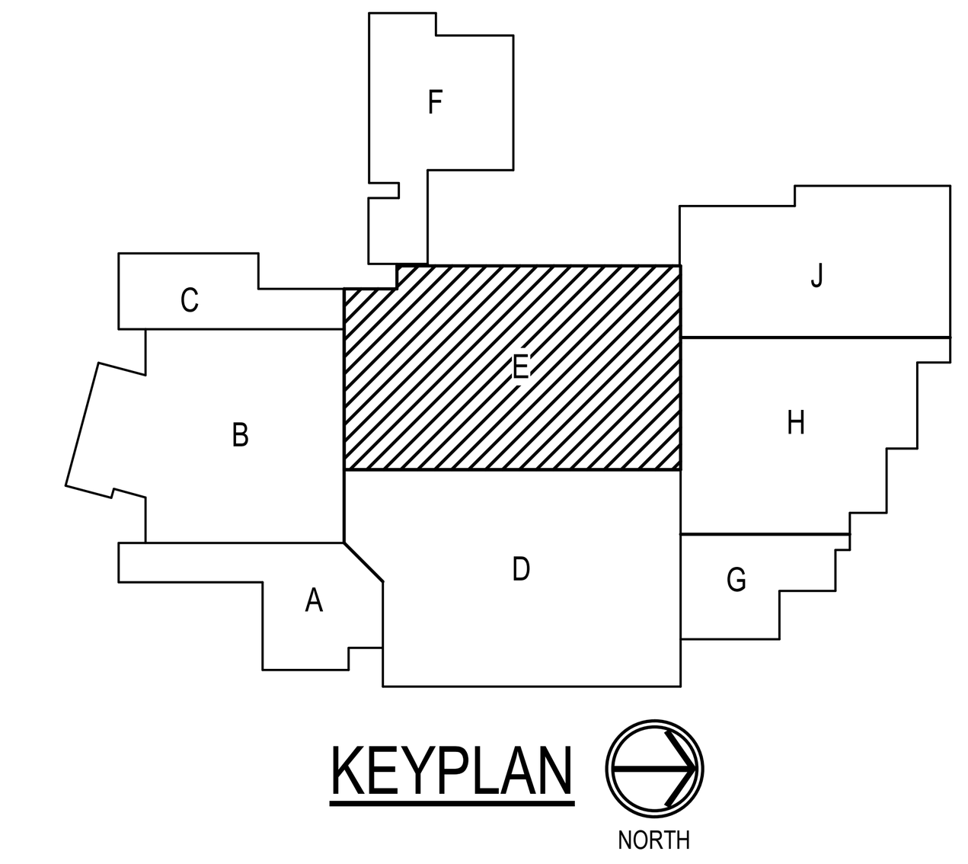
2021026

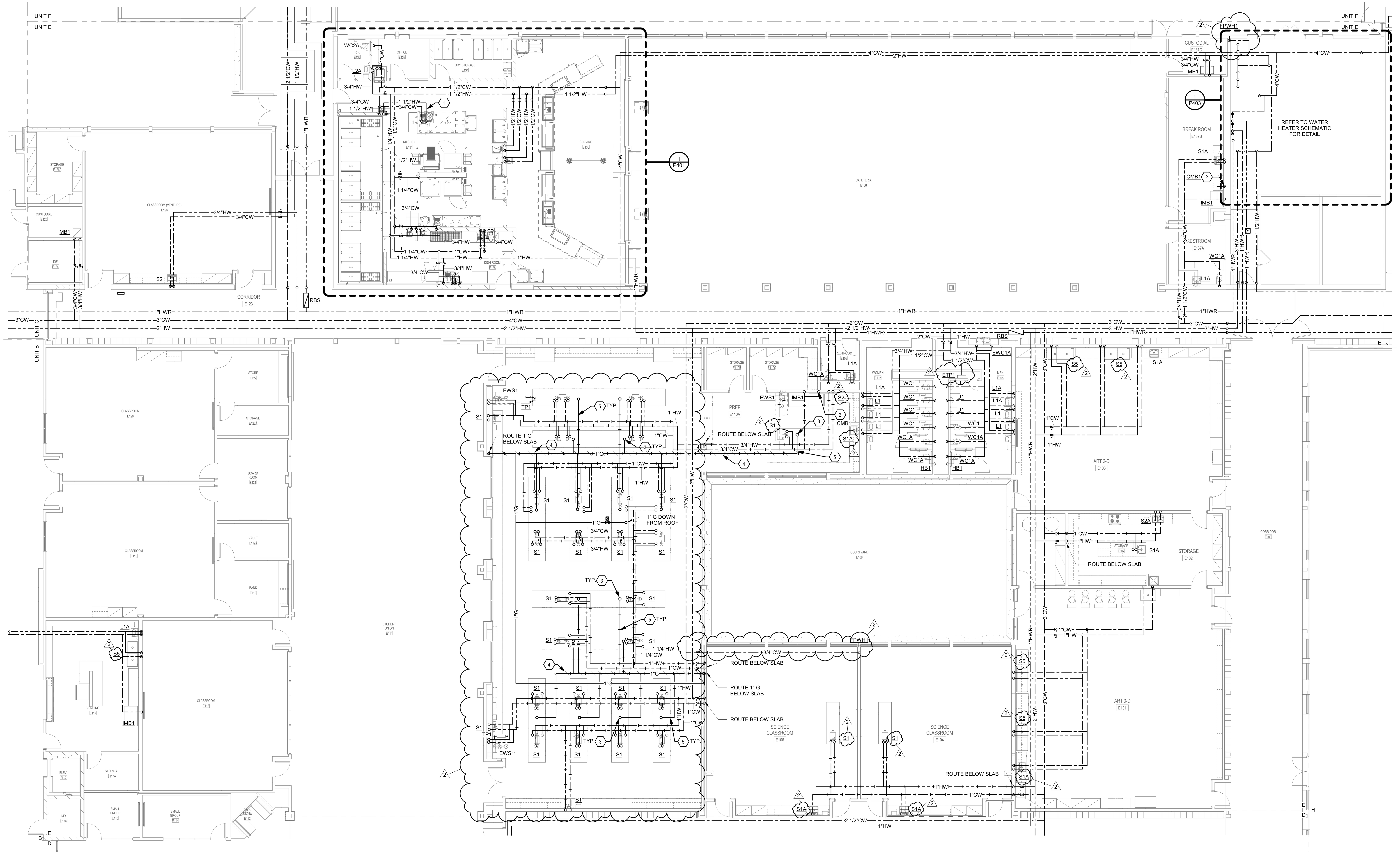
GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. PIPING INSTALLED BELOW SLAB.
2. COORDINATE FINAL LOCATION OF COFFEE MAKER BOX OUTLET WITH FINAL LOCATION OF COFFEE MAKER PRIOR TO ROUGH IN.
3. ROUTE GAS INTO VENTILATED CASEWORK CHASE.
4. ROUTE 1" GAS MAIN IN ACCESSIBLE TRENCH.
5. UNDERSLAB GAS RUNNOUTS TO BE SLEEVED AND VENTED.





1 FIRST FLOOR - UNIT E - DOMESTIC WATER

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

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT E - DOMESTIC WATER

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING NUMBER
P205

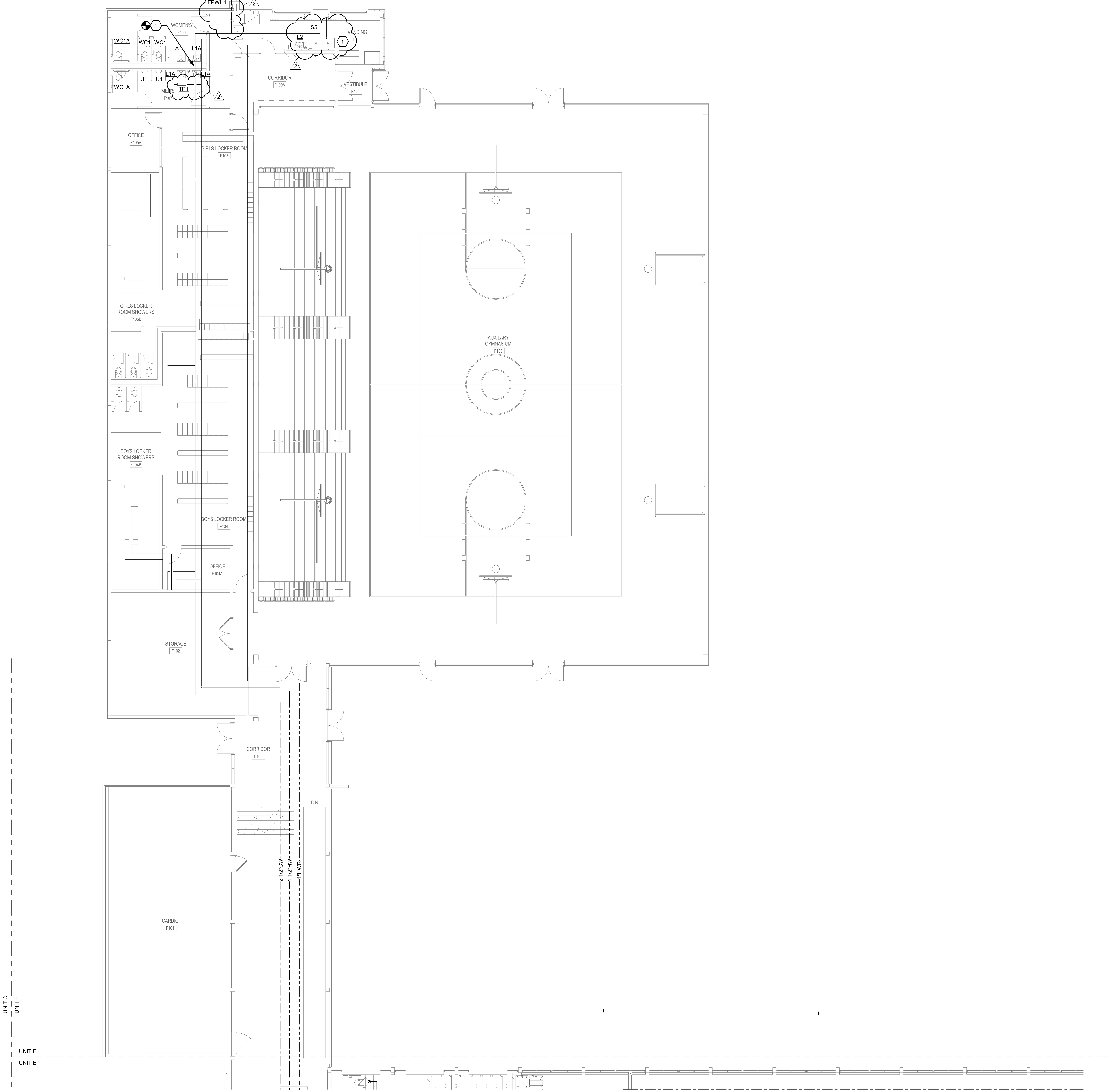
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

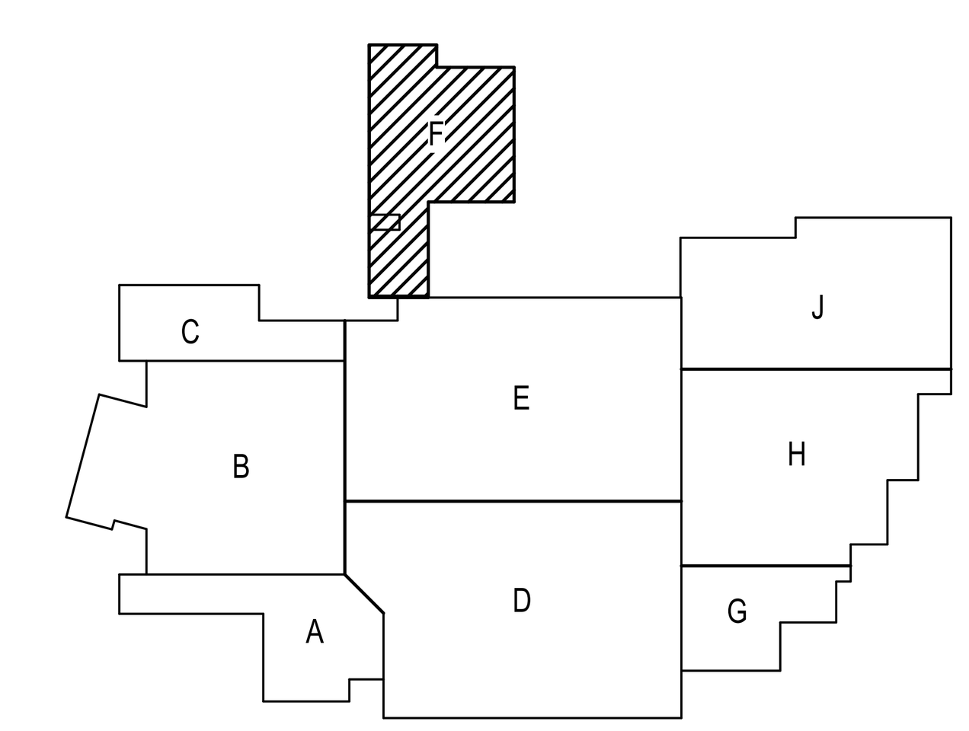
1. NEW FIXTURES CONNECTED TO EXISTING HW/CW PIPING.



1 FIRST FLOOR - UNIT F - DOMESTIC WATER

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

PLAN NORTH



KEYPLAN

NORTH

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SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT F - DOMESTIC WATER

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
P206

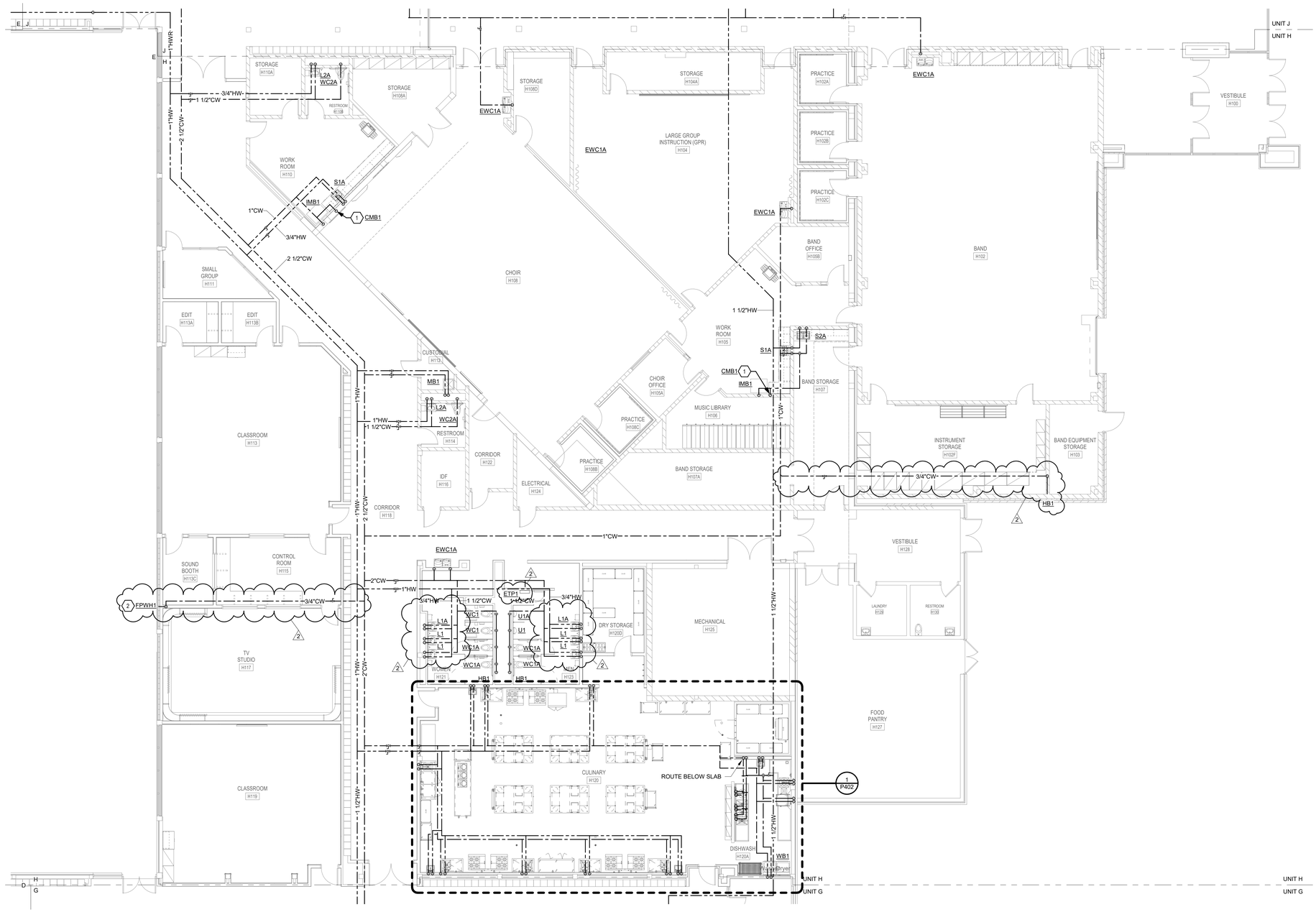
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

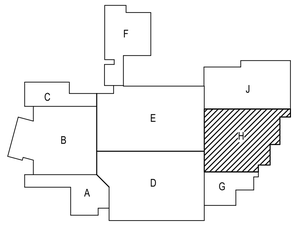
1. COORDINATE FINAL LOCATION OF COFFEE MAKER BOX OUTLET WITH FINAL LOCATION OF COFFEE MAKER PRIOR TO ROUGH IN.
2. COORDINATE WALL HYDRANT INSTALLATION AND FINISH WITH ARCHITECT.



1 FIRST FLOOR - UNIT H -DOMESTIC WATER
SCALE: 1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'



KEYPLAN

NORTH

SILVER CREEK SCHOOL CORPORATION

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The Contract Documents, including these drawings, describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
FIRST FLOOR - UNIT H - DOMESTIC WATER

CERTIFIED BY:
NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
8/04/22

DRAWING NUMBER
P208

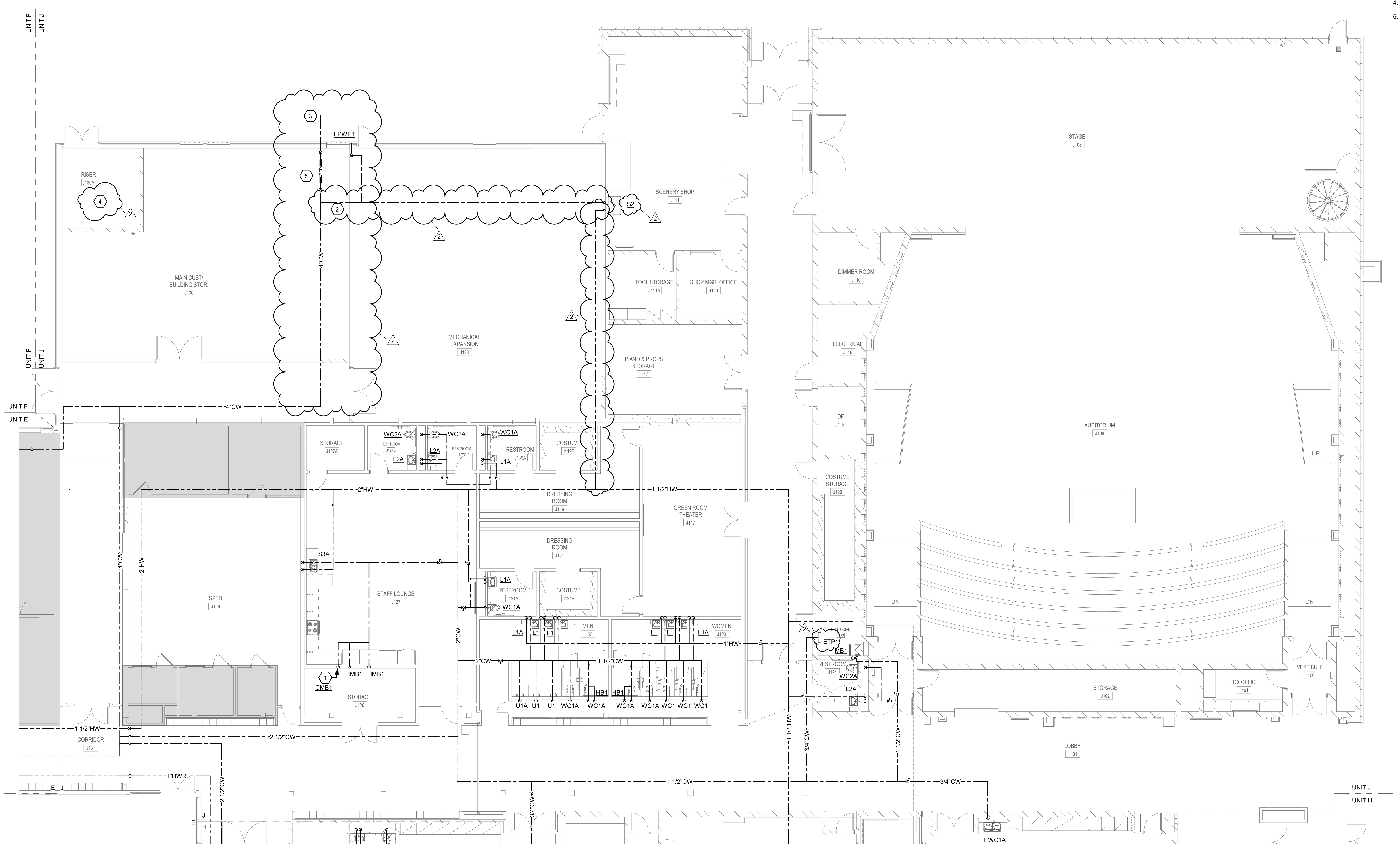
PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

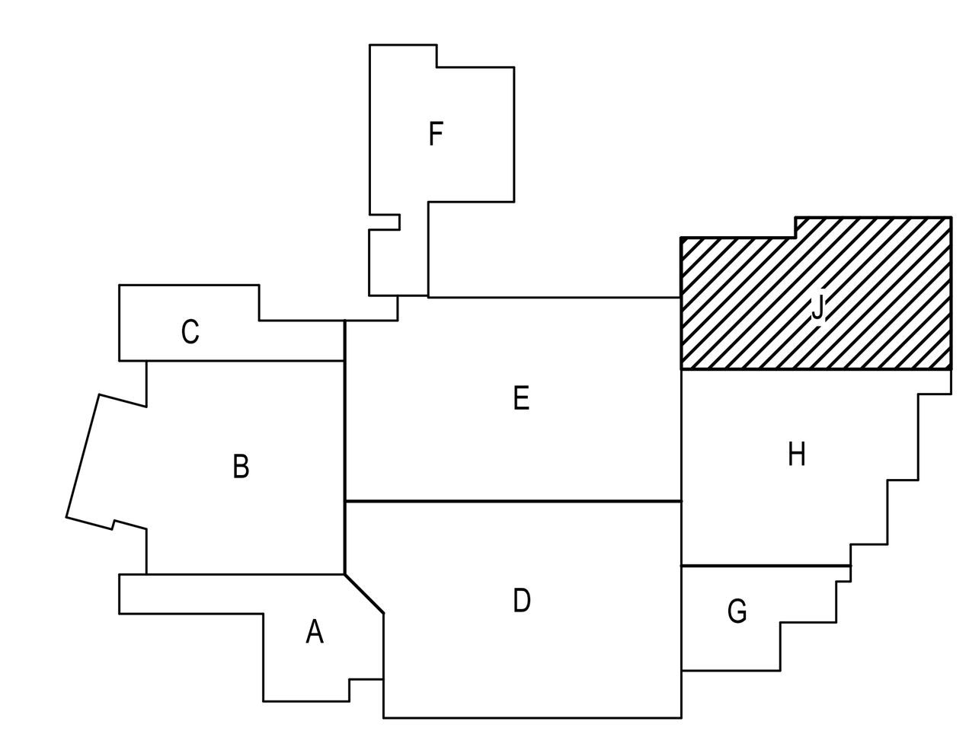
1. COORDINATE FINAL LOCATION OF COFFEE MAKER BOX OUTLET WITH FINAL LOCATION OF COFFEE MAKER PRIOR TO ROUGH IN.
2. HYDRONIC FILL STATION ASSEMBLY PER SCHEMATIC. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
3. SEE SITE UTILITY PLAN U102 FOR PIPE CONTINUATION.
4. SEE FIRE PROTECTION PLAN FP101 FOR SCOPE IN THIS AREA.
5. SEE BACK FLOW PREVENTER DETAIL FOR MORE INFORMATION.



1 FIRST FLOOR - UNIT J - DOMESTIC WATER

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

PLAN NORTH



KEYPLAN

NORTH

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

FIRST FLOOR - UNIT J - DOMESTIC WATER

CERTIFIED BY:

NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

P209

PROJECT NUMBER

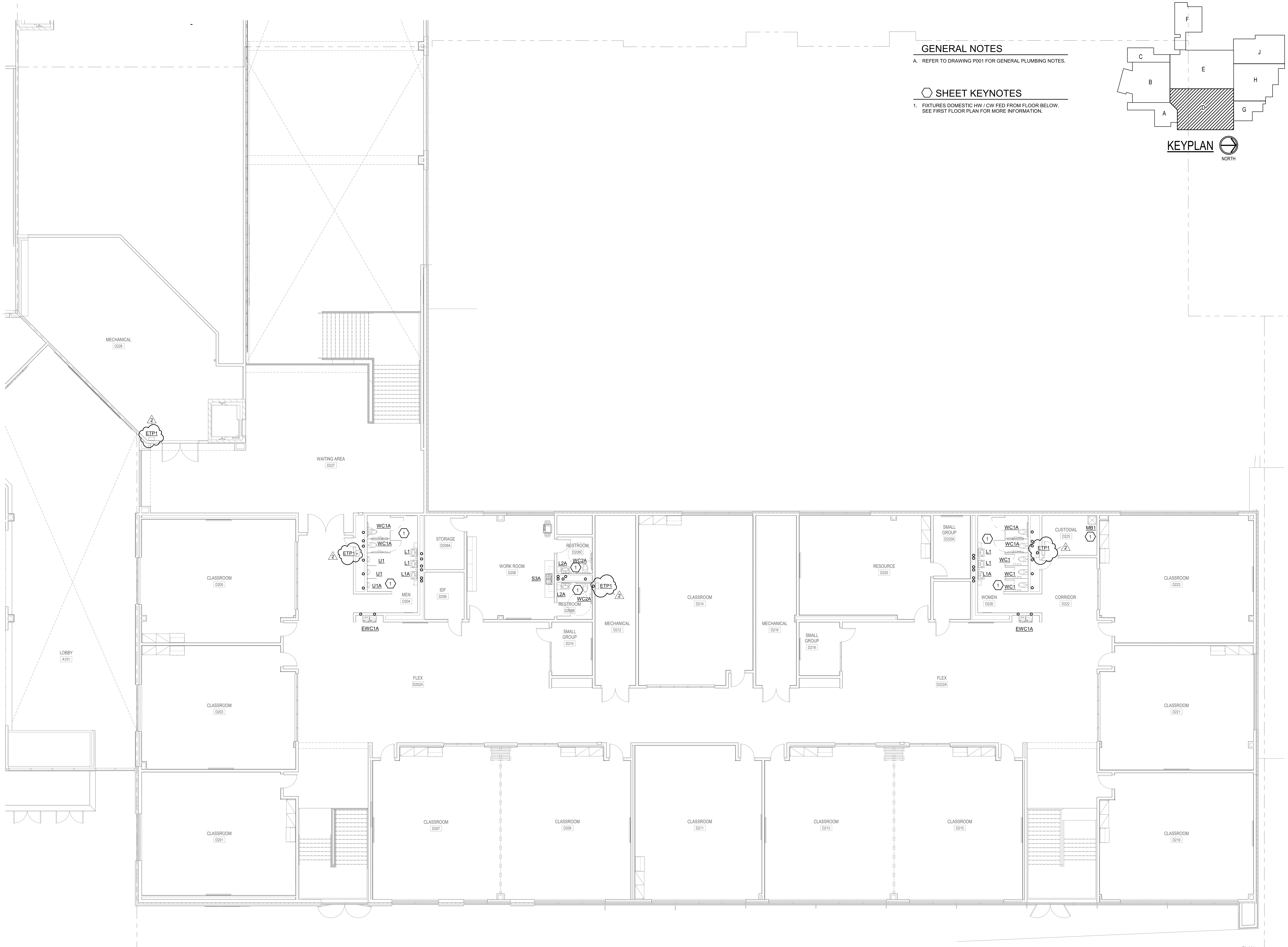
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

SHEET KEYNOTES

1. FIXTURES DOMESTIC HW / CW FED FROM FLOOR BELOW. SEE FIRST FLOOR PLAN FOR MORE INFORMATION.



1 SECOND FLOOR - UNIT D - DOMESTIC WATER

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

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

2	Addendum 2	08/04/2022

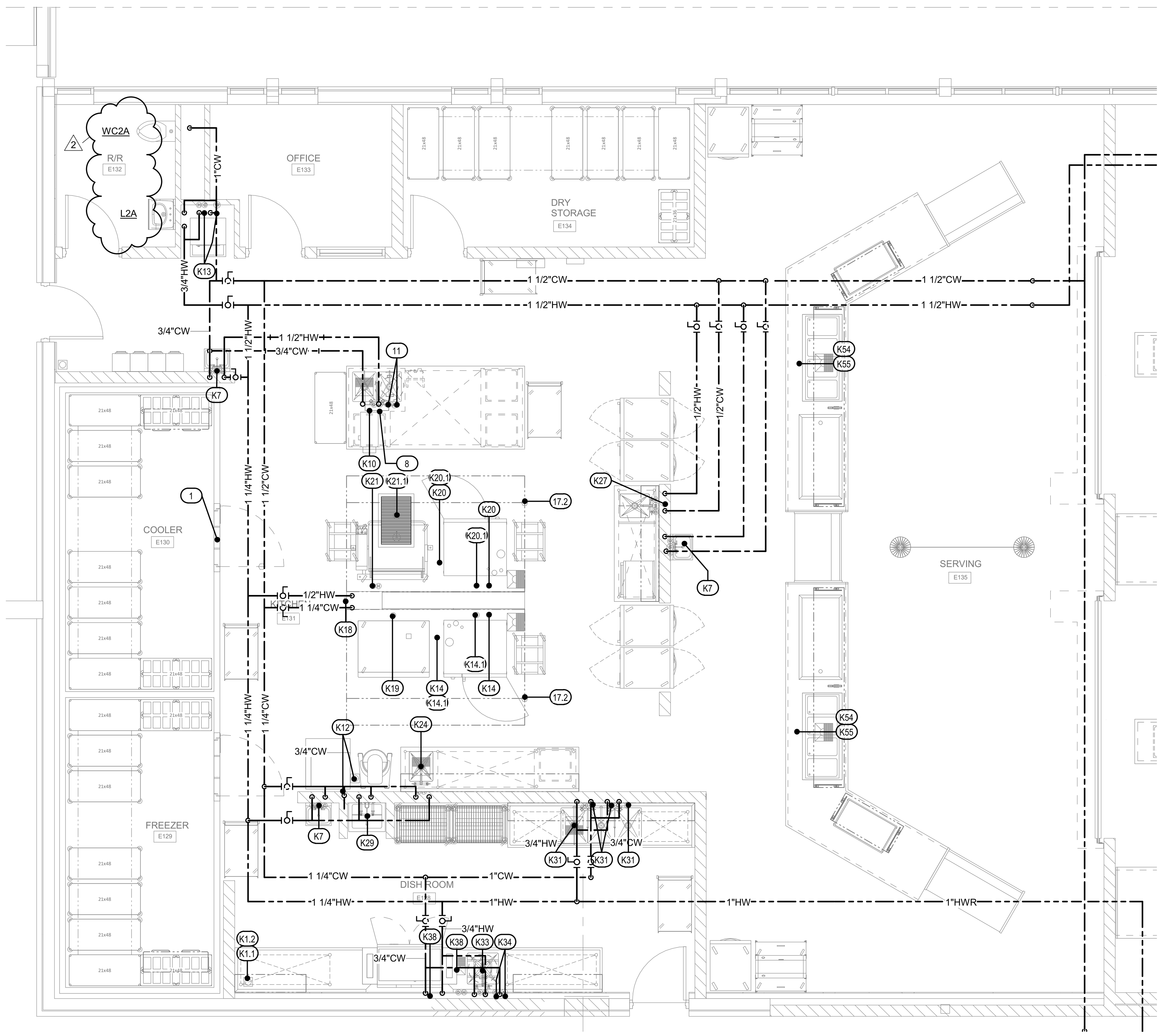
ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
SECOND FLOOR - UNIT D - DOMESTIC WATER

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

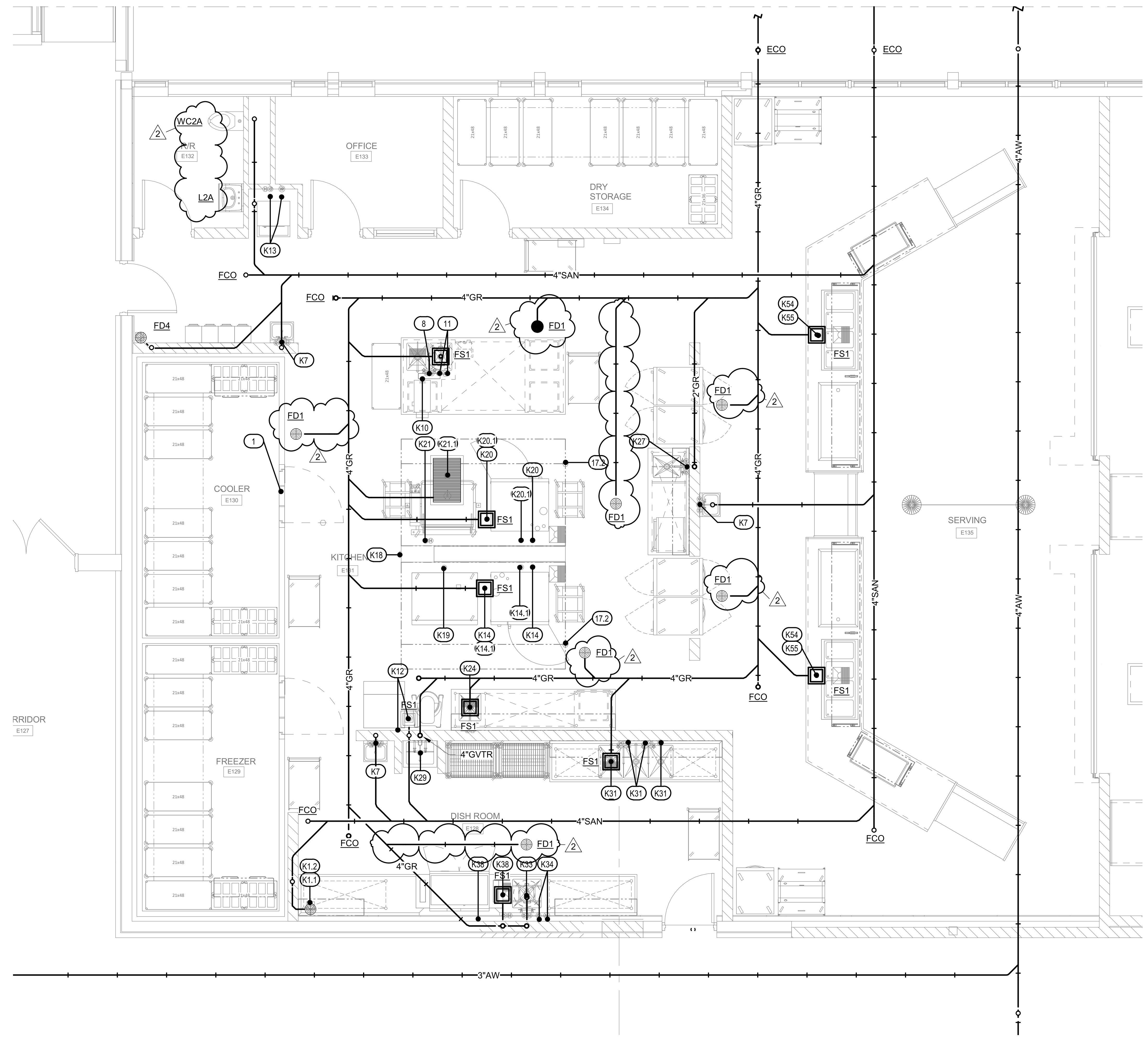
DRAWING NUMBER
P210

PROJECT NUMBER
2021026



1 ENLARGED KITCHEN PLAN - DOMESTIC WATER

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



2 ENLARGED KITCHEN PLAN - SANITARY SEWER

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

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

B. REFER TO FOOD SERVICE EQUIPMENT SCHEDULE K200 FOR KITCHEN EQUIPMENT INFORMATION.

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PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
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REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:
ENLARGED KITCHEN PLAN

CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER

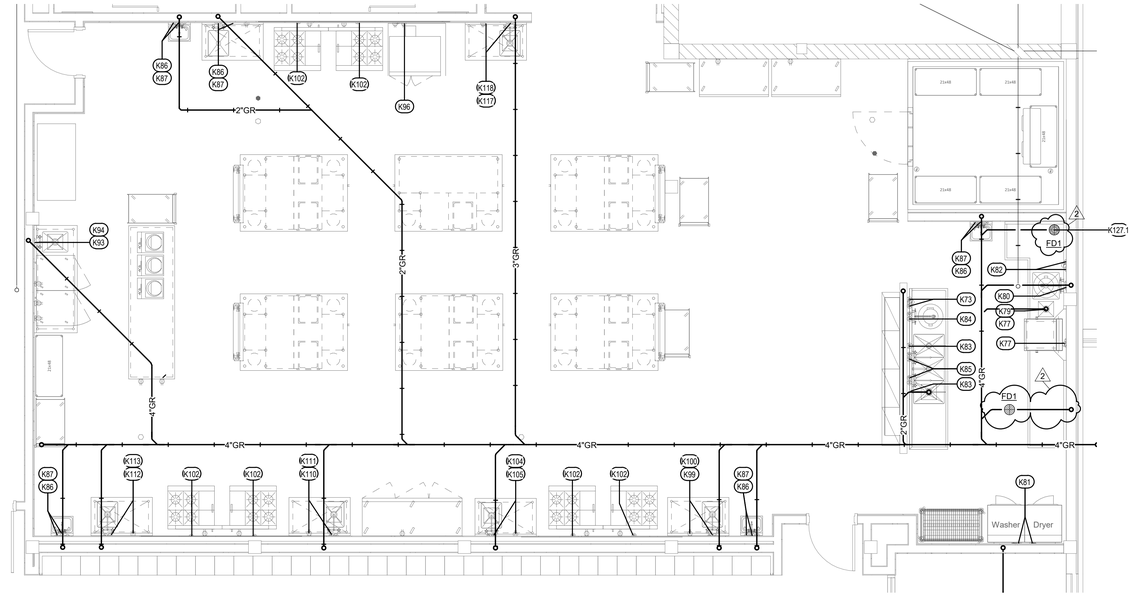
DRAWING NUMBER
P401

PROJECT NUMBER
2021026

GENERAL NOTES

A. REFER TO DRAWING P001 FOR GENERAL PLUMBING NOTES.

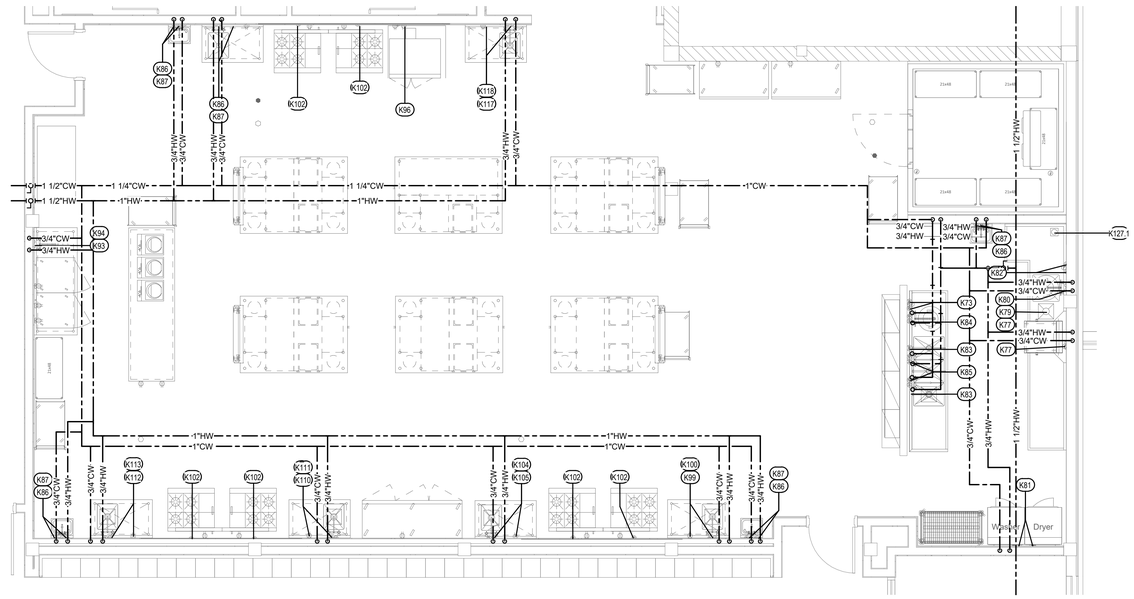
2 B. REFER TO FOOD SERVICE EQUIPMENT SCHEDULE K201 FOR KITCHEN EQUIPMENT INFORMATION.



2 ENLARGED CULINARY PLAN - SANITARY SEWER

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

0 2' 4' 8'



1 ENLARGED CULINARY PLAN - DOMESTIC WATER

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

0 2' 4' 8'

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PROJECT:

SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITION AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.

The drawings and specifications are intended to describe all work required for full performance and completion of the requirements of the Contract.

On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	Addendum 1	07/26/2022
2	Addendum 2	08/04/2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	STAFF	NCM

DRAWING TITLE:

ENLARGED CULINARY PLAN

CERTIFIED BY:

NICHOLAS C. MORGAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER

8/4/22

DRAWING NUMBER

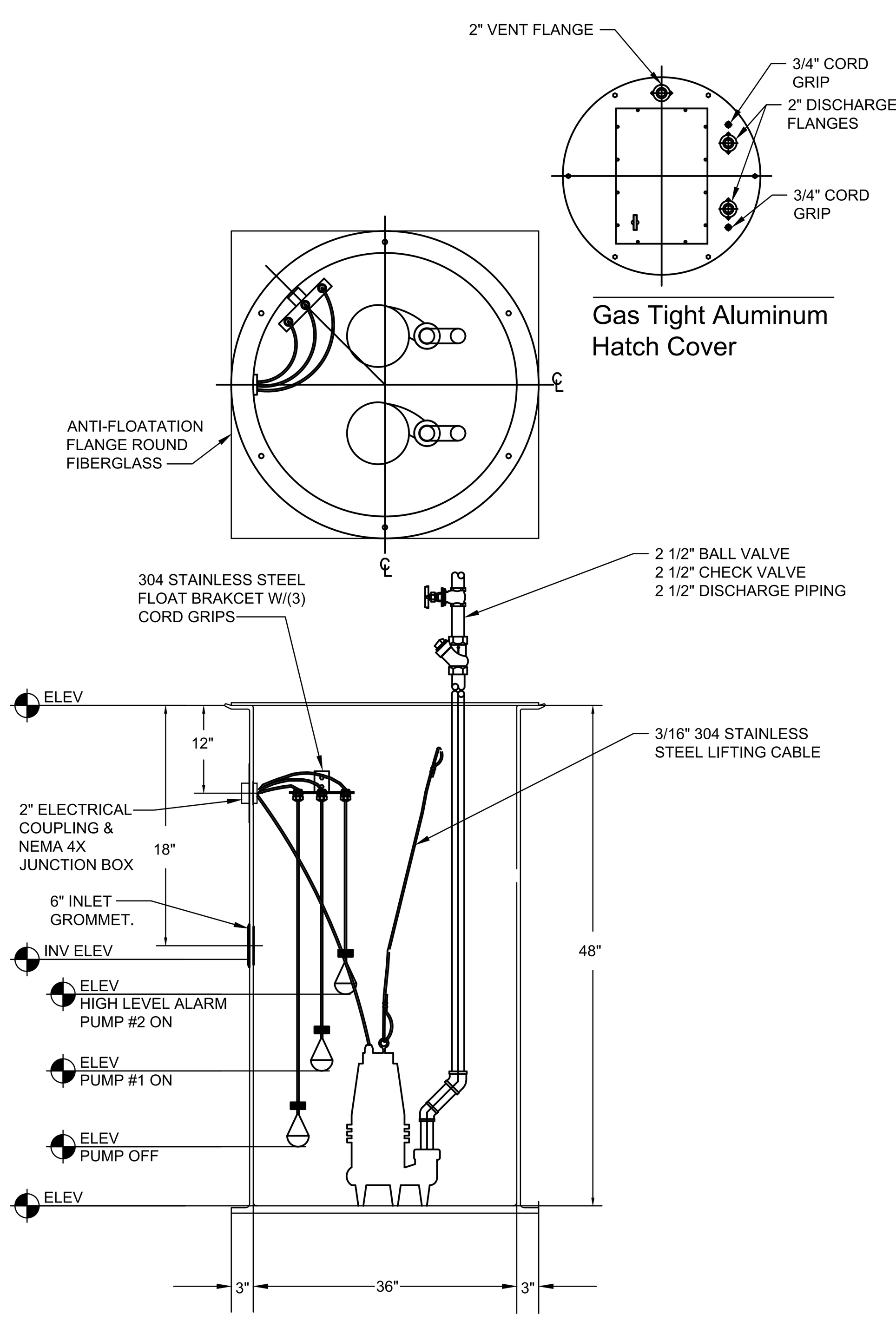
P402

1

PROJECT NUMBER

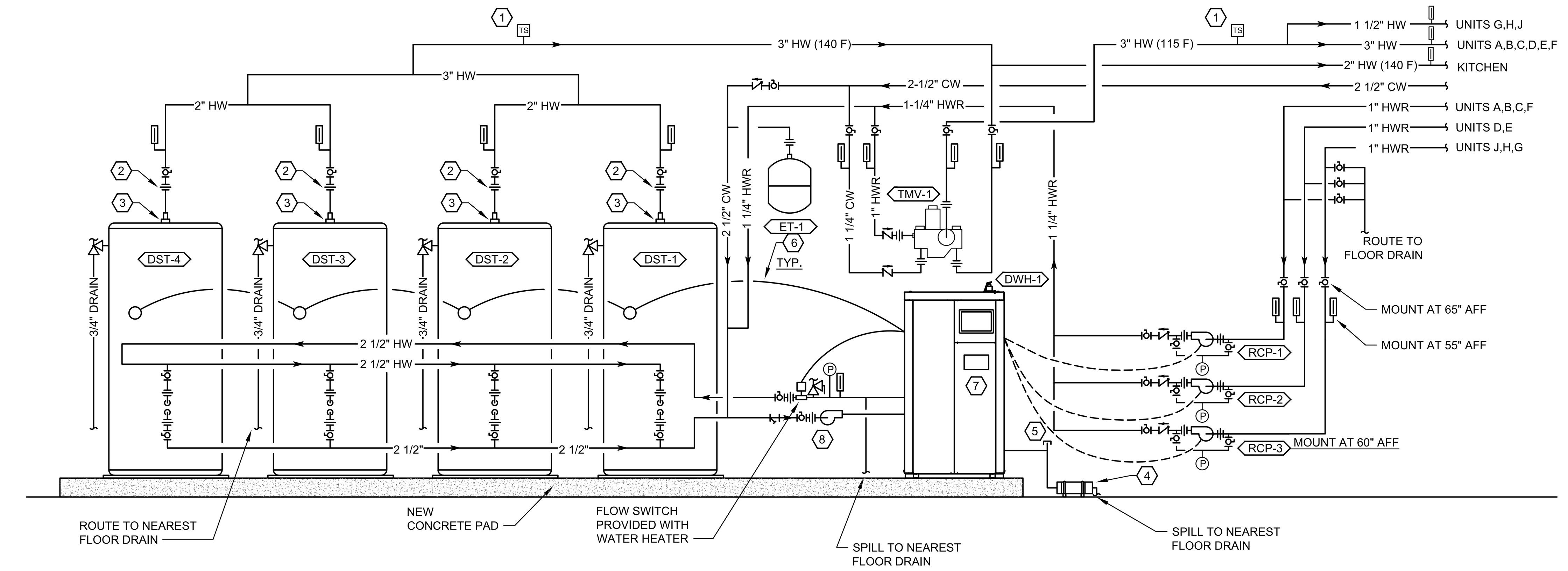
2021026

SUMP PUMP STATION DETAIL



NOT TO SCALE

DOMESTIC WATER HEATER PIPING SCHEMATIC

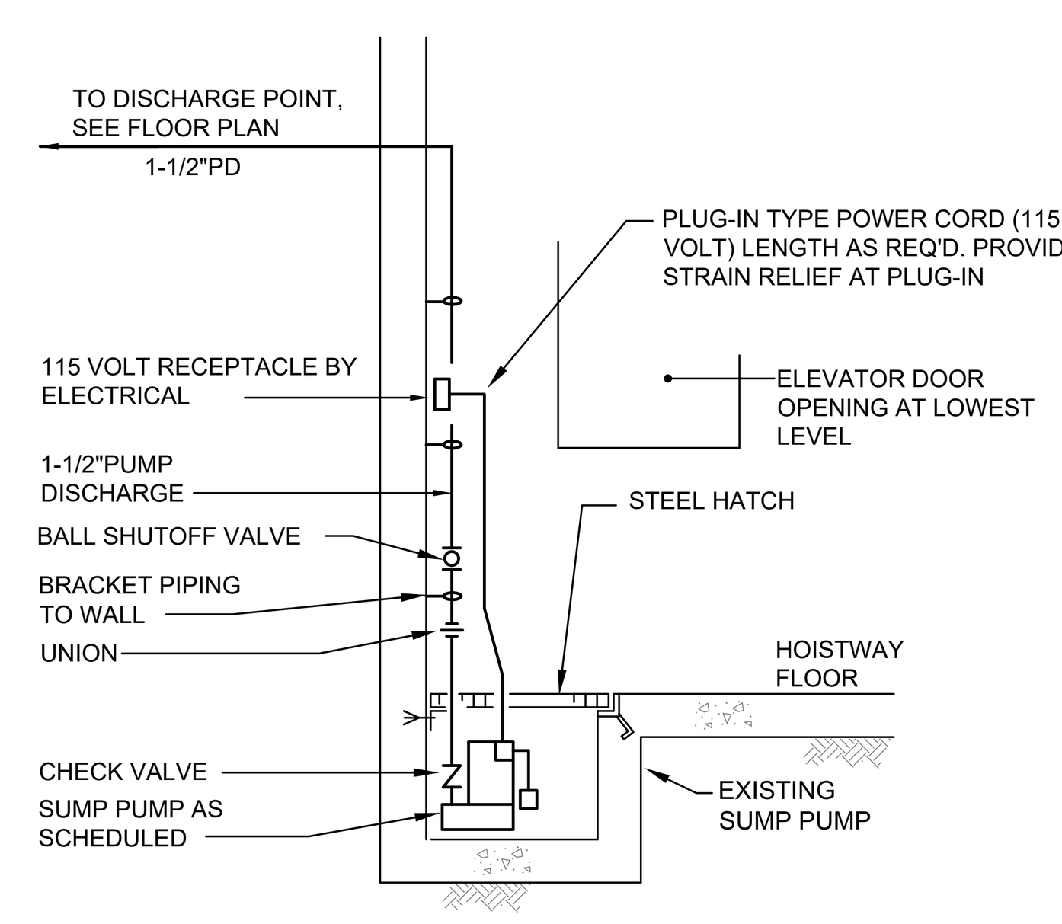


NOT TO SCALE

SHEET KEYNOTES:

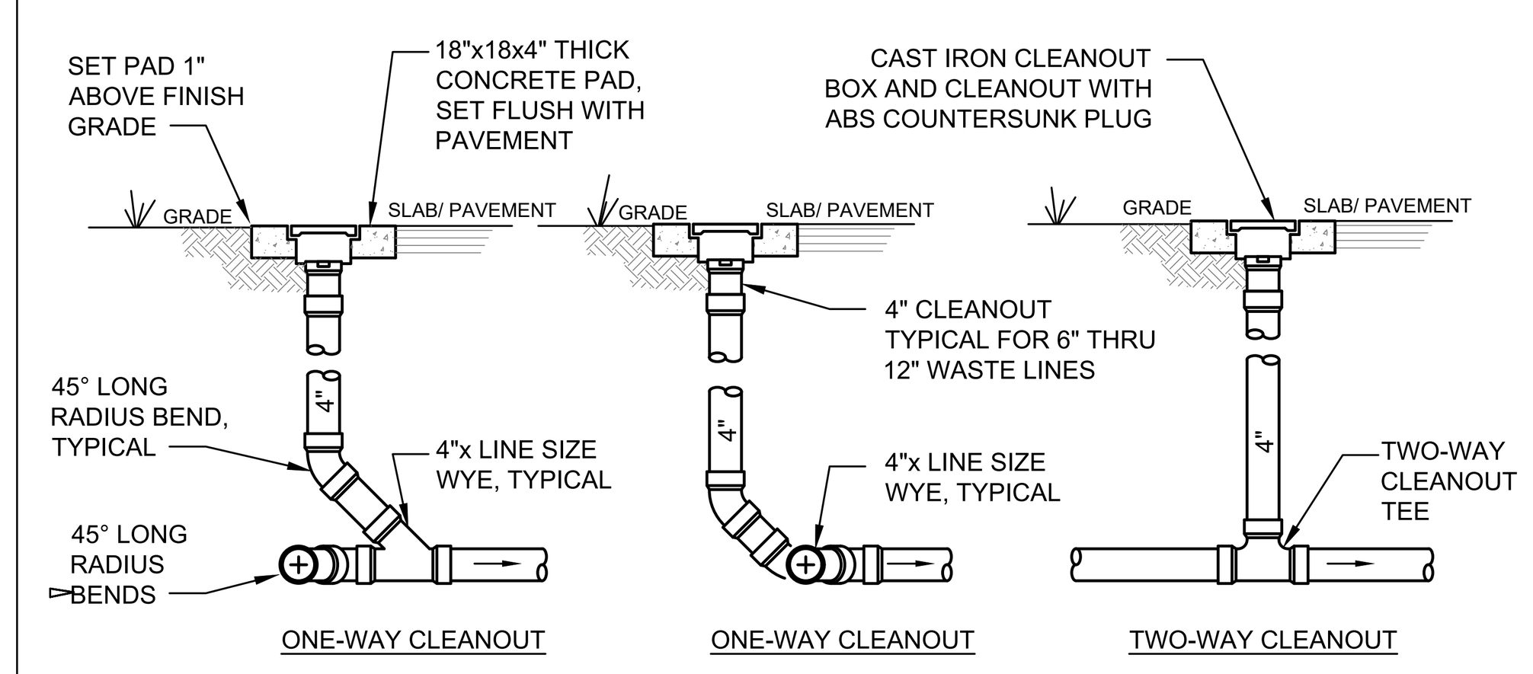
1. COORDINATE CONNECTION TO EXISTING BUILDING DDC CONTROL SYSTEM WITH CONTROLS CONTRACTOR.
2. COPPER UNION. DIELECTRIC UNIONS ARE NOT ACCEPTABLE.
3. DIELECTRIC COUPLING / THROUGH WAY.
4. FACTORY CONDENSATE NEUTRALIZATION KIT.
5. FIELD FABRICATE VACUUM BREAK PER MANUFACTURER'S RECOMMENDATIONS.
6. ALL FIELD WIRING TO BE IN EMT. EMT SHALL BE INDIVIDUALLY SUPPORTED AND NOT STRAPPED TO PIPING. DO NOT MOUNT ON FLOOR OR CURB.
7. NEW EQUIPMENT LABEL WITH PANEL AND CIRCUIT NUMBERS.
8. FACTORY PROVIDED, FIELD INSTALLED STAINLESS STEEL CIRCULATING PUMP FOR DWH-1.

ELEVATOR SUMP PUMP DETAIL



NOT TO SCALE

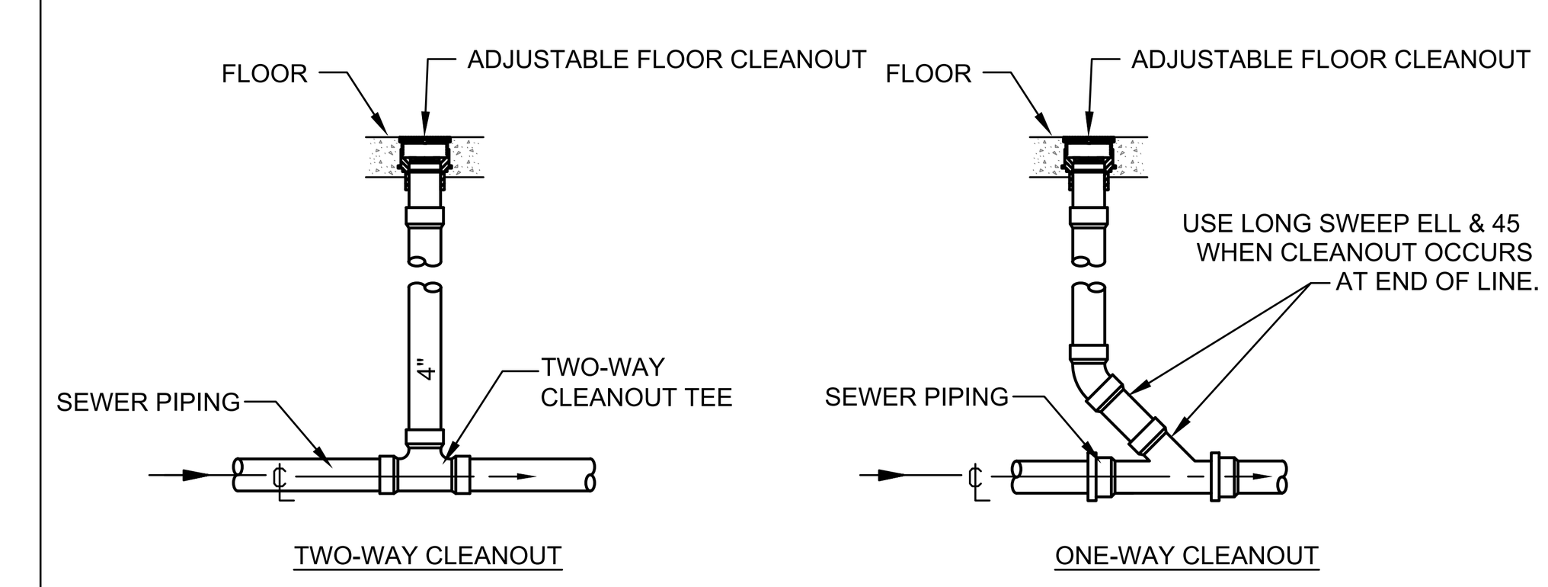
TYPICAL EXTERIOR CLEANOUT DETAILS



CLEANOUTS IN STRAIGHT RUNS OF PIPING SHALL BE TWO-WAY TYPE, UNLESS OTHERWISE SHOWN AND OR NOTED.

NOT TO SCALE

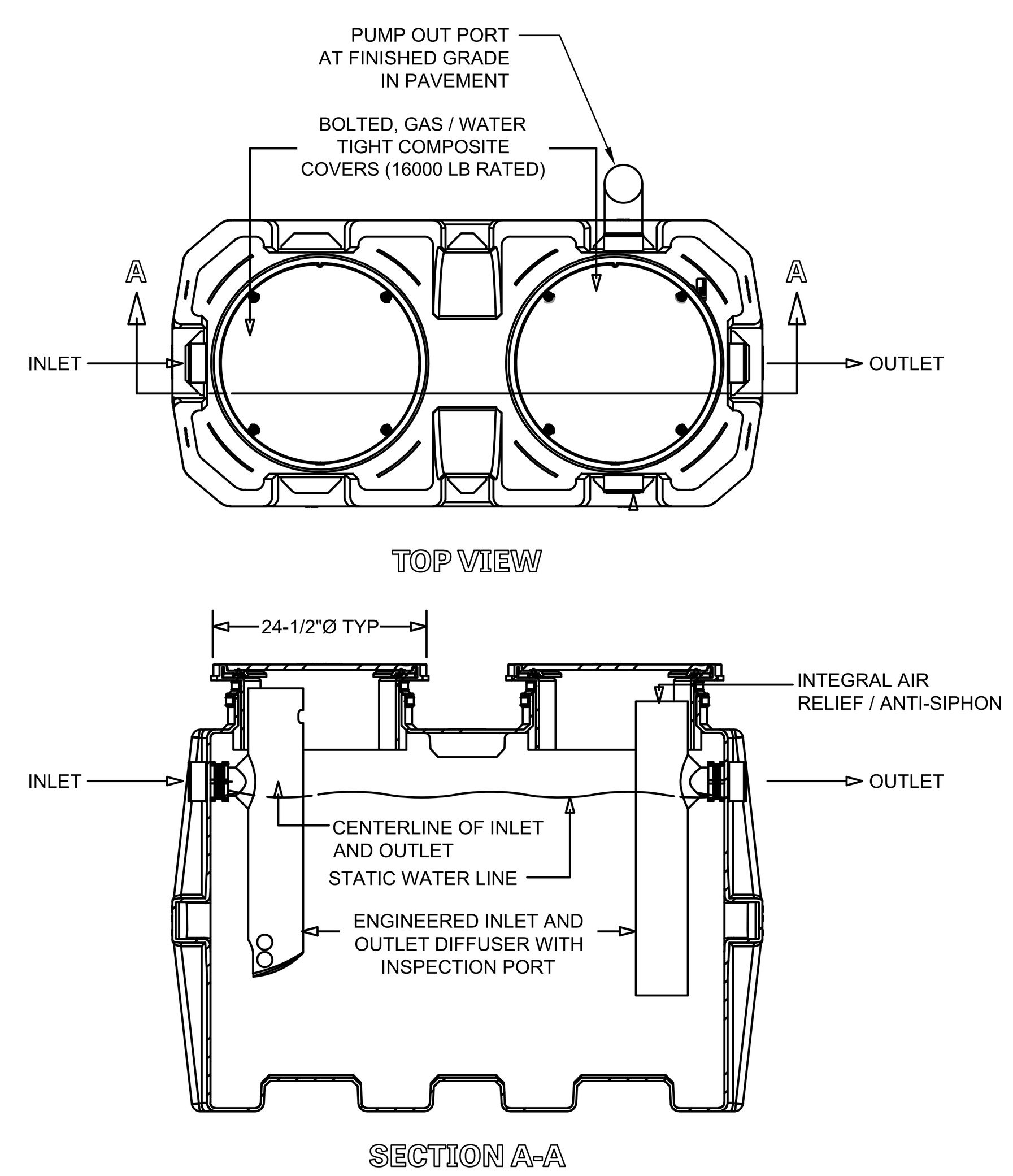
TYPICAL INTERIOR CLEANOUT DETAIL



CLEANOUTS IN STRAIGHT RUNS OF PIPING SHALL BE TWO-WAY TYPE, UNLESS OTHERWISE SHOWN AND OR NOTED.

NOT TO SCALE

100 GPM GREASE TRAP DETAIL

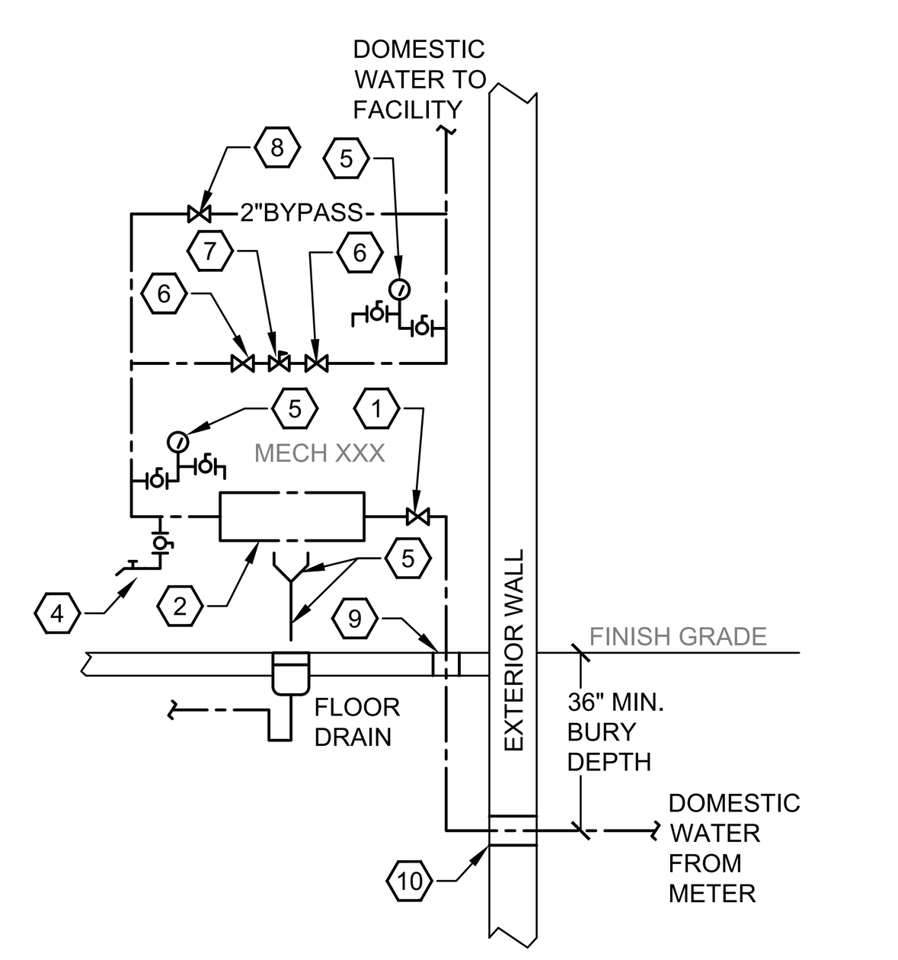


GENERAL NOTE:

1. BASIS OF DESIGN IS SCHIER MODEL GB-250 WITH OPTIONAL PUMP OUT PORT AT FINISHED GRADE.
2. MANWAYS MUST BE RATED FOR VEHICULAR TRAFFIC AT H20 LOADING, CLASS "D".
3. PROVIDE NEW CONCRETE PAD AROUND GREASE TRAP (MINIMUM 12" AROUND GREASE TRAP).

NOT TO SCALE

DOMESTIC WATER SERVICE ENTRANCE DETAIL

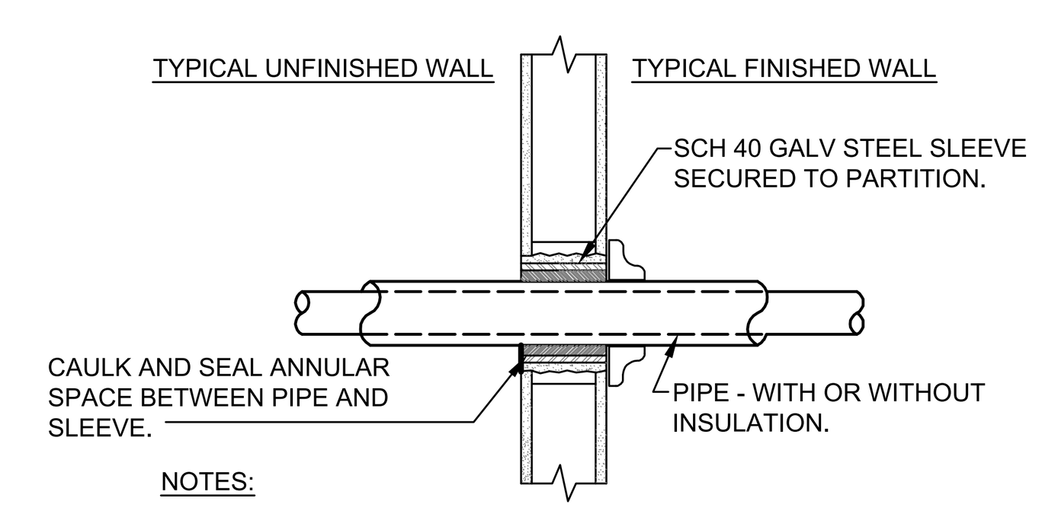


DETAIL NOTES

1. MAIN DOMESTIC WATER SERVICE VALVE. EPOXY COATED NON-RISING STEM RESILIENT WEDGE GATE VALVE, SIZE OF WATER SERVICE.
2. RPZ BACK FLOW PREVENTER. EPOXY COATED, WITH OPTIONAL EPOXY COATED WYE STRAINER, AND OPTIONAL OS&Y GATE VALVES. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
3. ROUTE DRAIN FUNNEL AND PIPING TO NEAREST FLOOR DRAIN. CUT DRAIN PIPING AT 60° ANGLE.
4. ¾" HB HOSE BIBB AND SHUT-OFF VALVE FOR SYSTEM DRAIN DOWN.
5. PRESSURE GAUGE WITH GAUGE PROTECTER, SHUTOFF, AND BLEED VALVE.
6. SERVICE SIZE OS&Y GATE VALE FOR PRV ISOLATION.
7. PRV PRESSURE REDUCING VALVE WITH LOW FLOW BY-PASS AND EPOXY COATING. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
8. NORMALLY CLOSED 2" OS&Y GATE VALVE FOR EMERGENCY BYPASS.
9. SLEEVE WATER SERVICE THROUGH FLOOR SLAB.
10. SLEEVE WATER SERVICE IN FOUNDATION WALL IF NECESSARY. COORDINATE LOCATION AND DEPTH WITH STRUCTURAL CONTRACTOR.

NOT TO SCALE

PIPE PENETRATION THROUGH INTERIOR WALL DETAIL



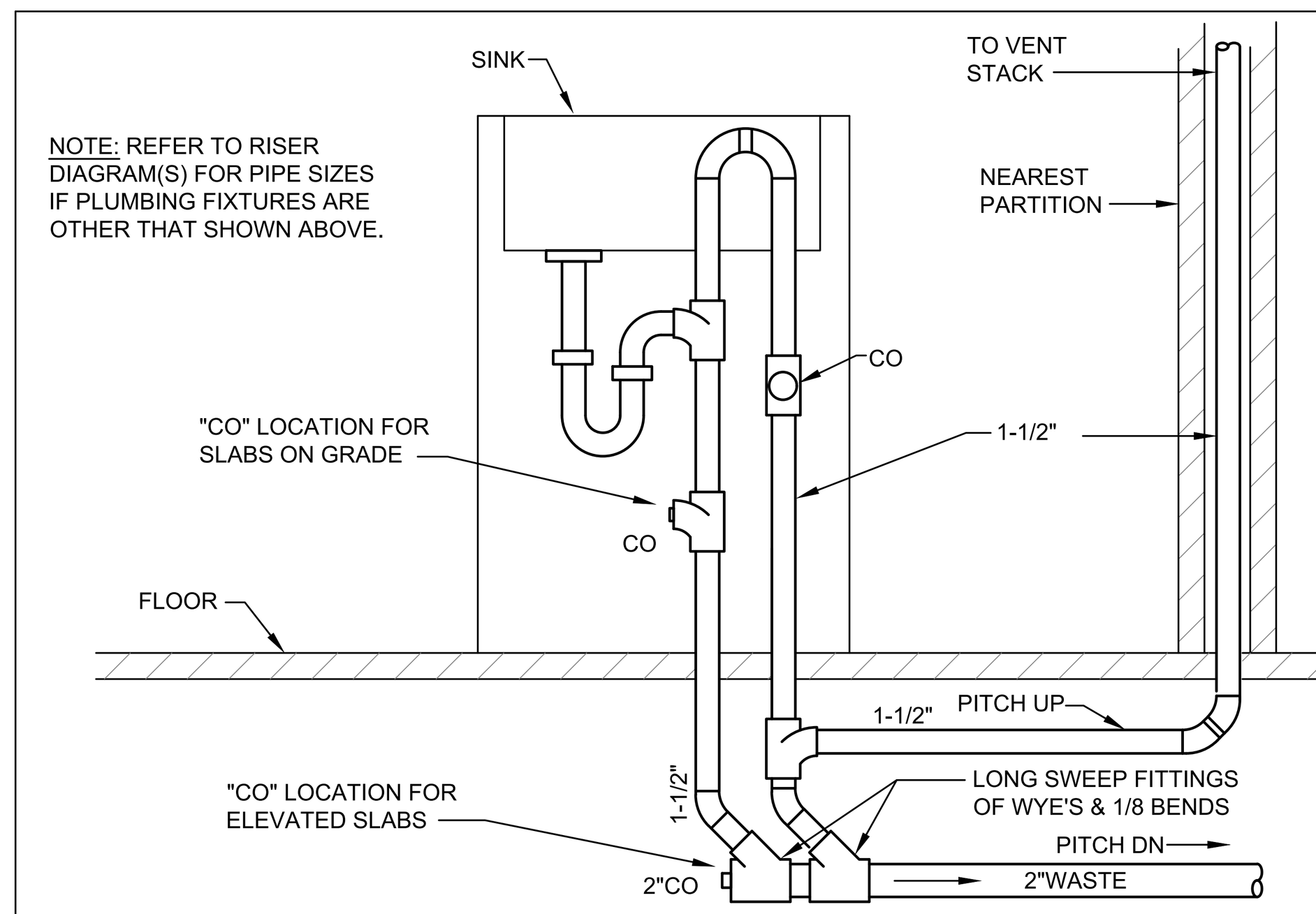
NOTES:

1. TYPICAL FOR NON-INSULATED PIPE AND CONDUIT.
2. ALL CAULKING AND SEALANT SHALL BE FIRE RATED (SEE SPECIFICATIONS).
3. WHERE PIPING IS EXPOSED AT FINISHED FLOOR, FLUSH MOUNT SLEEVE AND PROVIDE ESCUTCHEON PLATE.

NOT TO SCALE

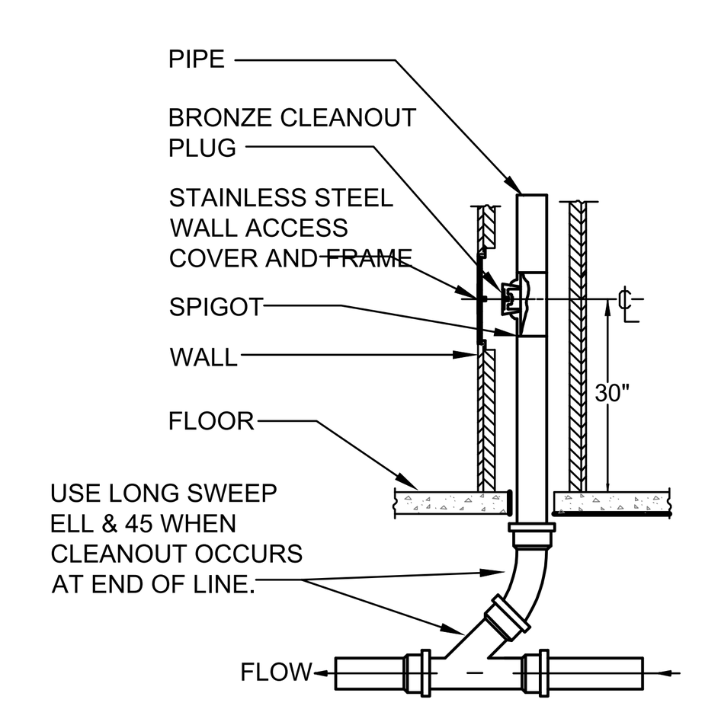
ISLAND SINK WASTE & VENT PIPING DETAIL

NOTE: REFER TO RISER DIAGRAM(S) FOR PIPE SIZES IF PLUMBING FIXTURES ARE OTHER THAT SHOWN ABOVE.



NOT TO SCALE

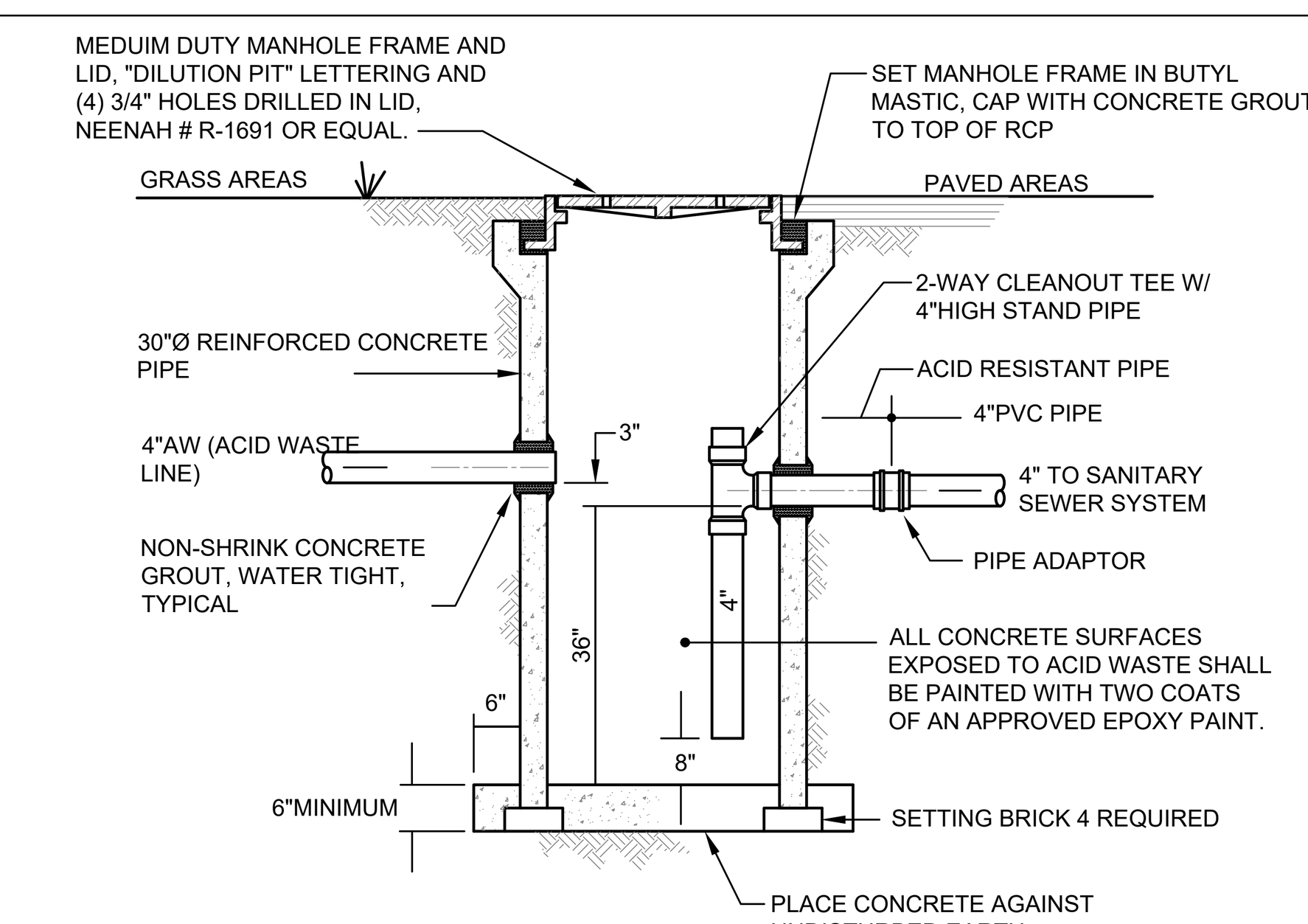
TYPICAL WALL CLEANOUT DETAIL



NOTE:
EXPOSED PIPE WITH CLEANOUT SAME EXCEPT OMIT ACCESS COVER AND FRAME.

NOT TO SCALE

ACID DILUTION PIT DETAIL



NOT TO SCALE

SILVER CREEK SCHOOL CORPORATION

CSO
8831 Keystone Crossing, Indianapolis, IN 46240
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SHROUT TATE WILSON MECHANICAL AND ELECTRICAL ENGINEERS
Lexington - Louisville - Charleston
www.stweng.com

PROJECT:
SILVER CREEK SCHOOL CORPORATION
SILVER CREEK HIGH SCHOOL
ADDITIONS AND RENOVATIONS
557 Renz Ave, Sellersburg, IN 47172

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	BMS	JAT

DRAWING TITLE:
PLUMBING DETAILS

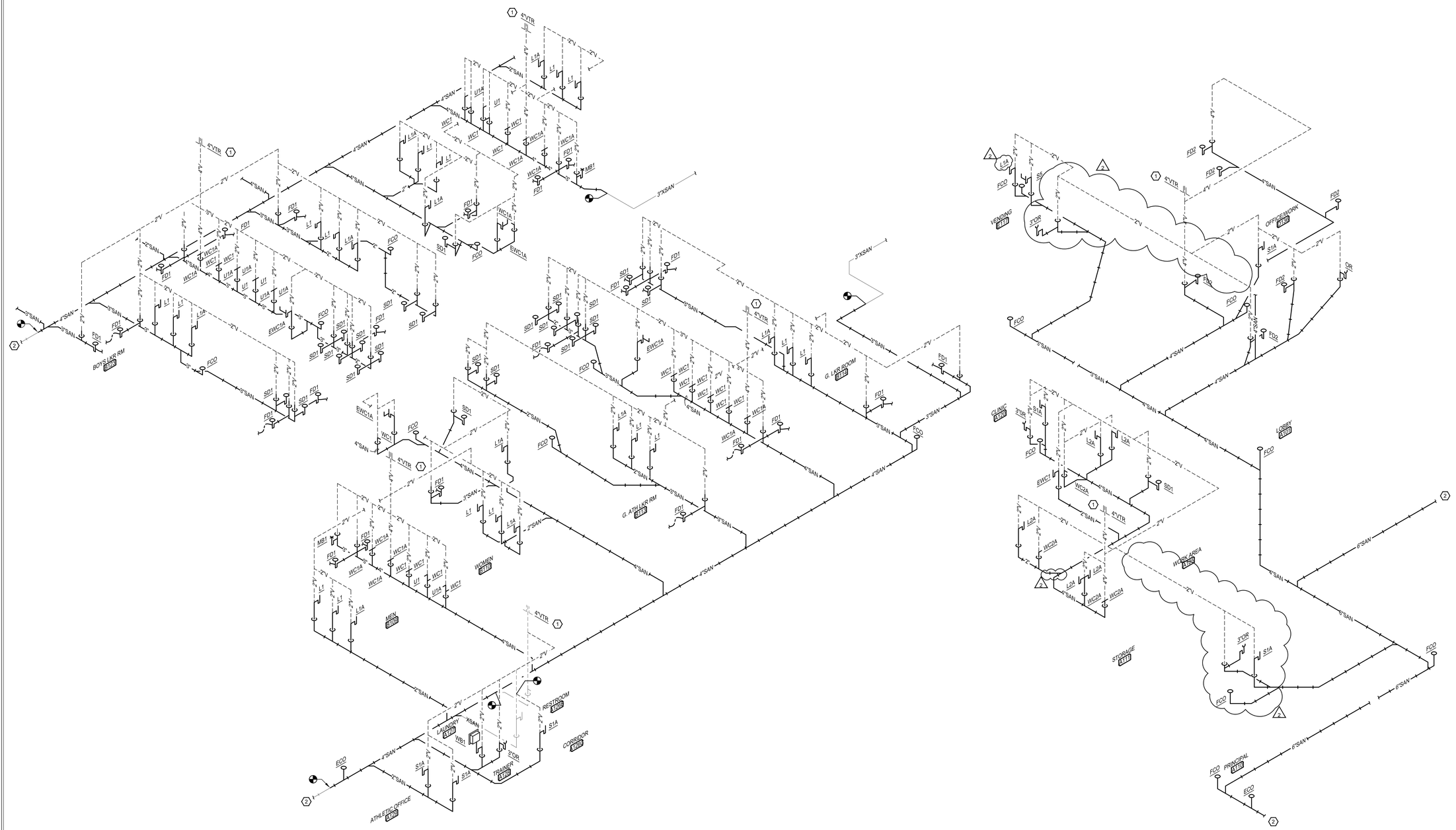
CERTIFIED BY:
NICHOLAS C. MORGAN REGISTERED No. PE10607183 STATE OF INDIANA PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
P501

PROJECT NUMBER
2021026

SHEET KEYNOTES:

1. CONTRACTOR SHALL ROUTE SANITARY VENT THROUGH ROOF A MINIMUM OF 15'-0" FROM ANY HVAC INTAKE LOCATED ON ROOF, TYPICAL.
2. SEE SITE UTILITIES PLAN FOR CONTINUATION.



1 FIRST FLOOR - UNITS A&B - SANITARY SEWER RISER
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DRAWING TITLE:
PLUMBING RISERS

CERTIFIED BY:
NICHOLAS C. MORAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
P503

PROJECT NUMBER
2021026

SHEET KEYNOTES:

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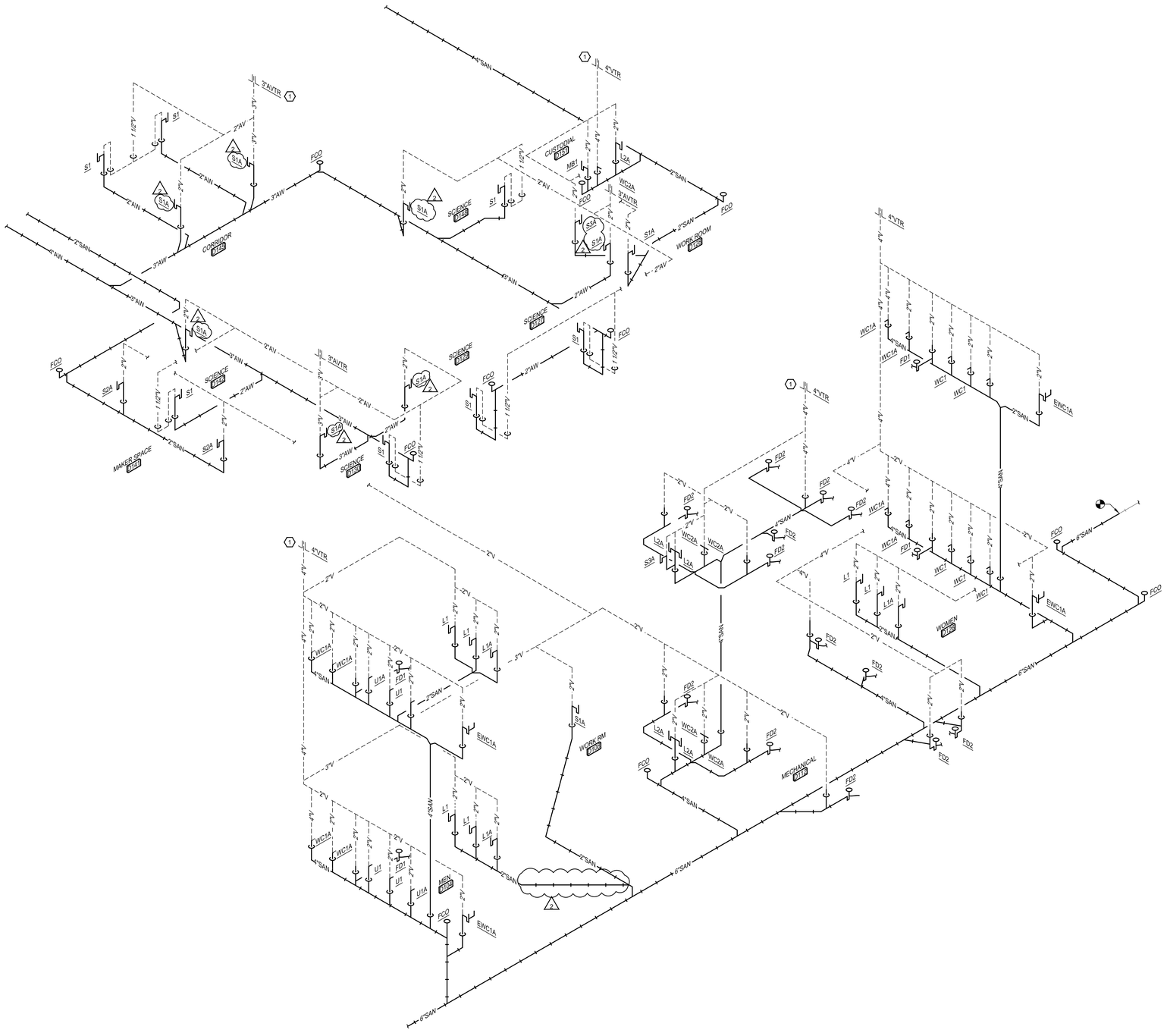

2 FIRST & SECOND FLOOR - UNIT D - SANITARY SEWER RISER

NOT TO SCALE

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PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
P504

PROJECT NUMBER
2021026

SHEET KEYNOTES:

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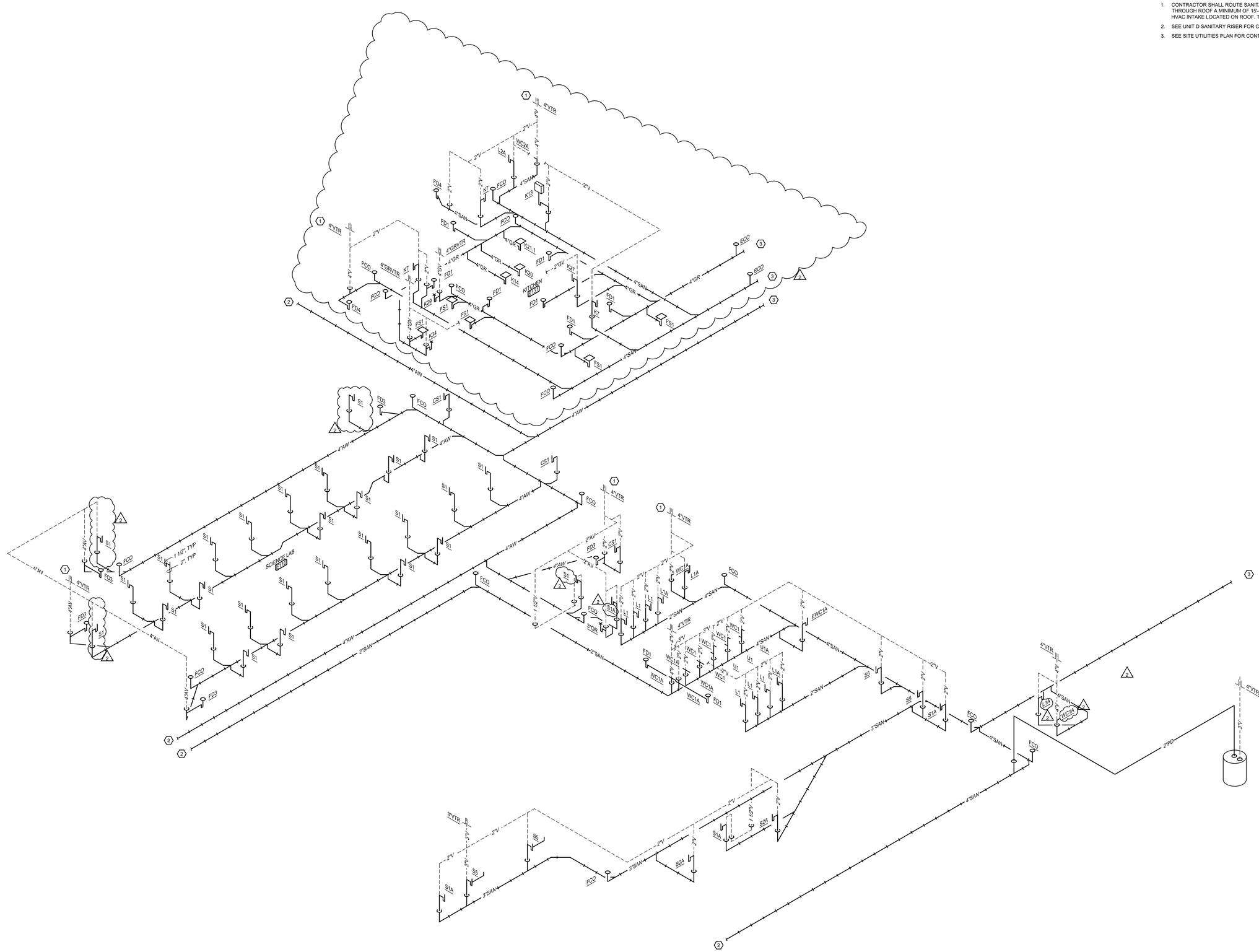
2. SEE UNIT D SANITARY RISER FOR CONTINUATION.
3. SEE SITE UTILITIES PLAN FOR CONTINUATION.



1 FIRST FLOOR - UNIT E - SANITARY SEWER RISER

NOT TO SCALE

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DRAWING NUMBER
P505

PROJECT NUMBER
2021026

SHEET KEYNOTES:

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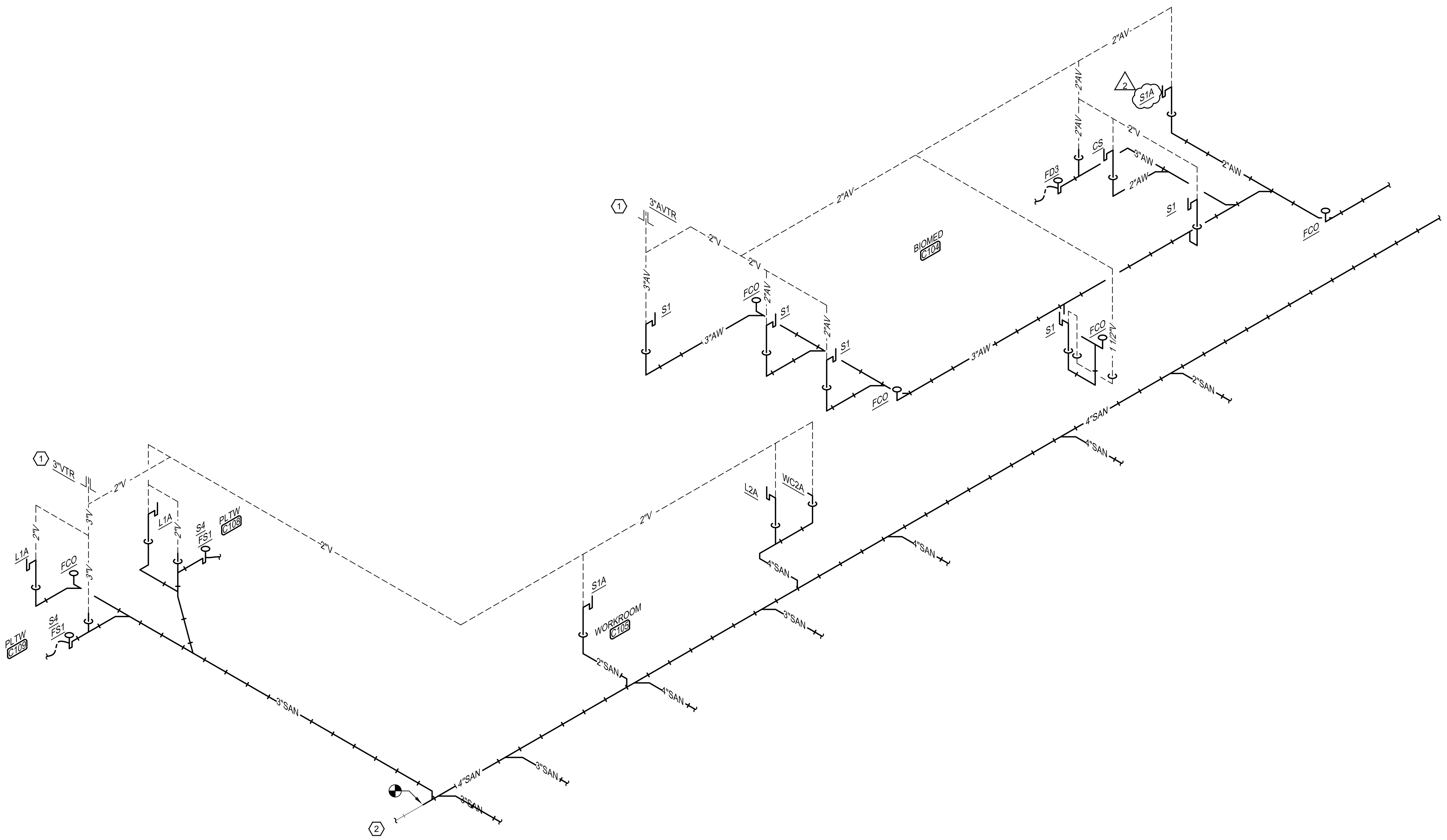
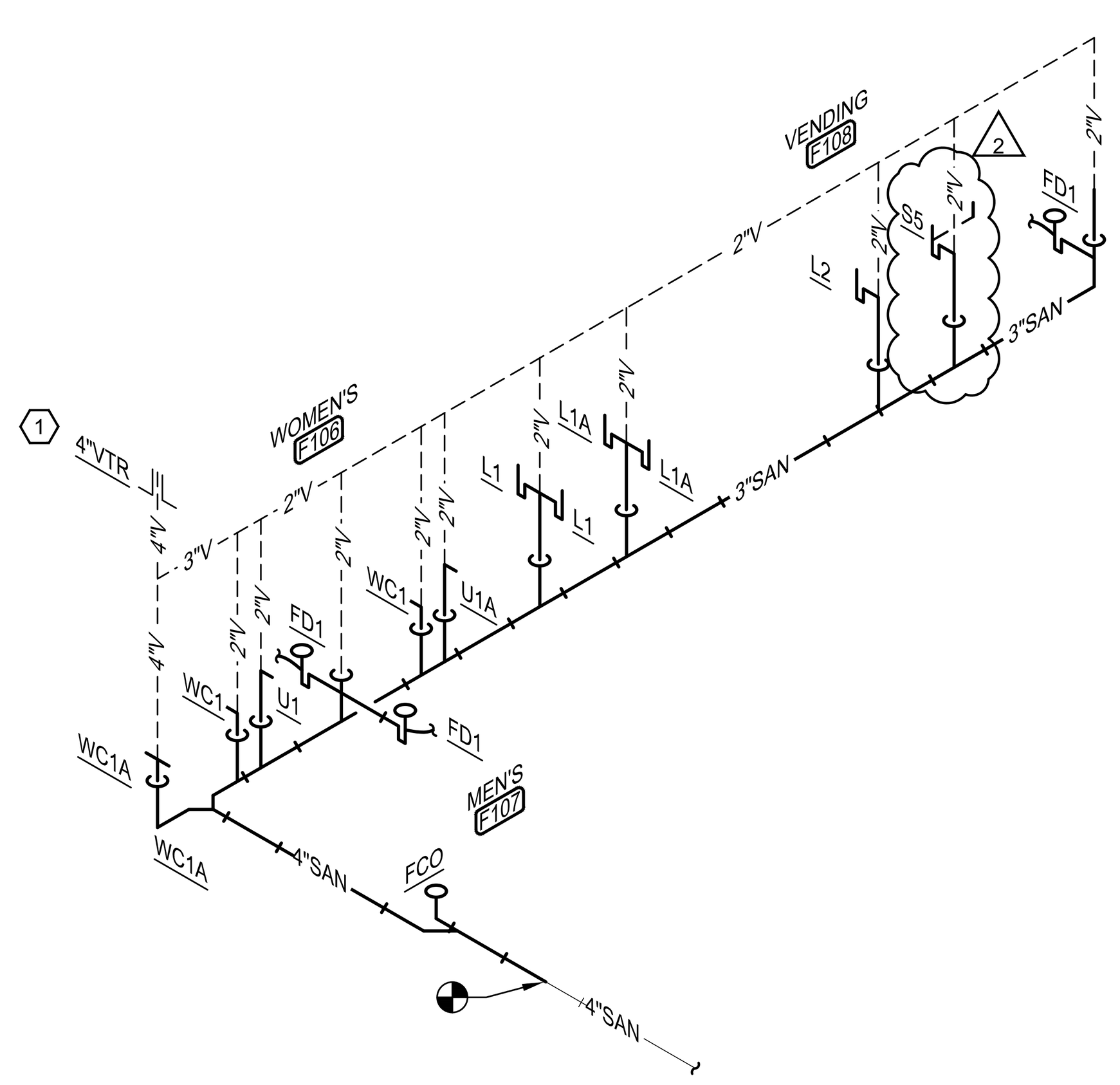
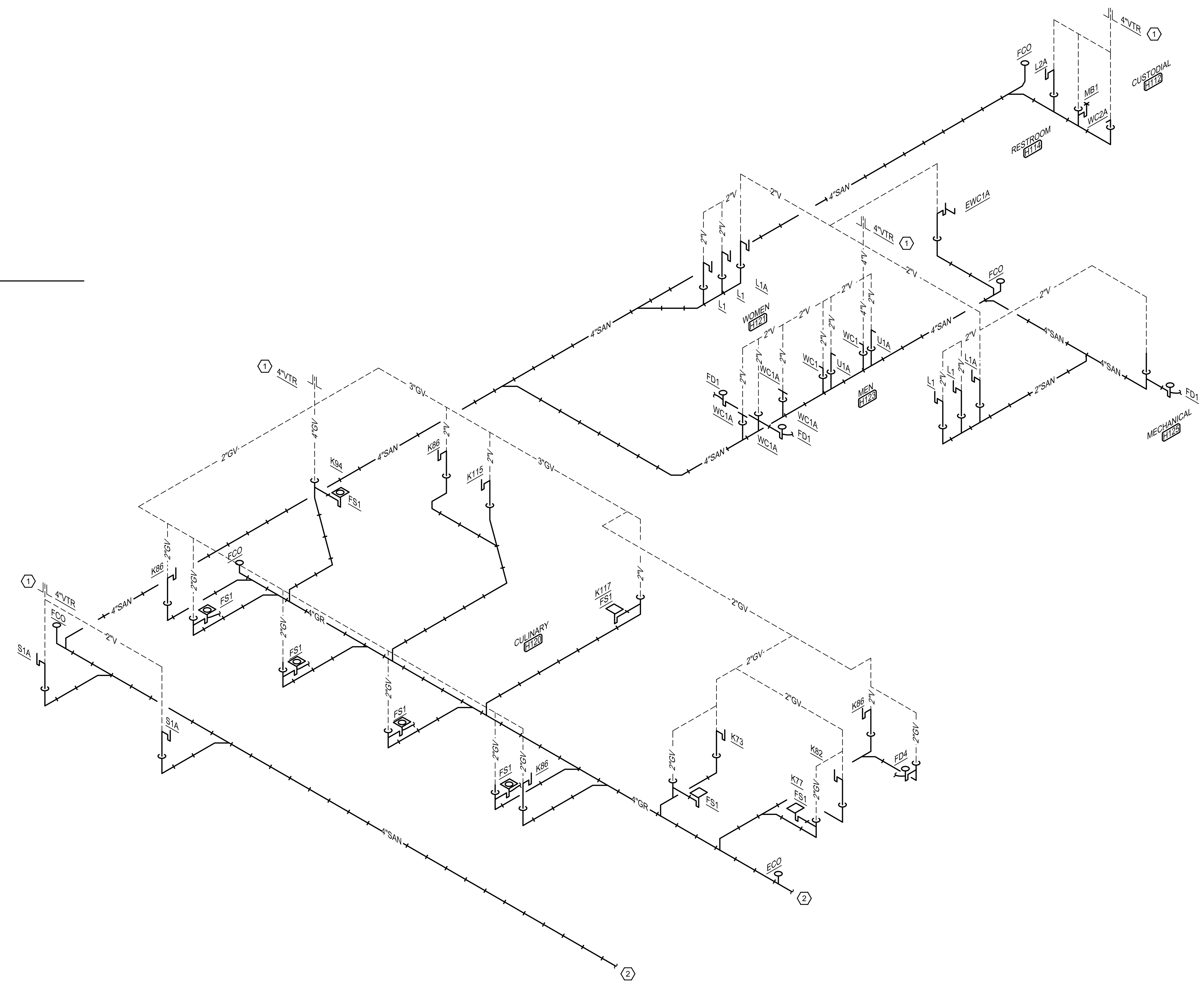


1 FIRST FLOOR - UNIT C - SANITARY SEWER RISER
NOT TO SCALE



2 FIRST FLOOR - UNIT F - SANITARY SEWER RISER
NOT TO SCALE



3 FIRST FLOOR - UNITS G&H - SANITARY SEWER RISER
NOT TO SCALE

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CERTIFIED BY:
NICHOLAS C. MORGAN
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No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
07/07/22

DRAWING NUMBER
P507

PROJECT NUMBER
2021026

DOMESTIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	RECOVERY AT 100°F RISE	STORAGE TANK	EXPANSION TANK #	RECIRCULATION PUMP #	NATURAL GAS MBH		ELECTRICAL			REMARKS
								INPUT	OUTPUT	V / Ø / Hz	MCA	MOCP	
DWH-1	LOCHNIVAR	ARMOR AWN650	-	772 GPH	DST-1 - DST-4	ET-1	RCP-1	650	637	120/1/60	6.8	15	ALL

REMARKS:
1. PROVIDE FACTORY MOUNTED JUNTCTION BOX FOR WIRING.
2. INLET GAS PRESSURE RANGE: 4" - 14" INCHES.
3. PROVIDE WITH ONE(1) SPARE IGNITER - TURN OVER TO OWNER.
4. PROVIDE WITH CONDENSATE NEUTRALIZATION KIT (PART # CN4-850) AND (2) FACTORY RECHARGE KITS (PART # 100295916)
5. AHRI CERTIFIED 98% THERMAL EFFICIENCY.
6. PROVIDE WITH VERTICAL NON METALLIC VENT OPTION KIT. CONNECT NEW VENT / COMBUSTION AIR PIPING TO EXISTING. REFER TO SHEETS M102 / M104 FOR DETAILS.
7. PROVIDED WITH ALL STAINLESS STEEL CIRCULATING PUMP FOR STORAGE TANK CIRCULATION. PUMP TO BE POWERED FROM WATER HEATER.
8. REFER TO DOMESTIC WATER HEATER PIPING SCHEMATIC.
9. REFER TO STORAGE TANK SCHEDULE FOR ASSOCIATED WATER STORAGE.

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: A.O. SMITH, STATE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

SUMP PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	FLOW (GPM)	HEAD (FT)	RPM	OUTLET SIZE (IN)	SUMP PIT DIMENSIONS		ELECTRICAL		REMARKS
								DIAMETER (IN)	DEPTH (IN)	HP	V / Ø / Hz	
SP-1, 2	WEIL	1412	ELEVATOR PIT	50	15	1750	1-1/2	24	18	1/2	115/1/60	2-6,8-10
SP-3A, 3B (DUPLEX)	WEIL	2533	MECHANICAL ROOM (EXISTING BASIN)	50	25	1750	2	32	60	2	460/3/60	1,3-7

REMARKS:
1. NEW SUMP PUMP(S) INSTALLED IN EXISTING BASIN. FIELD VERIFY BASIN DIMENSIONS AS REQUIRED PRIOR TO ORDERING.
2. NEW SUMP PUMP(S) INSTALLED IN NEW BASIN. PROVIDE FIBERGLASS BASIN INSERT.
3. PROVIDE WITH FACTORY DISCONNECT / MOTOR STARTER / POWER CORD ACCESSORY SHIPPED LOOSE FOR FIELD INSTALLATION BY ELECTRICAL CONTRACTOR. COORDINATE REQUIRED SCOPE WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.
4. PROVIDE WITH NEW FACTORY CONTROL PANEL WITH SECURITY AND BAS INTERLOCKS.
5. PROVIDE WITH FACTORY CHECK AND ISOLATION VALVE ASSEMBLY MOUNTED ABOVE SUMP LID.
6. PROVIDE WITH FACTORY SUMP PUMP REMOVAL SYSTEM WITH STAINLESS STEEL PIPING / GUIDE COMPONENTS. SYSTEM SHALL ALLOW COMPLETE REMOVAL OF SUMP PUMP(S) WITHOUT ENTERING THE BASIN.
7. PROVIDE WITH FACTORY METAL COVER. FIELD VERIFY SUMP PIT DIMENSIONS PRIOR TO ORDERING.
8. PROVIDE WITH FACTORY OIL-GUARD SYSTEM SUITABLE FOR USE IN AN ELEVATOR PIT.
9. PROVIDE WITH NEW ALUMINUM GRATE. FIELD VERIFY SUMP PIT DIMENSIOSN PRIOR TO ORDERING.
10. PROVIDE WITH FACTORY ON / OFF FLOAT SWITCH.

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: LIBERTY,ZOLLER. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	FLOW (GPM)	HEAD (FT)	RPM	CONNECTIONS		ELECTRICAL				REMARKS
							INLET	OUTLET	HP	V / Ø / Hz	MCA	MOCP	
RCP-1	TACO	0011-SF4	MECHANICAL ROOM	10	30	3250	1"	1"	1/6	115/1/60	5.5	15	ALL
RCP-2	TACO	0011-SF4	MECHANICAL ROOM	10	30	3250	1"	1"	1/6	115/1/60	5.5	15	ALL
RCP-3	TACO	0011-SF4	MECHANICAL ROOM	10	30	3250	1"	1"	1/6	115/1/60	5.5	15	ALL

REMARKS:
1. STAINLESS STEEL CASING WITH STAINLESS STEEL CARTRIDGE.
2. 100% LEAD FREE.
3. INSTALL WITH SHAFT IN A HORIZONTAL POSITION.

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: WILO, B&G, GRUNDFOS. REFER TO SPECIFICIATIONS FOR ADDITIONAL REQUIREMENTS.

EXPANSION TANK SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	TANK VOLUME (GAL)	ACCEPTANCE VOLUME	REMARKS
ET-1	AMTROL	ST-12	MECHANICAL ROOM	4.4	3.2	ALL

REMARKS:
1. 40 PSIG STANDARD FACTORY PRECHARGE
2. 150 PSIG PRESSURE RATING
3. 200°F. MAXIMUM ALLOWABLE WORKING TEMPERATURE
4. OTHER ACCEPTABLE MANUFACTURERS INCLUDE: WESSELS, WATTS.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	FLOW RANGE GPM	FLOW AT 5 PSIG DROP	OUTLET TEMP °F	CONNECTIONS	
							INLET	OUTLET
TMV-1	BRADLEY	S59-3080		0.5 - 88.0	26	115	3"	3"

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: POWERS, LEONARD, ACORN. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ACID DILUTION PIT SCHEDULE

MARK	MANUFACTURER	MODEL	DIMENSIONS	LOCATION	INLET/OUTLET CONNECTION	VENT CONNECTION	TANK VOLUME (GAL)	POUNDS OF FILL	NOTES
AD-1	SPEARS	LABWASTE - 300 GALLON	36"D x 74"H	EXTERIOR	4" / 4"	4"	300.0	3,200	ALL

REMARKS:
1. HDPE CONSTRUCTION.
2. ROUND VEHICULAR WEATHERPROOF TRAFFIC COVER
3. CONCRETE PAD:
   BASE: 6' x 6' x 8" WITH #5 BAR 12" CENTER EACH WAY
   COVER: 6' x 6' x 8" WITH #5 BAR 12" CENTER EACH WAY
   ANCHOR DILUTION TANK TO BASE PAD

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: SCHIER PRODUCTS CO., IPEX INC., TOWN AND COUNTRY PLASTICS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

DOMESTIC HOT WATER STORAGE TANK SCHEDULE

MARK	MANUFACTURER	MODEL	WORKING PRESSURE	TANK VOLUME (GAL)	TANK CONSTRUCTION	REMARKS
DST-1	LOCHNIVAR	LOCK-TEMP SJS119	150 PSI	119	STAINLESS STEEL	ALL
DST-2	LOCHNIVAR	LOCK-TEMP SJS119	150 PSI	119	STAINLESS STEEL	ALL
DST-3	LOCHNIVAR	LOCK-TEMP SJS119	150 PSI	119	STAINLESS STEEL	ALL
DST-4	LOCHNIVAR	LOCK-TEMP SJS119	150 PSI	119	STAINLESS STEEL	ALL

REMARKS:
1. LIGHT WEIGHT 316L STAINLESS STEEL TANK CONSTRUCTION.
2. PROVIDE WITH TEMPERATURE & PRESSURE RELIEF VALVE.
3. 10 YEAR LIMITED TANK WARRANTY.
4. INSULATED WITH POLYEURETHANE FOAM - R-16.

OTHER ACCEPTABLE MANUFACTURERS INCLUDE: A.O. SMITH, STATE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

GREASE INTERCEPTOR SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	DIMENSIONS LxWxD	INLET/ OUTLET (IN)	WEIGHT (LBS)	REMARKS
GT-1	OLDCASTLE	SGI-1000	EXTERIOR	120"X48"X60"	4"	21,600	ALL
GT-2	OLDCASTLE	SGI-1000	EXTERIOR	120"X48"X60"	4"	21,600	ALL

REMARKS:
1. INSTALL OUTSIDE BUILDING AS SHOWN AND DETAILED ON PLANS
2. LIFETIME WARRANTY
3. H20 RATED GAS/WATER TIGHT COVERS
4. REFERENCE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR CONCRETE SLAB REQUIREMENTS.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL / TYPE	TRIM	CW	HW	TRAP	WASTE	VENT	MOUNTING	REMARKS	OTHER ACCEPTABLE MANUFACTURERS
WC1 / WC1A	AMERICAN STANDARD	2257.101 WATER CLOSET	FLUSH VALVE: AMERICAN STANDARD 6067.161.002 SEAT: AMERICAN STANDARD 5901.100	1"	---	INTEGRAL	4"	2"	WALL HUNG: WC1 - RIM 15" WC1A - RIM 17"	ADA COMPLIANT, ELONGATED BOWL, BACK SPUD, 1.6G AC SENSOR FLUSH VALVE, HEAVY DUTY OPEN FRONT SEAT LESS COVER, WITH CARRIER	ZURN, SLOAN, KOHLER, CRANE
WC2 / WC2A	AMERICAN STANDARD	2257.101 WATER CLOSET	FLUSH VALVE: AMERICAN STANDARD 6047.161.002 SEAT: AMERICAN STANDARD 5901.100	1"	---	INTEGRAL	4"	2"	WALL HUNG: WC1 - RIM 15" WC1A - RIM 17"	ADA COMPLIANT, ELONGATED BOWL, TOP SPUD, 1.6G MANUAL FLUSH VALVE, HEAVY DUTY OPEN FRONT SEAT LESS COVER, WITH CARRIER	ZURN, SLOAN, KOHLER, CRANE
U1 / U1A	AMERICAN STANDARD	6590.001 URNIAL	FLUSH VALVE: AMERICAN STANDARD 6068.101.002 POWER KIT: PK00.HAC	3/4"	---	INTEGRAL	2"	2"	WALL HUNG: U1 - LIP 24" U1A - LIP 17"	TOP SPUD, 1.0G AC SENSOR FLUSH VALVE, WITH CARRIER	ZURN, SLOAN, KOHLER, CRANE
L1/L1A	AMERICAN STANDARD	0355.012 ADA LAVATORY	FAUCET: AMERICAN STANDARD 6056.202 TRIM: 605XTMV1070 MIXING VALVE AND HOSE, CHROME PLATED GRID DRAIN, LOOSE KEY OPERATED SUPPLY STOPS, ADA COMPLIANT INSULATION WRAP.	1/2"	1/2"	1-1/4"	2"	2"	WALL HUNG: RIM 34"	20-1/2 " X 18-1/4", VITREOUS CHINA, 4" CENTERS, BACK AND SIDE SPLASH, HEAVY DUTY CONCEALED ARM CARRIERS, 1.5 GPM PLUG IN AC POWERED ELECTRONIC PROXIMITY FAUCET.	ZURN, SLOAN, KOHLER, CRANE, MOEN, DELTA, T&S
L2/L2A	AMERICAN STANDARD	0355.012 ADA LAVATORY	FAUCET: AMERICAN STANDARD 7385.003 TRIM: CHROME PLATED GRID DRAIN, LOOSE KEY OPERATED SUPPLY STOPS, ADA COMPLIANT INSULATION WRAP.	1/2"	1/2"	1-1/4"	2"	2"	WALL HUNG: RIM 34"	20-1/2 " X 18-1/4", VITREOUS CHINA, 4" CENTERS, BACK AND SIDE SPLASH, HEAVY DUTY CONCEALED ARM CARRIERS, SINGLE HANDLE FAUCET	ZURN, SLOAN, KOHLER, CRANE, MOEN, DELTA, T&S
S1	SPECIFIED BY ARCHITECT	SINGLE COMPARTMENT EPOXY SINK	FAUCET: AMERICAN STANDARD 6540.170 TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	WITH CASEWORK	OFF-CENTER REAR DRAIN, 3 HOLE PUNCH, WRIST BLADE HANDLE GOOSE NECK FAUCET	N/A
S1A	ELKAY	LRADQ 2219553 SINGLE COMPARTMENT SINK	FAUCET: AMERICAN STANDARD 6540.170 TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	COUNTER SET	18" X 14 X 5-1/2" INSIDE BOWL, #18 GAUGE 304 STAINLESS STEEL, OFF-CENTER REAR DRAIN, 3 HOLE PUNCH, WRIST BLADE HANDLE GOOSE NECK FAUCET	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA,T&S
S2	ELKAY	WNSF81362 SINGLE COMPARTMENT SCULLERY SINK	FAUCET: ELKAY LK940BR07T6H TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	FLOOR SET	36" x 24" x 14" INSIDE BOWL, #14 GAUGE 304 STAINLESS STEEL, CENTER DRAIN, 2 HOLE PUNCH	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA,T&S
S2A	ELKAY	LRAD291855 ADA TWO COMPARTMENT SINK	FAUCET: AMERICAN STANDARD 4205.001 TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	COUNTER SET	12" X 12" X 5-1/2" INSIDE BOWLS, #18 GAUGE 304 STAINLESS STEEL, OFF-CENTER REAR DRAIN, 3 HOLE PUNCH, SINGLE HANDLE FAUCET	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA,T&S
S3A	ELKAY	LRAD291855 ADA TWO COMPARTMENT SINK	FAUCET: AMERICAN STANDARD 4205.001 TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	COUNTER SET	#18 GAUGE 304 STAINLESS STEEL, OFF-CENTER REAR DRAIN, 4 HOLE PUNCH, SINGLE HANDLE FAUCET W/ HAND SPRAY	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA,T&S
S4	ELKAY	WNSF83604 THREE COMPARTMENT SINK	FAUCET: ELKAY LK940HA10T6S TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	FLOOR SET	20"X24"X14" INSIDE BOWLS, #14 GAUGE 304 STAINLESS STEEL, CENTER DRAIN, 4 HOLE PUNCH	
S5	ELKAY	WNSF83604 TWO COMPARTMENT SINK	FAUCET: ELKAY LK940HA10T6S TRIM: CHROME PLATED GRID STRAINER, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	FLOOR SET	20"X24"X14" INSIDE BOWLS, #14 GAUGE 304 STAINLESS STEEL, CENTER DRAIN, 4 HOLE PUNCH	JUST, AMERICAN STANDARD, KOHLER, MOEN, DELTA,T&S
MB1	FIAT	TSB100 TERRAZZO MOP SINK	FAUCET: 830AA WITH VACUUM BREAKER TRIM: 832AA HOSE AND HANGER, M5G WALL GUARDS	3/4"	3/4"	3"	3"	2"	FLOOR SET	24" X 24" X 12", STAINLESS STEEL CAPS ON ALL SIDES, ACCESSIBLE CHECK VALVES ON SUPPPLIES	STERN WILLIAMS, MUSTEE
EWC1	ACORN	172108F-UBL-BF2 ADA HI-LO WATER COOLER & BOTTLE FILLER	TRIM: CSC3 CONCEALED ARM SUPPORT, SK5 SKIRT KIT, BAT BATTERY OPERATED, CHROME P-TRAP	1/2"	---	1-1/4"	2"	2"	WALL HUNG: SPOUT 34" / 40"	SENSOR OPERATED BOTTLE FILLER, 8 GPH OF CHILLED WATER, GRANITE FINISH, FLEXIBLE BUBBLER.	ELKAY, OASIS, HALSEY TAYLOR, MURDOCK
SH1	ACORN	458B SURFACE MOUNTED SHOWER	TRIM: T/P BALANCING MIXING VALVE, -LVR LEVER HANDLE, -T TOP SUPPLY, -SC SUPPLY COVER	1/2"	1/2"	---	---	---	SURFACE WALL HUNG: HEAD - 78"	LIGATURE RESTISTANT TRI-LEVER HANDLES	BRADLEY, SYMMONS, DELTA
SH1A	ACORN	458BADA SURFACE MOUNTED HAND SPRAY SHOWER	TRIM: T/P BALANCING MIXING VALVE, -LVR LEVER HANDLE, -T TOP SUPPLY, -SB SLIDE BAR, -SC SUPPLY COVER, SERIES 1103 ALL STAINLESS STEEL, FOLD DOWN SEAT	1/2"	1/2"	---	---	---	SURFACE WALL HUNG: CONTROLS - 48"	ADA TRI-LEVER HANDLES, REMOVABLE HAND SPRAY ON SLIDE BAR, SEAT	BRADLEY, SYMMONS, DELTA
EWS1	ACORN	S1310 PEDESTAL MOUNTED EYE WASH AND SHOWER	TRIM: TMV33 THERMOSTATIC MIXING VALVE	3/4" TO TMV33	3/4" TO TMV33	1-1/4"	1-1/4"	2"	PEDESTAL FLOOR SET	1-1/4" TEMPERED WATER FROM VALVE TO SHOWER. 1/2" TEMPERED WATER TO EYE WASH.	BRADLEY, SPEAKMAN
HB1	MURDOCK	8121-LF BENT NOSE HOSE BIBB	WITH VACUUM BREAKER & REMOVABLE LOOSE KEY HANDLE	3/4"	---	---	---	---	18" AFF	WITH FLANGE	WOODFORD, ZURN , MIFAB
FPWH1	WOODFORD	B67	EXTERIOR FREEZE PROOF WALL HYDRANT	3/4"	---	---	---	---	36" AFG	WITH VACUUM BREAKER AND LOACKABLE BOX	WOODFORD, ZURN , MIFAB
WB1	SIOUX CHIEF	696-2333XF WASHING MACHINE OUTLET BOX	TRIM: VALVES WITH SLOTTED SHUT-OFF WITH ARRESTORS	1/2"	1/2"	1-1/4"	2"	2"	48" AFF	FIRE RATED, WITH FRAME, SUPPLY CONNECTION TYPE BY CONTRACTOR	ZURN, GUY GRAY, OATEY, JAY R SMITH
IMB1	SIOUX CHIEF	696G1010XF ICE MAKER OUTLET BOX	TRIM: NO LEAD VALVES, WITH ARRESTORS	1/2"	---	---	---	---	48" AFF	FIRE RATED, WITH FRAME, SUPPLY CONNECTION TYPE BY CONTRACTOR	ZURN, GUY GRAY, OATEY, JAY R SMITH
CMB1	SIOUX CHIEF	696G1010XF COFFEE MAKER OUTLET BOX	TRIM: NO LEAD VALVES, WITH ARRESTORS	1/2"	---	---	---	---	48" AFF	FIRE RATED, WITH FRAME, SUPPLY CONNECTION TYPE BY CONTRACTOR	ZURN, GUY GRAY, OATEY, JAY R SMITH
ETP1	PRECISION PLUMBING PRODUCTS	PTS-X SURFACE MOUNTED ELECTRONIC TRAP PRIMER	WITH ACCESS PANEL, COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.	3/4"	---	---	---	---	SURFACE MOUNT: TOP 60" AFF	NUMBER OF OUTLETS AS TO NUMBER OF DRAINS BEING SERVED. ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAPS PRIMED.	
ETP2	PRECISION PLUMBING PRODUCTS	MPB-5000115V PLUG IN ELECTRONIC TRAP PRIMER	CORD AND PLUG	1/2"	---	---	---	---	SURFACE MOUNT: TOP 24" AFF	NUMBER OF OUTLETS AS TO NUMBER OF DRAINS BEING SERVED. ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAPS PRIMED.	
TP	PRECISION PLUMBING PRODUCTS	PRO1-500, PRO1-ULP500. PR500	MODEL VARIES WITH INSTALLTION LOCATION AND CONDITION. INSTALLTION SHALL BE TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS..	1/2"	---	---	---	---	ON COLD WATER SUPPLY	NUMBER OF OUTLETS AS TO NUMBER OF DRAINS BEING SERVED. ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAPS PRIMED.	WATTS, SIOUX CHIEF, MIFAB
FD1	JOSAM	30004-A FLOOR DRAIN / RESTROOM FLOOR DRAIN	7" SATIN FINISH BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION	1/2"	---	---	3"	---	FLUSH IN FLOOR	TRAP PRIMER PIPING MAY BE PEX TYPE.	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
FD2	JOSAM	30004-A FLOOR DRAIN / MECHANICAL ROOM FLOOR DRAIN	7" SATIN FINISH BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION	1/2"	---	---	4"	---	FLUSH IN FLOOR	TRAP PRIMER PIPING MAY BE PEX TYPE.	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
FD3	JOSAM	30004-A FLOOR DRAIN / EMERGENCY SHOWER FLOOR DRAIN	7" SATIN FINISH BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION, ACID RESISTANT EPOXY	1/2"	---	---	3"	---	FLUSH IN FLOOR	TRAP PRIMER PIPING MAY BE PEX TYPE.	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
FD4	JOSAM	32104 FLOOR DRAIN / KITCHEN FLOOR DRAIN	9" DUCTILE IRON STRAINER, 1/2" PRIMER CONNECTION, SEDIMENT BUCKET, 4" FUNNEL ASSEMBLY (F-SUFFIX)	1/2"	---	---	4"	---	FLUSH IN FLOOR	INSTALL FUNNEL ON FLOOR DRAIN GRATE WHERE NOTED. COORDINATE ALL CONDENSATE AND T&P RELIEF DISCHARGE PIPING WITH FUNNEL	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
SD1	ZURN	Z415S FLOOR DRAIN	SHOWER DRAIN, DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, "TYPE S" POLISHED NICKEL BRONZE, SQUARE HEEL-PROOF STRAINER	---	---	---	2"		FLUSH IN FLOOR		WATTS, JAY R SMITH, MIFAB, WADE
FS1	JOSAM	49324A-LF FLOOR SINK	CAST IRON BODY WITH ACID RESTITANT EPOXY COATED INTERIOR, LESS FLANGE, 3/4 GRATE	---	---	---	4"	---	RIM 1" AFF	TRAP PRIMER PIPING MAY BE PEX TYPE.	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
CS1	SPECIFIED BY ARCHITECT	FUME HOOD CUP SINK	INTEGRAL TO FUME HOOD	---	---	1-1/2"	1-1/2"	1-1/2"	CASEWORK	ARCHITECT TO APPROVE ALL LOCATIONS AND ELEVATIONS	N/A
CRD1	FROET	100C-LP COMBINATION ROOF DRAIN	15" CAST IRON DOME, OTHER OPTIONS AS NECESSARY FOR INSTALLATION.	---	---	---	(2) 4"	---	FLUSH IN ROOF	INSULATE ROOF DRAIN BODY.	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
DSN1	JOSAM	2501 DOWN SPOUT NOZZEL	POLISHED BRONZE BODY, REMOVABLE STAINLESS STEEL SCREEN	---	---	---	VARIES	---	VARIES	ARCHITECT TO APPROVE ALL LOCATIONS AND ELEVATIONS	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
AP	JR SMITH	4760 ACCESS PANEL	12"X12" VANDAL RESISTANT ACCESS PANEL.	---	---	---	---	---	VARIES	ARCHITECT TO APPROVE ALL LOCATIONS AND ELEVATIONS	WATTS, JAY R SMITH, MIFAB, WADE, ZURN
FCO	JOSAM	55000-1-Y INTERIOR CLEANOUT	COATED CAST IRON BODY, WITH SATIN FINISH NIKALOY TOP	---	---	---	2"-4"	---	FLOOR	LINE SIZE UP TO 4", 4" MAXIMUM. COORDINATE FLOOR TYPE WITH ARCH. DRAWINGS. COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	FCO: WADE, ZURN
ECO	JOSAM	55000-Y HEAVY DUTY EXTERIOR CLEANOUT	COATED CAST IRON	---	---	---	2"-4"	---	GROUND	LINE SIZE UP TO 4", 4" MAXIMUM. COORDINATE FLOOR TYPE WITH ARCH. DRAWINGS. COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	FCO: WADE, ZURN
WCO	JOSAM	58600-CO-VP WALL CLEANOUT	D.C.C.I. BODY GAS/WATER TIGHT TAPERED THREAD PLUG, ROUND STAINLESS STEEL ACCESS COVER WITH SECURING SCREW	---	---	---	2"-4"	---	WALL	LINE SIZE UP TO 4", 4" MAXIMUM. COORDINATE FLOOR TYPE WITH ARCH. DRAWINGS. COLOR/FINISH SHALL BE SELECTED BY ARCHITECT.	WCO: WADE, ZURN
OR	JOSAM	88210 DEEP SEAL TRAP	1/2" THREADED CONNECTION, INTERNAL BUCKET, CLEANOUT WITH BRONZE PLUG	1/2"	---	---	3"	1-1/2"	VARIES	INSTALL IN ACCESSIBLE LOCATION WITH AP ACCESS PANELS. ROUTE CONDENSATE AND DISCHARGE PIPING TO SPILL INTO OPENING.	---
SF1	T&S BRASS	BL-5709-08WH4-VR FAUCET BL-4200-0 HOSE COCK	TRIM: LOOSE KEY OPERATED SUPPLY STOPS, QUARTER TURN CARTRIDGE WITH CHECK VALVES.	1/2"	---	--	FBO	---	DECK MOUNTED	FAUCET: ADA COMPLIANT, 4" WRISTBLADE HANDLES, SERRATED TIP OUTLET, VACUUM BREAKER HOSE COCK: 2 SERRATED TIP OUTLETS AT 90 DEG.	CHICAGO, SPEAKMAN

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SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of construction required for the building shell.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the construction required.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

1	ADDENDUM #1	07-28-2022
2	ADDENDUM #2	08-04-2022

ISSUE DATE	DRAWN BY	CHECKED BY
07-08-2022	BMS	JAT

DRAWING TITLE:
PLUMBING SCHEDULES

CERTIFIED BY:
NICHOLAS C. MORAN
REGISTERED
No. PE10607183
STATE OF INDIANA
PROFESSIONAL ENGINEER
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