R.E. Dimond and Associates, Inc.
Consulting Engineers

ADDENDUM NO. 1

Brownsburg Community School Corporation
White Lick ES Central Plant Equipment Installation

DATE: March 13, 2023

Daniel J Ulrich, PE

This Addendum issued prior to bidding, alters, amends, corrects or clarifies the Proposal Documents to the extent stated herein and does hereby become a part of the Proposal Documents, and will become a part of the Contract Documents of the successful bidder.

GENERAL

A. GENERAL (N/A)

B. SPECIFICATIONS (N/A)

C. DRAWINGS

1. Drawing: Title Sheet

1) Updated to reflect Structural Plan – see Structural below.

ARCHITECTURAL (N/A)

STRUCTURAL

A. SPECIFICATIONS (N/A)

B. DRAWINGS

1. Drawing: S101 – Chiller Support Framing Plan and Details
   a. Sheet Added to Set.

PLUMBING

A. SPECIFICATIONS (N/A)

B. DRAWINGS (N/A)

MECHANICAL

A. SPECIFICATIONS (N/A)

B. DRAWINGS

1. Drawing M301 – Enlarged Plan - Mechanical
   a. Revise Chiller location and extend piping as indicated.

ELECTRICAL

A. SPECIFICATIONS (N/A)

B. DRAWINGS

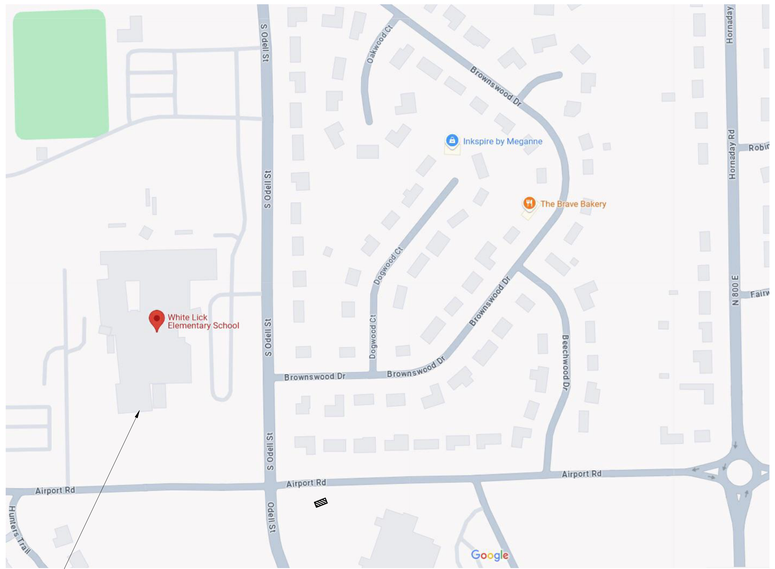
1. Drawing E301 – Mechanical Room Plan - Electrical
   a. Revise Chiller location and extend electrical branch circuit as indicated.

END OF ADDENDUM

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION

1400 S ODELL STREET, BROWNSBURG, IN 46112

CONSTRUCTION DOCUMENTS
03/06/2025



PROJECT LOCATION

DRAWING INDEX	
GENERAL	
T1	TITLE SHEET
STRUCTURAL	
S101	CHILLER SUPPORT FRAMING PLAN AND DETAILS
PLUMBING	
PM001	SYMBOLS, ABBREVIATIONS, & GENERAL NOTES - PLUMBING AND MECHANICAL
PD301	ENLARGED PLAN - PLUMBING DEMOLITION
P301	ENLARGED PLAN - PLUMBING
MECHANICAL	
MD301	ENLARGED PLAN - MECHANICAL DEMOLITION
M301	ENLARGED PLAN - MECHANICAL
M401	DETAILS - MECHANICAL
M601	SCHEDULES - MECHANICAL
M701	CONTROLS - GENERAL
M702	CONTROLS - CHILLED WATER
M703	CONTROLS - HEATING WATER
ELECTRICAL	
E001	SYMBOLS, ABBREVIATIONS, & GENERAL NOTES - ELECTRICAL
ED301	MECHANICAL ROOM PLAN - ELECTRICAL DEMOLITION
E301	MECHANICAL ROOM PLAN - ELECTRICAL
E401	DETAILS - ELECTRICAL
E601	SCHEDULES & ONE-LINE DIAGRAM - ELECTRICAL

OWNER

Brownsburg Community School Corporation
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MECHANICAL/ELECTRICAL/PLUMBING ENGINEER

R.E. Dimond and Associates, Inc.
Consulting Engineers

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D&A #24128

WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION - BROWNSBURG COMMUNITY SCHOOL CORPORATION

D&A #24128

GENERAL NOTES

1. The Contractor shall be responsible for complying with all safety precautions and regulations during the work. The SER will not advise on, nor issue direction as to safety precautions and programs.
2. The Structural Drawings herein represent the finished structure. The Contractor shall provide all temporary guying and bracing required to erect and hold the structure in proper alignment until all Structural Work and connections have been completed. The investigation, design, safety, adequacy and inspection of the bracing, shoring, temporary supports, etc. is the sole responsibility of the Contractor.
3. The SER shall not be responsible for the methods, techniques and sequences of procedures to perform the Work. The supervision of the Work is the sole responsibility of the Contractor.
4. The Drawings indicate general and typical details of construction. Where conditions are not specifically shown, similar details of construction shall be used, subject to approval of the SER.
5. All structural systems which are to be composed of components to be field erected shall be supervised by the Supplier during manufacturing, delivery, handling, storage, and erection in accordance with the Supplier's instructions and requirements.
6. Loading applied to the structure during the process of construction shall not exceed the safe load-carrying capacity of the structural members. The live loads used in the design of this structure are indicated in the "Design Criteria Notes." Do not apply any construction loads until structural framing is properly connected together and until all permanent bracing is in place.
7. All ASTM and other referenced standards and codes are for the latest editions of these publications, unless noted otherwise.
8. Shop drawings and other items shall be submitted to the SER for review prior to fabrication. All Shop Drawings shall be reviewed by the Contractor before submittal. The SER's review is to be for conformance with the design concept and general compliance with the relevant Contract Documents. The SER's review does not relieve the Contractor of the sole responsibility to review, check, and coordinate the Shop Drawings prior to submission. The Contractor remains solely responsible for errors and omissions associated with the preparation of Shop Drawings as they pertain to member sizes, details, dimensions, etc.
9. Submit Shop Drawings electronically. In no case shall reproductions of the Contract Documents be used as Shop Drawings. As a minimum, submit the following items for review.
   A. Structural Steel Shop Drawings
10. Resubmitted Shop Drawings: Resubmitted shop drawings are reviewed only for responses to comments made in the previous submittal.
11. When calculations are included in the submittals for components of work designed and certified by a Specialty Structural Engineer, the review by the Structural Engineer of Record (SER) shall be for conformance with the relevant Contract Documents. The SER's review does not relieve the Specialty Structural Engineer from responsibility for the design of the system(s) and the coordination with the elements of the structure under the certification of the Engineer of Record, or other Specialty Structural Engineer. The SER's review does not constitute a warranty of the accuracy or completeness of the Specialty Structural Engineer's design.
12. Contractors shall visit the site prior to bid to ascertain conditions which may adversely affect the work or cost thereof.
13. No structural member may be cut, notched, or otherwise reduced in strength without written direction from the SER.
14. When modifications are proposed to structural elements under the design and certification of a Specialty Engineer, written authorization by the Specialty Engineer must be obtained and submitted to the SER for review, prior to performing the proposed modifications.

EXISTING CONSTRUCTION

1. The contractor shall field verify the dimensions, elevations, etc. necessary for the proper construction and alignment of the new portions of the work to the existing work. The Contractor shall make all necessary measurements for fabrication and erection of the structural members. Any discrepancy shall be immediately brought to the attention of the Engineer of Record.
2. Before proceeding with any work within the existing facility, the Contractor shall familiarize himself with existing structural and other conditions. Any shoring shown or noted on the Plans is a partial and schematic representation of that required. It shall be the Contractor's responsibility to provide all necessary bracing, shoring, and other safeguards to maintain all parts of the work in a safe condition during the progress of demolition and construction, and to protect from damage those portions of the existing work which are to remain. Shoring shall remain in place until the structural work is complete, has been inspected by the Testing Agency, and is certified to be in substantial compliance with the Contract Documents.
3. When required by the Specifications or by Plan Note, the Contractor shall submit for the Engineer of Record's review, a "Proposed Shoring Plan," including, but not limited to: plans, sections, details, notes, description of proposed sequence of work, and calculations prepared by, or under the supervision of a Professional Engineer (Specialty Engineer). The Specialty Engineer shall be registered in the State where the project is located.
4. Welding to and within an existing facility presents potential hazards including:
   A. Fire Hazard - Due to the existing construction and building contents.
   B. Structural Liquefaction - Due to welding across the full section of the structural members.

   Recommendations to prevent these hazards include:
   A. Fire Hazard - Protect existing combustibles prior to welding. Keep a separate watchman and several fire extinguishers on hand.
   B. Structural Liquefaction - weld in small increments. Allow welds to harden before continuing to the next increment.
   C. Do not leave the site until satisfied that no fire hazard exists.
   D. Preference should be given to the use of beam clamps, mechanical fasteners, or bolted connections in lieu of welding within existing facilities, whenever possible. Do not field-drill existing structural members without the written permission of the Engineer of Record.

COORDINATION WITH OTHER TRADES

1. The Contractor shall coordinate and check all dimensions relating to Architectural finishes, mechanical equipment and openings, elevator shafts and overrides, etc. and notify the Architect/Engineer of any discrepancies before proceeding with any work in the area under question.
2. The Structural Drawings shall be used in conjunction with the Drawings of all other disciplines and the Specifications. The Contractor shall verify the requirements of other trades as to sleeves, chases, hangers, inserts, anchors, holes, and other items to be placed or set in the Structural Work.
3. There shall be no vertical or horizontal sleeves set, or holes cut or drilled in any beam or column unless shown on the Structural Drawings or approved in writing by the SER.
4. Mechanical and electrical openings through supported slabs and walls, 8" diameter or larger not shown on the Structural Drawings must be approved by the SER. Openings less than 8" diameter shall have at least 1'-0" clear between openings, unless approved in writing by the SER.
5. Verify locations and dimensions of mechanical and electrical openings through supported slabs and walls shown on the Structural Drawings with the Mechanical and Electrical Contractors.
6. Do not install conduit in supported slabs, slabs on grade, or concrete walls unless explicitly shown or noted on the Structural Drawings.
7. Do not suspend any items, such as ductwork, mechanical or electrical fixtures, ceilings, etc. from steel roof deck or wood roof sheathing.
8. The Mechanical Contractor shall verify that mechanical units supported by steel framing are capable of spanning the distance between the supporting members indicated on the Structural Drawings. The Mechanical Contractor shall supply additional support framing as required.
9. If the Drawings and Specifications are in conflict, the most stringent restrictions and requirements shall govern.

LINTEL SCHEDULE

1. Where lintels are not specifically shown or noted on the Structural or Architectural Drawings, provide the following lintels over all openings and recesses in both interior and exterior non-load-bearing walls.

A) Brick:

Masonry Opening	Angle Size
Up to 5'-0"	L4x4x5/16
5'-1" to 7'-0"	L6x4x5/16
7'-1" to 12'-0"	L7x4x3/8

All angles are LLV (long leg vertical) unless noted otherwise. Provide 1" bearing length per foot of span each end with minimum 8".

B) Block: For openings up to 8'-0" long exposed in the finished room, use lintel block filled with grout. Grout all exposed joints and reinforce as follows:
   1. For 8" thick block: 1 - #5 bar.
   2. For 8" thick block: 2 - #5 bars.
   3. For 10" thick block: 2 - #6 bars.
   4. For 12" thick block: 2 - #6 bars.

C) Block: For openings between 8'-1" & 12'-0" long exposed in the finished room, use lintel block filled with grout. Grout all exposed joints and reinforce per the "Long Masonry Lintel Detail" on the Typical Detail Drawings.

D) Shore all block and steel angle lintels over 8'-0" in length until masonry has attained its specified design strength.

DESIGN CRITERIA

1. DESIGN STANDARDS: The intended design standards and/or criteria are as follows:

General	The 2014 Indiana Building Code (2012 International Building Code [IBC] with Indiana Amendments)
Concrete	ACI318
Masonry	ACI 530 / TMS 402
Steel	AISC Manual, Allowable Stress Design (ASD)
Steel Joists/Girders	Steel Joist Institute
Steel Deck	Steel Deck Institute
Cold-Formed Metal	AISI-ASD

All referenced standards and codes, as well as ASTM numbers are for the latest editions of these publications, unless otherwise noted.

2. DEAD LOADS: Gravity Dead Loads used in the design of the structure are as computed for the materials of construction incorporated into the building, including but not limited to walls, floors, ceilings, stairways, fixed partitions, finishes, cladding and other similar architectural and structural items, as well as mechanical, electrical and plumbing equipment and fixtures, and material handling and fixed service equipment, including the weight of cranes.

3. ROOF LIVE / SNOW LOADS: Gravity Live Loads used in the design of the roof structure meet or exceed the following table:

A. Snow Load	
Ground Snow Load, p_g	20 PSF
Flat Roof Snow Load, p_f	15.4 PSF
Low-Slope Minimum Roof Snow Load, p_m	22 PSF
Snow Exposure Factor, C_e	1.0
Risk Category (IBC 2012, Table 1604.5)	III
Snow Importance Factor, I_s	1.1
Thermal Factor, C_t	1.0
B. Minimum Roof Live Load	20 PSF
C. Overhanging Eaves, Canopies & Projections	30 PSF

   1. Drift loads calculated in accordance with Section 7.7, ASCE 7. Specialty Engineers must consider snow drift loads in the design of pre-engineered trusses, frames, skylights, curtain walls, cold-formed metal framing, canopies, etc.

4. LATERAL LOADS: Lateral loads were computed using the following criteria:

A. Wind Load	
Ultimate Design Wind Speed, V_{ult}	120 MPH
Nominal Design Wind Speed, V_{asd}	93 MPH
Wind Exposure Category	C
Risk Category (IBC 2012, Table 1604.5)	III
Internal Pressure Coefficient, GC_{pi}	+/- 0.18
B. Seismic Load	
Site Class	D (assumed)
Risk Category (IBC 2012, Table 1604.5)	III
Seismic Importance Factor, I_e	1.25
Mapped Spectral Response Acceleration Parameter, S_S	0.166g
Mapped Spectral Response Acceleration Parameter, S_1	0.088g
Design Spectral Response Acceleration Parameter, S_{DS}	0.177g
Design Spectral Response Acceleration Parameter, S_{D1}	0.141g
Seismic Design Category, SDC	C
Analysis Procedure	Equivalent Lateral Force

5. SAFETY FACTORS: This structure has been designed with 'Safety Factors' in accordance with accepted principles of structural engineering. The fundamental nature of the 'Safety Factor' is to compensate for uncertainties in the design, fabrication, and erection of structural building components. It is intended that 'Safety Factors' be used such that the load-carrying capacity of the structure does not fall below the design load and that the building will perform under design load without distress. While the use of 'Safety Factors' implies some excess capacity beyond design load, such excess capacity cannot be adequately predicted and SHALL NOT BE RELIED UPON.

STRUCTURAL STEEL NOTES

1. Structural steel construction shall conform to the American Institute of Steel Construction "Specification for Structural Steel Buildings".
2. All structural wide flange members and channels shall be ASTM A992, Fy = 50 ksi.
3. All plates, bars, angles, and rods shall be ASTM A572, Grade 50 unless noted.
4. All rectangular and square structural tube members shall be ASTM A500, Grade C, Fy = 50 ksi unless noted.
5. All round structural tube members shall be ASTM A500, Grade C, Fy = 46 ksi unless noted.
6. Details for design, fabrication and erection of all structural steel shall be in accordance with the latest AISC Standards, unless otherwise noted or specified.
7. Provide temporary erection guying and bracing as required.
8. Unless otherwise shown or noted on the Drawings, provide 8" minimum bearing each end for all loose lintels and beams.
9. For loose lintels, masonry shelf angles and other such items generally not shown on the Structural Drawings, refer to the Architectural Drawings. See general notes on lintels this sheet for sizes, reinforcing, etc.
10. Steel columns below grade shall be encased in a minimum of 4" concrete or painted with 2 coats of asphaltum paint, unless otherwise shown.
11. Fabricate simple span beams not specifically noted to receive camber so that after erection, any minor camber due to rolling or shop assembly be upward.
12. Refer to the Division 5 Structural Steel Specification of the Project Manual for structural steel surface preparations and prime painting requirements.
13. The Erector shall shim between parallel roof beams and joists with differential mill and induced cambers for level deck bearing.
14. Provide cap plates/end plates to close off exposed, open ends of all tubular members, unless noted. Seal weld with partial penetration square groove welds for watertight condition.

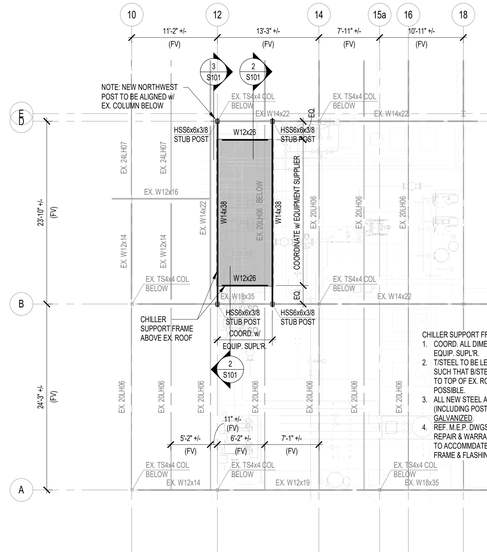
STEEL CONNECTION NOTES

1. Typical beam-to-beam connections shall be bearing type using A325 bolts, unless noted otherwise.
2. Shop connections, unless otherwise shown, may be either bolted or welded. All field connections shall be bolted unless otherwise shown on the Structural Drawings.
3. Connections shall be designed by the Steel Fabricator to support the reactions shown on the framing plan(s). Simple span connections without reactions listed on the Structural Drawings shall be designed by the Steel Fabricator's SSE in accordance with Table 3-6 of the AISC "Manual of Steel Construction, 14th Edition". For composite beams where reactions are not indicated, design connections for 75% of the Maximum Total Uniform Load ASD value for the applicable beam size and span given in Table 3-6. For non-composite beams, design connections for 50% of the tabulated ASD value. The minimum shear connection design load shall be 15 kips.
4. All beam-to-beam connections shall be double angle, unless shown or noted otherwise.
5. Typical bearing-type beam-to-beam, and beam-to-column field-bolted connections may be tightened to the snug-tight condition, unless otherwise shown or noted.
6. Bolted connections in moment frames, bracing connections, hangers and stub columns, crane connections, and those designated PT (pretensioned) on the Drawings shall be pretensioned joints utilizing tension-control (TC) bolts or direct tension indicators. Holes for bolts in pretensioned joints shall be 1/16" larger than the bolt diameter. All pretensioned joints must be inspected by the Testing Agency.
7. All welding shall be in conformance with AWS D1.1, using E70XX electrodes, unless shown or noted otherwise. Welding, both shop and field, shall be performed by welders certified for the weld types and positions involved according to the current edition of AWS D1.1. Perform all AESS welds with care to provide a clean, uniform appearance.
12. Backup bars required for welded connections shall be continuous.
13. Holes in steel shall be drilled or punched. All slotted holes shall be provided with smooth edges. Burning of holes in structural steel shall not be allowed without approval of the SER.
14. The minimum thickness of all connection material shall be 5/16", unless noted.
15. A qualified independent Testing Agency shall be retained to perform inspection and testing of structural steel field weldments as follows:

WELD INSPECTION SCHEDULE

WELD TYPE	VT	MT	UT	PT	RT	COMMENTS
FILLET (SINGLE PASS)	25%	--	--	--	--	ROOT PASS AND FINISHED WELD
FILLET (MULTIPLE PASS)	50%	25%	--	--	--	
FLARE BEVEL/ FLARE V	25%	--	--	--	--	
GROOVE (PARTIAL PENETRATION)	100%	--	100%	--	--	REFERENCE NOTE 'E' BELOW
GROOVE (FULL PENETRATION)	100%	--	100%	--	--	ALL FULL PENE-TRATION WELDS

A) Test procedures:
   VT = Visual Test (inspection)
   MT = Magnetic Particle Test: ASTM E109, cracks or incomplete fusion or penetration not acceptable.
   UT = Ultrasonic Test: ASTM E164.
   PT = Penetrant Test: ASTM E165.
   RT = Radiographic Test: ASTM E94 and ASTM E142, min. quality level 2-2/1.
B) Acceptance standards in AWS D1.1 shall be followed for each test procedure.
C) Test procedures may be substituted to meet feasibility requirements of test based upon weld geometry or other factors with the approval of the SER.
D) Samples shall occur at random locations; additional tests may be required at locations noted on the Drawings.
E) Groove welds include square, bevel, V, U, and J grooves including single and double pass types.
F) Partial penetration square groove welds at end seal plates of tubular members do not require inspection.
G) Weld Procedure Specifications (WPS) shall be produced and maintained in accordance with AWS D1.1. The independent Testing Agency shall have access to all WPS's during the course of testing and inspection.
H) For highly-restrained welded joints, especially in thick plates and/or heavy structural shapes, detail the welds so that shrinkage occurs as much as possible in the direction the steel was rolled. Refer to the AISC Manual for preferred welded-joint arrangements that reduce the possibility for lamellar tearing. Members scheduled to receive highly-restrained connections shall be tested by the independent Testing Agency by Ultrasonic Testing prior to commencing welding.
I) In addition to inspection requirements for fillet welds in Table above, 100% of field welding of diagonal bracing members to gusset plates shall be visually inspected (VT).



CHILLER SUPPORT FRAMING NOTES:
1. COORD. ALL DIMENSIONS w/ EQUIP. SUPLR.
2. T/STEEL TO BE LEVEL AND SET SUCH THAT B/STEEL IS AS CLOSE TO TOP OF EX. ROOFING AS POSSIBLE.
3. ALL NEW STEEL ABOVE THE ROOF (INCLUDING POSTS) SHALL BE GALVANIZED.
4. REF. M.E.P. DWGS. FOR ROOFING REPAIR & WARRANY INFORMATION TO ACCOMMODATE NEW STEEL FRAME & FLASHING.

1 S101 CHILLER SUPPORT FRAMNG PLAN

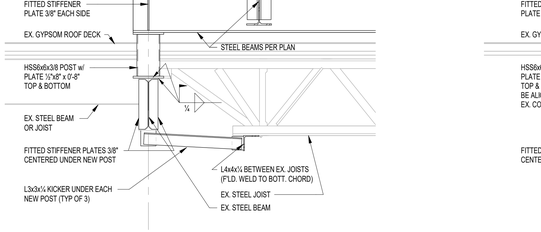
SCALE: 1/8" = 1'-0"

NORTH

FRAMING PLAN NOTES

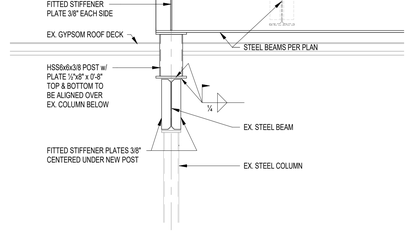
1. REF. THIS SHEET FOR STRUCTURAL NOTES, DESIGN DATA, SCHEDULES & LEGENDS.
2. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
3. ALL ELEVATIONS ARE REFERENCED FROM THE EXISTING FIRST FLOOR FIN. FLOOR ELEVATION +0'-0", VERIFY USGS ELEVATION WITH CIVIL DWGS.
4. COORDINATE EXACT SIZE & LOCATION OF ANY MECHANICAL OPENINGS IN FLOOR SLAB, ROOF DECK, OR WALLS WITH THE MEP CONTRACTOR(S). LOCATION & SIZE OF ALL DUCT OPENINGS, GRILLES, ETC. SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
5. ALL ELEVATIONS SHOWN ON PLAN INDICATE TOP OF STEEL BEAM UNLESS NOTED OTHERWISE.
6. PROVIDE FRAMES AT ALL ROOF DRAINS, ROOF HATCHES & OTHER ROOF OPENINGS PER TYPICAL DETAILS. COORD. EXACT NUMBER, LOCATIONS & DIMENSIONS WITH THE APPROPRIATE CONTRACTORS & THE ARCH. & MEP DWGS.
7. ALL EXISTING CONSTRUCTION SHOWN IN PLAN AND/OR SECTION WAS DERIVED FROM EXISTING DWGS. AND SHALL BE FIELD VERIFIED. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL CONDITIONS, IMMEDIATELY CONTACT THE ARCHITECT/ENGINEER FOR DIRECTION BEFORE PROCEEDING WITH WORK.
8. PLAN LEGEND:

FF	DENOTES FIN. FLOOR
T/'X'	DENOTES TOP OF STEEL, SLAB, ETC.
B/'X'	DENOTES BOTTOM OF LINTEL, ETC.
EX	DENOTES EXISTING CONSTRUCTION



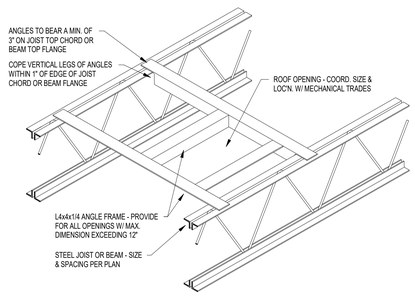
2 S101 SECTION

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

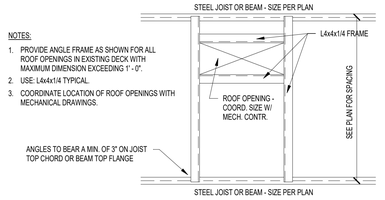


3 S101 SECTION

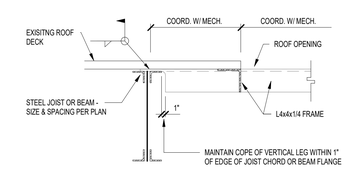
SCALE: 3/4" = 1'-0"



ISOMETRIC



PLAN



SECTION

4 S101 ROOF OPENING FRAME DETAIL

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

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Brownsburg Community School Corporation
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D&A #24128

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CERTIFIED BY:

03/06/2025

REVISIONS:

NO.	DESCRIPTION	DATE
1	Addendum 01	03/13/2025

PROJECT DESCRIPTION:

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION
1400 S ODELL STREET, BROWNSBURG, IN 46112

KEYPLAN

N

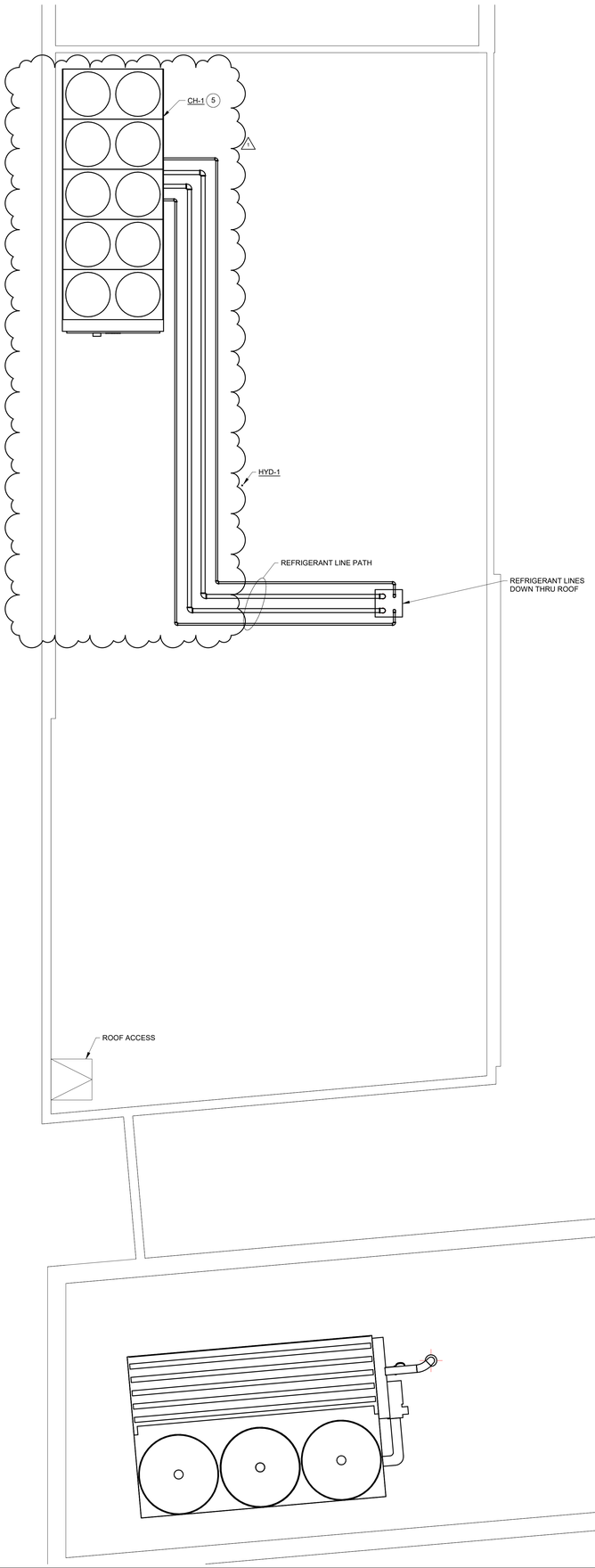
DRAWN BY: MDL	DESIGNED BY: MDL
SCALE: REFER TO DRAWING	CHECKED BY: MDL
DATE: 03/06/2025	JOB NO.: 24128

SHEET DESCRIPTION:

CHILLER SUPPORT FRAMING PLAN AND DETAILS

SHEET NUMBER:

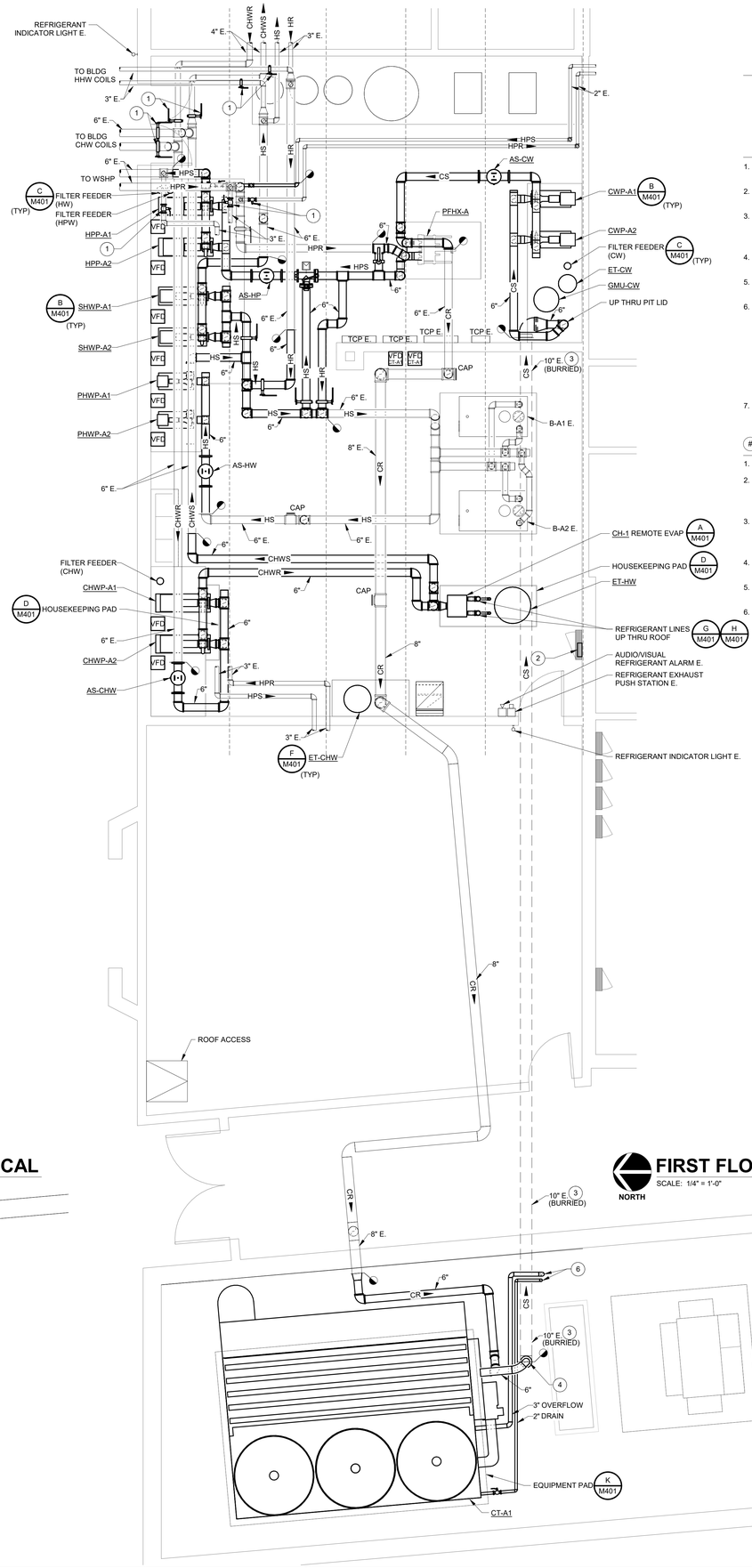
S101



ROOF - MECHANICAL

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

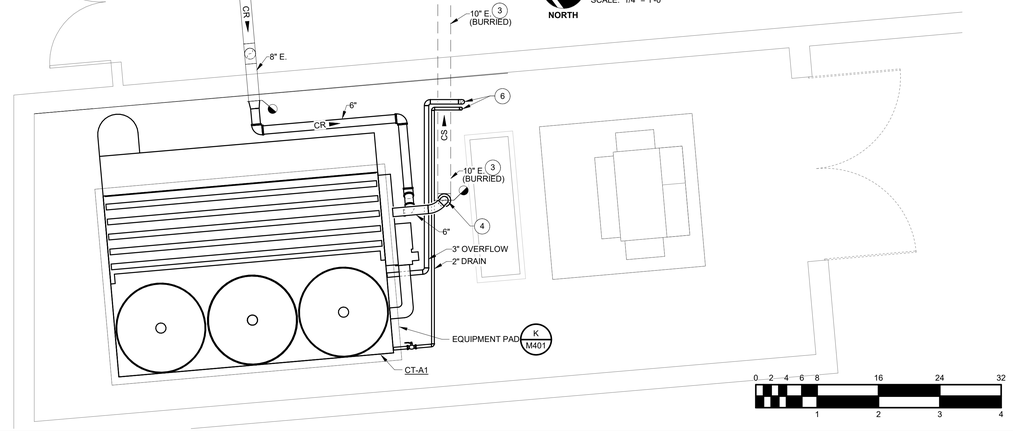
NORTH



FIRST FLOOR PLAN - MECHANICAL

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

NORTH



RENOVATION LEGEND:

WORK TO BE INSTALLED

WORK TO REMAIN

GENERAL NOTES:

1. SEE SHEETS M700 SERIES DRAWINGS FOR ADDITONAL PIPING AND HVAC REQUIREMENTS AND ADDITIONAL INFORMATION.
2. UPDATE REFRIGERANT MONITOR SYSTEM CONTROLLER/SENSORS AS REQUIRED FOR CHILLER REFRIGERANT.
3. REFRIGERANT PIPING INDICATED ON DRAWINGS IS SCHEMATIC IN NATURE. SUCTION LINE PIPING IS 3 1/8" AND LIQUID LINE PIPING SHALL BE 1 1/4". PROVIDE DOUBLE SUCTION RISERS WHERE REQUIRED BY MFG.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING, FLUSHING AND FILLING OF PIPING AND SYSTEMS AS REQUIRED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR CHEMICAL TREATMENT OF SYSTEMS.
6. ROOF IS UNDER WARRANTY THRU 2038 AND WAS INSTALLED IN 2018. OWNER'S ROOFING WARRANTY SHALL BE MAINTAINED. COORDINATE REQUIRMENTS WITH:

   BLACKMORE & BUCKNER ROOFING
   9750 E 150TH ST. UNIT 1700
   NOBLESVILLE, IN 46060

   THE ROOF IS A FULLY ADHERED PVC WHITE MEMBRANE SYSTEM BY SIKA SARNAFIL. ALL ROOFING WORK SHALL BE IN COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS FOR THIS TYPE OF ROOF.
7. SEE ALSO DRAWING PM001 FOR ADDITIONAL GENERAL NOTES.

(#) PLAN NOTES:

1. INSTALL ISOLATION VALVES.
2. INSTALL REFRIGERANT MONITOR SYSTEM AT APPROXIMATELY THIS LOCATION. RECALIBRATE SYSTEM AND VERIFY OPERATION. SYSTEM SHALL BE CONNECTED TO EXISTING PUSH BUTTON, LIGHTS, ALARM, ETC.
3. EXISTING BURIED 10" CONDENSER WATER SUPPLY TO BE SCOPED AND FLUSHED PRIOR TO CONNECTION TO 6" WITHIN EXISTING SUMP PIT. REPORT CONDITION OF PIPING TO ENGINEER PRIOR TO CONNECTION OF NEW WORK.
4. 6" CONDENSER SUPPLY PIPE SHALL BE CONNECTED TO EXISITNG 10" PIPE FLANGE.
5. REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATION OF CHILLER SUPPORT.
6. 3" OVERFLOW AND 2" DRAIN, ROUTE TO NEAREST DRAIN AND TERMINATE ABOVE DRAIN WITH ELBOW. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF DRAIN.

Brownsburg Community School Corporation
Higher Achievement • Together

D&A #24128

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CERTIFIED BY:

DANIEL JOSEPH ULRICH
REGISTERED
No. 12100624
STATE OF INDIANA
PROFESSIONAL ENGINEER

03/06/2025

REVISIONS:

NO.	DESCRIPTION	DATE
1	Addendum 01	03/13/2025

PROJECT DESCRIPTION:

BROWNSBURG COMMUNITY SCHOOL CORPORATION
WHITE LICK ES CENTRAL PLANT EQUIPMENT INSTALLATION
1400 S ODELL STREET, BROWNSBURG, IN 46112

KEYPLAN

DRAWN BY: DJU	DESIGNED BY: DJU
SCALE: REFER TO DRAWING	CHECKED BY: DJU
DATE: 03/06/2025	JOB NO.: 24128

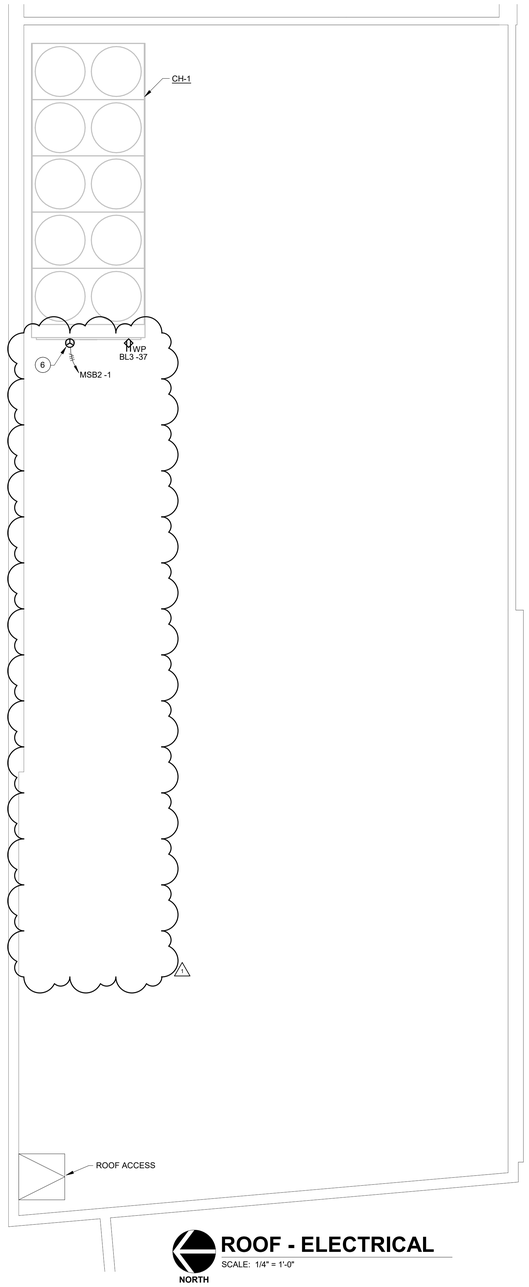
SHEET DESCRIPTION:

ENLARGED PLAN - MECHANICAL

SHEET NUMBER:

M301

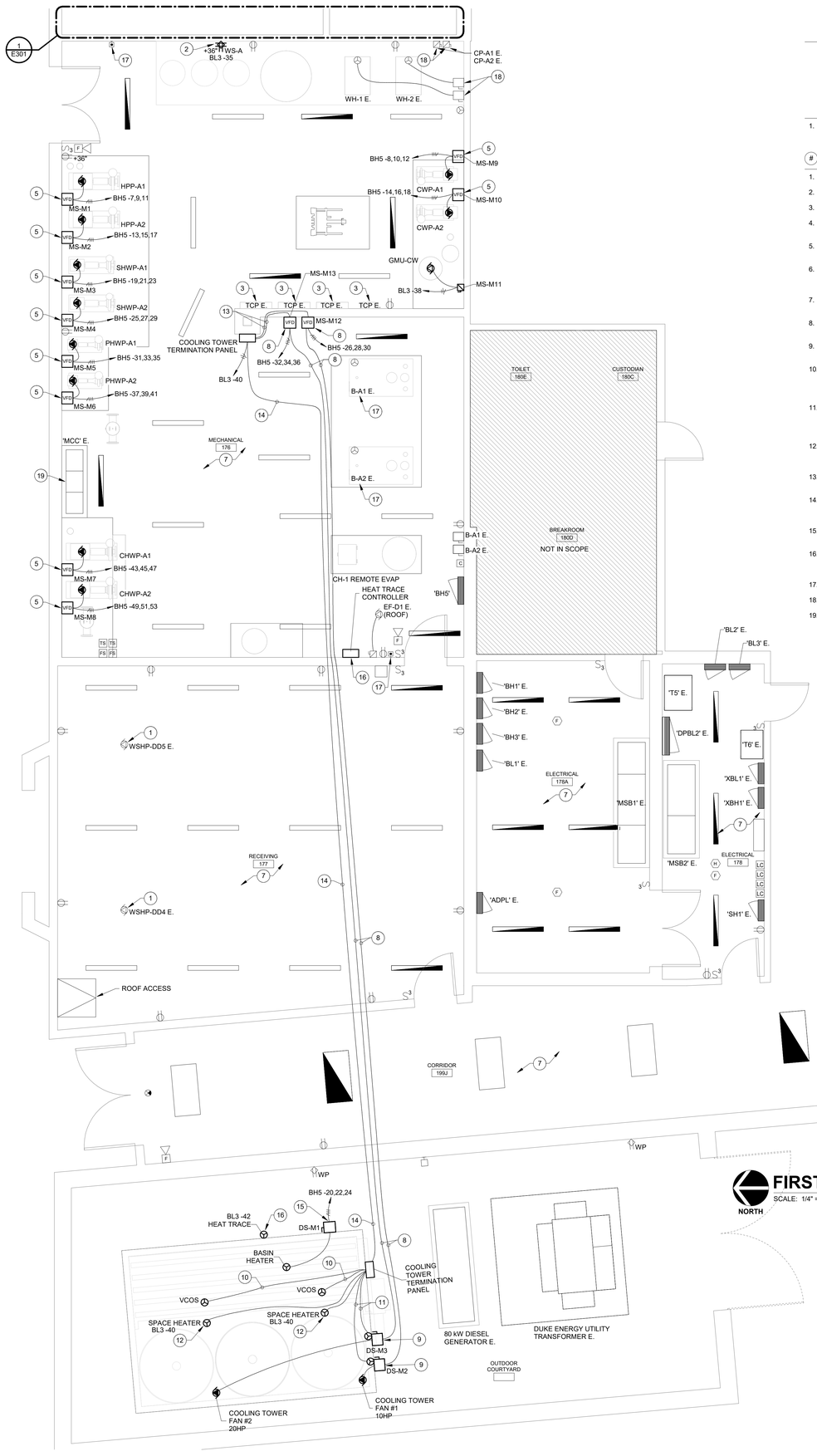
PRINTED ON: 3/13/2025 11:40:18 AM



ROOF - ELECTRICAL

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

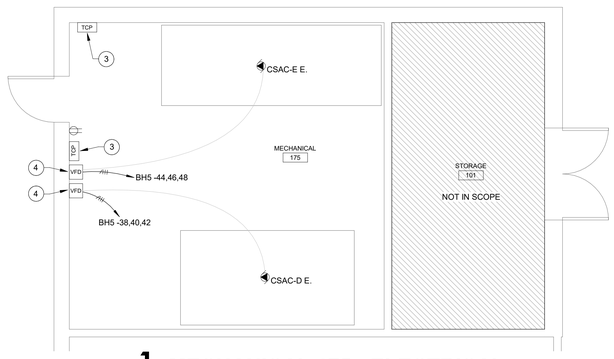
NORTH



FIRST FLOOR PLAN - ELECTRICAL

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

NORTH



1 MECHANICAL 175 - ELECTRICAL

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

RENOVATION LEGEND:

- WORK TO BE INSTALLED
- WORK TO REMAIN

GENERAL NOTES:

1. SEE E001 FOR GENERAL NOTES.

(#) PLAN NOTES:

1. WATER SOURCE HEAT PUMP TO REMAIN.
2. PROVIDE GFCI QUAD RECEPTACLE FOR WATER SOFTENER.
3. EXISTING TEMPERATURE CONTROL PANEL TO REMAIN.
4. EXISTING AIR HANDLING UNIT AND ASSOCIATED VFD TO REMAIN. RE-FEED FROM CIRCUIT INDICATED. 3 #10, 1 #10 GND, 3/4" C.
5. PROVIDE VARIABLE FREQUENCY DRIVE FOR PUMP. SEE E601 FOR VFD, WIRE, AND CONDUIT SIZE.
6. AIR-COOLED CHILLER. PROVIDE 480V CIRCUIT INDICATED TO MANUFACTURER'S CONTROL PANEL MOUNTED ON CHILLER. SEE E601 FOR WIRE AND CONDUIT SIZE.
7. EXISTING LIGHT FIXTURES AND DEVICES IN THIS AREA TO REMAIN UNLESS NOTED OTHERWISE.
8. PROVIDE VARIABLE FREQUENCY DRIVE FOR COOLING TOWER. SEE E601 FOR VFD, WIRE, AND CONDUIT SIZE.
9. COOLING TOWER DISCONNECT. SEE E601 FOR DISCONNECT, WIRE, AND CONDUIT SIZE.
10. PROVIDE INTERLOCK WIRING (3 CONDUCTOR #14 THHN) IN 3/4" CONDUIT BETWEEN THE COOLING TOWER INTERFACE PANEL AND THE MANUFACTURER'S VIBRATION CUT-OUT SWITCH ON THE COOLING TOWER. SEE SCHEMATIC ON E401.
11. PROVIDE INTERLOCK WIRING AND 1" CONDUIT BETWEEN COOLING TOWER INTERFACE PANEL AND MICROSWITCH ON DISCONNECT. COORDINATE WIRING REQUIREMENTS WITH MANUFACTURER. SEE SCHEMATIC ON E401.
12. PROVIDE 120V CIRCUIT FOR INTERNAL FAN MOTOR SPACE HEATER. ROUTE CIRCUIT THROUGH COOLING TOWER TERMINATION PANEL. 2 #10, 1 #10, 3/4" CONDUIT. SEE SCHEMATIC ON E401.
13. PROVIDE 1" CONDUIT BETWEEN VFD AND COOLING TOWER INTERFACE PANEL FOR CONTROL WIRING. SEE SCHEMATIC ON E401.
14. PROVIDE 2" CONDUIT BETWEEN COOLING TOWER INTERFACE PANEL AND COOLING TOWER TERMINATION PANEL FOR WIRING. SEE NOTE (10), (11), AND (12). SEE SCHEMATIC ON E401.
15. BASIN HEATER DISCONNECT. SEE E601 FOR DISCONNECT, WIRE, AND CONDUIT SIZE. PROVIDE UNISTRUT STAND AS REQUIRED.
16. HEAT TRACE FOR DOMESTIC WATER PIPING TO COOLING TOWER. WIRING CONTROLLED V/A CONTROLLER BY COOLING TOWER VFD. PROVIDE 120V CIRCUIT. SEE SPECIFICATIONS.
17. EXISTING BOILER AND BOILER EM SHUTOFF TO REMAIN.
18. EXISTING WATER HEATER AND CIRCULATION PUMPS TO REMAIN.
19. EXISTING MOTOR CONTROL CENTER TO REMAIN.

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CERTIFIED BY:

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REGISTERED
No. 12200363
STATE OF
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KEYPLAN

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DRAWN BY: JPS	DESIGNED BY: JPS
SCALE: REFER TO DRAWING	CHECKED BY: JPS
DATE: 03/06/2025	JOB NO.: 24128

SHEET DESCRIPTION:

MECHANICAL ROOM PLAN - ELECTRICAL

SHEET NUMBER:

E301

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