MORE THAN ARCHITECTS

ADDENDUM

NO. 3

TO THE DRAWINGS AND THE PROJECT MANUAL

05.15.25

PROJECT NAME: Hays High School 2025 Additions and Renovations

CLIENT NAME: Hays CISD

LOCATION: Buda, TX

PROJECT NUMBER: 1954-09-01

PROPOSAL DATE: 27 May, 2025

ADDENDUM DATE: 15 May, 2025

For additional information regarding this project, contact Gigi Morgan at 800.687.1229.

THIS ADDENDUM INCLUDES:

Civil Items	3 Pages
Sports	3 Pages
Structural Items	16 Pages
Architectural Items	8 Pages
Plumbing Items	4 Pages
Mechanical Items	5 Pages
Electrical Items	12 Pages

AND ALL ATTACHED REVISED SPECIFICATION & DRAWING REFERENCES IN THE ADDENDUM

Huckabee

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

CIVIL ITEMS FOR ADDENDUM NO. 3

NOTICE TO PROPOSERS:

A. This Addendum shall be considered part of the contract documents for the above-mentioned project as though it had been issued at the same time and incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original contract documents, this Addendum shall govern and take precedence.
B. Proposers are hereby notified that they shall make any necessary adjustments in their estimate on account of this Addendum. It will be construed that each Proposer's proposal is submitted with full knowledge of all modifications and supplemental data specified therein. Acknowledge receipt of this addendum in the space provided on the proposal form. Failure to do so may subject Proposer to disqualification.

REFERENCE IS MADE TO THE DRAWINGS AS NOTED:

DRAWINGS:

AD No 3, Civil Item 1: **To the Drawings, Sheet C4.01, "DIMENSION CONTROL PLAN (1 OF 2),"**

1) Modification of MAC footprint.

AD No 3, Civil Item 2: **To the Drawings, Sheet C6.01, "GRADING PLAN (1 OF 2),"**

1) Modification of MAC footprint.

END OF CIVIL ADDENDUM

Huckabee

Project Name: Hays High School 2025 Additions
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

2025-05-14

F-7524

SPORTS ITEMS FOR ADDENDUM NO. 3

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

DRAWINGS:

AD No 1, Sports Item 1: **To the Drawings, Sheet F1**

1) Tension netting behind football goal posts have been adjusted to be 100 ft long.
2) Added note 70FF to the sheet and labeled it at all four soccer field corners.
3) Added note 70GG to the sheet and labeled it at all four soccer field corners

AD No 1, Sports Item 2: **To the Drawings, Sheet F3**

1) All UGE lines have been updat3d to be called out with note 76D and detail 76A.

END OF SPORTS ADDENDUM

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

STRUCTURAL ITEMS FOR ADDENDUM NO. 3

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

DRAWINGS:

AD No 3, Struct Item 1: **To the Drawings, Sheet 1.1, "GENERAL NOTES,"**

1. Added note 3.3.1g for exposed polished concrete slabs
2. Added 3.3.1, w/c ratio for composite slabs
3. Added 3.4.2, composite slab type CB for exposed polished concrete slabs
4. Added 6.1.1, delegated design for mudskipper system

AD No 3, Struct Item 2: **To the Drawings, Sheet S2.1A2, "ROOF FRAMING PLAN - AREA A,"**

1) Added detail references where shown.

AD No 3, Struct Item 3: **To the Drawings, Sheet S2.1B1, "FOUNDATION PLAN - AREA B,"**

1) Revised top of pier elevations and grade beam depths where shown.
2) Added piers and grade beams where shown.
3) Revised pier types where shown.
4) Revised foundation detail references where shown.

AD No 3, Struct Item 4: **To the Drawings, Sheet S2.1B1S, "FOUNDATION PLAN - SAWJOITS - AREA B,"**

1) Revised sawjoint layout in area B slab on grade.

AD No 3, Struct Item 5: **To the Drawings, Sheet S2.1B2, "LEVEL 2 FRAMING PLAN - AREA B,"**

1) Removed duplicate beam sizes where shown
2) Revised stud count where shown

AD No 3, Struct Item 6: **To the Drawings, Sheet S2.1B3, "ROOF FRAMING PLAN - AREA B,"**

1) Added dimensions where shown.

AD No 3, Struct Item 7: **To the Drawings, Sheet S2.1C1, "FOUNDATION PLAN - AREA C,"**

1) Revised dimensions.

AD No 3, Struct Item 8: **To the Drawings, Sheet S2.1C2, "ROOF FRAMING PLAN - AREA C,"**

1) Revised dimensions.

AD No 3, Struct Item 9: **To the Drawings, Sheet S3.1, "TYPICAL CONCRETE DETAILS,"**

1) Drilled pier schedule – Added dowel types
2) Detail 3 – Clarified dowel reference
3) Detail 11 – Revised slab on grade reinforcing

AD No 3, Struct Item 10: **To the Drawings, Sheet S3.2, "TYPICAL CONCRETE DETAILS,"**

1) Detail 13 – New detail.

AD No 3, Struct Item 11: **To the Drawings, Sheet S3.3, "CONCRETE DETAILS,"**

1) Detail 16 – Revised grade beam width.

AD No 3, Struct Item 12: **To the Drawings, Sheet S3.5, "CONCRETE DETAILS,"**

1) Details 8, 11, 12, 16 – New details.

AD No 3, Struct Item 13: **To the Drawings, Sheet S5.1, "TYPICAL STEEL DETAILS,"**

1) Column Schedule – Revised bolt diameter, added column type

AD No 3, Struct Item 14: **To the Drawings, Sheet S5.10, "BRACE ELEVATIONS AND DETAILS,"**

1) Elevation 3 – Fixed graphics.
2) Elevation 11 & 12 – Revised beam size

END OF STRUCTURAL ADDENDUM

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

ARCHITECTURAL ITEMS FOR ADDENDUM NO. 3

05.15.25

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 3, Arch Item 1: To the Project Manual, Section 05-5516, "METAL STAIR NOSINGS,"
Section added in its entirety to Project Manual

AD No 3, Arch Item 2: To the Project Manual, Section 14-2100, "ELECTRIC TRACTION ELEVATORS,"
Section added in its entirety to Project Manual

DRAWINGS:

AD No 3, Arch Item 3: To the Drawings, Sheet G3.01, "EXTERIOR WALL, ROOF TYPES & INTERIOR PARTITION TYPES,"

1) Updated wall types to include 10-inch stud walls

AD No 3, Arch Item 4: To the Drawings, Sheet A1.1A1, "FLOOR PLAN – AREA 1 – KITCHEN,"

1) Updated wall types W105A and W106A to clarify stud size and wall type
2) Removed canopy manufacturer's name from floor plan

AD No 3, Arch Item 5: To the Drawings, Sheet A1.1B1, "FLOOR PLAN - AREA B - LEVEL 1,"

1) Updated callout to clarify how the new wall will tie into existing in corridor B102

AD No 3, Arch Item 6: To the Drawings, Sheet A1.40, "PLAN DETAILS,"

1) Updated plan detail to clarify how new wall will tie into existing in corridor B102

AD No 3, Arch Item 7: To the Drawings, Sheet A5.01 "EXTERIOR ELEVATIONS – AREAS A & B,"

1) Coordinated brick ledge elevations with the structural team at details 6/A6.05 and 7/A5.01
2) Updated wall type tags and heights

AD No 3, Arch Item 8: To the Drawings, Sheet A6.03 "WALL SECTIONS - AREA A, C"

1) Updated coiling door to be between jamb, clarified opening dimension

END OF ARCHITECTURAL ADDENDUM

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

05/14/2025

PLUMBING ITEMS FOR ADDENDUM NO. 3

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

DRAWINGS:

AD No 3, Plumb Item 1: **To the Drawings, Sheet P0.10, "Schedules - Plumbing,"**

1) Revised floor sink "FS2" to have "hinged" full grate.

AD No 3, Plumb Item 2: **To the Drawings, Sheet P2.1A1, "First Floor Plan - Area A - Plumbing - Waste,"**

2) Revised floor drain "FD7" waste routing.
3) Shifted grease waste to miss pier.
4) Shifted floor sinks under serving line plan West
5) Added floor sink in Snack Bar.

AD No 3, Plumb Item 3: **To the Drawings, Sheet P3.1A1, "First Floor Plan - Area A - Plumbing – Supply,"**

6) Added water and RPZ at 3-compartment sink for Owner provided soap system.
7) Added Keyed Note 'P16' for RPZ for soap system

END OF PLUMBING ADDENDUM

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

MECHANICAL ITEMS FOR ADDENDUM NO. 3

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

DRAWINGS:

AD No 3, Mech Item 1: **To the Drawings, Sheet M0.02, "Notes and Legends - Mechanical,"**

1) Removed duct insulation box note.

AD No 3, Mech Item 2: **To the Drawings, Sheet M1.11, "Details - Mechanical,"**

2) Added note to "Duct Drop Detail" for return elbow to be horizontal.

AD No 3, Mech Item 3: **To the Drawings, Sheet M2.1B1, "First Floor Plan - Area B - Mechanical,"**

3) Revised exhaust in Gang Restrooms to have one exhaust register per stall.

AD No 3, Mech Item 4: **To the Drawings, Sheet M2.1B2, "Second Floor Plan - Area B - Mechanical,"**

4) Deleted random duct and grille from Office B215.
5) Revised exhaust in Gang Restrooms to have one exhaust register per stall.

END OF MECHANICAL ADDENDUM

Huckabee

Project Name: Hays High School 2025 Additions and Renovations
Client: Hays CISD
Buda, TX
Project Number: 1954-09-01

ELECTRICAL ITEMS FOR ADDENDUM NO. 3

NOTICE TO PROPOSERS: **05/14/2025**

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REFERENCE IS MADE TO THE DRAWINGS AND THE PROJECT MANUAL AS NOTED:

DRAWINGS:

AD No 3, Elec Item 1: **To the Drawings, Sheet E0.01 "SCHEDULES, NOTES, AND LEGENDS - ELECTRICAL"**
1) Added scope for owner requested air purifiers.
2) Added General Note II per owner request.

AD No 3, Elec Item 2: **To the Drawings, Sheet E0.10 "SCHEDULES - ELECTRICAL"**
1) Added clarification regarding power pack installation location.

AD No 3, Elec Item 3: **To the Drawings, Sheet E0.13 "PANEL SCHEDULES - ELECTRICAL"**
1) Added circuits for kitchen equipment as shown to Panel 'LK'.
2) Added notes for shunt trip main breaker for Panel 'LKS'.
3) Added circuits for sports netting as shown in Panel 'LMAC'.

AD No 3, Elec Item 4: **To the Drawings, Sheet E3.1A1 "FIRST FLOOR PLAN - AREA A - POWER"**
1) Added receptacle and air purifier power as shown.

AD No 3, Elec Item 5: **To the Drawings, Sheet E3.1A2 "ENLARGED KITCHEN PLAN - AREA A - POWER"**
2) Added power for kitchen equipment as shown.

AD No 3, Elec Item 6: **To the Drawings, Sheet E3.1B1 "FIRST FLOOR PLAN - AREA B - POWER"**
1) Added power air purifiers as shown.
2) Expanded note regarding IDF room rough-in as shown per owner request.

AD No 3, Elec Item 7: **To the Drawings, Sheet E3.1B2 "SECOND FLOOR PLAN - AREA B - POWER"**
1) Added power air purifiers as shown.

Huckabee

AD No 3, Elec Item 8: **To the Drawings, Sheet E3.1C1 "FIRST FLOOR PLAN - AREA C - POWER"**

1) Added power for sports netting as shown.

AD No 3, Elec Item 9: **To the Drawings, Sheet E4.1A1 "ROOF PLAN - AREA A - POWER"**

1) Added power for cooler/freezer condenser as shown.

AD No 3, Elec Item 10: **To the Drawings, Sheet ES1.00 "SITE PLAN - ELECTRICAL"**

1) Added clarifications to plan regarding fire alarm fiber interconnection scope.
2) Expanded site circuiting note to include owner requirement for warning tape with all buried conduit.

END OF ELECTRICAL ADDENDUM

Technology & Security Narrative

Hays HS 2025 Additions and Renovations Addendum #3 for Hays CISD

May 14, 2025

Special Space A/V Systems

The multipurpose activity center AV system will be modified to utilize Community R.5-96MAX speakers on the columns at middle of endzone, 17yds, 39yds, 39yds, 17yds, and middle of endzone in lieu of the shown QSC speakers. Wall box at field shall be OWB-X3-SM-GNG mounted at 36" AFF on center. Speakers shall all be mounted at 15'. AV rack for multipurpose activity center to be located in plan northeast corner of existing storage J-102 of weight room building.

SECTION 05 5516
METAL STAIR NOSINGS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Interior Cast-in-Place Stair Nosings

B. Exterior Cast-in-Place Stair Nosings

1.02 RELATED REQUIREMENTS

A. Section 03 3000 - Cast-in-Place Concrete

B. Section 05 5100 - Metal Stairs

1.03 REFERENCE STANDARDS

A. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes

B. ADAAG, Americans with Disabilities Act Accessibility Guidelines.

C. TAS, Texas Accessibility Standards

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product data: Within 15 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
   1. Materials list of items proposed to be provided under this Section;
   2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements;
   3. Shop Drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with the work of adjacent trades; including color samples.
   4. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.

1.05 QUALITY ASSURANCE

A. See Section 01 4000 - Quality Requirements, for additional requirements.

B. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

C. Perform shop and/or field welding required in connection with the work of this Section in strict accordance with pertinent recommendations of the American Welding Society.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Comply with pertinent provisions of Section 01 6000 - Product Requirements.

1.07 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Correct defective Work within a one year period after Date of Substantial Completion.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. American Safety Tread Company: www.americansafetytread.com

B. Babcock-Davis: www.babcockdavis.com.

C. Balco, Inc.: www.balcousa.com

D. Nystrom, Inc.: www.nystrom.com.

E. Substitutions: See Section 01 6000 - Product Requirements.

2.02 MATERIALS

A. Cast-in-Place Interior Stair Nosings

1. At interior locations of concrete filled steel stair pans, stair nosings shall be a two part system, equal to type DST-330 (Type 1 Anchor) as manufactured by Balco, Inc. The base shall consist of heat treated extruded aluminum alloy 6063-T5. The abrasive filler shall consist of a mixture of aluminum oxide and silicon carbide granules in an epoxy matrix locked into the extruded channels of the base. The abrasive ribs shall project a minimum of 1/16 inch above the extruded channels. Nosings shall be full length of steps. Color shall be as selected by the architect.

B. Exterior locations

1. At exterior locations of concrete stairs, nosings shall be a two part system, equal to type XH-330 (Type 1 Anchor) as manufactured by Balco, Inc. The base shall consist of heat treated extruded aluminum alloy 6063-T5. The abrasive filler shall consist of a mixture of aluminum oxide and silicon carbide granules in an epoxy matrix locked into the extruded channels of the base. Nosings shall terminate not more than 1" from ends of steps for poured concrete stairs. Color shall be as selected by the architect.

2.03 ACCESSORIES

A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

2.04 FABRICATION

A. Except as otherwise shown on the Drawings or the approved Shop Drawings, use materials of size, thickness, and type required to produce reasonable strength and durability in the work of this Section.

B. Fabricate with accurate angles and surfaces which are true to the required lines and levels, grinding exposed welds smooth and flush, forming exposed connections with hairline joints, and using concealed fasteners wherever possible.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine the area and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

B. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.

3.02 INSTALLATION

A. General

1. Set work accurately into position, plumb, level, true and free from rack.
2. Anchor firmly into position.
3. Where field welding is required, comply with AWS recommended procedures of manual-shielded metal-arc welding for appearance and quality of weld and for methods to be used in correcting welding work.
4. Grind exposed welds smooth and touch-up shop prime coats.
5. Do not cut, weld, or abrade surfaces which have been hot-dip galvanized after fabrication and which are intended for bolted or screwed field connections.

3.03 CLOSEOUT ACTIVITIES

A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

3.04 PROTECTION

A. Protect installed Ladders from subsequent construction operations.

3.05 MAINTENANCE

A. See Section 01 7000 - Execution Requirements, for additional requirements relating to maintenance service.

END OF SECTION

SECTION 14 2100
ELECTRIC TRACTION ELEVATORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Complete electric traction elevator systems.
   1. Passenger type.

B. Elevator Maintenance Contract.

1.02 RELATED REQUIREMENTS

A. Section 04 2000 - Unit Masonry: Masonry hoistway enclosure; building-in and grouting hoistway door frames.

B. Section 05 1200 - Structural Steel Framing: Includes hoistway framing, divider beams, and overhead hoist beams.

C. Section 05 5000 - Metal Fabrications: Includes elevator pit ladder, sill supports, divider beams, and overhead hoist beams.

D. Section 05 5133-Metal Ladders: Includes elevator pit ladders.

E. Division 21 - Fire Suppression: Fire Sprinkler System in Hoistway

F. Division 22 - Plumbing: Motor for sump pump in pit.

G. Division 26 - Electrical: Conduit and wiring connections.

H. Division 28 - Electronic Safety and Security: Fire detection and alarm systems.

1.03 REFERENCE STANDARDS

A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; Current Edition.

B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

C. AISC 360 - Specification for Structural Steel Buildings; 2016.

D. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test; 2015 (Reaffirmed 2020).

E. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

F. ASME A17.1 - Safety Code for Elevators and Escalators; 2016.

G. ASME A17.2 - Guide for Inspection of Elevators, Escalators, and Moving Walks; 2014.

H. ASME QEI-1 - Standard for the Qualification of Elevator Inspectors; 2024.

I. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.

J. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes; 2017.

K. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.

L. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.

M. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2021.

N. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.

O. ASTM B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric); 2014.

P. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.

Q. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.

R. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass; 2019.

S. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2020, with Errata (2023).

T. IBC - International Building Code as indicated on the drawings

U. ITS (DIR) - Directory of Listed Products; current edition.

V. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

W. NEMA MG 1 - Motors and Generators; 2018.

X. NFPA 13 - Standard for the Installation of Sprinkler Systems; 2015, with Errata (2017).

Y. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

Z. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2019.

AA. PS 1 - Structural Plywood; 2019.

BB. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Coordinate work with other installers to provide necessary conduits for proper installation of wiring, including but not limited to, the following:
      a. Elevator equipment devices remote from elevator machine room or hoistway.
      b. Remote group automatic panel in lobby from controller cabinet.
      c. Telephone service for machine room.
      d. Elevator pit for lighting and sump pump.
      e. Automatic transfer switch from controller cabinet.
      f. Fire alarm panel from controller cabinet.
   2. Coordinate work with other installers for equipment provisions necessary for proper elevator operation, including but not limited to, the following:
      a. Automatic transfer switches with auxiliary contacts for emergency power transfer status indication.
      b. Shunt trip devices for automatic disconnection of elevator power prior to fire suppression system activation; include provisions for shunt trip power monitoring.
      c. Overcurrent protection devices selected to achieve required selective coordination.

B. Preinstallation Meeting: Convene meeting at least one week prior to start of this work.
   1. Review schedule of installation, proper procedures and conditions, and coordination with related work.
   2. Review use of elevator for construction purposes, hours of use, scheduling of use, cleanliness of car, employment of operator, and maintenance of system.

C. Construction Use of Elevator: Provide designated elevator for transport of construction personnel and materials in compliance with ASME A17.1.
   1. Make elevator available for construction use as early as possible.
   2. Enclose car with protective plywood on floor, walls, and ceiling.
   3. Provide temporary lighting.
   4. Provide control panel with manual and emergency operation.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Submit data on following items:
   1. Signal and operating fixtures, operating panels, and indicators.
   2. Car design, dimensions, layout, and components.
   3. Car and hoistway door and frame details.
   4. Electrical characteristics and connection requirements.

C. Shop Drawings: Include appropriate plans, elevations, sections, diagrams, and details on following items:
   1. Elevator Equipment and Machines: Size and location of driving machines, power units, controllers, governors, and other components.
   2. Hoistway Components: Size and location of car machine beams, guide rails, buffers, ropes, and other components.
   3. Rail bracket spacing; maximum loads imposed on guide rails requiring load transfer to building structural framing.
   4. Individual weight of principal components; load reaction at points of support.
   5. Loads on hoisting beams.
   6. Clearances and over-travel of car and counterweight.
   7. Locations in hoistway of traveling cables and connections for car lighting and telephone.
   8. Location and sizes of hoistway and car doors and frames.
   9. Calculated heat dissipation of elevator equipment.
   10. Interface with building security system.
   11. Electrical characteristics and connection requirements.
   12. Indicate arrangement of elevator equipment and allow for clear passage of equipment through access openings.

D. Samples: Submit samples illustrating car floor material, car interior finishes, car and hoistway door and frame finishes, and handrail material and finish in the form of cut sheets or finish color selection brochures.

E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

F. Initial Maintenance Contract.

G. Maintenance Contract: Submit proposal to Owner for standard one year continuing maintenance contract agreement in accordance with ASME A17.1 and requirements as indicated, starting on date initial maintenance contract is scheduled to expire.
   1. Indicate in proposal the services, obligations, conditions, and terms for agreement period and for renewal options.

H. Operation and Maintenance Data:
   1. Parts catalog with complete list of equipment replacement parts; identify each entry with equipment description and identifying code.
   2. Operation and maintenance manual.
   3. Schematic drawings of equipment, and wiring diagrams of installed electrical equipment with list of corresponding symbols to identify markings on machine room and hoistway apparatus.

1.06 QUALITY ASSURANCE

A. Maintain one copy of each quality standard document on site.

B. Designer Qualifications: Design guide rails, brackets, anchors, and machine anchors under direct supervision of a licensed Professional Structural Engineer experienced in design of this type of work and licensed in Texas.

C. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.

D. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years of documented experience and approved by elevator manufacturer.

E. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of type specified in this section.

F. Products Requiring Fire Resistance Rating: Listed and classified by ITS (DIR), UL (DIR), or testing agency acceptable to authorities having jurisdiction.

G. Products Requiring Electrical Connection: Listed and classified by UL (DIR) or testing agency acceptable to authorities having jurisdiction as suitable for the purpose indicated in construction documents.

1.07 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Provide manufacturer's warranty for elevator operating equipment and devices for one year from Date of Final Acceptance..

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design - Electric Traction Elevators: TK Elevator; EOX Self-Supported MRL; www.tkelevator.com.

B. Other Acceptable Manufacturers - Electric Traction Elevators:
   1. Otis Elevator Company: www.otis.com.
   2. Schindler Elevator Corporation: www.us.schindler.com/#sle.

C. Substitutions: See Section 01 6000 - Product Requirements.

D. Products other than Basis of Design are subject to compliance with specified requirements and prior approval of Architect. By using products other than Basis of Design, the Contractor accepts responsibility for costs associated with any necessary modifications to related work, including any design fees.

E. Source Limitations: Provide elevator and associated equipment and components produced by a single manufacturer and obtained from a single supplier.

2.02 ELECTRIC TRACTION ELEVATORS

A. Electric Traction Elevator:
   1. Electric Traction Elevator Equipment:
      a. Gearless Traction Machine: Provide traction driving sheave, with dual brake.
   2. Drive System:
      a. Synchronous alternating current (AC) motors and variable voltage variable frequency (VVVF) drive.
   3. Operation Control Type:
      a. Selective Collective Automatic Operation Control.
   4. Service Control Types:
      a. Standard service control.
      b. Independent service control.
      c. Restricted Access service control.
   5. Interior Cab Height: 88 inch. Confirm with elevator manufacturer.
   6. Electrical Power: 480 volts; alternating current (AC); three phase; 60 Hz.
   7. Car Loading Classification: Class A - General Freight Loading in compliance with ASME A17.1.
   8. Rated Net Capacity: 2500 pounds.
   9. Rated Speed: 150 feet per minute.
   10. Hoistway Size: As indicated on drawings. Confirm with elevator manufacturer.

11. Interior Car Platform Size: As indicated on drawings. Confirm with elevator manufacturer.
12. Travel Distance: As indicated on drawings.
13. Number of Stops: As indicated on drawings.
14. Number of Openings: As indicated on the drawings.
15. Traction Machine Location: As indicated on drawings.

2.03 COMPONENTS

A. Elevator Equipment:
   1. Motors, Controllers, Controls, Buttons, Wiring, Devices, and Indicators: Comply with NFPA 70 requirements, and refer to Refer to Division 26 for additional requirements.
   2. Guide Rails, Cables, Counterweights, Sheaves, Buffers, Attachment Brackets and Anchors: Design criteria for components includes safety factors in accordance with applicable requirements of Elevator Code, ASME A17.1.
   3. Buffers:
      a. Spring type for elevators with speed less than or equal to 200 feet per minute.
   4. Lubrication Equipment:
      a. Provide grease fittings for periodic lubrication of bearings.
      b. Grease Cups: Automatic feed type.
      c. Lubrication Points: Visible and easily accessible.

B. Electrical Equipment:
   1. Motors: NEMA MG 1.
   2. Boxes, Conduit, Wiring, and Devices: Complying with NFPA 70 and in accordance with Division 26 specifications.
   3. Sump Pump in Pit: Refer to Division 2 for additional requirements.
   4. Spare Conductors: Provide ten percent in extra conductors and two pairs of shielded audio cables in traveling cables.
   5. Include wiring and connections to elevator devices remote from hoistway. Refer to Division 26 for additional requirements.

2.04 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with ASME A17.1, applicable local codes, and authorities having jurisdiction (AHJ).

B. Accessibility Requirements: Comply with ADA Standards.

C. Perform structural steel design, fabrication, and installation in accordance with AISC 360.

D. Comply with seismic design requirements in accordance with ASME A17.1, applicable local codes, and authorities having jurisdiction (AHJ).
   1. Comply with Elevator Safety Requirements for Seismic Risk Zone in accordance with ASME A17.1, ASCE 7 and other related requirements.
      a. Project Seismic Risk: As indicated on drawings.
   2. Provide earthquake emergency operations in accordance with ASME A17.1 requirements.
   3. Provide seismic switch in accordance with ASME A17.1 and ASCE 7 requirements.

E. Perform welding of steel in accordance with AWS D1.1/D1.1M.

F. Fabricate and install door and frame assemblies in accordance with NFPA 80 and complying with requirements of authorities having jurisdiction (AHJ).

G. Perform electrical work in accordance with NFPA 70.

H. Comply with venting or pressurization of hoistway design in accordance with HVAC system requirements and authorities having jurisdiction (AHJ).

I. Comply with fire protection sprinkler system of hoistway design in accordance with NFPA 13 requirements and authorities having jurisdiction (AHJ). Refer to Division 21 for additional requirements.

2.05 OPERATION CONTROLS

A. Elevator Controls: Provide vandal resistant landing operating panels and landing indicator panels.
   1. Landing Operating Panels: Metallic type, one for originating "Up" and one for originating "Down" calls, one button only at terminating landings; with illuminating indicators.
   2. Landing Indicator Panels: Illuminating.
   3. Comply with ADA Standards for elevator controls.

B. Car Lantern and Chime: A directional lantern visible from the corridor shall be provided in the car entrance. When the car stops and the doors are opening, the lantern shall indicate the direction in which the car is to travel and a chime will sound.

C. Hoistway Access key-switch at top floor in entrance jamb.

D. Hoistway Access key-switch at lowest floor in entrance jamb.

E. Interconnect elevator control system with building security, fire alarm, and smoke alarm systems.

F. Door Operation Controls:
   1. Program door control to open doors automatically when car arrives at floor landing.
   2. Render "Door Close" button inoperative when car is standing at dispatch landing with doors open.
   3. Door Control Features:
      a. Door control to open doors automatically when car arrives at a landing in response to a normal hall or car call.
      b. Elevator doors shall be provided with a reopening device that will stop and reopen the car door(s) and hoistway door(s) automatically should the door(s) become obstructed by an object or person.
      c. Door protection shall consist of a two dimensional, multi-beam array projecting across the car door opening.
      d. Door nudging operation to occur if doors are prevented from closing for an adjustable period of time.

G. Provide "Firefighter's Emergency Operation" in accordance with ASME A17.1, applicable building codes, and authorities having jurisdiction (AHJ).
   1. Designated Landing: As indicated on drawings.

2.06 OPERATION CONTROL TYPE

A. Selective Collective Automatic Operation Control: Applies to car in single elevator shaft.
   1. Refer to description provided in ASME A17.1.
   2. Automatic operation by means of one button in the car for each landing served and by "UP" and "DOWN" buttons at the landings.
   3. Stops are registered by momentary actuation of landing car buttons without consideration of the number of buttons actuated or the sequence buttons are actuated, but the stops are made in the order that landings are reached in each direction of travel.
   4. All "UP" landing calls are made when car is traveling in the up direction.
   5. All "DOWN" landing calls are made when car is traveling in the down direction.
   6. Uppermost and lowermost calls are answered as soon as they are reached without consideration of the car travel direction.

2.07 SERVICE CONTROL TYPE

A. Independent Service Control:
   1. Provide key operated "Independent Service" on car operating panel. Key activation will remove that car from normal operation and cancel pre-registered car calls.

2. Car will respond to selected floor. Car will not respond to any calls from landing call buttons. Car will only respond to calls placed on the car operating panel. Doors will remain open at last landing requested. Doors will close with a constant pressure on "Door Close" button.
3. Key activation to normal operation will return car to normal operation.

B. Restricted Access Service Control:
1. Hall Call Security Lock-out: Provide a security key switch in each hall station that performs the following when activated:
a. Restricts or permits registration of each landing button.
b. Landing calls are answered in normal manner.
2. Allow "Firefighter's Emergency Operation" to take control priority over "Restricted Access Service Control".

2.08 EMERGENCY POWER

A. Set-up elevator operation to run with building emergency power supply when the normal building power supply fails, and in compliance with ASME A17.1 requirements.

B. Building Emergency Power Supply: Supplied by backup generator; provide elevator system components as required for emergency power characteristics with phase rotation the same as for normal power.
1. Provide transfer switches and auxiliary contacts.
2. Install connections to power feeders.

C. Emergency Lighting: Comply with ASME A17.1 elevator lighting requirements.

D. Provide operational control circuitry for adapting the change from normal to emergency power.

E. Upon transfer to emergency power, advance one elevator at a time to a pre-selected landing, stop car, open doors, disable operating circuits, and hold in standby condition.

2.09 MATERIALS

A. Rolled Steel Sections, Shapes, Rods: ASTM A36/A36M.

B. Steel Sheet: ASTM A1008/A1008M, Designation CS (commercial steel), with matte finish.

C. Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating.

D. Stainless Steel Sheet: ASTM A666, Type 441; No. 4 Brushed finish unless otherwise indicated.

E. Stainless Steel Bars, Shapes and Moldings: ASTM A276/A276M, Type 441.

F. Extruded Aluminum: ASTM B221 (ASTM B221M), natural anodized finish unless otherwise indicated.

G. Aluminum Sheet: ASTM B209 (ASTM B209M), 3105 alloy, O temper.

H. Plywood: PS 1, Structural I, Grade C-D or better, sanded.

I. Laminated Glass: 3/8 inch minimum thickness, and in compliance with ASME A17.1, 16 CFR 1201, ANSI Z97.1, and ASTM C1172 laminated glass requirements.

J. Flooring: Reference drawings and Section 01 6210 - Schedule of Materials and Colors.

K. Plastic Laminate: NEMA LD 3, Type HGS, color as selected by Architect from manufacturer's standard line of colors.

2.10 CAR AND HOISTWAY ENTRANCES

A. Elevator, 1:
1. Car and Hoistway Entrances, Each Elevator Floor Lobby:
a. Hoistway Fire Rating: Match rating of hoistway as shown on the drawings.
b. Elevator Door Fire Rating: As indicated on drawings.

c. Framed Opening Finish and Material: Brushed stainless steel.
d. Car Door Material: To match hoistway entrance doors, with rigid sandwich panel construction.
e. Hoistway Door Material: To match cab entrance doors, with rigid sandwich panel construction.
f. Door Type: As indicated on the drawings.
g. Door Operation: As indicated on the drawings.
h. Door Width: As indicated on drawings.
i. Door Height: As indicated on drawings.
j. Sills: Extruded aluminum.

B. Sills/Thresholds: Configure to align with frame return and coordinate with floor finish.

C. Gasketing: Provide acoustic type gasketing at hoistway doors and frames to minimize audible noise due to car activities in the hoistway, and air pressure differential between hoistway and landing floors.

2.11 CAR EQUIPMENT AND MATERIALS

A. Elevator Car:
1. Car Operating Panel: Provide main; flush-mounted applied face plate, with illuminated call buttons corresponding to floors served with "Door Open/Door Close" buttons, "Door Open" button, "Door Close" button, and alarm button.
a. Panel Material: Stainless steel; one per car.
b. Car Floor Position Indicator: Above car operating panel with illuminating position indicators.
c. Locate alarm button where it is unlikely to be accidentally actuated; not more than 54 inch above car finished floor.
d. Emergency Communications System: Integral phone system provided. ADA Phone – Code Compliant Cellular Connectivity: Contractor shall provide a phone service through a self-contained cellular based VoIP system. This system shall meet code, include a backup battery capable of powering the emergency communication equipment for 4+ hours in the event of a power outage. The solution shall have remote monitoring capability to ensure continuous connectivity with a means of remote troubleshooting. Remote monitoring capability shall include, at a minimum, the ability to monitor connectivity and power supply. Remote monitoring shall be capable of providing local alerts to response personnel when on-site intervention is required.
2. Hall Fixtures: Hall fixtures shall be provided with necessary push buttons and key switches for elevator operation. Hall fixtures shall have a:
a. Integral Hall fixtures shall feature round stainless steel, mechanical buttons marked to correspond to the landings. Hall fixtures to be located in the entrance frame face or adjacent wall. Buttons shall be in vertically mounted fixture. Fixture shall be satin stainless steel finish.
b. Button Options:
1) Flat Flush Mounted satin stainless steel button with white LED illuminating halo.
3. Ventilation: Two speed fan with grille in ceiling.
4. Subfloor: Underlayment grade, exterior plywood, 5/8" nominal thickness.
5. Flooring: See Schedule of Materials and Colors for required flooring. Adjust recess for flooring material as well as load capacity of car. The flooring contractor must be an approved TDLR Vendor or you must subcontract the flooring through the elevator company. This is required for final elevator inspection with TDLR.
6. Front Return Panel: Stainless steel.
7. Door Wall: Stainless steel.
8. Side Walls: Plastic laminate on plywood.

9. Rear Wall: Plastic laminate on plywood.
10. Hand Rail: Stainless steel, at rear wall. Provide open clearance space 1-1/2 inch (38 mm) wide to face of wall.
    a. Round, Metal Tube: 1-1/2 inch diameter.
    b. Stainless Steel Finish: No. 4 Brushed.
11. Ceiling:
    a. Exposed Frame Suspended Ceiling: Translucent plastic panel, mount 7 inch below car canopy with 1-1/2 inch nominal space between edge of ceiling and wall.
    b. Frame Finish: Powder coated, See Section 01 6210 for color.
    c. Lighting: LED.
12. Provide emergency access panel for egress from car at ceiling.

B. Car Accessories:
1. Certificate Frame: Stainless steel frame glazed with clear acrylic plastic, and attached with tamper-proof screws.
2. Protective Pads: Canvas cover, padded with impact-resistant fill material, sewn with piping edges; fire resistant in compliance with ASME A17.1, covering side and rear walls and front return; provide one set for each elevator.
    a. Color: As selected by Architect.
    b. Provide at least 4 inch clearance from bottom of pad to finished floor.
    c. Pad Supports: Stainless steel studs, and mounted from top of wall panels.

2.12 FINISHES

A. Field Painting: Comply with requirements as specified in Section 09 9123.

B. Powder Coat on Steel: Clean and degrease metal surface; apply one coat of primer; two coats of powder coat.

C. Baked Enamel on Steel: Clean and degrease metal surface; apply one coat of primer sprayed and baked; two coats of enamel sprayed and baked.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting this work.

B. Verify that hoistway, pit, and machine room are ready for work of this section.

C. Verify hoistway shaft and openings are of correct size and within tolerance.

D. Verify location and size of machine foundation and position of machine foundation bolts.

E. Verify that electrical power is available and of correct characteristics.

3.02 PREPARATION

A. Arrange for temporary electrical power for installation work and testing of elevator components. Comply with requirements of Section 01 5000 - Temporary Facilities and Controls.

B. Maintain elevator pit excavation free of water.

3.03 INSTALLATION

A. Coordinate this work with installation of hoistway wall construction.

B. Install system components, and connect equipment to building utilities.

C. Provide conduit, electrical boxes, wiring, and accessories. Refer to Division 26 for additional requirements.

D. Mount machines and motors on vibration and acoustic isolators.
1. Place on structural supports and bearing plates.
2. Securely fasten to building supports.
3. Prevent lateral displacement.

E. Install hoistway, elevator equipment, and components in accordance with approved shop drawings.

F. Install guide rails to allow for expansion and contraction movement of guide rails.

G. Accurately machine and align guide rails, forming smooth joints with machined splice plates.

H. Bolt brackets to inserts placed in concrete form work.

I. Field Welds: Chip and clean away oxidation and residue with wire brush; spot prime with two coats.

J. Install hoistway door sills, frames, and headers in hoistway walls; grout sills in place, set hoistway floor entrances in alignment with car openings, and align plumb with hoistway.

K. Fill hoistway door frames solid with grout in accordance with Section 04 2000.

L. Structural Metal Surfaces: Clean surfaces of rust, oil or grease; wipe clean with solvent; prime with two coats.

M. Machine Room Components: Clean and degrease; prime one coat, finish with one coat of enamel.

N. Adjust equipment for smooth and quiet operation.

3.04 TOLERANCES

A. Guide Rail Alignment: Plumb and parallel to each other in accordance with ASME A17.1 and ASME A17.2.

B. Car Movement on Aligned Guide Rails: Smooth movement, without any objectionable lateral or oscillating movement or vibration.

3.05 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for additional requirements.

B. Testing and inspection by regulatory agencies certified in accordance with ASME QEI 1 will be performed at their discretion.
   1. Schedule tests with agencies and notify Owner and Architect.
   2. Obtain permits as required to perform tests.
   3. Document regulatory agency tests and inspections in accordance with requirements.
   4. Perform tests required by regulatory agencies.
   5. Furnish test and approval certificates issued by authorities having jurisdiction (AHJ).

C. Perform testing and inspection in accordance with requirements.
   1. Inspectors shall be certified in accordance with ASME QEI-1.
   2. Perform tests in accordance with ASME A17.2.
   3. Provide at least two weeks written notice of date and time of tests and inspections.
   4. Supply instruments and execute specific tests.

D. Operational Tests:
   1. Perform operational tests in the presence of Owner and Architect.
   2. At an agreed time, and the building occupied with normal building traffic, conduct tests to verify performance.
      a. Furnish event recording of each landing call registrations, time initiated, and response time throughout entire working day.

3.06 ADJUSTING

A. Adjust for smooth acceleration and deceleration of car to minimize passenger discomfort.

B. Adjust with automatic floor leveling feature at each floor landing to reach 1/4 inch maximum from flush with sill.

3.07 CLEANING

A. Remove protective coverings from finished surfaces.

B. Clean surfaces and components in accordance with manufacturers written instructions.

3.08 CLOSEOUT ACTIVITIES

A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

B. See Section 01 7900 - Demonstration and Training, for additional requirements.

C. Demonstrate proper operation of equipment to Owner's designated representative.

D. Demonstration: Demonstrate operation of system to Owner's personnel.
   1. Use operation and maintenance data as reference during demonstration.
   2. Conduct walking tour of project.
   3. Briefly describe function, operation, cleaning and maintenance of each component.

E. Training: Train Owner's personnel on cleaning and operation and maintenance of system.
   1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
   2. Provide minimum of two hours of training.
   3. Instructor: Manufacturer's training personnel.
   4. Location: At project site, unless otherwise indicated.

3.09 PROTECTION

A. Do not permit construction traffic within car after cleaning.

B. Protect installed products until Date of Substantial Completion.

C. Touch-up, repair, or replace damaged products and materials before Date of Substantial Completion.

3.10 MAINTENANCE

A. Refer to Section 01 7000 - Execution and Closeout Requirements, for additional requirements relating to initial maintenance service.

B. Provide Initial Maintenance Contract of elevator system and components in accordance with ASME A17.1 and requirements as indicated for 12 months from Date of Substantial Completion.

C. Perform maintenance contract services using competent and qualified personnel under the supervision and direct employ of the elevator manufacturer or installer.

D. Maintenance contract services shall not be assigned or transferred to any agent or other entity without prior written consent of Owner.

E. Examine system components periodically.

F. Include systematic examination, adjustment, and lubrication of elevator equipment.

G. Maintain and repair or replace parts, whenever required, using parts produced by original equipment manufacturer.

H. Replace wire ropes when necessary to maintain the required factor of safety.

I. Perform work without removing cars from use during peak traffic periods.

J. Provide emergency call back service during regular working hours throughout period of this maintenance contract.

K. Maintain an adequate stock of parts for replacement or emergency purposes, and have personnel available to ensure the fulfillment of this maintenance contract without unreasonable loss of time.

END OF SECTION

ROOF TYPE TAGS

LETTER INDICATES TYPE

NUMBER INDICATES CONSTRUCTION AS FOLLOWS:

R100

ROOF ASSEMBLY IN SECTION VIEW

R100 - MOD. BIT., INSUL., 1 1/2" MTL. DECK

R200 - STANDING SEAM METAL ROOF THROUGH DELEGATED DESIGN BY PEMB PROVIDER

ROOF TYPE LEGEND

EXTERIOR WALL TYPE TAGS

LETTER INDICATES EXTERIOR WALL

NUMBER INDICATES BACKUP CONSTRUCTION AS FOLLOWS:

W200

WALL ASSEMBLY IN SECTION VIEW

100 - CFMF
200 - CMU
300 - ICF
400 - STRUCTURAL CONC. PRECAST PANEL

EXTERIOR WALL TYPE LEGEND

PARTITION TYPE TAGS

A3 | D

WALL ASSEMBLY IN PLAN VIEW

LETTERS TO THE RIGHT INDICATE PARTITION HEIGHT, FIRE RATING AND ACOUSTICAL PROPERTIES.

- D — WALL TO **D**ECK / STRUCTURE
- C — WALL TO 6" (MIN.) ABOVE **C**EILING
- FR — **F**IRE **R**ATED WALL TO DECK / STRUCTURE
- AD — **A**COUSTICAL WALL TO **D**ECK / STRUCTURE
- AC — **A**COUSTICAL WALL TO 6" (MIN.) ABOVE **C**EILING
- AR — **A**COUSTICAL **R**ATED WALL TO DECK / STRUCTURE
- GD — GYP WALL ABOVE TO **D**ECK / STRUCTURE
- SR — **S**MOKE **R**ESISTANT PARTITION

LETTER & NUMBER TO THE LEFT INDICATE PARTITION TYPE & STUD OR CMU SIZE AS FOLLOWS:

1 - 7/8" HAT CHANNEL
2 - 1 5/8" CFMF
3 - 2 1/2" CFMF
4 - 3 5/8" CFMF OR CMU
6 - 6" CFMF OR 5 5/8" CMU OR 6" CORE ICF
8 - 8" CFMF OR 7 5/8" CMU OR 8" CORE ICF
10 - 9 5/8" CMU OR 10" CORE ICF
12 - 11 5/8" CMU OR 12" CORE ICF

WALL / PARTITION NOTES:

1. ALL INTERIOR WALL/PARTITIONS NOT OTHERWISE DESCRIBED BY A WALL SECTION ARE IDENTIFIED BY A SYMBOL WITH AN ALPHANUMERIC CODE INDICATING MATERIALS (BY LETTER), NOMINAL THICKNESS OF STRUCTURE (BY NUMBER) AND AN ALPHANUMERIC CODE REPRESENTING HEIGHT, FIRE RATING AND ACOUSTICAL PROPERTIES.

2. **UNTAGGED WALL/PARTITIONS AND COLUMN FURRINGS** SHALL BE ASSUMED TO BE **"TYPICAL"**, AS FOLLOWS, FOR BIDDING PURPOSES:
   GYP BOARD (EXTENDS TO 6" ABOVE CEILING U.N.O.)
   WALLS/PARTITIONS - TYPE **H4**, ACOUSTICAL
   COLUMN FURRING - **M4**, NON-ACOUSTICAL
   MASONRY (EXTENDS TO 4" ABOVE CEILING OR TO NEAREST 8" COURSING ABOVE 4" U.N.O.)
   WALLS/PARTITIONS - TYPE **A8**, NON-ACOUSTICAL
   COLUMN FURRING - TYPE **A6**, NON-ACOUSTICAL
   ANY UNTAGGED PARTITIONS WHICH APPEAR INCONSISTENT WITH THE DESCRIPTIONS ABOVE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO BIDDING.

3. WALL TYPES IDENTIFIED AS CMU MAY INCLUDE ACMU. FLOOR PLAN HATCH PATTERNS WILL DIFFERENTIATE REGULAR SMOOTH FACE CMU FROM ARCHITECTURAL CMU. FINISH PLANS AND SCHEDULES WILL IDENTIFY ACMU SELECTIONS (GROUND FACE, SPLIT FACE, ETC.) AND IDENTIFY WHICH SIDE OF A SINGLE WYTHE ACMU WALL IS THE FINISH SIDE.

4. WALL/PARTITION TYPES IDENTIFIED AS INCLUDING VENEER MAY INCLUDE BRICK, STONE, OR ACMU. FLOOR PLAN HATCH PATTERNS WILL DIFFERENTIATE REGULAR SMOOTH FACE CMU, BRICK, STONE, OR ARCHITECTURAL CMU. FINISH PLANS AND SCHEDULES WILL IDENTIFY ACMU SELECTIONS (GROUND FACE, SPLIT FACE, ETC.)

5. WALL/PARTITIONS INDICATED BY TAG "GYP WALL ABOVE TO DECK" SHALL BE CONSTRUCTED OF THE SPECIFIED WALL TYPE TO ONE FULL COURSE (MIN.) ABOVE THE CEILING, BRACED, AND AN H4 (OR M4) WALL/PARTITION (H8 OR M8 WHERE REQUIRED BY UNBRACED HEIGHT) SHALL BE BUILT FROM THE TOP OF WALL TO DECK. WALL/PARTITIONS INDICATED BY TAG "ACOUSTICAL GYP WALL ABOVE TO DECK" SHALL BE CONSTRUCTED OF THE SPECIFIED WALL TYPE TO A ONE FULL COURSE (MIN.) ABOVE THE CEILING, BRACED, AND AN H4 (OR M4) WALL/PARTITION (H6 OR M6 WHERE REQUIRED BY UNBRACED HEIGHT) WITH BATT INSULATION SHALL BE BUILT FROM THE TOP OF WALL TO DECK. WHERE INDICATED BY THE FIRE CODE PLAN TO BE FIRE RATED, ALL CONNECTIONS SHALL MEET RATING REQUIREMENTS.

6. FIRE-RATED WALL/PARTITIONS ARE INDICATED ON THE FIRE CODE PLANS ON THE G2 SHEETS. ALL GYP BOARD IN A RATED ASSEMBLY MUST BE 5/8" TYPE "X" AND CONSTRUCTION MUST MATCH THE ASSIGNED UL NUMBER. REFERENCE THE TYPE SCHEDULES ON THIS SHEET FOR UL NUMBERS WHERE APPLICABLE. SUBSTITUTE UL ASSEMBLIES MAY BE PRESENTED FOR THE CONSIDERATION OF THE ARCHITECT , BUT MUST NOT BE USED UNLESS APPROVED IN WRITING. PARTITIONS NOT IDENTIFIED AS RATED SHALL BE BUILT WITH STANDARD GYP BOARD.

7. WHERE FIRE-RATED MASONRY WALL/PARTITIONS ARE INDICATED TO EXTEND TO DECK, ANY VENEER OR ACMU MAY TERMINATE ABOVE CEILING LEVEL. THE CMU WALL/PARTITION SHALL EXTEND TO DECK WITH REGULAR CMU OF SAME THICKNESS AS THE CMU (OR ACMU) IN THE WALL ASSEMBLY.

8. ALL ACOUSTICAL GYP BD WALL/PARTITIONS REQUIRE HIGHER QUALITY CONSTRUCTION AND SHALL BE FULL HEIGHT SOUND ATTENUATING BATT INSULATION. IN ORDER TO ACHIEVE THE INDICATED STC RATING, ALL WALL/PARTITIONS ARE TO HAVE ALL PIN HOLES & VOIDS, PIPES, DUCTS, CONDUITS, ETC ACOUSTICALLY FILLED ON BOTH SIDES. ALL WALL BOXES ON BOTH SIDES OF WALL/PARTITION ARE TO HAVE ACOUSTICAL PUTTY PADS ON THE INTERIOR SIDE AS DETAILED. BOTH SIDES OF WALL/PARTITION SHALL BE SEALED TIGHT TO DECK AS DETAILED. THE FLOOR TRACK SHALL BE SET ON AN ACOUSTICAL ISOLATOR PAD.

9. ALL ACOUSTICAL CMU WALL/PARTITIONS REQUIRE A HIGHER QUALITY CONSTRUCTION, SHALL BE NORMAL WEIGHT CMU BLOCK, EXTEND TO DECK AND HAVE FULL HEAD JOINTS. ALL PENETRATIONS SHALL BE ACOUSTICALLY SEALED ON BOTH SIDES OF WALL. MORTAR JOINTS TO BE FILLED W/ NO PIN HOLES OR VOIDS. HEAD OF WALL SHALL BE SEALED TIGHT TO DECK AS DETAILED.

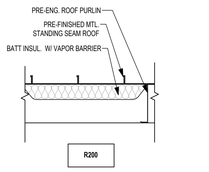
10. ALL COLD FORM METAL FRAMING ARE SUBJECT TO THE DESIGN OF A QUALIFIED STRUCTURAL ENGINEER. FINAL DETERMINATION OF GAUGE AND DIMENSIONS OF FRAMING WILL BE DETERMINED BY STRUCTURAL DESIGN. ENGINEERS RECOMMENDATIONS WHICH WOULD SIGNIFICANTLY IMPACT WALL THICKNESS MUST BE COORDINATED WITH THE ARCHITECT FOR ALIGNMENT PRIOR TO CONSTRUCTION.

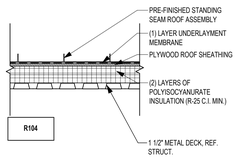
11. REFER TO TYPICAL INTERIOR WALL/PARTITION BRACING DETAILS FOR ADDITIONAL INFORMATION REGARDING FLOOR AND DECK CONNECTIONS. FIRE-RATED WALLS SHALL USE FIRE STOPPING SEALANTS OR ASSEMBLIES WHERE THE WALL/PARTITION ABUTS THE DECK, INCLUDING MINERAL WOOL INSULATION WHERE APPLICABLE. NON-RATED PARTITIONS SHALL USE ACOUSTICAL SEALANTS AND INSULATION WHERE THE WALL/PARTITION ABUTS THE DECK.

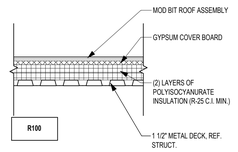
12. FOR ANY DISCREPANCY BETWEEN WALL/PARTITION TYPES AND WALL SECTIONS, WALL SECTION SHALL SUPERCEDE.

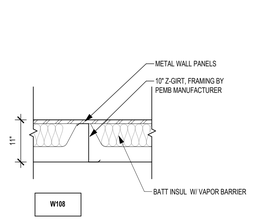
13. NOT ALL WALL/PARTITION TYPES SHOWN WILL BE USED IN EVERY PROJECT.

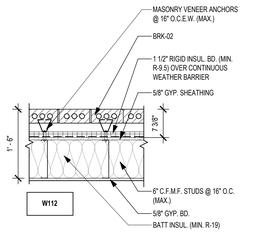
INTERIOR PARTITION TYPE LEGEND

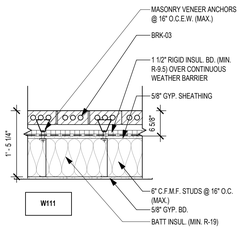


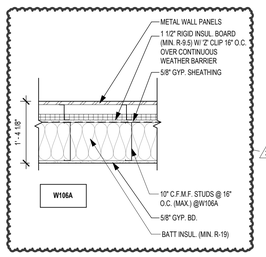


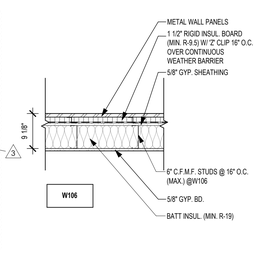


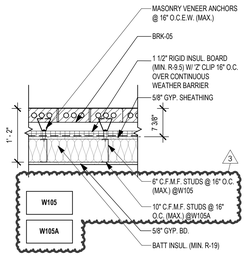


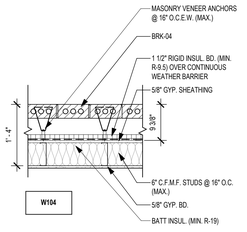


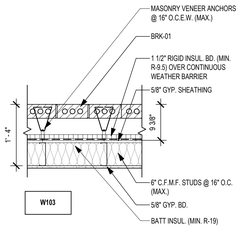


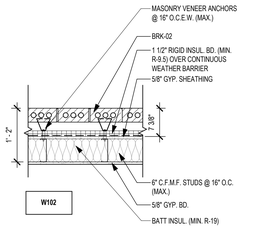


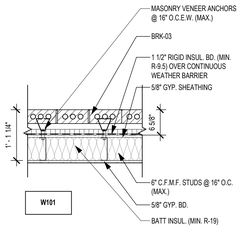


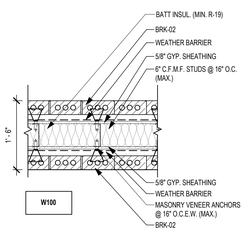




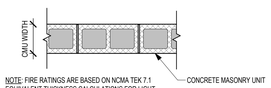








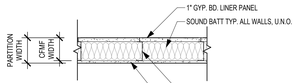
WALL TYPE	CMU WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
A6	5 5/8"	5 5/8"	1 HR	U906	45	50
A8	7 5/8"	7 5/8"	2 HR	U905	47	54
A10	9 5/8"	9 5/8"	2 HR	U905	50	57
A12	11 5/8"	11 5/8"	2 HR	U905	51	59



NOTE: FIRE RATINGS ARE BASED ON NCMA TEK 7.1 EQUIVALENT THICKNESS CALCULATIONS FOR LIGHT WEIGHT CMU OF EXPANDED CLAY, SHALE, OR SLATE.

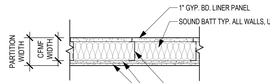
A — **SINGLE-WYTHE CMU**

WALL TYPE	CFMF WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
K3	2 1/2"	3 1/8"	1 HR	U415	37	48
K4	4"	4 5/8"	1 HR	U415	37	48
K6	6"	6 5/8"	1 HR	U415	37	48



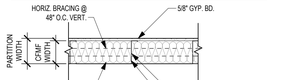
K — **GYP. BD. ON SHAFT LINER**

WALL TYPE	CFMF WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
L3	2 1/2"	3 3/4"	2 HR	U415	40	51
L4	4"	5 1/4"	2 HR	U415	40	51
L6	6"	7 1/4"	2 HR	U415	40	51



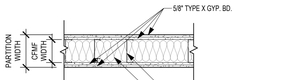
L — **GYP. BD. ON SHAFT LINER**

WALL TYPE	CFMF WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
M1	7/8"	1 1/2"	--		--	34
M2	1 5/8"	2 1/4"	--		--	34
M3	2 1/2"	3 1/8"	--		--	34
M4	3 5/8"	4 1/4"	--		--	34
M6	6"	6 5/8"	--		--	34



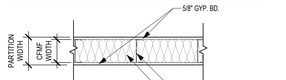
M — **GYP. BD. FURRING ON CFMF**

WALL TYPE	CFMF WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
J4	3 5/8"	6 1/8"	2 HR	U411; U419	45	53
J6	6"	8 1/2"	2 HR	U411; U419	45	53



J — **GYP. BD. ON CFMF - FIRE RATED**

WALL TYPE	CFMF WIDTH	PARTITION WIDTH	FIRE RATING	UL LISTING	STC RATING	
					NO SOUND ATTENUATION	WITH SOUND ATTENUATION
H4	3 5/8"	4 7/8"	--	U419; U465	40	44
H4	3 5/8"	4 7/8"	1 HR	U419; U465	40	44
H6	6"	7 1/4"	--	U419; U465	40	44
H6	6"	7 1/4"	1 HR	U419; U465	40	44
H8	8"	9 1/4"	1 HR	U419; U465	40	44



H — **GYP. BD. ON CFMF**

Date

Revision /

Project:

HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

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Jason Andrus
TX 19417

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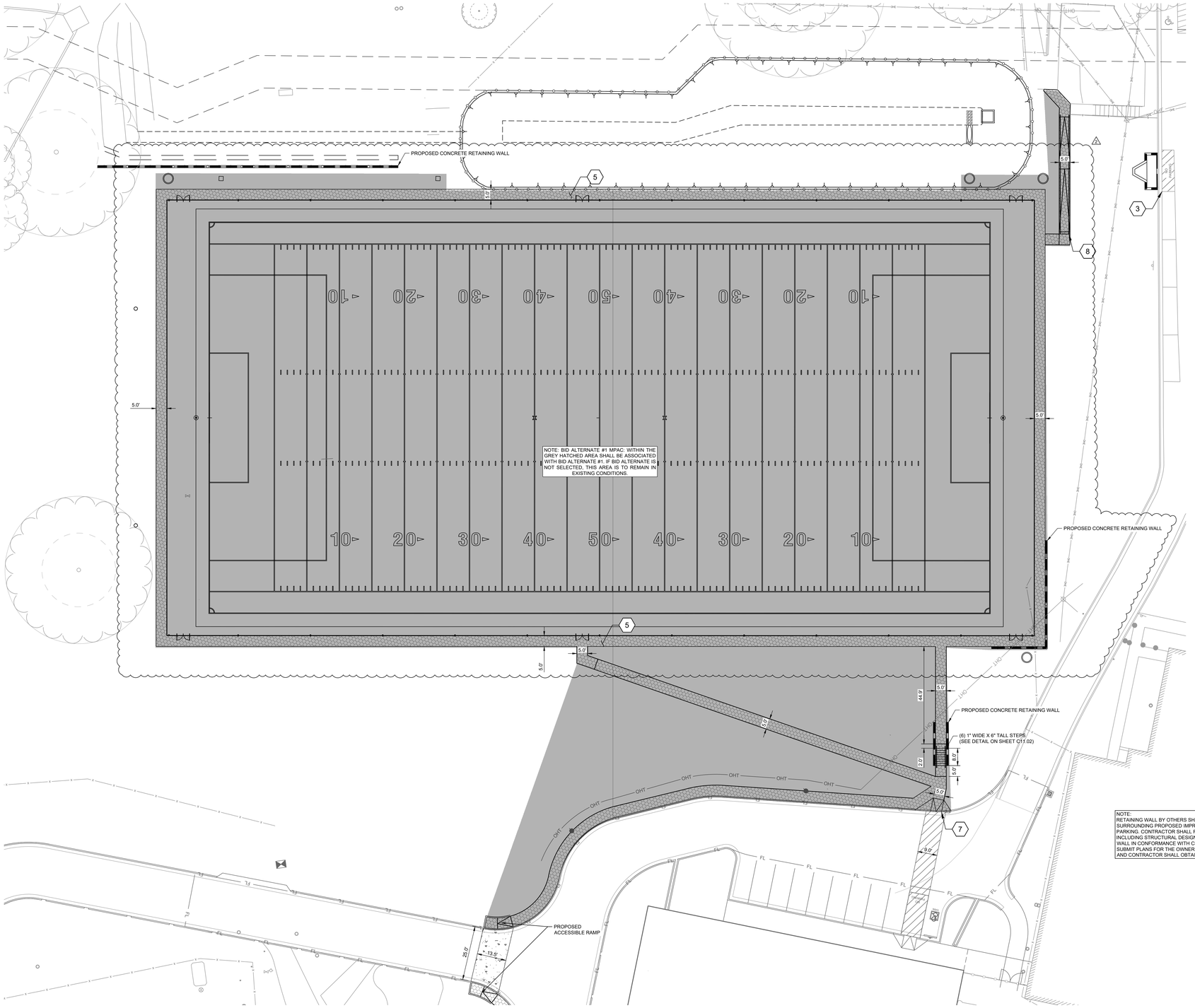
EXTERIOR WALL, ROOF TYPES & INTERIOR PARTITION TYPES

Job No. 01954-09-01
Drawn By: Author
Date: 5/7/25

Sheet No.
ISSUE FOR BID
G3.01

5/15/2025 10:15:44 AM
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2023/01954-09-01_HaysHSAdd_V23.rvt



GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- PROPERTY BOUNDARY
- PROPOSED SAWCUT LINE
- FL — PROPOSED FIRE LANE
- PROPOSED RELOCATED BASEBALL FIELD FENCING. 6' TALL W/ BLUE PRIVACY SLATS & PROTECTIVE TOP. CONTRACTOR TO MATCH EXISTING FENCING IN KIND.
- PROPOSED DECORATIVE FENCE (REF. ARCH.)
- PROPOSED RETAINING WALL (TRIANGLE INDICATES FACE OF WALL)
- PROPOSED BARRIER FREE RAMP
- EXISTING SANITARY SEWER MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING POWER POLE
- 1 — PROPOSED 6" CONCRETE CURB (REF. DETAIL, THIS SHEET)
- 2 — 4" PAINTED STRIPE (TYP.)
- 3 — 4" PAINTED STRIPING, 2' O.C. @ 45°
- 4 — FIRE LANE STRIPING (REF. DETAIL, SHEET C5.00)
- 5 — CONSTRUCT ON-SITE CONCRETE SIDEWALK (REF. DETAIL, SHEET C11.00)
- 6 — PROPOSED SAWTOOTH CURB (REF. DETAIL, SHEET C11.00)
- 7 — CONSTRUCT ON-SITE BARRIER FREE RAMP (REF. DETAIL, SHEET C11.00)
- 8 — CONSTRUCT ON-SITE RAMP WITH RAILS (REF. DETAIL, SHEET C11.02)
- 9 — PROPOSED CONCRETE FLUME (REF. DETAIL, SHEET C11.00)
- 10 — PROPOSED STAIR W/ HANDRAILS (REF. DETAIL, SHEET C11.02)
- 11 — PROPOSED 12" CURB CUT
- 12 — PROPOSED ELECTRICAL BOX RELOCATION (REF. ELEC PLANS FOR DETAILS)
- PROPOSED GENERAL PARKING ASPHALT PAVEMENT
- PROPOSED ACCESS DRIVES ASPHALT PAVEMENT
- PROPOSED HEAVY-DUTY ASPHALT PAVEMENT
- PROPOSED ON-SITE (PRIVATE) SIDEWALK
- PROPOSED PVC CONDUIT LOCATION
- PROPOSED ARTIFICIAL TURF (REF. LANDSCAPE)

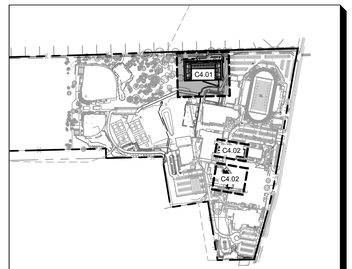
NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. REFER TO ARCHITECTURAL CONSTRUCTION DRAWINGS FOR EXACT BUILDING DIMENSIONS. REFER TO LANDSCAPE ARCHITECTS PLANS FOR DIMENSIONS AND DETAIL OF HARDSCAPE.
3. ALL CURB RADII ARE 3 FEET UNLESS DIMENSIONED OTHERWISE.
4. BUILDING, MECHANICAL EQUIPMENT AND SIGNS ARE SHOWN HEREON FOR REFERENCE ONLY. REFER TO CONSTRUCTION PLANS OF THOSE ITEMS FOR LOCATIONS AND DIMENSIONS.
5. ALL CONSTRUCTION SPECIFICATIONS WITHIN CITY RIGHT-OF-WAY AND EASEMENTS SHALL COMPLY WITH HAYS COUNTY STANDARDS. PRIOR APPROVAL TO USE ANY NON-STANDARD MATERIAL IS REQUIRED.
6. REFERENCE GEOTECHNICAL REPORT FOR ADDITIONAL PAVING AND SOIL PREPARATION NOTES.
7. REFERENCE IRRIGATION AND MEP PLANS FOR CONDUIT SIZES AND LOCATIONS UNLESS OTHERWISE NOTED ON THIS SHEET.
8. EXPANSION JOINTS SHOULD BE USED WHEREVER THE PAVEMENT WILL ABUT A STRUCTURAL ELEMENT SUBJECT TO DIFFERENT MAGNITUDE OF MOVEMENT, E.G., LIGHT POLES, RETAINING WALLS, EXISTING PAVEMENT, STAIRWAYS, ENTRYWAY PIERS, BUILDING WALLS, OR MANHOLES.
9. EXISTING MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MATCH PROPOSED GRADES. IF NECESSARY, ADJUSTMENTS SHALL BE PERFORMED UPON COMPLETION OF PAVING AND FINE GRADING TO ENSURE A SMOOTH TRANSITION.

TAS NOTE

GROUND AND FLOOR SURFACES ALONG ACCESSIBLE ROUTES AND IN ACCESSIBLE ROOMS AND SPACES INCLUDING FLOORS, WALKS, RAMPS, STAIRS, AND CURB RAMPS, SHALL BE STABLE, FIRM, SLIP-RESISTANT, AND SHALL COMPLY WITH SECTION 302 OF THE TEXAS ACCESSIBILITY STANDARDS.

NOTE:
RETAINING WALL BY OTHERS SHALL TAKE INTO CONSIDERATION THE SURROUNDING PROPOSED IMPROVEMENTS, SUCH AS LIGHT AND PARKING. CONTRACTOR SHALL PROVIDE CONSTRUCTION PLANS, INCLUDING STRUCTURAL DESIGN AND HANDRAIL, FOR THE RETAINING WALL IN CONFORMANCE WITH CITY STANDARDS. CONTRACTOR SHALL SUBMIT PLANS FOR THE OWNER, ARCHITECT, AND ENGINEER REVIEW AND CONTRACTOR SHALL OBTAIN CITY PERMIT.



KEY MAP
N.T.S.

BENCHMARK LIST

TBM 80D SPK/W
ELEV. = 839.14'

TBM MAG NAIL
ELEV. = 827.38'

811 Know what's below. Call before you dig.

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

Revision /	Date
ADDENDUM 01	05.08.25
ADDENDUM 03	05.15.25

Project:
HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR HAYS CISD
BUDA, TEXAS

Kimley»Horn
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TBPE FIRM NO. 928

STATE OF TEXAS
RICHARD J. UNDERWOOD
117843
REGISTERED PROFESSIONAL ENGINEER
05/15/2025

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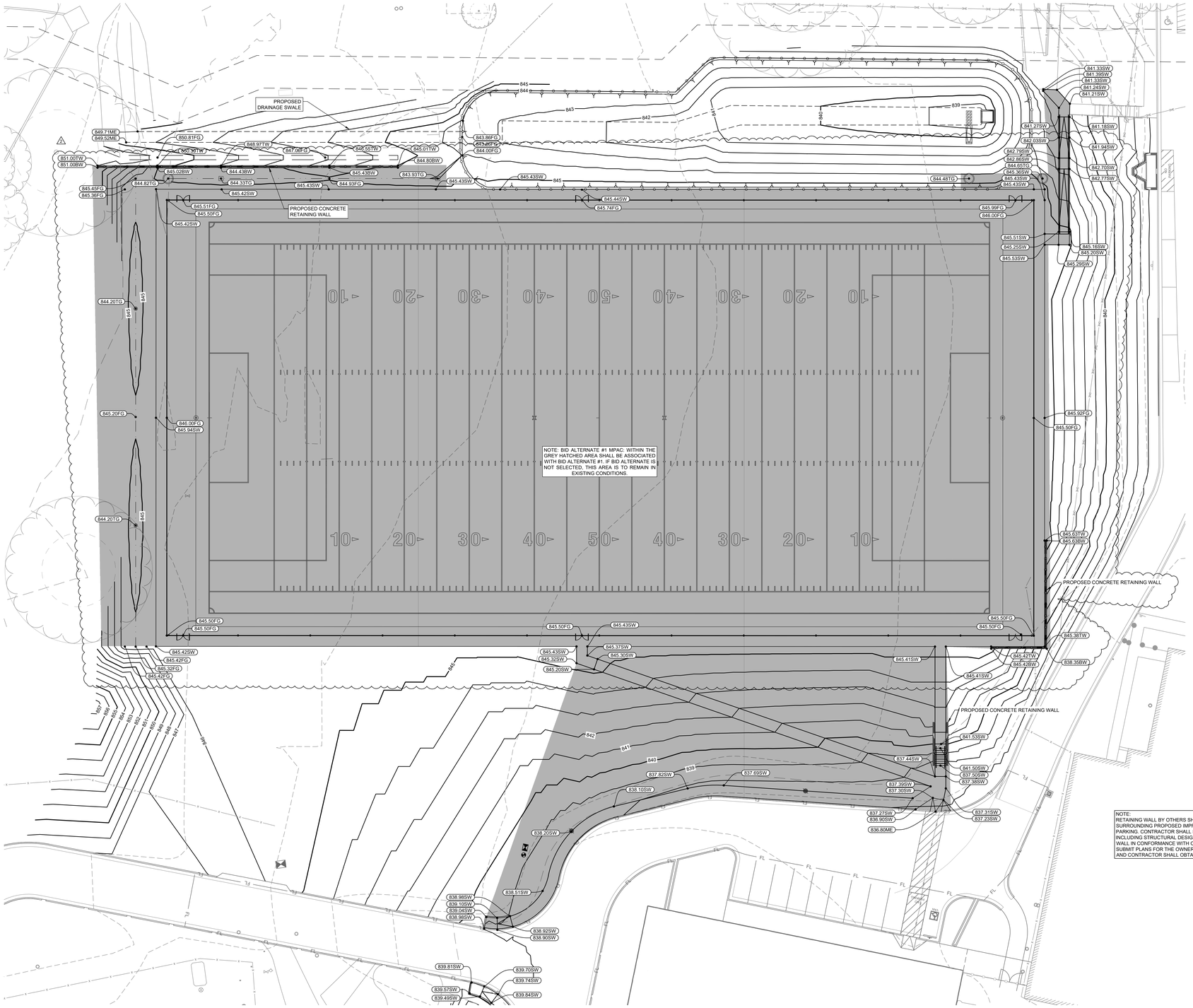
DIMENSION CONTROL PLAN (1 OF 2)

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. ISSUE FOR BID C4.01
Drawn By: RAU	
Date: 05/15/2025	



GRAPHIC SCALE IN FEET
0 10 20 40

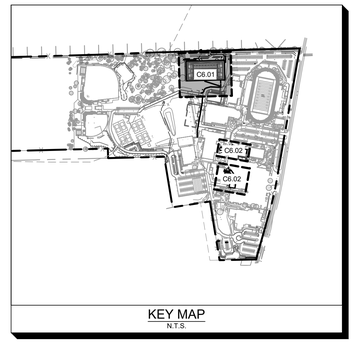
LEGEND

XXX.XX	PROPOSED SPOT ELEVATION
SW	SIDEWALK
TS	TOP OF STEP
BS	BOTTOM OF STEP
FG	FINISHED GRADE
TW	TOP OF WALL
BW	FINISHED GRADE AT BASE OF WALL
EW	END OF WALL
TC	TOP OF CURB
TG	TOP OF GRATE
EX	EXISTING SPOT ELEVATION
ME	MATCH EXISTING
910	PROPOSED CONTOURS
905	EXISTING CONTOURS
HP	PROPOSED HIGH POINT
	PROPOSED SWALE
	PROPOSED RETAINING WALL (TRIANGLE INDICATES FACE OF WALL)
	PROPOSED EXPOSED SLAB (>8")
	DIRECTION OF INTENDED FLOW
	PROPOSED CURB RAMP

NOTES

1. ALL SPOT GRADES ARE TO TOP OF PAVEMENT (TP) OR TOP OF GRATE (TG), UNLESS OTHERWISE NOTED AS TC (TOP OF CURB). CONTRACTOR TO ADD 6" FOR TOP OF CURB AS NECESSARY.
2. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
3. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES, LOADING ZONES AND SIDEWALK LANDINGS SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
4. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS UNLESS OTHERWISE NOTED. RUNNING SLOPE MAY EXCEED 5% IN PUBLIC R.O.W. IF EXISTING ROAD SLOPE EXCEEDS 5%.
5. GENERAL CONTRACTOR TO REFERENCE NOTE 1 REGARDING SPOT ELEVATIONS. COORDINATE WITH DIRT AND LANDSCAPE SUBCONTRACTORS REGARDING PROPOSED SOD AND HYDROMULCH LOCATIONS TO ENSURE ADEQUATE CUT FOR FUTURE VEGETATION.
6. EXISTING MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MATCH PROPOSED GRADES. IF NECESSARY, READJUSTMENTS SHALL BE PERFORMED UPON COMPLETION OF PAVING AND FINE GRADING TO ENSURE A SMOOTH TRANSITION.
7. REFERENCE LANDSCAPE PLANS FOR DETAILS FOR RAMPS, HANDRAILS AND STAIRS.
8. PROPOSED RETAINING WALLS TO BE STRUCTURALLY DESIGNED AND PERMITTED BY CONTRACTOR.
9. SPOT ELEVATIONS ARE PROVIDED BASED ON COMBINED AS-BUILT SURVEYS FROM SPOT ON SURVEYING COMPLETED IN 2019 AND 2021. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF EXISTING ELEVATIONS VARY BY MORE THAN 0.1 FT (1.2") IN PAVED PEDESTRIAN AREAS OR BY MORE THAN 0.25' (3") IN PAVED VEHICLE AREAS. FAILURE TO DO SO MAY RESULT IN ACCESSIBILITY ISSUES AND ADDITIONAL DESIGN EFFORT TO BE REMEDIED AT THE CONTRACTOR'S EXPENSE.

NOTE:
RETAINING WALL BY OTHERS SHALL TAKE INTO CONSIDERATION THE SURROUNDING PROPOSED IMPROVEMENTS, SUCH AS LIGHT AND PARKING. CONTRACTOR SHALL PROVIDE CONSTRUCTION PLANS, INCLUDING STRUCTURAL DESIGN AND HANDRAIL, FOR THE RETAINING WALL IN CONFORMANCE WITH CITY STANDARDS. CONTRACTOR SHALL SUBMIT PLANS FOR THE OWNER, ARCHITECT, AND ENGINEER REVIEW AND CONTRACTOR SHALL OBTAIN CITY PERMIT.



KEY MAP
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ELEV. = 839.14'

TBM MAG NAIL
ELEV. = 827.38'

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GRADING
PLAN (1 OF 2)

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. ISSUE FOR BID
Drawn By: RAU	C6.01
Date: 05/15/2025	

SITE BENCHMARK
TBM 800 SPK/W
ELEV. = 839.14'

TBM MAG NAIL
ELEV. = 827.38

NOTE:
SEE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PORCHES, RAMPS, VESTIBULE, SLOPED PAVING, TRUCK DOCKS, BUILDING UTILITY ENTRANCE LOCATIONS AND PRECISE BUILDING DIMENSIONS.

N

0 20' 30' 40'
SCALE IN FEET

811 Know what's below. Call before you dig.

SECTION 2
VOL. 2, PG. 109, P.R.H.C.TX.

VOL. 2, PG. 109, P.R.H.C.TX.

R.H.C.TX.

399.06'
362'
360.33'

9.44'

18.53'

TOTAL AREA = ±80,000 SF

198.88'

100'

27.03'

75' 60' 75' 60' 75'

27.03'

EXISTING LEGEND

CLEANOUT	CHAINLINK FENCE LINE
FIRE HYDRANT	STORM DRAIN
LIGHT POLE	SANITARY SEWER
SCOREBOARD	WATER
TREE	

GENERAL NOTES

A. CONTRACTOR SHALL RE-ESTABLISH DISTURBED GRASS AROUND FIELD WITH COMMON BERMUDA GRASS.

B. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED, AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS (SEE LANDSCAPE PLAN FOR SEED MIX AND PROPER APPLICATION RATE). ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

C. ALL DIMENSIONS ARE TAKEN FROM FACE OF CONCRETE AND FACE OF CHAIN LINK FENCE.

FIELD AND TURF NOTES

70A INSTALL PADS AT BUILDING COLUMNS AS NOTED ON A4.12 AND A1.1C1. ADD TO SPECIFICATION 32 8450.

70G INSTALL SHOCK PAD AS SPECIFIED BENEATH ENTIRE SYNTHETIC TURF AREA.

70H ALL FOOTBALL FIELD LINES SHALL BE 4 INCH WIDE AND WHITE IN COLOR PER COLOR RENDER.

70I END ZONE LINES SHALL BE 8 INCH WIDE AND WHITE IN COLOR PER COLOR RENDER.

70K BACK OF END ZONE SHALL BE 8 INCH WIDE AND WHITE IN COLOR PER COLOR RENDER.

70L FIELD NUMBERING AND ARROWS SHALL BE SOLID WHITE IN COLOR.

70M BASE PLATES TO BE WHITE INLAID SYNTHETIC TURF.

70N ALL BASEBALL/SOFTBALL FIELD LINES SHALL BE 4 INCH WIDE AND BLUE IN COLOR PER COLOR RENDER.

70P ALL SOCCER FIELD LINES SHALL BE 4 INCH WIDE AND GRAY IN COLOR PER COLOR RENDER.

70R INSTALL TENSION SPORTS NETTING TO BE ATTACHED TO FRAMING OF STEEL STRUCTURE PER SPECIFICATIONS..

70S CONTRACTOR PROVIDE ALLOWANCE FOR FIELD CUSTOMIZATION.

70T INSTALL STANDARD SOCCER GOAL.

70U INSTALL TENSION BATTING CAGE NETTING AS SPECIFIED.

70X INSTALL GREEN SYNTHETIC TURF SYSTEM PER COLOR RENDER.

70Z INSTALL ALTERNATING GREEN SYNTHETIC TURF SYSTEM.

70DD INSTALL SPORTS NETTING PER SPECIFICATIONS.

70EE PROPOSED SPORT FIELD COVER, TO BE CONSTRUCTED BY OTHERS AND SHOWN ON THIS PLAN FOR REFERENCE. REFER TO ARCHITECTURAL PLANS FOR FINAL PLACEMENT AND REQUIREMENTS.

70FF INSTALL SOCCER FLAGS AT ALL CORNERS OF FIELD.

70GG CONTRACTOR TO PROVIDE KWIK GOAL PREIMER WEIGHTED MODEL SOCCER FLAG, OR APPROVED EQUAL

FIELD AND TURF DETAIL

72C FOOTBALL FIELD ALTERNATING GREEN

91A GOAL POST WITH PADS INSTALLATION

EXISTING BLDG FF ELEV. APPROX.

Revision / 100% CD	Date: 02-26-2025
ADD-1	05-07-2025
ADD-3	05-15-2025

Project:

HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

JEFFERY J. BRESEE 89217 LICENSED PROFESSIONAL LANDSCAPE ARCHITECT STATE OF TEXAS

2025-05-14

F-7524

JEFFERY J. BRESEE
TX 89217

Huckabee
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800.687.1229

SURFACE PLAN
- ALTERNATE 1

Job No.	Sheet No.
34207	100% SD
Drawn By: MDT	F1
Date: 5/13/2025	

PROJECT RELEASE TYPE

2025-05-15 ADDENDUM-3

5/13/2025 7:41 AM

DRAWING LOCATION - P:\34000\34207.01\DRAWINGS\ESIGN\WORKING\34207-SP.DWG - SAVED BY - RMENDIA

SITE BENCHMARK

TBM 800 SPK/W
ELEV. = 839.14'

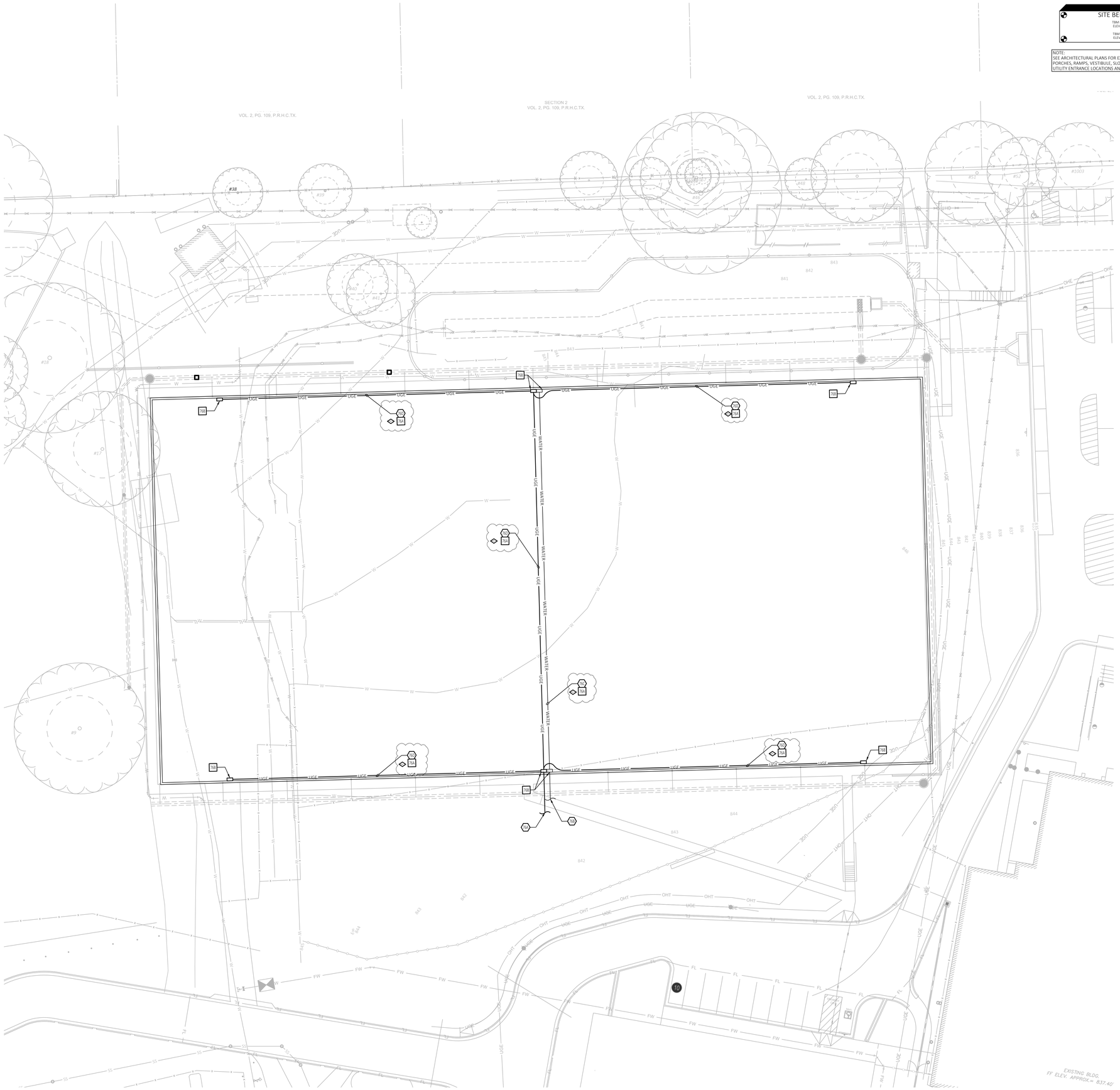
TBM MAG NAIL
ELEV. = 827.38

NOTE:
SEE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PORCHES, RAMPS, VESTIBULE, SLOPED PAVING, TRUCK DOCKS, BUILDING UTILITY ENTRANCE LOCATIONS AND PRECISE BUILDING DIMENSIONS.

N

0 20' 30' 40'
SCALE IN FEET

811 Know what's below. Call before you dig.



EXISTING LEGEND

- CLEANOUT
- FIRE HYDRANT
- LIGHT POLE
- SCOREBOARD
- TREE
- CHAINLINK FENCE LINE
- STORM DRAIN
- X"SS — SANITARY SEWER
- X"W — WATER

PROPOSED LEGEND

- PROPERTY LINE/RIGHT OF WAY LINE
- STORM DRAIN
- UGE — UNDERGROUND ELECTRIC SERVICE

PROPOSED LEGEND

- PROPERTY LINE/RIGHT OF WAY LINE
- UGE — UNDERGROUND ELECTRIC SERVICE
- X"W — WATER SERVICE

GENERAL UTILITY NOTES

A. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.

B. ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.

C. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.

D. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM CEI ENGINEERING AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. CEI ENGINEERING AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

UTILITY NOTES

76A TIE IN ELECTRIC LINE TO NEAREST ELECTRIC SOURCE.

76B TIE IN WATER LINE TO NEAREST POTABLE WATER SOURCE.

76C INSTALL 3 INCH Ø PVC CONDUIT WITH 1 INCH Ø POLYLINE WATERLINE.

76D INSTALL 1-1/2 INCH Ø PVC CONDUIT W/ELECTRIC LINES AND PULL STRINGS.

UTILITY DETAILS

76A PVC CONDUIT-CLASS "C" INCH PIPE BEDDING DETAIL

76B SYNTHETIC TURF UTILITY BOX

Revision / 100% CD	Date
ADD-1	05/07/2025
ADD-3	05-15-2025

Project:

HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

JEFFERY J. BRESEE — 96017 — LICENSED PROFESSIONAL ENGINEER

2025-05-14

F-7524

JEFFERY J. BRESEE
TX 96017

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UTILITY PLAN - ALTERNATE 1

Job No.	Sheet No.
24207	100% CD F3
Drawn By: MDT	
Date: 5/12/2025	

PROJECT RELEASE TYPE

2025-05-15 ADDENDUM-3

5/13/2025 7:39 AM

DRAWING LOCATION - P:\24000\24207.00\DRAWINGS\DESIGN\WORKING\24207-UP.DWG - SAVED BY - RMENDIA

GENERAL NOTES

SECTION 1 - GENERAL INFORMATION AND DESIGN CRITERIA

SECTION 1.1- DOCUMENTS

1.1.1 Structural Drawings are not stand-alone documents and are augmented by technical specifications and must be coordinated with the complete set of contract documents.

1.1.2 Structural documents are protected by Copyright Law of the United States and are not to be used for any purpose other than construction of the building structure described in the contract documents at the geographic location shown.

1.1.3 General Notes and Typical Details apply throughout the project wherever conditions similar to those depicted exist and are not necessarily specifically referenced in the documents.

1.1.4 The Geotechnical Report referenced herein is not part of the Structural Documents. However, a copy should be obtained for reference during installation of foundations and subgrade preparation.

COORDINATION

1.1.5 Contractor is responsible for coordinating Structural Documents with other trades and disciplines in the contract documents. Some requirements are not known prior to issue and may change as layout and fabrication drawings are developed. Promptly report deviations and interferences with structural components for resolution by the Architect.

1.1.6 Contractor to verify dimensional location and depth of slab recesses and offsets with Architectural Drawings.

1.1.7 Contractor to verify size, weights, location, and details of structurally supported equipment and associated openings prior to fabrication of the supporting structure.

1.1.8 Contractor to verify size and location of floor and roof penetrations shown on structural drawings with other disciplines.

1.1.9 Submit for approval a composite drawing showing all proposed openings and sleeves through structural members for engineering review prior to or simultaneous with shop drawings for affected framing.

1.1.10 Contractor to verify elevator pit dimensions and depth, elevator shaft floor opening dimensions, over-run clearance requirements at top of shaft, guide-rail bracing requirements, hoist or safety beam requirements, and penthouse dimensions with requirements of purchased equipment.

1.1.11 Contractor to verify dimensions, details, plumbness and squareness of existing structures meeting or tying into new construction.

1.1.12 Do not scale plans, details and sections for quantity, length or fit of materials.

REFERENCE ELEVATIONS

1.1.13 Heights of floor and roof decks and various framing components are given on the drawings relative to a reference elevation of 100'-0". This reference elevation is equivalent to a Mean Sea Level Elevation of 830.19 in the civil drawings for the PROPOSED KITCHEN/DINING ADDITION. Contractor to verify against Civil grading plans and report discrepancies to Architect for resolution prior to construction.

TEMPORARY BRACING

1.1.14 Structural systems are designed for final, in-place conditions only. Provide temporary bracing of structural components for conditions that will exist during construction and to meet all regulatory requirements for safety of workers.

1.1.15 Maintain temporary frame bracing until installation of permanent structural bracing elements, member connections and floor and roof diaphragms are complete.

SECTION 1.2- CODES AND STANDARDS

1.2.1 Building Code of jurisdiction - 2021 International Building Code

1.2.2 Structural Concrete Code - American Concrete Institute (ACI) 318

1.2.3 Structural Masonry Code – The Masonry Society (TMS) 402

1.2.4 Structural Steel Code - American Institute of Steel Construction (AISC) 360 (and 341 where applicable)

1.2.5 Structural Cold-Formed Steel Code - American Iron and Steel Institute (AISI) S100

SECTION 1.3- DESIGN CRITERIA

1.3.1 Structure Risk Category III

1.3.2 Live Loads

Occupancy or Use	Uniform (psf)	Concentrated (lbf)	Notes (5)
Ground Level, Typical	100		
Roof, Typical	20		
Schools, Upper Levels	80	1,000	
Stairs and Exitways	100	300	
Stair and Elevator Lobbies	100		
Mechanical Rooms	150		
PEMB Elevated Platform	100		

1.3.3 Roof Snow Loads
Ground Snow Load, Pg 5 psf

1.3.4 Superimposed Dead Loads
Typical Structured Level 15 psf
Typical Roof 30 psf
Kitchen Roof 40 psf

Notes:
Superimposed dead loads do not include self-weight of members shown in structural drawings.

1.3.5 Wind Loads
Ultimate design wind speed, Vult 115 mph
Allowable design wind speed, Vasd 89 mph
Serviceability wind speed 79 mph
Exposure Classification C
Internal Pressure Coefficient 0.18
See component and cladding wind load diagram

1.3.6 Seismic Loads
Seismic Importance Factor, Ie 1.15
Mapped Spectral Acceleration, Ss 0.052
Mapped Spectral Acceleration, S1 0.029
Site Class C
Design Spectral Acceleration, Sds 0.049
Design Spectral Acceleration, Sd1 0.029
Seismic Design Category A
Analysis Procedure Used:
Equivalent Lateral Force
Basic Seismic Force Resisting System:
Steel Systems Not Specifically
Detailed for Seismic Resistance
Response Modification Coefficient, R 3.00
Seismic Response Coeff, Cs 0.01

1.3.7 Rain Loads
Rain Intensity, i 4.75 in/hr

1.3.8 Other Concentrated Loads

Location	Load-pounds	Area
Steel Roof Deck	200	1 sq ft
Stair Treads	300	4 sq in

Notes:
Concentrated loads apply to any location on supporting structure, separately from (not in addition to) uniform live loads, except as noted otherwise.

1.3.9 Assumed weights and locations of structurally supported equipment are indicated on the framing plans.

1.3.10 Elevators - Basis of design: TKE Endura 35A

1.3.11 Pedestrian Guardrail - 50 lbf/ft horizontal and vertical, or 200 lbf concentrated at top, any direction.

STRUCTURAL DEFLECTIONS

1.3.12 Live Load - Floor and roof systems are designed to limit vertical deflections due to total loads to (Clear Span)/240 or less. Some deflections may occur incrementally as loads are placed on the structure, and in the case of concrete structures, may occur over an extended time period. Attachments of architectural and mechanical components do not allow for dead load deflections that may occur after installation. For example, significant deflections may occur when mechanical systems are charged with water or other coolants.

1.3.13 Dead Load - Floor and roof systems are designed to limit vertical deflections due to total loads to (Clear Span)/240 or less. Some deflections may occur incrementally as loads are placed on the structure, and in the case of concrete structures, may occur over an extended time period. Attachments of architectural and mechanical components do not allow for dead load deflections that may occur after installation. For example, significant deflections may occur when mechanical systems are charged with water or other coolants.

1.3.14 Structural cambers, where shown on the drawings, are generally for estimated dead load deflections. Components attached to cambered beams or trusses should not be connected in a manner that would restrict vertical deflection prior to the placement of dead loads. Where steel beams are connected with self-tensioning devices, final tensioning must be delayed until structural dead loads are in place.

1.3.15 Panelized Wall Systems- Attachments of curtainwall and other wall panel systems must allow for differential vertical deflection of 0.375 inches, and horizontal deflection of H/400 between adjacent floors. Wall cladding attachments do not transfer lateral reactions to bottom flanges of steel beams, joists, or trusses except, 1) where specifically shown on the Structural Drawings, or 2) special bracing is provided by the wall supplier/installer to transfer lateral reactions to the floor slab.

SECTION 2 - FOUNDATIONS AND RELATED EARTHWORK

SECTION 2.1- GEOTECHNICAL REPORT

2.1.1 Design of other foundations and structural components in contact with soil is based on the recommendations given in the following:

Report by : Alpha Testing
Date of Report : August 31, 2023
Report Number : A231813

2.1.2 Refer to the soil report for subsoil conditions that may be encountered in the installation of foundations, and other information relevant to foundations and site preparation.

SOIL IMPROVEMENT UNDER BUILDING SLABS

2.1.3 Design of soil-supported building slabs is based on a range of soil movement of up to 1 inch, based on the recommendations of Geotechnical Report.

2.1.4 Refer to Specifications for soil stabilization under soil-supported building slabs.

SECTION 2.2- STRAIGHT SHAFT PIERS

2.2.1 Design Criteria: MPAC

Bearing Stratum	:	Limestone
Top of Stratum Elevation (for Bidding Purposes Only)	:	5 ft below exist grade
Allowable End Bearing	:	6,000 psf
Positive Side Friction	:	1,200 psf
Upheaval Side Friction	:	1,800 psf
Upheaval Design Depth	:	10 ft
Negative Side Friction	:	1,000 psf

2.2.1 Design Criteria: Area A & Area B

Bearing Stratum	:	Limestone
Top of Stratum Elevation (for Bidding Purposes Only)	:	5 ft below exist grade
Allowable End Bearing	:	0 psf
Positive Side Friction	:	1,200 psf (0-10 ft) 6,000 psf (10-30 ft)
Upheaval Side Friction	:	1,800 psf
Upheaval Design Depth	:	10 ft
Negative Side Friction	:	1,000 psf (0-10 ft) 5,000 psf (10-30 ft)

2.2.2 Pier depths indicated are for bidding purposes only. Actual pier depths may vary depending on depth to bearing stratum.

2.2.3 Steel dowels at tops of piers or footings shall extend 30 bar diameters above and below top of pier unless noted otherwise (noted as "LAP" on Typical Details).

2.2.4 Top of pier elevations given are relative to reference elevation 100'-0".

2.2.5 Overpour at tops of piers ("mushrooms") shall be removed to the required pier diameter.

SECTION 3 - STRUCTURAL CONCRETE

SECTION 3.1 - CONCRETE FORMS

3.1.1 Formed Voids - Provide retained void spaces between bottom of structural members and subgrade as follows:
Grade Beams and Pilasters 12"

3.1.2 Form vertical faces of grade beams, pilasters, pier caps, and other vertical foundation element.

SECTION 3.2- STEEL REINFORCING

3.2.1 Reinforcing bars shall be deformed. Strength of bars shall be Grade 60.

SPLICING OF REINFORCING BARS

3.2.2 Top bars in beams or slabs shall be spliced at midspan between supports, unless noted otherwise.

3.2.3 Bottom and middle bars in beams or slabs shall be spliced at supports, unless noted otherwise.

3.2.4 Vertical bars in walls shall be spliced at top of concrete above floors, unless noted otherwise.

LAPPED SPLICE LENGTHS

3.2.5 Lap reinforcing 30 bar diameters at splices of slab-on-grade and temperature and shrinkage reinforcing unless noted or detailed otherwise.

3.2.6 Tension splice lengths shall be calculated in accordance with ACI 318. Use Class B splices unless noted otherwise.

3.2.7 Welded Wire Reinforcement splice length (overlap), measured between outermost cross wires of each fabric sheet, shall be at least one spacing of cross wires plus 2 inches, but in no case less than 6 inches.

CONCRETE COVER TO REINFORCING

3.2.8 Clearance from face of concrete to face of reinforcing:

Piers	3"
Formed Grade Beams, Pier Caps, Pilasters, Elevator Pit Walls	1 1/2" top, 2" sides, 3" bottom
Elevator Pit Slab	1" top, 3" bottom
CIP Walls	1" interior, 2" exterior exposure

Notes: Above dimensions apply unless noted otherwise in details

PLACEMENT OF REINFORCING

3.2.9 Place first bar of slab reinforcing parallel to side 2 inches from a free edge or half of required bar spacing from face of edge beam.

3.2.10 Single layer reinforcing in walls shall be placed at center of walls unless noted otherwise.

3.2.11 Place reinforcing in toppings or in slabs poured on steel deck at center of slab unless noted otherwise.

SECTION 3.3- CONCRETE MIX DESIGNS

3.3.1 Concrete Mix Schedule:
a. Concrete type is NWC unless noted otherwise. NWC refers to normalweight concrete having maximum cured density of 145 PCF.
b. Where w/c ratio is not indicated in the Concrete Mix Schedule, it shall be as necessary to meet strength requirements.
c. Where the w/c ratio is shown, it shall be adhered to regardless of strength requirements.
d. 'Strength' is required compressive cylinder strength at an age of 28 days.
e. Provide concrete mix for drilled piers with 5" to 7" slump. Use water-reducing admixture for other mixes to achieve a pumpable mix with optimum slump for placing and finishing.
f. Exposure classes are noted as defined in ACI 318. Exposure classes for concrete mixes are F0, S0, W0, and C0 unless noted otherwise.
g. At exposed polished concrete floors, fly ash is note permitted, wet curing required. 1

Description of Use	Strength psi	Agg Size	Max w/c	Air Content	Exposure Class	Notes
Drilled Piers	3000	1 1/2"	---	---	--	---
Grade Beams, Pilasters	4000	1"	0.55	4.5%	F1	---
Foundation Walls, Pilasters	4000	1"	0.55	4.5%	F1	---
Elevator Pit Walls and Slab	4000	1"	---	---	--	---
Slab on Grade (Interior)	3500	1"	---	---	--	---
Slab on Grade (Exterior)	5000	1"	0.40	5%	F3	---
Slab on Steel Composite Deck	3500	3/4"	0.45	---	--	---
Housekeeping Pads	3000	3/4"	---	---	--	---
Light Pole Base	5000	1"	0.45	5%	F2	---
Topping	3000	3/4"	---	---	--	---

SECTION 3.4- CONCRETE SLABS

3.4.1 Slab Placed on Grade – See typical details.

3.4.2 Slabs on Composite Steel Deck
Composite Slab Schedule:

Mark	Type	Thickness	Overall Reinf	Typ Slab Reinf	Notes	Addl Top Reinf
CA	1	6.5"	#3 @ 12 OC EW	#5(10-0)@12 over girders		

Notes:
1. See typical details for reinforcing placement and additional reinforcing over girders. "Girders" refers to interior beams oriented parallel to deck.
(2) Slab types correspond to deck type (see Composite Steel Deck).

3.4.3 Saw joints and tooled control joints (slab on grade only).
Sawjoint layout plan shall be submitted for approval prior to placing concrete slab. Layout of the sawjoints shall be based upon the following criteria:
a.) A maximum center to center spacing of sawjoints of 15'-0" in both directions.
b.) Sawjoints shall be located along column centerlines whenever possible.
c.) The ratio of sawjoints in each direction shall not exceed 1.5 to 1.0.
d.) Sawjoints shall be located at each interior corner of the building.
e.) Place first saw joint 5 ft inside perimeter edge.

3.4.4 Housekeeping Pads
Pad Thickness: 4.0 inches
Pad Reinforcing: WWF6x6-W2.1xW2.1
Pad Thickness: 6.0 inches
Pad Reinforcing: WWF6x6-W3.5xW3.5

Reinforcing shall be centered in the pad. Refer to mechanical drawings for pad locations, plan dimensions and thickness required at specific locations.

3.4.1 Slabs on EPS Geofoam
a) Reinforcement shall be centered in slab, unless detailed otherwise.
b) EPS Geofoam shall be meeting the requirements of ASTM D6817. Physical properties shall meet the minimum rating (type) for EPS12.
c) Geofoam blocks shall be adhered to concrete base and to one another with a non solvent based adhesive.

SECTION 3.5- DRILLED IN ANCHORS

3.5.1 Drill holes with rotary impact hammer drill using carbide tipped bits. Drill bits shall be of the diameter as specified by the anchor manufacturer. All holes shall be drilled perpendicular to the concrete or masonry surface.

3.5.2 Embedded items: Identify position of reinforcing steel and other embedded items prior to drilling holes for anchors. Exercise care in drilling to avoid damaging existing reinforcing or embedded items. Notify the Engineer if reinforcing steel or other embedded items are encountered during drilling. Take precautions as necessary to avoid damaging electrical and telecommunications conduit, and gas lines.

3.5.3 Base Material Strength: Unless otherwise specified, do not drill holes in concrete or masonry until concrete, mortar, or grout has achieved full design strength. Do not install adhesive anchors in concrete that is placed less than 21 days prior. (from ACI 318 requirement)

TESTING

3.5.4 Continuous special inspection is required for adhesive anchors. Remove and replace misplaced or malfunctioning anchors. Clean and fill empty anchor holes and patch failed anchor locations with high-strength nonshrink, nonmetallic grout. Anchors that fail to meet proof load or installation torque requirements shall be regarded as malfunctioning.

EXPANSION, UNDERCUT, SCREW AND ADHESIVE ANCHORS

3.5.5 Concrete base material: provide anchors of size and type shown with ICC-ES or IAPMO-UES compliance required

Expansion Anchors: Hilti KWIK Bolt TZ2 (ICC-ES ESR-4266)

Undercut Anchors: Hilti HDA Undercut Anchors (ICC-ES ESR-1546)

Screw Anchors: Hilti Kwik HUS-EZ (ICC-ES ESR-3027)

Adhesive Anchors: Hilti HIT-HY 200 Safe Set System (ICC-ES ESR-3187) for use with Hilti HIT-Z Rod, HAS-E Rod, & Hollow Drill Bit
Hilti HIT-RE 500-V3 Safe Set System (ICC-ES ESR-3814) for use with Hilti HAS-E Rod, Hollow Drill Bit & Hilti Roughening Tool
Hilti HIT HY-200 (ICC-ES ESR 3187)

3.5.6 Grout filled CMU (Concrete Masonry Unit) base material: provide anchors of size and type shown with ICC-ES or IAPMO-UES compliance required

Screw Anchors: Hilti Kwik HUS EZ (ICC-ES ESR-3056)

Adhesive Anchors: Hilti HIT-HY 270 (ICC-ES ESR-4143)

INSTALLATION

3.5.7 Perform anchor installation in accordance with manufacturer's printed installation instructions (MPII).

3.5.8 Protect threads from damage during anchor installation.

3.5.9 Contractor to arrange for a manufacturer's field representative to provide installation training for all products to be used prior to commencement of work. Only trained installers shall perform post-installed anchor installation. A record of training shall be kept on site and made available upon request.

3.5.10 Adhesive anchors installed horizontally or upwardly inclined shall be qualified in accordance with ACI 355.4 requirements for sensitivity to installation direction.

SECTION 4 - STRUCTURAL MASONRY

SECTION 4.1- GENERAL

4.1.1 See Architectural Drawings and Specifications for details and dimensions of masonry work.

4.1.2 Grout lifts at reinforced masonry walls shall be accomplished in accordance with TMS 402/602.

SECTION 4.2- STRUCTURAL PROPERTIES

4.2.1 Required compressive strength of structural assembly = 2000 psi

4.2.2 Load-bearing Concrete Masonry Units: ASTM C90 Normal-weight
Required net area compressive strength = 2000 psi

4.2.3 Mortar: ASTM C270 Type S

4.2.4 Grout: ASTM C476
Required 28-day compressive strength of grout 2000 psi

SECTION 4.3- REINFORCING

JOINT REINFORCEMENT

4.3.1 Horizontal joint reinforcing shall be "Ladder Type" 9 gage welded wires spaced 16 inches on center vertically.

4.3.2 Provide prefabricated "L" and "T" shaped sections at wall intersections.

4.3.3 Lap horizontal wires at least 8" at splices.

BAR REINFORCEMENT

4.3.4 Reinforcing bars shall conform to ASTM A615 Grade 60.

4.3.5 Bar reinforcing shall be lapped at splices per schedule in typical details. Stagger splices in adjacent horizontal bars at least 4'-0".

4.3.6 Vertical reinforcing in cells to be grouted shall be placed using fabricated bar positioners to maintain location within cell.

4.3.7 Grout solid cells below adjacent grade or finish floor elevation and cells with vertical or horizontal bar reinforcement.

STRUCTURAL WALLS

4.3.8 Typical wall reinforcing for load-bearing, structural CMU walls is noted in structural wall elevations.

NON-STRUCTURAL WALLS

4.3.9 Unless shown otherwise on plans or details, reinforcing for CMU walls not shown in the structural drawings shall be as follows:

Wall Thickness	Vert Reinf	Dowels
6 inches	1 #4 @ 48 max	1 #4(0-10/4-0) @ 48 max
8 inches	1 #5 @ 48 max	1 #5(0-10/4-0) @ 48 max

Notes:
a) Align and lap dowels with vertical wall reinforcing.
b) At wall openings, see wall opening reinforcing schedule in typical details for reinforcing of jambs and lintels.
c) Post-installed dowels are acceptable at non-structural CMU. Drill & embed dowels 9 bar diameters minimum with adhesive.

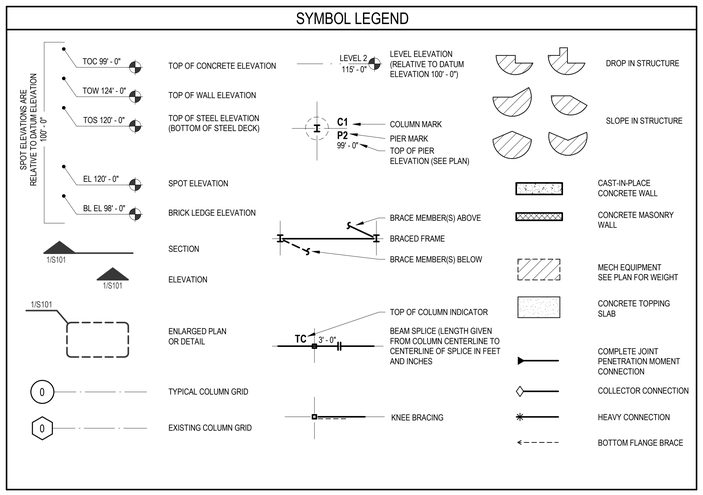
4.3.10 Grout and reinforce the first cell at corners, ends of walls, and each side of a control joint with 1 vertical bar for 6- or 8-inch CMU walls or 2 vertical bars for 12-inch CMU walls. Jambs adjacent to openings in structural masonry are to be grouted and reinforced per applicable details.

4.3.11 Install single course depth bond beam with at least one horizontal bar at the top of CMU walls.

AB	Anchor Bolt	JST	Joist
ADDL	Additional	JT	Joint
ADJ	Adjacent	K	Kip (1,000 pounds)
AESS	Architectural Exposed Structural Steel	KSI	Kips per Square Inch
		K-FT	Kip-Feet (Moment)
AFF	Above Finished Floor	K/FT	Kips per Foot
AGGR	Aggregate	LBF	Pound-Force
ALT	Alternate	LLBB	Long Leg Back-to-Back
AR	Anchor Rod	LLH	Long Leg Horizontal
ARCH	Architect(ural)	LLV	Long Leg Vertical
ASD	Allowable Strength Design	LRFD	Load and Resistance Factor Design
BB	Bond Beam	LSH	Long Side Horizontal or Long-Slotted Hole(s)
BCX	Bottom Chord Extension		
BL	Building Line or Brick Ledge	LSV	Long Side Vertical
		LT	Left
BLDG	Building	M	Moment
BLK	Block	MATL	Material
BLKG	Blocking	MAX	Maximum
BM	Beam	MECH	Mechanical
BOT, B	Bottom	MEP	Mech/Elec/Plumbing
BRG	Bearing	MFR	Manufacturer
BTWN	Between	MIN	Minimum
C	Channel	MK	Mark
CFMF	Cold-Formed Metal Framing	MTL	Metal
CGS	Center of Gravity of Steel	NIC	Not in Contract
CIP	Cast-in-Place	NO	Number
CJ	Construction Joint or Control Joint	NS	Near Side
		NSG	Non-Shrink Grout
CJP	Complete Joint Penetration	NTS	Not to Scale
CL	Center Line	OF	Outside Face
CMU	Concrete Masonry	OP HD	Opposite Hand
COL	Column	OPNG	Opening
COMP	Compression	P	Pan (form)
CONC	Concrete	P-T	Post-Tensioning
CONN	Connect(ion)	PCC	Precast Concrete
CONSTR	Construction	PEN	Penetration
CONT	Continuous	PJP	Partial Joint Penetration
COORD	Coordinate	PI	Plasticity Index
CTR	Center	PIL	Pilaster
CW	Curtain Wall	PL	Plate
db	Bar Diameter(s)	PNL	Panel
DBA	Deformed Bar Anchor	PSF	Pounds Per Square Foot
DBL	Double	PSI	Pounds Per Square Inch
DEG	Degree(s)	PT	Point or Pressure Treated
DET	Detail		
DIA	Diameter	R	Radius
DIM	Dimension	RECT	Rectangle(ular)
DWG	Drawing	REF	Refer (to)
DWL	Dowel	REINF	Reinforcing
EA	Each	REQD	Required
EF	Each Face	RT	Right
EJ	Expansion Joint	RTU	Rooftop Unit
EL	Elevation	SC	Slip-Critical
ELEV	Elevator	SCHED	Schedule
ENGR	Engineer	SECT	Section
EOD	Edge of Deck	SHT	Sheet
EOS	Edge of Slab	SIM	Similar
EQ	Equal	SOG	Slab on Grade
EQUIP	Equipment	SOV	Slab on Void Cartons
EW	Each Way	SPA	Space(ing)
EXP BT	Expansion Bolt	SPEC	Specifications
EXIST	Existing	SQ	Square
EXT	Exterior	SSH	Short-Slotted Hole(s)
F	Force (Axial)	ST	Stirrup(s)
FABR	Fabricator	STD	Standard
FDN	Foundation	STIF	Stiffener
Fe	Force (Effective)	STL	Steel
FIN	Finish	STRUCT	Structure(al)
FIN FLR, FF	Finish Floor	SUPPT	Support
FLR	Floor	SYM	Symmetrical
FRT	Fire Retardant Treated	T	Tension
FS	Far Side	T&B	Top and Bottom
FTG	Footing	TCX	Top Chord Extension
FV	Field Verify	TEMP	Temperature
GA	Gauge, Gage	TOC	Top of Concrete
GALV	Galvanize(ing)	TOF	Top of Footing
GC	General Contractor	TOJ	Top of Joist
GN	General Notes	TOP	Top of Pier
GR	Grade	TOPCC	Top of Precast Concrete
GR BM	Grade Beam	TOS	Top of Steel
HORIZ, H	Horizontal	TOW	Top of Wall
HSA	Headed Stud Anchor	TYP	Typical
HSS	Hollow Structural Section	ULT	Ultimate (force)
HT	Height	UNO	Unless Noted Otherwise
ICF	Insulating Concrete Form	V	Shear
IF	Inside Face	VERT, V	Vertical
INFO	Information	WD	Wood
INT	Interior	WF	Wide Flange
INTERM	Intermediate	WP	Working or Work Point

STANDARD ABBREVIATIONS

SYMBOL LEGEND



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Structural Engineers
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LAFP PROJ. NO. 24079 FIRM REG. NO. F-537

Revision / 1 Date 5-15-25 Addendum 03

Project:
HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

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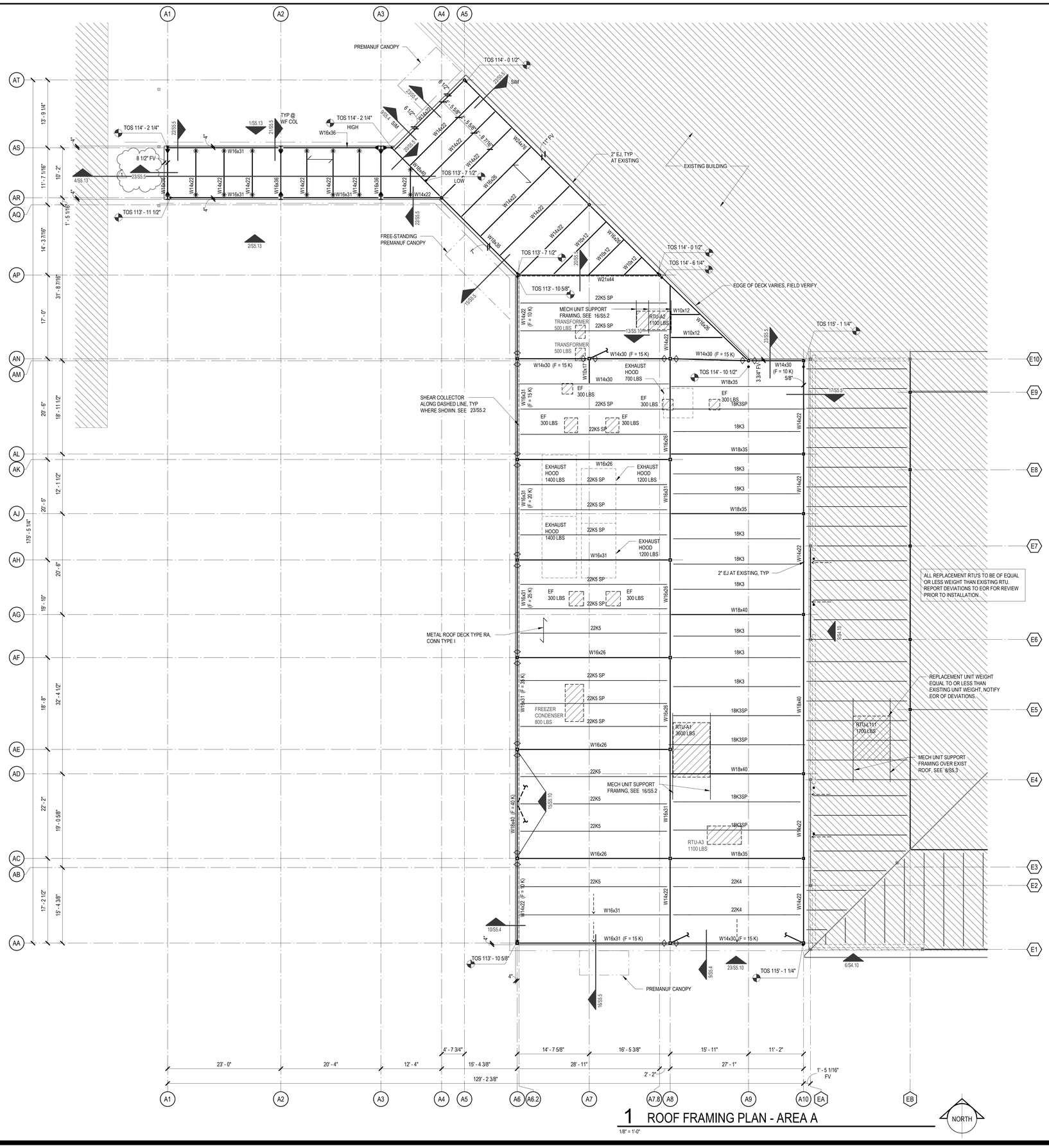
GENERAL NOTES

PACKAGE	VOLUME
Job No. 1054-09-01	Sheet No. ISSUE FOR BID S1.1
Drawn By: LAFP	
Date: 04/22/2025	

DESIGN PROGRESS REVIEW

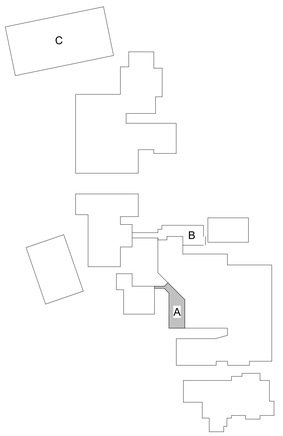


1 ROOF FRAMING PLAN - AREA A
1/8" = 1'-0"

PLAN NOTES

1. TOP OF ROOF STRUCTURE IS SLOPED FOR DRAINAGE. SEE TOP OF STEEL ELEVATIONS NOTED ON FRAMING PLANS, SLOPES SHALL BE UNIFORM BETWEEN COLUMN CENTERLINES UNO.
2. TOP OF STEEL ELEVATIONS SHOWN ON PLAN ARE BOTTOM OF ROOF DECK (TOP OF BEAM OR JOIST). ELEVATIONS ARE SHOWN RELATIVE TO DATUM 100'-0" UNO. SEE GENERAL NOTES FOR MORE INFO.
3. UNLESS NOTED OTHERWISE, STEEL JOISTS/BEAMS SHALL BE CENTERED ON AND EQUALLY SPACED BETWEEN COLUMN CENTERLINES.
4. JOISTS SUPPORTING MECHANICAL EQUIPMENT SHALL BE DESIGNED FOR TYPICAL ROOF LOADING PLUS A CONCENTRATED LOAD OF 60% OF INDICATED EQUIPMENT WEIGHT PLACED AT ANY PANEL POINT.
5. JOISTS NOTED AS "SP" ARE SPECIAL DESIGNS TO BE PROVIDED BY SUPPLIER FOR LOADING INDICATED.
6. SHEET INDEX:

GENERAL NOTES	-S1.1
TYPICAL DETAILS	-S3.01, S4.01, S5.01
PIER SCHEDULE	-S3.01
CMU WALL ELEVATIONS	-S4.10
STEEL COLUMN SCHEDULE	-S5.01
VERTICAL BRACES	-S5.10



KEY PLAN
N.T.S

NORTH

Revision /	Date	
1	5-15-25	Addendum 03

Project:
HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

CHERYL R. STEWART
117498
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
5-15-2025

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ROOF FRAMING PLAN - AREA A

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. S2.1A2
Drawn By: LAFP	ISSUE FOR BID
Date: 04/22/2025	

DESIGN PROGRESS REVIEW

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Structural Engineers
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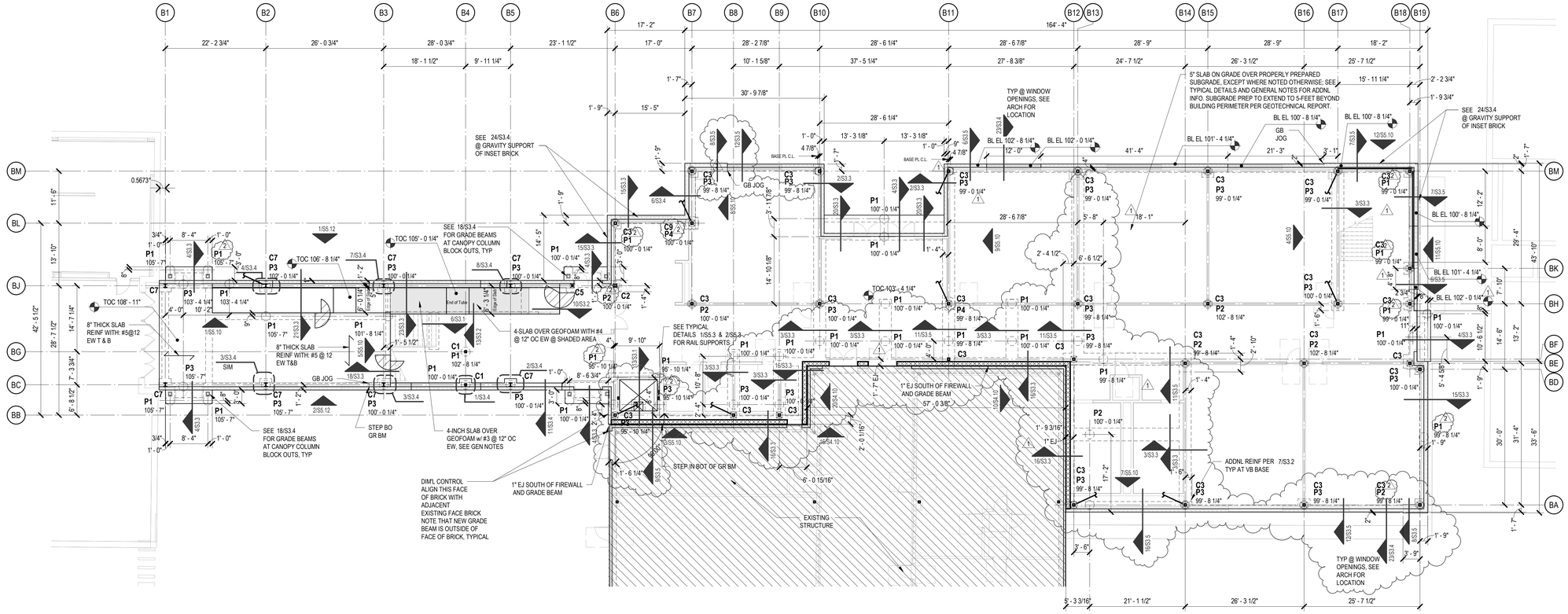
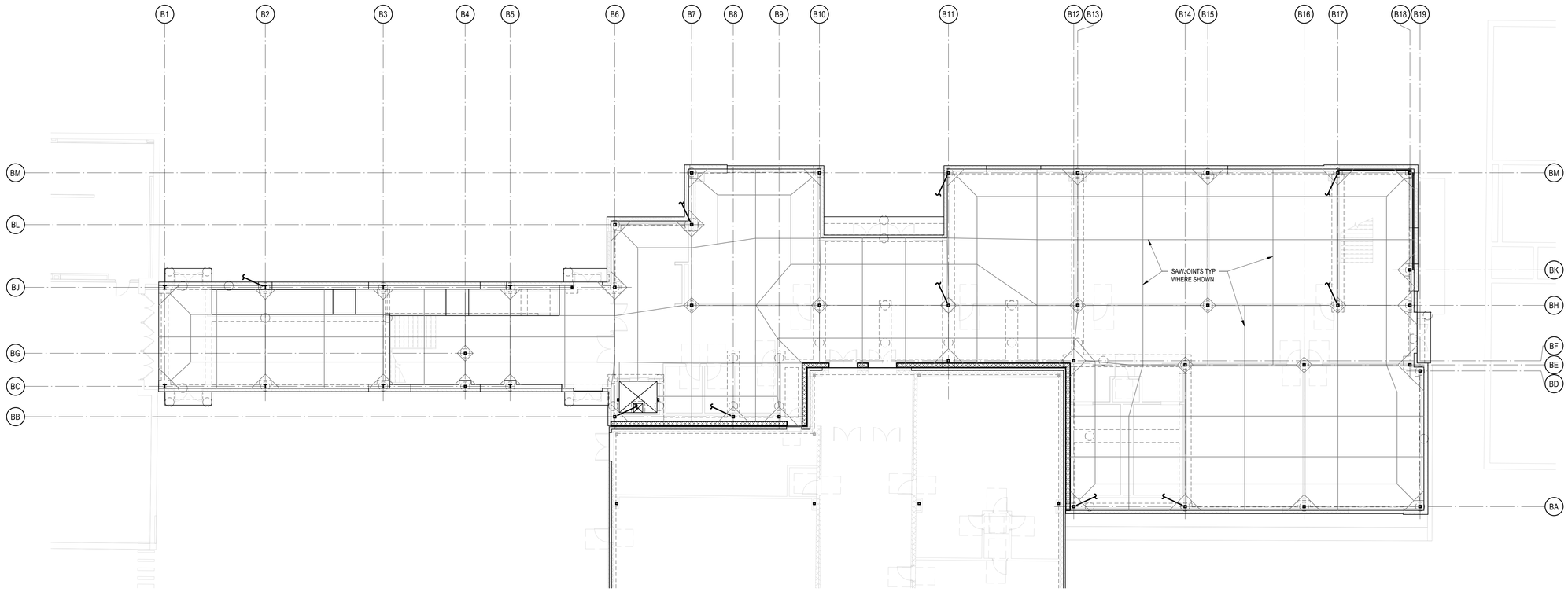
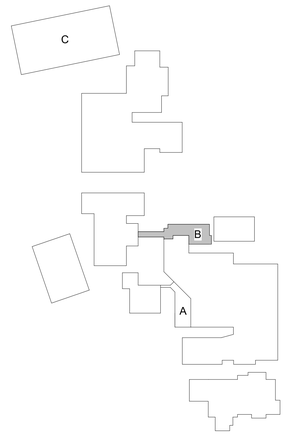

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19
BM BL BJ BG BC BB BK BH BF BE BD BA
164' - 4"
5" SLAB ON GRADE OVER PROPERLY PREPARED SUBGRADE. EXCEPT WHERE NOTED OTHERWISE, SEE TYPICAL DETAILS AND GENERAL NOTES FOR ADDNL INFO. SUBGRADE PREP TO EXTEND TO 5-FEET BEYOND BUILDING PERIMETER PER GEOTECHNICAL REPORT.
SEE 24/S3.4 @ GRAVITY SUPPORT OF INSET BRICK
SEE 24/S3.4 @ GRAVITY SUPPORT OF INSET BRICK
TYP @ WINDOW OPENINGS, SEE ARCH FOR LOCATION
TYP @ WINDOW OPENINGS, SEE ARCH FOR LOCATION
GB JOG
GB JOG
BL EL 100' - 8 1/4"
BL EL 102' - 8 1/4"
BL EL 102' - 0 1/4"
BL EL 101' - 4 1/4"
BL EL 100' - 0 1/4"
BL EL 102' - 0 1/4"
SEE 18/S3.4 FOR GRADE BEAMS AT CANOPY COLUMN BLOCK OUTS, TYP
TOC 105' - 0 1/4"
TOC 106' - 8 1/4"
TOC 108' - 11"
TOC 103' - 4 1/4"
8" THICK SLAB REINF WITH: #5@12 EW T & B
8" THICK SLAB REINF WITH: #5 @ 12 EW T&B
4-SLAB OVER GEOFOAM WITH #4 @ 12" OC EW @ SHADED AREA
SEE TYPICAL DETAILS 1/SS.3 & 2/SS.3 FOR RAIL SUPPORTS
1" EJ SOUTH OF FIREWALL AND GRADE BEAM
1" EJ SOUTH OF FIREWALL AND GRADE BEAM
ADDNL REINF PER 7/S3.2 TYP AT VB BASE
SEE 18/S3.4 FOR GRADE BEAMS AT CANOPY COLUMN BLOCK OUTS, TYP
STEP BO GR BM
4-INCH SLAB OVER GEOFOAM w/ #3 @ 12" OC EW, SEE GEN NOTES
STEP IN BOT OF GR BM
DIM'L CONTROL ALIGN THIS FACE OF BRICK WITH ADJACENT EXISTING FACE BRICK NOTE THAT NEW GRADE BEAM IS OUTSIDE OF FACE OF BRICK, TYPICAL
EXISTING STRUCTURE
BASE PL C.L.
22' - 2 3/4"
26' - 0 3/4"
28' - 0 3/4"
23' - 1 1/2"
17' - 0"
28' - 2 7/8"
28' - 6 1/4"
28' - 6 7/8"
28' - 9"
28' - 9"
18' - 2"
18' - 1 1/2"
9' - 11 1/4"
10' - 1 5/8"
37' - 5 1/4"
27' - 8 3/8"
24' - 7 1/2"
26' - 3 1/2"
25' - 7 1/2"
30' - 9 7/8"
28' - 6 1/4"
15' - 11 1/4"
2' - 2 3/4"
1' - 9 3/4"
13' - 3 1/8"
13' - 3 1/8"
4 7/8"
4 7/8"
12' - 0"
4' - 1"
41' - 4"
21' - 3"
3' - 1"
28' - 6 7/8"
18' - 1"
2' - 4 1/2"
6' - 6 1/2"
5' - 8"
1' - 4"
1' - 7"
1' - 9"
15' - 5"
1' - 0"
1' - 9"
3' - 11"
14' - 10 1/8"
42' - 5 1/2"
28' - 7 1/2"
14' - 7 1/4"
13' - 10"
11' - 6"
6' - 8 1/2"
7' - 3 3/4"
0.5673°
8' - 4"
1' - 0"
4' - 0"
10' - 2"
9' - 10"
8' - 6 3/4"
2' - 0"
1' - 6 1/4"
6' - 0 15/16"
2' - 0 1/16"
1' - 9 3/16"
1' - 7" EJ
1' - 7" EJ
5' - 3 3/16"
21' - 1 1/2"
26' - 3 1/2"
25' - 7 1/2"
43' - 10"
29' - 4"
30' - 0"
31' - 4"
33' - 6"
12' - 2"
8' - 0"
7' - 10"
14' - 6"
13' - 2"
10' - 6 1/2"
5' - 4 5/8"
1' - 9"
2' - 6"
1' - 7"
1' - 9"
1' - 5"
2' - 10"
1' - 4"
1' - 5 1/2"
1' - 8"
1' - 6"
1' - 2"
1' - 3"
1' - 0 1/4"
1' - 4"
1' - 0 1/4"
1' - 0 1/4"
1' - 0 1/



1 FOUNDATION PLAN - SAWJOITS - AREA B

3/32" = 1'-0"



KEY PLAN

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Revision /	Date	
1	05-07-25	ADDENDUM 01
2	5-15-25	Addendum 03

Project:

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2025 ADDITIONS + RENOVATIONS
FOR
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BUDA, TX

STATE OF TEXAS
CHERYL L. STEWART
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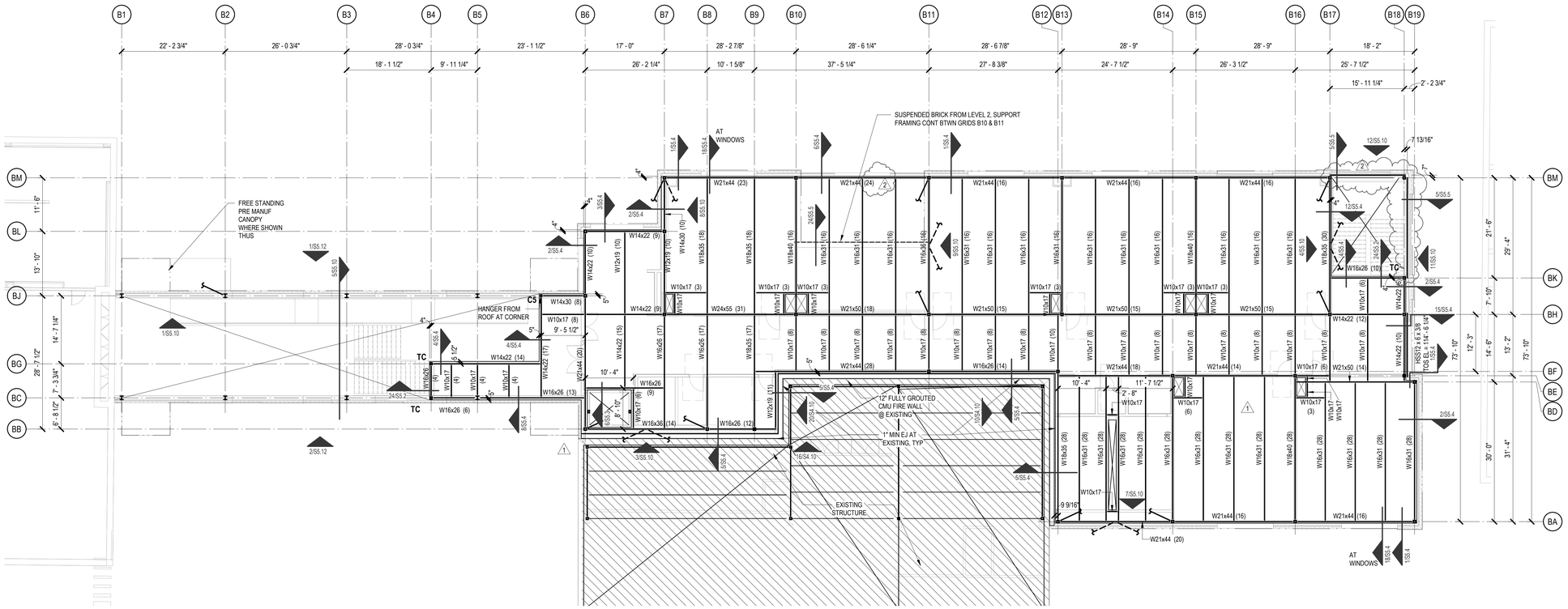
FOUNDATION PLAN - SAWJOINTS - AREA B

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. 1 ISSUE FOR BID
Drawn By: LAFP	S2.1B1S
Date: 04/22/2025	

DESIGN PROGRESS REVIEW



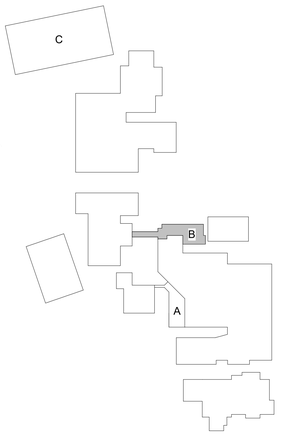
1 SECOND LEVEL FRAMING PLAN - AREA B

3/32" = 1'-0"

PLAN NOTES

1. SEE PLAN FOR FINISH FLOOR ELEVATION (RELATIVE TO DATUM 100'-0").
2. TOP OF CONCRETE SLAB IS FINISH FLOOR UNLESS SHOWN OTHERWISE.
3. TYPICAL FLOOR STRUCTURE IS NORMAL WEIGHT CONCRETE PLACED ON COMPOSITE METAL DECK SUPPORTED BY STEEL BEAMS, UNO. REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION.
4. UNLESS SHOWN OTHERWISE, STEEL BEAMS ARE CENTERED ON AND EQUALLY SPACED BETWEEN COLUMN CENTERLINES.
5. NUMBER OF SHEAR STUDS IS NOTED IN PARENTHESES ( ) ADJACENT TO BEAM SIZES. SEE TYPICAL DETAILS FOR LAYOUT REQUIREMENTS OF STUDS.
6. SHEET INDEX:

GENERAL NOTES	-S1.1
TYPICAL DETAILS	-S3.01, S4.01, S5.01
PIER SCHEDULE	-S3.01
CMU WALL ELEVATIONS	-S4.10
STEEL COLUMN SCHEDULE	-S5.01
VERTICAL BRACES	-S5.10



KEY PLAN
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Revision /	Date	
1	05-07-25	ADDENDUM 01
2	5-15-25	Addendum 03

Project:

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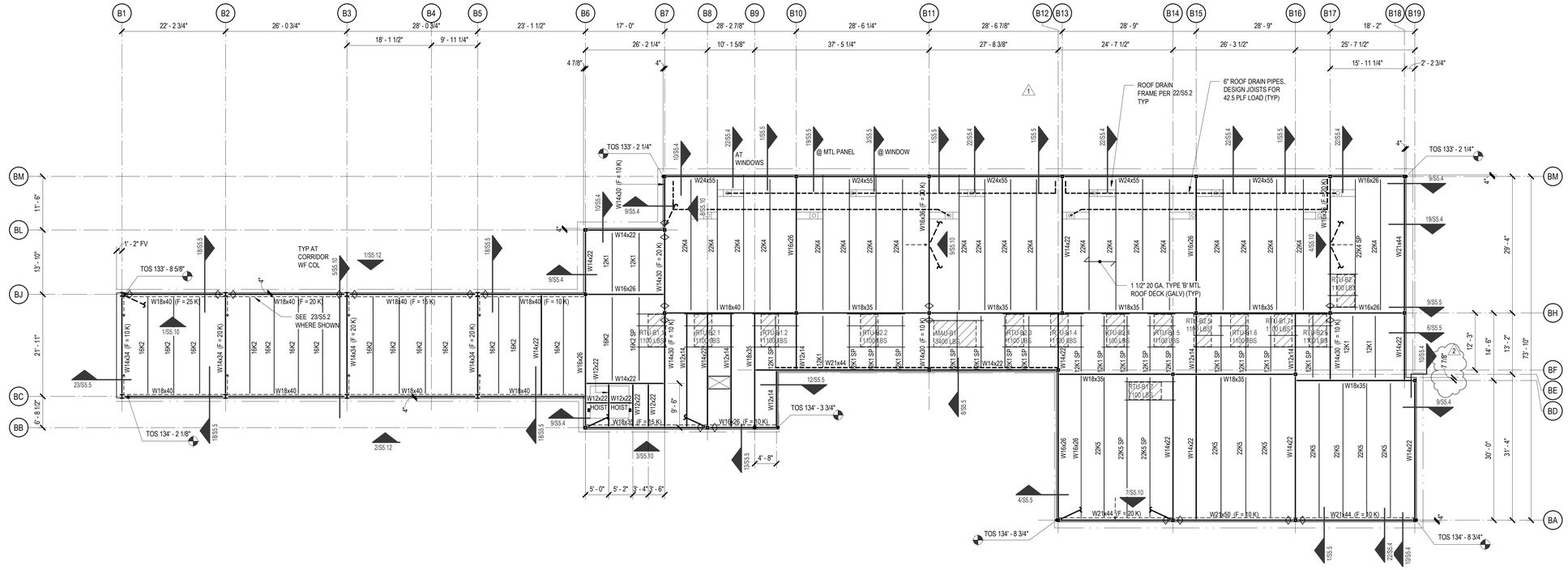
LEVEL 2 FRAMING PLAN - AREA B

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. ISSUE FOR BID S2.1B2
Drawn By: LAFP	
Date: 04/22/2025	

DESIGN PROGRESS REVIEW


B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19
22' - 2 3/4"
26' - 0 3/4"
28' - 0 3/4"
23' - 1 1/2"
17' - 0"
28' - 2 7/8"
28' - 6 1/4"
28' - 6 7/8"
28' - 9"
28' - 9"
18' - 2"
18' - 1 1/2"
9' - 11 1/4"
26' - 2 1/4"
10' - 1 5/8"
37' - 5 1/4"
27' - 8 3/8"
24' - 7 1/2"
26' - 3 1/2"
25' - 7 1/2"
15' - 11 1/4"
2' - 2 3/4"
BM BL BJ BC BB
BH BF BE BD BA
11' - 6"
13' - 10"
21' - 11"
6' - 8 1/2"
29' - 4"
30' - 0"
31' - 4"
12' - 3"
14' - 6"
13' - 2"
73' - 10"
ROOF DRAIN FRAME PER 22/SS.2 TYP
6" ROOF DRAIN PIPES, DESIGN JOISTS FOR 42.5 PLF LOAD (TYP)
1 1/2" 20 GA. TYPE 'B' MTL ROOF DECK (GALV) (TYP)
TOS 133' - 2 1/4"
TOS 133' - 8 5/8"
TOS 134' - 2 1/8"
TOS 134' - 3 3/4"
TOS 134' - 8 3/4"
1' - 2" FV
TYP AT CORRIDOR WF COL
SEE 23/SS.2 WHERE SHOWN
AT WINDOWS
@ MTL PANEL
@ WINDOW
W24x55
W18x40 (F = 25 K)
W18x40 (F = 20 K)
W18x40 (F = 15 K)
W18x40 (F = 10 K)
W14x34 (F = 10 K)
W14x34 (F = 20 K)
W14x20 (F = 10 K)
W14x20 (F = 20 K)
W16x26 (F = 10 K)
W16x26 (F = 15 K)
W18x35
W21x44 (F = 20 K)
W21x44 (F = 10 K)
W21x50 (F = 10 K)
W14x22
W16x26
W18x26
W16x36
W18x35
W21x44
W12x22
W12x26
W12x14
W21x44
W18x35
W16x26
W14x22
W14x22
W16x26
W18x35
W21x44
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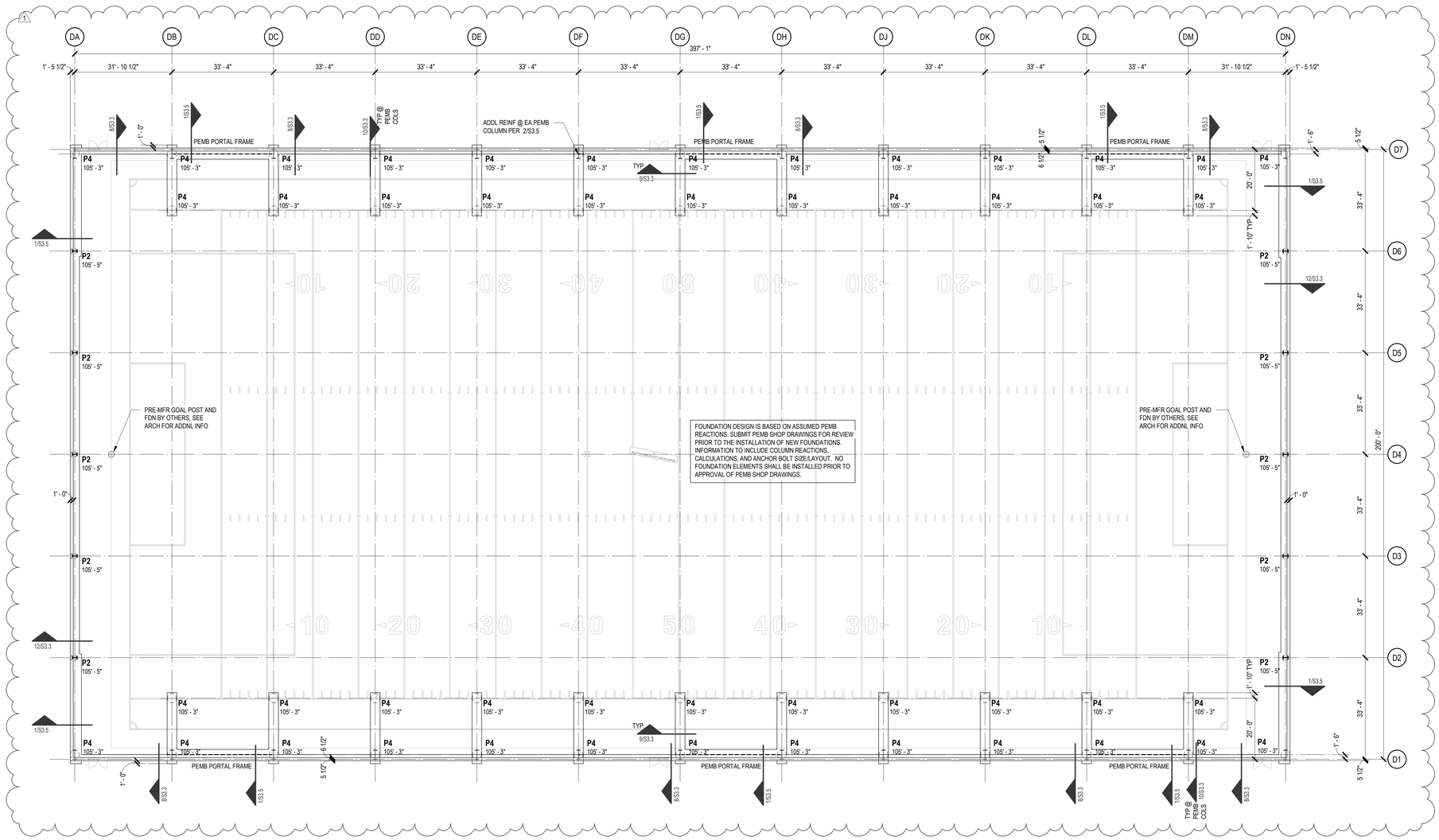
W18x35
W14x22
W16x26
W18x35
W14x22



1 FOUNDATION PLAN - AREA C

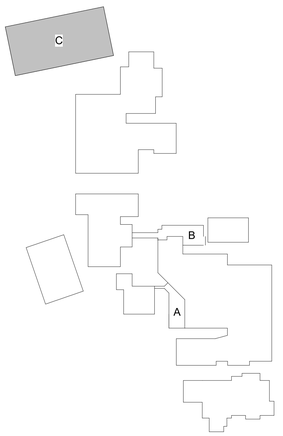
1/16" = 1'-0"

NORTH

FOUNDATION PLAN NOTES

1. SEE PLAN FOR TOP OF CURB ELEVATION (RELATIVE TO DATUM 100'-0").
2. SHEET INDEX:

GENERAL NOTES	-S1.1
TYPICAL DETAILS	-S3.01, S4.01, S5.01
PIER SCHEDULE	-S3.01
CMU WALL ELEVATIONS	-S4.10
STEEL COLUMN SCHEDULE	-S5.01
VERTICAL BRACES	-S5.10



KEY PLAN

N.T.S

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LAFP PROJ. NO. 24079 FIRM REG. NO. F-537

Revision /	Date	
1	5-15-25	Addendum 03

Project:

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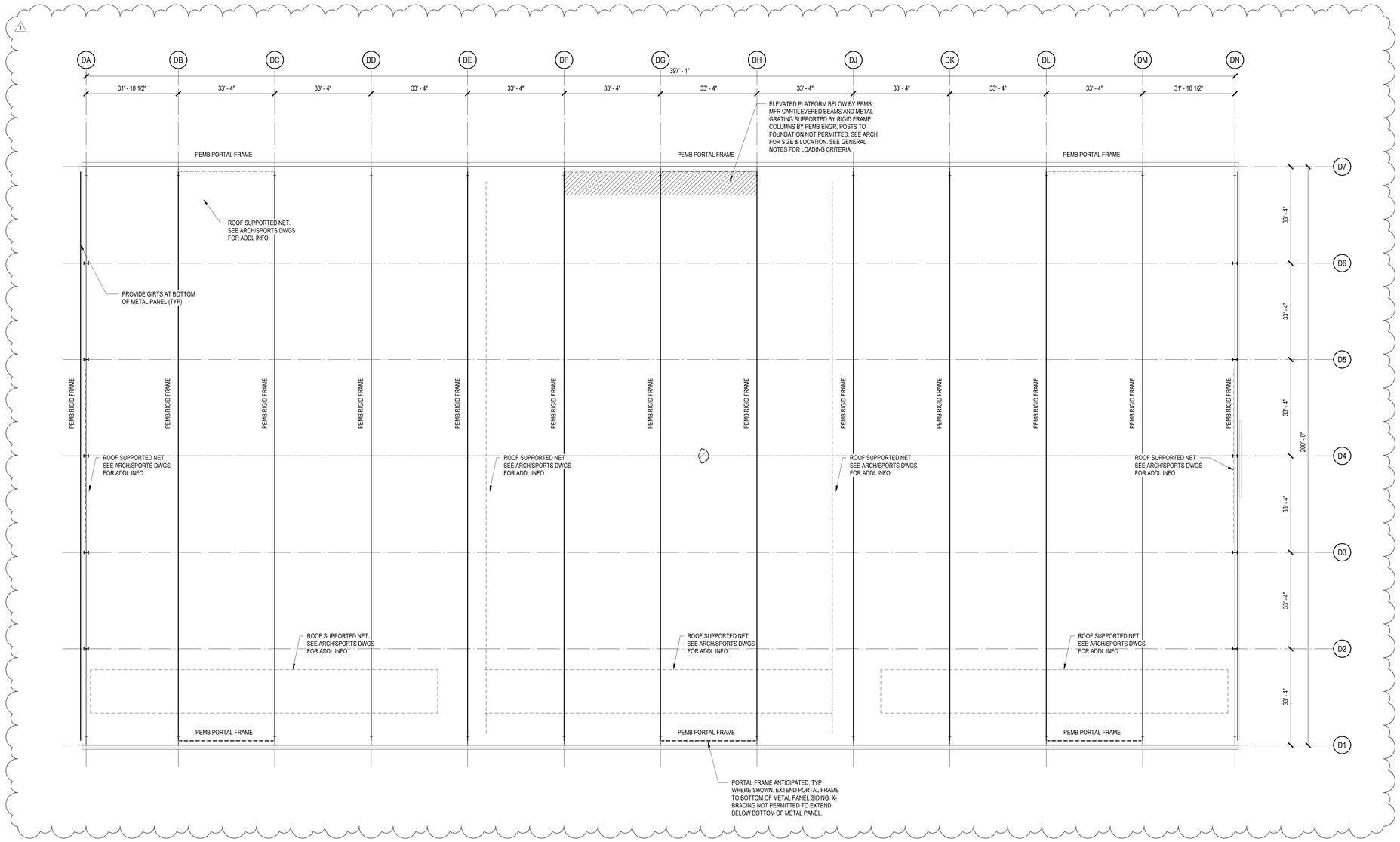
FOUNDATION PLAN - AREA C

PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. S2.1C1
Drawn By: LAFP	ISSUE FOR BID
Date: 04/22/2025	

DESIGN PROGRESS REVIEW



1 ROOF FRAMING PLAN - AREA C

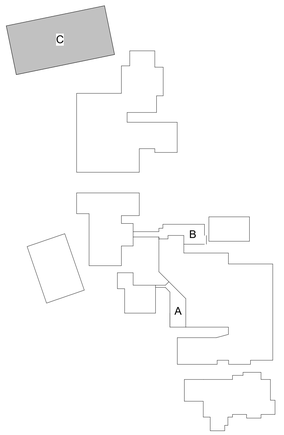
1/16" = 1'-0"

NORTH

PEMB PLAN NOTES

1. PEMB SUPPLIER SHALL BE RESPONSIBLE FOR THE ENTIRE DESIGN OF THE STEEL SUPERSTRUCTURE INCLUDING FLOORS ABOVE GRADE, ROOFING SUPPORT, FASCIAS, FACADE SUPPORT, ANCHOR BOLT LAYOUT & DESIGN, TEMPORARY BRACING, LATERAL ANALYSIS AND RELATED WORK.
2. SHEET INDEX:

GENERAL NOTES	-S1.1
TYPICAL DETAILS	-S3.01, S4.01, S5.01
PIER SCHEDULE	-S3.01
CMU WALL ELEVATIONS	-S4.10
STEEL COLUMN SCHEDULE	-S5.01
VERTICAL BRACES	-S5.10



KEY PLAN
NTS

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Revision /	Date	
1	5-15-25	Addendum 03

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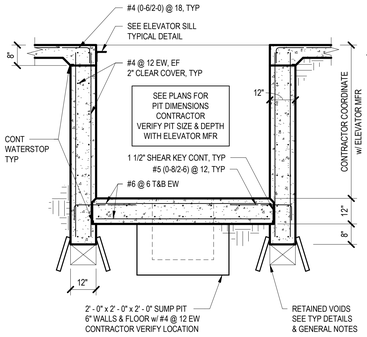
ROOF FRAMING PLAN - AREA C

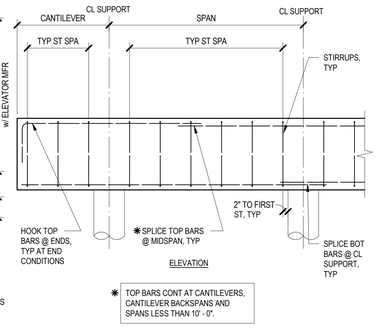
PACKAGE	VOLUME
Job No. 1954-09-01	Sheet No. S2.1C2
Drawn By: LAFP	ISSUE FOR BID
Date: 04/22/2025	

DESIGN PROGRESS REVIEW



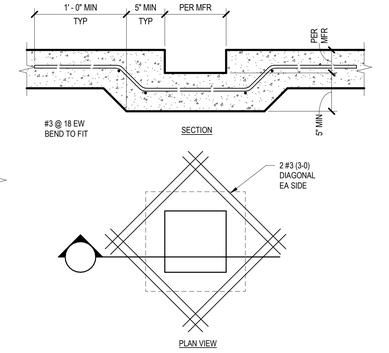
13 ELEVATOR PIT TYPICAL DETAIL

NO SCALE



9 GRADE BEAM REINF TYPICAL DETAIL

NO SCALE TD03141

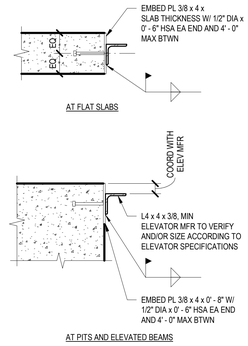


5 SLAB-ON-GRADE LEAVE-OUT TYPICAL DETAIL

NO SCALE

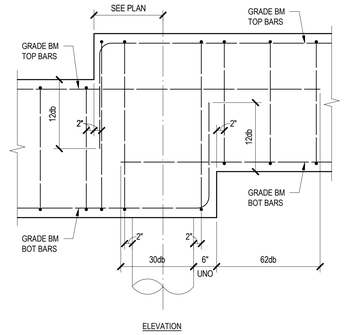
STRAIGHT SHAFT DRILLED PIER SCHEDULE (1)

PIER MARK	SHAFT DIAMETER	VERTICAL REINF	TIES / SPIRALS	MINIMUM PENETRATION	DOWELS	Pier Design Load
P1	24"	8#7	#3 @ 12	11' - 0"	4#6 (4-0)	90
P2	24"	8#7	#3 @ 12	15' - 0"	4#6 (4-0)	155
P3	24"	8#7	#3 @ 12	20' - 0"	6#7(7-2/1-0)	230
P4	36"	8 # 10	#3 @ 12	13' - 0"	<varies>	180



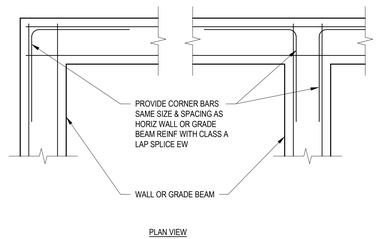
18 ELEVATOR SILL ANGLE TYPICAL DETAIL

NO SCALE TD03602



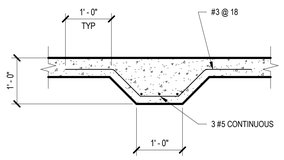
14 STEP IN GRADE BEAM TYPICAL DETAIL

NO SCALE TD03144



10 CORNER BARS TYPICAL DETAIL

NO SCALE TD03026



6 THICKENED SLAB TYPICAL DETAIL

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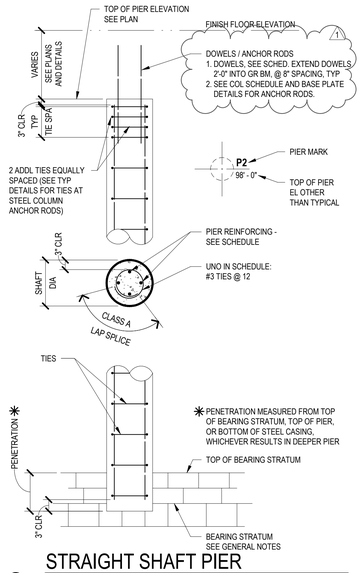
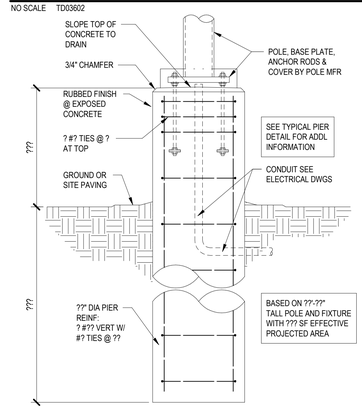


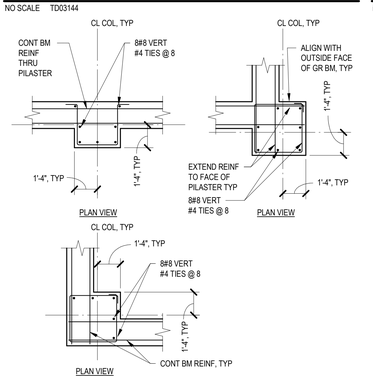
3 STRAIGHT SHAFT PIER TYPICAL DETAIL

NO SCALE TD02110



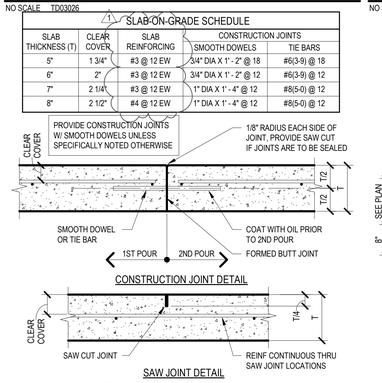
19 SITE LIGHT POLE FOUNDATION TYPICAL DETAIL

NO SCALE TD02111



15 PILASTER REINFORCING TYPICAL DETAIL

NO SCALE TD03150



11 SLAB ON GRADE TYPICAL DETAIL

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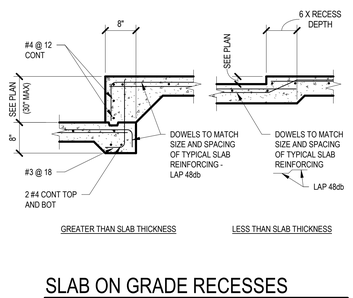

7 SLAB ON GRADE RECESSES TYPICAL DETAIL

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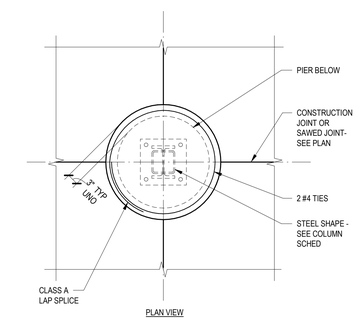
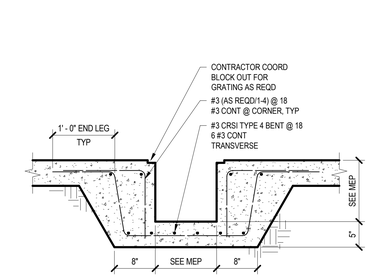


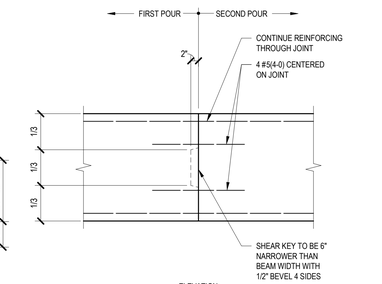
4 INTERIOR STEEL COLUMN BASE TYPICAL DETAIL

NO SCALE TD02161



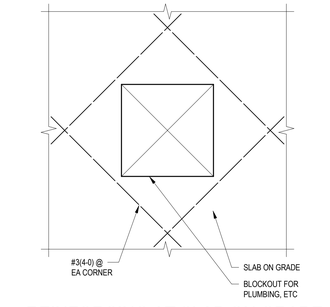
16 FLOOR TRENCH TYPICAL DETAIL

NO SCALE



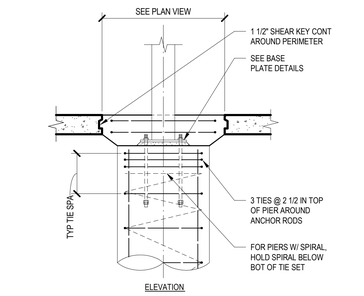
12 GRADE BEAM CONSTR JOINT TYPICAL DETAIL

NO SCALE TD03140



8 REINFORCING AT SLAB ON GRADE BLOCKOUT TYPICAL DETAIL

NO SCALE TD03042



Revision /	Date	
1	5-15-25	Addendum 03

HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

Project:

CHERYL R. STEWART
117498
LICENSED
PROFESSIONAL ENGINEER
5-14-2025

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TYPICAL CONCRETE DETAILS

Job No.	Sheet No.
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Date: 04/22/2025	

DESIGN PROGRESS REVIEW

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Structural Engineers
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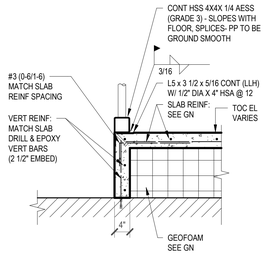
LAFP PROJ. NO. 24079 FIRM REG. NO. F-537



13 TYPICAL DETAIL

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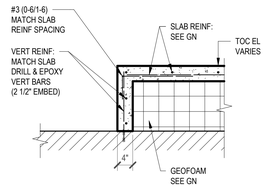
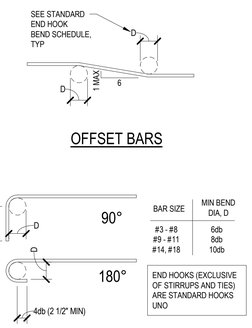


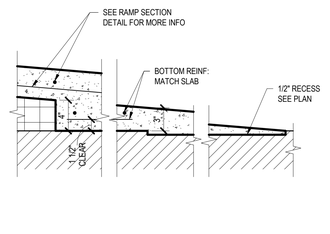
9 RAISED PLATFORM RAMP SECTION TYPICAL DETAIL

NO SCALE 317 GEOFOAM



5 REBAR BENDS AND HOOKS TYPICAL DETAIL

NO SCALE TD03201



10 RAISED PLATFORM RAMP END TYPICAL DETAIL

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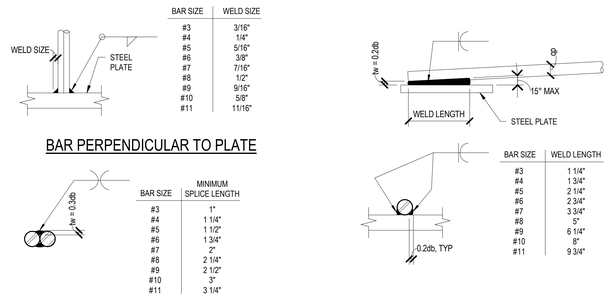

6 REBAR WELDING TYPICAL DETAIL

NO SCALE TD03202

7 GR BM REINF @ VERT BRACING TYPICAL DETAIL

NO SCALE 549 HSS Copy 1

Revision /	Date	
1	5-15-25	Addendum 03

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TYPICAL CONCRETE DETAILS

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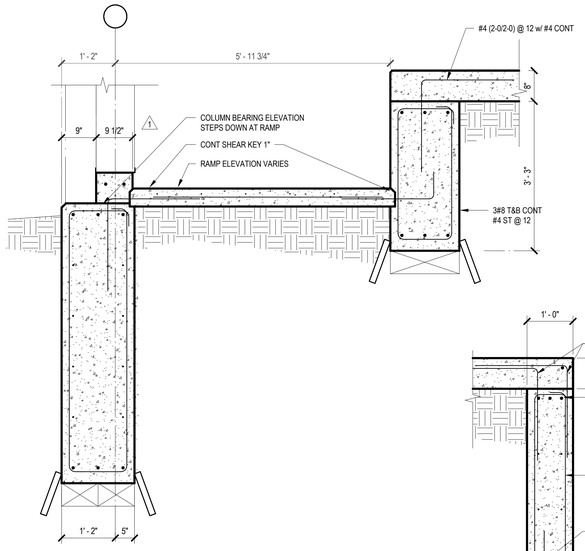

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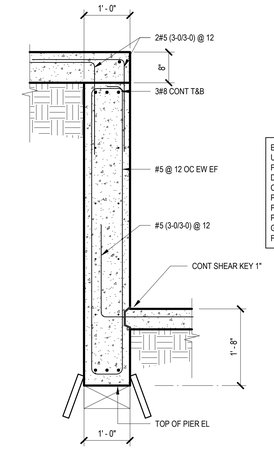

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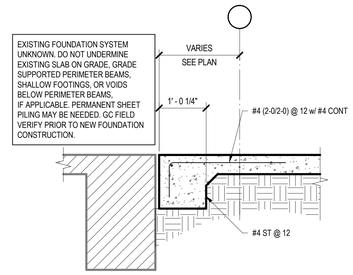

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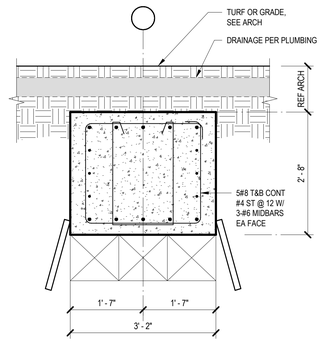

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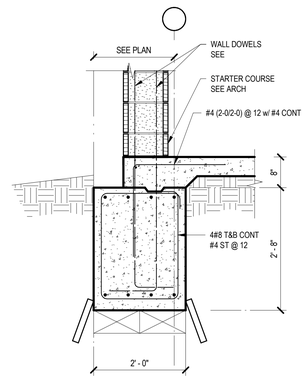

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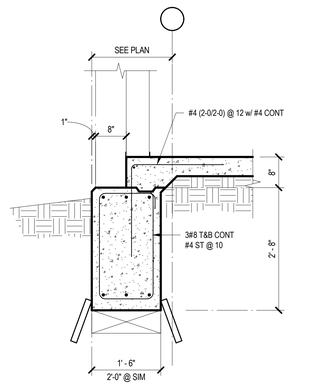

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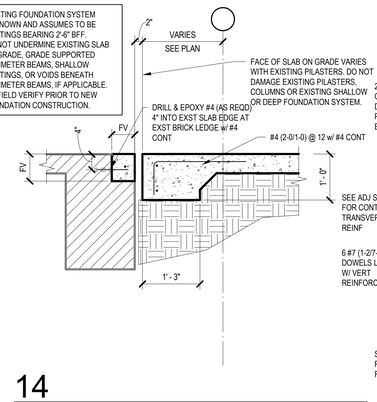

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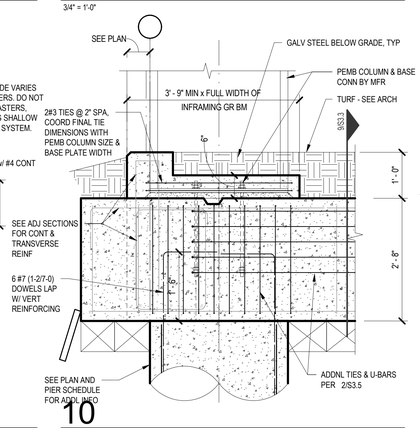

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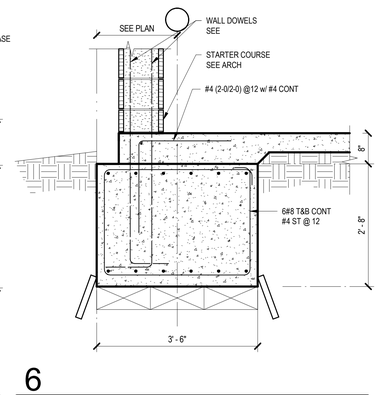

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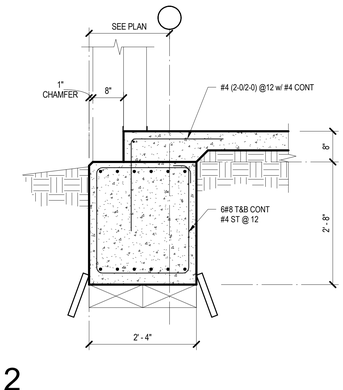

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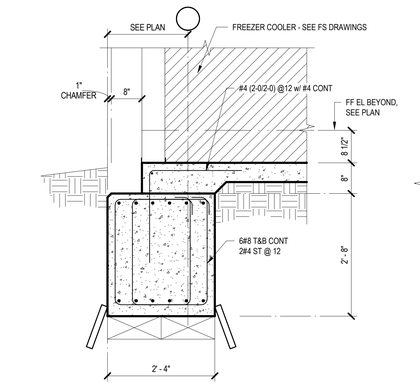

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19
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15
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11 ⚠1
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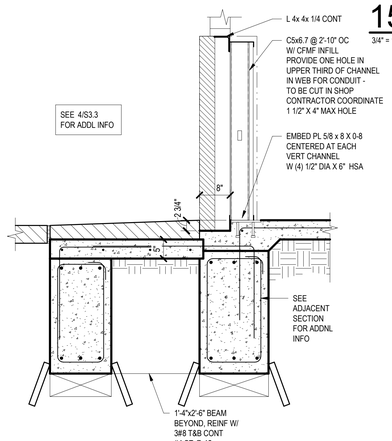
7
3/4" = 1'-0"

3
3/4" = 1'-0"

24
3/4" = 1'-0"



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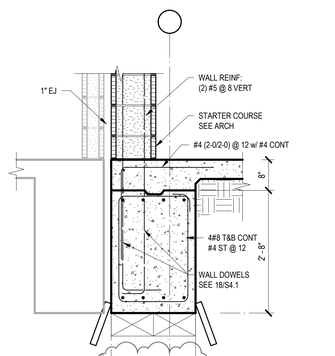

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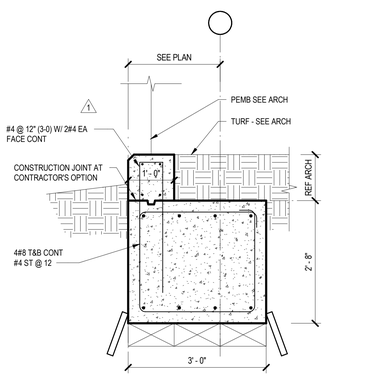

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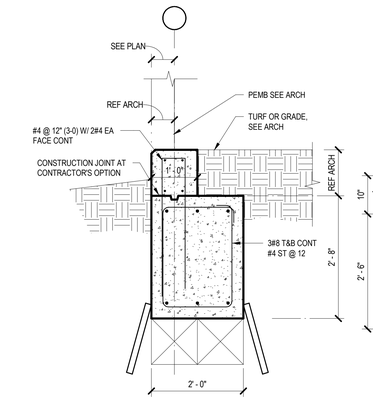

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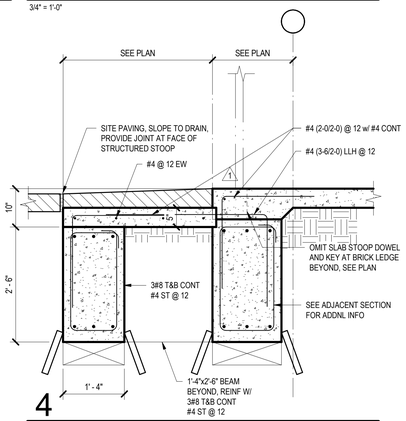

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Revision /	Date
1	05-07-25 ADDENDUM 01
2	5-15-25 Addendum 03

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BUDA, TX

CHERYL R. STEWART
117488
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PROFESSIONAL ENGINEER
5-14-2025

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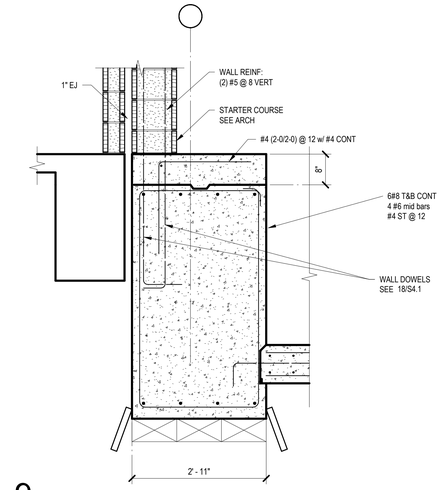

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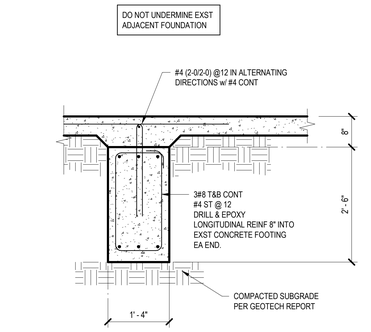

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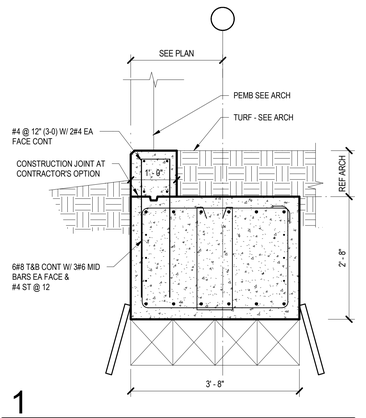

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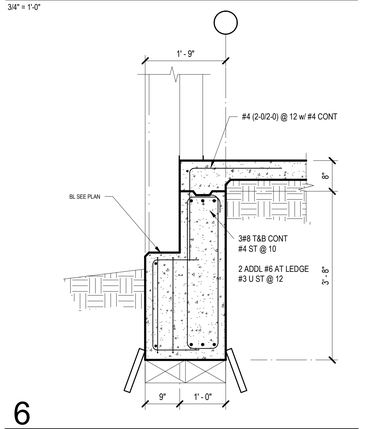

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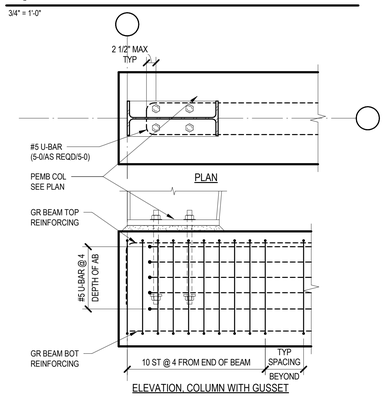

GR BM REINF @ PEMB COLUMN

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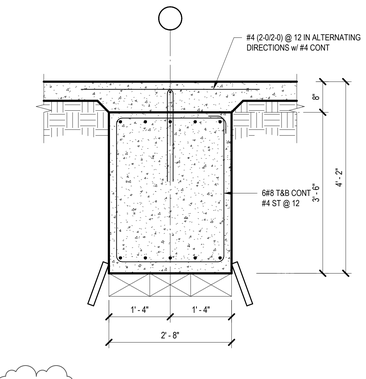

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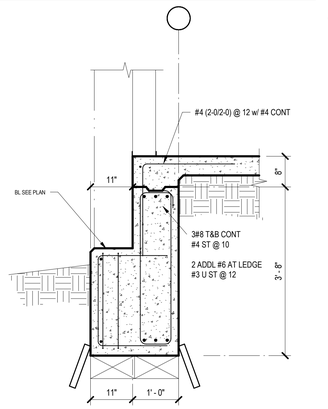

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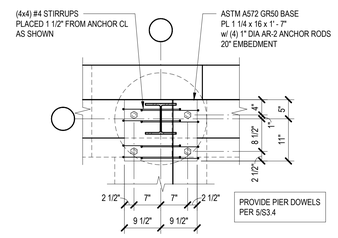

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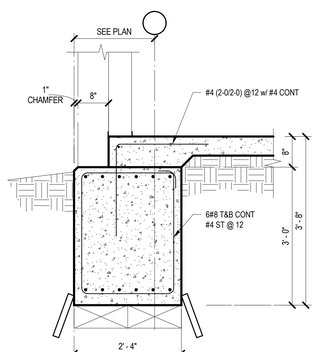

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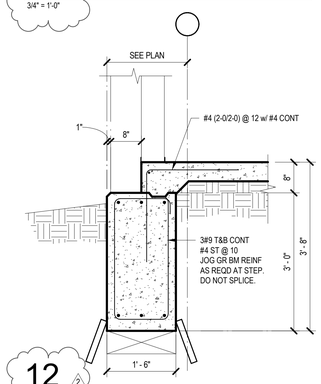

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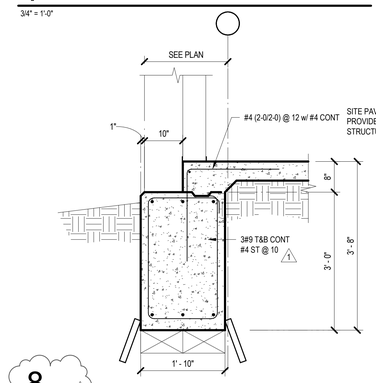

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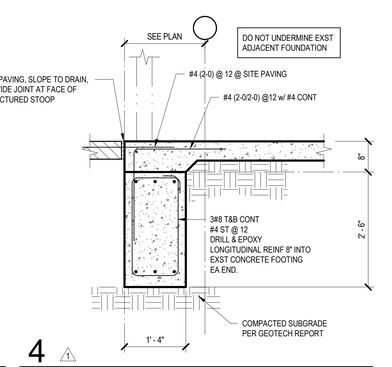

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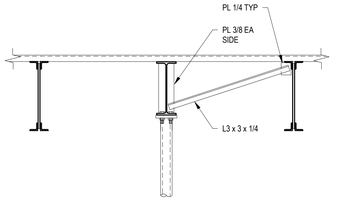
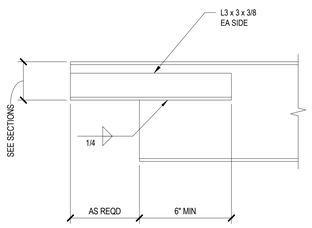


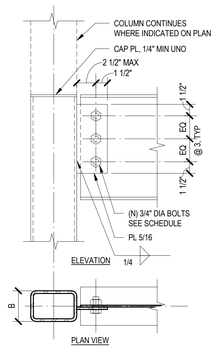
21 TOP OF COLUMN BRACING TYPICAL DETAIL

NO SCALE TD05180



17 COPED BEAM TYPICAL DETAIL

NO SCALE TD05210

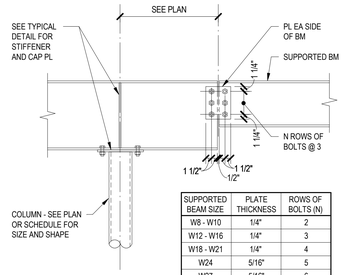


MIN COLUMN WALL THICKNESS FOR SINGLE PLATE CONN		
RECTANGULAR & SQUARE HSS	CONNECTED HSS WIDTH (B)	MIN WALL THICKNESS
	3" < B < 8"	1/4"
	8" < B < 10"	5/16"
	10" < B < 12"	3/8"
	12" < B < 16"	1/2"
	16" < B < 20"	5/8"
ROUND HSS	COLUMN DIA	MIN WALL THICKNESS
	3" < DIA < 12"	1/4"
	12" < DIA	5/16"
NO MIN WALL THICKNESS FOR A53 PIPE		

MINIMUM CONN DESIGN STRENGTH (LRFD, KIPS)		
BEAM SIZE	N BOLTS	CAPACITY
W8	2	20
W10	2	23
W12	3	36
W14	3	42
W16	4	61
W18	5	81
W21	6	89
W24	7	108
W27	7	108
W30	8	127

13 BEAM TO HSS COLUMN CONN TYPICAL DETAIL

NO SCALE TD05207



SUPPORTED BEAM SIZE	PLATE THICKNESS	ROWS OF BOLTS (N)
W8 - W10	1/4"	2
W12 - W16	1/4"	3
W18 - W21	1/4"	4
W24	5/16"	5
W27	5/16"	6
W30	5/16"	7
W33	5/16"	8
W36	5/16"	9

NOTE: BOLTS ARE 3/4" DIA GRADE A325N

9 BEAM SPLICE CONNECTION TYPICAL DETAIL

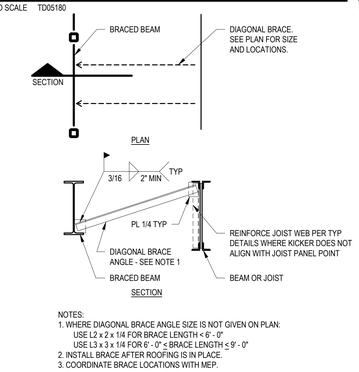
NO SCALE TD05170

STEEL COLUMN SCHEDULE

COL MARK	COL SIZE	BASE PLATE DIMENSIONS						ANCHOR BOLTS			
		DIM "A"	DIM "B"	t	DIM "C"	DIM "D"	DETAIL	NUMBER	TYPE	DIA	EMBED LENGTH
C1	HSS5 x 5 x 5/16	11"	11"	1"	4"	4"	3,4/SS.01	4	AR-1	3/4"	1' - 0"
C2	HSS6 x 6 x 5/16	1' - 0"	1' - 0"	1"	4 1/2"	4 1/2"	3,4/SS.01	4	AR-1	3/4"	1' - 0"
C3	HSS6 x 6 x 3/8	1' - 4"	1' - 4"	1"	6"	6"	3,6/SS.01	4	AR-2	1 1/4"	1' - 6"
C4	HSS6 x 0.375	1' - 0"	1' - 0"	1"	4 1/2"	4 1/2"	3,4/SS.01	4	AR-1	3/4"	1' - 0"
C5	HSS4 x 4 x 3/8	1' - 0"	1' - 0"	1"	4"	4"	3,4/SS.01	4	AR-2	3/4"	1' - 0"
C6	W8x31	1' - 6"	1' - 6"	1 1/2"	1' - 0"	1' - 0"	7,8/SS.01	4	AR-2	1"	1' - 6"
C7	W8x67	1' - 10"	1' - 0"	1 1/2"	4"	6"	7,8/SS.01	4	AR-2	1 1/4"	1' - 6"
C9	HSS6 x 6 x 3/8 (2)	1' - 4"	1' - 4"	1 1/2"	6"	6"	3,6/SS.01	4	AR-2	1 1/4"	1' - 6"

NOTE:
BASE PLATES WITH THICKNESS MARKED WITH AN ASTERISK (*) SHALL BE A572 GR. 50

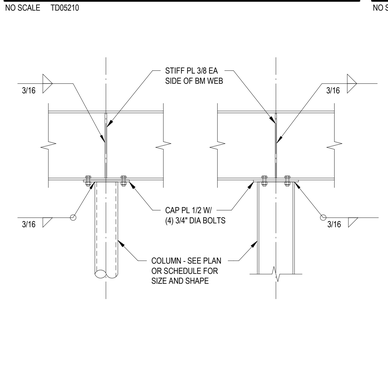
SEE PLAN FOR MODIFIED BASE PLATE/ANCHOR BOLT CONFIGURATION DETAILS AS REQUIRED FOR MOUNTING CONDITIONS



NOTES:
1. WHERE DIAGONAL BRACE ANGLE SIZE IS NOT GIVEN ON PLAN:
   USE L2 x 2 x 1/4 FOR BRACE LENGTH < 6' - 0"
   USE L3 x 3 x 1/4 FOR 6' - 0" < BRACE LENGTH < 9' - 0"
2. INSTALL BRACE AFTER ROOFING IS IN PLACE.
3. COORDINATE BRACE LOCATIONS WITH MEP.

22 BEAM BOT FLANGE BRACING TYPICAL DETAIL

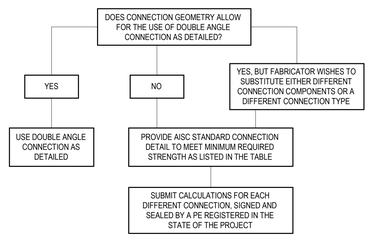
NO SCALE TD05181



18 BEAM TO COLUMN CONN TYPICAL DETAIL

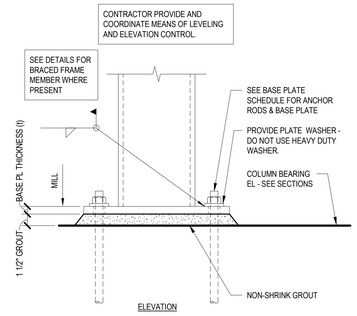
NO SCALE TD05171

SIMPLE SHEAR CONNECTION FLOW CHART



NOTES:
1. EXTENDED CONNECTIONS (IN WHICH THE END OF THE SUPPORTED BEAM STOPS SHORT OF THE COLUMN OR GIRDER FLANGES) ARE NOT ALLOWED, UNLESS SPECIFICALLY DETAILED IN THE DRAWINGS.

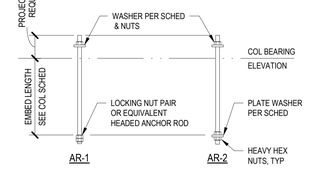
	MINIMUM CONNECTION DESIGN STRENGTH (LRFD, KIPS)	
BEAM SIZE	STANDARD	HEAVY
W8	17	-----
W10	21	-----
W12	28	38
W14	46	58
W16	50	66
W18	78	94
W21	92	130
W24	128	170
W27	150	230
W30	181	260
W33	215	300
W36	242	308



6 LATERAL COL BASE PLATE TYPICAL DETAIL

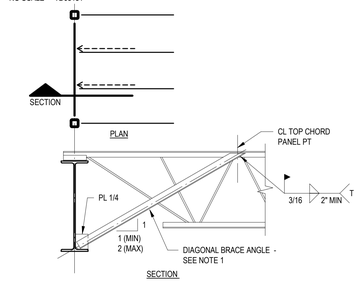
NO SCALE TD05122

SIZES FOR WASHERS AND ANCHOR ROD HOLES IN BASE PLATES					
ANCHOR ROD DIA	HOLE DIA	PLATE WASHER THICKNESS ANCHOR ROD GRADE			WASHER WIDTH
		GR 36	GR 55	GR 105	
3/4"	1 5/16"	1/4"	1/4"	3/8"	2"
7/8"	1 9/16"	3/8"	3/8"	1/2"	2 1/2"
1"	1 7/8"	3/8"	3/8"	1/2"	3"
1 1/4"	2 1/8"	3/8"	1/2"	5/8"	3 1/2"
1 1/2"	2 3/8"	3/8"	1/2"	5/8"	4"
1 3/4"	2 7/8"	3/4"	3/4"	3/4"	4 1/2"
2"	3 1/4"	3/4"	3/4"	3/4"	5"
2 1/2"	3 3/4"	3/4"	3/4"	7/8"	5 1/2"



2 ANCHOR ROD TYPES TYPICAL DETAIL

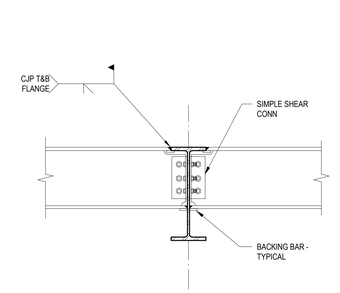
NO SCALE TD05102



NOTES:
1. WHERE DIAGONAL BRACE ANGLE SIZE IS NOT GIVEN ON PLAN:
   USE L2 x 2 x 1/4 FOR BRACE LENGTH < 6' - 0"
   USE L3 x 3 x 1/4 FOR 6' - 0" < BRACE LENGTH < 9' - 0"
2. INSTALL BRACE AFTER ROOFING IS IN PLACE.
3. COORDINATE BRACE LOCATIONS WITH MEP.

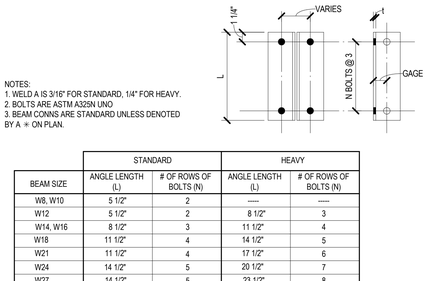
23 TYPICAL DETAIL

NO SCALE TD05182



19 BEAM TO BEAM MOMENT CONN TYPICAL DETAIL

NO SCALE TD05211

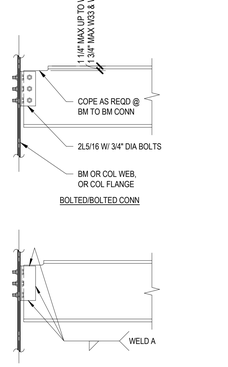


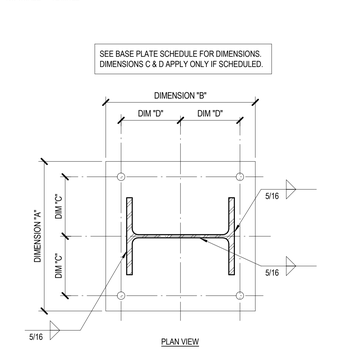
	STANDARD		HEAVY	
BEAM SIZE	ANGLE LENGTH (L)	# OF ROWS OF BOLTS (N)	ANGLE LENGTH (L)	# OF ROWS OF BOLTS (N)
W8, W10	5 1/2"	2	-----	-----
W12	5 1/2"	2	8 1/2"	3
W14, W16	8 1/2"	3	11 1/2"	4
W18	11 1/2"	4	14 1/2"	5
W21	11 1/2"	4	17 1/2"	6
W24	14 1/2"	5	20 1/2"	7
W27	14 1/2"	5	23 1/2"	8
W30	17 1/2"	6	26 1/2"	9
W33	20 1/2"	7	29 1/2"	10
W36	23 1/2"	8	29 1/2"	10

REFER TO AISC TABLES 10-1 & 10-2

15 SIMPLE SHEAR STEEL BEAM CONN TYPICAL DETAIL

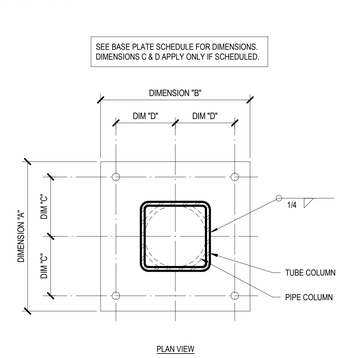
NO SCALE TD05200





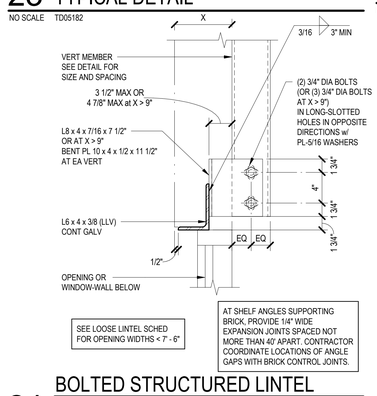
7 COLUMN BASE PLATE TYPICAL DETAIL

NO SCALE TD05110



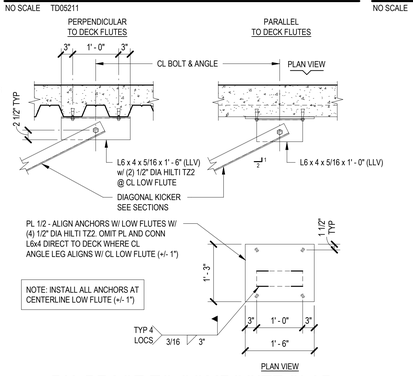
3 COLUMN BASE PLATE TYPICAL DETAIL

NO SCALE TD05120



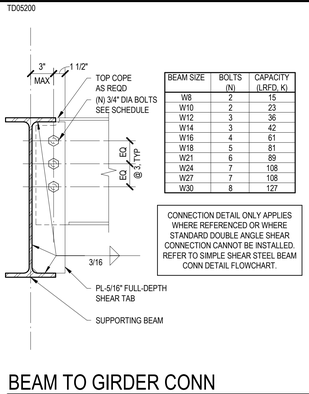
24 BOLTED STRUCTURED LINTEL TYPICAL DETAIL

NO SCALE 24/SD5.01



20 DIA BRACE TO COMPOSITE SLAB TYPICAL DETAIL

NO SCALE DIA BRACE TO COMPOSITE SLAB

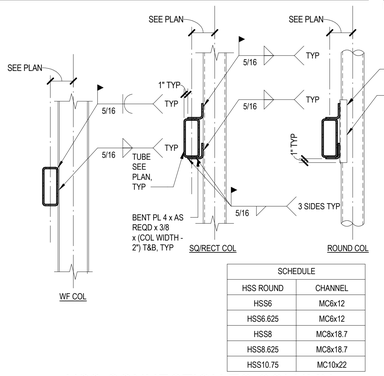


BEAM SIZE	BOLTS (N)	CAPACITY (LRFD, K)
W8	2	15
W10	2	23
W12	3	36
W14	3	42
W16	4	61
W18	5	81
W21	6	89
W24	7	108
W27	7	108
W30	8	127

CONNECTION DETAIL ONLY APPLIES WHERE REFERENCED OR WHERE STANDARD DOUBLE ANGLE SHEAR CONNECTION CANNOT BE INSTALLED. REFER TO SIMPLE SHEAR STEEL BEAM CONN DETAIL FLOWCHART.

16 BEAM TO GIRDER CONN TYPICAL DETAIL

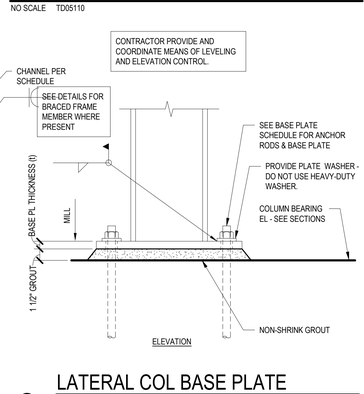
NO SCALE 548



SCHEDULE	
HSS ROUND	CHANNEL
HSS6	MC6x12
HSS6.625	MC6x12
HSS8	MC8x18.7
HSS8.625	MC8x18.7
HSS10.75	MC10x22

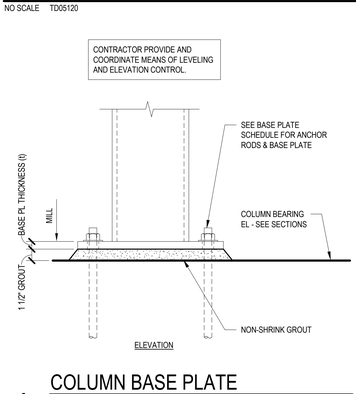
12 HSS CONNECTION TO COLUMN TYPICAL DETAIL

NO SCALE 20/SS.01



8 LATERAL COL BASE PLATE TYPICAL DETAIL

NO SCALE TD05112



4 COLUMN BASE PLATE TYPICAL DETAIL

NO SCALE TD05121

Revision / 1 — Date 5-15-25 — Addendum 03

Project: HAYS HIGH SCHOOL 2025 ADDITIONS + RENOVATIONS FOR HAYS CISD BUDA, TX

CHERYL L. STEWART, 117498, LICENSED PROFESSIONAL ENGINEER, STATE OF TEXAS, 5-15-2025

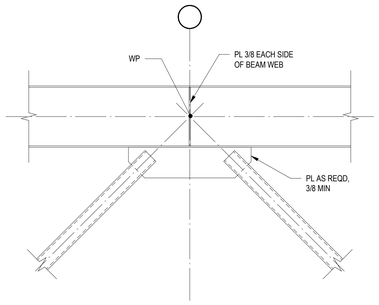
Huckabee
www.huckabee-inc.com
800.687.1229

TYPICAL STEEL DETAILS

Job No.	Sheet No.
1954-09-01	ISSUE FOR BID
Drawn By: LAFP	S5.1
Date: 04/22/2025	

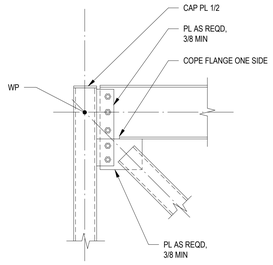
DESIGN PROGRESS REVIEW

L.A. FUESS PARTNERS, INC.
Structural Engineers
3333 Lee Parkway, Suite 300 • Dallas, TX 75219
LAFP PROJ. NO. 24079 FIRM REG. NO. F-537



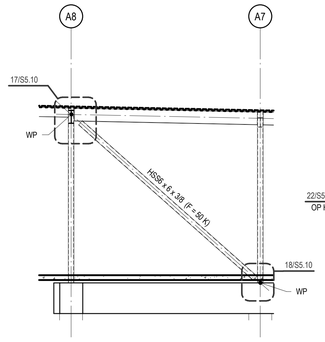
21 VERTICAL BRACE CONNECTION TYPICAL DETAIL

NO SCALE



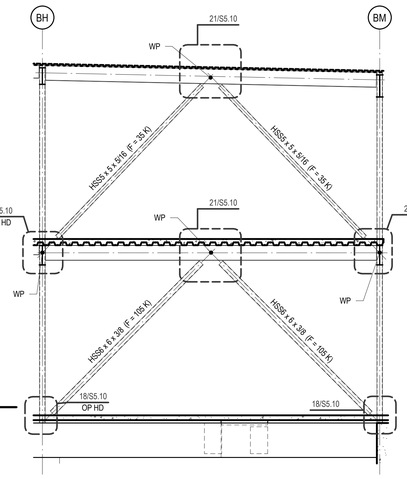
17 BRACED FRAME CONNECTION TYPICAL DETAIL

NO SCALE TD05607



13 BRACING ELEVATION - GRID AN

3/16" = 1'-0"



9 BRACING ELEVATION - GRID B11

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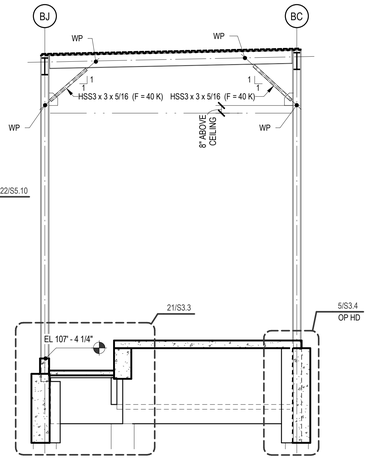
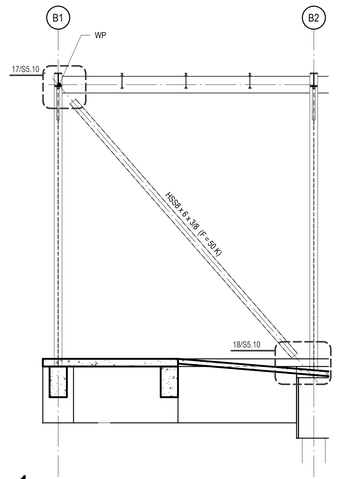


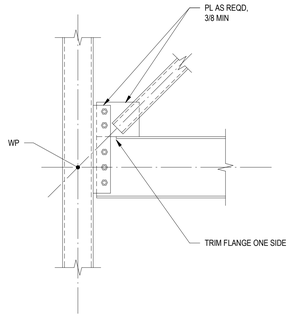
5 BRACING ELEVATION - GRID B3

3/16" = 1'-0"



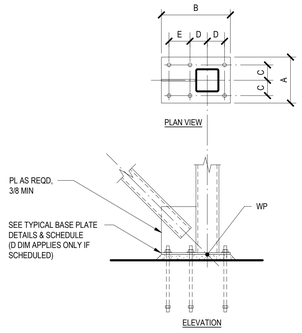
1 BRACING ELEVATION - GRID BJ

3/16" = 1'-0"



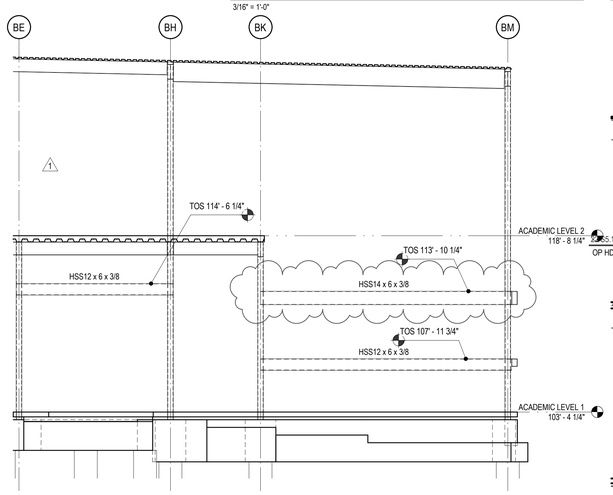
22 BRACED FRAME CONNECTION TYPICAL DETAIL

NO SCALE TD05617



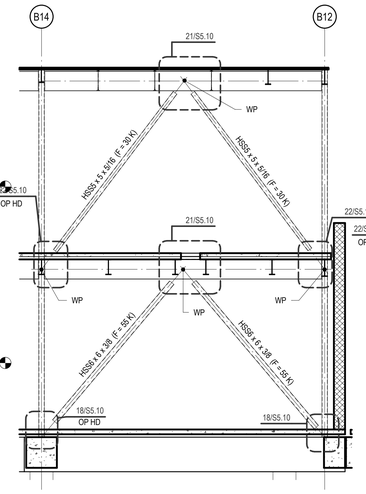
18 BRACED FRAME CONNECTION TYPICAL DETAIL

NO SCALE TD05608X



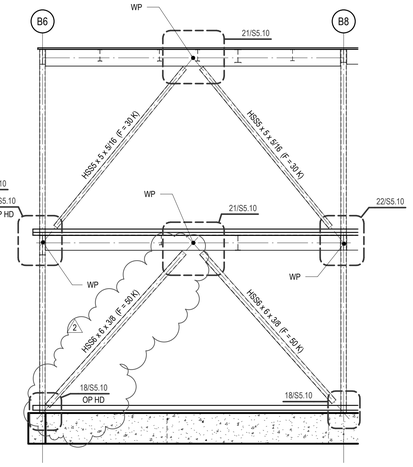
11 FRAME ELEVATION GRID 18

3/16" = 1'-0"



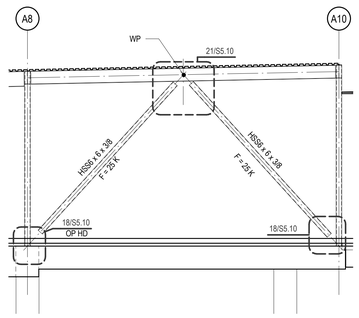
7 BRACING ELEVATION - GRID BA

3/16" = 1'-0"



3 BRACING ELEVATION - GRID BB

3/16" = 1'-0"



23 BRACING ELEVATION - GRID AA

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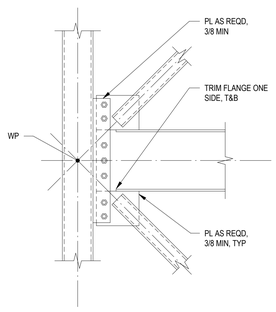
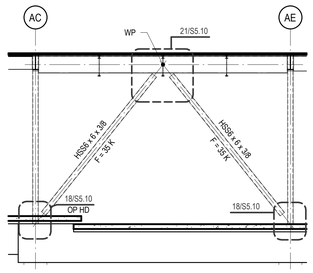


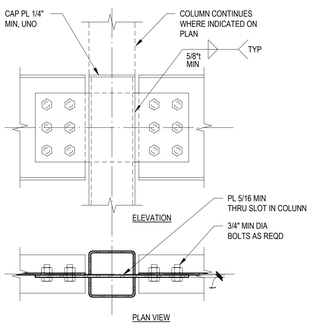
19 BRACED FRAME CONNECTION TYPICAL DETAIL

NO SCALE TD05616



15 BRACING ELEVATION - GRID A6

3/16" = 1'-0"



20 COLLECTOR BEAM CONN TYPICAL DETAIL

NO SCALE TD05215

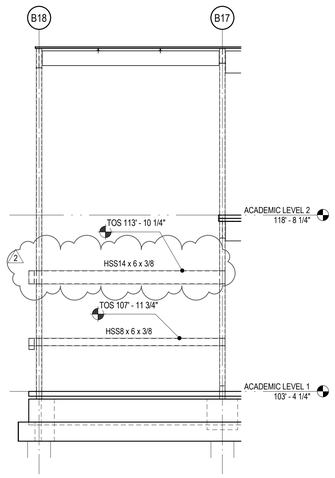
BRACED FRAME NOTES:

1. FABRICATOR TO DESIGN BRACED FRAME CONNECTIONS FOR FORCES SHOWN. SUBMIT CALCULATIONS FOR EACH DIFFERENT CONDITION, SIGNED AND SEALED BY A PE REGISTERED IN THE STATE OF THE PROJECT.
2. DESIGN AND DETAIL CONNECTIONS TO TRANSFER FORCES BETWEEN MEMBERS WITHOUT ECCENTRICITY.
3. DESIGN AND DETAIL CONNECTIONS FOR BOTH TENSION AND COMPRESSION FOR FORCES SHOWN.
4. FORCES (K) SHOWN ARE FACTORED ACCORDING TO THE LOAD RESISTANCE FACTOR DESIGN METHOD (LRFD).
5. WHERE SHEAR FORCES ARE NOT SHOWN FOR BEAMS FROM GRAVITY LOAD, DESIGN USING A SHEAR LOAD EQUAL TO THE CAPACITY IN THE SIMPLE SHEAR BEAM CONNECTION DETAIL.

BRACED FRAME NOTES

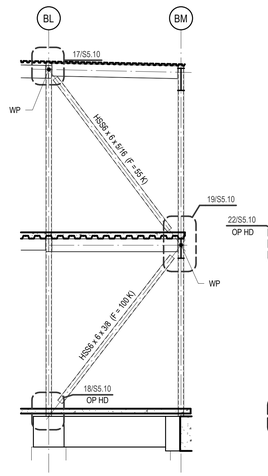
CONNECTION DESIGN NOTES

1. DETAILS ARE SHOWN FOR CONCEPT ONLY.
2. AXIALLY LOADED CONNECTIONS BETWEEN STEEL MEMBERS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT, WORKING FOR THE FABRICTOR.
3. SUBMIT CALCULATIONS, SIGNED AND SEALED BY THE ENGINEER, FOR EACH CONNECTION FOR REVIEW IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS.
4. AXIAL FORCES MAY ACT IN EITHER DIRECTION ALONG LONGITUDINAL AXIS OF BEAM. SHEAR FORCES ACT AT THE FACE OF COLUMN AND DO NOT INTRODUCE ADDITIONAL BENDING TO COLUMN. DESIGN CONNECTIONS FOR COMBINATIONS THAT CREATE THE GREATEST STRUCTURAL DEMAND IN ACCORDANCE WITH METHODS PUBLISHED OR RECOGNIZED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
5. SINGLE PLATE WELDED TO THE FACE OF THE COLUMN MAY BE PERMITTED IN LIEU OF THRU PLATE ONLY IF THE LOADS AND GEOMETRY ALLOW, AS VERIFIED BY SIGNED AND SEALED CALCULATIONS.
6. WHERE BEAM - COLUMN AND BEAM - BEAM CONNS ARE ANNOTATED WITH (F=XX K), DESIGN CONNS TO TRANSFER A HORIZONTAL LOAD OF THE SMALLER OF THE ADJACENT MAGNITUDES SHOWN ON PLAN.
7. WHERE SHEAR FORCES ARE NOT SHOWN FOR MEMBERS, DESIGN CONNS USING SHEAR LOAD EQUAL TO STANDARD CONN IN THE SIMPLE SHEAR BEAM CONN DETAIL.



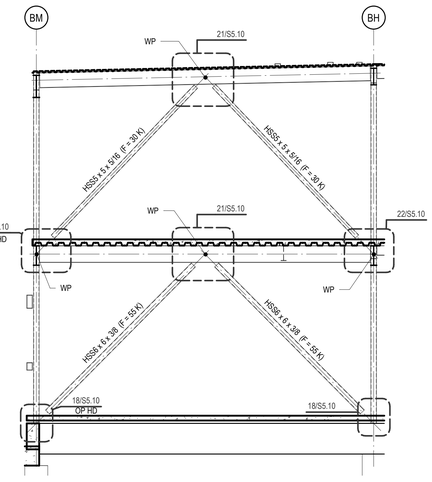
12 FRAME ELEVATION GRID BM

3/16" = 1'-0"



8 BRACING ELEVATION - GRID B7

3/16" = 1'-0"



4 BRACING ELEVATION - GRIB B17

3/16" = 1'-0"

Revision / Date
1 05-07-25 ADDENDUM 01
2 5-15-25 Addendum 03

Project:
HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

CHERYL R. STEWART 117498 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
5-15-2025

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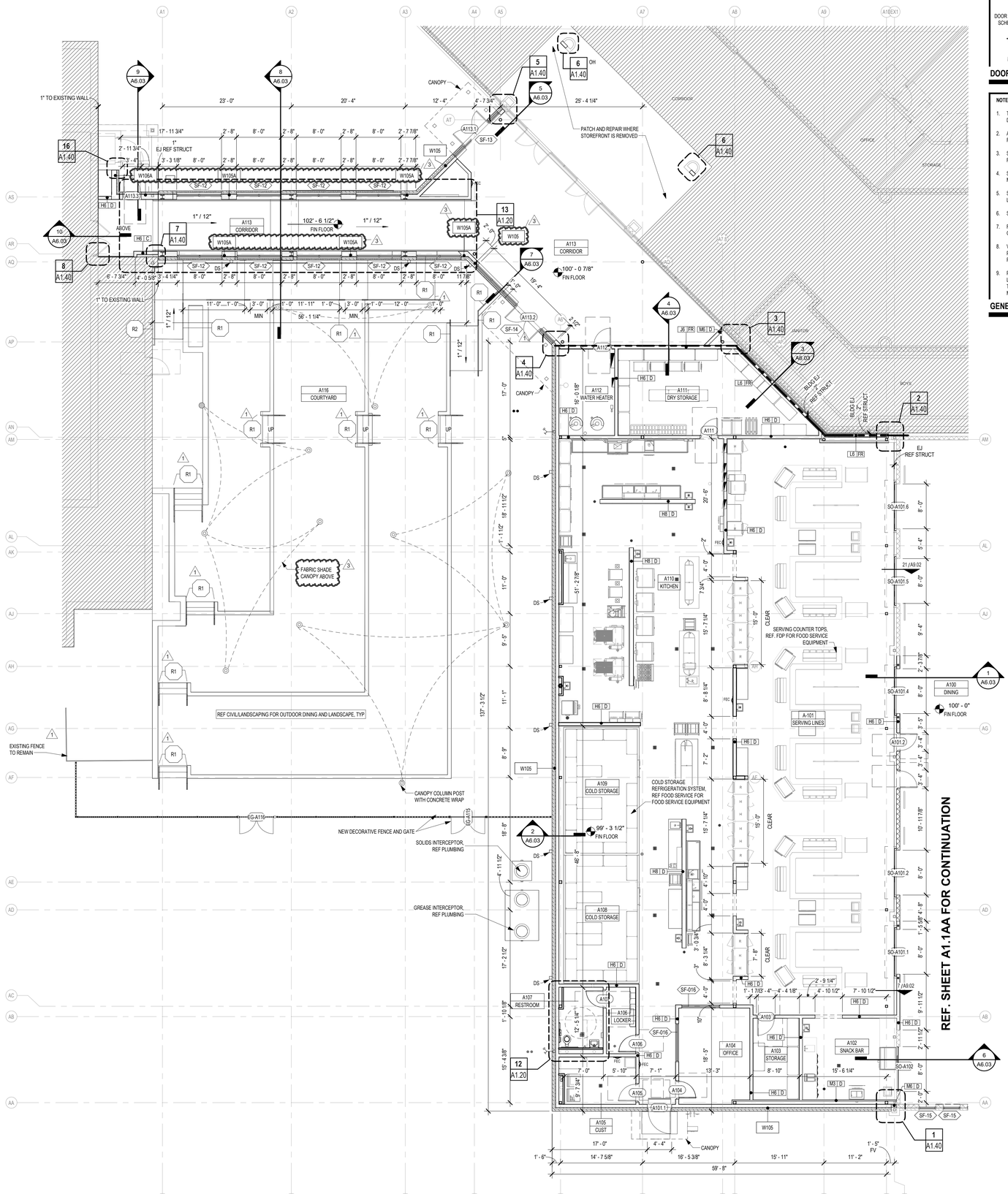
BRACE ELEVATIONS AND DETAILS

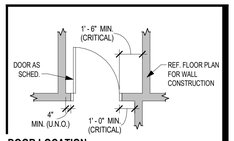
Job No. 1954-09-01
Drawn By: LAFP
Date: 04/22/2025
Sheet No. ISSUE FOR BID S5.10

DESIGN PROGRESS REVIEW

L.A. FUESS PARTNERS, INC.
Structural Engineers
3333 Lee Parkway, Suite 300 • Dallas, TX 75219
LAFP PROJ. NO. 24079 FIRM REG. NO. F-537



DOOR LOCATION



GENERAL FLOOR PLAN NOTES

NOTES:

1. THE CONTRACT DOCUMENTS ARE COMPRISED OF BOTH THE DRAWINGS AND THE SPECIFICATIONS.
2. ALL ARCHITECTURAL FLOOR PLAN DIMENSIONS SHOWN ARE TO FACE OF C.F.M.F. MASONRY OR CONCRETE, U.N.O.
3. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS.
4. SEE SPECIFICATIONS AND G3 SHEETS FOR ADDITIONAL MASONRY AND CFMF PARTITION REQUIREMENTS.
5. SEE PLUMBING PLANS AND ENLARGED FLOOR PLANS FOR LOCATIONS OF FIXTURES.
6. SEE FDP PLANS FOR SERVICE EQUIPMENT & LOCATION
7. REF. DOOR SCHEDULES AND DETAILS FOR MASONRY ROUGH OPENING SIZES.
8. VERIFY ALL MASONRY OPENINGS WITH MANUFACTURERS' PRODUCTS (E.G. FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, ETC.).
9. PROVIDE WD. BLOCKING IN ALL GYP. BD. WALLS AS REQ'D. AT LOCATIONS INCLUDING, BUT NOT LIMITED TO: HANDRAILS, TOILET ACCESSORIES, PROJECTORS, CASEWORK, TACK BD.'S, MARKER BD.'S, WALL STOPS & DOOR HOLDERS.

FLOOR PLAN LEGEND

- **F.E.** — **FIRE EXTINGUISHER (WALL MOUNTED)** - REF. SPEC. SECT. 10 4400. PROVIDE TYPE "K" @ KITCHEN AREAS
- **F.E.C.** — **FIRE EXTINGUISHER CABINET** - REF. SPEC. SECT. 10 4400, PROVIDE TYPE "K" @ KITCHEN AREAS
- **P.S.** — **PROJECTION SCREEN** REF. TYP. DET. ON A4 SHEETS
- **X' M.B.** — **MARKERBOARD** REF. TYP. DET. ON A4 SHEETS
- **X' T.B.** — **TACKBOARD** REF. TYP. DET. ON A4 SHEETS
- **ELECTRIC WATER COOLER** - REF PLUMBING PLAN.
- 1.01 — **DOOR ASSEMBLY NUMBER** - REF. SCHEDULE ON A3 SHTS.
- SF-A — **WINDOW/STOREFRONT/CURTAIN WALL ASSEMBLY TYPE** - REF. A3 SHTS.
- SO1.01 — **SPECIAL OPENING NUMBER (ROLLING DOOR)** - REF. SCHEDULE ON A3 SHTS.
- 1 / A1.1 — **CALLOUT REFERENCE**
- 1 / A101 SIM — **WALL SECTION REFERENCE** XX/A101
- XXX' - X" FIN FLOOR — **ELEVATION REFERENCE**
- 1-01 ROOM — **ROOM NUMBER & NAME**
- **NOT IN CONTRACT**

APPLIES TO AREA PLANS

PARTITION LEGEND

REF. TYP. CONST. DTLS. FOR ADDITIONAL INFO.

- **MASONRY VENEER**
- **STANDARD CMU**
- **CFMF PARTITION**
- **EXISTING CFMF PARTITION**

PARTITION TYPE TAGS

A3 D

WALL ASSEMBLY'N PLAN VIEW

LETTERS TO THE RIGHT INDICATE PARTITION HEIGHT, FIRE RATING AND ACOUSTICAL PROPERTIES.

D	WALL TO DECK / STRUCTURE
C	WALL TO 6" (MIN.) ABOVE CEILING
FR	FIRE RATED WALL TO DECK
AD	ACOUSTICAL WALL TO DECK
AC	ACOUSTICAL WALL TO 6" (MIN.) ABOVE CEILING
AR	ACOUSTICAL RATED WALL TO DECK
GD	GYP WALL ABOVE TO DECK
SR	SMOKE RESISTANT PARTITION

LETTER & NUMBER TO THE LEFT INDICATE PARTITION TYPE & STUD OR CMU SIZE AS FOLLOWS:

- 1 - 7/8" HAT CHANNEL
- 2 - 1 5/8" CFMF
- 3 - 2 1/2" CFMF
- 4 - 3 5/8" CFMF OR CMU
- 6 - 6" CFMF OR 5 5/8" CMU
- 8 - 8" CFMF OR 7 5/8" CMU
- 10 - 9 5/8" CMU
- 12 - 11 5/8" CMU

PARTITION NOTES:

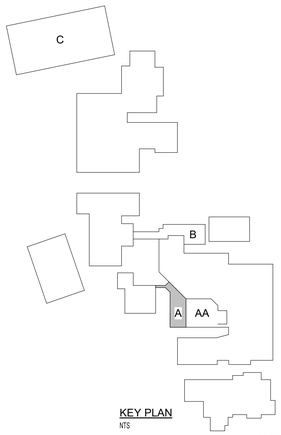
1. ALL INTERIOR WALL/PARTITIONS NOT OTHERWISE DESCRIBED BY A WALL SECTION ARE IDENTIFIED BY A SYMBOL WITH AN ALPHANUMERIC CODE INDICATING MATERIALS (BY LETTER), NOMINAL THICKNESS OF STRUCTURE (BY NUMBER) AND AN ALPHANUMERIC CODE REPRESENTING HEIGHT, FIRE RATING AND ACOUSTICAL PROPERTIES.
2. **UNTAGGED WALL/PARTITIONS AND COLUMN FURRINGS** SHALL BE ASSUMED TO BE **"TYPICAL"**, AS FOLLOWS, FOR BIDDING PURPOSES:
   GYP BOARD (EXTENDS TO 6" ABOVE CEILING U.N.O.)
   WALLS/PARTITIONS - TYPE **H4**, ACOUSTICAL
   COLUMN FURRING - **M4**, NON-ACOUSTICAL
   MASONRY (EXTENDS TO 4" ABOVE CEILING OR TO NEAREST 8" COURSING ABOVE 4" U.N.O.)
   WALLS/PARTITIONS - TYPE **A8**, NON-ACOUSTICAL
   COLUMN FURRING - TYPE **A6**, NON-ACOUSTICAL
   ANY UNTAGGED PARTITIONS WHICH APPEAR INCONSISTENT WITH THE DESCRIPTIONS ABOVE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO BIDDING.

REF. G3 SHEETS FOR EXTERIOR WALL TYPES AND INTERIOR PARTITION TYPE ASSEMBLIES.

Revision /	Date
1	05/07/25 ADDENDUM 01
3	05/14/25 ADDENDUM 03

Project:

HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX



KEY PLAN
NTS

PLAN
TRUE

DRAFT
COPY ONLY
NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

Jason Andrus
TX 19417

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FLOOR PLAN - AREA A - KITCHEN

Job No. 01954-09-01	Sheet No. ISSUE FOR BID A1.1A1
Drawn By: YR/AB	
Date: 5/7/25	

1 FLOOR PLAN - AREA A - KITCHEN
1/8" = 1'-0"

5/15/2025 11:45:06 AM
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2025/01954-09-01_HaysHSAdd_V23.rvt

NOTES:

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P.S. — **PROJECTION SCREEN** REF. TYP. DET. ON A4 SHEETS

X' M.B. — **MARKERBOARD** REF. TYP. DET. ON A4 SHEETS

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1 / A101 SIM — XX/A101 — **WALL SECTION REFERENCE**

XXX' - X" FIN FLOOR — **ELEVATION REFERENCE**

1-01 ROOM — **ROOM NUMBER & NAME**

NOT IN CONTRACT

APPLIES TO AREA PLANS

FLOOR PLAN LEGEND

REF. TYP. CONST. DTLS. FOR ADDITIONAL INFO.

MASONRY VENEER

STANDARD CMU

CFMF PARTITION

EXISTING CFMF PARTITION

PARTITION TYPE TAGS

A3 | D

WALL ASSEMBLY'N PLAN VIEW

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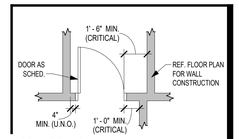
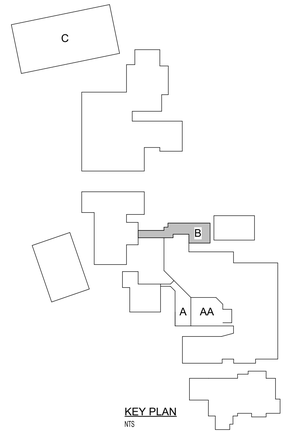
REF. G3 SHEETS FOR EXTERIOR WALL TYPES AND INTERIOR PARTITION TYPE ASSEMBLIES.

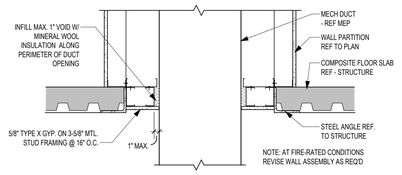
PARTITION LEGEND



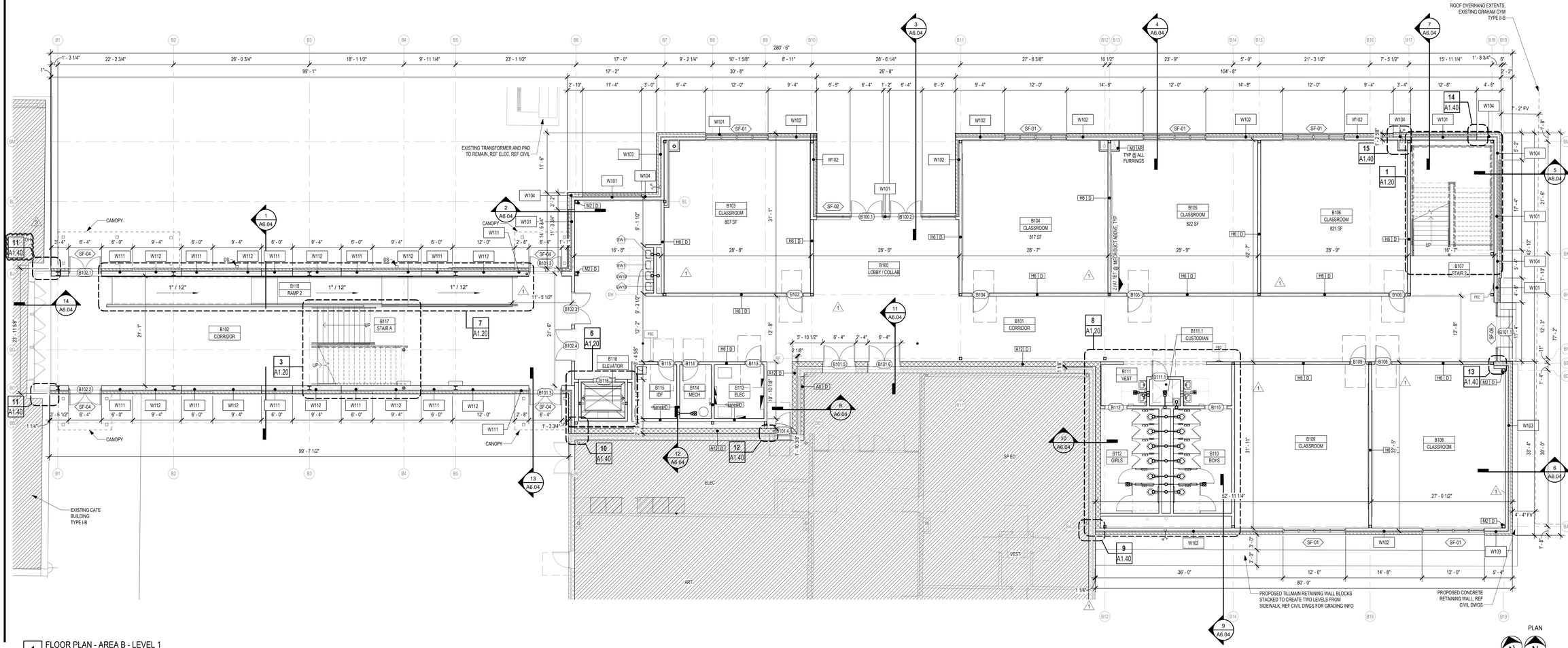
DOOR LOCATION



KEY PLAN
NTS



2 TYP DUCT DRAFT STOPPING DETAIL
1" = 1'-0"



1 FLOOR PLAN - AREA B - LEVEL 1
1/8" = 1'-0"

PLAN NORTH / TRUE NORTH

Revision /	Date
1	05/07/25 ADDENDUM 01
3	05/14/25 ADDENDUM 03

Project:
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Jason Andrus
TX 19417

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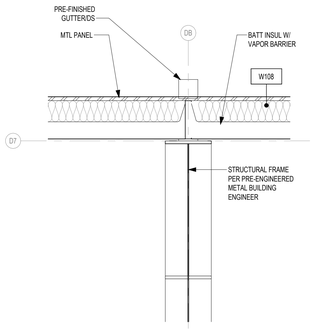
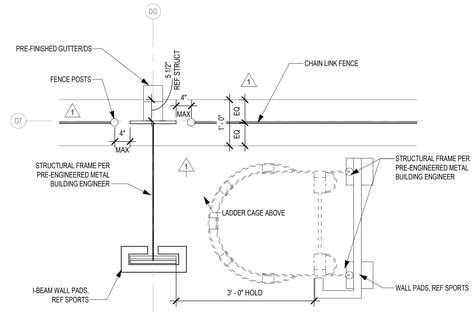
FLOOR PLAN - AREA B - LEVEL 1

Job No.	Sheet No.
01954-09-01	ISSUE FOR BID
Drawn By: YR/AB	A1.1B1
Date: 5/7/25	



21 PLAN DETAIL - MP SKIRT
3/4" = 1'-0" BACK REF: A1.1C1



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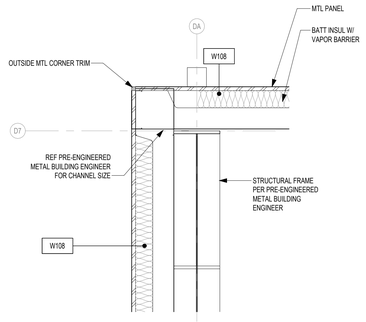
3/4" = 1'-0" BACK REF: A1.1C1



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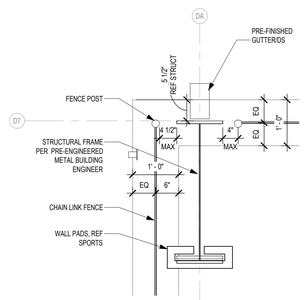
3/4" = 1'-0" BACK REF: A1.1C1



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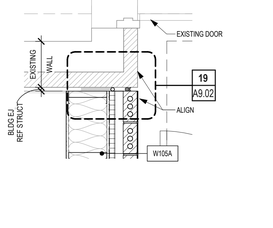
3/4" = 1'-0" BACK REF: A1.1C1



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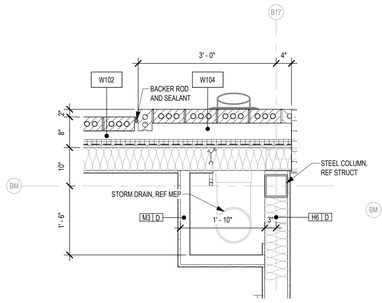
3/4" = 1'-0"



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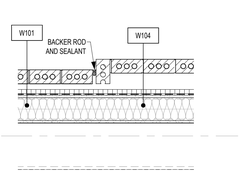
3/4" = 1'-0" BACK REF: A1.1B1



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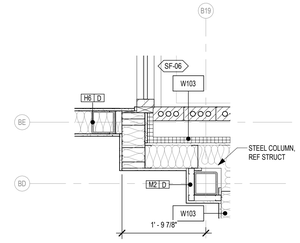
3/4" = 1'-0" BACK REF: A1.1B1



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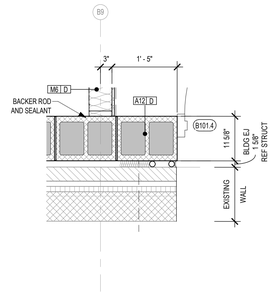
3/4" = 1'-0" BACK REF: A1.1B1



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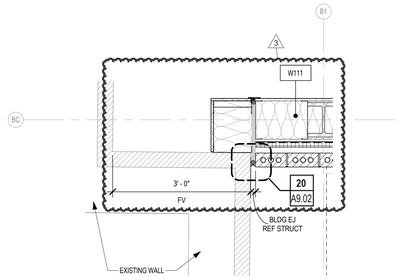
3/4" = 1'-0" BACK REF: A1.1B1



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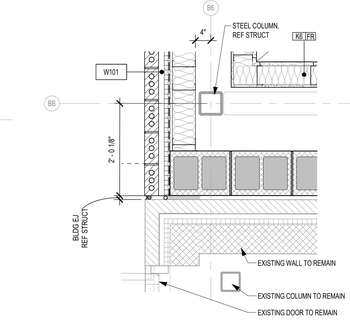
3/4" = 1'-0" BACK REF: A1.1B1



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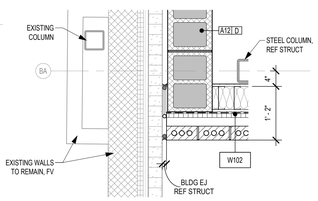
3/4" = 1'-0" BACK REF: A1.1B1



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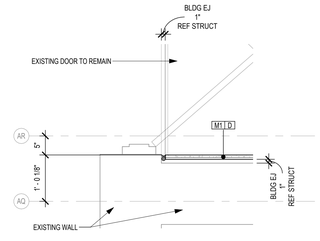
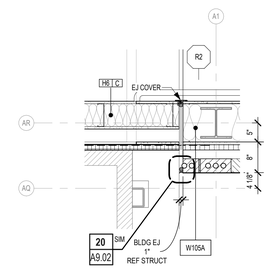
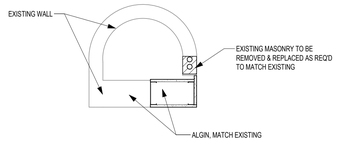
3/4" = 1'-0" BACK REF: A1.1B1



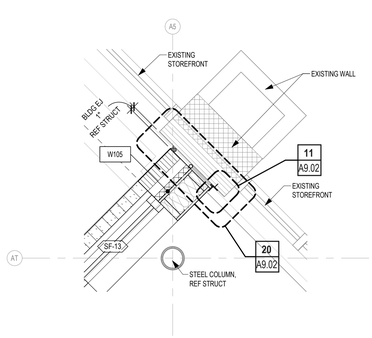
8 PLAN DETAIL
3/4" = 1'-0"



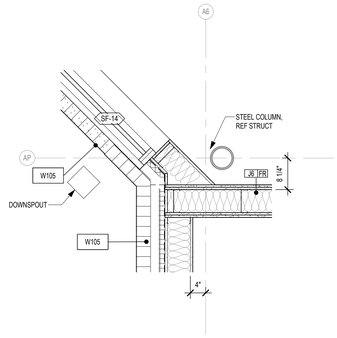
7 PLAN DETAIL
3/4" = 1'-0"



6 PLAN DETAIL
3/4" = 1'-0" BACK REF: A1.1A1



5 PLAN DETAIL
3/4" = 1'-0"



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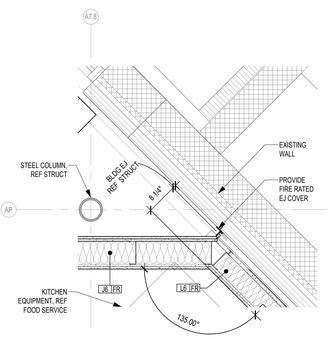
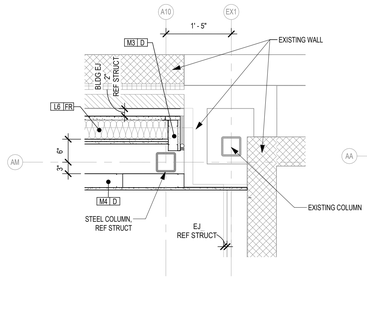
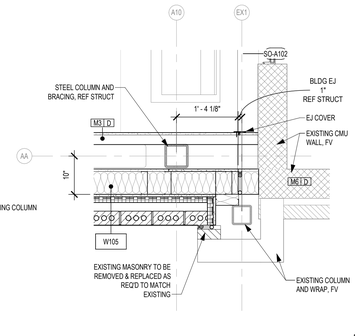
3/4" = 1'-0"



3 PLAN DETAIL
3/4" = 1'-0"



2 PLAN DETAIL
3/4" = 1'-0"



1 PLAN DETAIL
3/4" = 1'-0"

PLAN
N

Project:
HAYS HIGH SCHOOL
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

Revision /	Date
1	05/07/25 ADDENDUM 01
3	05/14/25 ADDENDUM 03

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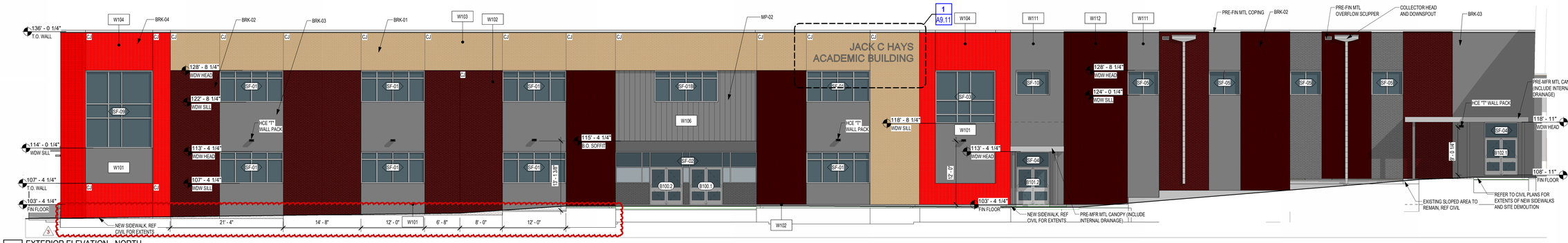
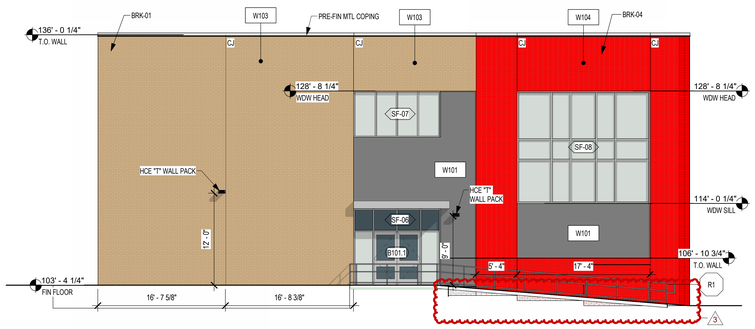
PLAN DETAILS

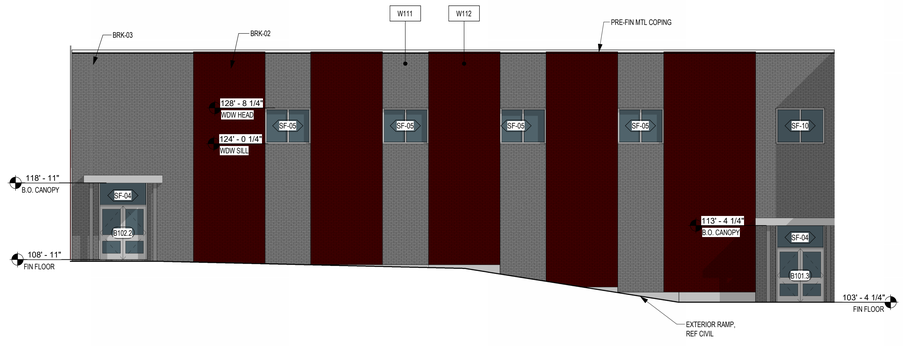
Job No.	Sheet No.
01954-09-01	ISSUE FOR BID A1.40
Drawn By: YR/AB	
Date: 5/7/25	



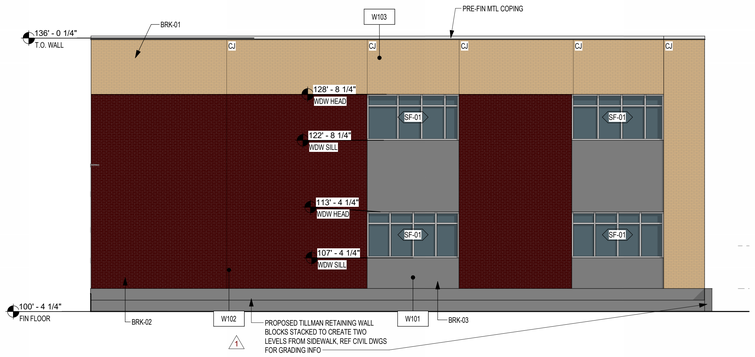
7 EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



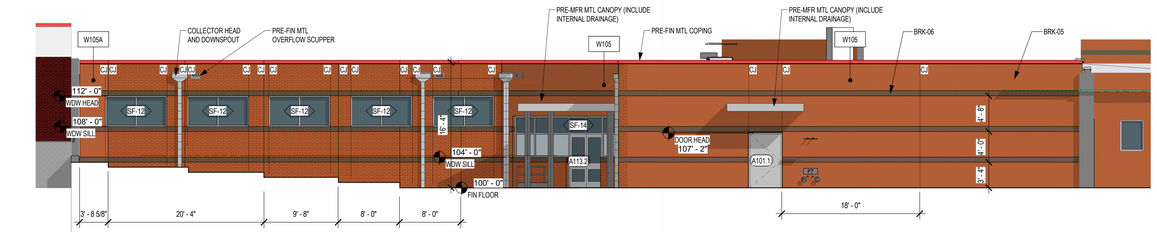
6 EXTERIOR ELEVATION - EAST
1/8" = 1'-0"



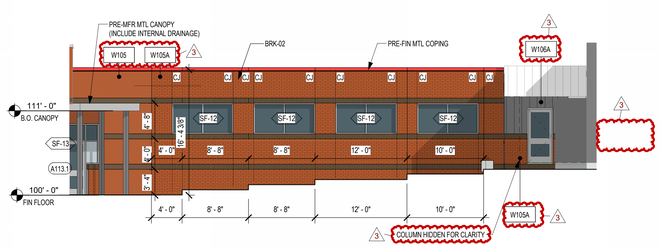
5 EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



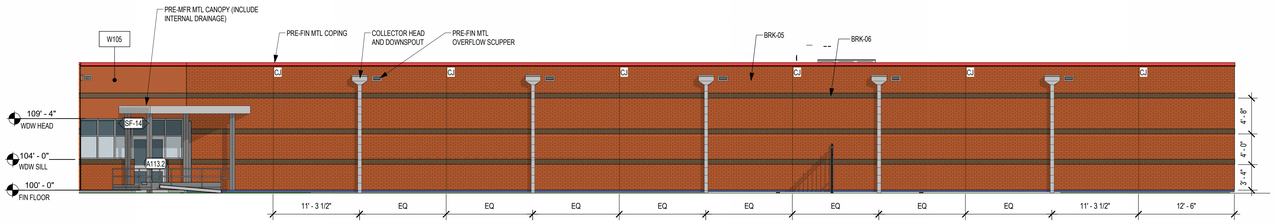
4 EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



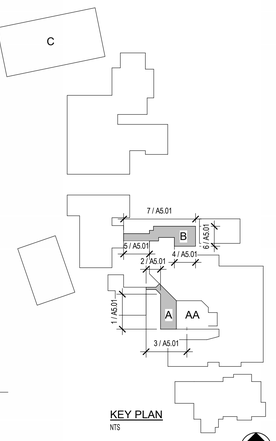
3 EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



2 EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



1 EXTERIOR ELEVATION - WEST
1/8" = 1'-0"



KEY PLAN
NTS

N
TRUE

Revision /	Date
1 ADDENDUM 01	05/07/25
3 ADDENDUM 03	05/14/25

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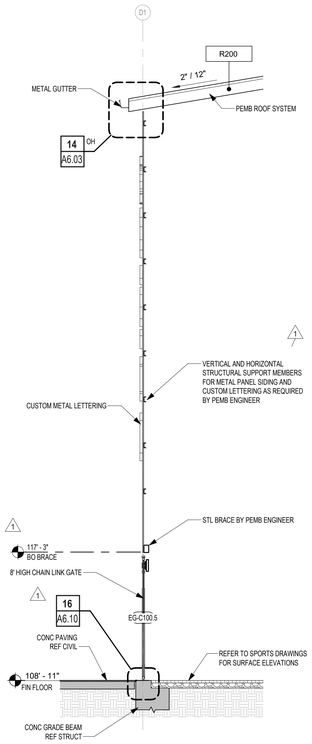
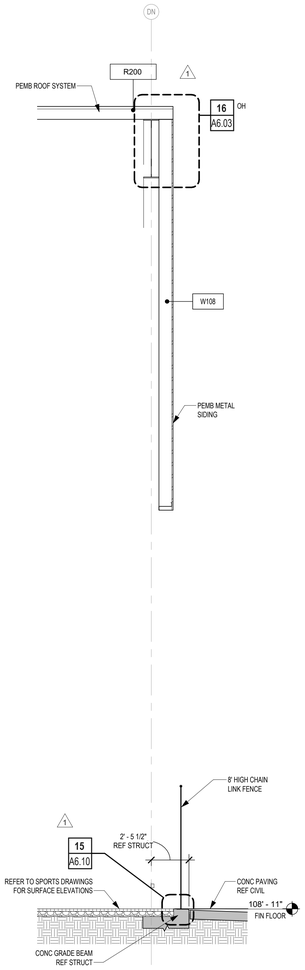
EXTERIOR ELEVATIONS - AREAS A & B

Job No.	Sheet No.
01954-09-01	ISSUE FOR BID
Drawn By: YR/AB	A5.01
Date: 5/7/25	



13 WALL SECTION
1/4" = 1'-0"



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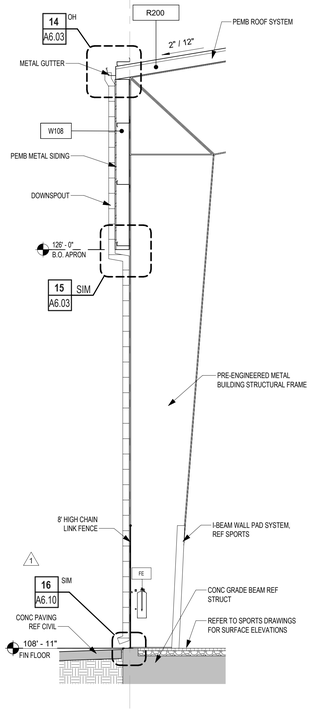
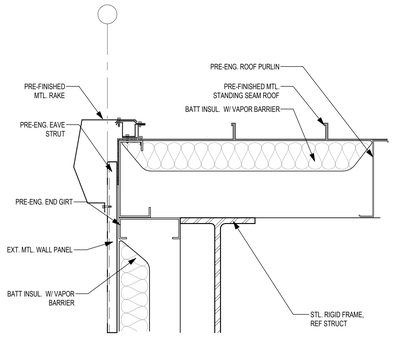
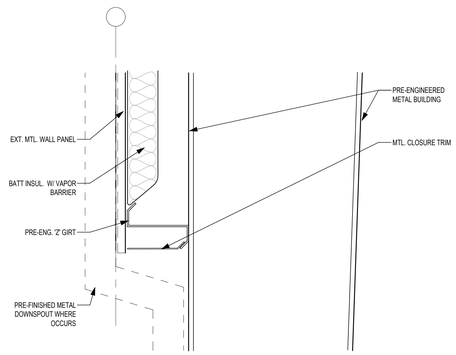
1/4" = 1'-0"



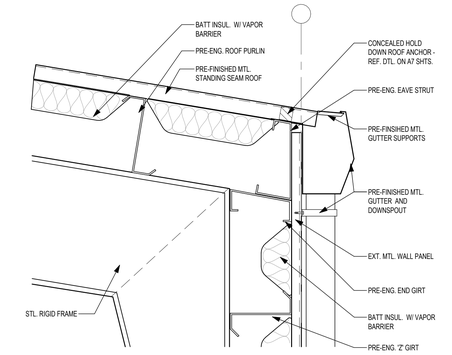
12 WALL SECTION
1/4" = 1'-0"



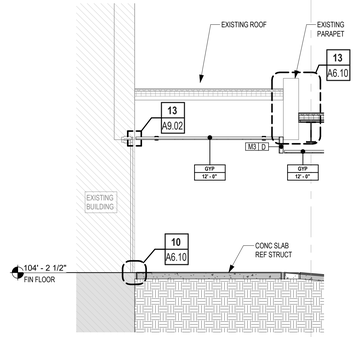
16 HIGH WALL DETAIL - RAKE
1 1/2" = 1'-0"



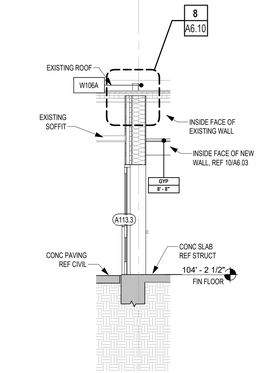
15 MID-WALL DETAIL
1 1/2" = 1'-0"



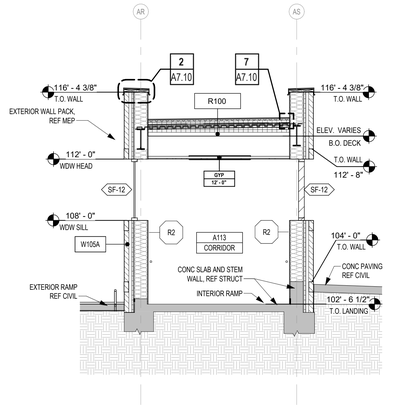
14 HIGH WALL DETAIL - GUTTER
1 1/2" = 1'-0"



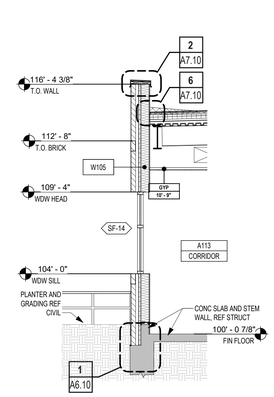
10 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



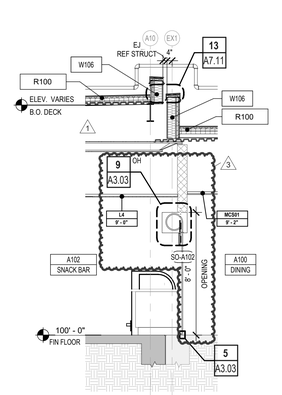
9 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



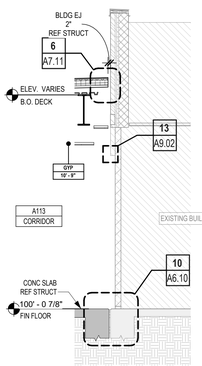
8 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



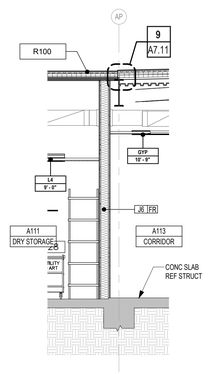
7 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



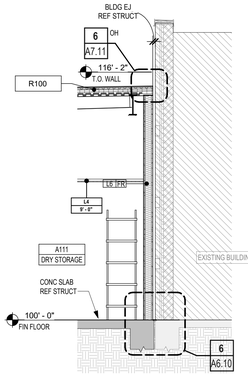
6 WALL SECTION
1/4" = 1'-0"



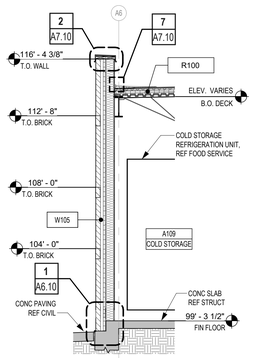
5 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



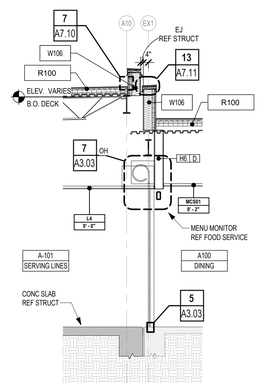
4 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



3 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



2 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1



1 WALL SECTION
1/4" = 1'-0" BACK REF: A1.1A1

LETTER INDICATES TYPE

NUMBER INDICATES CONSTRUCTION AS FOLLOWS:

- **R100** - BUILT-UP, INSUL., MTL. DECK
- **R101** - BUILT-UP, INSUL., MTL. DECK
- **R102** - SINGLE PLY, INSUL., MTL. DECK
- **R103** - SINGLE PLY, INSUL., MTL. DECK
- **R104** - STANDING SEAM, 3/4" TREATED PW SHEATHING, INSUL., MTL. DECK
- **R105** - STANDING SEAM, 3/4" TREATED PW SHEATHING, INSUL., MTL. DECK
- **R106** - BUILT-UP, INSUL., CONC. DECK
- **R107** - SINGLE-PLY, INSUL., CONC. DECK

REF. SHT. G3.01 FOR ROOF CONSTRUCTION TYPES

R100
ROOF ASSEMBLY IN SECTION VIEW

ROOF TYPE LEGEND

1. REFER ALSO TO G3 SHTS FOR WALL CONSTRUCTION DETAILS. TYPICAL DETAILS APPLY, AS NEEDED, TO ALL WALL SECTIONS U.N.O.
2. REINFORCING IN CONCRETE BEAMS, FOOTINGS, & PIERS HAS NOT BEEN INDICATED FOR CLARITY. REFER TO STRUCTURAL DRAWINGS FOR THIS REINFORCING.
3. CONTRACTOR SHALL VERIFY THE DIMENSIONAL CONDITIONS BETWEEN ALL STRUCTURAL ELEMENTS & THE ARCHITECTURAL ELEMENTS FOR CONFLICTS. IF DISCREPANCIES ARE ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY.
4. AT ALL EXTERIOR WALLS, PLACE WEATHER BARRIER AT THE EXTERIOR FACE OF CMU OR SHEATHING. CONTRACTOR TO VERIFY CHEMICAL COMPATIBILITY OF WEATHER BARRIER & SELF-ADHESIVE FLASHING.
5. PROVIDE 3 STACKED BRICK HEADERS OR ONE SOLID BRICK AT ALL SOLDIER OUTSIDE CORNERS. (4"W"X3 5/8")
6. PROVIDE A WEATHERED MORTAR JOINT AT ALL EXTERIOR CONDITIONS WHERE THE MASONRY COURSE BELOW THE JOINT PROJECTS BEYOND THE COURSE ABOVE.
7. WHERE CMU IS SHOWN SHADED, FILL CELL SOLID WITH GROUT UNLESS NOTED IN DETAILS AS MORTAR. COORDINATE ALL LOCATIONS WITH STRUCTURAL DRAWINGS. IN CASES OF APPARENT CONFLICT, STRUCTURAL DRAWINGS SHALL GOVERN DESIGN. GROUT
8. FILL ALL OPEN CELLS OF CMU SOLID WITH FOAM INSULATION AT ALL EXTERIOR CONDITIONS WHERE RIGID INSULATION IS NOT APPLIED IN THE CAVITY WALL.
9. PROVIDE THERMAL BATT INSULATION AT ALL EXTERIOR STUD WALLS & ACOUSTICAL BATT INSULATION AT INTERIOR STUD WALLS AS DESCRIBED IN SECTION 07 2100 OF THE SPECIFICATIONS.
10. REFER TO STRUCTURAL DRAWINGS FOR VERTICAL WALL REINFORCING.
11. ALL MASONRY WALLS SHALL BE REINFORCED WITH CONTINUOUS HORIZONTAL BED/JOINT REINFORCING AS SPECIFIED, AT 16" VERTICAL SPACING. AT VENEER CONDITIONS PROVIDE TIES AS SPECIFIED AT 16" O.C.E.W.
12. INFORMATION SHOWN BEYOND IN WALL SECTIONS IS PROVIDED FOR INFORMATION ONLY & SHALL NOT LIMIT THE SCOPE OF WORK REQUIRED IN THIS PROJECT.
13. SMALLER SCALE DRAWINGS MAY NOT SHOW ALL CONNECTIONS & FINISHES. ALWAYS REFER TO ENLARGED DETAILS, WHERE PROVIDED, FOR ADDITIONAL INFORMATION. IN CASES OF APPARENT CONFLICT, THE LARGER SCALED DETAIL SHALL APPLY.
14. INTERIOR WALL FINISHES ARE NOT SHOWN ON WALL SECTIONS TO AVOID VISUAL CLUTTER. REFER TO A4 SHEETS FINISH SCHED & INTERIOR ELEVATIONS FOR REQUIRED MATERIALS & MATERIAL PATTERNS.

TYPICAL WALL SECTION NOTES

APPLICABLE TO ALL A4 SHEETS

LETTER INDICATES EXTERIOR WALL

W200
WALL ASSEMBLY IN SECTION VIEW

NUMBER INDICATES BACKUP CONSTRUCTION AS FOLLOWS:

- **100** - CFMF
- **200** - CMU
- **300** - ICF
- **400** - STRUCTURAL CONC. PRECAST PANEL

REF. SHT. G3.01 FOR SPECIFIC WALL TYPES

EXTERIOR WALL TYPE LEGEND

Revision /	Date	
1	05/07/25	ADDENDUM 01
3	05/14/25	ADDENDUM 03

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WALL SECTIONS - AREA A, C

Job No.	Sheet No.
01954-09-01	ISSUE FOR BID A6.03
Drawn By: YR/AB	
Date: 5/7/25	

PLUMBING FIXTURE SCHEDULE

NOTES:

1. PROVIDE WASTE, COLD WATER, HOT WATER, AND VENT PIPING TO ALL PLUMBING FIXTURES AS DESCRIBED IN PLUMBING "FIXTURE CONNECTION SCHEDULE".
2. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. ALL WALL HUNG FIXTURES TO BE INSTALLED WITH WALL CARRIERS, VERIFY CONFIGURATION TYPE.
4. PROVIDE VANDAL RESISTANT SCREWS AT ALL FIXTURES.
5. INSTALL STAINLESS STEEL CAPS AT ALL UNUSED LAVATORY FAUCET HOLES.
6. NO OFFSET FLANGES WILL BE ALLOWED FOR WATER CLOSET INSTALLATIONS.
7. GROUT FOR LEVELING WATER CLOSETS SHALL NOT EXTEND UP ON SIDE OF WATER CLOSET BASES. TAKE GROUT BACK TO MINIMUM 1/8" UNDER BASE AND CAULK FOR FINAL FINISH. VERIFY CAULK COLOR AND TYPE WITH ARCHITECT.
8. REFERENCE ARCHITECTURAL CONTRACT DOCUMENTS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES. CONTACT ARCHITECT FOR ADDITIONAL INFORMATION AS REQUIRED.
9. PROVIDE INVERTED TEE CONNECTION FROM SINK TAILPIECE OR FLUSH VALVE TYPE TRAP PRIMER CONNECTION TO ALL FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS. AS LAST RESORT PROVIDE ELECTRONIC TYPE TRAP PRIMER (SIOUX CHIEF MODEL 695-ES01 FOR UP TO 8 FLOOR DRAINS WITH CORRECT ACCESSORIES). PROVIDE FLUSH MOUNTING BOX WITH KEYED SS COVER. CONNECT TO NEAREST UNSWITCHED 120 VOLT POWER AND PROVIDE DISCONNECTING MEANS. CONNECT TO NEAREST WATER SERVING THAT AREA PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
10. ALL PLUMBING FIXTURES TO BE "LEAD FREE" AB1953 COMPLIANT (.25% OR LESS AVERAGE LEAD CONTENT). PROVIDE DOCUMENTATION IN SUBMITTALS THAT THIS REQUIREMENT IS MET FOR EACH APPLICABLE FIXTURE.
11. PROVIDE WATER HAMMER ARRESTORS AT ALL PLUMBING FIXTURES. PROVIDE SIZE RECOMMENDED BY MANUFACTURER AND INSTALL IN LOCATIONS AS DIRECTED BY MANUFACTURER.

WC
WATER CLOSET: AMERICAN STANDARD FLOWISE MODEL 2234.001, FLOOR MOUNTED, VITREOUS CHINA, 1 1/2" TOP SPUD, 15" HIGH ELONGATED BOWL.
EXPOSED FLUSH VALVE: SLOAN ROYAL #111, 1.28 GALLON FLUSH.
SEAT: BEMIS 1955C OR EQUIVALENT. STAINLESS STEEL HARDWARE ONLY (NO PLASTIC ALLOWED).

WCH
WATER CLOSET (ADULT ADA): AMERICAN STANDARD FLOWISE MODEL 3461.001 WITH EVERCLEAN, FLOOR MOUNTED, VITREOUS CHINA, 1-1/2" TOP SPUD, 16-1/2" HIGH ELONGATED BOWL.
EXPOSED FLUSH VALVE: SLOAN ROYAL #111, 1.28 GALLON FLUSH.
SEAT: BEMIS 1955C OR EQUIVALENT. STAINLESS STEEL HARDWARE ONLY (NO PLASTIC ALLOWED).

LH (WALL HUNG-ADULT)
LAVATORY (ADA): AMERICAN STANDARD 0356.015, 20" x 18" VITREOUS CHINA, WALL HUNG, 8" FAUCET CENTERS AND GRID STRAINER. PROVIDE WITH TEMPERATURE MIXING VALVE EQUAL TO POWERS HYDROGUARD LFG480 SERIES, 0.25 GPM MINIMUM FLOW, ASSE 1070, INTEGRAL CHECKS, 1.2 GPM AT 10 psi DROP. SET AT 105º F MAXIMUM (VERIFY ACTUAL TEMPERATURE REQUIRED WITH OWNER).
FAUCET: CHICAGO #404-V317E66ABCP, TEMPERED AND COLD WATER, 4" WRIST BLADE HANDLES, AERATOR.

EWCHBF (NON-FILTERED. NO SUBSTITUTIONS - OWNER PREFERENCE)
ELECTRIC WATER COOLER WITH BOTTLE FILLER (ADA): ELKAY #VRCGRNTLBWSCX, HIGH EFFICIENCY, NON-FILTERED, SENSOR ACTIVATED BOTTLE FILLING STATION, VANDAL RESISTANT, TWO (2) STATION, VANDAL RESISTANT PUSH BUTTON IN FRONT, VANDAL RESISTANT BUBBLERS, STAINLESS STEEL FINISH, and CANE APRON. 120V-1PH. MODIFIED WITH BOTTLE FILLER ON LOWER RIGHT UNIT. VERIFY EXACT LOCATION OF BOTTLE FILLER WITH ARCHITECT PRIOR TO ORDERING.

SS
SERVICE SINK: FIAT #TSB-3001, 32" x 32" x 12"H ONE-PIECE PRECAST TERRAZO WITH CONTINUOUS STAINLESS STEEL CAPS ON ALL CURBS AND 6" FRONT DROP THRESHOLD, 832-AA HOSE AND HOSE BRACKET, MSG-3232 STAINLESS STEEL WALL GUARD.
FAUCET: MOEN #8230 SERVICE SINK FAUCET WITH VACUUM BREAKER, THREADED SPOUT, SERVICE STOPS AND WALL BRACKET.
PROVIDE WITH ADDITIONAL HOSE BIBB EQUAL TO WOODFORD MODEL 26 ABOVE SERVICE SINK. THIS HOSE BIBB IS TO BE FED FROM WATTS 009 RPZ FOR CONTINUOUS PRESSURE APPLICATIONS.

HB
HOSE BIBB: WOODFORD MODEL B67 SERIES, IN FLUSH MOUNTING WALL BOX, ASSE 1052 OR 1011 BACKFLOW PROTECTED AUTOMATIC DRAINING, FREEZELESS, NO SPRAYBACK. PROVIDE SHUT-OFF VALVE INSIDE BUILDING IN ACCESSIBLE LOCATION. SLOPE LINE FROM SHUT-OFF VALVE TO WALL HYDRANT TO ALLOW DRAINING OF LINE FOR FREEZE PROTECTION.

HBRR (GANG RESTROOM HOSE BIBB)
HOSE BIBB (MILD CLIMATE): WADE MODEL 8709, NARROW WALL HYDRANT, TEE KEY OPERATOR, ANTI-SIPHON BACKFLOW PREVENTER, ¼ TURN CARTRIDGE, BRONZE CASING, STAINLESS STEEL BOX WITH HINGED COVER, ¾" HOSE CONNECTION, SCREWDRIVER OPERATED STOP VALVE.

HBR
ROOF MOUNTED HOSE BIBB: WOODFORD MODEL SRH-MS, FREEZELESS, NO DRAIN LINE REQUIRED, ASSE 1057 LISTED, ASSE 1052 LISTED BACKFLOW PREVENTER, MOUNTING SYSTEM, UNDER DECK SUPPORT FLANGE. BALL VALVE FOR SHUT-OFF TO BE LOCATED SO THAT IT IS ACCESSIBLE FROM AN EIGHT FOOT (OR SHORTER) LADDER.

HBHC (MIXING)
MIXING HOSE BIBB: ACORN MODEL 8156, 18 GA. TYPE 304 STAINLESS STEEL RECESSED SUPPLY BOX, HOT AND COLD WATER MIXING WITH VACUUM BREAKER, WALL FLANGE, HINGED DOOR.

SP (ONE ELEVATOR CAR-SUMP PUMP)
ELEVATOR SUMP PUMP: PART OF ELEVATOR SEPARATOR PUMP COMBO BELOW. AUTOMATIC, 50 GPM AT 15' OF HEAD, 1/2HP-120V-1PH.

ES1 (ONE ELEVATOR CAR-SUMP PUMP AND OIL SEPARATOR COMBO)
ELEVATOR SEPARATOR: PARK ENVIRONMENTAL EQUIPMENT - ELEVATOR SEPARATOR, MODEL ELVC-100, 100 GALLON CAPACITY, 50 GPM FLOW RATE, 44" DIAMETER x 54" TALL, 3000 LBS EMPTY. WITH 50 GPM @50 FEET OF HEAD SUMP PUMP (SP), 120V-1PH AND OPTIONAL CONTROL/ALARM PANEL.

WM (DEFAULT)
WASHING MACHINE SUPPLY AND DRAIN: GUY GRAY 20 GAUGE POWDER COATED BOX AND FACEPLATE, 2" DRAIN PIPE, TOP OR BOTTOM SUPPLY, 1/4 TURN BALL VALVES AND WATER HAMMER ARRESTERS.

WH - A1, A2(199 GAS)
WATER HEATER: A.O.SMITH MODEL MXBTH199, 95%, 100 GALLON STORAGE, 199 MBH INPUT, 288 GPH RECOVERY AT 80° F. RISE, LO NOX, POWERED DIRECT VENT AND INTAKE WITH 3" PVC VENT MATERIALS, 120V-1PH. VENT THRU ROOF OR SIDEWALL WITH CONCENTRIC VENT ASSEMBLY. PROVIDE WITH MANUFACTURER'S CONDENSATE NEUTRALIZATION KIT.

WH - B1
WATER HEATER: A.O.SMITH MODEL DEL-40, 40 GALLON STORAGE, 3KW-208V-1PH NON-SIMULTANEOUS ELEMENTS, 15 GPH RECOVERY AT 80 DEGREES RISE.

HWRP-A1, B1, BC
HOT WATER RECIRCULATION PUMP: GRUNDFOS UPS15-55, THREE SPEED, 4 GPM AT TEN FEET (10') OF HEAD. 1/12 HP-120V-1PH.

FD
FLOOR DRAIN (GENERAL PURPOSE): C.I. BODY, FLASHING COLLAR, WEEPHOLES, ADJUSTABLE HEAVY DUTY STAINLESS STEEL SQUARE TOP (6" X6") AND STAINLESS STEEL SEDIMENT BASKET. MIFAB F1000-C-S-5-6-7 SERIES.

FD7 (KITCHEN)
FLOOR DRAIN (KITCHEN): C.I. BODY, FLASHING COLLAR, WEEPHOLES, SECURED AND ADJUSTABLE HEAVY DUTY STAINLESS STEEL STAINLESS STEEL SQUARE TOP (6" x 6") MINIMUM WITH COPPER SEDIMENT BASKET. TOP SIZE TO MATCH TILE SIZE AS CLOSE AS POSSIBLE, VERIFY TOP SIZE. MIFAB F1100 CS-3-5 SERIES.

FD8
FLOOR DRAIN: (CONDENSATE DRAIN, WITH FUNNEL) C.I. BODY, WEEPHOLES, FLASHING COLLAR, ADJUSTABLE SATIN NICKEL BRONZE STRAINER (7" DIAMETER) 4" DIAMETER FUNNEL EXTENSION. MIFAB F1100 C N7-F4 SERIES.

FS
FLOOR SINK: 12" x 12" x 8" DEEP WITH ACID-RESISTING PORCELAIN ENAMEL INTERIOR, ALUMINUM INTERNAL DOME STRAINER, and STAINLESS STEEL GRATE (**1/2 GRATE TYPE**). MIFAB FS1730-3 SERIES.

FS1
FLOOR SINK: 12" x 12" x 8" DEEP WITH ACID-RESISTING PORCELAIN ENAMEL INTERIOR, ALUMINUM INTERNAL DOME STRAINER, and STAINLESS STEEL GRATE (**3/4 GRATE TYPE**). MIFAB FS1730-3 SERIES.

FS2
FLOOR SINK: 12" x 12" x 8" DEEP WITH ACID-RESISTING PORCELAIN ENAMEL INTERIOR, ALUMINUM INTERNAL DOME STRAINER, and STAINLESS STEEL GRATE (**HINGED FULL GRATE TYPE**). MIFAB FS1730-3 SERIES.

2

RD1 (PRIMARY)
PRIMARY ROOF DRAIN: CAST IRON BODY, FLASHING COLLAR, GRAVEL STOP, GALVANIZED METAL DOME, UNDER DECK CLAMP, EXTENSION AND SUMP RECEIVER. MIFAB R1200-12-B-E-U SERIES.

RD2 (OVERFLOW)
OVERFLOW ROOF DRAIN: SAME AS RD1, SET ADJUSTABLE INLET 2 INCHES HIGHER THAN INLET OF RD1. MIFAB R1200-12-B-E-U-WB. COORDINATE AND CONFIRM FINAL LOCATION WITH ROOFING CONSULTANT PRIOR TO ROUGH-IN.

DN
DISCHARGE NOZZLE: MIFAB R1960, STAINLESS STEEL WITH HINGED PERFORATED COVER. SAME SIZE AS RAINLEADER.

Revision /	Date	
2	05/14/25	Addendum No.3

Project:
HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
REGISTERED
BJ HENDRIX
94813
LICENSED
PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO. 94813 ON 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION.

MEP/ENERGY CONSULTANTS
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HCE job no.: 24-035

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SCHEDULES - PLUMBING

PACKAGE VOLUME

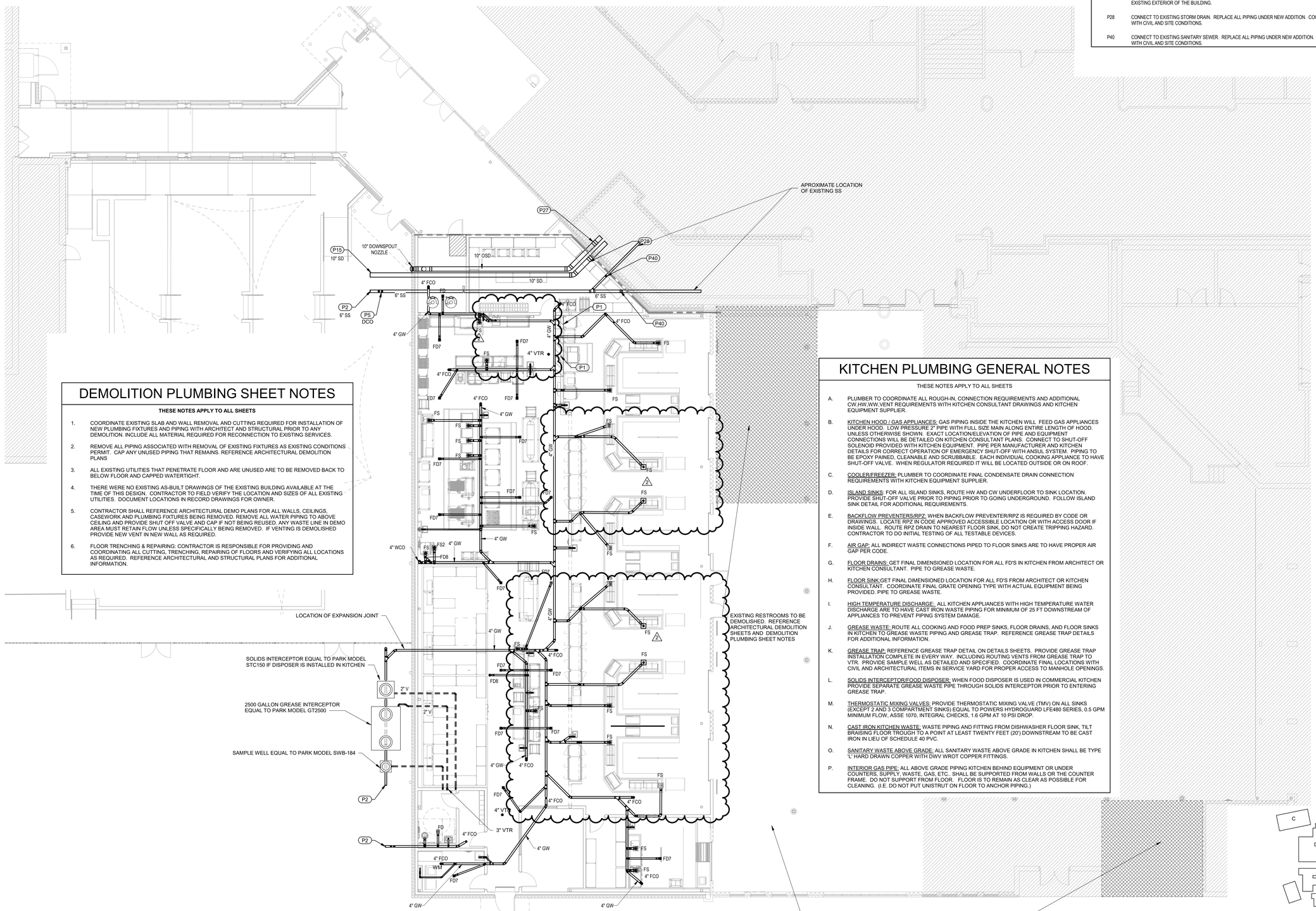
Job No. 01954-09-01
Drawn By: KAM
Date: 04/22/2025
Sheet No. ISSUE FOR BID P0.10

5/14/2025 9:45:59 AM
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2025/HaysHSAdd_MEP23.rvt

PLUMBING KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

P1	DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
P2	CONNECT TO SANITARY SEWER (SS)/WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION. PROVIDE EBAA IRON, INC. PVC FLEX TEND DOUBLE BALL EXPANSION JOINT OUTSIDE OF BUILDING FOOT PRINT AT EDGE OF BUILDING. SECURE TO GRADE BEAM PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
P5	RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
P15	CONNECT TO STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION. PROVIDE EBAA IRON, INC. FLEX- TEND DOUBLE BALL EXPANSION JOINT OUTSIDE OF BUILDING FOOT PRINT AT EDGE OF BUILDING. SECURE TO GRADE BEAM PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
P27	INTERCEPT AND CONNECT TO EXISTING STORM DRAIN PIPING INSIDE EXISTING BUILDING. FIELD VERIFY EXACT SIZE, LOCATION AND INSTALLED HEIGHT ABOVE FINISHED FLOOR. ABANDON PIPING GOING DOWN IN CHASE TO COWS TONGUE/DISCHARGE NOZZLE ON EXISTING EXTERIOR OF THE BUILDING.
P28	CONNECT TO EXISTING STORM DRAIN. REPLACE ALL PIPING UNDER NEW ADDITION. COORDINATE EXACT LOCATIONS AND INVERTS WITH CIVIL AND SITE CONDITIONS.
P40	CONNECT TO EXISTING SANITARY SEWER. REPLACE ALL PIPING UNDER NEW ADDITION. COORDINATE EXACT LOCATIONS AND INVERTS WITH CIVIL AND SITE CONDITIONS.



01 FIRST FLOOR PLAN - AREA A - PLUMBING - WASTE

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

DEMOLITION PLUMBING SHEET NOTES

THESE NOTES APPLY TO ALL SHEETS

1. COORDINATE EXISTING SLAB AND WALL REMOVAL AND CUTTING REQUIRED FOR INSTALLATION OF NEW PLUMBING FIXTURES AND PIPING WITH ARCHITECT AND STRUCTURAL PRIOR TO ANY DEMOLITION. INCLUDE ALL MATERIAL REQUIRED FOR RECONNECTION TO EXISTING SERVICES.
2. REMOVE ALL PIPING ASSOCIATED WITH REMOVAL OF EXISTING FIXTURES AS EXISTING CONDITIONS PERMIT. CAP ANY UNUSED PIPING THAT REMAINS. REFERENCE ARCHITECTURAL DEMOLITION PLANS
3. ALL EXISTING UTILITIES THAT PENETRATE FLOOR AND ARE UNUSED ARE TO BE REMOVED BACK TO BELOW FLOOR AND CAPPED WATERTIGHT.
4. THERE WERE NO EXISTING AS-BUILT DRAWINGS OF THE EXISTING BUILDING AVAILABLE AT THE TIME OF THIS DESIGN. CONTRACTOR TO FIELD VERIFY THE LOCATION AND SIZES OF ALL EXISTING UTILITIES. DOCUMENT LOCATIONS IN RECORD DRAWINGS FOR OWNER.
5. CONTRACTOR SHALL REFERENCE ARCHITECTURAL DEMO PLANS FOR ALL WALLS, CEILINGS, CASEWORK AND PLUMBING FIXTURES BEING REMOVED. REMOVE ALL WATER PIPING TO ABOVE CEILING AND PROVIDE SHUT OFF VALVE AND CAP IF NOT BEING REUSED. ANY WASTE LINE IN DEMO AREA MUST RETAIN FLOW UNLESS SPECIFICALLY BEING REMOVED. IF VENTING IS DEMOLISHED PROVIDE NEW VENT IN NEW WALL AS REQUIRED.
6. FLOOR TRENCHING & REPAIRING: CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND COORDINATING ALL CUTTING, TRENCHING, REPAIRING OF FLOORS AND VERIFYING ALL LOCATIONS AS REQUIRED. REFERENCE ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.

KITCHEN PLUMBING GENERAL NOTES

THESE NOTES APPLY TO ALL SHEETS

A. PLUMBER TO COORDINATE ALL ROUGH-IN, CONNECTION REQUIREMENTS AND ADDITIONAL CW,HW,WW,VENT REQUIREMENTS WITH KITCHEN CONSULTANT DRAWINGS AND KITCHEN EQUIPMENT SUPPLIER.

B. KITCHEN HOOD / GAS APPLIANCES: GAS PIPING INSIDE THE KITCHEN WILL FEED GAS APPLIANCES UNDER HOOD. LOW PRESSURE 2" PIPE WITH FULL SIZE MAIN ALONG ENTIRE LENGTH OF HOOD. UNLESS OTHERWISE SHOWN. EXACT LOCATION/ELEVATION OF PIPE AND EQUIPMENT CONNECTIONS WILL BE DETAILED ON KITCHEN CONSULTANT PLANS. CONNECT TO SHUT-OFF SOLENOID PROVIDED WITH KITCHEN EQUIPMENT. PIPE PER MANUFACTURER AND KITCHEN DETAILS FOR CORRECT OPERATION OF EMERGENCY SHUT-OFF WITH ANSUL SYSTEM. PIPING TO BE EPOXY PAINED, CLEANABLE AND SCRUBBABLE. EACH INDIVIDUAL COOKING APPLIANCE TO HAVE SHUT-OFF VALVE. WHEN REGULATOR REQUIRED IT WILL BE LOCATED OUTSIDE OR ON ROOF.

C. COOLER/FREEZER: PLUMBER TO COORDINATE FINAL CONDENSATE DRAIN CONNECTION REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER.

D. ISLAND SINKS: FOR ALL ISLAND SINKS, ROUTE HW AND CW UNDERFLOOR TO SINK LOCATION. PROVIDE SHUT-OFF VALVE PRIOR TO PIPING PRIOR TO GOING UNDERGROUND. FOLLOW ISLAND SINK DETAIL FOR ADDITIONAL REQUIREMENTS.

E. BACKFLOW PREVENTERS/RPZ: WHEN BACKFLOW PREVENTER/RPZ IS REQUIRED BY CODE OR DRAWINGS. LOCATE RPZ IN CODE APPROVED ACCESSIBLE LOCATION OR WITH ACCESS DOOR IF INSIDE WALL. ROUTE RPZ DRAIN TO NEAREST FLOOR SINK, DO NOT CREATE TRIPPING HAZARD. CONTRACTOR TO DO INITIAL TESTING OF ALL TESTABLE DEVICES.

F. AIR GAP: ALL INDIRECT WASTE CONNECTIONS PIPED TO FLOOR SINKS ARE TO HAVE PROPER AIR GAP PER CODE.

G. FLOOR DRAINS: GET FINAL DIMENSIONED LOCATION FOR ALL FD'S IN KITCHEN FROM ARCHITECT OR KITCHEN CONSULTANT. PIPE TO GREASE WASTE.

H. FLOOR SINK:GET FINAL DIMENSIONED LOCATION FOR ALL FD'S FROM ARCHITECT OR KITCHEN CONSULTANT. COORDINATE FINAL GRATE OPENING TYPE WITH ACTUAL EQUIPMENT BEING PROVIDED. PIPE TO GREASE WASTE.

I. HIGH TEMPERATURE DISCHARGE: ALL KITCHEN APPLIANCES WITH HIGH TEMPERATURE WATER DISCHARGE ARE TO HAVE CAST IRON WASTE PIPING FOR MINIMUM OF 25 FT DOWNSTREAM OF APPLIANCES TO PREVENT PIPING SYSTEM DAMAGE.

J. GREASE WASTE: ROUTE ALL COOKING AND FOOD PREP SINKS, FLOOR DRAINS, AND FLOOR SINKS IN KITCHEN TO GREASE WASTE PIPING AND GREASE TRAP. REFERENCE GREASE TRAP DETAILS FOR ADDITIONAL INFORMATION.

K. GREASE TRAP: REFERENCE GREASE TRAP DETAIL ON DETAILS SHEETS. PROVIDE GREASE TRAP INSTALLATION COMPLETE IN EVERY WAY. INCLUDING ROUTING VENTS FROM GREASE TRAP TO VTR. PROVIDE SAMPLE WELL AS DETAILED AND SPECIFIED. COORDINATE FINAL LOCATIONS WITH CIVIL AND ARCHITECTURAL ITEMS IN SERVICE YARD FOR PROPER ACCESS TO MANHOLE OPENINGS.

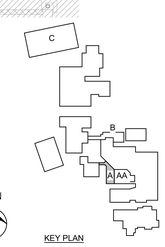
L. SOLIDS INTERCEPTOR/FOOD DISPOSER: WHEN FOOD DISPOSER IS USED IN COMMERCIAL KITCHEN PROVIDE SEPARATE GREASE WASTE PIPE THROUGH SOLIDS INTERCEPTOR PRIOR TO ENTERING GREASE TRAP.

M. THERMOSTATIC MIXING VALVES: PROVIDE THERMOSTATIC MIXING VALVE (TMV) ON ALL SINKS (EXCEPT 2 AND 3 COMPARTMENT SINKS) EQUAL TO POWERS HYDROGUARD LFE480 SERIES, 0.5 GPM MINIMUM FLOW, ASSE 1070, INTEGRAL CHECKS, 1.6 GPM AT 10 PSI DROP.

N. CAST IRON KITCHEN WASTE: WASTE PIPING AND FITTING FROM DISHWASHER FLOOR SINK, TILT BRAISING FLOOR TROUGH TO A POINT AT LEAST TWENTY FEET (20') DOWNSTREAM TO BE CAST IRON IN LIEU OF SCHEDULE 40 PVC.

O. SANITARY WASTE ABOVE GRADE: ALL SANITARY WASTE ABOVE GRADE IN KITCHEN SHALL BE TYPE 'L' HARD DRAWN COPPER WITH DWV WROT COPPER FITTINGS.

P. INTERIOR GAS PIPE: ALL ABOVE GRADE PIPING KITCHEN BEHIND EQUIPMENT OR UNDER COUNTERS, SUPPLY, WASTE, GAS, ETC., SHALL BE SUPPORTED FROM WALLS OR THE COUNTER FRAME. DO NOT SUPPORT FROM FLOOR. FLOOR IS TO REMAIN AS CLEAR AS POSSIBLE FOR CLEANING. (I.E. DO NOT PUT UNISTRUT ON FLOOR TO ANCHOR PIPING.)



KEY PLAN
NTS

PLAN TRUE NORTH

Revision /	Date	
2	05/14/25	Addendum No.3

Project:
HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
BRIAN L. HENDRIX
94813
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.L. HENDRIX, P.E. NO. 94813 ON 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION.

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HCE job no.: 24-035

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FIRST FLOOR PLAN - AREA A - PLUMBING - WASTE

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. P2.1A1
Drawn By: KAM	ISSUE FOR BID
Date: 04/22/2025	

5/14/2025 9:44:25 AM
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2025/HaysHSAdd_MEP23.rvt

PLUMBING KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

P1 DO NOT ROUTE ANY PIPING ABOVE THIS AREA.

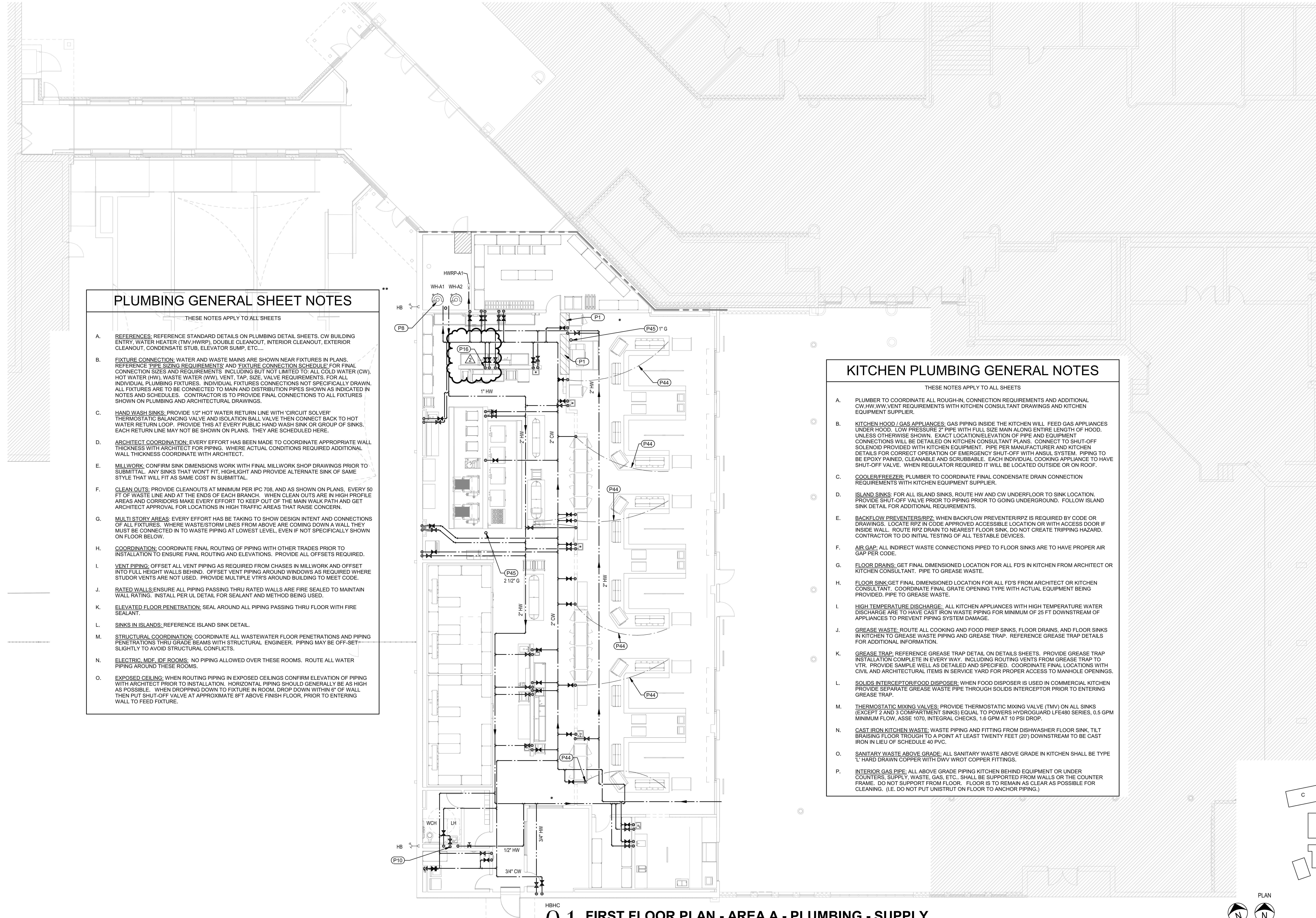
P8 REFERENCE WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.

P10 ROUTE HW DOWN ON ONE SIDE OF LAVATORIES, BACK UP ON OTHER SIDE OF LAVATORIES AND RECONNECT TO HW RECIRC MAIN. (THIS IS DONE TO MEET MAXIMUM LENGTHS PER IECC).

2 P16 CW DOWN TO IN-LINE RPZ BACKFLOW PREVENTOR ON WALL IN ACCESSIBLE LOCATION AT 54" BETWEEN WASH AND RINSE SINK FOR OWNER SUPPLIED SOAP SYSTEM. COORDINATE EXACT LOCATION WITH ARCHITECT AND EQUIPMENT. ROUTE RELIEF FROM RPZ TO FLOOR SINK.

P44 ROUTE CW LINE UNDERGROUND AND POP UP UNDER COUNTER TOP AND CONNECT TO FILL FAUCET TAP. FIELD COORDINATE EXACT LOCATION OF TAP PRIOR TO ROUTING WITH FOOD CONSULTANTS DRAWINGS.

P45 LOW PRESSURE GAS FROM ROOF. REFERENCE KITCHEN CONSULTANTS DRAWINGS FOR ADDITIONAL INFORMATION AND ROUTING BELOW ROOF.



PLUMBING GENERAL SHEET NOTES

THESE NOTES APPLY TO ALL SHEETS

A. REFERENCES: REFERENCE STANDARD DETAILS ON PLUMBING DETAIL SHEETS. CW BUILDING ENTRY, WATER HEATER (TMV,HWRP), DOUBLE CLEANOUT, INTERIOR CLEANOUT, EXTERIOR CLEANOUT, CONDENSATE STUB, ELEVATOR SUMP, ETC....

B. FIXTURE CONNECTION: WATER AND WASTE MAINS ARE SHOWN NEAR FIXTURES IN PLANS. REFERENCE 'PIPE SIZING REQUIREMENTS' AND 'FIXTURE CONNECTION SCHEDULE' FOR FINAL CONNECTION SIZES AND REQUIREMENTS INCLUDING BUT NOT LIMITED TO: ALL COLD WATER (CW), HOT WATER (HW), WASTE WATER (WW), VENT, TAP, SIZE, VALVE REQUIREMENTS. FOR ALL INDIVIDUAL PLUMBING FIXTURES. INDIVIDUAL FIXTURES CONNECTIONS NOT SPECIFICALLY DRAWN. ALL FIXTURES ARE TO BE CONNECTED TO MAIN AND DISTRIBUTION PIPES SHOWN AS INDICATED IN NOTES AND SCHEDULES. CONTRACTOR IS TO PROVIDE FINAL CONNECTIONS TO ALL FIXTURES SHOWN ON PLUMBING AND ARCHITECTURAL DRAWINGS.

C. HAND WASH SINKS: PROVIDE 1/2" HOT WATER RETURN LINE WITH 'CIRCUIT SOLVER' THERMOSTATIC BALANCING VALVE AND ISOLATION BALL VALVE THEN CONNECT BACK TO HOT WATER RETURN LOOP. PROVIDE THIS AT EVERY PUBLIC HAND WASH SINK OR GROUP OF SINKS. EACH RETURN LINE MAY NOT BE SHOWN ON PLANS. THEY ARE SCHEDULED HERE.

D. ARCHITECT COORDINATION: EVERY EFFORT HAS BEEN MADE TO COORDINATE APPROPRIATE WALL THICKNESS WITH ARCHITECT FOR PIPING. WHERE ACTUAL CONDITIONS REQUIRED ADDITIONAL WALL THICKNESS COORDINATE WITH ARCHITECT.

E. MILLWORK: CONFIRM SINK DIMENSIONS WORK WITH FINAL MILLWORK SHOP DRAWINGS PRIOR TO SUBMITTAL. ANY SINKS THAT WON'T FIT, HIGHLIGHT AND PROVIDE ALTERNATE SINK OF SAME STYLE THAT WILL FIT AS SAME COST IN SUBMITTAL.

F. CLEAN OUTS: PROVIDE CLEANOUTS AT MINIMUM PER IPC 708, AND AS SHOWN ON PLANS, EVERY 50 FT OF WASTE LINE AND AT THE ENDS OF EACH BRANCH. WHEN CLEAN OUTS ARE IN HIGH PROFILE AREAS AND CORRIDORS MAKE EVERY EFFORT TO KEEP OUT OF THE MAIN WALK PATH AND GET ARCHITECT APPROVAL FOR LOCATIONS IN HIGH TRAFFIC AREAS THAT RAISE CONCERN.

G. MULTI STORY AREAS: EVERY EFFORT HAS BE TAKING TO SHOW DESIGN INTENT AND CONNECTIONS OF ALL FIXTURES. WHERE WASTE/STORM LINES FROM ABOVE ARE COMING DOWN A WALL THEY MUST BE CONNECTED IN TO WASTE PIPING AT LOWEST LEVEL, EVEN IF NOT SPECIFICALLY SHOWN ON FLOOR BELOW.

H. COORDINATION: COORDINATE FINAL ROUTING OF PIPING WITH OTHER TRADES PRIOR TO INSTALLATION TO ENSURE FIANL ROUTING AND ELEVATIONS. PROVIDE ALL OFFSETS REQUIRED.

I. VENT PIPING: OFFSET ALL VENT PIPING AS REQUIRED FROM CHASES IN MILLWORK AND OFFSET INTO FULL HEIGHT WALLS BEHIND. OFFSET VENT PIPING AROUND WINDOWS AS REQUIRED WHERE STUDOR VENTS ARE NOT USED. PROVIDE MULTIPLE VTR'S AROUND BUILDING TO MEET CODE.

J. RATED WALLS:ENSURE ALL PIPING PASSING THRU RATED WALLS ARE FIRE SEALED TO MAINTAIN WALL RATING. INSTALL PER UL DETAIL FOR SEALANT AND METHOD BEING USED.

K. ELEVATED FLOOR PENETRATION: SEAL AROUND ALL PIPING PASSING THRU FLOOR WITH FIRE SEALANT.

L. SINKS IN ISLANDS: REFERENCE ISLAND SINK DETAIL.

M. STRUCTURAL COORDINATION: COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS THRU GRADE BEAMS WITH STRUCTURAL ENGINEER. PIPING MAY BE OFF-SET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.

N. ELECTRIC, MDF, IDF ROOMS: NO PIPING ALLOWED OVER THESE ROOMS. ROUTE ALL WATER PIPING AROUND THESE ROOMS.

O. EXPOSED CEILING: WHEN ROUTING PIPING IN EXPOSED CEILINGS CONFIRM ELEVATION OF PIPING WITH ARCHITECT PRIOR TO INSTALLATION. HORIZONTAL PIPING SHOULD GENERALLY BE AS HIGH AS POSSIBLE. WHEN DROPPING DOWN TO FIXTURE IN ROOM, DROP DOWN WITHIN 6" OF WALL THEN PUT SHUT-OFF VALVE AT APPROXIMATE 8FT ABOVE FINISH FLOOR, PRIOR TO ENTERING WALL TO FEED FIXTURE.

KITCHEN PLUMBING GENERAL NOTES

THESE NOTES APPLY TO ALL SHEETS

A. PLUMBER TO COORDINATE ALL ROUGH-IN, CONNECTION REQUIREMENTS AND ADDITIONAL CW,HW,WW,VENT REQUIREMENTS WITH KITCHEN CONSULTANT DRAWINGS AND KITCHEN EQUIPMENT SUPPLIER.

B. KITCHEN HOOD / GAS APPLIANCES: GAS PIPING INSIDE THE KITCHEN WILL FEED GAS APPLIANCES UNDER HOOD. LOW PRESSURE 2" PIPE WITH FULL SIZE MAIN ALONG ENTIRE LENGTH OF HOOD. UNLESS OTHERWISE SHOWN. EXACT LOCATION/ELEVATION OF PIPE AND EQUIPMENT CONNECTIONS WILL BE DETAILED ON KITCHEN CONSULTANT PLANS. CONNECT TO SHUT-OFF SOLENOID PROVIDED WITH KITCHEN EQUIPMENT. PIPE PER MANUFACTURER AND KITCHEN DETAILS FOR CORRECT OPERATION OF EMERGENCY SHUT-OFF WITH ANSUL SYSTEM. PIPING TO BE EPOXY PAINED, CLEANABLE AND SCRUBBABLE. EACH INDIVIDUAL COOKING APPLIANCE TO HAVE SHUT-OFF VALVE. WHEN REGULATOR REQUIRED IT WILL BE LOCATED OUTSIDE OR ON ROOF.

C. COOLER/FREEZER: PLUMBER TO COORDINATE FINAL CONDENSATE DRAIN CONNECTION REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER.

D. ISLAND SINKS: FOR ALL ISLAND SINKS, ROUTE HW AND CW UNDERFLOOR TO SINK LOCATION. PROVIDE SHUT-OFF VALVE PRIOR TO PIPING PRIOR TO GOING UNDERGROUND. FOLLOW ISLAND SINK DETAIL FOR ADDITIONAL REQUIREMENTS.

E. BACKFLOW PREVENTERS/RPZ: WHEN BACKFLOW PREVENTER/RPZ IS REQUIRED BY CODE OR DRAWINGS. LOCATE RPZ IN CODE APPROVED ACCESSIBLE LOCATION OR WITH ACCESS DOOR IF INSIDE WALL. ROUTE RPZ DRAIN TO NEAREST FLOOR SINK, DO NOT CREATE TRIPPING HAZARD. CONTRACTOR TO DO INITIAL TESTING OF ALL TESTABLE DEVICES.

F. AIR GAP: ALL INDIRECT WASTE CONNECTIONS PIPED TO FLOOR SINKS ARE TO HAVE PROPER AIR GAP PER CODE.

G. FLOOR DRAINS: GET FINAL DIMENSIONED LOCATION FOR ALL FD'S IN KITCHEN FROM ARCHITECT OR KITCHEN CONSULTANT. PIPE TO GREASE WASTE.

H. FLOOR SINK:GET FINAL DIMENSIONED LOCATION FOR ALL FD'S FROM ARCHITECT OR KITCHEN CONSULTANT. COORDINATE FINAL GRATE OPENING TYPE WITH ACTUAL EQUIPMENT BEING PROVIDED. PIPE TO GREASE WASTE.

I. HIGH TEMPERATURE DISCHARGE: ALL KITCHEN APPLIANCES WITH HIGH TEMPERATURE WATER DISCHARGE ARE TO HAVE CAST IRON WASTE PIPING FOR MINIMUM OF 25 FT DOWNSTREAM OF APPLIANCES TO PREVENT PIPING SYSTEM DAMAGE.

J. GREASE WASTE: ROUTE ALL COOKING AND FOOD PREP SINKS, FLOOR DRAINS, AND FLOOR SINKS IN KITCHEN TO GREASE WASTE PIPING AND GREASE TRAP. REFERENCE GREASE TRAP DETAILS FOR ADDITIONAL INFORMATION.

K. GREASE TRAP: REFERENCE GREASE TRAP DETAIL ON DETAILS SHEETS. PROVIDE GREASE TRAP INSTALLATION COMPLETE IN EVERY WAY. INCLUDING ROUTING VENTS FROM GREASE TRAP TO VTR. PROVIDE SAMPLE WELL AS DETAILED AND SPECIFIED. COORDINATE FINAL LOCATIONS WITH CIVIL AND ARCHITECTURAL ITEMS IN SERVICE YARD FOR PROPER ACCESS TO MANHOLE OPENINGS.

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M. THERMOSTATIC MIXING VALVES: PROVIDE THERMOSTATIC MIXING VALVE (TMV) ON ALL SINKS (EXCEPT 2 AND 3 COMPARTMENT SINKS) EQUAL TO POWERS HYDROGUARD LFE480 SERIES, 0.5 GPM MINIMUM FLOW, ASSE 1070, INTEGRAL CHECKS, 1.6 GPM AT 10 PSI DROP.

N. CAST IRON KITCHEN WASTE: WASTE PIPING AND FITTING FROM DISHWASHER FLOOR SINK, TILT BRAISING FLOOR TROUGH TO A POINT AT LEAST TWENTY FEET (20') DOWNSTREAM TO BE CAST IRON IN LIEU OF SCHEDULE 40 PVC.

O. SANITARY WASTE ABOVE GRADE: ALL SANITARY WASTE ABOVE GRADE IN KITCHEN SHALL BE TYPE 'L' HARD DRAWN COPPER WITH DWV WROT COPPER FITTINGS.

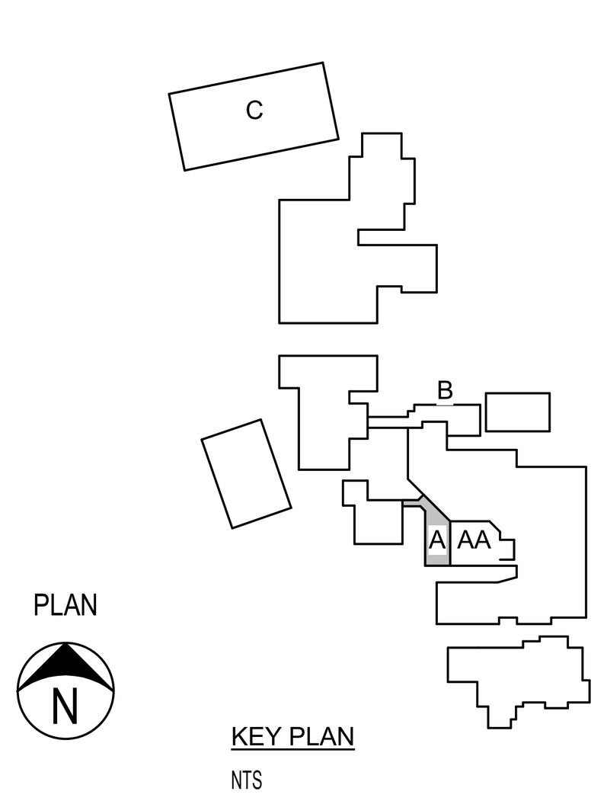
P. INTERIOR GAS PIPE: ALL ABOVE GRADE PIPING KITCHEN BEHIND EQUIPMENT OR UNDER COUNTERS, SUPPLY, WASTE, GAS, ETC.. SHALL BE SUPPORTED FROM WALLS OR THE COUNTER FRAME. DO NOT SUPPORT FROM FLOOR. FLOOR IS TO REMAIN AS CLEAR AS POSSIBLE FOR CLEANING. (I.E. DO NOT PUT UNISTRUT ON FLOOR TO ANCHOR PIPING.)

HBHC

01 **FIRST FLOOR PLAN - AREA A - PLUMBING - SUPPLY**

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

TRUE PLAN



KEY PLAN

NTS

Addendum No.3

Revision / 2 Date 05/14/25

Project: HAYS HIGH SCHOOL - JACK C. HAYS 2025 ADDITIONS + RENOVATIONS FOR HAYS CISD BUDA, TX

STATE OF TEXAS B.J. HENDRIX 94813 LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO: 94813 ON: 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

MEP/ENERGY CONSULTANTS

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COMMISSIONING • FIELD INVESTIGATIONS

HCE job no.: 24-035

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FIRST FLOOR PLAN - AREA A - PLUMBING - SUPPLY

PACKAGE VOLUME

Job No. 01954-09-01

Drawn By: KAM

Date: 04/22/2025

Sheet No. ISSUE FOR BID

P3.1A1

5/14/2025 9:43:30 AM

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KITCHEN EQUIPMENT COORDINATION NOTES

REFERENCE CAPTIVEAIRE PLANS THAT ARE PART OF KITCHEN CONSULTANT FOOD SERVICE DRAWINGS (FS SERIES) FOR KITCHEN MECHANICAL EQUIPMENT SCHEDULED BY CAPTIVEAIRE. THE MECHANICAL CONTRACTOR, KITCHEN EQUIPMENT SUPPLIER, AND CONTROLS CONTRACTORS ARE TO COORDINATE WITH EACH OTHER TO ENSURE THAT ALL EQUIPMENT, CONTROLS, DUCTWORK, ETC. ARE PROVIDED FOR COMPLETE AND OPERABLE SYSTEMS.

THE MECHANICAL CONTRACTOR IS TO PROVIDE, INSTALL, START-UP AND PROVIDE WARRANTY AND COMPLETE ALL REQUIRED COMMISSIONING ACTIVITIES FOR THE FOLLOWING EQUIPMENT SHOWN ON THE KITCHEN CONSULTANTS DRAWINGS.

- RTU-1 (KITCHEN) AND RTU-2 (KITCHEN) INCLUDING ALL ACCESSORIES NEEDED FOR A COMPLETE AND OPERABLE SYSTEM
- ALL "KEF" EXHAUST FANS
- CAPTIVEAIRE CONTROLS BETWEEN THE KITCHEN HOOD, KITCHEN EXHAUST FANS, RTU-1 (KITCHEN), AND RTU-2 (KITCHEN).
- GREASE DUCT FROM TYPE 1 HOODS TO KITCHEN EXHAUST FANS (KEF). THIS IS PREFAB DUCT SCHEDULED BY CAPTIVEAIRE. MECHANICAL CONTRACTOR IS TO FIELD VERIFY ALL OFFSETS AND LENGTHS OF DUCT PRIOR TO ORDERING.
- 18 GAGE WELDED STAINLESS STEEL DUCT BETWEEN DISH WASH HOOD AND EXHAUST FAN

DDC CONTROLS CONTRACTOR IS TO PROVIDE:

- REFERENCE SPECIFICATION FOR ALL REQUIREMENTS
- COORDINATE WITH CAPTIVEAIRE FOR ALL CONTROL REQUIREMENTS REQUIRED BETWEEN VARIABLE KITCHEN EXHAUST / MAKE-UP SYSTEM AND DDC CONTROLS.

THE CAPTIVEAIRE REPRESENTIVE IS RESPONSIBLE FOR COORDINATING ALL CONTROLS BETWEEN ALL TRADES. A FACTORY SERVICE TECHNICIAN IS TO ASSIST THE MECHANICAL CONTRACTOR IN THE START-UP OF ALL KITCHEN EQUIPMENT SHOWN ON THE CAPTIVEAIRE PLANS. THE CAPTIVEAIRE REP IS TO PROVIDE A LIST OF ALL CONTROL POINTS TO DDC CONTROLS CONTRACTOR.

CAPTIVEAIRE RTU: WHEN KITCHEN MAKE-UP AIR UNIT IS TO BE PROVIDED THROUGH A CAPTIVE AIRE KITCHEN RTU - MAU WITH HOT GAS REHEAT, MOTORIZED OUTSIDE AIR INTAKE, AND RETURN AIR DAMPERS. DAMPERS ARE TO BE CONTROLLED BY GREASE HOOD VARIABLE EXHAUST CONTROL SYSTEM , THAT ALSO CONTROLS THE GREASE HOOD EXHAUST FANS. AIR FROM THIS SYSTEM WILL BE DUCTED TO CEILING DIFFUSERS THROUGH OUT THE KITCHEN AND WILL PROVIDE HEATING AND COOLING TO THE SPACE. (COORDINATE ALL SCOPE THROUGH CAPTIVE AIR)

ADDITIONAL KITCHEN COORDINATION NOTES:

- REFERENCE KITCHEN CONSULTANTS DRAWINGS FOR ALL MECHANICAL ITEMS THAT NEED TO BE CONNECTED AND COORDINATED.
- MECHANICAL CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL DUCTWORK FROM HOODS (GREASE DUCT, DISHWASH DUCT, ETC.)
- GREASE DUCT TO BE 16 GAGE WELDED BLACK IRON DUCT, WRAPPED WITH INSULATION TO MEET CODE. TRANSITION FROM EQUIPMENT CONNECTION TO EXHAUST FAN CONNECTION. DUCT SIZE TO MAINTAIN 1500 FPM VELOCITY MINIMUM.
- DISHWASH DUCT TO BE 18 GAGE WELDED STAINLESS STEEL DUCT FROM DISHWASH MACHINE TO ROOF MOUNTED EXHAUST FAN. TRANSITION FROM EQUIPMENT CONNECTION TO EXHAUST FAN CONNECTION. DUCT SIZE TO MAINTAIN 1500 FPM VELOCITY MINIMUM.
- MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL ALL EXHAUST FANS (KEF, DISHWASH MACHINE FAN, ETC.)
- COORDINATE LOCATION OF COOLER FREEZER CONDENSING UNITS ON ROOF.
- COORDINATE OUTSIDE AIR INTAKE WITH PLUMBING VENTS.

CONTROL GENERAL NOTES

A. **PROVIDE COMPLETE DIRECT DIGITAL CONTROL SYSTEM DESIGNED TO MEET THE JOB SPECIFICATIONS.** REFERENCE SPECIFICATION FOR CONTROLS INFORMATION. IF DDC CONTROL SPECIFICATION NOT INCLUDED WITH JOB PROVIDE STAND ALONE SENSORS FOR TEMPERATURE, HUMIDITY, AND CO2 REQUIRED TO MAKE EACH UNIT FUNCTION WITH ALL SPECIFIED OPTIONS.

B. PRIOR TO SUBMISSION OF BIDS, CONTROL CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF CONTROL REQUIREMENTS FOR ALL HVAC GEAR WITH MANUFACTURER. VERIFY ACTUAL NUMBER OF POINTS REQUIRED AND PROVIDE APPROPRIATE CONTROLLERS WITH A SUFFICIENT NUMBER OF POINTS AVAILABLE. PULSE WIDTH MODULATORS OR ANY OTHER METHOD OF STRETCHING A GIVEN CONTROLLERS NUMBER OF POINTS ARE STRICTLY PROHIBITED. ADDITIONAL MONIES NOT WILL BE ALLOTTED DUE TO FAILURE OF BIDDER TO VERIFY ALL REQUIREMENTS PRIOR TO SUBMISSION OF BIDS.

C. UNIT CONTROL SENSORS: PROVIDE THERMOSTAT FOR EACH UNIT ON JOB. PROVIDE HUMIDISTAT FOR EACH UNIT ON JOB SPECIFIED WITH HUMIDITY CONTROL. PROVIDE CO2 SENSOR FOR EACH UNIT SPECIFIED WITH OUTSIDE AIR DAMPER/CO2 CONTROL.

D. ROOM SENSOR LOCATION: SENSORS TO BE LOCATED PER ELECTRICAL ROUGH-IN DETAIL ON ELECTRICAL SHEETS NEAR LIGHTING CONTROL FOR ROOM.

E. SENSORS IN PUBLIC SPACES: PROVIDE ACRYLIC LOCKING SECURITY COVER FOR ALL SENSORS LOCATED IN PUBLIC SPACES.

F. SENSORS IN HIGH IMPACT SPACES: SENSORS IN SPORTS AREAS ARE TO BE PROVIDE WITH LOCKING ACRYLIC IMPACT RESISTANT COVER OR WIRE GUARD. COORDINATE PREFERENCE WITH OWNER.

G. INSTALLATION REQUIREMENTS: PROVIDE FOAM BACKER PAD BEHIND ALL THERMOSTATS. DONT INSTALL IN DIRECT SUPPLY AIR PATH. DONT INSTALL ON EXTERIOR WALL.

H. CALIBRATION: CALIBRATE ALL SENSORS TO ACCURACY OF LESS THAN 1 DEGREE. PROVIDE WRITTEN DOCUMENTATION SHOWING BEFORE AND AFTER CALIBRATION. CALIBRATION DOCUMENT TO INCLUDE SIGNED WITH NAME AND PHONE NUMBER OF PERSON COMPLETING CALIBRATION. REPLACE ALL SENSORS THAT CAN NOT BE CALIBRATED OR ARE OUT OF RANGE.

I. GLASS: RELOCATE ALL SENSORS INADVERTENTLY SHOW ON GLASS TO NEAREST APPROPRIATE LOCATION.

J. LABELING: PROVIDE PERMANENT LABEL FOR ALL SENSORS WITH UNIT NAME AND NUMBER BEING CONTROLLED. REF SPECS.

K. OWNER/ARCHITECT: IF THERE IS ANY QUESTION ON A SENSOR LOCATION, CONFIRM WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.

L. SHOP DRAWING: SHOW ALL PROPOSED SENSOR LOCATION ON SHOP DRAWINGS.

M. SAMPLE: PROVIDE SAMPLE SENSOR FOR OWNER APPROVAL PRIOR TO PURCHASING ANY SENSORS.

N. HYBRID CONTROL SYSTEM NOT ALLOWED. DDC CONTROL CONTRACTOR IS TO PROVIDE ALL CONTROLS SCOPE. (HYBRID = PART BY MANUFACTURER AND PART BY CONTROL CONTRACTOR)

O. DDC CONTRACTOR TO MOUNT ANY SENSORS SHIPPED LOOSE WITH EQUIPMENT.

P. IF NO DDC SPECIFIED, PROVIDE PROGRAMMABLE THERMOSTATS FOR EACH AHU AND/OR RTU EQUAL TO PELICAN WITH PEARL CONTROLLER. WI-FI ENABLED, DEHUMIDIFICATION, DAMPER CONTROL, SUPPLY, RETURN AND OUTSIDE AIR TEMP SENSORS, FREE MOBILE PHONE APPS AND EASY TO USE WEB PORTAL. 365 DAY SCHEDULING AND 7 DAY PROGRAMMABILITY.

MECHANICAL GENERAL SHEET NOTES

THESE NOTES APPLY TO ALL MECHANICAL FLOOR PLAN SHEETS

A. COORDINATION: COORDINATED ALL AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, ETC. REFERENCE SPECIFICATIONS SECTION **"20 01 00, 1.04, A"** TO DETERMINE ORDER OF IMPORTANCE FOR RESOLVING INTERFERENCES BETWEEN TRADES.

B. CONTROL DEVICES ARE TO BE INSTALLED NEAR LIGHT SWITCHES SERVING THE ROOM. FINAL LOCATIONS ARE TO BE COORDINATED WITH THE ELECTRICAL DETAILS AND ELECTRICAL CONTRACTOR. CONTROL DEVICES MAY OR MAY NOT BE SHOWN ON DRAWINGS FOR CLARITY ON PLANS. ALL UNITS ARE REQUIRED TO HAVE APPROPRIATE CONTROL DEVICES.

C. AIR TRANSFER: PROVIDE PROPERLY SIZED TRANSFER AIR OPENINGS IN WALLS TO DECK FOR TRANSFER OF OUTSIDE AIR RELIEF AND EXHAUST MAKE-UP. TRANSFER TO / FROM OTHER SPACES MUST BE ACCOUNTED FOR WHEN SIZING TRANSFER OPENINGS. TRANSFER DUCTS ARE TO BE INTERNALLY LINED DUCTS WITH A 90 DEGREE ELBOW TURNED UP ON BOTH ENDS OR AS DIRECTED BY THE ACOUSTICAL ENGINEER IF LOCATED IN A SOUND SENSITIVE AREA. TRANSFER DUCTS SHOWN ON THE DRAWINGS ARE SIZED AT 14"x12" UNLESS OTHERWISE NOTED.

D. FIRE/SMOKE WALL DUCT PENETRATION: PROVIDE FIRE OR FIRE/SMOKE DAMPERS IN ALL DUCTS PASSING THROUGH RATED WALLS AND FLOORS. PROVIDE FIRE DAMPER AT EVERY DUCT FLOOR PENETRATION. PROVIDE DAMPER TYPE REQUIRED BY GOVERNING CODE AND LOCAL ORDINANCES. REFERENCE ARCHITECTURAL CODE REVIEW PLANS (SERIES A10 SHEETS). FIRE RESISTANCE PLANS (SERIES A10 SHEETS) AND RCP PLANS (SERIES A16 SHEETS) FOR ALL RATED WALL LOCATIONS AND FIRE RESISTANCE REQUIREMENTS. REFERENCE ALL ARCHITECTURAL PLANS AND DOCUMENTS FOR MORE INFORMATION. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL PLANS AND ENSURING THAT ALL DEVICES REQUIRED BY CODE WHETHER SHOWN IN MEP DOCUMENTS OR NOT HAS BEEN INCLUDED IN BID PRICE. REFERENCE "RATED WALL PENETRATION" ON DETAIL SHEETS FOR MORE INFORMATION.

E. FIRE WALL PIPING PENETRATION: PROTECT ALL PIPING PENETRATIONS THROUGH RATED WALLS WITH FIRE RATED ASSEMBLIES (FIRE CAULKING, ETC). EACH ASSEMBLY IS TO BE SPECIFICALLY DESIGNED FOR THE APPLICATION THAT IT IS BEING APPLIED TO (PIPING, CABLES, CONDUIT, DUCTWORK, ETC.). CONTRACTOR IS TO PROVIDE A COPY OF THE MANUFACTURER'S DETAILED INSTALLATION INSTRUCTIONS TO THE FIELD PERSONNEL THAT ARE INSTALLING THESE PRODUCTS. PROVIDE A COPY OF THESE INSTRUCTIONS IN THE SUBMITTALS.

F. CONDENSATE: ROUTE CONDENSATE DRAINS FROM ALL INDOOR AIR HANDLING UNITS (VERTICAL AHU'S, CEILING CASSETTES, HIGH WALL UNITS, ETC.) TO FLOOR DRAIN IN SAME ROOM OR NEAREST CODE APPROVED DISPOSAL POINT. PROVIDE CONDENSATE PUMP ONLY WHEN ABSOLUTELY NECESSARY. REFERENCE SPECIFICATIONS FOR MORE INFORMATION.

G. REFRIGERANT PIPING TO BE ROUTED FROM AIR HANDLING UNIT TO HEAT PUMP LOCATED ON THE ROOF IN A MANNER THAT WILL PROVIDE THE SHORTEST PIPING RUNS POSSIBLE. CONTRACTOR MUST SUBMIT PIPING SHOP DRAWINGS TO THE UNIT MANUFACTURER AND ENGINEER PRIOR TO ROUGH-IN OF ANY PIPING. PIPING SHOP DRAWINGS THAT HAVE BEEN APPROVED BY SIGNED BY THE MANUFACTURERS REP MUST BE SUBMITTED TO THE ENGINEER TO BE FILED FOR RECORD.

H. BALANCING: PROVIDE SPLITTER DAMPER OR TWO OBD BALANCING DAMPERS (ONE IN EACH OUTLET) OF ALL SUPPLY AIR TEE FITTINGS.

I. SEALANT: PROVIDE ACOUSTICAL SEALANT AROUND DUCTS, PIPES, CABLES AND CONDUITS THAT PASS THROUGH ACOUSTICAL DRYWALL PARTITION / SOUND-CONDITIONED CMU PARTITIONS. REFERENCE ARCHITECTURAL RCP PLANS AND FOR LOCATIONS OF WALLS.

J. ELEVATIONS: CONFIRM FINAL ELEVATION OF ALL WALL MOUNTED MECHANICAL GRILLES / LOUVERS WITH ARCHITECT PRIOR TO ROUGH IN. INDICATE SUGGESTED ELEVATION IN DUCTWORK SHOP DRAWINGS. THIS IS ESPECIALLY IMPORTANT FOR MULTI-STORY SPACES, STAIRWELLS, CAFETERIA CORRIDORS ETC... PAY ATTENTION TO WALLS WITH GRAPHICS.

K. EXHAUST FAN CONTROL: EXHAUST FAN ROOM CONTROLS SHOULD BE LOCATED NEXT TO ROOM LIGHT CONTROLS AND LABELED, PER ALL SCHEDULES, NOTES AND DETAILS. (WHEN NOT MOTION OR DDC CONTROLLED.)

L. RETURN AIR DUCT: ROOFTOP UNIT RETURN AIR- ALL ROOFTOP UNIT AND MAKE-UP AIR UNITS ARE TO HAVE DUCTED RETURN TO THE PLENUM SPACE THAT THE UNIT SERVES. INTERNALLY LINE 8' PAST THE FIRST 90 DEGREE ELBOW, EXTERNALLY WRAP THE REMAINDER OF THE DUCT. PROVIDE A "C" CLIP OVER THE LEADING EDGE OF THE DUCT LINER. REFERENCE SPECIFICATION FOR MORE INFORMATION.

M. SIDE WALL REGISTERS: COORDINATE ALL SIDEWALL REGISTER FINAL LOCATIONS. WITH LINE OF WALL AND COORDINATE FRAMING WITH DRYWALL CONTRACTOR. COORDINATE FINAL LOCATION OF ALL SIDEWALL REGISTERS WITH ARCHITECT PRIOR TO ROUGH-IN.

N. ACCESS DOORS: CONTRACTOR TO COORDINATE CEILING ACCESS DOOR LOCATIONS FOR BALANCING DAMPERS, FIRE /SMOKE DAMPERS , DUCTWORK ACCESS DOORS, VALVES, ETC WITH ARCHITECT IN ALL HARD CEILING AREAS. REFERENCE ARCHITECTURAL REFLECTED CEILING PLANS.

SHOP DRAWING NOTES

SHOP DRAWINGS(LOD 400):

A. ITEMS TO COORDINATE WITH ALL ROOF MOUNTED EQUIPMENT AND PENETRATIONS:

B. COORDINATE FINAL LOCATION OF ROOF MOUNTED EQUIPMENT SO THAT IT IS LOCATE OUTSIDE THE 10 FOOT CLEARANCE AREA REQUIRED.

C. COORDINATE WITH ROOF DRAINS AND VALLEYS CREATED BY TAPERED INSULATION.

D. ALL OUTSIDE AIR INTAKES MUST BE LOCATED A MINIMUM OF 10 FEET AWAY FROM EXHAUST OUTLETS AND PLUMBING VENTS **(COORDINATE PLUMBING VENT LOCATIONS WITH PLUMBING CONTRACTOR IN SHOP DRAWINGS)** WHERE POSSIBLE PROVIDE 15 FEET OF CLEARANCE. IF ANY CODE OR ORDINANCE IS MORE STRINGENT, GO BY THAT CODE.

E. **LOUVERS: COORDINATE EXACT LOCATIONS, ELEVATIONS AND FINAL SIZES WITH ARCHITECT. IF THE SIZE OF A LOUVER MUST BE ALTERED THE NEW SIZE MUST HAVE THE SAME PERFORMANCE AS THE SCHEDULED LOUVER. VERIFY NEW SIZE WITH ENGINEER.**

F. SHOW MANUFACTURE'S SERVICE AND OPERATING CLEARANCES AND CODE REQUIRED SEPARATIONS (SUCH AS EXHAUST SEPARATION FROM OUTSIDE AIR INTAKES) ON SHOP DRAWINGS

G. COORDINATE WITH STRUCTURAL FOR ROOF FRAMING THAT WILL NEED TO BE RELOCATED OR RESIZED DUE TO FINAL LOCATIONS AND SUBMITTED EQUIPMENT REQUIREMENTS.

H. ROOF MOUNTED ELECTRICAL PANELS AND TRANSFORMERS. (SHOW ON MECHANICAL SHOP DRAWINGS)

I. DONT LOCATION MECHANICAL EQUIPMENT OVER ELECTRICAL OR TECHNOLOGY ROOMS.

J. CONTRACT DOCUMENTS ARE DIAGRAMMATIC(LOD300). IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY AND PROVIDE MANUFACTURER'S REQUIRED SERVICE AND OPERATING CLEARANCES FOR ALL ROOF MOUNTED EQUIPMENT. IF THESE CLEARANCES ARE NOT PROVIDED IT WILL BE THE CONTRACTORS RESPONSIBILITY TO RELOCATE EQUIPMENT INCLUDING BUT NOT LIMITED TO STRUCTURAL, ROOFING, ELECTRICAL, PLUMBING, ETC. THAT ARE REQUIRED TO RELOCATE EQUIPMENT. ANY DEVIATION FROM PROVIDING MANUFACTURER'S REQUIRED SERVICE AND OPERATING CLEARANCE, ROOFING AND ARCHITECTURAL REQUIREMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT **DURING THE SHOP DRAWING PHASE** PRIOR TO INSTALL.

K. MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS ARE TO FULLY COORDINATE ROUTING OF ALL PIPING, AND CONDUIT ON ROOF PRIOR TO INSTALLATION OF ANY SYSTEMS TO MINIMIZE THE NUMBER OF SYSTEMS THAT WILL NEED TO CROSS. ALL PIPING AND CONDUIT MUST BE ROUTED OUT OF EQUIPMENT SERVICE AREAS. PIPING, CONDUIT, DISCONNECTS, VALVES, ETC. MUST BE INSTALLED SO THAT THEY DO NOT INTERFERE WITH THE REMOVAL OF OR HINGED OPENING OF SERVICE ACCESS DOORS. ALL CONTRACTORS ARE TO REFERENCE THE MEP, ROOFING CONSULTANT AND ARCHITECTURE PLANS AND SPECIFICATIONS FOR ALL REQUIREMENT.

L. SHOW ALL CONTROL DEVICE LOCATIONS: THERMOSTAT, HUMIDITY SENSOR, CO2 SENSOR.

M. ELECTRICAL / TECHNOLOGY ROOMS: DON'T INSTALL DUCTWORK ABOVE THESE ROOMS.

MECHANICAL DEMO - REMODEL NOTES

1. **REFERENCE ARCHITECTURAL SHEETS FOR ADDITIONAL DEMOLITION INFORMATION.**
2. **FIELD VERIFY EXISTING CONDITIONS:** CONTRACTOR IS TO OPEN WALLS/SLAB/CEILING AS REQUIRED TO MAKE ALL CONNECTIONS. CONNECTION SIZE IS BASED ON THE FIXTURE CONNECTIONS SCHEDULE. IF PIPE TO BE CONNECTED TO IS TOO SMALL, FIND LARGER PIPE UPSTREAM AND CONNECT THERE.
3. **REMOVE ALL MEP SYSTEMS: DUCTWORK, PIPING, CONDUIT, PLUMBING FIXTURES, LIGHT FIXTUERS, AIR DEVICES, ETC.**
4. **ALL EXISTING UTILITIES BELOW GROUND FLOOR TO BE CAPPED BELOW FINISHED FLOOR.**
5. **VERIFY ALL MECHANICAL / ELECTRICAL ITEMS THAT ARE TO REMAIN IN BUILDING PRIOR TO COMMENCEMENT OF DEMOLITION.**
6. **EXISTING HEATING RADIATORS AND A FEW NOTED LIGHTING FIXTURES ARE TO REMAIN IN PLACE AND BE PROTECTED AND/OR REMOVED, STORED AND REINSTALLED AS REQUIRED BY THE CONSTRUCTION PROCESS. CONNECTING PIPING AND VALVES FROM RADIATOR INTO WALL / FLOOR TO REMAIN TO GIVE APPEARANCE THAT RADIATOR IS STILL OPERATIONAL. THIS IS TO RESTORE THE HISTORIC LOOK OF THE BUILDING.**

DUCTWORK GENERAL NOTES

THESE NOTES APPLY TO ALL MECHANICAL PLANS.

PAINTED DUCTWORK NOTES:

A. • ALL DUCTWORK LOCATED IN EXPOSED AREAS (NO CEILING OR FLOATING CLOUDS) IS TO BE PAINTED AS DIRECTED BY THE ARCHITECT.
B. DUCTWORK TO BE PAINTED IS TO BE FABRICATED WITH PAINT GRIP (PHOSPHATIZED) METAL.
C. ALL EXPOSED DUCTWORK TO BE FABRICATED AND INSTALLED IN A NEAT WORKMANLIKE MANNER FREE OF DENT AND BLEMISHES.
D. DO NOT WRITE ON THE OUTSIDE OF THE DUCTWORK WITH A PERMANENT MARKER OR ANY OTHER MARKER THAT WILL BLEED THROUGH PAINT.
E. DO NOT PLACE STICKERS ON THE OUTSIDE OF DUCT WORK.
F. THESE NOTES APPLY TO ALL EXPOSED DUCTWORK ON THE ENTIRE PROJECT.

EXPOSED DUCTWORK NOTES:

A. ALL OVAL/SPIRAL DUCTS ARE TO HAVE PAINTGRIP OUTER JACKET AND PERFORATED INNER LINER.
B. RECTANGULAR DUCTS LOCATED IN EXPOSED AREAS ARE TO HAVE INTERNAL LINER AND BE FABRICATED FROM PAINTGRIP SHEETS.
C. ALL EXPOSED DUCT TO BE SEALED WITH PAINTABLE DUCT SEALANT FROM A CAULKING GUN IN A NEAT WORKMAN LIKE MANNER.
D. DUCTS THAT ARE NOT SEALED NEATLY WILL BE REMOVED AND REPLACED AT CONTRACTORS COST.
E. ALL EXPOSED DUCT TO BE INSTALLED IN A NEAT WORKMAN LIKE MANNER FREE OF DENTS, OIL CANNING, OR DISCOLORATION.
F. ALL DAMAGED SECTIONS WILL BE REPLACED.
G. PROVIDE AN ESCUTCHEON AROUND DUCT AT ALL WALL OR BULKHEAD PENETRATIONS.
H. EXPOSED DUCTWORK TO BE COORDINATED WITH LIGHTS PRIOR TO INSTALLATION. THIS SHOULD BE DONE DURING SHOP DRAWING PHASE. DUCTWORK SHOULD NOT BE INSTALLED UNDER LIGHTS TO CREATE SHADOWING. GENERALLY DUCTWORK SHOULD BE ABOVE LIGHTS. IF THERE IS A CONFLICT NOTIFY ENGINEER FOR ADJUSTED LAYOUT PRIOR ANY PRODUCT INSTALL.
I. DUCT MOUNTED GRILLES ON OVAL AND ROUND DUCTS TO BE INSTALLED AT 30 DEGREES BELOW HORIZONTAL OR AS REQUIRED FOR OPTIMAL AIR DISTRIBUTION, COORDINATE WITH SPACE. DUCT MOUNTED ON RECTANGULAR DUCTS ARE TO HAVE A TAP WITH RADIUS ELBOW IN ORDER TO INSTALL GRILLE AT 30 DEGREES BELOW HORIZONTAL OR AS REQUIRED FOR OPTIMAL AIR DISTRIBUTION. COORDINATE WITH EACH SPACE.

DUCTWORK INSULATION NOTES

A. ALL DUCTWORK TO BE EXTERNALLY INSULATED WITH R-6 INSULATION, REFERENCE SPECIFICATIONS FOR ALL REQUIREMENTS.
B. ALL DUCT SIZES LISTED ON THE PLANS ARE CLEAR INSIDE DIMENSIONS.
C. SUPPLY, RETURN AND OUTSIDE AIR DUCT DROPS ON ROOF MOUNTED EQUIPMENT TO BE INTERNALLY INSULATED DOWN PAST THE FIRST 90 DEGREE ELBOW. REFERENCE SPECIFICATIONS FOR ALL REQUIREMENTS.
D. DUCTWORK SERVING THE FOLLOWING AREAS ARE TO BE INTERNALLY LINED WITH 2" ACOUSTICAL INSULATION. SHOULD AN ALTERNATE DUCT SIZE BE REQUIRED, SIZE THE NEW DUCT WITH AN EQUIVALENT ASPECT RATIO.
   a. AUDITORIUM
   b. STAGE
   c. THEATRE ARTS CLASSROOM
   d. BAND HALL, CHOIR
   e. ENSEMBLE, OTHER ASSOCIATED ROOMS IN SAME SPACE.
   f. PRACTICE ROOMS - MINIMUM 3 90DEGREE BENDS IN DUCT TO SERVE.
   g. REFERENCE INSULATION SPECIFICATION SECTION 20 07 00 "SOUND CONTROL" FOR MORE INFORMATION.

TRANSFER AIR NOTES:

A. ALL WALLS TO DECK ARE TO HAVE TRANSFER AIR OPENINGS TO ALLOW FOR OUTSIDE AIR TO BE RELIEVED OUT OF THE BUILDING THROUGH THE BAROMETRIC RELIEF DAMPER AND ALSO PROVIDE MAKEUP AIR TO ALL EXHAUST FAN.
B. TRANSFER AIR OPENINGS ARE TO HAVE INTERNALLY LINED DUCTS WITH 90 DEGREE ELBOWS TURNED UP ON BOTH ENDS.
C. WHEN TRANSFER AIR DUCTS ARE LOCATED IN WALLS SURROUNDING SOUND CRITICAL ROOMS AS LISTED IN ACOUSTICAL ENGINEERING DOCUMENT, PROVIDE 2" ACOUSTICAL LINER AND ANY OTHER REQUIREMENTS LISTED IN THE ACOUSTICAL ENGINEER'S DOCUMENT.
D. MINIMUM SIZE OF TRANSFER DUCT (INSIDE CLEAR DIMENSION) TO BE 14"x12" UNLESS OTHERWISE NOTED.
E. TRANSFER AIR OPENINGS TO BE SIZED BASED ON AMOUNT OF AIRREQUIRED TO PASS THROUGH WALL. TYPICAL WALLS -0.05" W.G. PER 100'. SOUND WALLS -450 FPM MAX.
F. REFERENCE ARCHITECTURAL PLANS AND FIELD VERIFY WALLS TO DECK.

GYM STRUCTURAL NOTES: COORDINATE ALL DUCTWORK IN GYM WITH STRUCTURAL TRUSSES , JOISTS AND BRIDING, AND BASKET GOAL FRAMING AND STUCTURAL SUPPORTS DURING SHOP DRAWING PHASE.

DUCT NOTE: TRANSITION FROM DUCT SIZE SHOWN TO ROOF OPENING SIZE FOR EXHAUST FANS AND OTHER ROOF MOUNTED EQUIPMENT. ALLOW FOR CLEARANCE BETWEEN STRUCTURAL JOISTS. ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. ALL DUCTS 30" AND LARGER IN ANY DIMENSION TO HAVE DUCTMATE FITTINGS.

DUCT NOTE: ALL ACCESS DOORS SHALL BE INSTALLED IN EASILY ACCESSIBLE LOCATIONS. RELOCATE ANY ACCESS DOOR THAT IS NOT INSTALLED IN THIS MANNER. THIS SHALL BE DONE AT NO ADDITIONAL COST TO OWNER. INSTALL MINIMUM 12" x 12" HINGED ACCESS DOORS WITH CAM LOCKS AT THE END OF ALL DUCT RUNS, AT 20' INTERVALS ALONG LENGTH OF RUN, AND ON EACH SIDE OF ELBOWS WITH TURNING VANES. REFERENCE SPECIFICATIONS FOR MORE INFORMATION.

DUCT NOTE: BALANCING DAMPER: ALL SUPPLY BRANCH DUCTS ARE TO HAVE BALANCING DAMPERS WITH MANUAL LOCKING QUADRANT OPERATORS. PROVIDE STAND-OFF BRACKETS EQUIVALENT TO INSULATION THICKNESS. PROVIDE BALANCING DAMPERS IN OTHER DUCT SYSTEMS AS REQUIRED TO PROPERLY BALANCE SYSTEMS. SINGLE BLADE DAMPERS ARE ACCEPTABLE IN DUCTS 14" ROUND OR 14" TALL, LARGER DUCTS TO HAVE MULTIPLE BLADE DAMPERS. ALL DAMPER BLADES AND HARDWARE ARE TO BE FABRICATED OF SUFFICIENT GAGE AND HAVE REINFORCEMENTS AS REQUIRED TO PREVENT VIBRATION. BALANCING DAMPERS ARE TO BE INSTALLED IN AN EASILY ACCESSABLE LOCATION, WITHIN 4 FEET OF CEILING, IF BRANCH DUCT TAP IS INSTALLED MORE THAN 4 FEET ABOVE CEILING, BALANCING DAMPER IS TO BE INSTALLED DOWN STREAM OF TAP TO MEET ACCESSIBILITY REQUIREMENTS.

CONCEALED CEILING: BALANCING DAMPER: ALL AIR DEVICES LOCATED IN INACCESSIBLE CEILINGS ARE TO HAVE BALANCING DAMPERS INSTALLED IN THE NECK OF THE SUPPLY GRILLE WITH CABLE OPERATOR THAT ARE ACCESSIBLE THROUGH THE FACE OF THE GRILLE. COORDINATE INACCESSIBLE CEILING AREAS WITH ARCHITECTUAL REFLECTED PLANS.

FAN POWER BOX AND VAV BOX: PRIMARY DUCT SIZE TO MATCH SIZE LISTED IN SCHEDULES. PROVIDE ROUND DUCT WHERE SPACE ALLOWS. PROVIDE OVAL DUCT WHERE REQUIRED BY SPACE LIMITATIONS.

ROOF PLAN GENERAL NOTES: MECHANICAL

THESE NOTES APPLY TO ALL ROOF PLAN SHEETS

A. STRUCTURAL: COORDINATE FINAL ROOFTOP UNIT LOCATIONS WITH STRUCTURAL FRAMING. **ROOF DECK TO BE CUT OUT FOR DUCT OPENINGS ONLY NOT UNDER ENTIRE CURB**. PROVIDE TWO LAYERS OF RIGID INSULATION UNDER UNIT INSIDE CURB. REFERENCE DETAIL FOR ADDITIONAL INFORMATION.

B. FLASHING: COORDINATE FINAL FLASHING REQUIREMENTS WITH ROOTING DETAILS.

C. CONDENSING UNIT ROOF MOUNTED: PROVIDE THYCURB AND FRAMING FOR ALL CONDENSING UNITS REFERENCE DETAILS. ROUTE REFRIGERANT PIPING BETWEEN UNITS AND SUPPORT OF THY CURB. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ROUTING OF CONDUCT AND DISCONNECT LOCATIONS TO INSURE MAINTENANCE ACCESS IS NOT BLOCKED.

D. HORIZONTAL DISCHARGE CONDENSING UNITS: WHEN SHOWN TOGETHER INSTALL BACK TO BACK INSURE THAT UNIT DISCHARGES FACE AWAY FROM EACH OTHER FOR OPTIMUM PERFORMANCE. DO NOT BLOW TOWARD OUTSIDE AIR INTAKE, DO NOT BLOW TOWARD INTAKE OF ANOTHER CONDENSING UNIT. ANY DONE THIS WAY WILL BE RELOCATED AT CONTRACTORS EXPENSE.

E. CONDENSATE: ALL CONDENSATE DRAINS TO ROUTE CONDENSATE TO/PIPED OFF TO ROOF DRAINS OR DOWN SPOUT. ONLY ROUTE DOWN THROUGH ROOF IF CONDENSATE CANNOT BE ROUTED TO A ROOF DRAIN OR DOWN SPOUT ARE NOT AVAILABLE, OR SPECIFICALLY DIRECTED TO.

F. PIPING SUPPORT: ALL ROOF MOUNTED PIPING MUST BE SUPPORTED PER PLANS / DETAILS AND SPECIFICATIONS. ROLLER TYPE ONLY.

G. OSHA EDGE CLEARANCE: ALL ROOF MOUNTED EQUIPMENT MUST BE INSTALL A **MINIMUM OF 10 FEET AWAY FROM THE EDGE OF THE ROOF** OR A DROP IN ROOF ELEVATION MORE THAN 30 INCHES, OR AS REQUIRED BY CURRENT CODES AND OSHA. WHEN A 42 INCH PARAPET IS PRESENT EQUIPMENT MAY LOCATED CLOSER THAN 10 FEET TO THE EDGE OF THE ROOF, OR HAND RAIL MUST BE PROVIDED. REFERENCE ALL OF LATEST APPLICABLE CODES, PROVIDE THE MOST STRINGENT.

H. ROOFING CONSULTANT: LOCATE ALL ROOF MOUNTED EQUIPMENT CURBS, TEE TOPS, RAIL SUPPORTS, ETC. **A MINIMUM OF 3 FEET AWAY FROM WALLS, PARAPETS, EXPANSION JOINTS, ETC.** OR AS REQUIRED BY ROOFING CONSULTANT FOR PROPER ROOF FLASHING. REFERENCE ROOFING CONSULTANT DRAWINGS AND ARCHITECTS DRAWINGS FOR MORE INFORMATION.

I. ELECTRICAL COORDINATION: MECHANICAL IS REQUIRED TO COORDINATE WITH ELECTRICAL EQUIPMENT ON ROOF. NOTIFY GENERAL CONTRACTOR OR ENGINEER WHEN CONFLICT IS IDENTIFIED. DO NOT WAIT UNIT INSTALLATION IS COMPLETE.

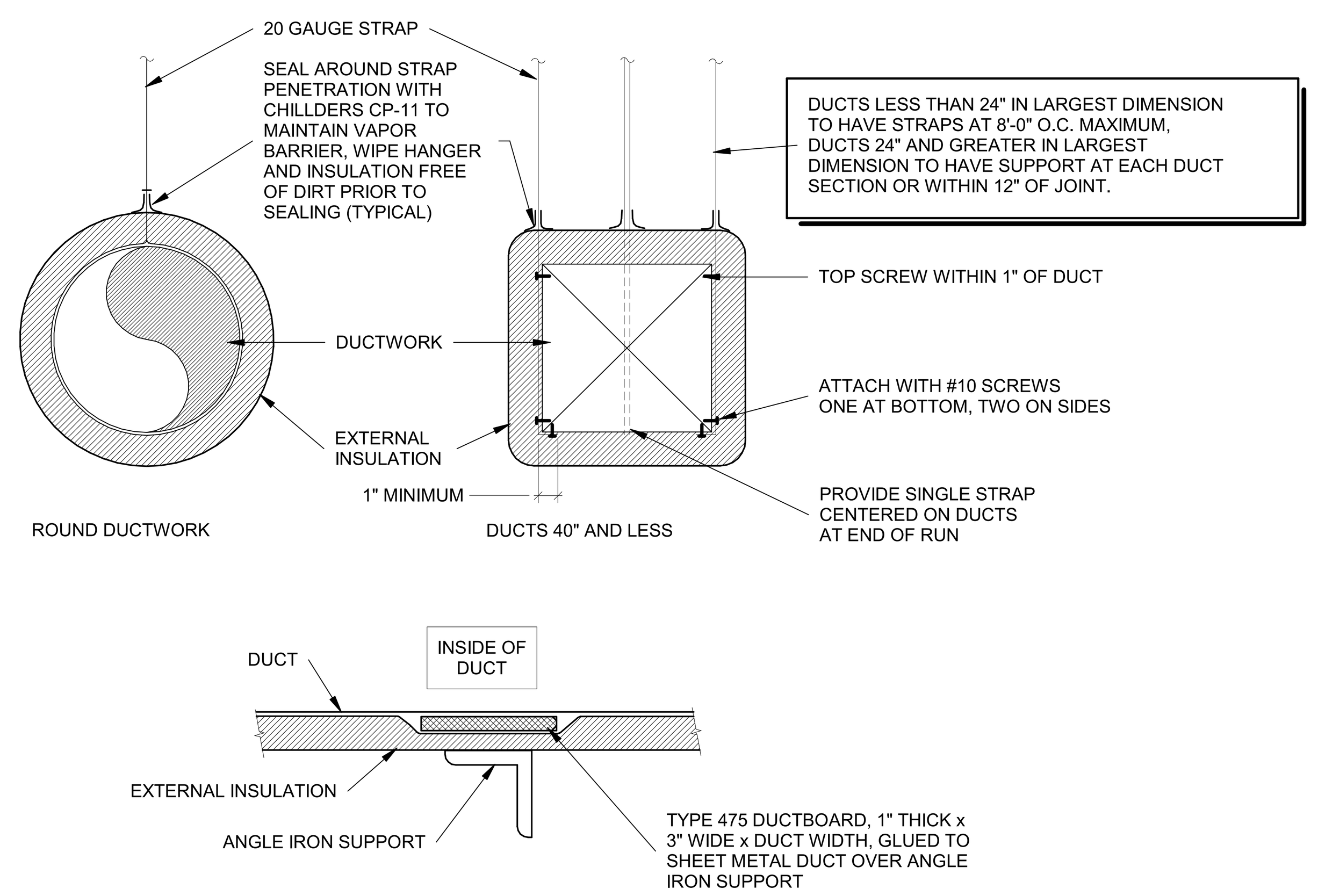
J. ELECTRICAL COORDINATION: COORDINATE WITH ROOF MOUNTED PANELS AND TRANSFORMERS.

K. **ROOFING PENETRATION NOTE:** CONTRACTOR SHALL COORDINATE TO PROVIDE A MINIMUM 2'-0" CLEARANCE AROUND ANY NEW PENETRATIONS WITH EXISTING PENETRATIONS AND WALLS AS REQUIRED FOR THE PROJECT. IF CONFLICT WITH THIS REQUIREMENT ARISES, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ARCHITECT AND ENGINEER.

SCIENCE ROOM SHEET NOTES

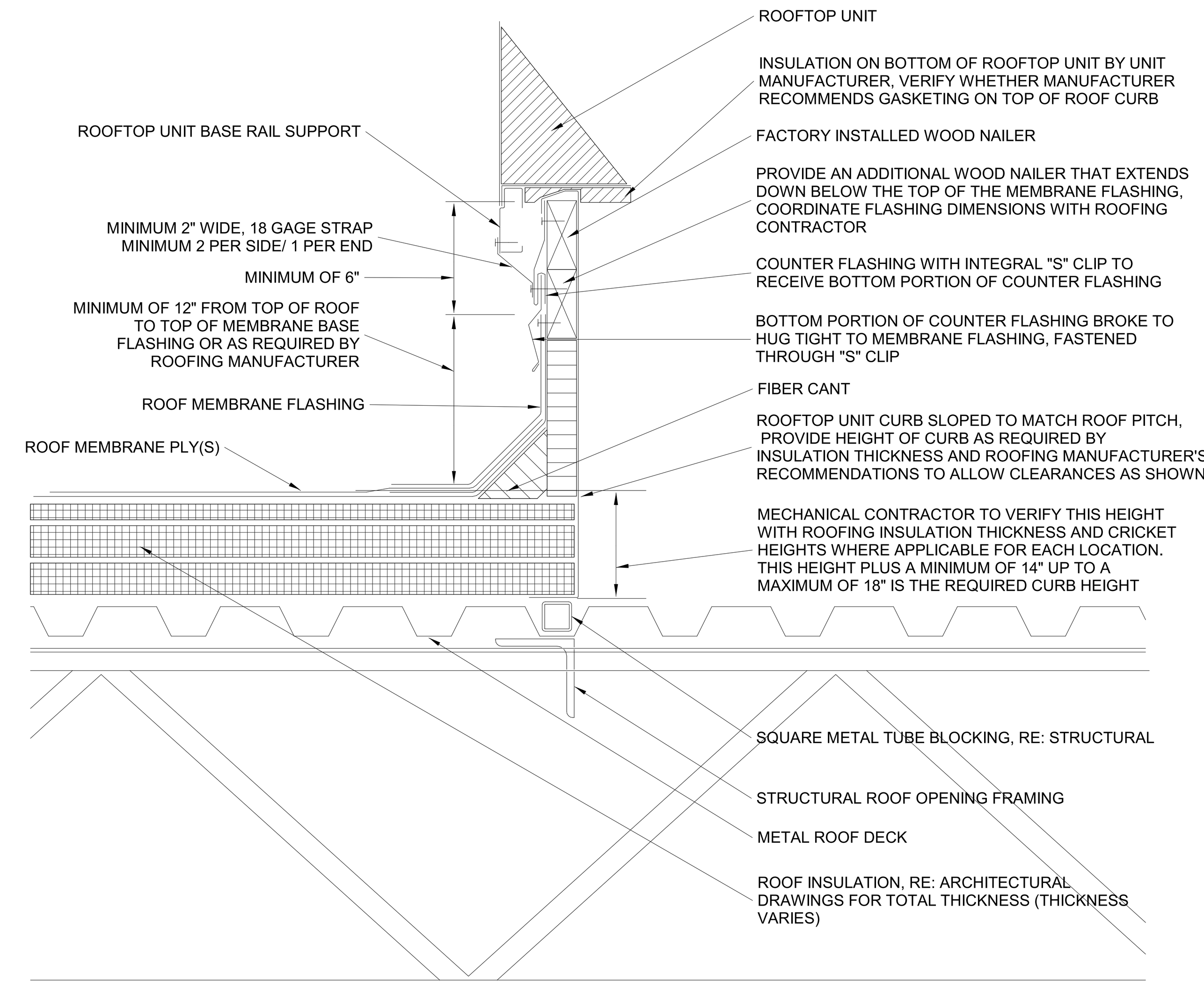
THESE NOTES APPLY TO ALL MECHANICAL PLANS.

A. FIRE SMOKE WALLS: ALL SCIENCE AND PREPROOM W



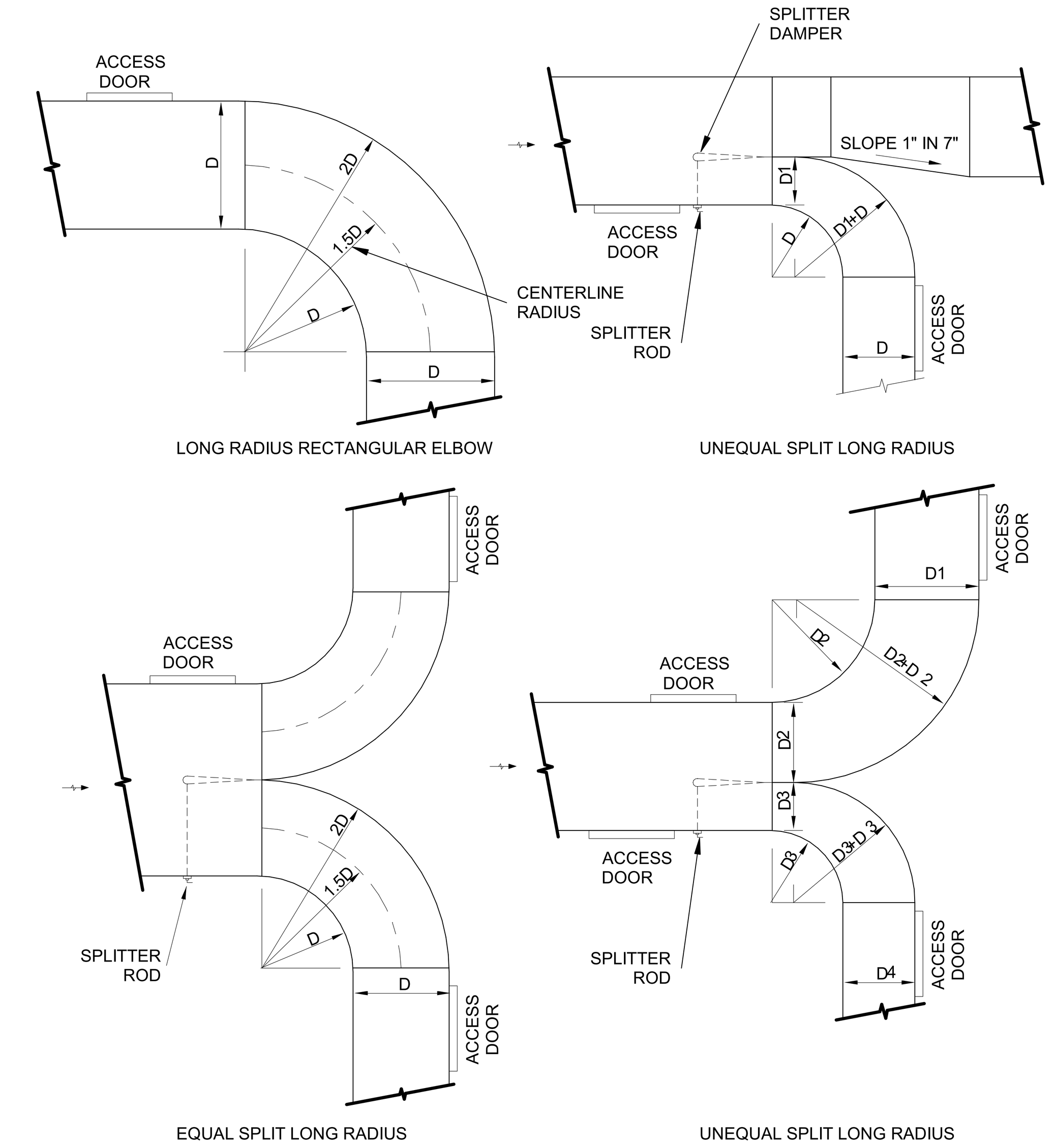
DUCT DETAILS

NO SCALE MDE08



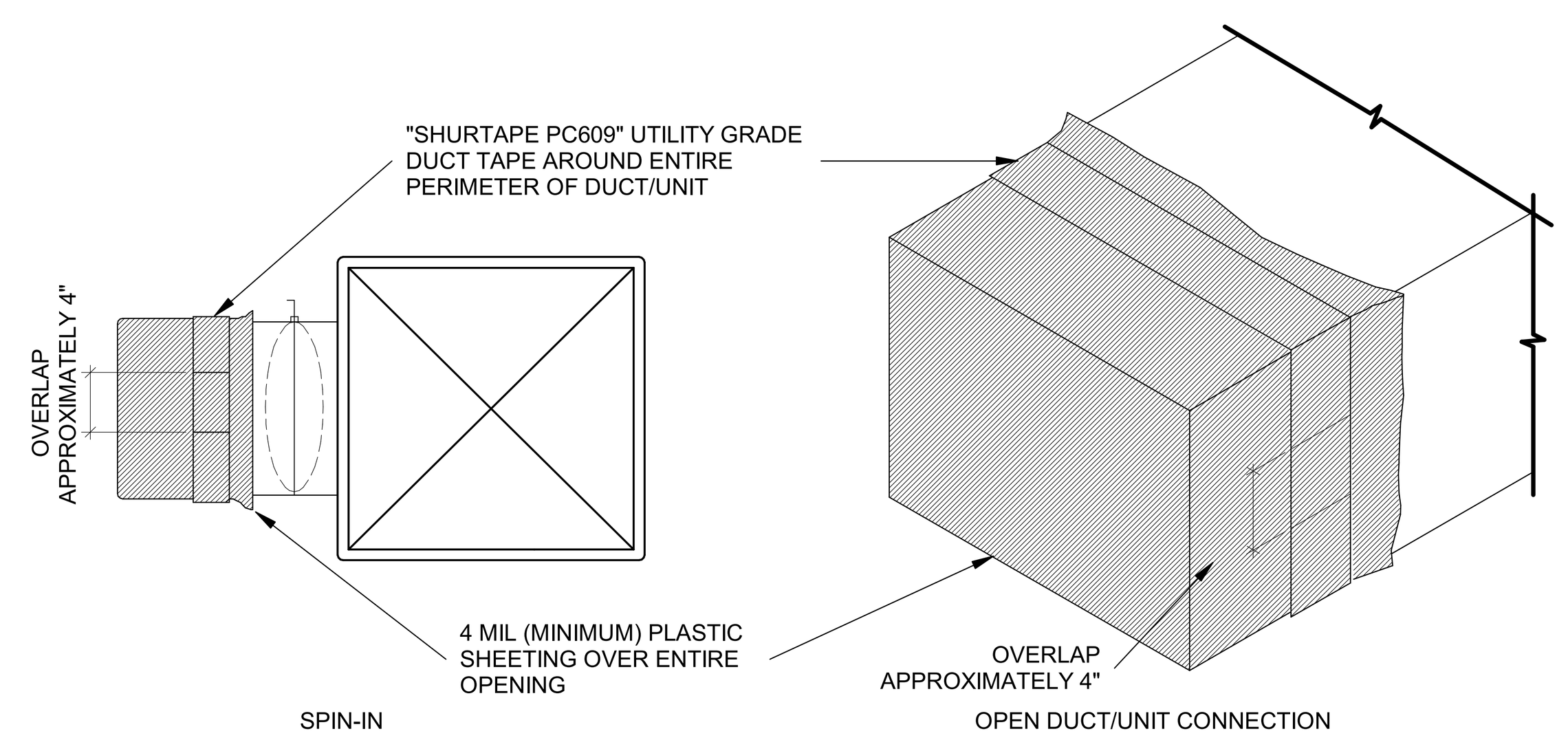
ROOFTOP UNIT CURB/FLASHING DETAIL

SCALE: NONE MDE141



SPLITTER DETAIL

NO SCALE MDE06



A. CAP OPEN ENDS OF ALL DUCTS (INCLUDING SPIN-INS) AND EQUIPMENT WITH PLASTIC TO PREVENT CONSTRUCTION DEBRIS AND DUST FROM ENTERING OPENINGS DURING CONSTRUCTION.

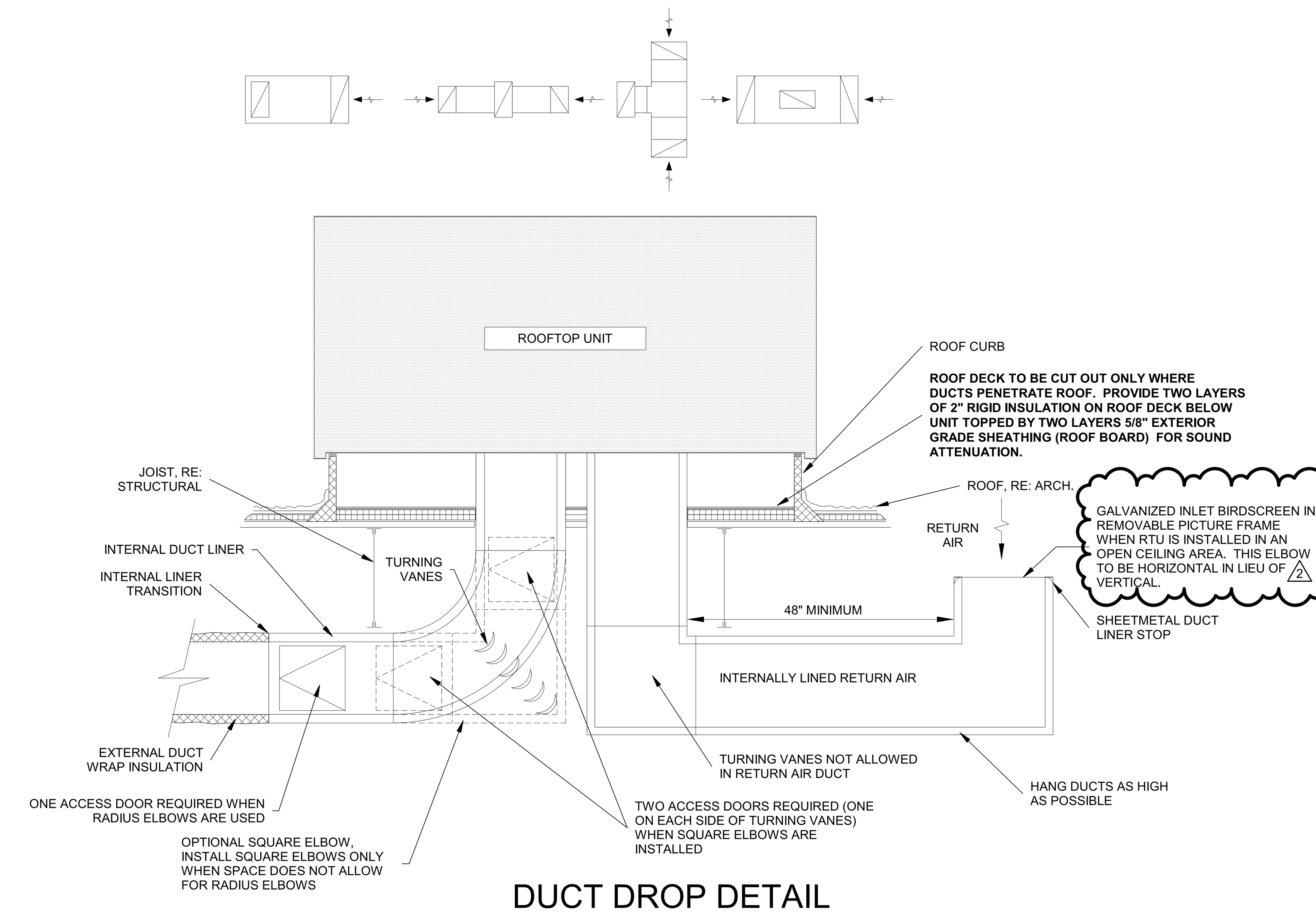
B. COVER ALL OPEN ENDS OF DUCTWORK WHILE SITTING ON GROUND (NOT INSTALLED). ALL PREFABRICATED DUCTWORK IN SHOP SHALL COME WITH ENDS PREWRAPPED WHEN DELIVERED TO THE SITE.

C. CONTRACTOR SHALL CLEAN ALL DUCTWORK THAT IS NOT PROTECTED PROPERLY DURING CONSTRUCTION.

DIRT BUSTER DETAIL

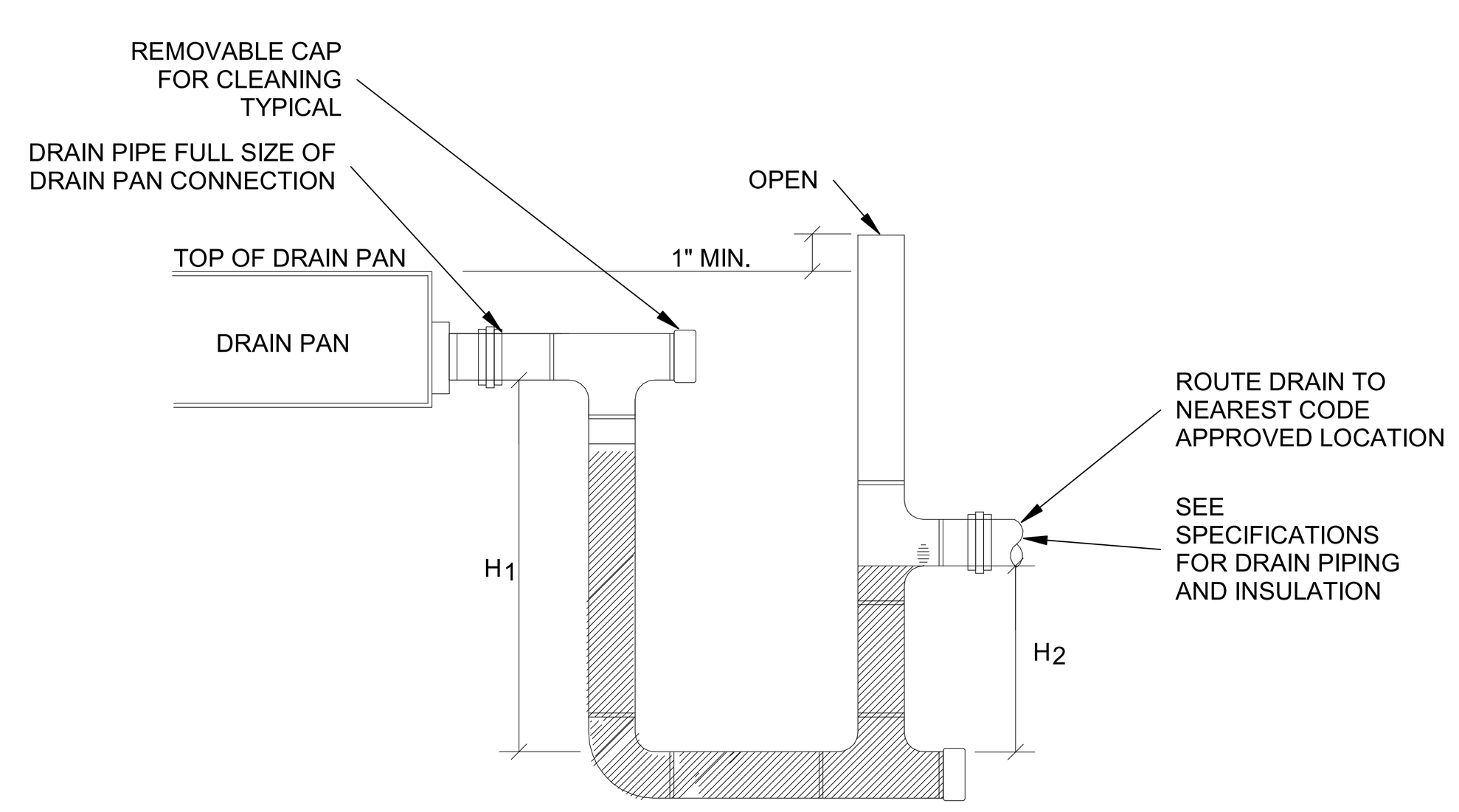
NO SCALE MDE10

TOP VIEWS OF OPTIONAL DUCT CONFIGURATIONS FOR RETURN AIR DUCTWORK. THE MAXIMUM INLET VELOCITY OF EACH OPENING TO BE 500 FEET PER MINUTE. PROVIDE THE APPROPRIATE CONFIGURATION AS REQUIRED BY EACH INDIVIDUAL APPLICATION. SHOW DUCT SIZES ON SHOP DRAWINGS.



DUCT DROP DETAIL

SCALE: NONE MDE131



CALCULATE TRAP DIMENSIONS USING FORMULAS OR DIMENSIONS LISTED BELOW. USE MANUFACTURER'S RECOMMENDATION IF MORE STRINGENT.

FORMULAS FOR DRAW-THRU UNITS
H_1= NEGATIVE STATIC PRESSURE x 1.5 +3.5"
H_2= NEGATIVE STATIC PRESSURE x 0.75 + 2.5"

MINIMUM DIMENSIONS FOR RESIDENTIAL AIRHANDLERS AND FURNACES UP TO 5 TONS
H_1= 5"
H_2= 3.5"

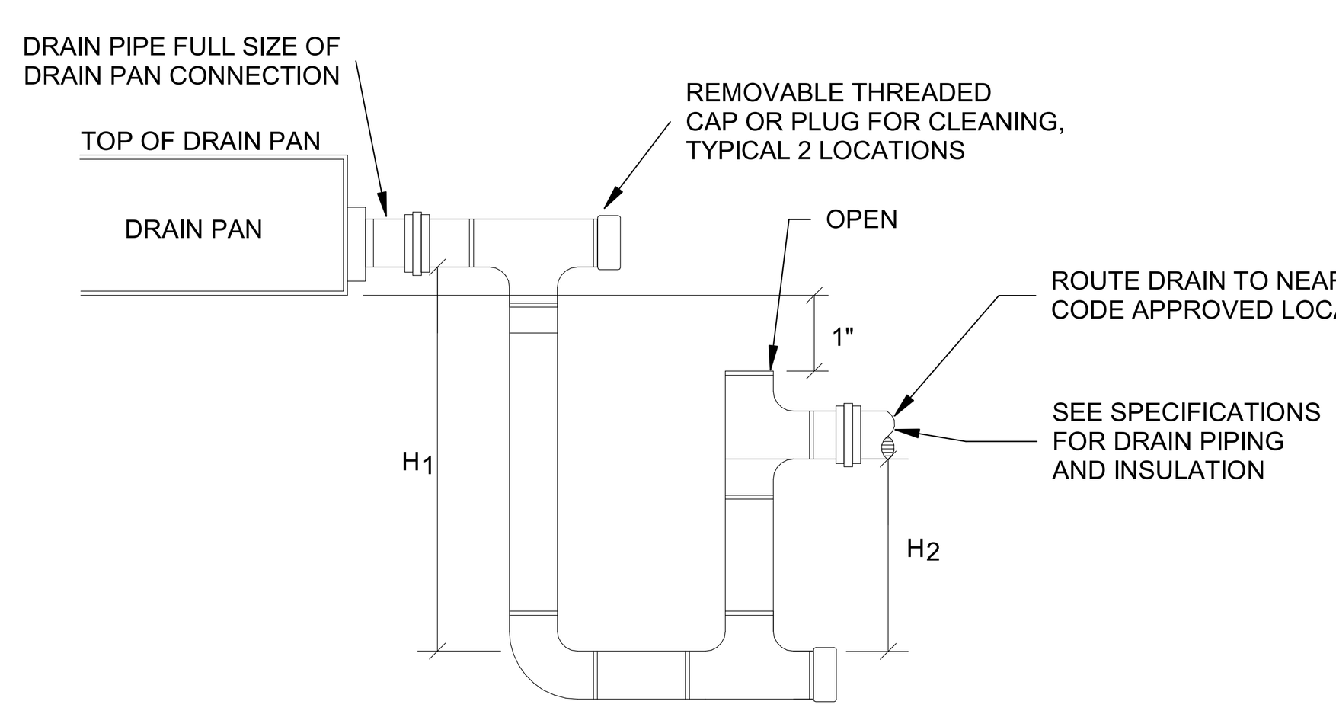
FORMULAS FOR BLOW-THRU UNITS
H_1= H_2+ 0.5"
H_2= MAXIMUM POSITIVE STATIC PRESSURE x 1.5

MINIMUM DIMENSIONS FOR RESIDENTIAL AIR HANDLERS AND FURNACES UP TO 5 TONS
H_1= 3"
H_2= 1.5"

INSTALL 90 DEGREE ELBOW IN OVERFLOW DRAIN CONNECTION OF DRAIN PAN, TURN DOWN INTO AUXILIARY PAN WITH FLOAT SWITCH AND PIPED OFF IF SHOWN OR CALLED OUT ON PLANS

TRAP DETAIL FOR AHU WITH OVERFLOW DRAIN CONNECTION

NO SCALE MDE117



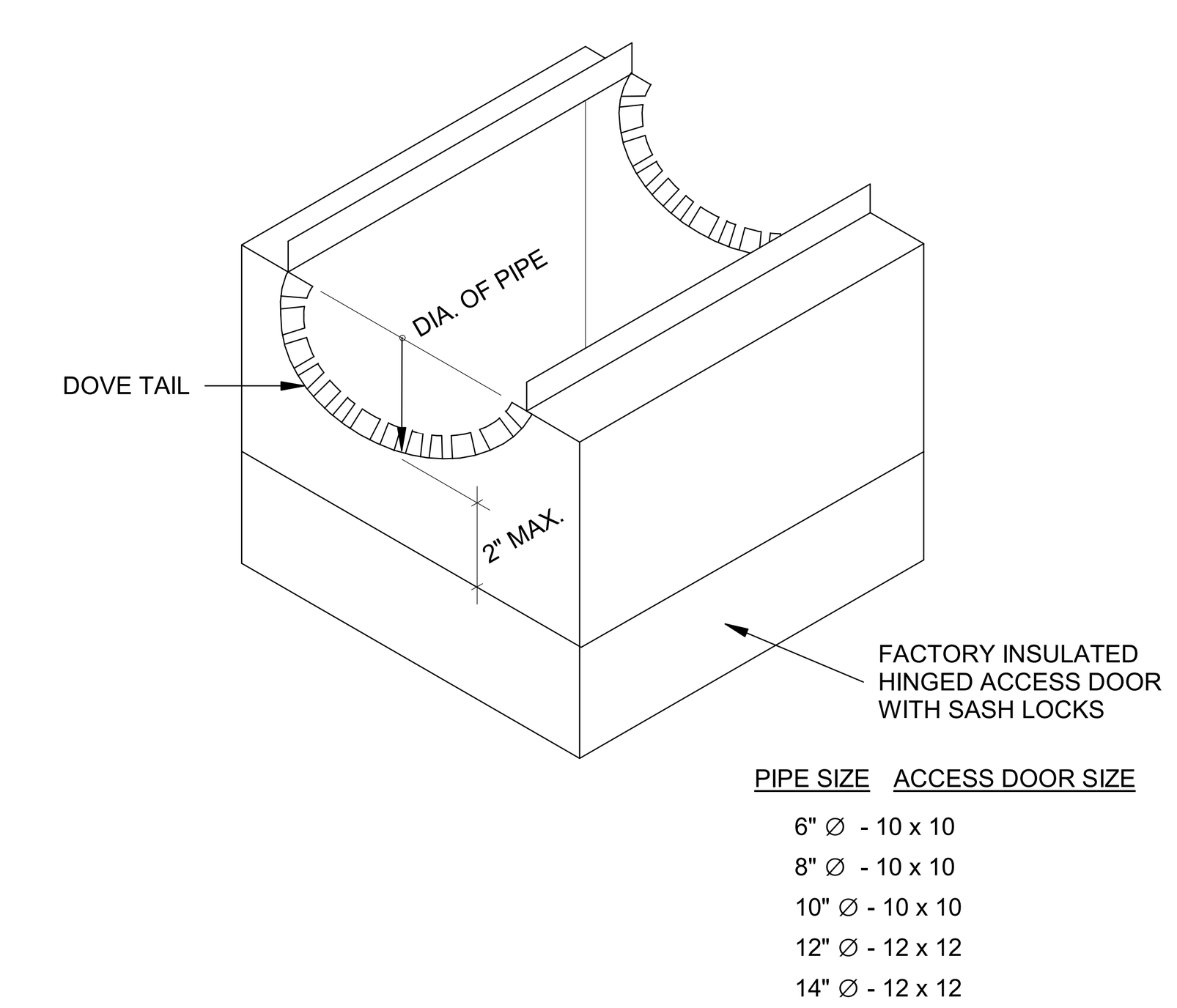
USE DIMENSIONS LISTED BELOW UNLESS MANUFACTURER'S RECOMMENDATIONS ARE MORE STRINGENT

RTU'S AND MULTIZONE RTU'S
H_1= 9"
H_2= 6"

MAU'S
H_1= 12"
H_2= 9"

DEEP SEAL TRAP DETAIL FOR RTU'S AND MAU'S

NO SCALE MDE118



PIPE SIZE	ACCESS DOOR SIZE
6" Ø	10 x 10
8" Ø	10 x 10
10" Ø	10 x 10
12" Ø	12 x 12
14" Ø	12 x 12

SADDLE TAP FOR ACCESS DOOR IN ROUND PIPE

NO SCALE MDE67

Revision / 2 | Date 05/14/25 | Addendum No.3

HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

Project:

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

MEP/ENERGY CONSULTANTS
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DETAILS - MECHANICAL

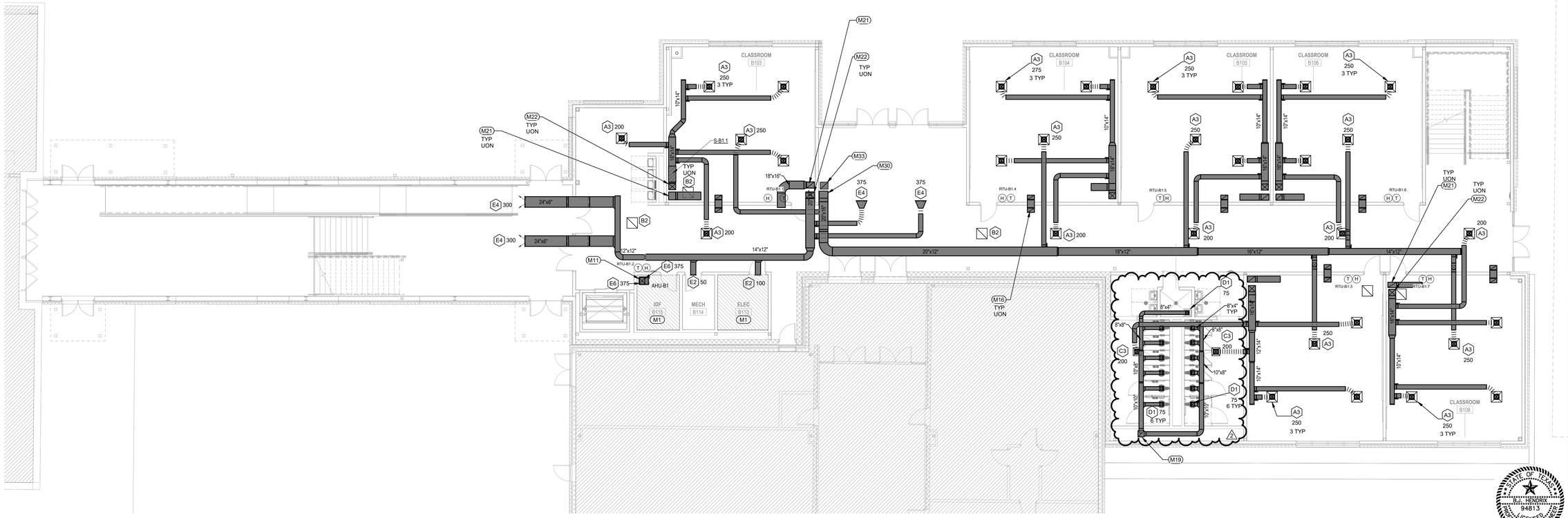
PACKAGE | VOLUME
Job No. 01954-09-01 | Sheet No.
Drawn By: KAM | ISSUE FOR BID
Date: 04/22/2025 | M1.11

5/14/2025 9:40:40 AM
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2025/HaysHSAdd_MEP23.rvt

MECHANICAL KEY NOTES

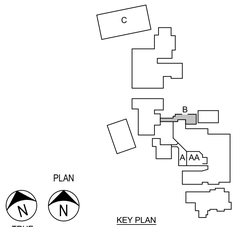
THESE NOTES APPLY TO THIS SHEET ONLY

M1	DO NOT ROUTE ANY DUCTWORK ABOVE THIS AREA.
M11	VERTICAL AIR HANDLING UNIT SETTING ON ANGLE IRON STAND. RETURN AIR THRU ANGLE IRON STAND.
M16	TRANSFER DUCT WITH 90 DEGREE ELBOW ON EACH END. 14/12 UNLESS OTHERWISE NOTED.
M19	EXHAUST AIR DUCT TO/FROM FLOOR ABOVE.
M21	RETURN AIR DUCT TO/FROM FLOOR ABOVE.
M22	SUPPLY AIR DUCT TO/FROM FLOOR ABOVE.
M30	OUTSIDE AIR DUCT TO/FROM FLOOR ABOVE.
M33	TRANSFER AIR DUCT TO/FROM FLOOR ABOVE.



01 FIRST FLOOR PLAN - AREA B - MECHANICAL

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



Revision / 2 — Date 05/14/25 — Addendum No.3

Project: HAYS HIGH SCHOOL - JACK C. HAYS 2025 ADDITIONS + RENOVATIONS FOR HAYS CISD BUDA, TX

STATE OF TEXAS — BRIAN J. HENDRIX — 94813 — LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO. 94813 ON 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

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FIRST FLOOR PLAN - AREA B - MECHANICAL

PACKAGE — VOLUME

Job No. 01954-09-01

Drawn By: KAM

Date: 04/22/2025

Sheet No. ISSUE FOR BID M2.1B1

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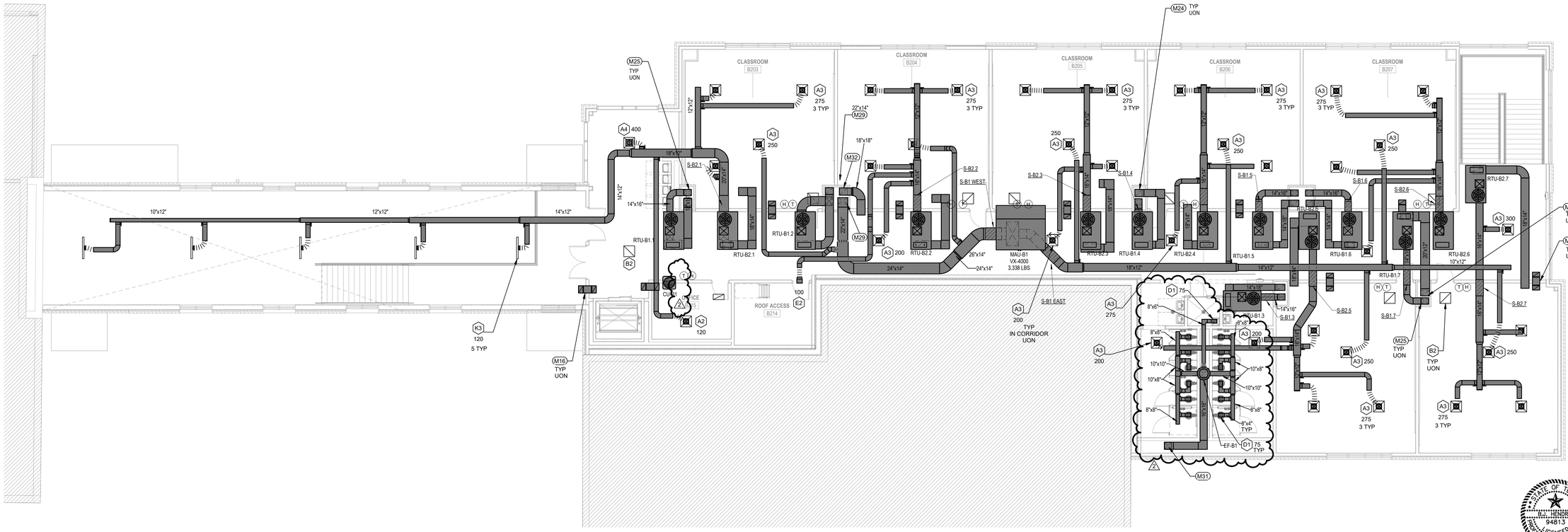
Autodesk Docs://HAYS CISD - HAYS HS ADD RENO 2025/HaysHSAdd_MEP23.rvt

MECHANICAL KEY NOTES

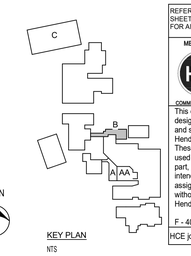
THESE NOTES APPLY TO THIS SHEET ONLY

M16	TRANSFER DUCT WITH 90 DEGREE ELBOW ON EACH END. 14/12 UNLESS OTHERWISE NOTED.
M24	RETURN AIR DUCT TO/FROM FLOOR BELOW.
M25	SUPPLY AIR DUCT TO/FROM FLOOR BELOW.
M29	OUTSIDE AIR DUCT TO/FROM FLOOR BELOW.
M31	EXHAUST AIR DUCT TO/FROM FLOOR BELOW.
M32	TRANSFER AIR DUCT TO/FROM FLOOR BELOW.



01 SECOND FLOOR PLAN - AREA B - MECHANICAL

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



KEY PLAN
NTS

PLAN
N
TRUE
N

Revision /	Date	
2	05/14/25	Addendum No.3

Project:
HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
BJ HENDRIX
94813
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SECOND FLOOR PLAN - AREA B - MECHANICAL

PACKAGE	VOLUME
Job No. 019564-09-01	Sheet No. ISSUE FOR BID M2.1B2
Drawn By: KAM	
Date: 04/22/2025	

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MISCELLANEOUS EQUIPMENT SCHEDULES

GENERAL NOTES:

A. ELECTRICIAN TO PROVIDE 120V POWER TO ALL EQUIPMENT FROM NEAREST PANEL HAVING CAPACITY, UNLESS OTHERWISE NOTED.

B. ELECTRICAL CONTRACTOR IS TO PROVIDE ALL POWER AND LABOR TO MAKE FINAL CONNECTIONS TO ALL EQUIPMENT SHOWN IN CONTRACT DOCUMENTS. POWER MAY BE SHOWN IN GENERAL LOCATION. IT IS EXPECTED THAT THE ELETRICAL CONTRACTOR COORDINATE FINAL LOCATION FOR ROUGH-IN AND CONNECTION REQUIREMENTS WITH EXACT EQUIPMENT BEING INSTALLED. THESE ITEMS INCLUDE, BUT NOT LIMITED TO, BOOK SECURITY, EXHAUST FANS, KILNS, HAND DRYERS, SENSOR OPERATED PLUMBING DEVICES, ELECTRIC OVERHEAD DOORS, FIRE SMOKE DAMPERS, AIR PURIFICATION UNITS, ETC.

LIGHTING CONTROL
REFERENCE LIGHTING CONTROL DETAILS AND NOTES.
1. EXTERIOR LIGHTS BY BAS.
2. INTERIOR LIGHTS BY 'NLIGHT'.

POWER FOR SPECIAL SYSTEMS POWER SUPPLIES
1. ELECTRICAL CONTRACTOR TO PROVIDE POWER TO ALL SECURITY, FIRE ALARM, ACCESS CONTROL, ETC. POWER SUPPLIES. COORDINATE EXACT LOCATION WITH SPECIAL SYSTEMS CONTRACTOR AND FLOOR PLANS. PROVIDE DEDICATED LOW VOLTAGE CIRCUIT TO NEAREST PANEL HAVING CAPACITY U.O.N.
2. LABEL ALL SPECIAL SYSTEMS POWER SUPPLIES WITH PANEL AND CIRCUIT NUMBERS.

RECEPTACLES AT MILLWORK
COORDINATE FINAL RECEPTACLE LOCATIONS AND ELEVATIONS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. REVIEW ARCHITECTURAL INTERIOS ELEVATIONS FOR FINAL LAYOUTS OF EQUIPMENT TO BE POWERED. REFERENCE DEVICE MOUNTING HEIGHT DETAIL FOR MOUNTING HEIGHTS.

ELECTRIC WATER COOLER (EWC) POWER
RECEPTACLE FOR POWER TO BE LOCATED BEHIND EWC AND HAVE GFCI BREAKER AT PANEL. COORDINATE FINAL ROUGH-IN LOCATION WITH ACTUAL EQUIPMENT.

KITCHEN EXHAUST AND SUPPLY FANS
PROVIDE SINGLE POINT CONNECTION TO CONTROL PANEL. PROVIDE WIRE CONDUIT FOR CONNECTION FROM CONTROL PANEL (PANEL MAY BE LOCATED IN KITCHEN OR ON ROOF) TO ALL KEF'S AND TO KSP'S ON ROOF. REFERENCE EXHAUST FAN SCHEDULE ON MECHANICAL SHEETS FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR TO PROVIDE ALL CONTROL WIRING AND MAKE ALL TERMINATION'S AND FEED THROUGH CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. CONTROL VOLTAGE TO BE OBTAINED FROM HOOD LIGHT CIRCUIT. TYPE OF CONNECTION VARIES BY MANUFACTURER, COORDINATE ALL REQUIREMENTS WITH ACTUAL FANS BEING SUPPLIED.

MOTORIZED CURTAIN / BLINDS / SHADES
CIRCUIT IS SHOWN IN GENERAL AREA AND DOES NOT REPRESENT QUANTITY OF LINE VOLTAGE CONNECTIONS. COORDINATE WITH ARCHITECT SPECIFICATIONS, SCHEDULES AND EXACT CURTAIN BEING PROVIDED FOR ALL ROUGH-IN REQUIREMENTS. CONNECT POWER TO MASTER CONTROL UNIT AND EACH CURTAIN / BLINDS / SHADES PER MANUFACTURE RECOMMENDATIONS. THIS INFO FOR BIDDING PURPOSES ONLY.PROVIDE ALL REQUIRED COMPONENTS FOR COMPLETE WORKABLE SYSTEM. PROVIDE ROUGH-IN AND CONNECTING CONDUIT FOR CONTROL OF BLINDS. WHEN NO LOCATION FOR CONTROL CAN BE COORDINATED, LOCATE NEXT TO ROOM LIGHT SWITCH AND LABEL. COORDINATE FINAL ROUGH-IN LOCATION AND FINAL REQUIREMENTS WITH OWNER/ARCHITECT.

MOTORIZED DAMPERS
PROVIDE 120V POWER TO ALL MOTORIZED DAMPERS SHOWN ON MECHANICAL DRAWINGS. COORDINATE DAMPER CONTROL REQUIREMENTS WITH MECHANICAL DRAWINGS.

OIL INTERCEPTOR
WHERE THE LOCAL AHJ REQUIRES AN OIL INTERCEPTOR THE CONTRACTOR SHALL PROVIDE 3/4" CONDUIT AND CONTROL CABLE FROM THE OIL INTERCEPTOR LOCATION TO THE NEAREST JANITOR CLOSET OR NEAREST ARCHITECT APPROVED EXTERIOR WALL OR AS SHOWN ON PLANS. CONTRACTOR SHALL COORDINATE PREFERRED LOCATION WITH ARCHITECT. CONTRACTOR SHALL ALSO PROVIDE 120V POWER TO THE CONTROL PANEL LOCATION FROM THE NEAREST 120V ELECTRICAL PANEL.

EXHAUST FAN
ELECTRICAL CONTRACTOR SHALL WIRE ALL EXHAUST FANS TO BE CONTROLLED PER "EXHAUST FAN SCHEDULE" ON MECHANICAL SHEET. ELECTRICAL CONTRACTOR TO PROVIDE ALL RELAYS, CONTACTORS, SPRING WOUND TIMERS, ETC., AS REQUIRED PER SCHEDULE TO OPERATE AND CONTROL EXHAUST FAN. IF NO CONTROL IS SPECIFIED, EXHAUST FAN SHALL ENERGIZE WHEN LIGHTS IN ANY ROOM IT SERVES ARE POWERED ON. REFERENCE DETAIL ON ELECTRICAL SHEET FOR ADDITIONAL INFORMATION.

PROJECTION SCREEN
PROVIDE POWER FOR SCREEN. PROVIDE ROUGH-IN AND CONNECTING CONDUIT FOR CONTROL OF SCREEN. COORDINATE EXACT ROUGH-IN LOCATION AND FINAL REQUIREMENTS WITH OWNER/ARCHITECT.

DISHWASHER
PROVIDE A SWITCH ABOVE COUNTER FOR DISCONNECTING MEANS TO DISHWASHER. FIELD COORDINATE LOCATION. RECEPTACLE FOR POWER TO DISHWASHER TO BE BE LCOATED IN ACCESSIBLE CABINET BELOW SINK AND BE FED BY GFCI BREAKER AT PANEL.

FIRE DOOR
POWER FOR FIRE DOOR. COORDINATE FINAL LOCATION AND POWER REQUIREMENTS WITH ACTUAL DOOR BEING SUPPLIED. INSTALL KEYED SWITCHES PROVIDED BY DOOR MANUFACTURER ON BOTH SIDES.

MOTORIZED OVERHEAD DOORS
PROVIDE POWER FOR DOOR AS SHOWN ON PLANS. PROVIDE SNAP SWITCH AS DISCONNECTING MEANS ADJACENT TO DOOR ABOVE CEILING. PROVIDE ABOVE CEILING CONTROLS J-BOX WITH CONDUIT TO DOOR OPERATOR FOR CONTROLS CABLE ROUTING. PROVIDE J-BOX AT MID-OPENING HEIGHT WITH CONDUIT TO ABOVE CEILING CONTROLS J-BOX ON ONE SIDE OF DOOR FOR BOTTOM BAR SENSING EDGE CONNECTIONS. PROVIDE J-BOX AT 6" AFF ON EACH SIDE OF DOOR WITH CONDUIT TO ABOVE CEILING CONTROLS J-BOX FOR PHOTO EYES ON EACH SIDE OF DOOR. PROVIDE J-BOX FOR DOOR CONTROL STATION AT LOCATION DIRECTED BY ARCHITECT OR OWNER WITH CONDUIT TO ABOVE CEILING CONTROLS J-BOX. PROVIDE CONTROL WIRES AS SPECIFIED BY THE MANUFACTURER AND MAKE ALL CONNECTIONS REQUIRED IN INSTALLATION MANUAL. DO NOT MAKE ANY CONNECTIONS THAT ARE INDICATED TO BE COMPLETED BY THE DOOR CONTRACTOR IN THE INSTALLATION MANUAL.

MECHANICAL SYSTEMS COMMISSIONING

THIS PROJECT HAS A TOTAL MECHANICAL EQUIPMENT CAPACITY OF 480,000 BTU/H OR MORE THEREFORE COMMISSIONING MUST BE PROVIDED PER THE LATEST STATE ADOPTED ENERGY CODE, 2021 IECC. COORDINATE THE COMMISSIONING SCOPE WITH THE OWNER SELECTED COMMISSIONING AGENT.

LIGHTING CONTROLS SYSTEM COMMISSIONING

LIGHTING CONTROL SYSTEM COMMISSIONING MUST BE PROVIDED PER THE LATEST ADOPTED ENERGY CODE, 2021 IECC, SECTION C408.3. COORDINATE THE COMMISSIONING SCOPE WITH THE OWNER SELECTED COMMISSIONING AGENT.

OWNER REQUESTED AIR PURIFIER

CONTRACTOR TO PROVIDE AND INSTALL "NOVAERUS MODEL NV500W" IN EACH ROOM AND IN THE QUANTITY LISTED BELOW. UNIT TO BE INSTALLED AT 6'-8" TO THE BOTTOM OF THE UNIT. EACH UNIT IS TO BE LOCATED ON A NON-TEACHING WALL. PROVIDE 120V-1PH DUPLEX RECEPTACLE NEXT TO EACH UNIT. CONNECT RECEPTACLE TO 120V CONVENIENCE RECEPTACLE CIRCUIT DIRECTLY BELOW AIR PURIFIER RECEPTACLE AS SHOWN.

WHERE APPLICABLE, UNITS IN GYM TO BE LOCATED AT 7'-10" TO THE BOTTOM OF THE UNITS. PROVIDE WIRE GUARD OVER UNITS IN THE GYM. UNITS IN THE CAFETERIA AND LIBRARY ARE TO BE INSTALLED AT 7'-10" TO THE BOTTOM OF THE UNITS. PROVIDE 120V-1PH DUPLEX RECEPTACLE NEXT TO EACH UNIT FOR THE GYM, CAFETERIA, AND LIBRARY. CONNECT RECEPTACLE TO CONVENIENCE RECEPTACLE CIRCUIT DIRECTLY BELOW AIR PURIFIER RECEPTACLE AS SHOWN.

VERIFY EXACT LOCATION AND MOUNTING HEIGHT IN EACH ROOM WITH THE ARCHITECT AND OWNER PRIOR TO ROUGH-IN. UNIT TO PLUG IN WITH THE PROVIDED CORD AND GROUNDED PLUG (6'-6" CORD, 120V-1PH- 3 AMPS).

NUMBER OF UNITS PER ROOM:

CLASSROOMS:	1
NURSE:	N/A
OFFICE RECEPTION:	N/A
GYM:	N/A
CAFETERIA:	2
LIBRARY:	N/A

BRANCH CIRCUIT WIRE AND CONDUIT SCHEDULE

NOTE:
A. PROVIDE INDIVIDUAL NEUTRALS FOR EACH CIRCUIT. NO SHARED NEUTRALS ALLOWED.

C - CONDUIT G - GROUND L - LINE OR PHASE N - NEUTRAL

MARK	WIRE AND CONDUIT	SYSTEM	MARK	WIRE AND CONDUIT	SYSTEM	MARK	WIRE AND CONDUIT	SYSTEM
1	2#12, 1/2"C.	LN	32	3#4, 1" C.	LLL	63	4#1/0, 1#6G., 2" C.	LLLNG
2	2#12, 1#12G., 1/2" C.	LNG	33	3#4, 1#8G., 1" C.	LLNG	64	2#2/0, 1 1/2" C.	LN
3	2#12, 1#12G., 1/2" C.	LLG	34	3#4, 1#8G., 1" C.	LLLG	65	2#2/0, 1#6G., 1 1/2"C.	LNG
4	3#12, 1/2" C.	LLL	35	4#4, 1#8G., 1 1/4" C.	LLLNG	66	2#2/0, 1#6G., 1 1/2" C.	LLG
5	3#12, 1#12G., 1/2" C.	LLNG	36	2#3, 1" C.	LN	67	3#2/0, 1 1/2" C.	LLL
6	3#12, 1#12G., 1/2" C.	LLLG	37	2#3, 1#8G., 1"C.	LNG	68	3#2/0, 1#6G., 2" C.	LLNG
7	4#12, 1#12G., 1/2" C.	LLLNG	38	2#3, 1#8G., 1" C.	LLG	69	3#2/0, 1#6G., 2" C.	LLLG
8	2#10, 1/2"C.	LN	39	3#3, 1" C.	LLL	70	4#2/0, 1#6G., 2" C.	LLLNG
9	2#10, 1#10G., 1/2" C.	LNG	40	3#3, 1#8G., 1 1/4" C.	LLNG	71	2#3/0, 1 1/2" C.	LN
10	2#10, 1#10G., 1/2" C.	LLG	41	3#3, 1#8G., 1 1/4" C.	LLLG	72	2#3/0, 1#4G., 2" C.	LNG
11	3#10, 1/2" C.	LLL	42	4#3, 1#8G., 1 1/4" C.	LLLNG	73	2#3/0, 1#4G., 2" C.	LLG
12	3#10, 1#10G., 1/2" C.	LLNG	43	2#2, 1"C.	LN	74	3#3/0, 2" C.	LLL
13	3#10, 1#10G., 1/2" C.	LLLG	44	2#2, 1#6G., 1" C.	LNG	75	3#3/0, 1#4G., 2" C.	LLNG
14	4#10, 1#10G., 1/2" C.	LLLNG	45	2#2, 1#6G., 1" C.	LLG	76	3#3/0, 1#4G., 2" C.	LLLG
15	2#8, 1/2" C.	LN	46	3#2, 1 1/4" C.	LLL	77	4#3/0, 1#4G., 2 1/2" C.	LLLNG
16	2#8, 1#10G., 3/4" C.	LNG	47	3#2, 1#6G., 1 1/4" C.	LLNG	78	2#4/0, 2" C.	LN
17	2#8, 1#10G., 3/4" C.	LLG	48	3#2, 1#6G., 1 1/4" C.	LLLG	79	2#4/0, 1#4G., 2" C.	LNG
18	3#8, 3/4" C.	LLL	49	4#2, 1#6G., 1 1/4" C.	LLLNG	80	2#4/0, 1#4G., 2" C.	LLG
19	3#8, 1#10G., 3/4" C.	LLNG	50	2#1, 1 1/4" C.	LN	81	3#4/0, 2" C.	LLL
20	3#8, 1#10G., 3/4" C.	LLLG	51	2#1, 1#6G., 1 1/4" C.	LNG	82	3#4/0, 1#4G., 2 1/2" C.	LLNG
21	4#8, 1#10G., 1" C.	LLLNG	52	2#1, 1#6G., 1 1/4" C.	LLG	83	3#4/0, 1#4G., 2 1/2" C.	LLLG
22	2#6, 3/4" C.	LN	53	3#1, 1 1/2" C.	LLL	84	4#4/0, 1#4G., 2 1/2" C.	LLLNG
23	2#6, 1#10G., 3/4" C.	LNG	54	3#1, 1#6G., 1 1/2" C.	LLNG	85	2#250, 3" C.	LN
24	2#6, 1#10G., 3/4" C.	LLG	55	3#1, 1#6G., 1 1/2" C.	LLLG	86	2#250, 1#4G., 3" C.	LNG
25	3#6, 3/4"C.	LLL	56	4#1, 1#6G., 1 1/2" C.	LLLNG	87	2#250, 1#4G., 3" C.	LLG
26	3#6, 1#10G., 3/4" C.	LLNG	57	2#1/0, 1 1/4" C.	LN	88	3#250, 3" C.	LLL
27	3#6, 1#10G., 3/4" C.	LLLG	58	2#1/0, 1#6G., 1 1/2" C.	LNG	89	3#250, 1#4G., 3" C.	LLNG
28	4#6, 1#10G., 1" C.	LLLNG	59	2#1/0, 1#6G., 1 1/2"C.	LLG	90	3#250, 1#4G, 3" C.	LLLG
29	2#4, 3/4" C.	LN	60	3#1/0, 1 1/2" C.	LLL	91	4#250, 1#4G., 3" C.	LLLNG
30	2#4, 1#8G., 1" C.	LNG	61	3#1/0, 1#6G., 2" C.	LLNG			
31	2#4, 1#8G., 1"C.	LLG	62	3#1/0, 1#6G., 2" C.	LLLG			

ELECTRICAL ABBREVIATION SCHEDULE

A	AMPERES
A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AL	ALUMINUM
AUTO	AUTOMATIC
AUX	AUXILIARY
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONTR	CONTRACTOR
CTV	CABLE TELEVISION
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
DN	DOWN
ELEC	ELECTRIC/ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EX	EXISTING
FA	FIRE ALARM
FF	FINISHED FLOOR
FLR	FLOOR/FLOORING
G	GROUND
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPT
HD	HEAVY DUTY
HP	HORSEPOWER
IMC	INTERMEDIATE METAL CONDUIT
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
LGT	LIGHT/LIGHTING
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MSB	MAIN SWITCHBOARD
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON-FUSED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER(S)
OE	OVERHEAD ELECTRIC
OT	OVERHEAD TELEPHONE
PC	PLUMBING CONTRACTOR
PH	PHASE
PNL	PANEL
PVC	POLYVINYL CHLORIDE
RE:	REFERENCE/REFER TO
RECPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
SCH	SCHEDULE
SPD	SURGE PROTECTIVE DEVICE
SPEC	SPECIFICATIONS
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UC	UNDERGROUND CONDUIT
UE	UNDERGROUND ELECTRIC
UL	UNDERWRITER'S LABORATORIES
UON	UNLESS OTHERWISE NOTED
UT	UNDERGROUND TELEPHONE
V	VOLTS/VOLTAGE
VA	VOLT-AMPERES
W	WATTS
W/	WITH
W/O	WITHOUT
WP	WEATHER PROOF
XFMR	TRANSFORMER

SPECIAL SYSTEM SYMBOL SCHEDULE

NOTE:
A. REFERENCE OWNER SPECIFICATIONS FOR ADDITIONAL INFORMATION.
B. THIS IS FOR GENERAL LOCATION ONLY. ALL DEVICES AND CABLING PER OWNER SPECIFICATIONS.
C. ALL DEVICE HEIGHTS ARE REFERENCED TO CENTER OF DEVICE.

SYMBOL	DESCRIPTION	REMARKS
FACP	FIRE ALARM CONTROL PANEL	
FAAP	FIRE ALARM ANNUNCIATOR PANEL	
RVEP	REMOTE VOICE EVACUATION PANEL	
SWP	SPEAKER, WALL MOUNTED WEATHER RESISTANT, 120" AFF U.O.N.	
TV	TELEVISION POWER, 72" AFF U.O.N. OR SPECIFIED BY TECHNOLOGY CONSULTANT/OWNER	
UC	UTILITY CONTROLLER (REFERENCE UTILITY CONTROLLER BLOCK NOTE)	
	CLOCK, SINGLE FACED WALL MOUNTED, 96"± AFF UON	
	CLOCK, DOUBLE FACED WALL MOUNTED, 96"± AFF UON	
CDU	CENTRAL DISPLAY UNIT	
WP	WEATHER PROOF EXTERIOR FIRE ALARM HORN	
	SECURITY KEY PAD, 48" AFF UON	3/4"C TO ABOVE CEILING
	BADGE READER FOR SECURITY SYSTEM, 48" AFF UON	3/4"C TO ABOVE CEILING
	LIGHTING RELAY ZONE OVERIDE CONTROL BUTTON	3/4"C TO ABOVE CEILING
M	MICROPHONE JACK	3/4"C TO ABOVE CEILING
	ROUGH-IN FOR CAMERA (WEATHERPROOF BOX FLUSH WITH EXTERIOR WALL)	1"C TO ABOVE CEILING
	CEILING MOUNTED CAMERA LOCATION (DATA DROP, CAMERA BY OTHERS)	
	INTERCOM PROGRAM PHONE LOCATION	3/4"C TO ABOVE CEILING
	MAG DOOR HOLD OPEN. POWERED BY SPECIAL SYSTEMS	
LS	LOCK DOWN DEVICE	3/4"C TO ABOVE CEILING
D	120V POWER FOR DOOR SECURITY POWER SUPPLY (COORDINATE WITH DOOR MFR)	
HC	120V POWER FOR HANDICAP DOOR POWER SUPPLY (REF MISC EQUIPMENT SCHEDULE)	
B	DOOR BUZZER, CONFIRM LOCATION WITH OWNER.	3/4"C TO ABOVE CEILING
V	INTERCOM VOLUME CONTROL	3/4"C TO ABOVE CEILING
OH	OVERHEAD DOOR POWER	
OC	OVERHEAD DOOR CONTROL LOCATION	
S	INTERCOM SPEAKER	
HD	HAND DRYER POWER (PROVIDE SNAP SWITCH DISCONNECT ABOVE CEILING)	SPECIFIED BY ARCHITEC
DW	DISHWASHER POWER	
CF	CIRCULATING FAN POWER	
	WALL MOUNTED MOTION SENSOR	
F	FIRE SPRINKLER POWER	
SL	MOTORIZED BLINDS	

DEVICE SYMBOL SCHEDULE

NOTES:
A. ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS.
B. ALL DEVICE PART NUMBERS ARE HUBBELL, UNLESS NOTED OTHERWISE.
C. ALL DEVICE HEIGHTS ARE REFERENCED TO CENTER OF DEVICE.

	SINGLE RECEPTACLE 20A/120V 18" AFF UON	HBL5361W
	DUPLEX RECEPTACLE 20A/120V 18" AFF UON-TAMPER RESISTANT, UON	CR20WHITR
U	DUPLEX RECEPTACLE WITH DUAL USB 20A/120V 18" AFF UON	USB20ACPDW
	DUPLEX RECEPTACLE 20A/120V 18" AFF UON WITH GROUND FAULT INTERRUPTER	GFTRST20W
	SWITCHED DUPLEX RECEPTACLE 20A/120V 18" AFF UON - TOP CONTROLLED	BR20C1WHITR
	FOURPLEX RECEPTACLE 20A/120V 18" AFF UON	(2) CR20WHITR
U	FOURPLEX RECEPTACLE 20A/120V, (1) WITH DUAL USB 18" AFF UON	(1) CR20WHITR,(1) USB20AC5W
	SWITCHED FOURPLEX RECEPTACLE 20A/120V 18" AFF UON - TOP CONTROLLED	(2) BR20C1WHI
K	CLOCK RECEPTACLE 120V 96" AFF UON	HBL5325
	SPECIAL PURPOSE RECEPTACLE 18" AFF SEE PLANS FOR DETAILS	
	CEILING MOUNTED DUPLEX RECEPTACLE 20A/120V (FLUSH)	CR20-W
	DUPLEX RECEPTACLE 20A/120V MOUNTED ABOVE COUNTER, HEIGHT SPECIFIED BY ARCHITECT	CR20WHITR
P	DUPLEX RECEPTACLE FOR PROJECTOR	
WP	WEATHER/TAMPER-RESISTANT DUPLEX RECEPTACLE WITH "IN-USE" COVER 20A/120V 18" AFF UON	GFTR20W/ WP26M
	DUPLEX GFI RECEPTACLE 20A/120V MOUNTED ABOVE COUNTER, HEIGHT SPECIFIED BY ARCHITECT	CR20WHITR
S	SAFETY TYPE DUPLEX RECEPTACLE 20A/120V 18" AFF UON	CR20WHITR
	DUPLEX RECEPTACLE, FLOOR MOUNTED FLUSH (PROVIDE 1" CONDUIT IN SLAB OR BELOW FLOOR FROM NEAREST WALL TO LOCATION CONFIRMED WITH ARCHITECT.)	CR20WHITR, CFB2G30RCR, CFBS1RCVR OR FOR POKE THRU, CR20WHITR,S1R4PTFIT S1R4SPDUPLEX, S1R4CVR
	FOURPLEX RECEPTACLE, FLOOR MOUNTED FLUSH (PROVIDE 1" CONDUIT IN SLAB OR BELOW FLOOR FROM NEAREST WALL TO LOCATION CONFIRMED WITH ARCHITECT.)	(2) CR20WHITR, CFB2G30RCR,CFBS1R6CVR OR FOR POKE THRU, (2) CR20WHITR, S1R6PTFIT (2) S1R6SPLS1R6CVR
	EXISTING DUPLEX RECEPTACLE	
	EXISTING FOURPLEX RECEPTACLE	
	EXISTING 208V RECEPTACLE	
$	SINGLE POLE SWITCH 20A, 48" AFF UON	CS120W
$D	DIMMER SWITCH, 48" AFF UON, SEE PLAN FOR DETAIL	
$P	SWITCH WITH PILOT LIGHT, 48" AFF UON	HBL1221PL
$2	TWO POLE SWITCH 20A, 48" AFF UON	CS1222W
$T	TIMER SWITCH, 48" AFF UON	INTERMATIC FF60MC
$F	FAN SWITCH, 48" AFF UON	RF51

DISTRIBUTION SYMBOL SCHEDULE

NOTES:
A. ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS.

SYMBOL	DESCRIPTION	REMARKS
	HOMERUN (REFER TO PANEL SCHEDULES FOR CONDUIT/WIRING)	
	CIRCUIT ROUTED THRU CONTACTOR OR RELAY	
UE	UNDERGROUND ELECTRIC	
UC	UNDERGROUND COMMUNICATION	
OE	OVERHEAD ELECTRIC	
OC	OVERHEAD COMMUNICATION	
	CIRCUIT INDICATORS (HOT, NEUTRAL, GROUND, SWITCHLEG)	
P	PHOTOCELL	
J	JUNCTION BOX	
J	JUNCTION BOX, FLOOR MOUNTED FLUSH	
J	JUNCTION BOX, WALL MOUNTED - 3/4"C TO ABOVE CEILING	
$M	MANUAL STARTER WITH THERMAL TRIP	
	DISCONNECT SWITCH, REFER TO DISCONNECT SCHEDULE	
	STARTER	
	COMBINATION STARTER/DISCONNECT SWITCH, REFER TO SCHEDULE	
	POWER AND/OR LIGHTING PANELBOARD, REFER TO PANELBOARD SCHEDULE	
	SWITCHBOARD, REFER TO SWITCHBOARD SCHEDULE	
	TRANSFORMER, REFER TO TRANSFORMER SCHEDULE	

SPECIAL SYSTEMS SCOPE

ACCESS CONTROL SYSTEM
1. REFERENCE TECHNOLOGY PLANS AND SPECIFICATIONS.

SECURITY SYSTEM
1. REFERENCE TECHNOLOGY PLANS AND SPECIFICATIONS.

TECHNOLOGY SYSTEM
1. REFERENCE TECHNOLOGY PLANS AND SPECIFICATIONS.

INTERCOM SYSTEM
1. REFERENCE TECHNOLOGY PLANS AND SPECIFICATIONS.

FIRE ALARM SYSTEM
1. UPGRADE EXISTING FIRE ALARM CONTROL PANEL IN MAIN BUILDING AND EXTEND MAIN BUILDING SYSTEM TO THE KITCHEN AND CLASSROOM ADDITIONS.
2. DUCT DETECTORS FOR ROOFTOP UNITS ARE TO BE INSTALLED IN THE UNIT. COORDINATE WITH MECHANICAL CONTRACTOR.
3. INTERCONNECT EXISTING FIRE ALARM SYSTEMS IN BUILDING NOTED BELOW TO EXISTING MAIN BUILDING FIRE ALARM SYSTEM WITH SINGLE MODE FIBER PER DISTRICT STANDARD FOR THE FOLLOWING BUILDINGS. BUILDING DESIGNATIONS PER EXISTING FIRE ALARM AS-BUILTS. REFERENCE SITE PLAN FOR ADDITIONAL INFORMATION.
   - LHS FIELD HOUSE BUILDING
   - BALES GYM
   - FIELD HOUSE/RED GYM/BURDINE THEATRE BUILDING (BUILDING D)
   - CTE BUILDING (BUILDING H&C)
   - BUILDING E
   - PEP BUILDING
   - LIVE OAK ACADEMY
   - GRAHAM GYM
4. REFERENCE CAMPUS WAYFINDING SCOPE REQUIREMENTS FOR ADDITIONAL SCOPE.

CLASSROOM AUDIO-VIDEO SYSTEM
1. REFERENCE TECHNOLOGY PLANS AND SPECIFICATIONS.

CAMPUS WAYFINDING SCOPE

CONTRACTOR IS MAKE ADJUSTMENTS AS REQUIRED TO REFLECT WAYFINDING SCOPE DEFINED IN ARCHITECTURAL DOCUMENTS WHERE THE ENTIRE CAMPUS IS TO RECEIVE ALL NEW ROOM NUMBERS IN ACCORDANCE WITH DISTRICT-WIDE STANDARDS. REFERENCE ARCHITECTURAL WAYFINDING DOCUMENTS FOR ADDITIONAL INFORMATION.

CONTRACTOR IS TO UPDATE ROOM NUMBERS FOR THE FOLLOWING EXISTING SYSTEMS:

- 1 **FIRE ALARM SYSTEM - UPDATE EXISTING CAMPUS FIRE ALARM SHOP DRAWINGS AND PROGRAMMING TO REFLECT NEW ROOM NUMBERS**
- **ELECTRICAL PANEL SCHEDULES - WHERE PANEL SCHEDULES REFLECT ROOM NUMBERS FOR CIRCUITS, CONTRACTOR IS TO PROVIDE UPDATED PANEL SCHEDULES COMPLETE WITH UPDATED ROOM NUMBERS. CONTRACTOR DOES NOT NEED TO TRACE OUT EXISTING UN-LABELED CIRCUITS.**
- **BAS CONTROL SYSTEM - UPDATE ALL EXISTING GRAPHICS.**

GENERAL NOTES

A. THE CONTRACTOR IS TO VISIT THE SITE PRIOR TO BID TO FAMILIARIZE HIMSELF WITH ALL CONDITIONS AS THEY EXIST. SUBMISSION OF BID INDICATES THE CONTRACTOR'S UNDERSTANDING OF EXISTING CONDITIONS AND HIS WILLINGNESS TO WORK WITH THESE CONDITIONS. NO ADDITIONAL TIME OR MONEY WILL BE ALLOTTED DUE TO LACK OF COORDINATION WITH EXISTING CONDITIONS OR OTHER TRADES.

B. CONTRACTOR IS TO REVIEW AND COMPARE ALL DRAWINGS SO ALL WORK IN THEIR RESPECTIVE TRADE IS INCLUDED IN BID. EACH CONTRACTOR SHALL INCLUDE ALL MATERIALS AND INSTALLATION REQUIRED FOR HIS PARTICULAR TRADE AFTER COMPLETE REVIEW OF ALL CONTRACT DRAWINGS AND SPECIFICATIONS.

C. ALL WORK SHALL COMPLY WITH THE CURRENT APPLICABLE LOCAL, STATE AND FEDERAL CODES AND ORDINANCES. FOLLOW RECOMMENDED PRACTICES AS SET FORTH BY NFPA, BUILDING CODE, MECHANICAL CODE, PLUMBING CODE, NATIONAL ELECTRICAL CODE, ADA, TAS, AND OSHA, AS THEY APPLY TO THIS PROJECT, EXCEPT IN CASES WHERE LOCAL STATUTES GOVERN. THE CONTRACTOR SHALL VERIFY WITH AUTHORITY HAVING JURISDICTION THE LATEST ADOPTED LOCAL CODES, ORDINANCES AND AMENDMENTS THAT APPLY TO THIS PROJECT.

D. THE ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE, SIZES OF BREAKERS, FUSES, WIRES, ETC., FOR ALL EQUIPMENT TO BE PROVIDED, INCLUDING BUT NOT LIMITED TO HVAC, LIGHTING, PUMPS, HEATERS, ETC, AND REPORT DISCREPANCIES TO THE ENGINEER/ARCHITECT PRIOR TO INSTALLATION OF CONDUIT. COORDINATE WITH MECHANICAL/ELECTRICAL COORDINATION SHEET PROVIDED BY MECHANICAL CONTRACTOR FOR ACTUAL EQUIPMENT BEING USED.

E. HOMERUNS SHALL BE COORDINATED WITH PANELBOARDS. ALL WIRING AND CONDUIT SHALL BE CONCEALED, EXCEPT IN ELECTRICAL ROOMS AND EXPOSED STRUCTURE AREAS.

F. ALL WIRING SHALL BE FREE OF SHORTS AND GROUNDS. NO WIRING SHALL BE LOADED BEYOND THE PERMITTED AMPACITIES ALLOWED BY CURRENT N.E.C.

G. MINIMUM WIRE/CONDUIT SIZES, EXCEPT FOR CLASS 2 LOW VOLTAGE CIRCUITS, ARE #12 AWG COPPER IN 1/2" CONDUIT. WHERE THE DISTANCE BETWEEN THE SUPPLYING PANEL AND THE FIRST BRANCH CIRCUIT RECEPTACLE OR LIGHT FIXTURE IS MORE THAN 100 FEET, CONTRACTOR REQUIRED TO UP SIZE CONDUCTOR TO ALLOW FOR MAXIMUM OF 3% VOLTAGE DROP FOR ACTUAL ROUTING OF CONDUITS TO DEVICE.

H. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR AND MATERIALS NECESSARY TO MAKE A COMPLETE AND WORKABLE SYSTEM.

I. CONFIRM THE EXACT LOCATION AND MOUNTING HEIGHTS OF LIGHTING FIXTURES WITH ARCHITECT BEFORE ROUGH-

RTU ELECTRICAL CONNECTION SCHEDULE

480 / 3	NATURAL [PROPANE] GAS (UNIT TYPES)					MINIMUM WIRE / CONDUIT SIZES		
UNIT TYPE	VOLTAGE / PHASE	KVA	MCA	FUSED DISCONNECT SIZE (NEMA 3R)	MOCP	LENGTH UP TO (FT)	LENGTH UP TO (FT)	LENGTH UP TO (FT)
						125	250	375
G2 - 208/1	208/1	3.2	19	30	25	10	17	24
G2.5 - 480/3	480/3	6.1	9	30	15	6	6	6
G3 - 480/3	480/3	6.1	9	30	15	6	6	6
G4 - 480/3	480/3	8.9	13	30	15	6	6	6
G5 - 480/3	480/3	9.5	14	30	15	6	6	13
G6 - 480/3	480/3	10.2	15	30	20	6	6	13
G7 - 480/3	480/3	15.7	23	30	25	13	13	20
G8 - 480/3	480/3	15.7	23	30	25	13	13	20
G10 - 480/3	480/3	17.0	25	30	30	13	13	20
G12 - 480/3	480/3	20.4	30	60	40	20	20	20
G13 - 480/3	480/3	23.2	34	60	45	20	20	20
G15 - 480/3	480/3	22.5	33	60	45	20	20	20
G17 - 480/3	480/3	28.6	42	60	50	20	20	27
G20 - 480/3	480/3	33.4	49	60	50	20	20	27
G25 - 480/3	480/3	44.3	65	100	70	34	34	34

RTU ELECTRICAL CONNECTION SCHEDULE

208 / 3	NATURAL [PROPANE] GAS (UNIT TYPES)					MINIMUM WIRE / CONDUIT SIZES		
UNIT TYPE	VOLTAGE / PHASE	KVA	MCA	FUSED DISCONNECT SIZE (NEMA 3R)	MOCP	LENGTH UP TO (FT)	LENGTH UP TO (FT)	LENGTH UP TO (FT)
						125	250	375
G2 - 208/1	208/1	3.2	19	30	25	10	17	24
G2.5 - 208/3	208/3	5.6	19	30	25	13	20	27
G3 - 208/3	208/3	5.6	19	30	25	13	20	27
G4 - 208/3	208/3	7.4	25	60	35	20	27	34
G5 - 208/3	208/3	8.3	28	60	40	20	27	34
G6 - 208/3	208/3	8.9	30	60	45	20	27	34
G7 - 208/3	208/3	12.7	43	60	50	20	34	41
G8 - 208/3	208/3	13.0	44	60	50	20	34	41
G10 - 208/3	208/3	15.3	52	60	60	27	34	48
G12 - 208/3	208/3	18.3	62	100	80	34	41	55
G13 - 208/3	208/3	20.4	69	100	90	41	41	55
G15 - 208/3	208/3	19.8	67	100	70	34	41	55
G17 - 208/3	208/3	27.1	92	100	100	41	55	62
G20 - 208/3	208/3	29.8	101	200	125	55	55	69
G25 - 208/3	208/3	41.6	141	200	150	62	62	76

UNIT MARK	UNIT TYPE
RTU-A1	G20 208V-3PH
RTU-A2	G6
RTU-A3	G4 - 208V-3PH
RTU-B1.1	G3
RTU-B1.2	G3

UNIT MARK	UNIT TYPE
RTU-B1.3	G3
RTU-B1.4	G3
RTU-B1.5	G3
RTU-B1.6	G3
RTU-B1.7	G3
RTU-B2.1	G3

UNIT MARK	UNIT TYPE
RTU-B2.2	G3
RTU-B2.3	G3
RTU-B2.4	G3
RTU-B2.5	G3
RTU-B2.6	G3
RTU-B2.7	G3

UNIT MARK	UNIT TYPE
RTU-L101A	G10 - 208/3
RTU-L101B	G10 - 208/3
RTU-L101C	G10 - 208/3
RTU-L111	G12 - 208/3
RTU-L125	G2 - 208/1

UNIT TYPE BREAKDOWN:
G = GAS HEAT RTU, E = ELECTRIC HEAT RTU

STANDARD NOTES:
A. VERIFY FINAL FUSE SIZE WITH ACTUAL EQUIPMENT PROVIDED. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING SWITCHGEAR.
B. IN THE EVENT THAT THERE IS A DIFFERENCE BETWEEN MINIMUM WIRE/CONDUIT SIZE ON THIS SCHEDULE AND ON THE PANEL SCHEDULE, BID THE MORE STRINGENT OF THE TWO.
C. SOME UNITS SHOWN ON THE MASTER SCHEDULE(S) MAY NOT BE USED ON THIS JOB.
D. REFERENCE BRANCH CIRCUIT WIRE AND CONDUIT SCHEDULE FOR WIRE/CONDUIT DEFINITION.

DISCONNECT SWITCH SCHEDULE

REMARKS:
A. THIS SCHEDULE IS NOT A COMPREHENSIVE DISCONNECT SCHEDULE. REFERENCE OTHER ELECTRICAL CONNECTION SCHEDULES FOR ADDITIONAL DISCONNECT REQUIREMENTS.
B. COORDINATE FINAL FUSE SIZES WITH EQUIPMENT BEING PROVIDED PRIOR TO ROUGH-IN.
C. WHEN THE LENGTH OF THE SECONDARY CONDUCTORS OF ANY TRANSFORMER EXCEEDS TEN FEET, PROVIDE AN ENCLOSED CIRCUIT BREAKER OR FUSED DISCONNECT WITHIN TEN FEET OF THE TRANSFORMER SECONDARY TERMINALS IN ACCORDANCE WITH NEC ARTICLE 240-21(C)(2). THIS OVERCURRENT DEVICE SHALL HAVE AN AMP RATING EQUAL TO THE AMP RATING OF THE PANEL BEING SERVED. THE PANEL BEING FED MAY BE CHANGED TO MAIN LUG ONLY.
D. PROVIDE LUG KITS AND/OR WIRING GUTTERS FOR PANELS WITH OVERSIZED CONDUCTORS DUE TO VOLTAGE DROP AND/OR DISTANCE. MAKE CONNECTIONS IN ACCORDANCE WITH THE N.E.C.
E. PROVIDE SHOP DRAWINGS OF ALL ELECTRIC ROOMS INDICATING ALL PANEL, TRANSFORMER AND DISCONNECT LOCATIONS. ELECTRICAL EQUIPMENT MAY SHIFT IN LOCATION TO INSURE PROPER CLEARANCES.
F. PROVIDE DISCONNECTING MEANS FOR ALL EQUIPMENT PER N.E.C.
G. DISCONNECTS MOUNTED ABOVE CEILING MUST BE MOUNTED TO BE READILY ACCESSIBLE NEAR UNIT. HANDLE TO BE NO MORE THAN 36" ABOVE CEILING GRID.
H. ALL EXTERIOR DISCONNECTS ARE TO BE MOUNTED BELOW LINE OF SIGHT OF A SCREEN WALL OR IF SINGLE DISCONNECT, LEVEL WITH TOP OF CONDENSER. VERIFY LOCATION WITH ARCHITECT/ENGINEER PRIOR TO ROUGH-IN.
** **U.O.N. FOR ALL PANELS SUBFED FROM TRANSFORMERS THAT REQUIRE DISCONNECT, REFERENCE TRANSFORMER SCHEDULE SECONDARY BREAKER SIZE FOR ALL ENCLOSURE TYPE AND DISCONNECT/FUSE SIZING INFORMATION.**

VOLTAGE RATING	POLES	AMP RATING	ENCLOSURE	FUSE SIZE	S/N	MOTOR STARTER REQ	Load Name
240	2	30.0 A	N1	20.0 A			AHU-B1
240	2	30.0 A	N3R	25.0 A			CU-B1
240	2	60.0 A	N1	40.0 A			WH-B1
240	3	30.0 A	N3R	20.0 A		Yes	KEF-A1
240	3	30.0 A	N3R	20.0 A		Yes	KEF-A2
240	3	30.0 A	N3R	20.0 A		Yes	KSF-A1
240	3	30.0 A	N3R	20.0 A		Yes	KSF-A2
600	3	60.0 A	N1	40.0 A			DISHMACHINE (E250)
600	3	100.0 A	N3R	100.0 A			MAU-B1
600	3	200.0 A	N1	125.0 A			ELEVATOR

NLIGHT - DEVICE SYMBOL SCHEDULE

NOTES:
A. ALL SYMBOLS DO NOT NECESSARILY APPEAR ON THESE DRAWINGS.
B. ALL DEVICE PART NUMBERS ARE NLIGHT UNLESS OTHERWISE NOTED.
C. THESE DEVICES SHOULD BE USED IN ALL AREAS TO BE CONTROLLED BY NLIGHT.
D. MOTION SENSOR: WHERE MOTION SENSORS ARE SHOWN ON THE PLANS. THAT INDICATES AREA SHOULD BE COVERED IN FULL BY MOTION SENSORS. IT IS UP TO MOTION SENSOR PROVIDER TO PROVIDE APPROPRIATE QUANTITY, LAYOUT, AND TYPE OF MOTION SENSORS FOR COMPLETE COVERAGE. PROVIDE SHOP DRAWING AT SUBMITTAL PHASE.
E. PHOTOCELL: WHERE PHOTOCELLS ARE SHOWN ON PLANS OR IN TYPICAL DETAILS. IE:CLASSROOMS. PHOTOCELL LOCATION AND QUANTITY SHOULD BE DETERMINED BY PHOTOCELL PROVIDER. PHOTOCELLS ARE INTENDED TO DIM LIGHTS IN DAYLIGHT ZONES AS INDICATED BY IECC 2018.
F. IF MULTIPLE ZONE CONTROL IS INDICATED FOR A SPACE AND THOSE ZONES ARE NOT CLEAR TO CONTRACTOR, THE CONTRACTOR IS TO MAKE BEST ASSUMPTION IN SHOP DRAWING PHASE AND NOTE AREAS IN QUESTION. ENGINEER WILL REVIEW AND MAKE ANY ADJUSTMENTS TO ZONES AT THAT TIME.
G. MANUFACTURER TO PROVIDE A COMPLETE SET OF SHOP DRAWINGS INDICATING ALL ASPECTS OF LIGHTING CONTROL AT A MINIMUM OF 1/8" = 1' SCALE WITH CLEAR DESCRIPTIONS AND LEGENDS FOR SYMBOLS.
H. BASIC COMPONENTS ARE CALLED FOR HERE, IT IS EXPECTED THAT MANUFACTURER PROVIDES ALL COMPONENTS FOR A COMPLETE WORKABLE SYSTEM.
I. FACTORY START-UP IS REQUIRED FOR ALL NLIGHT SPACES.
J. CONTRACTOR SHOULD SEND COMPLETE SET OF ELECTRICAL PLANS TO NLIGHT FACTORY REP TO ENSURE A COMPLETE BID.
K. CONTRACTOR TO ASSUME ALL DEVICES INTER-CONNECTED WITH CAT-5 CABLE. PROVIDE ALL REQUIRED CABLING BETWEEN DEVICES. CABLE COLOR IS TO BE COORDINATED WITH THE TECHNOLOGY CABLING TO BE A DIFFERENT COLOR. NO ZIP TIES MAY BE USED FOR SECURING CABLE. ONLY VECRO TIES MAY BE USED

SYMBOL	DESCRIPTION	REMARKS
S^{DT}	DUAL TECHNOLOGY WALL MOUNT MOTION AND DIMMING	nIWSXA-PDT-LV-DX
S^{CT}	ONE ZONE CONTROLLER, ON/OFF AND DIMMING	nPODMA-DX
S^{C2}	TWO ZONE CONTROLLER, ON/OFF AND DIMMING	nPODMA-2P-DX
S^{C4}	FOUR ZONE CONTROLLER, 4 PRESET TOGGLE BUTTONS	nPODMA-4S-DX
S^{K}	ONE ZONE KEYED CONTROLLER, ON/OFF AND DIMMING	nPOD-KEY
S^{CT}	COLOR SCENE CONTROLLER	nPODMA-4S-EDUTW
M_{DT}	MOTION SENSOR, DT (DUAL TECHNOLOGY)	nCM-PDT-9
M_{DT}	MOTION SENSOR, DT (DUAL TECHNOLOGY)	nCM-PDT-10
M_{DT}	MOTION SENSOR, DT (DUAL TECHNOLOGY)	nWV-PDT-16
Ⓟ	PHOTOCELL	nCM-ADCX

NLIGHT INTERIOR LIGHTING SCHEDULE

GENERAL NOTES:

PROVIDE LIGHTING CONTROL AS REQUIRED PER THE CURRENT ADOPTED EDITION OF IECC - 2015/2018.

POWER PACKS
FOR FIXTURES THAT ARE NOT NLIGHT COMPATIBLE, PROVIDE POWER PACKS TO ACHIEVE ZONING INDICATED ON PLANS AND SHALL BE INSTALLED ABOVE THE DOOR OF THE ROOM BEING SERVED.

AREAS WITH HIGH CEILINGS (15FT OR HIGHER). PROVIDE POWER PACKS TO ACHIEVE ZONING INDICATED ON PLANS. LOCATE POWER PACKS IN ACCESSIBLE LOCATION FROM LIGHTING PANEL SERVING CIRCUITS.

WHEN POWER PACKS ARE PROVIDED. CONTRACTOR MUST PROVIDE 0-10V DIMMING WIRES FROM POWER PACK TO FIXTURE FOR CONTROL IN LIEU OF CAT5 CABLE.

NLIGHT MANUFACTURER TO PROVIDE NLIGHT ENABLED FIXTURES OR POWER PACKS TO ACHIEVE ZONING SHOWN ON PLANS FOR SWITCHING AND DAYLIGHT ZONES TO PROVIDE BEST VALUE TO THE PROJECT.

MOTION SENSORS
PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR ENTIRE BUILDING, EXCEPT ELECTRIC ROOMS, AND AS WHEN NOTED EXCEPTION SHOWN ON PLANS. PROVIDE DUAL TECHNOLOGY MOTION SENSORS IN EVERY ROOM AS REQUIRED BY IECC. ASSUME CEILING MOUNT UNLESS WALL MOUNT SHOWN.

VACANCY SENSORS
PROVIDE COMPLETE DUAL TECHNOLOGY VACANCY SENSOR COVERAGE PER IECC IN ALL AREAS EXCEPT EMERGENCY EGRESS CORRIDORS AND PATHWAYS. SHOP DRAWING REQUIRED.

OCCUPANCY SENSORS
PROVIDE COMPLETE DUAL TECHNOLOGY OCCUPANCY SENSOR COVERAGE PER IECC IN ALL EMERGENCY EGRESS CORRIDORS AND PATHWAYS. SHOP DRAWING REQUIRED.

CONTROL STATION
ALL ROOMS SHALL HAVE A CONTROL STATION FOR CONTROL OF LIGHTS IN ROOM. IF NO CONTROL STATION IS SHOWN, ASSUME A TWO ZONE CONTROLLER FOR ROOMS LARGER THAN 9' X 9' AND A WALL MOUNT DUAL TECHNOLOGY CONTROLLER FOR ROOMS SMALLER THAN 9' X 9'.

PROGRAMMING MODULE
PROVIDE (2) NIO BT BLUETOOTH PROGRAMMING MODULES WITH PROJECT AND PROVIDE TO OWNER FOR OWNER'S FUTURE USE. STARTUP TECHNICIAN SHALL PROVIDE OWNER TRAINING ON USE OF MODULE.

SPACE TYPE DESCRIPTION:

CLASSROOMS, SCIENCE CLASSROOMS, GENERAL INSTRUCTION ROOMS
A. PROVIDE CONTROL STATIONS AS SHOWN ON PLANS.
B. TWO ZONE CONTROL. ZONE 'a' , ZONE 'b' AS SHOWN IN PLANS AND AS DESCRIBED BELOW:
1. ROOMS WITH UPLIGHTS AND DOWNLIGHTS, ZONE 'a' - DOWNLIGHTS, ZONE 'b' - UPLIGHTS.
2. ROOMS WITH DOWNLIGHTS ONLY, ZONE 'a' - ROW OF LIGHTS AT TEACHING WALL, ZONE 'b' - ALL OTHER LIGHTS IN ROOM, U.N.O.
C. PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR MINOR MOVEMENTS. MANUAL ON / AUTO OFF AFTER 20 MINUTES. SHOP DRAWING REQUIRED.
D. PROVIDE PHOTOCELL AND CONTROL LIGHTS IN DAYLIGHT ZONE PER IECC AS SHOWN ON PLANS.

KITCHEN
A. PROVIDE CONTROL STATIONS AS SHOWN ON PLANS.
B. TWO (2) BUTTON ZONE CONTROL. ZONE 'a' - SERVING AREA, ZONE 'b' COOKING AREA, ZONE 'c' - DECORATIVE LIGHTING (IF USED).
C. LIGHTS SHALL BE MANUAL ON/MANUAL OFF ONLY.
D. NO PHOTOCELL CONTROL.

COMMON AREAS
A. PROVIDE CONTROL STATIONS AS SHOWN ON PLANS.
B. TWO (2) BUTTON ZONE CONTROL ZONES INDICATED ON PLANS.
C. PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR MAJOR MOVEMENTS. AUTO ON. WHEN NO MOTION IS DETECTED AFTER 15 MINUTES, LIGHTS SHALL BE DIMMED TO 10%. IF NO ADDITIONAL MOTION IS DETECTED AFTER 5 MINUTES, LIGHTS SHALL POWER OFF. SHOP DRAWING REQUIRED.

HALLWAYS AND STAIRWELLS
A. PROVIDE CONTROL STATIONS AS SHOWN ON PLANS. ANY CONTROL STATION IN A CONTINUOUS CORRIDOR IS TO CONTROL THE ENTIRE CORRIDOR, NOT PORTIONS THEREOF, U.O.N. ON PLANS.
B. PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR MAJOR MOVEMENTS. AUTO ON. WHEN NO MOTION IS DETECTED AFTER 15 MINUTES, LIGHTS SHALL BE DIMMED TO 10%. IF NO ADDITIONAL MOTION IS DETECTED AFTER 2 HOURS, LIGHTS SHALL POWER OFF.

GROUP RESTROOMS
A. PROVIDE ON/OFF CONTROL STATIONS AS SHOWN ON PLANS.
B. PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR MAJOR MOVEMENTS. AUTO ON. WHEN NO MOTION IS DETECTED AFTER 15 MINUTES, LIGHTS SHALL BE DIMMED TO 10%. IF NO ADDITIONAL MOTION IS DETECTED AFTER 5 MINUTES, LIGHTS SHALL POWER OFF.
C. PROVIDE PLUG LOAD POWER PACK IN ACCESSIBLE LOCATION FOR EXHAUST FAN CONTROL.

SINGLE ZONE ROOMS
A. PROVIDE CONTROL STATIONS AS SHOWN ON PLANS.
B. ONE OVERALL ZONE TO CONTROL ALL LIGHTS IN ROOM.
C. PROVIDE COMPLETE MOTION SENSOR COVERAGE FOR MINOR MOVEMENTS. MANUAL ON / AUTO OFF AFTER 20 MINUTES. SHOP DRAWING REQUIRED.
D. PROVIDE PLUG LOAD POWER PACK IN ACCESSIBLE LOCATION FOR EXHAUST FAN CONTROL IN SINGLE RESTROOMS.

MULTIPURPOSE ATHLETIC COMPLEX (MPAC)
A. PROVIDE (3) SENSORSWITCH PTSA-720-WH-LT PROGRAMMABLE TIMER SWITCHES FOR LIGHTING CONTROL OF (3) LIGHTING ZONES. PROVIDE WEATHERPROOF COVER FOR EACH SWITCH. TIMER CONTROL TO BE ONLY PUBLICLY AVAILABLE CONTROL.
B. PROVIDE (3) 12-POLE LIGHTING CONTACTORS FOR LIGHTING CIRCUIT ON/OFF CONTROL THROUGH EACH PTSA TIME SWITCH. LOCATE LIGHTING CONTACTOR ENCLOSURE ON SERVICE RACK.
C. PROGRAM PTSA SWITCHES FOR BEEP WARNING, 4 HOUR MAX ALLOWABLE TIME AND 60 MINUTE DEFAULT ON TIME. BLINK WARNING NOT TO BE USED.
D. PROVIDE 'NPS-80-EZ-LT' DIMMING ONLY POWER PACKS (NO RELAY, EACH CONTROLLING DIMMING FOR MAX 20 FIXTURES) IN SUFFICIENT QUANTITY FOR THE SPECIFIED LIGHT QUANTITY. PROVIDE FOUR BUTTON SCENE CONTROLLER (NPODMA-4S-LT' PROGRAMMED FOR 70%, 80%, 90%, 100% DIMMING LEVEL PRESETS FOR OVERALL FACILITY. ON/OFF ZONES NOT TO BE DIMMED INDEPENDENTLY) AND LOCATED ADJACENT TO PTSA TIMER SWITCH IN A LOCKABLE NEMA 3R ENCLOSURE CONECTED TO 0-10V DIMMING WIRES FOR FIXTURES TO ALLOW OWNER TO SET DESIRED PRESET LIGHTING LEVEL. DIMMING CONTROL IS INTENDED TO BE ONLY SET BY DISTRICT PERSONNEL UPON STARTUP OF FACILITY AND ONLY ADJUSTED AS NEEDED BY OWNER. 'NPS-80-EZ-LT' SHALL BE WIRED TO CONSTANT HOT POWER SOURCE, 120V OR 277V.

LIGHT FIXTURE SCHEDULE

GENERAL NOTES:

A. CONFIRM CEILING TYPE AND CONSTRUCTION PRIOR TO ORDERING LIGHT FIXTURE. PROVIDE FLANGE KIT FOR PROPER INSTALLATION OF LAY-IN FIXTURE IN GYPSUM CEILING. PROVIDE FIXTURE TYPE 'HZ' IN LIEU OF FIXTURE TYP 'AZ' IN ROOMS WITH NO CEILING. CHAIN HANG AT 10' A.F.F.

B. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF WALL MOUNTED LIGHT FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.

C. REFER TO ARCHITECTURAL REFLECTIVE CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURE.

D. CONFIRM FINISH WITH ARCHITECT PRIOR TO ORDERING LIGHT FIXTURES.

E. 'E' DESIGNATION ADJACENT TO LIGHTING FIXTURE TYPE INDICATES FIXTURE SHALL BE PROVIDED WITH EMERGENCY BATTERY PACK UNIT. LIGHT FIXTURE SHALL BE SWITCHED, BATTERY PACK SHALL BE UNSWITCHED. BATTERY PACKS FOR EXTERIOR FIXTURES SHALL BE COLD WEATHER RATED.

F. 'N' DESIGNATION ADJACENT TO LIGHTING FIXTURE TYPE INDICATES FIXTURE SHALL BE PROVIDED WITH EMERGENCY BATTERY PACK UNIT. LIGHT FIXTURE AND BATTERY PACK SHALL BE UNSWITCHED.

G. FIXTURES SHALL BE PROVIDED WITH A DIMMING DRIVER.

H. CONNECT ALL EXIT LIGHTING TO THE NEAREST UNSWITCHED CIRCUIT OR THE NEAREST EMERGENCY CIRCUIT.

I. REFERENCE 'NLIGHT DEVICE SYMBOL SCHEDULE' AND 'NLIGHT INTERIOR LIGHTING SCHEDULE'.

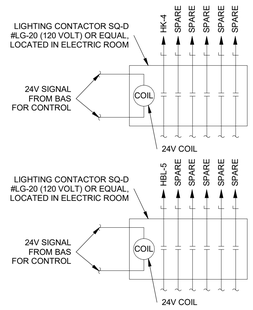
J. ELECTRICAL CONTRACTOR SHALL CONFIRM ALL FIXTURE DRIVER VOLTAGE RATINGS MATCH THE PROJECT ELECTRICAL POWER SYSTEM VOLTAGE AND LIGHTING CIRCUIT VOLTAGE PRIOR TO SUBMITTAL.

(*) PROVIDE UNIT PRICE FOR THIS FIXTURE. INCLUDE MATERIAL AND LABOR TO BE ADDED AT ANY TIME DURING THE PROJECT.

MARK	MANUFACTURER	MANUFACTURER'S CATALOG NUMBER	LUMENS	VOLTS	WATTS	DESCRIPTION
A3	LITHONIA	CPX 2x4 5000LM 80CRI 35K SWL MIN1 ZT MVOLT	5069	277 V	40 W	LED PANEL 2 x 4 LAY IN FIXTURE, WHITE FINISH. 1%DIMMING, GRID CLG
A4	LITHONIA	CPX 2x4 6000LM 80CRI 35K SWL MIN1 ZT MVOLT	5983	277 V	42 W	LED PANEL 2 x 4 LAY IN FIXTURE, WHITE FINISH. 1%DIMMING, GRID CLG
A5	LITHONIA	CPX 2x4 7200LM 80CRI 35K SWL MIN1 ZT MVOLT	7669	277 V	57 W	LED PANEL 2 x 4 LAY IN FIXTURE, WHITE FINISH. 1%DIMMING, GRID CLG
F2	FINELITE	HP-X-R-D-XX-H-835-F-277-SC-FC-1%-XX	802/FT	277 V	26 W	2.5" RECESSED LINEAR, HIGH OUTPUT LED. VERIFY TRIM/LOCATION/LENGTH WITH ARCHITECTS RCP. 1% DIMMING
F3	FINELITE	HP-X-R-D-XX-V-835-F-277-SC-FC-1%-XX	1032/FT	277 V	33 W	2.5" RECESSED LINEAR, VERY HIGH OUTPUT LED. VERIFY TRIM/LOCATION/LENGTH WITH ARCHITECTS RCP. 1% DIMMING
F4	FINELITE	HPX-P-ID-XX-S-S-835-TG-F-277-DC-FC-1%-FA50-XX-FE-SW	838/FT	277 V	40 W	(OPEN/HARD CEILING) 2.5" INDIRECT/DIRECT LINEAR PENDANT. STANDARD UP/STANDARD DOWN. PROVIDE 150" MOUNTING AIRCRAFT CABLE. COORDINATE LONGER IF REQUIRED. TOP GLOW LENS. VERIFY TRIM/LOCATION/LENGTH WITH ARCHITECTS RCP. 1% DIMMING. CONTROL UPLIGHT SEPARATE FROM DOWNLIGHT.
F4-10	FINELITE	HP-X-P-ID-XX-S-S-835-TG-F-277-DC-FC-1%-FA50-XX-FE-SW	838/FT	277 V	67 W	(OPEN/HARD CEILING) 2.5" INDIRECT/DIRECT LINEAR PENDANT. STANDARD UP/STANDARD DOWN. PROVIDE 150" MOUNTING AIRCRAFT CABLE. COORDINATE LONGER IF REQUIRED. TOP GLOW LENS. VERIFY TRIM/LOCATION/LENGTH WITH ARCHITECTS RCP. 1% DIMMING. CONTROL UPLIGHT SEPARATE FROM DOWNLIGHT.
G1	LITHONIA	WL2 18L MVOLT GZ1 LP835	1796	277 V	18 W	2' SURFACE MOUNT WRAP AROUND LED. MOUNT 6" ABOVE MIRROR, OR 8' ABOVE STAIRS DEPENDING ON APPLICATION. 1% DIMMING
H2	LITHONIA	CLX-L48-5000LM-SEF-FDL-MVOLT-EZ1-35K-80CRI-WH	4801	277 V	32 W	LED STRIP FIXTURE. CHAIN HANG, AIRCRAFT CABLE OR SURFACE MOUNT DEPENDING ON APPLICATION. PROVIDE THCLX BRACKET WHEN SURFACE MOUNTED. TYPICAL MOUNTING HEIGHT APPROX 8'-12'. 1% DIMMING, NLIGHT
J3	LITHONIA	FEM L48-6000LM-LPAFL-MD-MVOLT-GZ10-35K-80CRI	5703	277 V	38 W	ENCLOSED LED WET LOCATION STRIP, LOW PROFILE LENS. WHITE FINISH. 10% DIMMING.
J3K	KENALL	MLHA3-48-F-MW-PP-1400LF-35K8-DIM1-DV	5432	277 V	44 W	ENCLOSED LED WET LOCATION STRIP, LOW PROFILE LENS. WHITE FINISH. 1% DIMMING.
L2	LITHONIA	LBR6 NCH 20LM 35K AR LSS MWD MVOLT UGZ1	2533	277 V	25 W	6" LED DOWNLIGHT. TRIM TO MATCH CANOPY OR SILVER. PROVIDE 'EL' BATTERY WHEN SPECIFIED. 1%DIMMING.
L2X	LITHONIA	LBR6 NCH AL02 SWVY1 AR LSS MWD MVOLT UGZ1	2533	277 V	25 W	6" LED DOWNLIGHT. TRIM TO MATCH CANOPY OR SILVER. PROVIDE 'EL' BATTERY WHEN SPECIFIED. 1%DIM. CONTRACTOR TO SET TO 3000K
M4	LITHONIA	STAK 2x4 6000LM 80CRI 35K COL MIN1 ZT MVOLT	6035	277 V	50 W	BLT SERIES 2 x 4 LAY IN LED, 1% DIMMING, NLIGHT, WHITE FINISH, SMOOTH CURVED LENS.
N1	FINELITE	HP-4-WM-ID-X-H-H-835-TG-F-96LG-277-SC-FC-1%-MB-FE-SW	1618/FT	277 V	55 W	4" WALL MOUNT LINEAR, HIGH OUTPUT UP/DOWN, MOUNT 8' ABOVE STAIRS OR AS OTHERWISE NOTES IN PLANS. VERIFY FINISH WITH ARCHITECT.
S2	LITHONIA	RSX2-LED-P4-40K-R5-XVOLT-SPA-NLTAIR2-PIRHN-FINISH (pole) WILL BRANDS VS-SSSA-Z5-50-50-11-AB-FP-C-D2	25,002	480 V	374 W	POLE MOUNTED LED FIXTURE WITH DIE CAST ALUMINUM HOUSING, WITH NLIGHTAIR2 FOR MOTION DIMMING TO 50% AND PHOTOCELL CONTROL. FINISH TO BE SELECTED BY ARCHITECT. POLE IS STRAIGHT STEEL, DRILLED FOR FIXTURE MOUNTING AND BASE COVER. FINISH TO MATCH FIXTURE.
T1	LITHONIA	WDGE3-LED-P1-30K-70CRI-R3-MVOLT-NLIGHTAIR2-PIR-DDBXD	7,500	277 V	52 W	ARCHITECTURAL WALL MOUNTED LED FIXTURE WITH DIE CAST ALUMINUM HOUSING, WITH FULL CUT-OFF, HIGH EFFICIENCY DRIVER WITH NLIGHTAIR2 SENSORS FOR MOTION DIMMING TO 50% AND PHOTOCELL CONTROL. DARK BRONZE FINISH. APPROX. 12-14' AFF. COORDINATE FINAL HEIGHT WITH ARCHITECTURAL. FIXTURE TO BE SECURELY MOUNTED TO A STRUCTURAL SURFACE.
T3	LITHONIA	WDGE3-LED-P4-30K-70CRI-R3-MVOLT-NLIGHTAIR2-PIR-DDBXD	11194	277 V	88 W	ARCHITECTURAL WALL MOUNTED LED FIXTURE WITH DIE CAST ALUMINUM HOUSING, WITH FULL CUT-OFF, HIGH EFFICIENCY DRIVER WITH NLIGHTAIR2 SENSORS FOR MOTION DIMMING TO 50% AND PHOTOCELL CONTROL. DARK BRONZE FINISH COORDINATE FINAL HEIGHT WITH ARCHITECTURAL. FIXTURE TO BE SECURELY MOUNTED TO A STRUCTURAL SURFACE.
T5	LITHONIA	WDGE2-LED-P3SW-3K-80CRI-VW-MVOLT-NLIGHTAIR2-PIR-DDBXD	3,000	277 V	23 W	ARCHITECTURAL WALL MOUNTED LED FIXTURE WITH DIE CAST ALUMINUM HOUSING, WITH FULL CUT-OFF VISUAL COMFORT LENS, HIGH EFFICIENCY DRIVER WITH NLIGHTAIR2 SENSORS FOR MOTION DIMMING TO 50% AND PHOTOCELL CONTROL. DARK BRONZE FINISH. APPROX. 8-10' AFF. COORDINATE FINAL HEIGHT WITH ARCHITECTURAL. FIXTURE TO BE SECURELY MOUNTED TO A STRUCTURAL SURFACE.
U8	LUX DYNAMICS	L-6-D-A-840-2-U10-CP-B-3/10-AFH-UM4	65668	277 V	465 W	30" X 25" HIGH BAY LED, WITH 10% DIMMING. WHITE ACRYLIC DIFFUSE LENS AND STANDARD ALUMINUM FINISH. USE UNISTRUT TO SPAN JOIST OR MOUNT TO BOTTOM OF JOIST DEPENDING ON LOCATION. PROVIDE NLIGHT POWER PACK AS REQUIRED TO SUIT ZONING ON PLANS.
X1	BEGHELLI	LC1-E-SA-LR-1-B-AL	N/A	277 V	1 W	LED SINGLE FACE EXIT SIGN WITH DIE CAST ALUMINUM HOUSING, EMERGENCY BATTERY PACK. BLACK FINISH.
X2	BEGHELLI	LC1-E-SA-LR-2-B-AL	N/A	277 V	1 W	LED DOUBLE FACE EXIT SIGN WITH DIE CAST ALUMINUM HOUSING, EMERGENCY BATTERY PACK. BLACK FINISH.
X6	LITHONIA	LV-S-AB-1-R-120/277 -UM-ELN-CW	INCLUDED	277 V	5 W	LED SINGLE FACE EXTREME EXIT SIGN WITH DIE CAST ALUMINUM CONSTRUCTION FOR HIGH ABUSE AREAS. NEMA 4X WET LOCATION RATED.
Y1	BEGHELLI	EPE	154	277 V	2 W	EMERGENCY EGRESS FIXTURE WITH POLYCARBONATE HOUSING, EMERGENCY BATTERY PACK AND AMMETER. WHITE FINISH. WALL MT APPROX 9' AFF. CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT.

CEILING FANS (CF)

MARK NO.	STOCK/ MODEL NUMBER	MAX RPM	HP	VOLT/PH/AMPS	BLADE DIAMETER	WEIGHT
CF-3	BAF ESSENCE	107	FRACTION	208/1/10	10'-0"	81
CF-5	BAF BASIC 6	110	1.5	208/3/15	14'-0"	192


LIGHTING CONTACTOR SQ-D #LG-20 (120 VOLT) OR EQUAL, LOCATED IN ELECTRIC ROOM
HK-4
SPARE
SPARE
SPARE
SPARE
SPARE
24V SIGNAL FROM BAS FOR CONTROL
COIL
24V COIL
LIGHTING CONTACTOR SQ-D #LG-20 (120 VOLT) OR EQUAL, LOCATED IN ELECTRIC ROOM
HBJ-5
SPARE
SP

CIRCUIT BREAKER PANELBOARD: LB1

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: ELEC B113 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 225.0 A MAIN CB **SPECIAL:**
BUS AMPS: 225 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A	B	C	P	BKR	Wire/Conduit	Load Name	CKT
1	RECEPTACLES	2	20 A	1	1.4 1.2			1	20 A	2	RECEPTACLES	2
3	RECEPTACLES	2	20 A	1		1.3 1.3		1	20 A	2	RECEPTACLES	4
5	HAND DRYER	2	20 A	1			1.5 1.5	1	20 A	2	HAND DRYER	6
7	WASH FOUNTAIN POWER	2, (f)	20 A	1	0.4 1.3			1	20 A	2	RECEPTACLES	8
9	RECEPTACLES	2	20 A	1		1.3 1.3		1	20 A	2	RECEPTACLES	10
11	RECEPTACLES	2	20 A	1			1.3 1.3	1	20 A	2	RECEPTACLES	12
13	RECEPTACLES	2	20 A	1	1.3 0.9			1	20 A	2	RECEPTACLES	14
15	RECEPTACLES	2	20 A	1		0.7 1.3		1	20 A	2	RECEPTACLES	16
17	RECEPTACLES	2	20 A	1			0.2 0.9	1	20 A	2	RECEPTACLES	18
19	ELEVATOR SUMP PUMP	2	20 A	1	0.2 0.2			1	20 A	2	ELEVATOR PIT RECEPTACLE	20
21	ELEVATOR CAB LIGHTS	2	20 A	1		0.5 0.5		1	20 A	2	ELEVATOR SHUNT TRIP	22
23	IDF RECEPTACLES	2	20 A	1			1.0 1.0	1	20 A	2	IDF RECEPTACLES	24
25	IDF RECEPTACLES	2	20 A	1	1.0 1.0			1	20 A	2	IDF RECEPTACLES	26
27	IDF RECEPTACLES	2	20 A	1		0.4 1.0		1	20 A	2	IDF RECEPTACLES	28
29	FUTURE IDF POWER	2	20 A	1			1.0 1.0	1	20 A	2	FUTURE IDF POWER	30
31	HWRP-B1	2	20 A	1	0.3 3.0			2	40 A	17	WH-B1	32
33	EF-B1	2	20 A	1		1.0 3.0						34
35	AHU-B1	5	20 A	2			0.5 0.7	1	20 A	2, (f)	EWC	36
37					0.5 0.7			1	20 A	2, (f)	EWC	38
39	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	40
41	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	42
43	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	44
45	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	46
47	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	48
49	SPARE	--	20 A	1	0.0 0.0			2	30 A	--	SPARE	50
51	SPARE	--	20 A	1		0.0 0.0						52
53	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	54
55	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	56
57	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	58
59	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	60
61	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	62
63	SPARE	--	20 A	1		0.0 0.0		2	30 A	--	SPARE	64
65	SPARE	--	20 A	1			0.0 0.0					66
67	SPARE	--	20 A	1	0.0 0.0			2	20 A	--	SPARE	68
69	SPARE	--	20 A	1		0.0 0.0						70
71	SPACE	--	--	1			-- --	1	--	--	SPACE	72
73	SPACE	--	--	1	-- --			1	--	--	SPACE	74
75	SPACE	--	--	1		-- --		1	--	--	SPACE	76
77	SPACE	--	--	1			-- --	1	--	--	SPACE	78
79	SPACE	--	--	1	-- 0.0							80
81	SPACE	--	--	1		-- 0.0		3	60 A	---	SPD	82
83	SPACE	--	--	1			-- 0.0					84
			TOTAL LOAD:		13 kVA	14 kVA	12 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
HVAC	1.0 kVA	100.00%	1.0 kVA		
RCPT	12.1 kVA	91.46%	11.0 kVA	CONNECTED LOAD:	38.7 kVA
SPEC	25.7 kVA	100.00%	25.7 kVA	ESTIMATED DEMAND:	37.6 kVA
				EST. DEMAND CURRENT:	104.4 A

NOTES:

CIRCUIT BREAKER PANELBOARD: LB2

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: ELEC B113 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 225.0 A MAIN CB **SPECIAL:**
BUS AMPS: 225 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A	B	C	P	BKR	Wire/Conduit	Load Name	CKT
1	RECEPTACLES	2	20 A	1	1.2 1.1			1	20 A	2	RECEPTACLES	2
3	RECEPTACLES	2	20 A	1		1.3 1.3		1	20 A	2	RECEPTACLES	4
5	RECEPTACLES	2	20 A	1			1.3 1.3	1	20 A	2	RECEPTACLES	6
7	RECEPTACLES	2	20 A	1	1.3 1.3			1	20 A	2	RECEPTACLES	8
9	RECEPTACLES	2	20 A	1		1.3 1.3		1	20 A	2	RECEPTACLES	10
11	RECEPTACLES	2	20 A	1			1.3 1.3	1	20 A	2	RECEPTACLES	12
13	HAND DRYER	2	20 A	1	1.5 1.5			1	20 A	2	HAND DRYER	14
15	WASH FOUNTAIN POWER	2	20 A	1		0.4 1.4		1	20 A	2	RECEPTACLES	16
17	RECEPTACLES	2	20 A	1			1.2 1.3	1	20 A	2	RECEPTACLES	18
19	RECEPTACLES	2	20 A	1	1.3 1.3			1	20 A	2	RECEPTACLES	20
21	CU-B1	12	25 A	2		1.4 0.7		1	20 A	2, (f)	EWC	22
23							1.4 0.7	1	20 A	2, (f)	EWC	24
25	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	26
27	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	28
29	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	30
31	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	32
33	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	34
35	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	36
37	SPARE	--	20 A	1	0.0 0.0							38
39	SPARE	--	30 A	2		0.0 0.0		3	60 A	---	SPD	40
41							0.0 0.0					42
			TOTAL LOAD:		10 kVA	9 kVA	10 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Motor	2.7 kVA	100.00%	2.7 kVA		
RCPT	7.4 kVA	100.00%	7.4 kVA	CONNECTED LOAD:	29.0 kVA
SPEC	19.1 kVA	100.00%	19.1 kVA	ESTIMATED DEMAND:	29.0 kVA
				EST. DEMAND CURRENT:	80.4 A

NOTES:

CIRCUIT BREAKER PANELBOARD: LKM

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: WATER HEATER A112 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 600.0 A MCB **SPECIAL:**
BUS AMPS: 600 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A kVA	B kVA	C kVA	P	BKR	Wire/Conduit	Load Name	CKT
1					4.8 4.3							2
3	EX-RTU-L102 (***)	21	50 A	3		4.8 4.3		3	45 A	21	EX-RTU-L123 (***)	4
5							4.8 4.3					6
7	EX-RTU-L104 (***)	12	25 A	2	2.1 5.0							8
9						2.1 5.0		3	60 A	(a)	EX-RTU-L101A (***)	10
11	RECEPTACLES	2	20 A	1			0.9 5.0					12
13					5.0 5.0							14
15	EX-RTU-101C (***)	(a)	60 A	3		5.0 5.0		3	60 A	(a)	EX-RTU-101B (***)	16
17							5.0 5.0					18
19					6.0 1.6							20
21	EX-RTU-L111 (***)	(a)	80 A	3		6.0 1.6		2	25 A	(a)	EX-RTU-L125	22
23							6.0 0.0	1	20 A	--	SPARE	24
25					9.9 2.5							26
27	RTU-A1	(a)	125 A	3		9.9 2.5		3	35 A	(a)	RTU-A3	28
29							9.9 2.5					30
31					0.0 1.7			1	20 A	2	KEF-A4	32
33	SPARE	--	60 A	3		0.0 0.0		2	25 A	--	SPARE	34
35							0.0 0.0					36
37					0.0 0.0							38
39	SPARE	--	175 A	3		0.0 0.0		3	60 A	--	SPD	40
41							0.0 0.0					42
			TOTAL LOAD:		48 kVA	46 kVA	43 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
HVAC	136.4 kVA	100.00%	136.4 kVA		
RCPT	0.9 kVA	100.00%	0.9 kVA	CONNECTED LOAD:	137.3 kVA
SPEC	0.0 kVA	0.00%	0.0 kVA	ESTIMATED DEMAND:	137.3 kVA
				EST. DEMAND CURRENT:	381.1 A

NOTES:
*** INTERCEPT EXISTING CIRCUIT ABOVE CEILING AND EXTEND TO NEW PANEL LOCATION

CIRCUIT BREAKER PANELBOARD: LMAC

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 3R **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 225.0 A MAIN CB **SPECIAL:**
BUS AMPS: 225 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A kVA	B kVA	C kVA	P	BKR	Wire/Conduit	Load Name	CKT
1	RECEPTACLES	2	20 A	1	1.9 1.9			1	20 A	2	RECEPTACLES	2
3	RECEPTACLES	2	20 A	1		0.5 1.9		1	20 A	2	RECEPTACLES	4
5	RECEPTACLES	2	20 A	1			0.7 1.9	1	20 A	2	RECEPTACLES	6
7	RECEPTACLES	2	20 A	1	1.9 1.9			1	20 A	2	RECEPTACLES	8
9	RECEPTACLES	2	20 A	1		1.9 1.9		1	20 A	2	RECEPTACLES	10
11	RECEPTACLES	2	20 A	1			1.9 1.9	1	20 A	2	RECEPTACLES	12
13	RECEPTACLES	2	20 A	1	1.9 1.9			1	20 A	2	RECEPTACLES	14
15	RECEPTACLES	2	20 A	1		1.9 0.7		1	20 A	2	RECEPTACLES	16
17	RECEPTACLES	2	20 A	1			1.9 0.5	1	20 A	2	RECEPTACLES	18
19	RECEPTACLES	2	20 A	1	1.9 1.9			1	20 A	2	RECEPTACLES	20
21	RECEPTACLES	2	20 A	1		1.9 1.9		1	20 A	2	RECEPTACLES	22
23	RECEPTACLES	2	20 A	1			1.9 1.9	1	20 A	2	RECEPTACLES	24
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26
27	SPORTS NETTING	2	20 A	1		0.2 0.2		1	20 A	2	SPORTS NETTING	28
29	SPORTS NETTING	2	20 A	1			0.2 0.2	1	20 A	2	SPORTS NETTING	30
31	SPORTS NETTING	2	20 A	1	0.2 0.0			1	20 A	--	SPARE	32
33	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	34
35	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	36
37	SPARE	--	20 A	1	0.0 0.0							38
39	SPARE	--	20 A	1		0.0 0.0		3	60 A	--	SPD	40
41	SPARE	--	20 A	1			0.0 0.0					42
			TOTAL LOAD:		16 kVA	13 kVA	13 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
RCPT	41.6 kVA	62.01%	25.8 kVA		
SPEC	0.9 kVA	100.00%	0.9 kVA	CONNECTED LOAD:	42.5 kVA
				ESTIMATED DEMAND:	26.7 kVA
				EST. DEMAND CURRENT:	74.2 A

NOTES:

CIRCUIT BREAKER PANELBOARD: LKD

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: KITCHEN A110 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: RECESSED NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 600.0 A MAIN CB **SPECIAL:**
BUS AMPS: 600 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A kVA	B kVA	C kVA	P	BKR	Wire/Conduit	Load Name	CKT
1					10.0 10.0							2
3	LOAD CENTER (E201A)	56	120 A	3		10.0 10.0		3	120 A	56	LOAD CENTER (E201A)	4
5							10.0 10.0					6
7					10.0 1.3							8
9	LOAD CENTER (E201A)	56	120 A	3		10.0 1.3		3	20 A	7	KEF-A1	10
11							10.0 1.3					12
13					1.3 0.9							14
15	KEF-A2	7	20 A	3		1.3 0.9		3	20 A	7	KSF-A1	16
17							1.3 0.9					18
19					0.9 0.0							20
21	KSF-A2	7	20 A	3		0.9 0.0		3	100 A	--	SPARE	22
23							0.9 0.0					24
25					0.0 0.0							26
27	SPARE	--	30 A	3		0.0 0.0		3	30 A	--	SPARE	28
29							0.0 0.0					30
31					7.7 0.0							32
33	LKS	(g)	100 A	3		2.7 0.0		3	60 A	--	SPARE	34
35							4.0 0.0					36
37					43.7 0.0							38
39	LK	(g)	400 A	3		39.2 0.0		3	60 A	---	SPD	40
41							41.1 0.0					42
			TOTAL LOAD:		86 kVA	76 kVA	79 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
HVAC	16.8 kVA	100.00%	16.8 kVA		
RCPT	27.3 kVA	68.29%	18.7 kVA	CONNECTED LOAD:	241.3 kVA
SPEC	10.0 kVA	100.00%	10.0 kVA	ESTIMATED DEMAND:	167.1 kVA
KTCH	187.5 kVA	65.00%	121.9 kVA		
				EST. DEMAND CURRENT:	463.9 A

NOTES:

CIRCUIT BREAKER PANELBOARD: LKS

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: KITCHEN A110 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: RECESSED NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 400.0 A MAIN CB **SPECIAL:** PROVIDE WITH SHUNT TRIP MAIN BREAKER. 2
BUS AMPS: 400 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A kVA	B kVA	C kVA	P	BKR	Wire/Conduit	Load Name	CKT
1	CONVECTION OVEN (E161)	2, (f)	20 A	1	0.7 0.7			1	20 A	2, (f)	CONVECTION OVEN (E161)	2
3	CONVECTION OVEN (E161)	2, (f)	20 A	1		0.7 0.7		1	20 A	2, (f)	CONVECTION OVEN (E161)	4
5	CONVECTION OVEN (E161)	2, (f)	20 A	1			0.7 0.7	1	20 A	2, (f)	CONVECTION OVEN (E161)	6
7	CONVECTION OVEN (E161)	2, (f)	20 A	1	0.7 0.7			1	20 A	2, (f)	CONVECTION OVEN (E161)	8
9	CONV. STEAMER (E162)	2	20 A	1		0.5 0.5		1	20 A	2	CONV. STEAMER (E162)	10
11	CONV. STEAMER (E162)	2	20 A	1			0.5 0.5	1	20 A	2	CONV. STEAMER (E162)	12
13	CONV. STEAMER (E162)	2	20 A	1	0.5 0.5			1	20 A	2	CONV. STEAMER (E162)	14
15	TILT BRAISING PAN (E164)	2, (f)	20 A	1		0.2 0.2		1	20 A	2, (f)	TILT BRAISING PAN (E164)	16
17	CONVEYOR OVEN (E174)	2, (f)	20 A	1			0.7 0.8	1	20 A	2, (f)	CONVEYOR OVEN (E174)	18
19	KETTLE (E267)	2, (f)	20 A	1	1.9 1.9			1	20 A	2, (f)	6 BURNER RANGE (E632)	20
21	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	22
23	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	24
25	SPARE	--	20 A	1	0.0 0.0			1	20 A	--	SPARE	26
27	SPARE	--	20 A	1		0.0 0.0		1	20 A	--	SPARE	28
29	SPARE	--	20 A	1			0.0 0.0	1	20 A	--	SPARE	30
31	SPACE	--	--	1	-- --			1	--	--	SPACE	32
33	SPACE	--	--	1		-- --		1	--	--	SPACE	34
35	SPACE	--	--	1			-- --	1	--	--	SPACE	36
37	SPACE	--	--	1	-- --			1	--	--	SPACE	38
39	SPACE	--	--	1		-- --		1	--	--	SPACE	40
41	SPACE	--	--	1			-- --	1	--	--	SPACE	42
			TOTAL LOAD:		8 kVA	3 kVA	4 kVA					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
KTCH	14.4 kVA	65.00%	9.3 kVA		
				CONNECTED LOAD:	14.4 kVA
				ESTIMATED DEMAND:	9.3 kVA
				EST. DEMAND CURRENT:	25.9 A

NOTES:

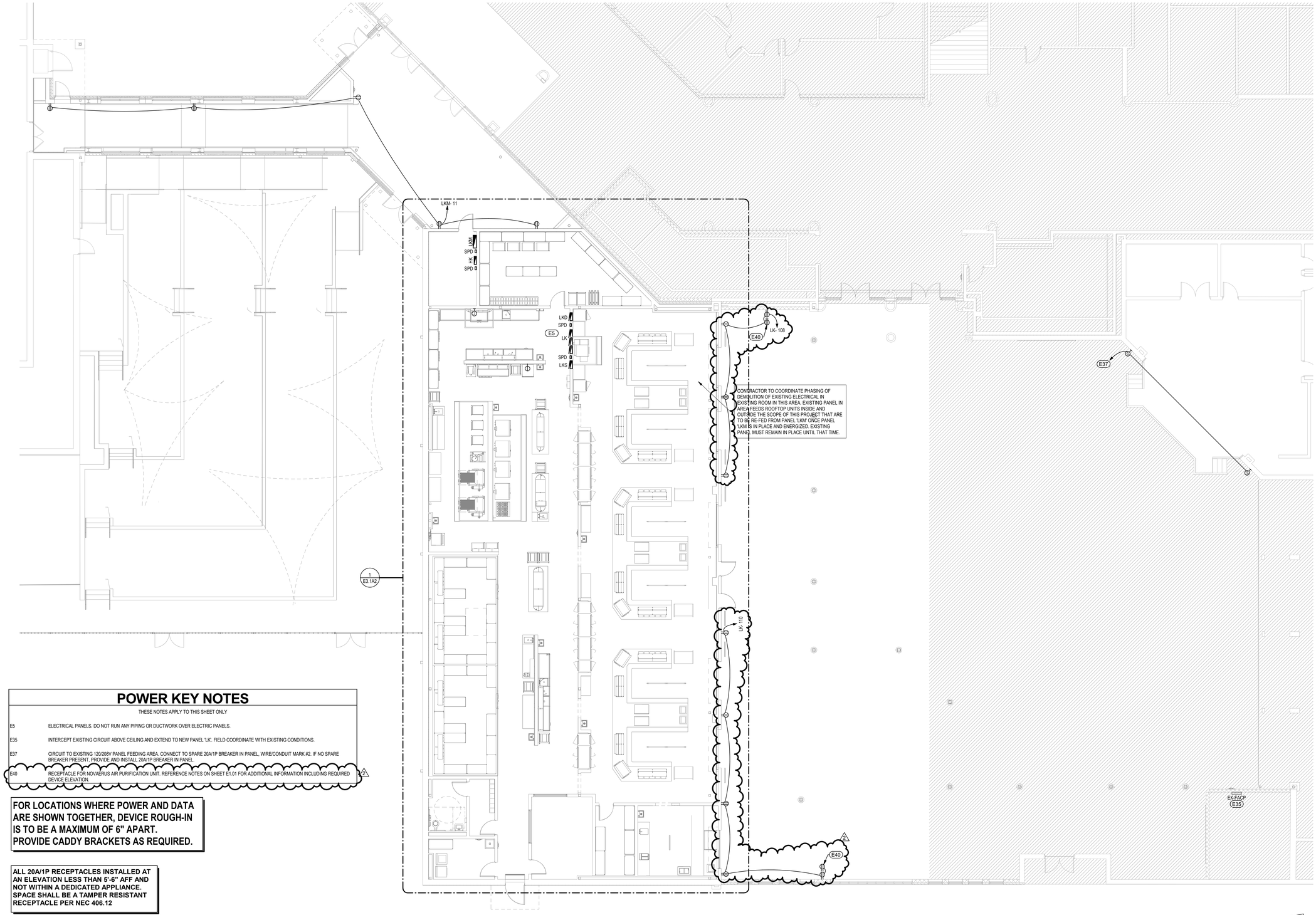
CIRCUIT BREAKER PANELBOARD: LK

HAYS HIGH SCHOOL - JACK C. HAYS

LOCATION: KITCHEN A110 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: RECESSED NEMA 1 **A.I.C. RATING:** REF. FAULT CURRENT STUDY NOTES ON RISER DIAGRAM SHEET
MAIN DEVICE: 400.0 A MAIN CB **SPECIAL:**
BUS AMPS: 400 AMPS

NOTES: (THESE ITEMS APPLY ONLY WHERE SPECIFIED BELOW)
(a) REFERENCE SPLIT SYSTEM / ROOFTOP ELECTRICAL CONNECTION SCHEDULE.
(b) REFERENCE TRANSFORMER SCHEDULE.
(c) REFERENCE FAN POWERED BOX / VAV CONNECTION SCHEDULE.
(d) PROVIDE WITH SHUNT TRIP BREAKER.
(e) PROVIDE WITH PERMANANTLY INSTALLED LOCKING DEVICE
(f) PROVIDE WITH GFCI BREAKER.
(g) REFERENCE ASSOCIATED PANEL SCHEDULE.
(h) PROVIDE 6" PANEL EXTENSION AND CT'S.

CKT	Load Name	Wire/Conduit	BKR	P	A	B	C	P	BKR	Wire/Conduit	Load Name	CKT
1	WH-A1	2	20 A	1	1.7 1.7			1	20 A	2	WH-A2	2
3	HWRP-A1	2	20 A	1		0.3 1.7		2	20 A	5	FREEZER COIL (E103C)	4
5	FREEZER COIL (E103C)	5	20 A	2			1.7 1.7					6
7					1.7 1.6			2	20 A	5	HEATED CABINET (E187)	8
9	HEATED CABINET (E187)	5	20 A	2		1.6 1.6						10
11							1.6 1.6	2	20 A	5	HEATED CABINET (E187)	12
13	HEATED CABINET (E187)	5	20 A	2	1.6 1.6							14
15						1.6 1.6		2	20 A	5	HEATED CABINET (E187)	16
17	HEATED CABINET (E190)	5	20 A	2			0.8 1.6					18
19					0.8 1.9			1	20 A	2	DOOR HEATER/LTS (E102A)	20
21	DOOR HEATER/LTS (E102A)	2	20 A	1		1.9 0.6		1	20 A	2	TEMP ALARM (E102B)	22
23	TEMP ALARM (E102B)	2	20 A	1			0.6 0.6	1	20 A	5	PRESS. RLF PORT (E102C)	24
25	PANIC ALM BUTTON (E102E)	5	20 A	1	1.2 1.2			1	20 A	2	COOLER COIL (E103D)	26
27	COOLER COIL (E103D)	2	20 A	1		1.2 1.5		2	20 A	12	CLOTHES DRYER (E110A)	28
29	DRAIN LINE HTR (E103F)	2	20 A	1			1.9 1.5					30
31	DRAIN LINE HTR (E103F)	2	20 A	1	1.9 1.4			1	20 A	2, (f)	ICE MACHINE (E109)	32
33	CLOTHES WASHER (E110)	2, (f)	20 A	1		1.9 1.0		1	20 A	2, (f)	20QT MIXER (E125)	34
35	FOOD PROCESSOR (E131)	2, (f)	20 A	1			0.4 1.8	1	20 A	2, (f)	INSUL. MOB. PROOFER (E139)	36
37	TABLE RECEPT (E144)	2, (f)	20 A	1	1.0 1.0			1	20 A	2, (f)	TABLE RECEPT (E144)	38
39	TABLE RECEPT (E144)	2, (f)	20 A	1		1.0 0.1		1	20 A	2	FIRE PROT. SYS. (E151)	40
41	HOOD LIGHTS (E153)	2	20 A	1			1.2 1.2	1	20 A	2	HEAT SENSOR (E153M)	42
43	HOOD LIGHTS (E153)	2	20 A	1	1.2 1.2			1	20 A	2	HEAT SENSOR (E153M)	44
45	HOOD LIGHTS (E153)	2	20 A	1		1.2 1.2		1	20 A	2	HEAT SENSOR (E153M)	46
47	FIRE PROT. SYS. (E151)	2	20 A	1			0.1 0.1	1	20 A	2	FIRE PROT. SYS. (E151)	48
49	REFRIGERATOR (E188)	2	20 A	1	0.9 0.9			1	20 A	2	REFRIGERATOR (E188)	50
51	REFRIGERATOR (E188)	2	20 A	1		0.9 0.9	



POWER KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

E5	ELECTRICAL PANELS. DO NOT RUN ANY PIPING OR DUCTWORK OVER ELECTRIC PANELS.
E35	INTERCEPT EXISTING CIRCUIT ABOVE CEILING AND EXTEND TO NEW PANEL 'LK'. FIELD COORDINATE WITH EXISTING CONDITIONS.
E37	CIRCUIT TO EXISTING 120/208V PANEL FEEDING AREA. CONNECT TO SPARE 20A/1P BREAKER IN PANEL, WIRE/CONDUIT MARK #2. IF NO SPARE BREAKER PRESENT, PROVIDE AND INSTALL 20A/1P BREAKER IN PANEL.
E40	RECEPTACLE FOR NOVAERUS AIR PURIFICATION UNIT. REFERENCE NOTES ON SHEET E1.01 FOR ADDITIONAL INFORMATION INCLUDING REQUIRED DEVICE ELEVATION.

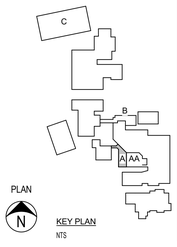
FOR LOCATIONS WHERE POWER AND DATA ARE SHOWN TOGETHER, DEVICE ROUGH-IN IS TO BE A MAXIMUM OF 6" APART. PROVIDE CADDY BRACKETS AS REQUIRED.

ALL 20A/1P RECEPTACLES INSTALLED AT AN ELEVATION LESS THAN 5'-6" AFF AND NOT WITHIN A DEDICATED APPLIANCE. SPACE SHALL BE A TAMPER RESISTANT RECEPTACLE PER NEC 406.12

REFERENCE MECHANICAL FAN SCHEDULE FOR EXHAUST FAN SWITCHING REQUIREMENTS.

01 FIRST FLOOR PLAN - AREA A - POWER

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



Revision /	Date	
2	05/14/25	Addendum No.3

Project:

HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
B.J. HENDRIX
94813
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO. 94813 ON 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

MEP/ENERGY CONSULTANTS

HCE HENDRIX CONSULTING ENGINEERS

COMMISSIONING + FIELD INVESTIGATIONS

F - 4095 ©

HCE job no.: 24-035

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FIRST FLOOR PLAN - AREA A - POWER

PACKAGE VOLUME

Job No. 01954-09-01

Drawn By: PP, LMM

Date: 04/22/2025

Sheet No. ISSUE FOR BID E3.1A1

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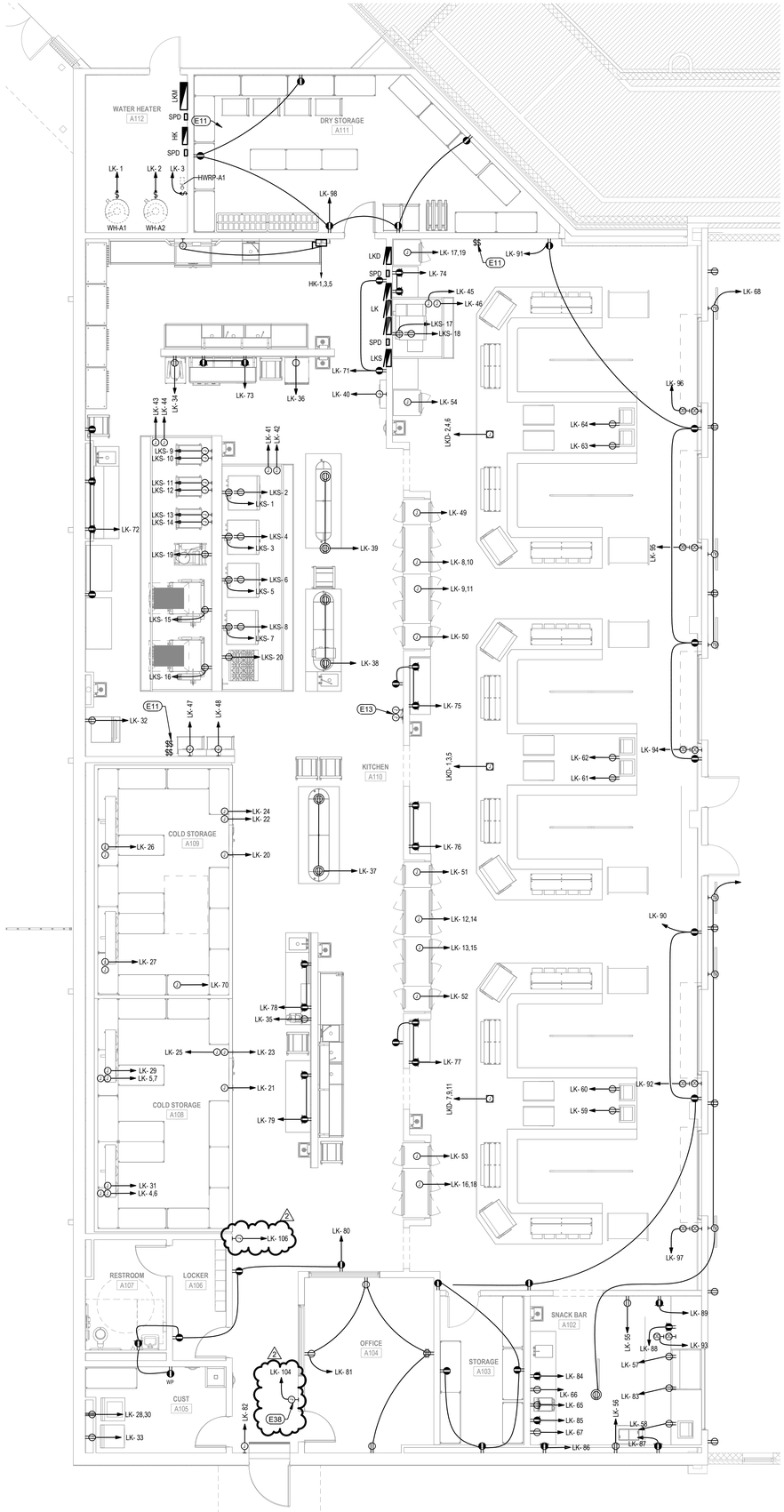


01 **ENLARGED KITCHEN PLAN - POWER**
SCALE: 3/16" = 1'-0"

POWER KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

E11	LOCATION FOR HOOD FAN AND LIGHT SWITCHES.
E13	REMOTE FIRE PULL ROUGH-IN.
E38	POWER FOR DOORBELL/BUZZER. COORDINATE WITH FOOD SERVICE FOR FINAL LOCATION AND ELECTRICAL REQUIREMENTS.

KITCHEN GENERAL ELECTRICAL NOTES

A. ELECTRICIAN TO COORDINATE ALL ROUGH-IN, CONNECTION REQUIREMENTS AND ADDITIONAL ELECTRICAL REQUIREMENTS WITH KITCHEN CONSULTANT DRAWINGS AND KITCHEN EQUIPMENT SUPPLIER.

B. KITCHEN HOOD: THE ELECTRICIAN SHALL PROVIDE ALL NECESSARY HARDWARE, WIRING AND MAKE ALL CONNECTIONS FOR KITCHEN HOOD LIGHTS, FAN, FAN INTERLOCKS, SHUNT CONNECTIONS, INTERLOCKS ETC.

C. COOLER/FREEZER: ELECTRICIAN TO COORDINATE AND PROVIDE ALL ELECTRICAL AND CONNECTION REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER. LIGHTING, DOOR JAMB HEATER, FAN, HEAT TRACE, DRAIN HEATER, CONDENSER SECTIONS, BLOWER COILS FOR AUTO DEFROST, TIME CLOCK, ETC

D. THE KITCHEN EQUIPMENT SUPPLIER IS TO PROVIDE CORD AND PLUG SET TO THE ELECTRICIAN. THE ELECTRICIAN SHALL INSTALL CORD AND PLUG AND PROPER RECEPTACLE TO MATCH. FOR LARGE PIECES WHEN THIS ISN'T PROVIDED THE ELECTRICIAN IT TO PROVIDE NEC DISCONNECTING MEANS RECEPTACLE OR DISCONNECT PER OWNER REQUIREMENTS. (SINGLE OR THREE PHASE 208V/480V GEAR)

E. ALL SINGLE PHASE RECEPTACLES LESS THAN 50 AMPS AND THREE PHASE RECEPTACLES LESS THAN 100 AMPS RATED 150 VOLT TO GROUND OR LESS IN KITCHEN TO BE GFCI PER NEC 210.8.(B).(2). GFCI BREAKERS ARE TO SERVE CIRCUITS TO EQUIPMENT WHERE GFCI RECEPTACLES ARE NOT ACCESSIBLE TO RESET.

F. COORDINATE LOCATION OF GFI RECEPTACLE SO THEY ARE ACCESSIBLE TO BE RESET.

G. PROVIDE DATA OUTLET UNDER EACH CASH REGISTER. COORDINATE FINAL LOCATION WITH KITCHEN PLANS.

H. ELECTRICIAN TO INTERLOCK TABLE LIMIT SWITCH WITH DISH WASHER PER MANUFACTURERS REQUIREMENTS.

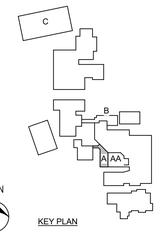
PROVIDE SHUNT TRIP PROTECTION FOR ALL EQUIPMENT UNDER EXHAUST HOODS.

ALL KITCHEN EQUIPMENT THAT IS HARDWIRED SHALL HAVE A PERMANENTLY INSTALLED LOCKABLE DEVICE ON THE BREAKER TO ALLOW THE BREAKER TO BE LOCKED-OUT.

ALL SINGLE PHASE RECEPTACLES LESS THAN 50 AMPS AND THREE PHASE RECEPTACLES LESS THAN 100 AMPS RATED 150 VOLT TO GROUND OR LESS IN KITCHEN TO BE GFCI PER NEC 210.8.(B).(2). GFCI BREAKERS ARE TO SERVE CIRCUITS TO EQUIPMENT WHERE GFCI RECEPTACLES ARE NOT ACCESSIBLE TO RESET.

COORDINATE ALL ROUGH-IN, CONNECTION REQUIREMENTS AND ADDITIONAL ELECTRICAL REQUIREMENTS WITH KITCHEN CONSULTANT DRAWINGS.

REFER TO FOOD SERVICES DRAWINGS FOR ROUGH-IN REQUIREMENTS AND EQUIPMENT INFORMATION.



KEY PLAN
NTS

PLAN N
TRUE N

Revision / 2 — Addendum No.3
Date 05/14/25

Project:
HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
B.J. HENDRIX
94813
LICENSED
PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO. 94813 ON 04/22/2025

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ENLARGED KITCHEN PLAN - AREA A - POWER

PACKAGE | VOLUME

Job No. 01954-09-01
Drawn By: PP, LMM
Date: 04/22/2025
Sheet No. ISSUE FOR BID
E3.1A2

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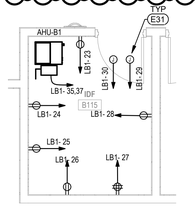
CONFIRM FINAL LAYOUT AND POWER REQUIREMENTS WITH TECHNOLOGY PRIOR TO ROUGH-IN.

GENERAL CONTRACTOR TO PROVIDE SHOP DRAWING SHOWING ROOM LAYOUT OF ALL SPECIAL SYSTEMS EQUIPMENT PANELS INCLUDING FIRE ALARM, DDC, ACCESS CONTROL, SECURITY, VIDEO, ETC PRIOR TO INSTALLATION OF ANY ROUGH-IN FOR ELECTRICAL, TECHNOLOGY, AND OWNER APPROVAL.

2



02 ENLARGED IDF ROOM - POWER
SCALE: 1/4" = 1'-0"

ELECTRICAL DEVICE MOCK-UP

ROUGH-IN ONE ENTIRE CLASSROOM FOR MOCK-UP APPROVAL. IN MOCK-UP, ROUGH-IN ALL DEVICES IN ROOM INCLUDING LIGHT SWITCHES, THERMOSTATS, F/A, RECEPTACLES, DATA, ETC. DO NOT ROUGH-IN ANY ADDITIONAL DEVICES UNTIL MOCK-UP IS APPROVED BY THE OWNER, ARCHITECT AND ENGINEER. ANY DEVICES THAT DON'T MEET APPROVED MOCK-UP LOCATIONS WILL BE REMOVED AND REINSTALLED IN CORRECT LOCATION AT CONTRACTOR'S EXPENSE.

FOR LOCATIONS WHERE POWER AND DATA ARE SHOWN TOGETHER, DEVICE ROUGH-IN IS TO BE A MAXIMUM OF 6" APART. PROVIDE CADDY BRACKETS AS REQUIRED.

ALL 20A/1P RECEPTACLES INSTALLED AT AN ELEVATION LESS THAN 5'-6" AFF AND NOT WITHIN A DEDICATED APPLIANCE. SPACE SHALL BE A TAMPER RESISTANT RECEPTACLE PER NEC 406.12

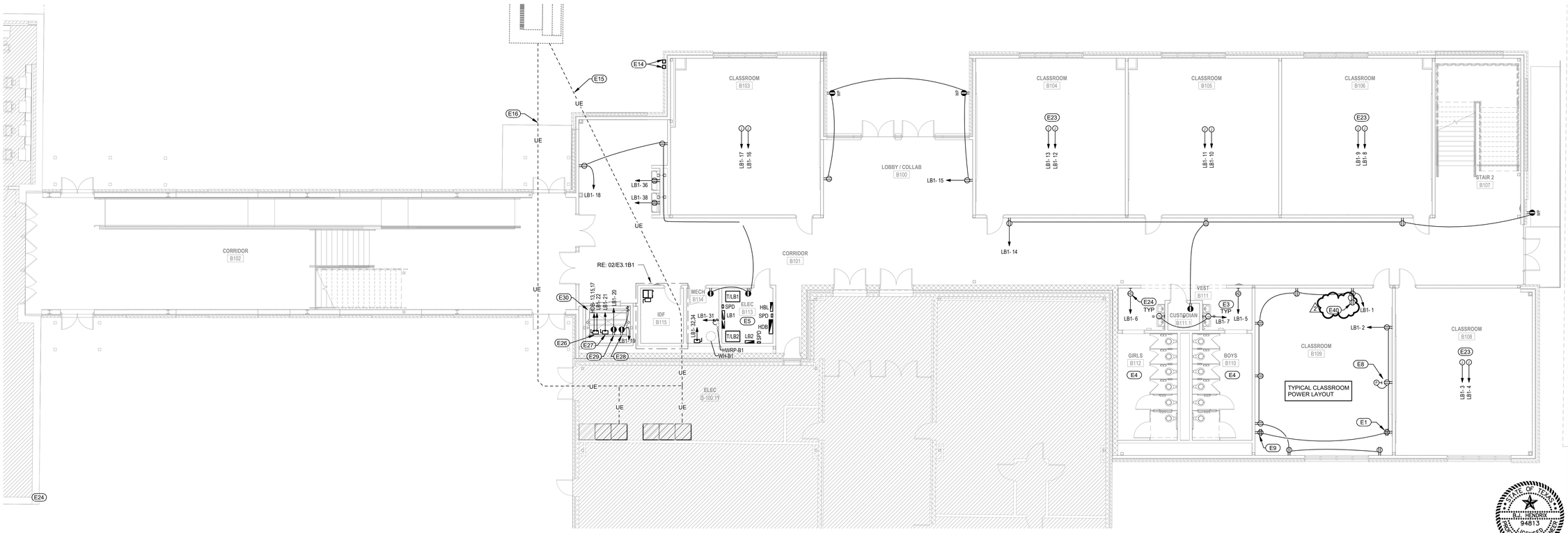
REFERENCE MECHANICAL FAN SCHEDULE FOR EXHAUST FAN SWITCHING REQUIREMENTS.

POWER KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

E1	RECEPTACLE FOR TEACHER'S DESK LOCATION. COORDINATE LOCATION WITH TECHNOLOGY PLANS TO BE LOCATED ADJACENT TO TEACHER AV CONTROLS. REFERENCE ELECTRICAL DEVICE MOCK-UP NOTE.
E3	WASH FOUNTAIN / EWC POWER. RECEPTACLE FOR POWER BEHIND WASH FOUNTAIN OR EWC TO HAVE GFCI BREAKER AT PANEL. COORDINATE FINAL ROUGH-IN LOCATION.
E4	REFERENCE MECHANICAL FAN SCHEDULE FOR CONTROL OF EXHAUST FANS
E5	ELECTRICAL PANELS. DO NOT RUN ANY PIPING OR DUCTWORK OVER ELECTRIC PANELS.
E8	CONVENIENCE RECEPTACLE MOUNTED ON ALL AT STANDARD RECEPTACLE HEIGHT. PROJECTOR/TV RECEPTACLE MOUNTED HIGH IN WALL. COORDINATE PROJECTOR/TV RECEPTACLE LOCATION WITH TECHNOLOGY PLANS PRIOR TO ROUGH-IN.
E9	POWER FOR LIGHTSPEED SYSTEM MOUNTED IN UPPER CABINET FLUSH TO BACK OF CABINET, WHERE PRESENT. COORDINATE FINAL LOCATION WITH TECHNOLOGY PLANS 'AVT' LOCATIONS PRIOR TO ROUGH-IN.
E14	KNOX REMOTE POWER BOX, RECESS MOUNT FOR REMOTE ELECTRICAL DISCONNECT OF MAIN DISCONNECT. REFER TO RISER DIAGRAM FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH AHJ PRIOR TO INSTALLATION. PROVIDE 1"C FOR CONTROL WIRE ROUTED TO MAIN ELECTRICAL ROOM. PROVIDE PLACARD WITH MAP OF BUILDING SHOWING LOCATION OF MAIN ELECTRIC ROOM ABOVE THESE DEVICES.
E15	EXISTING UNDERGROUND SECONDARY FEEDERS. CONTRACTOR TO PROVIDE DEDUCTIVE ALTERNATE TO RETAIN EXISTING FEEDERS AND CONDUIT. PROTECT AS REQUIRED DURING CONSTRUCTION.
E16	RE-ROUTE EXISTING SECONDARY FEEDERS TO MAIN SWITCHGEAR. ESTIMATED AS 16-4"C TO MSB AND MSB2. CONTRACTOR TO FIELD VERIFY EXISTING QUANTITY. PROVIDE IN-GRADE PULL BOXES AS REQUIRED TO INTERCEPT EXISTING FEEDER CONDUITS TO SWITCHGEAR.
E23	J-BOXES REPRESENT CIRCUITS ASSIGNED TO ROOM FOR RECEPTACLE POWER. REFERENCE TYPICAL CLASSROOM POWER LAYOUT (CLASSROOM B109, SHEET E3.1B1) FOR TYPICAL DEVICE LOCATIONS AND CIRCUITING REQUIREMENTS.
E24	FUTURE POWER FOR HAND DRYERS. STUB POWER IN J-BOX ABOVE CEILING WITH ACCESS PANEL. PROVIDE A LOCKING MECHANISM ON ALL BREAKERS SERVING HAND DRYERS PER NEC 422-31.
E26	PROVIDE CIRCUIT BREAKER ENCLOSURE WITH 125 AMP/480V/3PHASE SHUNT TRIP BREAKER. CONFIRM ELEVATOR BREAKER SIZE PRIOR TO RELEASE. MUST BE LOCATED IN ELEVATOR CONTROL PANEL OR IN A LOCATION WITH NO OTHER ELECTRICAL EQUIPMENT. COORDINATE FINAL REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS AND FINAL LOCATION WITH ARCHITECT AND ENGINEER.
E27	PROVIDE LOCKABLE LIGHT SWITCH FOR ELEVATOR CAB LIGHTS. MUST BE LOCATED IN ELEVATOR CONTROL PANEL OR IN A LOCATION WITH NO OTHER ELECTRICAL EQUIPMENT. COORDINATE FINAL REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS AND FINAL LOCATION WITH ARCHITECT AND ENGINEER.
E28	POWER AND SWITCH FOR ELEVATOR SUMP PUMP.
E29	ELEVATOR PIT MAINTENANCE RECEPTACLE.
E30	CONFIRM ALL ELEVATOR PIT AND EQUIPMENT ROOM LAYOUTS AND REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN.
E31	JUNCTION BOX ABOVE CEILING WITH CIRCUIT FOR FUTURE USE.
E40	RECEPTACLE FOR NOVAERUS AIR PURIFICATION UNIT. REFERENCE NOTES ON SHEET E1.01 FOR ADDITIONAL INFORMATION INCLUDING REQUIRED DEVICE ELEVATION.

2



01 FIRST FLOOR PLAN - AREA B - POWER
SCALE: 1/8" = 1'-0"

Revision /	Date	
2	05/14/25	Addendum No.3

Project:

HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

THE STATE OF TEXAS
BRANDON P. HENDRIX
94813
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRANDON P. HENDRIX, P.E. NO. 94813 05/14/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

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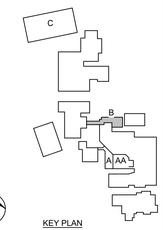
FIRST FLOOR PLAN - AREA B - POWER

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. ISSUE FOR BID
Drawn By: PP, LMM	E3.1B1
Date: 04/22/2025	



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ELECTRICAL DEVICE MOCK-UP

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POWER KEY NOTES

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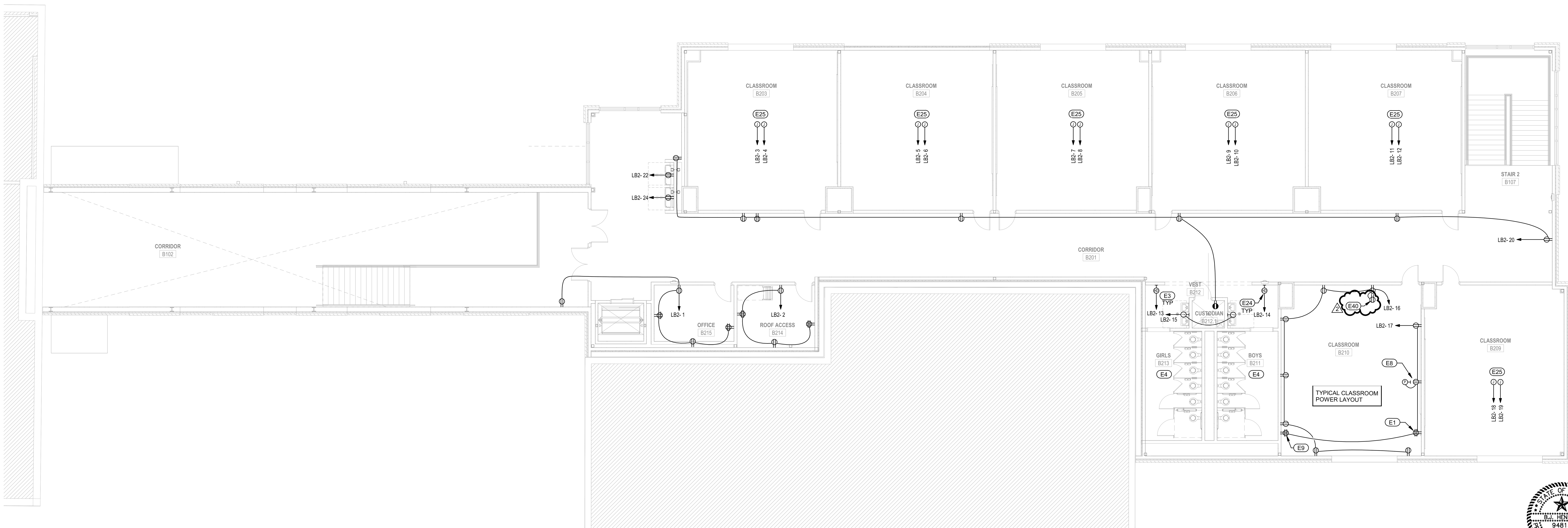
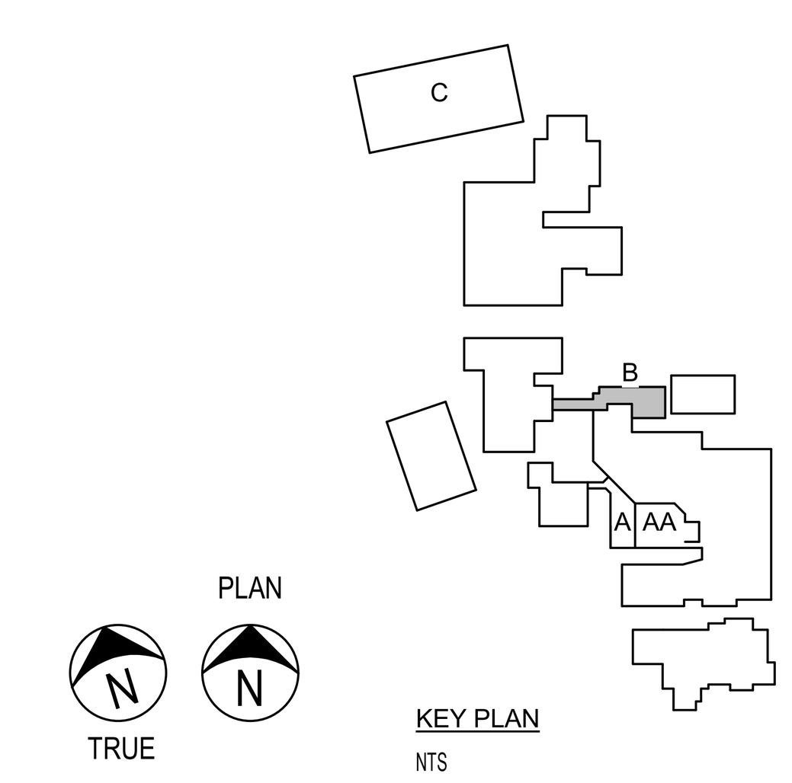
E3	WASH FOUNTAIN / EWC POWER. RECEPTACLE FOR POWER BEHIND WASH FOUNTAIN OR EWC TO HAVE GFCI BREAKER AT PANEL. COORDINATE FINAL ROUGH-IN LOCATION.
E4	REFERENCE MECHANICAL FAN SCHEDULE FOR CONTROL OF EXHAUST FANS
E8	CONVENIENCE RECEPTACLE MOUNTED ON ALL AT STANDARD RECEPTACLE HEIGHT. PROJECTOR/TV RECEPTACLE MOUNTED HIGH IN WALL. COORDINATE PROJECTOR/TV RECEPTACLE LOCATION WITH TECHNOLOGY PLANS PRIOR TO ROUGH-IN.
E9	POWER FOR LIGHTSPEED SYSTEM MOUNTED IN UPPER CABINET FLUSH TO BACK OF CABINET, WHERE PRESENT. COORDINATE FINAL LOCATION WITH TECHNOLOGY PLANS 'AV1' LOCATIONS PRIOR TO ROUGH-IN.
E24	FUTURE POWER FOR HAND DRYERS. STUB POWER IN J-BOX ABOVE CEILING WITH ACCESS PANEL. PROVIDE A LOCKING MECHANISM ON ALL BREAKERS SERVING HAND DRYERS PER NEC 422-31.
E25	J-BOXES REPRESENT CIRCUITS ASSIGNED TO ROOM FOR RECEPTACLE POWER. REFERENCE TYPICAL CLASSROOM POWER LAYOUT (CLASSROOM B210, SHEET E3.1B2) FOR TYPICAL DEVICE LOCATIONS AND CIRCUITING REQUIREMENTS.
E40	RECEPTACLE FOR NOVAERUS AIR PURIFICATION UNIT. REFERENCE NOTES ON SHEET E1.01 FOR ADDITIONAL INFORMATION INCLUDING REQUIRED DEVICE ELEVATION.



01 **SECOND FLOOR PLAN - AREA B - POWER**
SCALE: 1/8" = 1'-0"



KEY PLAN
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Revision / 2 | Date 05/14/25 | Addendum No.3

Project: HAYS HIGH SCHOOL - JACK C. HAYS 2025 ADDITIONS + RENOVATIONS FOR HAYS CISD BUDA, TX

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO: 94813 ON: 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

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SECOND FLOOR PLAN - AREA B - POWER

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. ISSUE FOR BID E3.1B2
Drawn By: PP, LMM	
Date: 04/22/2025	

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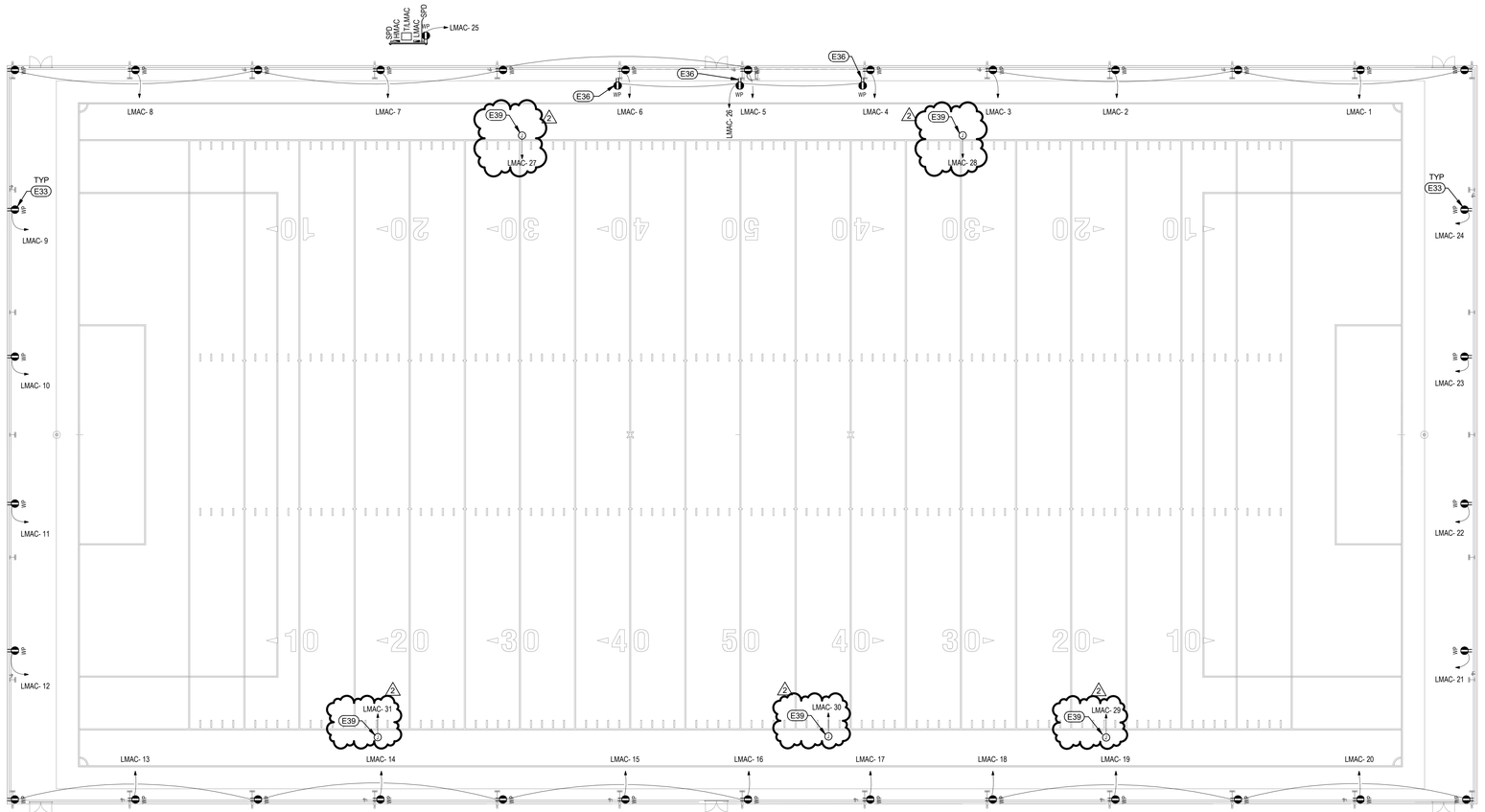
POWER KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

E33	RECEPTACLES TO BE MOUNTED TO NEAREST FENCE POSTS. COORDINATE FINAL LOCATION WITH FENCING.
E36	MOUNT RECEPTACLES AT CROWS NEST VIEWING PLATFORM AT STANDARD HEIGHT ABOVE PLATFORM.
E39	POWER FOR SPORTS NETTING MOTORS. COORDINATE INSTALLATION LOCATION AND ELECTRICAL CONNECTION REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED.



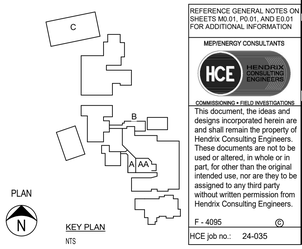
01 FIRST FLOOR PLAN - AREA C - POWER

SCALE: 1/16" = 1'-0"

Revision /	Date	
2	05/14/25	Addendum No.3

Project:

HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX



KEY PLAN
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FIRST FLOOR PLAN - AREA C - POWER

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. ISSUE FOR BID
Drawn By: PP, LMM	E3.1C1
Date: 04/22/2025	

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FLEXIBLE CONDUIT FOR CONNECTIONS TO EQUIPMENT SHALL BE CARFLEX ONLY. SEALTITE IS NOT ACCEPTABLE.

ROOF ELECTRICAL NOTES

A. DISCONNECTS TO BE MOUNTED TO MECHANICAL UNITS. COORDINATE PLACEMENT OF DISCONNECTS WITH MECHANICAL CONTRACTOR. DO NOT BLOCK ANY ACCESS DOORS WITH DISCONNECTS.

B. FIELD COORDINATE PLACEMENT AND MOUNTING REQUIREMENTS OF SERVICE RECEPTACLES. PLACE RECEPTACLES WITHIN 25' OF ALL EQUIPMENT.

C. REFERENCE MECHANICAL EXHAUST FAN SCHEDULE FOR CONTROL REQUIREMENTS OF FANS.

D. COORDINATE MOUNTING OF ROOF MOUNTED PANELS WITH DETAILS ON DETAIL SHEET(S).

E. NO CONDUITS ALLOWED TO BE RUN BETWEEN PANEL AND RTU ON ROOF. MUST BE RUN UNDER ROOFDECK.

F. REFERENCE DISCONNECT SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR ALL DISCONNECT SWITCHES.

ROOF PENETRATION NOTE:

G. CONTRACTOR SHALL COORDINATE TO PROVIDE A MINIMUM 2'-0" CLEARANCE AROUND ANY NEW PENETRATIONS WITH EXISTING AND NEW PENETRATIONS AND WALLS AS REQUIRED FOR THE PROJECT. IF CONFLICT WITH THIS REQUIREMENT ARISES, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ARCHITECT/ENGINEER.

POWER KEY NOTES

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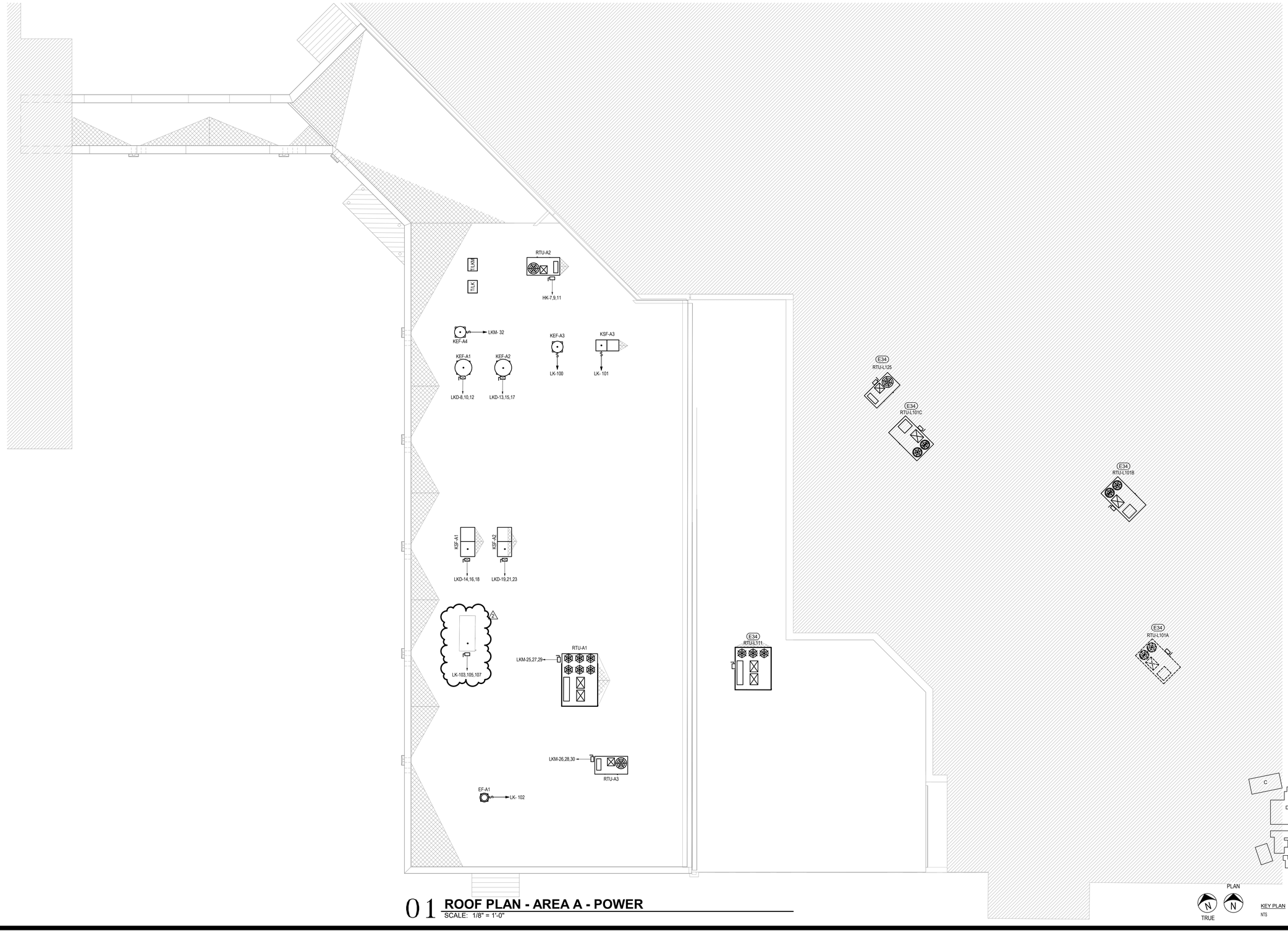
E34 EXISTING UNIT TO BE REPLACED. COORDINATE TIMING OF REPLACEMENT AND CIRCUIT TO EXISTING OR NEW PANEL AS REQUIRED TO SUIT PHASING. FOR NEW PANEL CONNECTION, INTERCEPT EXISTING CIRCUIT ABOVE CEILING AND EXTEND TO NEW PANEL 'LKM'. FIELD COORDINATE WITH EXISTING CONDITIONS. PROVIDE NEW FUSED DISCONNECT AT TIME OF UNIT REPLACEMENT.



PLAN

TRUE

KEY PLAN
NTS

01 ROOF PLAN - AREA A - POWER
SCALE: 1/8" = 1'-0"

Revision / 2 — Date 05/14/25 — Addendum No.3

Project:
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FOR
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STATE OF TEXAS
BRANDON R. HENDRIX
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ROOF PLAN - AREA A - POWER

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. E4.1A1
Drawn By: Author	ISSUE FOR BID
Date: 04/22/2025	

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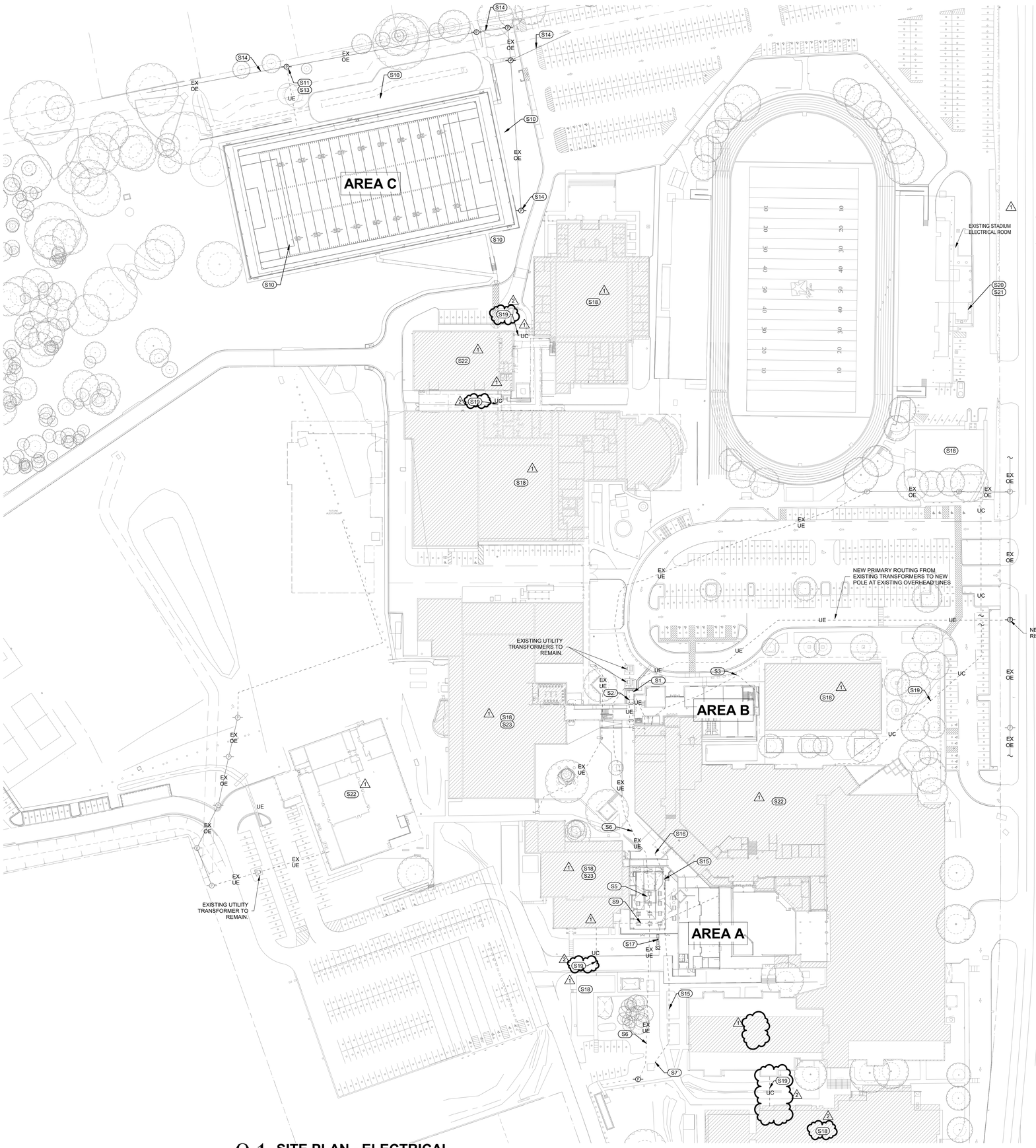


SITE KEY NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

S1	EXISTING UNDERGROUND SECONDARY FEEDERS. CONTRACTOR TO PROVIDE DEDUCTIVE ALTERNATE TO RETAIN EXISTING FEEDERS AND CONDUIT. PROTECT AS REQUIRED DURING CONSTRUCTION.
S2	RE-ROUTE EXISTING SECONDARY FEEDERS TO MAIN SWITCHGEAR AT SUITABLE DEPTH TO ALLOW ADDITION FOUNDATION CONSTRUCTION. ESTIMATED AS 16-4*C TO MSB AND MSB2. CONTRACTOR TO FIELD VERIFY EXISTING QUANTITY. PROVIDE IN-GRADE PULL BOXES AS REQUIRED TO INTERCEPT EXISTING FEEDER CONDUITS TO SWITCHGEAR.
S3	EXISTING UNDERGROUND 208Y/3PH 400A FEEDER ROUTED FROM PANEL 'GL' IN MAIN ELECTRIC ROOM TO 400A MAIN PANEL IN GRAHAM GYM. PROTECT CONDUIT FROM DAMAGE DURING CONSTRUCTION.
S5	ALL ELECTRICAL EQUIPMENT IN EXISTING ELECTRICAL YARD IS OBSOLETE AND TO BE DEMOLISHED.
S6	EXISTING UNDERGROUND PRIMARY TO BE DE-ENERGIZED BY UTILITY.
S7	EXISTING SERVICE RACK/CUSTOMER TRANSFORMER TO REMAIN.
S9	EXISTING UNDERGROUND 480Y/3PH 350A FEEDER ROUTED FROM PANEL 'MSB2' IN MAIN ELECTRIC ROOM TO 400A MAIN PANEL IN BAND BUILDING. PROTECT CONDUIT FROM DAMAGE DURING CONSTRUCTION.
S10	EXISTING SPORTS LIGHTING TO BE DEMOLISHED.
S11	EXISTING SERVICE TO BE DEMOLISHED. UTILITY TO PROVIDE NEW TRANSFORMER BANK FOR NEW SERVICE FOR UNDERGROUND SECONDARY SERVICE TO NEW SERVICE RACK.
S13	COORDINATE FINAL CONNECTION POINT WITH UTILITY.
S14	EXISTING OVERHEAD PRIMARY ELECTRICAL TO REMAIN.
S15	EXISTING UNDERGROUND FEEDER TO SCIENCE BUILDING IS TO REMAIN.
S16	CONTRACTOR TO FIELD VERIFY CONDUIT ROUTING. SURVEY INFORMATION IS UNCLEAR ON FINAL PATH TO MSB2.
S17	EXISTING LIGHT POLE IN THIS AREA TO BE REMOVED. MAINTAIN CIRCUIT CONTINUITY AND EXTEND CIRCUIT TO NEW POLE SHOWN.
S18	INTERCONNECT EXISTING FIRE ALARM FOR THIS BUILDING TO CAMPUS FIRE ALARM SYSTEM VIA FIBER. REFERENCE SPECIAL SYSTEMS SCOPE BOX ON E0.01 FOR ADDITIONAL INFORMATION.
S19	APPROXIMATE UNDERGROUND CONDUIT ROUTING FOR FIBER PATHWAY FOR FIRE ALARM SYSTEM CONNECTION TO AN EXISTING NETWORKED FIRE ALARM CONTROL PANEL. AT EACH BUILDING, SURFACE MOUNT CONDUIT VERTICALLY TO ELEVATION ABOVE CEILING AND PENETRATE BUILDING ABOVE CEILING. FIELD COORDINATE AND OBTAIN APPROVAL OF CONDUIT MOUNTING AND PENETRATION LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION. COORDINATE FINAL ROUTING WITH EXISTING UTILITIES AND TREES.
1 S20	EXISTING PRESSBOX ELEVATOR TO BE REPLACED WITH NEW. CONTRACTOR TO DISCONNECT AND RECONNECT AS REQUIRED. EXISTING ELEVATOR FEEDER CIRCUIT IS 70 AMP RATED. VOLTAGE IS 480Y/3PH. CONTRACTOR TO PROVIDE NEW 70A/3P ENCLOSED CIRCUIT BREAKER FOR NEW ELEVATOR. CONTRACTOR TO CONFIRM AMPACITY OF EXISTING WIRE IS MINIMUM 70 AMPS. FINAL ENCLOSED CIRCUIT BREAKER RATING SHALL BE COORDINATED WITH ELEVATOR SHOP DRAWING REQUIREMENTS. IF ELEVATOR ELECTRICAL REQUIREMENTS EXCEED 70 AMPS, CONTRACTOR IS TO REPLACE FEEDER BREAKER, FEEDER WIRE, AND CONDUIT (IF NEEDED) TO COORDINATE WITH FINAL ELEVATOR REQUIREMENTS.
S21	REPLACE EXISTING PIT/SHAFT LIGHTING WITH FIXTURE TYPE 'J3'. CIRCUIT TO EXISTING LIGHTING CIRCUIT. ASSUME (3) FIXTURES PER LANDING FOR (3) LANDINGS.
S22	THIS BUILDING FIRE ALARM IS ALREADY INTERCONNECTED WITH FIBER.
S23	INTERCONNECT BUILDING FIRE ALARM SYSTEM ABOVE CEILING THROUGH EXISTING BUILDING AND/OR NEW CONSTRUCTION. FIELD COORDINATE ROUTING WITH EXISTING CONDITIONS.

CONTRACTOR TO DETERMINE ALL EXISTING UNDERGROUND ELECTRICAL DEPTHS PRIOR TO PERFORMING SITE PREPARATION TO DETERMINE IF THE EXISTING LOCATIONS CAN BE PROTECTED OR NEED TO BE RE-ROUTED TO A NEW LOCATION OR NEW DEPTH TO ACCOMODATE CONSTRUCTION OF THE ADDITIONS. REFERENCE THIS PLAN AND CIVIL SURVEY PLAN FOR EXISTING SITE UTILITY INFORMATION THAT IS KNOWN. REFERENCE STRUCTURE FOR ALL REQUIRED STRUCTURAL DEPTH REQUIREMENTS. UNLESS INSTRUCTED OTHERWISE IN THESE PLANS, CONTRACTOR SHALL PLAN TO LOCATE AND PROTECT EXISTING UNDERGROUND ELECTRICAL THAT IS TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION TO ALLOW IT TO REMAIN DURING THE ENTIRE CONSTRUCTION SEQUENCE. ALL UNDERGROUND ELECTRICAL SHOWN IN CONFLICT WITH THE FOOTPRINT OF THE ADDITIONS SHOULD BE TRACED OUT TO CONFIRM THE SOURCE AND LOAD PRIOR TO START OF SITE WORK.

WITH THEIR BID, THE CONTRACTOR SHALL PROVIDE ALTERNATE PRICING TO RELOCATE ANY INTERFERING UNDERGROUND ELECTRICAL IN A MANNER THAT ALLOWS FOR THE WORK OF ALL OTHER TRADES AND ALIGNS WITH THE EXPECTED CONSTRUCTION SEQUENCE.

ANY OUTAGES FOR THE BUILDINGS SHOWN OR PORTIONS THEREOF TO RELOCATE EXISTING UNDERGROUND ELECTRICAL SHALL BE CLOSELY COORDINATED WITH THE OWNER FOR ACCEPTRABLE TIMING AND DURATIONS.

2 **ALL SITE CIRCUITING IS DIAGRAMMATIC ONLY. DOES NOT INDICATE CONDUIT ROUTING. ELECTRICAL CONTRACTOR IS TO DETERMINE ALL FINAL CONDUIT ROUTING, COORDINATED WITH ALL SITE UTILITIES AND SITE CONDITIONS. REFERENCE CIVIL AND LANDSCAPE PLANS FOR ADDITIONAL INFORMATION. ALL BURIED ELECTRICAL TO BE INSTALLED WITH WARNING TAPE ABOVE THE CONDUIT.**

DO NOT BEGIN SITE UTILITY WORK UNTIL DRAWINGS HAVE BEEN RECEIVED FROM UTILITY COMPANY.

Revision /	Date	
1	05/08/25	Addendum No.1
2	05/14/25	Addendum No.3

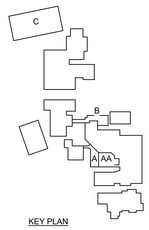
Project:
HAYS HIGH SCHOOL - JACK C. HAYS
2025 ADDITIONS + RENOVATIONS
FOR
HAYS CISD
BUDA, TX

STATE OF TEXAS
B.J. HENDRIX
94813
LICENSED
PROFESSIONAL
ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY B.J. HENDRIX, P.E. NO. 94813 ON 04/22/2025

REFERENCE GENERAL NOTES ON SHEETS M0.01, P0.01, AND E0.01 FOR ADDITIONAL INFORMATION

MEPENERGY CONSULTANTS
HENDRIX CONSULTING ENGINEERS
COMMISSIONING + FIELD INVESTIGATIONS

F - 4095 ©
HCE job no.: 24-035



KEY PLAN
NTS

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Huckabee
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SITE PLAN - ELECTRICAL

PACKAGE	VOLUME
Job No. 01954-09-01	Sheet No. ISSUE FOR BID ES1.00
Drawn By: PP, LMM	
Date: 04/22/2025	

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01 **SITE PLAN - ELECTRICAL**
SCALE: 1" = 60'-0"