MORE THAN ARCHITECTS

ADDENDUM

NO. 1

TO THE DRAWINGS AND THE PROJECT MANUAL

PROJECT NAME: New Operations Building

CLIENT NAME: New Caney Independent School District

LOCATION: New Caney, Texas

PROJECT NUMBER: 1971-05-01

PROPOSAL DATE: Tuesday, October 14, 2025 at 2:00 p.m.

ADDENDUM DATE: Tuesday, October 7, 2025



10/08/2025

For additional information regarding this project, contact Derek Bankston at derek.bankston@huckabee-inc.com or 281.520.4995

THIS ADDENDUM INCLUDES:

Civil Items	1 Page
Structural Items	1 Page
Architectural Items	8 Pages
Foodservice Items	1 Page
Plumbing Items	3 Pages
Mechanical Items	3 Pages
Electrical Items	3 Pages

AND ALL ATTACHED REVISED DRAWING AND SPECIFICATION REFERENCES IN THE ADDENDUM

SUPPLEMENTAL INFORMATION:

1. Pre-Bid Meeting Agenda
2. Pre Proposal Sign In Sheet

Huckabee

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



TX F-20740
10/07/25

CIVIL ITEMS FOR ADDENDUM NO. 1

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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, Civil Item 1: **To the Project Manual, Section 31 3213.19, "Lime Stabilization,"**
To paragraph 3.02.A., revise the paragraph to read the following "The percent of lime to the dry weight of the soil shall be as recommended by the materials testing lab."

AD No 1, Civil Item 2: **To the Project Manual, Section 31 3213.19, "Lime Stabilization,"**
To paragraph 3.08.B.2., revise the paragraph to read the following "Add lime at rate of 25 percent of specified rate at no additional cost to the Owner."

AD No 1, Civil Item 3: **To the Project Manual, Section 31 3213.26, "Lime Fly Ash or Fly Ash Stabilization,"**
To paragraph 3.02.A., revise the paragraph to read the following "The percent of lime to the dry weight of the soil shall be as recommended by the materials testing lab."

AD No 1, Civil Item 4: **To the Project Manual, Section 31 3213.26, "Lime Fly Ash or Fly Ash Stabilization,"**
To paragraph 3.08.B.2., revise the paragraph to read the following "Add lime at rate of 25 percent of specified rate at no additional cost to the Owner."

AD No 1, Civil Item 5: **To the Project Manual, Section 32 1723.13, "Painted Pavement Markings,"**
To paragraph 2.02.A., revise the paragraph to read the following "Paint for stripping shall be ToughLine® High-Performance Low VOC Solvent-Borne Acrylic Traffic Paint as manufactured by Aecel or approved equal."

DRAWINGS:

AD No 1, Civil Item 6: **To the Drawings, Sheet C7.07, "Civil Striping and Signage Details,"**
Add the attached sheet.

END OF CIVIL ADDENDUM

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



October 7, 2025
TX Eng Firm No. F-170

STRUCTURAL ITEMS FOR ADDENDUM NO. 1

NOTICE TO PROPOSERS:

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

PROJECT MANUAL:

AD No 1, Struct Item 1: **To the Project Manual, Section 03 3000, "CAST-IN-PLACE CONCRETE"**
To part 3 – Execution, article 3.09 – CURING AND PROTECTION, paragraph D – Surfaces No in Contact with Forms, subparagraph 2 – Initial Curing, revise the following from "not less than three days" to "not less than five days".

AD No 1, Struct Item 2: **To the Project Manual, Section 03 3000, "CAST-IN-PLACE CONCRETE"**
To part 3 – Execution, article 3.09 – CURING AND PROTECTION, paragraph D – Surfaces No in Contact with Forms, subparagraph 2a – Initial Curing, revise the following from "continuously for 4 days" to ""continuously for five days".

AD No 1, Struct Item 3: **To the Project Manual, Section 05 2100, "STEEL JOIST FRAMING"**
To part 3 – Execution, article 3.02 – ERECTION Add paragraph J as follows: "Coordinate with other trades as required to facilitate framed openings through bar joists".

AD No 1, Struct Item 4: **To the Project Manual, Section 05 2100, "STEEL JOIST FRAMING""**
To part 3 – Execution, article 3.02 – ERECTION Add paragraph K as follows: "All non-metal shop tags shall be removed prior to completion of project".

AD No 1, Struct Item 5: **To the Project Manual, Section 31 6329, "DRILLED CONCRETE PIERS AND SHAFTS"**
To part 3 – Execution, article 3.02 – INSTALLATION paragraph J – Placing of Concrete, subparagraph 1, revise to the following "Concrete must be placed through a tremie if pier excavation depth exceeds ten (10) feet."

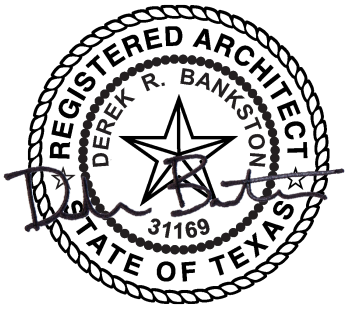
END OF STRUCTURAL ADDENDUM

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Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



10/08/2025

ARCHITECTURAL ITEMS FOR ADDENDUM NO. 1

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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, Arch. Item 1: To the Project Manual, Sections as listed below, Part 2 – Products;

Products listed herein are considered acceptable for conformance with the design concept of the project and general compliance with the information given in the contract documents. The manufacturer, supplier and installer are responsible for meeting all requirements given in the contract documents unless specifically noted in the written approval.

1) To Section 10 7300, "Protective Covers,"
   Add ARK Metal Builder, LLC as an approved manufacturer.
2) To Section 13 3419, "Metal Building Systems,"
   Add ACI Building Systems, LLC as an approved manufacturer.

AD No 1, Arch. Item 2: To the Project Manual, Section 00 0110, "Table of Contents,"

Add the following Sections to the Table of Contents

10 4300 – Emergency Aid Specialties
10 4313 – Defibrillator Cabinets
11 4000 – Food Service Equipment

Delete the following Sections from the Table of Contents

01 5719 – Indoor Air Quality Controls
09 6429 – Platform Flooring
31 3116 – Termite Control

AD No 1, Arch. Item 3: To the Project Manual, Section 01 2100, "Allowances,"
To paragraph 1.04 – Allowances Schedule, add the following:

B. Contingency Allowance: Include the stipulated sum/price of $200,000.00 for use upon Architect's and Owner's instructions.

AD No 1, Arch. Item 4: To the Project Manual, Section 01 2300, "Alternates,"
To paragraph 1.05 Schedule of Alternates, revise as follows to align with Proposal Form Part 2 – Alternate Proposals in Section 00 2216.

A. Alternate Number 1A:
1. Air Cooled Rotary Chillers by Daikin.
a. Base bid is to provide no chiller. Electrical feeders and all associated piping, housekeeping pad, controls, etc. required for complete chiller installation shall be included in base bid.
b. Alternate: Provide chiller as manufactured by Daikin that meets the specified requirements.

B. Alternate Number 1B:
1. Air Cooled Rotary Screw Chillers by JCI/York.
a. Base bid is to provide no chiller. Electrical feeders and all associated piping, housekeeping pad, controls, etc. required for complete chiller installation shall be included in base bid.
b. Alternate: Provide chiller as manufactured by JCI/York that meets the specified requirements.

AD No 1, Arch. Item 5: To the Project Manual, Section 01 4533, "Testing and Inspection Services,"
To paragraph 1.02.A, delete items 2, 3, and 4. Cost incurred by lab to be paid by Owner and back charged to the Contractor.

AD No 1, Arch. Item 6: To the Project Manual, Section 01 5719, "Indoor Air Quality Controls,"
Remove this section in its entirety.

AD No 1, Arch. Item 7: To the Project Manual, Section 04 0511, "Masonry Mortaring and Grouting,"

1) To paragraph 2.01.C, delete items 1 through 9 and revise the mortar types as follows
1. All CMU Masonry: Type S
2. All Masonry Veneer: Type N

2) To paragraph 2.01.D.2, delete items a through c and revise as follows:
a. Grout in partially grouted walls shall be placed in pour heights equal to the bond beam spacing not to exceed 5'-4". Pour heights are NOT permitted to be increased.

b. Grout in fully grouted walls are permitted to be poured per the maximum pour heights provided in the table above. Lift heights shall not exceed 5'-4".

c. Grout lift heights are not permitted to increase unless approved by the Structural Engineer of Record.

3) For clarification to paragraphs 2.03 and 2.04, note the measuring sand with a shovel is NOT acceptable. Use suitable containers for material measurements.

AD No 1, Arch. Item 8: To the Project Manual, Section 07 2100, "Thermal Insulation,"
To paragraph 2.05.C., add the following "Two pins at the top of each section when wall is one-sided only."

AD No 1, Arch. Item 9: To the Project Manual, Section 07 5113, "Three-Ply Modified Built-Up Bituminous Roofing,"
To paragraph 2.02.A, for clarification, delete the following verbiage "…consisting of two plies of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt base membrane, applied over a prepared substrate followed by a white granulated polyester reinforced fire rated finish ply."

AD No 1, Arch. Item 10: To the Project Manual, Section 08 5659, "Service and Teller Window Units,"
To paragraph 2.01.A.1.a., revise to read as follows "Basis of Design: Quikserv Corp [Model SC-4040]: www.quikserv.com."

AD No 1, Arch. Item 11: To the Project Manual, Section 08 7100, "Door Hardware,"
Replace the section in its entirety with the attached revised section.

AD No 1, Arch. Item 12: To the Project Manual, Section 08 8000, "Glazing,"
To paragraph 2.04, delete glazing type IGLSA in its entirety. To paragraph 2.05, delete glazing type GLSA in its entirety.

AD No 1, Arch. Item 13: To the Project Manual, Section 08 8856, "Security Glazing,"
Refer to the attached revised specification for the addition of glazing Type IGSE - Insulated Glass Security.

AD No 1, Arch. Item 14: To the Project Manual, Section 09 2116, "Gypsum Board Assemblies,"
Refer to the attached revised specification for revisions to Baking Board For Wet Areas.

AD No 1, Arch. Item 15: To the Project Manual, Section 09 2226, "Suspension Systems,"
1) For clarification to paragraph 3.04.A, Item 4, replace "metal deck" with "roof deck"
2) To paragraph 3.04.A, add the following item "6. Three twist, minimum, on all wire with wire ends turned up"

AD No 1, Arch. Item 16: To the Project Manual, Section 09 3000, "Tiling,"
1) To paragraph 3.03.O, add the following, "Do not grout these joints. Joints to be left open to receive sealant."
2) Revise paragraph 3.07.A to read as follows, "Over coated cement backer board on studs at restrooms, install in accordance with TCNA (HB) Method W245.

AD No 1, Arch. Item 17: To the Project Manual, Section 09 5100, "Acoustical Ceilings,"
1) To paragraph 2.02, delete paragraph B. Glass Fiber Acoustical Panels Type L6B in its entirety.
2) To paragraph 2.02, add the following ceiling type:

B. Acoustical Tile Type L4 - Standard Panel: Vinyl faced gypsum panel, ASTM E 1264 Type XX Pattern G, Sag Resistant Panels with the following characteristics:

1. Size: 24 by 24 inches.
2. Thickness: 5/8 inches.
3. Light Reflectance: Not less than 86 percent, determined in accordance with ASTM E1264.
4. Ceiling Attenuation Class (CAC): Not less than 34, determined in accordance with ASTM E1264.
5. Edge: Square.
6. Surface Color: White.
7. Surface Pattern: G (smooth texture).
8. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical tiles treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold and mildew.
9. Products:

a. Basis of Design: Ceramaguard as manufactured by Armstrong World Industries.
b. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed in paragraph.

AD No 1, Arch. Item 18: To the Project Manual, Section 09 6429, "Platform Flooring,"
Remove this section in its entirety.

AD No 1, Arch. Item 19: To the Project Manual, Section 09 6723, "Resinous Flooring,"
1) To paragraph 2.02A.2.c, revise as follows: Integral Cove Base: 6"
2) To paragraph 2.03.C, revise as follows: Provide stainless steel termination strips at top of cove base and at centerline of doors.

AD No 1, Arch. Item 20: To the Project Manual, Section 09 9000, "Painting and Coating,"
To paragraph 2.01 Manufacturers, delete items B through G.

AD No 1, Arch. Item 21: To the Project Manual, Section 10 1100, "Visual Display Units,"
To paragraph 3.03.A, delete the following "…this includes wall anchors at 2'-0" o.c. and wall adhesive at maximum of 16" o.c.e.w." and add the following, "Anchor into wood blocking as specified in Section 06 1000."

AD No 1, Arch. Item 22: To the Project Manual, Section 10 2213, "Wire Mesh Partitions,"
1) For clarification, revise paragraph 1.01.A as follows, "Wire mesh systems for walls and doors."
2) Revise paragraph 2.03.C.1 to read as follows, "Locking: Manufacturer to prepare door to accept Sargent 10X Cylindrical Lockset."

AD No 1, Arch. Item 23: To the Project Manual, Section 10 2600, "Wall and Door Protection,"
To paragraph 2.03, delete the following "B. Adhesives and Primers: As recommended by manufacturer."

AD No 1, Arch. Item 24: To the Project Manual, Section 10 4300, "Emergency Aid Specialties,"
Add this section in its entirety, issued as a part of this Addendum.

AD No 1, Arch. Item 25: To the Project Manual, Section 10 4313, "Defibrillator Cabinets,"
Add this section in its entirety, issued as a part of this Addendum.

AD No 1, Arch. Item 26: To the Project Manual, Section 10 5613, "Metal Storage Shelving,"
Add the following paragraph to Part 2 – Products

2.04 COMPONENTS - HEAVY DUTY PALLET RACKS
A. Heavy Duty Pallet Packs consists of simple components that lock rigidly together to form exceptionally strong shelving units. Equal to heavy duty pallet racks as manufactured by Penco.
B. Choose from a wide selection of component sizes and capacities to fit the storage requirements.
C. UPRIGHT COLUMN AND FRAMES WITH FRAME BRACING: Welded with channel type braces for maximum rigidity.
D. BEAMS WITH BEAM LOCKING KEY: Roll formed one piece beam with beam locking key that will resist an upward force from amterial handling equipment up to 1000 pounds.
E. HEAVY DUTY END BEAM CONNECTOR: Assures positive beam to post alignment along the length of the connector and uniform load distribution.
F. FOOT PLATE: Securely welded to each post to provide load distribution and allow for floor anchoring on either side of the frame.

AD No 1, Arch. Item 27: To the Project Manual, Section 10 7500, "Flagpoles,"
To paragraph 2.02.A.2, revise item 9 as follows "9. Finish (pole and accessories): Clear Anodized."

AD No 1, Arch. Item 28: To the Project Manual, Section 11 2336, "Commercial Appliances,"
To paragraph 2.03.A, delete item 1. Ice Machine with Storage Bin (Cubed Ice).

To the Project Manual, Section 11 3013, "Residential Appliances,"
To Part 2 Products, add the following paragraph:

2.03 LAUNDRY APPLIANCES
A. Clothes Washer: Front-loading.
1. Basis of Design: GE, Model# GFW430SSMWW
2. Size: Full-size.
3. Controls: Rotary-Electronic w/LEDs.
4. Cycles: Include normal, permanent press, and delicate.
5. Motor Speed: Variable.
6. Features: Include sound insulation and end of cycle signal.
7. Finish: Painted steel, color white.
8. Appliance shall be ADA Compliant.
B. Clothes Dryer: Electric, stationary.
1. Basis of Design (Electric): GE, Model# GFD43ESSMWW
2. Size: Full-size.
3. Controls: Rotary-Electronic w/LEDs, with temperature-sensing dry control.
4. Temperature Selections: Four.
5. Cycles: Include normal, permanent press, knit/delicate, and air only.
6. Features: Include interior light, sound insulation, and end of cycle signal.
7. Finish: Painted steel, color white.
8. Appliance shall be ADA Compliant.

AD No 1, Arch. Item 29: To the Project Manual, Section 12 3200, "Manufactured Wood Casework,"

1) To paragraph 2.08.E, revise to read as follows:
1. Hinges: Semi-Concealed, number as required by referenced standards for width, height, and weight of door.
a. Semi-Concealed Hinges: Installed as required by hinge design, satin chromium plated over nickel on base material.
1) Five knuckle wraparound hinges for flush overlay condition.
2. Pulls: Satin Chrome wire pulls, 3.5 inches wide, equal to model 4483-1/2 by Stanley
a. Pull design to comply with project's referenced accessibility requirements.
3. Catches: Magnetic.
2) To paragraph 2.08.F.1, revise to read as follows, "Pulls: Satin Chrome wire pulls, 3.5 inches wide, equal to model 4483-1/2 by Stanley."
3) To paragraph 2.08.F.2, revise to read as follows, "Slides: To match drawer design load capacity at full extension. 100 lbs. load capacity, full extension. Accuride, Knape & Vogt, Grant.
4) To paragraph 2.08.H, revise to read as follows:
1. Standards (K & V)#80

2. Brackets/Shelf(K & V)#180
3. Shelf rests to be metal. No plastic allowed.

AD No 1, Arch. Item 30: To the Project Manual, Section 31 3116, "Termite Control,"
Remove this section in its entirety.

DRAWINGS:

AD No 1, Arch. Item 31: To the Drawings, Sheet G1.02, "GENERAL DATA,"
For clarification, remove sheet C0.00 – Cover from the Index of Sheets and add the following sheets:

C7.07, "Civil Striping and Signage Details"
QF1, "FS General Coordination Notes"
QF1.0, "FS Equipment Plan"
QF1.1, "FS Facility Model"
QF1.2, "FS Condensing Units"
QF1.3, "FS Walk Ins"

AD No 1, Arch. Item 32: To the Drawings, Sheet G2.01, "CODE ANALYSIS PLANS - OPERATIONS BUILDING,"
Refer to attached sheet for revised door arrangement at rooms C101 and C103.

AD No 1, Arch. Item 33: To the Drawings, Sheet AS1.01, "ARCHITECTURAL SITE PLAN,"
Refer to attached sheet for the following revisions

1) Revised Comments column of the "SITE GATE SCHEDULE" to clarify access control at motorized gates.
2) Added detail callout for railing at the loading dock retaining wall
3) Added Detail 3 for site wayfinding signage and called out locations on the plan

AD No 1, Arch. Item 34: To the Drawings, Sheet AS2.01, "ARCHITECTURAL SITE DETAILS,"
Refer to attached sheet for the following revisions:

1) Added Detail 14 for double chain-link gate.
2) Added Detail 15 for railing at the loading dock retaining wall.

AD No 1, Arch. Item 35: To the Drawings, Sheet A1.01, "MASTER FLOOR PLANS - OPERATIONS BUILDING,"
Refer to attached sheet for the following revisions:

4) Added washer and dryer and shelving to room A123 – Custodial Storage
5) Revised door arrangement at rooms C101 and C103.

AD No 1, Arch. Item 36: To the Drawings, Sheet A1.02, "FLOOR PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING,"
Refer to attached sheet for the following revisions:

1) Added washer and dryer and shelving to room A123 – Custodial Storage
2) Revised door arrangement at rooms C101 and C103.

AD No 1, Arch. Item 37: To the Drawings, Sheet A1.03, "FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING,"
Refer to attached sheet for the addition of door numbers at the wire mesh partition doors and revised note.

AD No 1, Arch. Item 38: To the Drawings, Sheet A1.04, "FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE,"
Refer to attached sheet for the following revisions

1) Revised detail callout for railing at the loading dock retaining wall
2) For clarification, called out slab recess for cooler freezer
3) Added column wraps in rooms D116, D120, and D117. Provide finish to match adjacent walls.

AD No 1, Arch. Item 39: To the Drawings, Sheet A1.06, "ENLARGED PLANS,"
Refer to attached sheet for revised width of chase behind washer and dryer in Detail 8.

AD No 1, Arch. Item 40: To the Drawings, Sheet A1.07, "TOILET ACCESSORIES AND PLUMBING FIXTURES,"
Refer to attached sheet for revised shower bulkhead detail.

AD No 1, Arch. Item 41: To the Drawings, Sheet A2.01, "REFLECTED CEILING PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING,"
Refer to attached sheet for the following revisions:

1) For clarification, revised "Ceiling Finish Legend" to only include ceiling types used in the project.
2) Revised ceiling types at restrooms and custodial rooms to be type L4.
3) Revised lighting fixtures at canopies to be wall mounted.

AD No 1, Arch. Item 42: To the Drawings, Sheet A2.02, "REFLECTED CEILING PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING,"
Refer to attached sheet for the following revisions:

1) For clarification, revised "Ceiling Finish Legend" to only include ceiling types used in the project.
2) Revised ceiling types at restrooms and custodial rooms to be type L4.
3) Revised lighting fixtures at canopies to be wall mounted.
4) For clarification, revised light fixture location dimensions.

AD No 1, Arch. Item 43: To the Drawings, Sheet A2.03, "REFLECTED CEILING PLAN - LEVEL 1 - AREA D - WAREHOUSE,"
Refer to attached sheet for the following revisions:

1) For clarification, revised "Ceiling Finish Legend" to only include ceiling types used in the project.
2) Revised ceiling types at restrooms and custodial rooms to be type L4.
3) Revised lighting fixtures at canopies to be wall mounted.
4) For clarification, revised light fixture location dimensions.
5) Added column wraps in rooms D116, D120, and D117.

AD No 1, Arch. Item 44: To the Drawings, Sheet A3.01, "DOOR SCHEDULES AND CONFIGURATIONS,"
Refer to attached sheet for the following revisions:

1) Revisions as clouded on the Door Schedules.
2) For clarification, added" WWM - WOVEN WIRE MESH" to the "Door/Fram Materials" Legend.
3) For clarification, revised "Glazing Legend" to only include glazing types used in the project.
4) For clarification, added "FP - FOLDING PARTITION" to the "Schedule Abbreviations" Legend.
5) Revised detail callouts for Frame Types A, B, and OCD-ST
6) Added WWM door type to the "Door Configurations" Legend

AD No 1, Arch. Item 45: To the Drawings, Sheet A4.01, "FINISH PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING,"

Refer to attached sheet for the following revisions:

1) Added washer and dryer and shelving to room A123 – Custodial Storage
2) Revised door arrangement at rooms C101 and C103.
3) Added Note 7 to the "FINISH PLAN GENERAL NOTES"
4) For clarification, added tile pattern in Restroom A101

AD No 1, Arch. Item 46: To the Drawings, Sheet A4.07, "SIGNAGE PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING,"

Refer to attached sheet for clarification of the location of B109E/304E - Storage.

AD No 1, Arch. Item 47: To the Drawings, Sheet A8.01, "CASEWORK LEGENDS AND ELEVATIONS,"

Refer to attached sheet for revised location of the fire suppression button and range hood controls in details 16 & 18.

AD No 1, Arch. Item 48: To the Drawings, Sheet A8.02, "EQUIPMENT PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING,"

Refer to attached sheet for the following revisions:

1) Added washer and dryer and shelving to room A123 – Custodial Storage
2) Revised metal shelving tag in room A109.
3) Revised description and count of Equipment Marks 1 & 2 in the "Equipment Schedule"
4) Added Equipment Marks 17, 18, 19, and 20.
5) Added Defibrillator Cabinets (AED) and Bleed Control Kit (BC)

AD No 1, Arch. Item 49: To the Drawings, Sheet A8.03, "EQUIPMENT PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING,"

Refer to attached sheet for the following revisions:

1) Revised description and count of Equipment Marks 1 & 2 in the "Equipment Schedule"
2) Added Equipment Marks 17, 18, 19, and 20.

AD No 1, Arch. Item 50: To the Drawings, Sheet A8.04, "EQUIPMENT PLAN - LEVEL 1 - AREA D - WAREHOUSE,"

Refer to attached sheet for the following revisions:

1) Added Defibrillator Cabinets (AED) and Bleed Control Kit (BC)

END OF ARCHITECTURAL ADDENDUM

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



FOODSERVICE ITEMS FOR ADDENDUM NO. 1

NOTICE TO PROPOSERS:

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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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, FS. Item 1: To the Project Manual, Sections as listed below, Part 2 – Products;
Products listed herein are considered acceptable for conformance with the design concept of the project and general compliance with the information given in the contract documents. The manufacturer, supplier and installer are responsible for meeting all requirements given in the contract documents unless specifically noted in the written approval.

1) To Section 11 4000, "Food Service Equipment,"

Food Service Equipment Specification document issued in its entirety

DRAWINGS:

AD No 1, FS. Item 2: To the Drawings, Sheet QF1, "FS GENERAL COORDINATION NOTES,"
1) Sheet issued in its entirety.

AD No 1, FS. Item 3: To the Drawings, Sheet QF1.0, "FS EQUIPMENT PLAN,"
2) Sheet issued in its entirety.

AD No 1, FS. Item 4: To the Drawings, Sheet QF1.1, "FS FACILITY MODEL,"
3) Sheet issued in its entirety.

AD No 1, FS. Item 5: To the Drawings, Sheet QF1.2, "FS CONDENSING UNITS,"
4) Sheet issued in its entirety.

AD No 1, FS. Item 6: To the Drawings, Sheet QF1.3, "FS WALK INS,"
5) Sheet issued in its entirety.

END OF FOOD SERVICE ADDENDUM

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



PLUMBING ITEMS FOR ADDENDUM NO. 1

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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, Plumb. Item 1: To the Project Manual, Section 22 0553, "IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT,"

1) To paragraph 2.01, revise paragraph D to add "10. Natural Gas".
2) To paragraph 2.04, revise paragraph C to read as the following "Natural gas piping shall be painted yellow. Specific color selected by Architect."

AD No 1, Plumb. Item 2: To the Project Manual, Section 22 1111, "NATURAL GAS PIPING,"

1) To paragraph 2.B.1, revise paragraph B.1 to read as the following "a. PIPING 2" AND SMALLER: Ball type ANSI B16.33-1981, ANSI B16.38-1978 or UL 842-1980 approved and rated at the gas pressure of application. Nibco T-580-70-UL. Provide stainless steel trim. b. PIPING LARGER THAN 2": Plug valves are acceptable for piping larger than 2"."

AD No 1, Plumb. Item 3: To the Project Manual, Section 22 1116, "DOMESTIC WATER PIPING,"

1) To paragraph 3.02.B, revise paragraph D to add "e. Piping is smaller than 3""

AD No 1, Plumb. Item 4: To the Project Manual, Section 22 1119, "DOMESTIC WATER PIPING SPECIALTIES,"

1) To paragraph 2.01.E, revise paragraph D to replace "Honeywell L6008C" with "Resideo L6007A"

AD No 1, Plumb. Item 5: To the Project Manual, Section 22 1319, "SANITARY WASTE PIPING SPECIALTIES,"

1) To paragraph 2.02, revise paragraph B.2 to read as the following "FINISHED WALLS: Cast iron caulking ferrule with countersunk slotted head with PVC plug (full size up to 4"). Provide square smooth finish, 8"x8", 16 gauge steel, vandal-proof access cover, flanged frame with anchoring lugs, and screwdriver lock. Also provide flanged frame for pre-finished or CMU walls. Cleanout plug shall be installed within 2" of and centered on access panel. Install wall cleanouts at higher level than the flood level rim of adjacent plumbing fixtures. Paint to match wall, color selected by Architect."
2) To paragraph 2.03, revise paragraph A to read as the following "Provide Wade 5790 Series canister type stainless steel, side access, solids interceptor for under sink with internal flow control, drain plug, removable perforated sediment basket. Install union on both sides of interceptor to allow easy and complete removal for ease of servicing.

Install cleanout on top of all cross fittings and figure 5 fittings above floor in chase walls. Do not provide vandal-proof screws – they will not be allowed. Unused inlets outlets to be plugged."

AD No 1, Plumb. Item 6: To the Project Manual, Section 22 4200, "PLUMBING FIXTURES,"

1) To paragraph 1.04, revise paragraph D to remove "Eljer" and "Crane" and replace "500" with "1000".
2) To paragraph 1.04, revise paragraph J to remove "Josam", "Mifab", and "Watts/Ancon".
3) To paragraph 2.01, revise paragraph B.1 to replace "500" with "1000".

AD No 1, Plumb. Item 7: To the Project Manual, Section 22 500, "VEHICLE FUELING AND FLUIDS SYSTEM,"

1) To paragraph 2.05, revise paragraph E to read as the following "All new pipe, fittings and all associated steel components and hardware need to accommodate replacement equipment shall be field primed, and epoxy painted with two coats. Color shall be selected by Architect."
2) To paragraph 2.07, delete the entire paragraph.
3) To paragraph 3.01, delete paragraphs A, C, D & E.
4) To paragraph 3.02, delete paragraph A, C, D & E.
5) To paragraph 3.02, revise paragraph E to read as the following "All new pipe, fittings and all associated steel components and hardware need to accommodate replacement equipment shall be field primed, and epoxy painted with two coats. Color shall be selected by Architect."

DRAWINGS:

AD No 1, Plumb. Item 8: To the Drawings, Sheet P1.01, "PLUMBING SITE PLAN,"

1) Matched CW entry size to 3" shown on 1/P1.02

AD No 1, Plumb. Item 9: To the Drawings, Sheet P1.02, "PLUMBING FLOOR PLAN - LEVEL 1 / 2 - AREA A / C - OPERATIONS BUILDING,"

1) Rerouted storm drain piping to reduce number of fittings used.
2) Increased CW main size on 2nd floor from 3/4" to 3" for future expansion.
3) Included 1" CW to yard hydrant already shown on site plan.
4) Added wall hydrants on building exterior.
5) Added hose bibb to Main Mechanical Room.
6) Matched gas entry size to 3" already shown on site plan.
7) Added 5psi gas line to boilers.
8) Resized low pressure gas line to accommodate change in gas load.
9) Added wall hydrant at wall exterior of RPZ.
10) CUST A116: Relocate water line to avoid roof hatch as indicated.

AD No 1, Plumb. Item 10: To the Drawings, Sheet P1.03, "PLUMBING FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING,"

1) Added solids interceptors to all service sinks.
2) Added floor sinks for compressor and dryer condensate drainage.
3) Match sanitary flow lines to site plan.

AD No 1, Plumb. Item 11: To the Drawings, Sheet P1.04, "PLUMBING FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE,"

1) Added solids interceptors to all service sinks.
2) Moved valves out of restrooms and into break room and increased CW bathroom branch sizes to 1 1/2".
3) Split PRV-D1 into PRV-D1 and -D2 serving generator and building, respectively.
4) Rerouted sanitary piping for floor drain receiving freezer/cooler condensate and renamed drain to FD-P.
5) Added floor sink for compressor and dryer condensate drainage.
6) Adjusted gas pipe sizing throughout.

AD No 1, Plumb. Item 12: To the Drawings, Sheet P1.05, "PLUMBING FLOOR PLANS - BUS WASH, MECHANIC BAY, & STORAGE,"

1) Text compressed air reel pipe sizes made to be 3/4" for consistency.
2) Added missing pipe size tags to Mechanic Bay.
3) Added Proset trap guard to existing trench drains in Mechanic Bay.
4) Added hose bibb and
5) vent to trench drain to Bus Wash.

AD No 1, Plumb. Item 13: To the Drawings, Sheet P3.00, "PLUMBING DETAILS AND SCHEDULES,"

1) Updated generator loads. Added PRV-D2 and adjusted PRV-D1 to accommodate.

AD No 1, Plumb. Item 14: To the Drawings, Sheet P3.01, "PLUMBING DETAILS AND SCHEDULES,"

1) Added AC-3 and marks for AD-1, AD-2, and AD-3 to Air Compressor and Air Dryer Schedule.

AD No 1, Plumb. Item 15: To the Drawings, Sheet P3.03, "PLUMBING DETAILS AND SCHEDULES,"

1) Adjusted sink and lavatory sanitary/vent connections to be 1 1/2".
2) Adjusted service sink water connections to be 3/4"
3) Added 1/2" CW connection to FD

AD No 1, Plumb. Item 16: To the Drawings, Sheet P4.01, "PLUMBING RISER DIAGRAMS,"

1) Adjusted risers to reflect changes to floor plans.
2) Added missing water hammer arrestors.
3) Tied together any disconnected water and sanitary lines.

AD No 1, Plumb. Item 17: To the Drawings, Sheet P4.01, "PLUMBING RISER DIAGRAMS,"

1) Adjusted risers to reflect changes to floor plans.
2) Separated gas line to existing building to be consistent with site plan.
3) Split PRV-D1 into PRV-D1 and -D2 serving generator and building, respectively.
4) Adjusted gas loads on riser and schedule to be consistent with loads found on Mechanical and Electrical plans and adjusted gas pipe sizing accordingly.

END OF PLUMBING ADDENDUM

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



MECHANICAL ITEMS FOR ADDENDUM NO. 1

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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, Mech. Item 1: To the Project Manual, Section 23 0553, "IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT,"
To paragraph 2.01E, revise to read as the following "Suspended air moving equipment shall be marked on ceiling grid with specific identification name using a label maker with black letters on white background, apply directly to ceiling grid."

AD No 1, Mech. Item 2: To the Project Manual, Section 23 0923, "AUTOMATED TEMPERATURE CONTROLS,"
To paragraph 2.02M, revise to read as the following "CARBON MONOXIDE (CO) SENSORS/MONITORS to be provided and installed by the BOILER MANUFACTURER for all hydronic boilers, as well as all domestic gas water heaters over 200MBH. BMS contractor to provide uninterruptible power supply (UPS) for all CO sensors to prevent outage during power surges. Detection of CO to disable all boilers and water heaters within a shared space. Controller shall be mounted on wall at 48" AFF maximum.

AD No 1, Mech. Item 3: To the Project Manual, Section 23 0993, "SEQUENCE OF OPERATIONS FOR HVAC CONTROLS,"
To paragraph 2.03A, revise to read as the following "If the outdoor/indoor air temperature is such that heating will be required, hot water pump and lead boiler shall be pre-started to warm loop temperature prior to starting the air handling units. The building hot water pump shall be activated and operated by VFD to maintain system pressure. Note that at least the one boiler shall be enabled whenever a hot water pump is on, with no exceptions. The enabled boiler will open its isolation valve and monitor the loop temperature as it circulates through the HX. It will sit in standby and will only fire up when the setpoint dictates it. This will ensure at least one isolation valve is open to allow pump not to deadhead."

AD No 1, Mech. Item 4: To the Project Manual, Section 23 2923, "VARIABLE SPEED MOTOR CONTROLLERS,"

To paragraph 2.01A, revise to read as the following "GENERAL: Controller shall be a microprocessor controlled, adjustable frequency motor controller consisting of a sine-coded, pulse width modulated output inverter suitable for specified size and voltage motors listed on the Drawings. Unit shall be U. L. Listed as a complete package and comply with the applicable ANSI, IEEE and NEMA Standards as well as the National Electrical Code. Inverter shall be grounded and line, load, control and fire/safety wiring shall be installed in separate conduits. All VFDs shall have individual conduit runs to motors to avoid EMI; no shared electrical conduits allowed."

AD No 1, Mech. Item 5: To the Project Manual, Section 23 3113, "HVAC METAL DUCTS,"

To paragraph 2.14B.3, revise to read the following "All other low pressure ductwork to be visually inspected for proper sealant prior to insulation being installed."

AD No 1, Mech. Item 6: To the Project Manual, Section 23 5200, "CONDENSING BOILER HIGH EFFICIENCY SYSTEM,"

To paragraph 2.01E, revise acceptable manufacturers as the following.

1) Hydrotherm - KN (Basis of Design)
2) Lochinvar Crest
3) Patterson-Kelly Solis
4) Raypak – Xvers
5) RBI - Encore

DRAWINGS:

AD No 1, Mech. Item 7: To the Drawings, Sheet M1.02, "MECHANICAL FLOOR PLAN – LEVEL 1/2 AREA A/C – OPERATIONS BUILDING,"

1) RR A101: Revise exhaust duct wall termination to a 12"x12" wall louver.
2) CUST. A109: Add OBD to exhaust grille tap.
3) CUST. A116: Relocate 18" S/A duct into Corridor C114 as indicated.
4) CORRIDOR A117: Tag chilled water piping size as indicated.
5) TRAINING A118: Revise hot water piping size as indicated.
6) STAIR C156: Add R/A grille to space.

AD No 1, Mech. Item 8: To the Drawings, Sheet M1.04, "MECHANICAL FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE,"

1) BREAK RM D107: Wall louver for FCU-W1 outside air shall be 12"x12".
2) COOLER/FREEZER: Add supply and return air duct to condition space above Cooler/Freezer as indicated.

AD No 1, Mech. Item 9: To the Drawings, Sheet M2.00, "MECHANICAL DETAIL PLANS AND SECTIONS,"

1) Detail 1 – MECHANICAL CENTRAL PLANT DETAIL PLAN: Revise hot water piping size as indicated.
2) Detail 7 – AHU-2 SECTION #2: Revise the outside air duct termination height as indicated.

AD No 1, Mech. Item 10: To the Drawings, Sheet M4.01, "MECHANICAL SCHEDULES,"

1) AIR HANDLING UNIT SCHEDULE - DX: Revise as indicated.
2) FAN POWERED TERMINAL UNITS SCHEDULE: Revise as indicated.
3) VARIABLE AIR VOLUME BOX SCHEDULE: Revise as indicated.
4) PUMP SCHEDULE: Revise as indicated.

AD No 1, Mech. Item 11: To the Drawings, Sheet M5.02, "MECHANICAL DETAILS,"

1) Detail 1 – AHU COIL PIPING DETAIL: Revise 3-way valve on AHU as indicated.

AD No 1, Mech. Item 12: To the Drawings, Sheet M6.01, "MECHANICAL SCHEMATICS,"

1) HOT WATER SYSTEM PIPING AND CONTROLS SCHEMATIC: Revise as indicated.

END OF MECHANICAL ADDENDUM

Project Name: New Operations Building
Client: New Caney Independent School District
New Caney, Texas
Project Number: 1971-05-01



ELECTRICAL ITEMS FOR ADDENDUM NO. 1

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 AND THE PROJECT MANUAL AS NOTED:

PROJECT MANUAL:

AD No 1, Elec. Item 1: To the Project Manual, Section 260500, "ELECTRICAL WIRING,"
To paragraph 2.02 C, change the conduit home run minimum length from 3/4in to 1in.

AD No 1, Elec. Item 2: To the Project Manual, Section 260926, "LIGHTING CONTROL PANELBOARD,"
To paragraph 2.01 E, change the lighting control panel relay manufacturer to intelligent lighting controls (ILC).

AD No 1, Elec. Item 3: To the Project Manual, Section 271000, "STRUCTURED CABLING SYSTEM,"
To paragraph 2.05 E, change the vertical management panels to "Vertical: [10 inch] ([203.2] mm) x [84] inch ([2133.6] mm) & [12 inch] ([203.2] mm) x [84] inch ([2133.6] mm) management panels, Commscope 760244793 & 760244794."

AD No 1, Elec. Item 4: To the Project Manual, Section 280000, "ACCESS CONTROL SYSTEM,"
To paragraph 2.31 G.2, delete paragraph.

AD No 1, Elec. Item 5: To the Project Manual, Section 285129, "EMERGENCY RADIO COMMUNICATION SYSTEM,"
To paragraph 3.02 T, change "closset" to "closest" and "buidling" to "building."

DRAWINGS:

AD No 1, Elec. Item 6: To the Drawings, Sheet E0.01, "LEGEND, NOTES AND ABBREVIATIONS"
1) Revised legend to indicated blue horn strobe.

AD No 1, Elec. Item 7: To the Drawings, Sheet E1.00, "ELECTRICAL SITE PLAN
1) Clarified scope for buildings/areas.
2) Clarified demo scope for existing building.

AD No 1, Elec. Item 8: To the Drawings, Sheet E1.02, "POWER FLOOR PLAN – LEVEL 1 / 2 – AREA A / C"
1) Revised various FPB units from 120 volt to 277 volt. Refer to drawings for locations.
2) Provided dedicated circuit in C152 break room for FPD.
3) Moved data drop to adjacent wall for FPD in C101.
4) Shifted receptacle in corridor C151.
5) Revised power circuits for general purpose receptacles in MDF.
6) Added note in break room to coordinate data drop height for all data drops adjacent to above counter receptacles.

Huckabee

7) Added ceiling mounted sound system for FPD in Training A118. Refer to drawing for power and device locations.
8) Revised power to FPD to be isolated ground.

AD No 1, Elec. Item 9: To the Drawings, Sheet E1.03, "POWER FLOOR PLAN – LEVEL 1 – AREA B – OPERATIONS BUILDING"

1) Added power for air compressors AC-1 and AC-2 and dryers.
2) Provided power for drop cords in B108.
3) Revised power layout for dust collector.

AD No 1, Elec. Item 10: To the Drawings, Sheet E1.04, "ELECTRICAL FLOOR PLANS – LEVEL 1 – AREA D - WAREHOUSE"

1) Revised power, data and connections for cooler freezer. Refer to drawing for details.
2) Added doorbell and buzzer.
3) Show conduit for mechanical vents.
4) Added power for air compressor and dryer.
5) Showed power for exterior wp receptacle.

AD No 1, Elec. Item 11: To the Drawings, Sheet E1.05, "ELECTRICAL FLOOR PLANS - BUS WASH, MECHANIC BAY & STORAGE"

1) Revised scope description in transportation building additions. No electrical power scope in these buildings.

AD No 1, Elec. Item 12: To the Drawings, Sheet E1.06, "ELECTRICAL ROOF PLAN"

1) Revised spower for ACU-2B.

AD No 1, Elec. Item 13: To the Drawings, Sheet E2.02, "LIGHTING REFLECTED CEILING PLAN – LEVEL 1 / 2 – AREA A / C – OPERATIONS BUILDING,"

1) Changed WPE fixtures on exterior walls to 277V and placed on circuit EHA-18.
2) Changed one B fixture to a BWE fixture.
3) Removed 7 A fixtures.
4) Added 2 BWE fixtures.
5) Changed 7 L4 fixtures to 5 A fixtures in Cust. Stor. A123, Cust. C116, and Cust. A109.
6) Removed 1 CLE canopy fixture and added 1 WPE fixture.

AD No 1, Elec. Item 14: To the Drawings, Sheet E2.03, "LIGHTING REFLECTED CEILING PLAN – LEVEL 1 – AREA B – OPERATIONS BUILDING,"

1) Added 1 WP fixture to exterior wall and changed circuit for WP fixtures to 1HA-5.
2) Added 9 WPE fixtures to exterior walls on circuit EHA-17.
3) Removed 11 CLE fixtures from exterior canopies.

AD No 1, Elec. Item 15: To the Drawings, Sheet E2.04, "LIGHTING REFLECTED CEILING PLAN – LEVEL 1 – AREA D - WAREHOUSE,"

1) Removed 8 CLE fixtures from exterior canopies.
2) Added 6 WPE fixtures to exterior walls on Circuit EHA-18.
3) Removed 2 L4 fixtures and add 1 A fixture to Cust. D113.

AD No 1, Elec. Item 16: To the Drawings, Sheet E2.05, "LIGHTING REFLECTED CEILING PLAN - BUS WASH, MECHANIC BAY & STORAGE"

1) Revised sheet title name.

AD No 1, Elec. Item 17: To the Drawings, Sheet E2.06, "LIGHTING FIXTURE SCHEDULE,"

1) Updated Lighting Fixture Schedule to properly reflect drawings.

AD No 1, Elec. Item 18: To the Drawings, Sheet E4.01, "SECURITY SYSTEMS FLOOR PLAN – OPERATIONS BUILDING"

1) Revised description and location of blue horn strobe.
2) Add blue strobe to exterior.

AD No 1, Elec. Item 19: To the Drawings, Sheet E4.02, "SECURITY SYSTEMS FLOOR PLAN – WAREHOUSE BUILDING"

1) Revised description and location of blue horn strobe.
2) Add blue strobe to exterior.
3) Made note that security panel to be an expansion and to connect back to operations building.
4) Shown location of access control panel.

AD No 1, Elec. Item 20: To the Drawings, Sheet E7.01, "ELECTRICAL ONE LINE – OPERATIONS BUILDING"

1) Revised transformers sizes and wire. Refer to sheet for changes.

AD No 1, Elec. Item 21: To the Drawings, Sheet E7.01, "ELECTRICAL ONE LINE – WAREHOUSE"

1) Revised transformers sizes and wire. Refer to sheet for changes.
2) Revised panel LBW to 250 Amps.

AD No 1, Elec. Item 22: To the Drawings, Sheet E6.01, "ELECTRICAL DETAILS"

1) Added detail 12 for ceiling speaker system in training A118. Refer to detail for more information .

AD No 1, Elec. Item 23: To the Drawings, Sheet E7.01, "ELECTRICAL PANEL SCHEDULES"

1) Revised panel schedules breaker sizes and pole count, added and removed spares and spaces. Refer to sheet for more information.

AD No 1, Elec. Item 24: To the Drawings, Sheet E7.02, "ELECTRICAL PANEL SCHEDULES"

1) Revised panel schedules breaker sizes and pole count, added and removed spares and spaces. Refer to sheet for more information.

AD No 1, Elec. Item 25: To the Drawings, Sheet E7.03, "ELECTRICAL PANEL SCHEDULES"

1) Revised panel schedules breaker sizes and pole count, added and removed spares and spaces. Refer to sheet for more information.

AD No 1, Elec. Item 26: To the Drawings, Sheet E7.04, "ELECTRICAL PANEL SCHEDULES"

1) Revised panel schedules breaker sizes and pole count, added and removed spares and spaces. Refer to sheet for more information.

END OF ELECTRICAL ADDENDUM

A. NCISD Master Hardware Spec – Version 3.0

SECTION 087100 – DOOR HARDWARE

Prior to any programming of specifications, a meeting between owner, architect and hardware manufacturer representative must be conducted to meet NCISD door hardware standards and card access requirements.

Most current door hardware standards to be used.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

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

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Door Hardware Schedule”.
2. Division 08 Section “Hollow Metal Doors and Frames”.
3. Division 08 Section “Interior Aluminum Doors and Frames”.
4. Division 08 Section “Plastic Laminate Faced Wood Doors”.

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

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.

3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

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

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

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

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

3. Content: Include the following information:

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

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

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
    b. Complete (risers, point-to-point) access control system block wiring diagrams.
    c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Proof of Certification: Provide copy of manufacturer(s) official certification or accreditation document indicating proof of status as a qualified installer of Windstorm assemblies.

E. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

F. Informational Submittals:

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

G. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.

1.4 QUALITY ASSURANCE

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

B. Installer Qualifications: A minimum 3 years documented experience hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory

direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

D. Integrated Wiegand, Wireless, and IP-Enabled Access Control Products Supplier Qualifications: Integrated access control products and accessories are required to be supplied and installed by a"Certified Integrator" and provided with the hardware. Suppliers are to be factory trained, certified prior to project bid, and a direct purchaser of the specified product. Installers are to be factory trained, certified prior to project bid, and are responsible for commissioning, servicing, and warranting the installed equipment specified for the project.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated

F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

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

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site.

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

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

1.6 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.

C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

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

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Warranty Periods:

1. 10 years mortise locks and latches.
2. Five years for exit hardware.
3. 7 years on cylindrical locks.
4. 5 year for electric latch retraction exit motors
5. Twenty five years for manual surface door closer bodies.
6. Two years for electromechanical door hardware.

1.8 MAINTENANCE SERVICE

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

1.9 OWNER STOCK – Provide the following:

A.	Blank keys, 50 per building master keyway
B.	Unassembled cores, 10 per building master keyway

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

C. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity, unless otherwise indicated:

a. Two Hinges: For doors with heights up to 60 inches.
b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.
d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:

a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Acceptable Manufacturers:

a. Hager Companies (HA).
b. McKinney Products (MK).
c. Stanley Hardware (ST).
d. Ives (IV)

~~B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120 inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.~~ **NOT IN USE AT THIS TIME.**

1. ~~**Only** where specifically requested by Owner.~~

2. ~~Acceptable Manufacturers:~~

~~a. Pemko~~
~~b. Ives~~

2.3 POWER TRANSFER DEVICES

A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 10) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Acceptable Manufacturers:

a. Pemko Manufacturing (PE) – EL-CEPT Series.
b. Securitron (SU) - EL-CEPT Series.
c. Stanley Hardware (ST) EPT-12C Series.
d. Von Duprin (VD)– EPT10 Series

B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:
a. McKinney Products (MK) - Electrical Connecting Kit: QC-R001.
b. McKinney Products (MK) - Connector Hand Tool: QC-R003.
c. Von Duprin, Schlage (VD) SC) – Electrical Connector Kits: CON12 x Length required

2.4 DOOR OPERATING TRIM

A. Flush Bolts : ANSI/BHMA A156.3 and A156.16, Grade 1, certified.

1. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
4. Automatic flush bolts **ONLY** when specifically requested by owner or required by code (fire rated doors)
5. Acceptable Manufacturers:

a. Ives (IV).

b. Rockwood Manufacturing (RO).
c. Trimco (TC).

B. Door Push Plates and Pulls: ANS/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

5. Acceptable Manufacturers:

a. Ives (IV).
b. Rockwood Manufacturing (RO).
c. Trimco (TC).

2.5 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years' experience designing secured master key systems and have on record a published security keying system policy.

B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.

1. Acceptable Manufacturers:

a. Schlage (SFIC) Everest T 29 Series **NO SUBSTITUTION.**

C. Cylinders: Original manufacturer cylinders complying with the following:

1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
5. Keyway: Match Facility Standard.

D. Locksets and keyways must allow Everest T-29 (Owners pat. key system).

E. Keying System: Each type of lock and cylinders to be factory keyed.

1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Key locks to Owner's existing system.

F. Visual Key Control:
1. Stamp keys and core face with DHI key symbol

G. Visual Core Control:
1. Stamp on face of core.

H. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).
4. Construction Control Keys (where required): Two (2).
5. Permanent Control Keys (where required): Two (2).

I. Construction Keying: Provide temporary keyed construction cores at exteriors only. Temporary plastic cores at remaining openings.

J. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide bitting list in written an electronic file as directed by the Owner.

K. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Acceptable Manufacturers:

a. Lund Equipment (LU).
b. MMF Industries (MM).
c. Telkee (TK).

2.6 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.

1. Acceptable Manufacturers

a. Sargent Manufacturing (SA) 8200 Series, Schlage (SC) L9000 Series, Marks (MX) 5 Series (Mortise)
   a) Staff Toilet accessible by student V20 8251 / 5EW (always locked)
   b) Staff Restroom not-accessible by student V20 8265 / 5LJ
   c) Student Gang Restroom LC-4878 (shelter in place) (No Sub due to function)

b. Sargent Manufacturing (SA) 10 line Series, Schlage (SC) ND Series, Marks (MX) 195 Series
   a) Storeroom/Elec/Mech/IDF 10G04 / 195RF-F19 (always locked)
   b) Office 10G05 / 195RAB-F19 (push button)
   c) Passage 10U15 / 195N
   d) Classroom 10G37 / 195RS-F19 (locked or unlocked)
   e) Privacy 10U65 / 195L (coin turn)
   f) Public use restroom 10U65 / 195L (lock with coin turn outside)
   g) Secure Vestibule 10G71 / 195FEU-F19 (fail secure)

2.7 AUXILIARY LOCKS

A. Tubular Deadlocks: Acceptable Manufacturers:

a. Sargent Manufacturing (SA) – 4870 Series, Schlage (SC) L460 Series, Marks (MX) 3 Series
   a) Student Gang Restroom 4878
   b) Locker Room Restroom 4878
   c) Serving Line Pair 4875

2.8 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Auxiliary Deadlocks: BHMA A156.5.
3. Dustproof Strikes: BHMA A156.16.

2.9 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.

2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.

3. Except on fire rated doors, provide exit devices with cylinder dogging device to hold the push bar and latch in a retracted position. Provide cylinder dogging on devices where specified in Hardware Sets. Provide cylinder dogging at inactive leaf of electrified pairs.

4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.

5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

6. Vandal trim at all exteriors with exits.
    a. Rockwood Vandal Trim VRT22/VRT22 CFC
    b. Ives VR 910 Vandal Trim VR910 NL/VR910 DT
    c. Marks Vandal Trim MVPL/MVPCCL

7. Rail Sizing: Provide exit device rails factory sized for proper door width application.

8. Through Bolt Installation: For all exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be steel, pullman type, with deadlock feature.

1. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) - 80 Series.
    b. Von Duprin (VD) 99 Series

c. Marks (MX) M9900 Series

C. Tube Steel Removable Mullions: ANSI/BHMA A156.3 removable steel mullions with malleable-iron top and bottom retainers and a primed paint finish.

1. Provide keyed removable feature where specified in the Hardware Sets as requested by Owner.

2. Provide stabilizers and mounting brackets as required.

3. Provide wall mounting kits for all **keyed removable** mullions ONLY.

4. Provide electrical quick connection wiring options as specified in the hardware sets.

5. Acceptable Manufacturers:

a. Sargent Manufacturing (SA) – L980S Series.
b. Von Duprin (VD) – KR4954/KR9954

2.10 INTEGRATED WIEGAND/RS485 OUTPUT ACCESS CONTROL EXIT DEVICES OR WEIGAND/RS485 EXIT DEVICE TRIM

A. Wiegand Output Integrated Card Reader Exit Hardware: Wiegand output ANSI 156.3 Grade 1 rim, mortise, and vertical rod exit device hardware with integrated or lock installed proximity card reader, latchbolt and touchbar monitoring, and request-to-exit signaling. Hard wired, solenoid driven locking/unlocking control of the lever handle exit trim with 3/4" throw latch bolt. U.L listed and labeled for either panic or "fire exit hardware" for use on up to 3 hour fire rated openings. Available with or without keyed high security cylinder override.

1. Card reader to be mounted as follows:
a. Typical panic bar – mounted on door, active leaf, above anti-vandal pull or scheduled lockset on.
b. Typical lockset – mounted on door above anti-vandal pull or scheduled lockset.
c. With electric latch – mounted beside door on wall or on jamb.

2. Open architecture, hard wired platform supports centralized control of locking units with new or existing Wiegand compatible access control systems. Inside push bar (request-to-exit) signaling and door position (open/closed status) monitoring (via separately connected or integrated DPS). NCISD platform is RS2.

3. Reader supports either HID 125 kHz proximity (up to 39 bits, including Corporate 1000) or 13.56 MHz (2K-32K) iClass® credentials.

4. 12VDC or 24VDC external power supply required for reader, with optional 24VDC operation available with iClass® reader (125 kHz reader). 24VDC required for solenoid operated exit trim or entire lockset (12VDC if applicable). Fail safe or fail secure options.

5. Acceptable Manufacturers:

a. Sargent Manufacturing (SA) – SE LP10 - M1 80 Series Exits.
b. Sargent Manufacturing (SA) – SE LP10 - M1 8200 Series Locks.
c. Schlage AD300 Series

2.11 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.

2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.

4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.

5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.

6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets and spacers.

7. Through Bolt Installation: For all metal doors (steel and aluminum), and as requested by owner.

8. Drop plates are not necessary. NCISD requires a minimum 8” header on all doors.

9. Provide cushion stop arms (CPS) (CUSH)at all exterior

10. Provide cushion stop holder arms (CPSH) (HCUSH) as requested by owner

11. No closers on classrooms, computer labs, custodial closets, and small rooms.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with

adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.

1. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) - 351 Series.
    b. LCN (LC) 4050 Series

2.12 SURFACE MOUNTED CLOSER HOLDERS (for required fire rated openings **ONLY** when required by code)

A. Electromagnetic Door Holders: Certified ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate.12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Acceptable Manufacturers:

    a. Rixson (RF) - 980/990 Series.
    b. Sargent Manufacturing (SA) - 1560 Series.
    c. LCN (LC) – 7800 Series

2.13 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.

2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

3. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inch thick.

4. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.

5. Acceptable Manufacturers:

    a. Ives (IV).

b. Rockwood Manufacturing (RO).
c. Trimco (TC).

2.14 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops . Provide dome stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic

1. **NO** wall mounted stops
2. Floor stop equal to Rockwood 441CU
3. US 26D finish
4. Limited use of surface mounted stop when requested by owner.
5. Acceptable Manufacturers:
    a. Ives (IV).
    b. Rockwood Manufacturing (RO).
    c. Trimco (TC).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface mounted types (ONLY when specified by owner) as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of specified finish and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Only when requested by owner

2.15 ARCHITECTURAL SEALS

A. General: Thresholds, weather-stripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weather-strip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated or required by code. At exterior applications provide non-corrosive fasteners, and elsewhere, where indicated.

1. Mechanical/Electrical rooms, work rooms, practice rooms, gyms, locker rooms, SPED/Life Skills classrooms, stairways, restrooms (gang or single use) shall have required gasketing.
2. Classrooms and other openings: provide rubber bumpers.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.

D. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

E. Acceptable Manufacturers:

1. National Guard Products (NG).
2. Pemko Manufacturing (PE).
3. Reese Enterprises, Inc. (RE).
4. Zero Manufacturing (ZE)

2.16 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Acceptable Manufacturers:

a. Provided by Security

B. Switching Power Supplies: Provide UL listed or recognized filtered and regulated power supplies. Provide single, dual, or multi-voltage units as shown in the hardware sets. Units must be expandable up to eight Class 2 power limited outputs. Units must include the capability to incorporate a battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.

1. Acceptable Manufacturers:

a. Securitron (SU) - AQ Series.
b. Schlage (SC) – PS Series

2.17 OPERATING and PROTECTIVE TRIM UNITS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Metal Protective Trim Units:
a. Rockwood Manufacturing (RO).

b. Ives (IV).
c. Trimco Manufacturing (TR).

2. Mop Plate
   a. Restrooms, Kitchen, Athletics
3. Kick Plate
   a. At high traffic areas
4. Armor Plate
   a. Mechanical rooms, Athletics, Kitchen

B. Standard: Comply with BHMA A156.6.

C. Materials: Fabricate protection plates from the following:
1. Stainless Steel: .050 inches thick, beveled four sides (B4E) with countersunk screw holes.

D. Fasteners: Provide manufacturer's designated fastener type as indicated in door hardware sets.

2.18 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.19 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Integrated Wiegand access control products are required to be installed by Certified Integrator. Assa Abloy, Allegion and Mark’s Hardware products can be installed by Licensed Integrator – no proprietary certification required. ALL hardware integration to card access MUST be installed by RS2 licensed and certified personnel.

D. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

B. Final Adjustment: Installer shall return and make final adjustment of all hardware once all air conditioning test and balance is complete. Final adjustment shall be made while air conditioner system is operating. Coordinate with General Contractor and Owner.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

MANUFACTURER'S ABBREVIATIONS:

MK - McKinney
PE - Pemko
PR - Precision
SA - Sargent
HS – HES
KD – Keedex
LC – LCN
OT - OTHER
RO - Rockwood
MX - Marks
AD - Adams Rite
SU – Securitron
SC – Schlage
VD – Von Duprin

DOOR HARDWARE SETS

Set: 1.0

Doors: A100A

Description: Pair - Exterior - Aluminum Storefront - Exit Device Access Control - PB

6	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
2	Electric Power Transfer	EL-CEPT	630	SU
1	Mullion	L980S	PC	SA
1	Mounting Kit	98-2579		SA
1	Rim Exit Device	TB 56-SN200-8804	US32D	SA
1	Rim Exit Device, Exit Only	16 TB 43 55 8810 EO	US32D	SA
4	Permanent Core	23-030 Everest 29 -T	.626	SC
4	Construction Core	23-030-ICX		SC
4	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22	US32D	RO
1	Vandal Resistant Trim	VRT22 C	US32D	RO
2	Surface Closer	TB 351 CPS	EN	SA
1	Rain Guard	346C x Frame Width		PE
2	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
2	ElectroLynx Harness	QC-C1500P		MK
2	ElectroLynx Harness	QC-CxxxP		MK
1	Power Supply	By Others		SU
1	Perimeter Seals	By the frame manufacturer		OT
2	Remote Release	660		SC

Set: 2.0

Description: Pair- Exterior - Aluminum Storefront - Exit Device - Access Control

6	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
2	Electric Power Transfer	EL-CEPT	630	SU

1	Mullion	L980S	PC	SA
1	Rim Exit Device	TB 56-SN200-8804	US32D	SA
1	Rim Exit Device, Exit Only	16 TB 43 55 8810 EO	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO
2	Surface Closer	TB 351 CPS	EN	SA
1	Rain Guard	346C x Frame Width		PE
1	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
1	ElectroLynx Harness	QC-C1500P		MK
2	ElectroLynx Harness	QC-CxxxP		MK
2	Power Supply	By Others		SU
1	Perimeter Seals	By the frame manufacturer		OT

Set: 3.0

Doors: D100
Description: Pair- Exterior - HM - Exit Device - Access Control

6	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
2	Electric Power Transfer	EL-CEPT	630	SU
1	Mullion	L980S	PC	SA
1	Rim Exit Device	TB 56-SN200-8804	US32D	SA
1	Rim Exit Device, Exit Only	16 TB 43 55 8810 EO	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO
2	Surface Closer	TB 351 CPS	EN	SA
1	Astragal Set (2)	303AS		PE
1	Gasketing	2891AS (head & jambs)		PE
1	Rain Guard	346C x Frame Width		PE
1	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
2	ElectroLynx Harness	QC-C1500P		MK
2	ElectroLynx Harness	QC-CxxxP		MK
1	Power Supply	By Others		SU

Set: 5.0

Doors: B111.A, E102
Description: Pair - Exterior - Exit Device

6	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
2	Electric Power Transfer	EL-CEPT	630	SU
1	Mullion	L980S	PC	SA
1	Mounting Kit	98-2579		SA
1	Mullion	980	PC	SA
1	Rim Exit Device	LC 16 TB 43 8804	US32D	SA
1	Rim Exit Device	16 TB 43 8810	US32D	SA
4	Permanent Core	23-030 Everest 29 -T	.626	SC
4	Construction Core	23-030-ICX		SC
3	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22	US32D	RO
1	Vandal Resistant Trim	VRT22 C	US32D	RO
2	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Astragal Set (2)	303AS		PE
1	Gasketing	2891AS (head & jambs)		PE
1	Rain Guard	346C x Frame Width		PE
2	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
2	ElectroLynx Harness	QC-C1500P		MK
2	ElectroLynx Harness	QC-CxxxP		MK
1	Power Supply	By Others		SU

Set: 6.0

Doors: B102.B, B103.C, B104.D, B105.D, B106.B, B107.D, B108.B, B109.D, D118D, D118F, F101
Description: Sgl - Exterior - Exit Device x NL

3	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
1	Rim Exit Device	LC 16 TB 43 8804	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Gasketing	2891AS (head & jambs)		PE
1	Rain Guard	346C x Frame Width		PE

1	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
1	Viewer	622	CRM	RO

Notes: Add second viewer to opening A102.B

Set: 6.1

Doors: A111B, A120A, A130B
Description: Sgl - Exterior - Exit Device x NL - Access Control

3	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
1	Electric Power Transfer	EL-CEPT	630	SU
1	Rim Exit Device	TB 56-SN200-8804 ETL LC	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Gasketing	2891AS (head & jambs)		PE
1	Rain Guard	346C x Frame Width		PE
1	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE
1	ElectroLynx Harness	QC-C1500P		MK
1	ElectroLynx Harness	QC-CxxxP		MK
1	Power Supply	By Others		SU

Set: 6.2

Doors: A113B, A115B, A116B
Description: Sgl - Exterior - Exit Device x NL (Less Dogging)

3	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
1	Rim Exit Device, Storeroom	LC TB 43 8804 Less Pull	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Gasketing	2891AS (head & jambs)		PE

1	Rain Guard	346C x Frame Width		PE
1	Sweep	3452CNB TKSP8		PE
1	Panic Threshold	2005AT x Opening Width		PE

Set: 14.1

Doors: A104A
Description: Pair - INT - Aluminum Storefront - Exit Device

6	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP	US32D	MK
2	Electric Power Transfer	EL-CEPT	630	SU
1	Mullion	L980S	PC	SA
1	Mounting Kit	98-2579		SA
1	Exit Device (exit only)	16 TB 43 55 8810 ETL	US32D	SA
1	Rim Exit Device	TB 56-SN200-8804 ETL LC	US32D	SA
4	Permanent Core	23-030 Everest 29 -T	.626	SC
4	Construction Core	23-030-ICX		SC
4	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22	US32D	RO
1	Vandal Resistant Trim	VRT22 C	US32D	RO
2	Surface Closer	TB 351 CPS	EN	SA
2	ElectroLynx Harness	QC-C1500P		MK
2	ElectroLynx Harness	QC-CxxxP		MK
1	Power Supply	By Others		SU
1	Perimeter Seals	By the frame manufacturer		OT
2	Remote Release	660		SC

Set: 15.0

Doors: A104B, A117A, D102A, D102B, D112
Description: Int Pair - Classroom Exit Closer

6	Hinge (heavy weight)	T4A3786	US26D	MK
2	Concealed Vert Rod Exit, Classroom	NB 16 TB 43 XD8613 ETL	US32D	SA
4	Permanent Core	23-030 Everest 29 -T	.626	SC
4	Construction Core	23-030-ICX		SC
4	Cylinder	As required	.626	SC
2	Surface Closer	TB 351 PSH	EN	SA
2	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
2	Astragal Set (2)	303AS		PE
1	Gasketing	2891AS (head & jambs)		PE

Set: 16.1

Doors: D120
Description: Int - Pair - Class Funvtion - MFB - Closer

6	Hinge, Full Mortise	TA2714	US26D	MK
1	Dust Proof Strike	570	US26D	RO
2	Manual Flush Bolt	555 / 557 12" / 72" AFF	US26D	RO
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 P10	EN	SA
2	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
2	Door Stop	441CU	US26D	RO
2	Astragal Set (2)	303AS		PE
1	Gasketing	2891AS (head & jambs)		PE

Set: 19.0

Doors: A113A, A127
Description: Int - Pair - Storeroom - MFB

6	Hinge, Full Mortise	TA2714	US26D	MK
1	Dust Proof Strike	570	US26D	RO
2	Manual Flush Bolt	555 / 557 12" / 72" AFF	US26D	RO
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
2	Door Stop	441CU	US26D	RO
2	Astragal Set (2)	303AS		PE
1	Gasketing	2891AS (head & jambs)		PE

Set: 20.0

Doors: A115A, A116A
Description: Int - Pair - Storeroom - Auto FB - Closer - Gasket

6	Hinge, Full Mortise	TA2714	US26D	MK
1	Dust Proof Strike	570	US26D	RO
1	Flush Bolt (Selt-latching)	2845 / 2945 (as required)	US26D	RO
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC

1	Construction Core	23-030-ICX		SC
1	Coordinator (W/mtg plates)	2672 x Mtg Brkts	Black	RO
2	Surface Closer	TB 351 UO	EN	SA
2	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
2	Door Stop	409 / 446 as required	US26D	RO
2	Astragal Set (2)	303AS		PE
1	Astragal	357SP X S88D		PE
1	Gasketing	2891AS (head & jambs)		PE

Set: 24.0

Doors: A118A, A118B, A119A, A119B
Description: Sgl - Exit Device - Typical Classroom - closer

3	Hinge (heavy weight)	T4A3786	US26D	MK
1	Rim Exit Device, Classroom	LC 16 TB 43 8813 ETL	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 24.1

Doors: C152A, C152B
Description: Sgl - Push/Pull - DB - Closer/stop - Gang RR/Locker

3	Hinge (heavy weight)	T4A3786	US26D	MK
1	Public Toilet Deadlock	LC 4878	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Cylinder	As required	.626	SC
1	Push Plate	70E	US32D	RO
1	Door Pull	111 Mtg-Type 1	US32D	RO
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 1" LDW B4E CSK	US32D	RO
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 29.0

Doors: A111A, A129A, C155, C156
Description: Sgl - Exit Device - Passage - closer - gasket

3	Hinge (heavy weight)	T4A3786	US26D	MK
1	Exit Device (passage)	43 TB 8815 ETL (12- as required)	US32D	SA
1	Surface Closer	TB 351 CPS	EN	SA
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Door Stop	441CU	US26D	RO
1	Gasketing	2891AS (head & jambs)		PE

Notes: At stairwell, closer is on stair side.

Set: 31.0

Doors: A102B, A122, B103.A, B104.A, B104.B, B105.A, B105.B, B106.A, B108.A, C105, C120.A, C120.B, C154, D117A
Description: Sgl - Classroom Function - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Classroom Lock	SF 10XG37 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 31.1

Doors: A103A, A103B, A133A, A133B
Description: Sgl - Office Function - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Classroom Lock	SF 10XG37 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 31.2

Doors: A102A, B102.A, F201
Description: Sgl - Storeage Function - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 32.0

Doors: B107.A, B109.A, D107
Description: Sgl - Classroom Function - Closer - Gasket

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Public Toilet Deadlock	LC 4878	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Cylinder	As required	.626	SC
1	Push Plate	70E	US32D	RO
1	Door Pull	111 Mtg-Type 1	US32D	RO
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	441CU	US26D	RO
1	Gasketing	2891AS (head & jambs)		PE

Set: 35.0

Description: Sgl - Alum - Classroom Function - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Classroom Lock	SF 10XG37 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
1	Perimeter Seals	By the frame manufacturer		OT

Set: 35.1

Description: Sgl - Alum - Storeroom Function - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA

1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
1	Perimeter Seals	By the frame manufacturer		OT

Notes: Wall stop

Set: 37.0

Doors: A112
Description: Sgl - Storeroom - Closer / stop - Gasket

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Kick Plate	K1050 10" x 1" LDW B4E CSK	US32D	RO
1	Door Stop	409 / 446 as required	US26D	RO
1	Gasketing	2891AS (head & jambs)		PE

Set: 38.0

Doors: A114, B106.D, B106.E, B109B, C106, C108, C122, C153, D103, D110A, D110B
Description: Sgl - Storeroom - Closer - Gasket

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Kick Plate	K1050 10" x 1" LDW B4E CSK	US32D	RO
1	Door Stop	409 / 446 as required	US26D	RO
1	Gasketing	2891AS (head & jambs)		PE

Set: 39.0

Doors: A124, A125, A126, A128, D116
Description: Sgl - Storeroom - Closer

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA

1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Surface Closer	TB 351 UO	EN	SA
1	Kick Plate	K1050 10" x 1" LDW B4E CSK	US32D	RO
1	Door Stop	441CU	US26D	RO
3	Silencer	608		RO

Set: 41.0

Doors: A109, A123, C116, D113
Description: Sgl - Storeroom Custodian

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Storeroom/Closet Lock	SF 10XG04 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Kick Plate	K1050 10" x 2" LDW B4E CSK	US32D	RO
1	Door Stop	441CU	US26D	RO
3	Silencer	608		RO

Set: 47.0

Doors: A108, A110, C138, C139
Description: Sgl - Push/Pull - DB - Gang RR/Locker

3	Hinge (heavy weight)	T4A3786	US26D	MK
1	Public Toilet Deadlock	LC 4878	US26D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Push Plate	70E	US32D	RO
1	Door Pull	111 Mtg-Type 1	US32D	RO
1	Surface Closer	TB 351 UO	EN	SA
1	Kick Plate	K1050 10" x 1" LDW B4E CSK	US32D	RO
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 52.0

Doors: A105, A106, A107, A131, A132, A134, A135, C101, C102, C103, C104, C107, C109, C110, C111, C112, C113, C115, C117, C118, C119, C121, C123, C124, C125, C126, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, D104, D105, D106

Description: Sgl - Office Function

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Entry/Office Lock	SF 10XG05 LL	US26D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Door Stop	441CU	US26D	RO
3	Silencer	608		RO

Set: 60.0

Doors: C101A
Description: Sgl - Privacy

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Privacy Lock	10XU65 LL	US26D	SA
1	Door Stop	441CU	US26D	RO
3	Silencer	608		RO

Set: 61.0

Doors: A101, B100, B101, D101, D108, D109
Description: Sgl - Staff Privacy (Lounge)

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Privacy Lock	V21 8265 LL	US26D	SA
1	Surface Closer	TB 351 P10/O As Required	EN	SA
1	Door Stop	441CU	US26D	RO
3	Silencer	608		RO

Set: 61.1

Description: Sgl - Staff Privacy - (Cooridor)

3	Hinge, Full Mortise	TA2714	US26D	MK
1	Dormitory/Exit Lock	LC V21 8225 LL	US32D	SA
1	Permanent Core	23-030 Everest 29 -T	.626	SC
1	Construction Core	23-030-ICX		SC
1	Cylinder	As required	.626	SC
1	Surface Closer	TB 351 UO	EN	SA
1	Door Stop	409 / 446 as required	US26D	RO
3	Silencer	608		RO

Set: 64.0

Doors: SOB103, SOB104, SOB105, SOB106.C, SOB107.B, SOB107.C, SOB108.C, SOB109.B, SOB109.C, SOD117B, SOD118A, SOD118B, SOD118C, SOD118E, SOD119A, SOF101A, SOF101B, SOF201, SOF301

Description: Coiling Grille

1	Balance Hardware	By the door manufacturer		OT

Notes: Confirm cylinder type required.

Set: 66.0

Doors: EG.01, EG.03, EG.04

Description: Egress Gate

1	Balance Hardware	By the door manufacturer		OT
1	Rim Exit Gate	16 43 8804 Less Pull	US32D	SA
2	Permanent Core	23-030 Everest 29 -T	.626	SC
2	Construction Core	23-030-ICX		SC
2	Cylinder	As required	.626	SC
1	Vandal Resistant Trim	VRT22 C	US32D	RO

Notes: Adequate framing required for mullion installation - by gate manufacturer.

Set: 67.0

Doors: B104.E, B109.E, B109.F, B109.G, B109.H, G.02, G.05, G.06, G.07, SL.01A

Description: HBO

1	Balance Hardware	By the door manufacturer		OT

Notes: Verify hardware requirements with door manufacturer.

Set: 100.0

Doors: Misc

Description: Core only

10	Permanent Core	23-030 Everest 29 -T	.626	SC

END OF SECTION 080671

SECTION 08 8856
SECURITY GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulated Glass Units: Laminated Security.

B. Glass Units: Laminated Security.

1.02 RELATED REQUIREMENTS

A. Section 07 9200 - Joint Sealants: Sealants for other than glazing purposes.

B. Section 08 1113 - Hollow Metal Doors and Frames: Glazed lites in doors and borrowed lites.

C. Section 08 1416 - Flush Wood Doors: Glazed lites in doors.

D. Section 08 4313 - Aluminum-Framed Storefronts: Glazing provided as part of storefront assembly.

E. Section 08 4413 - Glazed Aluminum Curtain Walls: Glazing provided as part of wall assembly.

1.03 REFERENCE STANDARDS

A. 5-aa1 - Certification Standards for Retrofitting and Reinforcing of Standard Commercial Entry Systems, Windows and Glazing;; Current Edition.

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

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

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

E. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005 (Reapproved 2015).

F. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.

G. ASTM C1036 - Standard Specification for Flat Glass; 2021.

H. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.

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

J. ASTM C1184 - Standard Specification for Structural Silicone Sealants; 2014.

K. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass; 2015.

L. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2016.

M. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.

N. ASTM F1233 - Standard Test Method for Security Glazing Materials And Systems; 2008 (Reapproved 2019).

O. GANA (GM) - GANA Glazing Manual; 2008.

P. GANA (SM) - GANA Sealant Manual; 2008.

Q. GANA (LGRM) - Laminated Glazing Reference Manual; 2009.

R. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

S. IGMA TM-3000 - North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use; 1990 (2016).

T. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2017.

U. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2014, with Errata (2017).

V. NFRC 300 - Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2017.

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

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by each of the affected installers.

1.05 SUBMITTALS

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

B. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.

D. Samples: Submit two samples 4 by 6 inch in size of glass units.

E. Certificate: Certify that products of this section meet or exceed specified requirements.

F. Manufacturer's qualification statement.

G. Installer's qualification statement.

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

1.06 QUALITY ASSURANCE

A. Perform Work in accordance with GANA (GM), GANA (SM), GANA (LGRM), and IGMA TM-3000 for glazing installation methods.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years of documented experience.

1. Provide certified glass products through ANSI accredited certifications that include plant audits and independent laboratory performance testing.
   a. Insulating Glass Certification Council (IGCC).
   b. Safety Glazing Certification Council (SGCC).

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

1.07 FIELD CONDITIONS

A. Do not install glazing when ambient temperature is less than 40 degrees F.

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY

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

B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

C. Laminated Glass: Provide a five (5) year manufacturer warranty to include coverage for delamination, including providing products to replace failed units.

D. Polycarbonate Sheet Glazing: Provide a five (5) year manufacturer warranty to include coverage for breakage, coating failure, abrasion resistance, including providing products to replace failed units.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Laminated Security Glass Manufacturers:
1. Armoured One: www.armouredone.com.
2. Global Security Glazing: www.security-glazing.com.
3. Oldcastle BuildingEnvelope: www.obe.com.
4. School Guard Glass: www.schoolguardglass.com.
5. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.
1. Design Pressure: Calculated in accordance with applicable codes.
2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
3. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
4. Glass thicknesses listed are minimum. Deflection shall be no greater than the thickness of the glass. Final glazing thickness shall comply with all specification reference standards and glazing manufacturer recommendations for span width and height of each installation.
5. Forced Entry Resistance: See glazing types for specific requirements for each assembly.

B. Weather-Resistive Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure water-resistive barrier, vapor retarder, and/or air barrier.

C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.
3. Solar Optical Properties: Comply with NFRC 300 test method.

D. Security glazing shall be 6 minute delayed entry minimum.

E. Security glazing shall be installed at all windows 6'-0" aff minimum (or closest mullion above 6'-0" minimum that is NOT located behind a fence as required by TEA) or as indicated in the drawings.

2.03 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless otherwise indicated.
1. Kind FT - Fully Tempered Type: Complies with ASTM C1048.
2. Fully Tempered Glass: Complies with ANSI Z97.1 - Class A, or 16 CFR 1201 - Category II criteria.
3. Tinted Type: ASTM C1036, Class 2 - Tinted, Quality - Q3, with color and performance characteristics as indicated.

4. Thicknesses: Glass thicknesses listed are minimum. Deflection shall be no greater than the thickness of the glass. Final glazing thickness shall comply with all specification reference standards and glazing manufacturer recommendations for span width and height of each installation.

B. Laminated Glass: Float glass laminated in accordance with ASTM C1172.
1. Laminated Glass: Complies with ANSI Z97.1 - Class A or 16 CFR 1201 - Category II impact test requirements.
2. Forced Entry Resistance: See glazing types for specific requirements for each assembly.
3. Polyvinyl Butyral (PVB) Interlayer: 0.030 inch thick, minimum or manufactures custom security inerlayer as required to meet performance criteria.

2.04 INSULATING GLASS UNITS

A. Fabricator: Certified by glass manufacturer for type of glass, coating, and treatment involved and capable of providing specified warranty.

B. Insulating Glass Units: Types as indicated.
1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
3. Metal-Edge Spacers: Aluminum, bent and soldered corners.
4. Spacer Color: Aluminum.
5. Edge Seal:
   a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone sealant as secondary seal applied around perimeter.
   b. Color: Black.
6. Space between lites filled with air.
7. Purge interpane space with dry air, hermetically sealed.
8. Capillary Tubes: Provide tubes from air space for insulating glass units without inert type gas that have a change of altitude greater than 2500 feet between point of fabrication and point of installation to permit pressure equalization of air space.
   a. Capillary Tubes: Tubes to remain open and be of length and material type in accordance with insulating glass fabricator's requirements.

C. Type IGSE - Insulated Glass SEcurity:
1. Basis of Design: ArmorGarde by Oldcastle BuildingEnvelope: www.obe.com.
2. Applications: Where indicated on the drawings.
3. Outboard Lite: Fully tempered float glass, 1/4 inch thick, minimum.
   a. Tint: Light Gray Apperance.
   b. Coating: Low-E (passive type), on #2 surface.
4. Metal edge spacer.
5. Inboard Lite: Glass Type GLSE - Glass Laminated SEcurity.
   a. Tint: Clear.
6. Forced Entry Resistance; Must comply with one of the following multiple impact test:
   a. 5-aa1, Certification Standards for Retrofitting and Reinforcing of Standard Commercial Entry Systems, Windows and Glazing; 6 minutes.
   b. ASTM F1233 Standard Test Method for Security Glazing Materials and Systems, Class 1.3 - 6 minutes.
7. Total Thickness: 1-1/8 inch maximum.
8. Thermal Transmittance (U-Value), Summer - Center of Glass: 0.29, maximum.
9. Visible Light Transmittance (VLT): 36 percent, nominal.
10. Solar Heat Gain Coefficient (SHGC): 0.23, maximum.

11. Visible Light Reflectance, Outside: 13 percent, maximum.
12. Wet Glaze Anchoring System: Structural Silicone Sealant/Adhesive.
    a. Dow Chemical Company; Dowsil 995 Silicone Structural Sealant: www.dow.com.

2.05 GLASS UNITS

A. Type GLSE - Glass Laminated SEcurity..
   1. Basis of Design: Childgard Security Glazing.
   2. Applications: Locations as indicated on drawings.
   3. Tint: Clear.
   4. Thickness: 3/8-7/16 inch (nominal).
   5. Outer Lite: Fully Tempered glass.
   6. Interlayer: Manufactures custom security interlayer , thickness as required to meet performance criteria.
   7. Inside Lite: Fully Tempered glass.
   8. Forced Entry Resistance; Must comply with one of the following multiple impact test:
      a. 5-aa1, Certification Standards for Retrofitting and Reinforcing of Standard Commercial Entry Systems, Windows and Glazing; 6 minutes.
      b. ASTM F1233 Standard Test Method for Security Glazing Materials and Systems, Class 1.3 - 6 minutes.
   9. Wet Glaze Anchoring System: Structural Silicone Sealant/Adhesive.
      a. Dow Chemical Company; Dowsil 995 Silicone Structural Sealant: www.dow.com.

2.06 ACCESSORIES

A. Silicone Structural Sealant: Self-priming, elastomeric adhesive complying with ASTM C1184.
   1. Silicone Structural Sealant: Single component; neutral curing; designed specifically for structural bonding applications of glass; ASTM C920 Type S, Grade NS, Class 50, Uses NT, A, and G; with cured Shore A hardness of 40; color as selected.
   2. Basis of Design: Dow Chemical Company; Dowsil 995 Silicone Structural Sealant: www.dow.com.

B. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.

C. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.

D. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.

E. Glazing Gaskets: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color as selected.

F. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

B. Verify that the minimum required face and edge clearances are being provided.

C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.

D. Verify that sealing between joints of glass framing members has been completed effectively.

E. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.

B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.

C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.

D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.

E. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.

F. Structural Sealant and Supplemental Anchors: Install in accordance with manufacturer's instructions and shop drawings.

G. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

3.04 CLEANING

A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.

B. Remove nonpermanent labels immediately after glazing installation is complete.

C. Clean glass and adjacent surfaces after sealants are fully cured.

D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.05 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.

B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION

SECTION 09 2116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Performance criteria for gypsum board assemblies.

B. Exterior gypsum sheathing.

C. Gypsum wallboard.

D. Joint treatment and accessories.

E. Textured finish system.

1.02 RELATED REQUIREMENTS

A. Section 05 4000 - Cold-Formed Metal Framing: Structural steel stud framing.

B. Section 06 1000 - Rough Carpentry: Wood blocking product and execution requirements.

C. Section 07 2100 - Thermal Insulation: Acoustic insulation.

D. Section 07 2500 - Weather Barriers: Water-resistive barrier over sheathing.

E. Section 07 8400 - Firestopping: Top-of-wall assemblies at fire-resistance-rated walls.

F. Section 07 9200 - Joint Sealants: Sealing acoustical gaps in construction other than gypsum board or plaster work.

1.03 REFERENCE STANDARDS

A. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2017.

B. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2020.

C. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2020.

D. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications; 2022.

E. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2018.

F. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2020.

G. ASTM C1047 - Standard Specification for Accessories For Gypsum Wallboard and Gypsum Veneer Base; 2019.

H. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.

I. ASTM C1178/C1178M - Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel; 2018.

J. ASTM C1280 - Standard Specification for Application of Exterior Gypsum Panel Products for Use as Sheathing; 2018.

K. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.

L. ASTM C1629/C1629M - Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels; 2019.

M. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2016.

N. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).

O. ASTM E413 - Classification for Rating Sound Insulation; 2016.

P. GA-214 - Levels of Finish for Gypsum Panel Products; 2021.

Q. GA-216 - Application and Finishing of Gypsum Panel Products; 2016.

R. GA-226 - Application of Gypsum Board to Form Curved Surfaces; 2025.

1.04 SUBMITTALS

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

B. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.

C. Product Data: Provide data on gypsum board, glass mat faced gypsum board, accessories, and joint finishing system.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum five years of experience.

B. Product Qualifications:
   1. Single Source Responsibility:
      a. Obtain gypsum board products, joint treatment products, and textured coatings from a single manufacturer.

C. Mock-ups
   1. At an area on the site where approved by the Architect, provide a mock-up gypsum wallboard panel.
      a. Make the panel approximately 4'-0" square.
      b. Provide one mock-up panel for each gypsum wallboard finish used on the Work.
      c. For exterior gypsum sheathing, panel shall be complete with all joint sealant, wall ties and/or connectors, flashings and face veneer.
      d. The mock-ups may be used as part of the Work, and may be included in the finished Work, when so approved by the Architect.
      e. Revise as necessary to secure the Architect's approval.
   2. The mock-up panels, when approved by the Architect, will be used as datum points for comparison with the remainder of the work of this Section for the purpose of acceptance or rejection.

D. Reference Standards:
   1. Install gypsum board in accordance with applicable requirements and recommendations of Gypsum Association GA 216, "Recommended Specifications for the Application and Finishing of Gypsum Board", except for more stringent requirements of manufacturer.
   2. Apply acoustical sealant in accordance with applicable requirements of ASTM C919.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Comply with requirements of Section 01 6000 – Product Requirements.

B. Acceptance at Site
   1. Deliver material to site promptly without undue exposure to weather.
   2. Deliver in manufacturer's unopened containers or bundles, fully identified with name, brand, type and grade.

C. Storage and Protection
   1. Protect materials from contamination, dampness, freezing, or overheating in accordance with manufacturer's instructions.
   2. Store above ground in dry, ventilated space.
   3. Broken, or damaged gypsum board will be rejected, whether built-in or not.

1.07 PROJECT CONDITIONS

A. Project Environmental Requirements
   1. Comply with requirements of referenced standards and recommendations of material manufacturers for environmental conditions before, during, and after installation.
   2. Do not begin installation of gypsum board until building is completely enclosed and protected from water infiltration.
   3. Do not install gypsum board when ambient temperature is below 40ºF.
   4. For adhesive attachment of gypsum board, and for finishing of gypsum board, maintain ambient temperature above 55ºF from one week prior to attachment or joint treatment, and until joint treatment is complete and dry.
   5. Maintain illumination as required for proper installation of material.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.
   1. See PART 3 for finishing requirements.

B. Interior Partitions: Provide completed assemblies with the following characteristics:
   1. Acoustic Attenuation: STC of 45-49 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

C. Fire-Resistance-Rated Assemblies: Provide completed assemblies complying with applicable code.

2.02 METAL FRAMING MATERIALS

A. Structural and Non-Structural Steel Framing for Application of Gypsum Board: As specified in Section 05 4000.

2.03 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
   1. CertainTeed Corporation: www.certainteed.com/#sle.
   2. Georgia-Pacific Gypsum: www.gpgypsum.com/#sle.
   3. National Gypsum Company: www.nationalgypsum.com/#sle.
   4. USG Corporation: www.usg.com/#sle.
   5. Substitutions: See Section 01 6000 - Product Requirements.

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
   1. Application:
      a. Non-fire rated partitions and ceilings: Type X.
      b. Fire rated partitions: Type X.
      c. Fire rated ceilings: Type C.
   2. Thickness:
      a. Vertical Surfaces: 5/8 inch.
      b. Ceilings: 5/8 inch.
      c. Multi-Layer Assemblies: Thicknesses as indicated on drawings.
   3. Paper-Faced Products:
      a. CertainTeed Corporation; Type X and C Drywall: www.certainteed.com/#sle.
      b. Georgia-Pacific Gypsum; ToughRock Fireguard X and C: www.gpgypsum.com/#sle.
      c. National Gypsum Company; Gold Bond BRAND Fire-Shield Type X and C Gypsum Board: www.nationalgypsum.com/#sle.
      d. USG Corporation; USG Sheetrock Brand Firecode X and C Panels: www.usg.com/#sle.
      e. Substitutions: See Section 01 6000 - Product Requirements.

C. Impact Resistant Wallboard:
   1. Application: Vandal or destructive resistance areas indicated.
   2. Surface Abrasion: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
   3. Indentation: Level 1, minimum, when tested in accordance with ASTM C1629/C1629M.
   4. Soft Body Impact: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
   5. Hard Body Impact: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
   6. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
   7. Paper-Faced Type: Gypsum wallboard, as defined in ASTM C1396/C1396M.
   8. Type: Fire-resistance-rated Type X, UL or WH listed.
   9. Thickness: 5/8 inch.
   10. Edges: Tapered.
   11. Paper-Faced Products:
      a. CertainTeed Corporation; Extreme Impact Resistant Drywall with M2Tech: www.certainteed.com/#sle.
      b. National Gypsum Company; Gold Bond Hi-Impact XP Gypsum Board: www.nationalgypsum.com/#sle.
      c. USG Corporation; USG Sheetrock Brand Mold Tough VHI Firecode X Panels: www.usg.com/#sle.
      d. Substitutions: See Section 01 6000 - Product Requirements.

D. Backing Board For Wet Areas:
   1. Application: Surfaces behind tile and in wet areas including tub and shower surrounds, shower ceilings, and typical wall drywall base as detailed on the drawings.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
   3. At all walls and ceilings of high humidity rooms (showers, restrooms, and non-conditioned spaces) that do not receive a tile or masonry finish:
      a. Products:
         1) Type X Mold Tough Drywall by USG Corporation.
         2) Substitutions: See Section 01 6000 - Product Requirements.
   4. At tile finish substrates: Cement backer board made specifically for tile substrate.
      a. Products:
         1) Durarock by USG Corporation.
         2) Permabase by National Gypsum Company.
         3) Substitutions: See Section 01 6000 - Product Requirements.
   5. ~~Glass Mat Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in~~ ASTM C1178/C1178M.
      a. ~~Fire-Resistance-Rated Type: Type X core, thickness 5/8 inch.~~
      b. ~~Products:~~
         1) ~~CertainTeed Corporation; GlasRoc 5/8" Type X Tile Backer: www.certainteed.com/#sle.~~
         2) ~~Georgia-Pacific Gypsum; DensShield Tile Backer: www.gpgypsum.com/#sle.~~
         3) ~~National Gypsum Company; Gold Bond eXP Tile Backer: www.nationalgypsum.com/#sle.~~
         4) ~~Substitutions: See Section 01 6000 - Product Requirements.~~

E. Exterior Sheathing Board: Sizes to minimize joints in place; ends square cut.
   1. Application: Exterior sheathing, unless otherwise indicated.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
   3. Glass Mat Faced Sheathing: Glass mat faced gypsum substrate as defined in ASTM C1177/C1177M.

4. Core Type: Type X, as indicated.
5. Type X Thickness: 5/8 inch.
6. Edges: Square.
7. Glass Mat Faced Products:
    a. CertainTeed Corporation; GlasRoc Type X Exterior Sheathing: www.certainteed.com/#sle.
    b. Georgia-Pacific Gypsum; DensGlass Fireguard Sheathing: www.gpgypsum.com/#sle.
    c. National Gypsum Company; Gold Bond eXP Sheathing: www.nationalgypsum.com/#sle.
    d. USG Corporation; USG Securock Brand Ultralight Glass-Mat Sheathing Firecode X: www.usg.com/#sle.
    e. Substitutions: See Section 01 6000 - Product Requirements.

2.04 GYPSUM WALLBOARD ACCESSORIES

A. Acoustic Insulation: As specified in Section 07 2100.

B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.

C. Water-Resistive Barrier: As specified in Section 07 2500.

D. Beads, Joint Accessories, and Other Trim: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
    1. Corner Beads: Low profile, for 90 degree outside corners.
    2. Splayed Corner Beads: All other than 90 degree outside corner.
    3. Architectural Reveal Beads:
        a. Shapes: As indicated on drawings.
    4. Expansion Joints:
        a. Type: V-shaped metal with factory-installed protective tape.
    5. Adjustable Partition Closure between storefront and drywall: Gordon Interior Specialties; Mullion Mate. Provide insulation and gaskets. Size to match application. Finish to match storefront.
    6. Other trims and reveals where shown on the drawings.

E. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
    1. Fiberglass Tape: 2 inch wide, coated glass fiber tape for joints and corners at glass mat faced board assemblies.
    2. Paper Tape: 2 inch wide, creased paper tape for joints and corners, except as otherwise indicated.
    3. Joint Compound: Drying type, ready-mixed.

F. Finishing Compound: Surface coat and primer, takes the place of skim coating.

G. Textured Finish Materials: Latex- or Vinyl-based compound; plain.

H. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.

I. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion-resistant.

J. For exterior applications provide bugle or wafer head, rust-resistant sharp point, fine thread for light-gauge metal framing or furring.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C754 and as specified in Section 05 4000-Cold-Formed Metal Framing.

B. Blocking: Install supplementary framing, blocking and bracing for support of:
   1. Framed openings.
   2. Wall-mounted cabinets.
   3. Plumbing fixtures.
   4. Toilet partitions.
   5. Toilet accessories.
   6. Wall-mounted door hardware.
   7. Heavy trim, furnishings or similar construction.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
   1. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is provided.

3.04 BOARD INSTALLATION - GENERAL

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Wall Tile shall be installed on Concrete Unit Masonry or Cement Backer Board in toilet/shower rooms, around water fountains or other areas in which the tile might be exposed to moisture. If CMU is not provided in these areas, Cement Backer Board shall be used. Wall tile to be installed on Cememt Backer Board where located in corridors.

C. ~~FRP shall be installed on Glass Mat Faced Tile Backer Board in toilet rooms, janitor closets, around water fountains or other areas in which the tile might be exposed to moisture.~~

D. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

E. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.

F. Exterior Sheathing: Comply with GA-253 and ASTM C1280. Install sheathing vertically, with edges butted tight and ends occurring over firm bearing.
   1. Seal joints, cut edges, and holes with water-resistant sealant.
   2. Attach exterior sheathing to metal framing with screws spaced 8" o.c. at perimeter where there are framing supports; and 8" o.c. along intermediate framing in field. Do not counter sink.
   3. Locate fasteners minimum 3/8" from edges and ends of sheathing panels, tight against and flush with surface of sheathing.
   4. Immediately after installation, protect from weather by application of water-resistive barrier.

G. Installation on Metal Framing: Use screws for attachment of gypsum board.

H. Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.

3.05 BOARD INSTALLATION

A. Single Layer Gypsum Board on Metal Studs or ICF System.
   1. Loosely butt gypsum board joints together and neatly fit.
   2. Do not place butt ends against tapered edges.
   3. Maximum allowable gap at end joints: 1/8 inch.
   4. Stagger joints on opposite sides of partitions.
   5. Apply ceiling boards first where gypsum board ceilings and wall occur.
   6. Cut openings in gypsum board to fit electrical outlets, plumbing, light fixtures and piping snugly and small enough to be covered by plates and escutcheons. Cut both face and back paper.
   7. Screw board in place securely with screws spaced according to manufacturer's recommendations.
   8. At internal and external corners, conceal the cut edges of the boards by the overlapping covered edges of the abutting boards.
   9. Stagger the boards so that corners of any four boards will not meet at a common point except in vertical corners.
   10. At internal and external corners, conceal the cut edges of the boards by the overlapping covered edges of the abutting boards.
   11. In all installations, gypsum wallboard shall be held above the finished floor a minimum of ½”. Failure to comply with this requirement will be grounds for rejection and removal of the entire application.

B. Single Layer Gypsum Board on Furring
   1. Apply gypsum board with long dimension at right angles to furring channel.
   2. Center end joints over channel web; stagger end joints from those in adjacent rows of board.
   3. Fasten boards to furring channels with screws spaced according to manufacturer's recommendations.

C. Double Layer Gypsum Board
   1. Fasten base layer to studs or furring with screws, and attach face layer using laminating adhesive and screws, applied according to manufacturer's instructions.
   2. Offset face-layer joints at least 10 inches from parallel base-layer joints.
   3. Screw both layers to metal supports at double layer ceiling applications and where required for fire-rated construction.

D. Single Layer Gypsum Board Suspended for Ceilings:
   1. Install the gypsum wallboard to ceilings with the long dimension of the wallboard at right angles to the supporting members.
   2. Wallboard may be installed with the long dimension parallel to supporting members that are spaced 16" on centers when attachment members are provided at end joints.

3.06 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints
   1. Install control joints at junction of gypsum board partitions with walls or partitions of other finish material.
   2. Install control joints within long runs of partitions at approximately 30'-0" on center or as indicated on the drawing.
   3. Install control joints at bulkheads as shown on the drawings but in no case shall they exceed 15”-0” on center or as indicated on the drawing. Contractor shall be responsible to insure that bulkheads comply with this requirement and shall coordinate locations with the architect if not shown on the drawings.
   4. Where gypsum board is vertically continuous, as at stairwells, provide horizontal control joints at each floor level.

5. Special Trim: Install as indicated on Drawings and in accordance with manufacturer's instructions.
6. Install control joints at each door jamb from head of door ceiling as shown on the drawings.
7. Do not install control joints behind any applied wall coverings.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

D. Install metal casing bead trim whenever edge of gypsum board would otherwise be exposed or semi-exposed.

E. Special Trim and Reveal Joints: Install as indicated on Drawings and in accordance with manufacturer's instructions.

3.07 JOINT TREATMENT

A. Finish gypsum board in accordance with levels defined in GA-214 , ASTM C840, and as follows:
1. Level 1: Ceiling plenum areas and concealed areas, except provide higher level of finish as required to comply with fire resistance ratings and acoustical ratings.
2. Level 2: Gypsum board substrate at tile, except remove tool marks and ridges.
3. Level 3: Gypsum board surfaces, where textured finishes will be used.
4. Level 4: Gypsum board surfaces scheduled to receive non-textured painted finishes, vinyl wall covering or custom covering is to be applied, except where another finish level is indicated.
5. Level 5: Gypsum board surfaces scheduled to receive painted graphics or Dry-Erase Coating.

B. General:
1. Inspect areas to be joint treated, verifying that the gypsum wallboard fits snugly against supporting framework.
2. In areas where joint treatment and compound finishing will be performed, maintain a temperature of not less than 55 degrees for 24 hours prior to commencing the treatment, and until joint and finishing compounds have dried.
3. Apply the joint treatment and finishing compound by machine or hand tool.
4. Provide a minimum drying time of 24 hours between coats, with additional drying time in poorly ventilated areas.
5. Joint Treatment is required at all gypsum board walls including fire protection assemblies and ICF installations above the ceiling line.

C. Embedding compounds:
1. Apply to gypsum wallboard joints and fastener heads in a thin uniform layer.
2. Spread the compound not less than 3" wide at joints, center the reinforcing tape in the joint, and embed the tape in the compound. Then spread a thin layer of compound over the tape.
3. After this treatment has dried, apply a second coat of embedding compound to joints and fastener heads, spreading in a thin uniform coat to not less than 6" wide at joints, and feather edged.
4. Sandpaper between coats as required.
5. When thoroughly dry, sandpaper to eliminate ridges and high points.

3.08 TEXTURE FINISH

A. Apply finish texture coating by means of spraying apparatus in accordance with manufacturer's instructions.

B. Texture Required: Unless shown or otherwise indicated on the drawings, provide medium “Orange Peel or Spatter Finish” texture on walls or ceilings.

3.09 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION

SECTION 10 4300
EMERGENCY AID SPECIALTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Emergency Aid Cabinets.

1.02 SUBMITTALS

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

B. Product Data: Provide color and finish and installation instructions.

C. Manufacturer's Installation Instructions: Indicate special criteria and wall opening coordination requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Emergency Aid Cabinets and Accessories:
   1. Rescue Essentials: www.rescue-essentials.com.
   2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 EMERGENCY AID CABINETS

A. Type: Bleeding control.
   1. Basis of Design: Bleeding Control Station with Bleeding Control Kits by Rescue Essentials.
   2. Cabinet Configuration: Surface mounted type.
   3. Cabinet Mounting Hardware: Appropriate to cabinet, with predrilled holes for placement of anchors.
   4. Fabrication: Weld, fill, and grind components smooth.
   5. Finish of Door Pull or Handle: Stainless steel.
   6. Finish of Cabinet Interior: White powder coat.
   7. Bleeding Control Kit: (2) minimum per control station. Contents include:
      a. (1) CAT Tourniquet
      b. (1) Emergency Pressure Dressing, 4 inch
      c. (2) NAR S-Rolled Gauze, 4.5 inch x 4.1 yards
      d. (1) EMT Shears, 5.5 inch
      e. (1) Bleeding Control Instruction Card
      f. (2) Pairs of Nitrile Gloves, Large Size
   8. Fabrication: Weld, fill, and grind components smooth.
   9. Finish of Door Pull or Handle: Stainless steel.
   10. Finish of Cabinet Interior: White powder coat.
   11. Naloxone Overdose Emergency Kit: (4) doses minimum per cabinet.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify openings are correctly sized and located.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

3.03 ADJUSTING AND CLEANING

A. Remove temporary protective coverings and strippable films, if any, as units are installed unless otherwise indicated in manufacturer's written installation instructions.

B. Touch up marred finishes. Replace products that cannot be restored to factory-finished appearance. Use materials and procedures recommended by manufacturer.

3.04 CLOSEOUT ACTIVITIES

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

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

END OF SECTION

SECTION 10 4313
DEFIBRILLATOR CABINETS

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Defibrillator Cabinets

B. Defibrillators

1.02 SUBMITTALS

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

B. Product data: Within 30 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. 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.

1.03 WARRANTY

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

B. The contractor shall furnish a written guarantee warranting all materials, devices, equipment and workmanship to be free of defects for a period of one (1) year from the date of completion and acceptance. Any defects in materials, devices, equipment and workmanship which become apparent within the guarantee period shall be repaired and replaced by the contractor at his own expense and at no additional cost to the Owner.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Cardiac Science: www.cardiacscience.com

B. Defibtech, LLC: www.defibtech.com

C. HeartSine Technologies, Inc.: www.heartsine.com

D. JL Industries/Activar: www.activarcpg.com

E. Physio Control: www.physio-control.com

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

2.02 DEFIBRILLATOR CABINETS:

A. Basis of Design: 1400 Lifestart Series AED Cabinets
   1. Cabinet with Steel Trim and Door: 1400 Lifestart Series, model 1417
      a. Cabinet Style: Semi-recessed.
      b. Components:
         1) Tub: Cold-rolled steel.
            (a) Finish: Factory-applied white powder coat paint finish.
         2) Door and Trim Construction: Cold-rolled steel; flush doors with 5/8 inch (15.88 mm) door stop attached by continuous hinge and equipped with zinc-plated with roller catch.
            (a) Finish: Factory-applied white powder coat paint finish.
            (b) Style F17: Full Tempered Glazing; Pull & AED Decal
         3) Trim Style and Depth:
            (a) Semi-Recessed Cabinet:

(b) Square Edge: 1-1/2 inch (38.10 mm).

c. Fire-Rating: Nonfire-rated or Fire-Rated, reference plan for requirements.

d. Alarms: Standard: 85 db Commander (audible) cabinet-mounted alarm standard (battery operated) to protect against theft or tampering. Alarm deactivated when door is closed.

e. Wall Signs and Cabinet Lettering:

1) AED wall signs: 14S

2.03 DEFIBRILLATORS:

A. Unit shall be semi-automatic external defibrillator of type suggested by UIL.

B. Provide AED's, cabinets and wall signs to be located as shown on the drawings. Cabinets shall be semi-recessed and shall not project more than 4" from the wall.

C. Provide one set of adult and pediatric electrode pads.

D. AED Minimum Requirements:

1.	Waveform:	Biphasic
2.	Energy:	Min. 150 Joules
3.	Patient Analysis:	Automatic - Shock Advisory System
4.	Charge Time:	Min. 9 sec.
5.	Voice/Audible Prompts:	Audible prompts required in english
6.	Written Instructions:	Displayed on Controls
7.	Controls:	Lighted
8.	Battery:	Lithium Rechargable
9.	Pads:	Include pre-gelled, self-adhesive, disposable pads
10.	Self Test:	Automatic
11.	Min. Weight:	6.6 lbs.
12.	Warranty:	1 year
13.	Instructions:	Provide complete quick start guide, CDROM with training informatin and training guide

E. Approved Products:

1.	Cardiac Science:	Powerheart AED G3 Plus
2.	Defibtech:	Lifeline AED - DDU-100 Package
3.	HeartSine Technologies:	Samaritan PAD 350P (Public Access Defibrillator)
4.	Physio Control:	Lifepak CR Plus AED

PART 3 – EXECUTION

3.01 INSTALLATION

A. Install in accordance with approved submittals and manufacturer's instructions.

B. This contractor shall do all fitting, fastening, connecting, leveling and placing of all Equipment as required to complete each item in its permanent position.

3.02 CLOSEOUT ACTIVITIES

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

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

3.03 ADJUSTING

A. Prepare equipment and systems in accordance with manufacturers' instructions and recommendations.

B. Field Test after completing installation to verify performance.

C. Adjust for proper operation within manufacturer's published tolerances.

END OF SECTION

SECTION 11 4000
FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The general provisions of the Contract, including General and Supplementary Conditions and General Documents, apply to the Work specified in this Section.

1.2 SUMMARY OF THE WORK

A. Project Name and Location: New Caney ISD - New Operations Building
New Caney, Texas

B. Approval of Working Surface: Any contractor performing work over the work of other contractors shall notify the Architect of any unsatisfactory conditions. The beginning of work by any contractor shall constitute acceptance of the previous work.

C. Field Verification of All Dimensions: Before ordering any materials or doing any work, field verify all measurements of the building and be responsible for their accuracy. No extras will be allowed for variations from drawings in existing conditions or work performed under this contract. Any discrepancies found shall be submitted to the Architect or Foodservice Design Professionals (FDP) for instructions before proceeding.

D. Cutting and Patching: No excessive cutting will be permitted, nor shall any structural members be cut without the written approval of the Architect. Each Contractor shall leave all chases and openings straight, true, and of the proper size in their work, as may be necessary for the proper installation of their and other contractors' work. After such work has been installed, the contractor shall carefully fit around, close, repair, patch, and point up the same as directed to the satisfaction of the Architect.

E. Cooperation: The General Contractor, all other contractors, and all subcontractors shall coordinate their work with all adjacent work and shall cooperate with all other trades to facilitate the general progress of the work. Each trade shall afford all the other trades every reasonable opportunity to install their work and store their material.

F. Inspection and Tests: The architect, Owner, Foodservice Design Professionals (FDP), and their representative shall always have access to the work, whether in preparation or progress. Provide proper and safe facilities for such access and inspection.

G. Fees, Permits, and Inspections: Secure and pay fees for all permits, licenses, and inspections as required by all authorities having jurisdiction. Give all notices and comply with all laws, ordinances, codes, rules, regulations, and contract requirements bearing on the work.

1.3 SCOPE OF WORK

A. Include the Work specified, shown, or inferable as part of Food Service Equipment. Portions of this Work may be subcontracted to those qualified to do such work as necessary because of jurisdictional trade agreements and restrictions.

B. The General Contractor is responsible for Related Work specified in other Sections: i.e., final plumbing, electrical and mechanical connections. The Kitchen Equipment Contractor (KEC) is responsible for all internal connections.

C. Specifications and drawings have been prepared to form the basis for procurement, erection, start-up, and equipment adjustment in this contract. Plans and specifications shall be considered mutually explanatory. Work required by one, but not by the other, shall be performed as though required by both. Items required by one but not by the other shall be provided as though required by both. Work shall be accomplished as called for in specifications and shown on drawings so that all equipment items shall be entirely functional for the purpose for which they were designed and intended. Provide all necessary material, tools, equipment, and labor required for the complete delivery, un-crating, erection, and installation as designated on the food service equipment plan and, in the specifications, to be made ready for final connection by the appropriate Division contractors. When there is any discrepancy between drawings and specifications, bidders should seek clarification of any discrepancies from the Architect and or Foodservice Design Professionals (FDP) before bidding.

D. Should the drawings disagree in themselves or the specifications with the drawings *(and clarification was not sought before bidding)*, the higher cost, better quality, more stringent, and greater quantity of the work or materials shall be completed without additional costs to the Owner.

1.4 OTHER DIVISIONS/CONTRACTORS RELATED WORK

A. Division 03 (Concrete) is responsible for but not limited to:

1. Slab depressions reinforced concrete wearing bed at prefabricated walk-in assemblies.

2. Concrete or masonry platforms (with a finished top and coved base at the perimeter) for the raised setting of food service equipment.

3. Slab depressions to receive stainless steel drain trench liner/grate assemblies (provided under this Section).

B. Division 09 (Finishes) responsible for but not limited to:

1. Interior finished floor with a coved base at prefabricated walk-in assemblies.

C. Division 22 (Plumbing) is responsible for but not limited to:

1. All connections shall be made in accordance with local codes and national standards, except where plans and specifications exceed those codes and standards.

2. Empty PVC and wide-sweep bends for refrigerant piping to beverage lines, Co2 lines, and remote food service equipment refrigeration systems.

3. Rough-in and final connection of plumbing systems to food service equipment and between components (including materials and labor). Accessories provided loose with food service equipment by Section 11 4000 to be field installed by Division 22. This includes but is not limited to the installation of all faucets (water fill faucets, pre-rinse faucets, etc.), hoses, gas disconnects and drains from the equipment point of connection to building plumbing systems. All drain lines are provided and installed by Div. 22.

4. Indirect drain line runs from the equipment to the nearest drain or floor sink—lines to be type ‘K’ Copper.

5. If any plumbing accessories or fittings are provided loose with equipment by 11 4000, Div. 22 is to attach to equipment and provide final connection.

6. Piping and Drainage Systems (Sanitary and Grease-laden). ***Systems must be cleaned and flushed before the final connection with food service equipment - Critical.***

7. Floor Sinks (Provide and Install). Flange and grates to be flush with the finished floor.

8. Floor Drains (Provide and Install). Flange and grates to be flush with the finished floor.

9. Grease Traps as required (Size, Provide, Locate, and Install). Verify with local codes to bypass or pipe through Grease Trap and/or Interceptor.

10. P-Traps as required

11. Specified couplings and piping to all equipment furnished by 11 4000.

12. Fire System Piping. The exposed piping is to be chrome plated.

13. Refer to Section 2.2 PLUMBING / MECHANICAL REQUIREMENTS for additional information.

D. Division 23 (Mechanical) responsible for but not limited to:

1. All connections shall be made following local codes and national standards, except where plans and specifications exceed those codes and standards.

2. Empty EMT Conduit with pull-wire and wide-sweep bends for refrigerant piping to remote food service equipment refrigeration systems.

3. Rough-in and final connection of mechanical systems to food service equipment, walk-in assemblies, and between components (including materials and labor).

4. Circulating air above walk-in assemblies (Provide and Install).

5. Circulating air above and in air gaps at warehouse cold storage assemblies (Provide and Install).

6. Refer to Section 2.2 PLUMBING / MECHANICAL REQUIREMENTS for additional information.

E. Division 26 (Electrical) responsible for but not limited to:

1. Rough-in and final connection of electrical systems to food service equipment, walk-in assemblies, and between components (including materials and labor). Accessories provided loose with food service equipment by Section 11 4000 to be field installed by Division 26.

2. Empty EMT Conduit with pull-wire and wide-sweep bends for refrigerant piping to remote food service equipment refrigeration systems.

3. Empty EMT Conduit with pull-wire and wide-sweep bends for fire suppression systems. Interconnect the Fire Protection System to panel box shunt trips and building alarm.

4. Walk-in Assembly Light Fixture Installation (Provided loose by Section 11 4000) (if Walk-in is provided in this project).

5. in this project) – Install and interconnect to Dishmachine.

6. Electrical Materials and Devices (Shunt-trip breakers, surge protectors, lighting control devices, conduit, wire, etc.).

7. Switches and Stainless Steel Disconnects as required (Provide, Locate, and Install – to be in an accessible location).

8. Door Heaters, Lights, Coils, and Heated Pressure Relief Ports pre-wired to the junction box at the top of walk-in assemblies (if equipment is provided in this project) provided by Section 11 4000—final connection by Div. 26.

9. If any electrical accessories, fittings, and cord/plugs are provided loose with equipment by 11 4000, Div. 26 is to attach to equipment and provide final connection.

10. All electrical lighting, power, and distribution systems.

11. Other than convenience outlets, all electrical connections on food service plans are dedicated breakers.

12. (if Walk-in is provided in this project) Walk-in Manufacturer is to provide Two (2) Edwards 860 Series (or equal) red lens, surface-mounted Xenon Emergency Strobe Beacons. Walk-in manufacturer will install One (1) located in the Kitchen above Walk-In Freezer door (or Cooler door when Freezer is within Cooler in an 'inline' assembly), and provide the second unit loose for installation by Division 26 located in the Cafetorium (Division 26 to coordinate location with Owners and Architect). Division 26 is to provide all conduit and wiring required and interconnect the illuminated Push Button Panic Alarm in the Walk-In Freezer to both Strobe Beacons (***Critical***). Coordinate with Division 27.

13. Dedicated circuit for heated drain line connection in Walk-In Freezer (120/1/16.0 Amp) at each coil (if Walk-In is provided in this project).

14. Electrical contractor to provide conduit with pulled wires prior to installation of equipment.

15. Refer to Section 2.5, ELECTRICAL REQUIREMENTS, for additional information.

F. Division 27 (Communication) responsible for but not limited to:

1. Data line coordination for food service equipment.

2. (if Walk-in is provided in this project) (Provide conduit, data line, and interconnect the illuminated Push Button Panic Alarm inside the Walk-In Freezer to the Building Automation System (BAS). When activated, facility personnel are to be notified - coordinate notification requirements with the Owner (***Critical***). Coordinate with Division 26.

G. General Contractor responsible for but not limited to:

1. Any wall penetration required for food service equipment utilities. Escutcheon plates or S/S sleeves are to be provided and installed as needed.

2. Bulk Freezer Ventilation Pipe (if Bulk Freezer is provided in this project) (Provide and Install unless otherwise specified).

3. Interior Bollards (if required for this project) – to be epoxy painted per local codes (Provide and Install).

4. Furnish and Install ¾" Plywood blocking in the wall for mounting equipment furnished by Section 11 4000 as required.

5. Walk-in Depressions (to be dead level) and sand leveling bed (if Walk-in is provided in this project and recess is shown).

6. Structural bracing for Bulk Walk-in Assembly ceiling panels if required.

7. Interior/Exterior refrigeration penetrations and sleeves at building penetrations.

8. Final cleaning of all equipment before demonstrations.

1.5 QUALITY ASSURANCE

A. In addition to complying with all applicable laws, statutes, building codes, and regulations of public authorities, comply with the following:

1. National Sanitation Foundation (all equipment to bear label)

2. National Electric Code

3. Underwriters' Laboratories, Inc. (all applicable equipment to bear label)

4. American Gas Association Laboratories

5. National Fire Protection Association

6. Americans with Disabilities Act

7. Food and Drug Administration HAACP Guidelines

8. International Energy Conservation Code (IECC)

9. Department of Energy

10. Environmental Protection Agency

11. CSA Group

B. Furnish certification of regularly manufactured equipment listing or classification by Underwriters Laboratories, Inc., with the initial submittal.

C. Furnish a list of equipment and components (internal and external) that are not of domestic origin. All equipment and components (internal and external) should be of domestic origin when possible. This information should be provided with the initial submittal.

D. Projects outside the continental United States shall adhere to all local authorities having jurisdiction over that project.

1.6 SUBSTITUTIONS

A. **The specified equipment items or components are intended to be the basis of the bid. All other brands, including any additional names, which may be listed as "Alternates" or "Approved Equal," must conform with the general and item specifications,**

warranties, size/dimensions, quality, accessories, function, voltage, horsepower, etc. of the first-named brand and be subject to Paragraph C-03 of this Article.

B. Proposed Substitutions:

1. Submitted at least 14 calendar days before Bid Date.

2. Submit proposed substitutions with catalog data and manufacturer's shop details indicating all modifications required to conform with the specified brand.

3. List of deviations must include equipment name, model number, accessories, and features with deviation(s) noted for specified and proposed alternate equipment. Equipment without listed deviation(s) will be considered furnished as specified.

C. Substitutions with prior approval:

1. Submitted on Bidder's letterhead attached to Proposal Form with individual additive/deductive amounts stipulated and the documentation required in Paragraph B-02.

2. Owner reserves the right to accept or reject any or all substitution proposals before execution of the Contract.

3. Provide all design/engineering services required to adjust in space, systems, utilities, etc., and pay all additional costs of utilities, construction, or professional services that may be incurred due to the acceptance of any substitution.

D. All appliances or other equipment within a common group or category (e.g., refrigerators, kettles, ovens, shelving, etc.) must be from the same manufacturer.

1.7 INTERPRETATION OF DOCUMENTS

A. During Bidding: Bidder's, supplier's, or vendor's questions and comments about Construction Document's clarity or intent will be addressed by addendum.

B. After Award:

1. Clarification Bulletin will confirm Construction Document requirements.

2. Request for Information submitted by Contractor shall contain Contractor's proposed resolution.

1.8 WARRANTY

A. Provide a written warranty for parts and labor for one year ***from the date of Substantial Completion***, including an extended four-year replacement warranty on compressor bodies.

B. Components of equipment subject to replacement before one year's use (such as refrigerator door gaskets) and those items which may fail due to improper or inadequate periodic maintenance by the Owner/Operator (such as an uncleaned refrigeration system condenser) are not intended to be included within the scope of the Warranty.

C. Refrigeration Systems/Equipment: One-year free service available within twenty-four hours of notification.

D. Furnish three copies of a list of all equipment and their respective local service agencies, indicating the address, telephone number, and name of the person to contact. The service agencies selected shall be factory-authorized for the equipment assigned whenever possible.

E. Provide the following for refrigeration systems/equipment unless specified otherwise:

1. One (1) year of free refrigeration system service is available within twenty-four hours of notification.

2. Provide five (5) year manufacturer's registered written replacement warranty certificate covering compressor bodies. Warranty to cover labor costs for the first year.

3. Provide ten (10) years of the manufacturer's registered written replacement/repair warranty certificate covering walk-in assembly panels. Warranty to cover defects in material and workmanship. Warranty to cover labor costs for the first year.

4. Provide two (2) year parts and labor warranty for ***all parts/components (including third-party components that may be utilized)*** of the refrigeration system(s) ***(including freon)***, walk-in cooler(s), and freezer(s) not otherwise covered herein.

F. ***All above-stated warranty periods are from the date of Substantial Completion***. All replacement parts due to a warranty call should be the same quality as the original, or better if the original were defective. Replacement parts should be of domestic origin where possible.

1.9 SUBMITTAL DATA

A. **All submittals must be received, reviewed, and approved as noted prior to equipment procurement. If any equipment is procured prior to this process, it is on the KEC to replace any equipment, accessories, or other components that may not meet the specifications or design intent for the facility, including all costs associated with rectifying the errors made in procuring the equipment before this critical process.**

B. Special Requirements: The following are in addition to any general requirements given elsewhere in the Documents.

C. Submittal Requirements:

1. Kitchen Equipment Contractor to furnish all submittals via PDF, drawings to be scaled per General Specifications and provided in Three (3) submittal packages.

2. Foodservice Design Professionals requires the below-listed business days for each package submitted. Packages are to be submitted within 14 days between each issued package. Each package should contain individual submittal sets.

a. Package One to include (2) Individual sets: 10 Business Days for Review

i. Equipment rough-in

ii. Equipment Brochure

b. Package Two to include (2) Individual sets: 10 Business Days for Review

i. Walk-in Cold Storage Assemblies

ii. Refrigeration

D. Submittals to be identified with the below-listed file name structure:

1. 11 4000-1 EQUIPMENT BROCHURE
2. 11 4000-2 EQUIPMENT ROUGH-IN PLANS
3. 11 4000-3 WALK-IN COLD STORAGE ASSEMBLY
4. 11 4000-4 REFRIGERATION

E. Package One (1) requires both submittals: Brochure and Rough-in plans. **If not sent together, the submittal will be rejected.**

F. Foodservice Design Professionals (FDP) will notate all submittals in RED. Architects and General contractors will be notated in color per their direction.

G. If hard copy submittals are required, Kitchen Equipment Contractor will furnish all copies to the specified trades as required.

H. If discrepancies, missing information, or incorrect information occur within the documents, Kitchen Equipment Contractor is to seek clarification or note the need for further direction on submittals. The Kitchen Equipment Contractor is to bid the higher of the discrepancies. *Refer to Section 1.3 SCOPE OF WORK: Subsection D.*

I. Brochure Format (for regularly manufactured equipment and components):

1. Front and rear protective cover with labeled project name.
2. Brochure index: Indicate Functional Area/Room number, item number, quantity, description, and manufacturer.
3. A separate flysheet for each component or item of equipment, indicating item number, name, quantity, manufacturer, optional equipment, modifications, special instructions, and utility requirements. Any equipment or assembly containing more than one buyout sub-assembly or component shall have the second item listed in parenthesis beside the primary item name—for example, Serving Counter (hot food well).
4. Catalog specification sheet with all options notated on the specification sheet and manufacturer's drawing.

J. Shop Drawings (Rough-In Drawings):

1. Separate drawing sheets: same size as Contract Drawings (Contract Drawings are not to be traced or reproduced). Submittal drawings are to be provided by Kitchen Equipment Contractor and not copied or reproduced from Contract Documents. Any reproduced submittal drawings will be rejected.
2. ¼" scale drawing of fixed/movable food service equipment and prefabricated Walk-in assemblies with itemized schedules.
3. Special Conditions Drawings, sizing, and locating the following conditions:
   a. Slab depressions, cores, sleeves, or block-outs (walk-in assemblies, drain trenches, piping, etc.).
   b. Concrete or masonry platforms.

c. Pipe sleeves or roof jacks.

d. Wall openings or block-outs for pass-through equipment, recessed control panels, in-wall fire-protection system components, etc.

e. Blocking grounds or anchor plates required in walls for equipment support/attachment.

f. Above-ceiling hanger assemblies for support of exhaust hoods, ceiling-mounted pot racks, etc.

g. Access panels in walls or ceiling for service of equipment.

h. Ceiling pockets or recesses for unusually high equipment.

i. In-wall carriers for wall-hung or cantilevered equipment.

4. Electrical Rough-In Drawing

5. Plumbing and Mechanical Rough-In Drawing

6. Required information:

a. All fixed and portable food service equipment shown on Contract Drawings.

b. All prefabricated Walk-In Assemblies shown on Contract Drawings.

c. All general-use and convenience utilities or services indicated on Contract Drawings, including those required by or connected to equipment or devices, not in this Section.

d. All Rough-In Drawings: Fully dimensioned from engineering benchmark (column lines, when provided) and finished-room surface to the point of stub-up through floor and stub-out through wall or ceiling for all mechanical, electrical, and plumbing services.

e. Connection number/tag system and symbols: Identical to Contract Drawings.

K. Shop Drawings (Manufacturer's and Fabricator's):

1. Sheet Size: Identical to Contract Drawings, drawn or plotted at a ¼" scale for plan view, ½" for elevations, and 1½" for sections and construction details.

2. Included information: The item number, name, and quantity.

3. Construction details, sections, and elevations to reflect the requirements of the Specifications and Drawings.

4. Indicate adjacent walls, columns, and equipment.

5. Indicate plumbing and electrical schematic drawings for equipment such as conveyors, waste systems, self-cleaning exhaust hoods, exhaust hood fire protection systems, and fabricated fixtures with a single electrical or plumbing connection.

6. Mechanical or electrical operating components or products integrated into a fabricated fixture: ventilation and service access required or recommended by the manufacturer,

including panel size and location to permit easy lubrication, adjustment, or replacement of all moving parts.

L. All equipment and engineering rough-in plans sheet numbers are to match the contract documents. All equipment item numbers and engineer item numbers located on the schedules are to match the contract documents. All engineering requirements must be updated to accommodate the provided equipment and match the contract documents. The Kitchen Contractor coordinates any MEP revisions to accommodate the supplied and proposed equipment. The Kitchen Equipment Contractor is responsible for any costs associated with equipment substitution.

M. Foodservice Design Professionals (FDP) drawings and schedules are not to be copied in any way. Any replicated drawings of Foodservice Design Professionals (FDP) will be rejected.

1.10 SERVICE MANUAL

A. Three copies bound in 1½" hardback, three-ring binders (as many volumes as required by the scope of the project) with the same data as the brochure after installation (Refer to "Submittal Data"). Provide separate service manuals for each independent area within the project scope (Main Kitchen, Culinary, Concession, etc.).

B. Each Volume: Section for maintenance of finish materials (e.g., stainless steel, plastic laminates, FRP, Plexiglas, etc.).

C. Catalog specification sheet and/or manufacturer's shop drawings, including wiring diagrams when applicable.

D. Each Volume: Index of items, manufacturer's operating/maintenance information, replacement parts data, list of all product warranties, and price lists. Provide the name, title, and address of personnel at each respective manufacturer and service personnel to be contacted for spare/replacement parts and service after the warranty period.

E. To the greatest extent possible, provide two copies of the manufacturer's instructional video cassettes for operating, maintenance, and equipment service.

F. Internally subdivide binder contents with permanent page dividers, logically organized by equipment item number or manufacturer name, with tab titling printed under reinforced, laminated plastic tabs.

G. Electronically submitted manuals must follow the formatting requirements listed above.

H. **Service Manual to be provided to the owner before kitchen equipment demonstration.**

1.11 VERIFICATION AND COORDINATION OF PROJECT / DATA

A. Utilities Rough-in Drawings and field verifications are to be completed within four weeks after receipt of notice-to-proceed. Review Contract Drawings and Submittal Data for accuracy and completeness and notify Architect of conflicts and proposed adjustments. Coordinate work with other sub-contractors.

1. KEC to provide on-site field verification of all underground utilities before pouring concrete for capacity and location and coordinate with General Contractor. Submit a review to Architect and General Contractor. If rough-ins need to be relocated, KEC will compensate other trades for the required relocation.

2. KEC to provide on-site field verification of all other utility connections and locations and coordinate with General Contractor. Submit a review to Architect and General Contractor.

B. On-Site Inspection Reports

1. Before concrete pour: The Kitchen Equipment Contractor is to submit a copy of the report below to the Architect, General Contractor, and Foodservice Design Professionals (FDP) within 24 hours of the inspection. The form to be submitted is contained within these General Specifications.

2. Before delivery of equipment: The Kitchen Equipment Contractor is to submit a copy of the report below to the Architect, General Contractor, and Foodservice Design Professionals (FDP) within 24 hours of the inspection. The form to be submitted is contained within these General Specifications.

FOODSERVICE DESIGN PROFESSIONALS

0n - Site Inspection Report

Prior to Concrete Pour

Inspection Date_____ **Project Name** _____

Project Location_____

Inspector's Name_____ **Company** _____

Inspector's Contact Number_____ **Email** _____

Architectural Firm_____ **Project Architect** _____

Architect's Contact Number_____ **Email** _____

General Contractor_____ **Project Manager** _____

G.C. Contact Number_____ **Email** _____

Food Service Consultant Foodservice Design Professionals, LLC **Project Manager**_____

Contact Number 281.350.2323 **Email** _____

An on-site Inspection to verify the location of UNDERGROUND utilities was conducted on this date. The following conditions were observed and brought to the attention of the General Contractor. (KEC is to provide a written description and copy of the Utility Plan indicating the corrective action required).

1. What difficulties were encountered?

Inspector's Initials _____

This Inspection Report is the responsibility of the Kitchen Equipment Supplier and the General Contractor. Coordination between the two parties is mandatory.
Neither the Architect nor FDP need to be present at these inspections.

EMAIL A COPY OF THIS REPORT AND ANY ADDITIONAL INFORMATION TO THE ARCHITECT, GENERAL CONTRACTOR AND FOODSERVICE DESIGN PROFESSIONALS, LLC.

FOODSERVICE DESIGN PROFESSIONALS

CSA INSTALLATION APPROVAL REPORT

Report Date_____Project Name _____

KEC Firm_____ Phone Number_____

Contact Name_____ Email _____

- ☐ Walk-In panels are installed square, plumb, and level. Inspected prior to interior concrete pour.
- ☐ Ceiling panels are installed flush and tight to wall panels with undamaged gasket material. Any signs of condensation at joints or walls should be reported to FDP and addressed immediately. Caulk at panel seams will not be an acceptable solution.
- ☐ All cam-locks are engaged, and buttonholes are in place.
- ☐ Gaps under the screed or floor angle (due to shimming) are entirely sealed to the slab.
- ☐ Penetrations in the ceiling or wall panels are insulated and sealed.
- ☐ Weatherproofing / thermal barrier material is installed.
- ☐ All sharp edges of metal doors and diamond treadplate are clean of sharp edges and deburred.
- ☐ Door bumper or wall protection is installed and located as to prevent damage of door to adjacent walls.
- ☐ Cove base installed at all wall bases internal and external of walk-in.
- ☐ Door systems are correctly installed, and the door is self-closing and seals around the opening perimeter and at the floor threshold. Threshold has a smooth and level transition.
- ☐ Upon completion of the electrical connections, confirm the final operation of the IC/IC+ control, door heaters and light switches.
- ☐ Entrapment hardware and alarm systems are installed and functioning.

KEC SIGNATURE_____

COMMENTS_____

_____

EMAIL A COPY OF THIS REPORT AND ANY ADDITIONAL INFORMATION TO THE ARCHITECT, GENERAL CONTRACTOR AND FOODSERVICE DESIGN PROFESSIONALS, LLC.

FOODSERVICE DESIGN PROFESSIONALS

0n - Site Inspection Report

Prior to Delivery of Equipment

Inspection Date_____ **Project Name** _____

Project Location_____

Inspector's Name_____ **Company** _____

Inspector's Contact Number_____ **Email** _____

Architectural Firm_____ **Project Architect** _____

Architect's Contact Number_____ **Email** _____

General Contractor_____ **Project Manager** _____

G.C. Contact Number_____ **Email** _____

Food Service Consultant Foodservice Design Professionals, LLC **Project Manager**_____

Contact Number 281.350.2323 **Email** _____

An on-site Inspection to verify the location of INSTALLED utilities was conducted on this date. The following conditions were observed and brought to the attention of the General Contractor. (KEC is to provide a written description and copy of the Utility Plan indicating the corrective action required).

1. What difficulties were encountered?

Inspector's Initials _____

This Inspection Report is the responsibility of the Kitchen Equipment Supplier and the General Contractor. Coordination between the two parties is mandatory.
Neither the Architect nor FDP need to be present at these inspections.

EMAIL A COPY OF THIS REPORT AND ANY ADDITIONAL INFORMATION TO THE ARCHITECT, GENERAL CONTRACTOR AND FOODSERVICE DESIGN PROFESSIONALS, LLC.

C. Review critical systems/components for application, performance, and capacity and submit calculation worksheets with the initial submission of brochure/rough-in drawings, with all proposed adjustments noted, including:

1. Refrigeration Systems (compressor, condenser, and evaporator) capacities/sizes, quantities, and refrigerant piping distances/sizes.

2. ADA compliance of workstations, service positions, passageways, etc.

D. Ceiling mounted appliances/fixtures: Verify and coordinate dimensions/location of support framing/hangers with the General Contractor—all material and installation below 12'-0" AFF: Section 11 4000.

E. Dimension Responsibility: Obtain actual or guaranteed measurements for the proper equipment fit. All dimensions indicated in Contract Documents are approximate and are as accurate as can be determined at the time. Field-check all horizontal/vertical measurements and conditions at the building before fabrication or delivery of equipment and notify the Architect of all conflicts or deviations from the dimensions shown.

F. Checking Dimensions at Site: Before ordering any materials or doing any work, verify all measurements of the building and be responsible for their correctness. No extras will be allowed for variations from drawings in existing conditions or work performed under this contract. Any discrepancies found shall be submitted to the Architect for instructions before proceeding.

G. Scheduling to Fit Openings: Should it become necessary to schedule the construction of walls or partitions before delivery of fixed equipment, the equipment must be fabricated for passage through finished openings. Maintain close contact with the project and be cognizant of all conditions, including vertical handling limitations within the building (elevator cabs or openings, stairs, etc.) and possible hoisting requirements. Coordinate all procedures with General Contractor and Project Team.

H. Refrigerated and Dry Storage Areas: Verify and coordinate dimensions to accommodate scheduled modular shelf sections. Notify Architect of the variance between the Contract Documents and actual conditions.

I. Color/Pattern Selections: Submit selection samples of solid polymer products, plastic laminate, paint or stain finishes, and vinyl-coated surface material of equipment as selected by the Owner.

J. Movable Equipment Interface: Rolling stock (pan racks, carts, dollies, dish/tray/rack dispensers) required to fit through or into fixed equipment (roll-in refrigerators, counter bodies, etc.) is to be reviewed and coordinated for compatibility at the time initial of shop drawing submittal. Indicate conflicts and proposed adjustments.

K. Relocation of Work: Relocate or re-route work as required to coordinate related items free of charge if no extra work is involved.

L. **Kitchen Equipment Contractor must provide FDP with the food service equipment lump sum pricing (including material and labor) after the contract has been executed and *before submittals* are provided to FDP. *This information is critical to FDP for accounting/billing purposes.***

1.12 EQUIPMENT FURNISHED / INSTALLED BY OTHERS

A. Obtain and coordinate utility requirements of Owner-Furnished/Owner-Installed (OF/OI) equipment with the building utilities and rough-in drawings/provisions.

B. Coordinate physical data of OF/OI appliances or equipment and incorporate information into Submittal Drawings. Vendor- or Purveyor-Furnished equipment (e.g., coffee/tea equipment): same as OF/OI.

1.13 WORK INSTALLED BUT FURNISHED BY OTHERS

A. Coordinate delivery/installation schedule of Owner-Furnished/Contractor-Installed (OF/CI) equipment with the Owner at least ninety (90) days before equipment requirement.

B. Obtain and coordinate utility requirements of OF/CI equipment with the building utilities and rough-in drawings/provisions.

C. Receive at the job site and fully incorporate into installation procedures as if furnished under this Section.

PART 2 - PRODUCTS

2.1 FABRICATED FIXTURES MATERIAL / COMPONENTS

A. Stainless steel sheets or shapes: 18-8, Type 302, polished to 180 grit No. 4 finish.

1. Stainless steel joints and seams: Heli-arc welded, free of pits and flaws, ground smooth, and polished to a No. 4 finish.

2. The “grain” direction of horizontal stainless-steel surfaces: Longitudinal, including the backsplash. The polishing procedure at right-angle corners of fixtures shall provide a mitered appearance.

B. Galvanized Iron Sheets: Armco copper bearing Zinc Grip or Zinc Grip/Paint Grip.

1. Galvanized iron joints and seams: Arc-welded, free of pits, flaws, and ground smooth.

2. Galvanized sheets or shapes: Washed with mineral spirits and painted with Rust-Oleum gray semi-gloss enamel.

C. Identification Plates, Labels, Tags:

1. Prohibited Information: Names of suppliers, fabricators, and contractors.

2. NSF Labels: Required on all pieces of equipment.

3. Required Information: Function or purpose of controls such as display light switches, food warmer controls, etc.

4. Plate Construction: Engraved phenolic plastic, secured to equipment with epoxy cement or stainless-steel screws. Furnish samples.

2.2 PLUMBING / MECHANICAL REQUIREMENTS

A. Plumbing Fittings and Components: Furnished under this Section as follows:

Note: Fitting and components described in Items 1, 2, 3, 4, and 5 are furnished loose by 11 4000 for final installation and connection by Division 22.

1. Extensions of indirect waste fittings to open-sight floor sink or floor drains from sinks, under bar equipment, and food-holding components of serving counters (e.g., cold pans, hot food wells, refrigerator/freezer coils not equipped with condensate evaporators) furnished and installed by Division 22. Drains: All drains to be type 'K' Copper – Paint with aluminum paint where exposed**. Div. 22 to ensure a minimum air gap of 1" and not less than twice the effective opening of the indirect waste pipe, per code. Div. 22 to ensure all drain lines are centered over floor sink grate openings and no water splashes on the floor.**

2. Piping brackets and supports beneath fabricated equipment.

B. Final Plumbing Connections Provisions:

1. Fabricated equipment containing components, fittings, and devices indicated on food service connection drawings to be connected to the building systems: each component, fitting, or group thereof pre-piped to a utility compartment for final connection by Division 22. Refer to drawings for capacities.

2. Field-assembled equipment (e.g., prefabricated walk-in assemblies, exhaust hoods, ware wash machines, convection ovens, etc.): plumbing components completely interconnected under this Section for final connection arrangements indicated on Utility Connection Drawings.

3. All plumbing final connection points of equipment shall be tagged, indicating the following:

a. Item number

b. Name of devices or components

c. Type of utility (water, gas, steam, drain, chilled water)

C. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Sub Sections E. Plumbing and F. Mechanical for additional information.

2.3 FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS

A. Install complete with all refrigerants, oil, dials, dehydrators, gauges, and controls required for the system's proper operation.

B. Self-contained or factory-installed compressors: Check and adjust to the proper operating temperature prescribed by FDA/HACCP.

2.4 PLUMBING TRIM

A. Faucets: Furnished for all sinks or equipment requiring open water supply.

B. Drain Fittings: Furnished for all sinks or equipment requiring removal of liquids. Install specified chrome-plated or stainless-steel fittings in die-stamped openings with washers and locknuts. The solder may be used as a sealer but shall not be applied to the top surface of the drain fittings.

2.5 ELECTRICAL REQUIREMENTS

A. All electrical systems, components, and accessories within the work of this Section: Certified to be in accordance with NEC 70.

B. Electrical Fittings and Components: Furnished under this Section as follows. Coordinate food service equipment loads, voltage, and phase with the building system and confirm any existing or OF/OI equipment requirements.

C. Cord and Caps:

1. Coordinate all food service equipment cord/caps with related receptacles.

2. All 120, 120/208, and 208 volts “plug-in” equipment shall have Type SO or SJO cord and plug with ground wire fastened to the frame/body of the item.

3. Cord lengths for fixed equipment: Adjusted to eliminate loose-hanging excess.

4. All non-fixed plug-in “buy-out” equipment: Hubbell configuration and ratings as required.

D. Switches and Controls:

1. Each motor-driven appliance or electrically heated unit: Equipped with a control switch or starter per Underwriters’ Laboratories, Inc., with low-voltage and overload protection.

2. Equipment that is not provided with built-in circuit breakers or fused terminal block and is indicated on Utility Connections Drawings to be directly connected to the building electrical system: a NEMA 4 stainless steel disconnect switch furnished and installed by Division 26.

3. All remote manual starters, disconnect switches, magnetic contactors or starters, and push-button stations: NEMA Type 4 enclosure; NEMA Type 1 enclosure only when installed in a Closed Base Body.

E. Receptacles and Switches:

1. Receptacles installed in/on-fabricated equipment: Hubbell, Inc. assemblies horizontally mounted in a metal box with stainless steel cover plate.

2. Switches installed in/on-fabricated equipment: Hubbell, Inc. with metal box and stainless-steel cover plate. Switches: pre-wired to the controlled device and a junction box installed within 6” from the bottom of the utility or compressor compartment. All refrigeration system switches: Installed within the compressor compartment near the door opening.

F. Light Fixtures:

1. Light fixtures with lamps installed in/on fabricated or field-assembled equipment: pre-wired to a junction box for final connection (continuous-run fixtures when indicated).

2. **Walk-in assembly LED Light Fixtures: Furnished by Section 11 4000, final installation by Div. 26. All electrical wiring and conduit, provided by Div. 26, electrically connected through the Vapor Proof light fixture base connection, located on the interior door header—all Conduit to be Seal-tight conduit. Door frame wiring stubs out the top of panels 8" in flexible conduit for final connection by the electrical contractor. All horizontal conduits: below ceiling panels. All lighting fixtures will be wired from inside the assembly—no penetrations through the ceiling panels. Seal-sleeved penetrations are airtight at both sides of the panel. KEC is responsible for verifying that trade contractors seal all penetrations.**

G. Final Electrical Connection Provisions:

1. Field-assembled equipment (e.g., prefabricated walk-in assemblies, exhaust hoods, ware wash machines, etc.) shall have electrical components completely interconnected in this Section for final connection arrangements as indicated on Utility Connection Drawings by Division 26.

2. Pre-wire the following groups of walk-in assembly electrical devices to a top-mounted junction box for final connection by Division 26 per compartment grouping (unless otherwise indicated).

a. Light fixtures and switches; heated pressure-relief ports.

b. Door/jamb heaters.

c. Evaporator fans, defrost elements and drain line heaters.

3. All electrical final connection points of equipment shall be tagged, indicating the following:

a. Item number.

b. Name of devices on the circuit.

c. Total electrical load.

d. Voltage and phase.

H. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Subsection F. Division 26 (Electrical) for additional information.

2.6 ANCHOR PLATES / WOOD GROUNDS

A. Behind the finished surface, wherever building walls, partitions, or ceiling construction will not accommodate direct attachment of equipment such as over shelves, wall cabinets, hose reels, utensil racks, exhaust hoods, display cases, etc. Material and installation by General Contractor. Location and coordination with trades by Section 11 4000.

B. Anchor Plates: Not less than 12" x 12" x ¼" thick steel, secured to the structure above or behind the finished surface, positioned at attachment points.

C. Wood Grounds: Length required by fixture, component, or device, 24" wide x ¾" thick plywood secured to partition system before gypsum board installation.

D. Above ceiling supports: Structural shapes (4" x 8.0 lb. channel) suspended from the structure. Maximum height 15'-0" AFF. Size: width of equipment x length of equipment plus 6'-0". Cross bracing at 6'-0" OC maximum.

2.7 PREFABRICATED WALK-IN COLD STORAGE ASSEMBLIES

A. Assembly to be installed by Factory Authorized Installers only.

B. KEC to provide a 1-year walk-in assembly panel installation warranty. Panel installation warranty to cover labor and part replacement issues resulting from a failure to complete the following during installation:

1. Walk-in assembly panels to be installed square, plumb, and level.

2. To create a proper seal, ceiling panels must be installed flush and tight to wall panels with undamaged gasket material. Any signs of condensation at joints or assembly wall panels should be reported to FDP and addressed immediately. Caulk at panel seams will not be an acceptable solution.

3. All cam-locks should be engaged and cam-lock covers in place.

4. Any gaps under the floor angle (due to shimming) must be entirely sealed to the slab.

5. All penetrations in the ceiling or wall panels should be insulated and sealed by appropriate trade contractors and verified by KEC, including but not limited to Light Fixtures, Refrigeration Lines, Sprinklers, Temperature Sensors, etc.

6. Proper installation of the door systems should allow the door to self-close and seal around the perimeter of the door opening and at the floor threshold.

7. Final operation of the IC/IC+ control, door heaters, and light switches should be confirmed upon completion of the electrical connections.

8. The walk-in assembly panel installation warranty will cover service issues resulting from faulty installation.

C. **KEC is responsible for overall install accuracy/quality and quality control of work performed, regardless of the installer or any field modifications due to building/construction conditions. KEC is to provide the CSA Installation Approval Report (provided in this document) to Foodservice Design Professionals (FDP) upon completed installation, verifying that all items above have been inspected by the KEC for completeness and installed per manufacturer requirements. This report will be required as part of the completion of the contract.**

D. Sectional Assemblies: Size/shape indicated on drawings; 9'-6" interior clearance unless otherwise specified. Door locations/size: exactly as shown.

E. Sandwich Panel Insulation: Class 1 Urethane with a vapor barrier, 4" thickness (unless specified otherwise) with mature "U" factor of .030 or lower. Finished panels shall be UL-listed and demonstrate a flame spread rating of 20 or less. Panels must meet performance standards as outlined in U.S. Government legislation.

F. Wherever compartment dimension exceeds the clear-span ability of ceiling panels, provide I-beam support on the exterior of the ceiling or spline-hangers. Install ½" diameter steel rods through beams/hangers and secure them to the structure above. Beams or posts within compartments are not acceptable.

G. Reinforce prefabricated wall panels to rigidly support the door assemblies. The perimeter of the door and frame shall be built of a fiberglass reinforced polymer (FRP) pultrusion. All pultrusion's shall be non-conductive, non-corrosive, rust proof and NSF listed. All doors shall be furnished with a replaceable aluminum braided heater wire, electronically monitored, and controlled as to initiation temperature, termination temperature and percentage of operation time as required. Install 2" x 4" 16-gauge stainless steel hat-channel full-width of the jamb with 1/8" stainless steel removable flush sill, secured with stainless steel screws and sealed watertight to channel.

H. Reinforcement as required to be provided above Freezer door (exterior) and panel next to door (handle side – interior) for mounting of Emergency Strobe Beacon, Push Button Panic Alarm and Release Knob. Emergency Strobe Beacons are by Division 26.

I. Provide an aluminum cove base at the interior and exterior of exposed panels for all floor assemblies.

J. Floor Installations:

1. **4" Recessed Exposed Factory Floor Installation (if required):**

   a. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.

   b. Level and square prefabricated perimeter and partition wall panels anchored to slab recess. Protect the exposed surface of panels.

   c. 4" commercial grade manufacturer's dura floor with diamond treadplate surface and marine grade plywood subfloor.

   d. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of the finished floor base.

   e. 1/2" sand leveling bed by G.C.

2. **8-1/2" Recessed Floor Installation (if required):**

   a. Factory floor in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.

   b. Level and square prefabricated perimeter and partition wall panels anchored to slab recess. Protect the exposed surface of panels.

   c. 4" manufacturer's floor.

   d. 15# felt slip sheet over insulation with 6" lapped joints flashed up the height of the finished floor base.

   e. 1/2" sand leveling bed by G.C.

   f. Concrete flooring and tile over insulation by Divisions 03/09.

3. **12” Recessed Floor Installation (if required):**

    a. 6 mil polyethylene sheets in slab recess with all joints lapped 6 inches and sealed to form a watertight seal.

    b. Level and square prefabricated perimeter and partition wall panels anchored to slab recess. Protect the exposed surface of panels.

    c. 4” manufacturer’s floor.

    d. 15# felt slip sheet over insulation with 6” lapped joints flashed up the height of the finished floor base.

    e. 1/2” sand leveling bed by G.C.

    f. Concrete flooring over insulation by Division 03:

        i. Concrete mix: 5000 psi @ Freezers and 3000 psi @ Coolers.

        ii. No limestone or fly ash; fiberglass reinforced.

        iii. #3 rebar, set on 12” centers in both directions.

        iv. Center rebar vertically in wearing bed.

        v. 10” high concrete 45° angled wall curb at interior perimeter per food service details.

    g. Diamond treadplate wall panels on the interior and exposed exterior by 11 4000. Refer to drawings for height. Coordinate diamond treadplate wall covering at the interior with angled wall curb.

    h. Ventilation Pipe Requirements by G.C.:

        i. Bottom perforated vent pipes to be #40 PVC on six ft. max centers open on both ends with the thermostatically controlled fan on (1) end and perforated mesh on the opposite end of the fan at the exterior of the building.

        ii. Vent pipes are to be turned parallel with the exterior wall - 180°turn down.

        iii. Vent pipe openings to be held at 24” above grade or roof per design.

        iv. Fans to be Grainger Manufacturer and sized per airflow needs. Airflow is to be sized based on the length and number of bends.

        v. If no exterior wall is adjacent, vent pipes will route up and extend past the roof. Roof penetrations by Division 07.

4. **Surface Mounted Factory Floor Installation (if required):**

    a. 4” commercial grade manufacturer’s dura floor with diamond treadplate surface and marine grade plywood subfloor.

    b. 36” reinforced diamond treadplate internal ramp.

c. 10-gauge stainless steel threshold to provide a smooth transition to the interior walk-in assembly floor.

K. Modularm Model No. 75LC (Unless otherwise specified). Integrated, flush-mounted temperature monitor/alarm with sensor and probe-cord length required to extend from the exterior front of the assembly to a mounting position of the sensor within the evaporator return airstream. System to have an easy-to-read LCD with high and low alarm set points with audible and visual alerts for alarm conditions. System to include Adaptive Programming for automatic set point control. Wi-Fi connectivity is included for remote notifications of alarms such as power failure, high and low temperatures, entrapment, and door open. System to include a built-in panic alarm. The system is to be interconnected to the Building Automation System (BAS) or the Owner's Network (by Division 27) and to notify facility personnel of the district/owner choosing when activated.

L. Modularm Model No. IP-1 (unless otherwise specified). Heated Illuminated Push Button Panic Alarm with protective cover and Phenolic Label "PANIC ALARM" for entrapment **within Freezer** (ADA mounting height). Panic Alarm Encasing is to be stainless steel (not plastic). Manufacturer to pre-run conduit within panel from Panic Alarm to panel above Freezer door (or Cooler door if 'inline' assembly) for installation of Emergency Strobe/Horn. Division 26 will provide (2) external Emergency Strobe/Horn Beacons and interconnect the Push Button Panic Alarm to external Beacons (One above the Freezer door and One in the Cafetorium in location as directed by Architect). Division 27 will interconnect the Push Button Panic Alarm to the Building Automation System for Owner notification. Refer to Section 1.4: OTHER DIVISIONS/CONTRACTORS RELATED WORK; Subsections F. Division 26 (**Electrical**) and G. Division 27 (**Communication**) for additional information.

M. KE2 Smart Access (unless otherwise specified). Confirm all component model numbers for complete installation and operation.

N. LED surface-mounted light fixture, in quantity/arrangement shown on drawings. Light fixtures to be perpendicular to coils. Light fixtures wired to interior and exterior temperature control panel. Light fixtures are to be provided by Section 11 4000 and installed by Division 26. Division 26 is to seal all conduit penetrations at light fixtures. KEC to verify that penetrations are sealed.

O. Penetrations of Panels: To be sealed by factory installer and appropriate trade contractors, with Dow Corning 3-6548 silicone RTV foam, total depth of the panel. Trim excess flush. KEC to verify that all penetrations are sealed.

P. Install closure panels and trim strips to building walls and ceiling with concealed attachment. Closure material: same as wall panels unless noted otherwise.

Q. Compartment Entrance Doors: 36" x 78" nominal clearance unless otherwise noted.

1. Mount hinged doors on two Kason Model No. 1346; polished chrome-plated nylon cam-lift hinges. All doors to be equipped with polished chrome Kason 1094 or equivalent door closer assembly. Doors to be adjusted so all doors fully self-close.

2. Hinge doors as indicated on drawings.

3. Defrost heater: Thermostatically controlled and replaceable at the entire perimeter of all doors. Defrost heaters to be wired for continuous service.

4. 36" high x full-length diamond aluminum treadplate at front and rear of all hinged doors.

5. 12” x 2” engraved phenolic plastic compartment identification sign in Architect’s color selection with 1” letters, mounted above door window.

6. 14” x 24” four-panel glass view window with heater and molded non-metallic inner and outer frame. The heater is to be wired and controlled via the door monitor for continuous service.

7. Padlock/key provisions in the door latch with safety release mechanisms.

8. Kason 1826 Intelli-Vent LED Heated Pressure Relief Ports with Dual Port Vent and Security Light. Locate Two (2) 12” below ceiling on Cooler/Freezer common wall panel and Two (2) 12” below ceiling on Cooler wall panel. If Cooler and Freezer are separate units, locate one on the Freezer wall panel as well, 12” below ceiling and mounted in the door frame assembly. All ports to have separate dedicated electrical connections and be wired for continuous service. Located and installed by Manufacturer.

9. Kason Model No. 1238CQ (unless specified otherwise) Pacesetter Locking Handle QTLC polished chrome with Kason 0485 glow-in-the-dark backplate and turn knob safety release.

10. Manual backup vacuum release mechanism to punch 6” diameter hole in ceiling panel to release vacuum within freezer assembly. Mechanism to include a pull-down handle with freeze-proof hand grip. Handle to have the ability to penetrate and/or punch hole in wall accordingly to assist with opening of door assembly in the event of entrapment (and failure of inside release knob). Release mechanism assembly to be built-in/mounted to panel structural frame to minimize mechanism tear-out and/or failure. Handle to be glow-in-dark yellow with phenolic label “Vacuum Pressure Release.” Punch out portion to be replaceable in opening without the use of tools or sealants. Punch out is not to be located directly over interior ramp.

11. Provide Two (2) Edwards 860 Series (or equal) red lens, surface-mounted Xenon Emergency Strobe Beacons. Walk-in manufacturer will install One (1) located in the Kitchen above Walk-In Freezer door (or Cooler door when Freezer is within Cooler in an ‘inline’ assembly) and provide the second unit loose for installation by Division 26 located in the Cafetorium (Division 26 to coordinate location with Owners and Architect). Division 26 is to provide all conduit and wiring required and interconnect the illuminated Push Button Panic Alarm in the Walk-In Freezer to both Strobe Beacons (***Critical***).

R. Provide refrigeration calculations and refrigeration alarm to meet local jurisdiction code requirements.

S. If air screens or air shields are specified above doors or on the interior of the assembly, the manufacturer must provide adequate blocking in panels to support these components and pre-wired electrical connections. Installer to coordinate location of door closure to not interfere with air screens or air shields. Clear-VU, swinging door assemblies, are not required if air shields are specified.

T. S/S trim above walk-in assembly to conceal manufacturer ceiling grid.

U. Field-check all horizontal/vertical measurements and conditions at the building before fabrication or delivery of equipment.

V. Walk-in Assemblies to be installed by the PRE-APPROVED INSTALLERS listed below:

1. QBR Refrigeration, 30083 Hwy 90 Blvd., Katy, TX 77493, Mr. Andy Spellins, 713-973-2875, andy.spellins@qbrsales.com

2. Machine Ice, 8915 Sweetwater Ln., Houston, TX 77037, Mr. Will Weaver, 281-448-7823

3. Coolers Inc., 6922 Alder Dr., Houston, TX 77081, Mr. Lee Mamone, 713-665-8886

2.8 WALK-IN COLD STORAGE ASSEMBLY REFRIGERATION SYSTEMS

A. Unit Coolers: specified quantity and model, ceiling-hung by ½" OD nylon bolts with stainless steel washers and nuts. Insert hanger bolts through the plastic sleeve and seal penetration airtight.

1. Unit cooler drain fittings: positioned as indicated on drawings. Installation of cast tee-fittings on drain pan outlet with union and cleanout plug and extension of 1" Type K copper drain line through wall panel to airgap fitting or floor drain under this Section.

2. Slope drain line ½" per foot, trap at the exterior of assembly and turn down into the drain. Manifold drain lines of adjacent compartments wherever possible.

3. Install drain line plastic sleeve through compartment wall, seal around drain line, and install stainless steel escutcheon with setscrews.

4. Electric drain line heater cable (self-regulating 7 watts): on all unit coolers operating below 36°F., installed from coil drain line fitting to wall penetration under this Section. Heater cables: the minimum rating of 15 watts/lineal foot, 208 volts, single phase. Wrap drain line with maximum 2" loop spacing and interwire to unit cooler for continuous operation.

5. Mounted, pre-piped, and pre-wired evaporator components:

   a. Sporlan thermostatic expansion valve with external equalizer.

   b. Shut-off valve at evaporator suction and liquid lines.

   c. Sporlan "Catch-All" refrigerant filter/dehydrator on liquid line.

   d. White Rogers 1609-101 adjustable thermostat with remote bulb positioned in return airstream of the evaporator.

   e. Electrical disconnect switch in NEMA 4 enclosure.

   f. **For any facility within 20 miles of a salt air environment:** Condenser and Evaporators to be built with Electrofin coating to retard salt air deterioration. Coils are to be coated with Technicoat 10-2 coating for protection against a salt air environment.

   g. 110° Ambient Temperature Operation.

6. Two (2) fan door activation switches to turn off evaporator coils when the door is opened.

B. Refrigerant System Installation:

1. Refrigerant Lines; Type “L” rigid copper tubing. Fittings: Wrought copper or brass designed for use with high-temperature solder. Piping joints: Made with silver solder (Sil-Fos). Piping: Properly suspended from and anchored to the structure with adjustable hangers 6’ OC maximum. Suction lines: Sized to have a maximum pressure drop of two pounds in medium-temperature systems; one pound in low-temperature systems. Liquid lines: Sized to give maximum pressure to prevent trapping of oil. Insulation on all suction lines: Armaflex insulation by Armstrong. ¾” thick at medium-temp 1” thick at low temp. Refrigerant lines in PVC conduit: Sealed at both ends with Dow Corning 3-6548 silicone RTV foam. The refrigeration system installer will wrap Exterior Refrigerant Lines in the self-fastening jacket of Type 3003-H14 aluminum alloy 0.016-inch thick. Provide aluminum strapping and seals for applying aluminum jackets and covers according to the manufacturer’s recommendations for a completely weather-tight covering.

C. Evacuation and Charging:

1. After completion of the pressure test, the system shall be evacuated using an approved auxiliary vacuum pump. Connections for evacuation: Following the manufacturer’s recommendations.

2. Charging after the initial charge, which is contained in the condensing unit (R448A Non-CFC Ozone Depletion Refrigerant for medium and high temp units, R513A - Non- CFC Ozone Depletion Refrigerant on low temp units) – (Refrigerant must meet District Standards, Industry Standards, and local Codes): given through the charging valve in the high side passing all of the liquid refrigerants through a charging dehydrator. All charging lines and gauges must be purged of air before connection with the system. Refrigerant: unused and shall be delivered in clean containers. After the system is fully charged: start and place it in full operation.

D. Refrigeration system to be installed by the **PRE-APPROVED INSTALLERS** listed below:

1. QBR Refrigeration, Mr. Andy Spellins 30083 Hwy 90 Blvd., Katy, TX 77493, 713.973.2875, andy.spellins@qbrsales.com

2. Machine Ice, Mr. Will Weaver, 8915 Sweetwater Ln., Houston, TX 77037, 281.448.7823

3. Coolers Inc., 6922 Alder Dr, Houston, TX 77081, Mr. Lee Mamone, (713) 665-8886

2.9 PRE-APPROVED KITCHEN EQUIPMENT CONTRACTORS

A. Only the following named Subcontractors and those approved later, if any, are approved for inclusion in the Contractor’s Bid.

B. **Any contractor requesting inclusion within this bid must submit AIA form 305 a minimum of 14 days before the bid date for review or as required by Architect.**

1. Stafford Smith, Mr. JP Garcia, 7129 North Loop East, Houston, TX 77028, Phone: 713.892.5001, Email: jpgarcia@staffordsmith.com

2. Texas Metal Equipment Company, Mr. Travis Andrews, 23518 Coons Road, Tomball, Texas 77375, Phone: 713.466.8722, Email: tandrews@tmeco.com

3. Kirby Restaurant Supply, Mr. Brian Kernan, 809 S. Eastman Road, Longview, Texas 75602, Phone: 903.757.2723, Email: briank@kirbysupply.com

4. Mission Restaurant Supply, Mr. Robert Snoddy, 1126 S. St. Mary's Street, San Antonio, Texas 78210, Phone: 832.970.4020, Email: roberts@missionrs.com

5. Kommercial Kitchens, Mr. Terry Woodard, 13544 East Fwy., Houston, TX 77015, Phone: 409.769.1199, Email: terry@kommercialkitchens.com

6. Supreme Fixtures Co., Inc., Mr. Tim Hampel, 11900 Vinny Ridge Road, P.O. Box 193655, Little Rock, AR 72219, Phone: 501.455.2552, Email: tim@supremefixture.com

7. Amundsen Commercial Kitchens, Mr. Lewis Beville, 105 Montie, Longview, TX 75604, Phone: 903.576.6354, E-mail: lewis@afeok.com

2.10 PRE-APPROVED STAINLESS-STEEL FABRICATION SUPPLIERS

A. Only the following named Subcontractors and those approved later, if any, are approved for inclusion in the Contractor's Bid. Pre-approved fabricators shown below shall not sub-out fabrication.

B. **Any supplier requesting inclusion within this bid must submit AIA form 305 at least 14 days before the bid date for review or as required by Architect.**

1. Texas Metal Equipment Company, Mr. Travis Andrews, 23518 Coons Road, Tomball, Texas 77375, Phone: 713.466.8722, Email: tandrews@tmeco.com

2. Kommercial Kitchens, Mr. Terry Woodard, 13544 East Fwy., Houston, TX 77015, Phone: 832.767.5287, Email: terry@kommercialkitchens.com

3. Mission Restaurant Supply, Mr. Robert Snoddy, 1126 S. St. Mary's Street, San Antonio, Texas 78210, Phone: 832.970.4020, Email: roberts@missionrs.com

4. CSS Manufacturing, Mr. Jared Woodard, 7430 Fairbanks North Houston Rd., Houston, Texas 77040, Phone: 832.444.6311, Email: jared.woodard@css-mfg.com

PART 3 - EXECUTION

3.1 DELIVERY AND INSTALLATION

A. Supervision: Provide a skilled and proficient foreman or supervisor who shall remain on the job during the entire installation.

B. Delivery: Coordinate with the progress of construction and Owner's operation schedules. Unless otherwise instructed and documented by Owner or General Contractor, the following procedures apply:

1. Field-assembled fixed equipment integrated into the structure (e.g., walk-in assemblies, exhaust hoods, drain trench/grate assemblies, conveyor systems, ceiling-mounted utensil racks) are to be sent to the job site when directed by the General Contractor and installed or protected accordingly.

2. All other Fixed Equipment: delivered after completion of work on adjacent finished ceilings, lighting, finished floor, wall systems (including painting), and painted gas lines.

3. Major Movable Equipment: delivered, when possible, to inventory in a secured area for interim job-site storage or, if the secured area is unavailable when fixed equipment installation/clean-up has been completed.

4. Minor appliances and loose items (e.g., pans, covers, flatware containers, etc.) should be delivered only when the Owner is prepared to receive and inventory such items.

C. Installation: performed by the manufacturer of custom fabricated fixtures.

1. Assemble, square, level, and ready all items for the final utility connections.

2. Cut neatly around obstructions to provide sanitary conditions.

3. Where gaps of ¼" or less occur adjacent to or between equipment, insert rope backing and smoothly apply General Electric construction sealant Series SE-1200 silicone mastic (clear color). Mask both sides of the gap for neat sealant application and remove excess. If space exceeds ¼," neatly install 18-gauge stainless steel trim molding of proper shape with concealed attachment. Use epoxy cement or "Z" clips wherever possible to secure stainless steel trim. Exposed edges or corners of trim: eased and smooth.

4. Refrigeration coil drain line runs to an indirect drain connection greater than 2" from the face of the wall or panel: Either of the following field procedures:

a. Trench the floor and provide a 6" wide x 2" deep 16-gauge stainless steel sloping (-1" to -2") trough from the face of the cooler/freezer wall to the body of the floor sink/floor drain. Trough: turned up 4" at the wall; ¾" flange with ½" turndown at both long sides. Set trough in waterproof mastic and seal 1" OD drain tube penetration into floor sink/floor drain at -2½" BFF. Patch the floor to match adjacent material/surface.

b. Provide 12" x 6" x 2" deep 16-gauge stainless steel condensate pan mounted to cooler/freezer wall at 6" AFF clear. Trench the floor and install a 1" OD drain line from the bottom of the pan to the body of the floor sink/drain. Slope drain line ¼" per foot and seal all connections watertight. Patch the floor to match adjacent material/surface.

D. Protection of Work:

1. Fabricated fixtures: Fiberboard or plywood taped to tops and exposed body panels/components.

2. Manufactured Equipment: Fiberboard or plywood taped as required by equipment shape and installation-access requirements.

3. Prohibited use of equipment: Tool and materials storage, workbench, scaffold, stacking area, etc.

4. Damaged Equipment: Immediately documented and submitted to the Owner with the Contractor's recommendation of action for repair or replacement and its impact on the Project Schedule and Contract Amount, if any.

3.2 CLEAN AND ADJUST

A. Clean up and remove all debris from this Work from the job site as the installation progresses.

B. Lubricate and adjust drawer slides, hinges, and casters.

C. Adjust pressure regulating valves, timed-delay relays, thermostatic controls, temperature sensors, exhaust hood grilles, etc.

D. Clean or replace faucet aerators and line strainers.

E. Touch-up damage to painted finishes.

F. Start up and check the operation of all refrigeration systems for at least 72 hours before acceptance.

3.3 EQUIPMENT START-UP/DEMONSTRATION

A. Carefully test, adjust, and regulate all equipment following the manufacturer's instructions and certify in writing to the Owner that the installation, adjustments, and performance are in full compliance.

B. Provide the Owner or food service Operators with a thorough operational demonstration of all equipment and furnish instructions for general and specific care and maintenance. Coordinate and schedule selected equipment items and attendees with the Owner at least two weeks before the demonstration starts.

3.4 FINAL OBSERVATION

A. Final observation will be made when the Contractor certifies that they have completed their work, thoroughly reviewed the installation/operation of each item in the contract and found it to comply with the Construction Documents.

B. Repetitive final observations (more than two) and all costs associated with it which may be incurred due to the Contractor's failure to comply with the requirements of this Article will be invoiced to this Contractor on a $70.00/hr and expense basis.

PART 4 - EQUIPMENT SCHEDULE

4.1 REGULARLY MANUFACTURED EQUIPMENT/COMPONENTS: Standard finishes and accessories unless specifically deleted or superseded by the Contract Documents.

4.2 FABRICATED AND FIELD-ASSEMBLED EQUIPMENT: Arrangement and configuration as shown on Plans, Elevations, Detail Drawings, and outlined in Specifications.

4.3 REFER TO DRAWINGS: For unit quantities and plumbing, electrical or mechanical provisions are required, including the manufacturer's optional voltages, wattages, burner capacities, etc.

4.4 REFER TO PART 2 – PRODUCTS: For accessories, fittings, requirements, and procedures related to the listed buy-out and fabricated equipment.

4.5 ALTERNATE MANUFACTURER REQUIREMENTS: A specific product manufactured by the listed pre-approved equals shown under Section 4.7 Food Service Equipment are acceptable only if the specific product can evidence compliance with the specified line items and the contract documents (Refer to Section 1.6; Sub-Section A.).

4.6 RE-USED EXISTING EQUIPMENT IF PROVIDED IN THIS PROJECT

A. Existing equipment scheduled for re-use is to be inventoried and documented that equipment is in operating condition once Kitchen Contractor has taken ownership.

B. Provide pictures of all equipment once inventoried and issue them to the architect to ensure that equipment has not been damaged.

C. Verify the locations of all equipment with the owner.

D. Existing equipment that is to be reused may need parts or accessories for proper and complete operation. Submit a report listing all items with pricing for approval to allow complete installation.

E. Utility disconnection and re-connection: Under Divisions 22 and 26. Kitchen Contractor to verify utility requirements of existing equipment and coordinate with Foodservice Design Professionals (FDP) as required. If utilities shown on FDP drawings do not match the requirements of existing equipment – KEC is to relay that to FDP immediately. All utilities not scheduled for re-use must be capped and covered by required disciplines.

F. Disassembly, removal, transportation, and relocation: under this Section and scheduled with General Contractor. The owner's representative must be present and coordinate the date/time with the owner.

G. Thoroughly clean inside and out before relocation.

H. Review functional parts (e.g., doors, controls, heating elements, compressors, etc.) and submit a report of required repairs and cost estimates. Any finishes or equipment damaged due to construction will be repaired as required.

I. Existing equipment not scheduled for reuse is to be carefully removed/relocated by the Kitchen Contractor per the Owner's direction. Kitchen Contractor to coordinate the date/time with General Contractor and Owner.

J. Removal or replacement of existing equipment is to be scheduled for times of least interruption and inconvenience to the food service operation. Submit the proposed time frame schedule, task sequence, and process for approval before starting work.

K. Kitchen Contractor to verify size and shape for all existing re-used equipment and coordinate with Foodservice Design Professionals (FDP) as required.

L. Any modification(s) required/desired for re-used existing equipment to be verified by the Kitchen Contractor. Before the changes are made, all modifications must be approved by the Owner and Foodservice Design Professionals (FDP).

M. The KEC is to verify and coordinate all the utility requirements with the construction documents as required. Refer to the general specifications regarding conflicts.

4.7 FOOD SERVICE EQUIPMENT

A. All equipment is to have a performance check from factory-authorized personnel. Warranties will begin on the day of the performance check.

B. All equipment and internal components should be of domestic origin where possible.

C. Architect to verify/coordinate the finishes below:

1. Walls: Ceramic Tile, Flat FRP, or Molded FRP (Smooth, Impervious, and easily cleanable as approved by local jurisdiction)

2. Ceilings: Removable Vinyl Face Tile (Smooth, impervious, and easily cleanable as approved by local jurisdiction)

3. Floors: Tile, Epoxy, or Rubberized flooring system (Smooth, impervious, easily cleanable and slip resistant as approved by local jurisdiction) (Coordinate floor tile transition at serving lines)

4. Floors: Walk-in Assembly – Interior finished floor of Walk-in assembly to be sealed concrete with a medium broom finish, and aluminum coved base

ITEM NO. 102 COLD STORAGE ASSEMBLY QUANTITY 1

Manufacturer:	Thermokool
Model:	---
Size and Shape:	Refer to drawings
Alternate:	American Panel, Bally

1. Installation to be completed by Factory Approved / Authorized installer. Refer to Section 2.33 Submittal drawings to include factory approval letter or certificate. The warranty will not start until letter has been provided to FDP confirming installation meets manufacturer requirements.
2. Manufacturer to review final installation and provide a letter confirming installation meets manufacturer requirements.
3. Assembly to have 9'-6” interior clearance.

4. 304 #3 finish 20 gauge stainless steel finish where exposed, 26 gauge acrylume where concealed.
5. Factory floor with smooth aluminum finish, recessed in slab 8 1/2". Secure floor to wall assembly with cam-lock assembly. KEC to ensure the floor assembly is level prior to the wearing bed installation. Finished floor in assembly to be sealed concrete only, with a medium broom finish. No tile. Critical: Floor to be smooth and level prior to concrete pour and at each stage of installation.
6. Threshold to be smooth and level with finished floor. Critical: Floor threshold to be surfaced with Graphine Oxide Anti-Slip or similar surface to reduce freezing and prevent slip hazards.
7. Interior walls to be baked white enamel embossed texture .040” aluminum.
8. Ceiling to be baked white enamel smooth textured .040” aluminum.
9. Two (2) 36" doors. Doors to be 20 gauge stainless steel, type 304 (18-8), #3 finish, with heated perimeter / door jambs / windows and threshold heaters. Each door to be equipped with 3'-0" high diamond tread kick plate on both sides of doors. Mount hinged doors on two (2) Kason model no. 1346 (or equal); polished chrome plated nylon cam-lift hinges. All doors to be equipped with polished chrome Kason 1094 or equivalent door closer assembly.
10. Each door to be equipped with 3'-0" high diamond tread kick plate on both sides of doors. Mount hinged doors on two (2) Kason model no. 1346 (or equal); polished chrome plated nylon cam-lift hinges. All doors to be equipped with polished chrome Kason 1094 or equivalent door closer assembly.
11. Doors to be provided with CCI Industries, Inc., Clear-VU swinging door assemblies, Alternate: Kason.
12. Provide Kason model No. 1238CQ door handles with Kason 0485 Quarter Turn Frost Free inside release, glow in dark surface, tether to external strike mechanism, ADA compliant.
13. Provide heated illuminated Push Button Panic Alarm with protective cover and Phenolic Label “PANIC ALARM” for entrapment within Freezer (ADA mounting height). Panic Alarm Encasing is to be stainless steel (not plastic). Manufacturer to pre-run conduit within panel from Panic Alarm to panel above Freezer door (or Cooler door if ‘inline’ assembly) for installation of Emergency Strobe/Horn. Division 114000 to provide (2) external Emergency Strobe/Horn Beacons and interconnect the Push Button Panic Alarm to external Beacons (One above the Freezer door and One in the Cafetorium in location as directed by Architect) furnished loose for install by Division 26. Division 27 will interconnect the Push Button Panic Alarm to the Building Automation System for Owner notification.
14. Reinforcement as required to be provided above Freezer door (exterior) and panel next to door (handle side - interior) for mounting of Emergency Strobe Beacon, Push Button Panic Alarm and Release Knob.
15. The Cooler and Freezer will have the standard control panel with standard panic button tied into the Owner's network for notification.

16. Manual backup vacuum release mechanism to punch 6” diameter hole in ceiling panel to release vacuum within freezer assembly. Mechanism to include a pull-down handle with freeze-proof hand grip. Handle to have the ability to penetrate and/or punch hole in wall accordingly to assist with opening of door assembly in the event of entrapment (and failure of inside release knob). Release mechanism assembly to be built-in/mounted to panel structural frame to minimize mechanism tear-out and/or failure. Handle to be glow-in-dark yellow with phenolic label “Vacuum Pressure Release.” Punch out portion to be replaceable in opening without the use of tools or sealants. Punch out is not to be located directly over interior ramp.
17. 18-gauge stainless steel, type 304 (18-8), #3 finish trim where adjacent to walls and enclosure panels that extend to 2" above finished ceiling.
18. Freezer: One (1) lot LED light fixtures to operate in temperatures to -20 F. Lights to be installed perpendicular to coils.
19. Cooler: One (1) lot LED light fixtures. Lights to be installed perpendicular to coils.
20. Provide door bumper at doors.
21. Interior and exterior to be sealed with clear silicone. Stainless steel surfaces can be sealed factory approved waterproof and mildew resistant aluminum based metallic sealant.
22. 3’-0” high diamond tread plate at exposed exterior surfaces. Fasten to wall with stainless steel fasteners.
23. Electrical conduit for lights to be exposed, ran from fixture to fixture with no penetration in ceiling panel. Tap off existing light fixture circuit at door. Div. 26 to provide watertight conduit for lights.
24. K.E.C. to provide aluminum cove base to interior of assembly. Provide sealant between floor and wall panels.
25. Provide Manufacturers alarm/control system that includes hi/low limits. Route temperature sensor to be located to the side of evaporator coil.
26. All holes in assembly are to be sealed by assembly installer.
27. KEC to coordinate location of network switch with cold storage assembly as required.
28. Kason 1832 Large Spring Valve Heated Pressure Relief Port. Locate at 12” below ceiling on cooler/freezer common wall panel and at 12” below ceiling on exterior cooler wall. All ports are to have separate dedicated electrical circuits. Pressure relief ports to be wired for continuous service. Relief port to be located, sized, and installed by Walk-in Manufacturer.
29. RIB Kit: Fan door activation switch to turn fans off when door is opened.
30. Lights in Cooler and Freezer to turn on automatically when doors are opened.
31. KEC to field verify all horizontal/vertical measurements and conditions at the building prior to fabrication or delivery of equipment.
32. KEC to provide 1-year walk-in panel installation warranty. KEC is responsible for overall install accuracy/quality and quality control of work performed regardless of installer or any field modifications due to building/construction conditions. KEC to provide Letter of Install Approval to FDP upon completed install.

33. Manufacturer to provide One Year Parts and Labor Warranty upon receipt of warranty letter.
34. Interwiring of temperature monitor panel to master building alarm system or to the Owner's network. Technology department to provide all interfacing of alarm system and with the building alarm system. Conduit from refrigeration system to monitor by Division 26. Temperature Monitor installation at 4'-0" above finished floor. All conduit to be located above walk-in cooler/freezer ceiling. Exposed electrical conduit is not acceptable.
35. Manufacturer Representative to provide training on controls and inside emergency release mechanisms.
36. **Cooler/Freezer will NOT be started/energized until inspection and approval by NCISD.The Cooler will have the standard control panel with standard panic button tied into the Owner's network for notification.**

ITEM NO. 103 REFRIGERATION SYSTEM-STANDARD QUANTITY 1

Manufacturer:	RDT
Model:	ZS1-2 EcoSmart
Size and Shape:	Refer to drawings
Alternate:	Cold Zone

1. Air cooled system.
2. Scroll Compressors.
3. Cooler temperature to be +35 degrees.
4. Freezer temperature to be -10 degrees.
5. EcoSmart system on demand defrost.
6. Refrigeration system to accommodate 110F ambient exterior temperature. Coils to be oversized by 20%.
7. *KE2 Evap Controllers located per Owner requirements. .* ***KE2 Eco Smart controller to be mounted at exterior of assembly, at side wall, and LAN connection is to be provided***.
8. S/S covered housing.
9. A dedicated electrical connection to be provided for heated condensate drain line. Refer to electrical plan for location.
10. All exterior piping to be aluminum wrapped.
11. System to accommodate Item No. 102 Cold Storage Assembly.
12. S/S covered housing mounted to a 24" tall 1/8 galvanized angle iron frame anchored to concrete pad. Provide S/S skirting around frame.
13. Mount condensing unit on common exterior rack. Refer to Architectural and Engineering drawings for exact location of remote unit. Coordinate routing of refrigeration lines and conduit with appropriate trades. Heat tape and insulate all drain lines. General Contractor to seal all building penetrations at refrigeration lines.
14. Provide two (2) year parts and labor warranty for all parts and components (including third-party components that may be utilized).

ITEM NO. 104 COLD STORAGE SHELVING

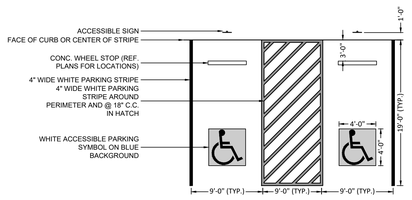
QUANTITY 2

Manufacturer:	Cambro
Model:	Camshelving Premium
Size and Shape:	Refer to drawings
Alternate:	**---**

1. Each unit to be four (4) tiers high with open grid mats.
2. Four (4) 72" post per unit. Provide foot plates at all posts when assembly is supplied with walk-in floor.
3. Refer to drawings for size, width and lengths.
4. Quantity Two (2) to equal One (1) lot: all shelving shown within cold storage assembly.
5. Verify shelving requirements with approved submittal prior to ordering.

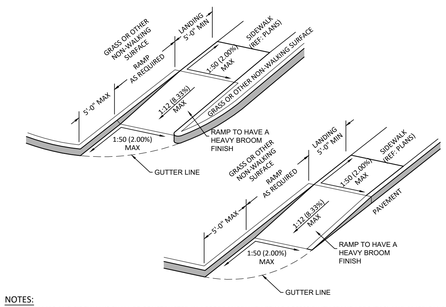
END SECTION 11 4000

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NOTES:
1. ALL MARKINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THESE REQUIREMENTS OR THE DRAWINGS, THE STRICTEST REQUIREMENT SHALL GOVERN.

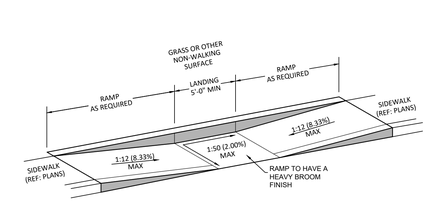
13 | 9 | 5 ACCESSIBLE PARKING N.T.S.



NOTES:
1. ALL RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THESE REQUIREMENTS OR THE DRAWINGS, THE STRICTEST REQUIREMENT SHALL GOVERN.
2. ALL SLOPES SHOWN ARE MAXIMUM ALLOWABLE. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
3. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP SURFACES IS 2%.
4. THE WIDTH OF THE RAMP SHALL MATCH THE WIDTH OF THE SIDEWALK. LANDINGS SHALL BE 5' X 5' MINIMUM. CROSS SLOPE SHALL BE MAXIMUM 2%.
5. PLACE CONCRETE AT A MINIMUM DEPTH OF 5" FOR RAMPS, FLARES AND LANDINGS.
6. FURNISH AND INSTALL NO. 3 REINFORCING STEEL BARS AT 18" O.C. BOTH WAYS.
7. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE PAVEMENT.

1 DIRECTIONAL CURB RAMPS N.T.S.

14 | 10 | 6 ACCESSIBLE PARKING SIGN N.T.S.



NOTES:
1. ALL RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THESE REQUIREMENTS OR THE DRAWINGS, THE STRICTEST REQUIREMENT SHALL GOVERN.
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5. PROVIDE FLARED SIDES WHERE THE PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP. FLARED SIDES SHALL BE SLOPED AT 10% MAXIMUM, MEASURED PARALLEL TO THE CURB.
6. PLACE CONCRETE AT A MINIMUM DEPTH OF 5" FOR RAMPS, FLARES AND LANDINGS.
7. FURNISH AND INSTALL NO. 3 REINFORCING STEEL BARS AT 18" O.C. BOTH WAYS.
8. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE PAVEMENT.

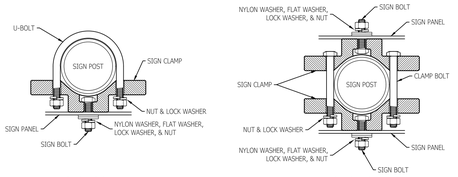
2 FLARED CURB RAMPS N.T.S.

15 | 11

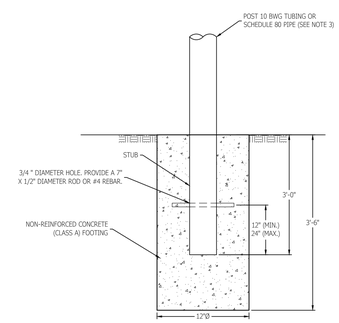
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7. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE PAVEMENT.

3 PARALLEL CURB RAMPS N.T.S.

16 | 12 | 8 DIRECT BURY SIGN FOUNDATION AND MOUNTING N.T.S.



SINGLE SIGN BACK-TO-BACK SIGNS



TRIANGULAR SIGN BASE

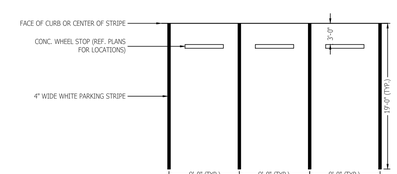
GENERAL NOTES:
1. ALL SIGN SHEETING SHALL BE "DIAMOND GRADE" OR APPROVED EQUAL.
2. ALL SIGNS SHALL UTILIZE ANODIZED BLANKS WITH A MINIMUM SIGN THICKNESS OF 0.080".
3. SIGNS SHALL BE MOUNTED SUCH THAT THE BOTTOM OF THE SIGN IS A A MINIMUM OF 7' TO A MAXIMUM OF 7.5' ABOVE THE EDGE OF THE PAVEMENT OR ABOVE THE GRADE AT THE BASE OF THE SLIP PLATE WHEN THE SLIP PLATE IS ABOVE THE PAVEMENT EDGE. THESE HEIGHTS MAY BE INCREASED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
4. BOLTS USED TO MOUNT SIGN PANELS TO THE CLAMP ARE 5/16-18 UNC GALVANIZED SQUARE HEAD WITH NUT, NYLON WASHER, FLAT WASHER AND LOCK WASHER. THE BOLT LENGTH IS 1" FOR ALUMINUM.
5. WHEN TWO SIGN CLAMPS ARE USED TO MOUNT SIGNS BACK-TO-BACK, USE A 5/16-18 UNC GALVANIZED HEX HEAD PER ASTM A307 WITH NUT AND HELICAL-SPRING LOCK WASHER. THE BOLT LENGTH WILL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
6. MATERIAL USED AS POST WITH THIS SYSTEM SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

10 BWG TUBING (2.875" OUTSIDE DIAMETER)
- 0.134" NOMINAL WALL THICKNESS
- SEAMLESS OR ELECTRIC-RESISTANCE WELDED STEEL TUBING OR PIPE
- STEEL SHALL BE HSLAS GR 55 PER ASTM A1011 OR ASTM A1008
- WALL THICKNESS (UNCOATED) SHALL BE WITHIN THE RANGE OF 0.122" TO 0.138"
- OUTSIDE DIAMETER (UNCOATED) SHALL BE WITHIN THE RANGE OF 2.867" TO 2.883"
- GALVANIZATION PER ASTM A123 OR ASTM A653 G210. FOR PRECOATED STEEL TUBING (ASTM A653), RECOAT TUBE OUTSIDE DIAMETER WELD SEAM BY METALLIZING WITH ZINC WIRE PER ASTM B833.

SCHEDULE 80 PIPE (2.875" OUTSIDE DIAMETER)
- 0.276" NOMINAL WALL THICKNESS
- STEEL TUBING PER ASTM A500 GR C
- WALL THICKNESS (UNCOATED) SHALL BE WITHIN THE RANGE OF 0.248" TO 0.304"
- OUTSIDE DIAMETER (UNCOATED) SHALL BE WITHIN THE RANGE OF 2.855" TO 2.895"
- GALVANIZATION PER ASTM A123

4 TYPICAL PARKING MARKINGS N.T.S.

NOTES:
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7. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE PAVEMENT.



Revision /	Date
01	10/07/25

ADDENDUM 01

SPR 10/07/25

NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D. NEW CANEY, TEXAS

Project:

STATE OF TEXAS
SEAN P. ROONEY
91977
LICENSED
PROFESSIONAL ENGINEER
09/10/25

Huckabee
www.huckabee-inc.com
800.687.1229

DRAWING SCALE		AURIC PROJECT NUMBER
HORIZ:	N/A	0131.0101
VERT:	N/A	

auric ENGINEERS
TEXAS ENGINEERING FIRM 20740
520 POST OAK BLVD. SUITE 895
HOUSTON, TEXAS 77027
AURICENGINEERS.COM

CIVIL STRIPING AND SIGNAGE DETAILS

ADDENDUM 01

Job No.	Sheet No.
1971-05-01	C7.07
Drawn By: Author	
Date: 09/10/25	

PLOTTED: 10/6/2025 6:06 PM

PLOT STYLE: AURIC2.0.STB

FILE PATH: C:_PROJECTS\ACCDOCS\AURIC ENGINEERS\0131.0101-NCISD TRANSPORTATION AND OPERATIONS\PROJECT FILES\01-CIVIL\06-DRAWINGS\03-SHEETS\C7.07 CIVIL STRIPING AND SIGNAGE DETAILS.DWG

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EGRESS (SPRINKLERED)

1. **(SPRINKLERED)** 3'-0" DOOR (32" CLR) AT 0.15" / OCCUPANT = 213 OCCUPANTS
2. PAIR OF 3'-0" DOOR (68" CLR) AT 0.15" / OCCUPANT = 453 OCCUPANTS
3. STAIRS (30" CLEAR WIDTH) AT 0.2"/OCCUPANT = 150 OCCUPANTS

EGRESS (NON-SPRINKLERED)

4. 3'-0" DOOR (32" CLR) AT 0.2" / OCCUPANT = 160 OCCUPANTS

EGRESS FACTORS LEGEND

CLASSIFICATION	OCCUPANTS MALE / FEMALE	WATER CLOSETS MALE / FEMALE	LAVATORIES	DRINKING FOUNTAIN
				(TOTAL NO. OF OCCUPANTS = 621)
A-2 ASSEMBLY (U) UNCONCENTRATED	191 / 191	1 PER 75 / 1 PER 75 2.55 / 2.55	1 PER 200 0.96 / 0.96	1 PER 500 0.76
B BUSINESS	32 / 32	1 PER 25 / 1 PER 25** 1.26 / 1.26	1 PER 40*** 0.79 / 0.79	1 PER 100 0.63
F INDUSTRIAL	77 / 77	1 PER 100 / 1 PER 100 0.77 / 0.77	1 PER 100 0.77 / 0.77	1 PER 400 0.29
S STORAGE	11 / 11	1 PER 100 / 1 PER 100 0.11 / 0.11	1 PER 100 0.11 / 0.11	1 PER 1000 0.02
TOTAL	REQUIRED PROVIDED	5 / 5 13 / 13	3 / 3 9 / 7	

** FOR THE FIRST 50 & 1 PER 50 FOR THE REMAINDER EXCEEDING 50
*** FOR THE FIRST 80 & 1 PER 80 FOR THE REMAINDER EXCEEDING 80

PLUMBING FIXTURE REQUIREMENTS

THE EMERGENCY ACCESS LOCK BOX(ES) SHALL BE AS SPECIFIED. REFER TO SPECIFICATIONS SECTION 10 4400. BOTTOM ELEVATION OF BOX SHALL BE 6'-0" ABOVE GROUND LEVEL (VERIFY WITH FIRE MARSHAL)

FIREMAN'S EMERGENCY LOCK BOX(ES)

1 HR. FIRE BARRIER ——————————

TO RESIST PASSAGE OF SMOKE (NOT REQUIRED BY CODE TO BE A SMOKE PARTITION) - - - - - - - - - - - - - - -

WALLS SHALL MEET ALL CODE REQUIREMENTS FOR RATED CONSTRUCTION. WINDOW ASSEMBLIES SHALL COMPLY WITH IBC AND BE U.L. LABELED. DOORS SHALL HAVE CLOSERS, BE U.L. LABELED, AND RATED AS SCHEDULED.

FIRE RATED CONSTRUCTION LEGEND

COUNTY: MONTGOMERY
CLIMATE ZONE: 2A

THE I.E.C.C. ESTABLISHES THE REQUIREMENTS FOR INSULATING THE BUILDING. THE MINIMUM REQUIREMENTS THAT ARE ACCEPTABLE (FOR STANDARD OCCUPIED BUILDINGS) ARE: ROOF= R-25c; MASS WALLS= R-5.7c, MTL FRAMED= R-13 + 5c, METAL BUILDINGS= R-13 + 6.5ci & METAL BUILDING ROOF = R-19 + R-11LS

ENERGY CODE R VALUES

NEW CONSTRUCTION

PRIMARY OCCUPANCY: GROUP S-1 & B **TYPE:** II-B
ALLOWABLE HEIGHT: 75 FEET (SPRINKLERED)
TOTAL HEIGHT PROVIDED: 40' - 5"
ALLOWABLE NUMBER OF STORIES: 4

ALLOWABLE AREA FACTOR:
(SM) MULTI-STORY, SPRINKLERED: 52,500 SQ. FT.

TOTAL AREA ALLOWED: 105,000 SQ. FT. [52,500 SQ. FT. PER STORY]

TOTAL AREA PROVIDED: 45,217 SQ. FT.
FIRST FLOOR: 31,447 SQ. FT.
SECOND FLOOR: 13,432 SQ. FT.
ROOF OVERHANG: 338 SQ. FT.

TOTAL OCCUPANT LOAD: 621 OCCUPANTS

TOTAL EGRESS CAPACITY REQUIRED
FIRST FLOOR: 432 OCCUPANTS
SECOND FLOOR: 189 OCCUPANTS

TOTAL EGRESS CAPACITY PROVIDED
FIRST FLOOR: 1,545 OCCUPANTS
SECOND FLOOR: 426 OCCUPANTS

CALCULATIONS PER IBC 2024

INFORMATION PROVIDED FOR CODE COMPLIANCE EVALUATION; NOT TO BE USED FOR BIDDING PURPOSES.

1) PROJECT IDENTIFICATION
A. OWNER: NEW CANEY I.S.D.
B. PROJECT NAME: NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D.
C. PHYSICAL ADDRESS: 21026 TX-494 LOOP, NEW CANEY, TX 77357

3) APPLICABLE CODES
A. INTERNATIONAL BUILDING CODE (IBC) 2024
B. INTERNATIONAL PLUMBING CODE 2024
C. INTERNATIONAL MECHANICAL CODE 2024
D. NATIONAL ELECTRICAL CODE (NEC) 2023
E. INTERNATIONAL FIRE CODE 2024
F. ELIMINATION OF ARCHITECTURAL BARRIERS ACT; TEXAS DEPT. OF LICENSING AND REGULATION
G. INTERNATIONAL ENERGY CONSERVATION CODE 2015
H. INTERNATIONAL EXISTING BUILDING CODE 2024
I. LOCAL AMENDMENTS

4) OCCUPANCY CLASSIFICATION
A. OCCUPANCY: GROUP S-1 & B
B. SEPARATED USES: NONE
C. INCIDENTAL USE AREAS: RATED PER TABLE 509
D. ACCESSORY OCCUPANCIES

5) TYPE OF CONSTRUCTION / FIRE-RESISTIVE REQUIREMENTS
A. CONSTRUCTION TYPE: II-B

TABLE 601	
BUILDING ELEMENT	TYPE II B
PRIMARY STRUCTURAL FRAME	0
BEARING WALLS EXTERIOR	0
BEARING WALLS INTERIOR	0
NON-BEARING WALLS & PARTITIONS (EXTERIOR)	0
NON-BEARING WALLS & PARTITIONS (INTERIOR)	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION & SECONDARY MEMBERS	0

7) FIRE-PROTECTION SYSTEMS
A. AUTOMATIC SPRINKLER SYSTEM: REF. BUILDING CODE SUMMARY SHEETS
B. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED PER INTERNATIONAL FIRE CODE
C. FIRE ALARM PROVIDED: YES
D. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM PROVIDED: YES

9) EXIT REQUIREMENTS
A. TRAVEL DISTANCES
1. ALLOWED, SPRINKLERED BUILDING:
TO EXIT FROM WITHIN A SPACE FOR OCCUPANCY LOAD GREATER THAN 50 = 250 FT.
TO EXIT FROM WITHIN BUILDING = 250 FT.
COMMON PATH OF EGRESS TRAVEL = 100 FT.

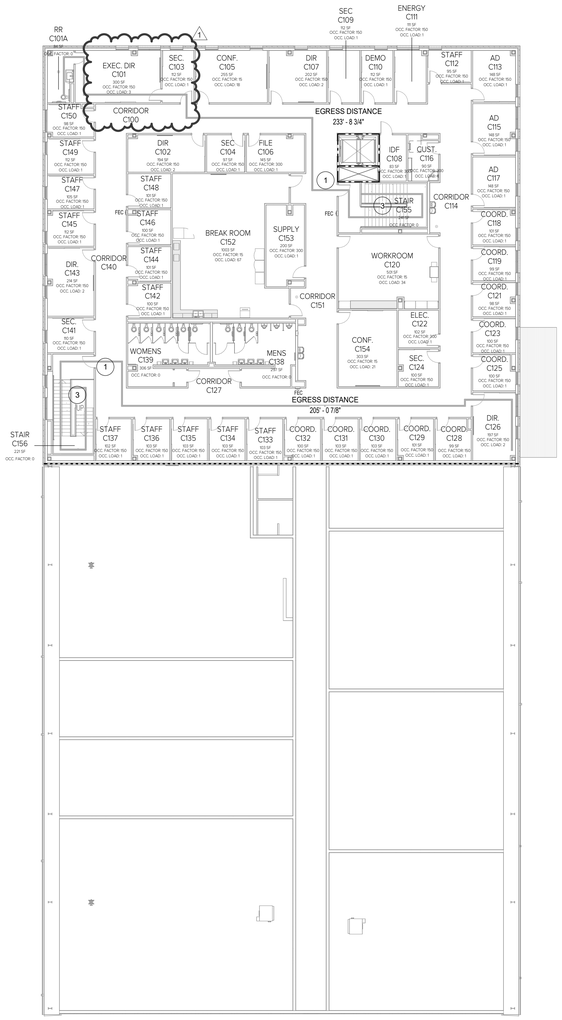
1. ALLOWED, NON-SPRINKLERED BUILDING:
TO EXIT FROM WITHIN A SPACE FOR OCCUPANCY LOAD GREATER THAN 50 = 200 FT.
TO EXIT FROM WITHIN BUILDING = 200 FT.
COMMON PATH OF EGRESS TRAVEL = 75 FT.

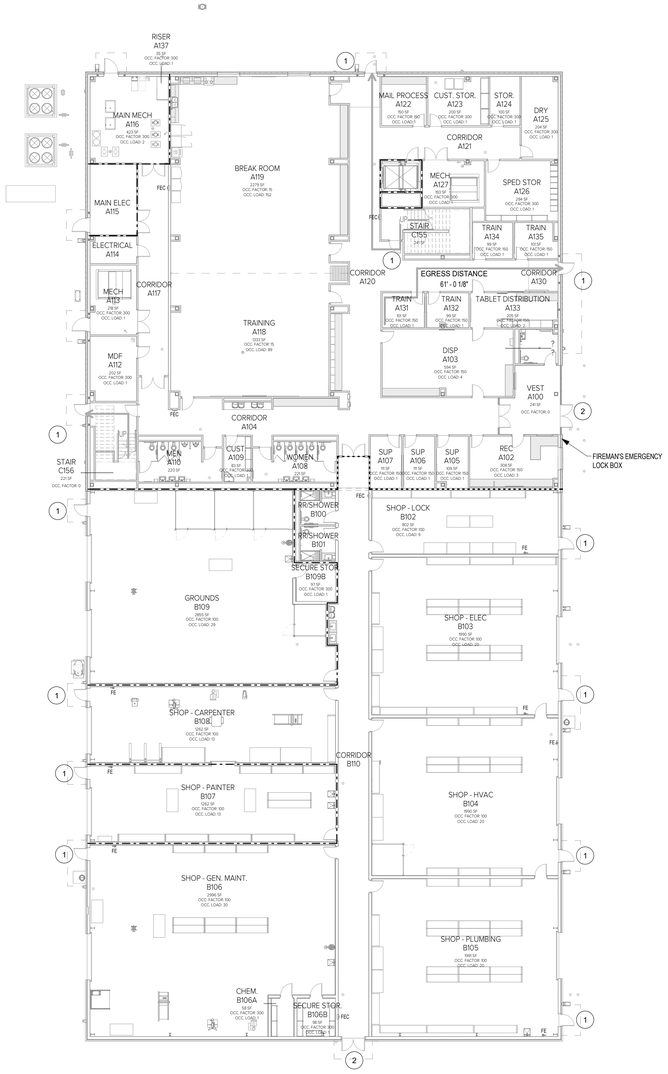
2. ACTUAL - REFER TO PLAN FOR PATHS & DISTANCE

BUILDING DESIGN CRITERIA

1. THIS CODE ANALYSIS PLAN IS PROVIDED AS A TOOL FOR VIEWING THE OVERALL CODE COMPLIANCE FOR THE ENTIRE FACILITY. WHILE STATED U.L. RATINGS REQUIRED THROUGH WALLS MUST BE MET, ALL CONTRACTORS MUST CONSTRUCT THIS FACILITY FROM THE MATERIALS AND IN THE DIMENSIONS DESCRIBED IN THE CONSTRUCTION DOCUMENTS. ANY APPARENT CONFLICT SHALL BE RESOLVED WITH THE ARCHITECT.
2. FIRE RATED WALLS NOT DESIGNED TO EXTEND ABOVE ROOF LEVEL SHALL EXTEND TO THE ROOF DECK WITH U.L. APPROVED CLOSURE TO THE DECK U.N.O.
3. ALL PENETRATIONS OF FIRE RATED WALLS SHALL BE CLOSED WITH CODE APPROVED METHODS AND MATERIALS TO MAINTAIN THE SPECIFIED RATING, INCLUDING FIRE TREATED BLOCKING / PLYWD.
4. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS FOR FIRE AND SMOKE DAMPERS.
5. REFER TO G3 SHEETS FOR TYP WALL CONSTRUCTION DETAILS.
6. SQUARE FOOT (SF) AREAS INDICATED ARE FOR CODE ANALYSIS ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AREAS FOR CONSTRUCTION PURPOSES.

CODE ANALYSIS PLAN NOTES





2 CODE ANALYSIS PLAN - LEVEL 2 - OPERATIONS BUILDING
1/16" = 1'-0"

N TRUE

1 CODE ANALYSIS PLAN - LEVEL 1 - OPERATIONS BUILDING
1/16" = 1'-0"

N TRUE

Revision / 1 — Date 10/07/25 — ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT ROBIN B. BANKS 27160 STATE OF TEXAS
10/08/2025

Huckabee
www.huckabee-inc.com
800.687.1229

CODE ANALYSIS PLANS - OPERATIONS BUILDING

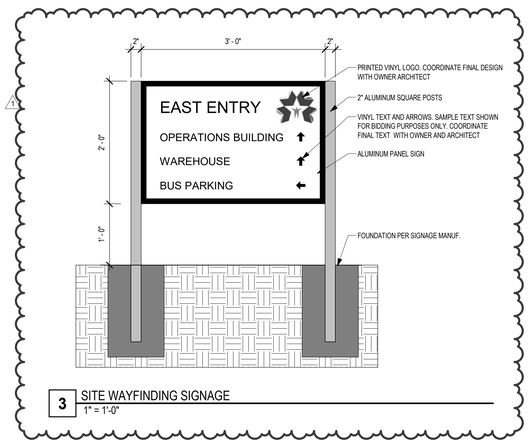
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Drawn By: JT	
Date: 09/18/2025	

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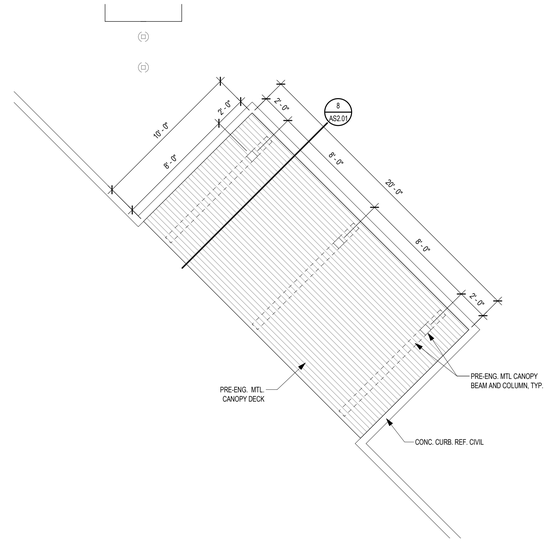
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SITE GATE SCHEDULE

MARK	GATE HEIGHT	GATE WDTH	CLEAR OPENING	FRAME MATERIAL	GATE TYPE	OPERATION	PANIC HARDWARE	COMMENTS
EG.01	8' - 0"	3' - 0"	3' - 0"	CL	ACCESSIBLE EGRESS	MANUAL	Yes	
EG.03	8' - 0"	3' - 0"	3' - 0"	CL	ACCESSIBLE EGRESS	MANUAL	Yes	
EG.04	8' - 0"	3' - 0"	3' - 0"	CL	ACCESSIBLE EGRESS	MANUAL	Yes	
G.02	8' - 0"	12' - 0"	12' - 0"	CL	DBL SWING	MANUAL		
G.05	8' - 0"	12' - 0"	12' - 0"	CL	DBL SWING	MANUAL		
G.06	8' - 0"	12' - 0"	12' - 0"	CL	DBL SWING	MANUAL		
G.07	6' - 0"	12' - 0"	12' - 0"	CL	DBL SWING	MANUAL		
SL.01A	6' - 0"	18' - 0"	18' - 0"	CL	SWING	MANUAL		MATCH EXIST. HEIGHT
SL.01B	6' - 0"	27' - 0"	18' - 0"	CL	SLIDING	MANUAL		MATCH EXIST. HEIGHT
SL.02A	6' - 0"	19' - 6"	13' - 0"	CL	SLIDING	MOTORIZED		CARD ACCESS AND KEY PAD BY DIV. 28, REF. ELEC. MATCH EXIST. HEIGHT
SL.02B	6' - 0"	19' - 6"	13' - 0"	CL	SLIDING	MOTORIZED		INTERLOCK WITH OPENING SL.02A. MATCH EXIST. HEIGHT
SL.03A	6' - 0"	37' - 6"	25' - 0"	CL	SLIDING	MOTORIZED		CARD ACCESS AND KEY PAD BY DIV. 28, REF. ELEC. MATCH EXIST. HEIGHT
SL.03B	6' - 0"	37' - 6"	25' - 0"	CL	SLIDING	MOTORIZED		INTERLOCK WITH OPENING SL.03A. MATCH EXIST. HEIGHT
SL.04A	8' - 0"	45' - 0"	30' - 0"	CL	SLIDING	MOTORIZED		HI-LOW CARD ACCESS AND KEY PAD BY DIV. 28, REF. ELEC.
SL.04B	8' - 0"	45' - 0"	30' - 0"	CL	SLIDING	MOTORIZED		INTERLOCK WITH OPENING SL.04A
SL.05A	8' - 0"	57' - 0"	38' - 0"	CL	SLIDING	MOTORIZED		CARD ACCESS AND KEY PAD BY DIV. 28, REF. ELEC

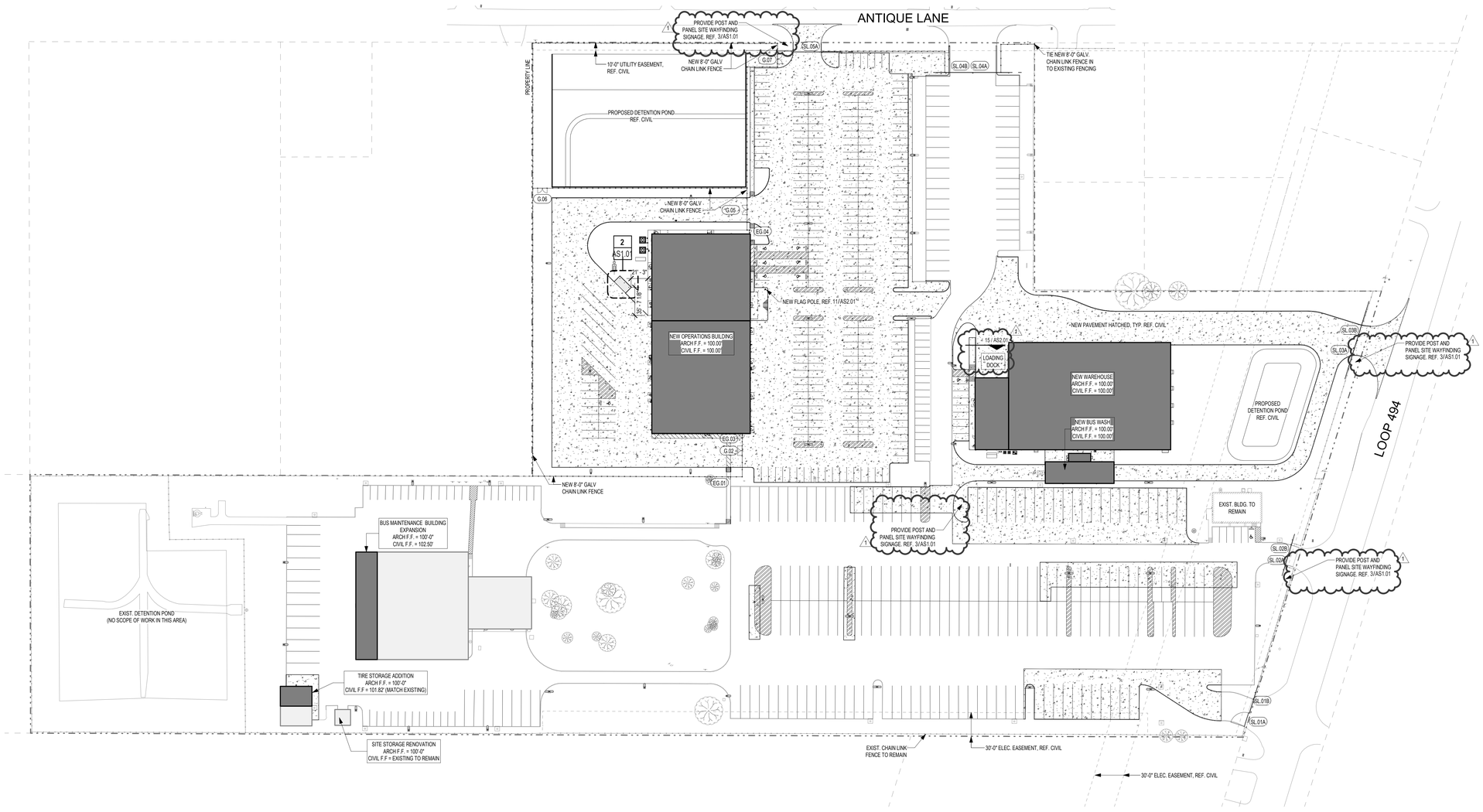


3 SITE WAYFINDING SIGNAGE
1" = 1'-0"



2 ENLARGED CANOPY PLAN
1/4" = 1'-0"

N
TRUE



1 MASTER SITE PLAN
1" = 60'-0"

N
TRUE

1. ALL SITE INFORMATION INCLUDING, BUT NOT LIMITED TO, PROPERTY LINES, METES & BOUNDS, CONTOURS, EXISTING BUILDINGS, EASEMENTS, TREES, WALKS, DRIVES, FENCES, ETC., TAKEN FROM SURVEY BY:

   WEST BELT SURVEYING, INC.
   21020 PARK ROW
   KATY, TX 77449
   PHONE (281) 599-8288

2. HUCKABEE AND ASSOCIATES, INC. ALONG WITH THEIR CONSULTANTS HAVE LOCATED, SHOWN , AND NOTED EXISTING SITE FEATURES INCLUDING BUT NOT LIMITED TO PROPERTY LINES, METES AND BOUNDS, GRADE CONTOURS, EXISTING STRUCTURES, EASEMENTS, TREES, FENCES, ROADWAYS, OVERHEAD AND UNDERGROUND UTILITIES, AND OTHER EXISTING FEATURES TO THE BEST OF OUR ABILITY BASED UPON OWNER PROVIDED SURVEYS, EXISTING CONSTRUCTION DOCUMENTS AND OTHER EXISTING DATA COLLECTION IN REGARDS TO THE SPECIFIED SITE. HUCKABEE AND ASSOCIATES, INC. NOR THEIR CONSULTANTS SHALL ASSUME ANY RESPONSIBILITY OR LIABILITIES IN REGARD TO THE ACCURACY OF THE ABOVE MENTIONED OWNER PROVIDED DATA.
3. IF THE CONTRACTOR FINDS ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND THOSE WHICH ARE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY CONTACT THE ARCHITECT.
4. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH ALL UTILITY ENTITIES TO LOCATE AND MARK ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS.
6. REF. SHEET AS2.01 FOR DETAILS AND OTHER SITE IMPROVEMENT DETAILS.
7. FINISH GRADE AT PERIMETER OF THE BUILDING SHALL BE AS SHOWN ON SITE GRADING PLAN. REF. CIVIL DRAWINGS. SITE GRADES SHALL SLOPE UNIFORMLY AWAY FROM THE BUILDING AND INTERSECT WITH ELEVATIONS SHOWN.
8. REF. CIVIL DRAWINGS FOR ALL SITE DIMENSIONS
9. MAKE ALL SLOPES OF WALKS AND DRIVES COMPLY WITH FINISH ELEVATION SHOWN ON CIVIL DRAWINGS. THE LINE OF SLOPE SHALL FORM STRAIGHT LINES BETWEEN FINISH ELEVATIONS WHEN POSSIBLE AND GRADING CONTOURS WHEN STRAIGHT LINES ARE NOT POSSIBLE. VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECT ON JOB. REF. CIVIL.
10. ALL WALKS AND PLAZAS SHALL BE REINFORCED CONCRETE - REF. CIVIL FOR DETAILS. PROVIDE 1/2" EXPANSION JOINT AS SHOWN BY CIVIL OR AT 25'-0" O.C. MAX. AND AT ALL INSIDE CORNERS. PROVIDE TOOLED CONTROL JOINTS AT 5'-0" O.C.B.W. MAX OR AS SHOWN. SEE CIVIL FOR TYPICAL WALK AND JOINT DETAILS.
11. PROVIDE 1/2" EXPANSION JOINT ALONG BUILDING FOUNDATION OR BRICK WHERE CONCRETE WALK IS PRESENT. REF. CIVIL DRAWINGS FOR TYPICAL DETAIL.
12. PROVIDE 1/2" EXPANSION JOINT ALONG BACK OF CONCRETE CURB WHERE WALK IS PRESENT. REF. CIVIL DRAWINGS FOR CURB DETAILS
13. CONTRACTOR SHALL REMOVE ALL EXISTING OBSTRUCTIONS TO NEW CONSTRUCTION, PAVING, WALKS, AND ALL OTHER SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO EXISTING TREES, FENCES, CONCRETE, ROCKS, DEBRIS, POSTS, VEGETATION, UTILITIES (AS NOTED), AND OTHER ITEMS AS NOTED FOR CONSTRUCTION.
14. REF. ELECTRICAL DRAWINGS FOR OUTDOOR LIGHTING REQUIREMENTS.
15. REF. CIVIL DRAWINGS FOR SITE GRADING PLAN, SITE UTILITY PLAN (INCLUDING FIRE HYDRANT LOCATIONS), EROSION CONTROL PLANS, AND CURB AND PAVING REQUIREMENTS AND DETAILS.
16. REF. CIVIL SHEETS FOR SITE GRADING CONTOURS. CONTRACTOR SHALL MAKE ALL CUTS AND FILLS REQUIRED TO ACCOMPLISH ALL WORK SHOWN. GRADE SITE TO TOLERANCES SPECIFIED.
17. REF. CIVIL DRAWINGS FOR THICKNESS AND LOCATIONS OF ALL TYPES OF PAVING.
18. FIRE LANE STRIPING SHALL COMPLY WITH MONTGOMERY COUNTY REQUIREMENTS AND NFPA.
19. PROVIDE DEDICATED STRUCTURAL CONCRETE FOUNDATION PAD FOR ALL ON-SITE ELECTRICAL TRANSFORMERS PER THE ELECTRICAL SERVICE PROVIDER REQUIREMENTS AND/OR SPECIFICATIONS.
20. PROVIDE DEDICATED STRUCTURAL CONCRETE FOUNDATION PAD FOR ALL ON-SITE GENERATORS AND ANY ASSOCIATED GENERATOR ENCLOSURES.
21. EXTENTS OF NEW PAVEMENT SHOWN HATCHED, TYPICAL. REF. CIVIL FOR PAVEMENT THICKNESS AND ADDITIONAL DETAILS.

    NEW PAVEMENT
22. RE-STRIPE ENTIRE PARKING LOT. COORDINATE SPACE NUMBERS WITH OWNER. REF. CIVIL.
23. PROVIDE (4) 24" CAST ALUMINUM BUILDING LETTERS FOR SITE BUILDINGS A, B, C, & D. COLOR TO BE RED. CONFIRM FINAL LOCATION AND LETTER WITH OWNER.

GENERAL SITE NOTES

PROPERTY DESCRIPTION

1) OWNER INFORMATION

A. NAME : NEW CANEY INDEPENDENT SCHOOL DISTRICT
B. ADDRESS: 21580 LOOP 494, NEW CANEY TEXAS, 77357

2) PROPERTY INFORMATION

A. NAME: NEW CANEY ISD OPERATIONS
B. ADDRESS: 21026 LOOP 494, NEW CANEY, TX 77357

PARKING COUNTS

TOTAL CAR SPACES
344 CAR SPACES
9 ACCESSIBLE SPACES
353 TOTAL SPACES

TOTAL BUS & TRAILER SPACES
270 BUS SPACES
6 TRAILER SPACES

PROPERTY & PARKING NOTES

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT BRENT C. BARKMAN 31168 STATE OF TEXAS
10/08/2025

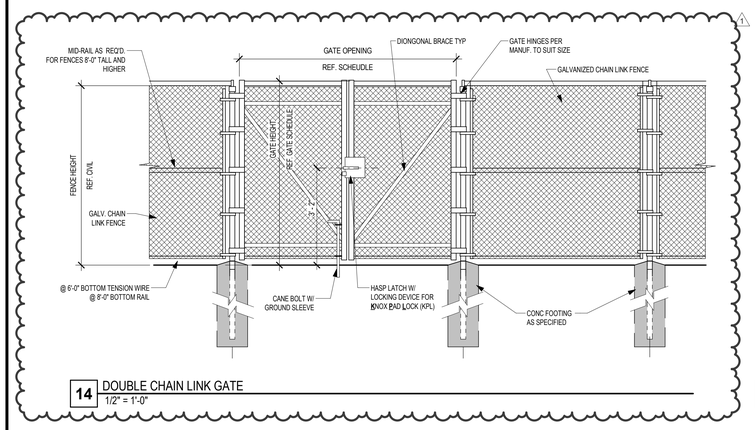
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ARCHITECTURAL SITE PLAN

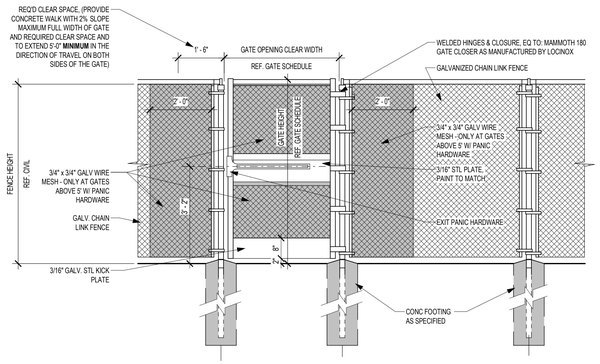
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Drawn By: JT	
Date: 09/18/2025	

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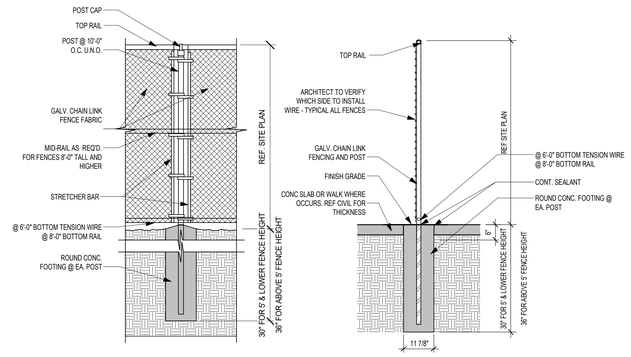
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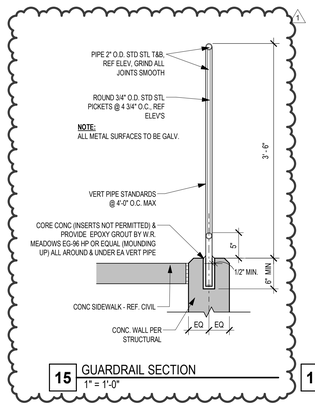
14 DOUBLE CHAIN LINK GATE
1/2" = 1'-0"



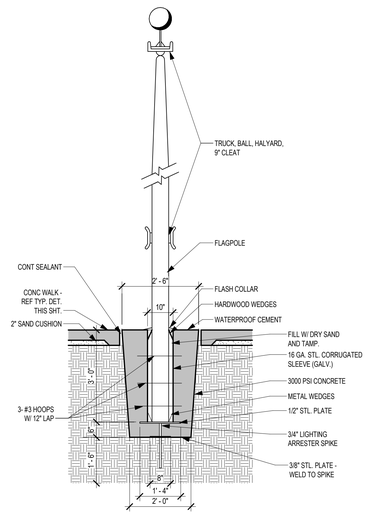
13 CHAIN LINK FENCE DETAIL - ACCESSIBLE EGRESS GATE
1/2" = 1'-0"



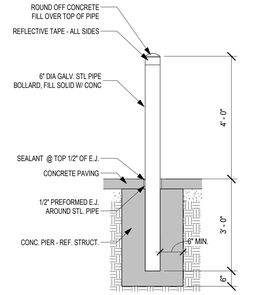
12 TYPICAL CHAIN LINK FENCE DETAILS
1/2" = 1'-0"



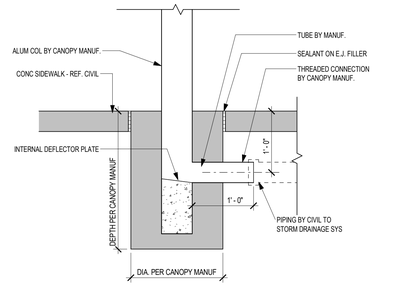
15 GUARDRAIL SECTION
1" = 1'-0"



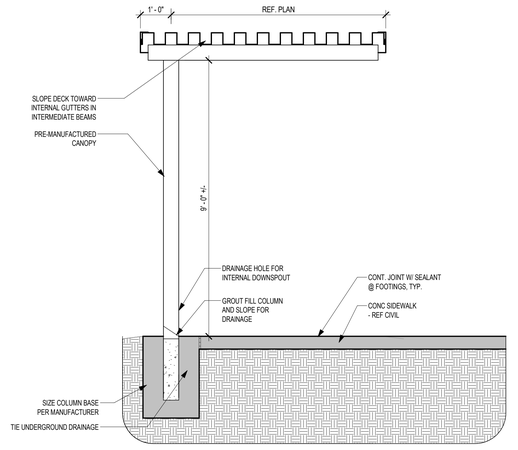
11 FLAGPOLE SECTION
1/2" = 1'-0"



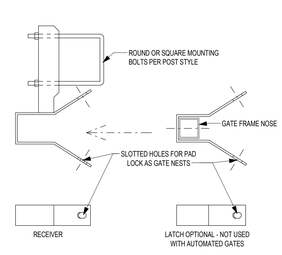
10 TYPICAL BOLLARD DETAIL
1/2" = 1'-0"



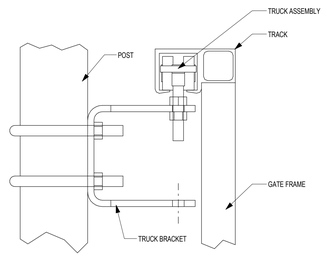
9 DETAIL - CANOPY DRAIN BELOW GRADE
1" = 1'-0"



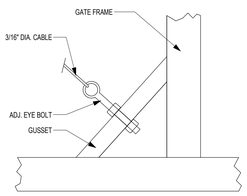
8 PRE-MANUFACTURED CANOPY SECTION
1/2" = 1'-0"



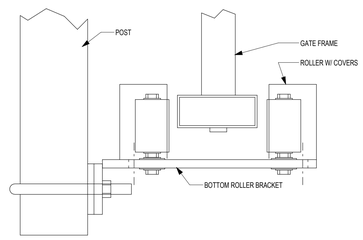
7 SLIDING CL GATE RECEIVER DETAIL
N.T.S.



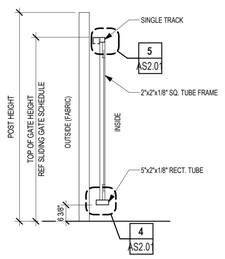
5 SLIDING CL GATE TOP
N.T.S.



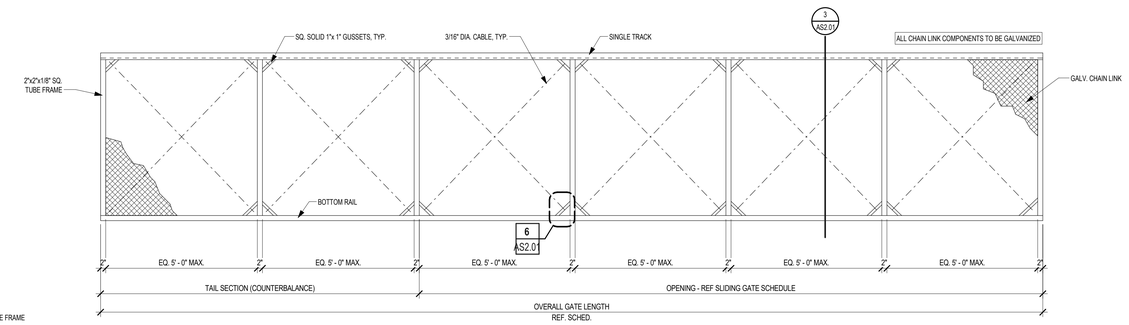
6 AS_SLIDING CL GATE GUSSET DETAIL
N.T.S.



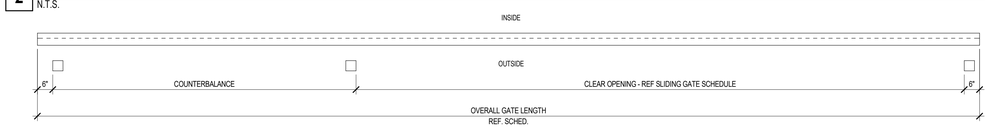
4 SLIDING CL GATE BOTTOM BRACKET DETAIL
N.T.S.



3 SLIDING CL GATE SECTION
N.T.S.



2 SLIDING CL GATE ELEVATION
N.T.S.



1 SLIDING CL GATE PLAN
N.T.S.

Revision / Date
1 ADDENDUM 1 10/07/25

Project:
NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT BRIAN R. BANNISTER 31165 STATE OF TEXAS
10/08/2025

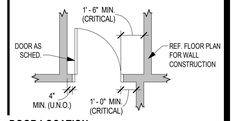
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ARCHITECTURAL SITE DETAILS

Job No. 1971-05-01	Sheet No. AS2.01
Drawn By: JT	
Date: 09/18/2025	

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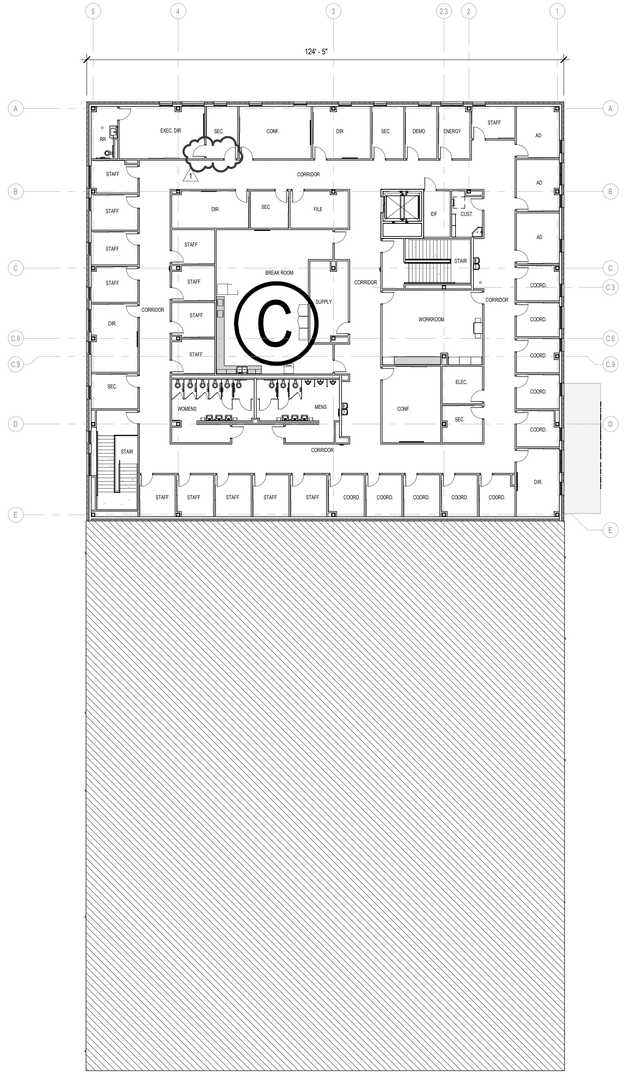
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DOOR LOCATION

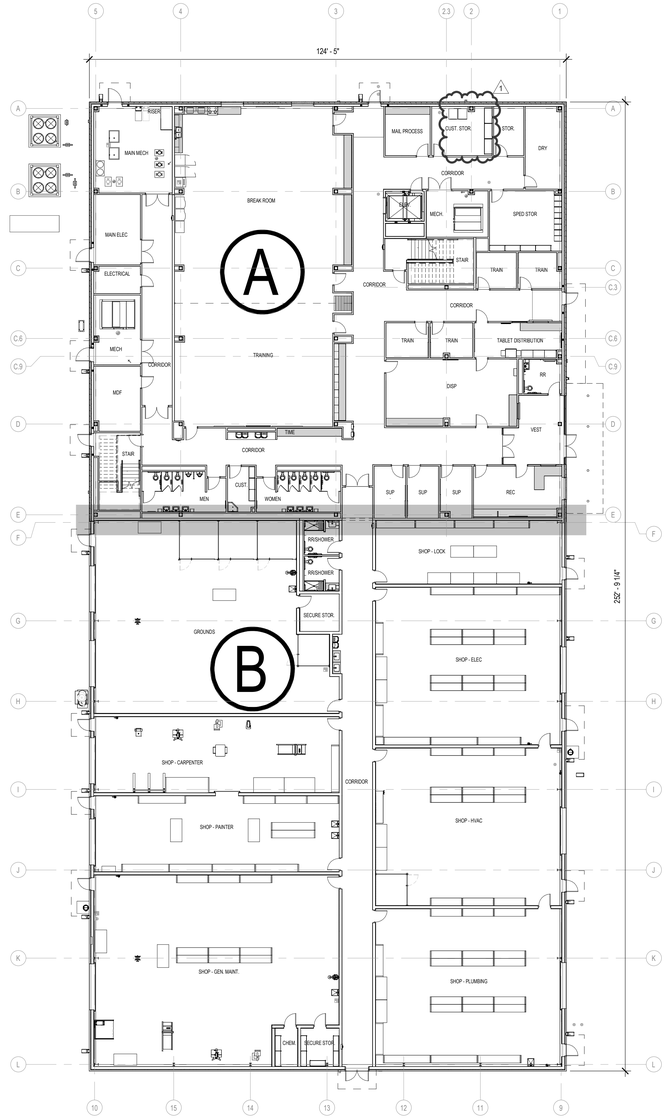
THE MASTER FLOOR PLAN SHOWS THE OVERALL BUILDING CONFIGURATION AND THE RELATIONSHIP OF THE PLAN AREAS WHICH FOLLOW. REFER TO LARGER SCALE FLOOR PLANS AND PLAN DETAILS FOR ADDITIONAL INFORMATION AND CONSTRUCTION REQUIREMENTS. MASTER PLAN LEGENDS ALSO APPLY TO 1/8" SCALE FLOOR PLAN AREAS.

MASTER FLOOR PLAN



2 MASTER PLAN - LEVEL 2 - OPERATIONS BUILDING
1/16" = 1'-0"

N TRUE



1 MASTER PLAN - LEVEL 1 - OPERATIONS BUILDING
1/16" = 1'-0"

N TRUE

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS



10/08/2025

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MASTER FLOOR PLANS - OPERATIONS BUILDING

Job No.	Sheet No.
1971-05-01	A1.01
Drawn By: JT	
Date: 09/18/2025	

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NOTES:

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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. REF. DOOR SCHEDULES AND DETAILS FOR MASONRY ROUGH OPENING SIZES.
7. VERIFY ALL MASONRY OPENINGS WITH MANUFACTURERS' PRODUCTS (E.G. FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, ETC.).
8. 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.
9. REFERENCE A8 SHEETS FOR ALL EQUIPMENT

GENERAL FLOOR PLAN NOTES

APPLIES TO AREA PLANS

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

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.

RD-1 **SPECIAL OPENING NUMBER (ROLLING DOOR)** - REF. SCHEDULE ON A3 SHTS.

CALLOUT REFERENCE (1 / A1.1)

WALL SECTION REFERENCE (1 / A6.1 SIM; XX / A101)

ELEVATION REFERENCE (XXX' - X" FIN FLOOR; 1-01 ROOM)

ROOM NUMBER & NAME

FLOOR PLAN LEGEND

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

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

MASONRY VENEER

CFMF PARTITION

EXISTING CFMF PARTITION

PARTITION TYPE TAGS

A3 | D

WALL ASSEMBLY 'A' IN 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 TO DECK / STRUCTURE

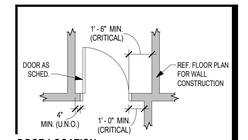
LETTER & NUMBER TO THE LEFT INDICATE PARTITION TYPE & STUD OR CMU SIZE AS FOLLOWS:

- 1 - 7/8" HAT CHANNEL
- 2 - 1 5/8" CFMF
- 3 - 2 1/2" CFMF
- 4 - 3 5/8" CFMF
- 5 - 6" CFMF
- 8 - 8" CFMF

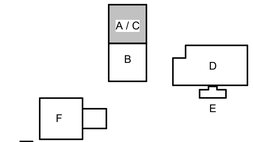
PARTITION NOTES:

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
   WALLS/PARTITIONS - TYPE **H4**, ACOUSTICAL TO DECK (AD)
   COLUMN FURRING - **M4**, NON-ACOUSTICAL TO CEILING (C)
   ANY UNTAGGED PARTITIONS WHICH APPEAR INCONSISTENT WITH THE DESCRIPTIONS ABOVE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO BIDDING.

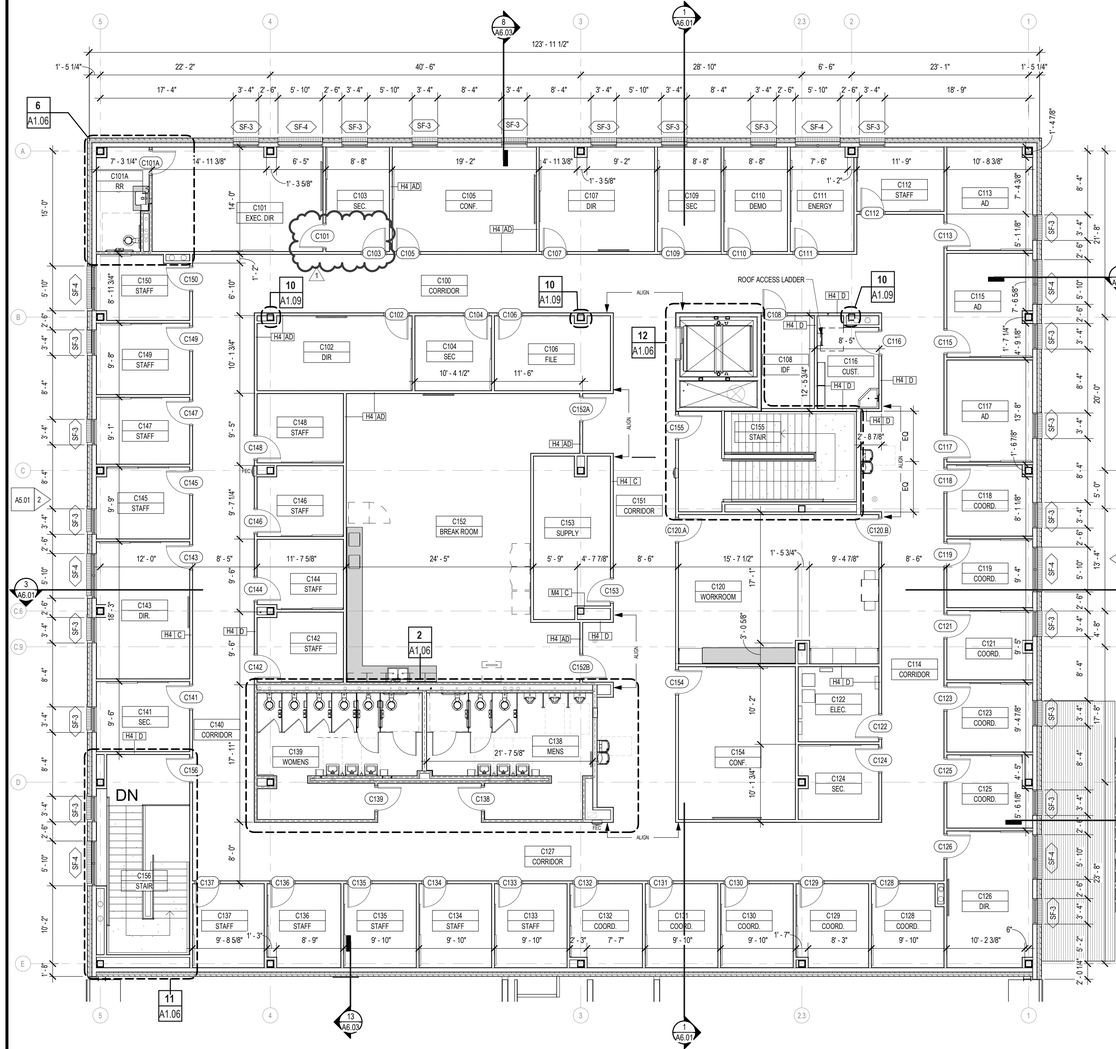
PARTITION LEGEND



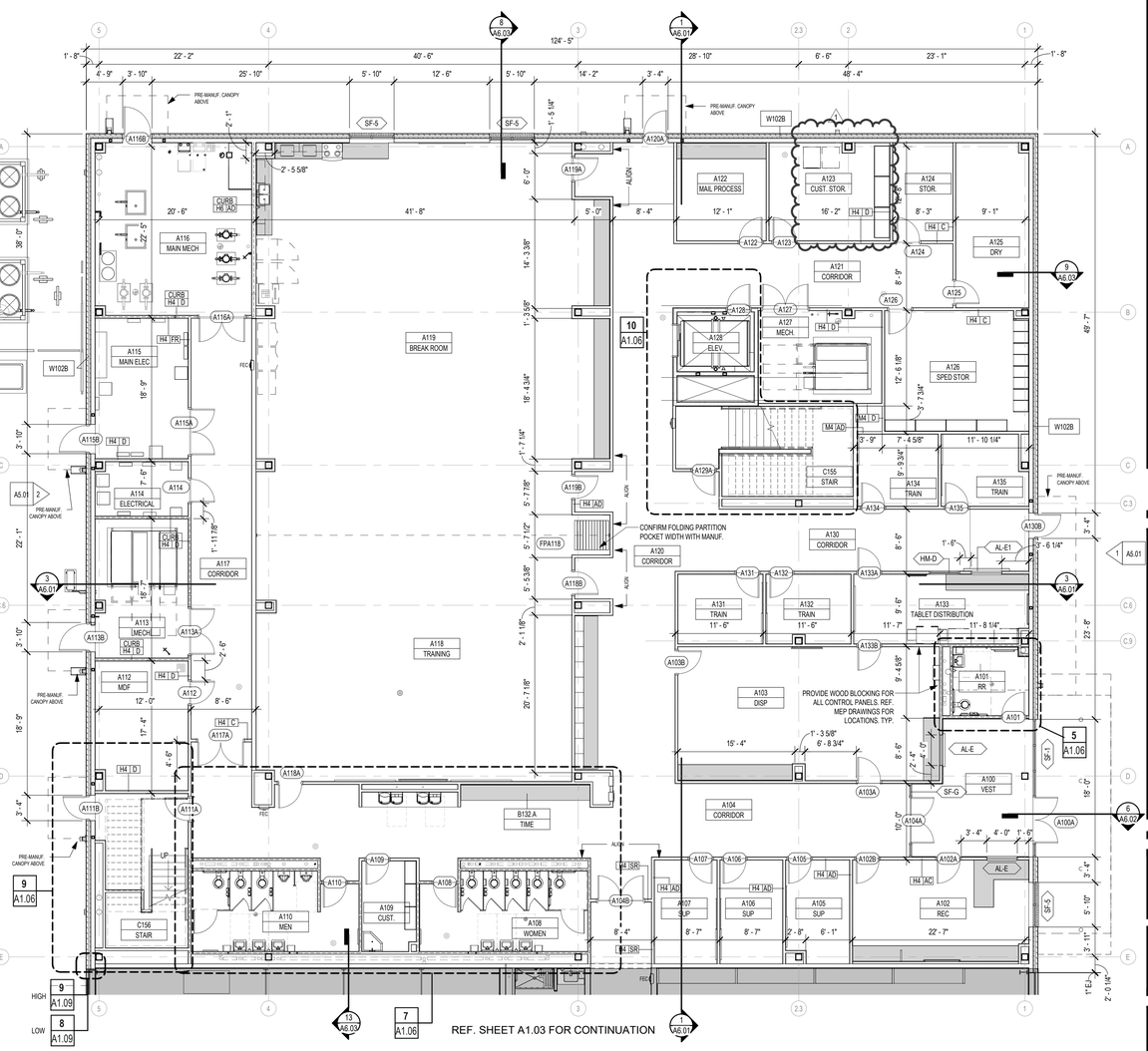
DOOR LOCATION



KEY PLAN
N.T.S.



2 FLOOR PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING
1/8" = 1'-0"



1 FLOOR PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING
1/8" = 1'-0"

Revision /	Date
1 ADDENDUM 1	10/07/25

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT
BRIAN R. BANNISTER
11160
STATE OF TEXAS
10/08/2025

Huckabee
www.huckabee-inc.com
800.687.1229

FLOOR PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING

Job No.	Sheet No.
1971-05-01	A1.02
Drawn By: JT	
Date: 09/18/2025	

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1 / A1.1 **CALLOUT REFERENCE**

1 / A6.1 SIM **WALL SECTION REFERENCE** XX / A101

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

1-01 ROOM **ROOM NUMBER & NAME**

FLOOR PLAN LEGEND

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

REF. TYP. CONST. DT'LS. FOR ADDITIONAL INFO.

- MASONRY VENEER
- CFMF PARTITION
- EXISTING CFMF PARTITION

PARTITION TYPE TAGS

A3 D — WALL ASSEMBLY 'A' IN PLAN VIEW

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

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GD	GYP WALL ABOVE TO DECK
SR	SMOKE RESISTANT PARTITION TO DECK / STRUCTURE

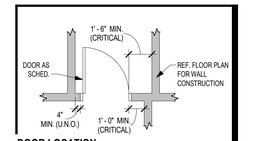
LETTER & NUMBER TO THE LEFT INDICATE PARTITION TYPE & STUD OR CMU SIZE AS FOLLOWS:

- 1 - 7/8" HAT CHANNEL
- 2 - 1 5/8" CFMF
- 3 - 2 1/2" CFMF
- 4 - 3 5/8" CFMF
- 6 - 6" CFMF
- 8 - 8" CFMF

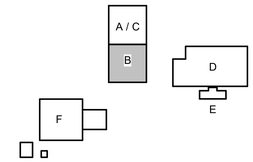
PARTITION NOTES:

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
   WALLS/PARTITIONS - TYPE **H4**, ACOUSTICAL TO DECK (AD)
   COLUMN FURRING - **M4**, NON-ACOUSTICAL TO CEILING (C)
   ANY UNTAGGED PARTITIONS WHICH APPEAR INCONSISTENT WITH THE DESCRIPTIONS ABOVE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO BIDDING.

PARTITION LEGEND

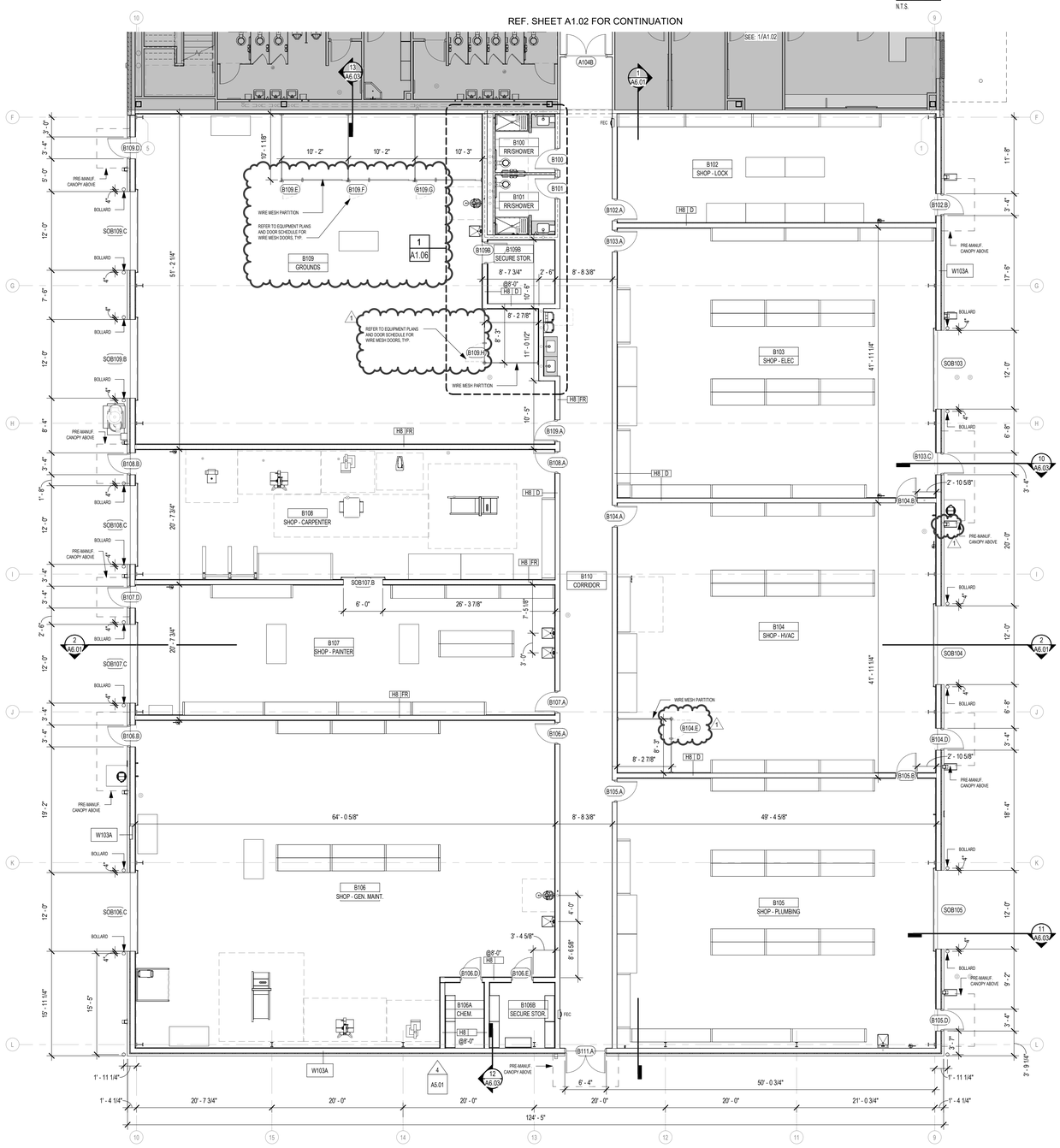


DOOR LOCATION



KEY PLAN
N.T.S.

REF. SHEET A1.02 FOR CONTINUATION



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

N TRUE

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT — DEREK B. BANKS — 31169 — STATE OF TEXAS
10/08/2025

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FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

Job No. 1971-05-01	Sheet No. A1.03
Drawn By: JT	
Date: 09/18/2025	

10/7/2025 12:29:42 PM
Autodesk Docs://NEW CANEY ISD - NEW OPERATIONS BUILDING/19711-05-01_NCISD Trans. Ops Building_ARCH_v25.rvt

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NOTES:

1. THE CONTRACT DOCUMENTS INCLUDE 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. REF. DOOR SCHEDULES AND DETAILS FOR MASONRY ROUGH OPENING SIZES.
7. VERIFY ALL MASONRY OPENINGS WITH MANUFACTURERS' PRODUCTS (E.G. FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, ETC.).
8. 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.
9. REFERENCE A8 SHEETS FOR ALL EQUIPMENT

GENERAL FLOOR PLAN NOTES

APPLIES TO AREA PLANS

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

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.

RD-1 — **SPECIAL OPENING NUMBER (ROLLING DOOR)** - REF. SCHEDULE ON A3 SHTS.

1 / A1.1 — **CALLOUT REFERENCE**

1 / A6.1 SIM — **WALL SECTION REFERENCE** XX' / A101

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

1-01 ROOM — **ROOM NUMBER & NAME**

FLOOR PLAN LEGEND

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

REF. TYP. CONST. DT'LS. FOR ADDITIONAL INFO.

MASONRY VENEER

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 TO DECK / STRUCTURE

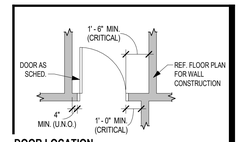
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LETTER & NUMBER TO THE LEFT INDICATE PARTITION TYPE & STUD OR CMU SIZE AS FOLLOWS:

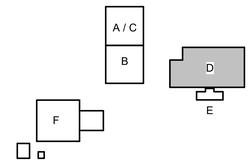
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- 2 - 1 5/8" CFMF
- 3 - 2 1/2" CFMF
- 4 - 3 5/8" CFMF
- 6 - 6" CFMF
- 8 - 8" CFMF

PARTITION NOTES:

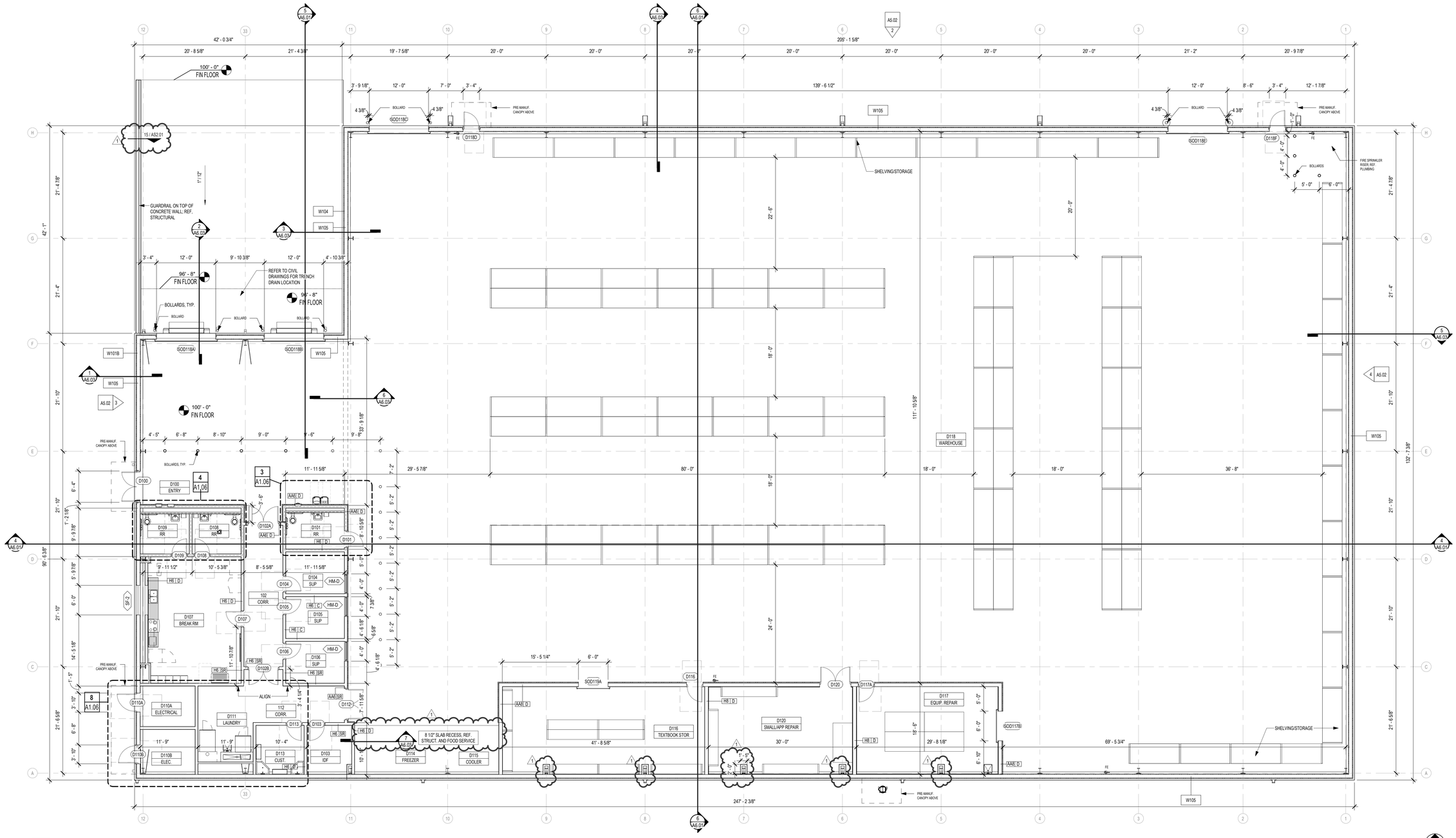
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   ANY UNTAGGED PARTITIONS WHICH APPEAR INCONSISTENT WITH THE DESCRIPTIONS ABOVE SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO BIDDING.



DOOR LOCATION



KEY PLAN
N.T.S.



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

N TRUE

Revision /	Date
1	10/07/25 ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT — BRENDA R. BANKS — 27169 — STATE OF TEXAS
10/08/2025

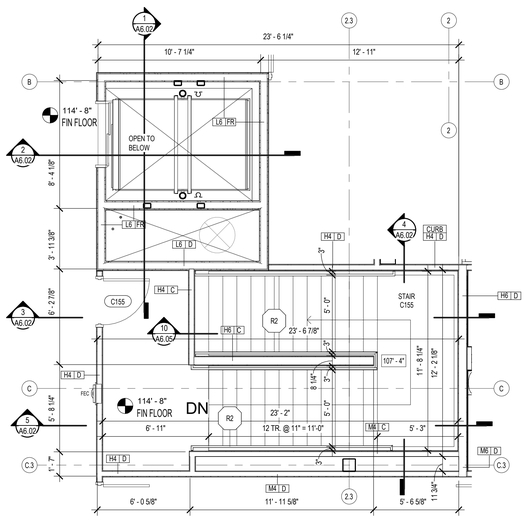
Huckabee
www.huckabee-inc.com
800.687.1229

FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

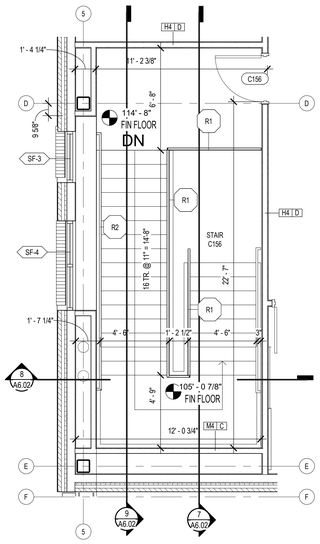
Job No.	Sheet No.
1971-05-01	A1.04
Drawn By: JT	
Date: 09/18/2025	

Autodesk Docs://NEW CANEY ISD - NEW OPERATIONS BUILDING/1971-05-01_NCISD Trans. Ops Building_ARCH_v25.rvt
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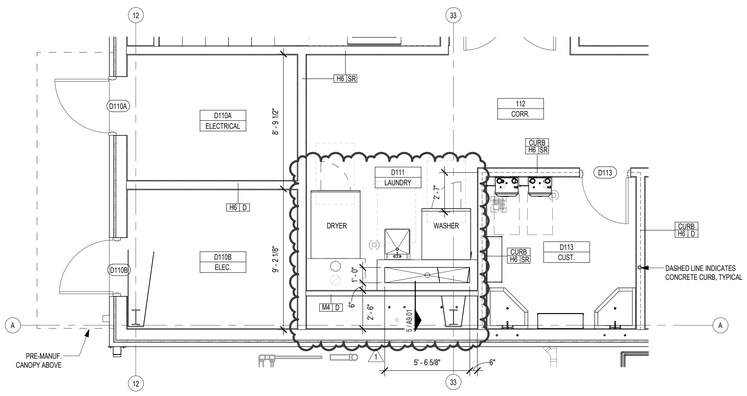
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12 ENLARGED PLAN - STAIR A129 / ELEV. A128 - LEVEL 2
1/4" = 1'-0"



11 ENLARGED PLAN - STAIR A111 - LEVEL 2
1/4" = 1'-0"



8 ENLARGED PLAN - D111 - LEVEL 1 - WAREHOUSE
1/4" = 1'-0"

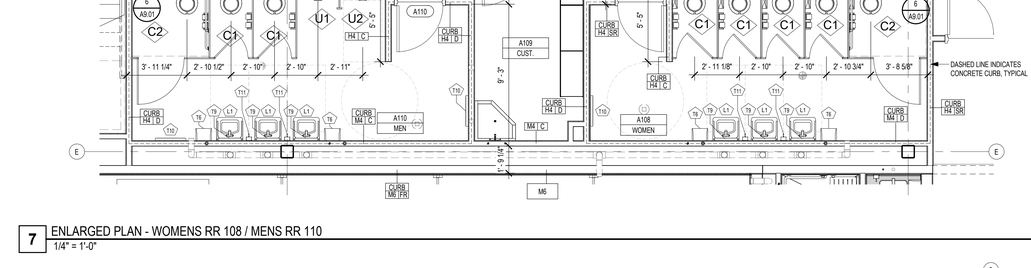
30" x 48" CLEAR FLOOR SPACE PER ACCESSIBILITY REQUIREMENTS

5'-0" DIAMETER TURNING SPACE PER ACCESSIBILITY REQUIREMENTS

PLAN LEGEND

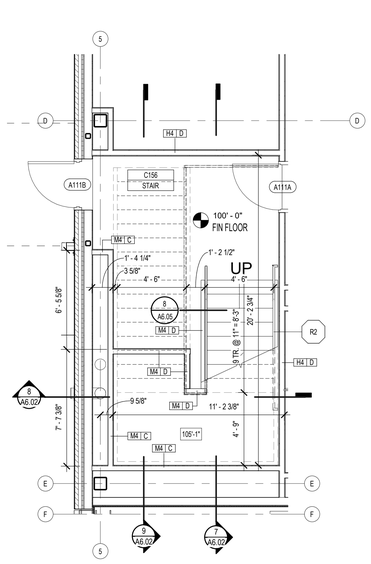
1. FOR ACCESSIBLE FIXTURES & ACCESSORIES REFER TO SHEET A1.06 "TOILET ACCESSORIES AND PLUMBING FIXTURES" FOR MOUNTING HEIGHTS & ACCESSIBILITY REQUIREMENTS. THE ACCESSORIES ARE CALLED OUT IN THE INDIVIDUAL STALL / ROOM TYPES / SHOWER TYPES.
   C1 T1 S1
2. FIXTURES THAT STAND ALONE WILL BE TAGGED W/ A SYMBOL; LAVS, URINAL'S & EWC'S L1 L2
3. PROVIDE PIPE INSULATION AS SPECIFIED AT ALL EXPOSED PIPING AND DRAIN AT ACCESSIBLE LAVATORIES.

GENERAL NOTES

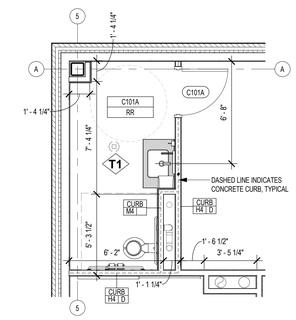


10 ENLARGED PLAN - STAIR A129 / ELEV. A128 - LEVEL 1
1/4" = 1'-0"

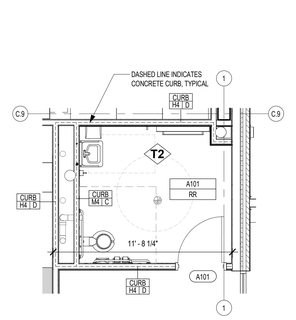
NOTE: CONTRACTOR TO COORDINATE CLEARANCES, LAYOUT, STRUCTURAL REQUIREMENTS, AND INFRASTRUCTURE REQUIREMENTS WITH SELECTED ELEVATOR. DIMENSIONS AND OTHER INFORMATION WILL VARY AND DIFFER FROM EACH ELEVATOR PRODUCT / MODEL / MANUFACTURER AND MAY EVEN CHANGE WHEN USING THE BASIS-OF-DESIGN PRODUCT. DO NOT COMMENCE THIS WORK, RELATED TO FOUNDATION WORK, STEEL FABRICATION OR OTHER IMPACTED ACTIVITIES UNTIL SUBMITTALS AND SHOP DRAWINGS HAVE BEEN PRODUCED, COORDINATED WITH THE OTHER WORK, AND REVIEWED.



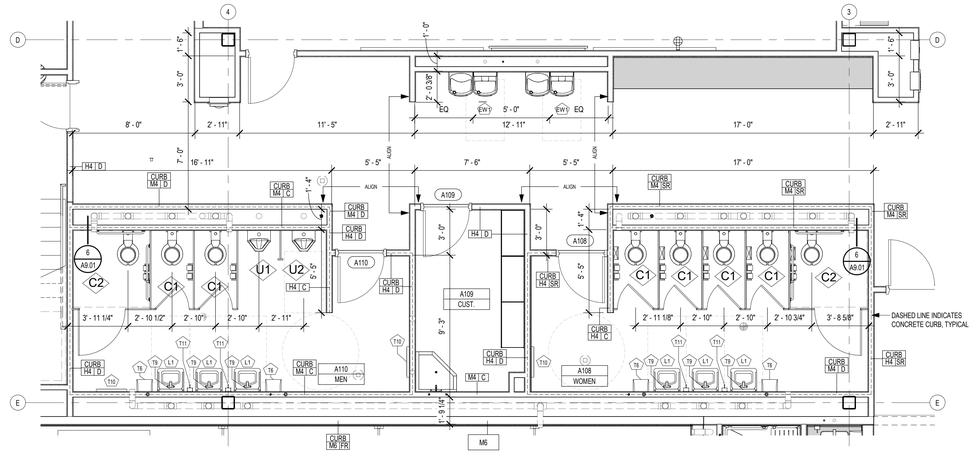
9 ENLARGED PLAN - STAIR A111 - LEVEL 1
1/4" = 1'-0"



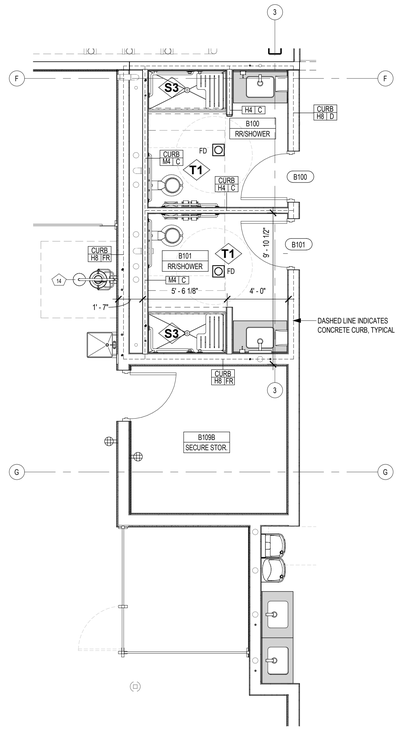
6 ENLARGED PLAN - SINGLE USER RR - C101.A
1/4" = 1'-0"



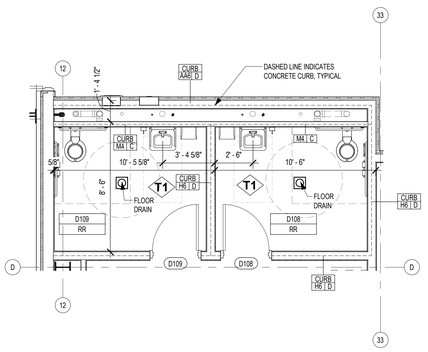
5 ENLARGED PLAN - SINGLE USER RR - A101
1/4" = 1'-0"



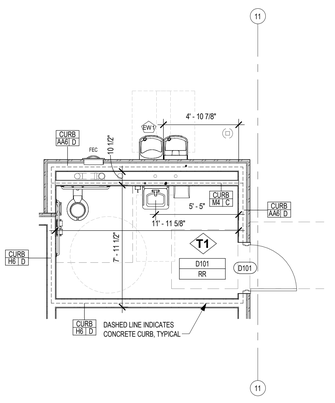
7 ENLARGED PLAN - WOMENS RR 108 / MENS RR 110
1/4" = 1'-0"



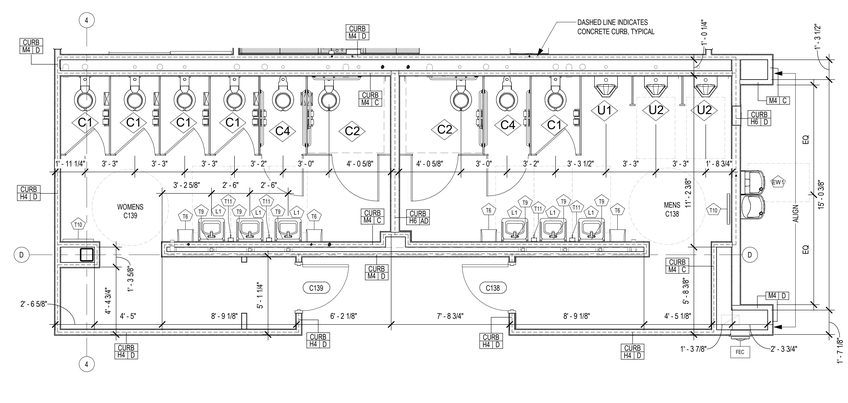
1 ENLARGED PLAN - RR/SHOWER - B100/B101
1/4" = 1'-0"



4 ENLARGED PLAN - D108 / D109 - LEVEL 1 - WAREHOUSE
1/4" = 1'-0"



3 ENLARGED PLAN - D101 - LEVEL 1 - WAREHOUSE
1/4" = 1'-0"



2 ENLARGED PLAN - WOMENS RR C139 / MENS C138
1/4" = 1'-0"

Revision /	Date
1	10/07/25 ADDENDUM 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT
BRIAN K. HUCKABEE
31169
STATE OF TEXAS
10/08/2025

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800.687.1229

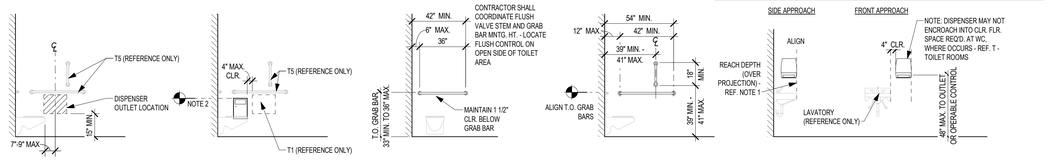
ENLARGED PLANS

Job No.	Sheet No.
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Drawn By: JT	
Date: 09/18/2025	

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2017 ICC A117.1 TABLE 603.6 MAXIMUM REACH DEPTH AND HEIGHT (FOR TOWEL DISPENSERS AND HAND DRYERS)						
REACH DEPTH	0.5 INCH	2 INCHES	5 INCHES	6 INCHES	9 INCHES	11 INCHES
REACH HEIGHT	48 INCHES	46 INCHES	42 INCHES	40 INCHES	36 INCHES	34 INCHES



T1 TOILET TISSUE (ROLL) DISPENSER
2012 TAS 604.7 & 609.3

NOTES:
1. MAINTAIN 1-1/2" CLEARANCE BELOW GRAB BAR.

T2 SANITARY NAPKIN DISPOSAL

NOTES:
1. MAINTAIN 1-1/2" CLEARANCE BELOW GRAB BAR.
2. ALIGN T.O. DISPOSAL WITH T.O. TOILET TISSUE DISPENSER.

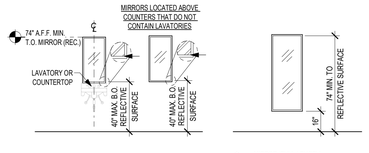
T3 REAR WALL GRAB BAR
2017 ICC A117.1 604.5.2

NOTES:
1. REAR GRAB BAR SHALL BE PERMITTED TO BE 24" MIN. IN LENGTH, CENTERED ON THE W.C. WHERE WALL SPACE DOES NOT PERMIT A 36" GRAB BAR DUE TO THE LOCATION OF A RECESSED FIXTURE ADJ. TO THE W.C.
2. WHERE THE A.H.J. REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE REAR GRAB BAR, THE GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA.

T4 SIDE WALL GRAB BAR
2017 ICC A117.1 604.5.1

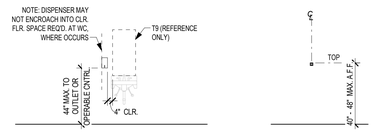
T5 PAPER TOWEL DISPENSER
2017 ICC A117.1 603.6

NOTE:
1. REFER TO TABLE 603.6 MAXIMUM REACH DEPTH AND HEIGHT WHERE DISPENSER CANNOT BE ALIGNED WITH FRONT OF LAVATORY.



T6 MIRROR
2017 ICC A117.1 603.3

T6.2 MIRROR (FULL-LENGTH)



T13 SOAP DISPENSER
2017 ICC A117.1 308

T12 COAT/CLOTHES HOOK
2017 ICC A117.1 603.4 & 604.8

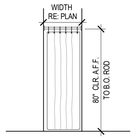
REF. S - SHOWER COMPARTMENTS FOR MOUNTING LOCATIONS AND HEIGHTS

T16 18" VERTICAL GRAB BAR

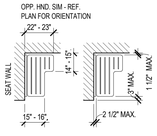
T14 24" GRAB BAR

T15 L-SHAPED 18" X 30" GRAB BAR

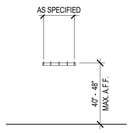
T18 30" GRAB BAR



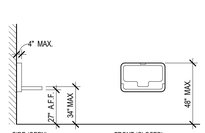
T17 SHOWER CURTAIN & ROD W/ CURTAIN HOOKS



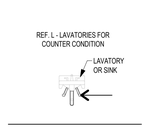
T18 FOLDING L-SHAPED SHOWER SEAT
2017 ICC A117.1 610.3.2



T19 TOWEL BAR
2017 ICC A117.1 308



T20 DIAPER CHANGING STATION
2017 ICC A117.1 603.5



T22 UNDER-SINK PIPING COVERS
2017 ICC A117.1 606.6



T20 MOP AND BROOM HOLDER

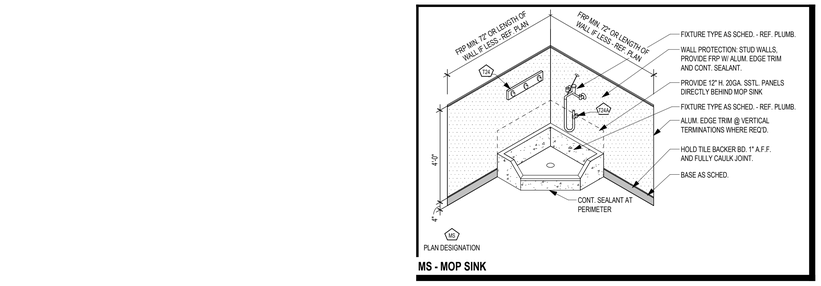
T20A HOSE AND HOSE HOLDER

T# PLAN DESIGNATION

T - TOILET ACCESSORIES

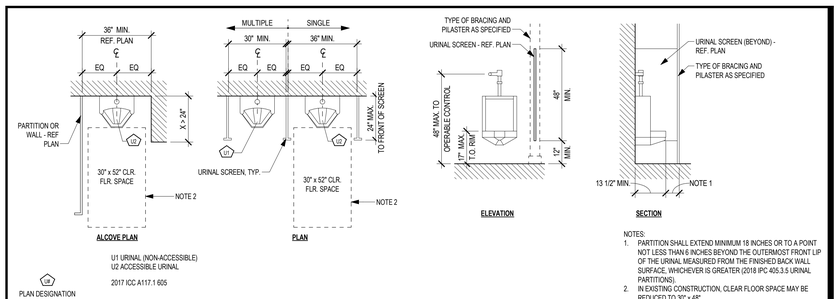
1. THIS SHEET PROVIDES GUIDANCE FOR MOUNTING LOCATIONS AND HEIGHTS DERIVED FROM ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES. NOT ALL TYPES SCHEDULED MAY BE USED. REFER TO ENLARGED FLOOR PLANS FOR QUANTITIES AND LOCATIONS.
2. CONFIGURATIONS ON THIS SHEET ARE DIAGRAMMATIC. IN THE EVENT A PROJECT-SPECIFIC CONDITION DOES NOT COMPLY WITH CLEARANCES INDICATED, NOTIFY THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK.
3. TOILET ACCESSORIES: REFER TO SPECIFICATION SECTION 10 2800 TOILET, BATH AND LAUNDRY ACCESSORIES FOR ADDITIONAL INFORMATION.
4. FIXTURES: REFER TO PLUMBING PLANS FOR SCHEDULED TYPE AND DIVISION 22 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. AT METAL STUD PARTITIONS, PROVIDE FIRE-RETARDANT TREATED WOOD BLOCKING FOR ANCHORAGE OF GRAB BARS, WALL-MOUNTED SEATS AND BENCHES, DIAPER CHANGING STATIONS, AND OTHER SUCH WALL-MOUNTED ACCESSORIES WHERE ADDITIONAL LOADS ARE ANTICIPATED.

GENERAL NOTES



MS PLAN DESIGNATION

MS - MOP SINK



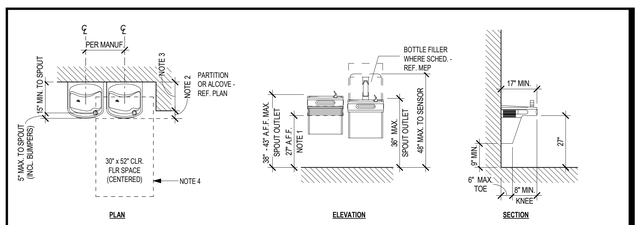
ALCOVE PLAN — PLAN — ELEVATION — SECTION

U1 URINAL (NON-ACCESSIBLE)
U2 ACCESSIBLE URINAL
2017 ICC A117.1 605

U# PLAN DESIGNATION

NOTES:
1. PARTITION SHALL EXTEND MINIMUM 18 INCHES OR TO A POINT NOT LESS THAN 6 INCHES BEYOND THE OUTERMOST FRONT LIP OF THE URINAL MEASURED FROM THE FINISHED BACK WALL SURFACE, WHICHEVER IS GREATER (2018 IPC 405.3.5 URINAL PARTITIONS).
2. IN EXISTING CONSTRUCTION, CLEAR FLOOR SPACE MAY BE REDUCED TO 30" x 48".

U - URINALS



PLAN — ELEVATION — SECTION

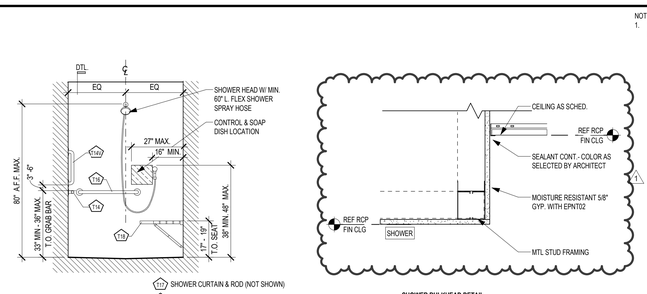
EW1 ACCESSIBLE BI-LEVEL WATER COOLER W/ BOTTLE FILLER
2017 ICC A117.1 602

EW# PLAN DESIGNATION

NOTES:
1. PROVIDE CANE DETECTION APRON. MUST NOT IMPEDE CLEAR FLOOR SPACE REQUIREMENT FOR ADJACENT UNIT.
2. WHERE L IS LOCATED IN ALCOVES, CANE DETECTION APRON NOT REQUIRED WHEN PROTRUSION IS 4" OR LESS.
3. WHERE A CLEAR FLOOR SPACE IS POSITIONED FOR A FORWARD APPROACH, THE ALCOVE SHALL BE 36 INCHES MINIMUM IN WIDTH WHERE THE DEPTH EXCEEDS 24 INCHES.
4. IN EXISTING CONSTRUCTION, CLEAR FLOOR SPACE MAY BE REDUCED TO 30" x 48".

EW - ELECTRIC WATER COOLERS

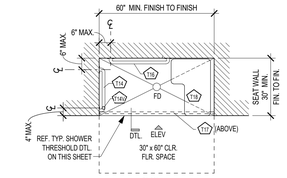
NOTE:
1. WHERE MULTIPLE GRAB BARS ARE USED, REQUIRED HORIZONTAL GRAB BARS SHALL BE INSTALLED AT THE SAME HEIGHT ABOVE FINISH FLOOR.



T17 SHOWER CURTAIN & ROD (NOT SHOWN)
T22 SOAP DISH (NOT SHOWN)

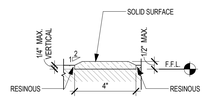
CONTROL WALL ELEVATION

SHOWER BULKHEAD DETAIL



PLAN

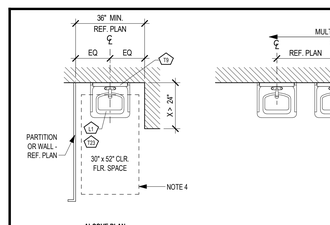
S3 STANDARD ROLL-IN TYPE SHOWER COMPARTMENT W/ SEAT
2017 ICC A117.1 608.2.2



SHOWER THRESHOLD DETAIL (DTL)

S# PLAN DESIGNATION

S - SHOWERS



ALCOVE PLAN — PLAN — COUNTER PLAN — COUNTER SECTION

L1 WALL-MOUNTED LAVATORY
L2 COUNTER-MOUNTED SINK
2017 ICC A117.1 606

L# PLAN DESIGNATION

NOTES:
1. THE FRONT OF THE LAVATORIES AND SINKS SHALL BE 34 INCHES MAXIMUM ABOVE THE FLOOR MEASURED TO THE HIGHER OF THE RIM OR COUNTER SURFACE.
2. PROVIDE AT EACH LAVATORY.
3. TOILET ACCESSORY MOUNTING HEIGHTS TO OPERABLE CONTROLS SHALL BE 44" A.F.F. MAX. WHERE THE FORWARD REACH DEPTH OVER THE COUNTER IS >20" AND NOT MORE THAN 25" MAX.
4. IN EXISTING CONSTRUCTION, CLEAR FLOOR SPACE MAY BE REDUCED TO 30" x 48".

L - LAVATORIES & SINKS

Revision /	Date
1	10/07/25 ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT DEREK R. BANKSTON 31169 STATE OF TEXAS
10/08/2025

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TOILET ACCESSORIES AND PLUMBING FIXTURES

Job No.	Sheet No.
1971-05-01	A1.07
Drawn By: JT	
Date: 09/18/2025	

10/7/2025 12:29:39 PM
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REFLECTED CEILING PLAN GENERAL NOTES

1. COORDINATE REFLECTED CEILING PLANS WITH MECHANICAL, ELECTRICAL AND AV/TECHNOLOGY PLANS. NOTIFY ARCHITECT OF CONFLICTS PRIOR TO PROCEEDING WITH THE WORK.
2. DIMENSIONS ARE FROM FACE OF FINISH, U.N.O.
3. MOUNT LIGHT FIXTURES IN SPACES EXPOSED TO STRUCTURE AT 9' - 0" A.F.F. TO B.O. FIXTURE, U.N.O.
4. HARD-CEILING PLENUM ACCESS:
   - A. MECHANICAL: PROVIDE 24" x 24" MIN. ACCESS PANELS LOCATED IN HARD CEILINGS.
   - B. ELECTRICAL: MINIMIZE SIZE AND QUANTITY TO THE EXTENT FEASIBLE. LOCATING CONCEALED BOXES ABOVE READILY-ACCESSIBLE CEILINGS WHERE PRACTICAL.
   - C. INDICATE ACCESS PANEL LOCATIONS ON SHOP DRAWING SUBMITTAL.
5. MDF/IDF ROOMS: TERMINATE CEILING TO WITHIN 6 INCHES OF NETWORK DISTRIBUTION WALL FOR CABLING PROVISIONS.
6. EXPOSED CEILING, STRUCTURE, MECHANICAL EQUIPMENT, AND SPRINKLERS TO BE PAINTED PNT01

CEILING FINISH LEGEND

REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING FINISH MATERIALS AND PAINT FINISH CODES.

CEILING TYPE — CX — ROOM NUMBER
CEILING HEIGHT — 1' - 0"

CEILING

- **ES** - EXPOSED DECK AND STRUCTURE
- **ESF** - EXPOSED DECK AND STRUCTURE (FINISHED)
- **GYP** - 5/8" GYPSUM BOARD
- **L1** - TYPE I 24" x 24" LAY-IN SUSPENDED CEILING TILE (STANDARD)
- **L4** - TYPE IV 24" x 24" LAY-IN SUSPENDED CEILING TILE (VINYL COVERED)
- **MS** - METAL SOFFIT PANEL (EXTERIOR)

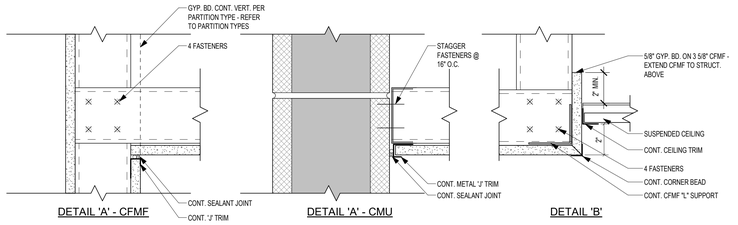
DEFAULT FINISHES

IF ANY ROOM IS NOT IDENTIFIED BY A ROOM FINISH TAG, THE FOLLOWING FINISHES SHALL BE USED AS "TYPICAL" OR "DEFAULT" FINISHES FOR BIDDING PURPOSES. VERIFY FINISHES WITH ARCHITECT BEFORE INSTALLATION.

CEILING - L1
CEILING HEIGHT - 9' - 0" A.F.F.

REFLECTED CEILING LEGEND

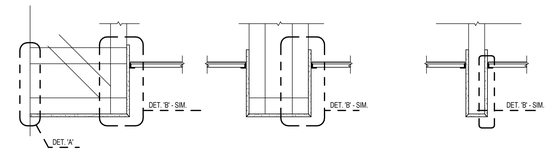
- **LAY-IN CEILING**
- **GYPSUM BOARD CEILING** WITH CONTROL JOINTS , FINISH AS INDICATED
- **METAL SOFFIT PANELS**
- **LIGHT FIXTURES** - REF. ELECTRICAL
- **PROJECTION SCREENS** - REF. A4 SHEETS
- **HVAC GRILLE, DIFFUSER** - REF. MECHANICAL DRAWINGS.



TYPICAL BULKHEAD DETAILS

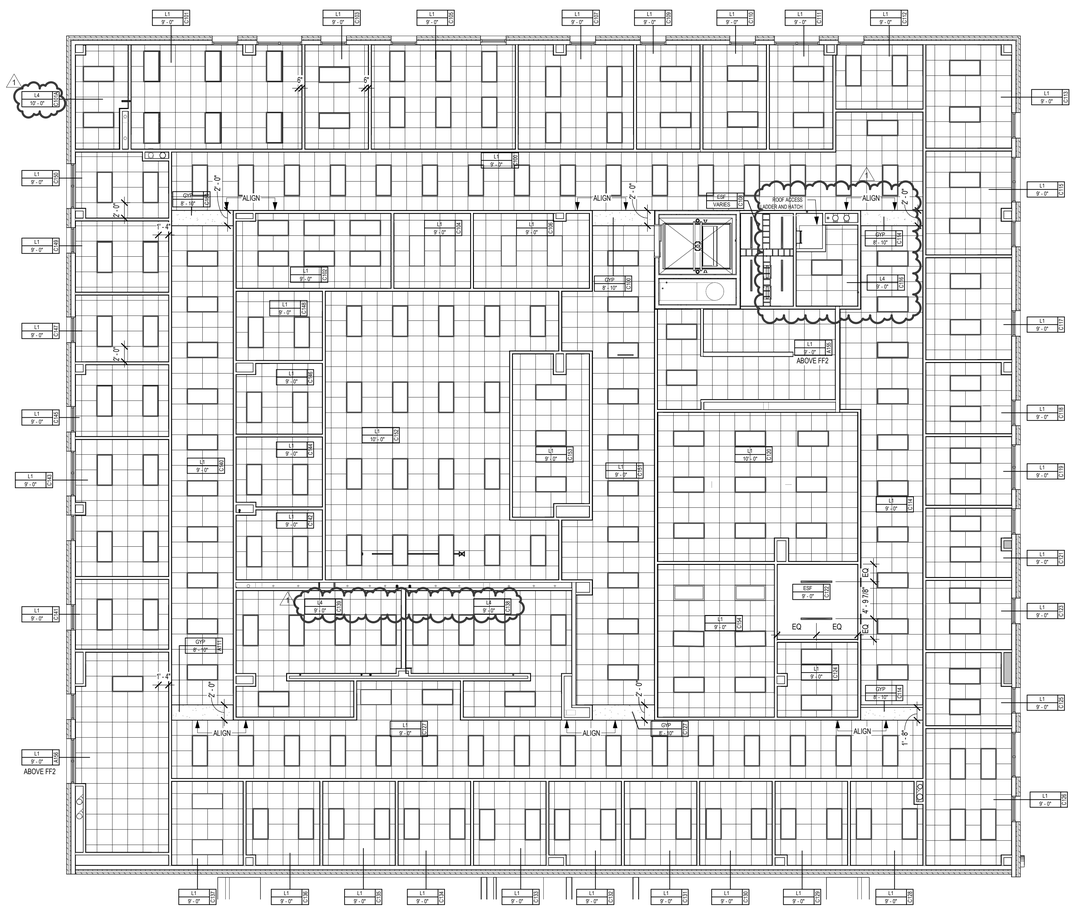
GENERAL NOTES - ALL BULKHEADS, PLASTER AND GYP. CEILINGS

1. ALL BULKHEADS SHALL BE CONSTRUCTED OF 5/8" GYP. BD. ON 3-5/8" MTL. STUDS AT 16" O.C. U.NO. TO DECK.
2. FINISH ALL BULKHEADS TO CODE 115, U.N.O.
3. PROVIDE CONTROL JOINTS (CJ) IN BULKHEADS AT 15'-0" O.C. OR AS SHOWN ON PLAN AND AS SPEC.
4. ALL SECTION PROFILES SHOWN IN THIS SCHEDULE SHALL BE DETAILED AS SHOWN UNDER TYPICAL DETAILS.
5. PROVIDE BRACING IN ALL BULKHEADS AT 48" O.C.
6. PROVIDE CONTROL JOINTS (CJ) IN ALL PLASTER CLGS., SOFFITS AT MAX. 18'-0" OR AS SHOWN ON PLAN.
7. PROVIDE STOP CONT. WHERE PLASTER SOFFIT MEETS VERTICAL SURFACE AND CAULK CONT.



TYPICAL BULKHEAD PROFILES

N.T.S.



2 REFLECTED CEILING PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING
1/8" = 1'-0"

1 REFLECTED CEILING PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING
1/8" = 1'-0"

N TRUE

KEY PLAN
N.T.S.

A / C
B
D
E
F

Revision /	Date
1	10/07/25 ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT BRENDA R. BANNISTER STATE OF TEXAS 27169
10/08/2025

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REFLECTED CEILING PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING

Job No.	Sheet No.
1971-05-01	A2.01
Drawn By: JT	
Date: 09/18/2025	

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   C. INDICATE ACCESS PANEL LOCATIONS ON SHOP DRAWING SUBMITTAL.
5. MDF/IDF ROOMS: TERMINATE CEILING TO WITHIN 6 INCHES OF NETWORK DISTRIBUTION WALL FOR CABLING PROVISIONS.
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REFLECTED CEILING PLAN GENERAL NOTES

REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING FINISH MATERIALS AND PAINT FINISH CODES.

CEILING TYPE — CX
CEILING HEIGHT — 9' - 0" — ROOM NUMBER

CEILING

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- **MS** - METAL SOFFIT PANEL (EXTERIOR)

CEILING FINISH LEGEND

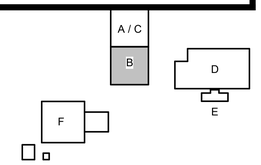
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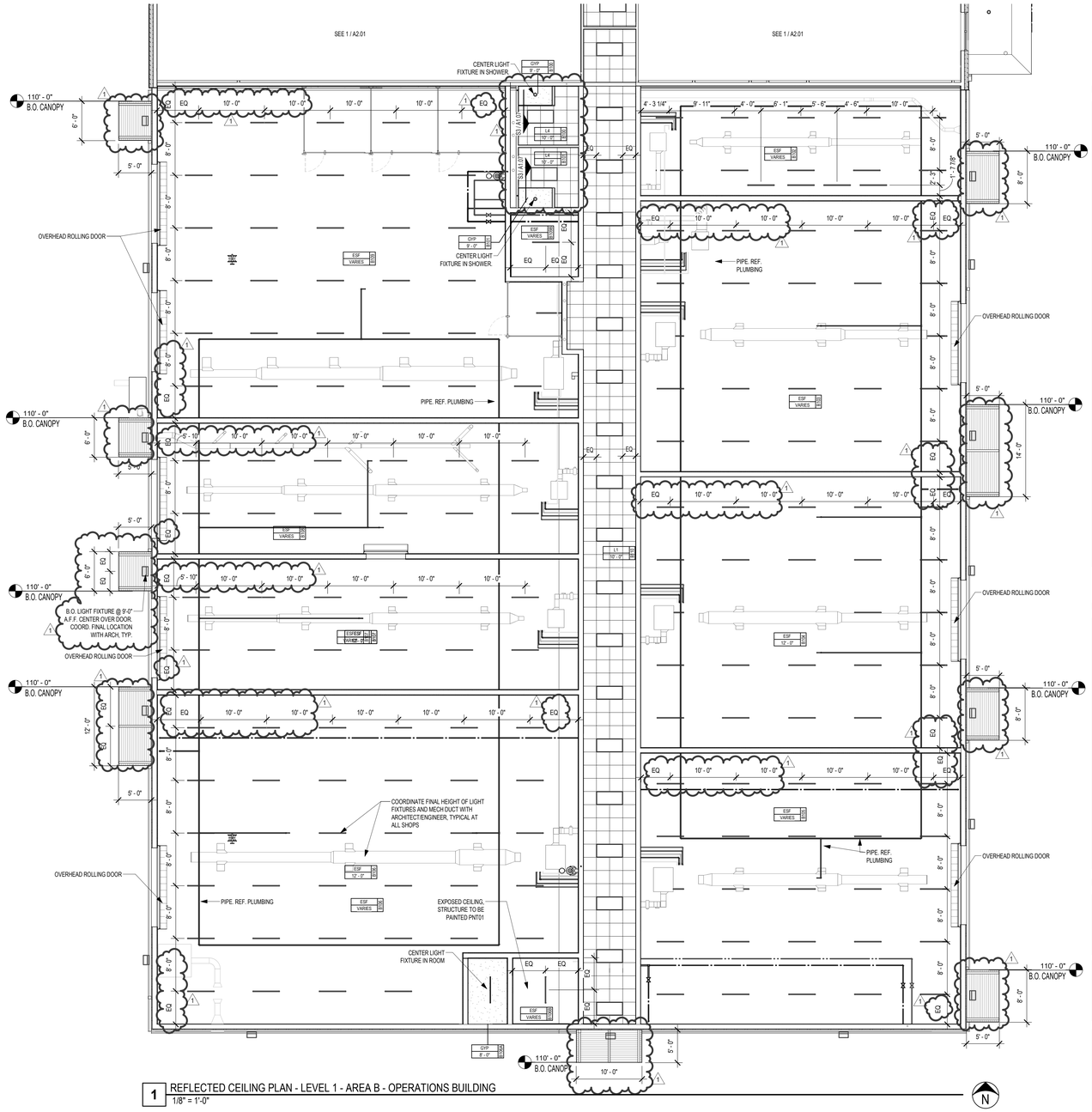
CEILING - L1
CEILING HEIGHT - 9' - 0" A.F.F.

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- **GYPSUM BOARD CEILING** WITH CONTROL JOINTS , FINISH AS INDICATED
- **METAL SOFFIT PANELS**
- **LIGHT FIXTURES** - REF. ELECTRICAL
- **PROJECTION SCREENS** - REF. A4 SHEETS
- **HVAC GRILLE, DIFFUSER** - REF. MECHANICAL DRAWINGS.

REFLECTED CEILING LEGEND



KEY PLAN
N.T.S.



1 REFLECTED CEILING PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING
1/8" = 1'-0"

N
TRUE

Revision /	Date
1	10/07/25 ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS



10/08/2025

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REFLECTED CEILING PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

Job No.	Sheet No.
1971-05-01	A2.02
Drawn By: JT	
Date: 09/18/2025	

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CEILING FINISH LEGEND

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CEILING HEIGHT — 1' - 0" — ROOM NUMBER

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- **ESF** - EXPOSED DECK AND STRUCTURE (FINISHED)
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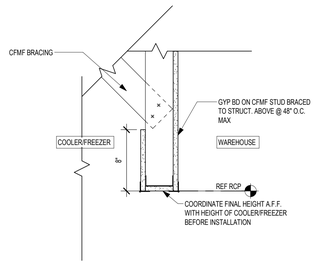
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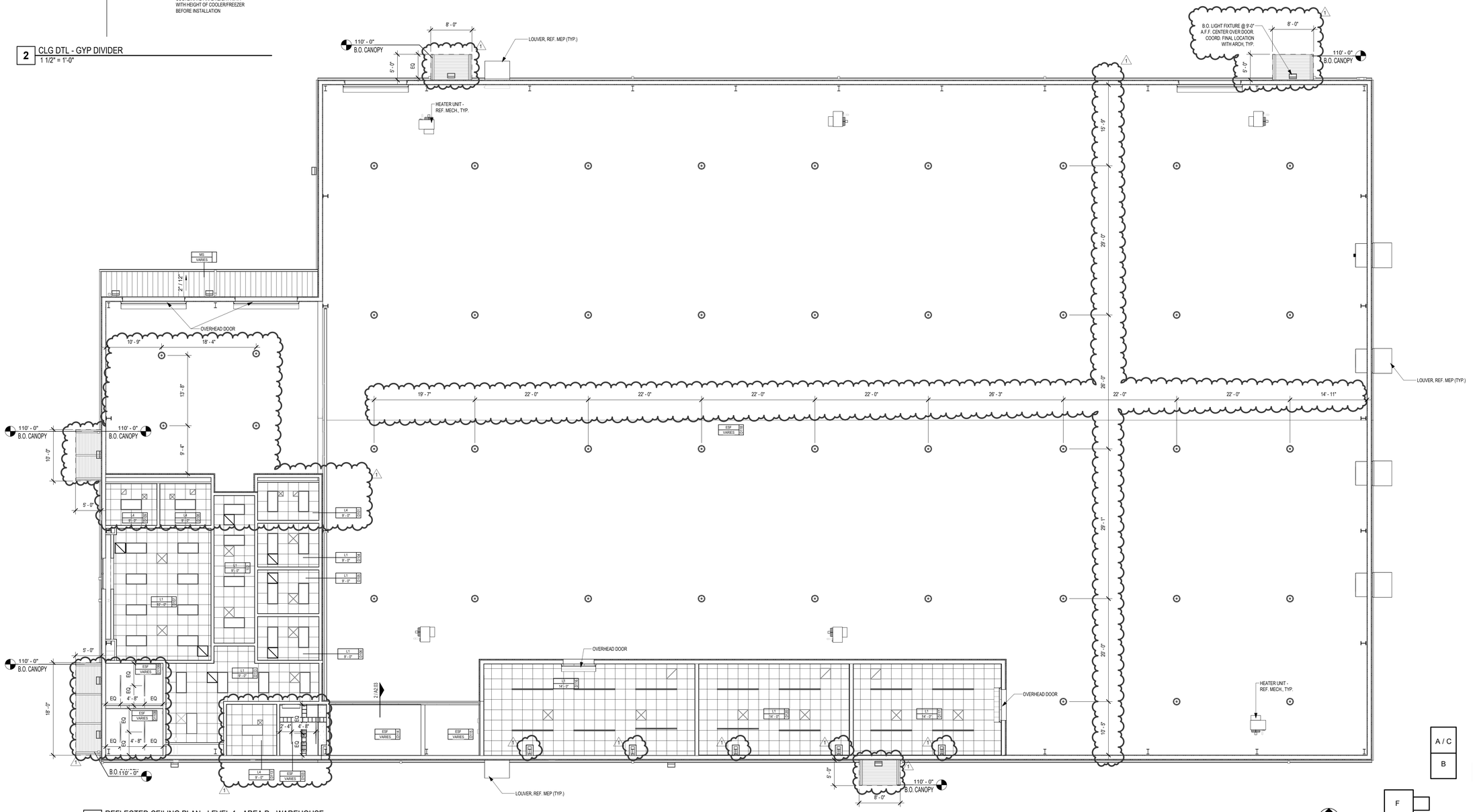
CEILING - L1
CEILING HEIGHT - 9' - 0" A.F.F.

REFLECTED CEILING LEGEND

- **LAY-IN CEILING**
- **GYPSUM BOARD CEILING** WITH CONTROL JOINTS , FINISH AS INDICATED
- **METAL SOFFIT PANELS**
- **LIGHT FIXTURES** - REF. ELECTRICAL
- **PROJECTION SCREENS** - REF. A4 SHEETS
- **HVAC GRILLE, DIFFUSER** - REF. MECHANICAL DRAWINGS.



2 CLG DTL - GYP DIVIDER
1 1/2" = 1'-0"



1 REFLECTED CEILING PLAN - LEVEL 1 - AREA D - WAREHOUSE
1/8" = 1'-0"

N TRUE

KEY PLAN
N.T.S.
A / C
B
D
E
F

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT
STEPHEN R. BAINBRIDGE
71160
STATE OF TEXAS
10/08/2025

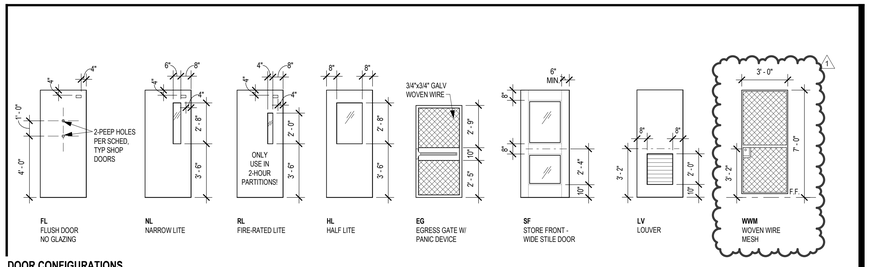
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REFLECTED CEILING PLAN - LEVEL 1 - AREA D - WAREHOUSE

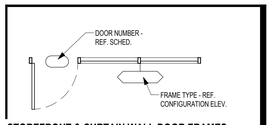
Job No.	Sheet No.
1971-05-01	A2.03
Drawn By: JT	
Date: 09/18/2025	

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DOOR CONFIGURATIONS



STOREFRONT & CURTAIN WALL DOOR FRAMES

A3 - DOOR SCHEDULE

OPENING NUMBER	OPENING HARDWARE	OPENING FIRE RATING	OPENING EXTERIOR	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR GLAZING	DOOR PANIC HARDWARE	FRAME MATERIAL	FRAME FRAME TYPE	FRAME SPECIAL NOTES	OPENING NUMBER
AREA A												
A100A	1.0		Yes	3' - 0"	7' - 0"	AL-SF (PR)	IGSE	Yes	AL	SF-1		A100A
A101	61.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A101
A102A	31.2		No	3' - 0"	7' - 0"	SC-HL	GLSE		HM	C1		A102A
A102B	31.0		No	3' - 0"	7' - 0"	SC-HL	GLSE		HM	C1		A102B
A103A	31.1		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A103A
A103B	31.1		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A103B
A104A	14.1		No	3' - 0"	7' - 0"	AL-SF (PR)	GLSE	Yes	AL	SF-G		A104A
A104B	15.0	SMOKE	No	3' - 0"	7' - 0"	SC-HL (PR)	GTC	Yes	HM	B1	7	A104B
A105	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A105
A106	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A106
A107	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A107
A108	47.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A108
A109	41.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A109
A110	47.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A110
A111A	29.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A111A
A111B	6.1		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	C		A111B
A112	37.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1		A112
A113A	19.0		No	3' - 0"	7' - 0"	HM-FL (PR)	--		HM	B1		A113A
A113B	6.2		Yes	3' - 6"	7' - 0"	HM-FL	--		HM	C		A113B
A114	38.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1		A114
A115A	20.0	45 MIN.	No	3' - 0"	7' - 0"	HM-FL (PR)	--	Yes	HM	B1		A115A
A115B	6.2		Yes	3' - 6"	7' - 0"	HM-FL	--		HM	C		A115B
A116A	20.0	45 MIN.	No	3' - 0"	7' - 0"	HM-FL (PR)	--		HM	B1		A116A
A116B	6.2		Yes	3' - 6"	7' - 0"	HM-LV	--		HM	C		A116B
A117A	15.0		No	3' - 0"	7' - 0"	SC-FL (PR)	--		HM	B1		A117A
A118A	24.0		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		A118A
A118B	24.0		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		A118B
A119A	24.0		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		A119A
A119B	24.0		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		A119B
A120A	6.1		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	C		A120A
A122	31.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A122
A123	41.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A123
A124	39.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A124
A125	39.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A125
A126	39.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		A126
A127	19.0		No	3' - 0"	7' - 0"	SC-FL (PR)	--		HM	B1		A127
A128	39.0		No	3' - 0"	7' - 0"	SC-FL	GTC		HM	C1		A128
A129A	29.0		No	3' - 0"	7' - 0"	SC-NL	GTC	Yes	HM	C1		A129A
A130B	6.1		Yes	3' - 0"	7' - 0"	HM-NL	IGU	Yes	HM	C		A130B
A131	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A131
A132	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A132
A133A	31.1		No	3' - 0"	7' - 0"	SC-HL	GTC		HM	C1		A133A
A133B	31.1		No	3' - 0"	7' - 0"	SC-HL	GTC		HM	C1		A133B
A134	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A134
A135	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		A135
AREA B												
B100	61.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1		B100
B101	61.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1		B101
B102.A	31.2		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B102.A
B102.B	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B102.B
B103.A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B103.A
B103.C	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B103.C
B104.A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B104.A
B104.B	31.0		No	3' - 0"	7' - 0"	HM-NL	--		HM	C1		B104.B
B104.D	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B104.D
B104.E	67.0		No	3' - 0"	7' - 0"	WWM			WWM			B104.E
B105.A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B105.A
B105.B	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B105.B
B105.D	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B105.D
B106.A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC	No	HM	C1		B106.A
B106.B	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	A	6	B106.B
B106.D	38.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	C1		B106.D
B106.E	38.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	C1		B106.E
B107.A	32.0	45 MIN.	No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B107.A
B107.D	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B107.D
B108.A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		B108.A
B108.B	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	6	B108.B
B109.A	32.0	45 MIN.	No	3' - 0"	7' - 0"	HM-NL	GFPR	No	HM	C1		B109.A
B109.D	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	A	6	B109.D
B109.E	67.0		No	3' - 0"	7' - 0"	WWM			WWM			B109.E
B109.F	67.0		No	3' - 0"	7' - 0"	WWM			WWM			B109.F
B109.G	67.0		No	3' - 0"	7' - 0"	WWM			WWM			B109.G
B109.H	67.0		No	3' - 0"	7' - 0"	WWM			WWM			B109.H
B109B	38.0	45 MIN.	No	3' - 0"	7' - 0"	HM-NL	GFPR	No	HM	C1		B109B
B111.A	5.0		Yes	3' - 0"	7' - 0"	HM-NL (PR)	IGSE	Yes	HM	B		B111.A
AREA C												
C101	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C101
C101A	60.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C101A
C102	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C102
C103	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C103
C104	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C104
C105	31.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C105
C106	38.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C106
C107	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C107
C108	38.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C108
C109	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C109
C110	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C110
C111	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C111
C112	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C112
C113	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C113
C115	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C115
C116	41.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C116
C117	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C117
C118	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C118
C119	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C119
C120.A	31.0		No	3' - 0"	7' - 0"	SC-HL	GTC		HM	C1		C120.A
C120.B	31.0		No	3' - 0"	7' - 0"	SC-HL	GTC		HM	C1		C120.B

A3 - DOOR SCHEDULE

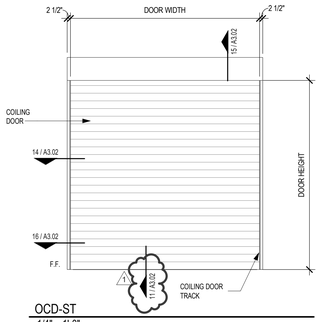
OPENING NUMBER	OPENING HARDWARE	OPENING FIRE RATING	OPENING EXTERIOR	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR GLAZING	DOOR PANIC HARDWARE	FRAME MATERIAL	FRAME FRAME TYPE	FRAME SPECIAL NOTES	OPENING NUMBER
C121	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C121
C122	38.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C122
C123	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C123
C124	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C124
C125	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C125
C126	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C126
C128	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C128
C129	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C129
C130	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C130
C131	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C131
C132	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C132
C133	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C133
C134	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C134
C135	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C135
C136	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C136
C137	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C137
C138	47.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C138
C139	47.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C139
C141	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C141
C142	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C142
C143	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C143
C144	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C144
C145	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C145
C146	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C146
C147	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C147
C148	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C148
C149	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C149
C150	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C150
C152A	24.1		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		C152A
C152B	24.1		No	3' - 0"	7' - 0"	SC-HL	GTC	Yes	HM	C1		C152B
C153	38.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		C153
C154	31.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		C154
C155	29.0		No	3' - 0"	7' - 0"	SC-NL	GTC	Yes	HM	C1		C155
C156	29.0		No	3' - 0"	7' - 0"	SC-NL	GTC	Yes	HM	C1		C156
AREA D												
D100	3.0		Yes	3' - 0"	7' - 0"	HM-NL (PR)	IGSE	Yes	HM	B		D100
D101	61.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1		D101
D102A	15.0		No	3' - 0"	7' - 0"	HM-NL (PR)	GTC		HM	B1		D102A
D102B	15.0		No	3' - 0"	7' - 0"	SC-NL (PR)	GTC		HM	B1	7	D102B
D103	38.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1	7	D103
D104	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		D104
D105	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		D105
D106	52.0		No	3' - 0"	7' - 0"	SC-NL	GTC		HM	C1		D106
D107	32.0		No	3' - 0"	7' - 0"	SC-HL	GTC		HM	C1		D107
D108	61.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		D108
D109	61.0		No	3' - 0"	7' - 0"	SC-FL	--		HM	C1		D109
D110A	38.0		Yes	3' - 6"	7' - 0"	HM-FL	--		HM	A		D110A
D110B	38.0		Yes	3' - 6"	7' - 0"	HM-FL	--		HM	A		D110B
D112	15.0		No	3' - 0"	7' - 0"	HM-NL (PR)	GTC		HM	B1	7	D112
D113	41.0		No	3' - 0"	7' - 0"	HM-FL	--		HM	C1	7	D113
D116	39.0		No	3' - 0"	7' - 0"	HM-FL	GTC		HM	C1		D116
D117A	31.0		No	3' - 0"	7' - 0"	HM-NL	GTC		HM	C1		D117A
D118D	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	A	6	D118D
D118F	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--	Yes	HM	A	6	D118F
D120	16.1		No	3' - 0"	7' - 0"	HM-NL (PR)	GTC		HM	B1		D120
AREA E												
E102	5.0		Yes	3' - 0"	7' - 0"	HM-FL (PR)	--		HM	B	AT BUS WASH	E102
AREA F												
F101	6.0		Yes	3' - 0"	7' - 0"	HM-FL	--		HM	A	AT MAINTENANCE ADDITION	F101
F201	31.2		No	3' - 0"	7' - 0"	HM-FL	--		HM	B	AT STORAGE ADDITION	F201

A3 - DOOR SCHEDULE - OVERHEAD DOORS

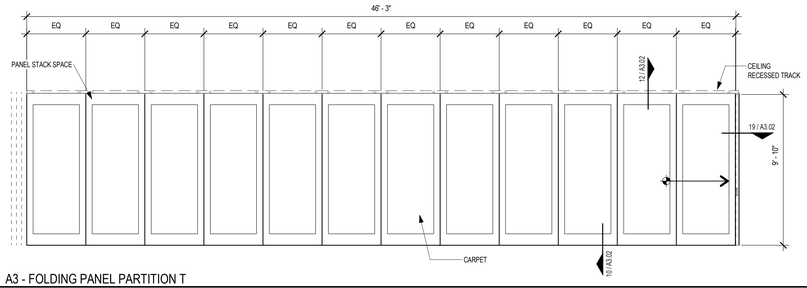
OPENING NUMBER	OPENING HARDWARE	OPENING FIRE RATING	OPENING EXTERIOR	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR GLAZING	DOOR PANIC HARDWARE	FRAME MATERIAL	FRAME FRAME TYPE	FRAME SPECIAL NOTES	OPENING NUMBER
AREA B												
SOB103	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB103
SOB104	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB104
SOB105	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB105
SOB106.C	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB106.C
SOB107.B	64.0		No	6' - 0"	12' - 0"	OCD-ST			ST		MANUAL	SOB107.B
SOB107.C	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB107.C
SOB108.C	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB108.C
SOB109.B	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB109.B
SOB109.C	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOB109.C
AREA D												
SOD117B	64.0		No	6' - 0"	10' - 0"	OCD-ST			ST		MANUAL	SOD117B
SOD118A	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MOTORIZED	SOD118A
SOD118B	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MOTORIZED	SOD118B
SOD118C	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOD118C
SOD118E	64.0		Yes	12' - 0"	12' - 0"	OCD-STI			ST		MANUAL	SOD118E
SOD119A	64.0		No	6' - 0"	10' - 0"	OCD-STI			ST		MANUAL	SOD119A
AREA F												
SOF101A	64.0		Yes	12' - 0"	14' - 0"	OCD-STI			ST		MANUAL	SOF101A
SOF101B	64.0		Yes	12' - 0"	14' - 0"	OCD-STI			ST		MANUAL	SOF101B
SOF201	64.0		Yes	6' - 0"	8' - 0"	OCD-ST			ST		MANUAL AT STORAGE ADDITION	SOF201
SOF301	64.0		Yes	10' - 0"	10' - 0"	OCD-ST			ST		MATCH EXIST. SIZE	SOF301

A3 - FOLDING PARTITION SCHEDULE

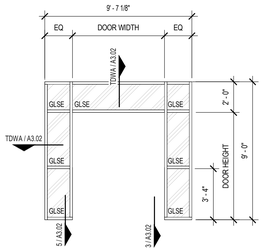
NUMBER	DOOR TYPE	DOOR DESCRIPTION DR HT	DOOR DESCRIPTION DR WDTH	DOOR MATERIAL	PANEL WIDTH	PANEL QUANTITY	PASS DOOR QUANTITY	SPECIAL NOTES
FPA118	FP-T	10' - 0"	46' - 3"	CARPET	3' - 10 1/4"	12	13	



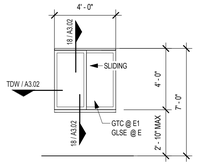
OCD-ST
1/4" = 1'-0"



A3 - FOLDING PANEL PARTITION T
1/4" = 1'-0"



FRAME TYPE SF-G
1/4" = 1'-0"



AL-E ,E1
1/4" = 1'-0"

DOOR ASSEMBLY NOTES

DEFAULT DOORS

IF A DOOR ASSEMBLY APPEARS ON THE FLOOR PLANS BUT IS NOT IDENTIFIED BY A SCHEDULE NUMBER, THE DOOR SHALL BE INCLUDED IN THE BID AS LISTED BELOW. THE CONTRACTOR SHALL REQUEST CLARIFICATION FROM THE ARCHITECT TO DETERMINE WHAT THE ACTUAL DOOR AND FRAME TYPE AND HARDWARE REQUIREMENTS WILL BE. ADJUSTMENTS IN CONTRACT PRICE WILL BE BASED ON THE DIFFERENCE BETWEEN ACTUAL REQUIREMENTS AND THE DEFAULT DOOR VALUE.

THE DEFAULT EXTERIOR DOOR SHALL BE A TYPE "HM-FL" (SINGLE OR PAIR PER PLAN) IN A TYPE "B" ("B1" AT EXTERIOR MASONRY WALL) FRAME WITH DEFAULT HARDWARE PER SPECIFICATIONS AND FRAME DETAILING PER TYPICAL DETAILS FOR EXTERIOR DOORS.

THE DEFAULT INTERIOR DOOR SHALL BE A TYPE "SC-FL" (SINGLE OR PAIR PER PLAN) IN A TYPE "B" FRAME WITH DEFAULT HARDWARE PER SPECIFICATIONS AND FRAME DETAILING PER TYPICAL DETAILS FOR INTERIOR DOORS.

TYPICAL NOTES

A. DOOR TYPES ARE INDICATED AS A MATERIAL-CONFIGURATION CODE. THE MATERIAL CODE DESIGNATES MATERIALS AND FINISHES AS SPECIFIED. REFER TO SPECIAL NOTES FOR NON-TYPICAL FINISHES. THE CONFIGURATION CODE REFERS TO TYPICAL OR SPECIAL CONFIGURATIONS AS DRAWN.

B. DOOR ASSEMBLIES ARE NUMBERED BY ASSEMBLY. MULTIPLE SETS OF DOORS MAY OCCUR IN THE SAME FRAME ASSEMBLY (REFER TO SCHEDULE AND PLAN FOR QUANTITY). DOORS MAY OCCUR IN PAIRS (REFER TO SCHEDULE AND PLAN FOR INCIDENCE).

C. FRAME CONFIGURATION IS DIAGRAMMATIC AND NOMINAL. DIMENSIONS SHALL BE ADJUSTED TO ACCOMMODATE DOOR SIZES AS SCHEDULED. WITHIN ANY HOLLOW METAL ASSEMBLY, THE WIDTH OF SIDELITES SHALL BE EQUAL AND SHALL NOT EXCEED 3'-0" U.N.O.

D. ALTERNATE FINISHES CAN SOMETIMES HAVE AN IMPACT ON DETAILING (E.G. HALF OR OFFSET SADDLES EMPLOYED IN LIEU OF STANDARD SADDLES WHEN ADJACENT TO THICKER FLOOR FINISHES SUCH AS TERRAZZO OR QUARRY TILE). COORDINATE DETAILS WITH FINAL FINISH SELECTIONS.

E. GLAZED FRAMES ASSOCIATED WITH 20-MINUTE, 45-MINUTE, AND/OR 60-MINUTE FIRE-RATED DOORS SHALL BE FIRE-RATED 1-HOUR. GLAZED FRAMES ASSOCIATED WITH 90-MINUTE FIRE-RATED DOORS SHALL BE FIRE-RATED 2-HOUR. GLAZING MUST MEET CODE REQUIREMENTS, INCLUDING SIZE LIMITATIONS, IN FIRE-RATED FRAMES. REF. IBC TABLE 716.1 (2).

F. PROVIDE 2x WOOD BLOCKING @ CFMF STUD WALLS FOR WALL MOUNTED ITEMS LIKE WALL STOPS, HOLD OPENS, ETC.

G. REFER TO FLOOR PLANS AND EXTERIOR ELEVATIONS FOR ALUMINUM FRAME LOCATIONS.

H. OVERHEAD COILING DOORS ARE MOTORIZED UNLESS NOTED OTHERWISE.

I. REFER TO SECURITY DRAWINGS FOR DOORS TO RECEIVE CARD READERS AND DOOR CONTACTS.

SPECIAL NOTES:

1. MAGNETIC HOLD OPEN - REF. FIRE ALARM SHEETS.
2. MANUAL HOLD OPEN.
3. SOUND CONTROL DOOR ASSEMBLY STC 50 (DOOR ASSEMBLY INCLUDES DOOR, DOOR FRAME, DOOR HARDWARE, AND ANY SCHEDULED DOOR / DOOR FRAME GLAZING).
4. SOUND SEAL W/ DOOR BOTTOM STC 40-42.
5. DOOR & FRAME PROVIDED AS PART OF SOUND-ISOLATION ROOM.
6. PROVIDE (2) PEEPHOLES IN DOOR PANEL. (1) LOCATED AT STANDARD HEIGHT AND (1) AT 42" AFF.
7. PROVIDE SMOKE SEALS.
8. NO LATCH, PUSH OPEN.
9. NO CLOSER.
10. PANIC BUTTON EMERGENCY OPEN.
11. FAIL SAFE IN OPEN POSITION.
12. FAIL SAFE IN CLOSED POSITION.
13. MANUAL OPERATION.

DOOR/FRAME MATERIALS

AL - ALUMINUM

HM - HOLLOW METAL

SC - SOLID CORE (PLAM FACED)

CL - CHAIN LINK (GALVANIZED)

WWM - WOVEN WIRE MESH (1)

ST - STEEL

STI - STEEL INSULATED

GLAZING LEGEND

IGSE - INSULATED GLASS SECURITY

IGU - INSULATED GLASS UNIT (1)

GFPR - GLASS FIRE-PROTECTION-RATED

GLSE - GLASS LAMINATED SECURITY

GTC - GLASS TEMPERED CLEAR

1. ALL GLAZING IS 1/4" THICK (U.N.O.). INSULATED GLASS SHALL CONSIST OF AN EXTERIOR LAYER OF GLASS, TINTED AS SPECIFIED, AN INTERIOR LAYER OF CLEAR GLASS, FACTORY SEALED WITH A 1/2" AIR SPACE. WHERE TEMPERED GLASS IS SPECIFIED, BOTH LAYERS OF INSULATED GLASS SHALL BE TEMPERED.
2. ANY WINDOW OR GLAZING PANELS LOCATED AT A INTERSTITIAL SPACE OR NOT READILY VISIBLE SHALL HAVE SPANDREL GLASS INSTALLED, REGARDLESS OF ANY NOTATION ELSEWHERE.
3. ALL EXTERIOR GLASS SHOULD HAVE "OPTIC GRAY" TINT COLOR.

SCHEDULE ABBREVIATIONS

TEM - TYP EXT MASONRY DETAIL - HM

TEMA - TYP EXT MASONRY DETAIL - ALUM

TIM - TYP INTERIOR MASONRY DETAIL - HM

TIMA - TYP INTERIOR MASONRY DETAIL - ALUM

TDW - TYP DRYWALL PARTITION DETAIL - HM

TDWA - TYP DRYWALL PARTITION DETAIL - ALUM

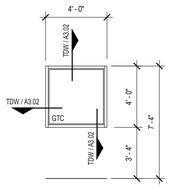
HO - DOOR HOLD OPEN (MAGNETIC OR MANUAL - SEE SPECIAL NOTES FOR MORE INFO)

TH - THRESHOLD

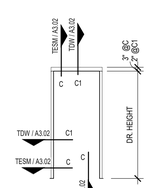
SEC - SECURITY CONTACTS (REF. ELEC. AND TECH.)

OH - DENOTES OPPOSITE HAND CONFIGURATION

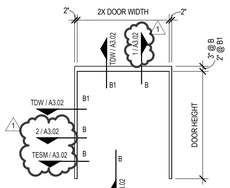
FP - FOLDING PARTITION (1)



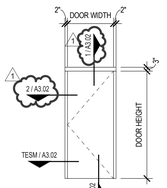
HM-D
1/4" = 1'-0"



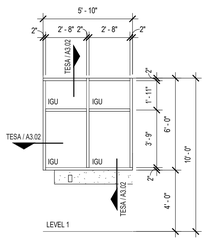
FRAME TYPE C, C1
1/4" = 1'-0"



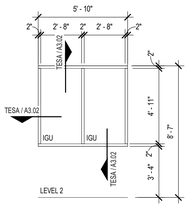
FRAME TYPE B, B1
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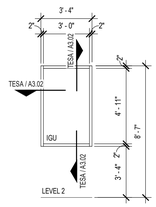
FRAME TYPE A
1/4" = 1'-0"



SF-5
1/4" = 1'-0"

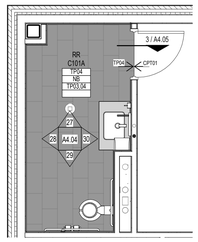


SF-4
1/4" = 1'-0"



SF-3
1/4" =

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5 ENLARGED FINISH FLOOR PLAN - LEVEL 2 @ SINGLE RR
1/4" = 1'-0"

FINISH PLAN LEGEND APPLIES TO SECTION PLANS

- A1.1 / 1 — ELEVATION REFERENCE
- 1 / A1.1 — CALLOUT REFERENCE
- SIM / 1 / A6.1 — WALL SECTION REFERENCE
- B — B - HORIZONTAL BLINDS; S - WINDOW SHADES; SB - WINDOW SHADES - BLACKOUT; SM - MOTORIZED SHADES; SMB - MOTORIZED SHADES - BLACKOUT
- FLOOR INSTALLATION DIRECTION
- FLOOR TRANSITION
- FINISH — WALL FINISH TAG
- 8' MB — EQUIPMENT TAG

FINISH REMARKS

NOTES APPLY TO ROOMS AS NOTED IN THE ROOM FINISH TAGS. SEE TAG LAYOUT ABOVE.

1. PROVIDE CUT TILE 4" IN HEIGHT, TP01, AND CONTINUE WITH WAINSCOT OF (5) FULL TILES, TP01, ABOVE.
2. PROVIDE MEDIUM BROOM FINISH AT SEALED CONCRETE.
3. PROVIDE 3/4" PLYWOOD OVER 5/8" GYP. BD. TO 8'-0" A.F.F. PAINT AS SCHEDULED
4. SEE **MS- MOP SINK** NOTE ON A1.07 FOR EXTENT OF FRP ON WALLS BEHIND MOP SINKS.
5. PROVIDE TC01 BACKSPLASH ABOVE PL01 BACKSPLASH AND ABUT TO THE UNDERSIDE OF THE UPPER CABINETS AND RANGE EXHAUST HOOD WHERE APPLICABLE. WHERE THERE ARE NO UPPER CABINETS OR RANGE EXHAUST HOOD ALIGN TO THE HEIGHT OF THE ADJACENT WALL TILE.

FINISH PLAN GENERAL NOTES

1. ALL DIMENSIONS SHOW ON FINISH FLOOR PLAN DRAWINGS ARE FROM FACE OF FINISH, U.N.O.
2. PROVIDE **PNT** AND **TC** (WAINSCOT) WALL FINISHES AS DEFINED ABOVE AND DETAILED ON INTERIOR ELEVATIONS.
3. PROVIDE 3/8" MIN SEALANT JOINT WHERE FULL HT TILE MEETS GYP CLG (MATCH CLG COLOR) OR LAY-IN GRID (WHITE)
4. PROVIDE SEALANT JTS @ INSIDE CORNERS OF TILED WALLS & AROUND DOOR FRAMES
5. VERIFY EXACT FLOOR TILE PATTERN FOR ALL TOILET ROOMS. COORDINATE WITH ARCHITECT.
6. ALL SCHEDULED WALL FINISH DIRECTIONS ARE DIRECTIONS PER PLAN NORTH OF THE FINISH PLANS, NOT TRUE NORTH OF THE PROJECT SITE
7. CONTRACTOR TO PROTECT POLISHED CONCRETE FLOORING DURING CONSTRUCTION

FINISH KEY

REFER TO GS.01 FOR ADDITIONAL INFORMATION REGARDING FINISH MATERIALS AND PAINT FINISH CODES.

CLASSROOM 025 ← ROOM NAME / ROOM NUMBER

TYP FLOOR FINISH →	LVT01
WALL BASE FINISH →	BR01
TYP WALL FINISH →	PNT01
REMARKS →	1

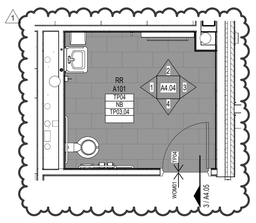
*REMARKS NUMBERS COORDINATED WITH FINISH REMARKS LEGEND LOCATED ON ALL FINISH FLOOR PLAN SHEETS

REFER TO PROJECT SPECIFICATIONS SECTION 01 6210 FOR ADDITIONAL INFORMATION REGARDING FINISH MATERIALS AND PAINT FINISH CODES.

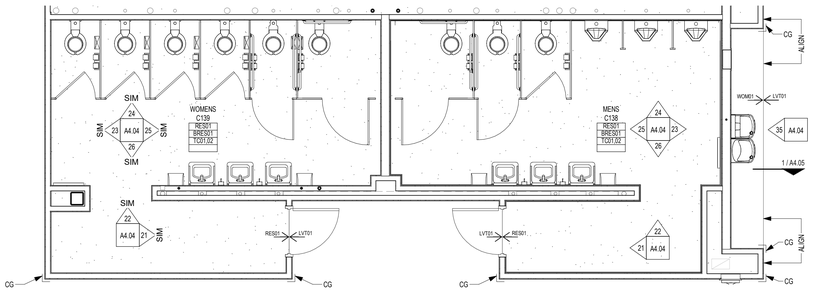
XY (MATERIAL TYPE) ## (FINISH, COLOR AND MATERIAL SIZE AS NOTED IN SPEC. SECTION 01 6210)

AL - ALUMINUM
BP - BASE, P**O**RCELAIN TILE
BRES - BASE, **RES**INOUS INTEGRAL
BRK - BRICK
BR - BASE, R**U**BBER
BTC - BASE, TILE, C**E**RAMIC
COP - CONCRETE P**O**LISHED
COS - CONCRETE **S**EALED
CPT - CAR**PE**T, SHEET
EPNT - EPOXY **PAINT**
FRP - FIBERGLASS R**E**INFORCED PLASTIC PANEL SYSTEM
LVT - LUXURY VINYL TILE
MB - MARKER B**O**ARD
MP - METAL WALL PANEL
MS - METAL **S**OFFIT
NB - NO BASE
PL - PLASTIC LAMINATE
PNT - PAINT
RES - RESINOUS FLOORING
RT - RUBBER TILE
RTR - RUBBER TREADS AND R**I**SERS
SPEC - SPECIAL FINISHES, REF. ROOM FINISH SCHEDULE & INTERIOR ELEVATIONS
SSM - SOLID **S**URFACE **M**ATERIAL
TB - TACK **B**OARD
TC - TILE, C**E**RAMIC
TP - TILE, P**O**RCELAIN
WOM - WALK-**O**FF **M**AT

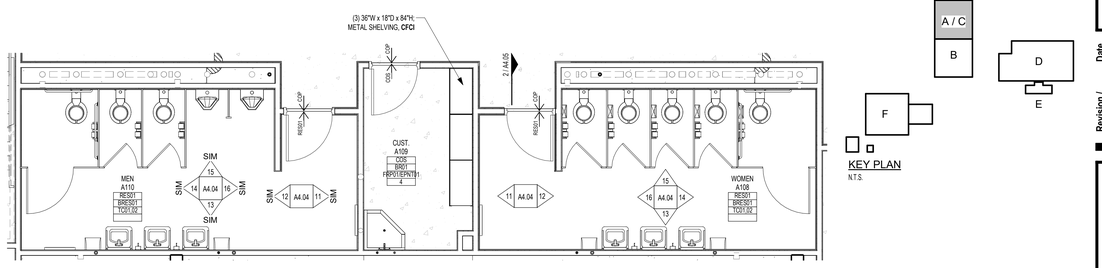
NOT ALL ABBREVIATIONS MAY BE USED



3 ENLARGED FINISH FLOOR PLAN - LEVEL 1 @ SINGLE RR
1/4" = 1'-0"

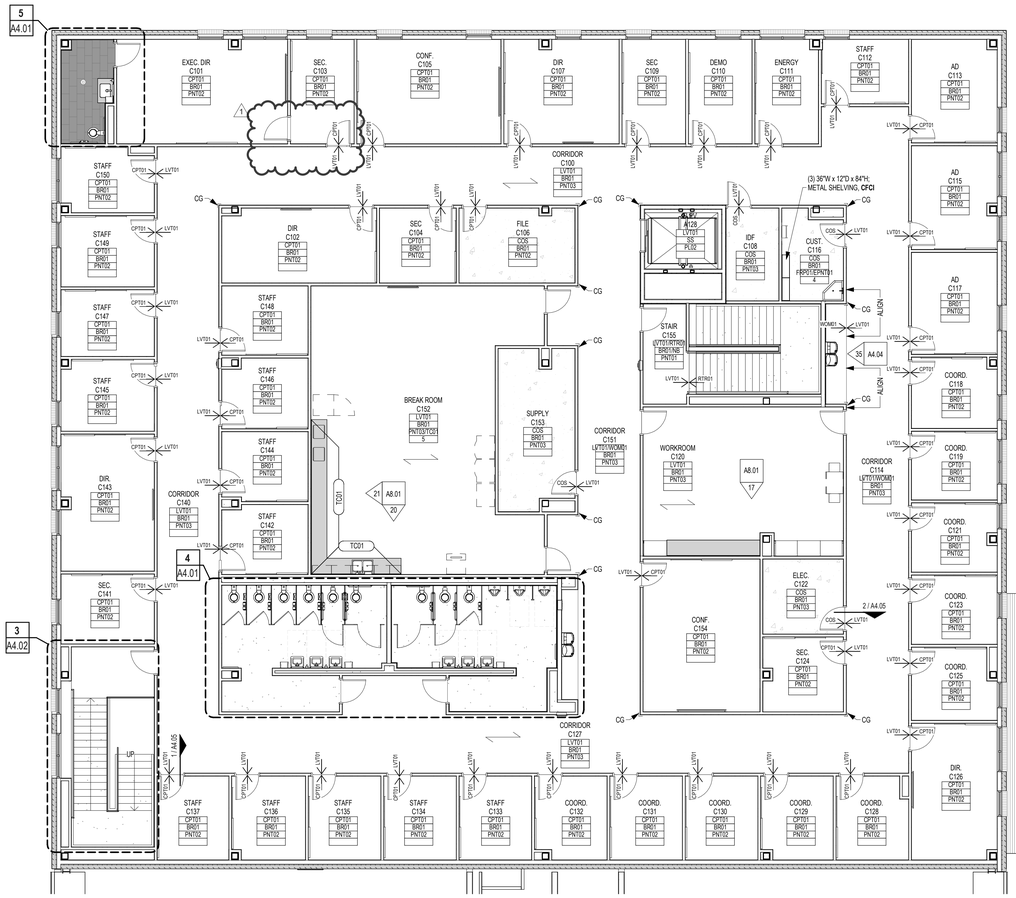


4 ENLARGED FINISH FLOOR PLAN - LEVEL 2 @ MULTI-USER RESTROOM
1/4" = 1'-0"

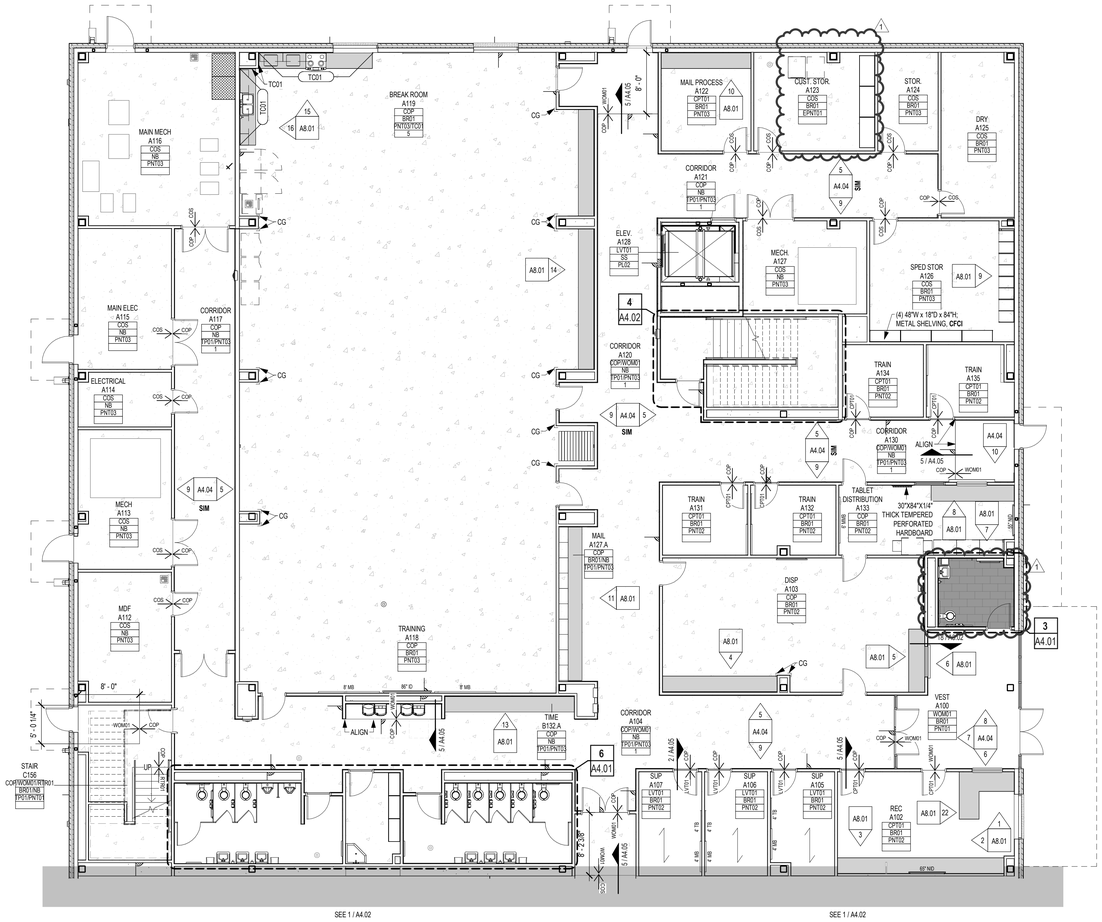


6 ENLARGED FINISH FLOOR PLAN - LEVEL 1 @ MULTI-USER RESTROOM
1/4" = 1'-0"

KEY PLAN
N.T.S.



2 FINISH FLOOR PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING
1/8" = 1'-0"



1 FINISH FLOOR PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING
1/8" = 1'-0"

N TRUE

N TRUE

Revision / 1 — Date 10/07/25 — ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT — DEREK R. BANKSTON — 31165 — STATE OF TEXAS
10/08/2025

Huckabee
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800.687.1229

FINISH PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING

Job No. 1971-05-01	Sheet No. A4.01
Drawn By: JT	
Date: 09/18/2025	

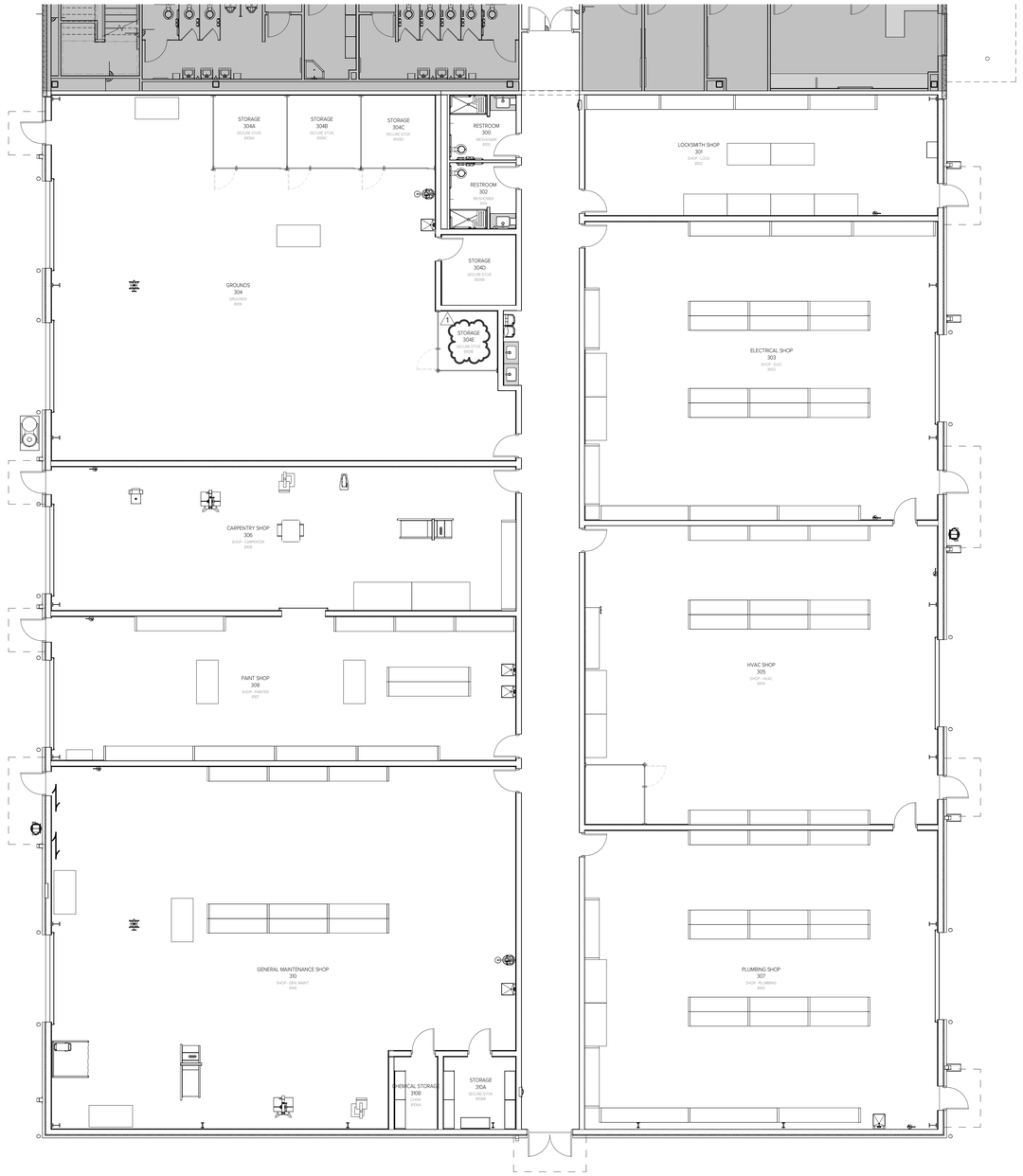
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Autodesk Docs://NEW CANEY ISD - NEW OPERATIONS BUILDING/19711-05-01_NCISD Trans. Ops Building_ARCH_v25.rvt

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ROOM SIGNAGE SCHEDULE - AREA B

CONSTRUCTION DOCUMENTS		NCISD SIGNAGE		SIGNAGE TYPE	SIGNAGE QUANTITY	BACKER PLATE	COMMENTS
NUMBER	NAME	NUMBER	NAME				
B100	RR/SHOWER	300	RESTROOM	C3	1		
B101	RR/SHOWER	302	RESTROOM	C3	1		
B102	SHOP - LOCK	301	LOCKSMITH SHOP	B1	2		EXTERIOR SIGNS
B103	SHOP - ELEC.	303	ELECTRICAL SHOP	B1	2		
B104	SHOP - HVAC	305	HVAC SHOP	B1	2		
B104A	SECURE STOR.	305A	STORAGE	B1	1	Yes	
B105	SHOP - PLUMBING	307	PLUMBING SHOP	B1	2		
B106	SHOP - GEN. MAINT.	310	GENERAL MAINTENANCE SHOP	B1	2		
B106A	CHEM.	310B	CHEMICAL STORAGE	B1	1		
B106B	SECURE STOR.	310A	STORAGE	B1	1		
B107	SHOP - PAINTER	308	PAINT SHOP	B1	2		
B108	SHOP - CARPENTER	306	CARPENTRY SHOP	B1	2		
B109	GROUNDS	304	GROUNDS	B1	2		
B109A	SECURE STOR.	304A	STORAGE	B1	1	Yes	
B109B	SECURE STOR.	304D	STORAGE	B1	1		
B109C	SECURE STOR.	304B	STORAGE	B1	1	Yes	
B109D	SECURE STOR.	304C	STORAGE	B1	1	Yes	
B109E	SECURE STOR.	304E	STORAGE	B1	1	Yes	

REF. SHEET A1.02 FOR CONTINUATION



1 SIGNAGE PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING
1/8" = 1'-0"

N TRUE

KEY PLAN
N.T.S.

	A / C	
F	B	D
		E

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT
DEREK R. DAMMERT
J7165
STATE OF TEXAS
10/08/2025

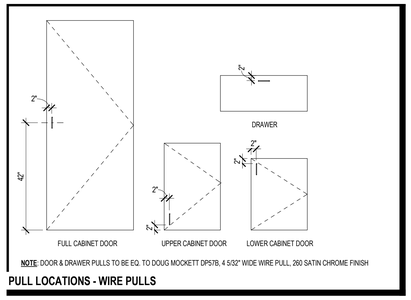
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SIGNAGE PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

Job No. 1971-05-01	Sheet No. A4.07
Drawn By: JT	
Date: 09/18/2025	

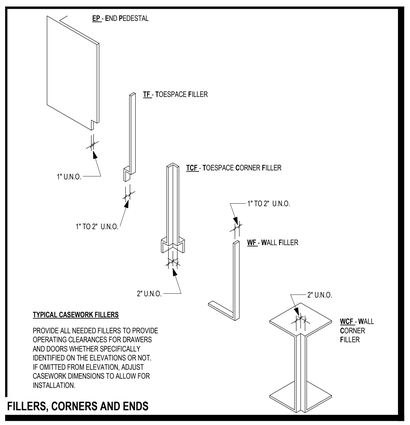
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Autodesk Docs://NEW CANEY ISD - NEW OPERATIONS BUILDING/1971-05-01_NCISD Trans_Ops Building_ARCH_v25.rvt

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NOTE: DOOR & DRAWER PULLS TO BE EQ. TO DOUG MOCKETT DP57B, 4 5/32" WIDE WIRE PULL, 260 SATIN CHROME FINISH

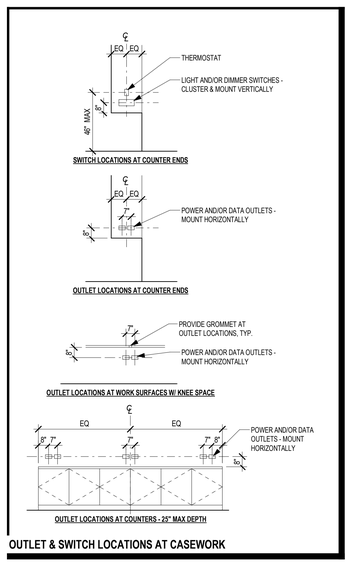
PULL LOCATIONS - WIRE PULLS



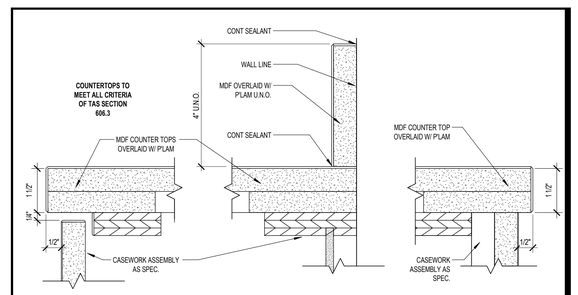
TYPICAL CASEWORK FILLERS

PROVIDE ALL NEEDED FILLERS TO PROVIDE OPERATING CLEARANCES FOR DRAWERS AND DOORS WHETHER SPECIFICALLY IDENTIFIED ON THE ELEVATIONS OR NOT. IF OMITTED FROM ELEVATION, ADJUST CASEWORK DIMENSIONS TO ALLOW FOR INSTALLATION.

FILLERS, CORNERS AND ENDS

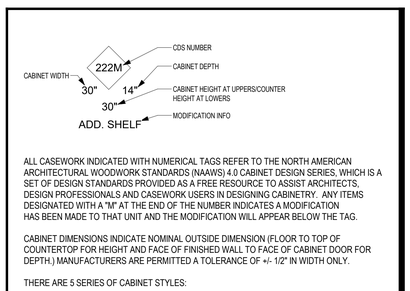


OUTLET & SWITCH LOCATIONS AT CASEWORK



P'LAM - COUNTERTOP/ EDGE DETAIL (SELF EDGE W/ WIDE BUILD UP) | **P'LAM - BACKSPLASH** | **P'LAM - COUNTERTOP/END (SELF EDGE W/ WIDE BUILD UP)**

COUNTERTOP DETAILS (6" = 1' - 0")



ALL CASEWORK INDICATED WITH NUMERICAL TAGS REFER TO THE NORTH AMERICAN ARCHITECTURAL WOODWORK STANDARDS (NAAWS) 4.0 CABINET DESIGN SERIES, WHICH IS A SET OF DESIGN STANDARDS PROVIDED AS A FREE RESOURCE TO ASSIST ARCHITECTS, DESIGN PROFESSIONALS AND CASEWORK USERS IN DESIGNING CABINETRY. ANY ITEMS DESIGNATED WITH A "M" AT THE END OF THE NUMBER INDICATES A MODIFICATION HAS BEEN MADE TO THAT UNIT AND THE MODIFICATION WILL APPEAR BELOW THE TAG.

CABINET DIMENSIONS INDICATE NOMINAL OUTSIDE DIMENSION (FLOOR TO TOP OF COUNTERTOP FOR HEIGHT AND FACE OF FINISHED WALL TO FACE OF CABINET DOOR FOR DEPTH.) MANUFACTURERS ARE PERMITTED A TOLERANCE OF +/- 1/2" IN WIDTH ONLY.

THERE ARE 5 SERIES OF CABINET STYLES:

100 SERIES = BASE CABINETS W/OUT DRAWERS
200 SERIES = BASE CABINETS W/ DRAWERS
300 SERIES = WALL HUNG CABINETS
400 SERIES = TALL STORAGE CABINETS
500 SERIES = TALL WARDROBE CABINETS

CASEWORK TYPE TAGS

1. COORDINATE DIMENSIONS AND CLEARANCE REQUIREMENTS FOR ALL FILE CABINETS, APPLIANCES AND EQUIPMENT PROVIDED BY CONTRACTOR AND/OR OWNER.
2. COORDINATE PLUMBING AND/OR ELECTRICAL REQUIREMENTS FOR APPLIANCES AND EQUIPMENT WITH CASEWORK.
3. PROVIDE TRIM AND FILLER PANELS WHERE EQUIPMENT IS LOCATED WITHIN CABINET UNITS.
4. COUNTERTOPS TO MEET THE CRITERIA PER TAS SECTION 606.3. LAVATORIES AND SINKS SHALL BE INSTALLED WITH THE HIGHER OF THE RIM OR COUNTER SURFACE 34 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
5. CONTINUE COUNTERTOP BACKSPLASH TO SIDEWALLS WHERE SUCH CONDITIONS OCCUR, UNLESS NOTED OTHERWISE.
6. ALL DOORS AND DRAWERS TO BE LOCKING U.N.O., KEY ALIKE INSIDE ROOM OR AT EACH KNEESPACE AND DIFFERENT BETWEEN ROOMS OR MULTIPLE KNEESPACES.
7. PROVIDE STAMPED NUMBER ON CYLINDER LOCK FACE. COORDINATE NUMBERING REQUIREMENT WITH ARCHITECT.
8. PROVIDE COUNTERTOP SUPPORT BRACKETS AT 36" O.C. MAX. AT KNEE SPACES AND LAVATORY COUNTERS, UNLESS NOTED OTHERWISE.
9. PROVIDE 2" DIA. GROMMETS AT ALL WORKSTATIONS WITH KNEE SPACES AND WHERE ACCESS TO POWER AND/OR LOW VOLTAGE IS NEEDED. COORDINATE FINAL LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
10. PROVIDE BOTTOM CLOSURE FOR FILLER PANELS AT TOE SPACE AND TOP AND BOTTOM OF UPPER WALL CABINETS TO FINISH COMPLETELY.
11. EXPOSED CORNERS AT PLASTIC LAMINATE COUNTERTOPS TO HAVE 1" RADIUS CORNERS. EXPOSED CORNERS AT QUARTZ/SOLID SURFACE COUNTERTOPS TO HAVE 1/2" RADIUS CORNERS. EXCLUDES WATERFALL COUNTERTOP CONDITIONS.
12. PROVIDE WALL BASE FOR RECESSED TOE-KICKS AND BACK OF KNEE SPACE(S) UNLESS NOTED OTHERWISE.
13. MILLWORK SHALL BE CAULKED TO WALLS W/ COLOR MATCHING SEALANT
14. CLOSE TOP AND BOTTOM VOIDS BETWEEN CORNER CABINETS AND FILLER PANELS WHERE BLIND CORNERS ARE NOT USED.
15. SPLICES ARE NOT PERMITTED ON COUNTERTOP LAMINATE MATERIAL LESS THAN 144" LONG.
16. ENSURE FILE DRAWERS ACCOMMODATE 8 1/2"x11" PENDAFLEX HANGING FILES WITH TABS FRONT TO REAR, TYP.

GENERAL CASEWORK NOTES

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

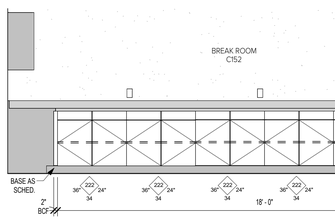


10/08/2025

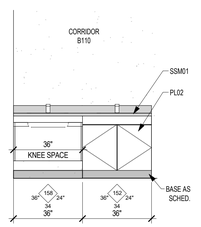
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CASEWORK LEGENDS AND ELEVATIONS

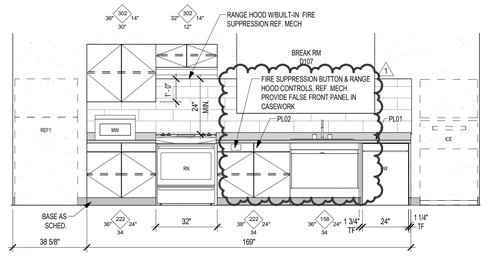
Job No.	Sheet No.
1971-05-01	A8.01
Drawn By: JT	
Date: 09/18/2025	



21 CASEWORK ELEVATION
3/8" = 1'-0"

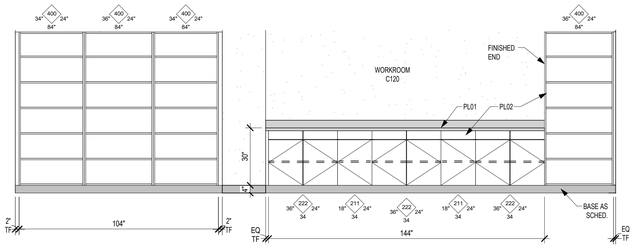


19 CASEWORK ELEVATION
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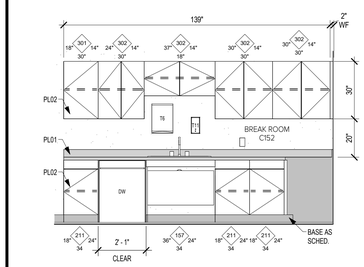


18 CASEWORK ELEVATION
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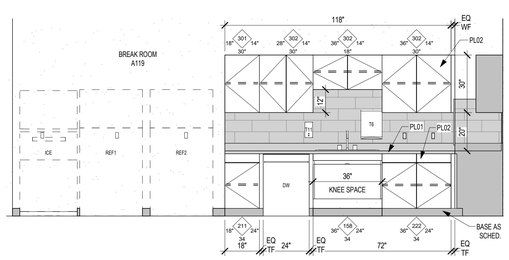
NOTE: LOCKS NOT NEEDED ON BREAK ROOM CASEWORK



17 CASEWORK ELEVATION
3/8" = 1'-0"

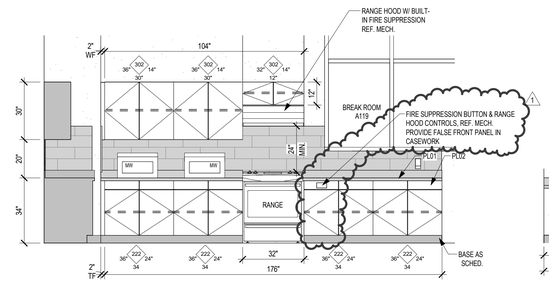


20 CASEWORK ELEVATION
3/8" = 1'-0"



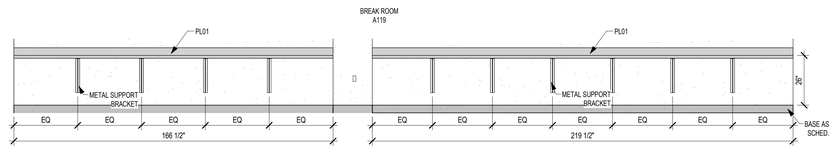
16 CASEWORK ELEVATION
3/8" = 1'-0"

NOTE: LOCKS NOT NEEDED ON BREAK ROOM CASEWORK

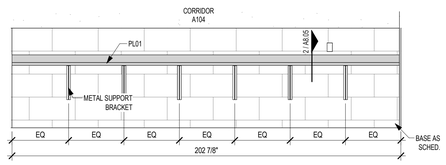


15 CASEWORK ELEVATION
3/8" = 1'-0"

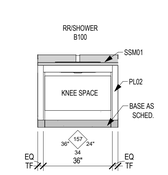
NOTE: LOCKS NOT NEEDED ON BREAK ROOM CASEWORK



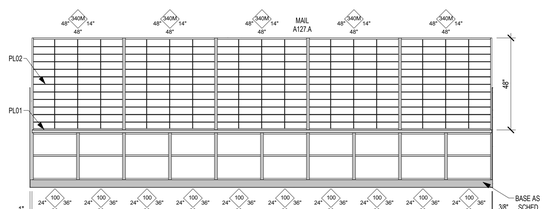
14 CASEWORK ELEVATION
3/8" = 1'-0"



13 CASEWORK ELEVATION
3/8" = 1'-0"

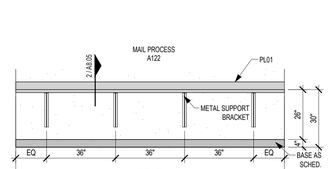


12 CASEWORK ELEVATION
3/8" = 1'-0"

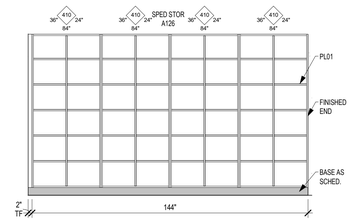


11 CASEWORK ELEVATION
3/8" = 1'-0"

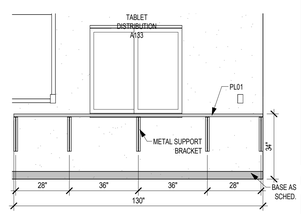
ALL MAIL SLOTS SHALL BE PROVIDED WITH SLIDE-IN NAME PLATE AND ADJUSTABLE SHELVES. 240 MAILBOX SLOTS, INSIDE CLEAR DIM TO BE VERIFIED IN FIELD



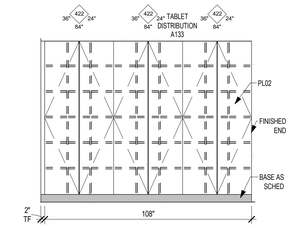
10 CASEWORK ELEVATION
3/8" = 1'-0"



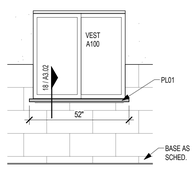
9 CASEWORK ELEVATION
3/8" = 1'-0"



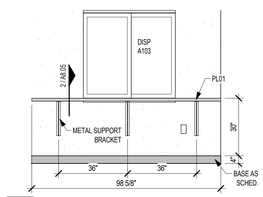
8 CASEWORK ELEVATION
3/8" = 1'-0"



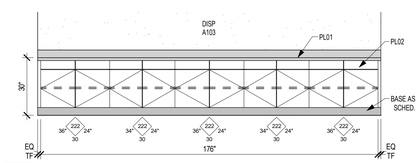
7 CASEWORK ELEVATION
3/8" = 1'-0"



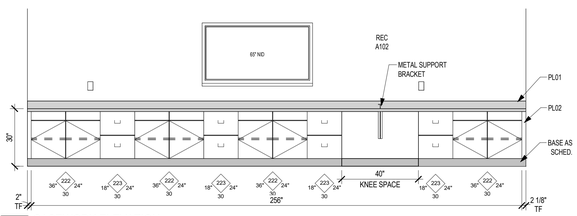
6 CASEWORK ELEVATION
3/8" = 1'-0"



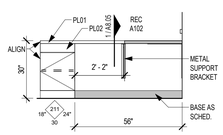
5 CASEWORK ELEVATION
3/8" = 1'-0"



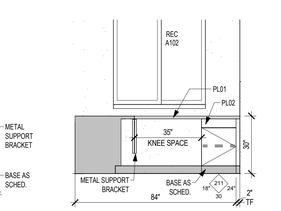
4 CASEWORK ELEVATION
3/8" = 1'-0"



3 CASEWORK ELEVATION
3/8" = 1'-0"



2 CASEWORK ELEVATION
3/8" = 1'-0"



1 CASEWORK ELEVATION
3/8" = 1'-0"

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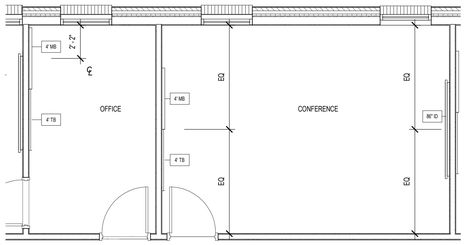
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A8 - EQUIPMENT SCHEDULE

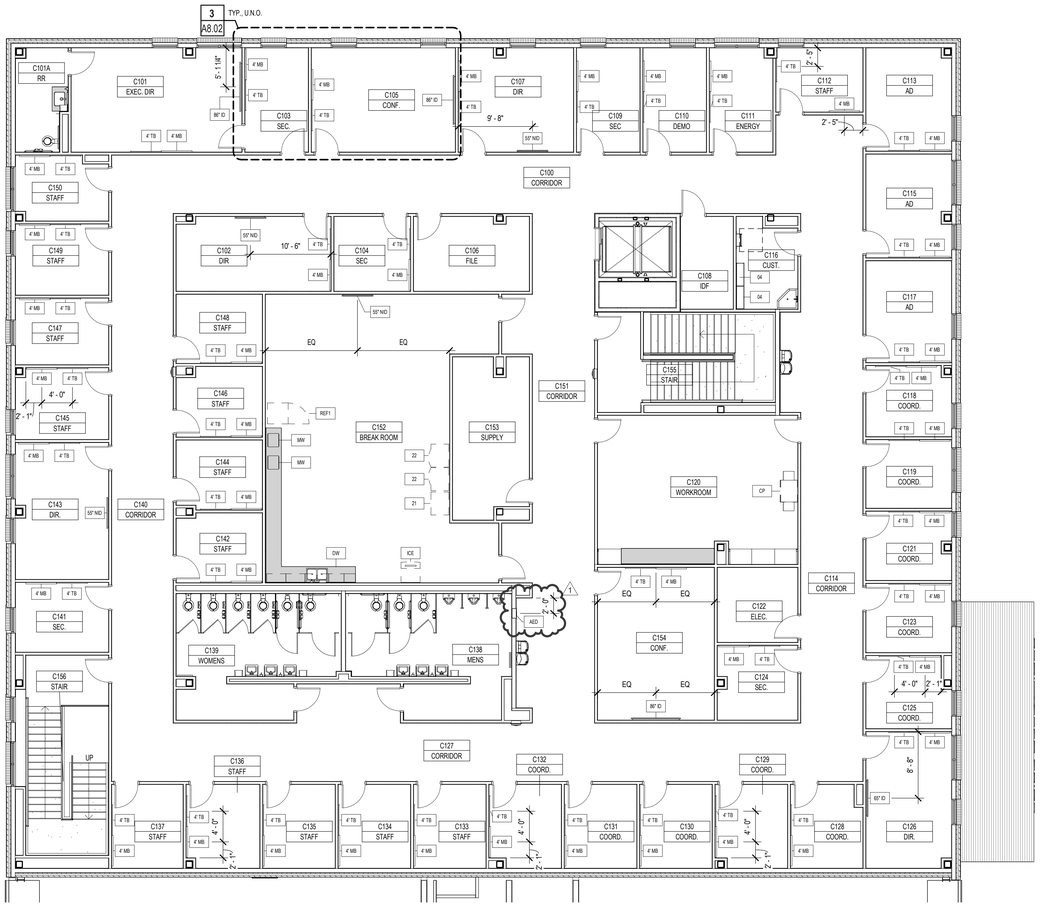
MARK	QTY	SPEC. SECTION	DESCRIPTION	RESPONSIBILITY	COMMENTS
CFCI					
01	5	10 2213	10' TALL WIRE MESH PARTITIONS	CFCI	LENGTH PER PLANS
02	5	10 2213	10' TALL WIRE MESH PARTITIONS W/ 3'-0" W X 7'-0" TALL SWING DOOR	CFCI	LENGTH PER PLANS
03	2	10 5100	METAL LOCKERS - (6)18x36 (DOUBLE TIER)	CFCI	
04	4	10 5613	METAL SHELVING 36"W x 12"D x 84"H	CFCI	
4' MB	48	10 1100	4' MARKER BOARD	CFCI	
4' TB	48	10 1100	4' TACK BOARD	CFCI	
05	38	10 5613	2'W X 10'H METAL SHELVING, LENGTH PER PLAN	CFCI	
06	11	10 5613	METAL SHELVING 48"W x 18"D x 84"H	CFCI	
6' MMB	1	10 5613	6' MAGNETIC MARKER BOARD	CFCI	
6' TB	1	10 5613	6' TACK BOARD	CFCI	
07	1	10 5613	4' x 12' FLOORING RACK	CFCI	
08	13	10 5613	4'W X 10'H PALLET RACK, LENGTH PER PLANS	CFCI	
8' MB	2	10 5613	8' MARKER BOARD	CFCI	
09	3	REF. PLUMB.	AIR COMPRESSOR	CFCI	
10	1	11 2336	COMMERCIAL DRYER/EXTRACTOR	CFCI	
11	1	11 2336	COMMERCIAL WASHER	CFCI	
12	1	23 3513	DUST COLLECTION SYSTEM	CFCI	
13	1	10 0100	60 GAL., 2 DOOR FLAMMABLE STORAGE CABINET (18" x 43" x 65")	CFCI	
14	2	22 4200	BARRIER-FREE EMERGENCY SHOWER & EYEWASH	CFCI	
15	2	EQ. TO NTH010-10 BY HARRINGTON	CHAIN HOIST - BEAM MOUNTED - MANUAL	CFCI	COORDINATE W/ PEMB MANUF.
16	3	14 4500	MECHANICAL EDGE OF DOCK LEVELER W/ BUMPERS	CFCI	
17	3	10 5613	METAL SHELVING 36"W x 18"D x 84"H	CFCI	
18	3	10 5613	METAL SHELVING 48"W x 24"D x 84"H	CFCI	
19	1	11 3013	RESIDENTIAL DRYER	CFCI	
20	1	11 3013	RESIDENTIAL WASHER	CFCI	
55" IND	6	27 4166	55" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDS-3055S-NIDS-S15
65" ID	1	27 4166	65" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6065A-UH40
65" NID	3	27 4166	65" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDS-NIO65-NIDS-S15
86" ID	2	27 4166	86" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6086A-UH40
AED	3	10 4313	DEFIBRILLATOR CABINET	CFCI	
BC	2	10 4300	BLEED CONTROL KIT	CFCI	
DW	3	11 3013	DISHWASHER	CFCI	
FE	15	10 4400	WALL HUNG FIRE EXTINGUISHER	CFCI	
FEC	9	10 4400	FIRE EXTINGUISHER CABINET	CFCI	
ICE	3	11 2336	COMMERCIAL ICE MACHINE	CFCI	
MW	5	11 3013	MICROWAVE	CFCI	
REF1	3	11 3013	REFRIGERATOR & FREEZER	CFCI	
REF2	1	11 3013	FULL HEIGHT REFRIGERATR ONLY	CFCI	
RN	2	11 3013	ELECTRIC RANGE W/ FIRE SUPPRESSION HOOD	CFCI	

A8 - EQUIPMENT SCHEDULE

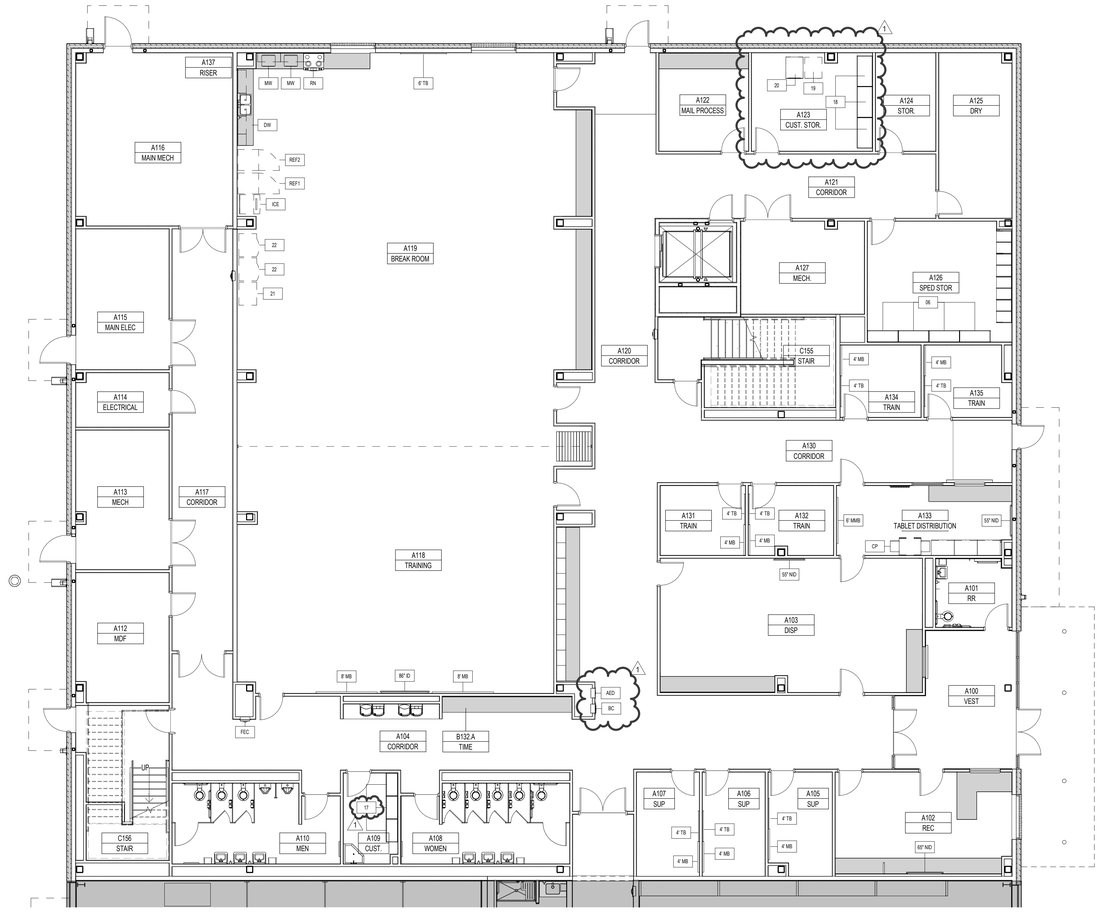
MARK	QTY	SPEC. SECTION	DESCRIPTION	RESPONSIBILITY	COMMENTS
NIC					
21	3		VENDING MACHINE - SNACKS	NIC	
22	5		VENDING MACHINE - DRINKS	NIC	
23	19		72" X 36" WORK BENCH ON CASTERS	NIC	
24	7		4' X 8' UTILITY TABLE	NIC	
25	2		TABLE SAW	NIC	
26	2		RADIAL ARM SAW	NIC	
27	2		BAND SAW (VERTICAL)	NIC	
29	1		DRILL PRESS	NIC	
30	1		WELDING BOOTH	NIC	
31	1		WORK BENCH W / VISE & TOOL STORAGE	NIC	
32	1		DRUM SANDER	NIC	
33	1		WOOD PLANER	NIC	
CP	2		COPIER	NIC	



3 ENLARGED EQUIPMENT PLAN - TYPICAL DIMENSIONS FOR OFFICES & CONF RMS
1/4" = 1'-0"

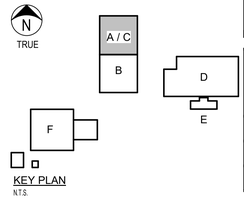


2 ENLARGED EQUIPMENT PLAN - TYPICAL DIMENSIONS FOR OFFICES & CONF RMS
1/8" = 1'-0"



REF. SHEET A1.03 FOR CONTINUATION

1 EQUIPMENT PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING
1/8" = 1'-0"



KEY PLAN
N.T.S.

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT — DEREK R. BANKSTON — 37165 — STATE OF TEXAS
10/08/2025

Huckabee
www.huckabee-inc.com
800.687.1229

EQUIPMENT PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING

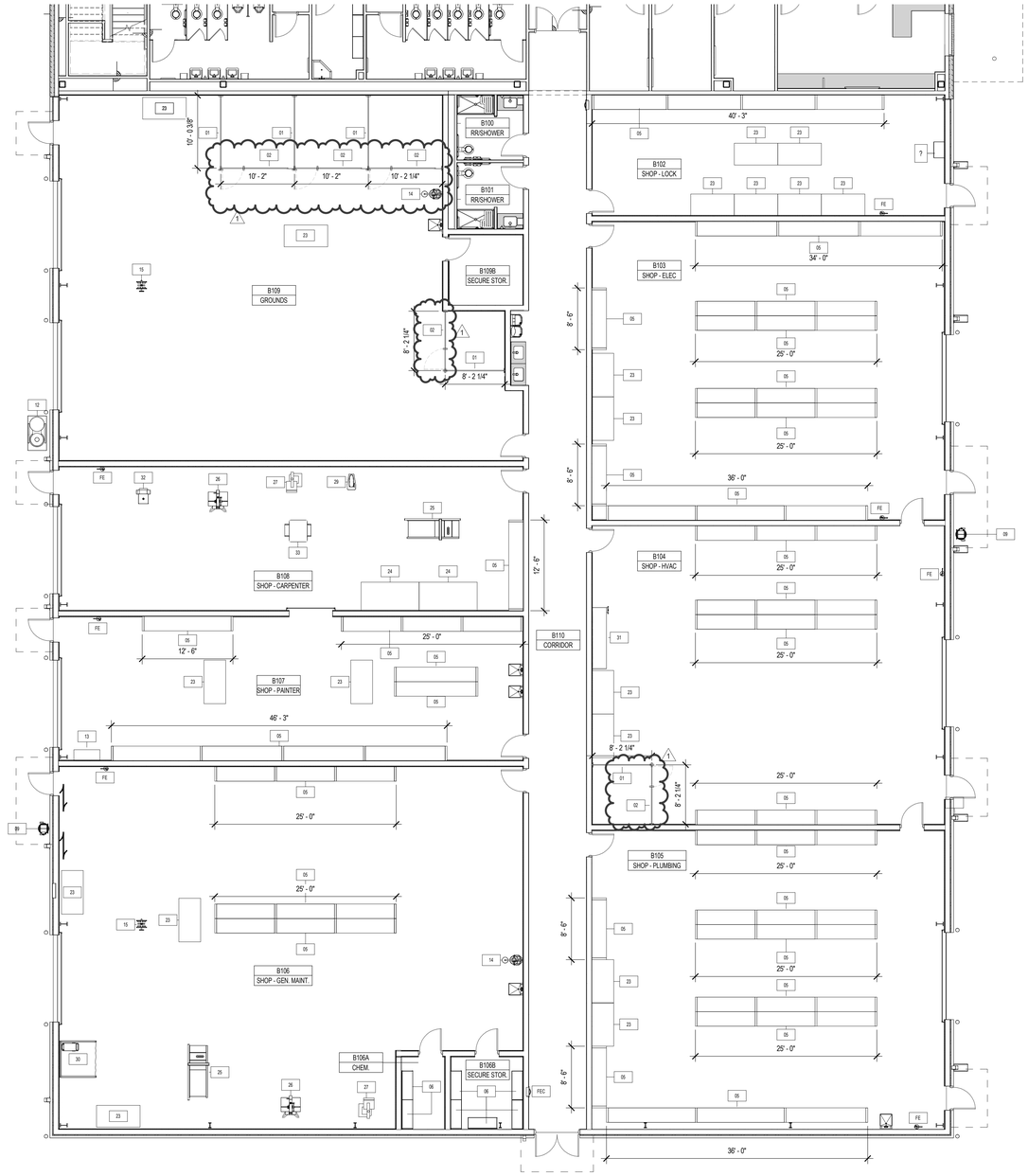
Job No.	Sheet No.
1971-05-01	A8.02
Drawn By: JT	
Date: 09/18/2025	

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A8 - EQUIPMENT SCHEDULE

MARK	QTY	SPEC. SECTION	DESCRIPTION	RESPONSIBILITY	COMMENTS
CFCI					
01	5	10 2213	10' TALL WIRE MESH PARTITIONS	CFCI	LENGTH PER PLANS
02	5	10 2213	10' TALL WIRE MESH PARTITIONS W/ 3'-0" W X 7'-0" TALL SWING DOOR	CFCI	LENGTH PER PLANS
03	3	10 0100	METAL LOCKING TOWELS BOUDOIR TIER	CFCI	
04	4	10 5613	METAL SHELVING 36"W x 12"D x 84"H	CFCI	
4' MB	48	10 1100	4' MARKER BOARD	CFCI	
4' TB	48	10 1100	4' TACK BOARD	CFCI	
05	38	10 5613	2'W X 10'H METAL SHELVING, LENGTH PER PLAN	CFCI	
06	11	10 5613	METAL SHELVING 48"W x 18"D x 84"H	CFCI	
6' MMB	1	10 5613	6' MAGNETIC MARKER BOARD	CFCI	
6' TB	1	10 5613	6' TACK BOARD	CFCI	
07	1	10 5613	4' x 12' FLOORING RACK	CFCI	
08	13	10 5613	4'W X 10'H PALLET RACK, LENGTH PER PLANS	CFCI	
8' MB	2	10 5613	8' MARKER BOARD	CFCI	
09	3	REF. PLUMB.	AIR COMPRESSOR	CFCI	
10	1	11 2336	COMMERCIAL DRYER/EXTRACTOR	CFCI	
11	1	11 2336	COMMERCIAL WASHER	CFCI	
12	1	23 3513	DUST COLLECTION SYSTEM	CFCI	
13	1	10 0100	60 GAL., 2 DOOR FLAMMABLE STORAGE CABINET (18" x 43" x 65")	CFCI	
14	2	22 4200	BARRIER-FREE EMERGENCY SHOWER & EYEWASH	CFCI	
15	2	EQ. TO MTH010-10 BY HARRINGTON	CHAIN HOIST - BEAM MOUNTED - MANUAL	CFCI	COORDINATE W/ PEMB MANUF.
16	2	44 1500	MECHANICAL EDGE OF DOCK LEVELER W/ BUMPERS	CFCI	
17	3	10 5613	METAL SHELVING 36"W x 18"D x 84"H	CFCI	
18	3	10 5613	METAL SHELVING 48"W x 24"D x 84"H	CFCI	
19	1	11 3013	RESIDENTIAL DRYER	CFCI	
20	1	11 3013	RESIDENTIAL WASHER	CFCI	
55" NID	6	27 4166	55" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDS-3055-NIDS-S15
65" ID	1	27 4166	65" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6065A+UH40
65" NID	3	27 4166	65" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDS-NIO65-NIDS-S15
86" ID	4	27 4166	86" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6086A+UH40
AED	3	10 4313	DEFIBRILLATOR CABINET	CFCI	
BC	2	10 4300	BLED CONTROL KIT	CFCI	
DW	3	11 3013	DISHWASHER	CFCI	
FE	15	10 4400	WALL HUNG FIRE EXTINGUISHER	CFCI	
FEC	9	10 4400	FIRE EXTINGUISHER CABINET	CFCI	
ICE	3	11 2336	COMMERCIAL ICE MACHINE	CFCI	
MW	5	11 3013	MICROWAVE	CFCI	
REF1	3	11 3013	REFRIGERATOR & FREEZER	CFCI	
REF2	1	11 3013	FULL HEIGHT REFRIGERATR ONLY	CFCI	
RN	2	11 3013	ELECTRIC RANGE W/ FIRE SUPPRESSION HOOD	CFCI	
NIC					
21	3		VENDING MACHINE - SNACKS	NIC	
22	5		VENDING MACHINE - DRINKS	NIC	
23	19		72" X 36" WORK BENCH ON CASTERS	NIC	
24	7		4' X 8' UTILITY TABLE	NIC	
25	2		TABLE SAW	NIC	
26	2		RADIAL ARM SAW	NIC	
27	2		BAND SAW (VERTICAL)	NIC	
29	1		DRILL PRESS	NIC	
30	1		WELDING BOOTH	NIC	
31	1		WORK BENCH W / VISE & TOOL STORAGE	NIC	
32	1		DRUM SANDER	NIC	
33	1		WOOD PLANER	NIC	
CP	2		COPIER	NIC	



1 EQUIPMENT PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING
1/8" = 1'-0"

N TRUE

KEY PLAN
N.T.S.

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT
DEREK R. BANKHEAD
31169
STATE OF TEXAS
10/08/2025

Huckabee
www.huckabee-inc.com
800.687.1229

EQUIPMENT PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

Job No.	Sheet No.
1071-05-01	A8.03
Drawn By: JT	
Date: 09/18/2025	

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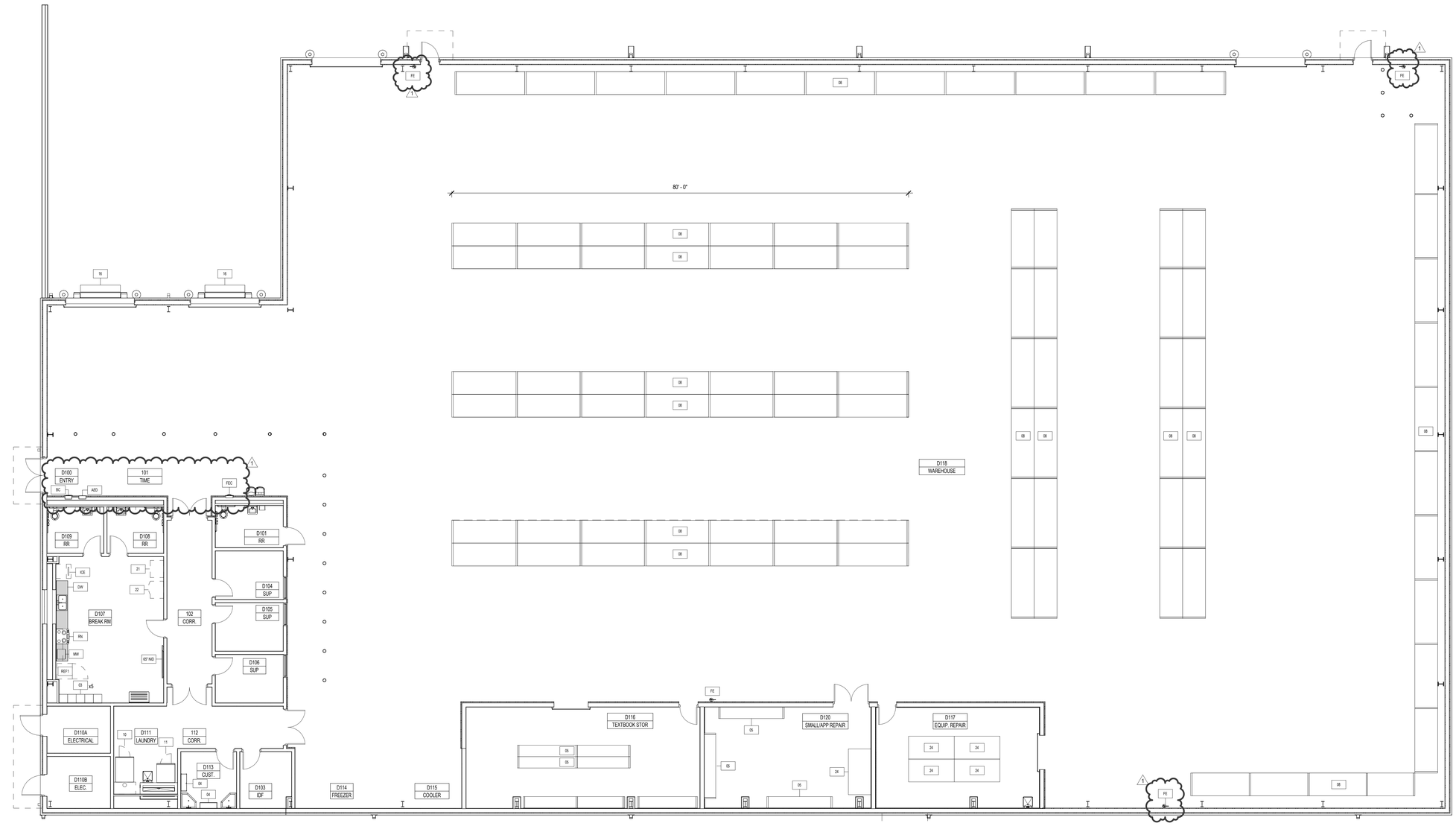
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A8 - EQUIPMENT SCHEDULE

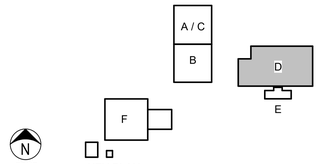
MARK	QTY	SPEC. SECTION	DESCRIPTION	RESPONSIBILITY	COMMENTS
CFCI					
01	5	10 2213	10' TALL WIRE MESH PARTITIONS	CFCI	LENGTH PER PLANS
02	5	10 2213	10' TALL WIRE MESH PARTITIONS W/ 3'-0" W X 7'-0" TALL SWING DOOR	CFCI	LENGTH PER PLANS
03	2	10 5100	METAL LOCKERS - (6)18Wx36 (DOUBLE TIER)	CFCI	
04	4	10 5613	METAL SHELVING 36"W x 12"D x 84"H	CFCI	
4' MB	48	10 1100	4' MARKER BOARD	CFCI	
4' TB	48	10 1100	4' TACK BOARD	CFCI	
05	38	10 5613	2'W X 10'H METAL SHELVING, LENGTH PER PLAN	CFCI	
06	11	10 5613	METAL SHELVING 48"W x 18"D x 84"H	CFCI	
6' MMB	1	10 5613	6' MAGNETIC MARKER BOARD	CFCI	
6' TB	1	10 5613	6' TACK BOARD	CFCI	
07	1	10 5613	4' x 12' FLOORING RACK	CFCI	
08	13	10 5613	4'W X 10'H PALLET RACK, LENGTH PER PLANS	CFCI	
8' MB	2	10 5613	8' MARKER BOARD	CFCI	
09	3	REF. PLUMB.	AIR COMPRESSOR	CFCI	
10	1	11 2336	COMMERCIAL DRYER/EXTRACTOR	CFCI	
11	1	11 2336	COMMERCIAL WASHER	CFCI	
12	1	23 3513	DUST COLLECTION SYSTEM	CFCI	
13	1	10 0100	60 GAL., 2 DOOR FLAMMABLE STORAGE CABINET (18" x 43" x 65")	CFCI	
14	2	22 4200	BARRIER-FREE EMERGENCY SHOWER & EYEWASH	CFCI	
15	2	EQ. TO NTH010-10 BY HARRINGTON	CHAIN HOIST - BEAM MOUNTED - MANUAL	CFCI	COORDINATE W/ PEMB MANUF.
16	2	11 1600	MECHANICAL EDGE OF DOCK LEVELER W/ BUMPERS	CFCI	
17	3	10 5613	METAL SHELVING 36"W x 18"D x 84"H	CFCI	
18	3	10 5613	METAL SHELVING 48"W x 24"D x 84"H	CFCI	
19	1	11 3013	RESIDENTIAL DRYER	CFCI	
20	1	11 3013	RESIDENTIAL WASHER	CFCI	
55" NID	1	27 4166	55" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDC-3055FNIDS-S15
65" ID	1	27 4166	65" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6065A+UH40
65" NID	3	27 4166	65" DIGITAL DISPLAY - CLEAR TOUCH NIO	CFCI	CDS-NIO65-NIDS-S15
86" ID	1	27 4166	86" INTERACTIVE DISPLAY - CLEAR TOUCH 6000A+ SERIES	CFCI	CTI-6086A+UH40
AED	3	10 4313	DEFIBRILLATOR CABINET	CFCI	
BC	2	10 4300	BLEED CONTROL KIT	CFCI	
DW	2	11 3010	DISHWASHER	CFCI	
FE	15	10 4400	WALL HUNG FIRE EXTINGUISHER	CFCI	
FEC	9	10 4400	FIRE EXTINGUISHER CABINET	CFCI	
ICE	3	11 2336	COMMERCIAL ICE MACHINE	CFCI	
MW	5	11 3013	MICROWAVE	CFCI	
REF1	3	11 3013	REFRIGERATOR & FREEZER	CFCI	
REF2	1	11 3013	FULL HEIGHT REFRIGERATR ONLY	CFCI	
RN	2	11 3013	ELECTRIC RANGE W/ FIRE SUPPRESSION HOOD	CFCI	

A8 - EQUIPMENT SCHEDULE

MARK	QTY	SPEC. SECTION	DESCRIPTION	RESPONSIBILITY	COMMENTS
NIC					
21	3		VENDING MACHINE - SNACKS	NIC	
22	5		VENDING MACHINE - DRINKS	NIC	
23	19		72" X 36" WORK BENCH ON CASTERS	NIC	
24	7		4' X 8' UTILITY TABLE	NIC	
25	2		TABLE SAW	NIC	
26	2		RADIAL ARM SAW	NIC	
27	2		BAND SAW (VERTICAL)	NIC	
29	1		DRILL PRESS	NIC	
30	1		WELDING BOOTH	NIC	
31	1		WORK BENCH W/ VISE & TOOL STORAGE	NIC	
32	1		DRUM SANDER	NIC	
33	1		WOOD PLANER	NIC	
CP	2		COPIER	NIC	



1 EQUIPMENT PLAN - LEVEL 1 - AREA D - WAREHOUSE
1/8" = 1'-0"



KEY PLAN
N.T.S.

N TRUE

Revision /	Date	
1	10/07/25	ADDENDUM 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

REGISTERED ARCHITECT DEREK R. BARRON J1165 STATE OF TEXAS

10/08/2025

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EQUIPMENT PLAN - LEVEL 1 - AREA D - WAREHOUSE

Job No.	Sheet No.
1971-05-01	A8.04
Drawn By: JT	
Date: 09/18/2025	

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EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS REFRIGERANT FOR PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT) - INSTALL AND INTERCONNECT TO DISHMACHINE .
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
21. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
22. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. (IF WALK-IN IS PROVIDED IN THIS PROJECT) WALK-IN MANUFACTURER IS TO PROVIDE TWO (2) EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. WALK-IN MANUFACTURER WILL INSTALL ONE(1) LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND PROVIDE THE SECOND UNIT LOOSE FOR INSTALLATION BY DIVISION 26 LOCATED IN THE CAFETORIUM (DIVISION 26 TO COORDINATE LOCATION WITH OWNERS AND ARCHITECT). DIVISION 26 IS TO PROVIDE ALL CONDUIT AND WIRING REQUIRED AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (CRITICAL). COORDINATE WITH DIVISION 27. REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).
29. GFCI BREAKER FOR ALL RECEPTACLES UNDER EXHAUST HOODS (IF HOODS ARE PROVIDED IN THE PROJECT), AND HOLDING CABINETS (IF HOLDING CABINETS ARE PROVIDED IN THIS PROJECT), TO BE LOCATED WITHIN KITCHEN'S ELECTRICAL BREAKER PANEL AND NOT AT THE RECEPTACLES.
30. REMOTE GFCI RESET SWITCHES TO BE ACCESSIBLE TO USER.
31. ALL ELECTRICAL BELOW EXHAUST HOOD (IF HOODS ARE PROVIDED IN THE PROJECT) ARE TO HAVE SHUNT TRIP BREAKERS.
32. INTERCONNECT TEMP SENSOR TO EXHAUST / SUPPLY FANS (IF HOODS ARE PROVIDED IN THE PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS AND FOOD SERVICE GENERAL SPECS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE. IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL REQUIREMENTS, REFER TO THE PLUMBING ENGINEER'S DRAWINGS AND FOOD SERVICE GENERAL SPECS.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

NOTE: MECHANICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FORTHE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 23. FOR ADDITIONAL REQUIREMENTS, REFER TO THE MECHANICAL ENGINEER'S DRAWINGS AND FOOD SERVICE GENERAL SPECS.

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

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FS GENERAL COORDINATION NOTES

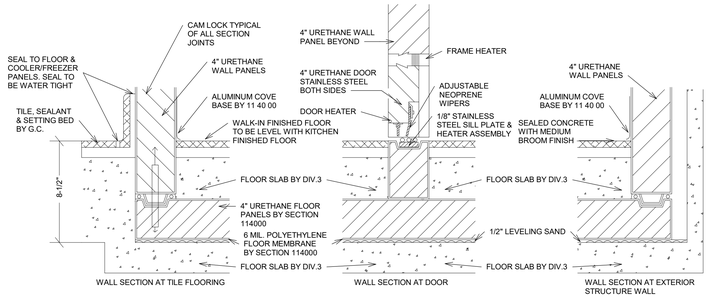
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Job No. 1971-05-01	Sheet No. ISSUED FOR BID QF1
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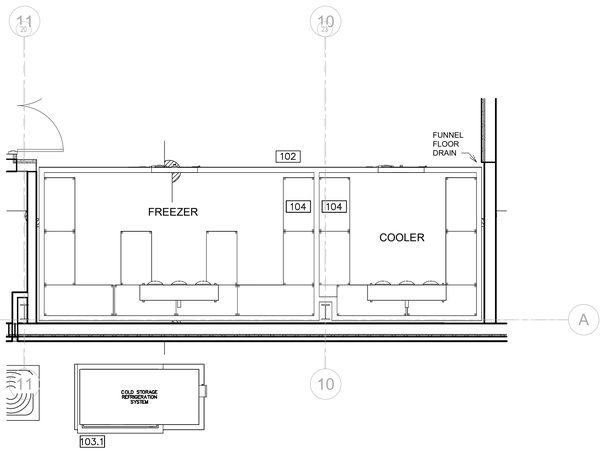
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FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
QF1	FS GENERAL COORDINATION NOTES
QF1.0	FS EQUIPMENT PLAN
QF1.1	FS FACILITY MODEL
QF1.2	FS CONDENSING UNITS
QF1.3	FS WALK-INS



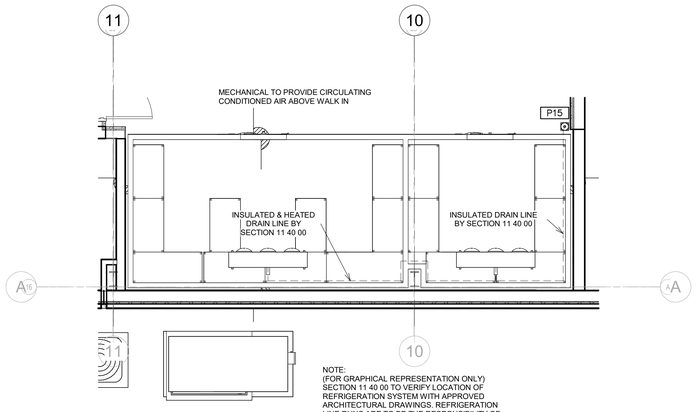
NOTE:
FLOOR SLAB COLD STORAGE ASSEMBLIES TO BE DEAD LEVEL
REFER TO SPECIFICATIONS FOR EXTERIOR/INTERIOR FINISH OF WALL PANELS.

3 COLD STORAGE ASSEMBLY 8 1/2" DEPRESSION DETAIL
NOT TO SCALE



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE - KITCHEN			
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH...			
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS
102	1	COLD STORAGE ASSEMBLY	
103.1	1	REFRIGERATION SYSTEM-LARGE	
104	2	COLD STORAGE SHELVING	

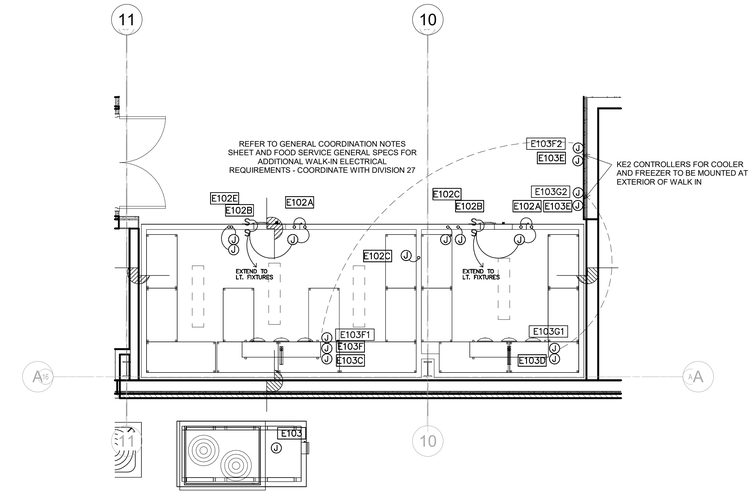


7 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

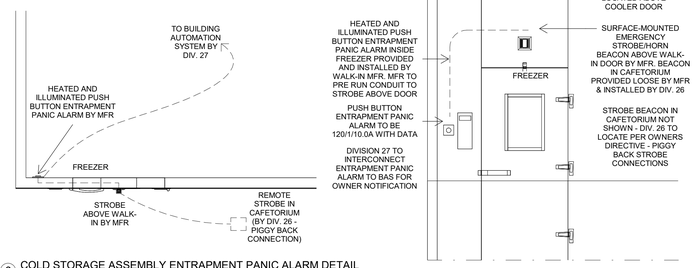
FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---

2 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

4 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE

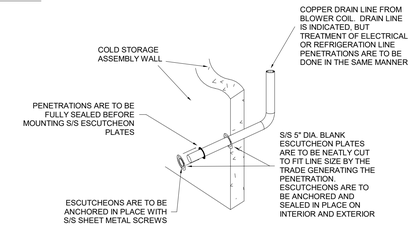


8 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"



6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE

FOOD SERVICE ELECTRICAL SCHEDULE									
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES									
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC; INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND OWNER DESIGNATED LOCATION
E103	JB	34.6A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC; WEATHERPROOF DISCONNECT SWITCH
E103C	JB	11.9A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	2.0A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E103F1	JB	---	---	---	KE2 FREEZER EVAPORATOR CONTROL BOARD	CLG	DFA	BTC - FREEZER FIELD MOUNTED CONTROLLER; ROUTE TO CONTROLLER ABOVE DOOR E103F2
E103F2	JB	---	---	---	KE2 FREEZER EVAPORATOR CONTROL BOARD	CLG	DFA	BTC - FREEZER FIELD MOUNTED CONTROLLER; ROUTE FROM EVAPORATOR COIL E103F1
E103G1	JB	---	---	---	KE2 COOLER EVAPORATOR CONTROL BOARD	CLG	DFA	BTC - COOLER FIELD MOUNTED CONTROLLER; ROUTE TO CONTROLLER ABOVE DOOR E103G2
E103G2	JB	---	---	---	KE2 COOLER EVAPORATOR CONTROL BOARD	CLG	DFA	BTC - COOLER FIELD MOUNTED CONTROLLER; ROUTE FROM EVAPORATOR COIL E103G1



5 COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
NOT TO SCALE

9 COLD STORAGE ASSEMBLY ESCUTCHEON & PENETRATION DETAIL
NOT TO SCALE

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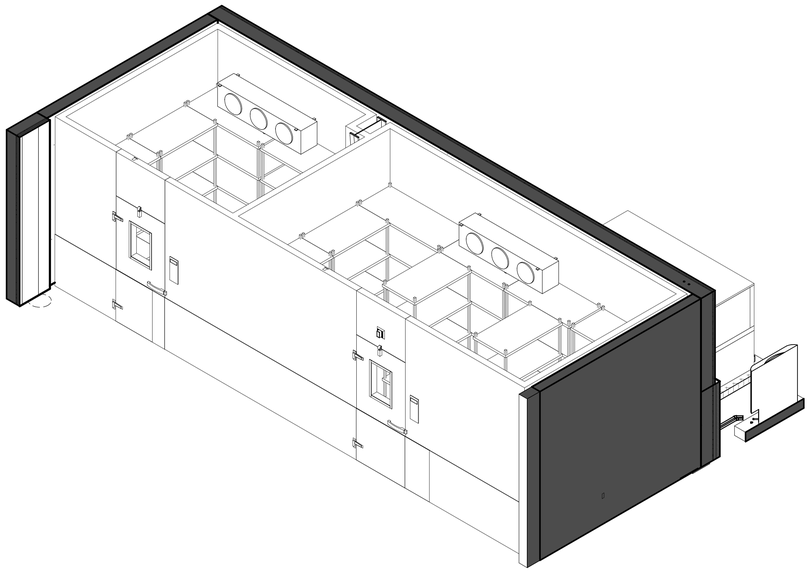
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FS EQUIPMENT PLAN

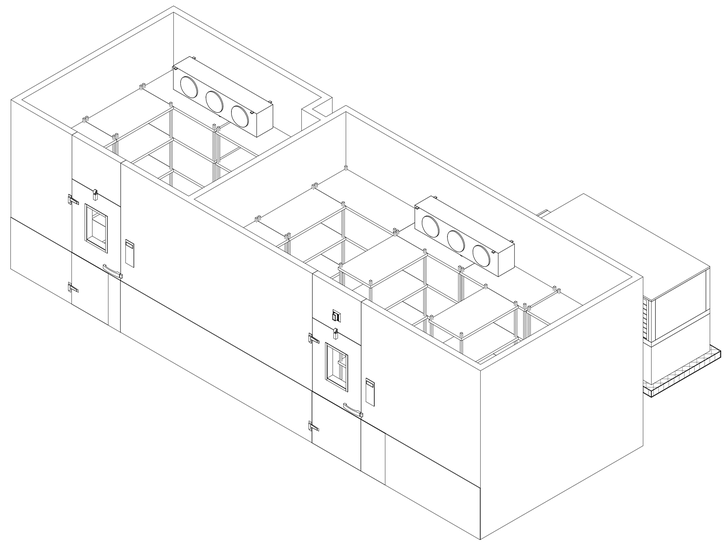
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1 FS FACILITY MODEL



2 FS EQUIPMENT MODEL

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FS FACILITY MODEL

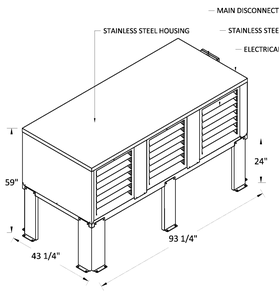
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MODEL NO. ROAM01012L01016T3F OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCH
- (2) DOOR SENSORS (SHIPPED LOOSE)
- 24" LEGS W/ SKIRT (SHIPPED LOOSE)

RACK WEIGHT: 775 LBS.

ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 34.6 AMPS

MOPD: 50 AMP
MINIMUM CIRCUIT AMPACITY: 39.5

SYSTEM	ITEM #	DESCRIPTION	FIXTURES TEMP °F FIXT.	FIXTURES TEMP °F SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R.	CONDENSING UNIT COMPRESSOR MODEL NO.	RATING @ 60 HZ RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	ESTIMATED REFRIGERANT CHARGE	CONDENSER	EVAPORATOR COILS ITEM #	MODEL NO.	QTY	FAN MOTORS @ 60 HZ RLA	V	PH	HEATERS @ 60 HZ RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES TSTAT	SOL. VALVE	EXP. V.L.V.	CHECK VALVE	SHUT-OFF V.V.	REFRIGERANT LINE SIZES (IN) SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	W// COOLER	35	25	11063	454A	Y511KAE	11.2	208	3	11700	Z	4.3	L1R	103	KLP212MA	1	2.0	115	1				O.C.	ECOSMART	1	F	F	EF	L	L	5/8	5/8	3/8	100	M	11.2
B	102	W// FREEZER	-10	-20	14848	454A	YF15KAE	23.4	208	3	16200	Z	4.3	L5R	103	KLP316LE	1	1.8	208	1	11.9	208	1	ELEC	ECOSMART	1	F	F	EF	L	L	7/8	7/8	3/8	100	M	23.4

ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

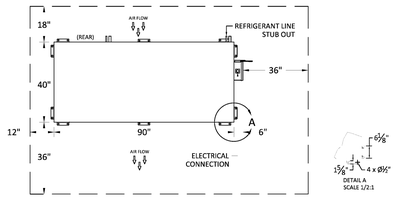
COMPRESSOR TYPE
Z SCROLL
H HERMETIC
S SEMI-HERMETIC
D DISCUS

DEFROST TYPE
O.C. OFF CYCLE
ELEC ELECTRIC

LINE TYPE
M MAIN - UP TO 100'
B BRANCH - UP TO 50'
T TRUNK - UP TO 200'

EVAPORATOR ACCESSORIES
EF EEV FACTORY EQUIPPED ON EVAP
TF TXV FACTORY EQUIPPED ON EVAP
F FACTORY EQUIPPED ON EVAP
O PROVIDED BY OTHERS
L LOOSE (FIELD INSTALLATION)

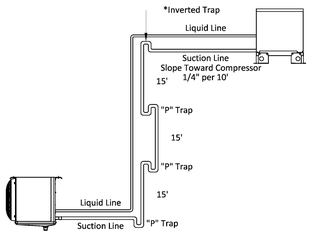
PLANVIEW/ CLEARANCE REQUIREMENTS



NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION

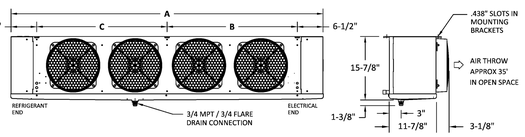
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

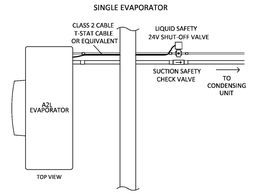
EVAPORATOR DETAILS - MODEL KLP



AIR DEFROST Size	DIMENSIONS A Inches	B Inches	C Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
212MA	46-1/4	33-1/4	-	1/2 OD	7/8 ID	3/4	74	2	2.0	1.2

ELECTRIC DEFROST Size	DIMENSIONS A Inches	B Inches	C Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/1
316LE	62-1/4	49-1/4	-	1/2 OD	1-1/8 ID	3/4	115	3	1.8	11.9	7.7	N/A

EVAPORATOR RDS PIPING DIAGRAM



EACH EVAPORATOR COIL:
- EQUIPPED WITH TWO LEAK SENSORS, PRE-MOUNTED AND PRE-WIRED
- SUPPLIED WITH A LIQUID LINE SHUT-OFF VALVE AND SUCTION LINE CHECK VALVE, SHIPPED LOOSE FOR FIELD INSTALL, LOCATED OUTSIDE OF COMPARTMENTS AND NO MORE THAN 10' FROM EVAPORATOR COIL.

PREMIERPAK ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "PREMIERPAK", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel-expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

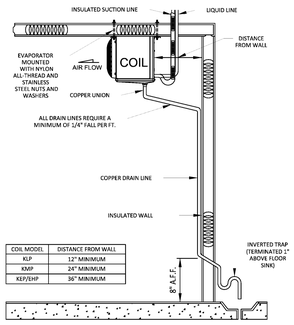
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

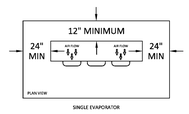
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
KLP	12" MINIMUM
KMP	24" MINIMUM
KEP/EHP	36" MINIMUM

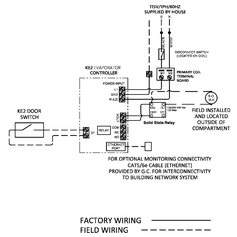
EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - KLP)



WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

ITEM	DESCRIPTION	VOLTAGE
103	W// COOLER	115/1

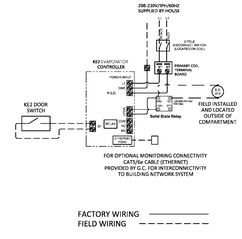


FACTORY WIRING ———————
FIELD WIRING - - - - - - -

WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

ITEM	DESCRIPTION	VOLTAGE
103	W// FREEZER	208/1



FACTORY WIRING ———————
FIELD WIRING - - - - - - -

APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

☐ APPROVED FOR FABRICATION NO CHANGES
☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	09-25-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals
The Woodlands, TX

Dealer
-
-

New Caney ISD Operations & Transportation
New Caney, TX

Project No: 32429
Designed By: L. Aguirre
Drawn By: L. Aguirre
Sheet 1.1 of sheets

Revision / A — Addendum 1 — Date 10/07/25

NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D. NEW CANEY, TEXAS

Project:

Huckabee
www.huckabee-inc.com
800.687.1229

FS CONDENSING UNITS

PACKAGE VOLUME

Job No. 1971-05-01
Drawn By: MM
Date: 10/07/2025
Sheet No. ISSUED FOR BID QF1.2

FOODSERVICE DESIGN PROFESSIONALS

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Q46897-55

IMPORTANT!

Thermo-Kool Standard Floor: Thermo-Kool's standard floor panels can handle 600 lbs. of stationary load. NO ROLLING TRAFFIC. Proper cleaning practices must be followed to ensure durability and warranty compliance, including avoiding water exposure or wet mopping.

These drawings represent our understanding of the requirements of your order. We submit them to you for the purpose of securing complete approval of sizes, finishes, framing, insulation, dimensions, specifications, and interpretations. The return of these drawings to us with instructions to proceed, or subsequent instructions to that effect, shall constitute complete approval.

Approved by _____ Date _____

WARNING

DO NOT EXPOSE CARTONED OR STACKED PANELS TO MOISTURE OR HIGH HUMIDITY CONDITIONS DURING STORAGE. STAINING OR OXIDIZING OF METAL SKINS MAY OCCUR.

NOTICE

THIS ORDER CANNOT BE PLACED INTO PRODUCTION UNTIL WE RECEIVE FINAL APPROVED DRAWING AND SPECIFICATIONS. THE DATE OF RECEIPT CAN AFFECT YOUR PROMISED DELIVERY DATE.

THIS THERMO-KOOL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. THERMO-KOOL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH THERMO-KOOL HAS NOT BEEN MADE AWARE IN WRITING PRIOR TO FABRICATION.

Thermo-Kool®
WALK-IN PANEL
Thermo-Kool/Mid-South Industries, Inc.
R-14781

BUILDING UNITS
1F88

USA
SURFACE BURNING CHARACTERISTICS

MATERIAL DETAILS	FLAME SPREAD	SMOKE DEVELOPED
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	300-400
GALVANIZED OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS	20	450-OVER 500
CORE MATERIAL, 6" THICK	20	250

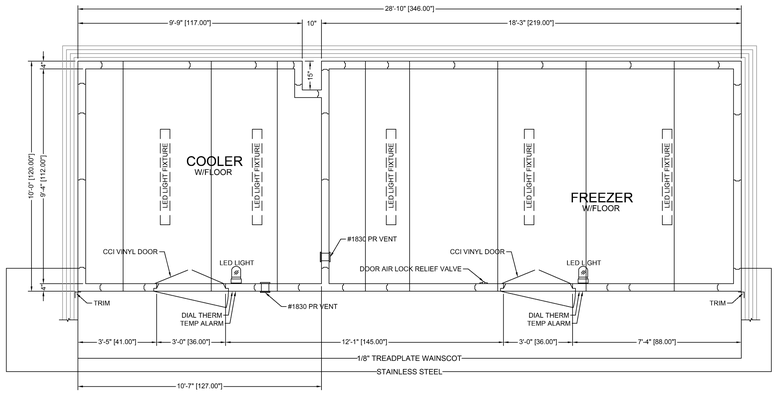
CANADA
SURFACE BURNING CHARACTERISTICS / CARACTERISTIQUES DE COMBUSTION SUPERFICIELLE IN ACCORDANCE WITH THE STANDARD / SELON LA NORME CAN/ULC-S102

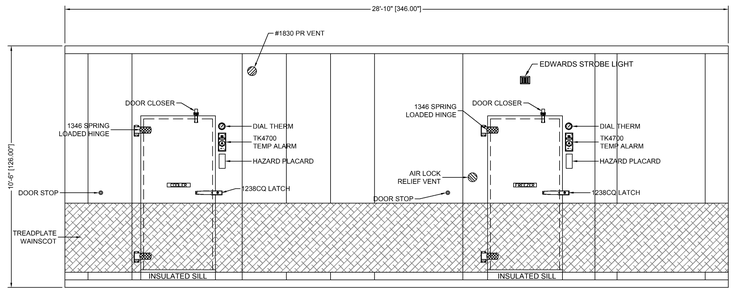
MATERIAL DETAILS / DETAILS DU MATERIAL	FLAME SPREAD / PROPAGATION DE LA FLAMME	SMOKE DEVELOPED / DEGAGEMENT DES FUMEES
ALUMINUM PANELS, PAINTED OR UNPAINTED, 127 MM (5 IN.) THICK OR LESS, PANNEAUX EN ALUMINUM, PEINTS OU NON PEINTS, 127 MM (5 PO) D'EPAISSEUR OU MOINS	10	105
GALVANIZED OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 127 MM (5 IN.) THICK OR LESS, PANNEAUX EN EN ACIER GALVANISE OU EN ACIER INOXYDABLE PEINTS OU NON (5 PO) D'EPAISSEUR OU MOINS	5	175
CORE MATERIAL, 150 MM (6 IN.) MATERIAU DE BASE, 150 MM (6 PO)	295	100

PULL DOWN RATE TO 45° F IS UNRESTRICTED. AFTER 45 ° F, PULL DOWN RATE SHOULD BE RESTRICTED TO 10° F PER/ 24 HOUR PERIOD.

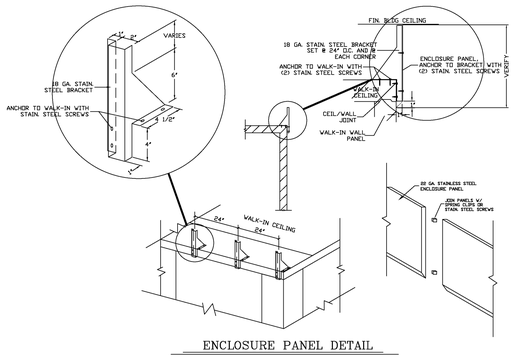
"THERMO-KOOL WALK-IN COOLERS AND FREEZERS COMPLY WITH 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11"

NOT APPROVED
QUOTATION SUBMITTAL
REVISED

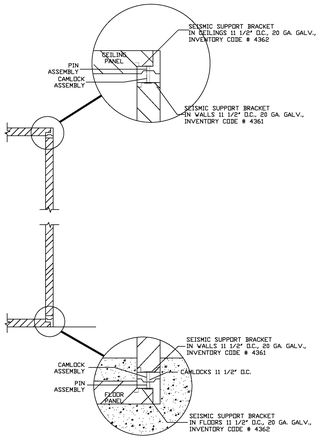




FRONT ELEVATION
DOOR SECTION 5.5 AMPS

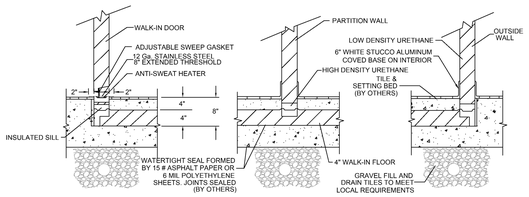


ENCLOSURE PANEL DETAIL



SEISMIC SUPPORT BRACKET DETAIL

Thermo-Kool Standard Floor: Thermo-Kool's standard floor panels can handle 600 lbs. of stationary load. NO ROLLING TRAFFIC. Proper cleaning practices must be followed to ensure durability and warranty compliance, including avoiding water exposure or wet mopping.



SECTION THRU DOOR | SECTION THRU PARTITION WALL | SECTION THRU OUTSIDE WALL

VERIFY !!!

* VERIFY HEIGHT OF TRIM & ENCLOSURE PANELS.

OVERALL DIMENSIONS WIDTH 28'-10" DEPTH 10'-0" HEIGHT 10'-6"

51

FINISH-Exterior
- UNEXPOSED: (•) 26 Ga. Stucco Embossed Galv. Steel; ( ) .040 Stucco Aluminum
- EXPOSED: (•) 20 Ga. Type 304 #3 Finish Stainless Steel; ( ) White Stucco Aluminum; ( ) White Smooth Aluminum; ( ) White Stucco Galv.; ( ) White Smooth Galv.

Interior (walls and ceiling)
- ( ) 26 Ga. Stucco Embossed Galv. Steel; ( ) .040 Stucco Aluminum; ( ) 20 Ga. Type 304 #3 Finish Stainless Steel
- WALLS: (•) White Stucco Aluminum
- CEILING: (•) White Smooth Aluminum; ( ) White Stucco Galv.; ( ) White Smooth Galv.

FINISH-Interior Floor
- ( ) Built-in by others. (Breaker strip must be under all wall panels including partitions)
- ( ) 4" x 2" Vinyl U-Channel Screeds ( ) Wall Anchors ( ) 4 1/4" Foam Screeds
- ( ) 14 Ga. Bright Galvanized Steel
- ( ) 16 Ga. Stainless Steel. SEE DETAIL BELOW
- (•) Smooth Aluminum
- ( ) Treadbrite Aluminum Foamed-In-Place

Thermo-Kool Standard Floor: Thermo-Kool's standard floor panels can handle 600 lbs. of stationary load. NO ROLLING TRAFFIC. Proper cleaning practices must be followed to ensure durability and warranty compliance, including avoiding water exposure or wet mopping.

SECTION FASTENERS-Thermo-Kool cam type Insta-Lok
INSULATION-4" thickness "Foamed-in-place" urethane-DURATHANE CONSTRUCTION CLASS I

( ) OUTDOOR INSTALLATION
- ( ) Vinyl weather roof W/ Facia Bar & Cover
- ( ) Sloped Foam ( ) _____SQ. FT. OF 4-MIL POLYETHYLENE (BETWEEN SLOPED FOAM & VINYL WEATHERCAP)

(•) INDOOR INSTALLATION
ELECTRICAL:-All wiring contained within the door sections is 115/60/1Ø. Connections to this and all other lights and refrigeration supplied by others.
- ( ) UNEXPOSED CONDUIT - Wiring stubs out top of panels 8"
- (•) EXPOSED CONDUIT - Wiring terminates in a field service box at top of panels

ENTRANCE DOOR-Flush infitting type with poly vinyl magnetic gasket and vinyl sweep gasket on bottom edge. Heater cables are built in around door opening to prevent frost accumulation and sweating. Ext. has a thermometer, indicating light and toggle switch. Interior has vapor proof light. Hinges are cam action type.
* Door finishes will be the same as adjacent panels unless specified otherwise under Door Accessories.

DOOR SIZE & QTY	HARDWARE
( ) 34" x 76"	(•) 1238CQ LATCH W/ KASON 0485 1/4 TURN FROST FREE INSIDE RELEASE,
( ) 30" x 76"	(2) 1346 PERFORMER ADJUSTABLE HINGES, DOOR CLOSER
(•) (2) 36" x 78"	( ) 1238-C LATCH, (3) 1346 PERFORMER ADJUSTABLE HINGES, DOOR CLOSER

SWING: ( ) RH (•) LH

(•) DOOR ACCESSORIES
- ( ) 14" x 14" Peep Window(s)W/ HEATED FRAME & GLASS
- ( ) 14" x 24" Peep Window(s)W/ HEATED FRAME & GLASS

STAINLESS STEEL ON INT/EXT OF DOOR(S)
(2) 25' LONG LEADS FOR ALARMS & THERMOMETERS
(PROBE(S) TO BE MOUNTED IN RETURN AIR STREAM OF EVAP. COIL)
KASON # 1806 LED LIGHT FIXTURE(S) W/ BULBS ON DOOR FRAME(S)
(2) THERMO-KOOL TK4700 WALK-IN MONITOR SYSTEM W/ TK4-MSS PANIC SWITCH, MOTION DETECTOR, BATTERY BACKUPS, DRY CONTACTS & THERMOSTATICALLY CONTROLLED HEATER WIRES
1/8" ALUMINUM TREADPLATE INT/EXT KICKPLATES 36" HIGH
1/8" ALUMINUM TREADPLATE EXTJAMB GUARDS 36" HIGH
(2) DOOR STOPS (SHIPPED LOOSE)
(2) BACKUP FRAME HEATER WIRE(S) (INSTALLED BUT NOT OPERATIONAL)
(2) DOOR HEATER(S)
(1) COOLER I. D. PLATE, BLACK COLOR W/ WHITE LETTERS. (MOUNTED) @ THERMOKOOL)
(1) FREEZER I. D. PLATE, BLACK COLOR W/ WHITE LETTERS. (MOUNTED @ THERMOKOOL)
(2) SET(S) OF CCI VINYL DOORS TO FIT THE ABOVE DOOR SIZE.
(2) RIB KIT(S) (CCI CONTROL CONSULTANT INC.) MODEL # DO1BDC-DOB FOR FAN TIMER SWITCH TEMP ACTIVATED OVERRIDE CONTROL
NON-SKID STRIPS ON THRESHOLD(S)
(1) EDWARDS STROBE LIGHTS # 868STRR-AQ 24/V (@ FREEZER DOOR)
(1) EDWARDS STROBE LIGHTS # 868STRR-AQ 24/V (SHIPPED LOOSE)
(1) DOOR AIR LOCK RELIEF VALVE @ FREEZER DOOR
12 Ga. STAINLESS STEEL 8" EXTENDED THRESHOLD

(•) MISCELLANEOUS EQUIPMENT
- ( ) Lights (NOT MOUNTED) 1 AMP EACH
- ( ) Interior Floor Ramp
- ( ) Exterior Floor Ramp
- (2) (•) # 1825 I.E Heated Pressure Relief Vent .5 AMPS EACH
- (•) # 1830 Heated Pressure Relief Vent .5 AMPS EACH
- ( ) # 1832-4 Heated Pressure Relief Vent .5 AMPS EACH
- (•) STAINLESS STEEL Trim & ANGLE BRACKET Enclosures (see detail)

(5) 48" LED LIGHT FIXTURE(S) W/ BULBS (.4 AMPS)
6" HIGH WHITE STUCCO ALUMINUM COVED BASE ON INTERIOR
(1) THREE-SIDED COLUMN CUTOUT(S)
SEISMIC SUPPORT PACKAGE
1/8" TREADPLATE WAINSCOT 36" HIGH ON EXPOSED EXTERIOR (SHIPPED LOOSE)

REFRIGERATION- ( ) Aircooled ( ) Watercooled (•) By Others

NOTE: IF REFRIGERATION IS NOT SUPPLIED WITH WALK-IN, BASED ON AN AMBIENT OF 100 DEGREES F, FOR NSF APPLICATIONS AT STANDARD HOLDING TEMPERATURES FOR A COOLER THE BTU RATING SHALL BE 8,500 AND FOR A FREEZER THE BTU RATING SHALL BE 13,500 .

( ) Condensing unit indoor
( ) Condensing unit outdoor
( ) Side Mounted Self Contained
( ) Top Mounted Self Contained
( ) Quick Connect ( ) Remote ( ) Top Mounted
( ) Prewired, Preassembled Remote

CONTROL KIT-The following controls indicated with a mark are included.
- ( ) Expansion valve
- ( ) Dryer
- ( ) Sight glass
- ( ) Temperature control
- ( ) Pump down solenoid valve
- ( ) Freezer Time Clock
- ( ) Pressure control
- ( ) Suction line vibration eliminator
- ( ) Winter control
- ( ) Crankcase heater
- ( ) Condensing unit cover
- ( ) Coil Mounting Kit

NSF

NOTES: Aircooled condensing units should be placed in a well ventilated area with a minimum of 1000 CFM's per/H.P.
Evaporator drain connections by others.
NOTE: THERMO-KOOL recommends a 1" min. clearance between walk-in & building walls.

ITEM # 102 BC

DATE	REV. BY	REVISIONS DESCRIPTION
9/29/2025	KCO	ADJUSTED CUTOUT & PARTITION WALL LOCATION, REMOVED PEEP WINDOWS

NOTE: THIS DRAWING, AND ALL DRAWINGS OR SPECIFICATIONS SUBMITTED BY THERMO-KOOL, AND REPRODUCTIONS THEREOF IN WHOLE OR IN PART, ARE THE PROPERTY OF THERMO-KOOL OF MID-SOUTH INDUSTRIES, INC., SUBJECT TO RECALL AT ANY TIME AND SHALL NOT BE USED FOR INSTALLATIONS OR PRODUCTION BY OTHERS EXCEPT BY OUR SPECIAL PERMISSION IN WRITING.

Walk-in panels manufactured under Patent # 5,424,118.

Thermo-Kool®
Mid-South Industries, Inc. ◆P.O. Box 669 Laurel Mississippi 39441 ◆Phone 601/649-4600 FAX 601/649-0558

SUBJECT: WALK-IN REFRIGERATION
FOR: NEW CANEY ISD OPERATIONS/TRANSPORTATION
NEW CANEY TX

DR. BY	CH. BY	DWG. NO.
KCO	EH /	Q46897-55
DATE: 09/25/2025	SCALE: 3/8"=1'-0"	SHEET NO. 1 OF 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

Revision / Date
A 10/07/25 Addendum 1

Project:
NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D. NEW CANEY, TEXAS

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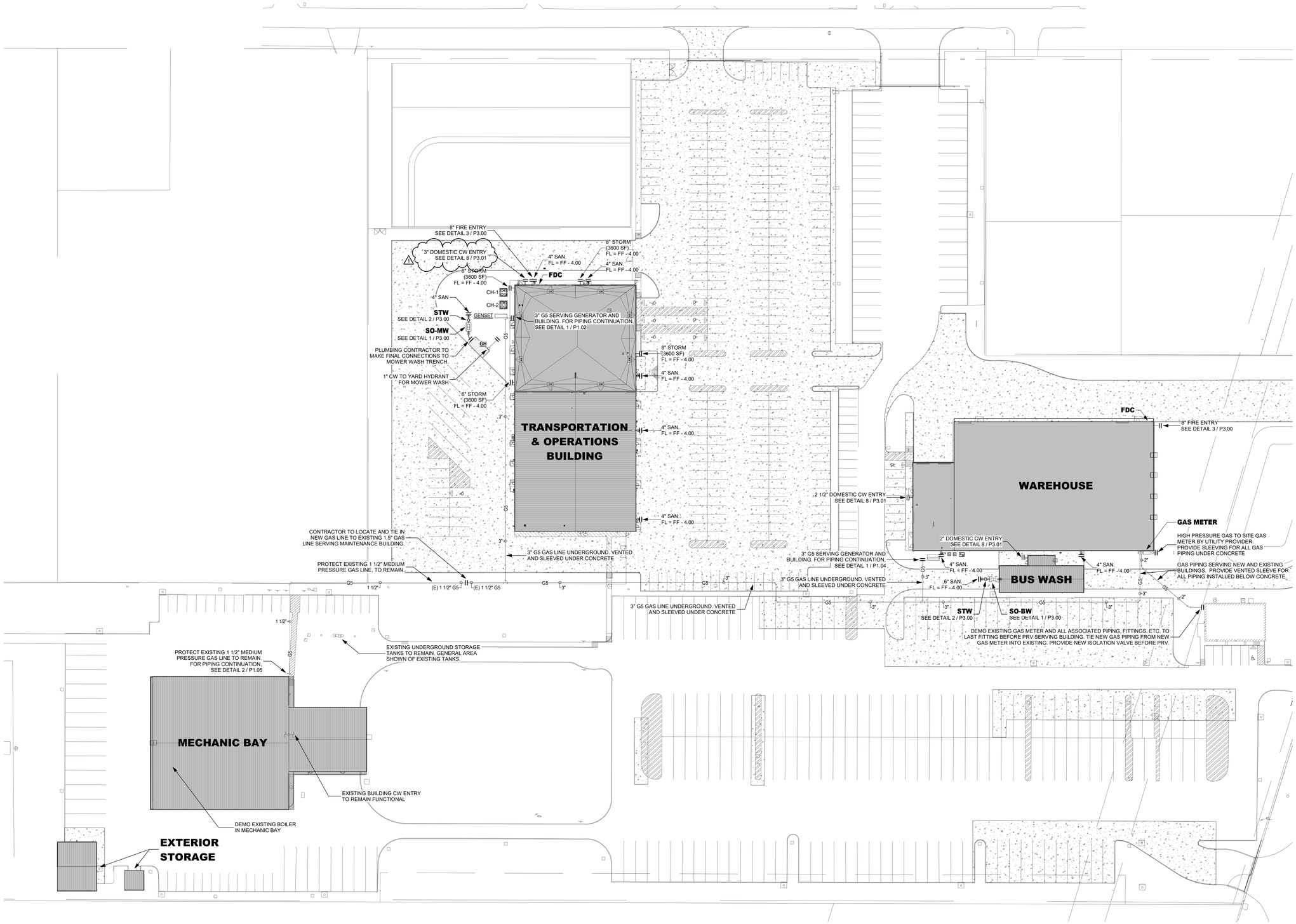
FS WALK-INS

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. ISSUED FOR BID QF1.3
Drawn By: MM	
Date: 10/07/2025	

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N
TRUE

1 PLUMBING SITE PLAN

SCALE= 1" = 40'-0"

Revision /	Date	
1	10/07/25	Addendum 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/10/2025

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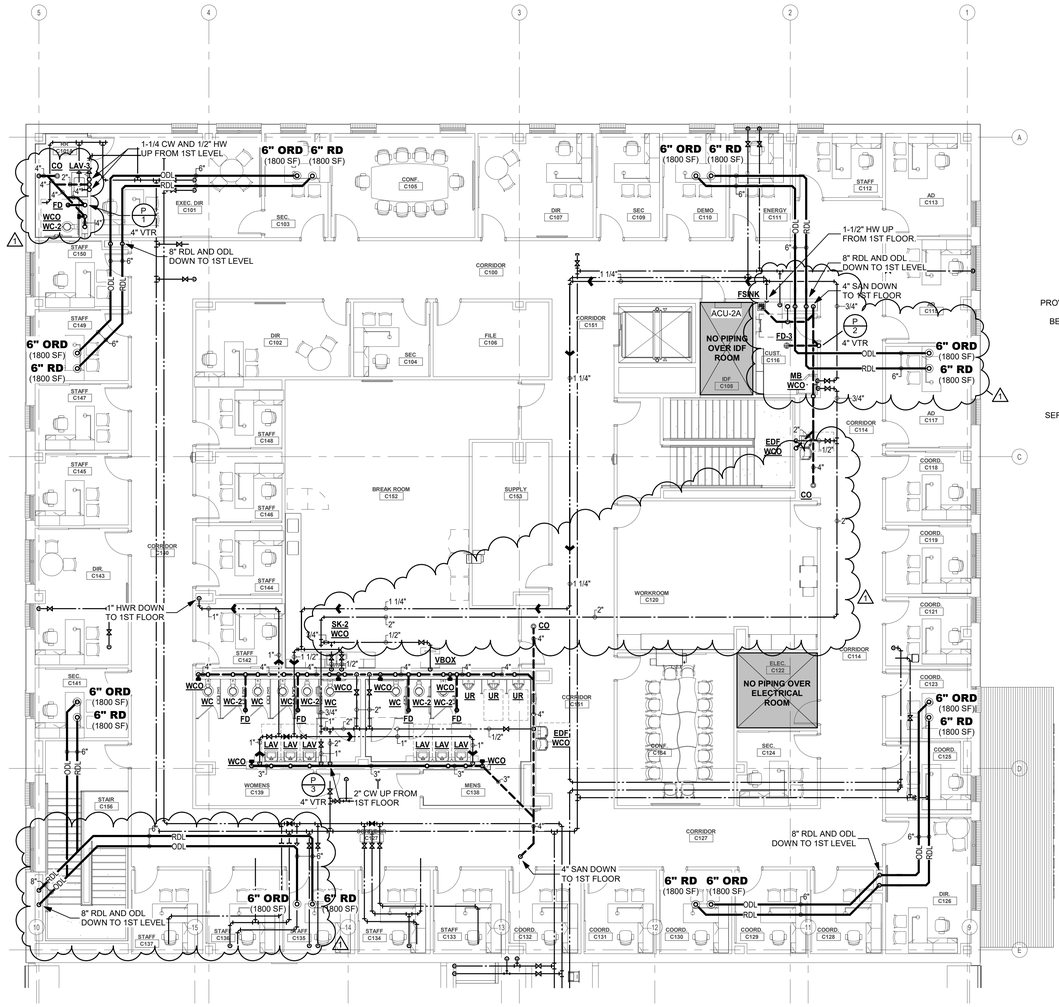
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PLUMBING SITE PLAN

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. P1.00
Drawn By: SC/MZS	
Date: 09/18/2025	

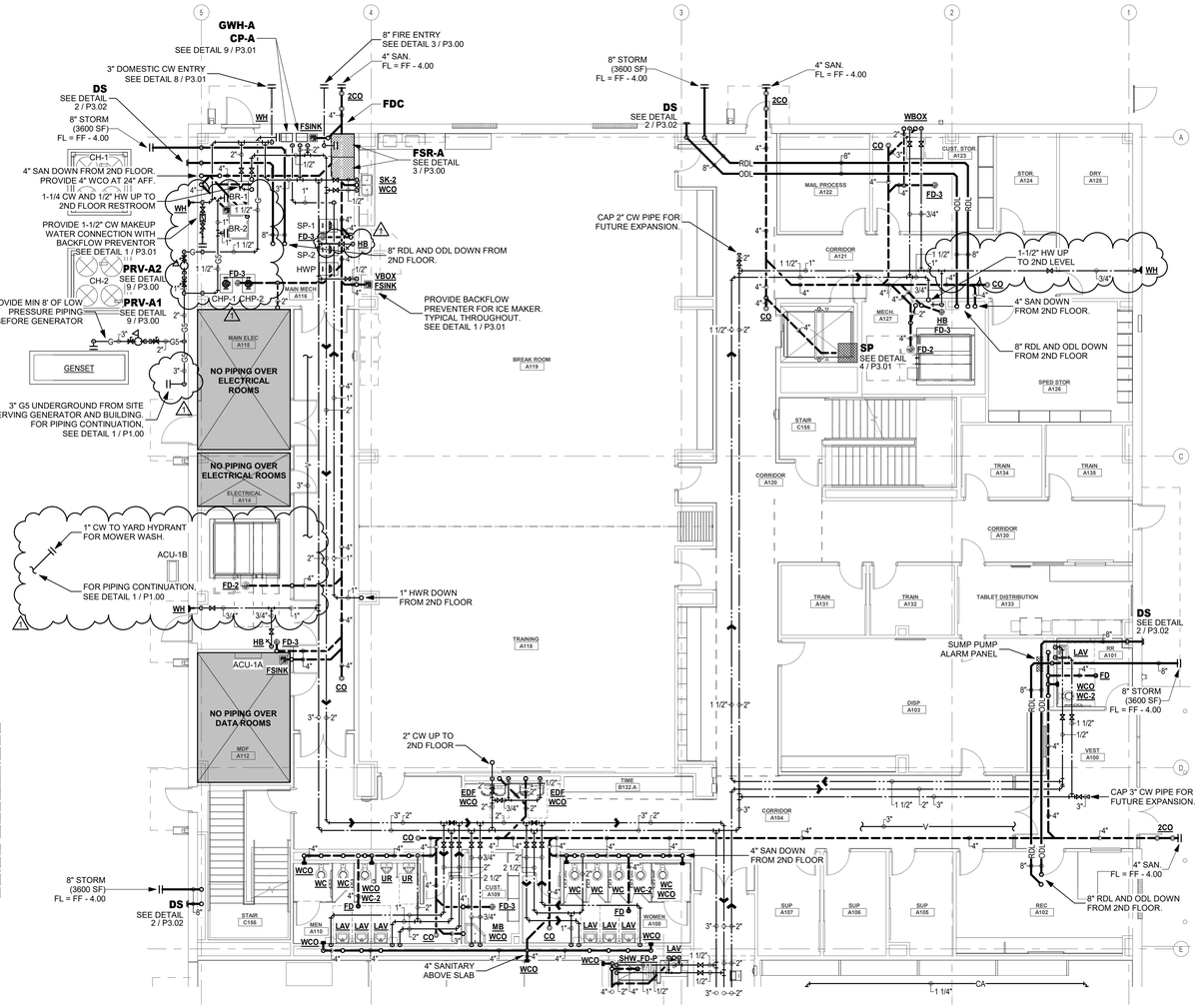
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2 PLUMBING FLOOR PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING

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



1 PLUMBING FLOOR PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED
PROFESSIONAL
ENGINEER
09/10/2025

Huckabee
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A / C
B
D
KEY PLAN
N.T.S

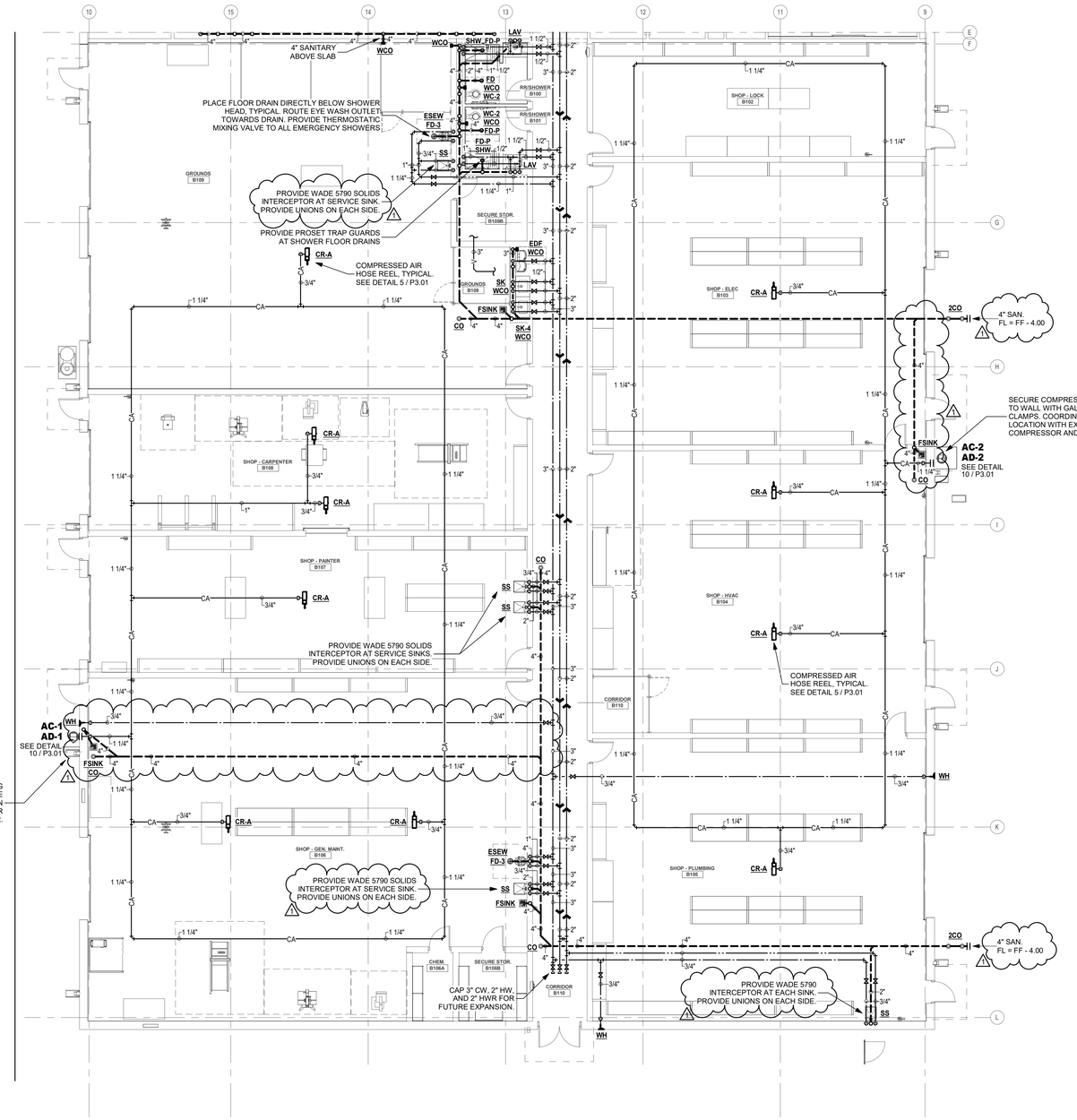
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PLUMBING FLOOR PLAN - LEVEL 1 / 2 - AREA A / C - OPERATIONS BUILDING

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. P1.02
Drawn By: SCM/ZS	
Date: 09/18/2025	

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N TRUE

1 PLUMBING FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
05/10/2025

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A / C
B

KEY PLAN
N.T.S.

D

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PLUMBING FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

PACKAGE	VOLUME
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PROVIDE SHUT OFF VALVE ~5' AFF TO WALL HYDRANT OUTSIDE, TYPICAL

TYPICAL GAS CONNECTION DETAIL FOR ALL GAS CONNECTIONS SEE DETAIL 10 / P3.00

GUH-6

CAP 2" CW FOR FUTURE EXPANSION.

GUH-5

PROVIDE SHUT OFF VALVE ~5' AFF TO WALL HYDRANT OUTSIDE, TYPICAL

GUH-4

FDC

FSR
3 / P3.00
SEE DETAIL

8" FIRE ENTRY
SEE DETAIL 3 / P3.00

STORAGE LIMITED TO ORDINARY HAZARD CLASSIFICATION

RUN GAS PIPE TIGHT TO STRUCTURE,TYPICAL.

PROVIDE SHUT OFF VALVE ~5' AFF TO WALL HYDRANT OUTSIDE, TYPICAL

1/2" DOMESTIC CW ENTRY SEE DETAIL 8 / P3.01

ROUTE WATER AND SANITARY VENT SERVING SK UNDER WINDOW

GWH-D
CP-D
SEE DETAIL 9 / P3.01

GUH-1

GAS PIPING TO UNIT HEATERS

GUH-2

PROVIDE FLUE VENT FOR ALL GUH

CAP 1 1/4" HW FOR FUTURE EXPANSION.

GUH-3

PROVIDE WADE 5790 SOLIDS INTERCEPTOR AT SERVICE SINK. PROVIDE UNIONS ON EACH SIDE.

2" G DOWN TO COMMERCIAL CLOTHES DRYER

PRV-D2
MOUNT PRV TO WALL SEE DETAIL 9 / P3.00

3" G5 UNDERGROUND FROM SITE SERVING GENERATOR AND BUILDING FOR PIPING CONTINUATION, SEE DETAIL 1 / P1.00

PRV-D1
SEE DETAIL 9 / P3.00

PROVIDE HOSE END CONNECTIONS FOR WASHER CONNECTION.

AC-3
AD-3
SEE DETAIL 10 / P3.01

PROVIDE WADE 5790 SOLIDS INTERCEPTOR AT SERVICE SINK. PROVIDE UNIONS ON EACH SIDE.

PROVIDE SHUT OFF VALVE ~5 AFF WITH HOSE BIB ON INSIDE AND WALL HYDRANT OUTSIDE AT 2' AFF, TYPICAL

NEW 3" G5 PIPING SERVING EXISTING AND NEW BUILDINGS ON SITE. PROVIDE SEPARATE ISOLATION VALVES FOR EACH LINE 24"ABOVE GRADE. FOR PIPING CONTINUATION, SEE DETAIL 1 / P1.00

GAS METER

HIGH PRESSURE GAS TO SITE GAS METER BY UTILITY PROVIDER. PROVIDE SLEEVING FOR ALL GAS PIPING UNDER CONCRETE

1 PLUMBING FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

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

N TRUE

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/10/2025

Huckabee
www.huckabee-inc.com
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KEY PLAN
N.T.S.

A / C
B
D

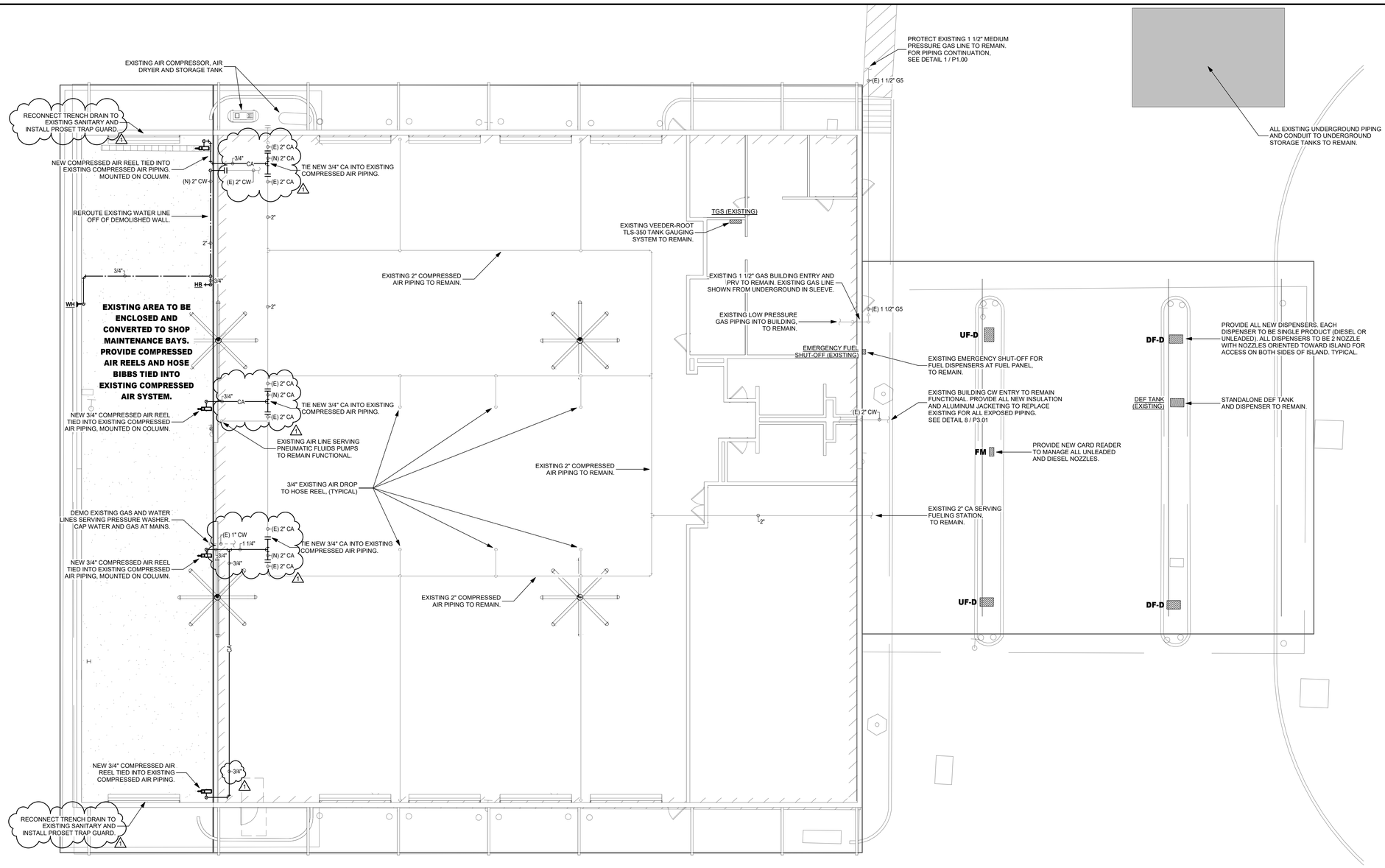
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PLUMBING FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

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Date: 09/18/2025	

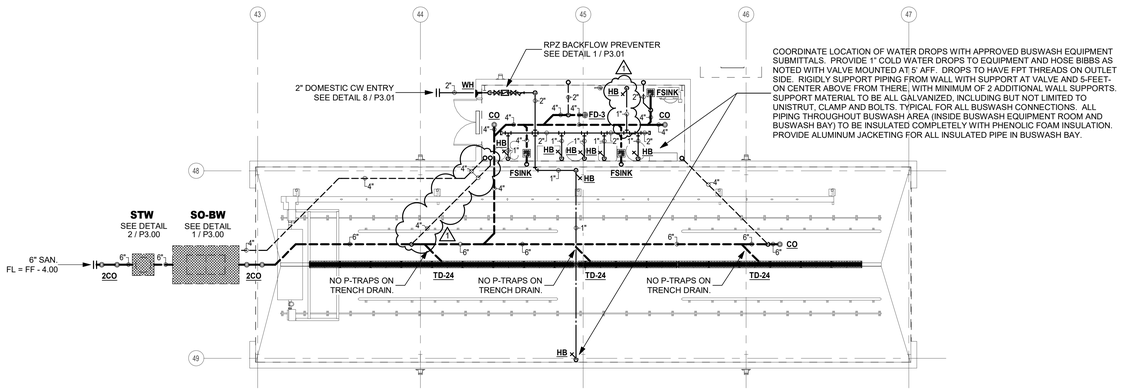
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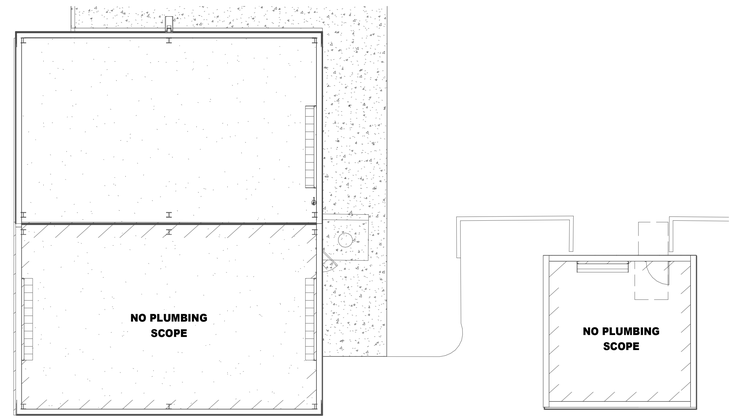
2 PLUMBING FLOOR PLAN- MECHANIC BAY

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



1 PLUMBING FLOOR PLAN- BUS WASH

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



3 PLUMBING FLOOR PLAN - TRANSPORTATION BUILDING ADDITION

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/10/2025

Huckabee
www.huckabee-inc.com
800.687.1229

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PLUMBING FLOOR PLANS - BUS WASH, MECHANIC BAY, & STORAGE

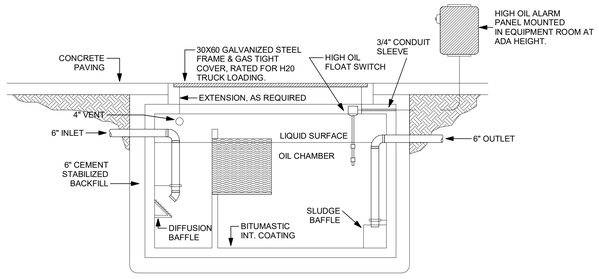
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Job No. 1971-05-01	Sheet No. P1.05
Drawn By: SCM/ZS	
Date: 09/18/2025	

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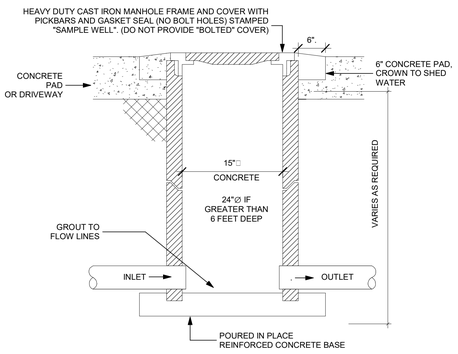
SAND / OIL SEPARATOR SCHEDULE (SOS-BW, SOS-MW)

DESCRIPTION/SPECIFICATION
CONSTRUCT TRAP OF 4500 PSI REINFORCED CONCRETE AND DESIGN FOR H-20 TRUCK LOADING. 8 FT-8 IN LONG X 5 FT WIDE X MINIMUM 6 FT DEEP. SAND OIL SEPARATOR SHALL HAVE 1000 GALLON LIQUID CAPACITY. 500 GALLON OIL CAPACITY AND 100 GPM FLOW RATE. PARK EQUIPMENT CO. SOCMP-1000 WITH H-20 TRUCK LOADING.



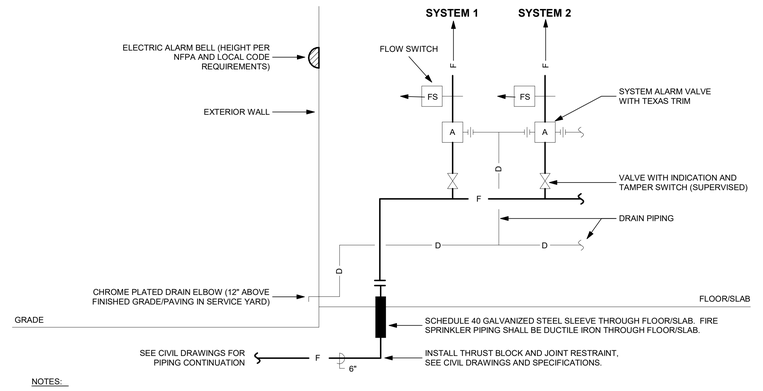
NOTE:

PLUMBING CONTRACTOR SHALL CLEAN AND PUMP OUT ALL SAND AND DEBRIS INSIDE SAND/OIL SEPARATOR AT SUBSTANTIAL COMPLETION OF PROJECT.



NOTES:

1. PRECAST UNIT APPROVED BY THE AHJ SHALL BE ACCEPTABLE.
2. SAMPLING WELL SHALL BE DESIGNED FOR H-20 TRAFFIC LOADING.
3. PROVIDE PLASTIC/RUBBER INSERT/GASKET BENEATH MANHOLE COVER TO PREVENT SEWER GAS FROM SEEPING OUT OF SAMPLE WELL COVER TO THE SURFACE.

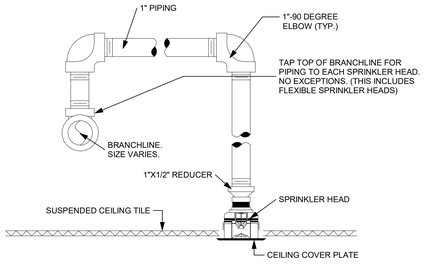


NOTES:

1. NUMBER OF FIRE SPRINKLER ZONES/SYSTEMS, PIPING SIZES AND ALL OTHER CRITERIA SHALL BE GOVERNED BY THE NFPA AND ALL OTHER LOCAL CODES AND REQUIREMENTS.
2. ENTIRE BUILDING SHALL BE FIRE SPRINKLERED FOR NEW BUILDINGS IN PROJECT.
3. SEE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. DOUBLE CHECK, FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE WITH SUPERVISORY SWITCH PROVIDED WITH BACKFLOW PREVENTER VAULT THAT IS INCLUDED UNDER THE CIVIL CONTRACT. SEE CIVIL DRAWINGS.
5. TEST VALVES SHALL NOT BE LOCATED EXPOSED IN FINISHED ROOMS AND SHALL NOT DISCHARGE TO EXTERIOR OF BUILDING WHERE CONCRETE IS LOCATED (I.E. SIDEWALK OR DRIVE). INSTALL DISCHARGE IN GRASSY AREAS OR TO DRAINS VARIOUS MECHANICAL ROOMS THROUGHOUT BUILDING (REFERENCE PLUMBING FLOOR PLANS).
6. ALL SPRINKLER HEADS IN AREAS WITH CEILING GRID SHALL BE CONCEALED TYPE AND SHALL BE CENTERED IN CEILING TILES.

1 SAND-OIL SEPERATOR DETAIL (SOS)

NO SCALE

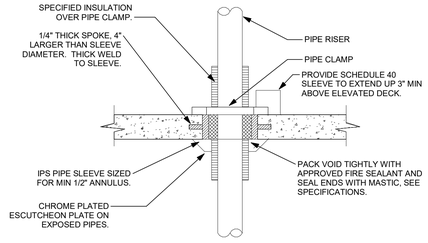


NOTE:

THIS DETAIL ALSO APPLIES TO FLEXIBLE SPRINKLER HEAD CONNECTIONS. ALL CONNECTIONS TO BE MADE AT TOP OF PIPE, NO EXCEPTIONS.

2 SAMPLE TEST WELL DETAIL (STW)

NO SCALE

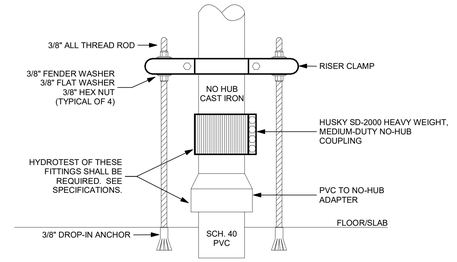


NOTE:

THIS DETAIL APPLIES TO ALL PIPING THROUGH FLOORS, INCLUDING FIRE SPRINKLER PIPING.

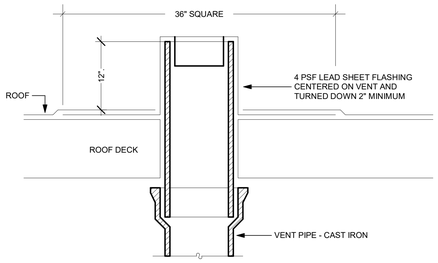
3 FIRE SPRINKLER SYSTEM RISER SCHEMATIC (FSR)

NO SCALE



NOTE:

HUSKY SD 4200 DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF THIS DETAIL. HYDROTEST OF COUPLING SHALL BE REQUIRED. ALL-THREAD RODS AND RISER CLAMP INSTALLATION REQUIRED AS SHOWN ABOVE.

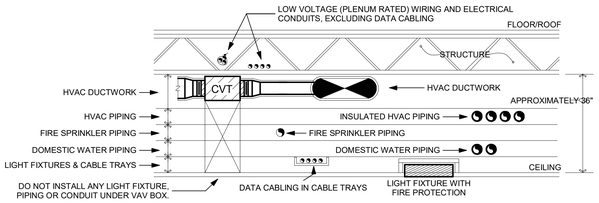


NOTE:

SHOWN FOR MEP COMPONENTS ONLY. COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

4 FIRE SPRINKLERHEAD INSTALLATION DETAIL

NO SCALE



PLENUM PRIORITY NOTES

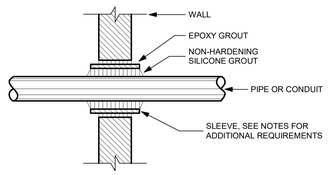
ELECTRICAL CONDUIT	INSTALLED WITHIN OPEN WEBS OF JOIST FRAMING. IF FRAMING IS USED FOR SUPPORT OF CONDUIT, A SADDLE SHALL BE REQUIRED FOR ISOLATION AT EACH SUPPORT POINT.
LOW VOLTAGE WIRING (EXCEPT DATA CABLING)	INSTALLED WITHIN OPEN WEBS OF JOIST FRAMING AND RUN PARALLEL OR PERPENDICULAR TO BUILDING WALLS. ALL INDIVIDUAL WIRES SHALL BE BUNDLED TOGETHER WITH PLASTIC TIE STRAPS AT 6 FOOT MAXIMUM INTERVALS AND EACH WIRE SHALL BE IDENTIFICATION TAGGED AT 25 FOOT MAXIMUM INTERVALS.
HVAC DUCTWORK	INSTALLED AS SNUG TO BOTTOM OF STRUCTURE AS POSSIBLE, ALLOWING ONLY ENOUGH SPACE FOR INSULATION WRAP. OFFSET HOT AND COLD MEDIUM PRESSURE DUCTS FOR TAKE-OFFS FOR DOUBLE DUCT VAV BOXES.
HVAC PIPING	INSTALLED IN PLANE DIRECTLY BELOW HVAC DUCTWORK. ALL VALVES AND INSTRUMENTS SHALL BE ACCESSIBLE AND EASILY OPERATED FROM BELOW.
FIRESPRINKLER PIPING	INSTALLED IN PLANE DIRECTLY BELOW HVAC PIPING.
DOMESTIC WATER PIPING	INSTALLED IN PLANE DIRECTLY ABOVE LIGHT FIXTURES. ALL VALVES AND INSTRUMENTS SHALL BE ACCESSIBLE AND EASILY OPERATED FROM BELOW. BALL VALVES INSTALLED WITH STEM HORIZONTAL SHALL BE USED IN LIEU OF WHEEL HANDLE VALVES OR OTHER TYPES EXCEPT IN SITUATIONS WHERE BALL VALVES ARE NOT APPROPRIATE.
LIGHT FIXTURES	TAKE PRIORITY IN SPECIAL LAYOUT. ALL OTHER SYSTEMS (DOUBLE DUCT UNITS, DUCTWORK, PIPING, CONDUITS, ETC.) SHALL BE ROUTED IN PLENUM SPACE TO AVOID PASSING DIRECTLY (LOW) OVER LIGHTING FIXTURES PREVENTING THEIR INSTALLATION, SERVICING AND/OR REMOVAL.
GRAVITY FED PLUMBING	THIS INCLUDES PLUMBING WASTE/VENT AND ROOF DRAIN SYSTEMS. THESE SYSTEMS TAKE PRIORITY OVER ALL OTHER SYSTEMS BUT MUST BE INSTALLED TAKING OTHER SYSTEMS INTO CONSIDERATION. IN GENERAL, ROOF DRAIN PIPING SHALL START AS HIGH AS POSSIBLE. WASTE/VENT PIPING SHALL BE INSTALLED IN VAC PIPING SPACE (IF AVAILABLE) IN AREAS WHERE CROSSING DUCTWORK. DO NOT INSTALL WASTE/VENT OR ROOF DRAIN PIPING UNDER DOUBLE DUCT VAV BOXES IF AVOIDABLE.

NOTES:

1. PIPING, CONDUIT AND DUCTWORK SUPPORTS ARE NOT SHOWN ON THIS DETAIL. SUPPORT ALL ENTITIES AS REQUIRED BY THE WRITTEN SPECIFICATIONS.
2. DO NOT INSTALL ANY PIPE OVER TOP OF ANY ELECTRICAL EQUIPMENT. THIS INCLUDES FIRE SPRINKLER PIPING. NO EXCEPTIONS.
3. DO NOT INSTALL ANY PIPE OVER TOP OF ANY IDF/MDF/SERVER/NETWORK EQUIPMENT. THIS INCLUDES EQUIPMENT PROVIDED BY OWNER. THIS INCLUDES FIRE SPRINKLER PIPING. NO EXCEPTIONS.

5 PIPE THROUGH FLOOR SLAB DETAIL

NO SCALE



NOTE:

1. FOR PENETRATIONS THROUGH FIRE RATED WALLS, FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.
2. PROVIDE SCHEDULE 40 GALVANIZED SLEEVE THROUGH ALL CMU, FIRE RATED, AND/OR EXTERIOR WALLS.
3. PROVIDE 16G SLIP-LOCK SLEEVES THROUGH INTERIOR SHEET ROCK WALLS.
4. SIZE SLEEVES TO ALLOW 1/2" SPACE BETWEEN PIPE AND SLEEVE OR SEALANT.
5. PROVIDE FIRE CAULK WHERE REQUIRED.

THIS DETAIL APPLIES TO ALL PIPING THROUGH WALLS OR FLOORS, INCLUDING FIRE SPRINKLER PIPING.

6 PVC-TO-CAST IRON INSTALLATION DETAIL

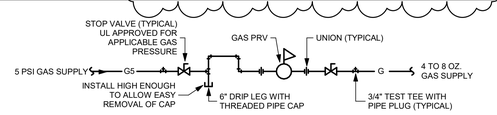
NO SCALE

7 ROOF VENT DETAIL

NO SCALE

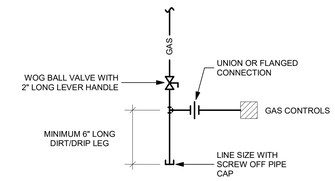
GAS PRV SCHEDULE

MARK	PRV-A1	PRV-A2	PRV-D1	PRV-D2
LOCATION	AREA A EXTERIOR	AREA A EXTERIOR	AREA D EXTERIOR	AREA D EXTERIOR
SERVES	GENERATOR A	BUILDING A	GENERATOR D	WAREHOUSE
GAS LOAD	2000 CFH	398 CFH	2000 CFH	1373 CFH
DISTANCE FROM METER	1000 FT	1000 FT	350 FT	350 FT
DISTANCE TO LAST OUTLET	10 FT	30 FT	10 FT	375 FT
INLET (SIZE/PRESSURE)	2" / 5 PSIG	1" / 5 PSIG	1-1/2" / 5 PSIG	1-1/2" / 5 PSIG
OUTLET (SIZE/PRESSURE)	3" / 4-8 OZ.	1 1/2" / 4-8 OZ.	3" / 4-8 OZ.	4" / 7-11 OZ.



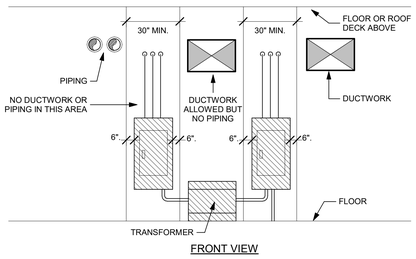
NOTES:

1. VENT ALL REGULATORS TO OUTDOORS. THIS INCLUDES PRVs PROVIDED WITH BOILERS AND GWHs.
2. FOR REGULATORS INSTALLED OUTDOORS, PROVIDE VENT PIPE ORIENTED DOWNWARD.



8 WALL PENETRATION DETAIL

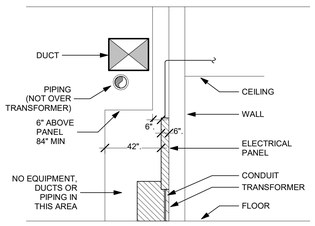
NO SCALE



FRONT VIEW

9 GAS PRESSURE REGULATOR DETAIL

NO SCALE



SIDE VIEW

10 TYPICAL GAS CONNECTION

NO SCALE

11 PLENUM SPACE PRIORITY DETAIL

NO SCALE

12 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

Revision /	Date
1	10/07/25

Addendum 1

NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D. NEW CANEY, TEXAS

Project:

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/18/2025

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PLUMBING DETAILS AND SCHEDULES

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Job No. 1971-05-01	Sheet No. P3.00
Drawn By: SCM/ZS	
Date: 09/18/2025	

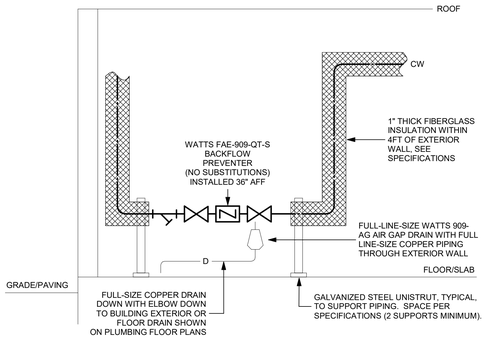
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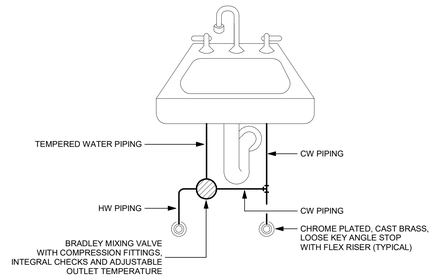


NOTES:

1. ALL BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED NO HIGHER THAN 36" ABOVE FINISHED FLOOR AND SHALL BE READILY ACCESSIBLE FOR TESTING AND REPAIR.
2. ALL BACKFLOW PREVENTERS TO BE FULL LINE SIZE, IE 4" BACKFLOW PREVENTER ON 4" WATER LINE. SEE FLOOR PLAN FOR SIZES.

1 BACKFLOW PREVENTER INSTALLATION DETAIL

NO SCALE

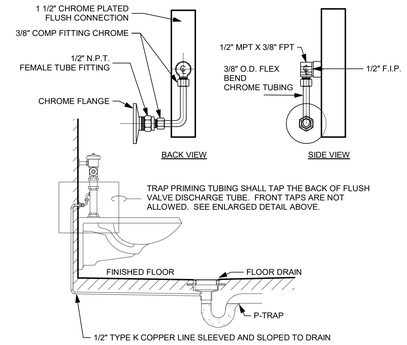


NOTES:

1. THIS DETAIL ONLY APPLIES TO ALL LAVATORIES AND SINKS THAT HAVE HOT WATER. BRADLEY S59-4000A LEAD-FREE ASSE 1070 CERTIFIED TMV WITH MOUNTING BRACKET.
2. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
3. TMV SHALL BE INSTALLED IN A EASILY/READILY ACCESSIBLE LOCATION.
4. DELIVERY TEMPERATURES SHALL NOT EXCEED 110°F. VARIANCE OF TEMPERATURE RANGE OF MIXING VALVE SHALL BE CONSIDERED. REFER TO MANUFACTURERS TEMPERATURE PERFORMANCE OF VALVE AT HIGHEST FLOW RATE OF FAUCET.

2 KNEESPACE TMV DETAIL

NO SCALE



NOTE:

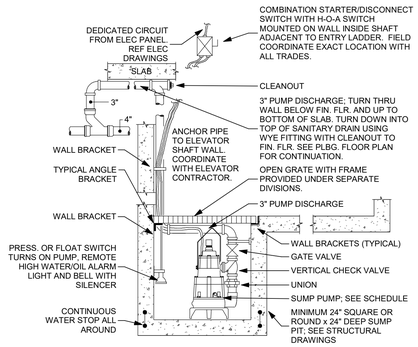
SLOAN ROYAL OR PPP FLUSH VALVE TRAP PRIMER MODELS ONLY.

3 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

ELEVATOR PUMP SPECIFICATION

MYERS MODEL ME50S-11 PUMP - HEAVY DUTY CAST IRON CONSTRUCTION, 50 GPM AT 40 FT. HEAD, INTERNAL OVERLOAD, 1/2 HP, 115 V. SUMP PUMP SHALL HAVE CONTROLS TO TURN PUMP ON AUTOMATICALLY WHEN WATER REACHES THE "ON" LEVEL AND TURN PUMP OFF AUTOMATICALLY WHEN OIL OR AIR REACHES THE "OFF" LEVEL. PUMPS MANUFACTURED BY AURORA OR WEIL ALSO ACCEPTABLE.

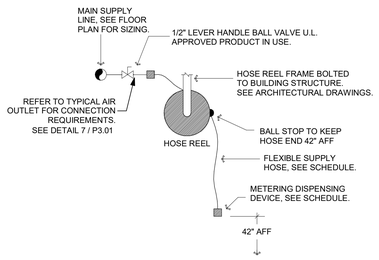


NOTE:

PROVIDE PENTEK ODS OIL DETECTION SYSTEM AND REMOTE ALARM MOUNTED ON WALL IN DISPATCH ROOM. SEE PLUM/ELEC DRAWINGS FOR EXACT LOCATION.

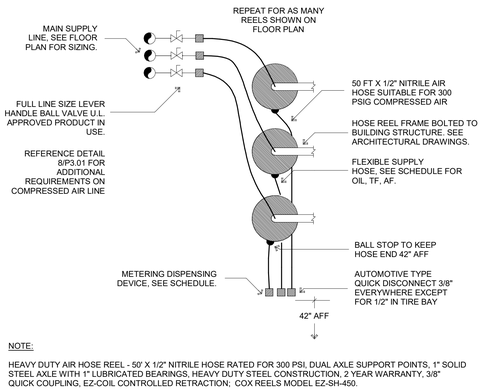
4 ELEVATOR SUMP PUMP DETAIL (SP)

NO SCALE



5 CEILING MOUNTED AIR HOSE REEL DETAIL

NO SCALE

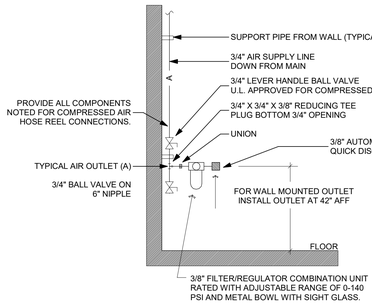


NOTE:

HEAVY DUTY AIR HOSE REEL - 50' X 1/2" NITRILE HOSE RATED FOR 300 PSI, DUAL AXLE SUPPORT POINTS, 1" SOLID STEEL AXLE WITH 1" LUBRICATED BEARINGS, HEAVY DUTY STEEL CONSTRUCTION, 2 YEAR WARRANTY, 3/8" QUICK COUPLING, EZ-COIL CONTROLLED RETRACTION; COX REELS MODEL EZ-SH-450.

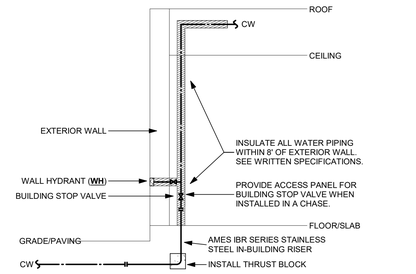
6 COLUMN SUPPORTED HOSE REELS

NO SCALE



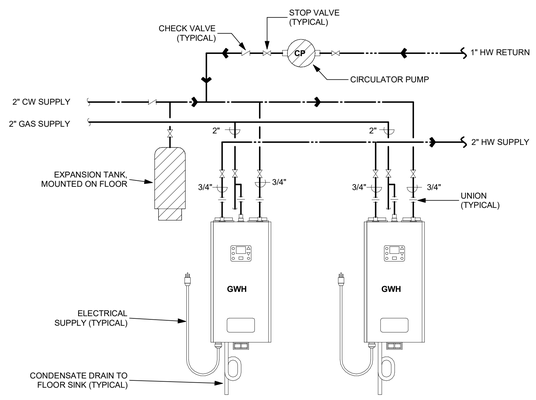
7 AIR OUTLET DETAIL

NO SCALE



8 BUILDING WATER ENTRY/EXIT DETAIL

NO SCALE



GAS WATER HEATER SYSTEM (GWH-A, GWH-D)

NAVIEN ONLY. NATURAL GAS, TANKLESS, 398 KBTUH INPUT, 378 KBTUH OUTPUT, 94% EFFICIENCY CAPABILITY, 4" DIAMETER FLUE SIZES, 120V/1Ø CONTROLS VOLTAGE. SYSTEM TO INCLUDE TWO (2) NPE-A 240 UNITS PACKAGED TOGETHER. FLUE SHALL BE CPVC POSITIVE PRESSURE EXHAUST VENT. VENT PROVIDED BY PLUMBING CONTRACTOR AND INSTALLED THROUGH ROOF BY MECHANICAL CONTRACTOR.

PROVIDE ELBI DTS-19 ASME EXPANSION TANK.

CIRCULATOR PUMP (CP-A, CP-D)

CIRCULATOR PUMP SHALL BE GRUNDFOS MODEL UPS-1555SF. ALL BRONZE CONSTRUCTION, 3/4" FLANGED CONNECTIONS, IMMERSION TYPE AQUASTAT, 120V/1Ø, 5 GPM @ 16 FEET HEAD CAPACITY. TACO CARTRIDGE PUMP AND B&G PL-B SERIES ALL BRONZE CIRCULATOR PUMP ALSO ACCEPTABLE.

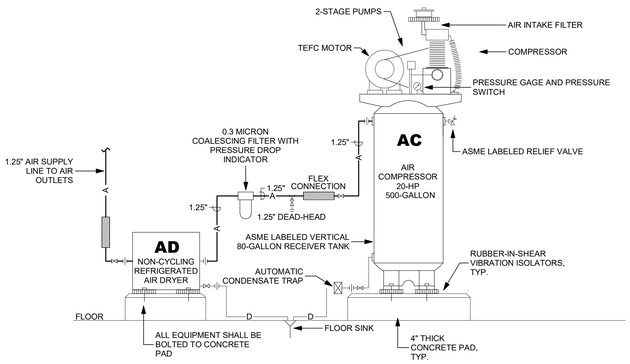
PROVIDE ONE SYSTEM AT OPS BUILDING MECH ROOM A116 (GWH-A) AND ONE SYSTEM AT THE WAREHOUSE CUST D113 (GWH-D). BOTH SYSTEMS CONSIST OF 2 BANKED 199 KBTU WATER HEATERS

9 GAS WATER HEATER SYSTEM (GWH & CP)

NO SCALE

AIR COMPRESSOR AND AIR DRYER

AIR COMPRESSOR MARK	AC-1, AC-2, & AC-3
LOCATION	OPERATIONS EXTERIOR
SERVES	OPERATIONS BUILDING
MINIMUM CFM SYSTEM DELIVERY @ 175 PSIG	66.8 ACFM
RECEIVER TANK CAPACITY AND TYPE	500 GALLON VERTICAL
GARDNER-DENVER MODEL	XGTK500-VB165
TANK DIMENSIONS	117" X 36" O.D.
MAWP	165 PSI AT 400°F
MDMT	-20°F AT 165 PSI
AIR COMPRESSOR HORSEPOWER	20 HP
AIR COMPRESSOR VOLTAGE	460V/3PH
AIR COMPRESSOR DIMENSIONS	31" X 27.5" X 47.3"
GARDNER-DENVER MODEL	XD-5
AIR DRYER MARK	AD-1, AD-2, & AD-3
AIR DRYER VOLTAGE (20 AMPS MAX)	115V
GARDNER-DENVER MODEL	RGD-100



NOTES:

1. ACCEPTABLE MANUFACTURERS SHALL INCLUDE GARDNER-DENVER OR INGERSOLL-RAND.
2. PROVIDE SCREW AIR COMPRESSOR WITH INTERCOOLER, AFTERCOOLER WITH SEPARATOR, NOISE CONTROL FILTERS/SILENCERS, OIL LEVEL SIGHT GLASS GAUGE, LOW OIL SWITCH, INTERSTAGE PRESSURE RELIEF VALVE, TEFC MOTOR, NEMA 1 STARTER, ALTERNATOR AND MOUNTING, V-BELT DRIVE IN A TOTALLY ENCLOSED OSHA-TYPE BELT GUARD, AUTOMATIC CONDENSATE TRAP, AUTO START/STOP, 0.3 MICRON COALESCING FILTER WITH PRESSURE DROP INDICATOR AND AIR DRYER. AIR DRYER SHALL BE NON-CYCLING REFRIGERATED TYPE SIZED BY MANUFACTURER BASED ON COMPRESSOR BEING OUTDOORS INDOORS AN UNCONDITIONED SPACE.
3. COMPRESSOR SHALL HAVE FACTORY WARRANTY OF 5 YEARS OR MORE.
4. FOR RECEIVER TANK, PROVIDE DRAIN KIT FITTING TO INCLUDE PRESSURE RELIEF VALVE, PRESSURE GAUGE AND MANUAL DRAIN VALVE. TANK TO BE BUILT TO ASME CODE WITH NATIONAL BOARD REGISTRATION. TANK FINISH TO BE INDUSTRIAL PRIMER.
5. FOR EXTERIOR INSTALLATIONS, DISCHARGE TO GROUND.

10 RECIPROCATING AIR COMPRESSOR AND STORAGE TANK DETAIL

NO SCALE

Revision /	Date	
1	10/07/25	Addendum 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:

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PLUMBING DETAILS AND SCHEDULES

PACKAGE	VOLUME
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Drawn By: SCM/ZS	
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PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	CONNECTION SIZE				SPECIFICATION
		SS	SV	CW	HW	
WC	WATER CLOSET	4"	2"	1"	-	WATER CLOSET - CARRIER MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, TOTO MODEL CT708E; SLOAN ROYAL 111-1.28 FLUSH VALVE WITH VANDAL-PROOF FREE-SPINNING TOP CAP, 1.28 GPF, VANDAL-PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP", INSTALL LEVER ON "WIDE-SIDE" OF TOILET STALL); BEMIS 1655-SSIC EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING, STAINLESS STEEL CHECK HINGE; 1000 LB RATED FLOOR MOUNTED CARRIER.
WC-2	WATER CLOSET WITH FLUSH VALVE TRAP PRIMER	4"	2"	1"	-	SAME AS TYPE "WC" EXCEPT WITH FLUSH VALVE TRAP PRIMER
UR	URINAL	2"	2"	3/4"	-	WALL MOUNTED, WHITE VITREOUS CHINA, WASHOUT ACTION, 0.5 GPF, WATERSENSE LABELED, MINIMUM 14" ELONGATED RIM, EXTENDED PRIVACY SHIELDS, 3/4" TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD WASHBROOK MODEL 6590.001EC; SLOAN ROYAL 186-0.5 FLUSH VALVE WITH VANDAL-PROOF TOP CAP, VANDAL-PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR, WITH LEVER INSTALLED ON LEFT SIDE; FLOOR MOUNTED CARRIER; STAINLESS STEEL VANDAL-PROOF BEEHIVE STRAINER OVER DRAIN. SEE DETAIL 6/P-501
LAV	WALL HUNG RESTROOM LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL HUNG, WHITE VITREOUS CHINA, CENTERSHANK DRILLING, OVERFLOW HOLE, SELF-DRAINING DECK AREA, 20" X 18", 4" MAXIMUM FRONT LIP DEPTH, 1/2" MAXIMUM INTEGRAL BACKSPLASH HEIGHT, ADA/TAS COMPLIANT AMERICAN STANDARD STUDIO MODEL 0614000; MANUAL NON-METERING, DECK MOUNTED, 4" FIXED CENTERS, 4" WRISTBLADE HANDLES, CERAMIC CARTRIDGES, 2.2 GPM AERATOR, FULLY VANDALPROOF. CHICAGO MODEL 802-V317XKABCP ONLY; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE, 1-1/4" CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOPS WITH FLEXIBLE SUPPLIES; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; FLOOR MOUNTED, CONCEALED ARMS CARRIER. P-TRAP PRIMER. INSTALL UNDER LAV MIXING VALVE ON HW SUPPLY SIDE OF FAUCET.
LAV-2	UNDERMOUNT RESTROOM LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	UNDERMOUNT TYPE, WHITE VITREOUS CHINA ADA/TAS COMPLIANT 19" X 13" AMERICAN STANDARD DECORUM MODEL 9024.004EC; MANUAL NON-METERING, DECK MOUNTED, 4" FIXED CENTERS, 4" WRISTBLADE HANDLES, CERAMIC CARTRIDGES, 2.2 GPM AERATOR, FULLY VANDALPROOF. CHICAGO MODEL 802-V317XKABCP ONLY; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE, 1-1/4" CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOPS WITH FLEXIBLE SUPPLIES; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. P-TRAP PRIMER. INSTALL UNDER LAV MIXING VALVE ON HW SUPPLY SIDE OF FAUCET.
SH	SHOWER VALVE ASSEMBLY	-	-	1/2"	1/2"	HANDICAP SAFETY MIX SHOWER - TILE ENCLOSURE, FOLD-DOWN SEAT, SHOWER CURTAIN AND ROD, GRAB BARS AND SOAP DISH BY OTHERS. SHOWER VALVE ASSEMBLY SHALL BE SYMMONS SAFETYMIX PRESSURE BALANCING MIXING VALVE WITH SINGLE BLADE BRASS LEVER HANDLE AND ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN (SET AT 110 F MAX); LEVERTROL BRASS DIVERTER WITH INTEGRAL VOLUMVE CONTROL; SYMMONS 295VP FRE-FLO ALL BRASS, VANDAL-PROOF, FIXED SHOWER HEAD WITH ADJUSTABLE METAL HOSE, IN-LINE VACUUM BREAKER, QUICK DISCONNECT, WALL CONNECTION AND FLANGE AND 30" METAL SLIDE BAR FOR HAND SHOWER MOUNTING; INTEGRAL SERVICE STOPS; AND, ALL MOUNTING FASTENERS FOR VALVE AND SHOWER HEAD SHALL BE VANDAL-PROOF. 1.5 GPM FLOW RESTRICTOR. SYMMONS SAFETYMIX 1-117-FS-B30-X-QD1.5. ENTIRE INSTALLATION SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS.
SK	ADA WORK SINK	1 1/2"	1 1/2"	1/2"	1/2"	SINGLE COMPARTMENT, 18-GAUGE STAINLESS STEEL WITH STAINLESS STEEL CHANNELS, DRAINS IN REAR-CENTER OF BOWLS, FULLY UNDERCOATED AND SOUND DEADENED, THREE (3) FAUCET HOLES, ADA/TAS COMPLIANT, 22" X 19" X 5-1/2" ELKAY MODEL ELRAD221955; FAUCET SHALL HAVE DUAL 2-3/8" LEVER HANDLES, BRASS CONSTRUCTION, 1.5 GPM, DECK MOUNT, COLD AND TEMPERED SUPPLIES, INTEGRAL 8" FIXED CENTERS, ANTI-SCALD ASSE1070 CERTIFIED THERMOSTATIC MIXING VALVE, VANDAL-PROOF, CHROME PLATED, 8" HIGH ARC SPOUT, CHICAGO MODEL 201-AHA8-317ABCP; ELKAY LK-99 DRAIN OUTLET WITH HEAVY-GAUGE STAINLESS STEEL BODY, REMOVABLE STAINLESS STEEL BASKET WITH LOCKING SHELL AND RUBBER STOPPER ON BOTTOM; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOPS WITH FLEXIBLE SUPPLIES; AND, TRUEBRO HANDI LAV-GUARD, VANDAL-PROOF, WHITE INSULATION KITS WHERE KNEESPACE MILLWORK SCREEN IS NOT PROVIDED. INSTALL UNDER LAV MIXING VALVE ON HW SUPPLY SIDE OF FAUCET PER DETAIL 2/P4.02.
SK-2	DOUBLE COMPARTMENT SINK	1 1/2"	1 1/2"	1/2"	1/2"	DOUBLE COMPARTMENT, 18-GAUGE STAINLESS STEEL WITH STAINLESS STEEL CHANNELS, ADA/TAS COMPLIANT, DRAINS IN REAR-CENTER OF BOWLS, FULLY UNDERCOATED AND SOUND DEADENED, FOUR (4) FAUCET HOLES,31-3/4" X 16-1/2" X 5-3/8" DEEP ELKAY MODEL ELUHAD321655; FAUCET SHALL HAVE DUAL 2-3/8" LEVER HANDLES, BRASS CONSTRUCTION, 1.5 GPM, DECK MOUNT, COLD AND TEMPERED SUPPLIES, INTEGRAL 8" FIXED CENTERS, ANTI-SCALD ASSE1070 CERTIFIED THERMOSTATIC MIXING VALVE, VANDAL-PROOF, CHROME PLATED, 8" HIGH ARC SPOUT, CHICAGO MODEL 201-AHA8-317ABCP; ELKAY LK-99 DRAIN OUTLET WITH HEAVY-GAUGE STAINLESS STEEL BODY, REMOVABLE STAINLESS STEEL BASKET WITH LOCKING SHELL AND RUBBER STOPPER ON BOTTOM; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOPS WITH CHROME PLATED COPPER RISERS; INSTALL DISPOSER ON DRAIN OUTLET PER ARCHITECTURAL DRAWINGS - SEE ARCHITECTURAL FOR DISPOSER SPECIFICATIONS; INSTALL SEPARATE/DEDICATED WATER STOPS FOR DISHWASHER AND DISPOSER CONNECTIONS.
SK-3	BAR SINK	2"	2"	1/2"	1/2"	SAME AS TYPE "SK" EXCEPT WITH LRAD151740 SINK. 12"X12" DROP IN BOWL.
SS	SERVICE SINK	2"	2"	3/4"	3/4"	SCULLERY TYPE SINK, 14-GAUGE TYPE 304 STAINLESS STEEL, 2 STATION, SEAMLESS WELDED CONSTRUCTION, 48" X 20" X 8" DEEP, 10" BACKSPLASH DRILLED FOR 2 FAUCETS, STAINLESS STEEL WALL BRACKETS, 3-1/2" DRAIN OUTLET ELKAY EWMA820; ELKAY LK18B STAINLESS STEEL PERFORATED STRAINER/GRID, PROVIDE WADE SOLIDS INTERCEPTOR WITH UNIONS ON EITHER SIDE FOR REMOVAL.; FAUCETS SHALL BE CHROME PLATED, 3-1/2" RIGID GOOSENECK SPOUT, LEVER HANDLES (CERAMIC CARTRIDGE), INTEGRAL SUPPLY STOPS, CHICAGO MODEL 640-GN1AE35-369YAB; AND, FLOOR MOUNTED, CHAIR CARRIER FOR WALL BRACKETS. INSTALL ASSE 1070 TMV ON HW SUPPLY SIDE OF FAUCETS PER DETAIL 8/P4.03.
MB	MOP BASIN	3"	2"	3/4"	3/4"	24" X 24" X 10" DEEP MOLDED TERRAZZO WITH DROP FRONT, SQUARE, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, REMOVABLE STAINLESS STEEL STRAINER MUSTEE MODEL ONLY; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE ZURN MODEL Z843M1-CS ONLY (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
EDF	DRINKING FOUNTAIN WITH BOTTLE FILLER	1-1/2"	1-1/2"	1/2"	-	DUAL STATION, MOUNTED ON WALL WITH CARRIER, ALL STAINLESS STEEL, DESIGNED FOR INDOOR INSTALLATION, 0.7 GPM MAX, ADA/TAS COMPLIANT, BARRIER FREE, MANUAL PUSH BUTTON ACTIVATED, 8 GPH AT ARI STANDARDS, 2-STREAM METAL BUBBLER, VANDAL-PROOF KITS, LEAD-FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC-134a, MECHANICAL ACTUATION VALVE (NO ELECTRONIC SOLENOID VALVE), NON-FILTERED, ADA HEIGHT UNIT ON LEFT SIDE, BOTTLE FILLER ON LOWER SIDE. HALSEY TAYLOR MODEL HTHBHVR8BL-NF; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; CHAIR CARRIERS; AND, STAINLESS STEEL ADA APRON WHERE REQUIRED BY ADA/TAS.

DRAINS, CLEANOUTS AND HYDRANTS

MARK	DESCRIPTION	CONNECTION SIZE				SPECIFICATION
		SS	SV	CW	HW	
FD	TOILET FLOOR DRAIN	4"	2"	1/2"	-	TWO-PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" ROUND HEAVY-DUTY SOLID STAINLESS STEEL STRAINER AND SECURITY SCREWS. ZURN MODEL ZS415BS-P-VP
FD-P	FLOOR DRAIN WITH TRAP GUARD	4"	2"	-	-	SAME AS "FD" BUT WITH PROSET TRAP GUARD IN LIEU OF TRAP PRIMER.
FD-2	EQUIPMENT FLOOR DRAIN	4"	2"	-	-	CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE-FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, PROSET TRAP GUARD. ZURN MODEL ZS05-P. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD-3	GRATED MECHANICAL ROOM FLOOR DRAIN	4"	2"	-	-	CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY-DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, VANDALPROOF SCREWS, CLAMPING DEVICE AND PROSET TRAP GUARD. ZURN MODEL ZS520-P-VP.
FS	FLOOR SINK	4"	2"	-	-	CAST IRON, 6" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4-TRACTOR GRATE AND PROSET TRAP GUARD. ZURN ZS1901-HD-KC-3-32.
TD-24'	24' MODULAR TRENCH DRAIN	4"	2"			12" WIDE FABRICATED MODULAR TRENCH DRAIN, CARBON STEEL MODULAT TRENCH WITH 10" WIDE THROAT, FLAT BOTTOM, FLANGED ENDS, REBAR SADDLES, DUCTILE IRON SLOTTED GRATES WITH CORROSION RESISTANT ARMORCOAT COATING, 4" BOTTOM OUTLET SANITARY CONNECTION, AVERAGE 4" DEEP. H-20 TRAFFIC RATED. 2940CS-FB-HDP-NH4
ESEW	EMERGENCY SHOWER AND EYEWASH	-	-	1-1/4"	-	COMBINATION DRENCH SPINTECH SHOWER AND HALO EYE/FACE WASH UNIT FULLY ACCESSIBLE TO PEOPLE WITH PHYSICAL DISABILITIES; GALVANIZED STEEL PROTECTED WITH BRADTECT SAFETY YELLOW COATING; MEETING ALL APPLICABLE CODES; INSTALL ELBOW DOWN AT DRAIN OUTLET BRADLEY MODEL S19-314BF.
CO	FLOOR CLEANOUT	VARIES	-	-	-	ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL-LINE-SIZE ABS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER ROUND FRAME AND TOP STYLE COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES). ZURN MODEL ZS1400-VP(-CF). PROVIDE CARPET FLANGE FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT - SAME AS TYPE "CO" EXCEPT WITH HEAVY-DUTY NICKEL BRONZE TOP. ZURN MODEL ZN1400-VP-HD. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	WALL CLEANOUT	VARIES	-	-	-	CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL-LINE-SIZE ABS PLUG UP TO 4") ZURN MODEL Z1440. ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, NICKEL BRONZE WITH POLISHED TOP ACCESS DOOR WITH BEVELED EDGE AND SCREW DRIVER ACCESS ZURN MODEL ZANB1462-8. WALL CLEANOUT ACCESS SHALL BE INSTALLED CENTERED ON AND WITHIN 2" OF ACCESS PANEL. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH SCREWDRIVER ACCESS, ZURN MODEL ZS1469-VP.
2CO	DOUBLE CLEANOUTS	4"	-	-	-	SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO-WAY RODDING. SINGLE CLEANOUT WITH 2-WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
GH	EXTERIOR GROUND HYDRANT	-	-	3/4"	-	EXPOSED, NON-FREEZE POST HYDRANT. GALVANIZED STEEL CASING AND CAST ALUMINUM CASING GUARD, ALL BRONZE INTERIOR PARTS, BRONZE SEAT AND REPLACEABLE SEAT WASHER., 3/4" HOSE CONNECTION, BOX WITH HINGED COVER. 2 FOOT DEPTH OF BURY. WADE 8900-L2
HB	HOSE BIBB	-	-	3/4"	-	3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	WALL HYDRANT	-	-	3/4"	-	MILD CLIMATE WALL HYDRANT - FULLY INSULATE PIPING LINE TO WALL HYDRANT BOX. PROVIDE INTERIOR SHUT-OFF ABOVE CEILING FOR HYDRANT.
VBOX	CW VALVE BOX	-	-	1/2"	-	RECESSED WITH ANGLE VALVE FOR CONNECTION TO VENDING MACHINE OR REFRIGERATOR ICE MAKER GUY GRAY MODEL BIM-875.
WBOX	CLOTHES WASHER DRAIN/VALVE BOX	4"	2"	1/2"	1/2"	HEAVY-GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL, VALVE AND DRAIN CONNECTIONS, WATTS DUO-CLOZ VALVE GUY GRAY MODEL WB-200.

FUELING EQUIPMENT SCHEDULE

DISPENSERS	
UF-D (2)	UNLEADED FUEL DISPENSER - DUAL NOZZLE, TWO HOSE, BACKLIT ELECTRONIC DIGITAL METER AND TOTALIZER DISPLAYING GALLONS, SHEAR VALVE AT CONNECTION TO FUEL SUPPLY PIPING, AUTOMATIC NOZZLE FOR DIESEL FUEL WITH BREAK-AWAY FITTING AND SWIVEL MEETING THE REQUIREMENTS OF A BALANCED STAGE II VAPOR RECOVERY SYSTEM, HIGH POST MOUNTED HOSE RETRACTOR WITH COUNTER WEIGHT. ISLAND OUTLET GASBOY ATLAS 9853 DUAL HOSE
DF-D (2)	DIESEL FUEL DISPENSER - DUAL NOZZLE, TWO HOSE, BACKLIT ELECTRONIC DIGITAL METER AND TOTALIZER DISPLAYING GALLONS, SHEAR VALVE AT CONNECTION TO FUEL SUPPLY PIPING, AUTOMATIC NOZZLE FOR DIESEL FUEL WITH BREAK-AWAY FITTING AND SWIVEL MEETING THE REQUIREMENTS OF A BALANCED STAGE II VAPOR RECOVERY SYSTEM, HIGH POST MOUNTED HOSE RETRACTOR WITH COUNTER WEIGHT. ISLAND OUTLET GASBOY ATLAS 9853 DUAL HOSE
FUEL MANAGEMENT SYSTEM	
FM	FUEL MANAGEMENT PEDESTAL

NOTE: REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P3.02) FOR PLUMBING SYMBOLS LEGEND. PLUMBING CONTRACTOR SHALL PROVIDE DEMOLITION WORK AS REQUIRED FOR PLUMBING WORK.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC. OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC.
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL OR COMPUTER EQUIPMENT. REF. ELECTRICAL DRAWINGS FOR LOCATIONS OF EQUIPMENT AND COORDINATE WITH WITH ELECTRICAL AND TECHNOLOGY SUBS ACCORDINGLY. SEE DETAILS 9 & 10/P3.00. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 12/P3.00. FIRE CAULK WHERE REQUIRED. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 8/P3.00.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1-1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVES SHALL BE BALL VALVE ONLY. GATE VALVES AND BUTTERFLY VALVES WILL NOT BE ACCEPTED FOR THIS PROJECT. SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE: PROVIDE 18" X 18", FIRE-RATED, STAINLESS STEEL ACCESS PANELS WITH HINGED, CYLINDER LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES. BALL VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON TOP OF PIPE AND LOCATED SUCH THAT LEVER OPERATION IS NOT OBSTRUCTED IN ANY WAY. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL WITH NOTHING OBSTRUCTING A PERSON FROM EASILY OPERATING VALVE.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE OR HYDROFLUSH TO PROVE FREE FLOWING, SEE SPECIFICATIONS. NEW AND EXISTING PIPE INCLUDED.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 11/P3.00 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 7/P3.00 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS PROVIDED BY OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALL COMMERCIAL ICE MAKERS SHALL HAVE ANGLE STOP AND WATER FILTER FOR ICE MAKER CONNECTION; INSTALL TYGON TUBING WITH STAINLESS STEEL FITTINGS BETWEEN WATER FILTER AND ICE MAKER WATER CONNECTION; ALSO, INSTALL WATTS 9BD DUAL CHECK WITH ATMOSPHERIC VENT IN WATER CONNECTION.
19. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED - NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING ELECTRONIC TRAP PRIMING MANIFOLD ASSEMBLIES OR WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES AS SHOWN ON DRAWINGS, REFERENCE DETAILS 3/P3.01 AND 5/P3.01. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS FOR EACH INDIVIDUAL DRAIN. DO NOT INSTALL FLUSH VALVE TRAP PRIMER DEVICES ON HANDICAP WATER CLOSETS - USE LAVATORY P-TRAP TRAP PRIMER DEVICES IN ONE-PERSON STAFF RESTROOMS WHERE SHOWN ON PLUMBING DRAWINGS.
20. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARVEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB-OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
21. REFERENCE STRUCTURAL DETAIL 17/S0.03 FOR GRADE BEAM PENETRATION REQUIREMENT.

PLUMBING PIPING MATERIALS

SANITARY WASTE AND VENT PIPING:

BELOW SLAB: SCHEDULE 40, DWV PVC. BEYOND 5 FEET FROM BUILDING, SEE CIVIL DRAWINGS AND SPECIFICATIONS.

ABOVE SLAB: STANDARD HUBLESS CAST IRON WITH HEAVY DUTY NO-HUB CLAMPS.

STORM PIPING:

BELOW SLAB: SCHEDULE 40, DWV PVC. BEYOND 5 FEET FROM BUILDING, SEE CIVIL DRAWINGS AND SPECIFICATIONS.

ABOVE SLAB: STANDARD HUBLESS CAST IRON WITH HEAVY DUTY NO-HUB CLAMPS.

DOMESTIC WATER PIPING:

INTERIOR: MAINS: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD-FREE SOLDER. CHROME PLATED WHERE EXPOSED.

TRAP PRIMERS: SOFT ROLLED COPPER IN SLEEVE

COMPRESSED AIR:

SCHEDULE 40 GALVANIZED STEEL WITH SCREWED JOINTS.

NATURAL GAS:

ABOVE GROUND: SCHEDULE 40 BLACK STEEL WITH WELDED OR SCREWED JOINTS. PIPING IN INACCESSIBLE LOCATIONS AND PIPING 2 1/2" AND LARGER MUST HAVE WELDED JOINTS.

EXTERIOR BELOW GRADE: POLYETHYLENE GAS PIPING WITH SOCKET FUSED JOINTS.

PLUMBING SYMBOLS LEGEND

SANITARY WASTE (BELOW SLAB)		EXIST.	EXISTING
SANITARY WASTE (ABOVE SLAB)		SAN.	SANITARY
VENT PIPING (BELOW SLAB)		CW	DOMESTIC COLD WATER
VENT PIPING (ABOVE SLAB)		HW	DOMESTIC HOT WATER
DOMESTIC COLD WATER PIPING		HWR	DOMESTIC HOT WATER RETURN
DOMESTIC HOT WATER PIPING		VB	VACUUM BREAKER
DOMESTIC HOT WATER RETURN PIPING		SO	SAND/OIL INTERCEPTOR
GAS SERVICE (BY UTILITY PROVIDER)		STW	SAMPLE TEST WELL
INTERMEDIATE PRESSURE GAS PIPING (5 PSIG)		MH	SANITARY MANHOLE
LOW PRESSURE GAS PIPING (4-8 OZ.)		GM	GAS METER
DRAIN/RELIEF VENT PIPING		GWH	GAS WATER HEATER
STOP VALVE		CP	HOT WATER CIRCULATOR PUMP
BACKFLOW PREVENTER (WATTS 909 ONLY)		A	AIR OUTLET - SEE DETAIL 8/P3.01
GAS PRESSURE REDUCING/REGULATING VALVE			
RISER P-1, 4" VENT THROUGH ROOF (P, T) 4" VTR			

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1	10/07/25	Addendum 1

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NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED
PROFESSIONAL
ENGINEER
09/18/2025

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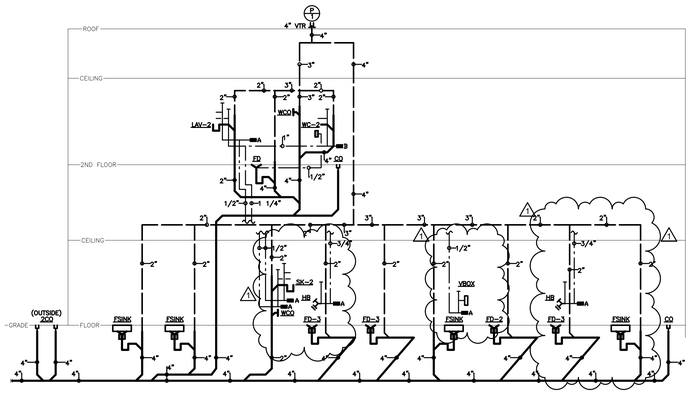
PLUMBING DETAILS AND SCHEDULES

PACKAGE VOLUME

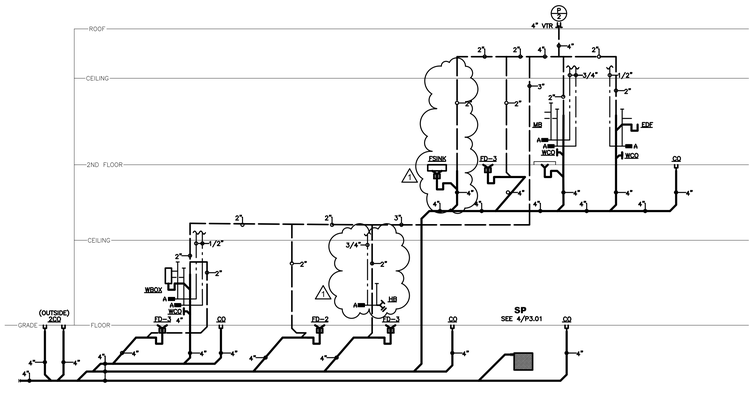
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Date: 09/18/2025
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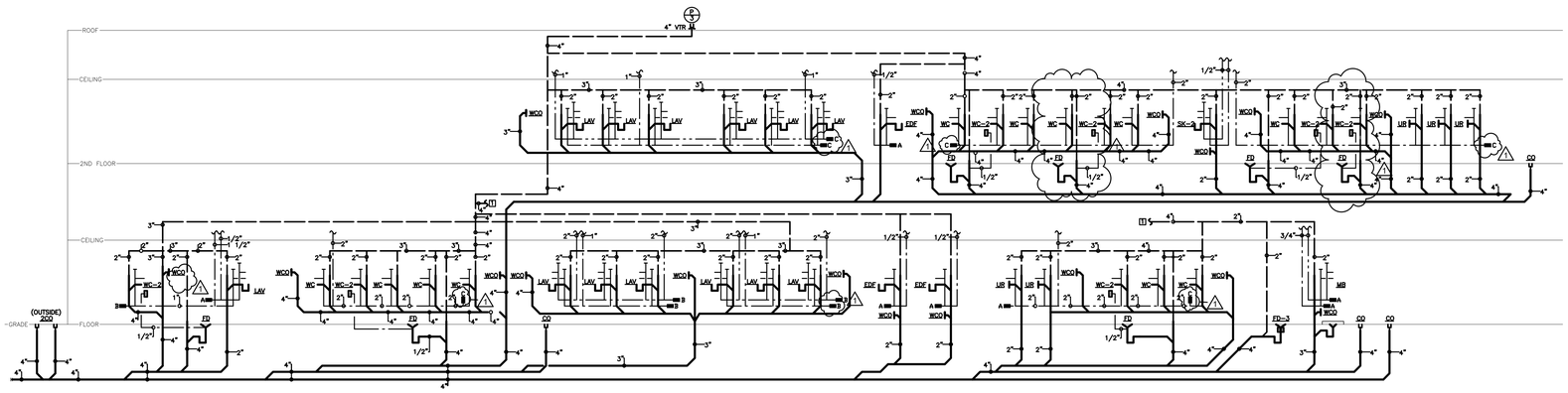
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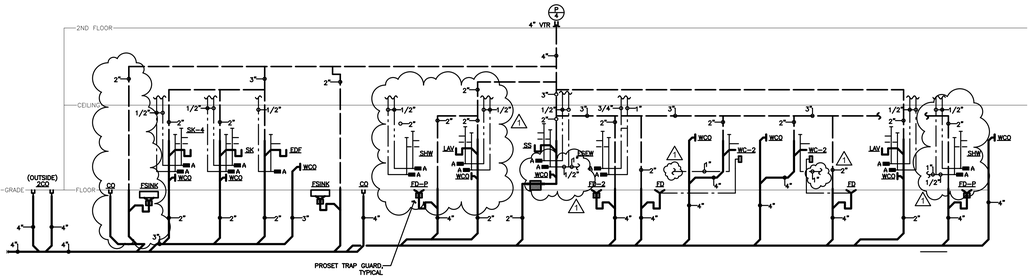
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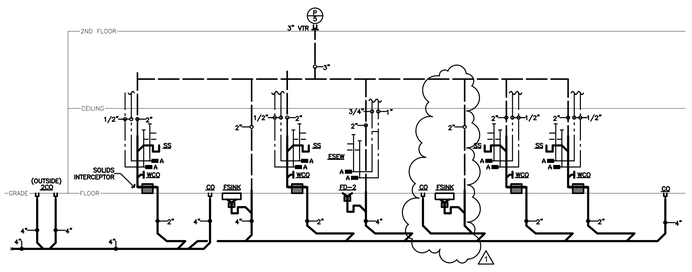
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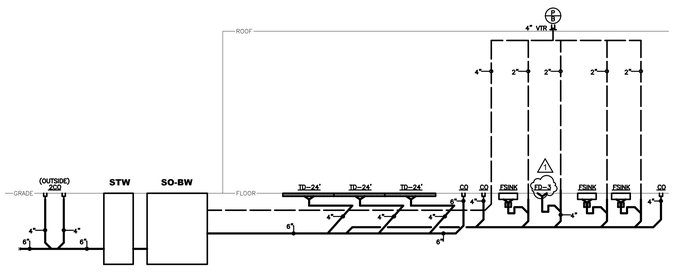
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NO SCALE



4 OPERATIONS BUILDING PLUMBING RISER DIAGRAM
NO SCALE



5 OPERATIONS BUILDING PLUMBING RISER DIAGRAM
NO SCALE



5 BUS WASH PLUMBING RISER DIAGRAM
NO SCALE

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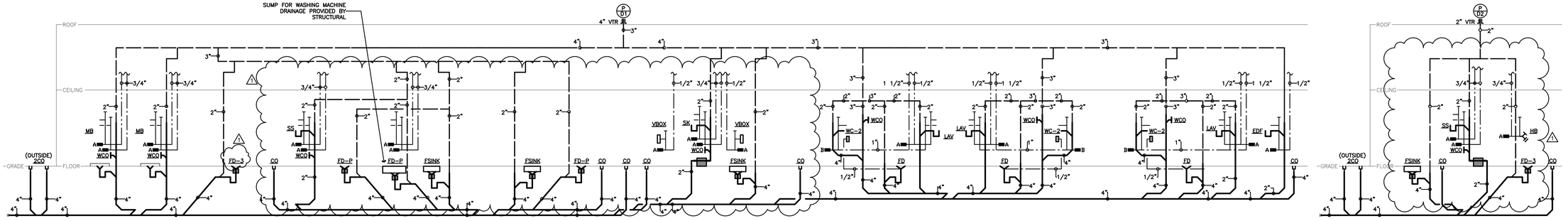
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PLUMBING RISER DIAGRAMS

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Date: 09/18/2025	

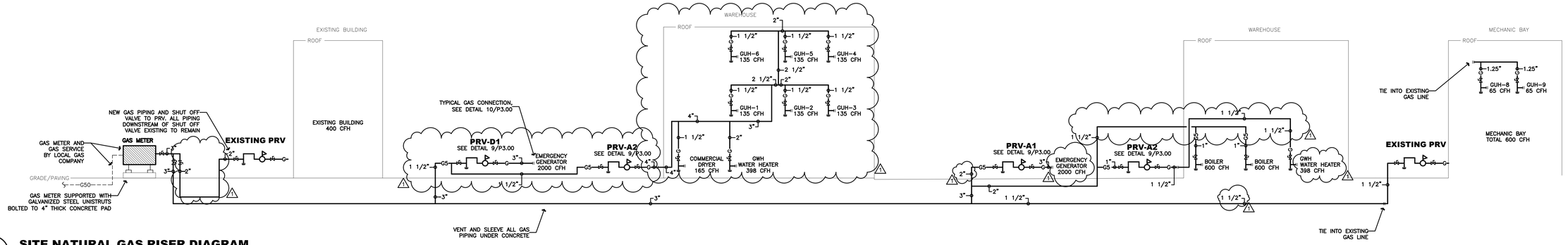
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1 WAREHOUSE PLUMBING RISER DIAGRAM

NO SCALE



2 SITE NATURAL GAS RISER DIAGRAM

NO SCALE

OPERATIONS BUILDING NATURAL GAS LOAD			
GENERATOR	1	2000	2000
DOMESTIC WATER HEATER	2	199	398
HYDRONIC BOILER	2	600	1200
TOTAL BUILDING A GAS LOAD (CFH)			3598
WAREHOUSE NATURAL GAS LOAD			
GENERATOR	1	2000	2000
DOMESTIC WATER HEATER	2	199	398
GAS UNIT HEATERS (GUH 1-6)	6	135	810
COMMERCIAL DRYER	1	165	165
TOTAL BUILDING D GAS LOAD (CFH)			3373
EXISTING NATURAL GAS LOAD			
MECHANIC BAY	1	600	600
EXISTING BUILDING	1	400	400
TOTAL MAINTENANCE GAS LOAD (CFH)			1000
TOTAL SITE NATURAL GAS LOAD (CFH)			**7971**

METER OUTLET PRESSURE SHALL BE 5 PSI.
FURTHEST PIPING RUN FROM METER IS 1100 FEET.

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1	10/07/25	Addendum 1

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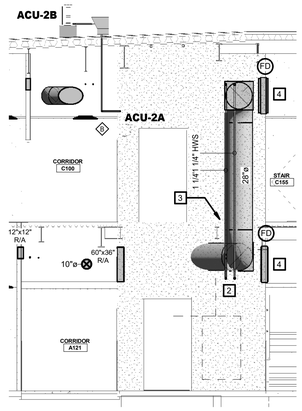
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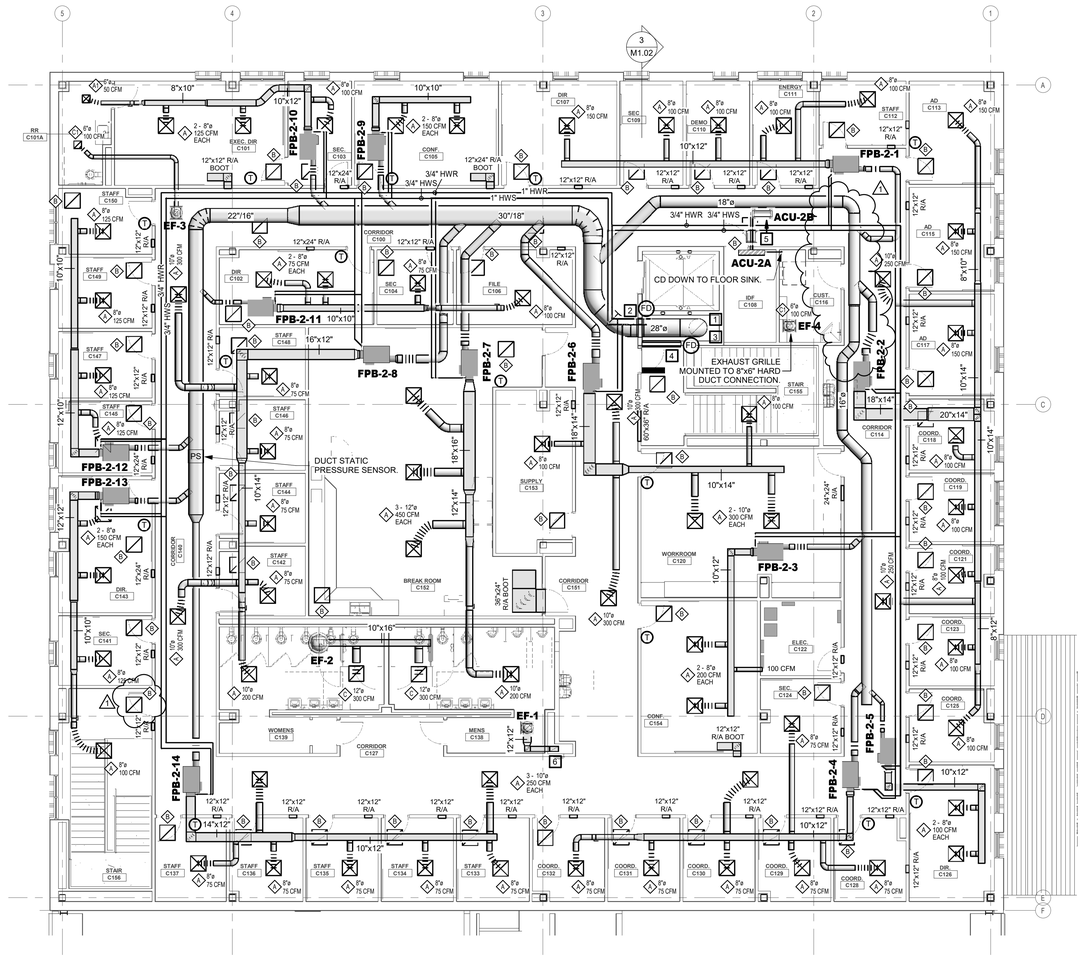
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MECHANICAL KEY NOTES

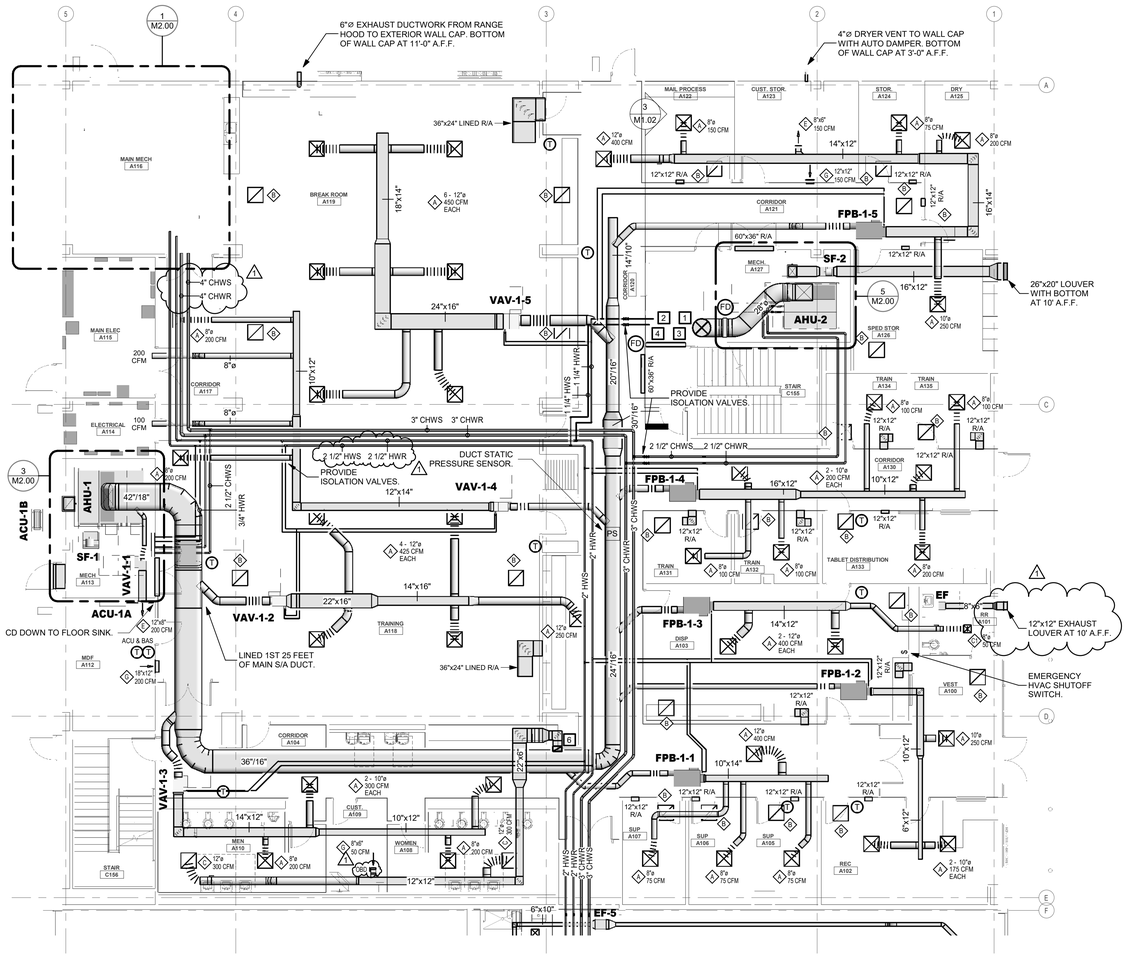
1. 28" SUPPLY DUCT TO SECOND FLOOR / FROM FIRST FLOOR.
2. 1-1/4" HWS/R PIPING TO SECOND FLOOR / FROM FIRST FLOOR.
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4. 60"X36" R/A OPENING IN CHASE WALL WITH FIRE DAMPER.
5. CONDENSING UNIT ACU-B ON ROOF, SEE DETAIL 14/IM5.02.
6. 14"x8" E/A DUCT UP TO SECOND FLOOR / FROM FIRST FLOOR INSIDE CHASE.



3 MECHANICAL SECTION - CHASE
SCALE= 3/16" = 1'-0"



2 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING
SCALE= 1/8" = 1'-0"



1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING
SCALE= 1/8" = 1'-0"

TRUE

KEY PLAN
N.T.S.

A / C
B
D

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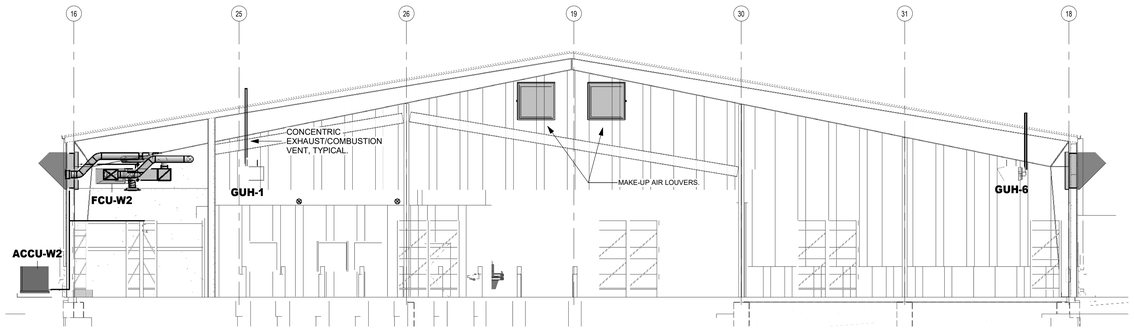
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MECHANICAL FLOOR PLAN - LEVEL 1 / 2 - AREA A / C - OPERATIONS BUILDING

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Job No. 1971-05-01	Sheet No. M1.02
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Date: 09/16/2025	

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2 MECHANICAL SECTION - WAREHOUSE

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

1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

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

N TRUE

WALL LOUVER WITH RAINHOOD & MOTORIZED DAMPER INTERLOCK WITH WEF, TYPICAL OF 4.

2 / M1.04

GUH-6

PROVIDE EXHAUST VENT THROUGH ROOF WITH ROOF CAP FOR ALL GAS UNIT HEATERS. TYPICAL.

GUH-5

PROVIDE CONCENTRIC EXHAUST/COMBUSTION AIR VENT THRU ROOF, TYPICAL.

GUH-4

WEF-1
14,500 CFM

WEF-2
14,500 CFM

WEF-3
14,500 CFM

WEF-4
14,500 CFM

FANS T'STAT WITH OVER-RIDE TIMER SWITCH.

GUH T'STAT INTERLOCKS WITH FAN OVER-RIDE SWITCH TO TURN OFF FANS WHEN GUHS ARE ON.

WALL LOUVERS AND RAINHOODS IN HIGH WALL.

EXHAUST FAN TO INTERLOCK WITH RESTROOM OCCUPANCY SENSORS.

12"x12" EXHAUST LOUVER 11'-6" A.F.F.

EF-W1

1" CD DOWN INSIDE WALL CAVITY AND EXIT TO TIE INTO TAILPIECE OF P-TRAP.

6"ø EXHAUST DUCTWORK FROM RANGE HOOD TO EXTERIOR WALL CAP. BOTTOM OF WALL CAP AT 12' A.F.F.

FCU-W1

O/A DUCT TO 12"x12" WALL LOUVER AT 11'-6" A.F.F. INSTALL NO LESS THAN 10' FROM EXHAUST AIR OR SANITARY VENTS. TYPICAL.

12"x12" R/A OPENING, TYPICAL

REFRIGERANT PIPING, TYPICAL.

RUN ACU DRAIN LINE DOWN TO F-SINK.

1" CD

1" CD LINE DOWN TO FLOOR SINK.

RUN REFRIGERANT LINES INSIDE WALL CAVITY, SEE DETAIL 11/M5.02.

ACU-WA

EF-W2

8" DIA. DRYER VENT TO WALL CAP WITH AUTO DAMPER. INSTALLED AT 11'-6" A.F.F.

MECHANICAL CONTRACTOR TO INSTALL GWH EXHAUST FLUE VENTS PROVIDED BY PLUMBING CONTRACTOR.

GENSET

8"x8" EXHAUST LOUVER AT 11'-6" A.F.F.

ACU-WB

ACU-W1

ACU-W2

COOLER/FREEZER REFRIGERATION UNIT. SHOWN FOR REFERENCE ONLY. PROVIDED BY OTHERS.

WALL LOUVER AND RAINHOOD.

12"x12" O/A DUCT TO WALL LOUVER AT 15'-6" A.F.F.

FCU-W2

GUH-1

GUH-2

GUH-3

WAREHOUSE D118

ENTRY D100

TIME 101

RR D109

RR D101

CORR. 102

SUP. D104

SUP. D105

SUP. D106

BREAK RM D107

HOOD

ELECTRICAL D110A

LAUNDRY D111

ELEC. D110B

CUST. D113

IDF D103

CORR. 112

FREEZER D114

COOLER D115

TEXTBOOK STOR D116

SMALL/APP REPAIR D120

EQUIP. REPAIR D117

24"x14"

24"x24" R/A

8"x14"

10"x14"

10"x12"

18"x18" R/A

12"x12" R/A

20"x18"

22"x16"

16"x16"

10"x14"

OBD

VD

KEY PLAN
N.T.S.

A / C

B

D

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MECHANICAL FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

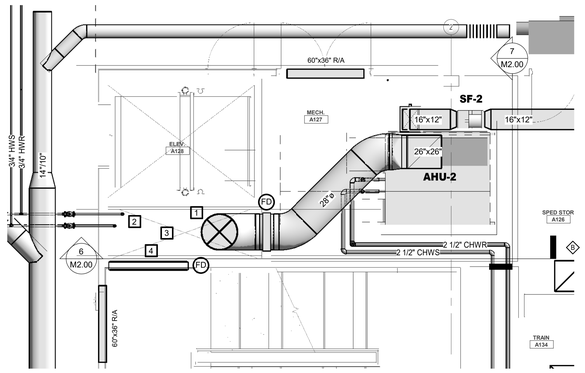
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Date: 09/18/2025	

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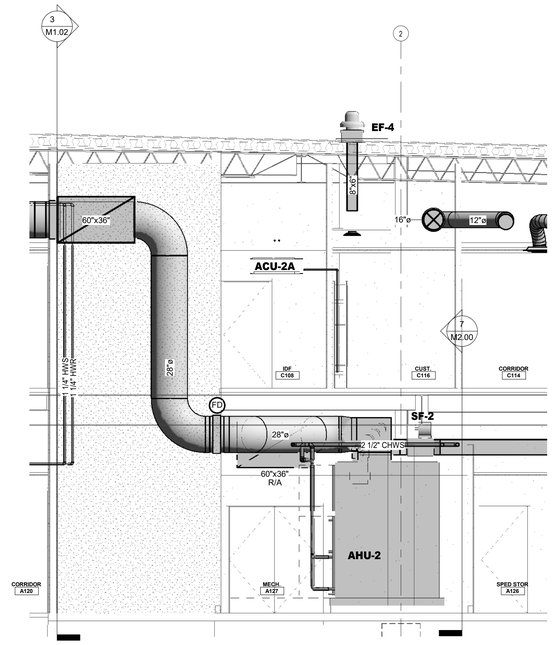
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MECHANICAL KEY NOTES

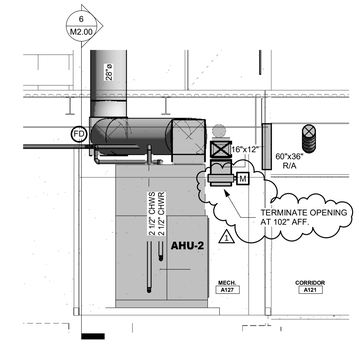
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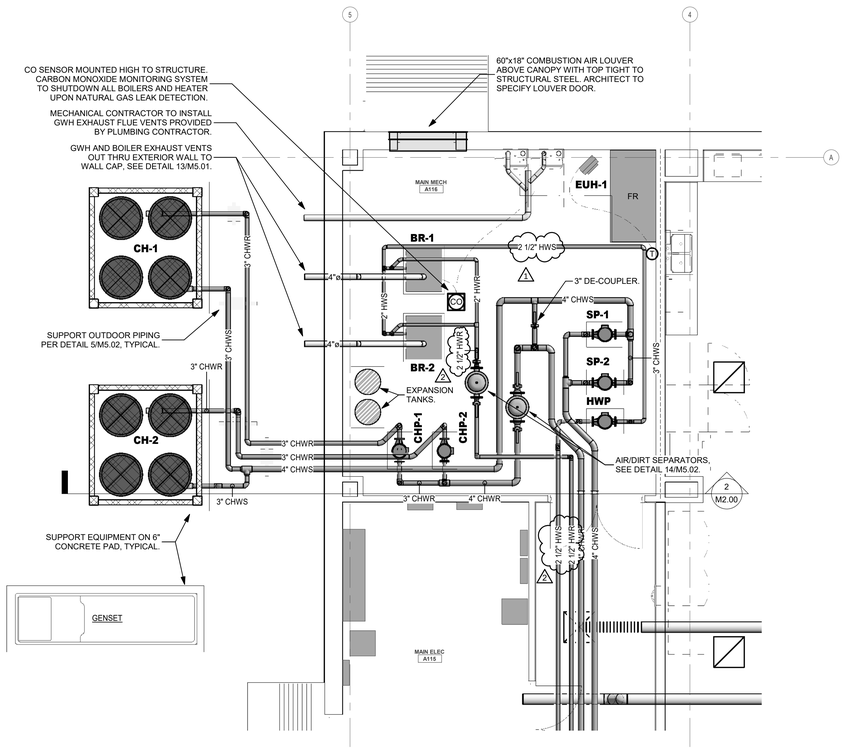
5 MECHANICAL ENGLARGED PLAN - MECH ROOM A127
SCALE= 1/4" = 1'-0"



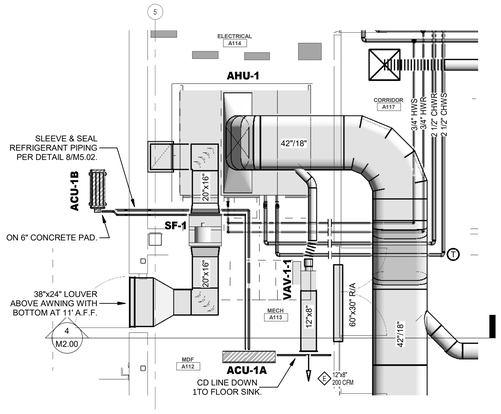
6 AHU-2 SECTION #1
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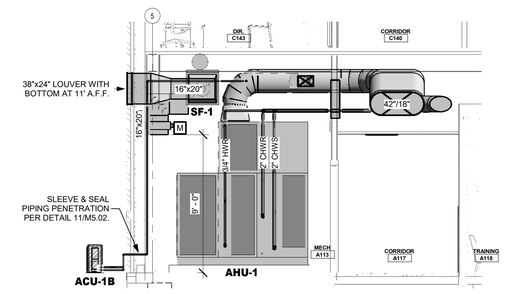
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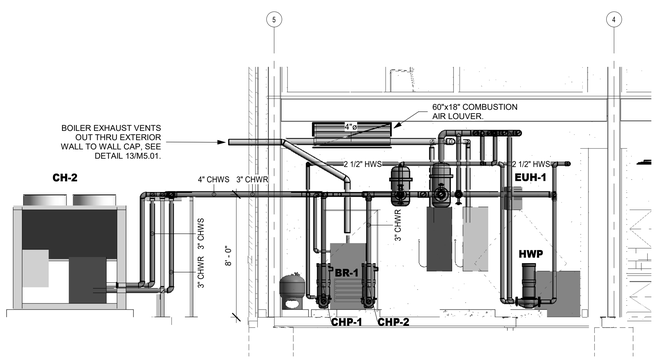
1 MECHANICAL CENTRAL PLANT DETAIL PLAN
SCALE= 1/4" = 1'-0"



3 MECHANICAL ENLARGED PLAN - MECH ROOM A113
SCALE= 1/4" = 1'-0"



4 AHU-1 SECTION
SCALE= 1/4" = 1'-0"



2 MECHANICAL SECTION - CENTRAL PLANT
SCALE= 1/4" = 1'-0"

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MECHANICAL DETAIL PLANS & SECTIONS

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(281) 945-8888
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AIR HANDLING UNIT SCHEDULE

	MARK	AHU-1	AHU-2	AHU-3	AHU-4	AHU-5	AHU-6	AHU-7	AHU-8	AHU-9	AHU-10	AHU-11
CABINET	SERVES	OPERATIONS 1ST FLOOR	OPERATIONS 2ND FLOOR	SHOP-CORR & RR	SHOP-LOCK	SHOP-ELEC	SHOP-GROUNDS	SHOP-CARPENTER	SHOP-HVAC	SHOP-PAINTER	SHOP-GEN MAINT	SHOP-PLUMBING
	INSTALLATION	HOUSEKEEPING PAD	HOUSEKEEPING PAD	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL	HANGING HORIZONTAL
	TYPE	SZ-VDT	SZ-VDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT	SZ-HDT
	TOTAL CFM	8,600 CFM	10,000 CFM	1,200 CFM	1,200 CFM	3,000 CFM	4,350 CFM	2,000 CFM	3,000 CFM	2,000 CFM	4,500 CFM	3,000 CFM
	O/A CFM	2,250 CFM	1,200 CFM	100 CFM	100 CFM	150 CFM	225 CFM	100 CFM	150 CFM	100 CFM	250 CFM	150 CFM
	EXT. STATIC WG	3.0"	3.0"	0.75"	1.0"	0.75"	0.75"	0.75"	0.75"	0.75"	0.75"	0.75"
	MOTOR HP / BHP / KW	15 HP	15 HP	1 HP	1 HP	3 HP	3 HP	2 HP	3 HP	2 HP	3 HP	3 HP
	VOLTAGE	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH
COOLING	COIL POSITION	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN	MAIN
	COIL CFM	8,600 CFM	10,000 CFM	1,200 CFM	1,200 CFM	3,000 CFM	4,350 CFM	2,000 CFM	3,000 CFM	2,000 CFM	4,500 CFM	3,000 CFM
	MIN. ROWS	6	6	6	6	6	6	6	6	6	6	6
	MAX. FINS / INCH	12	12	12	12	12	12	12	12	12	12	12
	MAX. FACE VELOCITY	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM
	EAT db/wb, °F	78.5°F/ 67.3°F	79.7°F/ 67.7°F	76°F/ 64.5°F	76°F/ 64.5°F	75.1°F/ 63.4°F	75.2°F/ 63.4°F	75.7°F/ 63.9°F	75.1°F/ 63.4°F	75.7°F/ 63.9°F	75.3°F/ 63.5°F	75.1°F/ 63.4°F
	LAT db/wb, °F	52.8°F/ 52.4°F	52.5°F/ 52.3°F	54.0°F/ 53.5°F	54.0°F/ 53.5°F	54.0°F/ 53.5°F	53.5°F/ 53.0°F	54.0°F/ 53.5°F	54.0°F/ 53.5°F	54.0°F/ 53.5°F	53.5°F/ 53.0°F	54.0°F/ 53.5°F
	GSH MBH	240	296	29	29	69	102	47	69	47	106	69
	GTH MBH	391	474	40	40	88	134	62	88	62	140	88
	GPM/SIZE	49 / 2.0"	68 / 2.5"	6 / 1.0"	6 / 1.0"	13 / 1.25"	19 / 1.5"	9 / 1.25"	13 / 1.25"	9 / 1.25"	20 / 1.5"	13 / 1.25"
	EWT/LWT, °F	42°F/ 58°F	42°F/ 58°F	44°F/ 58°F	42°F/ 58°F	44°F/ 58°F	44°F/ 58°F	42°F/ 58°F	44°F/ 58°F	42°F/ 58°F	44°F/ 58°F	44°F/ 58°F
	MAX. PD. FEET	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT	12 FT
	COND. DRAIN SIZE	1.0"	1.0"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
HEATING	COIL POSITION	PRE - HEAT	-	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT	RE-HEAT
	COIL CFM, MAX/MIN	8,600 CFM / 2250 CFM*	-	1,200 CFM	1,200 CFM	3,000 CFM	4,350 CFM	2,000 CFM	3,000 CFM	2,000 CFM	4,500 CFM	3,000 CFM
	MIN. ROWS	1	-	1	1	1	1	1	1	1	1	1
	MAX. FINS/INCH	12	-	12	12	12	12	12	12	12	12	12
	MAX. FACE VELOCITY	500 FPM	-	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM	500 FPM
	EAT, °F (AT MIN. CFM)	27°F	-	64.5°F	64.5°F	65.9°F	65.8°F	64.8°F	65.9°F	64.8°F	65.6°F	65.9°F
	LAT, °F	55°F	-	95°F	95°F	95°F	95°F	95°F	95°F	95°F	95°F	95°F
	GTH MBH	68	-	40	33	95	138	66	95	66	144	95
	EWT/LWT, °F	160°F/ 120°F	-	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F	160°F/ 120°F
	GPM/SIZE	3 / 0.75"	-	2 / 0.75"	2 / 0.75"	5 / 1.0"	7 / 1.0"	3 / 0.75"	5 / 1.0"	3 / 0.75"	7 / 1.0"	5 / 1.0"
	MAX. P.D. FEET	6 FT	-	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT

NOTES:
1. EXT. SP DOES NOT INCLUDE FILTERS, COILS, CASING, CONVERSIONS OR MIXING DAMPER LOSSES.
2. MOTORS SHALL BE COPPER WOUND, PREMIUM EFFICIENCY TYPE (+90% MINIMUM).
3. DESIGN FAN HP IS MOTOR SIZE REQUIRED BY ELECTRICAL. MANUFACTURERS REQUIRING LARGER MOTORS MUST PAY FOR INCREASED CIRCUIT COSTS. SMALLER MOTORS MAY BE PROVIDED IF BHP IS LESS THAN SCHEDULED AND A 1/4" WG PRESSURE DROP DOES NOT OVERLOAD MOTOR.
4. PROVIDE MERV 13 FILTERS WITH MAXIMUM FILTER VELOCITY AT 350 FT / MIN.
5. PROVIDE S.S. SLOPING DRAIN PAN WITH CONDENSATE OVERFLOW SENSOR FOR ALL HANGING AHUs.
6. ALL UNITS SHALL BE INTERNALLY ISOLATED.
7. PROVIDE RETURN AIR FILTER MIXING BOX FOR HORIZONTAL UNITS.
8. (*) DESIGNATE PRETREATED OUTSIDE AIR AND HEATING LOAD BASED ON WORST CASE SCENARIO.

FAN POWERED TERMINAL UNITS SCHEDULE

MARK	COOLING MAX	COOLING MIN	REHEAT	DIAMETER	E.S.P (W.G)	VELOCITY	HP	MCA	MOCP	VOLTS	HEATING MBH	HEATING GPM	PIPE SIZE & CONN. SIDE	PRICE MODEL #
FPB-1-1	625	188	313	8	0.3"	1790	0.25 HP	0.64	15	277V	11.8	0.6	3/4", RH	FDC
FPB-1-2	600	180	300	8	0.3"	1719	0.25 HP	0.64	15	277V	11.3	0.6	3/4", RH	FDC
FPB-1-3	850	255	425	10	0.3"	1558	0.25 HP	0.64	15	277V	16.1	0.8	3/4", RH	FDC
FPB-1-4	1000	300	500	10	0.3"	1833	0.5 HP	1.27	15	277V	18.9	0.9	3/4", LH	FDC
FPB-1-5	1450	435	725	12	0.3"	1846	0.75 HP	1.91	15	277V	27.4	1.4	3/4", RH	FDC
FPB-2-1	550	165	275	8	0.3"	1576	0.25 HP	0.64	15	277V	10.4	0.5	3/4", RH	FDC
FPB-2-2	1450	435	725	12	0.3"	1846	0.75 HP	1.91	15	277V	27.4	1.4	3/4", LH	FDC
FPB-2-3	500	150	250	8	0.3"	1432	0.25 HP	0.64	15	277V	9.5	0.5	3/4", LH	FDC
FPB-2-4	700	210	350	10	0.3"	1283	0.25 HP	0.64	15	277V	13.2	0.7	3/4", LH	FDC
FPB-2-5	200	60	100	6	0.3"	1019	0.25 HP	0.64	15	277V	3.8	0.2	3/4", LH	FDC
FPB-2-6	1400	420	700	12	0.3"	1783	0.75 HP	1.91	15	277V	26.5	1.3	3/4", RH	FDC
FPB-2-7	1550	465	775	12	0.3"	1974	0.75 HP	1.91	15	277V	29.3	1.5	3/4", RH	FDC
FPB-2-8	1100	330	550	12	0.3"	1401	0.5 HP	1.27	15	277V	20.8	1.0	3/4", LH	FDC
FPB-2-9	300	90	150	6	0.3"	1528	0.25 HP	0.64	15	277V	5.7	0.3	3/4", RH	FDC
FPB-2-10	400	120	200	8	0.3"	1146	0.25 HP	0.64	15	277V	7.6	0.4	3/4", RH	FDC
FPB-2-11	325	98	163	8	0.3"	1655	0.25 HP	0.64	15	277V	6.2	0.3	3/4", RH	FDC
FPB-2-12	500	150	250	8	0.3"	1432	0.25 HP	0.64	15	277V	9.5	0.5	3/4", LH	FDC
FPB-2-13	525	158	263	8	0.3"	1504	0.25 HP	0.64	15	277V	9.9	0.5	3/4", RH	FDC
FPB-2-14	875	263	438	10	0.3"	1604	0.25 HP	0.64	15	277V	16.5	0.8	3/4", LH	FDC

NOTES:
1. FAN POWERED BOXES SHALL HAVE ECM MOTOR WITH 277V/1PH POWER.
2. ALL UNITS REQUIRING HEAT SHALL BE EQUIPPED WITH HOT WATER HEATING COIL.
3. STATIC PRESSURES SHOWN ARE EXTERNAL TO UNITS. MANUFACTURER SHALL ADD DAMPER, HEATING COIL, CASING, FILTER, AND OTHER UNIT LOSSES BEFORE SELECTING FAN.
4. HEATING CAPACITY IS BASED ON COLD AIR AT 55ºF AND VALVE AT 50% OPENED MIXING WITH PLENUM AIR AT 75ºF.
5. REFERENCE 16/M5.01 FOR DETAIL AND WRITTEN SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
6. TERMINAL UNIT MANUFACTURER MUST FACTORY MOUNT, WIRE, AND PROGRAM DDC CONTROLLER AND CONTROL DEVICES

VARIABLE AIR VOLUME BOX SCHEDULE

MARK	COOLING MAX	COOLING MIN	REHEAT	DIAMETER	E.S.P (W.G)	VELOCITY	VOLTS	HEATING MBH	HEATING GPM	PIPE SIZE & HAND SIDE	PRICE MODEL #
VAV-1-1	200	60	N/A	6	0.3"	1019	277V	NO HEAT		3/4", LH	SDV
VAV-1-2	1950	585	975	14	0.3"	1824	277V	36.9	1.8	3/4", LH	SDV
VAV-1-3	1000	300	500	10	0.3"	1833	277V	18.9	0.9	3/4", LH	SDV
VAV-1-4	700	210	350	10	0.3"	1283	277V	13.2	0.7	3/4", LH	SDV
VAV-1-5	2700	810	1350	16	0.3"	1634	277V	51.0	2.6	3/4", LH	SDV

NOTES:
1. PROVIDE 277V TO VAV BOXES. BUILT IN TRANSFORMER TO STEP DOWN TO 24V FOR DAMPER CONTROL.
2. ALL UNITS REQUIRING HEAT SHALL BE EQUIPPED WITH HOT WATER HEATING COIL.
3. STATIC PRESSURES SHOWN ARE EXTERNAL TO UNITS. MANUFACTURER SHALL ADD DAMPER, HEATING COIL, CASING, FILTER, AND OTHER UNIT LOSSES BEFORE SELECTING UNIT.
4. HEATING CAPACITY IS BASED ON COLD AIR AT 55°F AND AIR VALVE AT 50% OPENED FOR VAV .
5. REFERENCE 9/M5.01 FOR DETAIL AND WRITTEN SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
6. TERMINAL UNIT MANUFACTURER MUST FACTORY MOUNT, WIRE, AND PROGRAM DDC CONTROLLER AND CONTROL DEVICES

EXHAUST FAN SCHEDULE

MARK	EF-1	EF-2	EF-3	EF-4	EF-5	EF-6	EF-7	WEF-1	WEF-2	WEF-3	WEF-4	WEF-5	WEF-6	EF-W1	EF-W2
SERVES	RR	RR	RR	CUSTODIAL	RR	CHEM STOR.	WELD. HOOD	WAREHOUSE	WAREHOUSE	WAREHOUSE	WAREHOUSE	BUSWASH	MECHANIC BAY	RR	CUSTODIAL
TYPE	ROOF	ROOF	ROOF	ROOF	INLINE	INLINE	INLINE	WALL	WALL	WALL	WALL	WALL	WALL	INLINE	CABINET
DRIVE	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
CFM	600	600	100	100	200	100	1,000	14,500	14,500	14,500	14,500	2,000	14,500	225	75
STATIC PRESSURE	0.5"	0.5"	0.35"	0.35"	0.675"	0.35"	0.5"	0.5	0.5	0.5	0.5	0.5"	0.5	0.675"	0.25"
IMPELLER SIZE	10	10	7	7	9	7	12	42	42	42	42	24	42	9	8
DESIGN H.P.	1/8 HP	1/8 HP	1/20 HP	1/20 HP	1/6 HP	1/20 HP	1/4 HP	3 HP	3 HP	3 HP	3 HP	1/2 HP	3 HP	1/6 HP	1/20 HP
VOLTAGE	120 V	120 V	120 V	120 V	120 V	120 V	120V	480V / 3 PH	480V / 3 PH	480V / 3 PH	480V / 3 PH	120 V	480V / 3 PH	120 V	120 V
MANUFACTURER	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK	LOREN COOK
MODEL #	100 ACED	100 ACED	70 ACED	70 ACED	90 SQND	70 SQND	120 SQND	42 EWD	42 EWD	42 EWD	42 EWD	24 EWD	42 EWD	90 SQND	GC-128
SONES	8.9	8.9	4.2	4.2	6.9	2.7	9.7	27.0	27.0	27.0	27.0	18.0	27.0	6.9	0.8
NOTES	1,2,6	1,2,6	1,2,6	1,2,6	1,5,6	1,5	1,5	3,7	3,7	3,7	3,7	3,7	3,7	1,5,6	1,4

NOTES:
1. STATIC PRESSURE SHOWN IS EXTERNAL TO UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN.
2. INSULATED ROOF CURB, BACKDRAFT DAMPER, BIRDSCREEN, SPEED CONTROLLER, AND DISCONNECT SWITCH.
3. INTERLOCK FAN WITH LOCAL TSTAT.
4. DISCONNECT SWITCH, CEILING GRILLE, AND WALL CAP. INTERLOCK WITH ROOM LIGHT SWITCH.
5. DISCONNECT SWITCH, BACKDRAFT DAMPER, AND SPEED CONTROLLER.
6. EXHAUST FAN TO BE INTERLOCKED WITH ASSOCIATED AHU.
7. EXHAUST FAN TO HAVE RAINHOOD, MOTOR GUARD, AND BE INTERLOCKED WITH ASSOCIATED MAKE-UP AIR DAMPER.

MOTOR STARTER REQUIREMENTS

EQUIPMENT	STARTER TYPE	PROVIDED UNDER
SP-1,2	VARIABLE FREQUENCY	MECHANICAL
HWP-1,2	VARIABLE FREQUENCY	MECHANICAL
ALL AHUs	VARIABLE FREQUENCY	MECHANICAL
ALL 480V/3PH SFs	VARIABLE FREQUENCY	MECHANICAL
CHP-1,2	VARIABLE FREQUENCY	MECHANICAL
ALL OTHER MOTORS	STANDARD	MECHANICAL

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A A1	CEILING SUPPLY DIFFUSER - 24" X 24" FACE, ARCHITECTURAL PLAQUE, STEEL CONSTRUCTION, WHITE FINISH PRICE SPD A1 = 12" X 12" FACE
B B1	CEILING RETURN GRILLE - 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, WHITE FINISH PRICE PDDR B1 = 12" X 12" FACE
C C1	CEILING EXHAUST GRILLE - 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, WHITE FINISH PRICE PDDR C1 = 12" X 12" FACE
D D1	FLOWBAR DIFFUSER - 48" LONG, 1.0" WIDE 2-SLOT INSULATED PLENUM, NECK SIZE SHOWN ON DRAWINGS PRICE SDS D1 = 24" LONG
E	SIDEWALL REGISTER - DOUBLE DEFLECTION, ALUMINUM CONSTRUCTION, AIRFOIL BLADES, 2" O.C. SPACING, WHITE FINISH. PRICE 620
F	SPIRAL DUCT MOUNTED REGISTER - DOUBLE DEFLECTION, ALUMINUM CONSTRUCTION, AIRFOIL BLADES, 3/4" O.C. SPACING, EXTRACTOR, WHITE FINISH. PRICE SDG
G	HEAVY DUTY RETURN GRILLE- 14 GAUGE BLADES, 16 GAUGE BORDER, STEEL CONSTRUCTION, WHITE FINISH, 1/2" BLADE SPACING, 38° FIXED DEFLECTION. PRICE 535

NOTE:
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPE FOR EACH AIR DEVICE.
2. INTERIOR DIFFUSERS TO BE ENVIRO-THERM. COORDINATE COLOR WITH ARCHITECT.
3. INCLUDE INTEGRAL PATTERN CONTROLLERS FOR ALL FLOWBAR LINEAR DIFFUSERS.

AIR-COOLED CHILLER SCHEDULE

	MARK	CH-1	CH-2
CHILLER	CAPACITY TONS	60	60
	COOLER FLOW RATE, GPM	90 GPM	90 GPM
	EWT, ° F	58°F	58°F
	LWT, ° F	42 °F	42 °F
	MAX. P.D.	12 FT	12 FT
	FOUL'G FACTOR	0.0001	0.0001
MISC	COMPRESSOR TYPE	SCROLL	SCROLL
	REFRIGERANT	R-32	R-32
	ARHI EER/IPLV	10.84 / 19.15	10.84 / 19.15
	VOLTAGE	460V / 3 PH	460V / 3 PH
	MCA / MOCP / FUSE SIZE, AMPS	143 / 175 / 175	143 / 175 / 175
	DAIKIN MODEL #	AGZ	AGZ

NOTES:
1. PROVIDE POWERED CONVENIENCE OUTLET AND SEPARATE ELECTRICAL CONNECTION FOR BARREL HEATER.
2. PROVIDE E-COATED CONDENSER COILS.
3. AMBIENT AIR = 100°F.
4. PROVIDE EXTRA HIGH EFFICIENCY/PERFORMANCE & HIGH AMBIENT OPTIONS.
5. PROVIDE HEAD PRESSURE CONTROLS FOR OPERATION DOWN TO 20°F AMBIENT
6. PROVIDE LOUVERED CONDENSER COIL GUARDS AND COMPRESSOR ACCESS WIRE GUARDS.
7. PROVIDE LOW NOISE CONDENSER FANS AND COMPRESSORS SOUND TREATMENT.
8. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS AND REQUIREMENTS.

AIR HANDLING UNIT SCHEDULE - DX

	MARK	FCU-W1	FCU-W2
CABINET	SERVES	WAREHOUSE	WAREHOUSE
	TOTAL CFM	2400	2400
	O/A CFM	200	180
	EXT. STATIC WG	1.0"	1.5"
	DESIGN HP	1 HP	1.5 HP
	VOLTAGE	480V / 3 PH	480V / 3 PH
	WEIGHT	-	-
	INSTALL ORIENTATION	HANGING HORIZONTAL	HANGING HORIZONTAL
	MANUFACTURER	DAIKIN	DAIKIN
	MODEL NUMBER	BCHD0301	BCHD0301
COOL	COIL CFM	2400	2400
	MIN. COIL ROWS	6	6
	EAT db/wb, °F	77.8°F/ 65.5°F	77.8°F/ 65.5°F
	LAT db/wb, °F	53.3°F/ 53.0°F	53.3°F/ 53.0°F
	GSH MBH	40	40
	GTH MBH	56	56
	COND. DRAIN SIZE	3/4"	3/4"
HEAT	ELECTRIC HEAT	14 kW	14 kW
	STAGE	2 STAGE	2 STAGE
	HEATING EAT/LAT, °F	60.6°F/ 90.0°F	62.5°F/ 90.0°F
	VOLTAGE	120V	120V
	MCA/MOCP	-	-
	HEATING ELEMENT	ELECTRIC	ELECTRIC

NOTES:
1. EXT. SP DOES NOT INCLUDE FILTERS, COILS, CASING, CONVERSIONS OR MIXING DAMPER LOSSES.
2. MOTORS SHALL BE COPPER WOUND, PREMIUM EFFICIENCY TYPE (+90% MINIMUM).
3. PROVIDE MERV 13 FILTERS WITH MAXIMUM FILTER VELOCITY AT 350 FT / MIN.
4. ALL UNITS SHALL BE INTERNALLY ISOLATED.

ACCU SCHEDULE

MARK	ACCU-W1	ACCU-W2
SERVES	FCU-W1	FCU-W2
CAPACITY, NOMINAL TONS	5	5
NO. OF COMP. & TYPE	2 / SCROLL	2 / SCROLL
NO. OF STAGES	2	2
NO. OF REFRIG. CIRCUIT	2	2
REFRIG. LIQUID LINE SIZE	1/2"	1/2"
REFRIG. SUCTION LINE SIZE	1-3/8"	1-3/8"
EER / SEER @ AHRI	13.4 / 14.5	13.4 / 14.5
VOLTAGE	460V / 3PH	460V / 3PH
MCA / MOCP (AMPS)	32.1 / 40	32.1 / 40
DAIKIN MODEL	DC6TE09040	DC6TE09040

NOTES:
1. PROVIDE E-COATED CONDENSER COIL AND HAIL-GUARD
2. PROVIDE 5-YEARS COMPRESSOR AND COND. FANS PART/LABOR AND REFRIGERANT WARRANTY
3. PROVIDE TIME GUARD CIRCUIT, LOW AMBIENT OPERATION DOWN TO 25°F.

PUMP SCHEDULE

MARK	CHP- 1 & 2	SP-1 & 2	HWP-1
SERVES	CH- 1 & 2	CHILLED WTR	HOT WATER
TYPE	VERTICAL	VERTICAL	VERTICAL
GPM	90 GPM	90 GPM	58 GPM
HEAD FT.	35 FT	70 FT	70 FT
MIN. EFF. %	75 %	67 %	54 %
MAX. RPM	1760 RPM	1760 RPM	1760 RPM
DESIGN H.P.	1.5 HP	3.0 HP	3.0 HP
VOLTAGE	460V / 3 PH	460V / 3 PH	460V / 3 PH
S/D SIZE	2" X 2"	2" X 2"	2" X 2"
TACO MODEL	KV2006D	KV2009D	KV2009D

NOTE: SEE DETAIL 3/M5.02 AND SPECS. FOR ADDITIONAL REQUIREMENTS.

HIGH VOLUME LOW SPEED (HVLS) FAN

HIGH VOLUME LOW SPEED FAN , GEARLESS DIRECT MOTOR, 14FT FAN DIAMETER, 10 AMPS @ 208/1/60, 120 RPM, AIRFOIL BLADES WITH WINGLETS, WALL CONTROLLER, 235 LBS FAN WEIGHT. BIG ASS FANS POWERFOIL SERIES. INSTALL AND ATTACH TO STRUCTURE PER MANUFACTURER RECOMMENDATIONS.

SUPPLY FAN SCHEDULE

MARK	SF-1	SF-2
SERVES	AHU-1	AHU-2
TYPE	INLINE	INLINE
DRIVE	BELT VFD	DIRECT
CFM	2,250	1,200
STATIC PRESSURE	0.35"	0.35"
IMPLR SIZE	15	12
DESIGN H.P.	1 HP	1 HP
VOLTAGE	480V / 3PH	120V
MANUFACTURER	LOREN COOK	LOREN COOK
MODEL #	150 SQNB	120 SQND
SONES	10.2	8.9
NOTES	1,2,3	1,3

NOTES:
1. STATIC PRESSURE SHOWN IS EXTERNAL TO UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN.
2. DISCONNECT SWITCH & BELT-GUARD
3. SPEED CONTROLLER.

IDF A/C UNITS (ACU)

ACU-2A & ACU-WA (INDOOR UNIT): DAIKIN FTK24BXVJU, 24.0 MBH COOLING CAPACITY, 21.4 SEER, WIRELESS REMOTE CONTROLLER. UNIT TO BE COOLING ONLY.

ACU-2B & ACU-WB (OUTDOOR UNIT): DAIKIN RK24BXVJU 24.0 MBH COOLING CAPACITY, E-COATED COIL.

POWER SUPPLY: 208V / 1PH / 60HZ, 25A MCA / 35A MOCP.

ACCESSORIES: LOW AMBIENT KIT & CRANKCASE HEATER, WALL-MOUNT BRACKET.

REFRIGERANT PIPING SIZE SHALL BE AS REQUIRED BY THE MANUFACTURER

MDF A/C UNITS (ACU)

ACU-1A (INDOOR UNIT): DAIKIN FTK36BXVJU, 36.0 MBH COOLING CAPACITY, 21.4 SEER, WIRELESS REMOTE CONTROLLER. UNIT TO BE COOLING ONLY.

ACU-1B (OUTDOOR UNIT): DAIKIN RK36BXVJU 36.0 MBH COOLING CAPACITY, E-COATED COIL.

POWER SUPPLY: 208V / 1PH / 60HZ, 25A MCA / 31A MOCP.

ACCESSORIES: LOW AMBIENT KIT & CRANKCASE HEATER, WALL-MOUNT BRACKET.

REFRIGERANT PIPING SIZE SHALL BE AS REQUIRED BY THE MANUFACTURER

ELECTRIC UNIT HEATER SCHEDULE

MARK	EUH-1	EUH-2
SERVES	BLDG A RISER	BUSWASH
HEATING CAPACITY, KW	5.0 KW	5.0 KW
AIR FLOW RATE	400 CFM	400 CFM
AIR TEMP. RISE	40 F	40 F
MAX. MOUNTING HEIGHT	9 FT	9 FT
VOLTAGE	208V / 3 PH	208V / 3 PH
AMPS	6.1 A	6.1 A
MARKEL MODEL #	P3P5105CA1N	P3P5105CA1N

NOTE: PROVIDE WALL MOUNTING ACCESSORIES AND THERMOSTAT

GAS UNIT HEATER SCHEDULE

MARK	GUH-1 THRU 6	GUH-8, GUH-9
SERVES	WAREHOUSE	WAREHOUSE
INPUT/OUTPUT (Btu/Hr)	135,000/125,500	65,000/60,000
OUTLET VELOCITY (FPM)	719	650
GAS SUPPLY PRESSURE	5" - 14" WC	5" - 14" WC
VOLTAGE	115V / 1PH	115V / 1PH
MOTOR HP	1/3 HP	1/8 HP
MANUFACTURER	MODINE	MODINE
MODEL	PTC-135	PTC-65
CONDENSATE DRAIN (IN)	1"	1"
UNIT WEIGHT (LBS)	80	80

NOTES:
PROVIDE THERMOSTAT, FLEXIBLE GAS CONNECTOR, EXHAUST FLUE INSTALLED PER MANUFACTURER'S REQUIREMENTS AND VIBRATION ISOLATION HANGER KIT

CONDENSING BOILER SCHEDULE

MARK	BR-1 & BR-2
INPUT MBH	600 MBH
OUTPUT MBH	540 MBH
MIN. EFFICIENCY	90%
OPERATING PRESSURE	80 PSI
GAS PRESSURE	4" - 14" WC
SYSTEM GPM	29 GPM
EWT / LWT, °F	120°F / 160°F
MAX. PD, FT	12 FT.
BOILER ELECTRICAL	120V / 1 PH / 60 HZ @ 15.8 AMP
MANUFACTURER / SERIES	HYDROTHERM
MODEL #	KN-6

NOTES:
1. BOILER MANUFACTURER TO PROVIDE CATEGORY IV FLUE VENT, ACID NEUTRALIZING KIT, CO MONITOR, AND VENTED GAS PRESSURE REDUCING VALVE FOR EACH BOILER. VENT ALL REGULATORS TO OUTSIDE OF BUILDING, VENTLESS REGULATORS NOT ALLOWED.
2. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE BOILER MANUFACTURER PRIOR TO COMMENCING INSTALLATION OF PIPING AND FLUE.

Revision / 1 — Date 10/07/25 — Addendum 1

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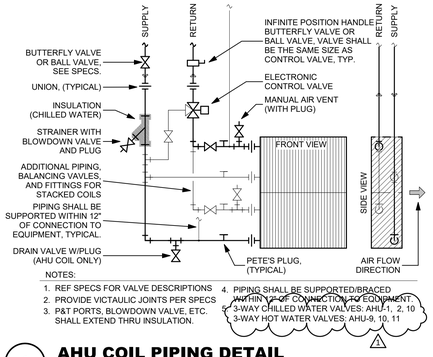
MECHANICAL SCHEDULES

PACKAGE 2 VOLUME

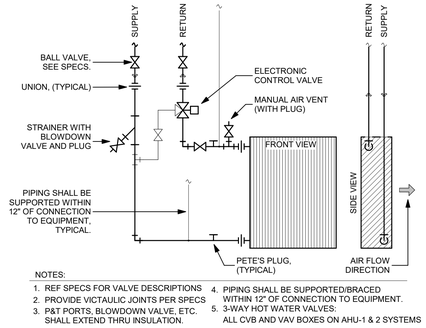
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Date: 09/18/2025

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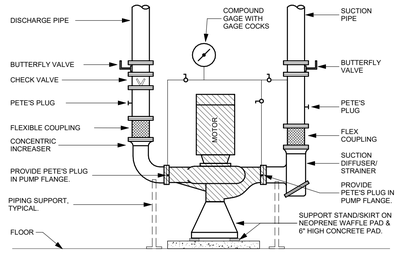
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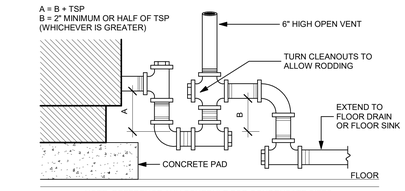
1 AHU COIL PIPING DETAIL
NO SCALE



2 CVB/VAV COIL PIPING DETAIL
NO SCALE

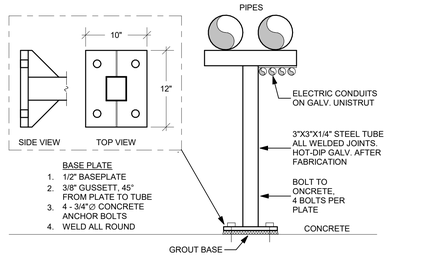


3 VERTICAL INLINE PUMP DETAIL
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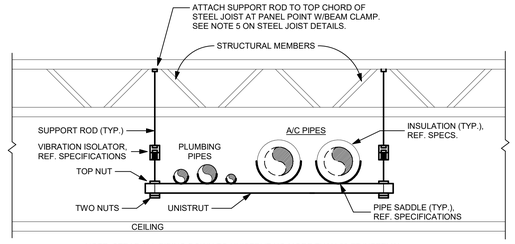


NOTE: REFERENCE AHU SCHEDULE FOR CONDENSATE SIZES

4 CONDENSATE DRAIN DETAIL
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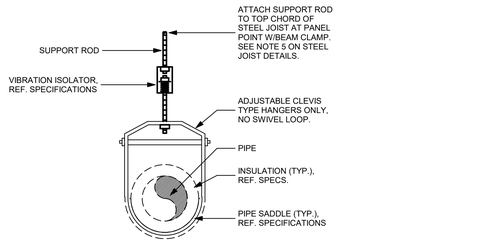


5 OUTDOOR PIPING SUPPORT DETAIL
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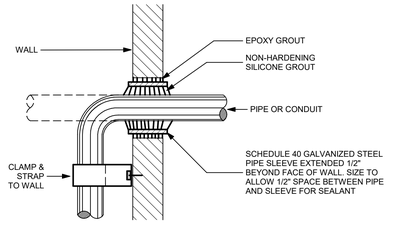


NOTE: STRAP ALL PIPING DOWN TO UNISTRUT NO MORE THAN 20 FT INTERVAL.

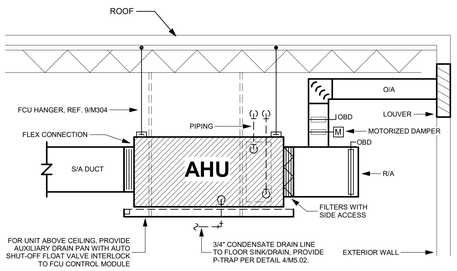
6 MULTIPLE PIPE HANGER DETAIL
NO SCALE



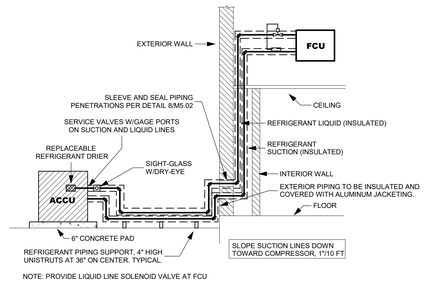
7 SINGLE PIPE HANGER DETAIL
NO SCALE



8 WALL PENETRATION DETAIL
NO SCALE

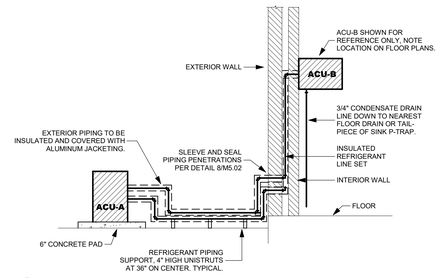


9 HANGING AHU DETAIL
NO SCALE

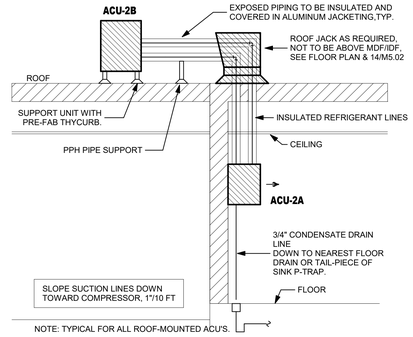


NOTE: PROVIDE LIQUID LINE SOLENOID VALVE AT FCU

10 REFRIGERANT PIPING SCHEMATIC FOR DX COIL
NO SCALE

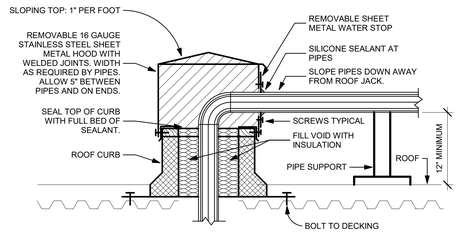


11 REFRIGERANT PIPING SCHEMATIC FOR ACU
NO SCALE



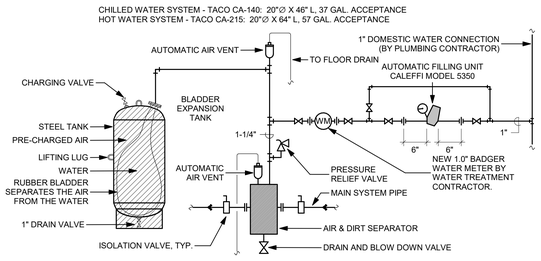
NOTE: TYPICAL FOR ALL ROOF-MOUNTED ACU'S.

12 REFRIGERANT PIPING SCHEMATIC FOR ACU
NO SCALE

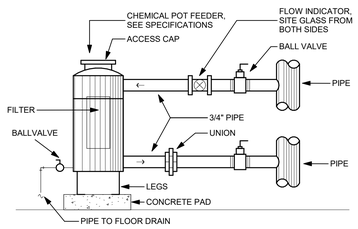


NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.

13 ROOF PIPE JACK DETAIL
NO SCALE



14 AIR SEPARATOR AND EXPANSION TANK DETAIL
NO SCALE



15 CHEMICAL POT FEEDER / FILTER
NO SCALE

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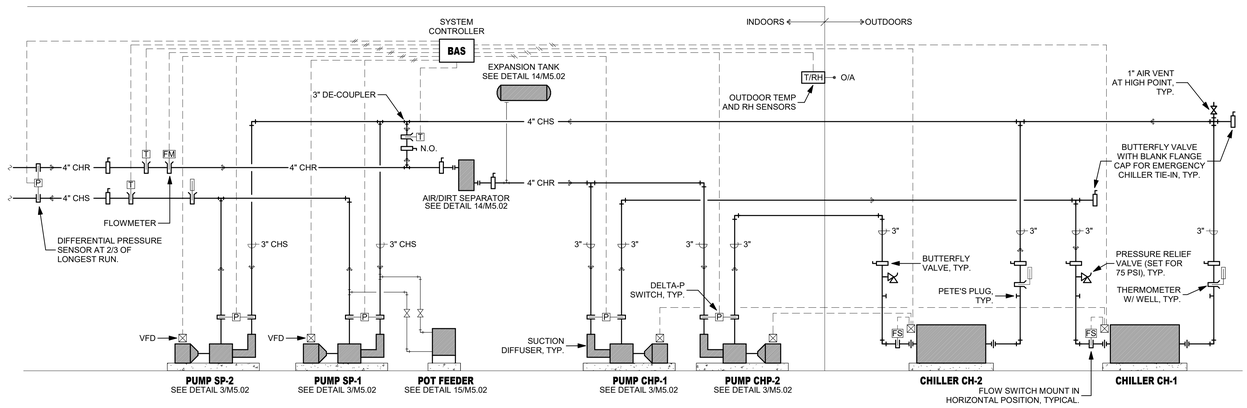
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Date: 09/18/2025	

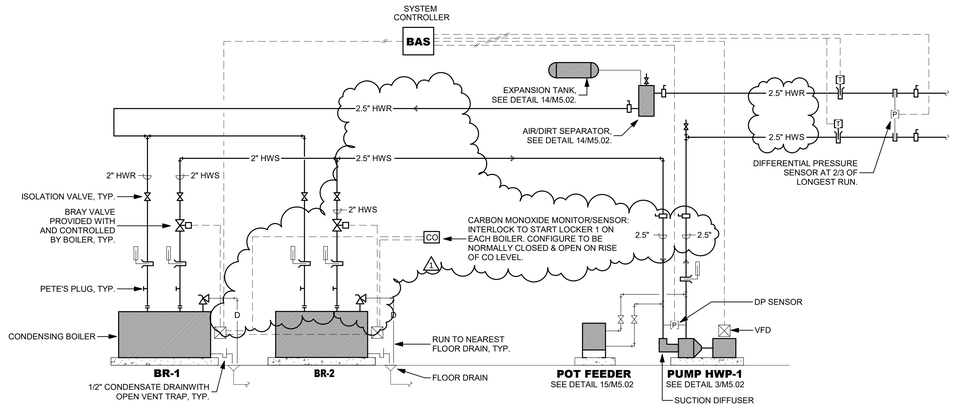
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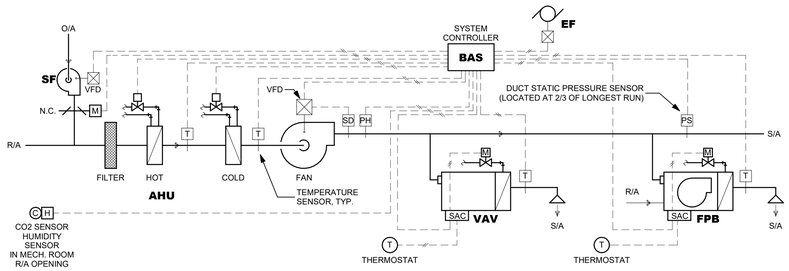
1 CHILLED WATER SYSTEM PIPING AND CONTROLS SCHEMATIC

NO SCALE



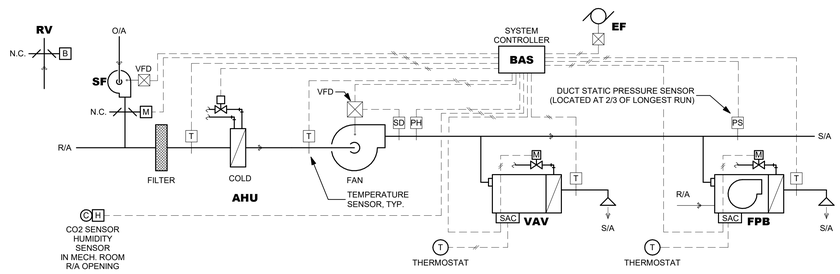
2 HOT WATER SYSTEM PIPING AND CONTROLS SCHEMATIC

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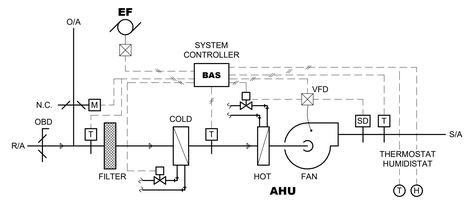
3 AHU-1 CONTROLS SCHEMATIC

NO SCALE



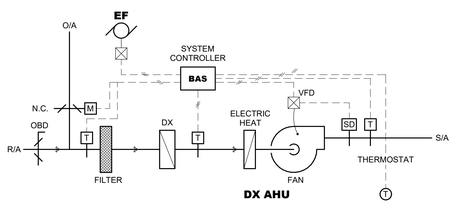
4 AHU-2 CONTROLS SCHEMATIC

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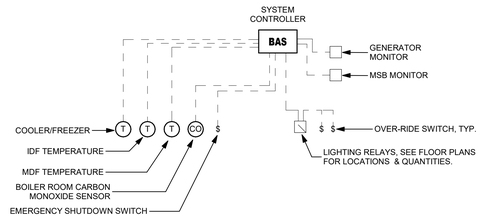
5 SZ AHU CONTROLS SCHEMATIC

NO SCALE



6 DX AHU CONTROLS SCHEMATIC

NO SCALE



7 MISCELLANEOUS BAS CONTROL

NO SCALE

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MECHANICAL SCHEMATICS

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FLOOR BOX/POKE THRU SCHEDULE

SYMBOLS	DESCRIPTION
F1	8-GANG FLOOR BOX: LEGRAND WIREMOLD EVOLUTION SERIES WITH FLUSH FLANGE AND THE FOLLOWING DEVICE(S): (4) 120V, 1Ø, 20A DUPLEX RECEPTACLE, 4 DATA, 1 HDMI (HDBASE-T,LEGRAND). VERIFY FINAL FINISH OF FLOOR BOX COVER WITH ARCHITECT. HD-BASE T FROM FLOOR BOX TO WALL DISPLAY.
F2	8-GANG FLOOR BOX: LEGRAND WIREMOLD EVOLUTION SERIES EFB8S-FC WITH FLUSH FLANGE AND THE FOLLOWING DEVICE(S): (4) 120V, 1Ø, 20A DUPLEX RECEPTACLES, (4) COMMUNICATIONS PORTS, 1 HDMI (HDBASE-T, LEGRAND). VERIFY FINAL FINISH OF FLOOR BOX COVER WITH ARCHITECT. HD-BASE T FROM FLOOR BOX TO WALL DISPLAY.
FB	WIREMOLD 6" BRASS POKE THRU #RC4ATCBS WITH (4) COMMUNICATIONS PORTS AND THE FOLLOWING DEVICE(S): (2) 120V, 1Ø, 20A DUPLEX RECEPTACLES.

AUDIO/VIDEO LEGEND

SYMBOLS	DESCRIPTION
TV IN	AUDIO & VIDEO STATION FOR TV INPUT (HDMI VIA HD BASET, LEGRAND)
TV O	AUDIO & VIDEO STATION FOR TV OUTPUT (HDMI VIA HD BASET, LEGRAND)
AUD I	AUDIO INPUT STATION FROM LOCAL SOUND SYSTEM TO DISPLAY
AUD O	AUDIO OUTPUT STATION FROM LOCAL SOUND SYSTEM TO DISPLAY
USB IN	USB INPUT STATION
USB O	USB OUTPUT STATION
S A	AUX. SPEAKER
VCS	VOLUME CONTROL STATION
TV	CEILING AUDIO & VIDEO INPUT STATION (HDMI, VGA & 3.5MM AUDIO) FOR TV

SECURITY SYSTEM LEGEND

SYMBOLS	DESCRIPTION
GB	CEILING MOUNTED GLASS BREAK SENSOR
MS	CEILING MOUNTED MOTION SENSOR
MS	WALL MOUNTED MOTION SENSOR
ML	CEILING MOUNTED LONG RANGE MOTION SENSOR
ML	WALL MOUNTED LONG RANGE MOTION SENSOR
1 DC	DOOR CONTACT WITH TWO CONTACTS ONE FOR SECURITY ANOTHER FOR ACCESS CONTROL
SR	30W SIREN WITH BLUE STROBE FOR SECURITY SYSTEM. PROVIDE WITHOUT HORN ON EXTERIOR.
SKP	SECURITY KEYPAD
PB	SECURITY PUSH BUTTON BELOW RECEPTION DESK TO CONTROL ENTRY DOORS
+60" SCP 2T 1D	SECURITY CONTROL PANEL PROVIDE TWO PHONE LINES AND ONE DATA DROP
CR	CARD READER
REX	REQUEST FOR EXIT
EPT	ELECTRIC POWER TRANSFER
EL	ELECTRIC LOCK
DR	DOOR RELEASE
LD	LOCK DOWN BUTTON
MAP	MASTER AIPHONE AND CONTROL STATION W/ BUILT-IN MONITOR
MG	MAG LOCK
AP	WEATHERPROOF OUTDOOR AIPHONE STATION

CAMERA SYSTEM LEGEND

SYMBOLS	DESCRIPTION
C-X	CEILING MOUNTED SECURITY CAMERA
C-X	WALL OR CORNER MOUNTED SECURITY CAMERA
C-X WP	OUTDOOR CEILING MOUNTED SECURITY CAMERA
C-X WP	OUTDOOR WALL OR CORNER MOUNTED SECURITY CAMERA
+60" CCTV 1D	CCTV HEADEND EQUIPMENT

"C-X" INDICATES CAMERA TYPE

C-1: 4MP (DWC-V5DG04Bi) (FIXED SENSOR)
C-2: 4K (i-PRO WV-S8570Z-F3L) (PANORAMIC 180)
C-3: 4K (Hanwha QNV-C9011R) (FIXED SENSOR)
C-4: 4K (i-PRO WV-S8573LG)(MULTI-SENSOR 270)

NOTE:

ALL DATA DROP & DATA CABLING FOR CAMERAS SHALL BE PROVIDED BY DATA CABLING SUBCONTRACTOR. GENERAL CONTRACTOR SHALL COORDINATE WITH DATA CABLING SUBCONTRACTOR TO PROVIDE (1) DATA DROP FOR EACH CAMERA INCLUDED IN BASE PROPOSAL.

DATA DEVICE LEGEND

SYMBOLS	DESCRIPTION
1D	DATA OUTLET WITH ONE DATA DROP WITH 1" CONDUIT.
2D	DATA OUTLET WITH TWO DATA DROPS WITH 1" CONDUIT.
3D	DATA OUTLET WITH THREE DATA DROP WITH 1" CONDUIT.
4D	DATA OUTLET WITH FOUR DATA DROP WITH 1" CONDUIT.
1T	VOICE OUTLET WITH ONE VOICE DROP WITH 1" CONDUIT.
2T	VOICE OUTLET WITH TWO VOICE DROPS WITH 1" CONDUIT.
3T	VOICE OUTLET WITH THREE VOICE DROPS WITH 1" CONDUIT.
4T	VOICE OUTLET WITH FOUR VOICE DROPS WITH 1" CONDUIT.
WAP	WI-FI DATA OUTLET WITH ONE DATA DROP WITH 1" CONDUIT. CEILING MOUNTED.
WAP	WI-FI DATA OUTLET WITH TWO DATA DROPS WITH 1" CONDUIT. CEILING MOUNTED.
1D 1T	OUTLET WITH ONE DATA DROP & ONE VOICE DROP WITH 1" CONDUIT.
1D 2T	OUTLET WITH ONE DATA DROP & TWO VOICE DROPS WITH 1" CONDUIT.
2D 1T	OUTLET WITH TWO DATA DROPS & ONE VOICE DROP WITH 1" CONDUIT.
2D 2T	OUTLET WITH TWO DATA DROP & TWO VOICE DROP WITH 1" CONDUIT.
1D 2D	CEILING DATA DROPS: 1D = 1 DATA DROP; 2D = 2 DATA DROPS, ETC. ABOVE CEILING W/ DATA IN BISCUIT BOX.
D	DATA FEED TO SYSTEM FURNITURE, WALL MOUNTED. PROVIDE FLEXIBLE WHIP CONNECTION TO THE FURNITURE AS REQUIRED.

NOTE:

1. ALL DATA DROP(S) & DATA CABLING SHALL BE PROVIDED BY DATA CABLING SUBCONTRACTOR. GENERAL CONTRACTOR SHALL COORDINATE WITH DATA CABLING SUBCONTRACTOR TO PROVIDE CABLE AS NECESSARY.

INTEGRATED AUDIO/ PHONE LEGEND

SYMBOLS	DESCRIPTION
S	SPEAKER, CEILING MOUNTED
S	SPEAKER, WALL MOUNTED
S	LAY-IN SPEAKER
S	PENDANT SPEAKER, CEILING MOUNTED
$V	VOLUME CONTROL SWITCH, WALL-MOUNTED
	WALL-MOUNTED PHONE HANDSET (1D DROP)
	DESK-MOUNTED PHONE HANDSET (1D DROP)
AH	DESK-MOUNTED ADMINISTRATIVE HANDSET
M	MICROPHONE OUTLET
I	REMOTE IPOD PORT
	CALL SWITCH
X	CEILING MOUNTED BOX WITH 80 WATT AMPLIFIER AND 120 VOLT RECEPTACLE.

Revision / 1 — Date 10/07/25 — Addendum 1

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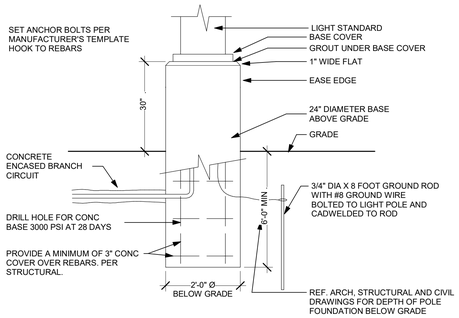
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LEGEND, NOTES, AND ABBREVIATIONS

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E0.01
Drawn By: HB/BRH	
Date: 09/18/2025	

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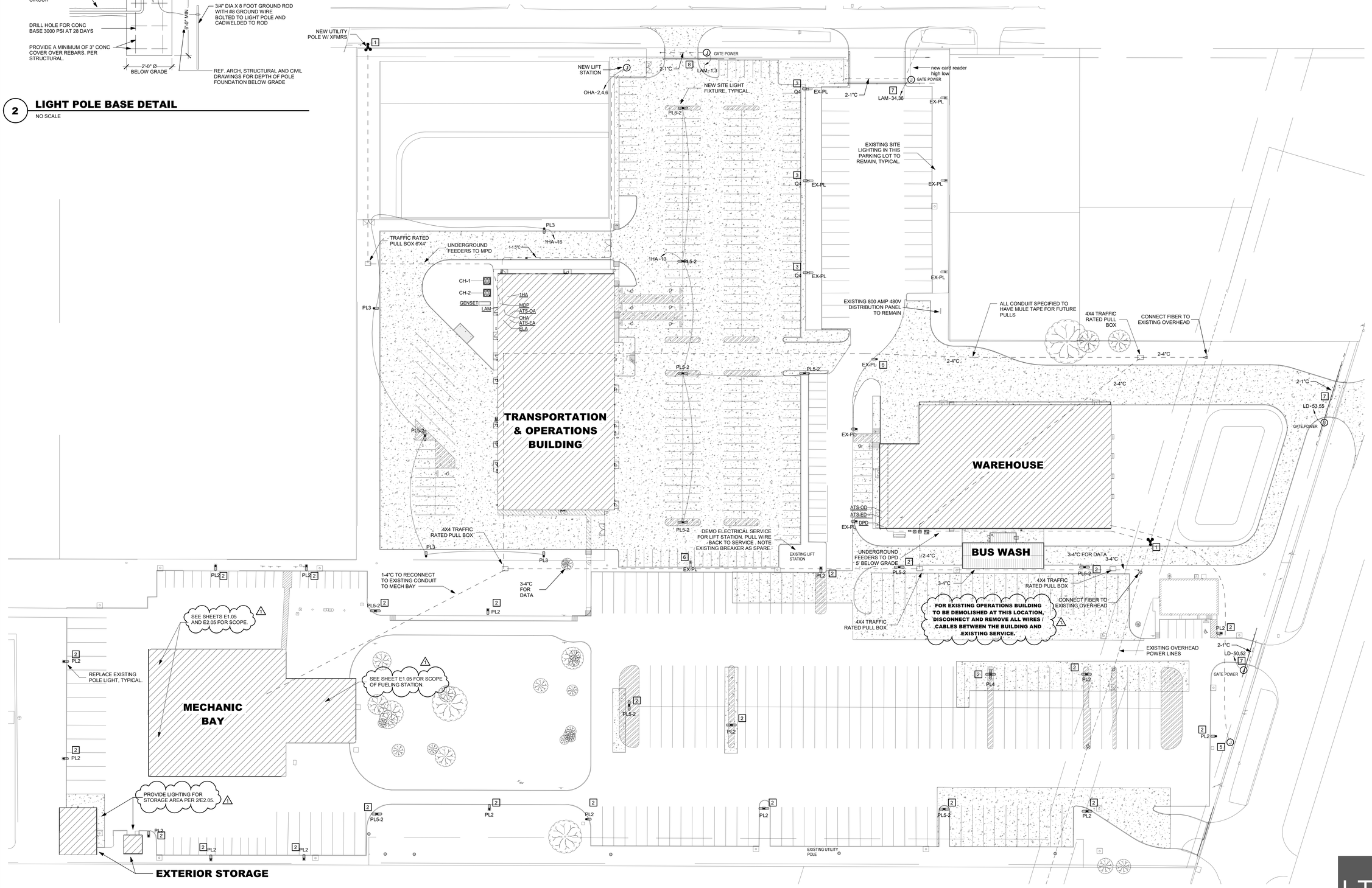


2 LIGHT POLE BASE DETAIL

NO SCALE

SITE KEY NOTES

1. PROPOSED LOCATION OF POLE MOUNTED UTILITY TRANSFORMER AND RISER.
2. EXISTING FIXTURE TO BE REPLACED. POLE BASE TO REMAIN. ENSURE WIRE SIZE IS MAINTAINED AND PROTECTED.
3. EXISTING LIGHT POLE, POLE TO REMAIN AND CONTRACTOR TO ADD FIXTURE HEAD.
4. NOT USED
5. REMOVE EXISTING FLOOD LIGHTS CIRCUITRY AND PROVIDE NEW AS SHOWN.
6. DEMO EXISTING POLE, RECONNECT EXISTING CONDUIT AND REPLACE WIRE WITH NEW FROM PANEL TO NEXT EXISTING LIGHT POLE TO REMAIN.
7. PROVIDE KEYPAD ON BOTH SIDES OF GATE. INTERCONNECT TO ACCESS CONTROL SYSTEM. PEDESTAL TO BE HIGH LOW WITH CARD READERS AT BOTH LEVELS. PROVIDE WITH KEYPAD AND CARD READER.
8. PROVIDE KEYPAD ON BOTH SIDES OF GATE. INTERCONNECT TO ACCESS CONTROL SYSTEM. PEDESTAL TO BE CAR HEIGHT. PROVIDE WITH KEYPAD AND CARD READER.



1 ELECTRICAL SITE PLAN

SCALE= 1" = 40'-0"

N TRUE

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Revision / Date
1 Addendum 1 10/07/25

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

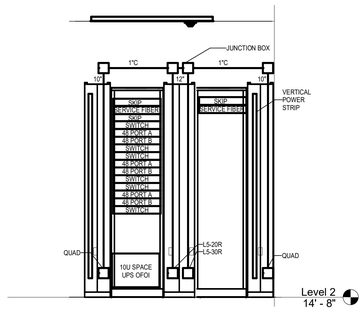
STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/10/2025

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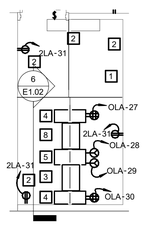
ELECTRICAL SITE PLAN

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Job No. 1971-05-01	Sheet No. E1.00
Drawn By: HB/BRH	
Date: 09/18/2025	



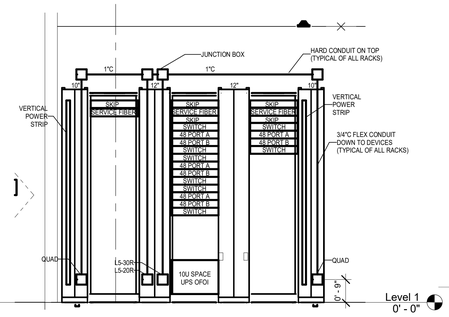
6 IDF ELEVATION - OPERATIONS

SCALE= 1/2" = 1'-0"



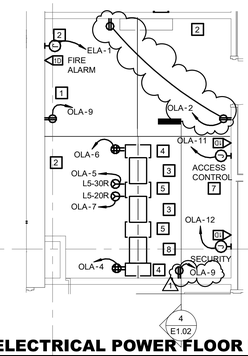
5 ELECTRICAL POWER FLOOR PLAN - IDF

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



4 MDF ELEVATION - OPERATIONS

SCALE= 1/2" = 1'-0"

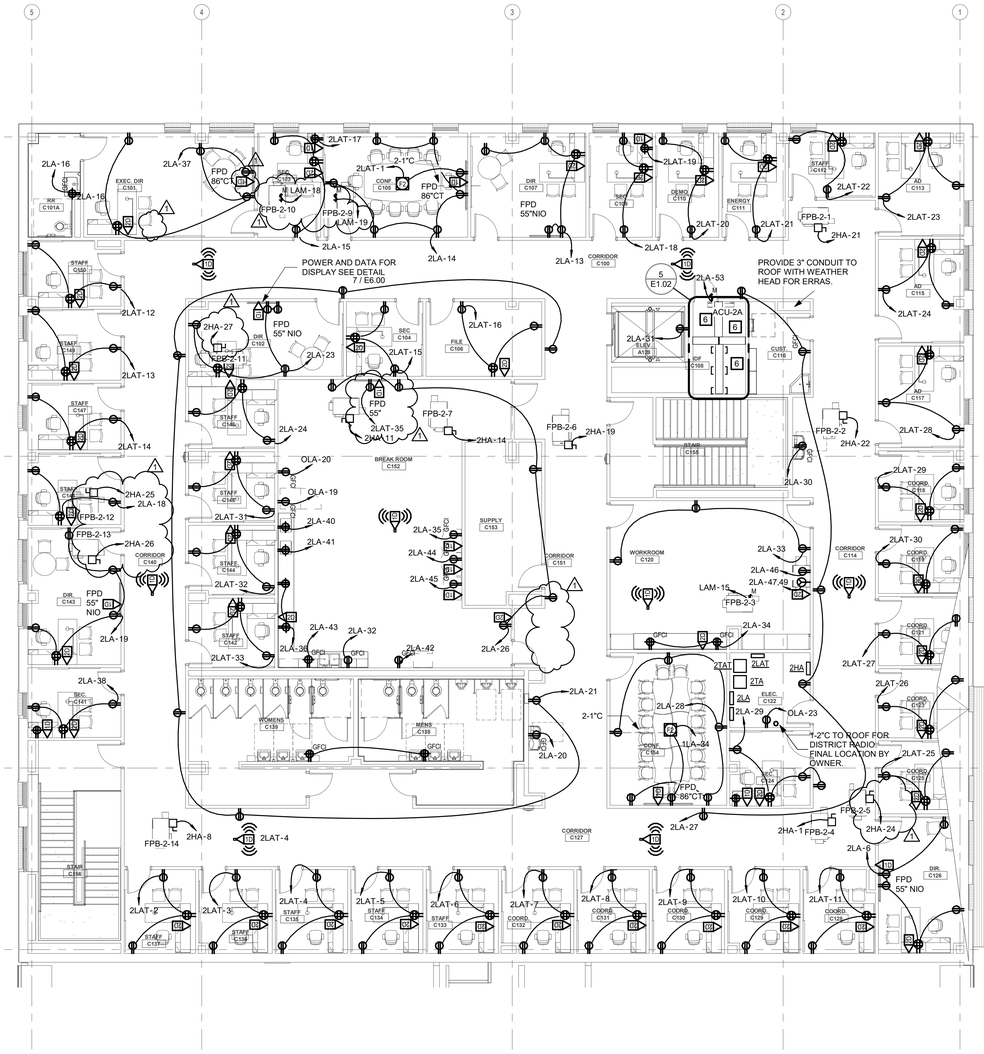


3 ELECTRICAL POWER FLOOR PLAN - MDF

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

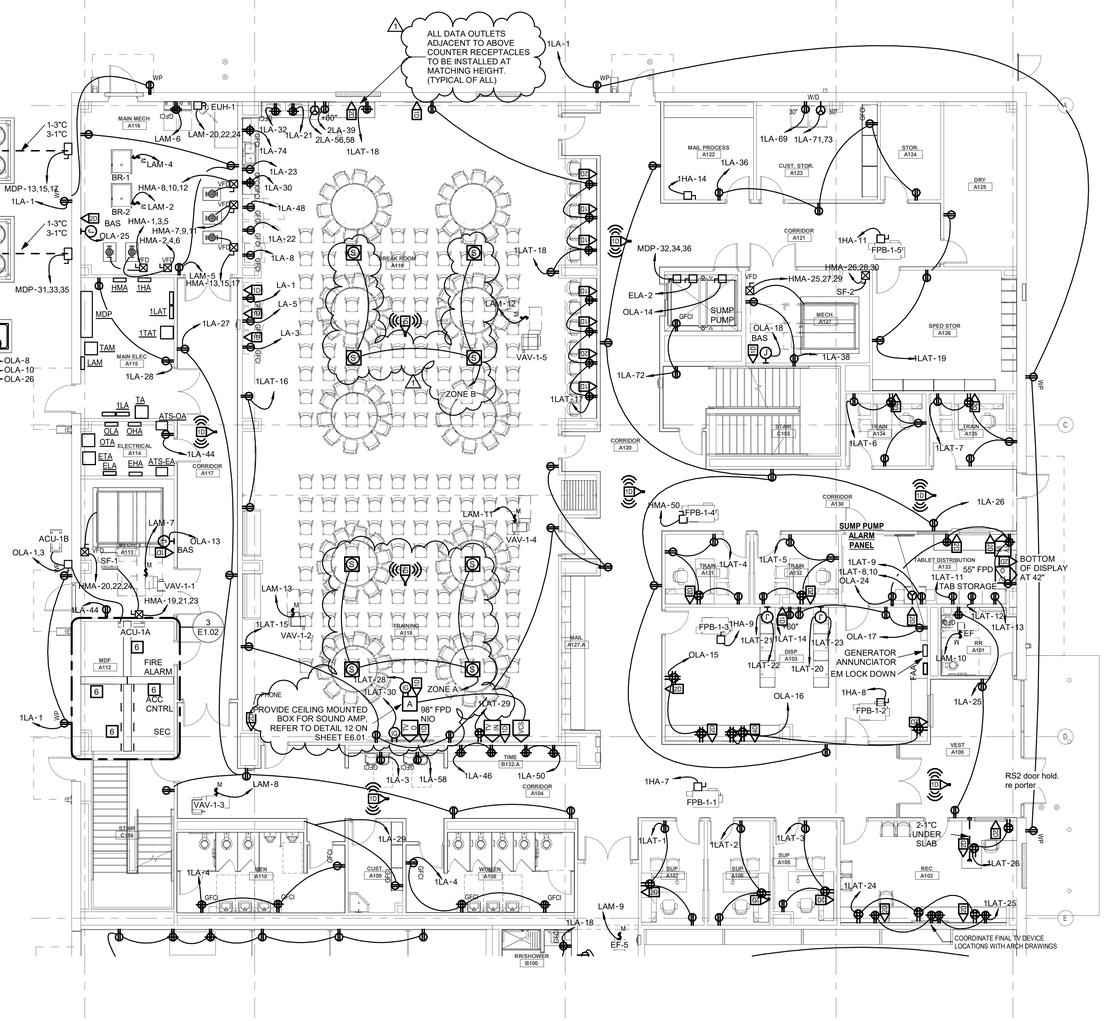
ELECTRICAL TECHNOLOGY KEY NOTES

1. INDICATES THE LOCATION OF A NEW WALL MOUNTED TELECOMMUNICATION GROUND BUS BAR (TGBB). CABLING CONTRACTOR TO PROVIDE BUS BAR AND ALL REQUIRED MATERIAL TO MOUNT AT THE LOCATION SHOWN. TGBB TO BE MOUNTED AT +18" AFF. RE: SHEET 12.40.
2. 8' TALL, 3/4" FIRE RATED PLYWOOD CONTRACTOR TO PROVIDE AND INSTALL PLYWOOD AND ALL REQUIRED MOUNTING HARDWARE. RE: SPECIFICATIONS. TYPICAL FOR ALL SHOWN ON DRAWING.
3. PROVIDE AND INSTALL (1) RACK PER SPECIFICATIONS. PROVIDE BONDING WASHERS, BOLTS, AND NUTS AT ALL MECHANICALLY CONNECTED LOCATIONS OF THE RACK TO INSURE THAT ALL PIECES OF THE RACK ARE COMPLETELY BONDED. SCRAPING PAINT FROM RACKS TO MAKE A BOND WILL NOT BE ACCEPTED. ALL RACK MOUNTED COMPONENTS SHALL BE MOUNTED WITH BONDING SCREWS AND THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (50) ADDITIONAL BONDING SCREWS FOR THE INSTALLATION OF OWNER EQUIPMENT. NO DAISY CHAINING GROUNDS FROM RACK TO CABLE TRAY OR TO OTHER RACKS WILL BE ACCEPTED. ALL GROUNDS SHALL BE HOME RUN TO THE TELECOMMUNICATIONS GROUND BUS BAR (TGBB). TYPICAL FOR ALL SHOWN ON THE ENTIRE PROJECT.
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7. INDICATES THE LOCATION THAT IS TO BE RESERVED FOR THE ACCESS CONTROL SYSTEM MAIN CONTROL PANEL.
8. PROVIDE AND INSTALL (1) RACK PER SPECIFICATIONS, DEDICATED FOR ATT FIBER PROVIDER. PROVIDE BONDING WASHERS, BOLTS, AND NUTS AT ALL MECHANICALLY CONNECTED LOCATIONS OF THE RACK TO INSURE THAT ALL PIECES OF THE RACK ARE COMPLETELY BONDED. SCRAPING PAINT FROM RACKS TO MAKE A BOND WILL NOT BE ACCEPTED. ALL RACK MOUNTED COMPONENTS SHALL BE MOUNTED WITH BONDING SCREWS AND THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (50) ADDITIONAL BONDING SCREWS FOR THE INSTALLATION OF OWNER EQUIPMENT. NO DAISY CHAINING GROUNDS FROM RACK TO CABLE TRAY OR TO OTHER RACKS WILL BE ACCEPTED. ALL GROUNDS SHALL BE HOME RUN TO THE TELECOMMUNICATIONS GROUND BUS BAR (TGBB).



N TRUE 2 ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING

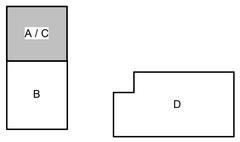
SCALE= 1/8" = 1'-0"



N TRUE 1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING

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

KEY PLAN
N.T.S.



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Revision /	Date	
1	10/07/25	Addendum 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED
PROFESSIONAL
ENGINEER
09/18/2025

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www.huckabee-inc.com
800.687.1220

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POWER FLOOR PLAN - LEVEL 1 & 2 - AREA A & C - OPERATIONS BUILDING

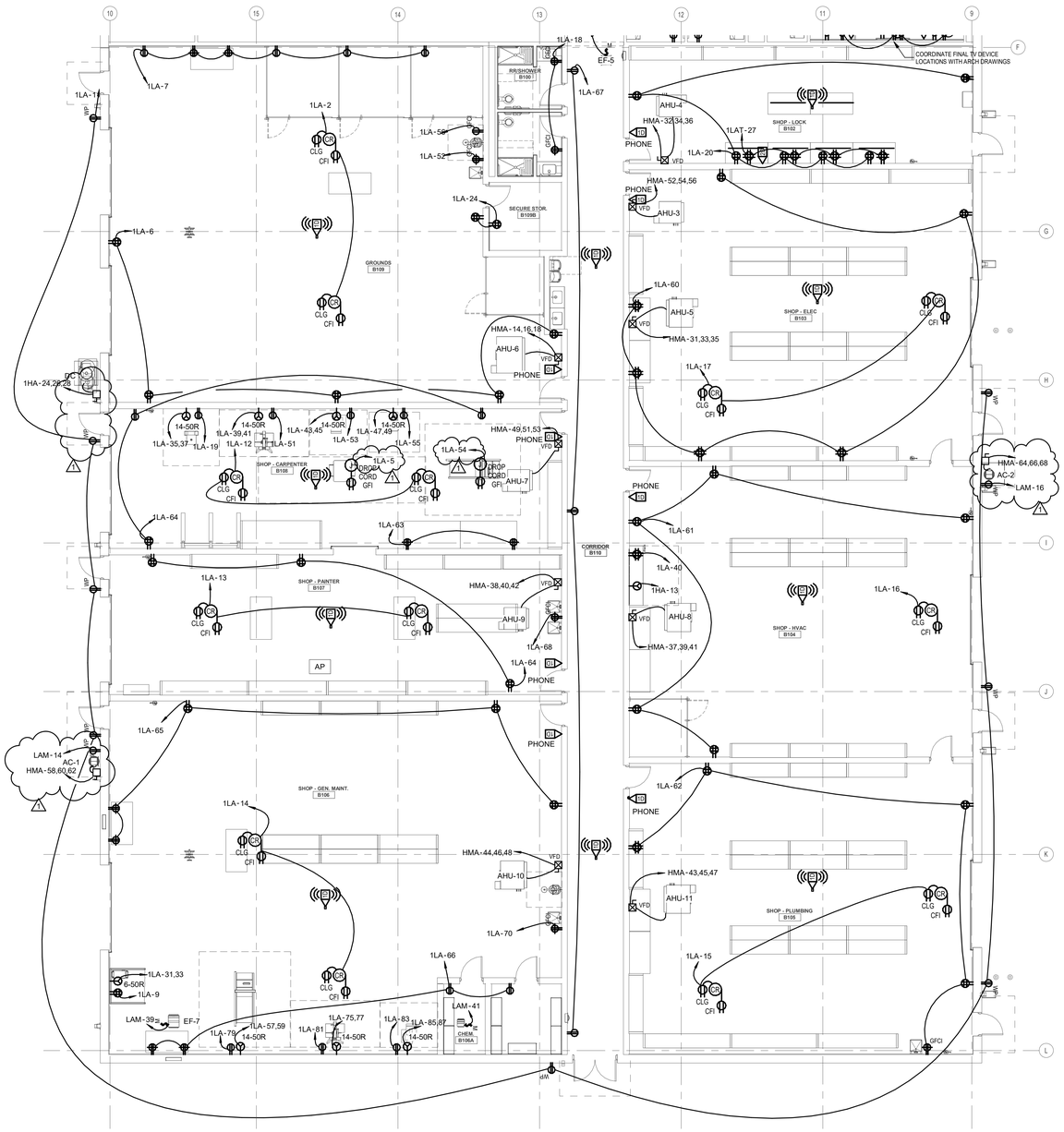
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Job No. 1971-05-01	Sheet No. E1.02
Drawn By: HB/BRH	
Date: 09/18/2025	

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GENERAL POWER NOTES:

1. CONTRACTOR SHALL VERIFY DEVICE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL CASEWORK AND MILLWORK ELEVATIONS.
2. FINAL LOCATION OF RECEPTACLES TO BE COORDINATED WITH THE FF&E LAYOUT.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL EXHAUST AND SUPPLY FAN CONTROLS. PROVIDE A FAN SWITCH IF INDICATED BY MECHANICAL. ALL EXHAUST FANS SHALL BE PROVIDED WITH BUILT-IN DISCONNECT SWITCH.
4. CONTRACTOR SHALL INDICATE CIRCUIT SERVING EACH RECEPTACLE BY PROVIDING TYPE WRITTEN LABEL LOCATED ON INSIDE FACE OF EACH RECEPTACLE COVER PLATE.
5. CONTRACTOR SHALL ARRANGE PANEL BOARD IN ELECTRICAL ROOM TO PROVIDE CLEARANCE PER NEC 110.26.
6. ENSURE ALL ELECTRICAL AND MECHANICAL EQUIPMENT HAVE PROPER WORKING CLEARANCE PER NEC REQUIREMENTS.
7. ALL RECEPTACLES LOCATED IN RESTROOMS, JANITOR CLOSETS, MECHANICAL ROOMS, ELEVATOR PITS OR SHAFTS, SERVING ELECTRIC DRINKING FOUNTAINS OR VENDING MACHINES, LOCATED WITHIN 6' OF A SINK, LOCATED ABOVE A WET COUNTERTOP SHALL BE GFCI. EACH GFCI PROTECTED RECEPTACLE SHARING THE SAME CIRCUIT SHALL HAVE ITS OWN RESET AND TEST BUTTON.
8. PROVIDE REMOTE GFCI PUSH-BUTTON IN READILY ACCESSIBLE LOCATION FOR ALL VENDING MACHINES, REFRIGERATORS, ICE MACHINES, DISHWASHERS AND GLASSWARE WASHERS.
9. REFER TO TECHNOLOGY DRAWINGS FOR EXACT MOUNTING HEIGHTS AND LOCATIONS OF ALL POWER OUTLETS.
10. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND BACKBOX FOR ALL THERMOSTAT (T-STAT) LOCATIONS. COORDINATE WITH LIGHT SWITCH LOCATION. REFER TO MECHANICAL DRAWINGS FOR T-STAT LOCATIONS.
11. ALL INDOOR DISCONNECTS SHALL BE NEMA 1 ENCLOSURE. ALL OUTDOOR DISCONNECTS SHALL BE NEMA 3R ENCLOSURE. REFER TO PANEL SCHEDULES FOR DISCONNECT SIZE.
12. FOR ALL NEMA RECEPTACLES, CONTRACTOR TO FIELD VERIFY CORRECT NEMA CONFIGURATION WITH MANUFACTURER PRIOR TO INSTALL.



ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

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

N TRUE

KEY PLAN
N.T.S.

A / C
B
D

Revision /	Date	
1	10/07/25	Addendum 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

CHI K. TRUONG
90332
PROFESSIONAL ENGINEER
09/10/2025

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POWER FLOOR PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING

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Drawn By: HB/BRH	
Date: 09/18/2025	

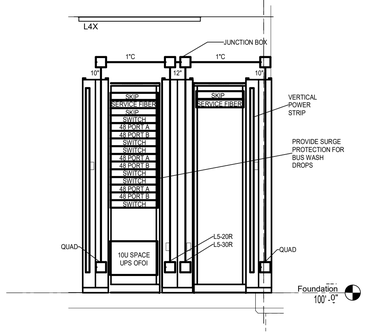
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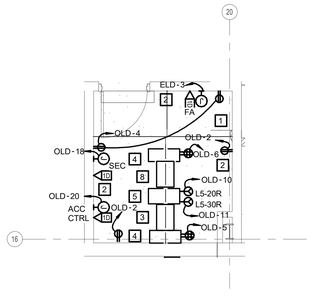
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3 IDF ELEVATION - WAREHOUSE

SCALE= 1/2" = 1'-0"



2 ELECTRICAL POWER FLOOR PLAN - WAREHOUSE - IDF

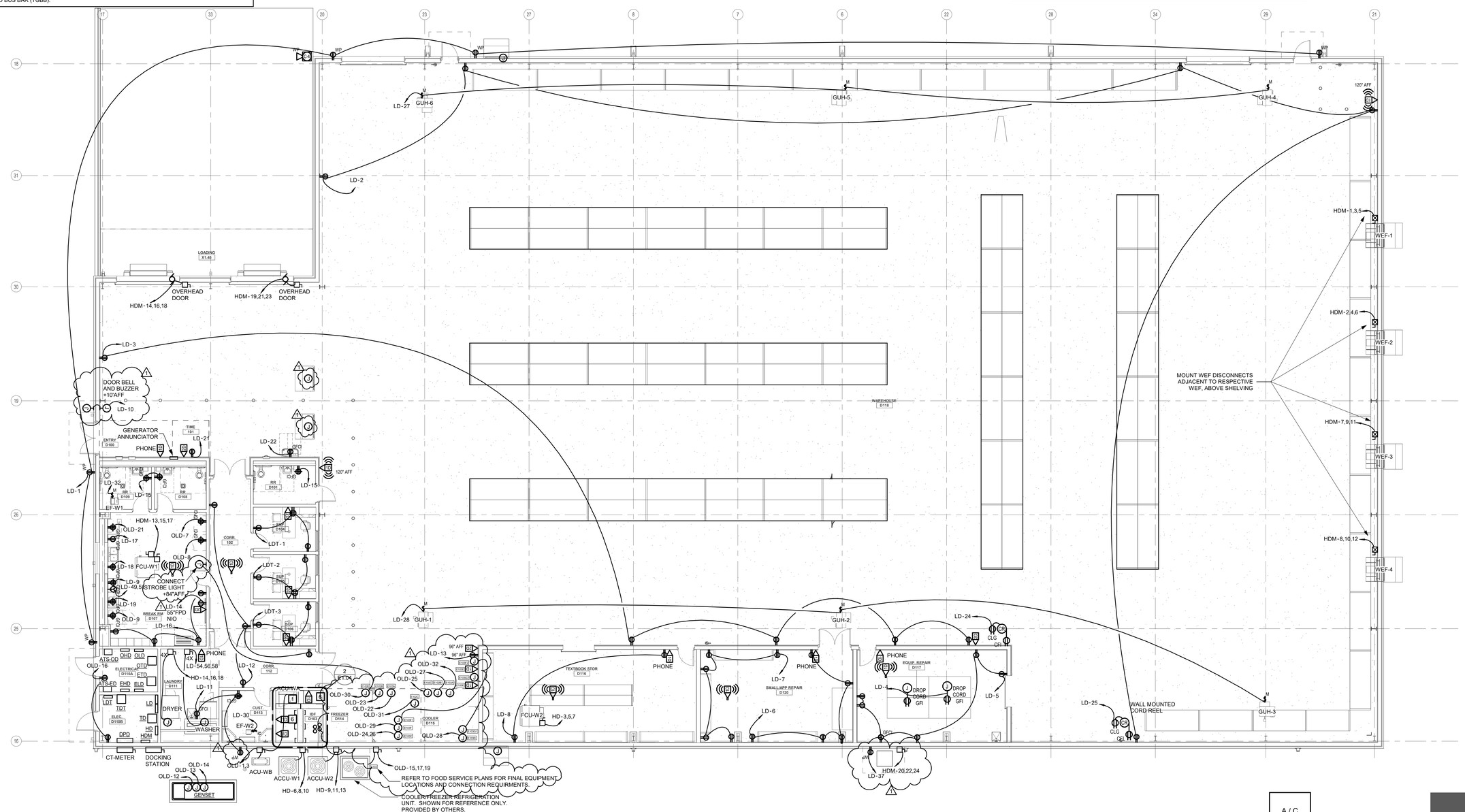
SCALE= 1/4" = 1'-0"

POWER KEY NOTES

1. ACU POWERED FROM OUTSIDE UNIT. PROVIDE CONDUIT PATHWAYS BACK TO EXTERIOR UNIT FOR POWER AND COMMUNICATION.
2. 2 SETS OF 4-4" CONDUIT. ONE SET FROM MDF ROOM TO UTILITY POLE. SECOND SET FROM MDF TO MDF LOCATED IN OPERATIONS BUILDING.

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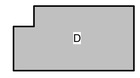


1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

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

N TRUE

KEY PLAN
N.T.S.



Revision /	Date
1 Addendum 1	10/07/25

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/18/2025

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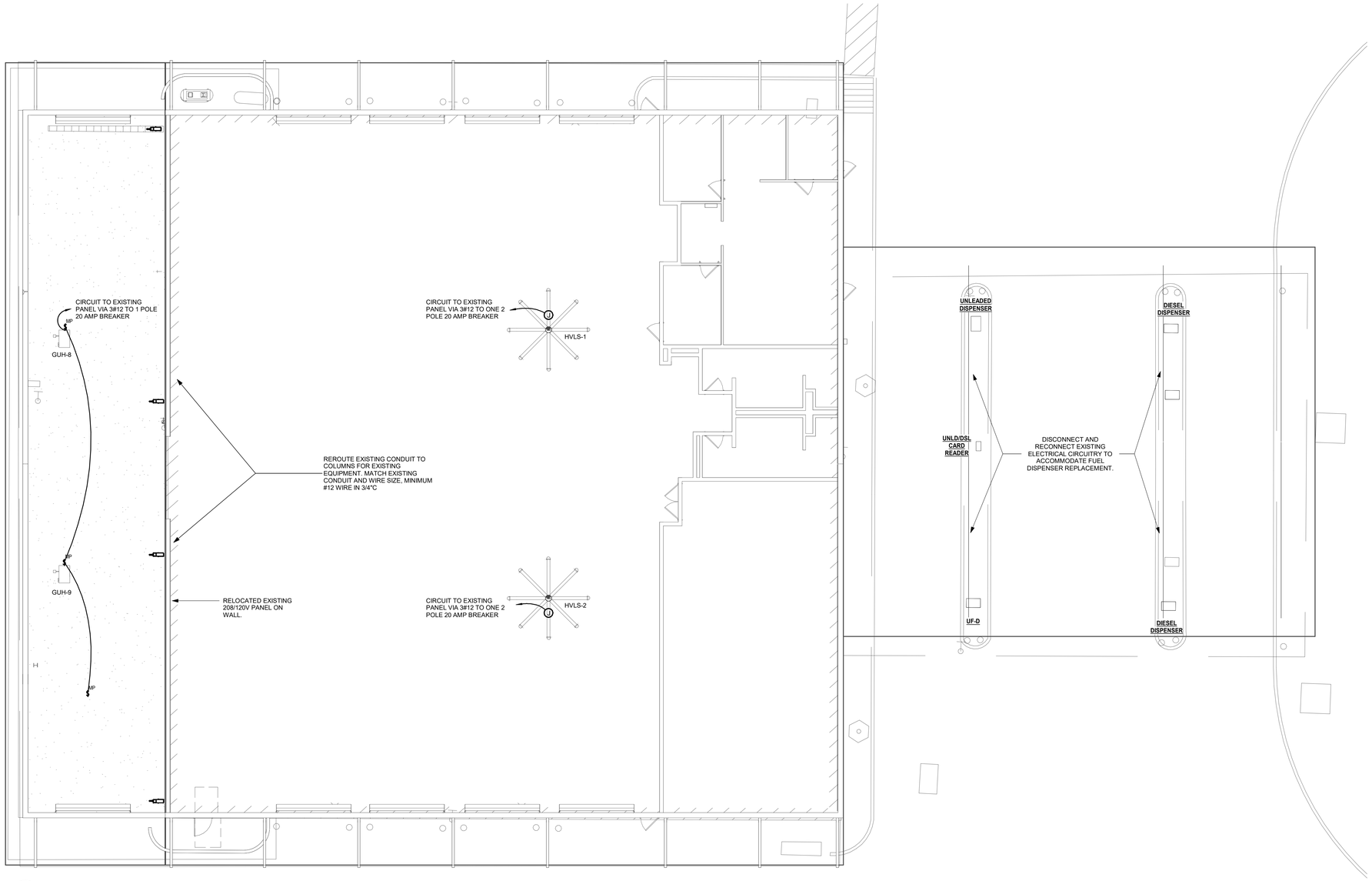
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POWER FLOOR PLAN - LEVEL 1 - AREA D - WAREHOUSE

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E1.04
Drawn By: HB/BRH	
Date: 09/18/2025	

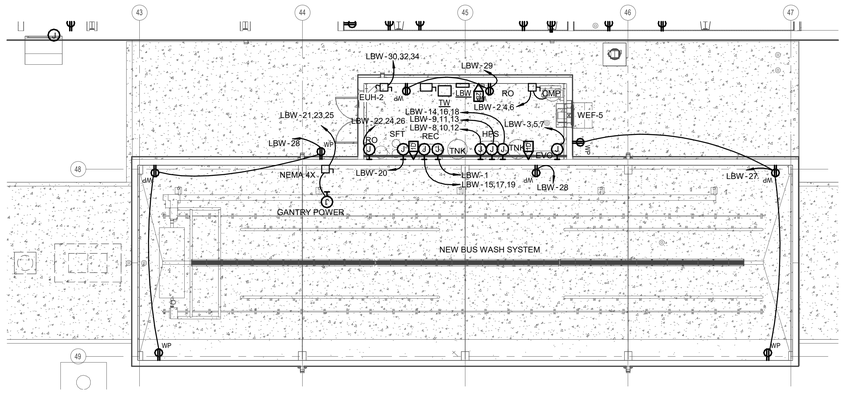
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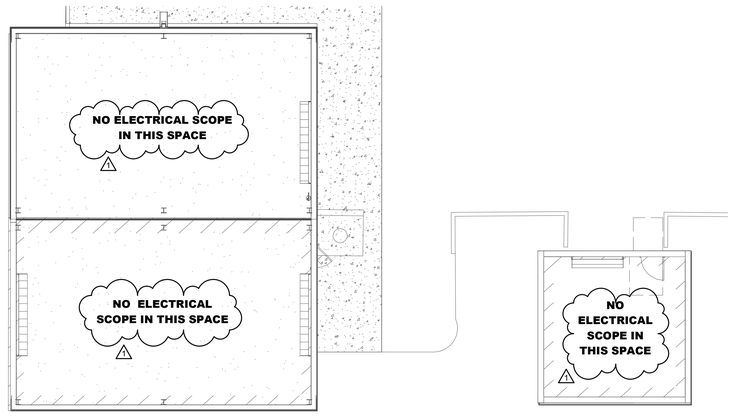
2 ELECTRICAL POWER FLOOR PLAN- MECHANIC BAY

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



1 ELECTRICAL POWER FLOOR PLAN- BUS WASH

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



3 ELECTRICAL POWER FLOOR PLAN- TRANSPORTATION BUILDING ADDITION

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/10/2025

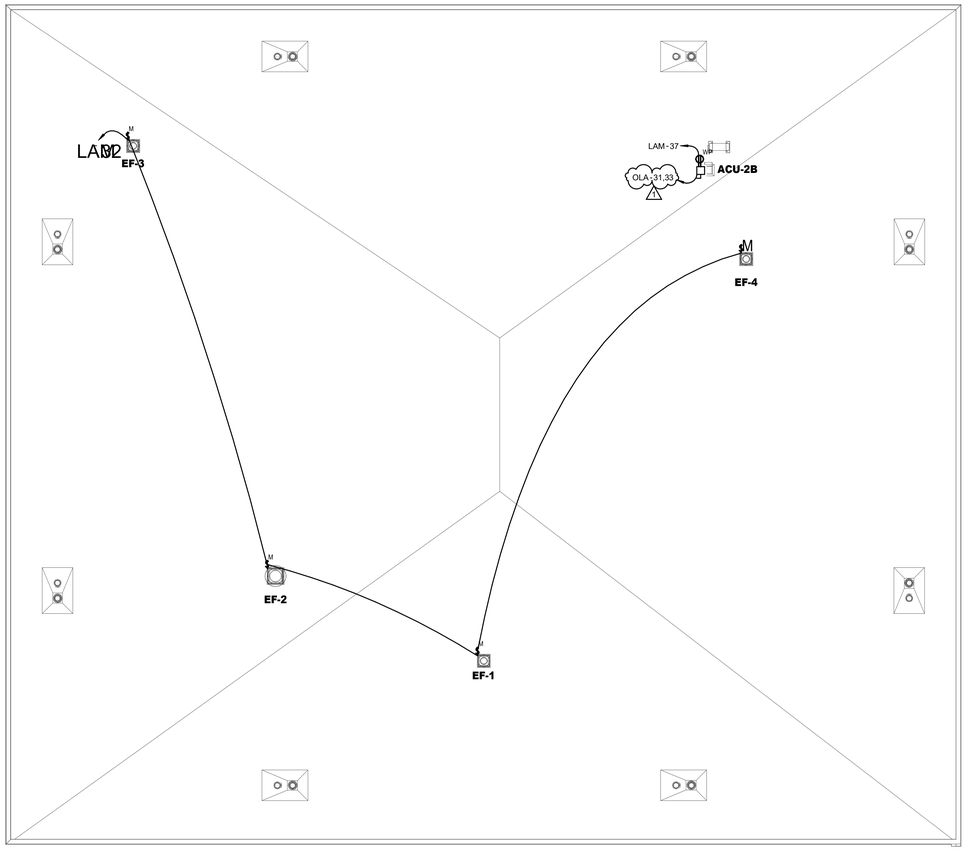
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ELECTRICAL FLOOR PLANS - BUS WASH, MECHANIC BAY, & STORAGE

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E1.05
Drawn By: HB/BRH	
Date: 09/18/2025	

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N
TRUE

1 ELECTRICAL ROOF PLAN

1/8" = 1'-0"

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Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY ISD

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED PROFESSIONAL ENGINEER
09/18/2025

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ELECTRICAL ROO

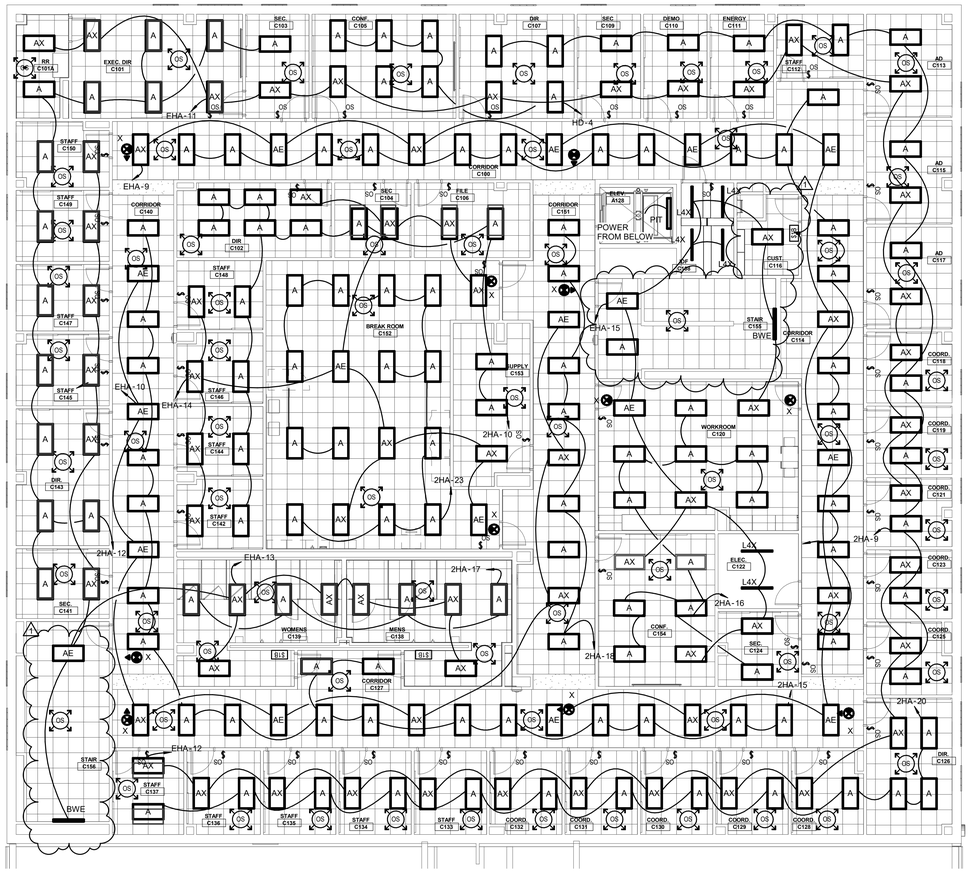
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Job No. 1971.05.0	Sheet No.
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Date 09/18/2025	E1.06

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GENERAL LIGHTING NOTES

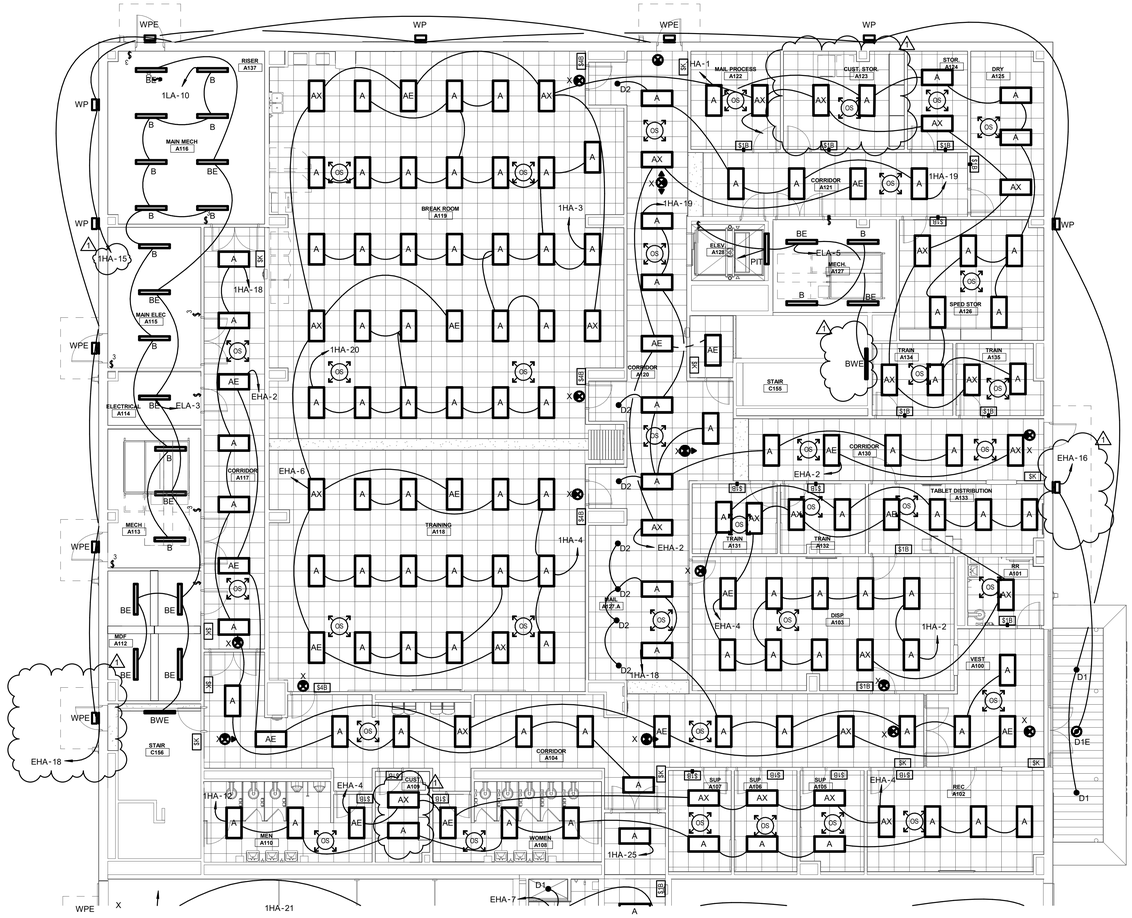
1. ALL ROOM LIGHTING ROOM CONTROLLERS TO BE LOCATED ABOVE CEILING ABOVE THE DOOR JUST OUTSIDE OF THE ROOM.
2. ALL LIGHTING CONTROLLERS THAT CONTROL FIXTURES LOCATED IN A HIGH CEILING SHALL BE MOUNTED IN AN ADJACENT LOWER CEILING TO ALLOW FOR EASY ACCESS.
3. ALL EMERGENCY FIXTURES TO BE CIRCUITED TO NEAREST EMERGENCY UN SWITCHED CIRCUIT OR EMERGENCY PANEL.
4. ALL EXIT SIGNS TO BE CONNECTED WITH 2#12 +12G IN 3/4" CONDUIT TO NEAREST UNSWITCHED EMERGENCY LIGHTING CIRCUIT. FINAL LAYOUT OF EMERGENCY EXIT SIGN TO BE CONFIRMED WITH THE EGRESS PLAN
5. PROVIDE REMOTE DRIVERS FOR FIXTURES IN DOUBLE VOLUME SPACES AND ARE INACCESSIBLE. REMOTE DRIVERS SHALL BE MOUNTED IN AN ACCESSIBLE SPACE WITHIN MANUFACTURE'S LIMIT OF DISTANCES.
6. REFER TO LIGHTING SCHEDULE DRAWING FOR THE LUMINARIES SPECIFICATION.
7. FINAL FINISH OF ALL LIGHTING FIXTURES ARE TO BE FINALIZED BY ARCHITECT.
8. EXTERIOR FIXTURES TO BE ON BAS CONTROLLED RELAY SCHEDULE



N TRUE

2 LIGHTING REFLECTED CEILING PLAN - LEVEL 2 - AREA C - OPERATIONS BUILDING

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



N TRUE

1 LIGHTING REFLECTED CEILING PLAN - LEVEL 1 - AREA A - OPERATIONS BUILDING

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/10/2025

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A / C
B
KEY PLAN
N.T.S.
D

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LIGHTING REFLECTED CEILING PLAN - LEVEL 1 / 2 - AREA A / C - OPERATIONS BUILDING
PACKAGE VOLUME

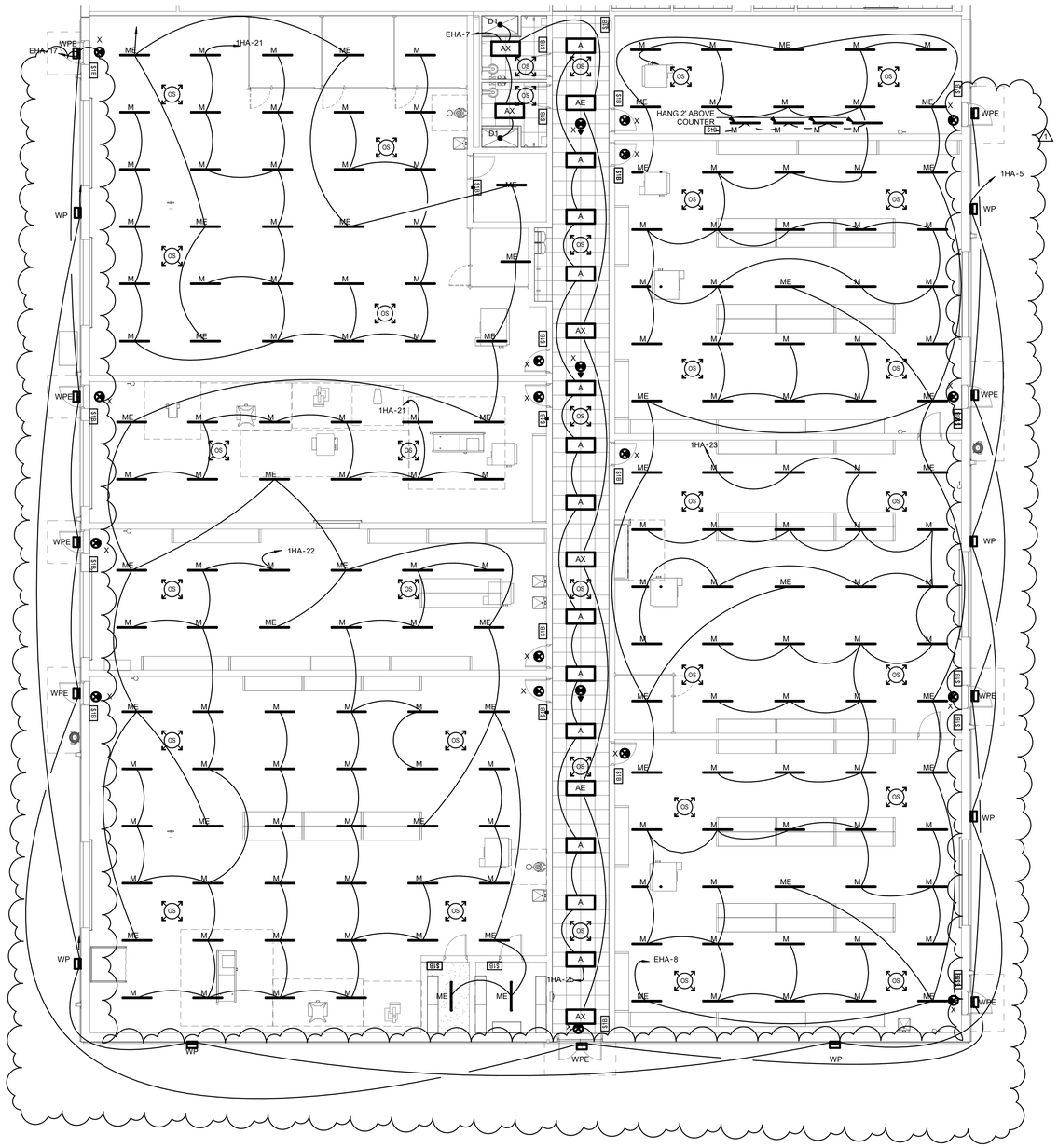
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Date: 09/18/2025	

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GENERAL LIGHTING NOTES

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N TRUE

1 **LIGHTING REFLECTED CEILING PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING**

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

Revision /	Date	
1	10/07/25	Addendum 1

Project: NEW OPERATIONS BUILDING FOR NEW CANEY I.S.D. NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/10/2025

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A / C
B

KEY PLAN
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LIGHTING REFLECTED CEILING PLAN - LEVEL 1 - AREA B - OPERATIONS BUILDING PACKAGE VOLUME

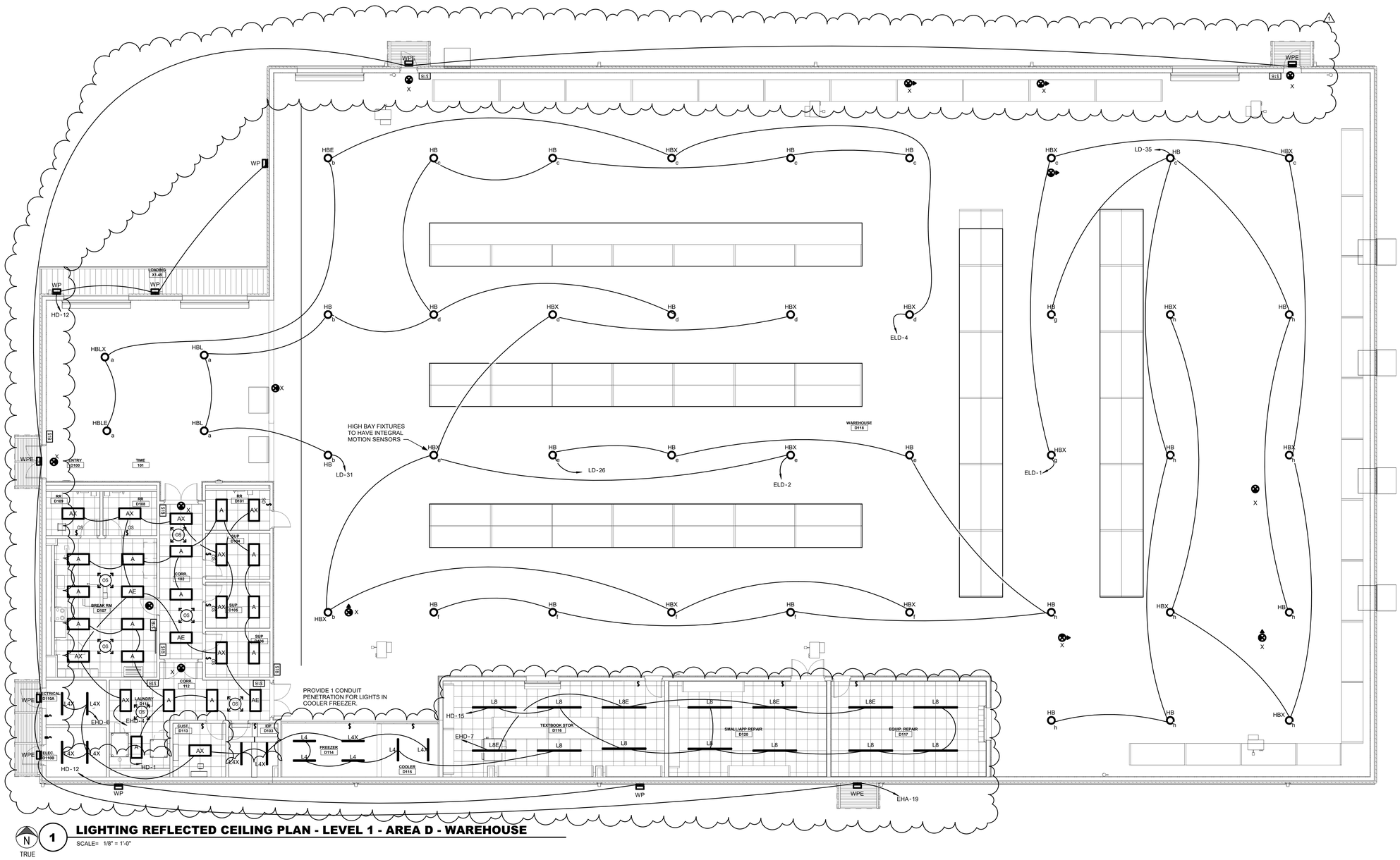
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Date: 09/18/2025	

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1 **LIGHTING REFLECTED CEILING PLAN - LEVEL 1 - AREA D - WAREHOUSE**

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

N TRUE

Revision /	Date	
1	10/07/25	Addendum 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED ARCHITECT
09/18/2025

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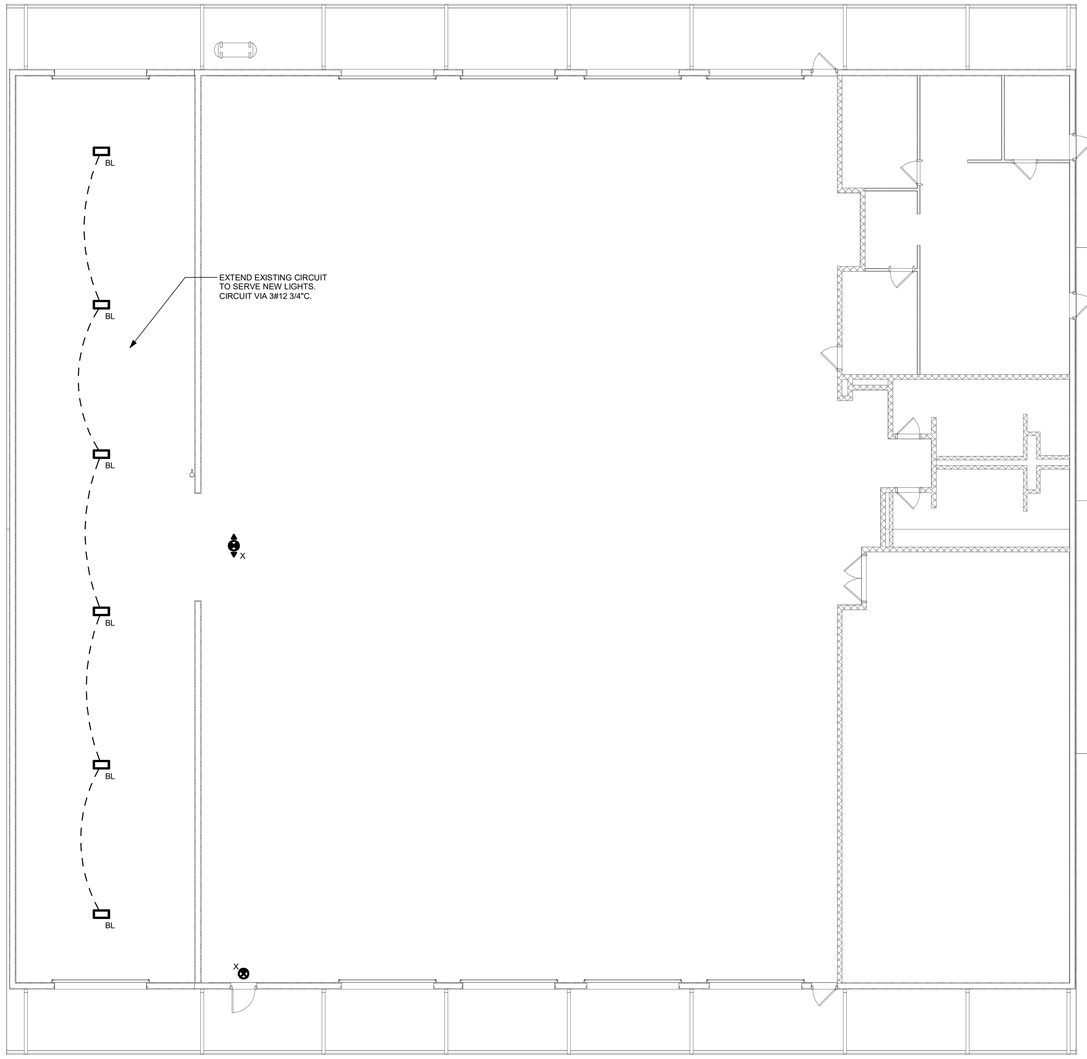
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LIGHTING REFLECTED CEILING PLAN - LEVEL 1 - AREA D - WAREHOUSE

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E2.04
Drawn By: HB/BRH	
Date: 09/18/2025	

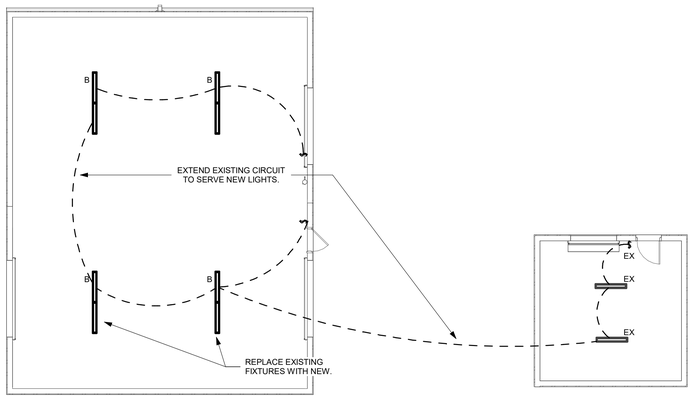
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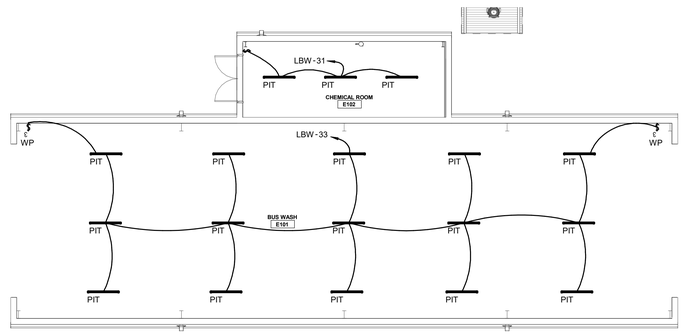
1 LIGHTING REFLECTED CEILING PLAN - SHOP MECHANIC BAY

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



2 LIGHTING REFLECTED CEILING PLAN - EXTERIOR STORAGE BUILDINGS

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



3 LIGHTING REFLECTED CEILING PLAN - BUS WASH

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

Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
REGISTERED
PROFESSIONAL
ENGINEER
09/18/2025

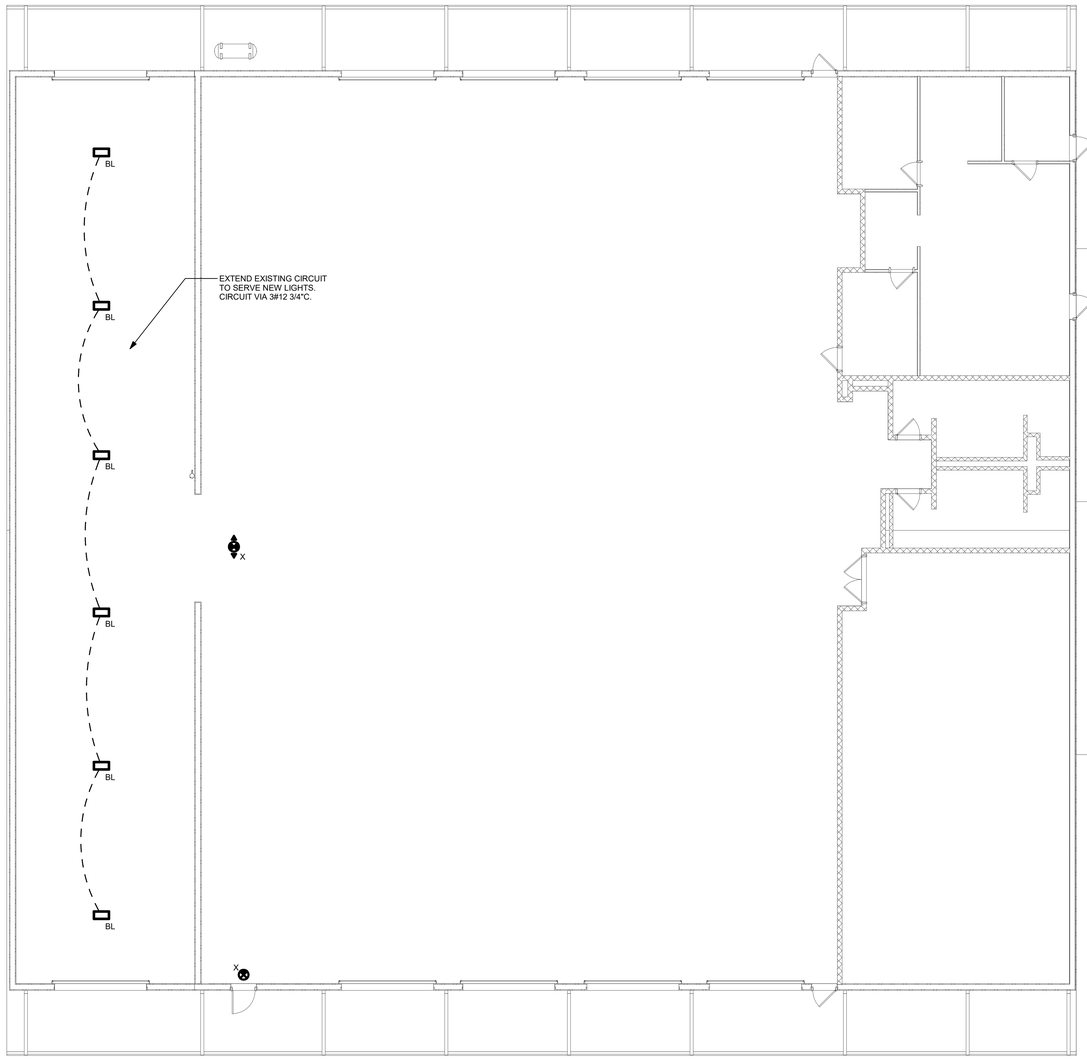
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LIGHTING REFLECTED CEILING PLAN - BUS WASH, MECHANIC BAY, & STORAGE PACKAGE VOLUME

Job No: 1971-05-01	Sheet No: E2.05
Drawn By: HB/BRH	
Date: 09/18/2025	

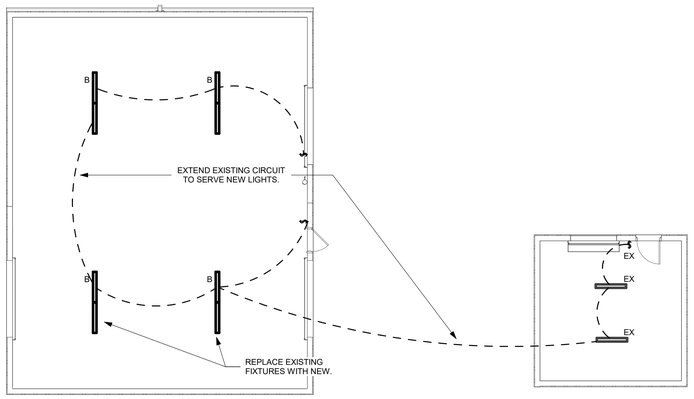
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1 LIGHTING REFLECTED CEILING PLAN - SHOP MECHANIC BAY

N TRUE

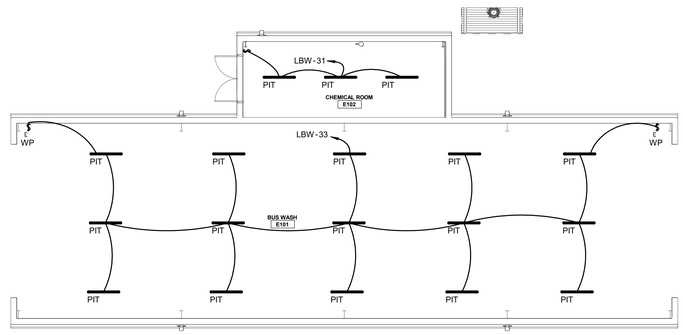
SCALE= 1/8" = 1'-0"



2 LIGHTING REFLECTED CEILING PLAN - EXTERIOR STORAGE BUILDINGS

N TRUE

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



3 LIGHTING REFLECTED CEILING PLAN - BUS WASH

N TRUE

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

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Revision /	Date	
1	10/07/25	Addendum 1

Project:

NEW OPERATIONS BUILDING
FOR
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NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED
PROFESSIONAL
ENGINEER
09/18/2025

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LIGHTING REFLECTED CEILING PLAN - BUS WASH, MECHANIC BAY, & STORAGE PACKAGE

VOLUME

Job No: 1971-05-01	Sheet No: E2.05
Drawn By: HB/BRH	
Date: 09/18/2025	

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NEW CANEY TRANSPORTATION & OPERATION LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	MOUNTING	LAMPS	VOLTS	WATTS	KELVIN	DESCRIPTION	LOCATION / NOTES
A	METALUX	24CGT5540C	RECESSED	LED 0-10V	120-277	47W	4000K	2X4' LED FLAT PANEL	
B	HEW	75R-4-L50-840-VBY-2-DIM-UNV	SUSPENDED	LED 0-10V	120-277	33W	4000K	4' LED STRIP WITH ROUND LENS AND 2 Y-HANGERS AND 2' CHAINS. CONTRACTOR TO VERIFY MOUNTING HEIGHT WITH OWNER'S REP.	
BE	HEW	75R-4-L50-840-VBY-2-DIM-UNV	SUSPENDED	LED 0-10V	120-277	33W	4000K	4' LED STRIP WITH ROUND LENS AND 2 Y-HANGERS AND 2' CHAINS. CONTRACTOR TO VERIFY MOUNTING HEIGHT WITH OWNER'S REP.	
BL	METALUX	SPHB-12-SE-M-UNV-L740	SURFACE	LED 0-10V	120-277	123W	4000K	2X4' HIGH BAY FIXTURE	
BWE	HEW	75R-4-L50-840-VBY-2-DIM-UNV	WALL/SURFACE	LED 0-10V	120-277	33W	4000K	4' LED STRIP WITH ROUND LENS AND 2 Y-HANGERS AND 2' CHAINS. CONTRACTOR TO VERIFY MOUNTING HEIGHT WITH OWNER'S REP.	
CLE	STARTEK	HYDROD-4-1000-SD-40K-80-FINISH-SM(x)-U-1C	SURFACE	LED 0-10V	120-277	36W	4000K	4FT LED WET LOCATION SURFACE MOUNT LINEAR	
D1	HALO COMMERCIAL	HC610D010-HM60525840-61PSMDW	RECESSED	LED 0-10V	120-277	11W	4000K	6" RECESSED ROUND DOWNLIGHT, NON CONDUCTIVE SHOWER TRIM, 1000 LUMENS	
D2	HALO COMMERCIAL	HC620D010-HM60525840-61MDH	RECESSED	LED 0-10V	120-277	21W	4000K	6" RECESSED ROUND DOWNLIGHT, SEMI SPEC FINISH & FLANGE, MEDIUM BEAM, 2000 LUMENS	
HBL	METALUX	VHB-1824-W-UNV-L840-CD-WLS4-U-Y-TOGGLE-10-2PK	SUSPENDED	LED 0-10V	120-277	125W / 147W	4000K	LED SELECTABLE HIGH BAY, INTEGRAL OCC DIMMING SENSOR	LOW OUTPUT TO BE SELECTED
HB	METALUX	VHB-1824-W-UNV-L840-CD-WLS4-U-Y-TOGGLE-10-2PK	SUSPENDED	LED 0-10V	120-277	125W / 147W	4000K	LED SELECTABLE HIGH BAY, INTEGRAL OCC DIMMING SENSOR	HIGH OUTPUT TO BE SELECTED
L4	METALUX	4SNLED-LD5-50SL-LW-UNV-L840-CD1-U+	SUSPENDED OR SURFACE	LED 0-10V	120-277	46W	4000K	4FT STANDARD STRIPLIGHT, FULL FROSTED LENS,	SURFACE OR PENDANT DEPENDING ON CEILING TYPE/LOCATION
L8	METALUX	8SNLED-LD5-50SL-LW-UNV-L840-CD1-U+	SUSPENDED OR SURFACE	LED 0-10V	120-277	92W	4000K	8FT STANDARD STRIPLIGHT, FULL FROSTED LENS,	SURFACE OR PENDANT DEPENDING ON CEILING TYPE/LOCATION
L8E	METALUX	8SNLED-LD5-50SL-LW-UNV-L840-CD1-U+	SUSPENDED OR SURFACE	LED 0-10V	120-277	92W	4000K	8FT STANDARD STRIPLIGHT, FULL FROSTED LENS,	SURFACE OR PENDANT DEPENDING ON CEILING TYPE/LOCATION
M	METALUX	4MB-6SL-RND-UNV-L840-CD-FINISH	SUSPENDED	LED 0-10V	120-277	44W	4000K	4FT HIGH BAY LINEAR	
ME	METALUX	4MB-6SL-RND-UNV-L840-CD-FINISH-EL10W	SUSPENDED	LED 0-10V	120-277	44W	4000K	4FT HIGH BAY LINEAR	
PIT	METALUX	4VT2-LD5-6-DR-UNV-L840-CD1-WL-U	SURFACE	LED 0-10V	120-277	51W	4000K	4FT LED VAPORTITE	ELEVATOR PIT LIGHT
PL2	LUMARK	PRV-XL-PA3A-740-U-T2R-FINISH-WLS4xx	POLE	LED 0-10V	120-277	172W	4000K	(1) AREA SITE LUMINAIRE, TYPE II, INTEGRAL OCC & DIMMING SENSOR	TO BE PROVIDED WITH 25FT KW POLE RATED AT 130MPH : RTSP25-6.1.11.F.DM10-BC
PL3	LUMARK	PRV-XL-PA3A-740-U-T3-FINISH-WLS4xx	POLE	LED 0-10V	120-277	172W	4000K	(1) AREA SITE LUMINAIRE, TYPE III, INTEGRAL OCC & DIMMING SENSOR	TO BE PROVIDED WITH 25FT KW POLE RATED AT 130MPH : RTSP25-6.1.11.F.DM10-BC
PL4	LUMARK	PRV-XL-PA3A-740-U-T4W-FINISH-WLS4xx	POLE	LED 0-10V	120-277	172W	4000K	(1) AREA SITE LUMINAIRE, TYPE IV, INTEGRAL OCC & DIMMING SENSOR	TO BE PROVIDED WITH 25FT KW POLE RATED AT 130MPH : RTSP25-6.1.11.F.DM10-BC
PL5-2	LUMARK	PRV-XL-PA3A-740-U-5WQ-FINISH-WLS4xx	POLE	LED 0-10V	120-277	172W EA	4000K	(2) AREA SITE LUMINAIRES, TYPE V, INTEGRAL OCC & DIMMING SENSOR	TO BE PROVIDED WITH 25FT KW POLE RATED AT 130MPH : RTSP25-6.1.11.F.DM10-BC
Q4	LUMARK	PRV-XL-PA3A-740-U-T4W-FINISH-WLS4xx	POLE	LED 0-10V	120-277	172W	4000K	(1) AREA SITE LUMINAIRE, TYPE IV, INTEGRAL OCC & DIMMING SENSOR	TO BE MOUNTED ON EXISTING 25FT POLE & AIMED AT OPERATIONS BUIDLING
WP	MCGRAW EDISON	GKO-PB2C-740-U-T4W-FINISH	SURFACE WALL	LED	120-277	57W	4000K	LED WALL PACK, TYPE IV	
X	EVENLITE	EXIT SIGN	UNIVERSAL SURFACE	LED	120-277		N/A		

NOTES :
1. LUMINAIRE LABELS WITH "E" SUFFIX SHALL BE PROVIDED WITH INTEGRAL OR REMOTE BATTERY.
2. LUMINAIRE LABELS WITH "X" SUFFIX ARE CONNECTED TO GENERATOR POWER AND PROVIDED WITH ESRN PER EMERGENCY ZONE.
3. ARCHITECT TO VERFIY ALL FINISHES & CCT PRIOR TO ORDER
4. FOR RETROFIT / REMODEL APPLICATIONS, EC TO VERIFY ALL MOUNTING CONDITIONS PRIOR ORDER
5. FOR RETROFIT / REMODEL APPLICATIONS, EC TO VERFY VOLTAGE PRIOR TO ORDER

Revision / 1 — Date 10/07/25 — Addendum 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED
ARCHITECT
09/18/2025

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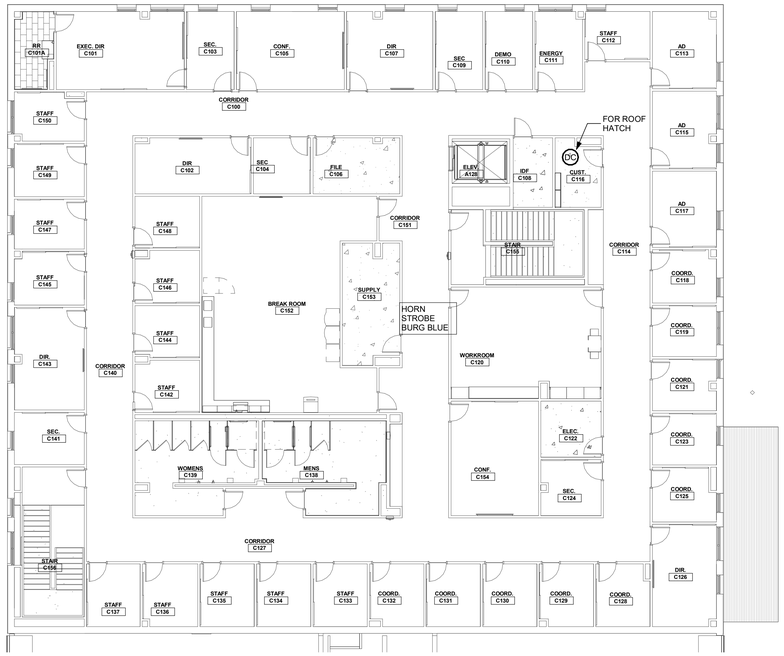
LIGHTING FIXTURE SCHEDULE

PACKAGE — VOLUME

Job No. 1971-05-01
Drawn By: HB/BRH
Date: 09/18/2025
Sheet No. E2.06

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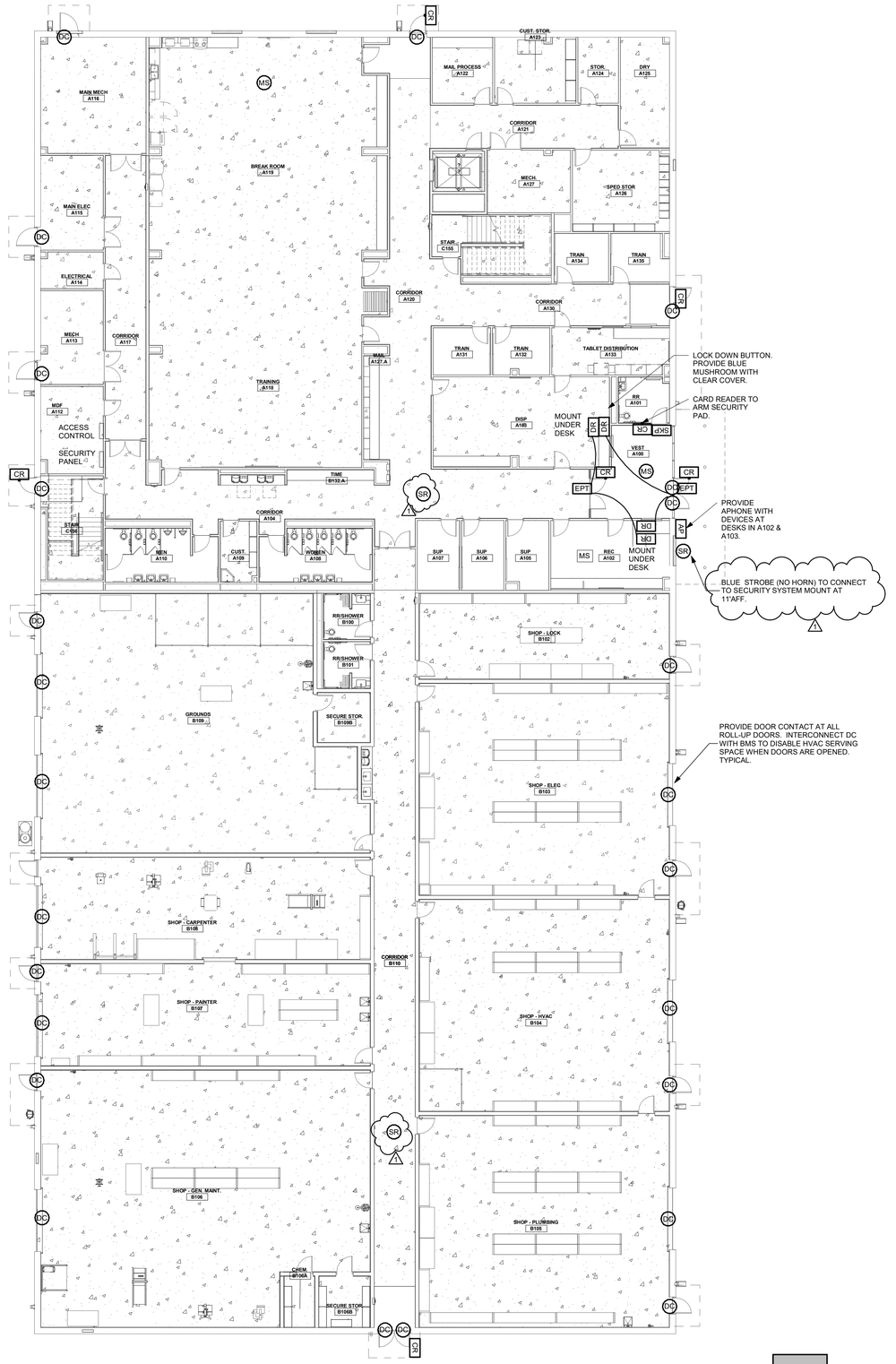
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2 SECURITY SYSTEMS 2ND FLOOR PLAN - OPERATIONS BUILDING

N TRUE

SCALE= 3/32" = 1'-0"



1 SECURITY SYSTEMS 1ST FLOOR PLAN - OPERATION BUILDING

N TRUE

SCALE= 3/32" = 1'-0"

KEY PLAN
N.T.S.

A / C
B
D

Revision /	Date	
1	10/07/25	Addendum 1

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NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/18/2025

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SECURITY SYSTEMS FLOOR PLANS - OPERATIONS BUILDING

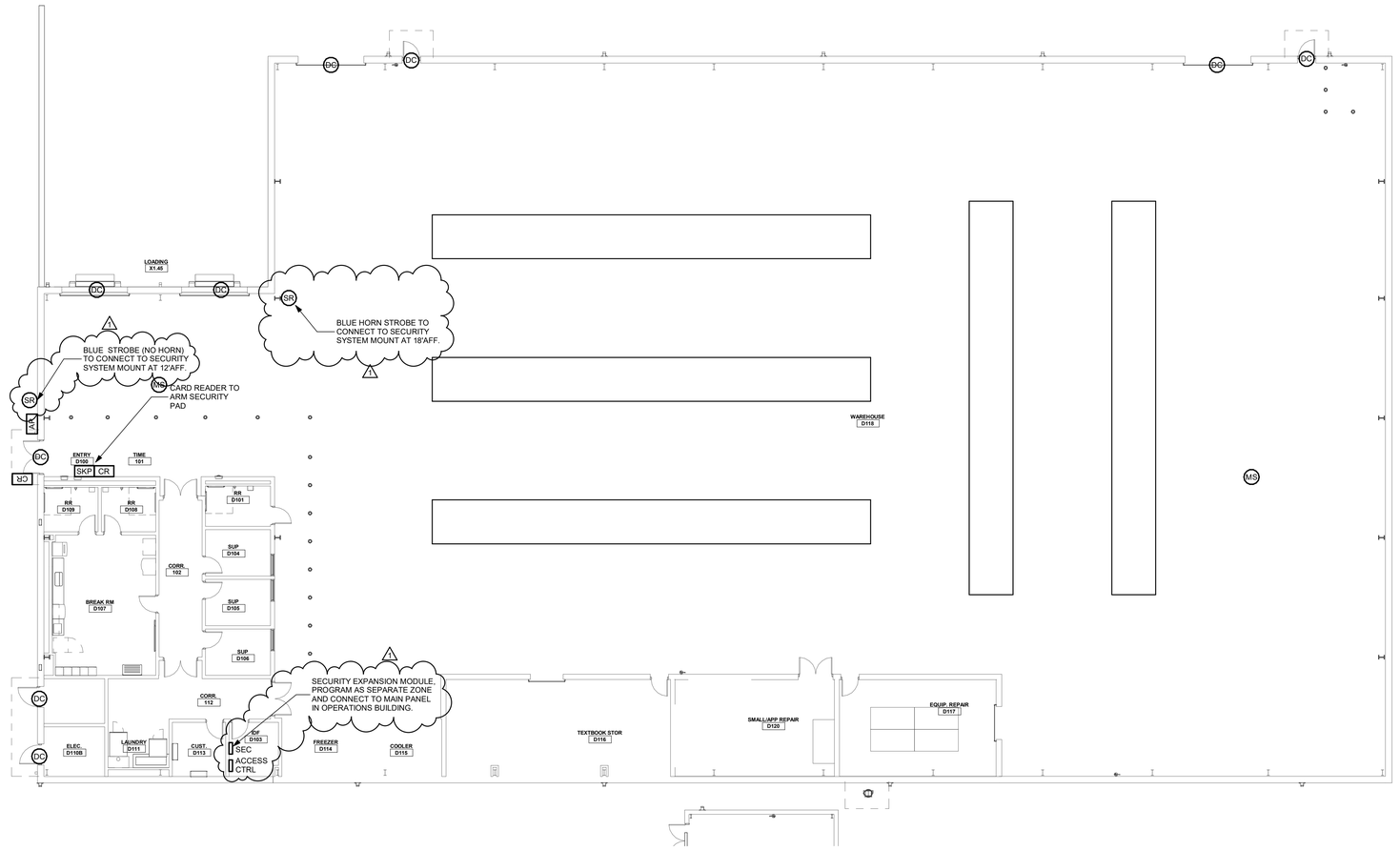
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Job No. 1971-05-01	Sheet No. E4.01
Drawn By: HB/BRH	
Date: 09/18/2025	

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Revision /	Date	
1	10/07/25	Addendum 1

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS



N
TRUE

1 **SECURITY SYSTEMS - WAREHOUSE**

SCALE= 3/32" = 1'-0"

A / C

B

D

KEY PLAN
N.T.S.



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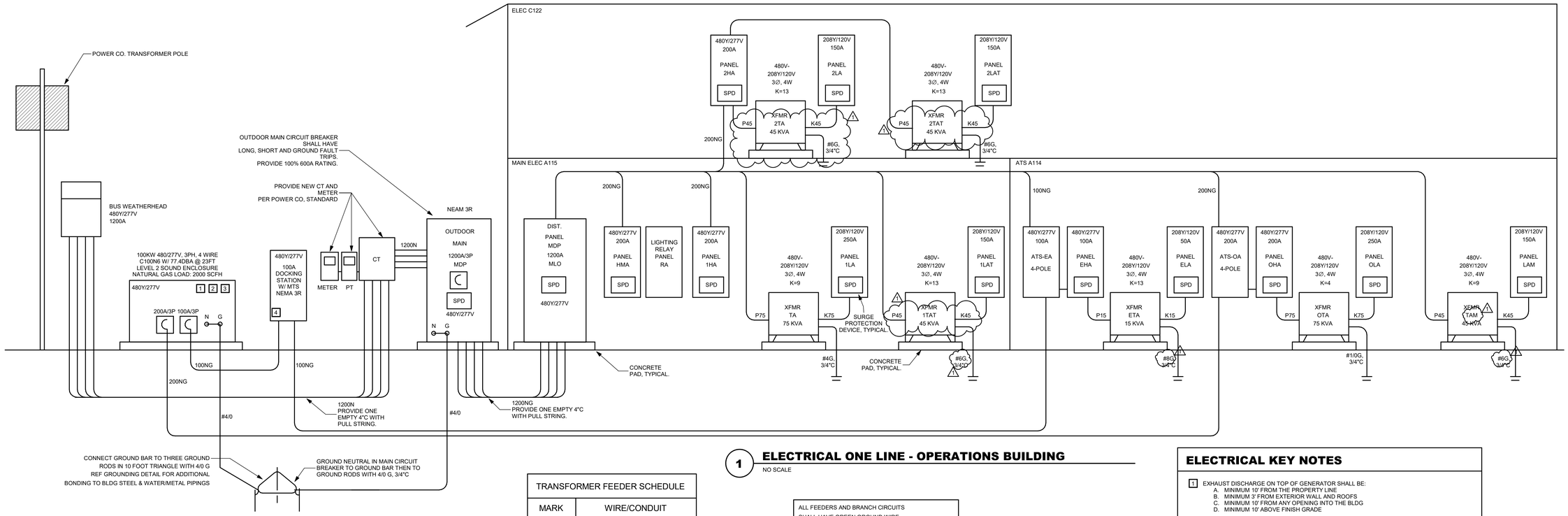
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SECURITY SYSTEMS FLOOR PLAN - WAREHOUSE BUILDING

PACKAGE	VOLUME
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1 ELECTRICAL ONE LINE - OPERATIONS BUILDING

NO SCALE

SHORT CIRCUIT ANALYSIS		480Y/277 VOLTS
LOCATION	SHORT CIRCUIT AVAILABLE	EQUIPMENT AIC FULLY RATING
OUTDOOR MAIN CIRCUIT BREAKER	100,000A	100,000A
DIST. PANEL DM	100,000A	100,000A
PANEL HK	65,000A	65,000A
PANEL HA	65,000A	65,000A
PANEL HB	65,000A	65,000A
* 208Y/120V OR 120/240V PANELS	<10,000A	10,000A
TVSS	TVSS SHALL HAVE SAME AIC RATING AS SWITCHGEAR TO BE PROTECTED.	
A PERMANENTLY AFFIXED LABEL SHALL BE ATTACHED TO ALL NEW ELECTRICAL EQUIPMENT WITH THE AVAILABLE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2" X 3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION.		

1. WHERE CIRCUIT BREAKERS ARE APPLIED IN COMPLIANCE WITH THE SERIES COMBINATION RATINGS MARKED ON THE EQUIPMENT BY THE MANUFACTURER, THE ENCLOSURE(S) SHALL BE LEGIBLE MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING. ELECTRICAL EQUIPMENT SUPPLIER SHALL PROVIDE READILY VISIBLE ENGRAVED NAMEPLATE READING:

CAUTION __ SERIES COMBINATION SYSTEM
RATED __ AMPERES. IDENTIFIED
REPLACEMENT COMPONENTS REQUIRED.

ELECTRICAL LOAD ANALYSIS

SERVICE VOLTAGE IS 480Y/277 VOLTS, 3 PHASE, 4 WIRE

LOAD DESCRIPTION	AMPS
LIGHTS	
ACCU(S)	
RTU(S)	
CCU & FCU	
MISC. ELECTRICAL	
KITCHEN	
TOTAL LOAD	
25% LIGHTS	
25% LARGEST MOTOR	
TOTAL LOAD	846 AMPS
EXISTING ELECTRICAL SERVICE CAPACITY	1200 AMPS
SPARE CAPACITY	354 AMPS

1. ALL LOADS ARE 100% CONNECTED LOADS, NO DEMAND FACTOR USED.
2. SERVICE IS ADEQUATE TO HANDLE 100% CONNECTED LOADS.

TRANSFORMER FEEDER SCHEDULE	
MARK	WIRE/CONDUIT
P15	3#10, 1#10G IN 1"C
K15	3#8,1#8N, 1#8G IN 1"C
P30	3#6, 1#10G IN 1"C
K30	3#1/0,1#2/0N, 1#6G IN 2"C
P45	3#4, 1#8G IN 1"C
K45	3#2/0, 1#250N, 1#4G IN 2"C
P75	3#1, 1#6G IN 1.5"C
K75	3#250, 1#250N, 1#2G IN 2.5"C
P112.5	3#2/0, 1#6G IN 2"C
K112.5	(2) SETS: 3#3/0, 1#3/0N, 1#1/0G IN 2"C
P150	3#250, 1#4G IN 2"C
K150	(2) SETS: 3#250, 1#250N, 1#1/0G IN 2.5"C

ALL FEEDERS AND BRANCH CIRCUITS SHALL HAVE GREEN GROUND WIRE SIZED PER NATIONAL ELECTRICAL CODE

SEE SHORT CIRCUIT ANALYSIS FOR EQUIPMENT AIC RATING.

COPPER FEEDER SCHEDULE

FEEDER DESIGNATION	NO. OF SETS	PHASE CONDUCTORS (PER SET)	N NEUTRAL CONDUCTOR (PER SET)	G GROUND CONDUCTOR (PER SET)	SG SYSTEM BONDING JUMPER (PER SET)	P PARTIAL NEUTRAL SERVICE CONDUCTOR (PER SET)	I ISOLATE GROUND CONDUCTOR (PER SET)	CONDUIT SIZE – CONDUIT TYPES EMT, FCM, IMC, RMC, SCH 40 PVS: 3 PHASE NEUTRAL & GROUND 'NG','NSG','PG','PSG' (PER SET)	3 PHASE & GROUND 'G' (PER SET)	3 PHASE NEUTRAL GROUND & ISOLATE GROUND 'NGI','NSGI' (PER SET)	CONDUIT SIZE – CONDUIT TYPES SCH 80 PVC: 3 PHASE NEUTRAL & GROUND 'NG','NSG','PG','PSG' (PER SET)	3 PHASE & GROUND 'G' (PER SET)	3 PHASE NEUTRAL GROUND & ISOLATE GROUND 'NGI','NSGI' (PER SET)
15	1	3 # 12	1 # 12	1 # 12	1 # 8	"	1 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
20	1	3 # 12	1 # 12	1 # 12	1 # 8	"	2 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
30	1	3 # 10	1 # 10	1 # 10	1 # 8	"	1 # 10	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
40/50	1	3 # 8	1 # 8	1 # 10	1 # 8	"	1 # 10	3/4"	3/4"	1"	1"	3/4"	1"
60	1	3 # 6	1 # 6	1 # 10	1 # 8	"	1 # 10	1"	3/4"	1"	1"	1"	1 1/4"
70/80	1	3 # 4	1 # 4	1 # 8	1 # 8	"	1 # 8	1 1/4"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
100	1	3 # 2	1 # 2	1 # 6	1 # 6	1 # 8	1 # 8	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/4"	1 1/2"
115	1	3 # 2	1 # 2	1 # 6	1 # 8	1 # 8	1 # 6	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/4"	1 1/2"
130	1	3 # 1	1 # 1	1 # 6	1 # 6	1 # 6	1 # 6	1 1/2"	1 1/2"	1 1/2"	2"	1 1/2"	2"
150	1	3 # 1/0	1 # 1/0	1 # 6	1 # 6	1 # 6	1 # 6	2"	1 1/2"	2"	2"	1 1/2"	2"
175	1	3 # 2/0	1 # 2/0	1 # 6	1 # 4	1 # 4	1 # 6	2"	1 1/2"	2"	2"	2"	2"
200	1	3 # 3/0	1 # 3/0	1 # 6	1 # 4	1 # 4	1 # 6	2"	2"	2"	2 1/2"	2"	2 1/2"
225	1	3 # 4/0	1 # 4/0	1 # 4	1 # 2	1 # 2	1 # 4	2 1/2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
250	1	3 # 250	1 # 250	1 # 4	1 # 2	1 # 2	1 # 4	2 1/2"	2"	2 1/2"	3"	2 1/2"	3"
300	1	3 # 350	1 # 350	1 # 4	1 # 2	1 # 2	1 # 4	3"	2 1/2"	3"	3"	3"	3"
350	1	3 # 500	1 # 500	1 # 3	1 # 1/0	1 # 1/0	1 # 3	4"	3"	4"	4"	3"	4"
400	2	3 # 3/0	1 # 3/0	1 # 3	1 # 1/0	1 # 1/0	1 # 3	2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
460	2	3 # 4/0	1 # 4/0	1 # 2	1 # 1/0	1 # 1/0	1 # 2	2 1/2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
500	2	3 # 250	1 # 250	1 # 2	1 # 1/0	1 # 1/0	1 # 2	2 1/2"	2 1/2"	3"	3"	2 1/2"	3"
600	2	3 # 350	1 # 350	1 # 1	1 # 2/0	1 # 2/0	"	3"	2 1/2"	"	3"	3"	"
700	2	3 # 500	1 # 500	1 # 1/0	1 # 2/0	1 # 2/0	"	4"	3"	"	4"	3"	"
800	3	3 # 300	1 # 300	1 # 1/0	1 # 2/0	1 # 2/0	"	3"	2 1/2"	"	3"	2 1/2"	"
1000	3	3 # 400	1 # 400	1 # 2/0	1 # 3/0	1 # 3/0	"	3"	3"	"	4"	3"	"
1200	4	3 # 350	1 # 350	1 # 3/0	1 # 4/0	1 # 4/0	"	3"	2 1/2"	"	3"	3"	"
1600	5	3 # 400	1 # 400	1 # 4/0	1 # 250	1 # 250	"	3"	3"	"	4"	3"	"
2000	6	3 # 400	1 # 400	1 # 250	1 # 300	1 # 300	"	3"	3"	"	4"	3"	"
2500	7	3 # 500	1 # 500	1 # 350	1 # 500	1 # 500	"	4"	3"	"	4"	4"	"
3000	8	3 # 500	1 # 500	1 # 400	1 # 500	1 # 500	"	4"	3"	"	4"	4"	"
4000	11	3 # 500	1 # 500	1 # 500	2 # 350	1 # 500	"	4"	4"	"	4"	4"	"

EXAMPLES:
1. 150NG = INDICATES 1 SET OF 4# 1/0 + 1#6 GROUND CONDUCTOR PER SET.
2. 500P = INDICATES 2 SET OF 3#250 KCMIL AND 1#1/0 PARTIAL NEUTRAL CONDUCTOR PER SET.
3. 3000NNG = INDICATES 5#350 KCMIL AND 1#4 GROUND CONDUCTOR.

ELECTRICAL KEY NOTES

1. EXHAUST DISCHARGE ON TOP OF GENERATOR SHALL BE:
   A. MINIMUM 10' FROM THE PROPERTY LINE
   B. MINIMUM 3' FROM EXTERIOR WALL AND ROOFS
   C. MINIMUM 10' FROM ANY OPENING INTO THE BLDG
   D. MINIMUM 10' ABOVE FINISH GRADE
2. BRANCH CIRCUITS FOR BATTERY CHARGER, ALTERNATOR HEATER, COOLANT HEATER, AND (2)-1"C FOR CONTROLS TO EACH ATS. SEE PANEL SCHEDULE FOR CIRCUITING
3. PROVIDE EMERGENCY STOP MUSHROOM BUTTON ON GENERATOR.
4. PROVIDE TWIST LOCKS FOR DOCKING STATION AS WELL AS MANUAL TRANSFER SWITCH TO SWITCH FROM PERMANENT GENERATOR TO TEMPORARY GENERATOR. PROVIDE 2 BANANA PLUG CLIPS FOR TEMPORARY GENERATOR START SIGNAL, 2#12 IN 1"C BACK TO ATS-E.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, DATA OUTLETS, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 3/8" FLEX CONDUIT WITH MIN. #12 WIRE. MC CABLE IS ACCEPTABLE FOR LIGHT FIXTURE WHIPS, MAXIMUM 6 FT LONG FROM J-BOX AND EMT CONDUIT SYSTEM. NO SNAP-IN CONNECTORS ARE ALLOWED.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED.
19. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

Revision /	Date	
1	10/07/25	Addendum 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:



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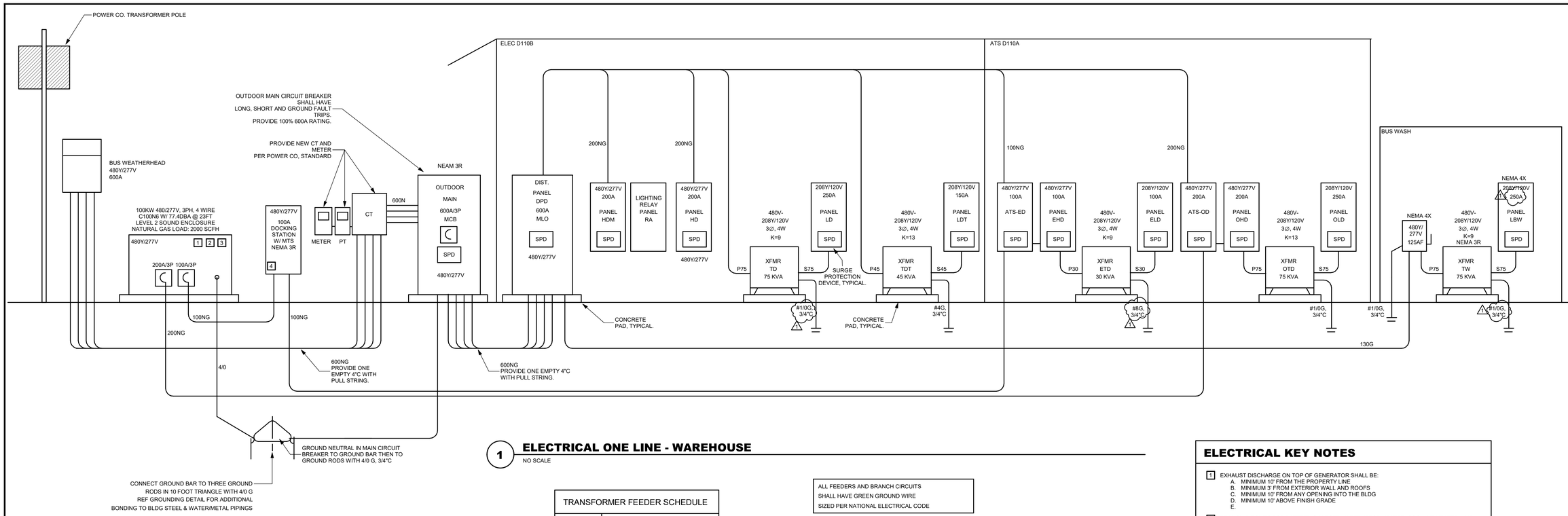
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Drawn By: Author	
Date: 09/18/2025	

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1 ELECTRICAL ONE LINE - WAREHOUSE

NO SCALE

ALL FEEDERS AND BRANCH CIRCUITS SHALL HAVE GREEN GROUND WIRE SIZED PER NATIONAL ELECTRICAL CODE

SEE SHORT CIRCUIT ANALYSIS FOR EQUIPMENT AIC RATING.

SHORT CIRCUIT ANALYSIS

	480Y/277 VOLTS	
LOCATION	SHORT CIRCUIT AVAILABLE	EQUIPMENT AIC FULLY RATING
OUTDOOR MAIN CIRCUIT BREAKER	100,000A	100,000A
DIST. PANEL DM	100,000A	100,000A
PANEL HK	65,000A	65,000A
PANEL HA	65,000A	65,000A
PANEL HB	65,000A	65,000A
* 208Y/120V OR 120/240V PANELS	<10,000A	10,000A

TVSS TVSS SHALL HAVE SAME AIC RATING AS SWITCHGEAR TO BE PROTECTED.

A PERMANENTLY AFFIXED LABEL SHALL BE ATTACHED TO ALL NEW ELECTRICAL EQUIPMENT WITH THE AVAILABLE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2" X 3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDE THE DATE OF THE CALCULATION.

1. WHERE CIRCUIT BREAKERS ARE APPLIED IN COMPLIANCE WITH THE SERIES COMBINATION RATINGS MARKED ON THE EQUIPMENT BY THE MANUFACTURER, THE ENCLOSURE(S) SHALL BE LEGIBLE MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING. ELECTRICAL EQUIPMENT SUPPLIER SHALL PROVIDE READILY VISIBLE ENGRAVED NAMEPLATE READING:

CAUTION __ SERIES COMBINATION SYSTEM
RATED __ AMPERES. IDENTIFIED
REPLACEMENT COMPONENTS REQUIRED.

ELECTRICAL LOAD ANALYSIS

SERVICE VOLTAGE IS 480Y/277 VOLTS, 3 PHASE, 4 WIRE

LOAD DESCRIPTION	AMPS
LIGHTS	
ACCU(S)	
RTU(S)	
CCU & FCU	
MISC. ELECTRICAL	
KITCHEN	
TOTAL LOAD	
25% LIGHTS	
25% LARGEST MOTOR	
TOTAL LOAD	434 AMPS
EXISTING ELECTRICAL SERVICE CAPACITY	600 AMPS
SPARE CAPACITY	166 AMPS

1. ALL LOADS ARE 100% CONNECTED LOADS, NO DEMAND FACTOR USED.
2. SERVICE IS ADEQUATE TO HANDLE 100% CONNECTED LOADS.

TRANSFORMER FEEDER SCHEDULE	
MARK	WIRE/CONDUIT
P15	3#10, 1#10G IN 1"C
K15	3#8,1#8N, 1#8G IN 1"C
P30	3#6, 1#10G IN 1"C
K30	3#1/0,1#2/0N, 1#6G IN 2"C
P45	3#4, 1#8G IN 1"C
K45	3#2/0, 1#250N, 1#4G IN 2"C
P75	3#1, 1#6G IN 1.5"C
K75	3#250, 1#250N, 1#2G IN 2.5"C
P112.5	3#2/0, 1#6G IN 2"C
K112.5	(2) SETS: 3#3/0, 1#3/0N, 1#1/0G IN 2"C
P150	3#250, 1#4G IN 2"C
K150	(2) SETS: 3#250, 1#250N, 1#1/0G IN 2.5"C

COPPER FEEDER SCHEDULE

FEEDER DESIGNATION	NO. OF SETS	PHASE CONDUCTORS (PER SET)	N NEUTRAL CONDUCTOR (PER SET)	G GROUND CONDUCTOR (PER SET)	SG SYSTEM BONDING JUMPER (PER SET)	P PARTIAL NEUTRAL SERVICE CONDUCTOR (PER SET)	I ISOLATE GROUND CONDUCTOR (PER SET)	CONDUIT SIZE – CONDUIT TYPES EMT, FCM, IMC, RMC, SCH 40 PVS: 3 PHASE NEUTRAL & GROUND 'NG','NSG','PG','PSG' (PER SET)	3 PHASE & GROUND 'G' (PER SET)	3 PHASE NEUTRAL GROUND & ISOLATE GROUND 'NGI','NSGI' (PER SET)	CONDUIT SIZE – CONDUIT TYPES SCH 80 PVC: 3 PHASE NEUTRAL & GROUND 'NG','NSG','PG','PSG' (PER SET)	3 PHASE & GROUND 'G' (PER SET)	3 PHASE NEUTRAL GROUND & ISOLATE GROUND 'NGI','NSGI' (PER SET)
15	1	3 # 12	1 # 12	1 # 12	1 # 8	"	1 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
20	1	3 # 12	1 # 12	1 # 12	1 # 8	"	2 # 12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
30	1	3 # 10	1 # 10	1 # 10	1 # 8	"	1 # 10	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
40/50	1	3 # 8	1 # 8	1 # 10	1 # 8	"	1 # 10	3/4"	3/4"	1"	1"	3/4"	1"
60	1	3 # 6	1 # 6	1 # 10	1 # 8	"	1 # 10	1"	3/4"	1"	1"	1"	1 1/4"
70/80	1	3 # 4	1 # 4	1 # 8	1 # 8	"	1 # 8	1 1/4"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
100	1	3 # 2	1 # 2	1 # 6	1 # 6	1 # 8	1 # 8	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/4"	1 1/2"
115	1	3 # 2	1 # 2	1 # 6	1 # 8	1 # 8	1 # 6	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/4"	1 1/2"
130	1	3 # 1	1 # 1	1 # 6	1 # 6	1 # 6	1 # 6	1 1/2"	1 1/2"	1 1/2"	2"	1 1/2"	2"
150	1	3 # 1/0	1 # 1/0	1 # 6	1 # 6	1 # 6	1 # 6	2"	1 1/2"	2"	2"	1 1/2"	2"
175	1	3 # 2/0	1 # 2/0	1 # 6	1 # 4	1 # 4	1 # 6	2"	1 1/2"	2"	2"	2"	2"
200	1	3 # 3/0	1 # 3/0	1 # 6	1 # 4	1 # 4	1 # 6	2"	2"	2"	2 1/2"	2"	2 1/2"
225	1	3 # 4/0	1 # 4/0	1 # 4	1 # 2	1 # 2	1 # 4	2 1/2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
250	1	3 # 250	1 # 250	1 # 4	1 # 2	1 # 2	1 # 4	2 1/2"	2"	2 1/2"	3"	2 1/2"	3"
300	1	3 # 350	1 # 350	1 # 4	1 # 2	1 # 2	1 # 4	3"	2 1/2"	3"	3"	3"	3"
350	1	3 # 500	1 # 500	1 # 3	1 # 1/0	1 # 1/0	1 # 3	4"	3"	4"	4"	3"	4"
400	2	3 # 3/0	1 # 3/0	1 # 3	1 # 1/0	1 # 1/0	1 # 3	2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
460	2	3 # 4/0	1 # 4/0	1 # 2	1 # 1/0	1 # 1/0	1 # 2	2 1/2"	2"	2 1/2"	2 1/2"	2"	2 1/2"
500	2	3 # 250	1 # 250	1 # 2	1 # 1/0	1 # 1/0	1 # 2	2 1/2"	2 1/2"	3"	3"	2 1/2"	3"
600	2	3 # 350	1 # 350	1 # 1	1 # 2/0	1 # 2/0	"	3"	2 1/2"	"	3"	3"	"
700	2	3 # 500	1 # 500	1 # 1/0	1 # 2/0	1 # 2/0	"	4"	3"	"	4"	3"	"
800	3	3 # 300	1 # 300	1 # 1/0	1 # 2/0	1 # 2/0	"	3"	2 1/2"	"	3"	2 1/2"	"
1000	3	3 # 400	1 # 400	1 # 2/0	1 # 3/0	1 # 3/0	"	3"	3"	"	4"	3"	"
1200	4	3 # 350	1 # 350	1 # 3/0	1 # 4/0	1 # 4/0	"	3"	2 1/2"	"	3"	3"	"
1600	5	3 # 400	1 # 400	1 # 4/0	1 # 250	1 # 250	"	3"	3"	"	4"	3"	"
2000	6	3 # 400	1 # 400	1 # 250	1 # 300	1 # 300	"	3"	3"	"	4"	3"	"
2500	7	3 # 500	1 # 500	1 # 350	1 # 500	1 # 500	"	4"	3"	"	4"	4"	"
3000	8	3 # 500	1 # 500	1 # 400	1 # 500	1 # 500	"	4"	3"	"	4"	4"	"
4000	11	3 # 500	1 # 500	1 # 500	2 # 350	1 # 500	"	4"	4"	"	4"	4"	"

EXAMPLES:
1. 150NG = INDICATES 1 SET OF 4# 1/0 + 1#6 GROUND CONDUCTOR PER SET.
2. 500P = INDICATES 2 SET OF 3#250 KCMIL AND 1#1/0 PARTIAL NEUTRAL CONDUCTOR PER SET.
3. 3000NNG = INDICATES 5#350 KCMIL AND 1#4 GROUND CONDUCTOR.

ELECTRICAL KEY NOTES

1. EXHAUST DISCHARGE ON TOP OF GENERATOR SHALL BE:
   A. MINIMUM 10' FROM THE PROPERTY LINE
   B. MINIMUM 3' FROM EXTERIOR WALL AND ROOFS
   C. MINIMUM 10' FROM ANY OPENING INTO THE BLDG
   D. MINIMUM 10' ABOVE FINISH GRADE
   E.
2. BRANCH CIRCUITS FOR BATTERY CHARGER, ALTERNATOR HEATER, COOLANT HEATER, AND (2)-1"C FOR CONTROLS TO EACH ATS. SEE PANEL SCHEDULE FOR CIRCUITING
3. PROVIDE EMERGENCY STOP MUSHROOM BUTTON ON GENERATOR.
4. PROVIDE TWIST LOCKS FOR DOCKING STATION AS WELL AS MANUAL TRANSFER SWITCH TO SWITCH FROM PERMANENT GENERATOR TO TEMPORARY GENERATOR. PROVIDE 2 BANANA PLUG CLIPS FOR TEMPORARY GENERATOR START SIGNAL, 2#12 IN 1"C BACK TO ATS-E.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, DATA OUTLETS, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 3/8" FLEX CONDUIT WITH MIN. #12 WIRE. MC CABLE IS ACCEPTABLE FOR LIGHT FIXTURE WHIPS, MAXIMUM 6 FT LONG FROM J-BOX AND EMT CONDUIT SYSTEM. NO SNAP-IN CONNECTORS ARE ALLOWED.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED.
19. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

Revision / Date
1 Addendum 1 10/07/25

Project:
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FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
CHI K. TRUONG
90332
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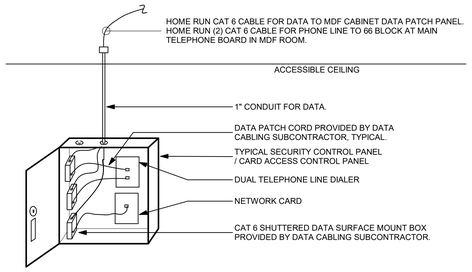
ELECTRICAL ONE LINE - WAREHOUSE

PACKAGE VOLUME

Job No. 1971-05-01
Sheet No. E5.01
Drawn By: Author
Date: 09/18/2025

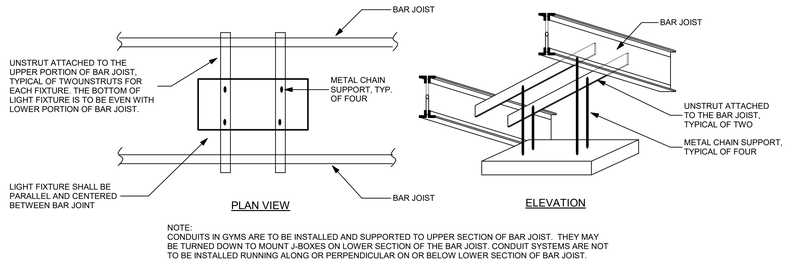
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1 DATA AND PHONE CABLING FOR SECURITY PANEL

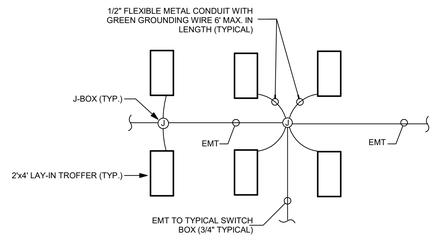
NO SCALE



NOTE:
CONDUITS IN GYMS ARE TO BE INSTALLED AND SUPPORTED TO UPPER SECTION OF BAR JOIST. THEY MAY BE TURNED DOWN TO MOUNT J-BOXES ON LOWER SECTION OF THE BAR JOIST. CONDUIT SYSTEMS ARE NOT TO BE INSTALLED RUNNING ALONG OR PERPENDICULAR ON OR BELOW LOWER SECTION OF BAR JOIST.

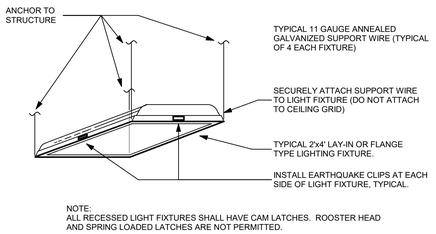
2 WAREHOUSE LIGHT FIXTURE INSTALLATION DETAIL

NO SCALE



3 CONDUIT/J-BOX DETAIL

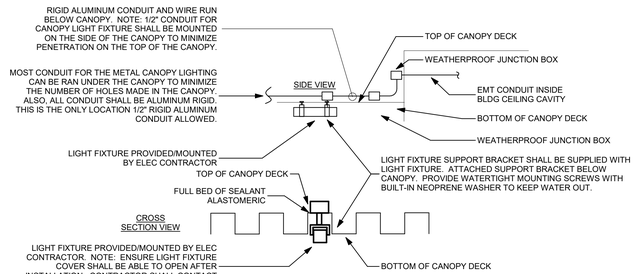
NO SCALE



NOTE:
ALL RECESSED LIGHT FIXTURES SHALL HAVE CAM LATCHES. ROOSTER HEAD AND SPRING LOADED LATCHES ARE NOT PERMITTED.

4 FIXTURE SUPPORT DETAIL

NO SCALE

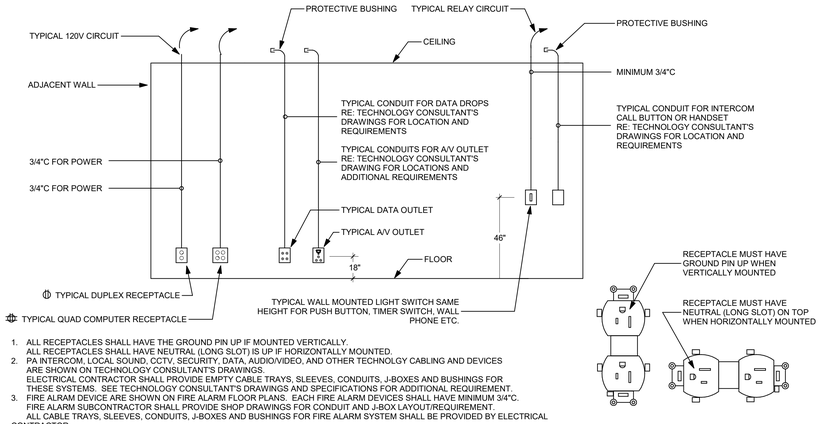


NOTES:
1. MOUNTING PLATES SHALL BE PROVIDED WITH CANOPY TO MOUNT LIGHT FIXTURES.
2. ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING.
3. CONDUIT SHALL BE SEALED TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.

NOTE: 1/2 INCH ALUMINUM CONDUIT IS ALLOWED FOR USE IN THIS CASE ONLY. COORDINATE THE CONDUIT ROUTING WITH NCISD PRIOR TO ROUGH-IN TO MINIMIZE HOLES ON TOP PARTITION OF CANOPY. NO EXCEPTION.

5 UNDER METAL CANOPY LIGHT FIXTURE MOUNTING DETAIL

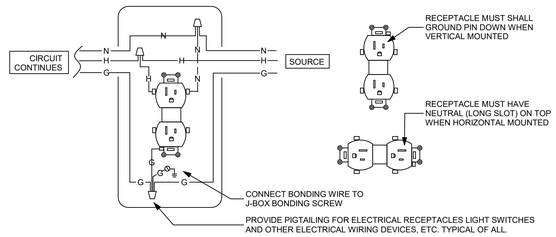
NO SCALE



1. ALL RECEPTACLES SHALL HAVE THE GROUND PIN UP IF MOUNTED VERTICALLY.
   ALL RECEPTACLES SHALL HAVE NEUTRAL (LONG SLOT) IS UP IF HORIZONTALLY MOUNTED.
2. PA INTERCOM, LOCAL SOUND, CCTV, SECURITY, DATA, AUDIO/VIDEO, AND OTHER TECHNOLOGY CABLING AND DEVICES ARE SHOWN ON TECHNOLOGY CONSULTANT'S DRAWINGS.
   ELECTRICAL CONTRACTOR SHALL PROVIDE EMPTY CABLE TRAYS, SLEEVES, CONDUITS, J-BOXES AND BUSHINGS FOR THESE SYSTEMS. SEE TECHNOLOGY CONSULTANT'S DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENT.
3. FIRE ALRAM DEVICE ARE SHOWN ON FIRE ALARM FLOOR PLANS. EACH FIRE ALARM DEVICES SHALL HAVE MINIMUM 3/4"C. FIRE ALARM SUBCONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR CONDUIT AND J-BOX LAYOUT/REQUIREMENT. ALL CABLE TRAYS, SLEEVES, CONDUITS, J-BOXES AND BUSHINGS FOR FIRE ALARM SYSTEM SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.

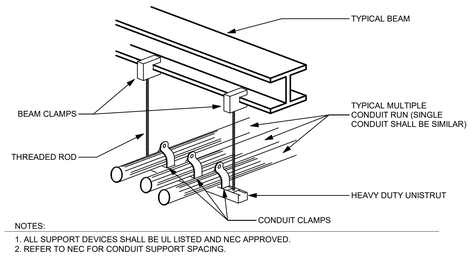
6 CONDUIT SIZE FOR ELECTRICAL DEVICES

NO SCALE



7 PIGTAIL WIRING DETAIL

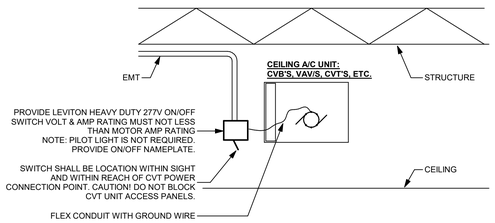
NO SCALE



NOTES:
1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

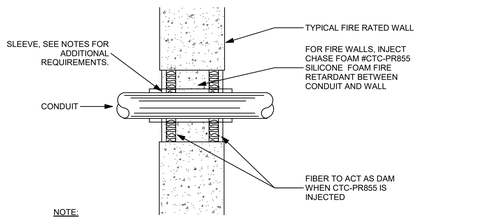
8 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE



9 CEILING A/C UNIT WIRING DETAIL

NO SCALE

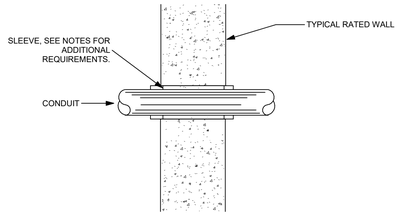


NOTE:

1. FOR PENETRATIONS THROUGH FIRE RATED WALLS, FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.
2. PROVIDE SCHEDULE 40 GALVANIZED SLEEVE THROUGH ALL CMU, FIRE RATED, AND/OR EXTERIOR WALLS.
3. PROVIDE 16G SLIP-LOCK SLEEVES THROUGH INTERIOR SHEET ROCK WALLS.
4. REFER TO DETAIL 17/S0.03 FOR GRADE BEAM CONDUIT PENETRATIONS.

10 FIRE WALL PENETRATION DETAIL

NO SCALE

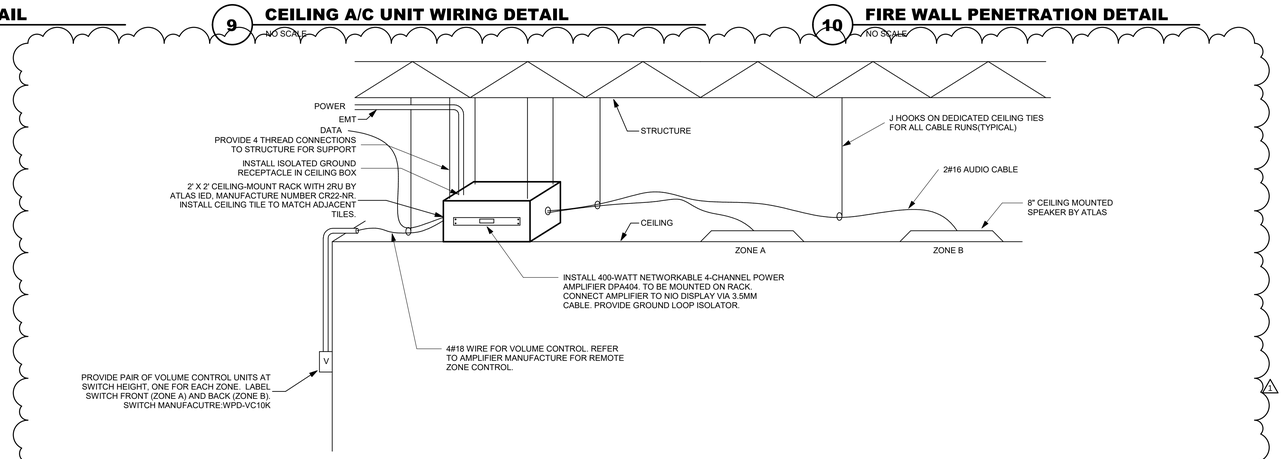


NOTE:

1. PROVIDE SCHEDULE 40 GALVANIZED SLEEVE THROUGH ALL CMU, FIRE RATED, AND/OR EXTERIOR WALLS.
2. PROVIDE 16G SLIP-LOCK SLEEVES THROUGH INTERIOR SHEET ROCK WALLS.
3. REFER TO DETAIL 17/S0.03 FOR GRADE BEAM CONDUIT PENETRATIONS.

11 WALL PENETRATION DETAIL

NO SCALE



12 CEILING AMP WIRING DETAIL

NO SCALE

Revision /	Date	
1	10/07/25	Addendum 1

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ELECTRICAL DETAILS

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E6.01
Drawn By: Author	
Date: 09/18/2025	

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Branch Panel: HMA

Location: Space 23 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:** Type 1
Volts: 480/277 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22,000 | **Mains Type:** MCB | **Mains Rating:** 200 A | **MCB Rating:** 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	CHP-1 (1.5HP)	15G	15 A	3	831 VA	831 VA		3	15 A	15G	CHP-2 (1.5HP)	2
3	--	--	--	--		831 VA	831 VA	--	--	--	--	4
5	--	--	--	--			831 VA	--	--	--	--	6
7	SP-2 (3HP)	20G	20 A	3	1330 VA	1330 VA		3	20 A	20G	SP-1 (3HP)	8
9	--	--	--	--		1330 VA	1330 VA	--	--	--	--	10
11	--	--	--	--			1330 VA	--	--	--	--	12
13	HWP (3HP)	20G	20 A	3	1330 VA	1330 VA		3	20 A	20G	AHU-4	14
15	--	--	--	--		1330 VA	1330 VA	--	--	--	--	16
17	--	--	--	--			1330 VA	--	--	--	--	18
19	SF-1	20G	20 A	3	582 VA	5818 VA		3	40 A	40G	AHU-1	20
21	--	--	--	--		582 VA	5818 VA	--	--	--	--	22
23	--	--	--	--			582 VA	--	--	--	--	24
25	AHU-2	40G	40 A	3	5818 VA	550 VA		3	20 A	20G	SF-2	26
27	--	--	--	--		5818 VA	550 VA	--	--	--	--	28
29	--	--	--	--			5818 VA	--	--	--	--	30
31	AHU-5	20G	20 A	3	1330 VA	600 VA		3	20 A	20G	AHU-4	32
33	--	--	--	--		1330 VA	600 VA	--	--	--	--	34
35	--	--	--	--			1330 VA	--	--	--	--	36
37	AHU-8	20G	20 A	3	1330 VA	1000 VA		3	20 A	20G	AHU-9	38
39	--	--	--	--		1330 VA	1000 VA	--	--	--	--	40
41	--	--	--	--			1330 VA	--	--	--	--	42
43	AHU-11	20G	20 A	3	1330 VA	1330 VA		3	20 A	20G	AHU-10	44
45	--	--	--	--		1330 VA	1330 VA	--	--	--	--	46
47	--	--	--	--			1330 VA	--	--	--	--	48
49	AHU-7	20G	20 A	3	1000 VA	0 VA		1	20 A	3-12	FPB-1-7	50
51	--	--	--	--		1000 VA	600 VA	3	20 A	20G	AHU-3	52
53	--	--	--	--			1000 VA	--	--	--	--	54
55	Spare		20 A	1	0 VA	600 VA		--	--		--	56
57	Spare		20 A	1		0 VA	7480 VA	3	60 A	60G	AC-1	58
59	Spare		20 A	1			0 VA	7480 VA	--	--	--	60
61	Spare		20 A	1	0 VA	7480 VA		--	--		--	62
63	Spare		20 A	1		0 VA	7480 VA	3	60 A	60G	AC-2	64
65	Spare		20 A	1			0 VA	7480 VA	--	--	--	66
67	Space		--	1	--	7480 VA		--	--		--	68
69	Space		--	1		--	--	1	--		Space	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	--	--		3	30 A		SPD	80
81	Space		--	1		--	0 VA	--	--	--	--	82
83	Space		--	1			--	0 VA	--	--	--	84
			Total Load:		43230 VA	43230 VA	43230 VA					
			Total...		156 A	156 A	156 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	129690 VA	100.00%	129690 VA		
				Total Conn. Load:	129690 VA
				Total Est. Demand:	129690 VA
				Total Conn.:	156 A
				Total Est. Demand:	156 A

Notes:

Branch Panel: 1HA

Location: Space 23 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:** Type 1
Volts: 480/277 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22,000 | **Mains Type:** MCB | **Mains Rating:** 200 A | **MCB Rating:** 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Storage Lighting	3-12	20 A	1	880 VA	1040 VA		1	20 A	3-12	Train Lighting	2
3	Lighting - Breakroom	3-12	20 A	1			1520 VA	1120 VA					1	20 A	3-12	Lighting - TRAINING	4
5	Ext Lighting		20 A	1					490 VA	886 VA	1	20 A	3-12	Elec Shop Lighting	6
7	FPB-1-3		15 A	1	0 VA	0 VA					1	15 A			8
9	FPB-1-5		15 A	1			0 VA	1720 VA			1	20 A	3-9	External Lighting	10
11	FPB-1-9		15 A	1					0 VA	880 VA	1	20 A	3-12	RR lighting	12
13	Receptacle Space 8		20 A	1	180 VA	0 VA					1	15 A			14
15	Lighting - Exterior		20 A	1			280 VA	1032 VA			1	20 A	3-9	External Lighting	16
17	Spare		20 A	1					0 VA	1440 VA	1	20 A	3-12	Corridor Lighting	18
19	Corridor Lighting	3-12	20 A	1	960 VA	640 VA					1	20 A	3-12	Break Room Lighting	20
21	Grounds Lighting	3-12	20 A	1			1115 VA	1181 VA			1	20 A	3-12	Shop Lighting	22
23	Plumb Shop Lighting	3-10	20 A	1					1312 VA	2100 VA	3	20 A			Power	24
25	Corridor Lighting	3-12	20 A	1	1120 VA	2100 VA					--	--	--		--	26
27	Spare		20 A	1			0 VA	2100 VA			--	--	--		--	28
29	Spare		20 A	1					0 VA	--	1	--			Space	30
31	Spare		20 A	1	0 VA	--					1	--			Space	32
33	Spare		20 A	1			0 VA	--			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
43	Space		--	1	--	--					1	--			Space	44
45	Space		--	1			--	--			1	--			Space	46
47	Space		--	1					--	0 VA	1	20 A			Spare	48
49	Space		--	1	--	0 VA					1	20 A			Spare	50
51	Space		--	1			--	0 VA			1	20 A			Spare	52
53	Space		--	1					--	0 VA	1	20 A			Spare	54
55	Space		--	1	--	0 VA					3	30 A			SPD	56
57	Space		--	1			--	0 VA			--	--	--		--	58
59	Space		--	1					--	0 VA	--	--	--		--	60
			Total Load:		6843 VA		9942 VA		7033 VA			
			Total...		25 A		36 A		25 A			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	9600 VA	55.31%	5310 VA		
Lighting - Exterior	770 VA	125.00%	963 VA	**Total Conn. Load:**	23809 VA
Receptacle	180 VA	100.00%	180 VA	**Total Est. Demand:**	20860 VA
Power	6300 VA	100.00%	6300 VA	**Total Conn.:**	29 A
Lighting - Non-Dwelling Unit	4494 VA	125.00%	5617 VA	**Total Est. Demand:**	25 A

Notes:

Branch Panel: 2HA

Location: ELEC. C122 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:** Type 1
Volts: 480/277 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 22,000 | **Mains Type:** MCB | **Mains Rating:** 200 A | **MCB Rating:** 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	FPB-2-3		15 A	1	696 VA	7380 VA		3	45 A		2TA	2
3	2TAT		45 A	3			7740 VA	5720 VA	--	--	--	4
5	--	--	--	--					7920 VA	5760 VA	--	--	--	6
7	--	--	--	--	6840 VA	696 VA					1	15 A			FPB-2-5	8
9	Lighting - Ad/Coord. Rooms	3-12	20 A	1			1120 VA	1040 VA			1	20 A	3-12	Lighting - Staff/Offices	10
11	FPB-2-6		15 A	1					696 VA	1120 VA	1	20 A	3-12	Lighting - Staff, Offices, RR	12
13	Lighting - Corridor	3-12	20 A	1	1360 VA	696 VA					1	15 A			FPB-2-5	14
15	Lighting - Corridor	3-12	20 A	1			1360 VA	960 VA			1	20 A	3-12	Lighting - Coference/Workroom	16
17	Lighting - RR/Stairs	3-12	20 A	1					320 VA	400 VA	1	20 A	3-12	Lighting -Corridor	18
19	FPB-2-4		15 A	1	696 VA	1040 VA					1	20 A	3-12	Lighting - Staff/Coord./DR.Rooms	20
21	FPB-2-1		15 A	1			696 VA	696 VA			1	15 A			FPB-2-2	22
23	Lighting - Break Room	3-12	20 A	1					1040 VA	696 VA	1	15 A			FPB-2-5	24
25	FPB-2-12		15 A	1	696 VA	696 VA					1	15 A			FPB-2-13	26
27	FPB-2-11		15 A	1			696 VA	0 VA			1	20 A			Spare	28
29	Spare		20 A	1					0 VA	0 VA	1	20 A			Spare	30
31	Spare		20 A	1	0 VA	0 VA					1	20 A			Spare	32
33	Space		--	1			--	0 VA			1	20 A			Spare	34
35	Space		--	1					--	0 VA	1	20 A			Spare	36
37	Space		--	1	--	0 VA					1	20 A			SPD	38
39	Space		--	1			--	0 VA			3	30 A				40
41	Space		--	1					--	0 VA	--	--	--		--	42
			Total Load:		20690 VA		19853 VA		17831 VA			
			Total...		76 A		73 A		64 A			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	9760 VA	54.98%	5366 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	58368 VA
Receptacle	41360 VA	74.18%	30680 VA	**Total Est. Demand:**	43466 VA
Power	7656 VA	100.00%	7656 VA	**Total Conn.:**	70 A
				Total Est. Demand:	52 A

Notes:

Branch Panel: 1LA

Location: Space 23 | **Supply From:** TA | **Mounting:** Surface | **Enclosure:** Type 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 18,000 | **Mains Type:** MCB | **Mains Rating:** 250 A | **MCB Rating:** 250 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Grounds Receptacle	3-12	20 A	1	900 VA	0 VA		1	20 A	3-12	GROUNDS Cord Reel Receptacle	2
3	Grounds Receptacle	3-12	20 A	1		180 VA	1080 VA	1	20 A	3-12	RR Receptacle	4
5	Power		20 A	1			500 VA	1800 VA	1	20 A	3-12	Grounds Receptical	6
7	Grounds Receptical	3-12	20 A	1	1080 VA	180 VA		1	20 A	3-12	Receptacle Space 1	8
9	Receptacle Space 6	3-12	20 A	1		360 VA	800 VA	1	20 A	3-12	Mechanical / Electrical Lighting	10
11	Receptacle	3-10	20 A	1			1440 VA	0 VA	1	20 A	3-12	SHOP - CARPENTER Cord Reel Receptacle	12
13	SHOP - PAINTER Cord Reel Receptacle	3-12	20 A	1	0 VA	0 VA		1	20 A	3-12	SHOP - GEN MAINT Cord Reel Receptacle	14
15	SHOP - PLUMBING Cord Reel Receptacle	3-10	20 A	1		0 VA	0 VA	1	20 A	3-12	SHOP - HVAC Cord Reel Receptacle	16
17	SHOP - ELEC Cord Reel Receptacle	3-12	20 A	1			0 VA	360 VA	1	20 A	3-12	RR/SHOWER Receptacle	18
19	Receptacle Space 4	3-12	20 A	1	180 VA	2160 VA		1	20 A	3-12	SHOP-LOCK Receptacle	20
21	Break Room Receptacle	3-12	20 A	1		180 VA	180 VA	1	20 A	3-12	Break room Fridge	22
23	Dishwasher Breakroom	3-12	20 A	1			180 VA	360 VA	1	20 A	3-12	Grounds Receptacle	24
25	Vest Receptacle	3-12	20 A	1	540 VA	1080 VA		1	20 A	3-12	Corridor Receptical	26
27	Corridor Receptical	3-12	20 A	1		1080 VA	360 VA	1	20 A	3-12	Main Elect Receptical	28
29	Cust Receptical	3-12	20 A	1			180 VA	180 VA	1	20 A	3-12	Break Room Receptical	30
31	Receptacle Space 6	486,1#10G	50 A	2	8320 VA	180 VA		1	20 A	3-12	Break Room Receptacle	32
33	--	--	--	--		0 VA	180 VA	1	20 A	3-12	Disp Receptacle	34
35	Receptacle	486,1#10G	50 A	2			8320 VA	720 VA	1	20 A	3-12	Storage Receptacle	36
37	--	--	--	--	0 VA	360 VA			1	20 A	3-12	MECH Receptacle	38
39	Receptacle	486,1#10G	50 A	2		8320 VA	360 VA		1	20 A	3-12	Receptacle Space 8	40
41	--	--	--	--			0 VA	160 VA	1	20 A	3-12	Mechanical Lighting	42
43	Receptacle	486,1#10G	50 A	2	8320 VA	360 VA			1	20 A	3-12	Receptacle	44
45	--	--	--	--		0 VA	360 VA		1	20 A	3-12	Time Receptacle	46
47	Receptacle	486,1#10G	50 A	2			8320 VA	180 VA	1	20 A	3-12	Break Room Fridge	48
49	--	--	--	--	0 VA	360 VA			1	20 A	3-12	Time Receptacle	50
51	Receptacle Space 4	3-12	20 A	1		180 VA	180 VA		1	20 A	3-12	Grounds Receptacle	52
53	Receptacle Space 4	3-12	20 A	1			180 VA	500 VA	1	20 A			Power	54
55	Receptacle Space 4	3-12	20 A	1	180 VA	180 VA			1	20 A	3-12	Grounds Receptical	56
57	Receptacle Space 6	486,1#10G	50 A	2		8320 VA	180 VA		1	20 A	3-12	EWC Receptical	58
59	--	--	--	--			0 VA	2160 VA	1	20 A	3-12	Elec Shop	60
61	HVAC Shop Receptical	3-12	20 A	1	1800 VA	1440 VA			1	20 A	3-10	Plumbing Receptical	62
63	Carpenter Receptical	3-12	20 A	1		360 VA	1440 VA		1	20 A	3-12	Shop Receptical	64
65	Gen Maintence Receptical	3-12	20 A	1			1440 VA	720 VA	1	20 A	3-12	Gen Maintence Receptical	66
67	Corridor Receptical	3-12	20 A	1	540 VA	180 VA			1	20 A	3-12	Painter Receptacle	68
69	Washer	3-12	20 A	1		180 VA	180 VA		1	20 A	3-12	Gen Maintence Receptical	70
71	Dryer	3-10 +10G	30 A	2			180 VA	360 VA	1	20 A	3-12	Elevator Rcpt	72
73	--	--	--	--	0 VA	180 VA			1	20 A	3-12	Breakroom Microwave	74
75	Receptacle Space 6	486,1#10G	50 A	2		8320 VA	0 VA		1	20 A			Spare	76
77	--	--	--	--			0 VA	0 VA	1	20 A			Spare	78
79	Receptacle	3-12	20 A	1	180 VA	0 VA			1	20 A			Spare	80
81	Receptacle	3-12	20 A	1		180 VA	0 VA		1	20 A			Spare	82
83	Receptacle	3-12	20 A	1			180 VA	0 VA	1	20 A			Spare	84
85	Receptacle Space 6	486,1#10G	50 A	2	8320 VA	0 VA			1	20 A			Spare	86
87	--	--	--	--		0 VA	0 VA		1	20 A			Spare	88
89	Spare		20 A	1			0 VA	0 VA	1	20 A			Spare	90
91	Spare		20 A	1	0 VA	0 VA			1	20 A			Spare	92
93	Spare		20 A	1		0 VA	0 VA		1	20 A			Spare	94
95	Spare		20 A	1			0 VA	0 VA	1	20 A			Spare	96
97	Spare		20 A	1	0 VA	0 VA			1	20 A			Spare	98
99	Space		--	1		--	--		1	--			Space	100
101	Space		--	1			--	--	1	--			Space	102
103	Space		--	1	--	--			1	--			Space	104
105	Space		--	1		--	--		1	--			Space	106
107	Space		--	1			--	--	1	--			Space	108
109	Space		--	1	--	--			1	--			Space	110
111	Space		--	1		--	--		1	--			Space	112
113	Space		--	1			--	--	1	--			Space	114
115	Space		--	1	--	--			1	--			Space	116
117	Space		--	1		--	--		1	--			Space	118
119	Space		--	1			--	--	1	--			Space	120
121	Space		--	1	--	0 VA			3	30 A			SPD	122
123	Space		--	1		--	0 VA		--	--	--		--	124
125	Space		--	1				--	--	--	--		--	126
			Total Load:		37020 VA	32921 VA	28412 VA					
			Total...		314 A	280 A	237 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	960 VA	100.00%	960 VA		
Receptacle	96440 VA	60.37%	58220 VA	**Total Conn. Load:**	98352 VA
Power	1000 VA	100.00%	1000 VA	**Total Est. Demand:**	60133 VA
				Total Conn.:	273 A
				Total Est. Demand:	167 A

Notes:

Branch Panel: 1LAT

Location: Space 23 | **Supply From:** 1TAT | **Mounting:** Surface | **Enclosure:** Type 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 10,000 | **Mains Type:** MCB | **Mains Rating:** 150 A | **MCB Rating:** 150 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	SUP A107		20 A	1	720 VA	720 VA		1	20 A		SUP A106	2
3	SUP A105		20 A	1			720 VA	900 VA	1	20 A			Train A131	4
5	Train A132		20 A	1					900 VA	900 VA	1	20 A			Train A134	6
7	Train A135		20 A	1	900 VA	1000 VA					2	30 A	3#10,1#12G		A133 Copier	8
9	A133 Copier		20 A	1			180 VA	0 VA			--	--	--		--	10
11	A133 Tablets	3-12	20 A	1					180 VA	180 VA	1	20 A			A133 Tablets	12
13	A133 Tablets	3-12	20 A	1	180 VA	180 VA					1	20 A			Disp A103 TV	14
15	Break Room Receptacle	3-12	20 A	1			1080 VA	360 VA			1	20 A	3-12		Break Room Receptacle	16
17	Break Room Receptacle	3-12	20 A	1					720 VA	1080 VA	1	20 A	3-12		Break Room Receptacle	18
19	Receptacle	3-12	20 A	1	540 VA	500 VA					1	20 A			A103 Furn Feed	20
21	A103 Furn Feed		20 A	1			500 VA	500 VA			1	20 A			A103 Furn Feed	22
23	A103 Furn Feed		20 A	1					500 VA	1080 VA	1	20 A	3-12		Rec Receptacle	24
25	Rec Receptacle	3-12	20 A	1	720 VA	720 VA					1	20 A	3-12		Rec Receptacle	26
27	SHOP-LOCK Receptacle	3-12	20 A	1			1440 VA	180 VA			1	20 A			CEILING MOUNT REC	28
29	A118 Workstation	3-12	20 A	1					360 VA	180 VA	1	20 A			FPD 98" NIO	30
31	Spare		20 A	1	0 VA	--					1	--			Space	32
33	Spare		20 A	1			0 VA	--			1	--			Space	34
35	Spare		20 A	1					0 VA	--	1	--			Space	36
37	Spare		20 A	1	0 VA	0 VA					3	30 A	4-10		SPD	38
39	Spare		20 A	1			0 VA	0 VA			--	--	--		--	40
41	Spare		20 A	1					0 VA	0 VA	--	--	--		--	42
			Total Load:		6180 VA		5860 VA		6080 VA			
			Total...		52 A		49 A		51 A			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	2000 VA	100.00%	2000 VA		
Receptacle	16120 VA	100.00%	16120 VA	**Total Conn. Load:**	18120 VA
				Total Est. Demand:	18120 VA
				Total Conn.:	50 A
				Total Est. Demand:	50 A

Notes:

Branch Panel: MDP

Location: Space 23 | **Supply From:** | **Mounting:** FLOOR | **Enclosure:** Type 1
Volts: 480/277 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 65,000 | **Mains Type:** MCB | **Mains Rating:** 1200 A | **MCB Rating:** 1200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	TAM	P45	45 A	3	2132 VA	6180 VA		3	75 A	P	1TAT	2
3	--	--	--	--		2992 VA	5860 VA	--	--	--	--	4
5	--	--	--	--			2672 VA	6080 VA	--	--	--	6
7	TA	P45	45 A	3	37020 VA	0 VA		3	100 A		Spare	8
9	--	--	--	--		32921 VA	0 VA	--	--	--	--	10
11	--	--	--	--			28412 VA	0 VA	--	--	--	12
13	CH-1	200G	175 A	3	39611 VA	43230 VA		3	200 A	200NG	HMA	14
15	--	--	--	--		39611 VA	43230 VA	--	--	--	--	16
17	--	--	--	--			39611 VA	43230 VA	--	--	--	18
19	1HA	200NG	200 A	3	6843 VA	20690 VA		3	200 A	200NG	2HA	20
21	--	--	--	--		9942 VA	19853 VA	--	--	--	--	22
23	--	--	--	--			7033 VA	17831 VA	--	--	--	24
25	ATS-OD	200NG	200 A	3	41725 VA	6124 VA		3	100 A	100NG	ATS-EA	26
27	--	--	--	--		35244 VA	5172 VA	--	--	--	--	28
29	--	--	--	--			28184 VA	4700 VA	--	--	--	30
31	CH-2	200G	175 A	3	39611 VA	3047 VA		3	75 A	80NG	ELEVATOR	32
33	--	--	--	--		39611 VA	3047 VA	--	--	--	--	34
35	--	--	--	--			39611 VA	3047 VA	--	--	--	36
37	Spare		30 A	3	0 VA	0 VA		3	30 A	4-10	SPD	38
39	--	--	--	--			0 VA	0 VA	--	--	--	40
41	--	--	--	--				0 VA	0 VA	--	--	--	42
			Total Load:		245816 VA		237169 VA		220013 VA			
			Total...		897 A		866 A		794 A			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	32320 VA	41.03%	13262 VA		
Lighting - Exterior	1960 VA	125.00%	2450 VA	**Total Conn. Load:**	702998 VA
Other	2000 VA	100.00%	2000 VA	**Total Est. Demand:**	615576 VA
Receptacle	162200 VA	56.17%	91100 VA	**Total Conn.:**	846 A
Power	491602 VA	100.00%	491602 VA	**Total Est. Demand:**	740 A
Kitchen	5200 VA	100.00%	5200 VA		
Lighting - Non-Dwelling Unit	5838 VA	125.00%	7298 VA		

Notes:

Addendum 1
Date 10/07/25
Revision / 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:

STATE OF TEXAS
CHI K. TRUONG
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09/10/2025

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HOUSTON, TX 77024
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ELECTRICAL PANEL SCHEDULES

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E7.01
Drawn By: Author	
Date: 09/18/2025	

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Autodesk Docs://NEW CANEY ISD - NEW OPERATIONS BUILDING/1971-05-01_NCISD Trans & Ops_MEP_R25.rvt

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Branch Panel: OLA

Location: ELECTRICAL A114
Supply From: OTA
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 250 A
MCB Rating: 250 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	ACU-1B	2#8,1#10G	35 A	2	2600 VA 360 VA			1	20 A	3-12	Receptacle Space 21	2
3	--	--	--	--		2600 VA 360 VA		1	20 A	3-12	Receptacle	4
5	Receptacle Space 21	3-12	30 A	1			180 VA 360 VA	1	20 A	3-12	Receptacle	6
7	Receptacle Space 21	3-12	20 A	1	180 VA 500 VA			1	20 A	3-12	Power	8
9	Receptacle	3-12	20 A	1		360 VA 500 VA		1	20 A	3-12	Power	10
11	ACCESS CONTROL	3-12	20 A	1			0 VA 0 VA	1	20 A	3-12	SECURITY	12
13	Other Space 20	3-12	20 A	1	0 VA 9141 VA			1	20 A	3-12	SUMP PUMP	14
15	Disp Receptacle	3-12	20 A	1		720 VA 1080 VA		1	20 A	3-12	Disp Space 26	16
17	Disp Receptacle	3-12	20 A	1			720 VA 0 VA	1	20 A	3-12	Other Space 36	18
19	BREAK ROOM Fridge Receptacle	3-12	20 A	1	180 VA 180 VA			1	20 A	3-12	BREAK ROOM Fridge Receptacle	20
21	CH-1 REC	3-12	20 A	1		500 VA 500 VA		1	20 A	3-12	CH-2 REC	22
23	Receptacle	3-12	20 A	1			180 VA 720 VA	1	20 A	3-12	Tab Receptacle	24
25	Other	3-12	20 A	1	0 VA 500 VA			1	30 A	3-12	Power	26
27	Receptacle	3-12	20 A	1		360 VA 180 VA		1	30 A	3-12	Receptacle	28
29	Receptacle	3-12	20 A	1			180 VA 360 VA	1	20 A	3-12	Receptacle	30
31	ACU-2B	2#8,1#10G	35 A	2	2600 VA 0 VA			1	20 A		Spare	32
33	--	--	--	--		2600 VA 0 VA		1	20 A		Spare	34
35	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	36
37	Spare		20 A	1	0 VA 0 VA			3	30 A	4#10	SPD	38
39	Spare		20 A	1		0 VA 0 VA		--	--	--	--	40
41	Spare		20 A	1			0 VA 0 VA	--	--	--	--	42
			Total Load:		16241 VA	9760 VA	2700 VA					
			Total...		144 A	90 A	23 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
Receptacle	6660 VA	100.00%	6660 VA	**Total Conn. Load:**	28701 VA
Power	16841 VA	100.00%	16841 VA	**Total Est. Demand:**	28701 VA
Kitchen	5200 VA	100.00%	5200 VA	**Total Conn.:**	80 A
				Total Est. Demand:	80 A

Notes:

Branch Panel: 2LAT

Location: ELEC. C122
Supply From: 2TAT
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Receptacle		20 A	1	360 VA 720 VA			1	20 A		Staff C137	2
3	Staff C136		20 A	1		720 VA 720 VA		1	20 A		Staff C135	4
5	Staff C134		20 A	1			720 VA 720 VA	1	20 A		Staff C133	6
7	Coord C132		20 A	1	720 VA 720 VA			1	20 A		Coord C131	8
9	Coord 130		20 A	1		720 VA 720 VA		1	20 A		Coord 129	10
11	Coord C128		20 A	1			720 VA 720 VA	1	20 A		Staff C150	12
13	Staff C149		20 A	1	720 VA 720 VA			1	20 A		Staff C147	14
15	SEC C104		20 A	1		720 VA 720 VA		1	20 A		File C106	16
17	SEC C103 Copier		20 A	1			180 VA 720 VA	1	20 A		SEC C109	18
19	SEC C109 COPIER		20 A	1	180 VA 720 VA			1	20 A		DEMO C110	20
21	Energy C111		20 A	1		720 VA 720 VA		1	20 A		Staff C112	22
23	AD 113		20 A	1			720 VA 720 VA	1	20 A		AD C115	24
25	Coord C125		20 A	1	720 VA 720 VA			1	20 A		Coord C123	26
27	Coord C121		20 A	1		720 VA 720 VA		1	20 A		AD C117	28
29	Coord C118		20 A	1			720 VA 720 VA	1	20 A		Coord C119	30
31	Staff C146		20 A	1	720 VA 720 VA			1	20 A		Staff C144	32
33	Staff C142		20 A	1		720 VA 0 VA		1	20 A		Spare	34
35	Receptacle		20 A	1			180 VA 0 VA	1	20 A		Spare	36
37	Spare		20 A	1	0 VA 0 VA			3	30 A	4-10	SPD	38
39	Spare		20 A	1		0 VA 0 VA		--	--	--	--	40
41	Spare		20 A	1			0 VA 0 VA	--	--	--	--	42
			Total Load:		7740 VA	7920 VA	6840 VA					
			Total...		66 A	67 A	57 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	22500 VA	94.44%	21250 VA		
				Total Conn. Load:	22500 VA
				Total Est. Demand:	21250 VA
				Total Conn.:	62 A
				Total Est. Demand:	59 A

Notes:

Branch Panel: EHA

Location: ELECTRICAL A114
Supply From: ATS-EA
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	ETA	30G	30 A	3	500 VA 1120 VA			1	20 A	3-12	Lighting - Cooridor	2
3	--	--	--	--		800 VA 1040 VA		1	20 A	3-12	Lighting - RR	4
5	--	--	--	--			320 VA 1360 VA	1	20 A	3-12	Lighting -Break/Train Room	6
7	lighting	3-12	20 A	1	602 VA 1345 VA			1	20 A	3-10	Lighting - Opperations Building	8
9	Emergency Lighting - Corridor	3-12	20 A	1		960 VA 640 VA		1	20 A	3-12	Emergency Lighting - Corridor	10
11	Emergency Lighting - Conference/StaffAD	3-12	20 A	1			1280 VA 1040 VA	1	20 A	3-12	Emergency Lighting - Staff/Coord.	12
13	Emergency Lighting - RR/Stairs/Staff	3-12	20 A	1	1120 VA 1040 VA			1	20 A	3-12	Emergency Lighting - Staff/Break Room	14
15	Emergency Lighting - Workroom/ELEC	3-12	20 A	1		1659 VA 91 VA		1	20 A		Ext Canopy Lighting	16
17	Ext Lighting		20 A	1			630 VA 70 VA	1	20 A		Ext Lighting	18
19	Ext Lighting		20 A	1	420 VA --			1	--		Space	20
21	Spare		20 A	1		0 VA --		1	--		Space	22
23	Spare		20 A	1			0 VA --	1	--		Space	24
25	Spare		20 A	1	0 VA --			1	--		Space	26
27	Spare		20 A	1		0 VA --		1	--		Space	28
29	Spare		--	1			-- --	1	--		Space	30
31	Spare		--	1	-- --			1	--		Space	32
33	Spare		--	1		-- 0 VA		1	20 A		Spare	34
35	Spare		--	1			-- 0 VA	1	20 A		Spare	36
37	Spare		--	1	-- 0 VA			3	30 A	4-10	SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- --	--	--	--	--	42
			Total Load:		6124 VA	5172 VA	4700 VA					
			Total...		22 A	19 A	17 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	12000 VA	51.25%	6150 VA		
Lighting - Exterior	1190 VA	125.00%	1488 VA	**Total Conn. Load:**	15991 VA
Other	0 VA	0.00%	0 VA	**Total Est. Demand:**	10778 VA
Power	500 VA	100.00%	500 VA	**Total Conn.:**	19 A
Lighting - Non-Dwelling Unit	1345 VA	125.00%	1681 VA	**Total Est. Demand:**	13 A

Notes:

Branch Panel: ELA

Location: ELECTRICAL A114
Supply From: ETA
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 50 A
MCB Rating: 50 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	FIRE ALARM		20 A	1	0 VA 500 VA			1	20 A		ELEVATOR CAB LIGHTS	2
3	Mechanical -Lighting		20 A	1		800 VA --		1	--		Space	4
5	Elevator Shaft Lighting		20 A	1			320 VA --	1	--		Space	6
7	Spare		20 A	1	0 VA --			1	--		Space	8
9	Spare		20 A	1		0 VA --		1	--		Space	10
11	Spare		20 A	1			0 VA --	1	--		Space	12
13	Spare		20 A	1	0 VA --			1	--		Space	14
15	Space		--	1		-- --		1	--		Space	16
17	Space		--	1			-- --	1	--		Space	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1			-- --	1	--		Space	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	--			1	--		Space	32
33	Space		--	1		-- 0 VA		1	20 A		Spare	34
35	Space		--	1			-- 0 VA	1	20 A		Spare	36
37	Space		--	1	-- 0 VA			3	30 A	4-10	SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		500 VA	800 VA	320 VA					
			Total...		4 A	7 A	3 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	1120 VA	100.00%	1120 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	1603 VA
Power	500 VA	100.00%	500 VA	**Total Est. Demand:**	1603 VA
				Total Conn.:	4 A
				Total Est. Demand:	4 A

Notes:

Branch Panel: OHA

Location: ELECTRICAL A114
Supply From: ATS-OA
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	OTA		75 A	3	16241 VA 16020 VA			3	100 A	125NG	LIFT STATION	2
3	--	--	--	--		9760 VA 16020 VA		--	--	--	--	4
5	--	--	--	--			2700 VA 16020 VA	--	--	--	--	6
7	CH-1 HEATER		20 A	3	4432 VA 4432 VA			3	20 A		CH-2 HEATER	8
9	--	--	--	--		4432 VA 4432 VA		--	--	--	--	10
11	--	--	--	--			4432 VA 4432 VA	--	--	--	--	12
13	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	14
15	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	16
17	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1			-- --	1	--		Space	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- --		1	--		Space	34
35	Space		--	1			-- --	1	--		Space	36
37	Space		--	1	-- 0 VA			3	30 A	4#10	SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		41725 VA	35244 VA	28184 VA					
			Total...		155 A	131 A	102 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
Receptacle	6660 VA	100.00%	6660 VA	**Total Conn. Load:**	105153 VA
Power	93293 VA	100.00%	93293 VA	**Total Est. Demand:**	105153 VA
Kitchen	5200 VA	100.00%	5200 VA	**Total Conn.:**	126 A
				Total Est. Demand:	126 A

Notes:

Branch Panel: 2LA

Location: ELEC. C122
Supply From: 2TA
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	2
3	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	4
5	Spare		20 A	1			0 VA 1080 VA	1	20 A	3-12	DIR. Receptacle	6
7	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	8
9	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	10
11	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	12
13	DIR Receptacle	3-12	20 A	1	1080 VA 900 VA			1	20 A	3-12	CONF Receptacle	14
15	SEC Receptacle	3-12	20 A	1		720 VA 180 VA		1	20 A	3-12	RR Receptacle	16
17							720 VA	1	20 A	3-12	STAFF Receptacle	18
19	DIR Receptacle	3-12	20 A	1	1080 VA 180 VA			1	20 A	3-12	DRINKING FOUNTAIN Receptacle	20
21	CORRIDOR Receptacle	3-12	20 A	1		1080 VA 0 VA		1	20 A		Spare	22
23	DIR Receptacle	3-12	20 A	1			1080 VA 720 VA	1	20 A	3-12	STAFF Receptacle	24
25	Spare		20 A	1	0 VA 900 VA			1	20 A	3-12	BREAK ROOM Receptacle	26
27	CORRIDOR Receptacle	3-12	20 A	1		900 VA 900 VA		1	20 A	3-12	CONF Receptacle	28
29	SEC/ELEC Receptacle	3-12	20 A	1			900 VA 180 VA	1	20 A	3-12	WATER FOUNTAIN/CUST. Receptacle	30
31	BREAK ROOM Receptacle	3-12	20 A	1	720 VA 180 VA			1	20 A		Dishwasher	32
33	WORKROOM Receptacle	3-12	20 A	1		540 VA 360 VA		1	20 A	3-12	WORKROOM Receptacle	34
35	BREAK ROOM Vending Machine Receptacle	3-12	20 A	1			180 VA 360 VA	1	20 A	3-12	BREAK ROOM Receptacle	36
37	EXEC DIR. Receptacle	3-12	20 A	1	1080 VA 720 VA			1	20 A	3-12	SEC. Receptacle	38
39	Range hood		20 A	1		500 VA 180 VA		1	20 A	3-12	BREAK ROOM Microwave Receptacle	40
41	BREAK ROOM Microwave Receptacle	3-12	20 A	1			180 VA 180 VA	1	20 A	3-12	BREAK ROOM Icemaker Receptacle	42
43	BREAK ROOM Receptacle	3-12	20 A	1	180 VA 180 VA			1	20 A	3-12	BREAK ROOM Vending Machine Receptacle	44
45	BREAK ROOM Vending Machine Receptacle	3-12	20 A	1		180 VA 180 VA		1	20 A	3-12	Copier Receptacle	46
47	NEMA Copier Receptacle	3#10,1#12G	30 A	2			180 VA 0 VA	1	20 A		Spare	48
49	--	--	--	--	0 VA 0 VA			1	20 A		Spare	50
51	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	52
53	ACU-2A		35 A	1			0 VA 0 VA	1	20 A		Spare	54
55	Spare		20 A	1	0 VA 180 VA			2	40 A	3#8,1#10g	Oven Range	56
57	Spare		20 A	1		0 VA 0 VA		--	--	--	--	58
59	Spare		20 A	1			0 VA --	1	--		Space	60
61	Spare		20 A	1	0 VA --			1	--		Space	62
63	Spare		20 A	1		0 VA --		1	--		Space	64
65	Spare		20 A	1			0 VA --	1	--		Space	66
67	Spare		20 A	1	0 VA --			1	--		Space	68
69	Spare		20 A	1		0 VA --		1	--		Space	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 VA			3	30 A		SPD	80
81	Space		--	1		-- 0 VA		--	--	--	--	82
83	Space		--	1			-- 0 VA	--	--	--	--	84
			Total Load:		7380 VA	5720 VA	5760 VA					
			Total...		62 A	48 A	48 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
Receptacle	18860 VA	100.00%	18860 VA	**Total Conn. Load:**	18860 VA
				Total Est. Demand:	18860 VA
				Total Conn.:	52 A
				Total Est. Demand:	52 A

Notes:

Branch Panel: LAM

Location: Space 23
Supply From: TAM
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Exterior Gate	3#4,1#6G	20 A	2	1040 VA 0 VA			1	20 A		BR-1 BR-2	2
3	--	--	--	--		1040 VA 0 VA		1	20 A		Other	4
5	MECH Receptacle	3-12	20 A	1			540 VA 360 VA	1	20 A		GWH A116	6
7	Other Space 20		20 A	1	0 VA 0 VA			1	20 A		Other Space 18	8
9	Other Space 67		20 A	1		0 VA 0 VA		1	20 A		Other	10
11	Other Space 1		20 A	1			0 VA 0 VA	1	20 A		Other Space 1	12
13	Other Space 2		20 A	1	0 VA 180 VA			1	20 A		AIR DRYER	14
15	VAV-2-1		20 A	1		0 VA 180 VA		1	20 A		AIR DRYER	16
17	Spare		20 A	1			0 VA 0 VA	1	20 A		VAV-2-4	18
19	VAV-2-3		20 A	1	0 VA 732 VA			3	20 A		EUH-1	20
21	Spare		20 A	1		0 VA 732 VA		--	--	--	--	22
23	Spare		20 A	1			0 VA 732 VA	--	--	--	--	24
25	Spare		20 A	1	0 VA --			1	--		Space	26
27	Spare		20 A	1		0 VA --		1	--		Space	28
29	Spare		20 A	1			0 VA --	1	--		Space	30
31	Spare		20 A	1	0 VA 0 VA			1	20 A		EF-1,2,3,4	32
33	Spare		20 A	1		0 VA 1040 VA		2	20 A	3#3,1#6G	Exterior Gate	34
35	Spare		20 A	1			0 VA 1040 VA	--	--	--	--	36
37	Receptacle		20 A	1	180 VA 0 VA			3	30 A	4#10	SPD	38
39	Other Space 6		20 A	1		0 VA 0 VA		--	--	--	--	40
41	Other		20 A	1			0 VA 0 VA	--	--	--	--	42
			Total Load:		2132 VA	2992 VA	2672 VA					
			Total...		18 A	26 A	23 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
Receptacle	1440 VA	100.00%	1440 VA	**Total Conn. Load:**	7796 VA
Power	6356 VA	100.00%	6356 VA	**Total Est. Demand:**	7796 VA
				Total Conn.:	22 A
				Total Est. Demand:	22 A

Notes:

Addendum 1
Revision / Date
1 10/07/25

Project:
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FOR
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ELECTRICAL PANEL SCHEDULES

PACKAGE	VOLUME
Job No. 1971-05-01	Sheet No. E7.02
Drawn By: Author	
Date: 09/18/2025	

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Branch Panel: DPD

Location: ELEC. D110B
Supply From:
Mounting: Floor
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 65,000
Mains Type: MCB
Mains Rating: 600 A
MCB Rating: 600 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	HDM		150 A	3	59880 VA 19727 VA			3	150 A		HD	2
3	--	--	--	--	59880 VA 19680 VA			--	--	--	--	4
5	--	--	--	--		59880 VA 18116 VA		--	--	--	--	6
7	TA		45 A	3	9057 VA 1440 VA			3	45 A		TDT	8
9	--	--	--	--	5240 VA 720 VA			--	--	--	--	10
11	--	--	--	--		6045 VA 0 VA		--	--	--	--	12
13	EHD		100 A	3	3248 VA 12742 VA			3	100 A		OHD	14
15	--	--	--	--	2858 VA 13752 VA			--	--	--	--	16
17	--	--	--	--		1356 VA 14422 VA		--	--	--	--	18
19	TW		125 A	3	25409 VA 0 VA			3	30 A		Spare	20
21	--	--	--	--	26117 VA 0 VA			--	--	--	--	22
23	--	--	--	--		24612 VA 0 VA		--	--	--	--	24
25	Spare		100 A	3	0 VA 0 VA			3	30 A	4#10	SPD	26
27	--	--	--	--	0 VA 0 VA			--	--	--	--	28
29	--	--	--	--		0 VA 0 VA		--	--	--	--	30
			Total Load:		131209 VA	128159 VA	124405 VA					
			Total...		476 A	465 A	449 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	2720 VA	100.00%	2720 VA		
Lighting - Exterior	350 VA	125.00%	438 VA	**Total Conn. Load:**	383763 VA
Motor	132000 VA	112.50%	148500 VA	**Total Est. Demand:**	398461 VA
Other	53460 VA	100.00%	53460 VA	**Total Conn.:**	462 A
Receptacle	24240 VA	91.25%	22120 VA	**Total Est. Demand:**	479 A
Power	158662 VA	100.00%	158662 VA		
Lighting - Non-Dwelling Unit	990 VA	125.00%	1238 VA		

Notes:

Branch Panel: HDM

Location: ELEC. D110B
Supply From: DPD
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	WEF-1	20G	20 A	3	2100 VA 2100 VA			3	20 A	20G	WEF-2	2
3	--	--	--	--		2100 VA 2100 VA		--	--	--	--	4
5	--	--	--	--			2100 VA 2100 VA	--	--	--	--	6
7	WEF-3	20G	20 A	3	2100 VA 2100 VA			3	20 A	20G	WEF-4	8
9	--	--	--	--		2100 VA 2100 VA		--	--	--	--	10
11	--	--	--	--			2100 VA 2100 VA	--	--	--	--	12
13	AHU-W-1	20G	20 A	3	0 VA 22000 VA			3	20 A	20G	Overhead Door Motor	14
15	--	--	--	--		0 VA 22000 VA		--	--	--	--	16
17	--	--	--	--			0 VA 22000 VA	--	--	--	--	18
19	Overhead Door Motor	20G	20 A	3	22000 VA 7480 VA			3	60 A	60G	AC-3	20
21	--	--	--	--		22000 VA 7480 VA		--	--	--	--	22
23	--	--	--	--			22000 VA 7480 VA	--	--	--	--	24
25	Space		--	1	-- 0 VA			1	20 A		Spare	26
27	Space		--	1		-- 0 VA		1	20 A		Spare	28
29	Space		--	1			-- 0 VA	1	20 A		Spare	30
31	Space		--	1	-- 0 VA			1	20 A		Spare	32
33	Space		--	1		-- 0 VA		1	20 A		Spare	34
35	Space		--	1			-- 0 VA	1	20 A		Spare	36
37	Space		--	1	-- 0 VA			3	30 A		SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		59880 VA	59880 VA	59880 VA					
			Total...		216 A	216 A	216 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	132000 VA	112.50%	148500 VA		
Power	47640 VA	100.00%	47640 VA	**Total Conn. Load:**	179640 VA
				Total Est. Demand:	196140 VA
				Total Conn.:	216 A
				Total Est. Demand:	236 A

Notes:

Branch Panel: HD

Location: ELEC. D110B
Supply From: DPD
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Lighting - Corridor, Offices, Break Room	3-12	20 A	1	1200 VA 800 VA			1	20 A		Lighting - IDF, CUST., Freezer, Cooler	2
3	AHU-W-2		20 A	3		0 VA 480 VA		1	20 A		Lighting - Dwelling Unit	4
5	--	--	--	--			0 VA 8892 VA	3	40 A	40G	ACCU-W1	6
7	--	--	--	--	0 VA 8892 VA			--	--	--	--	8
9	ACCU-W2	40G	40 A	3		8892 VA 8892 VA		--	--	--	--	10
11	--	--	--	--			8892 VA 350 VA	1	20 A		Lighting - Exterior	12
13	--	--	--	--	8892 VA 0 VA			3	20 A		Power Space 65	14
15	Lighting - Textbook Storage/Repair	3-12	20 A	1		1440 VA 0 VA		--	--	--	--	16
17	Spare		20 A	1			0 VA 0 VA	--	--	--	--	18
19	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	20
21	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	22
23	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- 0 VA		1	20 A		Spare	34
35	Space		--	1			-- 0 VA	1	20 A		Spare	36
37	Space		--	1	-- 0 VA			3	30 A	4#10	SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		19727 VA	19680 VA	18116 VA					
			Total...		72 A	72 A	65 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	1680 VA	100.00%	1680 VA		
Lighting - Exterior	350 VA	125.00%	438 VA	**Total Conn. Load:**	57522 VA
Power	53350 VA	100.00%	53350 VA	**Total Est. Demand:**	57606 VA
				Total Conn.:	69 A
				Total Est. Demand:	69 A

Notes:

Branch Panel: LD

Location: ELEC. D110B
Supply From: TD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14,000
Mains Type: MCB
Mains Rating: 250 A
MCB Rating: 250 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	External Receptacle	3-10	20 A	1	900 VA 900 VA			1	20 A	3-10	Warehouse Receptacle	2
3	Warehouse Receptacle	3-12	20 A	1		900 VA 1000 VA		1	20 A	3-12	Equip. Repair Drop COrd	4
5	Equip Repair Receptacle	3-12	20 A	1			1080 VA 900 VA	1	20 A	3-12	Small/App Repair Receptacle	6
7	Small/App Repair Receptacle	3-12	20 A	1	900 VA 360 VA			1	20 A		Textbook Stor Receptical	8
9	Range hood		20 A	1		180 VA 500 VA		1	20 A		Other Space 53	10
11	Cust. & LaundryReceptacle	3-12	20 A	1			720 VA 720 VA	1	20 A		Corridor Receptacle	12
13	TV Monitor		20 A	1	180 VA 180 VA			1	20 A		Receptacle Space 57	14
15	RR Receptacle	3-12	20 A	1		540 VA 720 VA		1	20 A		Break Rm Receptacle	16
17	D107 Dishwasher	3-12	20 A	1			180 VA 180 VA	1	20 A		Break Rm microwave	18
19	Break Rm microwave	3-12	20 A	1	180 VA 0 VA			1	20 A		Spare	20
21	Time Clock Receptacle	3-12	20 A	1		180 VA 180 VA		1	20 A		EWC Receptacle	22
23	Spare		20 A	1			0 VA 0 VA	1	20 A		Power	24
25	Power Space 53		20 A	1	0 VA 1330 VA			1	20 A		Lighting	26
27	GUH-4, GUH-5, GUH-6		20 A	1		0 VA 0 VA		1	20 A		GUH-1, GUH-2, GUH-3	28
29	Spare		20 A	1			0 VA 0 VA	1	20 A		EF	30
31	Lighting		20 A	1	1900 VA 0 VA			1	20 A		EF	32
33	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	34
35	Lighting Space 53	3-9	20 A	1			1330 VA 0 VA	1	20 A		Spare	36
37	AIR DRYER		20 A	1	180 VA 0 VA			1	20 A		Spare	38
39	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	40
41	Space		--	1			-- 0 VA	1	20 A		Spare	42
43	Space		--	1	-- 0 VA			3	30 A		SPD	44
45	Space		--	1		-- 0 VA		--	--	--	--	46
47	Space		--	1			-- 0 VA	--	--	--	--	48
49	Receptacle Space 57		40 A	2	180 VA 1040 VA			2	20 A		Exterior Gate	50
51	--	--	--	--		0 VA 1040 VA		--	--	--	--	52
53	Exterior Gate		20 A	2			1040 VA 0 VA	3	20 A		Power Space 65	54
55	--	--	--	--	1040 VA 0 VA			--	--	--	--	56
57	Space		--	1		-- 0 VA		--	--	--	--	58
59	Space		--	1			-- --	1	--		Space	60
61	Space		--	1	-- --			1	--		Space	62
63	Space		--	1		-- --		1	--		Space	64
65	Space		--	1			-- --	1	--		Space	66
67	Space		--	1	-- --			1	--		Space	68
69	Space		--	1		-- --		1	--		Space	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	-- --			1	--		Space	80
81	Space		--	1		-- --		1	--		Space	82
83	Space		--	1			-- --	1	--		Space	84
			Total Load:		9057 VA	5240 VA	6045 VA					
			Total...		77 A	44 A	51 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	500 VA	100.00%	500 VA		
Receptacle	10440 VA	100.00%	10440 VA	**Total Conn. Load:**	20302 VA
Power	5160 VA	100.00%	5160 VA	**Total Est. Demand:**	20302 VA
				Total Conn.:	56 A
				Total Est. Demand:	56 A

Notes:

Branch Panel: LDT

Location: ELEC. D110B
Supply From: TDT
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14,000
Mains Type: MCB
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	SUP D104		20 A	1	720 VA 720 VA			1	20 A		SUP D105	2
3	SUP D106		20 A	1		720 VA 0 VA		1	20 A		Spare	4
5	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	6
7	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	8
9	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	10
11	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	12
13	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	14
15	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	16
17	Space		--	1			-- --	1	--		Space	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1			-- --	1	--		Space	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- --		1	--		Space	34
35	Space		--	1			-- --	1	--		Space	36
37	Space		--	1	-- 0 VA			3	30 A	4#10	SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		1440 VA	720 VA	0 VA					
			Total...		13 A	7 A	0 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	2160 VA	100.00%	2160 VA		
				Total Conn. Load:	2160 VA
				Total Est. Demand:	2160 VA
				Total Conn.:	6 A
				Total Est. Demand:	6 A

Notes:

Addendum 1
Date 10/07/25
Revision/ 1

NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

Project:

STATE OF TEXAS
CHI K. TRUONG
90332
LICENSED PROFESSIONAL ENGINEER
09/18/2025

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HOUSTON, TX 77024
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ELECTRICAL PANEL SCHEDULES

PACKAGE VOLUME

Job No. 1971-05-01
Drawn By: Author
Date: 09/18/2025
Sheet No. E7.03

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Branch Panel: EHD

Location: ELECTRICAL D110A
Supply From: DPD
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	ETD		50 A	3	2660 VA 0 VA			1	20 A		Spare	2
3	--	--	--	--		1901 VA 960 VA		1	20 A		Emergency Lighting - Corridor, Offices, Break	4
5	--	--	--	--			0 VA 1356 VA	1	20 A		Emergency Lighting - ELEC, ATS, IDF	6
7	Emergency Lighting - Textbook...		20 A	1	640 VA 0 VA			1	20 A		Spare	8
9	Space		--	1		-- 0 VA		1	20 A		Spare	10
11	Space		--	1			-- 0 VA	1	20 A		Spare	12
13	Space		--	1	-- --			1	--		Space	14
15	Space		--	1		-- --		1	--		Space	16
17	Space		--	1			-- --	1	--		Space	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1			-- --	1	--		Space	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- 0 VA		1	20 A		Spare	34
35	Space		--	1			-- 0 VA	1	20 A		Spare	36
37	Space		--	1	-- 0 VA			3	30 A		SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		3248 VA	2858 VA	1356 VA					
			Total...		13 A	11 A	5 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	1040 VA	100.00%	1040 VA		
Other	1000 VA	100.00%	1000 VA	**Total Conn. Load:**	7404 VA
				Total Est. Demand:	7404 VA
				Total Conn.:	9 A
				Total Est. Demand:	9 A

Notes:

Branch Panel: ELD

Location: ELECTRICAL D110A
Supply From: ETD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Warehouse Lighting	3-10	20 A	1	1330 VA 1330 VA			1	20 A	3-12	Warehouse Lighting	2
3	Other		20 A	1		1000 VA 950 VA		1	20 A	3-12	Warehouse Lighting	4
5	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	6
7	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	8
9	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	10
11	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	12
13	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	14
15	Space		--	1		-- --		1	--		Space	16
17	Space		--	1			-- --	1	--		Space	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1			-- --	1	--		Space	24
25	Space		--	1	-- --			1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- --		1	--		Space	34
35	Space		--	1			-- 0 VA	1	20 A		Spare	36
37	Space		--	1	-- 0 VA			3	30 A		SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	1	20 A		Spare	42
			Total Load:		2660 VA	1901 VA	0 VA					
			Total...		25 A	18 A	0 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	1000 VA	100.00%	1000 VA		
				Total Conn. Load:	4531 VA
				Total Est. Demand:	4531 VA
				Total Conn.:	13 A
				Total Est. Demand:	13 A

Notes:

Branch Panel: LBW

Location: Space 68
Supply From: TW
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 250 A
MCB Rating: 250 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	REC CTRL Voltage		20 A	1	500 VA 2400 VA			3	30 A		Air Compressor	2
3	4HWP Chemical Pumps & Controls		30 A	3		2880 VA 2400 VA		--	--	--	--	4
5	--	--	--	--			2880 VA 2400 VA	--	--	--	--	6
7	--	--	--	--	2880 VA 2880 VA			3	30 A		HPS - PUMP A	8
9	HPS - PUMP B		30 A	3		2880 VA 2880 VA		--	--	--	--	10
11	--	--	--	--			2880 VA 2880 VA	--	--	--	--	12
13	--	--	--	--	2880 VA 2880 VA			3	30 A		HPS - PUMP C	14
15	REC Pump & VFD		30 A	3		2880 VA 2880 VA		--	--	--	--	16
17	--	--	--	--			2880 VA 2880 VA	--	--	--	--	18
19	--	--	--	--	2880 VA 500 VA			1	20 A		Water Softner	20
21	Washer Gantry Power		50 A	3		4800 VA 1920 VA		3	20 A		Spot Free RO Unit	22
23	--	--	--	--			4800 VA 1920 VA	--	--	--	--	24
25	--	--	--	--	4800 VA 1920 VA			--	--	--	--	26
27	Receptacle		20 A	1		360 VA 720 VA		1	20 A		Receptacle	28
29	Receptacle		20 A	1			360 VA 732 VA	3	20 A		EUH-2	30
31	Space 68		20 A	1	165 VA 732 VA			--	--	--	--	32
33	Lighting - Non-Dwelling Unit		20 A	1		825 VA 732 VA		--	--	--	--	34
35	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	36
37	Spare		20 A	1	0 VA 0 VA			3	30 A		SPD	38
39	Spare		20 A	1		0 VA 0 VA		--	--	--	--	40
41	Spare		20 A	1			0 VA 0 VA	--	--	--	--	42
			Total Load:		25409 VA	26117 VA	24612 VA					
			Total...		213 A	219 A	205 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	49960 VA	100.00%	49960 VA		
Receptacle	1440 VA	100.00%	1440 VA	**Total Conn. Load:**	76137 VA
Power	23796 VA	100.00%	23796 VA	**Total Est. Demand:**	76373 VA
Lighting - Non-Dwelling Unit	990 VA	125.00%	1238 VA	**Total Conn.:**	211 A
				Total Est. Demand:	212 A

Notes:

Branch Panel: OHD

Location: ELECTRICAL D110A
Supply From: DPD
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22,000
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	OTD		125 A	3	12742 VA 0 VA			1	20 A		Spare	2
3	--	--	--	--		13752 VA 0 VA		1	20 A		Spare	4
5	--	--	--	--			14422 VA 0 VA	1	20 A		Spare	6
7	Spare		20 A	1	0 VA 0 VA			1	20 A		Spare	8
9	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	10
11	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	12
13	Space		--	1	-- --			1	--		Space	14
15	Space		--	1		-- --		1	--		Space	16
17	Space		--	1			-- --	1	--		Space	18
19	Space		--	1	-- --			1	--		Space	20
21	Space		--	1		-- --		1	--		Space	22
23	Space		--	1	-- --			1	--		Space	24
25	Space		--	1			-- --	1	--		Space	26
27	Space		--	1		-- --		1	--		Space	28
29	Space		--	1			-- --	1	--		Space	30
31	Space		--	1	-- --			1	--		Space	32
33	Space		--	1		-- --		1	--		Space	34
35	Space		--	1			-- --	1	--		Space	36
37	Space		--	1	-- 0 VA			3	30 A		SPD	38
39	Space		--	1		-- 0 VA		--	--	--	--	40
41	Space		--	1			-- 0 VA	--	--	--	--	42
			Total Load:		12742 VA	13752 VA	14422 VA					
			Total...		46 A	50 A	53 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	2000 VA	100.00%	2000 VA		
Receptacle	10200 VA	100.00%	10200 VA	**Total Conn. Load:**	40916 VA
Power	28716 VA	100.00%	28716 VA	**Total Est. Demand:**	40916 VA
				Total Conn.:	49 A
				Total Est. Demand:	49 A

Notes:

Branch Panel: OLD

Location: ELECTRICAL D110A
Supply From: OTD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 250 A
MCB Rating: 250 A

Notes:

CKT	Circuit Description	Comments	Trip	P	A	B	C	P	Trip	Comments	Circuit Description	CKT
1	Power		35 A	2	2600 VA 360 VA			1	20 A		Receptacle	2
3	--	--	--	--		2600 VA 360 VA		1	20 A		IDF Receptacle	4
5	Receptacle		20 A	1			1200 VA 1200 VA	1	20 A		Receptacle	6
7	Receptacle	3-12	20 A	1	180 VA 180 VA			1	20 A		Receptacle	8
9	Break Rm Fridge		20 A	1		180 VA 3000 VA		1	20 A		Receptacle	10
11	Receptacle		20 A	1			3000 VA 500 VA	1	20 A		Power	12
13	Power		20 A	1	500 VA 500 VA			1	30 A		Power	14
15	E103 REfrigeration system	3-8	50 A	3		4152 VA 360 VA		1	20 A		Receptacle	16
17	--	--	--	--			4152 VA 1000 VA	1	20 A		Other	18
19	--	--	--	--	4152 VA 1000 VA			1	20 A		Other	20
21	D107 Microwave	3-12	20 A	1		180 VA 1920 VA		1	20 A		E102A DOOR HEATER/LIGHTS	22
23	E102B TEMP ALARM		20 A	1			600 VA 250 VA	2	20 A		E103C FREEZER COIL	24
25	E102C PRESSURE RELIEF PORT		20 A	1	500 VA 250 VA			--	--	--	--	26
27	E102B TEMP ALARM		20 A	1		500 VA 500 VA		1	20 A		E103D COOLER COIL	28
29	E103F DRAIN LINE HEATER		20 A	1			1920 VA 600 VA	1	20 A		E102E PANIC ALARM BUTTON	30
31	E102C PRESSURE RELIEF PORT		20 A	1	600 VA 1920 VA			1	20 A		E102A DOOR HEATER/LIGHTS	32
33	Spare		20 A	1		0 VA 0 VA		1	20 A		Spare	34
35	Spare		20 A	1			0 VA 0 VA	1	20 A		Spare	36
37	Spare		20 A	1	0 VA 0 VA			3	30 A	4#10	SPD	38
39	Spare		20 A	1		0 VA 0 VA		--	--	--	--	40
41	Spare		20 A	1			0 VA 0 VA	--	--	--	--	42
			Total Load:		12742 VA	13752 VA	14422 VA					
			Total...		106 A	116 A	121 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	2000 VA	100.00%	2000 VA		
Receptacle	10200 VA	100.00%	10200 VA	**Total Conn. Load:**	40916 VA
Power	28716 VA	100.00%	28716 VA	**Total Est. Demand:**	40916 VA
				Total Conn.:	114 A
				Total Est. Demand:	114 A

Notes:

Addendum 1
Revision / Date
1 10/07/25

Project:
NEW OPERATIONS BUILDING
FOR
NEW CANEY I.S.D.
NEW CANEY, TEXAS

STATE OF TEXAS
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www.huckabee-inc.com
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ELECTRICAL PANEL SCHEDULES

PACKAGE VOLUME

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Sheet No. E7.04
Drawn By: Author
Date: 09/18/2025

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MORE THAN ARCHITECTS

MEETING AGENDA

Project Name:	New Operations Building		
Client:	New Caney ISD		
Location:	21026 TX-494 Loop, New Caney, TX 77357	**Date of Meeting:**	10/02/2025
Project No:	01971-05-01	**Time of Meeting:**	1:00 pm
Meeting Subject:	Pre-Proposal Meeting	**Place of Meeting:**	22784 Hwy 59s Building E, Porter, Texas 77365

INTRODUCTIONS:

- Richard Ressler – NCISD, Director of Facilities and Construction
- Jesse Lemus – NCISD, Project Manager – QA/QC Manager
- Tanci Foster – NCISD, Project Manager
- Brandi Barroso - NCISD, Planning Coordinator
- Mark Smith – NCISD, Assistant Director
- Tim Stewart – NCISD, QA/QC Manager
- Karla Castillo – Huckabee Architects, Principal
- Matthew Gvist – Huckabee Architects, Associate Principal
- Jordan Tripp – Huckabee Architects, Senior Project Architect
- Sean Rooney – Auric Engineering, Civil
- Hunter Kornegay – CJG Engineers, Structural
- Chi Truong – LTY Engineers, MEPT
- Linda Roe – Foodservice Design Professionals – Food Service Equipment

PROPOSAL INFORMATION:

Who: Proposal addressed to: Mr. Isai (Jesse) Lemus, Project Manager
Where: NCISD Facilities and Construction Building – 22784 Hwy 59S, Building E, Porter, TX 77365
When: Bid date: October 14, 2025: Base Bid Time: 2:00pm, Alternate Bid Time: 3:00pm
What: Proposal to include (1) original and (1) copy in sealed envelope.

Document 00 2216 – Request for Competitive Sealed Proposals

Documents to be submitted PRIOR to proposal - submitted to Huckabee Architects no later than 5:00pm on October 10, 2025

- Contractor's Qualification statement, AIA Document A305, and Contractor's references – refer to **Attachment 1**
- Proposer's proposed Project Manager resume stating his/her qualifications and experience on projects of similar scope and size.

- Proposer's proposed Project Superintendent resume stating his/her qualifications and experience on projects of similar scope and size.

Required Documentation and Attachments

- Proof of Insurance – certificates of insurance of the types and amounts described in this procurement solicitation, including in Exhibit A and in Exhibit A to the AIA Document A101-2017, Insurance and Bonds, as modified by NCISD (enclosed as Exhibit C hereto).
- Letter of statement from a bonding company that the proposer is eligible to obtain both payment and performance bonds of the types described in this procurement solicitation.
- Proposal security – Proposal security shall be submitted with each proposal in the amount of ten percent (10%) of the proposed amount.
- A list of proposed subcontractors for the Project:
    - Concrete
    - Masonry
    - Structural Steel (Fabricator & Erector)
    - Cold-formed Metal Framing & Gypsum Board Assemblies
    - Roofing
    - Waterproofing
    - Hardware
    - Curtainwall & Glazing Systems
    - Fire Suppression
    - Plumbing
    - HVAC
    - Electrical
    - Communications
    - Electronic Access Control System
    - Video Surveillance System
    - Fire Detection and Alarm
    - Earthwork
    - Utilities
    - Tiling/Flooring/Carpet
    - Paint
    - Acoustic Ceilings
    - Kitchen Equipment
- Proof of Proposer's Safety Record – Proposers must submit:
    a) Proposer's OSHA (Occupational Safety and Health Administration) inspection logs for the last three years,
    b) a loss analysis from the proposer's insurance carrier, and
    c) a loss history covering all lines of insurance coverage carried by the proposer.
- Attachment A – Proposal Form – Base Proposal and Certification of Proposer; Alternate Proposals
- Attachment B – Proposer Questionnaire and Qualification Statement

- Attachment C – Proposer Certification Forms
- Attachment D – Asbestos-Free Materials and Inspection
- Attachment E – Acknowledgement of Final Completion Documents
- Attachment F – W-9 Form
- Attachment G – Criminal History Certification Form

- All documents can be obtained from www.huckabee-inc.com
- ALL QUESTIONS MUST BE SENT IN WRITING TO Jordan Tripp and Matthew Gvist, email to jordan.tripp@huckabee-inc.com and matt.gvist@huckabee-inc.com. Verbal responses are not considered binding.
- Substitution requests will be accepted through the end of day 10/2 by noon. The required substitution request form can be found on Huckabee's website.
- All Addenda will be posted to Huckabee's website.

SCHEDULE: *(Refer to Section 01 1400)*

Addenda 10/7/2025, sign in + agenda + pre-proposal meeting minutes + RFI responses
Bid date: Base Bid 2p on 10/14/25; Alternates 3p on 10/14/25
Board award: October 20, 2025
Notice to proceed: Following signed contract
Phased construction schedule per sheet G4.01:

- Phase 1 – October 21, 2025 – June 21, 2026
- Phase 2 – May 21, 2026 – August 1, 2026
- Phase 3 – July 1, 2026 – October 1, 2026
- Phase 4 – October 1, 2026 – February 15, 2027

Substantial completion: February 16, 2027

SCOPE: New Operations Building, to include operations, maintenance, transportation, food service, and custodial. A new warehouse, a new freestanding bus wash, and additions to the mechanic shop, tire storage building, and two detention ponds.

ALLOWANCES: *(Section 01 2100)*

- Temporary Facilities and Control: Include the stipulated sum of $1,500.00 for purchase of project identification sign.
- Owners' contingency of $200,000.00 – to be included in Addendum No. 1.

ALTERNATES: *(Section 01 2300)*

- Alternate 1A – Air Cooled Rotary Screw Chillers by JCI/York
  - Base Bid – No Chiller, Electrical feeders and all associated piping, housekeeping pad, controls, etc. required to complete chiller installation shall be included in base bid.
  - Alternate – Provide chiller as manufactured by JCI/York
- Alternate 1B – Air Cooled Rotary Chillers by Daikin
  - Base Bid – No Chiller, Electrical feeders and all associated piping, housekeeping pad, controls, etc. required to complete chiller installation shall be included in base bid.
  - Alternate – Provide chiller as manufactured by Daikin

- Alternate 2 – Lighting Controls
    - This alternate shall be priced during the bidding process. The lighting controls shall be broken out from the light fixture package for bidding.

WORK RESTRICTIONS: *(Section 01 1400 – Project schedule and other restrictions)*

SITE TOURS:

- Optional site visit immediately following the pre-proposal meeting.

BUDGET: $28,500,000.00

MORE THAN ARCHITECTS

SIGN IN SHEET

Project Name: NCISD New Operations Building

Project Number: 01971-05-01

Owner: New Caney ISD

Meeting Description: Proposal Sign In Sheet

Meeting Date and Time: 10/02/2025 – 1:00 PM

Meeting Location: 22784 Hwy 59s Building E, Porter, Texas 77365

Owner's Designated Representative: Richard Ressler

INITIAL	NAME	EMAIL	PHONE
RR	Ressler, Richard	rressler@newcaneyisd.org	281.577.8640
	Barroso, Brandi	bbarroso@newcaneyisd.org	281.577.8640
JL	Lemus, Jessie	jlemus@newcaneyisd.org	346.731.4232
MS	Smith, Mark	msmith5@newcaneyisd.org	281.577.8640
	Stewart, Tim	tstewart@newcaneyisd.org	832.492.7482
	Foster, Tanci	tfoster@newcaneyisd.org	936.697.0047
KC	Castillo, Karla	karla.castillo@huckabee-inc.com	713.292.6925
MG	Gvist, Matthew	matt.gvist@huckabee-inc.com	281.380.0863
JT	Tripp, Jordan	Jordan.tripp@huckabee-inc.com	281.520.4995
	Kornegay, Hunter	hkornegay@cjgengineers.com	
CKT	~~Mcleod, Sean~~ Chi Truong	~~sean.mcleod@lty-engineers.com~~ chi.truong	281.945.8888
	Rooney, Sean	Sean.rooney@auricengineers.com	
RP	Ryland Parker	estimating@primecontractorsinc.com	281-998-0875
PH	Pam Haynes	PHAYNES@GAMMACONST.com	713-963-0086
JS	Jeff Schafer	bids@iciconstructioninc.com	281-355-5151
A.D	Alexis Delgado	bided1construction.com	713 688 7330
	Ron Gilbert	ron.Gilbert@dnbenl.com	281 328-5002
	Marshall McMurrey	MMCMURREY@CMOSETX.com	281-831-7906
CD	Chance Davis	estimating@GTTconstruction.com	936-441-8282
DP	Danny Palmer	dannyp@ahelectric.com	936-521-5291
BC	BRANDON CASTRO	BRANDONC@AHELECTRIC	936 443 0427
EBR	Emily Ellisor	emily@ellisorinc.com	832-995-3434
RW	Rebekah Wells	rebekah@ellisorinc.com	281-359-5426
MD	Morgan DeBorde	Morgan.deborde@flintco.com	(713)822-5006
EA	Elton Allemang	ERA@Patriotllc.us	281 460 9156
JS	JOSH SEAYDON	bids@sterlingstructures.com	(713)827-7447
D.M.	DANNY MACIC	CHAMIE/MACIC@TEAL.COM.COM	281 850 4525
WP	Will Pat	estimating@mps-tcom.com	281 814 9271

INITIAL	NAME	EMAIL	PHONE
LWB	LARRY BURNS	burnselectric@sbcglobal.net	7137243558
	David Giesy (Johns Manville)	david.giesy@jm.com	832-795-7436