A D D E N D U M N O. 3

Lake Campus Workforce Development Project
7600 Lake Campus Drive
Celina, Ohio 45822

Wright State University
3640 Colonel Glenn Highway
Dayton, Ohio 45435-0001

Project No. 224102.00

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Revised Drawing Sheet Nos. A-101, A-102, A-311, A-530, A-601, A-620, AD101, E-601, E-602, EP11, ET11, FP101, IF-101, IF-601, IQ-101, IQ-201, IQ-601, and L-501
Existing Drawings - For Information Only
Pre-Bid Request for Interpretation/Clarification Log

October 29, 2026

I hereby certify that the Project Drawings and the Project Manual were prepared by me or under my direct supervision and that I am a duly registered Architect/Engineer under the Laws of the State of Ohio.

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS/ENGINEERS



JENNIFER M. FULLER, License #1115297
Expiration Date 12/31/27

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 3 to Drawings and Project Manual, dated October 29, 2026, for Lake Campus Workforce Development Project, Wright State University, Dayton, OH 45435-0001; as prepared by Fanning/Howey Associates, Inc., Celina, Ohio.

This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. REVISED PROJECT MANUAL SECTION

A. Section 08 06 71 – Door Hardware Schedule, Section 21 10 00 – Water-Based Fire Suppression Systems, Section 23 21 23 – Hydronic Pumps, Section 23 36 00 – Air Terminal Units, and 23 74 13 -Packaged, Outdoor, Central-Station Air-Handling Units have been revised, dated 10-29-26, are included with and hereby made a part of this Addendum.

ITEM NO. 2. REVISED DRAWING SHEETS

A. Drawing Sheet Nos. A-101, A-102, A-311, A-530, A-601, A-620, AD101, E-601, E-602, EP11, ET11, FP101, IF-101, IF-601, IQ-101, IQ-201, IQ-601, and L-501 have been revised, dated 10-29-26, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 3. EXISTING DRAWINGS – FOR INFORMATION ONLY

A. The Existing Drawings are part of this addendum for information only.

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SECTION 08 06 71 – DOOR HARDWARE SCHEDULE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section references specification sections relating to commercial door hardware for the following:

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

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

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

C. Related Sections:

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

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

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

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

1.3 SUBMITTALS

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

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

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

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

3. Content: Include the following information:

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

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

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

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

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

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

1.4 QUALITY ASSURANCE

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

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

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

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

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

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

1.5 DELIVERY, STORAGE, AND HANDLING

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

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

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

1.6 COORDINATION

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

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

1.7 WARRANTY

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

1.8 MAINTENANCE SERVICE

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

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

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

PART 3 - EXECUTION

3.1 DOOR HARDWARE SETS

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

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

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

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

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

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

1. Section 08 71 00 – Door Hardware.

C. Manufacturer's Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. RO - Rockwood
4. SC - Schlage
5. VO - Von Duprin
6. HS - HES
7. NO - Norton Rixson
8. LC - LCN Closers
9. SU - Securitron

Hardware Sets

Set: 1.0
Doors: 107B

2	Continuous Hinge	CFM-SLF-HD1-M x Length Required		PE	087100
1	**SVR Exit, Nightlatch**	98 Series; Rhodes Lever	.630	VO	087100
1	**SVR Exit, Exit Only**	98 Series; Rhodes Lever	.630	VO	087100
1	**Cylinder**	**20-740 w/housing and core**	**.626**	**SC**	**087100**
2	Overhead Stop	6-X36	630	NO	087100
1	**Door Operator**	**4640 Series**	**.689**	**LC**	**087100**
2	**Actuator**	**As Required**		**LC**	**087100**
1	Surface Closer	4040XP Series (Arm to Suit)	.689	LC	087100
2	Sweep	3452CNB x Length Required		PE	087100
1	Threshold	27_x224AFGT x Length Required		PE	087100

Notes: Perimeter and meeting stile gasket by door/frame manufacturer.
Exit devices must be manually dogged down for the automatic opener to work

Set: 2.0
Doors: 140B

1	Continuous Hinge	CFM-SLF-HD1-M x Length Required		PE	087100
1	Rim Exit, Classroom	98 Series; Rhodes Lever	.630	VO	087100
1	Cylinder	20-740 w/housing and core	.626	SC	087100
1	Overhead Stop	6-X36	630	NO	087100
1	Surface Closer	4040XP Series (Arm to Suit)	.689	LC	087100
1	Sweep	3452CNB x Length Required		PE	087100
1	Threshold	27_x224AFGT x Length Required		PE	087100

Notes: Perimeter gasket by door/frame manufacturer.

Set: 3.0
Doors: 137B

1	Continuous Hinge	CFM-SLF-HD1-M x Length Required		PE	087100	
1	Rim Exit, Classroom	98 Series; Rhodes Lever	.630	VO	087100	
1	**Cylinder**	**20-740 w/housing and core**	**.626**	**SC**	**087100**	
~~1~~	~~Electric Strike~~	~~7000C~~	~~630~~	~~HS~~	~~087100~~	
~~1~~	~~SMART Pac Bridge Rectifier~~	~~2005M3~~		~~HS~~	~~087100~~	
1	Overhead Stop	6-X36	630	NO	087100	
1	Door Operator	4640 Series	.689	LC	087100	
1	Sweep	3452CNB x Length Required		PE	087100	
1	Threshold	27_x224AFGT x Length Required		PE	087100	
~~1~~	~~ElectroLynx Harness - Frame~~	~~QC-C1500P~~		~~MK~~	~~087100~~	
2	Actuator	As Required		LC	087100	
~~1~~	~~Power Supply~~	~~AQL4-R8E1 x Relays as Required~~		~~SU~~	~~087100~~	
3	**Silencer**	**608-RKW**		**RO**	**087100**	

Notes:
Operational description: Door normally closed, secured by key. When unlocked, access by lever. When scheduled, hands free entry by actuator activates door operator. Free egress always. Door remains latched in event of power loss or fire alarm. Exit device must be manually dogged down for the automatic opener to work.

~~**Set: 4.0**~~
~~Doors: 250~~

~~4~~	~~Continuous Hinge~~	~~CFM-HD1 x Length Required~~		~~PE~~	~~087100~~	
~~1~~	~~Storeroom Lock~~	~~ND Series; Rhodes Lever~~	~~.626~~	~~SC~~	~~087100~~	
~~1~~	~~Cylinder~~	~~20-740 w/housing and core~~	~~.626~~	~~SC~~	~~087100~~	
~~1~~	~~Surface Closer~~	~~4040XP Series (Arm to Suit)~~	~~.689~~	~~LC~~	~~087100~~	
~~1~~	~~Wall Stop~~	~~RM860 (or) RM861 (As Required)~~	~~US26D~~	~~RO~~	~~087100~~	
~~2~~	~~Gasketing~~	~~290APK (Jambs)~~		~~PE~~	~~087100~~	
~~1~~	~~Gasketing~~	~~2891APK (Heads)~~		~~PE~~	~~087100~~	
~~1~~	~~Rain Guard~~	~~346C (Omit at overhangs)~~		~~PE~~	~~087100~~	
~~1~~	~~Sweep~~	~~3452CNB x Length Required~~		~~PE~~	~~087100~~	
~~1~~	~~Threshold~~	~~27_x224AFGT x Length Required~~		~~PE~~	~~087100~~	

Set: 5.0
Doors: 119A

4	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100	
1	Storeroom Lock	ND Series; Rhodes Lever	.626	SC	087100	
1	Cylinder	20-740 w/housing and core	.626	SC	087100	
1	Electric Strike	5000C	630	HS	087100	
1	SMART Pac Bridge Rectifier	2005M3		HS	087100	
1	Surface Closer	4040XP Series (Arm to Suit)	.689	LC	087100	
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100	
1	ElectroLynx Harness - Frame	QC-C1500P		MK	087100	
1	Card Reader	By Security Supplier				
1	Power Supply	AQL4-R8E1 x Relays as Required		SU	087100	

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

Set: 6.0
Doors: 137A

3	Hinge, Full Mortise, Hvy Wt	T4A3786-MCK [NRP]	US26D	MK	087100	
1	Rim Exit, Nightlatch	98 Series; Rhodes Lever	.630	VO	087100	
1	Cylinder	20-740 w/housing and core	.626	SC	087100	
~~1~~	~~Electric Strike~~	~~7000C~~	~~630~~	~~HS~~	~~087100~~	
~~1~~	~~SMART Pac Bridge Rectifier~~	~~2005M3~~		~~HS~~	~~087100~~	
1	Surface Closer, Stop Arm	4040XP Series	.689	LC	087100	
~~1~~	~~ElectroLynx Harness - Frame~~	~~QC-C1500P~~		~~MK~~	~~087100~~	
~~1~~	~~Card Reader~~	~~By Security Supplier~~				
~~1~~	~~Power Supply~~	~~AQL4-R8E1 x Relays as Required~~		~~SU~~	~~087100~~	

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

~~**Set: 7.0**~~
~~Doors: 119~~

~~3~~	~~Hinge, Full Mortise~~	~~TA2714-MCK [NRP]~~	~~US26D~~	~~MK~~	~~087100~~	
~~1~~	~~Storeroom Lock~~	~~ND Series; Rhodes Lever~~	~~.626~~	~~SC~~	~~087100~~	
~~1~~	~~Cylinder~~	~~20-740 w/housing and core~~	~~.626~~	~~SC~~	~~087100~~	
~~1~~	~~Electric Strike~~	~~5000C~~	~~630~~	~~HS~~	~~087100~~	
~~1~~	~~SMART Pac Bridge Rectifier~~	~~2005M3~~		~~HS~~	~~087100~~	
~~1~~	~~Overhead Stop~~	~~6-X36~~	~~630~~	~~NO~~	~~087100~~	
~~1~~	~~Surface Closer~~	~~4040XP Series (Arm to Suit)~~	~~.689~~	~~LC~~	~~087100~~	
~~1~~	~~Wall Stop~~	~~RM860 (or) RM861 (As Required)~~	~~US26D~~	~~RO~~	~~087100~~	
~~3~~	~~Silencer~~	~~608-RKW~~		~~RO~~	~~087100~~	
~~1~~	~~ElectroLynx Harness - Frame~~	~~QC-C1500P~~		~~MK~~	~~087100~~	
~~1~~	~~Card Reader~~	~~By Security Supplier~~				
~~1~~	~~Power Supply~~	~~AQL4-R8E1 x Relays as Required~~		~~SU~~	~~087100~~	

~~Notes: Perimeter gasket by door/frame manufacturer.~~
~~Operational narrative: Door normally closed and secure. Access by valid credential. Free egress always. Door remains latched and secure upon power loss or fire alarm activation. Keyed cylinder for emergency access.~~

Set: 8.0
Doors: 120

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Classroom Lock	ND Series; Rhodes Lever	.626	SC	087100
1	Cylinder	20-740 w/housing and core	.626	SC	087100
1	Concealed Overhead Stop	6-X36	630	NO	087100
1	Surface Closer	4040XP Series (Arm to Suit)	.689	LC	087100

Notes: Perimeter gasket by door/frame manufacturer.

Set: 9.0
Doors: 107A

2	Continuous Hinge	CFM-SLF-HD1-M x Length Required		PE	087100
2	Dummy Push Pad	350 x Rhodes Lever	.630	VO	087100
2	Exit Device Trim	Rhodes Lever	.630	VO	
2	Overhead Stop	6-X36	630	NO	087100
1	**Door Operator**	**4640 Series**	**.689**	**LC**	**087100**
2	**Actuator**	**As Required**		**LC**	**087100**
1	**Surface Closer**	**4040XP Series (Arm to Suit)**	**.689**	**LC**	**087100**
2	Sweep	18061CNB x Length Required		PE	087100
1	Threshold	271A x Length Required		PE	087100

Notes: Perimeter and meeting stile gasket by door/frame manufacturer.

Set: 10.0
Doors: 138

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Storeroom Lock	ND Series; Rhodes Lever	.626	SC	087100
1	**Cylinder**	**20-740 w/housing and core**	**.626**	**SC**	**087100**
1	**Door Operator**	**4640 Series**	**.689**	**LC**	**087100**
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
1	Gasketing	S88BL (Head & Jambs)		PE	087100
1	ElectroLynx Harness - Frame	QC-C1500P		MK	087100
1	Automatic Opener Restroom Kit	8310-2420		LC	087100
1	Power Supply	AQL4-R8E1 x Relays as Required		SU	087100
1	Coat Hook	RM801	US26D	RO	087100
3	**Silencer**	**608-RKW**		**RO**	**087100**

Notes:
Operational description: Door normally closed and secure. Access by actuator, activating the door operator. Interior "Push to Lock" button disables access when in use. Free egress always. Hands free egress by actuator activates door operator. Door remains latched in event of power loss or fire alarm.

Set: 11.0
Doors: 122

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Storeroom Lock	ND Series; Rhodes Lever	.626	SC	087100
1	Cylinder	20-740 w/housing and core	.626	SC	087100
1	Surface Closer	4040XP Series (Arm to Suit)	.689	LC	087100
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3	Silencer	608-RKW		RO	087100

Set: 12.0
Doors: 141

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Storeroom Lock	ND Series; Rhodes Lever	.626	SC	087100
1	Cylinder	20-740 w/housing and core	.626	SC	087100
1	Surface Closer, Stop Arm	4040XP Series	.689	LC	087100
3	Silencer	608-RKW		RO	087100

Set: 13.0
Doors: 112, 114, 116, 118, 134, 135, 136

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Entrance/Office Lock	ND Series; Rhodes Lever	.626	SC	087100
1	Cylinder	20-740 w/housing and core	.626	SC	087100
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3	Silencer	608-RKW		RO	087100

Set: 14.0
Doors: 139

3	Hinge, Full Mortise	TA2714-MCK [NRP]	US26D	MK	087100
1	Privacy Lock (w/ Indicator)	ND Series; Rhodes Lever	.626	SC	087100
1	Surface Closer, Hold Open	4040XP Series	.689	LC	087100
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
1	Gasketing	S88BL (Head & Jambs)		PE	087100
1	Coat Hook	RM801	US26D	RO	087100

Set: 15.0
Doors: 125

6	Hinge, Full Mortise, Hvy Wt	T4A3786-MCK [NRP]	US26D	MK	087100
1	Dust Proof Strike	570	US26D	RO	087100
1	Flush Bolt	2945	US26D	RO	087100
2	Double Dummy Trim	ND Series; Rhodes Lever	.626	SC	087100
1	Deadbolt, Double Cylinder	B660 Series	.626	SC	087100
2	Cylinder	20-740 w/housing and core	.626	SC	087100
2	Surface Closer, Hold Open	4040XP Series	.689	LC	087100
2	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
2	Silencer	608-RKW		RO	087100

Description of operation. Inactive door secured with flush bolt. Active leaf is latched to inactive door with deadbolt. Doors are normally closed and locked. If deadbolt is retracted, doors both doors will be unlocked push/pull

Set: 16.0
Doors: 130

3	Hinge, Full Mortise, Hvy Wt	T4A3786-MCK [NRP]	US26D	MK	087100
1	Double Dummy Trim	ND Series; Rhodes Lever	.626	SC	087100
1	Surface Closer, Hold Open	4040XP Series	.689	LC	087100
1	Wall Stop	RM860 (or) RM861 (As Required)	US26D	RO	087100
3	Silencer	608-RKW		RO	087100

Set: 17.0
Doors: 131

1	Cylinder	20-740 w/housing and core	.626	SC	087100

END OF SECTION 080671

SECTION 21 10 00 - WATER-BASED FIRE-SUPPRESSION SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

B. The fire protection contract shall include all labor and materials as required for the complete installation of this classification of the Work as hereinafter specified and as shown by all of the accompanying Drawings. The Contractor shall examine all Drawings, including Equipment Drawings and those which are intended primarily for other classifications as such items will be considered a part of the Contract.

C. The materials and workmanship throughout shall be first class in every detail, to the best modern practice. All fixtures shall be first quality of their respective kinds and grades, free from defects, furnished and set up complete in every detail and in accordance with all codes and regulations governing the Work. All piping shall be concealed, unless otherwise distinctly specified or shown on the Drawings.

D. The sprinkler systems shall be zoned on a square foot basis with no zones exceeding 52,000 SF. Each zone shall be provided with all necessary valves, valve tamper switches, water flow alarms, and drains as required by NFPA 13.

E. Provide Knox boxes at the main entrances to the building as indicated on the Drawings.

F. Refer to Section 01230 for Alternates that may affect the Work of this Section.

1.2 SUMMARY

A. This Section includes the following fire-suppression piping inside the building:
1. Wet-pipe sprinkler systems.

B. Related Sections include the following:
1. Division 22 Section "Facility Water Distribution Piping" for piping outside the building.
2. Division 28 Section "Fire Detection and Alarm" for alarm devices not specified in this Section.

1.3 SYSTEM DESCRIPTIONS

A. Electrical Contractor shall provide, install, and wire alarm bell on exterior of building that will sound upon flow in the fire protection system.

B. The new building addition and the renovated building areas shall be provided with seismic bracing on all piping mains, cross mains, branch piping and all other system components in accordance with the most currently enforced edition of the International Building Code and the local authority having jurisdiction. The bracing materials and methods and installation shall be done in accordance with the procedures described in the latest, and currently enforced edition of NFPA 13.

1.4 AUTHORITY HAVING JURISDICTION

A. Public Safety
1. Fire Prevention and Building Safety Commission Compliance: Install fire protection systems in accordance with the following codes and local regulations of Fire Marshal.
a. Ohio Building Code currently enforced edition.
b. Ohio Mechanical Code currently enforced edition.

c. Ohio Fire Code currently enforced edition.
d. NFPA 101 Life Safety Systems.
e. NFPA sections listed below.

1.5 PERFORMANCE REQUIREMENTS

A. Standard Piping System Component Working Pressure: Listed for at least 175 psig.

1.6 ACTION SUBMITTALS

A. Product Data: For the following:
1. Piping materials, including sprinkler specialty fittings.
2. Pipe hangers and supports, including seismic restraints.
3. Valves, including listed fire-protection valves, unlisted general-duty valves, and specialty valves and trim.
4. Sprinklers, escutcheons, and guards. Include sprinkler flow characteristics, mounting, finish, and other pertinent data.
5. Fire department connections, including type; number, size, and arrangement of inlets; caps and chains; size and direction of outlet; escutcheon and marking; and finish.
6. Alarm devices, including electrical data.

B. Approved Sprinkler Piping Drawings: Working plans, prepared according to NFPA 13, that have been approved by authorities having jurisdiction, including hydraulic calculations, if applicable.

1.7 INFORMATIONAL/QUALITY ASSURANCE/CONTROL SUBMITTALS

A. Welding certificates.

B. Field quality-control test reports.

C. Test Reports and Certificate: Submit test reports and certificates including “Contractor’s Material & Test Certificate for Aboveground Piping” and “Contractor’s Material & Test Certificate for Underground Piping” as described in NFPA 13.

1.8 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
1. Operation and Maintenance Data: For sprinkler specialties to include in emergency, operation, and maintenance manuals.

1.9 QUALITY ASSURANCE

A. Installer Qualifications:
1. Installer's responsibilities include hydraulic calculations, fabricating, and installing fire-suppression systems. Base calculations on results of fire-hydrant flow test.

B. Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX.

C. NFPA Standards: Fire-suppression-system equipment, specialties, accessories, installation, and testing shall comply with the following:
1. NFPA 13, "Installation of Sprinkler Systems."
2. NFPA 24, "Installation of Private Fire Service Mains and Their Appurtenances."

D. The sprinkler designer shall be state certified and meet all NFPA state and local requirements.

1.10 COORDINATION

A. Coordinate layout and installation of sprinklers with other construction that penetrates ceilings, including light fixtures, HVAC equipment, and partition assemblies.

1.11 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Sprinkler Cabinets: Finished, wall-mounting, steel cabinet with hinged cover, with space for minimum of six spare sprinklers plus sprinkler wrench. Include number of sprinklers required by NFPA 13 and sprinkler wrench. Include separate cabinet with sprinklers and wrench for each type of sprinkler on Project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
   1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 INTERIOR FIRE MAIN PIPING

A. General: Provide, at the Contractor's option, pipe and pipe fittings complying with NFPA 13, in accordance with one or a combination of the following listings and as a minimum meet specifications ASTM A53 GR.B, A106 GR.B, A135 GR.B, A795, type E, GR.A.

B. Black Steel Pipe: Threaded Ends; Schedule 40 for all sizes through 2 inches; conforming to ANSI B1.20.1.

C. Black Steel Pipe: Cut Groove Ends; Schedule 40 for 2 inches through 6 inches.

D. Sprinkler Head Pipe Drops: Schedule 40, black steel threaded both ends applies to all exposed structure locations. Sprinkler head drops in ceilings and walls with acceptable mounting support frames may, at the Contractor's option, be flexible braided stainless steel hose sprinkler fittings, Victualic "Vic Flex" AH2 series or equal by FlexHead or approved equal. Flexible sprinkler drops and associated support frames shall be by the same manufacturer. Installation of the flexible drops shall be per manufacturer's requirements. Hydraulic calculations shall include correct equivalent lengths per flexible sprinkler drop type.

E. Manufacturer: Subject to compliance with requirements, provide pipe and fittings of the following:
   1. Allied Tube and Conduit, Division of Grinnell Co.
   2. American Tube and Pipe Co.
   3. Bullmoose Tube Co.
   4. Grinnell Co.
   5. Tyler Gustin-Bacon
   6. Vitaulic
   7. Wheatland Tube Co.

2.3 FITTINGS

A. Cast-Iron Cast-Iron Threaded Fittings: ANSI B16.4, Class 125, Class 250, standard pattern, for threaded joints. Threads shall conform to ANSI B1.20.1.

B. Malleable-Iron Threaded Fittings: ANSI B16.3, Class 150, Class 300, standard pattern, for threaded joints. Threads shall conform to ANSI B1.20.1.

C. Ductile – Iron Threaded Fittings: ANSI B16.3, Class 150, Class 300, Standard pattern, for threaded joints. Threads shall conform to ANSI B1.20.1.

D. Steel Fittings: UL listed/FM approved ASTM A106 GR B, ANSI 16.9 or ASTM A234, seamless or welded for welded joints.

E. Grooved Mechanical Fittings: ASTM A536, Grade 65-45-12 ductile iron; ASTM A47 Grade 32510 malleable iron; or ASTM A53, Type F or Types E or S, Grade B fabricated steel fittings with grooves or shoulders designed to accept grooved end couplings.

F. Grooved Mechanical Couplings: Consist of UL listed/FM approved ductile or malleable iron housing, a synthetic rubber gasket of a central cavity pressure-responsive design; with nuts, bolts, locking pin locking toggle, or lugs to secure roll-grooved pipe and fittings.

G. Housing: Ductile iron castings (ASTM A636 Grade 65-45-12).

H. Housing: Malleable iron casting (ASTM A47 Grade 32510).

I. Rubber Gasket: Ethylene Propylene Rubber (EPDM) as standard, to ASTM D2000.

J. Bolts – carbon steel track bolt (ASTM A183 Grade 2).

K. Nuts – carbon steel bars (ASTM A283 Grade D).

L. Cast-Iron Threaded Flanges: ANSI B16.1, Class 250; raised ground face, bolt holes spot faced.

M. Cast Bronze Flanges: ANSI B16.24, Class 300; raised ground face, bolt holes spot faced.

2.4 DIELECTRIC FITTINGS

A. Assembly shall be copper alloy, ferrous, and insulating materials with ends matching piping system.

B. Dielectric Unions: Factory-fabricated assembly, designed for 250-psig minimum working pressure at 180 deg F. Include insulating material that isolates dissimilar materials and ends with inside threads according to ASME B1.20.1.
   1. Acceptable Manufacturers:
      a. Capitol Manufacturing Co.
      b. Epco Sales, Inc.
      c. Watts Industries, Inc.; Water Products Div.
      d. Zurn Industries, Inc.; Wilkins Div.

C. Dielectric Flanges: Factory-fabricated companion-flange assembly, for 175-psig minimum working-pressure rating as required for piping system.
   1. Acceptable Manufacturers:
      a. Capitol Manufacturing Co.
      b. Epco Sales, Inc.
      c. Watts Industries, Inc.; Water Products Div.

D. Dielectric Couplings: Galvanized steel with inert and noncorrosive thermoplastic lining and threaded ends and 300-psig working-pressure rating at 225 deg F.
   1. Acceptable Manufacturers:
      a. Calpico, Inc.
      b. Lochinvar Corp.

E. Dielectric Nipples: Electroplated steel with inert and noncorrosive thermoplastic lining, with combination of plain, threaded, or grooved ends and 300-psig working-pressure rating at 225 deg F.
   1. Manufacturers:
      a. Perfection Corporation.
      b. Precision Plumbing Products, Inc.
      c. Victaulic Co. of America.

2.5 LISTED FIRE-PROTECTION VALVES

A. Valves shall be UL listed or FMG approved, with 175-psig minimum pressure rating. Valves shall have 300-psig pressure rating if valves are components of high-pressure piping system.

B. Gate Valves with Wall Indicator Posts:
   1. Gate Valves: UL 262, cast-iron body, bronze mounted, with solid disc, nonrising stem, operating nut, and flanged ends.
   2. Indicator Posts: UL 789, horizontal-wall type, cast-iron body, with hand wheel, extension rod, locking device, and cast-iron barrel.
   3. Acceptable Manufacturers:
      a. Grinnell Fire Protection.
      b. McWane, Inc.; Kennedy Valve Div.
      c. NIBCO.
      d. Stockham.

C. Ball Valves: Comply with UL 1091, except with ball instead of disc.
   1. NPS 1-1/2 and Smaller: Bronze body with threaded ends.
   2. NPS 2 and NPS 2-1/2: Bronze body with threaded ends or ductile-iron body with grooved ends.
   3. NPS 3: Ductile-iron body with grooved ends.
   4. Acceptable Manufacturers:
      a. NIBCO.
      b. Victaulic Co. of America.

D. Butterfly Valves: UL 1091.
   1. NPS 2 and Smaller: Bronze body with threaded ends.
      a. Acceptable Manufacturers:
         1) Global Safety Products, Inc.
         2) Milwaukee Valve Company.
   2. NPS 2-1/2 and Larger: Bronze, cast-iron, or ductile-iron body; wafer type or with flanged or grooved ends.
      a. Acceptable Manufacturers:
         1) Central Sprinkler Corp.
         2) Global Safety Products, Inc.
         3) McWane, Inc.; Kennedy Valve Div.
         4) Mueller Company.
         5) NIBCO.
         6) Pratt, Henry Company.
         7) Victaulic Co. of America.

E. Check Valves NPS 2 and Larger: UL 312, swing type, cast-iron body with flanged or grooved ends.
   1. Acceptable Manufacturers:
      a. Central Sprinkler Corp.
      b. Crane Co.; Crane Valve Group; Crane Valves.
      c. Grinnell Fire Protection.
      d. Hammond Valve.
      e. Mueller Company.
      f. NIBCO.
      g. Potter-Roemer; Fire Protection Div.

h. Reliable Automatic Sprinkler Co., Inc.
i. Star Sprinkler Inc.
j. Stockham.
k. Victaulic Co. of America.
l. Watts Industries, Inc.; Water Products Div.

F. Gate Valves: UL 262, OS&Y type.
1. NPS 2 and Smaller: Bronze body with threaded ends.
a. Acceptable Manufacturers:
1) Crane Co.; Crane Valve Group; Crane Valves.
2) Hammond Valve.
3) NIBCO.
2. NPS 2-1/2 and Larger: Cast-iron body with flanged ends.
a. Acceptable Manufacturers:
1) Crane Co.; Crane Valve Group; Crane Valves.
2) Hammond Valve.
3) Milwaukee Valve Company.
4) Mueller Company.
5) NIBCO.
6) Red-White Valve Corp.

G. Indicating Valves: UL 1091, with integral indicating device and ends matching connecting piping.
1. Indicator: Electrical, 115-V ac, prewired, single-circuit, supervisory switch.
2. NPS 2 and Smaller: Ball or butterfly valve with bronze body and threaded ends.
a. Acceptable Manufacturers:
1) Milwaukee Valve Company.
2) NIBCO.
3) Victaulic Co. of America.
3. NPS 2-1/2 and Larger: Butterfly valve with cast- or ductile-iron body; wafer type or with flanged or grooved ends.
a. Acceptable Manufacturers:
1) Central Sprinkler Corp.
2) Grinnell Fire Protection.
3) McWane, Inc.; Kennedy Valve Div.
4) Milwaukee Valve Company.
5) NIBCO.
6) Victaulic Co. of America.

2.6 SPRINKLERS

A. Sprinklers shall be UL listed or FMG approved, with 175-psig minimum pressure rating. Sprinklers shall have 300-psig pressure rating if sprinklers are components of high-pressure piping system.

B. Acceptable Manufacturers:
1. Central Sprinkler Corp.
2. Firematic Sprinkler Devices, Inc.
3. Globe Fire Sprinkler Corporation.
4. Grinnell Fire Protection.
5. Reliable Automatic Sprinkler Co., Inc.
6. Star Sprinkler Inc.
7. Victaulic Co. of America.
8. Viking Corp.

C. Automatic Sprinklers: With heat-responsive element complying with the following:
1. UL 199, for nonresidential applications.
2. UL 1767, for early-suppression, fast-response applications.

D. Sprinkler Types and Categories: Nominal 1/2-inch orifice for "Ordinary" temperature classification rating, unless otherwise indicated or required by application.
   a. Orifice: 1/2 inch, with discharge coefficient K between 5.3 and 5.8.
   b. Orifice: 17/32 inch, with discharge coefficient K between 7.4 and 8.2.

E. Sprinkler types, features, and options as follows:
   1. Concealed ceiling sprinklers, including cover plate.
   2. Extended-coverage sprinklers.
   3. Flush ceiling sprinklers, including escutcheon.
   4. Pendent sprinklers.
   5. Quick-response sprinklers.
   6. Recessed sprinklers, including escutcheon.
   7. Sidewall sprinklers.
   8. Upright sprinklers.

F. Sprinkler Finishes: Chrome plated, bronze, and painted.

G. Special Coatings: Wax, lead, and corrosion-resistant paint.

H. Sprinkler Escutcheons: Materials, types, and finishes for the following sprinkler mounting applications. Escutcheons for concealed, flush, and recessed-type sprinklers are specified with sprinklers.

I. Automatic Sprinklers Types and Locations: Provide automatic sprinkler as listed by UL and F.M.
   1. Provide brass upright pendant and side wall sprinklers as required on exposed piping in unfinished spaces.
   2. Provide brass exposed pendant sprinkler heads in finished areas such as storage rooms and janitor closets.
   3. Provide concealed ceiling sprinklers with white cover plate in all finished spaces, unless noted otherwise. **Refer to Architectural Ceiling Plans for locations of black and dark green ceilings. Provide sprinklers to match.**
   4. Center heads in ceiling tiles in corridors. All other heads in lay-in ceiling areas shall be in tile to within 4 inches of grid.
   5. Provide wire guards for sprinkler heads in gymnasium.
   6. Provide a higher temperature head in rooms containing kilns. Verify temperature requirements.
   7. Provide factory corrosion resistance coated sprinklers in areas exposed to exterior, pool, freezer/cooler or other corrosive environments.

2.7 HOSE CONNECTIONS

A. Acceptable Manufacturers:
   1. Central Sprinkler Corp.
   2. Elkhart Brass Mfg. Co., Inc.
   3. Grinnell Fire Protection.
   4. Guardian Fire Equipment Incorporated.
   5. McWane, Inc.; Kennedy Valve Div.
   6. Mueller Company.
   7. Potter-Roemer; Fire-Protection Div.

B. Description: UL 668, brass or bronze, 300-psig minimum pressure rating, hose valve for connecting fire hose. Include angle pattern design; female NPS inlet and male hose outlet; and lugged cap, gasket, and chain. Include NPS 1-1/2 or NPS 2-1/2 as indicated, and hose valve threads according to NFPA 1963 and matching local fire department threads.

2.8 ALARM DEVICES

A. Alarm-device types shall match piping and equipment connections.

B. Water-Flow Indicator: UL 346, electrical-supervision, paddle-operated-type, water-flow detector with 250-psig pressure rating and designed for horizontal or vertical installation. Include two single-pole, double-throw circuit switches for isolated alarm and auxiliary contacts, 7 A, 125-V ac and 0.25 A, 24-V dc; complete with factory-set, field-adjustable retard element to prevent false signals and tamperproof cover that sends signal if removed.
   1. Acceptable Manufacturers:
      a. ADT Security Services, Inc.
      b. Grinnell Fire Protection.
      c. Potter Electric Signal Company.
      d. Viking Corp.
      e. Watts Industries, Inc.; Water Products Div.

C. Pressure Switch: UL 753, electrical-supervision-type, water-flow switch with retard feature. Include single-pole, double-throw, normally closed contacts and design that operates on rising pressure and signals water flow.
   1. Acceptable Manufacturers:
      a. Grinnell Fire Protection.
      b. Potter Electric Signal Company.
      c. System Sensor.
      d. Viking Corp.

D. Valve Supervisory Switch: UL 753, electrical, single-pole, double-throw switch with normally closed contacts. Include design that signals controlled valve is in other than fully open position.
   1. Acceptable Manufacturers:
      a. McWane, Inc.; Kennedy Valve Div.
      b. Potter Electric Signal Company.

E. Indicator-Post Supervisory Switch: UL 753, electrical, single-pole, double-throw switch with normally closed contacts. Include design that signals controlled indicator-post valve is in other than fully open position.
   1. Acceptable Manufacturers:
      a. Potter Electric Signal Company.
      b. System Sensor.

2.9 PRESSURE GAUGES

A. Acceptable Manufacturers:
   1. AGF Manufacturing Co.
   2. AMETEK, Inc.; U.S. Gauge.
   3. Brecco Corporation.
   4. Dresser Equipment Group; Instrument Div.
   5. Marsh Bellofram.
   6. WIKA Instrument Corporation.

PART 3 - EXECUTION

3.1 PREPARATION

A. Perform fire-hydrant flow test according to NFPA 13 and NFPA 291. Use results for system design calculations required in Part 1 "Quality Assurance" Article.

B. Report test results promptly and in writing.

3.2 EARTHWORK

A. Refer to Division 31 Section "Earth Moving" for excavating, trenching, and backfilling.

3.3 EXAMINATION

A. Examine roughing-in for hose connections and stations to verify actual locations of piping connections before installation.

B. Examine walls and partitions for suitable thicknesses, fire- and smoke-rated construction, framing for hose-station cabinets, and other conditions where hose connections and stations are to be installed.

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

3.4 PIPING APPLICATIONS, GENERAL

A. Shop weld pipe joints where welded piping is indicated.

B. Do not use welded joints for galvanized-steel pipe.

C. Flanges, flanged fittings, unions, nipples, and transition and special fittings with finish and pressure ratings same as or higher than system's pressure rating may be used in aboveground applications, unless otherwise indicated.

D. Piping between Fire Department Connections and Check Valves: Galvanized, standard-weight steel pipe with cast- or malleable-iron threaded fittings joints.

E. Underground Service-Entrance Piping: Ductile-iron, mechanical-joint pipe and fittings and restrained joints.

3.5 VALVE APPLICATIONS

A. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:
   1. Listed Fire-Protection Valves: UL listed and FMG approved for applications where required by NFPA 13.
      a. Shutoff Duty: Use ball, butterfly, or gate valves.

3.6 JOINT CONSTRUCTION

A. Refer to Division 21 Section "Common Work Results for Fire Suppression" for basic piping joint construction.

B. Threaded Joints: Comply with NFPA 13 for pipe thickness and threads. Do not thread pipe smaller than NPS 8 (DN 200) with wall thickness less than Schedule 40 unless approved by authorities having jurisdiction and threads are checked by a ring gauge and comply with ASME B1.20.1.

C. Grooved Joints: Assemble joints with listed coupling and gasket, lubricant, and bolts.
   1. Ductile-Iron Pipe: Radius-cut-groove ends of piping. Use grooved-end fittings and grooved-end-pipe couplings.
   2. Steel Pipe: Square-cut or roll-groove piping as indicated. Use grooved-end fittings and rigid, grooved-end-pipe couplings, unless otherwise indicated.
   3. Test each groove for proper depth and width with manufacturers approved tape measure. If groove does not meet the manufacturers requirement, regroove pipe as required.

D. Dissimilar-Metal Piping Joints: Construct joints using dielectric fittings compatible with both piping materials.

3.7 PIPING INSTALLATION

A. Refer to Division 21 Section "Common Work Results for Fire Suppression" for basic piping installation.

B. Locations and Arrangements: Drawing plans, schematics, and diagrams indicate general location and arrangement of piping. Install piping as indicated, as far as practical.
   1. Deviations from approved working plans for piping require written approval from authorities having jurisdiction. File written approval with Architect before deviating from approved working plans.

C. Install underground ductile-iron service-entrance piping according to NFPA 24 and with restrained joints.

D. Use approved fittings to make changes in direction, branch takeoffs from mains, and reductions in pipe sizes.

E. Install unions adjacent to each valve in pipes NPS 2 and smaller. Unions are not required on flanged devices or in piping installations using grooved joints.

F. Install flanges or flange adapters on valves, apparatus, and equipment having NPS 2-1/2 and larger connections.

G. Install "Inspector's Test Connections" in sprinkler system piping, complete with shutoff valve, sized and located according to NFPA 13.

H. Install sprinkler piping with drains for complete system drainage.

I. Install sprinkler zone control valves, test assemblies, and drain risers adjacent to standpipes when sprinkler piping is connected to standpipes.

J. Install drain valves on standpipes.

K. Install ball drip valves to drain piping between fire department connections and check valves. Drain to floor drain or outside building.

L. Install alarm devices in piping systems.

M. Hangers and Supports: Comply with NFPA 13 for hanger materials.
   1. Install sprinkler system piping according to NFPA 13.
   2. Provide swivel clamp connections at steel supports as required.
   3. Do not support components of the fire-suppression system from steel roof decks. In locations where structural framing members are not available, provide intermediate structural supports spanning between closest structural framing members.

N. Earthquake Protection: Install piping according to NFPA 13 to protect from earthquake damage.

O. Install pressure gauges on riser or feed main, at each sprinkler test connection, and at top of each standpipe. Include pressure gauges with connection not less than NPS 1/4 and with soft metal seated globe valve, arranged for draining pipe between gauge and valve. Install gauges to permit removal, and install where they will not be subject to freezing.

P. Fill wet-pipe sprinkler system piping with water.

3.8 VALVE INSTALLATION

A. Install listed fire-protection valves, unlisted general-duty valves, specialty valves and trim, controls, and specialties according to NFPA 13 and authorities having jurisdiction.

B. Install listed fire-protection shutoff valves supervised-open, located to control sources of water supply except from fire department connections. Install permanent identification signs indicating portion of system controlled by each valve.

C. Specialty Valves:
   1. Alarm Check Valves: Install in vertical position for proper direction of flow, including bypass check valve and retarding chamber drain-line connection.

3.9 SPRINKLER INSTALLATION

A. Install Schedule 40 steel pipe with threaded joints and fittings for 2 inch and smaller.

B. Install Schedule 40 steel pipe with roll-grooved ends and grooved mechanical couplings for 2-1/2 inches to 6 inches.

C. Comply with requirements of ANSI/NFPA #13 for installation of fire sprinkler piping materials. Install fire sprinkler piping products where indicated, in accordance with manufacturer's written instructions, and in accordance with recognized industry practices to ensure that fire sprinkler piping complies with requirements and serves intended purposes.

D. Coordinate with other work including but not limited to plumbing piping, ductwork, equipment, as necessary to interface components of fire sprinkler piping properly with other work.

E. Install supports, anchors, seals, valves, meters, and gauges per NFPA #13.

F. Prior to connecting sprinkler risers for flushing, flush water feed mains, lead-in connections, and control portions of sprinkler piping. After sprinkler piping installation has been completed and before piping is placed in service, flush entire sprinkler system, as required to remove foreign substances, under pressure as specified in ANSI/NFPA #13. Continue flushing until water is clean and check to ensure that debris has not clogged sprinklers.

G. After flushing system, test fire sprinkler piping hydrostatically, for a period of 2 hours, at not less than 200 psi or at 50 psi in excess of maximum static pressure when maximum static pressure is in excess of 150 psi. Check system for leakage of joints. Measure hydrostatic pressure at low point of system.

H. Repair or replace piping system as required to eliminate leakage in accordance with ANSI/NFPA standards. Retest as specified to demonstrate compliance.

I. Sprinkler Head Cabinet and Wrench: Finished steel baked red enamel cabinet, suitable for wall mounting, with hinged cover and space for 12 spare sprinkler heads plus sprinkler head wrench. Provide a separate cabinet for each style sprinkler head on the Project.

J. Piping which passes through a non-sprinklered area shall be adequately protected by fire resistive construction as specified by the Owner and/or code.

K. Cross mains or feed mains which pass through electrical switchgear room(s) shall be double piped (sleeve) unless the pipe is a branch line serving heads in said rooms. Sleeve shall be set in such a manner as to avoid joints in the room. If a joint is required in the room, it shall be a welded joint. Pipe shall be of Schedule 40, black steel. Avoid installing any fire protection piping in electrical rooms, elevator equipment rooms, switch gear rooms unless absolutely necessary. Contact Engineer prior to any of these installations.

L. Drains shall terminate at an open-site drain, or outside of the building. Location of drains to building exterior shall be approved by the Owner/Architect.

M. System main drain shall be piped to the exterior of the building unless noted otherwise.

N. Piping shall not pass through electrical transformer room.

O. In general, sprinkler riser pipe routing has been shown on plans. Integrate sprinkler piping with ducts, lights, diffusers and other mechanical work. All sprinkler head locations shall be integrated with reflected ceiling plans.

P. Locations and Arrangements: Drawings (plans, schematics, and diagrams) indicate the general location and arrangement of piping systems. So far as practical, install piping as indicated.
   1. Deviations from approved “Working Plans” for sprinkler piping, require written approval of the authority having jurisdiction. Written approval shall be on file with the Architect prior to deviating for the approved “Working Plans”.

Q. Install sprinkler piping to provide for system drainage in accordance with NFPA 13.

R. Use approved fittings to make all changes in direction, branch takeoffs from mains, and reductions in pipe sizes.

S. There shall be no sprinkler piping or equipment installed within a minimum of 12’-0” of any building wall opening which communicates with the outdoors

3.10 HOSE-CONNECTION INSTALLATION

A. Install hose connections adjacent to standpipes, unless otherwise indicated.

B. Install freestanding hose connections for access and minimum passage restriction.

C. Install NPS 1-1/2 hose-connection valves with flow-restricting device, unless otherwise indicated.

D. Install NPS 2-1/2 hose connections with quick-disconnect NPS 2-1/2 by NPS 1-1/2 reducer adapter and flow-restricting device, unless otherwise indicated.

3.11 HOSE-STATION INSTALLATION

A. Install freestanding hose stations for access and minimum passage restriction.

B. Install NPS 1-1/2 hose-station valves with flow-restricting device, unless otherwise indicated.

C. Install NPS 2-1/2 hose connections with quick-disconnect NPS 2-1/2 by NPS 1-1/2 reducer adapter and flow- restricting device, unless otherwise indicated.

D. Install freestanding hose stations with support or bracket attached to standpipe or substrate.

3.12 CONNECTIONS

A. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to equipment to allow service and maintenance.

C. Install ball drip valves at each check valve for fire department connection. Drain to floor drain or outside building.

D. Connect piping to specialty valves, hose valves, specialties, fire department connections, and accessories.

E. Connect air compressor to the following piping and wiring:
   1. Pressure gauges and controls.
   2. Electrical power system.
   3. Fire alarm devices, including low-pressure alarm.

F. Electrical Connections: Power wiring is specified in Division 26.

G. Connect alarm devices to fire alarm.

3.13 LABELING AND IDENTIFICATION

A. Install labeling and pipe markers on equipment and piping according to requirements in NFPA 13

B. This Contractor shall identify all piping installed by him, exposed or concealed, with a marker consisting of an arrow indicating direction of flow and an abbreviation of the service. Piping shall be labeled close to valves, at changes in direction, at branches, at access panels, where pipes pass through the floor before going through the floor), and at entry point into rooms, however, spacing of markers shall not exceed twenty feet. Markers shall be in contrasting color, such as black or white placed conspicuous location subject to approval by the Engineer. The marker shall consist of an arrow, approximately six inches in length with the width to be determined by letter height, and an abbreviation of the service (FL) for Fireline).
The following table of letter sizes shall apply.

Pipe and Covering O.D.	Letter Size
Under 1 inch diameter	1/2 inch
1 inch to 3 inch diameter	1 inch
Over 3 inch diameter	2 inches

3.14 FIELD QUALITY CONTROL

A. Perform the following field tests and inspections and prepare test reports:
   1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
   2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
   3. Energize circuits to electrical equipment and devices.
   4. Start and run air compressors.
   5. Flush, test, and inspect sprinkler systems according to NFPA 13, "Systems Acceptance" Chapter.
   6. Coordinate with fire alarm tests. Operate as required.
   7. Verify that equipment hose threads are same as local fire department equipment.

B. Report test results promptly and in writing to Architect and authorities having jurisdiction.

3.15 CLEANING AND PROTECTION

A. Clean dirt and debris from sprinklers.

B. Remove and replace sprinklers with paint other than factory finish.

C. Protect sprinklers from damage until Substantial Completion.

3.16 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain specialty valves. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 21 10 00

SECTION 23 21 23 - HYDRONIC PUMPS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Refer to Division 23 Section “Common Motor Requirements for HVAC Equipment”.
   1. All motors energized by a variable frequency controller shall include a maintenance free, circumferential, conductive microfiber shaft grounding ring to discharge shaft currents to ground.

B. Refer to Division 26 Section “General Electrical Requirements”.

1.2 SUMMARY

A. This Section includes the following:
   1. Close-coupled, in-line centrifugal pumps.
   2. Pump specialty fittings.

1.3 DEFINITIONS

A. Buna-N: Nitrile rubber.

B. EPT: Ethylene propylene terpolymer.

1.4 ACTION SUBMITTALS

A. Product Data: Include certified performance curves and rated capacities, operating characteristics, furnished specialties, final impeller dimensions, and accessories for each type of product indicated. Indicate pump's operating point on curves.

1.5 CLOSEOUT SUBMITTALS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals.
   1. Operation and Maintenance Data: For pumps to include in emergency, operation, and maintenance manuals.

1.6 QUALITY ASSURANCE

A. Source Limitations: Obtain hydronic pumps through one source from a single manufacturer.

B. Product Options: Drawings indicate size, profiles, and dimensional requirements of hydronic pumps and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements."

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

D. UL Compliance: Comply with UL 778 for motor-operated water pumps.

E. Each pump shall be provided with premium efficient motors.

F. Impellers shall be sized for a maximum diameter not to exceed 85 percent of the pumps largest diameter.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Manufacturer's Preparation for Shipping: Clean flanges and exposed machined metal surfaces and treat with anticorrosion compound after assembly and testing. Protect flanges, pipe openings, and nozzles with wooden flange covers or with screwed-in plugs.

B. Store pumps in dry location.

C. Retain protective covers for flanges and protective coatings during storage.

D. Protect bearings and couplings against damage from sand, grit, and other foreign matter.

E. Comply with pump manufacturer's written rigging instructions.

1.8 COORDINATION

A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 03.

1.9 EXTRA MATERIALS AND TRIMMING

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Mechanical Seals: One mechanical seal(s) for each pump.
   2. Provide services to trim each pump impeller to specific performance characteristics as specified.

1.10 WARRANTY

A. Manufacturer’s standard form in which manufacturer agrees to repair or replace components that fail in materials or workmanship within specified warranty period.
   1. Warranty Period: ~~***One year***~~ ***Five years parts and labor*** from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 CLOSE-COUPLED, IN-LINE CENTRIFUGAL PUMPS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Armstrong Pumps Inc.
   2. Bell & Gossett; Div. of ITT Industries.
   3. Grundfos Pumps Corporation.
   4. Patterson Pump Co.; a Subsidiary of The Gorman-Rupp Co.
   5. Taco, Inc.

B. Description: Factory-assembled and -tested, centrifugal, overhung-impeller, close-coupled, in-line pump as defined in HI 1.1-1.2 and HI 1.3; designed for installation with pump and motor shafts mounted horizontally or vertically. Rate pump for 175-psig minimum working pressure and a continuous water temperature of 225 deg F.

C. Pump Construction:
   1. Casing: Radially split, cast iron, with replaceable bronze wear rings, threaded gauge tappings at inlet and outlet, and threaded companion-flange connections.
   2. Impeller: ASTM B 584, cast bronze; statically and dynamically balanced, keyed to shaft, and secured with a locking cap screw. Trim impeller to match specified performance.
   3. Pump Shaft: Stainless steel.

4. Mechanical Seal: Carbon rotating ring against a ceramic seat held by a stainless-steel spring, and EPT bellows and gasket. Include water slinger on shaft between motor and seal.
5. Pump Bearings: Oil lubricated; bronze-journal or thrust type.

D. NEMA Premium Efficient Motor: Single speed, with permanently lubricated or grease-lubricated ball bearings, unless otherwise indicated; and rigidly mounted to pump casing. Motor shall be nonoverloading throughout the entire pump curved. Comply with requirements in Division 23 Section "Common Motor Requirements for HVAC Equipment."

2.2 PUMP SPECIALTY FITTINGS

A. Triple-Duty Valve: Angle or straight pattern, 175-psig pressure rating, cast-iron body, pump-discharge fitting; with drain plug and bronze-fitted shutoff, balancing, and check valve features. Brass gauge ports with integral check valve, and orifice for flow measurement.

B. All pump fittings to be provided by the same manufacturer as the pump.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine equipment foundations and anchor-bolt locations for compliance with requirements for installation tolerances and other conditions affecting performance of work.

B. Examine roughing-in for piping systems to verify actual locations of piping connections before pump installation.

C. Examine foundations and inertia bases for suitable conditions where pumps are to be installed.

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

3.2 PUMP INSTALLATION

A. Comply with HI 1.4 and HI 2.4.

B. Install pumps with access for periodic maintenance including removal of motors, impellers, couplings, and accessories.

C. Independently support pumps and piping so weight of piping is not supported by pumps and weight of pumps is not supported by piping.

D. Vibration isolation devices are specified in Division 23 Section "Vibration Controls for HVAC Piping and Equipment." Fabricate brackets or supports as required. Hanger and support materials are specified in Division 23 Section "Hangers and Supports for HVAC Piping and Equipment."

E. Suspend vertically mounted, in-line centrifugal pumps independent of piping. Install pumps with motor and pump shafts vertical. Vibration isolation devices are specified in Division 21 Section "Vibration Controls for HVAC Piping and Equipment." Hanger and support materials are specified in Division 22 Section “Hangers and Supports for HVAC Piping and Equipment."

F. Provide services to trim pump impellers for specific performance requirements as specified.

3.3 ALIGNMENT

A. Align pump and motor shafts and piping connections after setting on foundation, grout has been set and foundation bolts have been tightened, and piping connections have been made.

B. Comply with pump and coupling manufacturers' written instructions.

C. Adjust pump and motor shafts for angular and offset alignment by methods specified in HI 1.1-1.5, "Centrifugal Pumps for Nomenclature, Definitions, Application and Operation or HI 2.1-2.5, "Vertical Pumps for Nomenclature, Definitions, Application and Operation."

D. After alignment is correct, tighten foundation bolts evenly but not too firmly. Completely fill baseplate with nonshrink, nonmetallic grout while metal blocks and shims or wedges are in place. After grout has cured, fully tighten foundation bolts.

3.4 CONNECTIONS

A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to machine to allow service and maintenance.

C. Connect piping to pumps. Install valves that are same size as piping connected to pumps.

D. Install suction and discharge pipe sizes equal to or greater than diameter of pump nozzles.

E. Install check valve and balancing or triple-duty valve on discharge side of pumps.

F. Install Y-type strainer or suction diffuser and shutoff valve on suction side of pumps.

G. Install flexible connectors on suction and discharge sides of base-mounted pumps between pump casing and valves.

H. Install pressure gauges on pump suction and discharge, at integral pressure-gauge tapping. Install single gauge with multiple input selector valve.

I. Install check valve and ball valve on each condensate pump unit discharge.

J. Install electrical connections for power, controls, and devices.

K. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."

L. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

3.5 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.
   1. Complete installation and startup checks according to manufacturer's written instructions.
   2. Check piping connections for tightness.
   3. Clean strainers on suction piping.
   4. Perform the following startup checks for each pump before starting:
      a. Verify bearing lubrication.
      b. Verify that pump is free to rotate by hand and that pump for handling hot liquid is free to rotate with pump hot and cold. If pump is bound or drags, do not operate until cause of trouble is determined and corrected.
      c. Verify that pump is rotating in the correct direction.
   5. Prime pump by opening suction valves and closing drains, and prepare pump for operation.
   6. Start motor.
   7. Open discharge valve slowly.

3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain hydronic pumps. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 23 21 23

SECTION 23 36 00 - AIR TERMINAL UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Shutoff single-duct air terminal units.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product indicated, include rated capacities, furnished specialties, sound-power ratings, and accessories.

B. Shop Drawings: Detail equipment assemblies and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
   1. Include a schedule showing unique model designation, room location, model number, size, and accessories furnished.

C. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
   1. Ceiling suspension assembly members.
   2. Method of attaching hangers to building structure.
   3. Size and location of initial access modules for acoustical tile.
   4. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.

1.3 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
   1. Operation and Maintenance Data: For air terminal units to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data" include the following:
      a. Instructions for resetting minimum and maximum air volumes.
      b. Instructions for adjusting software set points.

1.4 QUALITY ASSURANCE

A. Product Options: Drawings indicate size, profiles, and dimensional requirements of air terminal units and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements."

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. NFPA Compliance: Install air terminal units according to NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems."

1.5 COORDINATION

A. Coordinate layout and installation of air terminal units and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

PART 2 - PRODUCTS

2.1 SHUTOFF SINGLE-DUCT AIR TERMINAL UNITS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Environmental Technologies, Inc.; Enviro-Air Div.
2. Krueger.
3. METALAIRE, Inc.; Metal Industries Inc.
4. Nailor Industries of Texas Inc.
5. Price Industries.
6. Titus.
7. Trane Co. (The); Worldwide Applied Systems Group.

B. Configuration: Volume-damper assembly inside unit casing with control components located inside a protective metal shroud.

C. Casing: 0.034-inch steel.
1. Casing Lining: 1-inch thick, ~~***coated, fibrous-glass***~~ ***fiber free*** duct liner complying with ASTM C 1071; secured with adhesive.
2. Air Inlet: Round stub connection or S-slip and drive connections for duct attachment.
3. Air Outlet: S-slip and drive connections.
4. Access: Removable panels for access to dampers and other parts requiring service, adjustment, or maintenance; with airtight gasket.

D. Volume Damper: Galvanized steel with peripheral gasket and self-lubricating bearings.
1. Maximum Damper Leakage: ARI 880 rated, 3 percent of nominal airflow at 3-inch wg inlet static pressure.
2. Damper Position: Normally open.

E. Damper Actuator
1. DDC electronic damper actuator for fixing air flow on terminal shall be supplied by temperature control contractor and shipped for factory installation by terminal unit manufacturer.

F. Velocity Sensor
1. For DDC control, velocity sensor shall be averaging multi-point flow cross or ring type provided as an integral part of box by terminal unit manufacturer. Control of terminal unit velocity sensor shall be by unitary controller provided by Temperature Control Contractor.

G. Attenuator Section: 0.034-inch steel sheet metal (factory provided or field fabricated).
1. Lining: 1-inch thick, ~~***coated, fibrous-glass***~~ ***fiber free*** duct liner complying with ASTM C 1071; secured with adhesive.
2. Line as a minimum the first four feet after the heating coil unless indicated otherwise on Contract Documents.

H. Multioutlet Attenuator Section: With collars of size and quantity denoted on Drawings; each with locking butterfly balancing damper.

I. Hot-Water Heating Coil: Copper tube, mechanically expanded into aluminum-plate fins; leak tested underwater to 200 psig; and factory installed.

J. DDC Controls: Single-package unitary controller and actuator specified in Division 23 Section "Instrumentation and Control for HVAC."

K. Factory-Mounted and Wired Controls: Electrical components shall be mounted in control box with removable cover. Incorporate single-point electrical connection to power source.
1. Control Transformer: Factory mounted for control voltage on electric and electronic control units with terminal strip in control box for field wiring of thermostat and power source.

2. Wiring Terminations: Fan, relay, and controls to terminal strip, and terminal lugs shall match quantities, sizes, and materials of branch-circuit conductors. Enclose terminal lugs in terminal box that is sized according to NFPA 70.
3. Disconnect Switch: Factory-mounted, fused type.
4. All controls shall be mounted in a NEMA 1 enclosure.
5. Temperature Control Contractor shall provide DDC unitary controller to terminal unit manufacturer complete with wiring diagram for factory installation by terminal unit manufacturer, at cost to the terminal unit manufacturer.
6. All testing and calibration of control system shall be by Temperature Control Contractor.

2.2 SOURCE QUALITY CONTROL

A. Identification: Label each air terminal unit with plan number, nominal airflow, maximum and minimum factory-set airflows, coil type, and ARI certification seal.

B. Verification of Performance: Rate air terminal units according to ARI 880.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install air terminal units level and plumb. Maintain sufficient clearance for normal service and maintenance.

3.2 CONNECTIONS

A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to air terminal units to allow service and maintenance.

C. Hot-Water Piping: In addition to requirements in Division 23 Section "Hydronic Piping," connect heating coils to supply with shutoff valve, strainer, control valve, and union or flange; and to return with balancing valve or automatic flow control valve and union or flange.

D. Connect ducts to air terminal units according to Division 23 Section "Metal Ducts."

E. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

F. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3.3 FIELD QUALITY CONTROL

A. Perform the following field tests and inspections and prepare test reports:
1. After installing air terminal units and after electrical circuitry has been energized, test for compliance with requirements.
2. Leak Test: After installation, fill water coils and test for leaks. Repair leaks and retest until no leaks exist.
3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

B. Remove and replace malfunctioning units and retest as specified above.

3.4 STARTUP SERVICE

A. Complete installation and startup checks according to manufacturer's written instructions and do the following:
   1. Verify that inlet duct connections are as recommended by air terminal unit manufacturer to achieve proper performance.
   2. Verify that controls and control enclosure are accessible.
   3. Verify that control connections are complete.
   4. Verify that nameplate and identification tag are visible.
   5. Verify that controls respond to inputs as specified.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain air terminal units. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 23 36 00

SECTION 23 74 13 - PACKAGED, OUTDOOR, CENTRAL-STATION AIR-HANDLING UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes packaged, outdoor, central-station air-handling units (rooftop units) with the following components and accessories:
   1. Direct-expansion cooling.
   2. Heat-pump refrigeration components.
   3. Hot-gas reheat.
   4. Gas furnace.
   5. Economizer outdoor- and return-air damper section.
   6. Integral, space temperature controls.
   7. Roof curbs.

1.2 DEFINITIONS

A. DDC: Direct-digital controls.

B. ECM: Electrically commutated motor.

C. Outdoor-Air Refrigerant Coil: Refrigerant coil in the outdoor-air stream to reject heat during cooling operations and to absorb heat during heating operations. "Outdoor air" is defined as the air outside the building or taken from outdoors and not previously circulated through the system.

D. Outdoor-Air Refrigerant-Coil Fan: The outdoor-air refrigerant-coil fan in RTUs. "Outdoor air" is defined as the air outside the building or taken from outdoors and not previously circulated through the system.

E. RTU: Rooftop unit. As used in this Section, this abbreviation means packaged, outdoor, central-station air-handling units. This abbreviation is used regardless of whether the unit is mounted on the roof or on a concrete base on ground.

F. Supply-Air Fan: The fan providing supply air to conditioned space. "Supply air" is defined as the air entering a space from air-conditioning, heating, or ventilating apparatus.

G. Supply-Air Refrigerant Coil: Refrigerant coil in the supply-air stream to absorb heat (provide cooling) during cooling operations and to reject heat (provide heating) during heating operations. "Supply air" is defined as the air entering a space from air-conditioning, heating, or ventilating apparatus.

1.3 ACTION SUBMITTALS

A. Product Data: Include manufacturer's technical data for each RTU, including rated capacities, dimensions, required clearances, characteristics, furnished specialties, and accessories.

B. Coordination Drawings: Plans and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
   1. Structural members to which RTUs will be attached.
   2. Roof openings
   3. Roof curbs and flashing.

1.4 INFORMATIONAL/QUALITY ASSURANCE/CONTROL SUBMITTALS

A. Warranty:
   1. Provide full parts and labor warranty for ~~***24 months***~~ ***five years*** following initial startup
   ~~***2. Special warranty specified in this Section.***~~

1.5 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
   1. Operation and Maintenance Data: For RTUs to include in emergency, operation, and maintenance manuals.

1.6 QUALITY ASSURANCE

A. ARI Compliance:
   1. Comply with ARI 210/240 and ARI 340/360 for testing and rating energy efficiencies for RTUs.
   2. Comply with ARI 270 for testing and rating sound performance for RTUs.

B. ASHRAE Compliance:
   1. Comply with ASHRAE 15 for refrigeration system safety.
   2. Comply with ASHRAE 33 for methods of testing cooling and heating coils.
   3. Comply with ASHRAE/IESNA 90.1 for minimum efficiency of heating and cooling.

C. NFPA Compliance: Comply with NFPA 90A and NFPA 90B.

D. UL Compliance: Comply with UL 1995.

E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

~~***1.7 WARRANTY***~~

~~***A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to replace components of RTUs that fail in materials or workmanship within specified warranty period.***~~
   ~~***1. Warranty Period for Compressors: Manufacturer's standard, but not less than five (5) years from date of Substantial Completion.***~~
   ~~***2. Warranty Period for Gas Furnace Heat Exchangers: Manufacturer's standard, but not less than five (5) years from date of Substantial Completion.***~~

1.8 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Fan Belts: One set for each belt-driven fan.
   2. Filters: ~~***One***~~ ***Two sets*** of filters for each unit.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Carrier Corporation.
   2. Daikin.
   3. Trane; American Standard Companies, Inc.
   4. Johnson Controls Inc..

2.2 CASING

A. General Fabrication Requirements for Casings: Formed and reinforced double-wall insulated panels, fabricated to allow removal for access to internal parts and components, with joints between sections sealed.

B. Exterior Casing Material: Galvanized steel with factory-painted finish, with pitched roof panels and knockouts with grommet seals for electrical and piping connections and lifting lugs.
   1. Exterior Casing Thickness: 0.052 inch thick.

C. Inner Casing Fabrication Requirements:
   1. Inside Casing: Galvanized steel, 0.034 inch thick.

D. Casing Insulation and Adhesive: Comply with NFPA 90A or NFPA 90B.
   1. Materials: ASTM C 1071, Type I.
   2. Thickness: 1 inch.
   3. Liner materials shall have air-stream surface coated with an erosion- and temperature-resistant coating or faced with a plain or coated fibrous mat or fabric.
   4. Liner Adhesive: Comply with ASTM C 916, Type I.

E. Condensate Drain Pans: Formed sections of stainless-steel sheet, a minimum of 2 inches deep, and complying with ASHRAE 62.
   1. Double-Wall Construction: Fill space between walls with foam insulation and seal moisture tight.
   2. Drain Connections: Threaded nipple.

2.3 FANS

A. Direct-Driven Supply-Air Fans: Double width, forward curved or backward inclined, centrifugal; with permanently lubricated, multispeed motor resiliently mounted in the fan inlet. Aluminum or painted-steel wheels, and galvanized- or painted-steel fan scrolls.

B. Condenser-Coil Fan: Propeller, mounted on shaft of permanently lubricated motor.

C. Relief-Air Fan: Forward curved or backward inclined, shaft mounted on permanently lubricated motor.

D. Fan Motor: Comply with requirements in Division 23 Section "Common Motor Requirements for HVAC Equipment."

E. All motors driven by a variable frequency controller shall include a maintenance free, circumferential, conductive microfiber shaft grounding ring (AEGIS-SGR) to discharge shaft currents to ground.

2.4 COILS

A. Supply-Air Refrigerant Coil:
   1. Aluminum-plate fin and seamless copper tube in steel casing with equalizing-type vertical distributor.
   2. Polymer strip shall prevent all copper coil from contacting steel coil frame or condensate pan.
   3. Coil Split: Interlaced.
   4. Coating.
   5. Condensate Drain Pan: Stainless steel formed with pitch and drain connections complying with ASHRAE 62.

B. Outdoor-Air Refrigerant Coil:
   1. Aluminum-plate fin and seamless copper tube in steel casing with equalizing-type vertical distributor.

2. Polymer strip shall prevent all copper coil from contacting steel coil frame or condensate pan.

C. Hot-Gas Reheat Refrigerant Coil:
1. Aluminum-plate fin and seamless copper tube in steel casing with equalizing-type vertical distributor.
2. Polymer strip shall prevent all copper coil from contacting steel coil frame or condensate pan.

2.5 REFRIGERANT CIRCUIT COMPONENTS

A. Number of Refrigerant Circuits: ~~***[One] [Two] <Insert number>.***~~ ***Per Manufacturer.***

B. Compressor: Hermetic, scroll, mounted on vibration isolators; with internal overcurrent and high-temperature protection, internal pressure relief, and crankcase heater.

C. Refrigeration Specialties:
1. Refrigerant Charge: R-32, or R-454b.
2. Expansion valve with replaceable thermostatic element.
3. Refrigerant filter/dryer.
4. Manual-reset high-pressure safety switch.
5. Automatic-reset low-pressure safety switch.
6. Minimum off-time relay.
7. Automatic-reset compressor motor thermal overload.
8. Brass service valves installed in compressor suction and liquid lines.
9. Low-ambient kit high-pressure sensor.
10. Hot-gas reheat solenoid valve with a replaceable magnetic coil.
11. Hot-gas bypass solenoid valve with a replaceable magnetic coil.
12. Four-way reversing valve with a replaceable magnetic coil, thermostatic expansion valves with bypass check valves, and a suction line accumulator.

2.6 AIR FILTRATION

A. Minimum arrestance according to ASHRAE 52.1, and a minimum efficiency reporting value (MERV) according to ASHRAE 52.2.
1. Pleated: Minimum 90 percent arrestance, and MERV 13.

2.7 GAS FURNACE

A. Description: Factory assembled, piped, and wired; complying with ANSI Z21.47 and NFPA 54.
1. CSA Approval: Designed and certified by and bearing label of CSA.

B. Burners: Stainless steel with a minimum thermal efficiency of 80 percent.
1. Fuel: Natural gas.
2. Ignition: Electronically controlled electric spark or hot-surface igniter with flame sensor.

C. Heat-Exchanger and Drain Pan: Stainless steel.

D. Venting: Gravity vented with vertical extension.

E. Power Vent: Integral, motorized centrifugal fan interlocked with gas valve with vertical extension.

F. Safety Controls:
1. Gas Control Valve: Modulating.
2. Gas Train: Single-body, regulated, redundant, 24-V ac gas valve assembly containing pilot solenoid valve, pilot filter, pressure regulator, pilot shutoff, and manual shutoff.

2.8 DAMPERS

A. Outdoor-Air Damper: Linked damper blades, for 0 to 25 percent outdoor air, with motorized damper.

B. Outdoor- and Return-Air Mixing Dampers: Parallel- or opposed-blade galvanized-steel dampers mechanically fastened to cadmium plated for galvanized-steel operating rod in reinforced cabinet. Connect operating rods with common linkage and interconnect linkages so dampers operate simultaneously.
   1. Damper Motor: Modulating with adjustable minimum position.
   2. Relief-Air Damper: Gravity actuated with bird screen and hood.

2.9 ELECTRICAL POWER CONNECTION

A. Provide for single connection of power to unit with unit-mounted disconnect switch accessible from outside unit and control-circuit transformer with built-in overcurrent protection.

2.10 DUAL-PLY AIR-INTAKE FILTER SCREEN SYSTEM

A. Outer ply shall consist of a commercial-grade screen that has a smooth UV resistant vinyl coating over a polyester-fiber core. The inner ply shall consist of a fine mesh screen that has electrostatic properties. Both filters shall be constructed as a single filter using a 0.3 mm heavy duty, fiber reinforced vinyl outer binding wrapped around the edge on all sides to provide a 1.125” face and back binding for high strength and durability. Binding is to be sewn to the mesh using double row of double-lock stitching. Heavy duty nylon, rust proof grommets compatible with mechanicaly locking twist fasteners must be uniformly spaced around the perimeter of the outer biding and located 9/16” from center of grommet to edge of filer. Nylon twist lock fasteners with self-drilling screws must be included.

B. Filters shall be weather-resistant, mold and mildew resistant, flame-retardant, and UV-resistant.

C. Filter screens shall be cleanable without removal.

D. Dual-Ply Performance: Airflow performance shall be less than or equal to 0.006 ich w.g. at 100 fpm, 0.083 inch w.g. at 400 fpm and 0.174 inch w.g. at 600 fpm.

E. Filter screens shall be installed on the outside of outside air-intake. Coordinate with equipment manufacturer.

F. Provide equivalent to Air Solution Company.

2.11 CONTROLS

A. Control equipment and sequence of operation are specified in Division 23 Section "Instrumentation and Control for HVAC."

B. Interface Requirements for HVAC Instrumentation and Control System:
   1. Interface relay for scheduled operation.
   2. Interface relay to provide indication of fault at the central workstation and diagnostic code storage.
   3. Provide BACnet compatible interface for central HVAC control workstation for the following: Communication protocol shall be coordinated with the Temperature Control Contractor.
      a. Adjusting set points.
      b. Monitoring supply fan start, stop, and operation.
      c. Inquiring data to include outdoor-air damper position, supply- and room-air temperature and humidity.
      d. Monitoring occupied and unoccupied operations.

2.12 ACCESSORIES

A. Electric heater with integral thermostat maintains minimum 50 deg F temperature in gas burner compartment.

B. Duplex, 115-V, ground-fault-interrupter outlet with 15-A overcurrent protection. Include transformer if required. Outlet shall be energized even if the unit main disconnect is open.

C. Filter differential pressure switch with sensor tubing on either side of filter. Set for final filter pressure loss.

D. Coil guards of painted, galvanized-steel wire.

2.13 STRUCTURAL ROOF CURBS

A. Roof curbs with vibration isolators specified in Division 23 Section "Vibration Controls for HVAC Piping and Equipment."

B. Equipment Supports: Internally reinforced metal equipment supports capable of supporting superimposed live and dead loads, including equipment loads and other construction indicated on Drawings; with welded or mechanically fastened and sealed corner joints, integral metal cant, and integrally formed deck-mounting flange at perimeter bottom.

C. Materials: Galvanized steel with corrosion-protection coating, watertight gaskets, and factory-installed wood nailer; complying with NRCA standards.
   1. Curb Insulation and Adhesive: Comply with NFPA 90A or NFPA 90B.
      a. Materials: ASTM C 1071, Type I or II.
      b. Thickness: 1-1/2 inches.
   2. Application: Factory applied with adhesive and mechanical fasteners to the internal surface of curb.
      a. Liner Adhesive: Comply with ASTM C 916, Type I.
      b. Mechanical Fasteners: Galvanized steel, suitable for adhesive attachment, mechanical attachment, or welding attachment to duct without damaging liner when applied as recommended by manufacturer and without causing leakage in cabinet.
      c. Liner materials applied in this location shall have air-stream surface coated with a temperature-resistant coating or faced with a plain or coated fibrous mat or fabric depending on service air velocity.
      d. Metal Counterflashing: Manufacturer’s standard, removable, fabricated of same metal and finish as equipment support. Coordinate with roofing contractor.
      e. On ribbed or fluted metal roofs, form deck-mounting flange at perimeter bottom to conform to roof profile.
      f. Fabricate pedestal curb equipment supports to minimum height of 36 inches unless otherwise indicated.
      g. Sloping Roofs: Where roof slope exceeds 1:48, fabricate each support with height to accommodate roof slope so that tops of supports are level with each other. Equip supports with water diverters or crickets on sides that obstruct water flow.

2.14 SOURCE QUALITY CONTROL

A. Fan Sound-Power Level Ratings: Comply with AMCA 301, "Methods for Calculating Fan Sound Ratings from Laboratory Test Data." Test fans according to AMCA 300, "Reverberant Room Method for Sound Testing of Fans." Fans shall bear AMCA-certified sound ratings seal.

B. Fan Performance Rating: Factory test fan performance for airflow, pressure, power, air density, rotation speed, and efficiency. Rate performance according to AMCA 210, "Laboratory Methods of Testing Fans for Aerodynamic Performance Rating."

2.15 VARIABLE FREQUENCY CONTROLLERS

A. Description: NEMA ICS 2, IGBT, PWM, VFC; listed and labeled as a complete unit and arranged to provide variable speed of an NEMA MG 1, Design B, 3-phase induction motor by adjusting output voltage and frequency.
   1. Provide unit suitable for operation of premium-efficiency motor as defined by NEMA MG 1.

B. Design and Rating: Match load type such as fans, blowers, and pumps; and type of connection used between motor and load such as direct or through a power-transmission connection. RTU Manufacturer provided and installed.

C. Output Rating: 3-phase; 6 to 60 Hz, with voltage proportional to frequency throughout voltage range.

D. Unit Operating Requirements:
   1. Input ac voltage tolerance of 208 V, plus or minus 10 percent.
   2. Input ac voltage tolerance of 380 to 500 V, plus or minus 10 percent.
   3. Input frequency tolerance of 60 Hz, plus or minus 6 percent.
   4. Minimum Efficiency: 96 percent at 60 Hz, full load.
   5. Minimum Displacement Primary-Side Power Factor: 96 percent.
   6. Overload Capability: 1.1 times the base load current for 60 seconds; 2.0 times the base load current for 3 seconds.
   7. Starting Torque: 100 percent of rated torque or as indicated.
   8. Speed Regulation: Plus or minus 1 percent.

E. Automatic Reset/Restart: Attempts three restarts after controller fault or on return of power after an interruption and before shutting down for manual reset or fault correction. Bidirectional autospeed search shall be capable of starting into rotating loads spinning in either direction and returning motor to set speed in proper direction, without damage to controller, motor, or load.

F. Enclosures: NEMA 250, Type 3R, unless otherwise indicated

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of RTUs.

B. Examine roughing-in for RTUs to verify actual locations of piping and duct connections before equipment installation.

C. Examine roofs for suitable conditions where RTUs will be installed.

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

3.2 INSTALLATION

A. Roof Curb: Install on roof structure, level and secure, according to NRCA's "Low-Slope Membrane Roofing Construction Details Manual," Illustration "Raised Curb Detail for Rooftop Air Handling Units and Ducts." and ARI Guideline B. Install RTUs on curbs and coordinate roof penetrations and flashing with roof construction specified in Division 07 Section "Roof Accessories." Secure RTUs to upper curb rail, and secure curb base to roof framing or concrete base with anchor bolts.

B. Unit Support: Install unit level on structural curbs. Coordinate wall penetrations and flashing with wall construction. Secure RTUs to structural support with anchor bolts.

3.3 CONNECTIONS

A. Install condensate drain, minimum connection size, with trap and indirect connection to nearest roof drain.

B. Install piping adjacent to RTUs to allow service and maintenance.
   1. Gas Piping: Comply with applicable requirements in Division 23 Section "Facility Natural-Gas Piping" Connect gas piping to burner, full size of gas train inlet, and connect with union and shutoff valve with sufficient clearance for burner removal and service.

C. Duct installation requirements are specified in other Division 23 Sections. Drawings indicate the general arrangement of ducts. The following are specific connection requirements:
   1. Install ducts to termination at top of roof curb.
   2. Remove roof decking only as required for passage of ducts. Do not cut out decking under entire roof curb.
   3. Connect supply ducts to RTUs with flexible duct connectors specified in Division 23 Section "Air Duct Accessories."
   4. Install return-air duct continuously through roof structure.

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections. Report results in writing.

B. Perform tests and inspections and prepare test reports.
   1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing. Report results in writing.

C. Tests and Inspections:
   1. After installing RTUs and after electrical circuitry has been energized, test units for compliance with requirements.
   2. Inspect for and remove shipping bolts, blocks, and tie-down straps.
   3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
   4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Remove and replace malfunctioning units and retest as specified above.

3.5 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.

B. Complete installation and startup checks according to manufacturer's written instructions and do the following:
   1. Inspect for visible damage to unit casing.
   2. Inspect for visible damage to furnace combustion chamber.
   3. Inspect for visible damage to compressor, coils, and fans.
   4. Inspect internal insulation.
   5. Verify that labels are clearly visible.
   6. Verify that clearances have been provided for servicing.
   7. Verify that controls are connected and operable.
   8. Verify that filters are installed.
   9. Clean condenser coil and inspect for construction debris.
   10. Clean furnace flue and inspect for construction debris.
   11. Connect and purge gas line.
   12. Remove packing from vibration isolators.

13. Inspect operation of barometric relief dampers.
14. Verify lubrication on fan and motor bearings.
15. Inspect fan-wheel rotation for movement in correct direction without vibration and binding.
16. Start unit according to manufacturer's written instructions.
    a. Start refrigeration system.
    b. Do not operate below recommended low-ambient temperature.
    c. Complete startup sheets and attach copy with Contractor's startup report.
17. Inspect and record performance of interlocks and protective devices; verify sequences.
18. Operate unit for an initial period as recommended or required by manufacturer.
19. Perform the following operations for both minimum and maximum firing. Adjust burner for peak efficiency.
    a. Measure gas pressure on manifold.
    b. Inspect operation of power vents.
    c. Measure combustion-air temperature at inlet to combustion chamber.
    d. Measure flue-gas temperature at furnace discharge.
    e. Perform flue-gas analysis. Measure and record flue-gas carbon dioxide and oxygen concentration.
    f. Measure supply-air temperature and volume when burner is at maximum firing rate and when burner is off. Calculate useful heat to supply air.
20. Calibrate thermostats.
21. Adjust and inspect high-temperature limits.
22. Inspect outdoor-air dampers for proper stroke and interlock with return-air dampers.
23. Start refrigeration system and measure and record the following when ambient is a minimum of 15 deg F above return-air temperature:
    a. Coil leaving-air, dry- and wet-bulb temperatures.
    b. Coil entering-air, dry- and wet-bulb temperatures.
    c. Outdoor-air, dry-bulb temperature.
    d. Outdoor-air-coil, discharge-air, dry-bulb temperature.
24. Inspect controls for correct sequencing of heating, mixing dampers, refrigeration, and normal and emergency shutdown.
25. Measure and record the following minimum and maximum airflows. Plot fan volumes on fan curve.
    a. Supply-air volume.
    b. Return-air volume.
    c. Relief-air volume.
    d. Outdoor-air intake volume.
26. Simulate maximum cooling demand and inspect the following:
    a. Compressor refrigerant suction and hot-gas pressures.
    b. Short circuiting of air through condenser coil or from condenser fans to outdoor-air intake.
27. Verify operation of remote panel including pilot-light operation and failure modes. Inspect the following:
    a. High-temperature limit on gas-fired heat exchanger.
    b. Low-temperature safety operation.
    c. Filter high-pressure differential alarm.
    d. Economizer to minimum outdoor-air changeover.
    e. Relief-air fan operation.
    f. Smoke and firestat alarms.
28. After startup and performance testing and prior to Substantial Completion, replace existing filters with new filters.

3.6 CLEANING AND ADJUSTING

A. After completing system installation and testing, adjusting, and balancing RTU and air-distribution systems, clean filter housings and install new filters.

3.7 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain RTUs. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 23 74 13

FANNING HOWEY

LAKE CAMPUS WORKFORCE DEVELOPMENT PROJECT

PRE-BID REQUEST FOR INTERPRETATION/CLARIFICATION LOG				
RFI#	**Date Received**	**Request for Interpretation Item**	**Dwg./Spec.**	**Response**
1	10-13-26	Specification Section 07 19 00 requires penetrating water-repellent treatment for new clay brick masonry; however, the drawings do not appear to identify the locations or extent of application. Please confirm whether water-repellent treatment is required on all new exterior brick veneer only, or whether existing brick masonry is also to receive treatment. If existing masonry is included, please identify the applicable elevations and limits of work.		It is to be applied to only the new brick.
2	10-13-26	Specification Section 05 12 00, Paragraph 2.16.A references a $3,000 allowance for structural steel shop testing when the fabricator is not certified. However, this allowance is not separately identified on the Bid Form. Please confirm whether the GC is required to include the $3,000 allowance in the Base Bid.		Only if certified fabricator is not used. This amount will be used as reimbursement to Owner for testing that is only required when fabricator is not certified.
3	10-23-26	Section 01 32 33 outlines extensive photographic and video documentation requirements, including the use of a qualified professional photographer. Please confirm whether all requirements outlined in this section will be enforced as written, or if standard construction progress photography and documentation performed by the General Contractor's project staff will be acceptable. Specifically, is a third-party professional photographer/ videographer required?		Refer to 01 32 33, Article 1.4.
4	10-13-26	Drawing IF-101 indicates dry-shake floor hardener (DSCH) in existing Welding/Machining Room 131. Since dry-shake hardener must be applied to freshly poured concrete, please clarify the intended installation method over the existing concrete slab.		Refer to Addendum No. 2.

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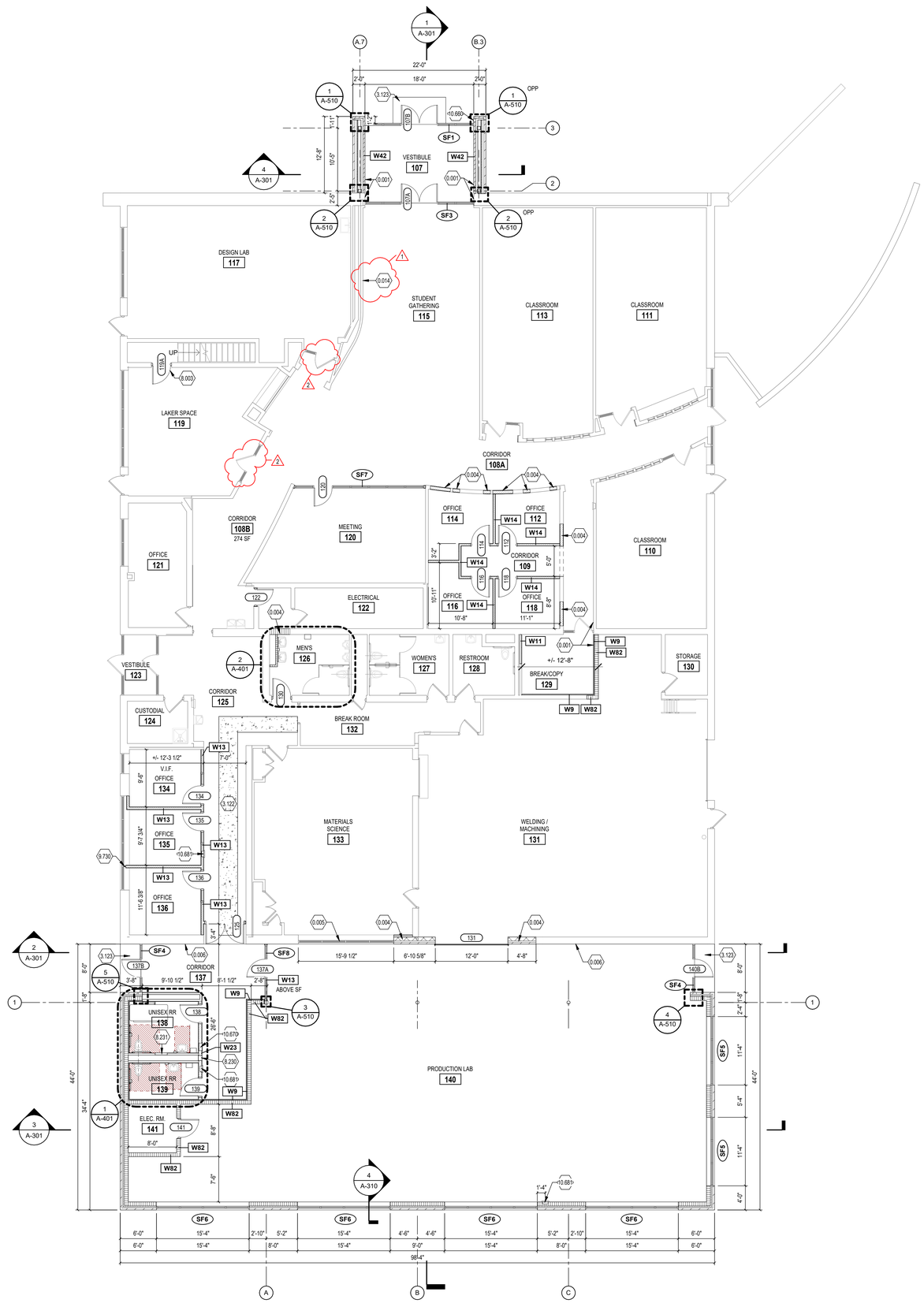
5	10-13-26	Please confirm that the Owner will contract directly with and pay for all code-required special inspections and associated testing, including soils, concrete, structural steel, and masonry where applicable. Please identify any additional third-party testing or inspection services that the General Contractor is required to procure and pay for under the Contract Documents.		Correct, code required special inspections will be provided by the Owner's testing agent.
6	10-15-26	Per the Public Bid Advertisement, the bid appears to be due November 4, 2026 @ 2:00 PM. However, on Bid Express, it is showing the deadline as 11/10/26. Please confirm actual bid date.		Refer to Addendum No. 1.
7	10-15-26	1. "Security Supplier" / Pro-Watch: who is it, and does it furnish and install readers, panels, contacts, REX, cable and programming? 08 06 71 lists readers "By Security Supplier"; ET51 shows rough-in only. 2. Low-voltage wiring for electrified hardware: who pulls and terminates wire from power supplies to strikes, harnesses, operators, actuators? Div 26 only gives 120 V (EP11 P4). 3. Access-control door list: hardware electrifies 117, 119, 137A, 137B, 138; ET11 shows 12 locations including Laker interior doors, 133, 131 (2), 108A and 123 vestibule that have no electrified hardware specified. Which list governs, and who supplies hardware at existing doors? 4. Cable tray type: 26 05 37 wire mesh (steel, 1'-0" clear above) vs ET11/ET51 aluminum ladder with 1" rungs @ 9" (6" clear above). 5. Camera scope: cameras, cable and VMS by WSU or contractor? Rough-in only shown. 6. Floor box: FSR FL-640P-8" (26 05 33, ET51) vs FSR FL-2000 (ET11 H, R5). 7. Comm handhole: 30"x42"x36" (26 05 43) vs 24"x30"x30" (ES101 S5). 8. Outlet conduit/box: ET11 note D 1-1/4" to 5"x5"x2.75" box vs ET51 legend 1" to 4-11/16" box. 9. Room 133 door: Alt 5 base bid says no new work in 133, but ET11 shows reader/strike/J-box at its door. Base or alternate? 10. Card reader height: 42" AFF (ET51) vs 44" AFF (ET11).		1. WSU furnishes and installs all security cabling, devices, and programming. Division 26 to provide rough ins and pathways only as shown on ET51. 2. WSU furnishes and installs all Security cabling. Division 26 to provide rough ins and pathways only as shown on ET51. Typically, all low-voltage wiring for access controls is by the Technology Contractor. 3. Refer to Addendum No. 2. 4. Refer to Addendum No. 2. 5. WSU furnishes and installs all cameras/cabling/VMS. Division 26 to provide rough ins and pathways only as shown on ET51. 6. Refer to Addendum No. 2. 7. Refer to Addendum No. 2. 8. Refer to Addendum No. 2. 9. Refer to Addendum No. 2. 10. Refer to Addendum No. 2. 11. Refer to Addendum No. 2. 12. Refer to Addendum No. 2. 13. Refer to Addendum No. 2. 14. Clocks are not included in this Project. 15. J-box shown in 124 is intended for main door access in 123 Vestibule. The J-box is used for Door Hardware. The Keynote P4 should explain everything. 16. Division 26 will be responsible for this work. 17. Refer to Addendum No. 2.

		11. Office outlets: note F requires 2 work-station locations per office; ET11 shows 1. 12. "B" tag beside existing classroom outlets (110, 111, 113) is undefined. 13. R6 4" conduits from the 2nd-floor tech room: new, or the existing drops on ETD1? 14. Clock: AC101 says "refer to technology drawings"; none shown. 15. J-box in Custodial 124 has no device tied to it. 16. Amphitheater cable (ETD1 D2): who pulls back and re-extends network, paging and camera cable? 17. WSU missing documents: issue the WSU Construction Electrical Specifications and Standards of Design referenced in 26 05 33 and the ET notes. 18. Div 27 references: 26 05 19 and 26 27 26 point to a Div 27 cabling section that does not exist — confirm all cabling will be done by WSU.		18. WSU furnishes and installs all low voltage cabling. Division 26 to provide rough ins and pathways only as shown on ET51.
8	10-16-26	Please clarify the following discrepancies and requirements associated with the welding gas distribution system: 1. Gas Types: Keynote 16 specifies connections for Argon and Argon/CO_2 mixture (75/25), while Keynote 19 references Argon, CO_2, and Argon/CO_2 mixture. Keynote 20 specifies a control panel for two gases. Please confirm whether two or three separate gas distribution systems are required. 2. Pipe Sizes: Keynote 19 specifies 3/4" gas supply drops, while the plumbing plan depicts 1" piping at the welding stations. Please confirm the required pipe sizes for the main distribution lines and individual station drops. 3. Piping Material: Please confirm the required piping material, fitting types, and applicable specifications for the welding gas distribution system.		1. A 2 gas system (100% Argon and mixed Argon/CO2) is required. Keynote 19 references pure CO2 mistakenly. 2. Horizontal Welding Gas piping design intent is 1" header size with individual ¾" size drops to welding booth outlet stations. 3. Refer to Addendum No. 2.
9	10-16-26	1. Electrified-hardware wiring: who pulls and terminates low-voltage wire from power supplies to strikes, harnesses, operators and actuators? Div 26 only provides 120 V (EP11 P4). 2. Enhanced-security doors: are any doors enhanced (second reader + siren box)? 3. Power meter data pathway: where is the meter E-701 sends "to data network"? Not on the ET sheets.		1. WSU furnishes and installs all Security cabling. Division 26 to provide rough ins and pathways only as shown on ET51. 2. The only Enhanced-Security door is the existing entrance at 123 Vestibule. Contractor shall confirm that all control/monitoring hardware for all exterior doors are installed according to WSU standards as shown on ET51. 3. Power meter data pathway is existing and shall remain in place.

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10	10-21-26	With starting the project in December, is there a chance that you would want the roof installed before April/May? Weather may not allow for an adhered roofing system. I believe the roof on Trenary Hall Is currently a mechanically fastened Duro-Last roof. Any reason why an adhered system is being called for? Will a mechanically fastened membrane system be allowed?		Adhered is preferred. Will only look at mechanically fastened or induction weld assembly if absolutely necessary by Change Order.
11	10-21-26	New 400 AMP Building Service - Can you advise if this can be directional bored and do we have to provide all other spare conduits per the duct bank detail 1D on sheet E-501. The one-line diagram on sheet E-701 only calls for a quantity of (1) 4" conduit to feed T2-MDP electrical panel but the detail mentioned above requires a quantity of (2).		Only one 4” conduit is needed for T2-MDP.
12	10-21-26	Are there any drawings of the existing building available?		Refer to Addendum No. 3 for available existing Drawings.
13	10-22-26	1. It will not be a part of our scope to install any technology cabling correct only back boxes and conduit risers per drawings ETD1, ET11, ET21, ET51, ET52. 2. Per site drawing ES101 note S4 we are to reroute existing conduits to the amphitheater into the new addition, can you advise what is in each of those conduit and if any of it is technology cabling then will Wright State provide their own cable and installation for that cable.		1. WSU will be providing and installing all technology cabling as stated on ET51, Detail No. 1. 2. Division 26 responsibility is providing the conduit pathway. WSU will be responsible for any technology cabling installation.
14	10-23-26	Can I get the existing sprinkler drawings for Trenary Hall at the Wright State University Lake Campus?		Refer to Addendum No. 3 for available existing Drawings.
15	10-23-26	1. Has an asbestos survey been performed. This will be required prior to construction to assure the proper personal protection is worn during the selective demolition per the EPA. 2. Can the as-built documents be downloaded? 3. The supplementary conditions identifies parking fees at the main campus and for all other campuses to be coordinated with the project manager. Confirm no parking fees apply to this project and all field workers are able to park in the parking lot, far away from the campus buildings to assure the students have parking.		1. WSU is working to locate or provide this information. 2. Refer to Addendum No. 3. 3. That is correct, there are no parking fees on this site, and contractor parking is far away from campus buildings to assure the students have parking. 4. The existing plate is to remain, refer to Addendum No. 3.

		4. The masonry exterior wall between the storefront and entrance for the vestibule addition will be removed. The soffit at the storefront and entrance is a metal plate that may be resting upon the removed masonry wall between the storefront and entrance. Confirm if the existing plate is to be replaced to provide structural support above the removed masonry wall. See attached photo.		
16	10-23-26	While reviewing the plans and specifications, we were able to identify the following signage scope: Section 10 14 19 – Dimensional Letter Signage Section 10 14 23.14 – Exterior Panel Signage (Security) Section 10 14 53 – Traffic Signage Based on our review, we found the exterior door security signage package consisting of 7" x 7" aluminum identification signs at exterior door locations, the "WORKFORCE DEVELOPMENT CENTER" dimensional letter signage, as well as accessible parking and accessible route signage. We also reviewed the architectural plans, door schedules, finish plans, equipment plans, and signage details; however, we were unable to locate a schedule or specifications for any interior room identification signs, ADA/Braille signs, restroom signs, occupancy signs, or wayfinding signage. Can you please confirm whether the signage scope is limited to the exterior/security, dimensional letter, and traffic signage identified above? If any interior signage is required, could you please direct us to the applicable drawings or specifications so we can include it in our pricing?		Interior signage is Owner supplied/Owner installed.
17	10/26/26	Underground sanitary waste/storm CA/Argon/CO2 - Can Underground sanitary waste and storm piping be sch 40 pvc with dwv fittings? Please provide specifications on the Compressed Air system - Pipe/fittings? Please provide specification on the CO2 system - Pipe/Fittings? Please Provide specification on the Argon system - Pipe/Fittings?		PVC piping is not included in the acceptable drainage piping materials due to WSU Construction Standards requiring Cast Iron. Bidding Contractors shall comply with the Division 22 Specifications. Addendum 2 Specification Section 22 15 19 clarified piping material requirements for compressed air and welding gases.
18	10/28/26	Please confirm whether PVC roofing membrane systems by GAF, Carlisle, FiberTite, or approved equal are acceptable as a substitution for the specified Duro-Last roofing system, provided all specified performance and warranty requirements are maintained.		No other manufacturers are acceptable.



1 FIRST FLOOR OVERALL PLAN

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

ROOM LEGEND - FIRST FLOOR

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
107	107	VESTIBULE	225 SF
108A	COR100	CORRIDOR	744 SF
108B	COR101	CORRIDOR	274 SF
109	COR102	CORRIDOR	213 SF
110	110	CLASSROOM	496 SF
111	111	CLASSROOM	612 SF
112	114D	OFFICE	93 SF
113	113	CLASSROOM	677 SF
114	114C	OFFICE	104 SF
115	115	STUDENT GATHERING	751 SF
116	114B	OFFICE	102 SF
117	117	DESIGN LAB	843 SF
118	114A	OFFICE	88 SF
119	119	LAKER SPACE	439 SF
120	120	MEETING	405 SF
121	121	OFFICE	197 SF
122	122A	ELECTRICAL	184 SF
123	123	VESTIBULE	57 SF
124	125	CUSTODIAL	70 SF
125	COR104	CORRIDOR	510 SF
126	124M	MEN'S	126 SF
127	124W	WOMEN'S	133 SF
128	126	RESTROOM	92 SF
129	112	BREAK/COPY	120 SF
130	133A	STORAGE	70 SF
131	133	WELDING / MACHINING	1,930 SF
132	128	BREAK ROOM	190 SF
133	130	MATERIALS SCIENCE	812 SF
134	127	OFFICE	112 SF
135	129	OFFICE	109 SF
136	131	OFFICE	131 SF
137	COR105	CORRIDOR	292 SF
138	138	UNISEX RR	97 SF
139	139	UNISEX RR	69 SF
140	140	PRODUCTION LAB	3,417 SF
141	140A	ELEC. RM.	64 SF
			14,846 SF

ARCHITECTURAL PLAN GENERAL NOTES

A. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
B. WHERE DISSIMILAR FLOOR MATERIALS MEET, THEY SHALL DO SO UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
C. THERE SHALL BE PERIMETER INSULATION CONTINUOUS AROUND THE ENTIRE PERIMETER OF THE BUILDING EXTENDING 2'-0" MINIMUM BELOW GRADE.
D. THE BASE FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.
E. ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE OF DECK ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO BE FILLED WITH MINERAL WOOL AT THE NON-RATED WALLS, TO ALLOW FOR DEFLECTION.
F. FOR TYPICAL COMMON JOINT DETAILS AND CONSTRUCTION MOVEMENT JOINT DETAILS REFER TO DETAILS ON SHEET A-502.
G. ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS, UNLESS NOTED OTHERWISE.
H. HINGE SIDE DOOR JAMB AT WALLS WILL TYPICALLY BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
I. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSE, EXCEPT AT WINDOW JAMBS, BULKHEADS, WINDOW AND DOOR HEADS.
J. SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIONS AND DETAIL REFERENCES.
K. REFER TO ROOM FINISH SCHEDULE OR PLAN AND EQUIPMENT PLANS FOR LOCATION AND EXTENT OF FINISH FLOOR MATERIALS.
L. PROVIDE WOOD BLOCKING AS REQUIRED. WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
M. REFER TO CODE PLANS FOR CODE INFORMATION.
N. PROVIDE SPRAY FOAM INSULATION AND THERMAL BARRIER CONTINUOUS AT INTERSECTION OF EXTERIOR WALLS AND DECK.

ARCHITECTURAL PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

—— W### INDICATES WALL TYPE. REFER TO DRAWING ____ FOR WALL THICKNESS, HEIGHT AND COMPOSITION.

NO.	DESCRIPTION
0.001	ALIGN FINISH FACES
0.004	INFILL TO MATCH ADJACENT CONSTRUCTION
0.005	EXISTING, MODIFIED STOREFRONT, 4 SALVAGED WINDOW PANES
0.006	PAINT THE EXISTING/INFILLED BRICK WALL AT THE INTERIOR ONLY - REFER TO FINISH PLANS FOR COLOR
0.014	PATCH WALL AT LOCATIONS WHERE CONDUIT HAS BEEN ADDED - REFER TO ELECTRICAL DRAWINGS.
3.122	CONCRETE SLAB ON VAPOR BARRIER ON DRAINAGE FILL - REFER TO STRUCTURAL DRAWINGS
3.123	CONCRETE FROST SLAB - REFER TO STRUCTURAL DRAWINGS
8.003	NEW DOOR FRAME, REINSTALL EXISTING WOOD DOOR. COORDINATE WITH ELECTRICAL AND TECHNOLOGY DRAWINGS. BASE BID.
8.230	ACCESS DOOR AND FRAME 10" x 24"
8.231	ACCESS DOOR AND FRAME 24" X 24"
9.730	SOUND BARRIER MULLION TRIM CAP
10.660	FIRE DEPARTMENT LOCK BOX
10.670	DEFIBRILLATOR CABINET (AED)
10.681	FIRE PROTECTION CABINET, SEMI-RECESSED

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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WRIGHT STATE UNIVERSITY

ARCHITECT

FANNING HOWEY

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128 W Market St, Celina, OH 45822

A
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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO JENNIFER M. FULLER 1115297 REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

DRAWN BY: EAH

PROJECT NUMBER: FH224102.00/WSU-231035

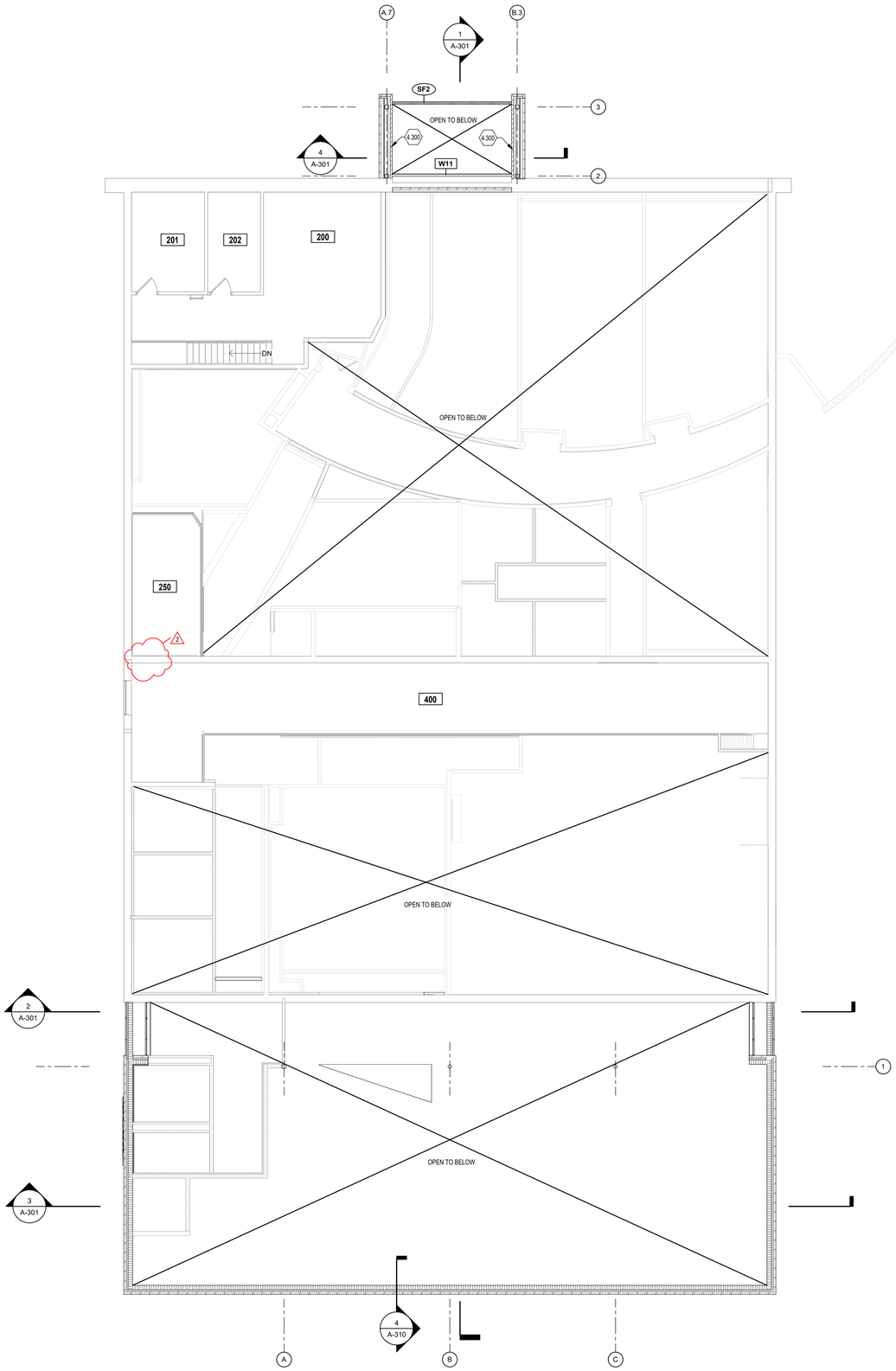
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 2	10.21.2026
2	ADDENDUM 3	10.29.2026

FIRST FLOOR PLAN

A-101

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1 MECHANICAL PLATFORM PLAN

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

ROOM LEGEND - SECOND FLOOR

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
201	201	BOILER	165 SF
202	202	IT CLOSET	120 SF
200	200	MECHANICAL PLATFORM	620 SF
250	250	TELECOM PLATFORM	223 SF
400	400	MECHANICAL PLATFORM	1,105 SF
			2,233 SF

ARCHITECTURAL PLAN GENERAL NOTES

A. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.
B. WHERE DISSIMILAR FLOOR MATERIALS MEET, THEY SHALL DO SO UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
C. THERE SHALL BE PERIMETER INSULATION CONTINUOUS AROUND THE ENTIRE PERIMETER OF THE BUILDING EXTENDING 2'-0" MINIMUM BELOW GRADE.
D. THE BASE FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.
E. ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE OF DECK ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO BE FILLED WITH MINERAL WOOL AT THE NON-RATED WALLS, TO ALLOW FOR DEFLECTION.
F. FOR TYPICAL COMMON JOINT DETAILS AND CONSTRUCTION MOVEMENT JOINT DETAILS REFER TO DETAILS ON SHEET A-502.
G. ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS. UNLESS NOTED OTHERWISE.
H. HINGE SIDE DOOR JAMB AT WALLS WILL TYPICALLY BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.
I. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSE, EXCEPT AT WINDOW JAMBS, BULKHEADS, WINDOW AND DOOR HEADS.
J. SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIONS AND DETAIL REFERENCES.
K. REFER TO ROOM FINISH SCHEDULE OR PLAN AND EQUIPMENT PLANS FOR LOCATION AND EXTENT OF FINISH FLOOR MATERIALS.
L. PROVIDE WOOD BLOCKING AS REQUIRED. WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.
M. REFER TO CODE PLANS FOR CODE INFORMATION.
N. PROVIDE SPRAY FOAM INSULATION AND THERMAL BARRIER CONTINUOUS AT INTERSECTION OF EXTERIOR WALLS AND DECK.

ARCHITECTURAL PLAN NOTES

(X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

—— W### INDICATES WALL TYPE. REFER TO DRAWING _____ FOR WALL THICKNESS, HEIGHT AND COMPOSITION.

NO. NOTE

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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128 W Market St, Celina, OH 45822

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO · JENNIFER M FULLER 1115297 · REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

DRAWN BY: Author

PROJECT NUMBER: FH224102.00/WSU-231035

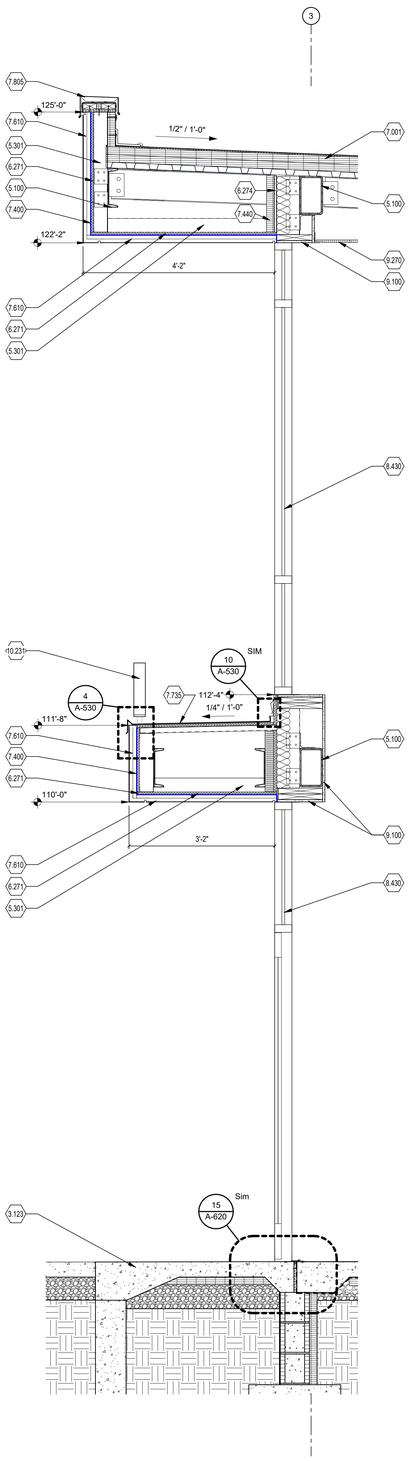
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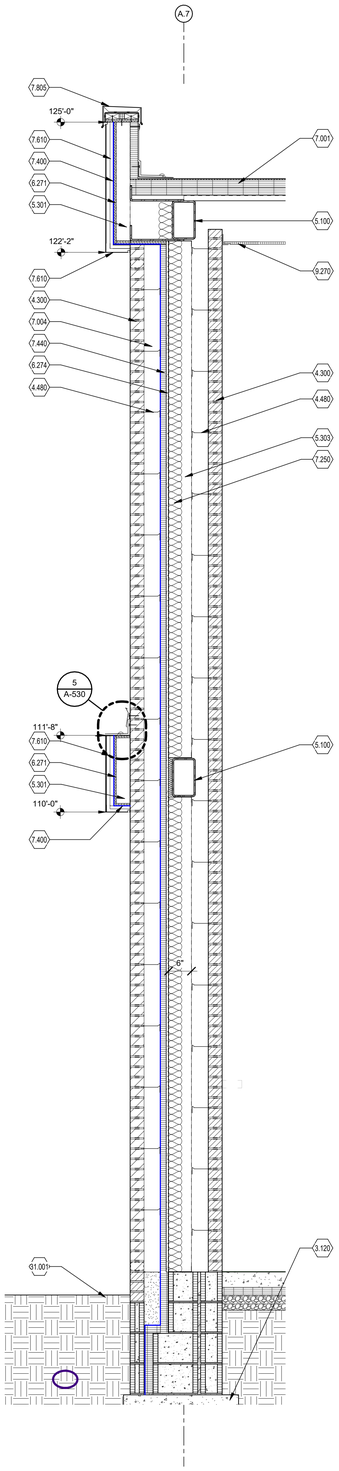
MECHANICAL PLATFORM PLAN

A-102

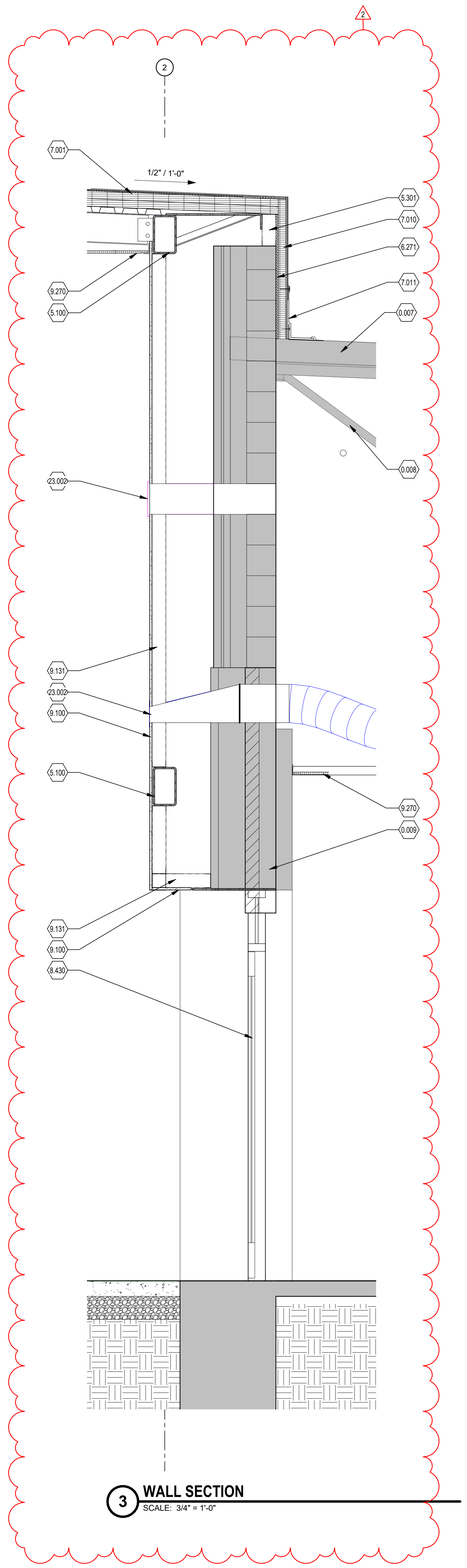
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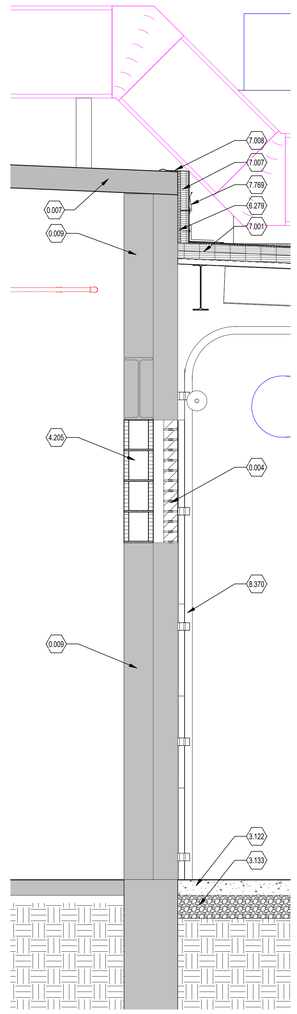
1 **WALL SECTION**
SCALE: 3/4" = 1'-0"



2 **WALL SECTION**
SCALE: 3/4" = 1'-0"



3 **WALL SECTION**
SCALE: 3/4" = 1'-0"



4 **WALL SECTION**
SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. COORDINATE ALL LINTEL AND BOND BEAM REQUIREMENTS WITH STRUCTURAL DRAWINGS AND PROJECT MANUAL.
B. REFER TO THE STRUCTURAL DRAWINGS FOR ALL FOUNDATION AND FOOTING CONDITIONS.
C. PROVIDE HORIZ. JOINT REFINFORCING, TIES, AND OTHER ANCHORAGE/REINFORCEMENT ITEMS AS REQ'D. PER PROJECT MANUAL.
D. ROOF TO EXTERIOR WALL JUNCTIONS: REFER TO DIVISION 07 SECTION "THERMAL INSULATION" FOR SPRAY POLYURETHANE INULATION REQUIRED AT THESE LOCATIONS.
E. WALL INSULATION PENETRATIONS: PROVIDE SPRAY POLYURETHANE INSULATION OR SEALANT AROUND ALL PENETRATIONS OF THE WALL INSULATION BY PIPING, CONDUITS, FRAMING, STRUCTURE, ETC.

WALL SECTION NOTES

(X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

NO.	DESCRIPTION
0.004	INFILL TO MATCH ADJACENT CONSTRUCTION
0.007	EXISTING ROOF
0.008	EXISTING WEB JOISTS
0.009	EXISTING WALL CONSTRUCTION
3.120	CONCRETE FOOTING - REFER TO STRUCTURAL DRAWINGS
3.122	CONCRETE SLAB ON VAPOR BARRIER ON DRAINAGE FILL - REFER TO STRUCTURAL DRAWINGS
3.123	CONCRETE FROST SLAB - REFER TO STRUCTURAL DRAWINGS
3.133	DRAINAGE FILL
4.205	8" CMU
4.300	BRICK 1 - MODULAR - BELDON EBONY BLACK BRICK
4.480	MASONRY VENEER ANCHORS
5.100	STEEL BEAM - REFER TO STRUCTURAL DRAWINGS
5.301	3 5/8" COLD-FORMED METAL FRAMING
5.303	6" COLD-FORMED METAL FRAMING
6.271	5/8" PLYWOOD WALL SHEATHING
6.274	5/8" GLASS-MAT GYPSUM WALL (OR SOFFIT) SHEATHING
6.279	3/4" PLYWOOD WALL SHEATHING
7.001	ROOFING SYSTEM - REFER TO ROOF PLAN
7.004	AIR SPACE
7.007	2" ROOF INSULATION
7.008	RUN ROOFING MEMBRANE UP WALL AND LAP OVER EXISTING ROOF, WELDED SEAM
7.010	2" ROOF INSULATION W/ COVERBOARD AS REQUIRED BY ROOFING MANUFACTURER
7.011	FLEXIBLE MEMBRANE FLASHING ADHERED TO WALL, WELD TO ROOFING MEMBRANE AND PROVIDE LAP SEALANT IF REQUIRED BY MANUFACTURER
7.250	3 1/2" THICK UNFACED FACED GLASS-FIBER BLANKET INSULATION
7.400	WEATHER BARRIER
7.440	1 1/2" BOARDSTOCK AIR BARRIER
7.610	METAL COMPOSITE MATERIAL WALL PANELS - B.O.D. ALUCOBOND, COLOR: DUSTY CHARCOAL II
7.735	SHEET METAL ROOFING
7.769	SHEET METAL COUNTERFLASHING
7.805	METAL COPING
8.370	SECTIONAL DOOR WITH FRAMED GLASS PANELS
8.430	STOREFRONT FRAMING
9.100	5/8" GYPSUM WALLBOARD (GWB)
9.131	3 5/8" METAL STUDS AT 1'-4" O.C. (20 GA)
9.270	ACOUSTICAL PANEL CEILING - REFER TO CEILING PLANS
10.231	1'-2" DIMENSIONAL LETTER SIGNAGE, COLOR: WHITE
23.002	MECHANICAL DUCTWORK - REFER TO MECH. DRAWINGS.
31.001	APPROXIMATE FINISH GRADE

VERIFICATION NOTE

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ARCHITECT

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128 W Market St, Celina, OH 45822

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KEY PLAN

N

CONSTRUCTION DOCUMENTS

STATE OF OHIO
JENNIFER M FULLER
1115297
REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

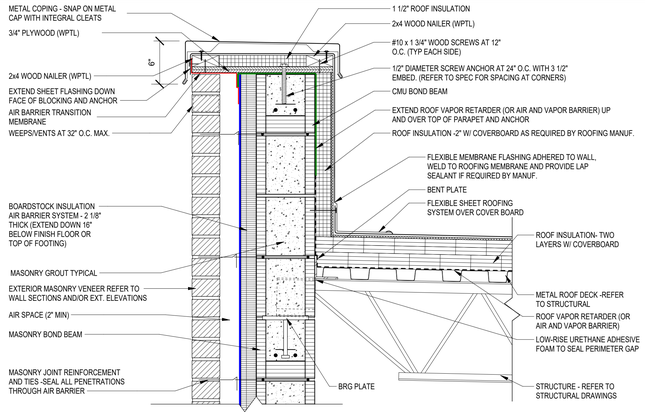
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PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
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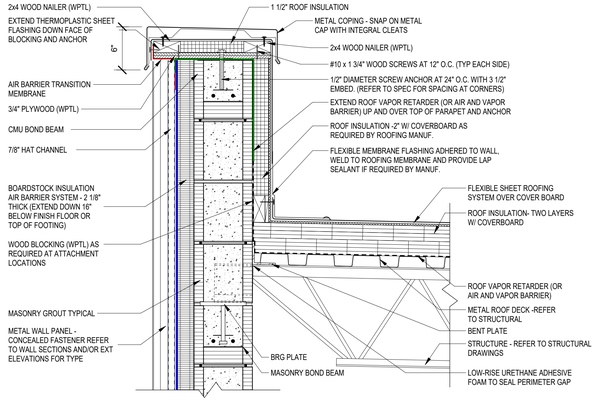
WALL SECTIONS

A-311

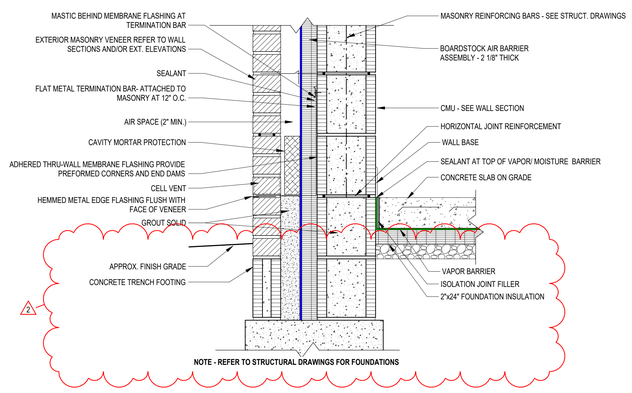
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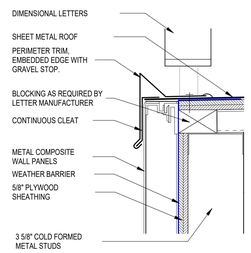
1 PARAPET DETAIL
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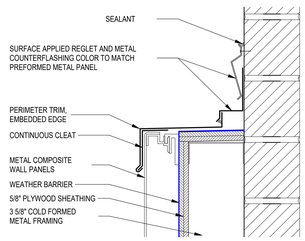
2 PARAPET DETAIL
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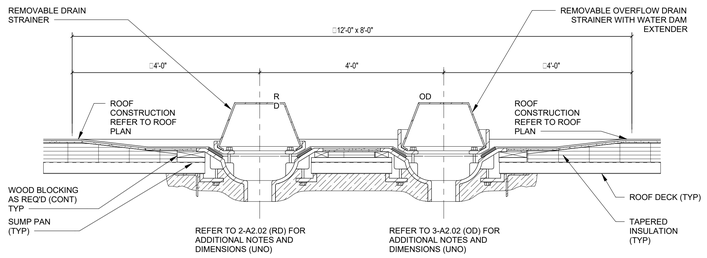
3 TYPICAL DETAIL AT FLOOR
SCALE: 1 1/2" = 1'-0"



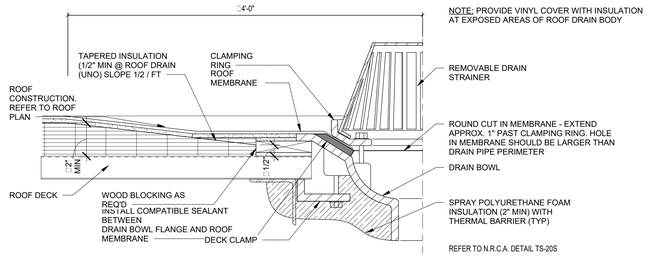
4 EMBEDDED EDGE WITH GRAVEL STOP
SCALE: 3" = 1'-0"



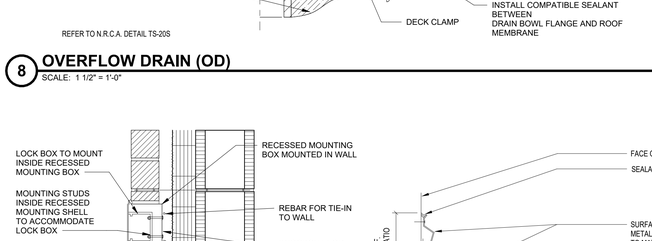
5 EMBEDDED EDGE - DRAINAGE EDGE
SCALE: 3" = 1'-0"



6 SECTION - ROOF DRAIN (RD) / OVERFLOW DRAIN (OD)
SCALE: 3/4" = 1'-0"



7 ROOF DRAIN (RD)
SCALE: 1 1/2" = 1'-0"

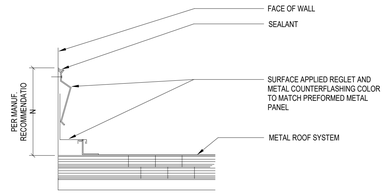


8 OVERFLOW DRAIN (OD)
SCALE: 1 1/2" = 1'-0"

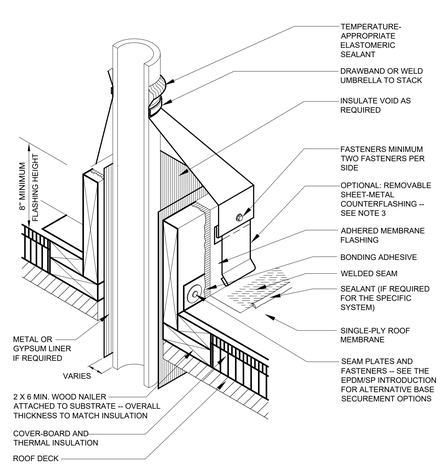
NOTE:
COORDINATE INSTALLATION WITH MANUFACTURERS RECOMMENDATIONS

CONTRACTOR TO COORDINATE AND MOUNT LOCK BOX IN ACCORDANCE WITH LOCAL FIRE DEPARTMENT REQUIREMENTS.

9 LOCK BOX RECESSED MOUNTING
SCALE: 1 1/2" = 1'-0"



10 ROOF TERMINATION
SCALE: 1 1/2" = 1'-0"



11 ISOLATED STACK FLASHING (HOT OR COLD)
SCALE: 12" = 1'-0"

12 PLUMBING VENT (PREMANUFACTURED BOOT)
SCALE: 12" = 1'-0"

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

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128 W Market St, Celina, OH 45822

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO · JENNIFER M FULLER · 1115297 · REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

DRAWN BY: BNC

PROJECT NUMBER: FH224102.00/WSU-231035

PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM 3	10.29.2026

EXTERIOR ENVELOPE DETAILS

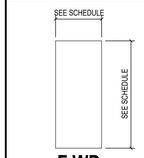
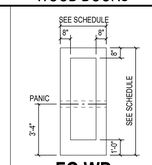
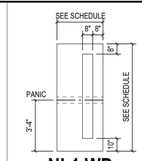
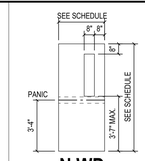
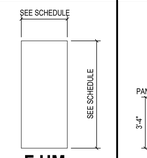
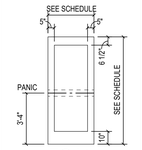
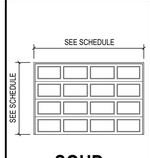
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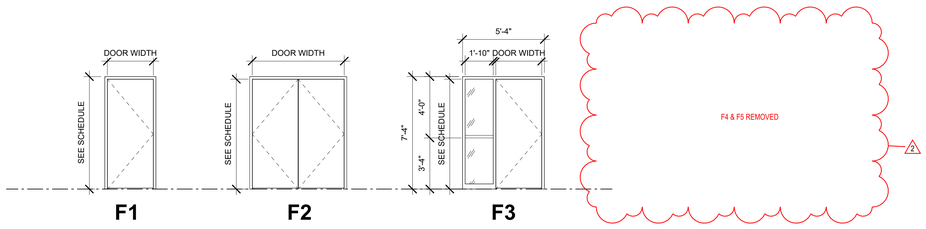
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DOOR AND FRAME SCHEDULE

DOOR MARK	DOORS: DOOR SIZE (WxH)	DOORS: DOOR TYPE	FRAME: FRAME MATERIAL	FRAME: FRAME ELEVATION	FRAME: JAMB DEPTH	FRAME: DETAILS: HEAD	FRAME: DETAILS: JAMB	FRAME: DETAILS: SILL	FIRE RATING	HARDWARE: SET NO.	HARDWARE: KEYSIDE ROOM	STC RATING	REMARKS	DOOR MARK
107A	PR 3'-0" x 7'-2"	FGAL	AL	SF3	4 1/2"	-	-	8/A-620		9.0	107			107A
107B	PR 3'-0" x 7'-2"	FGAL	AL	SF1	4 1/2"	1/A-311	1/A-510	15/A-620		1.0	EXT			107B
112	3'-0" x 7'-2"	N WD	HM	F1	5 3/4"	3/A-620	4/A-620	-		13.0	109			112
114	3'-0" x 7'-2"	N WD	HM	F1	5 3/4"	3/A-620	4/A-620	-		13.0	109			114
116	3'-0" x 7'-2"	N WD	HM	F1	5 3/4"	3/A-620	4/A-620	-		13.0	109			116
118	3'-0" x 7'-2"	N WD	HM	F1	5 3/4"	3/A-620	4/A-620	-		13.0	109			118
119A	3'-0" x 6'-10"	F WD	HM	F1	5 3/4"	-	-	-		5.0	119		REINSTALL EXISTING WOOD DOOR IN NEW FRAME. VERIFY DIMENSIONS IN FIELD	119A
120	3'-0" x 7'-2"	FG WD	AL	SF7	4 1/2"	6/A-620	7/A-620	8/A-620		8.0	108A			120
122	2'-8" x 7'-2"	F WD	HM	F1	5 3/4"	9/A-620	10/A-620	-		11.0	108B			122
125	PR 3'-2" x 7'-2"	FG2 WD	HM	F2	6 3/4"			-		15.0	137			125
130	3'-0" x 7'-2"	F WD	HM	F1	5 3/4"	9/A-620	10/A-620	-		16.0	125			130
131	12'-0" x 10'-0"	SOHD	STL	-	2"	16/A-620	17/A-620	-		17.0	140			131
134	3'-0" x 7'-2"	NL1 WD	HM	F3	6 3/4"	3/A-620	4/A-620	5/A-620		13.0	125			134
135	3'-0" x 7'-2"	NL1 WD	HM	F3	6 3/4"	3/A-620	4/A-620	5/A-620		13.0	125			135
136	3'-0" x 7'-2"	NL1 WD	HM	F3	6 3/4"	3/A-620	4/A-620	5/A-620		13.0	125			136
137A	3'-0" x 7'-2"	FG WD	AL	SF8	4 1/2"	6/A-620	7/A-620	8/A-620		6.0	137			137A
137B	3'-0" x 7'-2"	FGAL	AL	SF4	4 1/2"	1/A-310	14/A-620	15/A-620		3.0	EXT			137B
138	3'-0" x 7'-2"	F WD	HM	F1	8 1/2"	3/A-620	4/A-620	-		10.0	137			138
139	3'-0" x 7'-2"	F WD	HM	F1	8 1/2"	3/A-620	4/A-620	-		14.0	137			139
140B	3'-0" x 7'-2"	FGAL2	AL	SF4	4 1/2"	1/A-310	14/A-620	15/A-620		2.0	EXT			140B
141	3'-0" x 7'-2"	F WD	HM	F1	5 3/4"	9/A-620	10/A-620	-		12.0	140			141

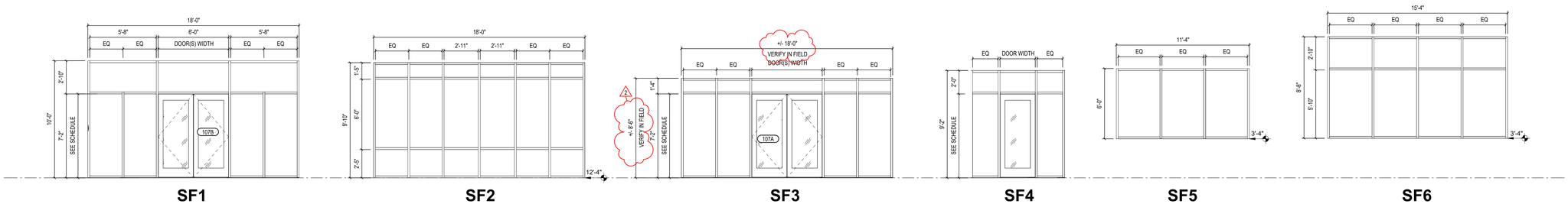
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WOOD DOORS				HOLLOW METAL	ALUMINUM DOORS	OTHER
						
SEE SCHEDULE; SEE SCHEDULE	SEE SCHEDULE; 6", 6"; 3'-0"; PANIC; 3'-4"; SEE SCHEDULE; 1'-0"	SEE SCHEDULE; 6", 6"; 3'-0"; PANIC; 3'-4"; SEE SCHEDULE; 10"	SEE SCHEDULE; 6", 6"; 3'-0"; PANIC; 3'-4"; 3'-7" MAX.; SEE SCHEDULE	SEE SCHEDULE; SEE SCHEDULE	SEE SCHEDULE; 5", 5"; 6'-10"; PANIC; 3'-4"; SEE SCHEDULE; 10"	SEE SCHEDULE; SEE SCHEDULE; SEE SCHEDULE
F WD	FG WD	NL1 WD	N WD	F HM	FGAL	SOHD
FLUSH DOOR	FULL GLASS WOOD	NARROW LITE LONG	NARROW LITE	FLUSH DOOR	FULL GLASS	SECTIONAL OVERHEAD DOOR



DOOR - HOLLOW METAL FRAME TYPES

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



STOREFRONT - FRAME TYPES

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

*ALL STOREFRONT FRAMES TO BE BLACK U.N.O.

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ARCHITECT

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128 W Market St, Celina, OH 45822

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO · JENNIFER M FULLER · 1115297 · REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

DRAWN BY: Author

PROJECT NUMBER: FH224102.00/WSU-231035

PROJECT ISSUE DATE: 09.04.2026

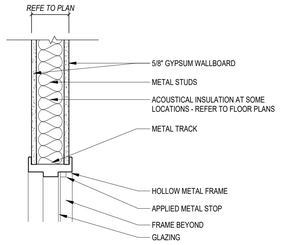
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2	ADDENDUM 3	10.29.2026

DOOR AND FRAME SCHEDULE

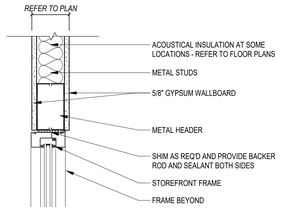
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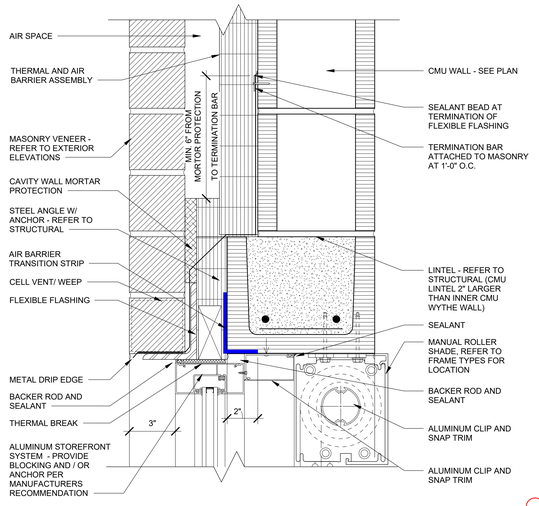
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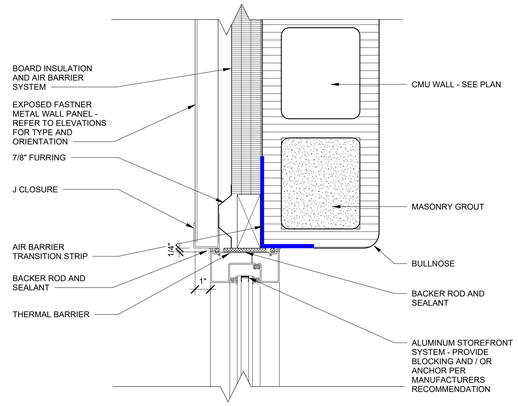
1 STUD HEAD (BL)
SCALE: 1 1/2" = 1'-0"



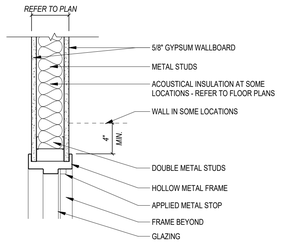
6 STUD HEAD (SF)
SCALE: 1 1/2" = 1'-0"



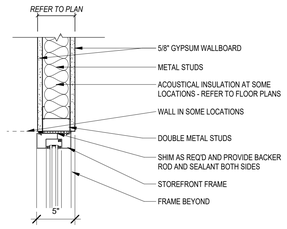
11 HEAD - STOREFRONT
SCALE: 3" = 1'-0"



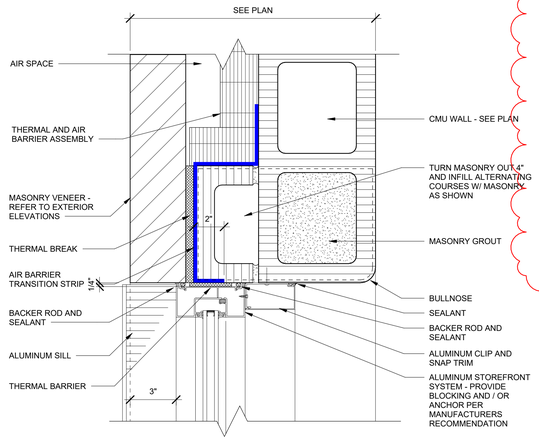
14 JAMB - STOREFRONT (DOOR)
SCALE: 3" = 1'-0"



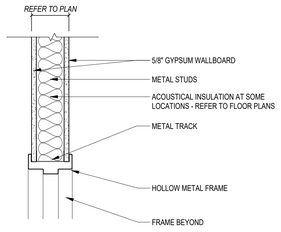
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SCALE: 1 1/2" = 1'-0"



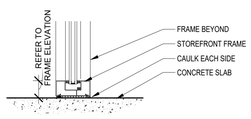
7 STUD JAMB (SF)
SCALE: 1 1/2" = 1'-0"



12 JAMB - STOREFRONT
SCALE: 3" = 1'-0"

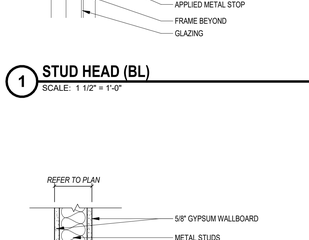


3 STUD HEAD (HM)
SCALE: 1 1/2" = 1'-0"

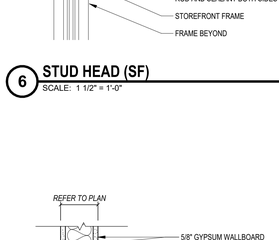


8 SILL FLOOR (SF)
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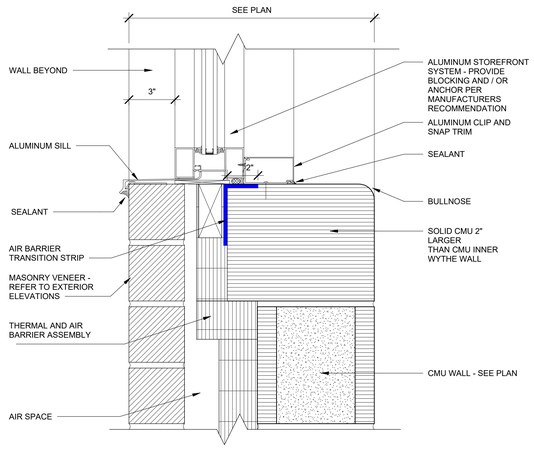
13 SILL - STOREFRONT
SCALE: 3" = 1'-0"



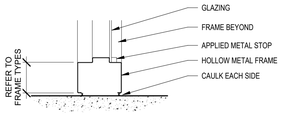
4 STUD JAMB (HM)
SCALE: 1 1/2" = 1'-0"



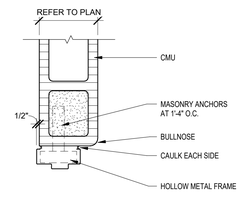
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SCALE: 1 1/2" = 1'-0"



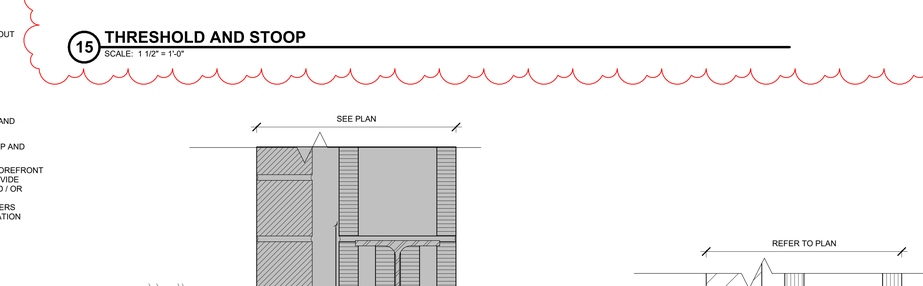
13 SILL - STOREFRONT
SCALE: 3" = 1'-0"



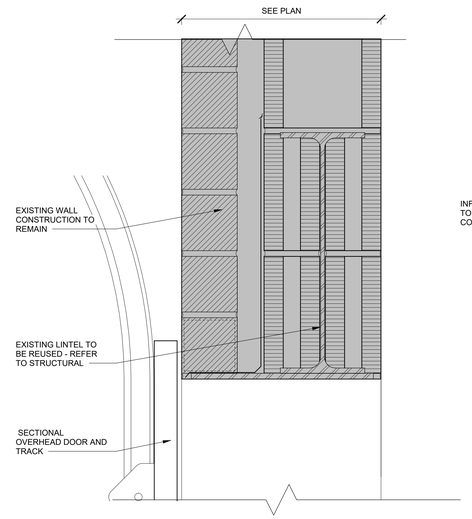
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SCALE: 1 1/2" = 1'-0"



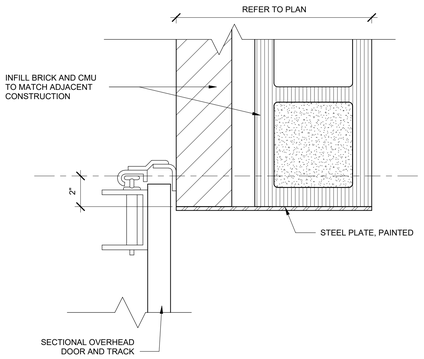
10 CMU JAMB (HM)
SCALE: 1 1/2" = 1'-0"



15 THRESHOLD AND STOOP
SCALE: 1 1/2" = 1'-0"



16 HEAD - SOHD
SCALE: 3" = 1'-0"



17 JAMB - SOHD
SCALE: 3" = 1'-0"

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KEY PLAN

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STATE OF OHIO
JENNIFER M FULLER
1115297
REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/2027

PROJECT NUMBER: FH224102.00/WSU-231035

PROJECT ISSUE DATE: 09.04.2026

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FRAME TYPES

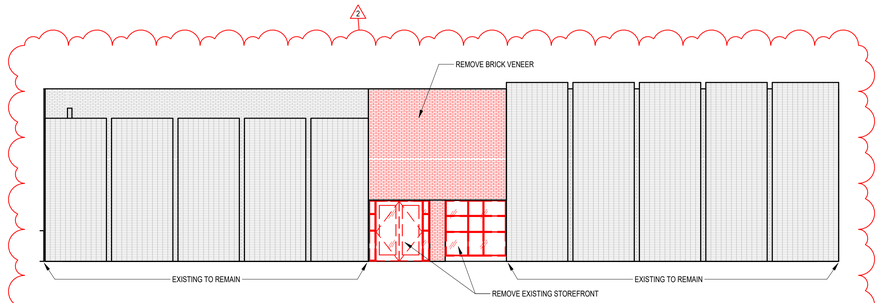
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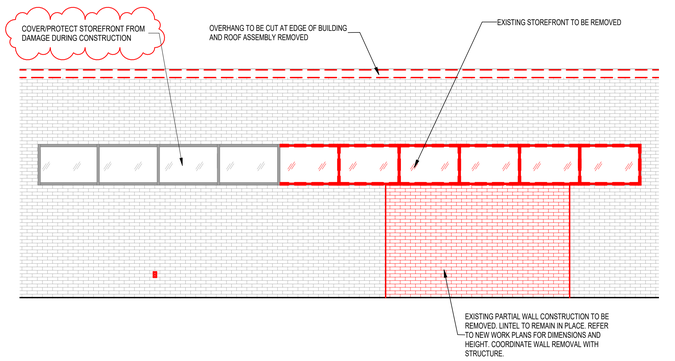
NO.	NOTE
AD01	EXISTING WALL CONSTRUCTION TO BE REMOVED
AD02	EXISTING PARTIAL WALL CONSTRUCTION TO BE REMOVED. LINTEL TO REMAIN IN PLACE. REFER TO NEW WORK PLANS FOR DIMENSIONS AND HEIGHT. COORDINATE WALL REMOVAL WITH STRUCTURE.
AD03	EXISTING DOOR, FRAME AND HARDWARE TO BE REMOVED
AD04	EXISTING HOLLOW METAL FRAME AND GLASS TO BE REMOVED
AD05	EXISTING CASEWORK TO BE REMOVED
AD06	EXISTING MARKERBOARD/CHALKBOARD/TACKBOARD TO BE SALVAGED AND TURNED OVER TO THE OWNER
AD07	EXISTING PROJECTOR TO BE SALVAGED AND TURNED OVER TO THE OWNER
AD08	EXISTING FLOORING TO BE REMOVED
AD10	EXISTING SINK AND FAUCET TO BE REMOVED
AD11	EXISTING DOWNSPOUTS TO BE REMOVED
AD14	EXISTING STOREFRONT TO BE REMOVED
AD16	EXISTING TOILET TO BE REMOVED
AD17	EXISTING SHOWER TO BE REMOVED
AD18	OVERHANG TO BE CUT AT EDGE OF BUILDING AND ROOF ASSEMBLY REMOVED
AD19	EXISTING WALL TO BE CUT AT 11'-0" AND THE SECTION BELOW TO BE REMOVED.
AD20	EXISTING WALL TO BE CUT AT 9'-0" AND THE SECTION BELOW TO BE REMOVED.
AD22	EXISTING FIRE EXTINGUISHER TO BE TURNED OVER TO OWNER
AD24	EQUIPMENT TO STAY ACCESSIBLE AND FUCTIONAL DURING CONSTRUCTION OF PRODUCTION LAB. RELOCATE EQUIPMENT TO DESIRED LOCATIONS WHEN PRODUCTION LAB ADDITION IS COMPLETE.
AD26	EXISTING WINDOW TO BE REMOVED
AD27	SALVAGE CASEWORK FOR REINSTALLATION IN ROOM 133, DISPOSE OF COUNTERTOP
AD28	REFER TO DETAIL 2/AD101
AD29	EXISTING REFRIGERATOR TO BE SALVAGED AND TURNED OVER TO THE OWNER
AD30	REMOVE EXISTING FLOOR SLAB, REFERENCE PLUMBING DRAWINGS



1 FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



3 NORTH DEMOLITION ELEVATION
SCALE: 1/8" = 1'-0"



2 SOUTH DEMOLITION ELEVATION
SCALE: 1/4" = 1'-0"

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JENNIFER M. FULLER, License # 1115297
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DEMOLITION PLANS

AD101

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LUMINAIRE SCHEDULE

PLAN TYPE	MANUFACTURER/CATALOG	MOUNTING	LAMPS NO.	LAMPS WATTS	LAMPS TYPE	LAMPS LUMENS	APPLIED VOLTAGE	DESCRIPTION	VA LOAD
3DCP	NEORAY DEFINE GEO RING SERIES SPI LIGHTING ZYNN RING SERIES LUMOS RM42_UP-DN SERIES OR AN A/E APPROVED LIGHT FROM COOPER LIGHTING	SUSPENDED	1	120 W	LED	10000 lm	277 V	3-FOOT DIAMETER SUSPENEDED RING LIGHT. DIRECT AND INDIRECT SUSPENDED, 4000K, 90 CRI, 0-10VDC DIMMING DRIVER. 8000 LUMENS DIRECT AND 2000 LUMENS INDIRECT	120 VA
4DCP	NEORAY DEFINE GEO RING SERIES SPI LIGHTING ZYNN RING SERIES LUMOS RM42_UP-DN SERIES OR AN A/E APPROVED LIGHT FROM COOPER LIGHTING	SUSPENDED	1	120 W	LED	10000 lm	277 V	4-FOOT DIAMETER SUSPENEDED RING LIGHT. DIRECT AND INDIRECT SUSPENDED, 4000K, 90 CRI, 0-10VDC DIMMING DRIVER. 8000 LUMENS DIRECT AND 2000 LUMENS INDIRECT	120 VA
4DCPX	NEORAY DEFINE GEO RING SERIES SPI LIGHTING ZYNN RING SERIES LUMOS RM42_UP-DN SERIES OR AN A/E APPROVED LIGHT FROM COOPER LIGHTING	SUSPENDED	1	120 W	LED	10000 lm	277 V	4-FOOT DIAMETER SUSPENEDED RING LIGHT. DIRECT AND INDIRECT SUSPENDED, 4000K, 90 CRI, 0-10VDC DIMMING DRIVER. PROVIDE WITH AN EMERGENCY TRANSFER DEVICE. 8000 LUMEN DIRECT AND 2000 LUMENS INDIRECT	120 VA
LAV2	FAIL-SAFE HVL8 LED SERIES KENALL LIGHTING MLHA8S SERIES LUMINARE LED VPF8 SERIES A/E APPROVED EQUAL LAMARLED VANL SERIES	SURFACE	1	54 W	LED	4938 lm	277 V	4-FOOT BY 8-INCH VANDAL RESISTANT LED ARCHITECTURAL FIXTURE, EXTRUDED ALUMINUM CONSTRUCTION, WITH .156" HIGH IMPACT CLEAR RIBBED ACRYLIC LENS, DIE-CAST ROUNDED END CAPS, 0-10VDC DIMMING DRIVER.	54 VA
LAV2X	FAIL-SAFE HVL8 LED SERIES KENALL LIGHTING MLHA8S SERIES LUMINARE LED VPF8 SERIES A/E APPROVED EQUAL LAMARLED VANL SERIES	SURFACE	1	54 W	LED	4938 lm	277 V	4-FOOT BY 8-INCH VANDAL RESISTANT LED ARCHITECTURAL FIXTURE, EXTRUDED ALUMINUM CONSTRUCTION, WITH .156" HIGH IMPACT CLEAR RIBBED ACRYLIC LENS, DIE-CAST ROUNDED END CAPS, 0-10VDC DIMMING DRIVER. PROVIDE WITH EMERGENCY TRANSFER DEVICE.	54 VA
LDW61	FAIL-SAFE FLD6A SERIES PHILIPS BRANDS A/E APPROVED EQUAL GOTHAM EVO SHOWER SERIES PRESCOLITE LF6LEDG4 SERIES	RECESSED	1	15 W	LED	1000 lm	277 V	6-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED.	15 VA
LDW61X	FAIL-SAFE FLD6A SERIES PHILIPS BRANDS A/E APPROVED EQUAL GOTHAM EVO SHOWER SERIES PRESCOLITE LF6LEDG4 SERIES	RECESSED	1	15 W	LED	1000 lm	277 V	6-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED. PROVIDE WITH EMERGENCY TRANSFER DEVICE.	15 VA
LE1X	McGRAW-EDISON GWC SEREIS GARDCO PWS SERIES LITHONIA DSXW1 LED SERIES BEACON VIPER WALL VPW SERIES	SURFACE WALL /2	1	59 W	LED	5286 lm	277 V	EXTERIOR WEDGE SHAPED LED WALLPACK WITH TYPE IV/FORWARD-THROW OPTIC. LUMINAIRE FINISH COLOR SHALL BE DARK BRONZE. EMERGENCY TRANSFER VIA REMOTE WHOLE CIRCUIT EMERGENCY TRANSFER DEVICE.	39 VA
LF2	LITHONIA CPX SERIES DAYBRITE CFI SERIES EATON METALUX CGT SERIES COLUMBIA CFP SERIES	RECESSED	1	32 W	LED	4000 lm	277 V	2 BY 4-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V DIMMING.	36 VA
LF22	LITHONIA CPX SERIES DAYBRITE CFI SERIES EATON METALUX CGT SERIES COLUMBIA CFP SERIES METALUX CGTX SERIES	RECESSED	1	20 W	LED	3200 lm	277 V	2 BY 2-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V DIMMING.	20 VA
LF22X	LITHONIA CPX SERIES DAYBRITE CFI SERIES EATON METALUX CGT SERIES COLUMBIA CFP SERIES METALUX CGTX SERIES	RECESSED	1	20 W	LED	3200 lm	277 V	2 BY 2-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V DIMMING. PROVIDE WITH EMERGNECY TRANSFER DEVICE.	20 VA
LN4	LUMENWERX VIA 4 SERIES NEORAY DEFINE 4 SERIES MARK ARCHITECTURAL SLOT 4 SERIES LITECONTROL MOD 4 LED SERIES	SUSPENDED	1	39 W	LED	3900 lm	277 V	LENGTH AS INDICATED BY 4" SLOT TYPE INDIRECT/DIRECT PENDANT HUNG FIXTURE. ONE PERCENT DIMMING, HIGH LUMEN OUTPUT, SQUARE CANOPY, AIR CRAFT CABLE SUSPENSION AND WHITE POWER CORD. MOUNT AT 8'-6" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE.	39 VA
LN4X	LUMENWERX VIA 4 SERIES NEORAY DEFINE 4 SERIES MARK ARCHITECTURAL SLOT 4 SERIES LITECONTROL MOD 4 LED SERIES	SUSPENDED	1	39 W	LED	3900 lm	277 V	LENGTH AS INDICATED BY 4" SLOT TYPE INDIRECT/DIRECT PENDANT HUNG FIXTURE. ONE PERCENT DIMMING, HIGH LUMEN OUTPUT, SQUARE CANOPY, AIR CRAFT CABLE SUSPENSION AND WHITE POWER CORD. MOUNT AT 8'-6" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. PROVIDE AN EMERGENCY TRANSFER DEVICE	39 VA
LSP4DI	NEORAY DEFINE 2 SERIES LEDALITE TRUGROOVE 290 SERIES MARK LIGHTING SLOT 2 LED SERIES LITECONTROL MOD 2 LED SERIES	SUSPENDED	1	30 W	LED	2400 lm	277 V	2-INCH BY 6-FOOT (NO2-INCH BY 6-FOOT (NOMINAL) LINEAR SUSPENDED LED SLOT TYPE LUMINAIRE WITH DIRECT/INDIRECT DISTRIBUTION, FLUSH OPAL ACRYLIC BOTTOM AND TOP LENS, 300 LUMENS/FT. DIRECT. 300 LUMENS/FT. INDIRECT (MINIMUM FOR EACH DISTRIBUTION, OR SUPPLIED MFGR. NEXT HIGHEST STANDARD LUMEN PACKAGE), AIRCRAFT CABLE SUSPENSION, BLACK FINISH HOUSING, 0-10VDC DIMMING DRIVER.	30 VA
MMS	METALUX MMS SERIES OR AN A/E APPROVED LIGHT FROM COOPER LIGHTING TGS SL SERIES	RECESSED	1	32 W	LED	3000 lm	277 V	6-INCH BY 4-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V DIMMING.	32 VA
MMSX	METALUX MMS SERIES OR AN A/E APPROVED LIGHT FROM COOPER LIGHTING TGS SL SERIES	RECESSED	1	32 W	LED	3000 lm	277 V	6-INCH BY 4-FOOT, BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 4000K, 80+ CRI, 0-10V DIMMING. PROVIDE WITH AN EMERGENCY TRANSFER DEVICE	32 VA
XC	SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES OR A/E APPROVED EQUAL	SURFACE CEILING	1	3 W	RED LED	0 lm	277 V	CAST ALUMINUM AC ONLY EXIT SIGN, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA
XW	SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES	SURFACE WALL	1	3 W	RED LED	0 lm	277 V	CAST ALUMINUM AC ONLY EXIT SIGN, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA

LUMINAIRE SCHEDULE - GENERAL NOTES

1. FOR ALL DOWNLIGHTING FIXTURES, PROVIDE REQUIRED MOUNTING HARDWARE FOR MOUNTING IN LAY-IN TYPE CEILINGS.
2. CONTRACTOR TO VERIFY TYPES AND QUANTITY OF LIGHT FIXTURES REQUIRING EMERGENCY TRANSFER DEVICES AND PROVIDE REQUIRED QUANTITY OF EMERGENCY TRANSFER DEVICES, LABOR, MATERIAL, ETC. IN THE PROJECT BID FOR FIELD INSTALLATION OF EMERGENCY TRANSFER DEVICES.
3. LIGHT FIXTURE SUBMITTALS TO INCLUDE DATA SHEETS FOR ALL FIXTURE TYPES, INCLUDING ADDITIONAL DATA SHEETS FOR BALLAST COMBINATIONS REQUIRED TO MEET THE INSTALLATION REQUIREMENTS OF THE VARIOUS FIXTURE TYPES INDICATED IN THE REMARKS COLUMN OF THE FIXTURE SCHEDULES OR ON THE DRAWINGS. SUBMITTALS SHALL ALSO INDICATE COLOR FOR ANY CUSTOM COLOR LIGHT FIXTURES.

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

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CONSTRUCTION DOCUMENTS

STATE OF OHIO
MARK Z. HOPE
E-79009
REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: MTT

PROJECT NUMBER: 224102.00

PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#2	10/21/2026
2	ADDENDUM#3	10/28/2026

LUMINAIRE SCHEDULES

E-601

Autodesk Docs://WSU-LC - Workforce Development Project/2025_ELEC_224102.00.rvt
10/28/2026 8:44:44 AM

Branch Panel: P1-2

Location: ELEC. RM. 141
Supply From: T2-MDP
Mounting: Recessed
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 35k A.I.C
Mains Type: MLO
Mains Rating: 225 A
MCB Rating:

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	ELECTRICAL TRAINER	30 A	3	0 VA	0 VA					3	30 A	ELECTRICAL TRAINER	2
3	--	--	--			0 VA	0 VA			--	--	--	4
5	--	--	--					0 VA	0 VA	--	--	--	6
7	ELECTRICAL TRAINER	30 A	3	0 VA	0 VA					3	30 A	ELECTRICAL TRAINER	8
9	--	--	--			0 VA	0 VA			--	--	--	10
11	--	--	--					0 VA	0 VA	--	--	--	12
13	ELECTRICAL TRAINER	30 A	3	0 VA	3047...					3	20 A	RTU-2	14
15	--	--	--			0 VA	3047...			--	--	--	16
17	--	--	--					0 VA	3047...	--	--	--	18
19	YASKAWA HC10DCT	20 A	3	0 VA	9650...					2	60 A	WELDER	20
21	--	--	--			0 VA	9650...			--	--	--	22
23	--	--	--					0 VA	9650...	2	60 A	WELDER	24
25	WELDER	60 A	2	9650...	9650...					--	--	--	26
27	--	--	--			9650...	4269...			3	20 A	ECUH-2	28
29	WFC-01	20 A	3					2105...	4269...	--	--	--	30
31	--	--	--	2105...	4269...					--	--	--	32
33	--	--	--			2105...	0 VA			1	20 A	Spare	34
35	ECUH-1	20 A	3					1200...	0 VA	1	20 A	Spare	36
37	--	--	--	1200...	0 VA					1	20 A	Spare	38
39	--	--	--			1200...	0 VA			1	20 A	Spare	40
41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42
		Total Load:		39571 VA		29221 VA		20271 VA					
		Total Amps:		148 A		113 A		73 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	15457 VA	114.78%	17742 VA		
Other	16407 VA	100.00%	16407 VA	**Total Conn. Load:**	89764 VA
Receptacle - Welding	57900 VA	50.00%	28950 VA	**Total Est. Demand:**	63099 VA
				Total Conn.:	108 A
				Total Est. Demand:	76 A

Notes:

Branch Panel: L1-1

Location: ELECTRICAL 122
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 200 A
MCB Rating: 200 A

Notes:
EXISTING PANELBOARD - NEW LOADS ARE SHOWN IN BOLD TEXT

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	**RM 125, 126, 127, CORRIDOR 128 LIGHTS (EN)**	20 A	1	2019...	438 VA					1	20 A	**RM 112, 114, 116, 118, 133 LIGHTS (EN)**	2
3	**RM 134 LIGHTS (EN)**	20 A	1			54 VA	0 VA			1	20 A	OFFICE LIGHTS (E)	4
5	ROOM 122 LIGHTS (E)	20 A	1					0 VA	0 VA	1	20 A	OFFICE LIGHTS (E)	6
7	ROOM 127 LIGHTS (E)	20 A	1	0 VA	0 VA					1	20 A	SHOP LIGHTS (E)	8
9	SHOP LIGHTS (E)	20 A	1			0 VA	0 VA			1	20 A	BATHROOM/HALL LIGHTS/RM 121 (E)	10
11	**RM 107 AND 115 LIGHTS**	20 A	1					3 VA	39 VA	1	20 A	**LAB RM 103 LIGHTS (EN)**	12
13	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare (E)	14
15	Spare (E)	20 A	1			0 VA	0 VA			1	20 A	Spare (E)	16
17	Spare (E)	20 A	1					0 VA	--	1	--	Space (E)	18
19	RM 119, 120 & CORRIDOR LIGHTS (E)	20 A	1	0 VA	--					1	--	Space (E)	20
21	RM 115, 117 & MECHANICAL RM LIGHTS (E)	20 A	1			0 VA	--			1	--	Space (E)	22
23	ELECTRICAL RM & BATHROOM LIGHTS (E)	20 A	1					0 VA	0 VA	1	20 A	RM 111, 113 LIGHTS (E)	24
25	Space (E)	--	1	--	--					1	--	Space (E)	26
27	Space (E)	--	1			--	--			1	--	Space (E)	28
29	RM 110, 112, 114, 116, 118 LIGHTS (E)	20 A	1					0 VA	0 VA	1	20 A	LIGHTS (E)	30
31	Spare (E)	30 A	3	0 VA	0 VA					3	30 A	Spare (E)	32
33	--	--	--			0 VA	0 VA			--	--	--	34
35	--	--	--					0 VA	0 VA	--	--	--	36
37	Spare (E)	30 A	3	0 VA	0 VA					3	30 A	Spare (E)	38
39	--	--	--			0 VA	0 VA			--	--	--	40
41	--	--	--					0 VA	0 VA	--	--	--	42
		Total Load:		2457 VA		54 VA		42 VA					
		Total Amps:		9 A		0 A		0 A					

Legend:
Circuit Breaker Legend: "(XX)" after circuit load/room number in Circuit Description column on schedule: (E)=Existing circuit breaker serving existing load to remain. (EN)=Existing circuit breaker to remain and be used for new load as indicated. (N)=New circuit breaker in existing circuit space(s). (NR)= New/replacement circuit breaker (remove circuit breaker(s) as required to install and turn over to...

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	2553 VA	125.00%	3191 VA		
				Total Conn. Load:	2553 VA
				Total Est. Demand:	3191 VA
				Total Conn.:	3 A
				Total Est. Demand:	4 A

Notes:
NEW CIRCUIT BREAKERS ARE TO MATCH THE EXISTING A.I.C. RATING

Branch Panel: T2-MDP

Location: ELEC. RM. 141
Supply From: MSB1
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 35K A.I.C.
Mains Type: MCB
Mains Rating: 400 A
MCB Rating: 400 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	P1-2	225 A	3	3957...	1985...					3	125 A	T2	2
3	--	--	--			2992...	1681...			--	--	--	4
5	--	--	--					2027...	1369...	--	--	--	6
7	Spare	100 A	3	0 VA	0 VA					3	100 A	Spare	8
9	--	--	--			0 VA	0 VA			--	--	--	10
11	--	--	--					0 VA	0 VA	--	--	--	12
13	Space	--	3	--	--					3	--	Space	14
15	--	--	--			--	--			--	--	--	16
17	--	--	--					--	--	--	--	--	18
19	Space	--	3	--	--					3	--	Space	20
21	--	--	--			--	--			--	--	--	22
23	--	--	--					--	--	--	--	--	24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
		Total Load:		59430 VA		46733 VA		33963 VA					
		Total Amps:		222 A		176 A		123 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	33638 VA	106.79%	35923 VA		
Other	18661 VA	100.00%	18661 VA	**Total Conn. Load:**	140126 VA
Receptacle	1980 VA	100.00%	1980 VA	**Total Est. Demand:**	107872 VA
Receptacle - Convenience	27947 VA	80.00%	22358 VA	**Total Conn.:**	169 A
Receptacle - Welding	57900 VA	50.00%	28950 VA	**Total Est. Demand:**	130 A

Notes:

Branch Panel: R1-4

Location: ELEC. RM. 141
Supply From: T2
Mounting: Recessed
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10k A.I.C
Mains Type: MCB
Mains Rating: 250 A
MCB Rating: 250 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	CHANGING TABLE, RECEPT. RM. 138, 139, 141	20 A	1	922 VA	1800...					1	20 A	TITAN CONVEYER BELT RM. 140	2
3	YASKAKA MOTOMAN RM. 140	20 A	1			1800...	1800...			1	20 A	FANU ROBOT RM. 140	4
5	YASKAKA MOTOMAN RM. 140	20 A	1					1800...	1800...	1	20 A	FANU ROBOT RM. 140	6
7	YASKAWA HCDT10 RM. 140	20 A	1	1800...	1800...					1	20 A	YASKAWA HC10 RM. 140	8
9	PLANNED ABB ROBOT	20 A	1			1800...	360 VA			1	20 A	CORD REEL RM. 140	10
11	CORD REEL RM. 140	20 A	1					360 VA	360 VA	1	20 A	CORD REEL RM. 140	12
13	RECEPTS RM. 140	20 A	1	1080...	1127...					1	20 A	GARAGE DOOR RM. 140	14
15	ADO DOOR MOTOR RM. 138	20 A	1			1127...	1127...			1	20 A	GARAGE DOOR RM. 131	16
17	SMC MACHONE SIM. RM. 140	20 A	1					1800...	450 VA	1	20 A	MONITOR QUAD. RM. 140	18
19	FUME EXTRACTER FOR WELD. BOOTH	20 A	2	1373...	1373...					2	20 A	FUME EXTRACTER FOR WELD. BOOTH	20
21	--	--	--			1373...	1373...			--	--	--	22
23	FUME EXTRACTER FOR WELD. BOOTH	20 A	2					1373...	180 VA	1	20 A	ACCESS CONTROL SYSTEM	24
25	--	--	--	1373...	540 VA					1	20 A	WELDER BOOTH RECEPT.	26
27	NTSUNG FU TOOL CUTTER AND GRINDER	20 A	1			1127...	180 VA			1	20 A	WILSON QUAD. RM. 133	28
29	EPUH-1	20 A	2					936 VA	1800...	1	20 A	GLOWFORGE RM. 119	30
31	--	--	--	936 VA	1800...					1	20 A	GLOWFORGE RM. 119	32
33	H-PAK PNUEMATICS TRAINER RM. 140	20 A	1			1800...	1800...			1	20 A	HYDROLICS STATION RM. 140	34
35	WELDER GAS SHUT-OFF CONTROLLER	20 A	1					0 VA	791 VA	2	20 A	EF-5	36
37	EF-6	20 A	1	667 VA	791 VA					--	--	--	38
39	EF-7	20 A	1			230 VA	915 VA			2	20 A	EF-8	40
41	ADO DOOR MOTOR RM. 137	20 A	1					1127...	915 VA	--	--	--	42
43	ADO DOOR MOTOR RM. 107	20 A	1	1127...	1350...					1	20 A	MONITOR RM 115, RECEPT. RM 107	44
45	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	46
47	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	48
49	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	50
51	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	52
53	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	54
55	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	56
57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	58
59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	60
61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	62
63	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	64
		Total Load:		19859 VA		16812 VA		13692 VA					
		Total Amps:		169 A		144 A		114 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	18181 VA	103.78%	18868 VA		
Other	2254 VA	100.00%	2254 VA	**Total Conn. Load:**	50362 VA
Receptacle	1980 VA	100.00%	1980 VA	**Total Est. Demand:**	45459 VA
Receptacle - Convenience	27947 VA	80.00%	22358 VA	**Total Conn.:**	140 A
				Total Est. Demand:	126 A

Notes:

Branch Panel: R1-1

Location: ELECTRICAL 122
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 200 A
MCB Rating: 200 A

Notes:
EXISTING PANELBOARD - NEW LOADS ARE SHOWN IN BOLD TEXT

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	OUTSIDE 60@ 208V RECEPTACLE WEST SID...	60 A	2	0 VA	0 VA					1	20 A	ELECTRIC RM EF4 (E)	2
3	--	--	--			0 VA	540 VA			1	20 A	**OFFICE RM 112 RECEPT (EN)**	4
5	OUTSIDE 50@ 208V RECEPTACLE WEST SID...	50 A	2					0 VA	900 VA	1	20 A	**OFFICE RM 116, 118 RECEPT (EN)**	6
7	--	--	--	0 VA	0 VA					1	20 A	RECEPTACLE IN ELECTRIC RM (E)	8
9	**OFFICE RM 114 RECEPT (EN)**	20 A	1			720 VA	1000...			1	20 A	**RM 133 REFRIGERATOR (NR)(GFCI)**	10
11	OUTSIDE RECEPT WEST SIDE (E)	20 A	1					0 VA	1500...	1	20 A	**RM 133 COPY MACHINE (EN)**	12
13	OUTSIDE RECEPT WEST SIDE (E)	20 A	1	0 VA	0 VA					3	20 A	Spare (E)	14
15	OUTSIDE RECEPT WEST SIDE (E)	20 A	1			0 VA	0 VA			--	--	--	16
17	OUTSIDE 50@ 208V RECEPTACLE WEST SID...	50 A	2					0 VA	0 VA	--	--	--	18
19	--	--	--	0 VA	0 VA					3	100 A	SHOP WELDER OUTLET (E)	20
21	(E)	20 A	1			0 VA	0 VA			--	--	--	22
23	**RM 133 RECEPT (EN)**	20 A	1					180 VA	0 VA	--	--	--	24
25	**RM 125 RECEPT (EN)**	20 A	1	900 VA	540 VA					1	20 A	**CORRIDOR 128, 137 RECEPT (EN)**	26
27	**RM 126 RECEPT (EN)**	20 A	1			900 VA	1500...			1	20 A	**MICROWAVE RM 129**	28
29	**RM 127 RECEPT (EN)**	20 A	1					180 VA	0 VA	1	20 A	Spare (E)	30
31	JOHNSON CTRLS CABINET & PWR SUPPLY (E)	20 A	1	0 VA	0 VA					1	20 A	Spare (E)	32
33	BOILER (E)	20 A	1			0 VA	0 VA			1	20 A	RECEPTACLES ON UPPER LEVEL (E)	34
35	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	36
37	BARN PANEL 208V 3PH 100A (E)	100 A	3	0 VA	0 VA					2	30 A	208V 30A RECEPT IN ELECTRIC RM (E)	38
39	--	--	--			0 VA	0 VA			--	--	--	40
41	--	--	--					0 VA	0 VA	1	20 A	Spare (E)	42
		Total Load:		1440 VA		4660 VA		2760 VA					
		Total Amps:		12 A		41 A		25 A					

Legend:
Circuit Breaker Legend: "(XX)" after circuit load/room number in Circuit Description column on schedule: (E)=Existing circuit breaker serving existing load to remain. (EN)=Existing circuit breaker to remain and be used for new load as indicated. (N)=New circuit breaker in existing circuit space(s). (NR)= New/replacement circuit breaker (remove circuit breaker(s) as required to install and turn over to Owner) (GFCI)=5mA GFCI type circuit breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	2340 VA	100.00%	2340 VA		
Kitchen Equipment	1500 VA	50.00%	750 VA	**Total Conn. Load:**	6860 VA
Receptacle - Convenience	2520 VA	80.00%	2016 VA	**Total Est. Demand:**	7106 VA
Receptacle - Refrigerator	1000 VA	80.00%	800 VA	**Total Conn.:**	25 A
Receptacle - Copy Machine	1500 VA	80.00%	1200 VA	**Total Est. Demand:**	20 A

Notes:
NEW CIRCUIT BREAKERS ARE TO MATCH THE EXISTING A.I.C. RATING

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

7600 State Route 73
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WRIGHT STATE UNIVERSITY

WRIGHT STATE UNIVERSITY

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128 W Market St, Celina, OH 45822

CONSTRUCTION DOCUMENTS

STATE OF OHIO
MARK
Z.
HOPE
E-79009
REGISTERED
PROFESSIONAL ENGINEER

DRAWN BY: MTT
PROJECT NUMBER: 224102.00
PROJECT ISSUE DATE: 09.04.2026

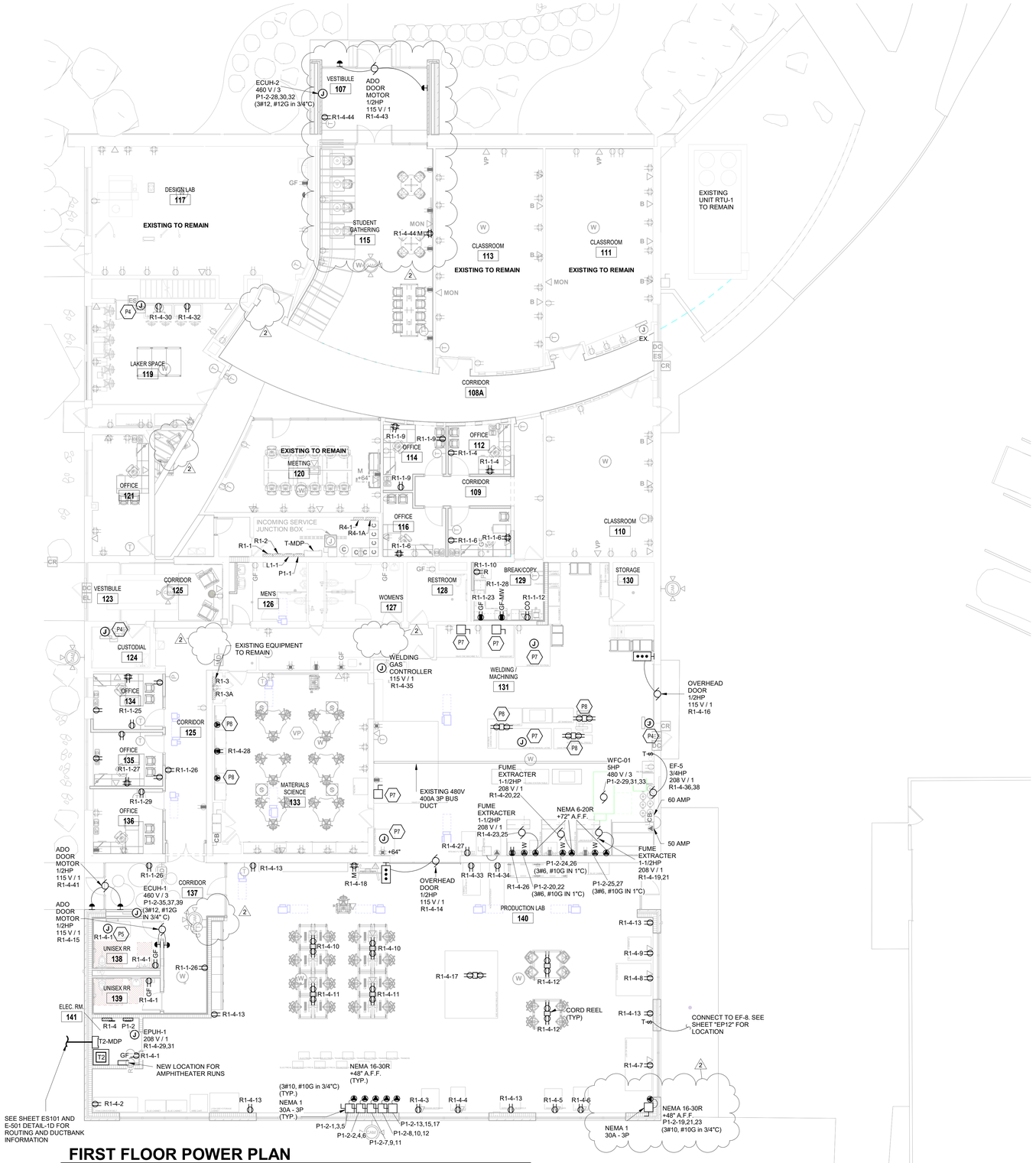
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#2	10/21/2026
2	ADDENDUM#3	10/28/2026

PANELBOARD SCHEDULES

E-602

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ROOM LEGEND			
ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)



FIRST FLOOR POWER PLAN

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

POWER PLAN GENERAL NOTES

1. PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
2. VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
4. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.
5. PROVIDE "GFCI PROTECTED" LABEL ON COVER PLATE FOR ANY GFCI PROTECTED DEVICE.
6. CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 /N.E.C./ REQUIREMENTS.
7. REFER TO MECHANICAL PLANS FOR LOCATION OF MECHANICAL EQUIPMENT. LOCATE DISCONNECT SWITCHES PER NEC.
8. REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS.
9. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM.

SHEET KEYNOTES

P4	PROVIDE 120 VOLT CONNECTION TO ELECTRIC DOOR LOCK POWER SUPPLY UNIT(S). DIVISION 26 CONTRACTOR TO INSTALL AND MAKE FINAL CONNECTION TO ELECTRIC LOCK POWER SUPPLY UNIT(S) SUPPLIED BY DOOR HARDWARE SUPPLIER AND ANY 120 VOLT ACCESS CONTROL SYSTEM HARDWARE. INSTALL ABOVE ACCESSIBLE CEILING (OR AT ROOF DECK LEVEL FOR ROOMS/SPACES WITH EXPOSED STRUCTURE). COORDINATE INSTALLATION WITH GENERAL TRADES AND SECURITY CONTRACTORS PRIOR TO ROUGH-IN. CONNECT DEVICE TO EXISTING DOOR SECURITY CIRCUIT. FIELD VERIFY EXISTING CIRCUIT AS REQUIRED.
P5	PROVIDE A HARDWIRED CONNECTION FOR MOVABLE TABLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH ROUGH-IN FROM MANUFACTURER, ALONG WITH AN EMPTY BOX AND CONDUIT BETWEEN THE POWERED TABLE AND THE EMERGENCY SHUTOFF SWITCH.
P7	NEW LOCATION FOR EXISTING EQUIPMENT. RECONNECT TO EXISTING BUS PLUG.
P8	NEW LOCATION FOR EXISTING EQUIPMENT. RECONNECT TO THE EXISTING CIRCUIT.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO MARK E. HOPE E-79009 REGISTERED PROFESSIONAL ENGINEER

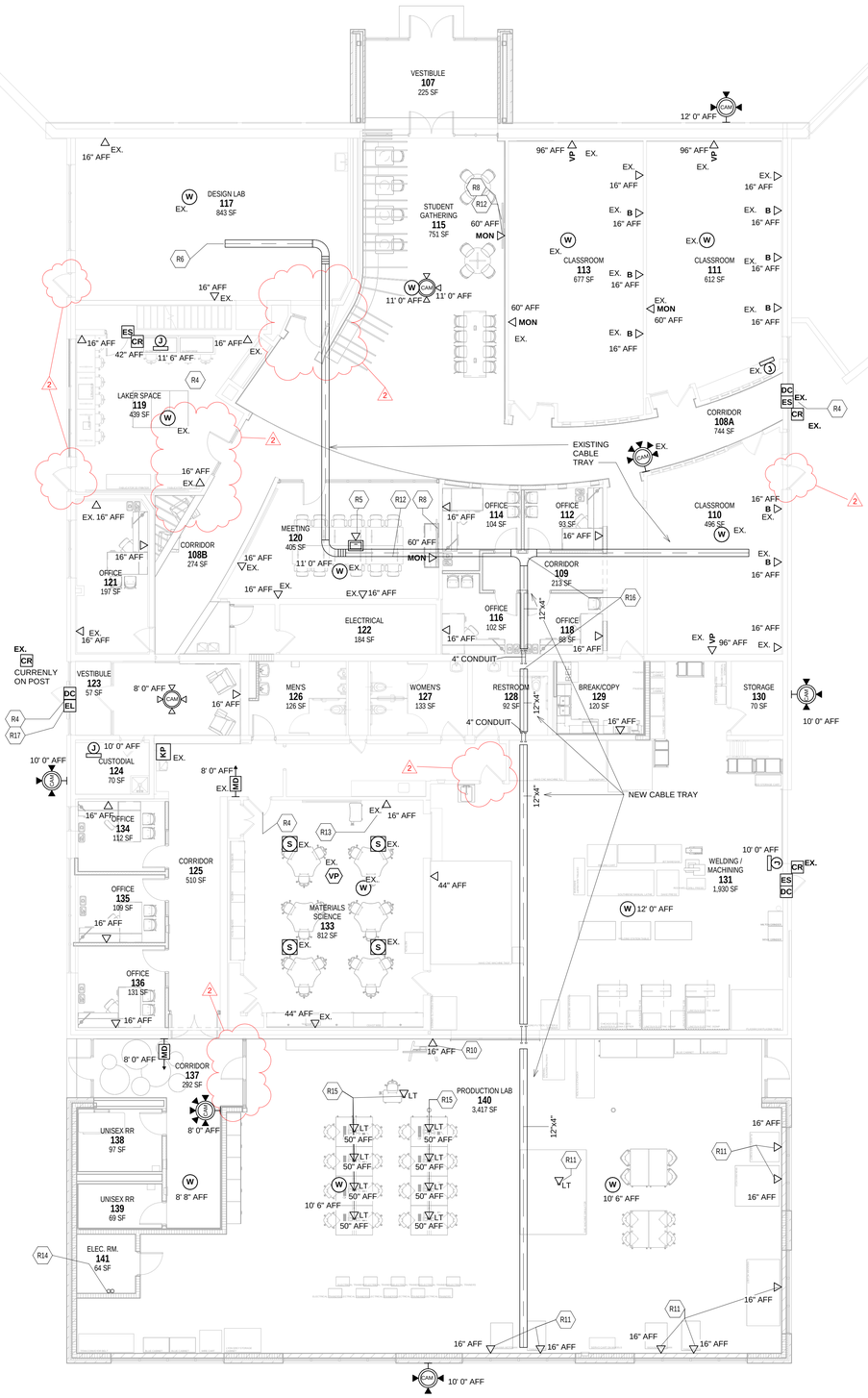
DRAWN BY: RJG
PROJECT NUMBER: 224102.00
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM#2	10/21/2026
2	ADDENDUM#3	10/28/2026

FIRST FLOOR POWER PLAN

EP11

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1 TECHNOLOGY ROUGH-IN PLAN

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

ROOM LEGEND

ROOM NO.	OWNER ROOM NO.	ROOM NAME	AREA (SF)
FIRST FLOOR			
107	107	VESTIBULE	225 SF
108A	COR100	CORRIDOR	744 SF
108B	COR101	CORRIDOR	274 SF
109	COR102	CORRIDOR	213 SF
110	110	CLASSROOM	496 SF
111	111	CLASSROOM	612 SF
112	114D	OFFICE	93 SF
113	113	CLASSROOM	677 SF
114	114C	OFFICE	104 SF
115	115	STUDENT GATHERING	751 SF
116	114B	OFFICE	102 SF
117	117	DESIGN LAB	843 SF
118	114A	OFFICE	88 SF
119	119	LAKER SPACE	439 SF
120	120	MEETING	405 SF
121	121	OFFICE	197 SF
122	122A	ELECTRICAL	184 SF
123	123	VESTIBULE	57 SF
124	125	CUSTODIAL	70 SF
125	COR104	CORRIDOR	510 SF
126	124M	MEN'S	126 SF
127	124W	WOMEN'S	133 SF
128	126	RESTROOM	92 SF
129	112	BREAK/COPY	120 SF
130	133A	STORAGE	70 SF
131	133	WELDING / MACHINING	1930 SF
132	128	BREAK ROOM	190 SF
133	130	MATERIALS SCIENCE	812 SF
134	127	OFFICE	112 SF
135	129	OFFICE	109 SF
136	131	OFFICE	131 SF
137	COR105	CORRIDOR	292 SF
138	138	UNISEX RR	97 SF
139	139	UNISEX RR	69 SF
140	140	PRODUCTION LAB	3417 SF
141	140A	ELEC. RM.	64 SF

TECHNOLOGY ROUGH-IN GENERAL NOTES

A. DEVICES SHALL BE INSTALLED AT LOCATIONS SHOWN ON DRAWINGS. LOCATIONS OF DEVICES SHALL BE COORDINATED WITH OTHER ELECTRICAL DEVICES/ CASEWORK/ ARCHITECTURAL FEATURES AND OTHER TRADES PRIOR TO ROUGH-IN. IF RELOCATION OF DEVICES IS REQUIRED DUE TO LACK OF COORDINATION BETWEEN ELECTRICAL DRAWINGS AND OTHER TRADES, ANY ASSOCIATED COSTS SHALL BE RESPONSIBILITY OF ELECTRICAL CONTRACTOR.

B. CABLE TRY SHALL BE A CONTINUOUS ALUMINUM CABLE TRAY SYSTEM AND SHALL BE INSTALLED ON EACH FLOOR. TRAY SIZE SHALL BE 12" WIDE BY 4" DEEP WITH 1" RUNGS SPACED EVERY 9". WHEN MAKING TURNS AND ELEVATION CHANGES THE APPROPRIATE TRAY ACCESSORIES, HAVING THE PROPER BEND RADIUS, SHALL BE USED. THIS TRAY SYSTEM SHALL HAVE 6" MIN. UNOBSTRUCTED CLEARANCE ABOVE THE TRAY MEASURED FROM THE TOP MOST SURFACE OF THE TRY AND A 12' MIN. CLEARANCE ALONG THE SIDE. THERE SHALL BE NO OTHER EQUIPMENT, DUCTWORK, LIGHTS, CONDUITS, FIXTURES, ETC. ATTACHED TO, MOUNTED ON, RUNNING THROUGH OR ON THE TRAYS. CABLE TRAY SHALL NOT RUN THROUGH WALLS.

C. REFER TO PAGE 3 I Part FOUR 26 OF THE WRIGHT STATE UNIVERSITY CONSTRUCTION ELECTRICAL SPECIFICATIONS FOR COLOR IDENTIFICATION OF ALL CONDUITS.

D. CONDUIT FROM THE CABLE TRAY TO A TYPICAL WALL OUTLET SHOULD BE A MINIMUM OF 1-1/4". EACH 1-1/4" CONDUIT WILL SERVICE ONLY ONE WALL OUTLET LOCATION. THE CONDUIT WILL BE TERMINATED IN A 5" X 5" X 2.75" DEEP BOX WITH A PULL STRING. THE BOX SHALL BE FITTED WITH A DOUBLE GANG MUD RING. OUTLETS ARE TYPICALLY LOCATED AT THE FOLLOWING HEIGHTS TO CENTER:
- Desks 16" AFF ;.

E. CONDUITS RUN TO THE CABLE TRAY SHOULD END APPROXIMATELY 4"-6" AWAY FROM THE TOP OR BOTTOM EDGE OF THE CABLE TRAY TO MAINTAIN A PROPER BEND RADIUS. FLEXIBLE CONDUIT SHALL NOT BE PERMITTED UNLESS PRIOR APPROVAL HAS BEEN GIVEN BY WSU CATS PERSONNEL.

F. EACH STANDARD OFFICE SHALL HAVE A MINIMUM OF ONE (1) WORK STATION LOCATIONS. THE WORK STATION LOCATIONS SHOULD BE THREE (3) FEET FROM THE BACK WALL (THE WALL OPPOSITE FROM THE WALL WITH THE DOOR IN IT).

G. EXTERIOR CAMERAS SHALL HAVE A FLUSH MOUNTED 4" SQUARE BOX 2-1/8" DEEP AT THE CAMERA LOCATION WITH A 1" CONDUIT TO THE NEAREST CABLE TRAY.

H. EACH CLASSROOM WILL VARY ON A CASE BY CASE BASIS.
- Conduits for data cabling to be 1-1/4".
- WALL PHONE LOCATION 48" AFF WITH 4" SQUARE BOX 2 1/8" DEEP WITH A SINGLE-GANG MUD RING AND 1-1/4" CONDUIT TO CABLE TRAY.
- PREFERRED FLOOR BOX IS FSR FL-2000 SERIES.

ROUGH-IN PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

#	NOTE
R4	ROUGH IN DOOR CONTROL CABLE PATHWAY FOR ALL CONTROL/MONITORING HARDWARE TO ALL EXTERIOR DOORS ACCORDING TO WSU STANDARDS. REFER TO ET DETAILS FOR MORE INFORMATION.
R5	PROVIDE 1-1/2" CONDUIT FROM FSR FL-640P-8" FLOOR BOX WALL UP TO CABLE TRAY. REFER TO DETAILS FOR INFO.
R6	TWO EXISTING 4" CONDUITS GOING FROM THE EXISTING SECOND FLOOR TECH ROOM TO ABOVE FIRST FLOOR CEILING SPACE TO REMAIN IN PLACE.
R8	PROVIDE WALL BLOCKING, POWER, AND TECH ROUGHIN FOR A LARGE VIDEO MONITOR.
R10	LOCATION FOR MOBILE MONITOR SHALL INCLUDE POWER AND TECH ROUGHIN.
R11	PLC LOCATIONS WILL NEED POWER AND TECH ROUGHIN PATHWAYS. TECH SHALL FOLLOW THE SAME ROUTE AS POWER IN A SEPERATE PATHWAY. CONFIRM NEEDS WITH MANUFACTURER SPECS.
R12	PROVIDE POWER AND TECH ROUGHIN FOR 86" MONITOR.
R13	ANY LOCATIONS MARKED WITH THE EX (EXISTING) ARE TO REMAIN UNCHANGED DURING CONSTRUCTION.
R14	LOCATION OF THE NEW AMPHITHEATER CONDUIT FEED FOR DATA TO BE REROUTED. REFER TO DRAWING ES101 FOR DETAILS.
R15	THIS LOCATION SHALL BE 1" LIQUIDTIGHT FLEXIBLE CONDUIT, NON-METALLIC, GRAY. SECURED TO STRUCTURE AND DROPPED DOWN TO WORKSTATION HEIGHT (50" AFF). WORKSTATION END SHALL CONTAIN ALUMINUM, RECTANGULAR, 1 GANG, 1 in HUB SIZE, GRAY BOX ATTACHED BY A LIQUIDTIGHT BOX CONNECTOR. INTENT IS FOR LOCATION TO BE CAPABLE OF BEING COILED IN CEILING WHEN NOT IN USE.
R16	ADD 12"X4" CABLE TRAY INTERSECTION AND EXTEND EXISTING CONTINUOUS ALUMINUM CABLE TRAY SYSTEM TO THE SOUTH AS SHOWN.
R17	ONLY EXISTING ENHANCED SECURITY DOOR LOCATION. CONFIRM PATHWAYS AND SYSTEM IS INSTALLED PER WSU STANDARD AS SHOWN ON ET51.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO · MARK E. HOPE · E-79009 · REGISTERED PROFESSIONAL ENGINEER

PROJECT MANAGER: RW

DRAWN BY: CDT

PROJECT NUMBER: FH224102.00/WSU-231035

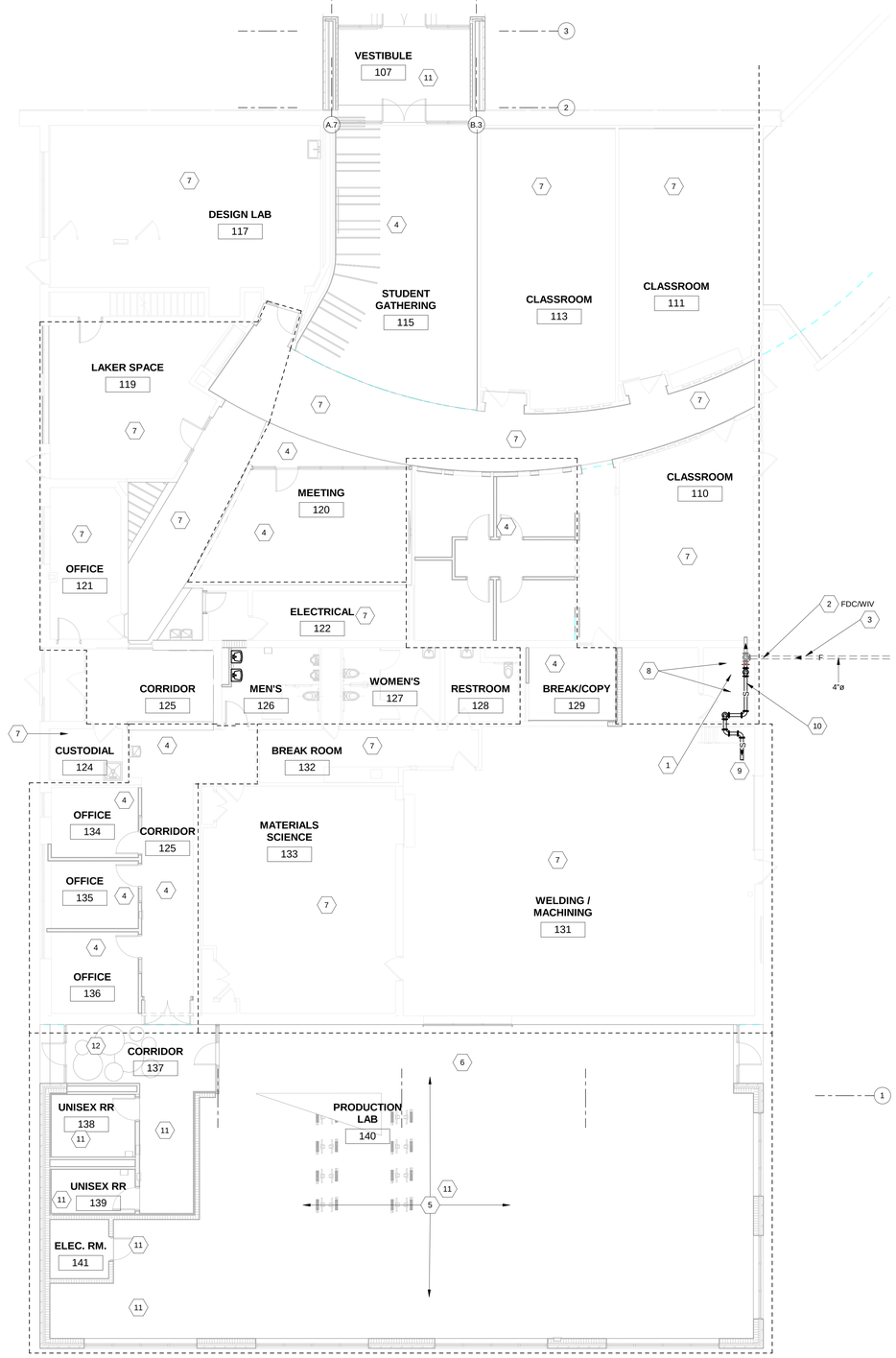
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	Addendum #2	10/21/2026
2	Addendum #3	10/28/2023

FIRST FLOOR TECHNOLOGY ROUGH-IN PLAN

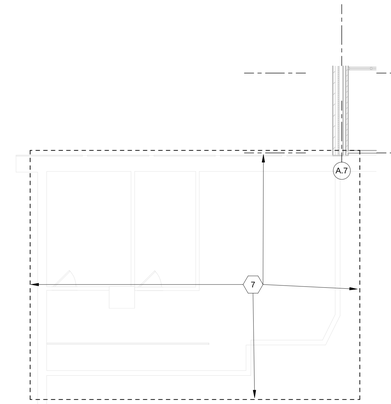
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1 FIRST FLOOR-FIRE PROTECTION

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

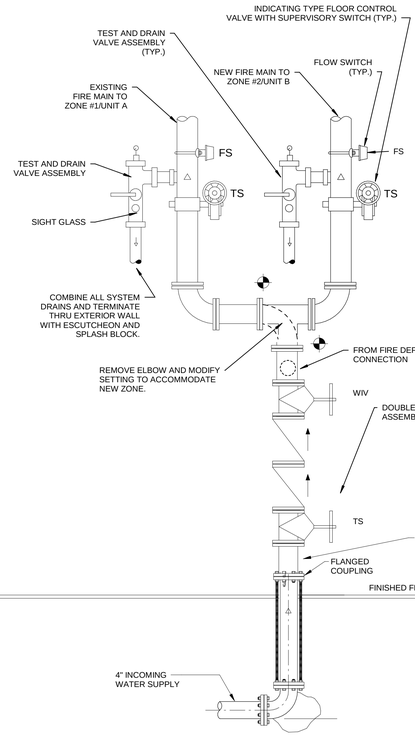


3 SECOND FLOOR-FIRE PROTECTION

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

CONTRACTOR SPRINKLER COLOR NOTE:

SPRINKLERS LOCATED IN CEILING AREAS WITH COLOR FINISHES OTHER THAN WHITE, PROVIDE BLACK FINISH SPRINKLERS IN AREAS WITH BLACK OR DARK GREEN FINISHES AS NOTED ON THE ARCHITECTURAL CEILING PLANS.



2 SUPERVISED ZONE CONTROL DETAIL

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

FIRE PROTECTION GENERAL NOTES

A. ALL FIRE PROTECTION WORK PERFORMED ON THIS PROJECT SHALL BE SIZED PER HYDRAULIC CALCULATIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL DUCTWORK, RACEWAYS, CABLE TRAYS CONDUITS, STRUCTURAL MEMBERS, PIPING AND ARCHITECTURAL CEILING HEIGHTS AND DESIGN INTENT. ALL FIRE PROTECTION WORK SHALL BE DONE IN ACCORDANCE WITH NFPA 13, ALL APPLICABLE STATE AND LOCAL CODES AND THE AUTHORITY HAVING JURISDICTION TO DELIVER A PENALTY FREE SYSTEM.

B. REFER TO DIVISION 21 FOR ALL AUTOMATIC WET PIPE SPRINKLER SYSTEM REQUIREMENTS.

C. ALL SPRINKLER PIPING SYSTEM INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AS IT RELATES TO ACCESS AND SERVICEABILITY OF THAT TRADES EQUIPMENT (I.E.: MECHANICAL UNITS, LIGHTS...) ANY SPRINKLER SYSTEM PIPING DETERMINED BY THE ENGINEER TO BE IN CONFLICT WITH OTHER TRADES WILL BE RELOCATED WITH ALL COST TO BE BORNE BY THE FIRE PROTECTION CONTRACTOR.

D. REFER TO ARCHITECTURAL BUILDING SECTIONS, WALL SECTIONS AND STRUCTURAL DRAWINGS FOR STRUCTURAL STEEL ELEVATIONS AND SPACE AVAILABLE ABOVE THE FINISHED CEILING. PROVIDE ALL APPROPRIATE SUPPORT AND BRACING TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION OF PIPING WITHIN THE GIVEN CONDITIONS.

E. THE CONTRACTOR SHALL ENSURE THAT NO PIPING OR EQUIPMENT WILL BE INSTALLED WITHIN 12'-0" OF ANY EXTERIOR BUILDING WALL OPENING. OPENINGS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO RELIEF AIR, LOUVERS... TO PREVENT FREEZING OF PIPING AND EQUIPMENT. PIPING INSTALLED WITHIN THIS SPECIAL ZONE AND ANY DAMAGE RESULTING FROM THIS INSTALLATION WILL BE COMPLETELY RESTORED AND ALL ASSOCIATED COST BORNE BY THIS CONTRACTOR.

F. FIRE RISER PRESSURE 2023 VALUES - 90 PSIG STATIC, 57 RESIDUAL.

G. ANY FIRE WATCHES REQUIRED BY THE NATURE OF THE FIRE SERVICE REVISION SCOPE WILL BE CONSIDERED CONTRACTOR SCOPE. COST AND STAFFING REQUIRED SHALL BE BORNE BY CONTRACTOR.

CODED NOTES

1 EXISTING FIRE RISER AND SPRINKLER ZONE. REVISE SPRINKLER ZONE AND ASSOCIATED SERVICE EQUIPMENT TO ACCOMMODATE NEW SPRINKLER ZONE INSTALLATION. COORDINATE PHASING OF REMOVAL TO LIMIT SYSTEM DOWNTIME. EXTEND NEW SPRINKLER ZONE PIPING FROM NEW FIRE RISER AND CONNECT TO EXISTING SPRINKLER MAIN PIPING AT UNDERSIDE OF STRUCTURE.

2 EXISTING FDC AND WALL INDICATOR VALVE TO REMAIN.

3 EXISTING FIRE SERVICE PIPING TO REMAIN.

4 RENOVATION AREA OF EXISTING WET SPRINKLER SYSTEM. MODIFY EXISTING PIPING IN AREA TO ACCOMMODATE NEW CEILING LAYOUT. PROVIDE NEW SPRINKLERS AND ARM-OVERS.

5 ORDINARY HAZARD 1 SPACE.

6 ROLL BACK OVERHEAD DOOR. PROVIDE SPRINKLER BELOW TRACK TO ACCOMMODATE SPRINKLER OBSTRUCTION.

7 EXISTING AREA AND WET SPRINKLER SYSTEM TO REMAIN.

8 FIRE SERVICE REVISIONS AND SPRINKLER ZONES PER DETAIL 2, THIS SHEET.

9 EXTEND SPRINKLER MAIN TO FULLY SPRINKLER NEW ADDITION.

10 EXTEND SPRINKLER DRAINS THROUGH WALL. PROVIDE PIPE ESCUTCHEON AT PENETRATIONS. SEAL WALL PENETRATIONS WEATHER TIGHT.

11 NEW ADDITION AREA. EXTEND NEW SPRINKLER MAIN PIPING AND FULLY SPRINKLER SPACE.

12 CLOUD CEILING AREA. PROVIDE SUPPLEMENTAL SPRINKLERS IN CLOUDS WHERE TOTAL OBSTRUCTION DIMENSIONS EXCEED NFPA 13 LIMITS FOR ALLOWABLE SPRINKLER OBSTRUCTIONS.

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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO MARK Z. HOPE E-79009 REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: CSS
PROJECT NUMBER: 224102.00
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM 3	10/29/26

FIRST FLOOR FIRE SUPPRESSION PLAN

FP101

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ROOM LEGEND - MASTER LIST		
ROOM NO.	ROOM NAME	AREA (SF)
107	VESTIBULE	225 SF
108A	CORRIDOR	744 SF
108B	CORRIDOR	274 SF
109	CORRIDOR	213 SF
110	CLASSROOM	496 SF
111	CLASSROOM	612 SF
112	OFFICE	93 SF
113	CLASSROOM	677 SF
114	OFFICE	104 SF
115	STUDENT GATHERING	751 SF
116	OFFICE	102 SF
117	DESIGN LAB	843 SF
118	OFFICE	88 SF
119	LAKER SPACE	439 SF
120	MEETING	405 SF
121	OFFICE	197 SF
122	ELECTRICAL	184 SF
123	VESTIBULE	57 SF

ROOM LEGEND - MASTER LIST		
ROOM NO.	ROOM NAME	AREA (SF)
124	CUSTODIAL	70 SF
125	CORRIDOR	510 SF
126	MEN'S	126 SF
127	WOMEN'S	133 SF
128	RESTROOM	92 SF
129	BREAK/COPY	120 SF
130	STORAGE	70 SF
131	WELDING / MACHINING	1930 SF
132	BREAK ROOM	190 SF
133	MATERIALS SCIENCE	812 SF
134	OFFICE	112 SF
135	OFFICE	109 SF
136	OFFICE	131 SF
137	CORRIDOR	292 SF
138	UNISEX RR	97 SF
139	UNISEX RR	69 SF
140	PRODUCTION LAB	3417 SF
141	ELEC. RM.	64 SF



1 FIRST FLR FINISH PLAN - BASE BID

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

2 FIRST FLR FINISH PLAN - ALTERNATES 1 & 5

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

FINISH GENERAL NOTES

A. REFER TO LIST OF FINISHES ON DRAWINGS SHEETS IF-601 FOR ADDITIONAL INFORMATION.
B. REFER TO DRAWING SHEET IF-602 FOR TYPICAL FLOOR TRANSITION DETAILS.
C. (P-X) ● INDICATES PAINT COLOR SELECTION FOR THE ENTIRE PLANE OF THE WALL OR SURFACE INDICATED TO BE PAINTED.
(P-X) ◆ ARROW POINTER DIRECTS CORNER TO CORNER OR ENTIRE SURFACE. REFER TO IF-601 AND PROJECT MANUAL FOR ADDITIONAL INFORMATION.
D. (P-X) INDICATES PAINT COLOR SELECTION. REFER TO I-601 FOR ADDITIONAL INFORMATION AND PROJECT MANUAL FOR USE OF INTERIOR PAINT TYPES AND LOCATIONS, INCLUDING HIGH PERFORMANCE COATINGS.
E. REFER TO PROJECT MANUAL AND IF SERIES DRAWINGS FOR CLARIFICATION ON ALL ALTERNATE BID FINISHES VERSUS THOSE FINISHES PROVIDED IN BASE BID.

FLOOR PATTERN/FINISH KEY NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- **REFER TO SHEET IF-601 FOR GENERAL FINISH PLAN NOTES AND LIST OF FINISHES.**
- **REFER TO SHEET IF-602 FOR TYPICAL FLOOR TRANSITION DETAILS AND ADDITIONAL INFORMATION.**

1. AS INDICATED WITH HEAVY PINK LINE (EXTENTS), PROVIDE CMT-1 COVE BASE WHERE CMT-1 FLOORING WAS PATCHED. REFER TO SHEET IF-601, IF-602 AND THE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
2. NO WORK TAKING PLACE IN THIS ROOM. ALL FINISHES ARE EXISTING TO REMAIN.
3. PAINT EXPOSED STRUCTURE IN ENTIRE SPACE P3, WHITE.
4. PAINT WALL WITHIN THE EXTENTS OF THE ARROWS WHERE GYP BOARD IS PATCHED. PAINT COLORS AS INDICATED.
5. PAINT EXPOSED STRUCTURE IN ENTIRE SPACE P6, DARK GREEN. PAINT P-6 DOWN ONTO THE WALLS AND STOP IT AT 12'-0" A.F.F.
6. PAINT ALL EXPOSED STEEL ON STAIRS, RAILS, AND STRINGERS P4, BLACK.
7. PLASTIC LAMINATE PANEL AND METAL REVEAL SYSTEM. REFER TO CASEWORK ELEVATIONS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. PAINT GYP. BOARD BEHIND THIS SYSTEM P4, BLACK.
8. AS INDICATED WITH HEAVY CYAN LINE (EXTENTS), PROVIDE PWT FROM WALL TO WALL. PWT TO BE INSTALLED OVER CMT-1 AND SVT-1. PWT TILE TO ALSO EXTEND OVER THE DOORS IN THE RESTROOMS. REFER TO SHEET IF-601 AND THE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
9. IN THIS ROOM, DO NOT PAINT THE WALLS OR EXPOSED CEILINGS. DO NOT INSTALL RESILIENT BASE (RB).
10. WALLCOVERING TO RUN THE FULL HEIGHT OF THE WALL AND WITHIN THE EXTENTS OF THE ARROWS. OWNER TO SUPPLY GRAPHIC SPECIFICATION & DESIGN. CONTRACTOR TO HAVE IT PRINTED AND INSTALLED.
11. AS INDICATED IN YELLOW, PATCH EXISTING CARPET WITH MATCHING ADJACENT CARPET. USE ATTIC STOCK OR SALVAGE EXISTING CARPET FROM OTHER RENOVATED SPACES FOR PATCHING. FEATHER PATCHED PIECES INTO EXISTING CORRIDOR FLOORING SO THERE ARE AS MANY FULL TILES AS POSSIBLE.
12. AS INDICATED IN CORRIDOR 108A, THE EXISTING WINDOW BOXES ARE TO BE PAINTED P-2, MEDIUM GREIGE, TO MATCH THE ADJACENT WALL COLOR. LEAVE ALL WOOD GRAIN PORTIONS AS IS BUT PAINT OVER THE EXISTING PURPLE PORTIONS OF THE BOXES TO MATCH THE WALL COLOR.
13. PAINT BULKHEAD ABOVE (INDICATED WITH DASHED LINES) IN ACCENT PAINT COLOR INDICATED. PAINT ACCENT COLOR ON ALL SIDES OF BULKHEAD.
14. BASE BID & ALTERNATE BID: PAINT NEW BULKHEAD P-1 & P-2 CONTINUING THE PAINT SCHEME FROM THE EXISTING ADJACENT WALLS.
15. BASE BID: INSTALL NEW RESILIENT BASE WHERE THERE IS FLOORING REPLACEMENT. MATCH EXISTING RESILIENT BASE TO MATCH THE EXISTING BASE IN ADJACENT AREAS.
16. PAINT EXISTING HOLLOW METAL DOOR FRAME P-4, BLACK. EXISTING WOOD DOORS ARE TO REMAIN AS IS. IF THERE IS AN EXISTING HOLLOW METAL DOOR ASSOCIATED WITH THE EXISTING HOLLOW METAL FRAME BEING PAINTED, THE DOOR MUST BE PAINTED THE SAME AS THE FRAME. PAINT ALL SIDES OF FRAMES AND DOORS (IF APPLICABLE). REFER TO SHEET IF-601 & PROJECT MANUAL FOR ADDITIONAL INFORMATION.
17. PAINT NEW & EXISTING WALLS P-3, WHITE.
18. BASE BID & ALTERNATE BID: PAINT NEW & EXISTING GYPSUM CEILINGS P-3, WHITE.
19. PAINT DOOR. REFER TO SHEET IF-601 AND THE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
20. PAINT NEW AND EXISTING WALLS P-7, CREAM.
21. PAINT EXISTING BULKHEAD P-10, MEDIUM GRAY.
22. PAINT NEW HOLLOW METAL DOOR FRAME P-9, YELLOW.

FLOOR PATTERN LEGEND

REFER TO IF-601 AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. ALL FLOOR PATTERNS/FINISHES BELOW MAY NOT BE INDICATED ON THIS SHEET.

CARPET TILE
CART-1

ENTRANCE CARPET TILE
ECT-1

SOLID VINYL TILE
SVT-1
SVT-2

PAVER FLOOR TILE
PFT-1

PIGMENTED MINERAL DRY-SHAKE FLOOR HARDENER
DSCH

CERAMIC MOSAIC TILE
CMT-1

PATCH WITH SALVAGED/ATTIC STOCK CARPET

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

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Celina, OH 45822

WRIGHT STATE UNIVERSITY

ARCHITECT
FANNING HOWEY
419-586-7771 WWW.FHAI.COM
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A
B

KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO
JENNIFER M FULLER
1115297
REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/27

PROJECT MANAGER: RW
DRAWN BY: HL
PROJECT NUMBER: FH224102.01/WSU-231035
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

OVERALL FIRST FLOOR FINISH PLAN

IF-101

Autodesk Docs://WSU-LC - Workforce Development Project/2025_EQPT_224102.00.rvt
10/29/2026 4:42:16 PM

LIST OF FINISHES

EQUIPMENT MATERIALS

HP PLASTIC LAMINATE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PL-1 [CABT & WALL PANELS]	FORMICA [MATTE/FINE VELVET]	NATURAL MAPLE 756
PL-2 [COUNTERTOPS]	WILSONART [MATTE/FINE VELVET]	HANDSPUN CHESTNUT 5036-38
PL-3 [WALL PANELS]	NEVAMAR [MATTE/FINE VELVET]	GREEN MATRIX II MR5007

BUTCHER BLOCK

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
BB-1	RED OAK - REFER TO PROJECT MANUAL	CLEAR POLYURETHANE

KICKPLATES

- STAINLESS STEEL

FLOOR MATERIALS

CARPET TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CART-1	TARKETT "CREATE BALANCE" [18" x 36"]	32810 CANDID
	MOHAWK "STONE COMMUNITY GT472"	CUSTOM TO MATCH
	PATCRAFT "MATERIAL" [24" x 24"]	EARTH 00780

ENTRANCE CARPET TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ECT-1	TARKETT "ASSERTIVE STRIA" [24" x 24"]	CHROMIUM 26201
	MOHAWK "STEP IN STYLE II" [24" x 24"]	IRON ORE 983
	PATCRAFT "WALK RIGHT IN II" 10304 [24" x 24"]	CHARCOAL 00590

SOLID VINYL TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
SVT-1	TARKETT "ID LATITUDE STONE" [18" x 18"]	3515 ALUMIN
	MOHAWK "MATUTO PLUS STONE" [12" x 24"]	TBS FROM STANDARDS
	PATCRAFT "AGGREGATE" [24" x 24"]	TBS FROM STANDARDS
SVT-2	TARKETT "ID LATITUDE ABSTRACT"	7555 KINGSTON
	MOHAWK "MATUTO PLUS STONE [12" x 24"]	CUSTOM TO MATCH
	PATCRAFT "GRAPH" [24" x 24"]	PINE 00310

PAVER FLOOR TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PFT-1	DALTILE "VOLUME 1.0" [12" x 24"]	TRUFFLE VL64
	AMERICAN OLEAN "THEORETICAL EVOLVED" [12" x 24"]	TBS FROM STANDARDS
	CROSSVILLE "COLOR BLOX 2.0" [12" x 24"]	SEA OTTER CBX08

PIGMENTED MINERAL DRY-SHAKE FLOOR HARDENER

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER
DSCH	REFER TO SPECIFICATIONS

CERAMIC MOSAIC TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CMT-1	DALTILE "KEYSTONES" [2" x 2"]	TBS TO MATCH EXISTING
	AMERICAN OLEAN "UNGLAZED MOSAICS" [2" x 2"]	TBS TO MATCH EXISTING
	CROSSVILLE "MULTIPLIER" [2" x 2"]	TBS TO MATCH EXISTING

BASE MATERIALS

RESILIENT BASE — COVE BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RB-1	TARKETT "BASEWORKS (TS) or DURACOVE (TP)"	BLACK
	MANNINGTON	BLACK
	NORA	BLACK
	FLEXCO	BLACK
	ROPPE	BLACK
	VPI	BLACK
RB-2	TARKETT "BASEWORKS (TS) or DURACOVE (TP)"	TO MATCH EXISTING
	MANNINGTON	TO MATCH EXISTING
	NORA	TO MATCH EXISTING
	FLEXCO	TO MATCH EXISTING
	ROPPE	TO MATCH EXISTING
	VPI	TO MATCH EXISTING

DECORATIVE RESINOUS FLOORING — 6"H INTEGRAL COVE BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DRF-1	KEY RESIN COMPANY	ARCHITECT TO SELECT FROM
	DURA-FLEX INC.	FULL RANGE OF STANDARD
	STONHARD INC.	BASE COAT PIGMENT COLORS,
	GENERAL POLYMERS CORP.	ALONG WITH UP TO 5 VINYL
		FLAKE AGGREGATE CHIP CLRS
		(GRAYS, WHITE, GREENS, BLACK, ETC.)

TRANSITION FROM PWT TO PFT = SCHLUTER COVE

- AT TRANSITION BETWEEN PAVER FLOOR TILE (PFT) AND PAVER WALL TILE (PWT): PROVIDE SCHLUTER DILEX-EHK COVE TRANSITION AND ALL COORDINATING CORNER, END CAPS AND TRIM PIECES FOR SEALESS TRANSITION.
- COLOR TO BE BRUSHED STAINLESS STEEL.

CERAMIC MOSAIC TILE — 5"H INTEGRAL COVE BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CMT-1	DALTILE "KEYSTONES" 2X2	TO MATCH EXISTING
	AMERICAN OLEAN "UNGLAZED MOSAICS" 2X2	TO MATCH EXISTING
	CROSSVILLE "MULTIPLIER" [2" x 2"]	TO MATCH EXISTING

WALL FINISHES

PAINT

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
P-1 [LIGHT GREIGE]	SHERWIN WILLIAMS	SW7043 WORLDLY GRAY
P-2 [MEDIUM GREIGE]	SHERWIN WILLIAMS	SW7045 INTELLECTUAL GRAY
P-3 [WHITE]	SHERWIN WILLIAMS	SW7004 SNOWBOUND
P-4 [BLACK]	SHERWIN WILLIAMS	SW6258 TRICORN BLACK
P-5 [KELLY GREEN]	SHERWIN WILLIAMS	SW6741 DERBYSHIRE
P-6 [DARK GREEN]	SHERWIN WILLIAMS	SW2847 ROYCROFT BOTTLE GREEN
P-7 [CREAM]	SHERWIN WILLIAMS	SW7042 SHOJI WHITE
P-8 [GRAY]	SHERWIN WILLIAMS	SW7066 GRAY MATTERS
P-9 [YELLOW]	SHERWIN WILLIAMS	SW6128 BLONDE
P-10 [MEDIUM GRAY]	SHERWIN WILLIAMS	SW6277 SPECIAL GRAY

PAVER WALL TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PWT-1	DALTILE "VOLUME 1.0"	DEGREES SILVER
	AMERICAN OLEAN "THEORETICAL EVOLVED" [12" x 24"]	TBS FROM STANDARDS
	CROSSVILLE "COLOR BLOX 2.0"	SLINKYCBX03

- AT ALL EXPOSED EDGES OF WALL TILE PROVIDE SCHLUTER JOLLY AS REQUIRED FOR FINISHED EDGE.
- COLOR TO BE BRUSHED STAINLESS STEEL.

FIBERGLASS REINFORCED PLASTIC

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
FRP-1	REFER TO SPECIFICATIONS	WHITE

- SURFACE FINISH ON ALL PLASTIC SHEETS TO BE SMOOTH.
- ALL TRIM PIECES TO BE WHITE TO MATCH THE PANELS.

MISCELLANEOUS FINISHES

INTERIOR WOOD DOORS/ INTERIOR WOOD TRIM

- ALL WOOD TRIM/RAIL'S/DOORS/ETC. TO BE STAINED TO MATCH EXISTING DOORS.
- WOOD SPECIES TO MATCH EXISTING WOOD DOORS.
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- SUBMIT ACTUAL STAINED WOOD DOOR SAMPLE FOR VERIFICATION & APPROVAL.

RESILIENT MOLDING ACCESSORIES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RMA-1	TARKETT	BLACK
	MANNINGTON	BLACK
	NORA	BLACK
	FLEXCO	BLACK
	ROPPE	BLACK
	VPI	BLACK

P.E.T. FELT CEILING CLOUDS & BAFFLES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PET-1 [BLADE BAFFLE]	KINETICS "KLEEN"	TBS (DARK GREEN)
	HUDDL DESIGN	
	MDC "ZINTRA"	
	MPS ACOUSTICS	
	AUTEX INTERIOR ACOUSTICS	
PET-2 [ROUND CLOUD]	KINETICS "KLEEN"	TBS (DARK GREEN)
	HUDDL DESIGN	
	MDC "ZINTRA"	
	MPS ACOUSTICS	
	AUTEX INTERIOR ACOUSTICS	
PET-3 [ROUND CLOUD]	KINETICS "KLEEN"	TBS (YELLOW)
	HUDDL DESIGN	
	MDC "ZINTRA"	
	MPS ACOUSTICS	
	AUTEX INTERIOR ACOUSTICS	
PET-4 [ROUND CLOUD]	KINETICS "KLEEN"	TBS (KELLY GREEN)
	HUDDL DESIGN	
	MDC "ZINTRA"	
	MPS ACOUSTICS	
	AUTEX INTERIOR ACOUSTICS	

EQPT MATERIAL & FINISH GEN. NOTES

C. PLASTIC LAMINATE FACED ARCHITECTURAL CABINETRY (CUSTOM CASEWORK - DIV. 06) CASEWORK FINISHES ARE AS FOLLOWS (U.N.O.):

- HIGH PRESSURE PLASTIC LAMINATE COUNTERTOPS AND WORKSURFACES ARE TO BE PL-2, UNLESS OTHERWISE NOTED.
  - 3MM AND 1MM PVC EDGES ON COUNTERTOPS AND WORKSURFACES ARE TO MATCH PL-2. SUBMIT ALL MANUFACTURER SAMPLES FOR VERIFICATION AND SELECTION. 3MM AND 1MM EDGES TO MATCH PL-2 ARE TO BE MANUFACTURED UTILIZING THE SAME LAMINATE PAPER, PATTERN AND COLORATION AS PL-2. DEVIATION FROM CUSTOM PRECISE MATCH IS NOT ACCEPTABLE.
    1. DOELLKEN/CANPLAST - MATCH TO PL-2
    2. CHARTER INDUSTRIES - MATCH TO PL-2
    3. TEKNAFORM - MATCH TO PL-2
    4. WILSONART - MATCH TO PL-2
- HIGH PRESSURE PLASTIC LAMINATE CABINETS/VERTICAL SURFACES ARE TO BE PL-1, UNLESS OTHERWISE NOTED. INTERIOR MELAMINE TO BE WHITE.
  - 3MM AND 1MM PVC EDGES ON STUDENT CASEWORK ARE TO MATCH PL-1. SUBMIT ALL MANUFACTURER SAMPLES FOR VERIFICATION AND SELECTION. 3MM AND 1MM EDGES TO MATCH PL-1 ARE TO BE MANUFACTURED UTILIZING THE SAME LAMINATE PAPER, PATTERN AND COLORATION AS PL-1. DEVIATION FROM CUSTOM PRECISE MATCH IS NOT ACCEPTABLE.
    1. DOELLKEN/CANPLAST - MATCH TO PL-1
    2. CHARTER INDUSTRIES - MATCH TO PL-1
    3. TEKNAFORM - MATCH TO PL-1
    4. WILSONART - MATCH TO PL-1
- HANDLES TO BE SILVER METALLIC POWDERCOAT.
- HINGES TO BE SILVER METALLIC POWDERCOAT.
- GROMMETS TO MATCH MOCKETT 93P PECAN ON ALL COUNTERTOPS AND WORKSURFACES.
- WHERE APPLICABLE, TECHNOLOGY CABINET VENTS, VENT GRILLES, ETC. TO MATCH MOCKETT 93 PUTTY PER LAMINATE INSTALLED ON CORRESPONDING WARDROBE TECHNOLOGY, SOUND SYSTEM, WALL TECH CABINETS, ETC. (SUBMIT ALL COLOR SAMPLES FOR VERIFICATION & APPROVAL).

ALL PLAM-FACED ARCHITECTURAL CASEWORK TO BE LOCKABLE.

MATERIAL & FINISH GENERAL NOTES

GENERAL/ MISC.
A. REFER TO FINISH PLAN DRAWINGS AND DETAILS (IF SERIES) FOR MATERIALS, PATTERNS AND COLORS.
B. REFER TO IF-601 FOR LIST OF FINISHES.

FLOORING
A. CENTER FLOORING TILE AND PATTERN IN ROOM UNLESS OTHERWISE INDICATED ON FINISH PLANS.
B. ALIGN EDGE OF FINISHED FLOOR MATERIAL WITH EDGE OF WALL OR CASEWORK.
C. FLOOR FINISH MATERIAL TRANSITIONS SHALL OCCUR UNDER THE CENTER OF THE DOOR UNLESS OTHERWISE INDICATED, WHERE THE FLOORING MATERIAL CHANGES FROM ROOM TO ROOM.
D. EXTEND FLOOR MATERIAL AND PATTERN UNDER ALL OPEN TO THE FLOOR CASEWORK AND FURNITURE.
E. COORDINATE CONTROL JOINTS IN CONCRETE SLAB WITH STRUCTURAL DRAWINGS AND FINISH FLOORING INSTALLER.
F. REFER TO FLOOR PLANS, RESTROOM ENLARGED PLANS, PLUMBING DRAWINGS, ETC. FOR FLOOR DRAIN LOCATIONS.
G. AT BUILDING EXPANSION JOINTS (IF APPLICABLE) PROVIDE PRE-FABRICATED MOVEMENT PROFILE SYSTEM IN MORTAR BED. PROVIDE SCHLUTER DILEX-EDP OR APPROVED EQUAL. TYPICAL AT ALL LOCATIONS.

CARPET TILE
A. ALL CARPET TILE BACKING TO HAVE A MOISTURE RESISTANT BARRIER AND BE HARDBACK.
B. INSTALLATION METHOD TO BE VERTICAL ASHLAR FOR ALL CARPET TILE LISTED, REGARDLESS OF PLANKS, SQUARES OR SIZE OF TILE. SUBMIT INSTALLATION DRAWINGS INDICATING LAYOUT OF CARPET TILE PRIOR TO INSTALLATION FOR APPROVAL.
C. ADDITIONAL MANUFACTURERS LISTED MUST CUSTOM MATCH BASIS OF DESIGN PRODUCT AS LISTED, INCLUDING PATTERN, YARN TYPE AND DYE METHOD, PATTERN REPEAT WIDTH AND LENGTH, MODIFICATION RATIO, MINIMUM FACE WEIGHT AND MINIMUM DENSITY FACTOR (DENSITY FACTOR = FACE WEIGHT X 36 / PILE THICKNESS)

WALL BASE
A. RESILIENT BASE (RB-1) TO BE INSTALLED AT ALL NEW CART, ECT, SVT AND DSCH LOCATIONS UNLESS OTHERWISE INDICATED.
B. ALL RB BASE TO BE COVED.
C. AT RB LOCATIONS PROVIDE PREFORMED OUTSIDE CORNERS, AND USE MANUFACTURER'S RECOMMENDED ADHESIVE (CONTACT CEMENT) FOR PROPER ADHESION WITH NO GAPS.

PAINT & STAIN
A. PAINT ALL WALLS UNLESS OTHERWISE INDICATED ON FINISH PLANS.
B. PAINT ONCE MOCK-UP OFFICE TO RECEIVE ARCHITECT'S APPROVAL PRIOR TO ORDERING PAINT FOR THE ENTIRE BUILDING.
C. ALL WOOD TRIM/RAILS/DOORS/ETC. TO BE CLEAR POLYURETHANE
   - WOOD SPECIES TO BE STAIN GRADE BIRCH.
   - REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.
   - SUBMIT ACTUAL CUSTOM STAINED BIRCH SAMPLE FOR VERIFICATION AND APPROVAL.

PAINT TYPE GENERAL NOTES

A. UNDER SECTION 099123 - INTERIOR PAINTING, PAINT EXPOSED PIPES, DUCTWORK, BREACHING, CONDUIT, INSULATED PIPES, CONDUIT HANGERS, SUPPORTS, BRACING, ETC., WHICH OCCURS IN SPACES DESIGNATED TO BE PAINTED IN PART OR WHOLE.
B. PAINTING AND FINISHING OF EXTERIOR SURFACES AS DESIGNATED. DETAILS SHALL BE UNDER THE WORK SECTION 099113 - EXTERIOR PAINTING OR 099600 - HIGH PERFORMANCE COATINGS. REFER TO PROJECT MANUAL.
C. ALL GYPSUM BOARD WALLS (VERTICAL WHERE FREQUENT CLEANING WILL NOT OCCUR) SHALL BE PAINTED WITH INTERIOR PAINT TYPE # 9.22 (EGGSHELL) UNLESS OTHERWISE INDICATED.
D. ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL BE PAINTED WITH PAINT TYPE #9.21 (FLAT) UNLESS OTHERWISE INDICATED.
E. ALL GYPSUM BOARD WALLS (VERTICAL WHERE FREQUENT CLEANING WILL OCCUR) SHALL BE PAINTED WITH PAINT TYPE #9.23 (SEMI-GLOSS) UNLESS OTHERWISE INDICATED.
F. PAINT ALL NON-INTEGRALLY COLORED CMU WALLS WITH INTERIOR PAINT TYPE #4.14 (SEMI-GLOSS), UNLESS OTHERWISE INDICATED.
G. IN THE FOLLOWING ROOMS PAINT WITH PAINT CODE #4.222 [CMU-RR-WET] (EPOXY-GLOSS). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.
   a. **[126]**
H. IN THE FOLLOWING ROOMS PAINT WITH PAINT CODE #4.224 [CMU-RR-DRY] (EPOXY-SEMI-GLOSS). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.
   a. **[126, 131, 140]**
I. IN THE FOLLOWING ROOMS PAINT WITH PAINT CODE #9.211 [GYP. BD.] (EPOXY-SEMI-GLOSS). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.
   a. **[131]**
J. ALL FERROUS METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.12.
K. ALL GALVANIZED METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.32.
L. ALL EXPOSED STEEL (FERROUS) STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.11.
M. ALL EXPOSED GALVANIZED-METAL STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.31.
N. ALL CONCRETE SUBSTRATES, INCLUDING PRECAST CONCRETE, SHALL BE PAINTED INTERIOR PAINT TYPE #3.11.
O. ALL COTTON, CANVAS, ETC. ON PIPE AND DUCT COVERINGS SHALL BE PAINTED INTERIOR PAINT TYPE #10.11.
P. ALL WALLS ARE TO RECEIVE A SEMI-GLOSS FINISH AND ALL CEILINGS/SUCKHEADS ARE TO RECEIVE A FLAT FINISH.

PAINT COLOR GENERAL NOTES

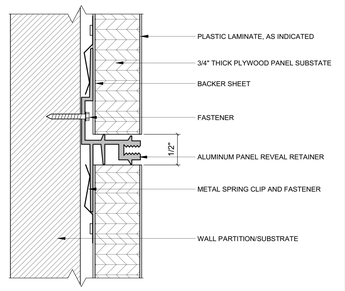
A. ALL NEW INTERIOR WALLS SHALL BE PAINTED P-1, UNLESS OTHERWISE INDICATED ON FINISH PLANS OR INTERIOR ELEVATIONS.
B. ALL EXISTING WALLS WHERE FLOORING IS BEING REPLACED SHALL BE PAINTED P-1, UNLESS OTHERWISE INDICATED ON FINISH PLANS OR ELEVATIONS.
C. PAINT ALL GWB SOFFITS P-1 UNLESS OTHERWISE NOTED ON FINISH PLANS OR INTERIOR ELEVATIONS.
D. PAINT ALL SIDES (HORIZ. AND VERT.) OF SOFFIT INDICATED COLOR, UNLESS OTHERWISE NOTED.
E. PAINT ALL PAINTED EXPOSED CEILINGS AND GYPSUM BOARD CEILINGS P-3 UNLESS OTHERWISE NOTED ON FINISH PLANS, CEILING PLANS, OR INTERIOR ELEVATIONS.
F. ALL NEW INTERIOR HOLLOW METAL DOOR & WINDOW FRAMES AND INTERIOR HOLLOW METAL DOORS ARE TO BE PAINTED P-4 UNLESS OTHERWISE NOTED ON FINISH PLANS.
G. ALL EXPOSED INTERIOR STEEL COLUMNS SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR, UNLESS OTHERWISE INDICATED ON INTERIOR ELEVATIONS OR FINISH PLANS.
H. ALL EXPOSED MECHANICAL DUCTWORK, INCLUDING INSULATION WRAP IF APPLICABLE, TO BE PAINTED TO MATCH THE ADJACENT PAINTED EXPOSED CEILINGS OR ADJACENT WALL COLOR, UNLESS OTHERWISE IDENTIFIED ON FINISH PLANS & ELEVATIONS.
I. ALL EXPOSED STRUCTURE, CEILING, DECK, ETC. TO BE PAINTED P-3 OR P-6. REFER TO THE FINISH PLANS FOR PAINT DESIGNATIONS.
J. ALL EXPOSED PLUMBING, ELECTRICAL, TECHNOLOGY, ETC. TO BE PAINTED TO MATCH THE ADJACENT PAINTED EXPOSED CEILINGS OR ADJACENT WALL COLOR, UNLESS OTHERWISE IDENTIFIED ON FINISH PLANS & ELEVATIONS.

1

ACOUSTIC CEILING SCHEDULE

ACT TYPE	ITEM DESCRIPTION
A	**ACT TYPE A [CONFERENCE ROOM]** WET FORMED, MINERAL FIBER, ASTM E 1264, TYPE III, FORM 2, PATTERN III, 24 BY 48 BY 3/4 INCH, ANGLED TEGULAR, 15/16 INCH GRID, WITH NRC OF 0.55, CAC OF 35, HUMIDITY SAG RESISTANT, LIGHT REFLECTANCE OF 0.82 AND >1 POUND/SQ.FT. FACTORY APPLIED VINYL LATEX PAINT, COLOR - WHITE, UNLESS OTHERWISE NOTED. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING PRODUCTS SPECIFIED: • ITEM NO. 1762, FINE FISSURED (SECOND LOOK III); ARMSTRONG. ** SALVAGE AND REINSTALL EXISTING TILES BEFORE PURCHASING NEW TILES**
B	**ACT TYPE B [RESTROOMS, CUSTODIAL, STORAGE ROOMS ETC.]** WET FORMED, MINERAL FIBER, ASTM E 1264, TYPE III, FORM 2, PATTERN CD OR CE, 24 BY 24 BY 5/8 INCH, SQUARE LAY-IN, 15/16 INCH GRID, WITH NRC OF 0.50-0.60, CAC OF 21-40, CLASS A, HUMIDITY SAG RESISTANT, LIGHT REFLECTANCE OF 0.80 MINIMUM AND <1 POUND/SQ.FT.. FACTORY APPLIED LATEX PAINT, COLOR - WHITE, UNLESS OTHERWISE NOTED. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING PRODUCTS SPECIFIED: • ITEM NO. 1728 FINE FISSURED (SQUARE LAY-IN); ARMSTRONG. • HHF157, HIGH HUMIDITY FINE FISSURED; CERTAINTEED. • ITEM NO. 2210, RADAR CLIMAPLUS; USG INTERIORS.
C	**ACT TYPE C [OFFICES, CORRIDORS, ETC.]** WET FORMED, MINERAL FIBER, ASTM E 1264, TYPE III, FORM 2, PATTERN CE, 24 BY 24 BY 5/8 - 3/4 INCH, SQUARE LAY-IN, 15/16 INCH GRID, WITH NRC OF 0.65-0.70, CAC OF 21 MINIMUM, HUMIDITY SAG RESISTANT, LIGHT REFLECTANCE OF 0.79 MINIMUM AND >.45 POUND/SQ.FT. FACTORY APPLIED VINYL LATEX PAINT, COLOR - WHITE,UNLESS OTHERWISE NOTED. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING PRODUCTS SPECIFIED: • ITEM NO. 1713, SCHOOL ZONE FINE FISSURED (HIGH NRC/CAC); ARMSTRONG. • HHF-457 HNRC, FINE FISSURED (HIGH NRC); CERTAINTEED. • ITEM NO. 22421, RADAR EDUCATION CLIMAPLUS HIGH NRC; USG INTERIORS.
D	**ACT TYPE D [STUDENT GATHERING]** BLACK: WET FORMED MINERAL FIBER, ASTM E 1264, TYPE IV, FORM 2, PATTERN E, 24- BY 48- BY 3/4-INCH (MINIMUM) THICK, SQUARE LAY-IN FOR 15/16-INCH GRID, WITH MINIMUM NRC OF 0.75, CAC OF 30, CLASS A, HUMIDITY- AND SAG-RESISTANT, ANTI-MOLD/MILDEW. ACOUSTICALLY TRANSPARENT MEMBRANE WITH FACTORY APPLIED ACRYLIC LATEX PAINT; COLOR: BLACK. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING PRODUCTS SPECIFIED. • 1319 BACKSTAGE NOIR; ARMSTRONG. • 1530-AST-5 VERSATONE; CERTAINTEED. • 7055G, PREMIER HI-LITE *CLIMAPLUS* KAPOK; USG INTERIORS
E	**ACT TYPE E [VESTIBULE]** BLACK: WET FORMED MINERAL FIBER, ASTM E 1264, TYPE IV, FORM 2, PATTERN E, 24- BY 24- BY 3/4-INCH (MINIMUM) THICK, SQUARE LAY-IN FOR 15/16-INCH GRID, WITH MINIMUM NRC OF 0.75, CAC OF 30, CLASS A, HUMIDITY- AND SAG-RESISTANT, ANTI-MOLD/MILDEW. ACOUSTICALLY TRANSPARENT MEMBRANE WITH FACTORY APPLIED ACRYLIC LATEX PAINT; COLOR: BLACK. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING PRODUCTS SPECIFIED. • 1318 BACKSTAGE NOIR; ARMSTRONG. • 1532-AST-5 VERSATONE; CERTAINTEED. • 7054G, PREMIER HI-LITE *CLIMAPLUS* KAPOK; USG INTERIORS

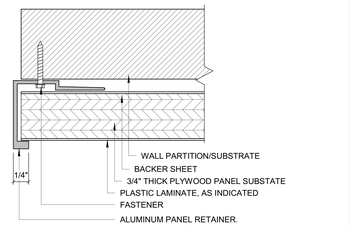
ALL REVEALS - VERTICAL & HORIZONTAL. VERIFY CONDITIONS IN FIELD AND INSTALL PER LOCATION AS INDICATED ON DRAWINGS & DETAILS



A PLASTIC LAMINATE PANELS & REVEAL DETAIL

- SCALE: 12" = 1'-0"
- HORIZONTAL/VERTICAL REVEAL (JOINED AT 45 DEGREE ANGLE)
- ALUMINUM PANEL RETAINER TO BE BLACK POWDERCOAT FINISH

ALL "END OF RUN"/PERIMETER CONDITIONS - VERTICAL & HORIZONTAL. VERIFY CONDITIONS IN FIELD AND INSTALL PER LOCATION AS INDICATED ON DRAWINGS & DETAILS



B PLASTIC LAMINATE PANELS & REVEAL DETAIL

- SCALE: 12" = 1'-0"
- OUTSIDE EDGE REVEAL
- ALUMINUM PANEL RETAINER TO BE BLACK POWDERCOAT FINISH

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A

B

KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO · JENNIFER M. FULLER · 1115297 · REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/27

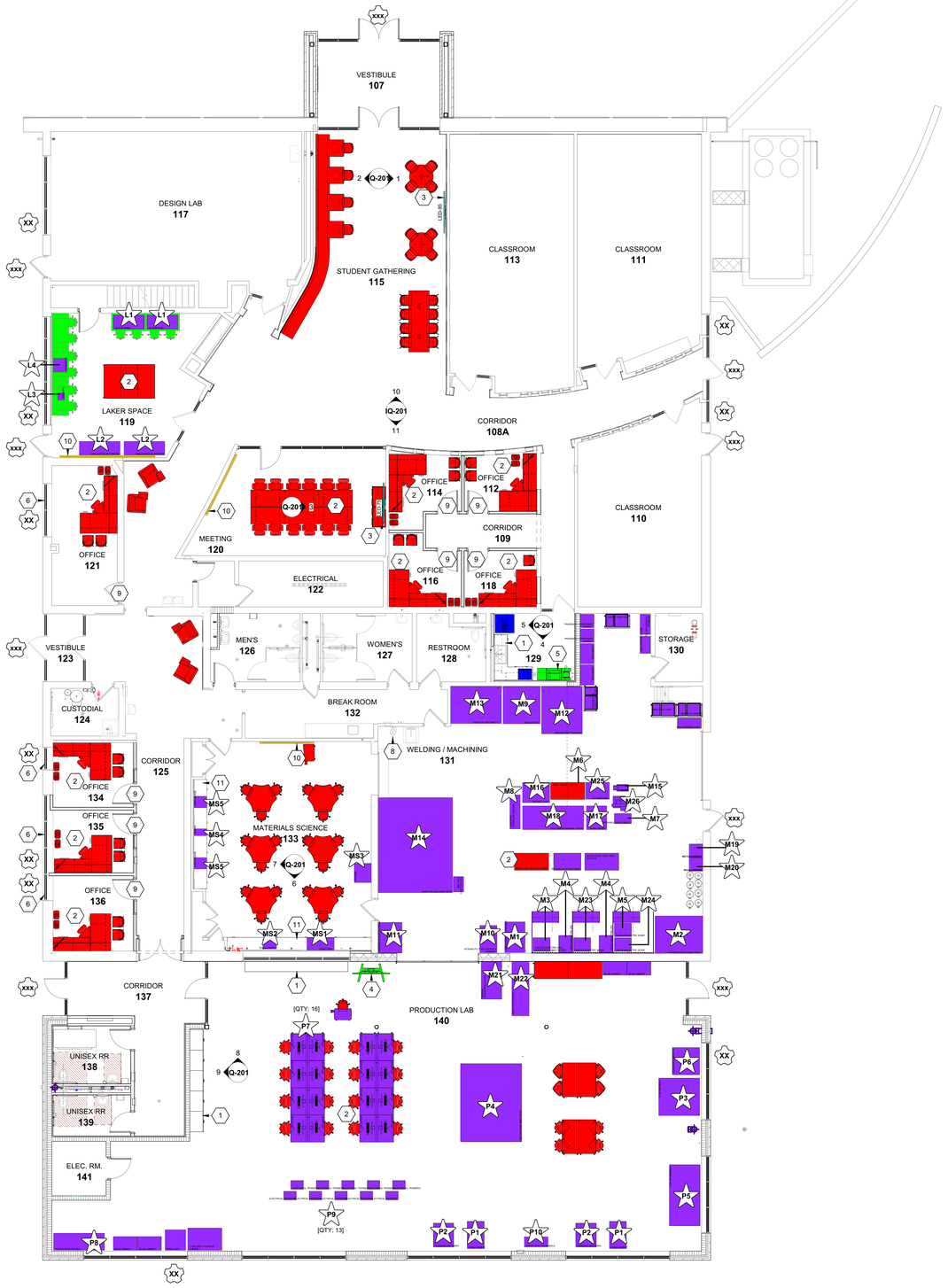
PROJECT MANAGER: RW
DRAWN BY: HL
PROJECT NUMBER: FH224102.01/WSU-231035
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

LIST OF FINISHES

IF-601

Autodesk Docs://WSU-LC - Workforce Development Project/2025_EQPT_224102.00.rvt
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1 OVERALL FIRST FLOOR EQUIPMENT PLAN

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

ROOM LEGEND - MASTER LIST		
ROOM NO.	ROOM NAME	AREA (SF)
107	VESTIBULE	225 SF
108A	CORRIDOR	744 SF
108B	CORRIDOR	274 SF
109	CORRIDOR	213 SF
110	CLASSROOM	496 SF
111	CLASSROOM	612 SF
112	OFFICE	93 SF
113	CLASSROOM	677 SF
114	OFFICE	104 SF
115	STUDENT GATHERING	751 SF
116	OFFICE	102 SF
117	DESIGN LAB	843 SF
118	OFFICE	88 SF
119	LAKER SPACE	439 SF
120	MEETING	405 SF
121	OFFICE	197 SF
122	ELECTRICAL	184 SF
123	VESTIBULE	57 SF

ROOM LEGEND - MASTER LIST		
ROOM NO.	ROOM NAME	AREA (SF)
124	CUSTODIAL	70 SF
125	CORRIDOR	510 SF
126	MEN'S	126 SF
127	WOMEN'S	133 SF
128	RESTROOM	92 SF
129	BREAK/COPY	120 SF
130	STORAGE	70 SF
131	WELDING / MACHINING	1930 SF
132	BREAK ROOM	190 SF
133	MATERIALS SCIENCE	812 SF
134	OFFICE	112 SF
135	OFFICE	109 SF
136	OFFICE	131 SF
137	CORRIDOR	292 SF
138	UNISEX RR	97 SF
139	UNISEX RR	69 SF
140	PRODUCTION LAB	3417 SF
141	ELEC. RM.	64 SF

EQUIPMENT GENERAL NOTES

A. REFER TO CASEWORK ELEVATIONS FOR ADDITIONAL INFO.
B. ALL COUNTERTOPS TO HAVE CONTINUOUS 4" HIGH BACKSPLASHES AND ENDSPLASHES U.N.O.
C. HIDDEN LINES (- - - - -) INDICATE ITEMS BY OWNER, WHICH ARE NOT INCLUDED IN CONSTRUCTION CONTRACTS. DASHED LINES (- - - - -) INDICATE OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
D. (TB) INDICATES 4' HIGH TACK BOARD LENGTH AS INDICATED. REFER TO CASEWORK ELEVATIONS.
E. (MB) INDICATES 4' HIGH MARKER BOARD LENGTH AS INDICATED. REFER TO CASEWORK ELEVATIONS. (SL) INDICATES STAFF LINES TO BE IMPLEMENTED ONTO MB SURFACE.
F. PROVIDE FILLER STRIPS BETWEEN CASEWORK UNITS & WALL OR BETWEEN ANY UNIT AS REQUIRED. EXTEND COUNTER TO FACE OF WALL OR ADJACENT TALL CABINET.
G. ALL CASEWORK DOORS & DRAWERS SHALL BE LOCKABLE, U.N.O.
H. ALL EXPOSED ENDS & BACKS OF CASEWORK SHALL BE FINISHED.
I. CASEWORK INSTALLER SHALL CUT CASEWORK AS REQUIRED FOR PLUMB./ELEC./MECH. LINES.
J. CASEWORK INSTALLER SHALL CAULK BETWEEN COUNTERS, BACKSPLASHES, AND WALLS.
K. ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH THE TOP AT 7'-0" AFF U.N.O.
L. REFER TO ENLARGED RESTROOM PLANS FOR EQUIPMENT AND DETAILS OF SPACES.
M. (TS) INDICATES 2" HIGH TACKSTRIP. LENGTH AND MOUNTING HEIGHT AS INDICATED ON PLAN, CASEWORK ELEVATIONS, OR INTERIOR ELEVS.
N. (TWS) INDICATES TACKABLE WALL SURFACE. REFER TO CASEWORK ELEVATIONS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFO.
O. REFER TO LIST OF FINISHES & CASEWORK ELEVATIONS FOR FINISH/COLOR SELECTIONS FOR ALL ITEMS.

A-## INDICATES SCHEDULED RESIDENTIAL EQUIPMENT. REFER TO RESIDENTIAL APPLIANCE SCHEDULE ON IQ-601.

XXX INDICATES EXTERIOR GRADE APPLIED VINYL DOOR LETTER SIGNAGE (RSXXX). DOORS TO BE LABELED & LETTERED PER LOCAL JURISDICTIONS UTILIZING THE ALPHA, BRAVO, CHARLIE, DELTA BUILDING ORIENTATION. REFER TO IQ-602 AND PROJECT MANUAL.

XX INDICATES EXTERIOR GRADE APPLIED VINYL WINDOW ROOM SIGNAGE (RSXX). IMPLEMENT ACTUAL OWNER ROOM NUMBERS ON THESE VINYL DECALS. REFER TO IQ-602 AND PROJECT MANUAL.

EQUIPMENT LEGEND

COLOR	PROJECT REQUIREMENTS & DESIGNATIONS
	OWNER FURNISHED / OWNER INSTALLED
	OWNER FURNISHED / CONTRACTOR REINSTALLED
	CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
	RESIDENTIAL APPLIANCES REFER TO RESIDENTIAL EQUIPMENT SCHEDULE ON IQ-601.
	VISUAL DISPLAY SURFACES CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
	LOCKERS CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
	FF&E/LOOSE FURNISHINGS OWNER FURNISHED / OWNER INSTALLED

1 OWNER FURNISHED / OWNER INSTALLED

CASEWORK LEGEND

XX-XXX CABINET TYPE (REF. TO CASEWORK SCHEDULE)
00x00x00 WIDTH (IN.) x HEIGHT (IN.) x DEPTH (IN.)

KS3030
CABINET TYPE
CABINET WIDTH (IN.)
CABINET HEIGHT (IN.)

EQUIPMENT NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1. PLASTIC LAMINATE FACED ARCHITECTURAL CABINETRY (DIV. 06 CUSTOM CASEWORK). REFER TO CASEWORK ELEVS. & DETAILS, CASEWORK SCHEDULE, PROJECT MANUAL AND IC-601.
2. LOOSE FURNISHINGS BY OWNER. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.
3. LED MONITOR, SIZE AS INDICATED. REFER TO CASEWORK/INTERIOR ELEVATIONS & ELEC./TECH. DWGS.
4. MOBILE LED MONITOR BY OWNER. REFER TO ELEC./TECH. DWGS.
5. COPIER/PRINTER.
6. MANUAL ROLLER SHADES. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.
7. NOT USED.
8. SAFETY SHOWER & EMERGENCY EYEWASH. REFER TO PLUMBING DRAWINGS AND PROJECT MANUAL FOR ADDITIONAL INFO.
9. COAT HOOK PROVIDED ON REAR OF DOOR. REFER TO PROJECT MANUAL AND IQ-602. MOUNT CENTERED HORIZONTALLY ON WIDTH OF DOOR AT HEIGHT INDICATED.
10. EXISTING EQUIPMENT TO REMAIN.
11. RELOCATE EXISTING CASEWORK FROM ROOM 115 AND PLACE AS SHOWN ON CASEWORK ELEVATIONS. PROVIDE NEW APRONS, FILLERS, AND BUTCHER BLOCK COUNTERTOPS AS SHOWN.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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B

KEY PLAN

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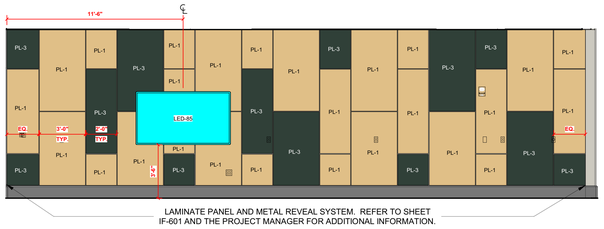
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DRAWN BY: HL
PROJECT NUMBER: FH224102.01/WSU-231035
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

OVERALL FIRST FLOOR EQUIPMENT PLAN

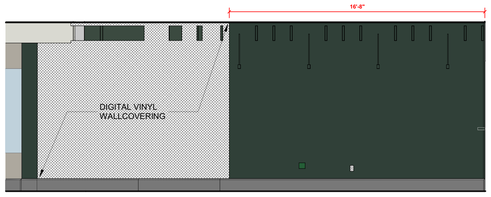
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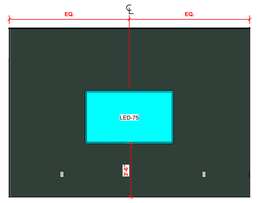
1 RM. 115 - STUDENT GATHERING

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



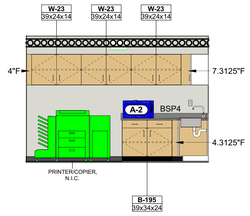
2 RM. 115 - STUDENT GATHERING

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



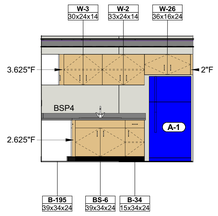
3 RM. 120 - CONFERENCE ROOM

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



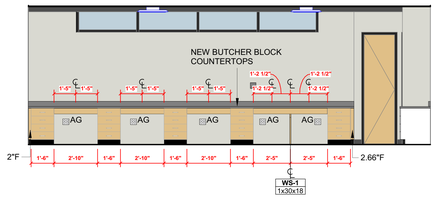
4 RM. 129 - BREAK/COPY

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



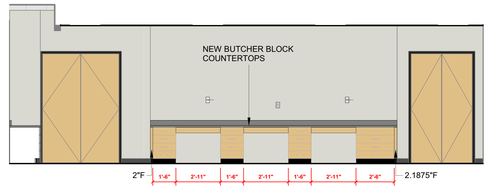
5 RM. 129 - BREAK/COPY

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



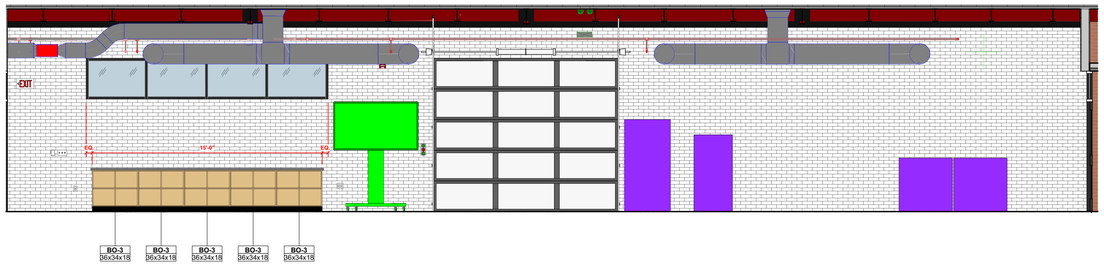
6 RM. 133 - MATERIALS SCIENCE

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



7 RM. 133 - MATERIALS SCIENCE

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



8 RM. 140 - PRODUCTION LAB

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



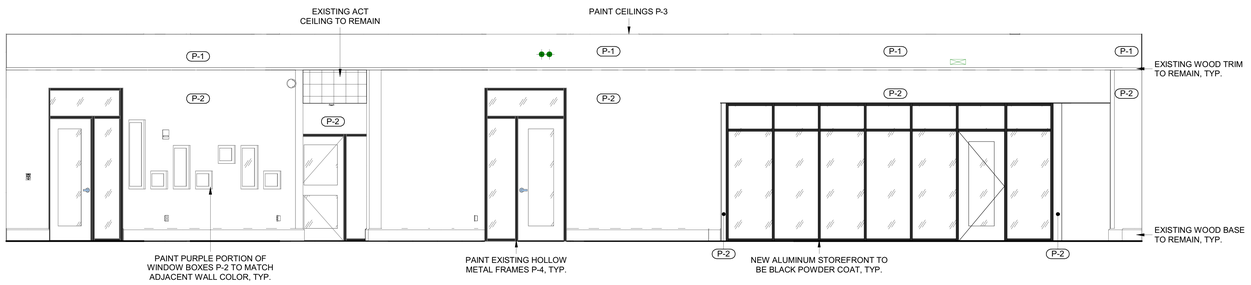
9 RM. 140 - PRODUCTION LAB

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



10 RM. 108A - CORRIDOR - ALT FINISHES

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



11 RM. 108A - CORRIDOR - ALT FINISHES

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

CASEWORK GENERAL NOTES

A. ALL CASEWORK TO BE EDUCATIONAL CASEWORK UNLESS OTHERWISE NOTED ON EQUIPMENT PLANS OR CASEWORK ELEVATIONS. REFER TO CASEWORK ELEVATIONS.
B. REFER TO DRAWING SHEET IQ-201 FOR TYPICAL CASEWORK DETAILS.
C. VERIFY EXACT SIZE OF CASEWORK AND VISUAL DISPLAY BOARDS IN FIELD PRIOR TO FABRICATION. IDENTIFY ALL MODIFIED DIMENSIONS TO MEET FIELD CONDITIONS ON SHOP DRAWINGS FOR APPROVAL.
D. ALL COUNTERTOPS WHERE SINKS ARE LOCATED TO HAVE 4" BACKSPLASHES. HIGH BACKSPLASHES AND ENDSPLASHES UNLESS NOTED OTHERWISE.
E. PROVIDE FILLER STRIPS BETWEEN CASEWORK UNITS AND WALL OR BETWEEN ANY UNIT AS REQUIRED. EXTEND COUNTER TO FACE OF WALL OR ADJACENT TALL CABINET.
F. ALL CASEWORK DOORS AND DRAWERS SHALL BE LOCKABLE UNLESS OTHERWISE NOTED.
G. ALL WALL CABINETS 24" DEEP OR GREATER SHALL BE CONSTRUCTED W/ 3/4" THICK BACK AND 1" THICK SHELVES.
H. ALL BASE CABINETS AND FILING CABINETS SHALL BE SET BACK 3/4-1" FROM EDGE OF COUNTERTOP OR WORKSURFACE UNLESS OTHERWISE NOTED ON DRAWINGS OR A TALL CABINET IS ADJACENT.
I. ALL DOORS SHALL BE SELF-CLOSING.
ALL TALL CABINETS WITH DOORS ADJACENT TO COUNTERTOP OR WORKSURFACE SHALL HAVE A MINIMUM 1" FILLER TO FACILITATE DOOR SWING.
J. TALL CABINETS SHOULD BE SAME DEPTH AS ADJACENT WORKSURFACE OR COUNTERTOP AS WELL AS ADJACENT BASE CABINETS UNLESS OTHERWISE NOTED.
K. WHERE CASEWORK IS LOCATED WALL TO WALL, FIELD VERIFY SIZE AND PROVIDE FILLERS AS REQ'D TO CLOSE OFF ALL SIDES AND TOP.
L. ALL EXPOSED ENDS AND BACKS OF CASEWORK SHALL BE FINISHED. EXPOSED SIDES OF CABINETS WITH DEPTH LESS THAN COUNTERTOP OR WORKSURFACES SHALL HAVE EXTENDED SIDES TO ELIMINATE ANY GAPS BETWEEN CABINETS AND WALLS. FILLER STRIPS ARE NOT ACCEPTABLE.
M. CASEWORK INSTALLER SHALL CUT CASEWORK AS REQUIRED FOR PLUMBING/ELECTRICAL LINES AND CASEWORK INSTALLED EQUIPMENT. CASEWORK INSTALLER SHALL CAULK BETWEEN COUNTERS, BACKSPLASHES, AND WALLS.
N. ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH THE TOP AT 7'-0" AFF UNLESS OTHERWISE NOTED.
O. REFER TO SHEET IF-601 FOR FINISH AND MATERIAL SELECTIONS.
P.

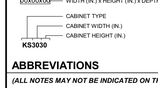
A-# INDICATES SCHEDULED RESIDENTIAL EQUIPMENT. REFER TO RESIDENTIAL EQUIPMENT SCHEDULE ON IC-601.

P-X INDICATES PAINT COLOR SELECTION FOR WALL, SOFFIT, ARCH. ITEM, ETC. REFER TO I.F. SERIES DRAWINGS FOR ADDITIONAL INFORMATION.

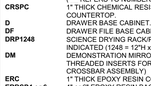
- OWNER PROVIDED / OWNER INSTALLED (OP / OI)
- OWNER PROVIDED / CONTRACTOR INSTALLED (OP / CI)
- CONTRACTOR PROVIDED / CONTRACTOR INSTALLED (CP / CI)
- RESIDENTIAL APPLIANCES — REFER TO RESIDENTIAL EQUIPMENT SCHEDULE ON IQ-601.
- VISUAL DISPLAY SURFACES- CP / CI
- LOCKERS - CP / CI
- FF&E/LOOSE FURNISHINGS- (OP / OI)
- INDICATES ALTERNATE. REFER TO PROJECT MANUAL.
- EDUCATIONAL CASEWORK/PLAM-FACED ARCH. CABINETRY — REFER TO EQUIPMENT PLANS FOR PROJECT MANUAL SPEC SECTION DESIGNATION

TYP. CABINET GRAPHIC DESIGNATION

FOR EACH CABINET SHOWN, PROVIDE A QUANTITY OF EACH COMPONENT DEPICTED. REFER TO CASEWORK SCHEDULE FOR ADDITIONAL INFORMATION



CASEWORK LEGEND



ABBREVIATIONS

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

AG	2" DIAM. ACCESS GROMMET.
ALT	ALTERNATE.
B	BASE CABINET.
BS	SINK BASE CABINET.
BSP4	4" PLASTIC LAMINATE BACKSPLASH.
BSP6	6" PLASTIC LAMINATE BACKSPLASH.
BTECH	TECHNOLOGY BASE CABINET.
CAC1	COMPRESSED AIR TURRET/COCK. (1 = SINGLE VALVE, 2 = DUAL VALVE)
CH	CASEWORK CHASE, SIZE AS INDICATED.
CHBD__	COAT/SMOCK HOOKS & BOARD. REFER TO A7.00E. (REFERS TO NUMBER OF HOOKS PROVIDED.)
CRSPC	1" THICK CHEMICAL RESISTANT SOLID PHENOLIC COUNTERTOP.
D	DRAWER BASE CABINET.
DF	DRAWER FILE BASE CABINET.
DRP1248	SCIENCE DRYING RACK/PEGBOARD (SIZE AS INDICATED (1248 = 12"H x 48"L)
DM	DEMONSTRATION MIRROR (TO FIT WITHIN THE THREADED INSERTS FOR THE DEMO RODS & CROSSBAR ASSEMBLY)
ERC	1" THICK EPOXY RESIN COUNTERTOP.
ERBSP4 or 6	4" or 6" EPOXY RESIN BACKSPLASH.
F	VERTICAL AND/OR HORIZONTAL FILLER PIECE. FIELD VERIFY.
FE	FINISHED END.
FEP	1-1/4" THICK FULL PLASTIC LAMINATE END PANEL WITH 3MM PVC EDGE.
GC1	GAS TURRET/COCK. (1 = SINGLE VALVE, 2 = DUAL VALVE)
KBT	KEYBOARD TRAY.
KS	KNEE SPACE.
L-#	MEDIA CENTER/LIBRARY CASEWORK, STACKS. REFER TO CASEWORK SCHEDULE.
LED	LED MONITOR (SIZE AS INDICATED, LED-70 IS 70" LED MONITOR).
MB	MARKERBOARD.
MU-#	MUSIC CASEWORK/EQUIPMENT. REFER TO CASEWORK SCHEDULE
NIC	NOT IN CONTRACT.
PBSP4 or 6	4" or 6" CHEMICAL RESISTANT SOLID PHENOLIC BACKSPLASH.
P/D	POWER/DATA RECEPTACLE. REFER TO ELECTRICAL/TECHNOLOGY DRAWINGS.
PD	PENCIL DRAWER.
PSS_	PENCIL SHARPENER SUPPORT.
RAP	REMOVABLE ACCESS PANEL
RS_	ROOM SIGNAGE.
S-#	SCIENCE CASEWORK/EQUIPMENT. REFER TO CASEWORK SCHEDULE.
SD	SOAP DISPENSER.
SMBBCTOP	1-3/4" SOLID MAPLE BUTCHERBLOCK TOP.
SMBBBSP	SOLID MAPLE BUTCHERBLOCK BACKSPLASH.
SR	STEREO RACK CABINET.
SS	SOLID SURFACE TOP AND EDGE.
SSBSP	SOLID SURFACE BACKSPLASH.
SSEE	SAFETY SHOWER/EMERGENCY EYEWASH.
STIP	WALL MOUNTED SHORT-THROW INTERACTIVE PROJECTOR.
T	TALL CABINET.
TH_	TOWEL HOOKS & BOARD. REFER TO ARCH.
TO	TALL OPEN CABINET.
TB	TACKBOARD.
TD	PAPER TOWEL DISPENSER.
TS	TACKSTRIP.
TW	TALL WARDROBE CABINET.
TWS	TACKABLE WALL SURFACE.
UDRC	UPRIGHT DEMO RODS AND CROSSBAR ASSEMBLY WITH THREADED INSERTS.
UHBS_	UNIFORM STORAGE HANGING BRACKET & SHELF (LENGTH AS INDICATED _) REFER TO DTL. A7.00D.
W	WALL CABINET.
WDF	WARDROBE FILE CABINET.
WDS	WARDROBE STORAGE CABINET/STUDENT CUBBIE.
WDTECH	WARDROBE TECHNOLOGY CABINET.
WO	WALL OPEN CABINET.
WS	1" THICK WORKSURFACE SUPPORT.
WTECH	WALL TECHNOLOGY CABINET.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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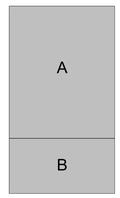
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KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO JENNIFER M FULLER 1115297 REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/27

PROJECT MANAGER: RW

DRAWN BY: HL

PROJECT NUMBER: FH224102.01/WSU-231035

PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

CASEWORK ELEVATIONS

IQ-201

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EQUIPMENT SCHEDULE

RM. 104 - PRODUCTION LAB

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	ADDITIONAL CONNECTIONS	ITEM PHOTO
P1	**FANUC ROBOT** • MODEL NO. LR MATE 200 ID • SERIAL NO. E15531806	200-230V 1 PHASE 50/60 HZ	PER MANF. GUIDELINES, V.I.F.	
P2	**YASKAWA MOTOMAN** • MODEL NO. MH0000J-A00 • SERIAL NO. S41Q86-1-1	120/240V	PER MANF. GUIDELINES, V.I.F.	
P3	**YASKAWA MOTOMAN HC10** • MODEL NO. E304169 • SERIAL NO. WJ1842	120/240V 15A 60HZ	PER MANF. GUIDELINES, V.I.F.	
P4	**SMC MACHINE SIMULATOR** • MODEL NO. FMS 200 • SERIAL NO. 2008 0234	120/240V	AIR & NETWORK CABLE	
P5	**YASKAWA METHOD TOOL LIMITED** • MODEL NO. HC10DT	480V, 120/240V	COMPRESSED AIR & ETHERNET	
P6	**PLANNED ABB ROBOT** • MODEL NO. • SERIAL NO.		PER MANF. GUIDELINES, V.I.F.	
P7	**HP LAPTOP**	120/240V AIR		
P8	**TITAN CONVEYOR BELT** • MODEL NO. • SERIAL NO. 201428	120/240V	PER MANF. GUIDELINES, V.I.F.	
P9	**ELECTRICAL TRAINERS**	480V		
P10	**SERVI CART ON WHEELS**	120/240V	PER MANF. GUIDELINES, V.I.F.	

RM. 106 - MACHINING/WELDING LAB

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	MECH. FIELD CONNECTION	ITEM PHOTO
M1	**YASKAWA WELDING ROBOT** • MODEL NO. MH5 • SERIAL NO. S41S51-2-5-O	480V 50/60HZ 3 PHASE	COMPRESSED AIR, VENTILATION/ EXHAUST SYSTEM	
M2	**PLASMACAM PLASMA TABLE** • MODEL NO. DCH2 https://www.plasmacam.com/archive4/accessories	480V, 120/240V 115/230 VAC 50/60HZ 10A	PER MANF. GUIDELINES, V.I.F.	
M3	**CHICAGO ELECTRIC 240V INVERTER PLASMA CUTTER** • ITEM 60767 • SERIAL NO. 1614-36537-0175	240V 50/60HZ 25A	PER MANF. GUIDELINES, V.I.F.	
M4	**LINCOLN ELECTRIC POWER MIG 256 WELDER** • ITEM 62486	230V 60HZ	PER MANF. GUIDELINES, V.I.F.	
M5	**LINCOLN ELECTRIC POWER MIG 350MP** • K2403-2	230V 60HZ 1 PHASE	PER MANF. GUIDELINES, V.I.F.	
M6	**CENTRAL MACHINERY DRILL PRESS STATION** • ITEM 60238 • SERIAL NO. 366851530	120VAC 2.4A		
M7	**ROCKWELL DRILL PRESS** • SERIES NO. 15-655 • SERIAL NO. 1784381	115/230V 60HZ 1/2 HP 1 PHASE		
M8	**CENTRAL MACHINARY BANDSAW** • ITEM 97009	110/220V 60HZ 1 HP 16A		
M9	**BRIDGEPORT PRECISION MACHINE VISE** • MODEL NO. HB65 • SERIAL NO. D675-016485	460V 60HZ		
M10	**NTSUNG FU** • MODEL NO. CT-457 • SERIAL NO. 5336	115V 60HZ 1 PHASE 1/2 HP	PER MANF. GUIDELINES, V.I.F.	
M11	**HARIG PRODUCTS GRINDER** • MODEL NO. CT-457 • SERIAL NO. 5336	480V 60HZ 3 PHASE 1.4A		
M12	**BRIDGEPORT TEXTRON** • SERIAL NO. 92011-2	480V 3 PHASE 60 HZ 15A		
M13	**HAAS CNC MACHINE** • MODEL NO. TL1 • SERIAL NO. 3103506 https://www.haascnc.com/owners/pre-install-guide/Pre-install-Guide-Template-Lathe/TL-1.html	480V 1 PHASE 60 HZ 13A	PER MANF. GUIDELINES, V.I.F.	

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	MECH. FIELD CONNECTION	ITEM PHOTO
M14	**HAAS - CNC MACHINE** • MODEL NO. TM-1P • SERIAL NO. 1125031	480V 3 PHASE 60 HZ 13A	PER MANF. GUIDELINES, V.I.F.	
M15	**CARVER LABORATORY PRESS** • MODEL NO. C • SERIAL NO. 29000-494			
M16	**RIGGING CART** • REQUIRES A HANGING ANCHOR ON A CEILING HOIST MOUNTED TO STRUCTURE			
M17	**DAKE PRESS** • MODEL NO. 25H • SERIAL NO. 176375			
M18	**SOUTHBEND - NORDIC 15 MANUAL LATHE**	480V		
M19	**WILTON GRINDER** • MODEL NO. 157 • SERIAL NO. 1-80	115V 4.4A 3/4 HP 60HZ		
M20	**SIOUX GRINDER** • MODEL NO. 2081 • SERIAL NO.	115/230V 8.8/4.4A 1 PHASE 1 HP 60HZ		
M21	**PARKER H-PAK PNUEMATICS TRAINER** • MODEL NO. H1S2.7T10P0X13909/13 • SERIAL NO. L02G04	120/240V	MAX PRESSURE: 580 PSI PUMP FLOW: 2.7 GPM	
M22	**HYDROLICS STATION**	120/240V	NEEDS COMPRESSED AIR	
M23	**LINCOLN ELECTRIC POWER MIG 360MP** • MODEL NO. K4467-1 • SERIAL NO. U1240902238	208/230V 1 PHASE 50/60HZ	PER MANF. GUIDELINES, V.I.F.	
M24	**LINCOLN ELECTRIC POWER MIG 262MP** • MODEL NO. K5376-1	208/230V 60HZ	PER MANF. GUIDELINES, V.I.F.	
M25	**JET BANDSAW** • MODEL NO. J-8201K • SERIAL NO. 11081521	115/230V 1 PHASE		
M26	**DRILL STATION**	120/240V		

RM. 114 - LAKER SPACE

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	ADDITIONAL CONNECTIONS	ITEM PHOTO
L1	**GLOWFORGE PRO LASER CUTTER** https://shop.glowforge.com/products/glowforge-pro?_gl=1*2n0ad5*_gcl_au*NzkzNzIxNDM5LjE3MzY1NDE2MjA.*_ga*OTc4NDY4MTM4LjE3MzY1NDE2MjE.*_ga_YM0X41VEGH*MTczNjU0MTYyMC4xLjEuMTczNjU0MTgyMi40MC4wLjA.	110/220V 50/60 HZ	PER MANF. GUIDELINES, V.I.F.	
L2	**FABLICATOR 3D PRINTER** • MODEL NO. MX SERIES	100/240V 50/60 HZ 5.5A	PER MANF. GUIDELINES, V.I.F.	
L3	**ANYCUBIC RESIN 3D PRINTER** • MODEL NO. PHOTON MONO X 6K	120W		
L4	**STRATASYS 3D PRINTER**		PER MANF. GUIDELINES, V.I.F.	

RM. 133 - MATERIAL SCIENCE

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	ADDITIONAL CONNECTIONS	ITEM PHOTO
MS1	**CEAST 9050 IMPACT PENDULUM** • SERIAL NO. 24406	115/230V 50/60 HZ 1 PHASE	PER MANF. GUIDELINES, V.I.F.	
MS2	**TECQUIPMENT SM1090 FATIGUE MACHINE** • MODEL NO. TQ161817-002	220/240V 50/60 HZ 5.5A	PER MANF. GUIDELINES, V.I.F.	
MS3	**INSTRON 3369** • MODEL NO. 3369U2060	100/120/220/240V 47/63 HZ 6.25A	PER MANF. GUIDELINES, V.I.F.	
MS4	**WILSON HARDNESS ROCKWELL 574** • SERIAL NO. R574-00-0878	AC100/240V 47/63 HZ 100VA	PER MANF. GUIDELINES, V.I.F.	
MS5	**SENTRO TECH MUFFLE BOX FURNACE** • SERIAL NO. 1092213 • MODEL NO. ST-1150C-7812	208V 25A	PER MANF. GUIDELINES, V.I.F.	

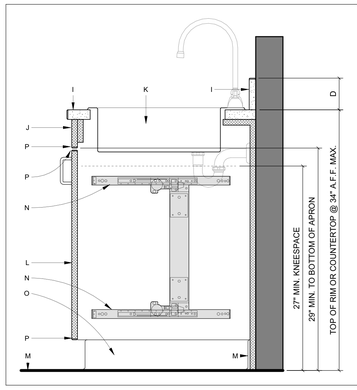
RESIDENTIAL APPLIANCE SCHEDULE

** RESIDENTIAL APPLIANCES ARE PROVIDED BY THE OWNER **

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	MECH. FIELD CONNECTION
A-1	**REFRIGERATOR WITH ICE MAKER** • 21.1 CU.FT. (TOTAL CAPACITY) • 15.1 CU.FT. (FOOD CAPACITY) • 6.04 CU.FT. (FREEZER CAPACITY) • REVERSIBLE HINGES • ICEMAKER FACTORY INSTALLED - NO DISPENSER • ENERGY STAR QUALIFIED • 66.75"H x 32.875"W x 34"D • COLOR: STAINLESS STEEL • BASIS OF DESIGN: GE #GIE21GSHSS	120V 60HZ 15 AMPS	PER MANUF. GUIDELINES 
A-2	**COUNTERTOP MICROWAVE** • 1.6 CU.FT. • GLASS TURNTABLE • ELECTRONIC TOUCH CONTROLS/DISPLAY WITH CLOCK • MULTIPLE POWER LEVELS, SENSOR COOKING CONTROLS • 21.75"W x 13"H X 17.75"D • COLOR: STAINLESS STEEL • BASIS OF DESIGN: GE #GCST16S1WSS	120V 1600W 14.5 AMPS	PER MANUF. GUIDELINES 

CASEWORK SCHEDULE

TYPE	#	SIZE W	D	H	DESCRIPTION
B	34	1'-3"	2'-0"	2'-10"	BASE UNIT WITH ONE DRAWER. ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.
B	195	3'-3"	2'-0"	2'-10"	BASE UNIT WITH TWO DRAWERS, ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.
BO	3	3'-0"	1'-6"	2'-10"	OPEN BASE UNIT WITH TWO FIXED SHELVES. PROVIDE ONE VERTICAL DIVIDER PER SHELF TO CREATE 4 CUBBIES
BS	6	3'-3"	2'-0"	2'-10"	ADA SINK BASE UNIT WITH TWO POCKET DOORS AND ONE BLANK DRAWER PANEL. REFER TO DETAIL ON IQ-201.
T	6	2'-6"	2'-0"	7'-0"	TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND TWO HINGED DOORS.
T	32	3'-0"	2'-0"	7'-0"	TALL DOOR/DRAWER UNIT WITH A FIXED SHELF ABOVE DRAWERS. PROVIDE THREE ADJUSTABLE SHELVES AND TWO HINGED DOORS AT UPPER CABINET AND FOUR EQUAL DRAWERS BELOW WITH 5 INCH INSIDE DEPTH.
W	2	2'-9"	1'-2"	2'-0"	WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.
W	3	2'-6"	1'-2"	2'-0"	WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS
W	23	3'-3"	1'-2"	2'-0"	WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS
W	26	3'-0"	2'-0"	1'-4"	WALL UNIT WITH TWO HINGED DOORS.
WS	1	1"	1'-5 1/2"	2'-6"	WORKSURFACE SUPPORT. REFER TO DETAIL ON A7.00D & PROVIDE CORRECT SIZE PER EQUIPMENT PLANS & CASEWORK ELEVATIONS. RESILIENT WALL BASE DOES NOT WRAP WORKSURFACE SUPPORT.



ADA ACCESSIBLE SINK GENERAL NOTES AND KEYNOTES

* DEPTH OF UNIT MAY VARY. REFER TO CASEWORK ELEVATIONS FOR ADDITIONAL INFORMATION.

* IF DEPTH OF SINK BASE CABINET IS 30", OR GREATER THAN 24", PROVIDE FALSE CHASE PANEL AT REAR OF CABINET SO THAT ADA ACCESSIBLE APPROACH IS NOT GREATER THAT 24"D AND FORWARD APPROACH "ALCOVE" IS ADA COMPLIANT.

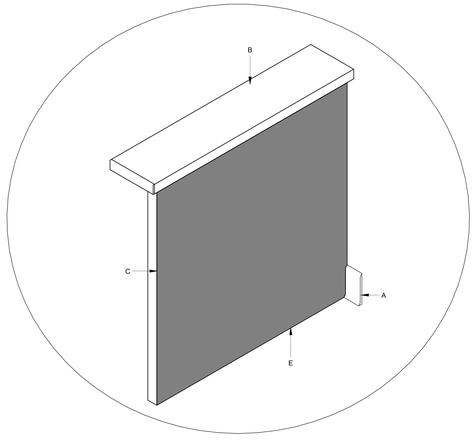
A. COORDINATE LOCATION AND SIZE OF SINK TO AVOID CONFLICT WITH CABINET. MAXIMUM SINK DEPTH OF 6-1/2", HOWEVER ACCESSIBLE LAVS. AND SINKS CANNOT ENCROACH INTO THE REQUIRED KNEE AND TOE CLEARANCES, HOWEVER THE DIP OF THE THE OVERFLOW SHALL NOT BE CONSIDERED IN DETERMINING KNEE AND TOE CLEARANCES.
B. PROVIDE WOOD BLOCKING AS REQUIRED.
C. REFER TO CASEWORK ELEVATIONS FOR WIDTH OF UNIT (30" MIN. INSIDE CLEARANCE REQUIRED).
D. TOP OF BACKSPLASH TO ALIGN WITH TOP OF ADJACENT BACKSPLASH. PROVIDE 4"H BACKSPLASH IF NO ADJACENT BACKSPLASH.
E. 24" NOMINAL DEPTH, UNLESS NOTED OTHERWISE, OR ALIGN FACE OF APPROACH WITH FACE OF CABINET BEYOND.
F. PLUMBING CONTRACTOR TO PROVIDE INSULATED PIPES.
G. OFFSET GRID STRAINER, DRAIN, AND PIPING TOWARDS REAR OF SINK TO AVOID POTENTIAL CONFLICT WITH ACCESSIBLE CABINET.
H. THE 34" DIMENSION IS TO THE HIGHEST SURFACE, THE COUNTERTOP OR THE RIM OF THE PLUMBING FIXTURE.
I. PLASTIC LAMINATE COUNTERTOP AND BACKSPLASH WITH 3MM VINYL PVC EDGE AT ALL EXPOSED EDGES, U.N.O.
J. PLASTIC LAMINATE APRON FRONT/BLANK DRAWER FRONT.
K. SINK. REFER TO PLUMBING DRAWINGS.
L. PLASTIC LAMINATE POCKET DOORS.
M. FINISH FLOOR MATERIAL AND WALL BASE. REFER TO FINISH PLANS, LIST OF FINISHES, AND PROJECT MANUAL.
N. POCKET DOOR HARDWARE BY BLUM (B270E-5500-04R, RIGHT HAND/B270E-5500-05L, LEFT HAND).
O. WALL BASE BEYOND.
P. 3MM VINYL PVC EDGE AT ALL EXPOSED EDGES, TYP.

ADA ACCESSIBLE SINK (ADULT)

- NOT TO SCALE
- APPLICABLE FOR 6th GRADE THROUGH ADULT
- REFER TO EQUIPMENT PLANS AND CASEWORK ELEVATIONS FOR LOCATIONS

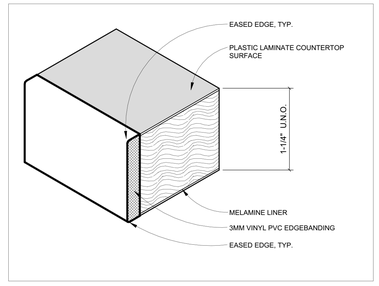
FINISHED END PANEL GENERAL NOTES & KEYNOTES

A. RESILIENT BASE TO BE CUT AT SUPPORTS. BASE DOES NOT WRAP FINISHED END PANELS.
B. 1-1/4" THICK PLASTIC LAMINATE TOP WITH 3MM PVC EDGE. REFER TO CASEWORK ELEVATIONS FOR ADDITIONAL INFORMATION.
C. 1-1/4" THICK FULLY FINISHED PLASTIC LAMINATE PARTICLE BOARD END PANEL SUPPORT WITH 3MM PVC EDGE ON EXPOSED FRONT EDGE. REFER TO CASEWORK SCHEDULE AND ELEVATIONS FOR ADDITIONAL INFORMATION INCLUDING DEPTH AND HEIGHT OF FINISHED END PANEL.
D. SECURE FINISHED END PANEL TO COUNTERTOP WITH STAINLESS STEEL "L" BRACKETS OR MANUFACTURER RECOMMENDED STANDARD CONCEALED FASTENERS.
E. AT CONCEALED SURFACE WHERE FINISHED END PANEL MEETS HARD SURFACE FLOOR, APPLY TWO COATS OF SEALER OR PRIMER AS RECOMMENDED BY CASEWORK AND JOINT-SEALANT MANUFACTURER. AFTER INSTALLATION OF END PANEL, SEAL JUNCTURE OF SUPPORTS AND FLOOR WITH CLEAR MILDEW-RESISTANT SILICONE, PERMANENTLY ELASTIC SEALING COMPOUND, AS RECOMMENDED BY CASEWORK AND JOINT-SEALANT MANUFACTURER. (THIS CONDITION OCCURS AT 1-1/4" THICK FINISHED END PANELS (FEP-X, SEE CASEWORK ELEVATIONS AND SCHEDULE.)



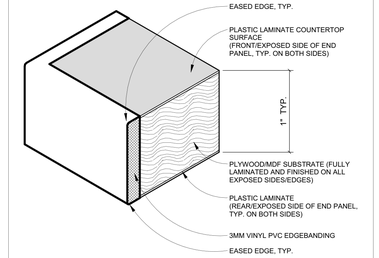
FINISHED END PANEL SUPPORT (FEP)

- SCALE: NOT TO SCALE UNLESS OTHERWISE INDICATED
- PROVIDE UNDER EDUCATIONAL CASEWORK, DIV. 12, WITHIN PROJECT MANUAL.
- REFER TO CASEWORK ELEVATIONS FOR ADDITIONAL INFO.



3MM PVC CTOP EDGE - TYP.

- NOT TO SCALE
- TYPICAL AT ALL COUNTERTOP EDGES UNLESS OTHERWISE NOTED



PLASTIC LAMINATE END PANEL

- NOT TO SCALE
- REFER TO EQUIPMENT PLANS AND CASEWORK ELEVATIONS FOR LOCATIONS

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

7600 State Route 703
Celina, OH 45822

WRIGHT STATE UNIVERSITY

ARCHITECT
FANNING HOWEY
419-586-7771 WWW.FHAI.COM
128 WEST MARKET STREET CELINA, OH 45822

A
B

KEY PLAN

CONSTRUCTION DOCUMENTS

STATE OF OHIO
JENNIFER M. FULLER
1115297
REGISTERED ARCHITECT

JENNIFER M. FULLER, License # 1115297
Expiration Date 12/31/27

PROJECT MANAGER: RW
DRAWN BY: HL
PROJECT NUMBER: FH224102.01/WSU-231035
PROJECT ISSUE DATE: 09.04.2026

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

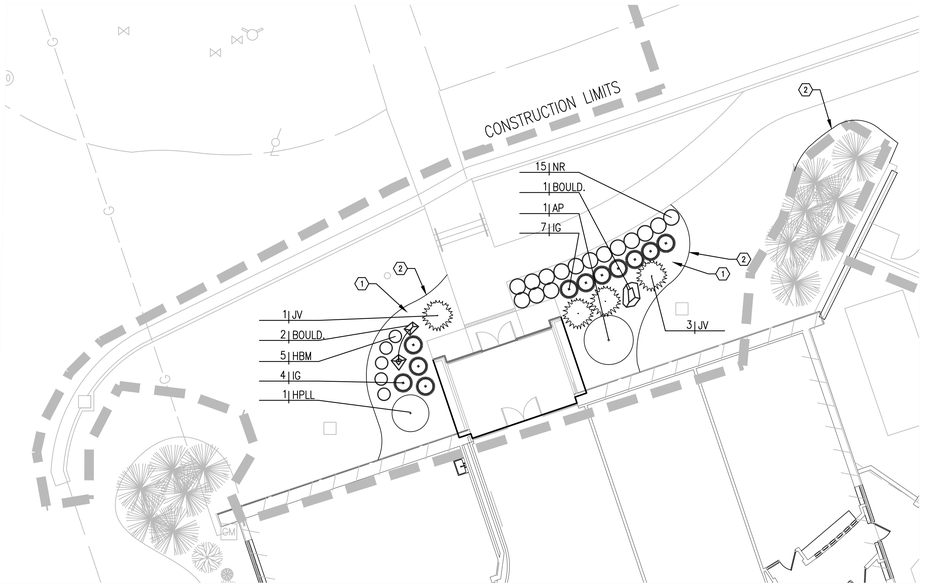
CASEWORK & EQUIPMENT SCHEDULES & DETAILS

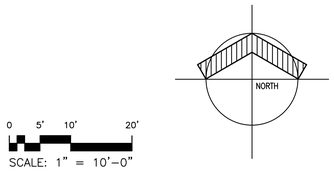
IQ-601

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PLANTING SCHEDULE

KEY	ALT	BASE	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENT
TREES						
AP	1		ACER PALMATUM 'TWOMBLEY'S RED SENTINEL'	TWOMBLY'S RED SENTINEL JAPANESE MAPLE	6'-8'	B&B SINGLE LEADER
SHRUBS						
HPLL	1		HYDRANGEA PANICULATA 'LIMELIGHT'	LIMELIGHT HYDRANGEA	18"-24"	CONT.
IG	11		ILEX GLABRA 'GEM BOX'	GEM BOX INKBERY HOLLY	12-18"	CONT.
JV	4		JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	12"-15"	CONT.
GRASSES AND PERENNIALS						
HBM	5		HEUCHERA SANGUINEA 'RUBY BELLS'	RUBY BELLS CORAL BELLS	#1 POT	CONT.
NR	15		NEPETA RACEMOSA 'WALKER'S LOW'	WALKER'S LOW CATMINT	#1 POT	CONT.
BOULDERS						
BOULD	3		EXIST. BOULDERS RELOCATED FROM MECHANICAL YARD AREA			SET 1/3 OF BOULDER HEIGHT IN GROUND





PLANTING PLAN - ALTERNATE

SCALE: 1" = 10'-0"

PLANTING PLAN KEYNOTE LEGEND

CONSTRUCTION LIMITS

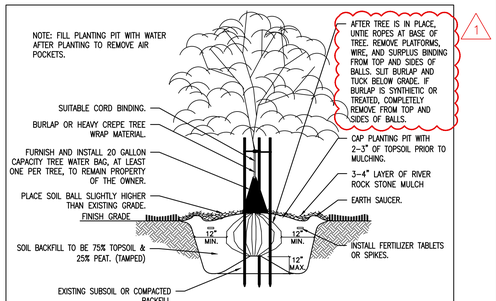
1. PLANTING AREA WITH 12" TOPSOIL AND 3-4" DEPTH OF ¾" DIAMETER RIVER ROCK STONE MULCH
2. SHOVEL CUT BED EDGE

LEGEND

QTY. | TAG — BASE BID PLANT MATERIAL

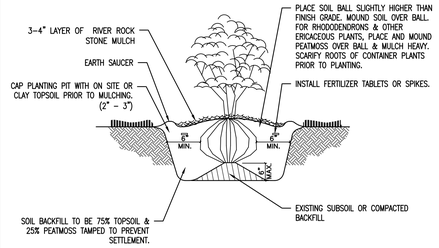
GENERAL LANDSCAPE NOTES

1. LANDSCAPING INCLUDES FURNISHING AND PLANTING OF PLANTS AS INDICATED WITH A 3"-4" DEPTH STONE MULCH IN BEDS.
2. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE PROJECT MANUAL.
3. LAWN WORK SHALL INCLUDE SODDING ALL "DISTURBED" AREAS. REQUIRED 6" OF TOPSOIL FOR LAWN AREAS.
4. CONTRACTOR SHALL CONFIRM LOCATION OF ALL UTILITIES AND SUBSURFACE DRAINS. CONTRACTOR TO REPAIR ALL DAMAGES TO EXISTING UTILITIES, CURBS, PAVEMENTS, ETC., RESULTING FROM LANDSCAPE INSTALLATIONS THAT OCCUR DURING THE INSTALLATION PROCESS.
5. ALL PLANTING OPERATIONS AND MATERIALS SHALL ADHERE TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1) AND THE PROJECT MANUAL.
6. PLANTING FOR ALL PLANTS SHALL BE PER DETAILS 1, 2, & 3/L-501.
7. CONTRACTOR SHALL PREPARE AND SOD AREAS AS INDICATED ACCORDING TO THE PROJECT MANUAL.
8. THE CONTRACTOR SHALL MAINTAIN THE COMPLETED LANDSCAPE UNTIL THE DATE OF FINAL ACCEPTANCE.
9. CONTRACTOR SHALL PERFORM CLEANUP OPERATIONS OF THE SITE DURING INSTALLATION OF LANDSCAPE MATERIALS AND UPON COMPLETION OF THE WORK. REMOVE FROM SITE ALL EXCESS LANDSCAPE RELATED MATERIAL, SOIL DEBRIS AND EQUIPMENT. REPAIR DAMAGE RESULTING FROM LANDSCAPE OPERATIONS.



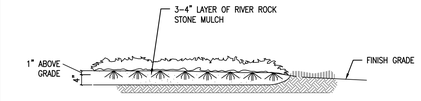
1 DECIDUOUS TREE PLANTING

NOT TO SCALE



2 SHRUB PLANTING

NOT TO SCALE



GROUND COVER PLANTING SOIL TO BE 2 PARTS TOPSOIL AND 1 PART PEATMOSS OR COMPOST FROM AN OHIO EPA APPROVED FACILITY, TOTAL UNCOMPACTED DEPTH 10". INCLUDE FERTILIZER AT SOIL ANALYSIS RECOMMENDED RATES.

3 GROUND COVER OR PERENNIAL BED

NOT TO SCALE

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TRENARY HALL WORKFORCE DEVELOPMENT ADDITION & RENOVATION

7600 State Route 703
Celina, OH 45822

WRIGHT STATE UNIVERSITY

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ARCHITECT

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128 W Market St, Celina, OH 45822

CONSTRUCTION DOCUMENTS

STATE OF OHIO · JENNIFER M. FULLER · 1115297 · REGISTERED ARCHITECT

Jennifer M. Fuller License # 1115297
Expiration Date 12/31/2027

DRAWN BY: KNB

PROJECT NUMBER: FH224102.00/WSU-231035

PROJECT ISSUE DATE: 09.04.26

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	10.29.2026

PLANTING PLAN

L-501

TECHNICAL EDUCATION BUILDINGS

FOR

STATE OF OHIO

WRIGHT STATE UNIVERSITY

WESTERN OHIO BRANCH CAMPUS

CELINA, OHIO

PREPARED FOR

DEPARTMENT OF ADMINISTRATIVE SERVICES

RICHARD D. JACKSON, P.E. — DIRECTOR

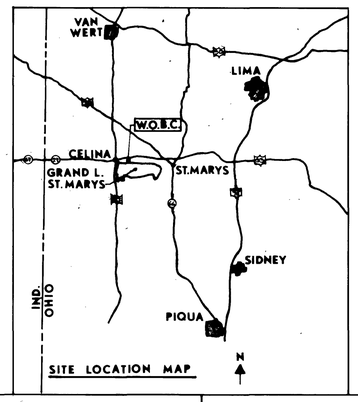
DIVISION OF PUBLIC WORKS

RAYMOND R. KOHLI, P.E. — DEPUTY DIRECTOR

DONALD C. WELSCH — STATE ARCHITECT

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON, OHIO

STRONG & HEFFELBOWER
ARCHITECTS & PLANNERS
LIMA, OHIO



SITE LOCATION MAP

SHEET INDEX

ARCHITECTURAL
- a-1 SITE PLAN
- a-2 PARTIAL SITE PLAN (BLDG."A")
- a-3 PARTIAL SITE PLAN (BLDG."B")
- a-4 FOUNDATION PLAN (BLDG."A")
- a-5 FOUNDATION PLAN (BLDG."B")
- a-6 FLOOR PLAN (BLDG."A")
- a-7 FLOOR PLAN (BLDG."B")
- a-8 ROOM FINISH SCHEDULE
- a-9 DOOR SCHEDULE
- a-10 ELEVATIONS & CROSS-SECTIONS (BLDG."A")
- a-11 ELEVATIONS (BLDG."B")
- a-12 CROSS-SECTIONS (BLDG."B") & DETAILS
- a-13 SECTIONS & DETAILS
- a-14 SECTIONS & DETAILS
- a-15 ROOF PLANS (BLDG'S."A"&"B") & DETAILS
- a-16 ROOF FRAMING PLAN (BLDG."A")
- a-17 ROOF FRAMING PLAN (BLDG."B") & DETAILS
- a-18 REFLECTED CEILING PLAN (BLDG."A") & DETAILS
- a-19 ADD ALTERNATE (BLDG."B")

PLUMBING
- p-1 PLOT PLAN
- p-2 FLOOR PLAN (BLDG."A")
- p-3 FLOOR PLAN (BLDG."B")
- p-4 DIAGRAMS & DETAILS

HVAC
- h-1 FLOOR PLAN (BLDG."A")
- h-2 FLOOR PLAN (BLDG "B")
- h-3 SCHEDULES & DETAILS

ELECTRICAL
- e-1 LEGEND & SCHEDULES
- e-2 FLOOR PLAN (BLDG."A") & PLOT PLAN
- e-3 FLOOR PLAN (BLDG."A") & EXIST. MECH. RM. PLAN
- e-4 FLOOR PLAN (BLDG."B") & DIAGRAMS
- e-5 ELECTRIC DISTRIBUTION & PANELBOARD

MATERIAL INDICATIONS

CONCRETE BLOCK
BRICK AND CONCRETE BLOCK
SOLID CONC. BLOCK
BRICK
GLAZED BRICK
CERAMIC GLAZED TILE
CONCRETE
STONE
FILL EARTH
EXISTING EARTH NOT FILL
PLYWOOD
FINISH LUMBER
ROUGH LUMBER WOOD BLOCKING
PLASTER
GRAVEL FILL
INSULATION
ACOUSTICAL TILE
STRUCTURAL DECK
INSUL
TERRAZZO
MARBLE
METAL
METAL IN SECTION
STEEL IN LARGE SECTION
AS NOTED

ABBREVIATIONS

ACOUS. T.	ACOUSTICAL TILE	E. W.	EACH WAY	PLAS.	PLASTER
AC. P. C.	ACOUSTIC PANEL CEILING	E. W. C.	ELECTRIC WATER COOLER	PL.	PLATE
ADJ.	ADJUSTABLE	EXIST.	EXISTING	P. L.	PROPERTY LINE
A. D. S.	"A" QUALITY DOUBLE STRENGTH GLASS	EXPO.	EXPOSED	PLAST. LAM.	PLASTIC LAMINATE
		EXT.	EXTERIOR	PLYWD	PLYWOOD
ALUM.	ALUMINUM				
ALT.	ALTERNATE	F. A. I.	FRESH AIR INTAKE	Q. T.	QUARRY TILE
A. P.	ACCESS PANEL	F. D.	FLOOR DRAIN		
APPROX.	APPROXIMATE	F. E.	FIRE EXTINGUISHER	R.	RADIUS
A. T.	ASPHALT TILE	FIN.	FINISH	R's.	RISERS
		FL.	FLOOR	R. A.	RETURN AIR
BD.	BOARD	F. L.	FLOW LINE	RD.	ROUND
BLK.	BLOCK	FTG.	FOOTING	R. D.	ROOF DRAIN
BM.	BEAM			RM.	ROOM
B. M.	BENCH MARK	GA.	GAUGE	R. O.	ROUGH OPENING
B. O.	BY OWNER	G. C.	GENERAL CONTRACTOR	REQ'D.	REQUIRED
BOT.	BOTTOM	G. I.	GALVANIZED IRON	REINF.	REINFORCING
BRG.	BEARING	GL.	GLASS OR GLAZED		
BSMT.	BASEMENT	GR.	GRADE	S.	SINK
B. V.	BRICK VENT	GYP.	GYPSUM	S. C.	SOLID CORE
				SHT.	SHEET
CB.	CHALKBOARD	H. C.	HEATING CONTRACTOR	SIM.	SIMILAR
C. B.	CATCH BASIN	H. M.	HOLLOW METAL	S. S.	SERVICE SINK
C/C	CENTER TO CENTER	H. P.	HIGH POINT	S/S	STAINLESS STEEL
CEM.	CEMENT	HR.	HOUR	S. T.	SOFT TILE
CER.	CERAMIC	HORIZ.	HORIZONTAL	STL.	STEEL
C. & T.	CERAMIC GLAZED TILE	H. W.	HOT WATER	STOR.	STORAGE
C. I.	CAST IRON			STRUCT.	STRUCTURAL
CLG.	CEILING	INSUL.	INSULATION	SUSP.	SUSPENDED
C. J.	CONTROL JOINT				
℄	CENTER LINE	J. B.	JOIST BEARING	T.	TILE
C. O.	CLEAN OUT	JT.	JOINT	T. & G.	TONGUE & GROOVE
CLOS.	CLOSET			T. B.	TACKBOARD
COL.	COLUMN	K. E. C.	KITCHEN EQUIPMENT CONTRACTOR	T. C.	TEACHER'S CLOSET
CONC.	CONCRETE	K. P.	KICK PLATE	TEL.	TELEPHONE
CONT.	CONTINUOUS			TERR.	TERRAZZO
CONTR.	CONTRACTOR	LAV.	LAVATORY	T. J.	TRIPLE JOIST
C. T.	CERAMIC TILE			TOIL.	TOILET
CONV.	CONVECTOR	M. C.	MEDICINE CABINET	T. O. S.	TOP OF STEEL
CS.	COURSE	MH.	MANHOLE	TYP.	TYPICAL
C. W. G.	CLEAR WIRE GLASS	MET.	METAL		
		M. I. C.	MISCELLANEOUS IRON CONTRACTOR	UR.	URINAL
DBL.	DOUBLE	M. O.	MASONRY OPENING	U. V.	UNIT VENTILATOR
DET.	DETAIL	M. R.	MAP RAIL		
DIA.	DIAMETER			V. A. T.	VINYL ASBESTOS TILE
DIM.	DIMENSION	N. I. C.	NOT IN CONTRACT	V. C. P.	VITRIFIED CLAY PIPE
D. F.	DRINKING FOUNTAIN	N. T. S.	NOT TO SCALE	VERT.	VERTICAL
D. J.	DOUBLE JOIST			V. S.	VENT STACK
DN.	DOWN	O/C	ON CENTER		
D. S.	DOWNSPOUT	OPP.	OPPOSITE	W. C.	WATER CLOSET
		OPN'G.	OPENING	WD.	WOOD
E. C.	ELECTRICAL CONTRACTOR			W. D.	WINDOW DIMENSION
E. J.	EXPANSION JOINT	P. C.	PLUMBING CONTRACTOR	W. I.	WROUGHT IRON
EL.	ELEVATION	PERIM.	PERIMETER	WGT.	WEIGHT
EQUIP.	EQUIPMENT			W. P.	WEATHERPROOF
EQ. C.	EQUIPMENT CONTRACTOR			YD.	YARD

APPROVED BY:	DATE
DIRECTOR, DEPARTMENT OF ADMINISTRATIVE SERVICES	4-10-79
APPROVED BY:	DATE
DEPUTY DIRECTOR, DIVISION OF PUBLIC WORKS	4-10-79
APPROVED BY:	DATE
STATE ARCHITECT	4-10-79
APPROVED BY:	DATE
BUILDING COMMITTEE CHAIRMAN	4-10-79
APPROVED BY:	DATE
THE UNIVERSITY ENGINEER, WRIGHT STATE UNIVERSITY	4-13-79

SET NO.

STATE OF OHIO — LYMAN J. STRONG 1743 — RICHARD E. HEFFELBOWER 3846 — REGISTERED ARCHITECTS

WRIGHT STATE UNIVERSITY
WESTERN OHIO BRANCH CAMPUS

TECHNICAL
EDUCATION BLDG'S

STATE OF OHIO
JAMES A. RHODES
GOVERNOR

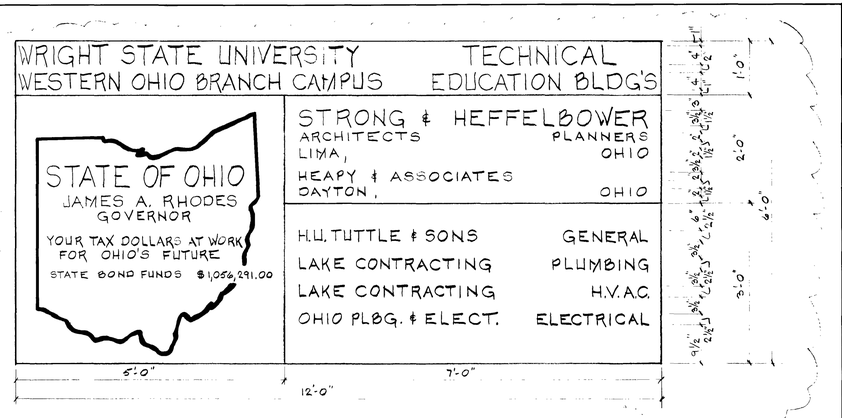
YOUR TAX DOLLARS AT WORK
FOR OHIO'S FUTURE

STATE BOND FUNDS $1,056,291.00

STRONG & HEFFELBOWER
ARCHITECTS PLANNERS
LIMA, OHIO

HEAPY & ASSOCIATES
DAYTON, OHIO

H.U. TUTTLE & SONS	GENERAL
LAKE CONTRACTING	PLUMBING
LAKE CONTRACTING	H.V.A.C.
OHIO PLBG. & ELECT.	ELECTRICAL



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

SITE PLAN
SCALE: 1" = 50'-0"

NORTH

DETAIL FOR STAKING TREES
FOR TREES WITH LESS THAN 6" DIA. TRUNKS
NO SCALE

PLANTING LIST (ADD ALT.)

QUAN.	COMMON NAME & VARIETY	SIZE & SPECS.
6	AMERICAN REDBUD (CERCIS CANADENSIS)	6 FT. HGT., B&B
1	RED FLOWERING DOGWOOD (CORNUS FLORIDA RUBRA)	8-10 FT. HGT., 6' SPR. 2-2½" CAL., B&B
8	BROWNS YEW (TAXUS CUSPIDATA BROWN)	1½ - 2 FT. SPR., B&B
4,320	GROUND COVER (EUONYMUS COLORATUS)	10" O.C. EA. WAY

GRAPHIC SCALE 3 2 1 1/8

GRAPHIC SCALE 3 2 1 1/10

REVISIONS:
⚠ 7-31-79

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

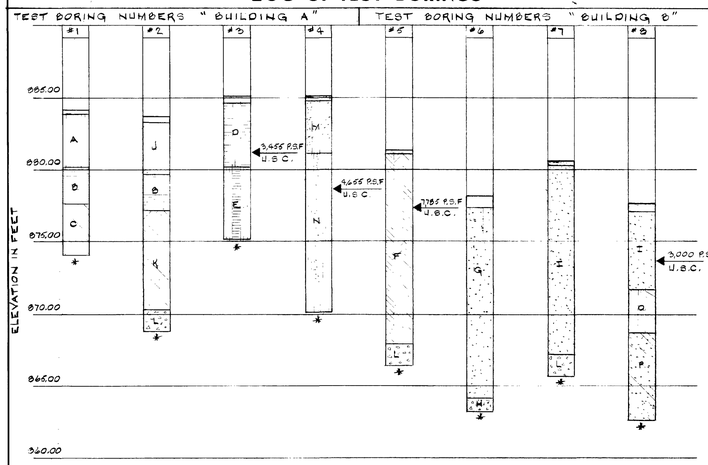
PREPARED FOR
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: R E H
DRAWN BY: B E
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: SITE PLAN
SHEET NO. a-1
OF 19

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

LOG OF TEST BORINGS



LEGEND

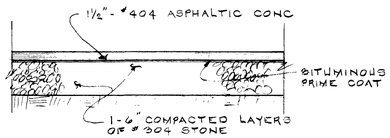
- A TOPSOIL (FILL)
- [A] (FILL) VERY STIFF BROWN SILT, SOME CLAY, SOME SAND, TRACE OF GRAVEL, TRACE OF ORGANIC MATERIAL - MOIST
- [D] (ORIGINAL) VERY STIFF GRAY SILT, SOME CLAY, SOME SAND, TRACE OF ORGANIC MATERIAL - MOIST
- [C] VERY STIFF BROWN AND GRAY CLAY, SOME SAND, SOME SILT, TRACE OF GRAVEL - MOIST
- [B] (FILL) STIFF BROWN SILT, SOME CLAY, SOME SAND, TRACE OF GRAVEL - MOIST
- [E] GRAY AND BROWN CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL - MOIST
- [F] (ORIGINAL) HARD BROWN CLAY, SOME SILT, SOME CLAY, TRACE OF GRAVEL - MOIST
- [G] (ORIGINAL) VERY STIFF BROWN CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL, TRACE OF ROOTS - MOIST
- [H] HARD GRAY SILT, SOME CLAY, SOME SAND, TRACE OF GRAVEL
- [I] (ORIGINAL) VERY STIFF BROWN CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL - MOIST
- [J] (FILL) VERY STIFF BROWN AND GRAY SILT, SOME CLAY, SOME SAND, TRACE OF GRAVEL, TRACE OF ORGANIC MATERIAL - MOIST
- [K] VERY STIFF BROWN AND GRAY CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL
- [L] HARD GRAY SILT, SOME CLAY, SOME SAND, TRACE OF GRAVEL - MOIST
- [M] (FILL) VERY STIFF BROWN SILT, SOME SAND, TRACE OF CLAY, TRACE OF GRAVEL - MOIST
- [N] (ORIGINAL) HARD BROWN AND GRAY CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL - MOIST
- [O] MEDIUM DENSE BROWN SAND, SOME SILT, TRACE OF CLAY, TRACE OF GRAVEL - MOIST
- [P] HARD BROWN CLAY, SOME SILT, SOME SAND, TRACE OF GRAVEL

U.S.C. - UNCONFINED COMPRESSIVE STRENGTH

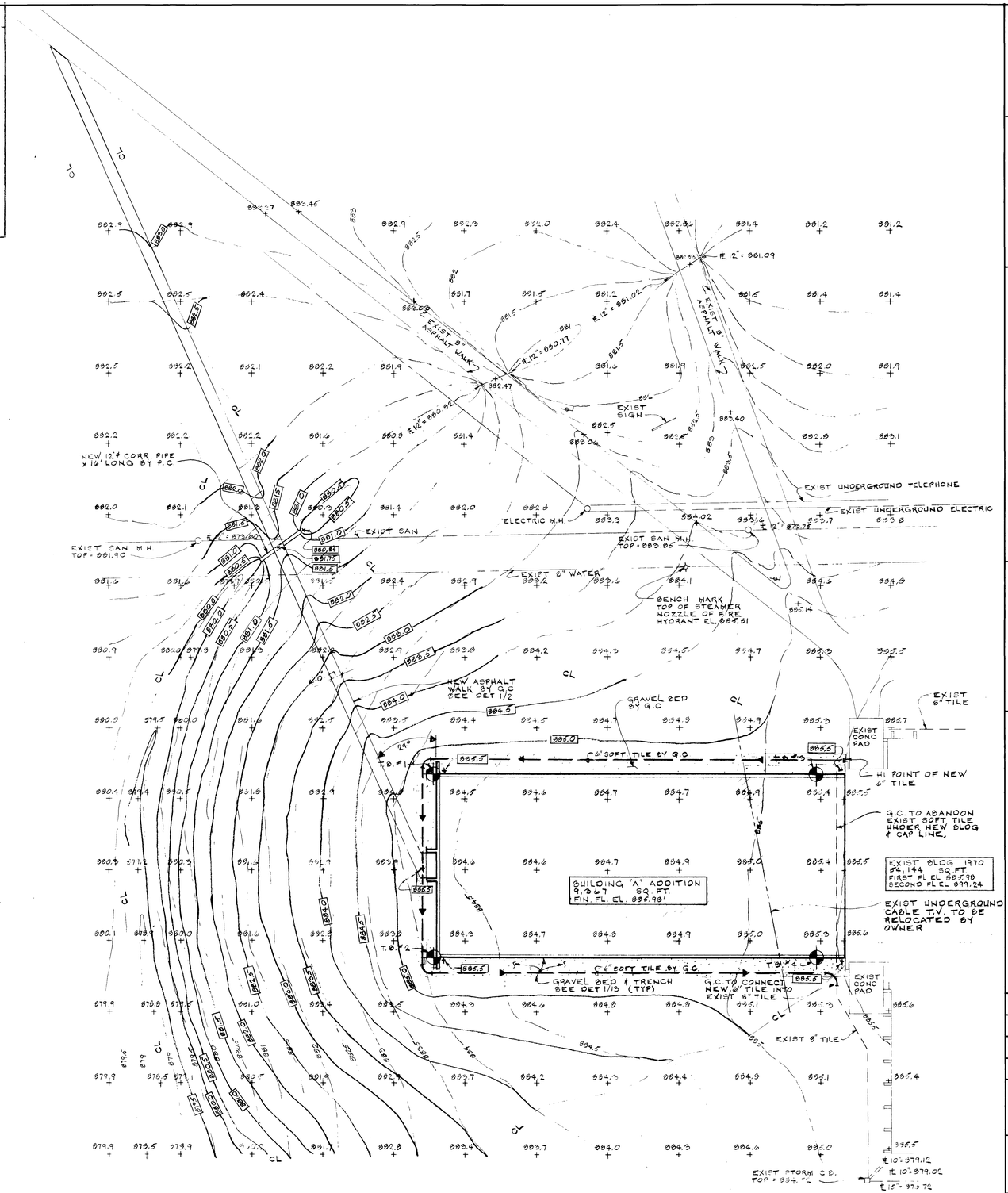
* - INDICATES NO GROUNDWATER ENCOUNTERED DURING OR AT COMPLETION OF BORING

LEGEND

- EXIST MANHOLE
- EXIST FIRE HYDRANT
- EXIST CATCH BASIN
- + 880.0 EXIST GRADE
- —880.0— EXIST CONTOUR
- —(880.0)— NEW CONTOUR
- + (880.0) NEW GRADE
- —— -- —— EXIST WATER LINE
- —— --- —— EXIST SAN. LINE
- —— ----- —— EXIST TELEPHONE LINE
- —— ------ —— EXIST ELECT LINE



1/2 ASPHALT WALK
SCALE : 1" = 1'-0"



PARTIAL SITE PLAN (BUILDING "A")
SCALE : 1" = 20'-0"

NORTH

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C
CELINA, OHIO

PREPARED BY DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

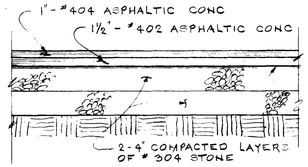
STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: REH
DRAWN BY: B.E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: PARTIAL SITE PLAN (BLDG. "A")
SHEET NO. a-2 OF 19

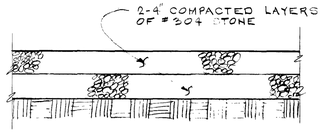
STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3846 · REGISTERED ARCHITECTS

LEGEND

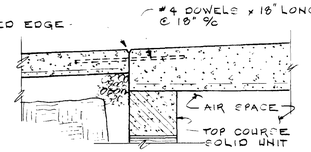
○ EXIST MANHOLE	—·— EXIST STORM LINE
⊹ EXIST FIRE HYDRANT	—·—·— EXIST SAN. LINE
□ EXIST CATCH BASIN	—•— NEW CHAIN LINK FENCE
TREE	+ 879.0 NEW GRADE
+ 879. EXIST GRADE	879.0 NEW CONTOUR
—879— EXIST CONTOUR	NEW CATCH BASIN



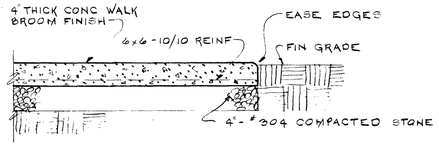
1/3 BLACKTOP DRIVE
SCALE : 1" = 1'-0"



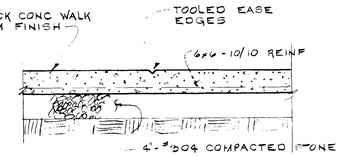
2/3 STONE DRIVE & PARKING
SCALE : 1" = 1'-0"



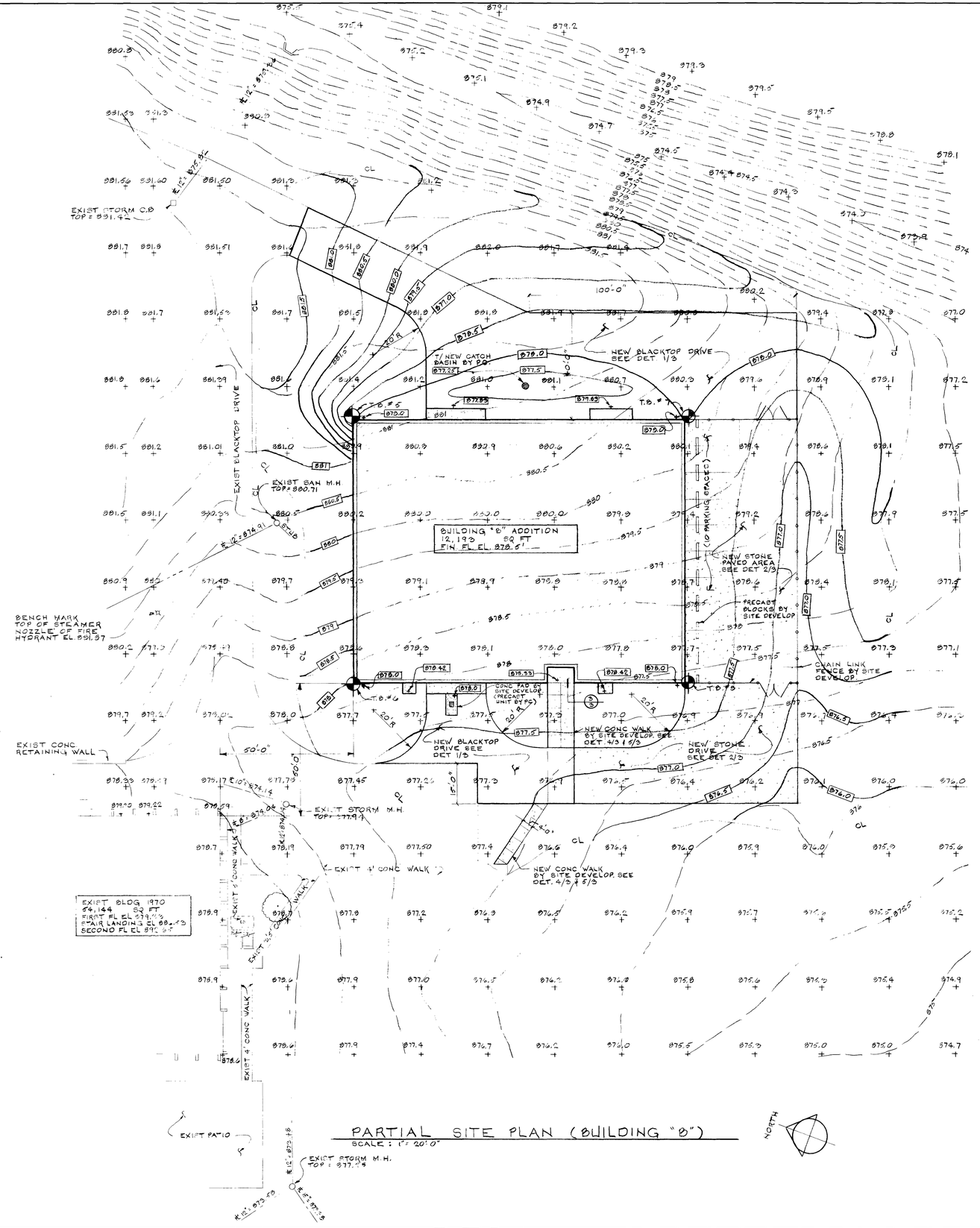
3/3 SIDEWALK TO APRON
SCALE : 1" = 1'-0"



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



5/3 TYP. SCORED JOINT
SCALE : 1" = 1'-0"



PARTIAL SITE PLAN (BUILDING "B")
SCALE : 1" = 20'-0"

REVISIONS:

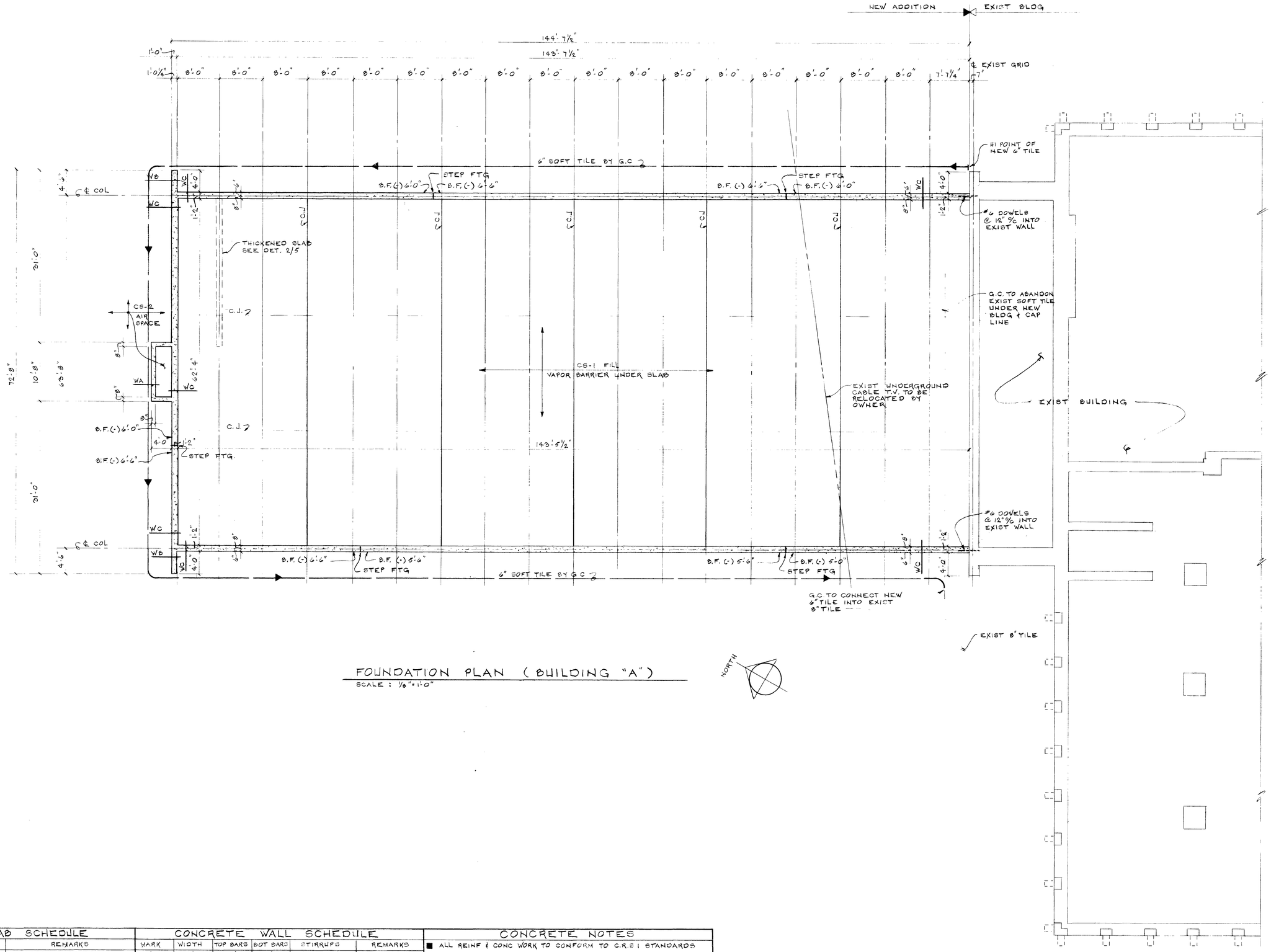
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: R.E.H
DRAWN BY: B.E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: PARTIAL SITE PLAN (BLDG "B")
SHEET NO. a-3 OF 3

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



FOUNDATION PLAN (BUILDING "A")

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

NORTH

CONCRETE SLAB SCHEDULE					
MARK	THICK	RESTEEL	WWM OR TEMP STEEL	REMARKS
CS-1	4"		6x6 - 30#	VAPOR BARRIER
CS-2	7"	#6 @ 12" T & B	#4 @ 12" ℄	AIR SPACE BELOW (PERMANENT FORM)

CONCRETE WALL SCHEDULE					
MARK	WIDTH	TOP BARS	BOT BARS	STIRRUPS	REMARKS
WA	8"	2-#5	2-#5	#3 @ 24"℄	
WB	12"	2-#5	2-#5	#3 @ 24"℄	
WC	16"	2-#5	2-#5	#3 @ 24"℄	

CONCRETE NOTES

- ALL REINF & CONC WORK TO CONFORM TO C.R.S.I. STANDARDS
- ELEV'S SHOWN ON FOUNDATION PLAN ARE FROM FIN. FL. TO BOT OF FTG
- PROVIDE 6 MIL VAPOR BARRIER UNDER SLAB ON GRADE
- LAP REINF BARS MIN 30 DIAMETERS @ SPLICES MIN LAP = 1'-0"

REVISIONS:

PROJECT TITLE:

TECHNICAL EDUCATION BUILDINGS

FOR

STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. # 2
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER

·ARCHITECTS
·PLANNERS

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DRAWN BY: B.E.

COMM. NO.: 78-642

DATE: 4-2-79

SHEET TITLE: FOUNDATION PLAN (BLDG "A")

SHEET NO. a-4

OF)

STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3846 · REGISTERED ARCHITECTS

CONCRETE SLAB SCHEDULE

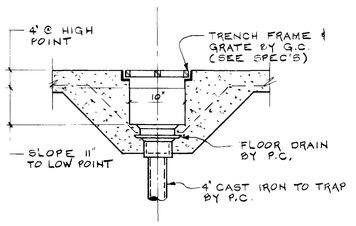
MARK	THICK	RESTEEL	MESH OR TEMP STL	REMARKS
CS-1	5"			VAPOR BARRIER AS NOTED IN SPECS & ROOM SCHEDULE
CS-2	7"	#4 @ 12" E.W.	#4 @ 12" %	AIR SPACE BELOW (PERMANENT FORM)

CONCRETE FOOTING SCHEDULE

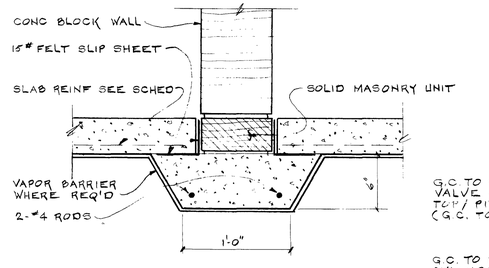
MARK	SIZE	RESTEEL	TIES	REMARKS
FA	12" x 24"	3-#4	#2 @ 24" %	
FB	12" x 16"	2-#4	#2 @ 24" %	

CONCRETE NOTES

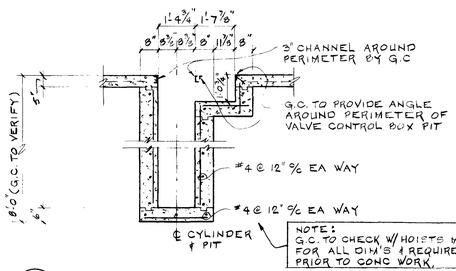
- ALL REINF & CONC WORK TO CONFORM TO C.R.S.I. STANDARDS
- ELEV'S SHOWN ON FOUNDATION PLAN ARE FROM FIN FL TO BOT OF FTG
- PROVIDE 6 MIL VAPOR BARRIER UNDER SLAB ON GRADE. SEE SPECS & ROOM SCHEDULE FOR LOCATION
- LAP REINF BARS MIN 30 DIAMETERS @ SPLICES MIN LAP = 1'-0"



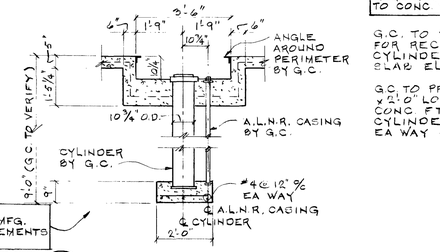
1 / 5,7 TRENCH DRAIN
SCALE : 3/4" = 1'-0"



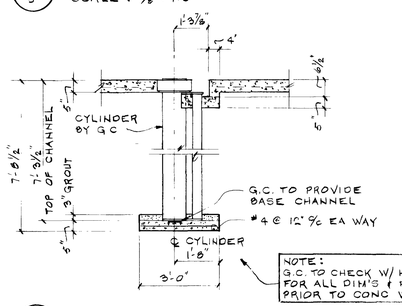
2 / 4,5 THICKENED SLAB DETAIL
SCALE : 1 1/2" = 1'-0"



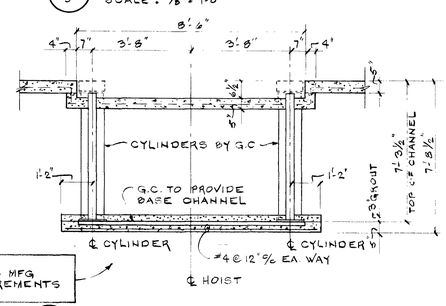
3 / 5 MOVABLE CYLINDER
SCALE : 3/8" = 1'-0"



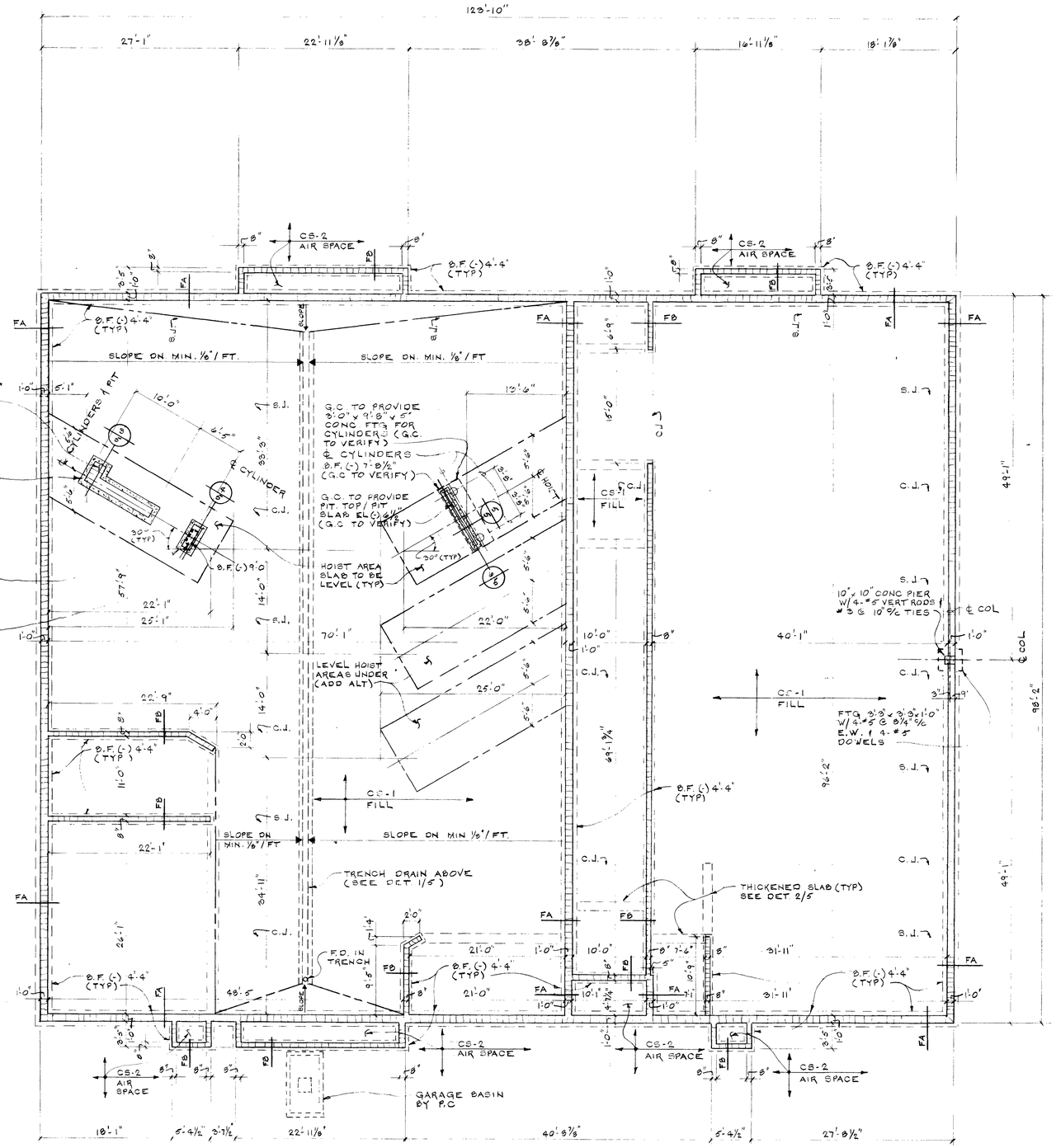
4 / 5 RECESSED CYLINDER
SCALE : 3/8" = 1'-0"



5 / 5 TWO CYLINDER HOIST
SCALE : 3/8" = 1'-0"



6 / 5 TWO CYLINDER HOIST
SCALE : 3/8" = 1'-0"



FOUNDATION PLAN (BUILDING "B")
SCALE : 1/8" = 1'-0"

NORTH

REVISIONS:

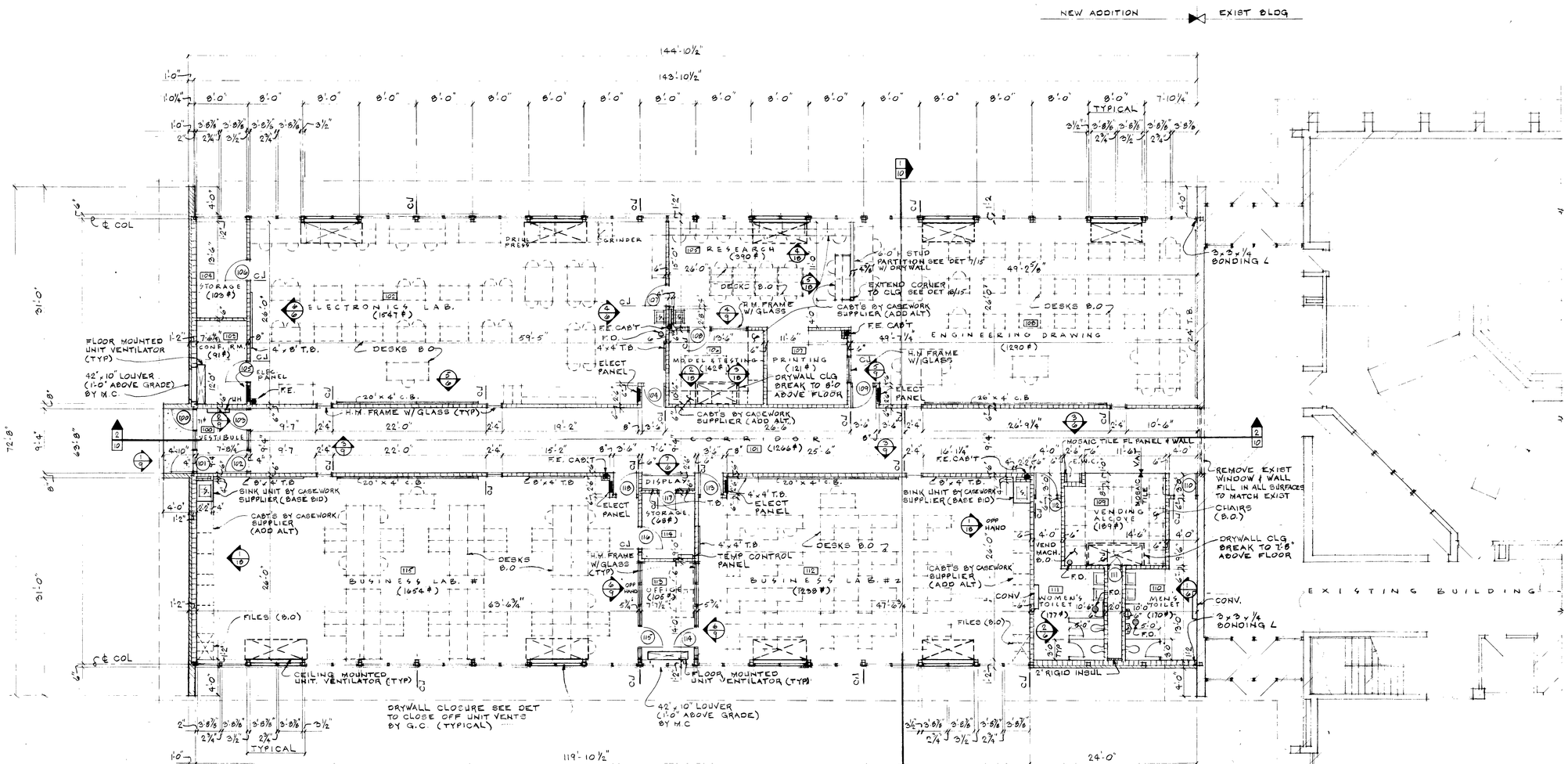
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PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

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45805
(419) 228-2112

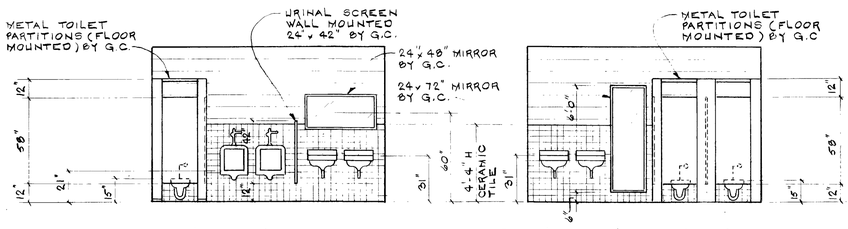
CHECKED BY: R E H
DRAWN BY: B. E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FOUNDATION PLAN (BLDG "B")
SHEET NO. a-5 OF :

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



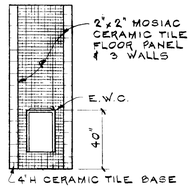
FLOOR PLAN (BUILDING "A")

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

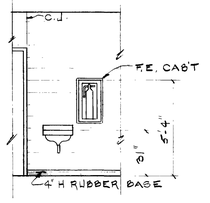


1/6 MEN'S TOILET 110
SCALE: ¼"=1'-0"

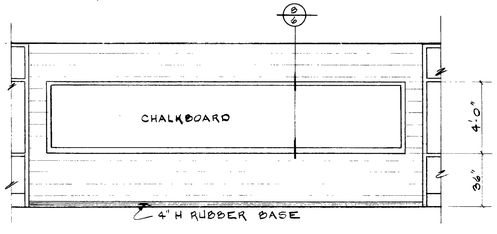
2/6 WOMEN'S TOILET 111
SCALE: ¼"=1'-0"



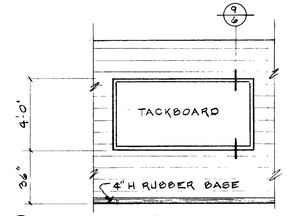
3/6 CORRIDOR 101
SCALE: ¼"=1'-0"



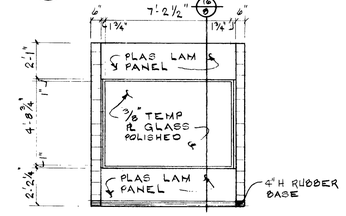
4/6 ELECT. LAB 102
SCALE: ¼"=1'-0"



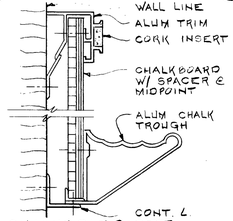
5/6,7 ELEVATION OF TYP. CHALKBOARD
SCALE: ¼"=1'-0"



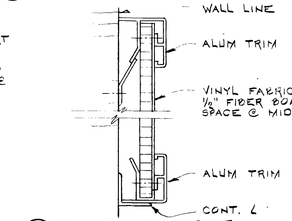
6/6,7 ELEVATION OF TYP. TACKBOARD
SCALE: ¼"=1'-0"



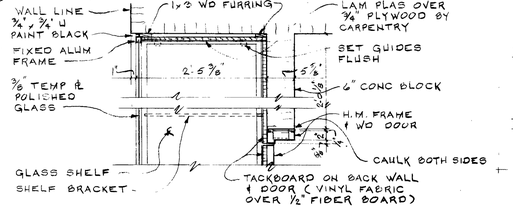
7/6 CORRIDOR 101
SCALE: ¼"=1'-0"



8/6 CHALKBOARD DET
SCALE: 1½"=1'-0" (TYP)



9/6 TACKBOARD DET.
SCALE: 1½"=1'-0" (TYP)



10/6 JAMB DETAIL
SCALE: ¾"=1'-0"

REVISIONS:

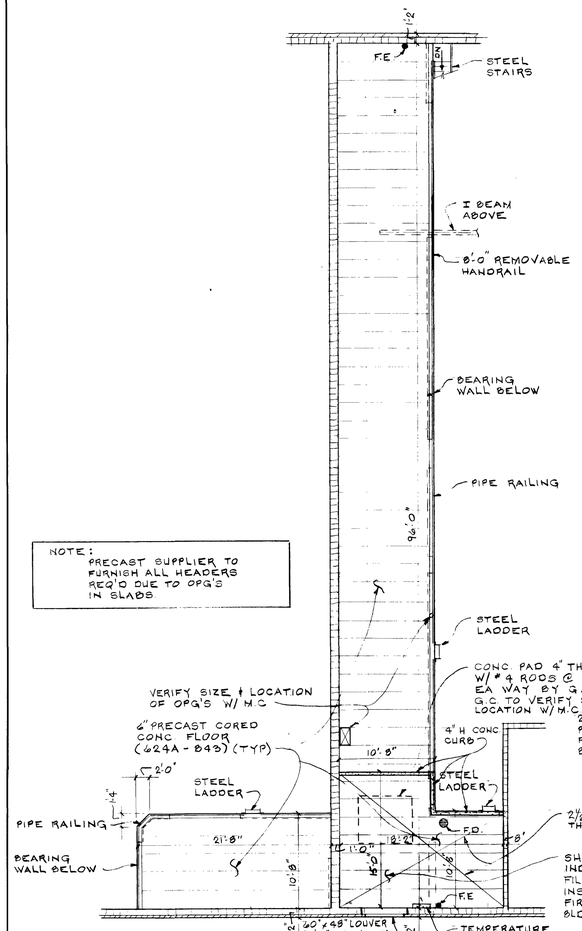
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: REH
DRAWN BY: REH / BE
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN (BLDG "A")
SHEET NO. a-6
OF 1

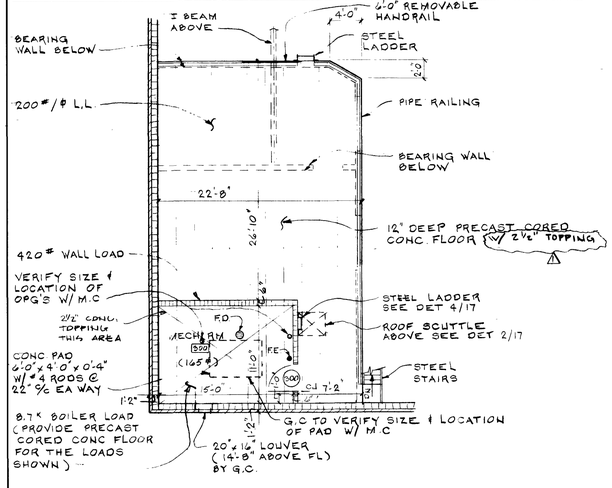
STATE OF OHIO REGISTERED ARCHITECTS
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846



NOTE:
PRECAST SUPPLIER TO FURNISH ALL HEADERS REQ'D DUE TO OPG'S IN SLABS

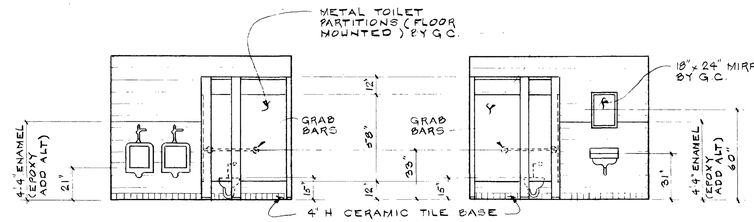
PLAN OF STORAGE AREA & ENGINEERING LAB. & AUTO MECHANICS

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



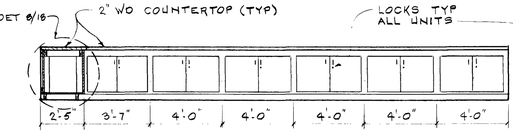
MECH ROOM FLOOR PLAN & PLAN OF STORAGE AREA & AUTO MECHANICS

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

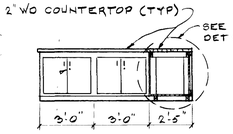


1/7 MEN'S TOILET 211
SCALE : 1/4" = 1'-0"

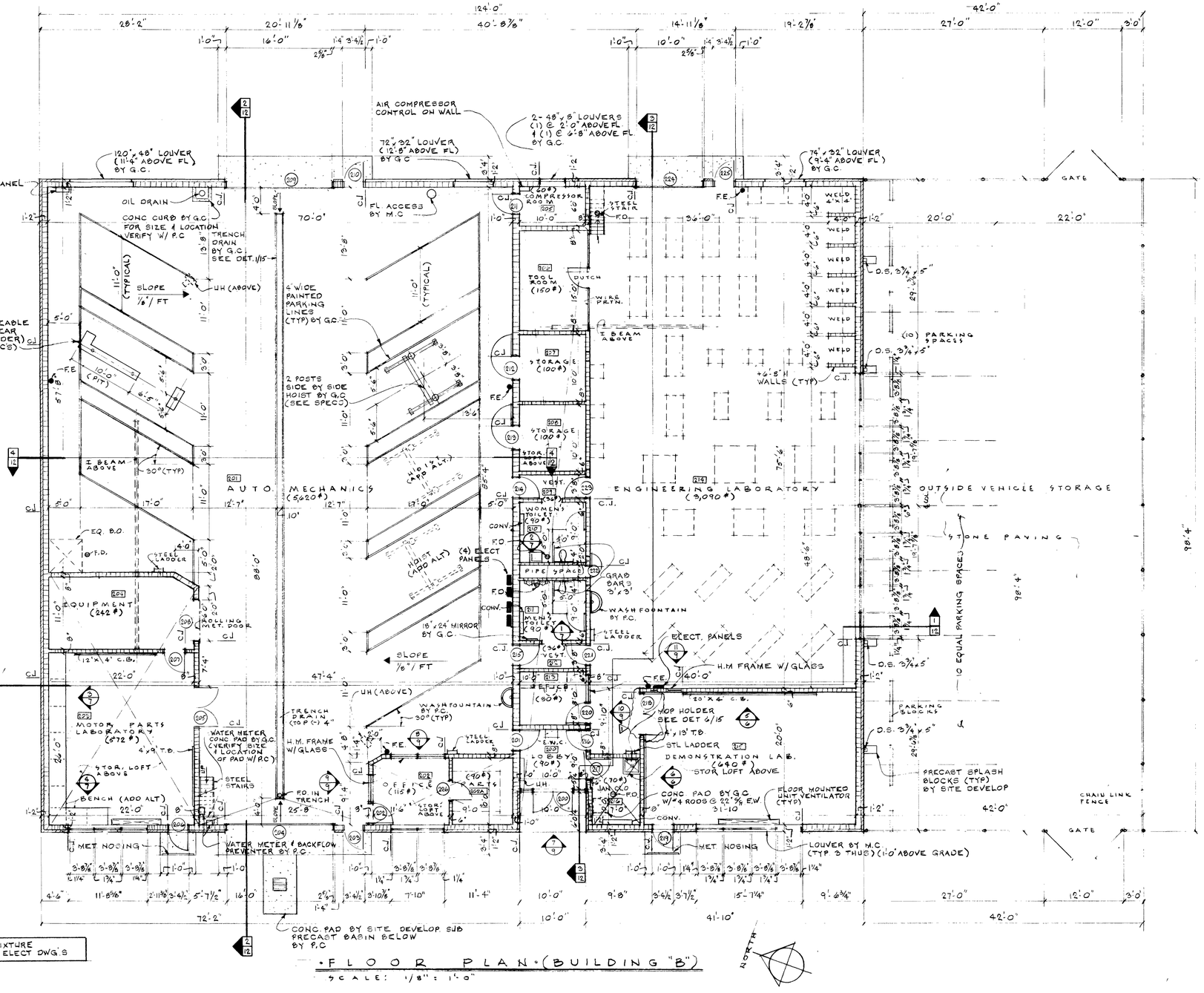
2/7 WOMEN'S TOILET 210
SCALE : 1/4" = 1'-0"



3/7 MOTOR PARTS LAB 203
SCALE : 1/4" = 1'-0" (ADD ALT)



4/7 MOTOR PARTS LAB 203
SCALE : 1/4" = 1'-0" (ADD ALT)



FOR LIGHT FIXTURE LAYOUT SEE ELECT DWG'S

FLOOR PLAN (BUILDING "B")

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

REVISIONS:
1 "AS BUILT" 9/15/80

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

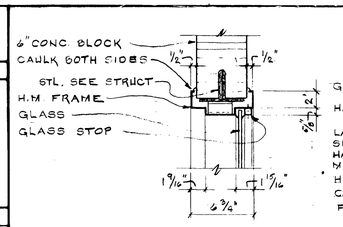
STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: REH
DRAWN BY: REH & B.E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN (BLDG. "B")
SHEET NO. a-7
OF 19

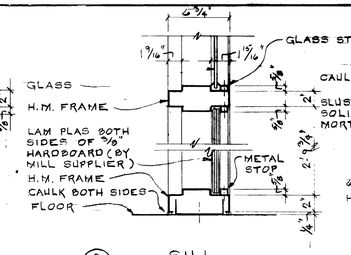
STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

ROOM FINISH SCHEDULE

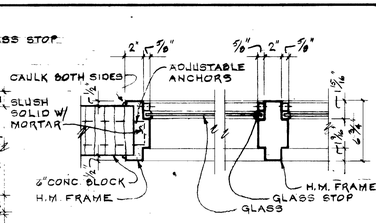
ROOM NO.	ROOM NAME	Floor Material: V.A.T. 1	Vinyl Cove Base 2	Mosaic Tile 3	Carpet (add alt) 4	4"H Rubber 5	6	Base Material: 4" Ceramic 1	Exposed Block 2	4" Ceramic 3	Exposed Exist Brick 4	5	6	Wainscot Material: Epoxy (4'-0" add alt) 1	Epoxy (6'-0") 2	4"H Cer. Tile 3	Epoxy (8'-0" add alt) 4	5	6	Mat'l	Wall Material: Conc Block 1	Drywall 2	Exist Brick 3	Epoxy 4	5	6	Ceiling Material: 2'x4' Lay-In 1	Exposed 2	12"x12" Acoust Tile 3	4	5	6	Cl'g Ht'l	Remarks
	BUILDING "A"																																	
100	VESTIBULE	1						1													1			4			1						9'-10"	
101	CORRIDOR	1						1		4											1		3	4			1						9'-2"	
102	ELECTRONICS LAB	1						1							2						1						1						9'-2"	
103	CONFERENCE RM.	1						1													1						1						9'-0"	
104	STORAGE	1						1													1						1						9'-2"	
105	RESEARCH	1						1													1	2					1						9'-2"	
106	MODEL & TESTING	1						1													1						1						9'-2"	
107	PRINTING	1						1													1						1						9'-2"	
108	ENGINEERING DWG	1						1		4											1	2	3				1						9'-2"	
109	VENDING ALCOVE			3					3												1			4			1						9'-2	
110	MEN'S TOILET			3						4						3					1			3			1						8'-8"	
111	WOMEN'S TOILET			3												3					1						1						8'-8"	
112	BUSINESS LAB #2	1			4			1													1						1						9'-2"	
113	OFFICE	1			4			1													1						1						9'-2"	
114	STORAGE	1						1													1						1						8'-0"	
115	BUSINESS LAB #1	1			4			1													1						1						9'-2"	
	BUILDING "B"																																	
200	LOBBY	1						1									4				1								3				7'-11¼"	# VAPOR BARRIER UNDER SLAB
201	AUTO MECHANICS		2						2								4				1						2							
202, 202A	OFFICE, (PARTS 202A)	1						1													1						2	3					8'-0" & 8'-2" & 7'-11¼" & 9'-2"	# VAPOR BARRIER UNDER SLAB & # ACOUST TILE IN OFFICE ONLY
203	MOTOR PARTS LAB.		2						2												1						2						8'-0"	
204	EQUIPMENT		2						2												1						2						8'-0"	
205	COMPRESSOR RM.		2						2												1						2						8'-0"	
206	TOOL ROOM		2						2												1						2						8'-0"	
207	STORAGE		2						2												1						2						8'-0"	
208	STORAGE		2						2												1						2						8'-0"	
209	VESTIBULE		2							3				1							1						2						8'-0"	
210	WOMEN'S TOILET		2							3				1							1						2						8'-0"	
211	MEN'S TOILET		2							3				1							1						2						8'-0"	
212	VESTIBULE		2							3				1							1						2						8'-0"	
213	OFFICE	1						1													1								3				7'-11¼"	# VAPOR BARRIER UNDER SLAB
214	ENGINEERING LAB.		2						2								4				1						2							
215	DEMONSTRATION LAB	1							1												1						1						9'-0"	# VAPOR BARRIER UNDER SLAB
216	JAN. CLOS		2						2												1						2						8'-0"	
300	MECH. ROOM		2						2												1						2							



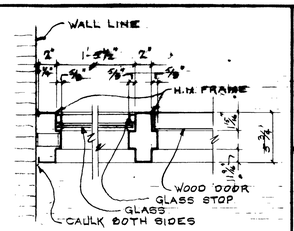
1/9 HEAD
SCALE : 1½"=1'-0"



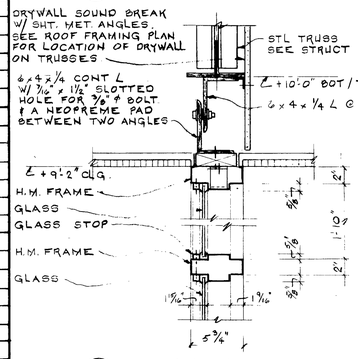
2/9 SILL
SCALE : 1½"=1'-0"



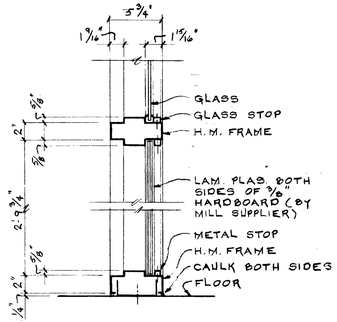
3/9 JAMB
SCALE : 1½"=1'-0"



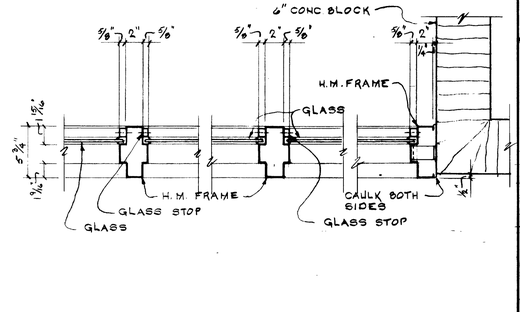
4/9 JAMB
SCALE : 1½"=1'-0"



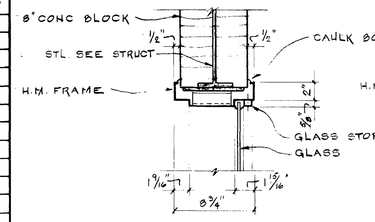
5/9 HEAD
SCALE : 1½"=1'-0"



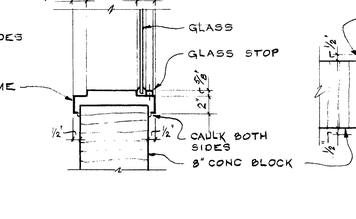
6/9 SILL
SCALE : 1½"=1'-0"



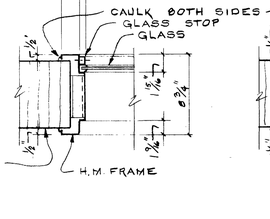
7/9 JAMB
SCALE : 1½"=1'-0"



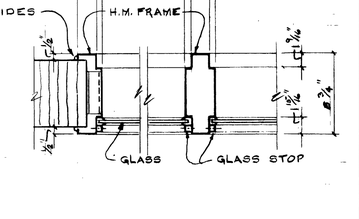
8/9 HEAD
SCALE : 1½"=1'-0"



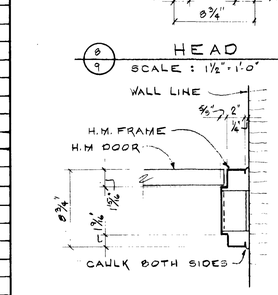
9/9 SILL
SCALE : 1½"=1'-0"



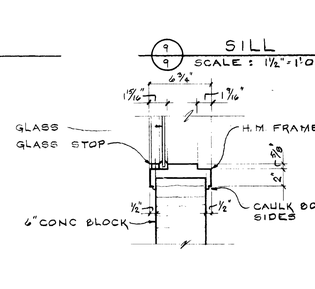
10/9 JAMB
SCALE : 1½"=1'-0"



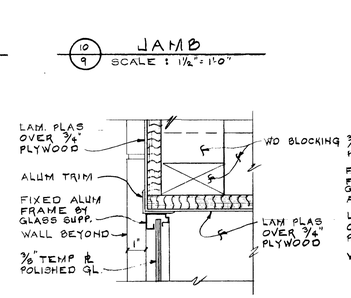
11/9 JAMB
SCALE : 1½"=1'-0"



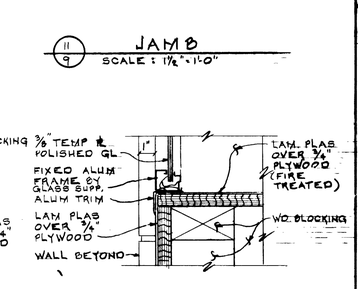
12/9 JAMB
SCALE : 1½"=1'-0"



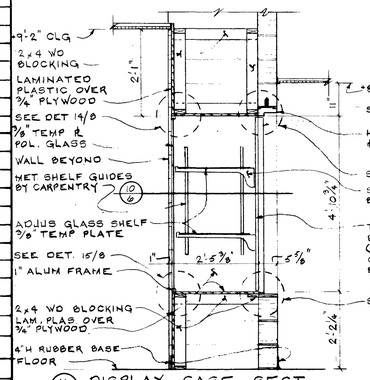
13/9 SILL
SCALE : 1½"=1'-0"



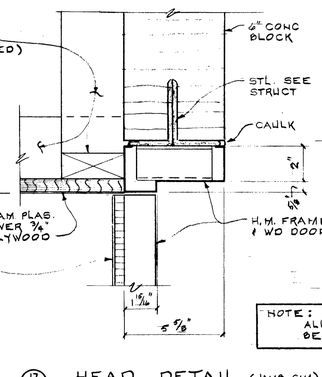
14/8 HEAD DETAIL
SCALE : 3"=1'-0"



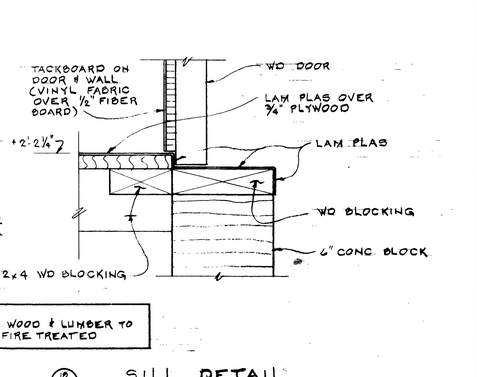
15/8 SILL DETAIL
SCALE : 3"=1'-0"



16/9 DISPLAY CASE SECT.
SCALE : ½"=1'-0"



17/8 HEAD DETAIL (JAMB SIM)
SCALE : 3"=1'-0"



NOTE:
ALL WOOD & LUMBER TO BE FIRE-TREATED

18/8 SILL DETAIL
SCALE : 3"=1'-0"

DEVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. C. B. C
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

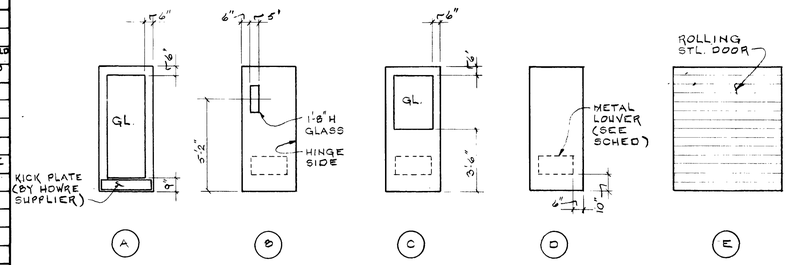
STRONG & HEFFELBOWER
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·PLANNERS
905 N. CABLE RD.
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CHECKED BY: R E H
DRAWN BY: B. E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: ROOM FINISH SCHEDULE
SHEET NO. a-8 OF 10

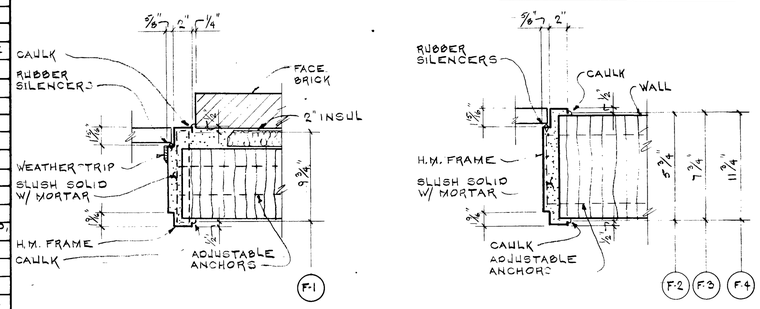
STATE OF OHIO · LYNDE A. STRONG · 17428 · EDWARD C. HEFFELBOWER · 20425 · REGISTERED ARCHITECT

DOOR SCHEDULE

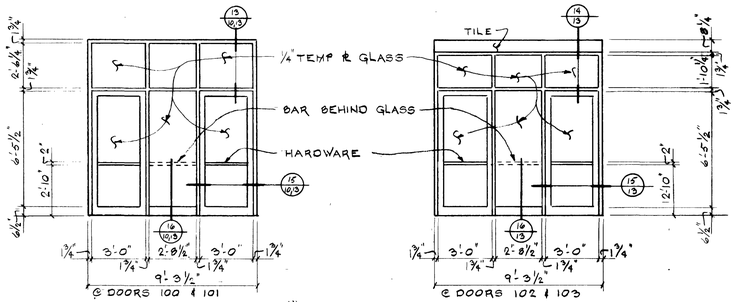
DOOR NO.	OPENING SIZE	DOOR Thick	DOOR Type	DOOR Mat'l	FRAME Type	FRAME Mat'l	DOOR GLASS	LOUVER	SOUND PROOF	REMARKS
	BUILDING "A"									
100	3'-0" x 7'-0"	1¾"	G	ALUM	*	ALUM	¼" TEMP PLATE	—	—	* SEE WALL SECTIONS ; MET. THRESHOLD WEATHERSTRIP
101	3'-0" x 7'-0"	1¾"	G	ALUM	*	ALUM	¼" TEMP PLATE	—	—	* SEE WALL SECTIONS ; MET. THRESHOLD WEATHERSTRIP
102	3'-0" x 7'-0"	1¾"	G	ALUM	*	ALUM	¼" TEMP PLATE	—	—	* SEE WALL SECTIONS
103	3'-0" x 7'-0"	1¾"	G	ALUM	*	ALUM	¼" TEMP PLATE	—	—	* SEE WALL SECTIONS
104	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	—	—	
105	3'-0" x 7'-0"	1¾"	D	S.C.	F-3	H.M.	—	18"x24"	—	
106	3'-0" x 7'-0"	1¾"	D	S.C.	F-3	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
107	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	—	—	
108	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	18"x24"	—	
109	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	—	—	
110	3'-0" x 7'-0"	1¾"	D	S.C.	F-2	H.M.	—	12"x24"	—	
111	1'-0" x 7'-0"	1¾"	D	S.C.	F-2	H.M.	—	—	—	
112	3'-0" x 7'-0"	1¾"	D	S.C.	F-2	H.M.	—	12"x24"	—	
113	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	—	—	
114	3'-0" x 7'-0"	1¾"	B	S.C.	*	H.M.	¼" TEMP PLATE	18"x24"	—	* SEE WALL SECTIONS
115	3'-0" x 7'-0"	1¾"	B	S.C.	*	H.M.	¼" TEMP PLATE	—	—	* SEE WALL SECTIONS
116	3'-0" x 7'-0"	1¾"	D	S.C.	F-2	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
117	3'-0" x 4'-11"	1¾"	D	S.C.	**	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME ** SEE WALL SECTIONS
118	3'-0" x 7'-0"	1¾"	B	S.C.	F-2	H.M.	¼" TEMP PLATE	—	—	
	BUILDING "B"									
200	6'-0" x 7'-0"	1¾"	A	H.M.	*	H.M.	¼ TEMP PLATE	—	—	* SEE WALL SECTIONS, MET. THRESHOLD, WEATHERSTRIP
201	3'-0" x 7'-0"	1¾"	B	H.M.	F-4	H.M.	C.W.G.	—	—	* ¾ HR "C" LABEL DOOR & FRAME
202	3'-0" x 7'-0"	1¾"	C	H.M.	F-3	H.M.	¼" TEMP PLATE	12"x24"	—	
203	3'-0" x 7'-0"	1¾"	C	H.M.	F-1	H.M.	¼" TEMP PLATE	—	—	* WEATHERSTRIP, MET THRESHOLD HWRE FOR EXIT ONLY
204	16'-0" x 12'-0"	2"	F	H.M.	*	STL L.	—	—	—	* ROLLING STL DOOR SEE DETAILS
205	6'-0" x 7'-0"	1¾"	B	H.M.	F-3	H.M.	¼" TEMP PLATE	12"x24"	—	
206	3'-0" x 7'-0"	1¾"	D	H.M.	F-1	H.M.	—	—	—	* WEATHERSTRIP, MET THRESHOLD HWRE FOR EXIT ONLY
207	3'-0" x 7'-0"	1¾"	D	H.M.	F-3	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
208	6'-0" x 7'-0"	2"	E	H.M.	*	STL L.	—	—	—	* ROLLING STL DOOR SEE DETAILS
209	16'-0" x 12'-0"	2"	F	H.M.	*	STL L.	—	—	—	* ROLLING STL DOOR SEE DETAILS
210	3'-0" x 7'-0"	1¾"	C	H.M.	F-1	H.M.	¼" TEMP PLATE	—	—	* WEATHERSTRIP, MET THRESHOLD
211	3'-0" x 7'-0"	1¾"	D	H.M.	F-4	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
212	3'-0" x 7'-0"	1¾"	D	H.M.	F-4	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
213	3'-0" x 7'-0"	1¾"	D	H.M.	F-4	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
214	3'-0" x 7'-0"	1¾"	D	H.M.	F-4	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
215	3'-0" x 7'-0"	1¾"	D	H.M.	F-4	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME
216	3'-0" x 7'-0"	1¾"	B	H.M.	F-3	H.M.	¼" TEMP PLATE	—	—	
217	3'-0" x 7'-0"	1¾"	D	H.M.	F-3	H.M.	—	—	—	
218	6'-0" x 7'-0"	1¾"	B	H.M.	F-3	H.M.	¼" TEMP PLATE	24"x30"	—	
219	3'-0" x 7'-0"	1¾"	D	H.M.	F-1	H.M.	—	—	—	* WEATHERSTRIP, MET THRESHOLD, HWRE FOR EXIT ONLY
220	3'-0" x 7'-0"	1¾"	C	H.M.	F-3	H.M.	¼" TEMP PLATE	6"x24"	—	
221	3'-0" x 7'-0"	1¾"	D	H.M.	F-3	H.M.	—	6"x24"	—	
222	1'-8" x 7'-0"	1¾"	D	H.M.	F-3	H.M.	—	—	—	
223	3'-0" x 7'-0"	1¾"	D	H.M.	F-3	H.M.	—	6"x24"	—	
224	10'-0" x 10'-0"	2"	F	H.M.	*	STL L.	—	—	—	* ROLLING STL DOOR SEE DETAILS
225	3'-0" x 7'-0"	1¾"	C	H.M.	F-1	H.M.	¼" TEMP PLATE	—	—	* WEATHERSTRIP, MET. THRESHOLD
226	3'-0" x 7'-0"	1¾"	D	H.M.	F-2	H.M.	—	—	—	
300	3'-0" x 7'-0"	1¾"	D	H.M.	F-2	H.M.	—	—	—	* ¾ HR "C" LABEL DOOR & FRAME



DOOR TYPES

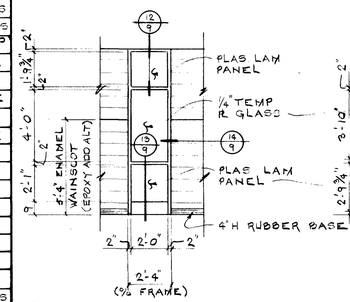


FRAME TYPES

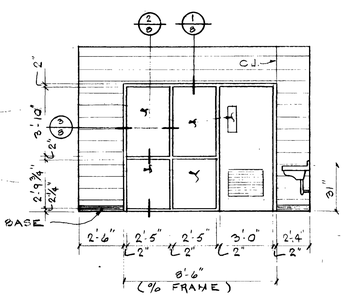


1/6 VESTIBULE 100
SCALE : ¼" = 1'-0"

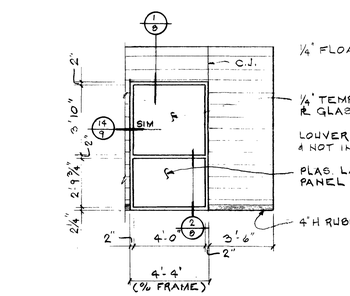
2/6 VESTIBULE 100
SCALE : ¼" = 1'-0"



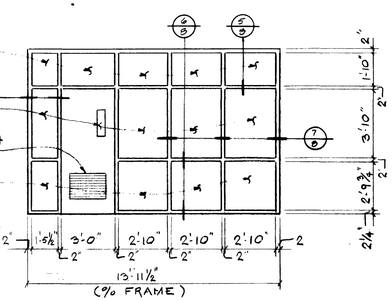
3/6 CORRIDOR 101 (TYP)
SCALE : ¼" = 1'-0"



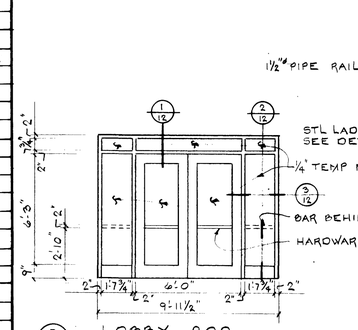
4/6 RESEARCH 105
SCALE : ¼" = 1'-0"



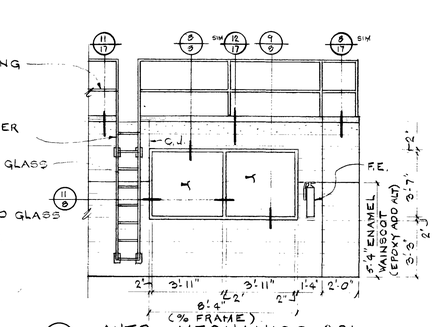
5/6 ENGINEERING DRAWING 108
SCALE : ¼" = 1'-0"



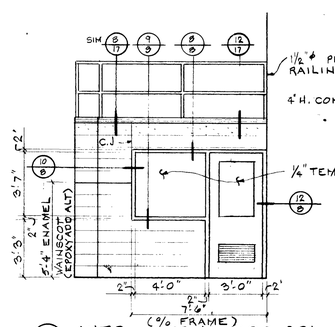
6/6 BUSINESS LAB #2 112
SCALE : ¼" = 1'-0"
BUSINESS LAB #1 OPPOSITE HAND



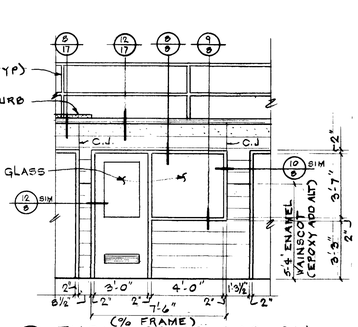
7/7 LOBBY 200
SCALE : ¼" = 1'-0"



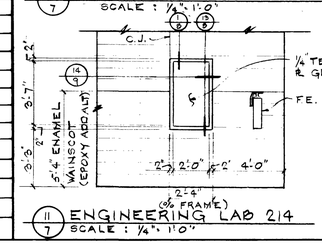
8/7 AUTO MECHANICS 201
SCALE : ¼" = 1'-0"



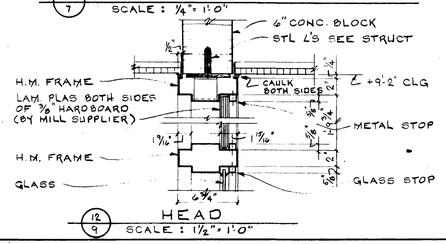
9/7 AUTO MECHANICS 201
SCALE : ¼" = 1'-0"



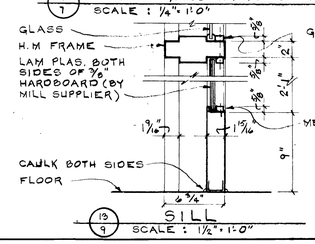
10/7 ENGINEERING LAB. 214
SCALE : ¼" = 1'-0"



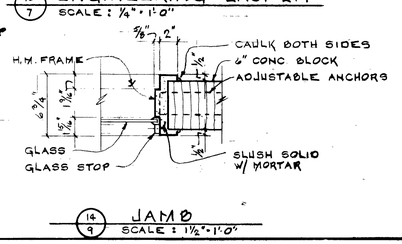
11/7 ENGINEERING LAB 214
SCALE : ¼" = 1'-0"



12/9 HEAD
SCALE : 1½" = 1'-0"



13/9 SILL
SCALE : 1½" = 1'-0"



14/9 JAMB
SCALE : 1½" = 1'-0"

REVISIONS:
1 "AS BUILT" 7/15/80 CG

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS

FOR

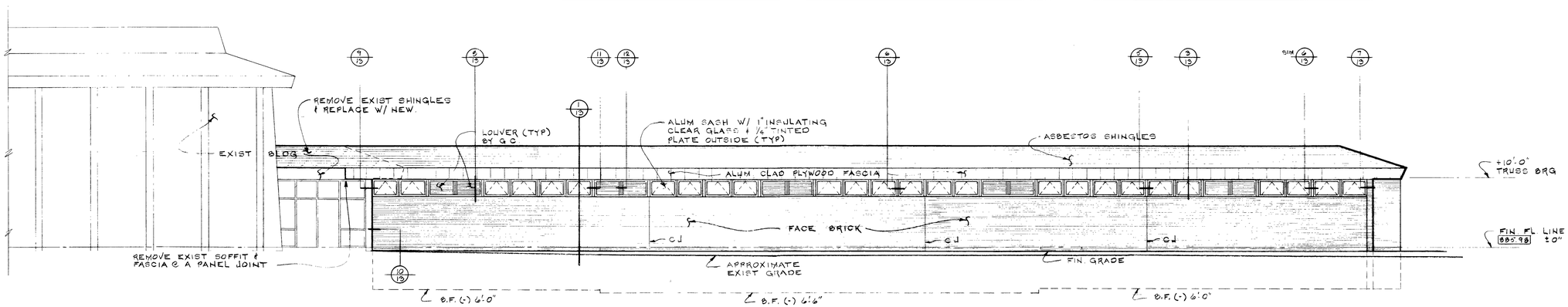
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
· ARCHITECTS
· PLANNERS
506 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

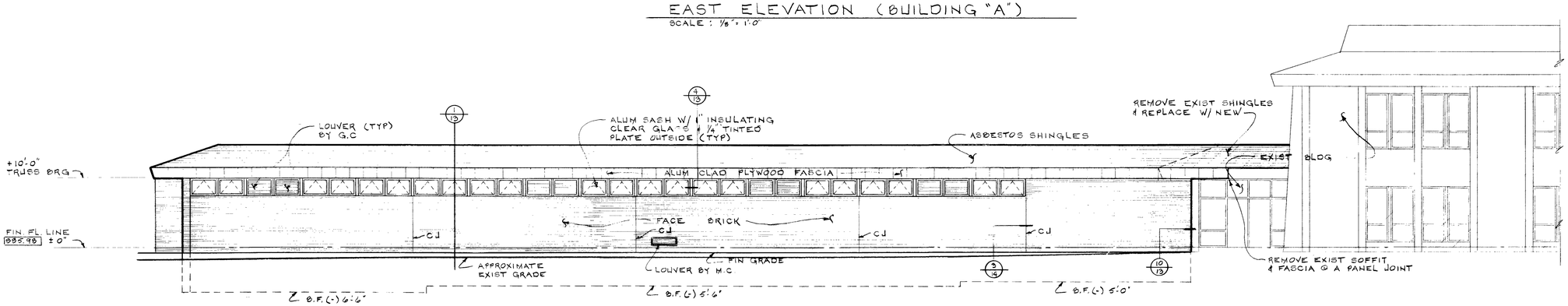
CHECKED BY: R.E.H.
DRAWN BY: D.E.
CONSTR. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: DOOR SCHEDULE
SHEET NO. a-9 of 10

STATE OF OHIO REGISTERED ARCHITECT



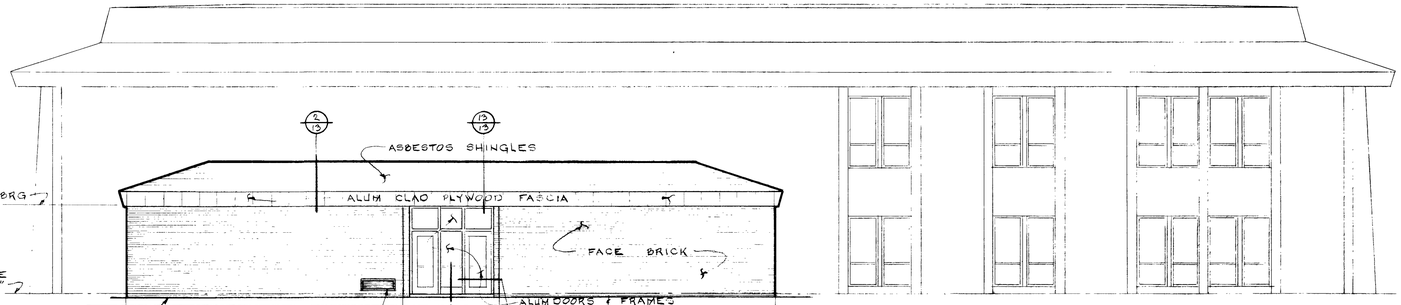
EAST ELEVATION (BUILDING "A")

SCALE : ⅛" = 1'-0"



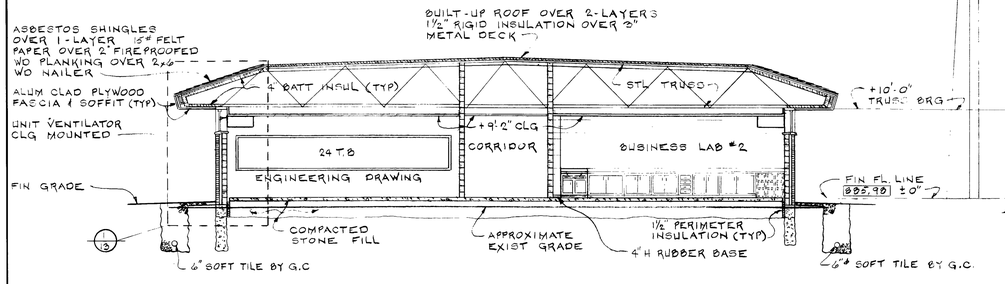
WEST ELEVATION (BUILDING "A")

SCALE : ⅛" = 1'-0"



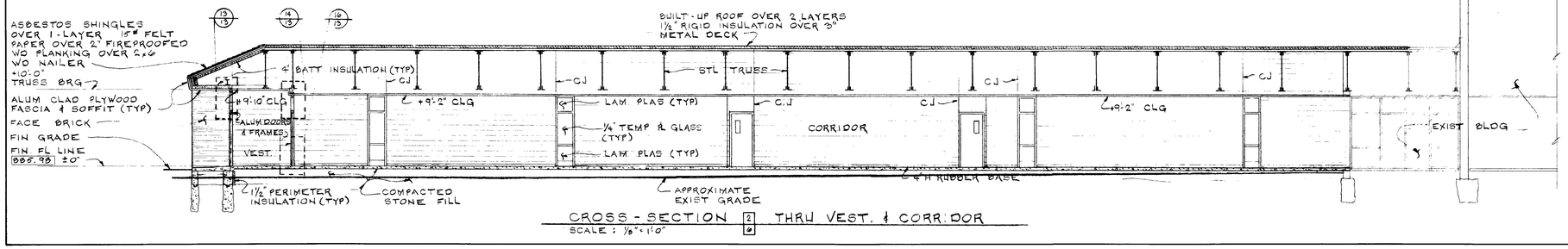
NORTH ELEVATION (BUILDING "A")

SCALE : ⅛" = 1'-0"



CROSS-SECTION 1/6 THRU DWG RM & LAB. #2

SCALE : ⅛" = 1'-0"



CROSS-SECTION 2/6 THRU VEST. & CORRIDOR

SCALE : ⅛" = 1'-0"

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

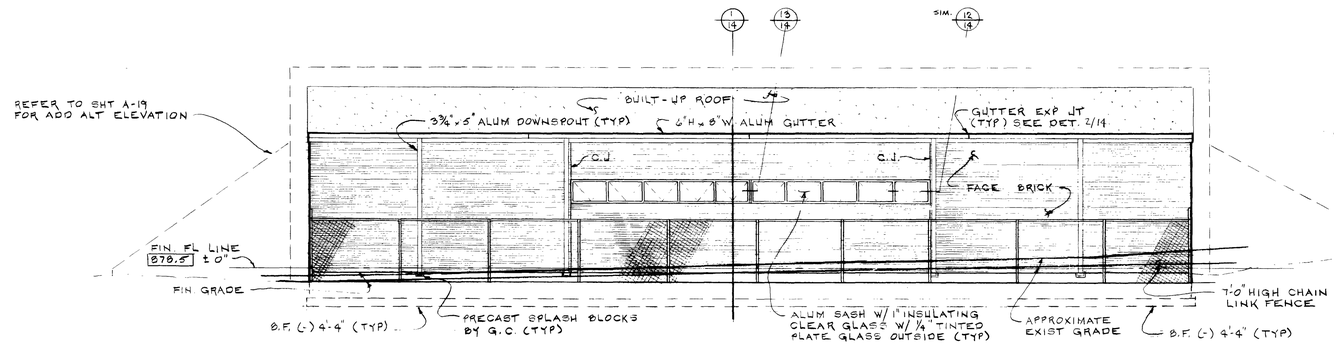
STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: R E H
DRAWN BY: D. E.
COMM. NO.: 78-642
DATE: 4-2-79

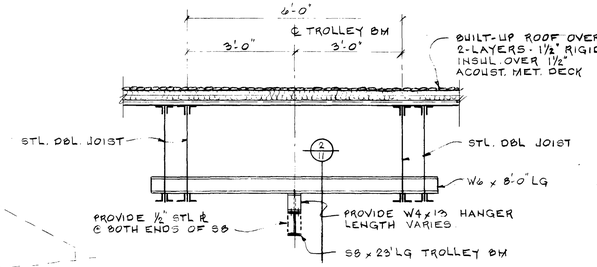
SHEET TITLE:
ELEVATIONS & CROSS-SECTIONS (BLDG. "A")

SHEET NO.
a-10
OF 19

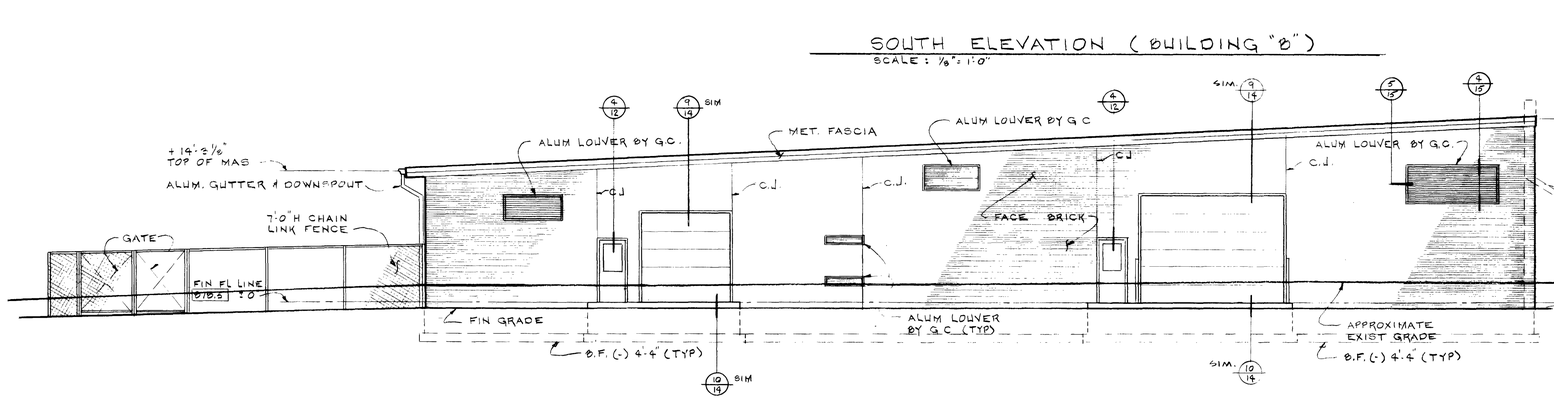
STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



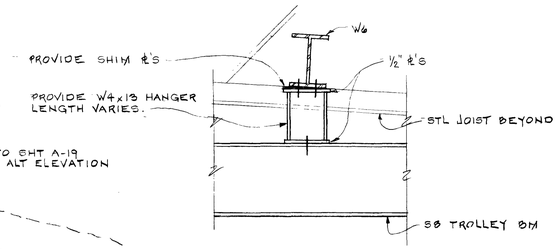
SOUTH ELEVATION (BUILDING "B")
SCALE : ⅛" = 1'-0"



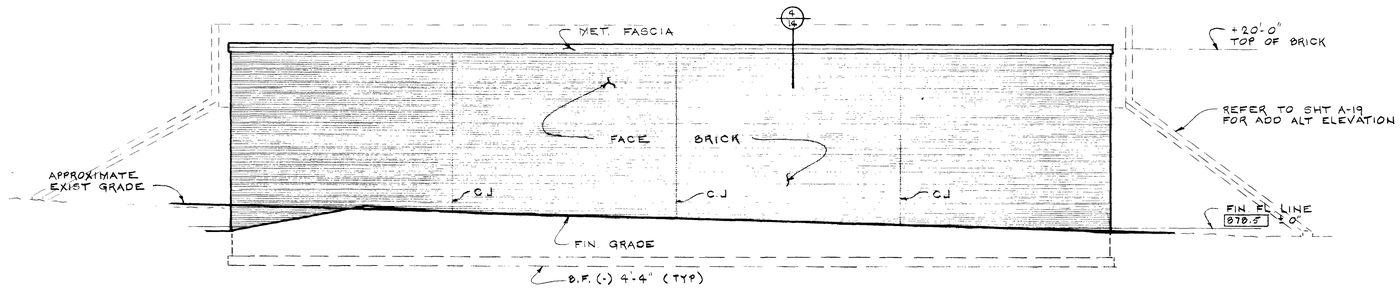
TROLLEY BM DETAIL
SCALE : ½" = 1'-0"



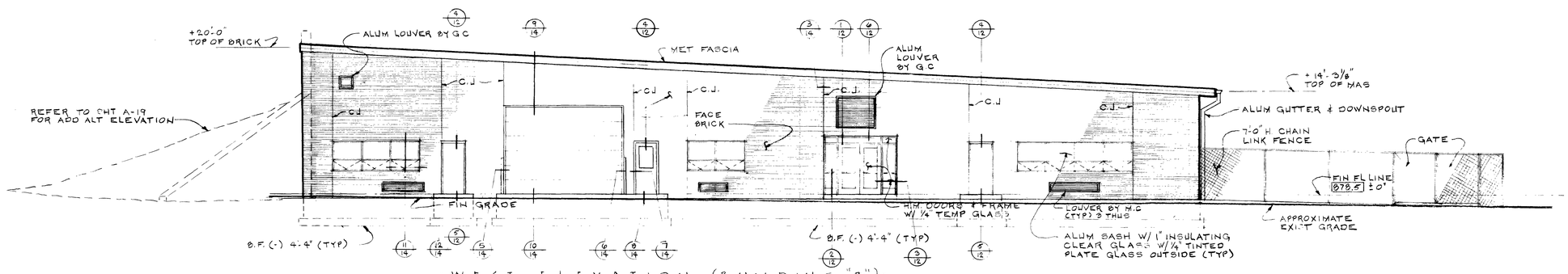
EAST ELEVATION (BUILDING "B")
SCALE : ⅛" = 1'-0"



TROLLEY BM DETAIL
SCALE : 1½" = 1'-0"



NORTH ELEVATION (BUILDING "B")
SCALE : ⅛" = 1'-0"



WEST ELEVATION (BUILDING "B")
SCALE: ⅛" = 1'-0"

REVISIONS:

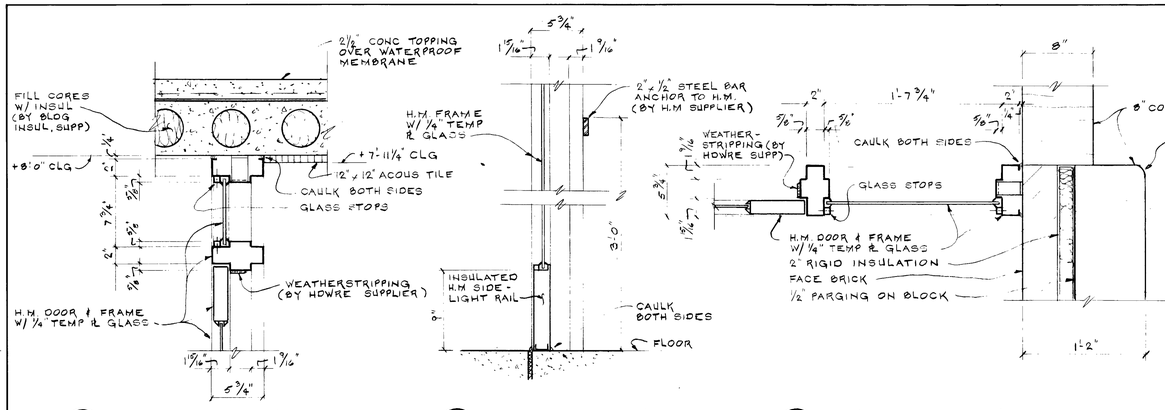
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
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·PLANNERS
505 N. CABLE RD.
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45805
(419) 228-2112

CHECKED BY: REH
DRAWN BY: REH & B.E.
COMM. NO. 78-642
DATE: 4-2-79
SHEET TITLE: ELEVATIONS (BLDG "B")
SHEET NO. a-11
OF 19

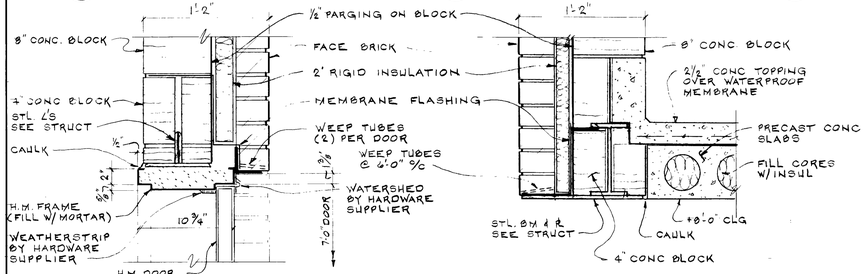
STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3846 · REGISTERED ARCHITECTS



1/9,11 HEAD DETAIL
SCALE : 1½" = 1'-0"

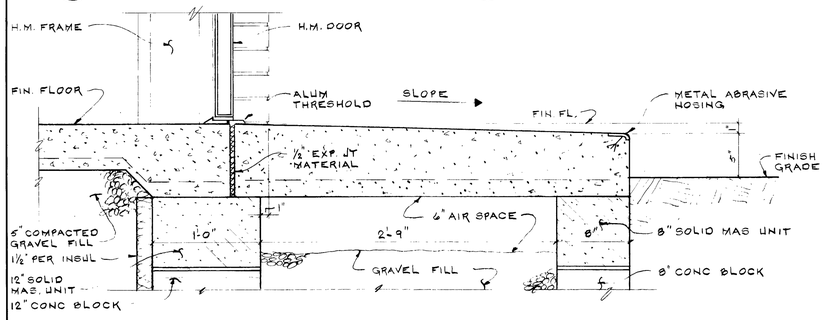
2/9,11 SILL DETAIL
SCALE : 1½" = 1'-0"

3/9,11 JAMB DETAIL
SCALE : 1½" = 1'-0"

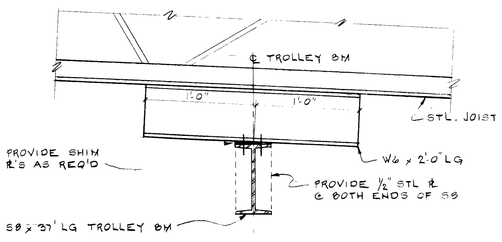


4/11 HEAD DETAIL
SCALE : 1½" = 1'-0"

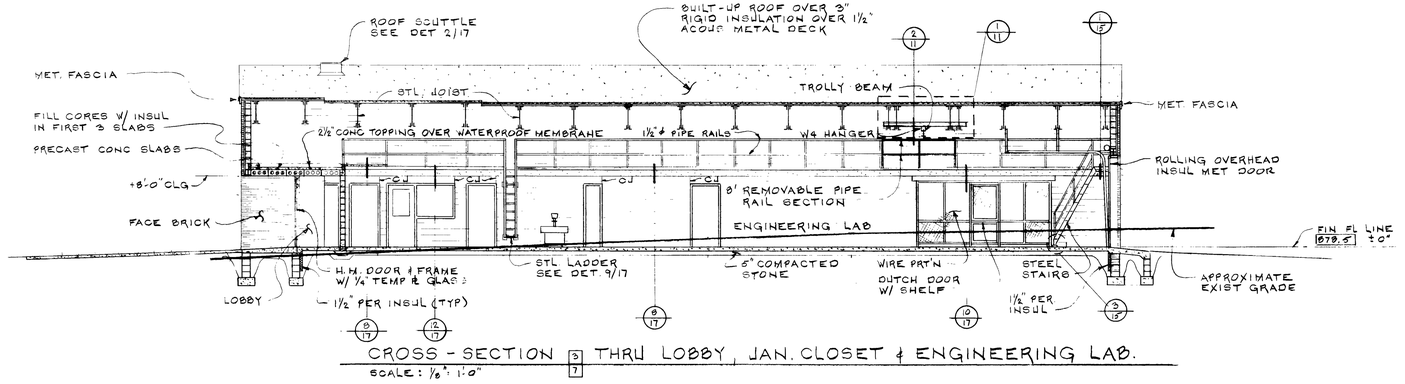
6/11
SCALE : 1½" = 1'-0"



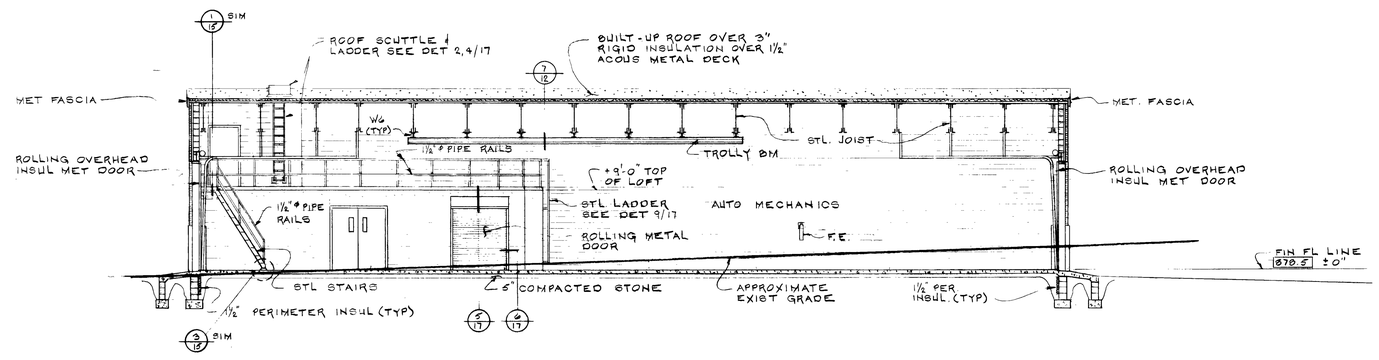
5/11 SILL DETAIL
SCALE : 1½" = 1'-0"



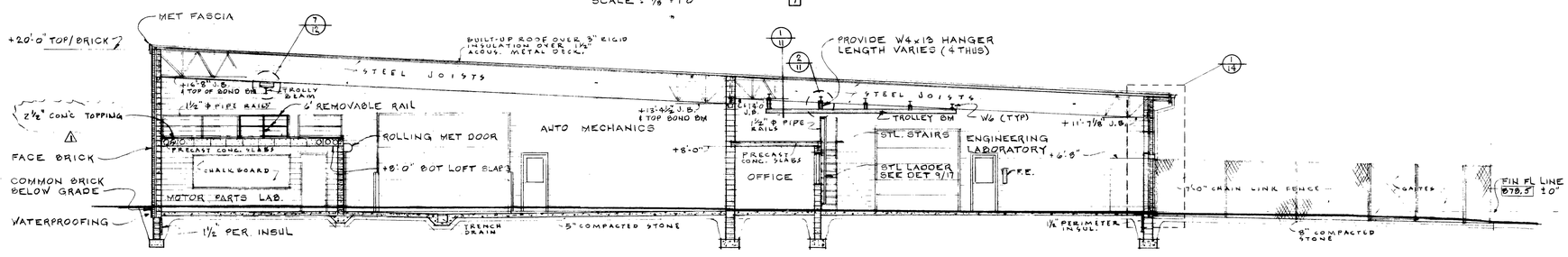
7/12 TROLLEY BM DETAIL
SCALE : 1½" = 1'-0"



CROSS-SECTION 5/7 THRU LOBBY, JAN. CLOSET & ENGINEERING LAB.
SCALE : ⅛" = 1'-0"



CROSS-SECTION 2/7 THRU AUTO MECHANICS
SCALE : ⅛" = 1'-0"



"CROSS-SECTION 1/7 THRU. BUILDING "B"
SCALE: 1/8" = 1'-0"

REVISIONS:
1 "AS BUILT" 9/15/80 CJ

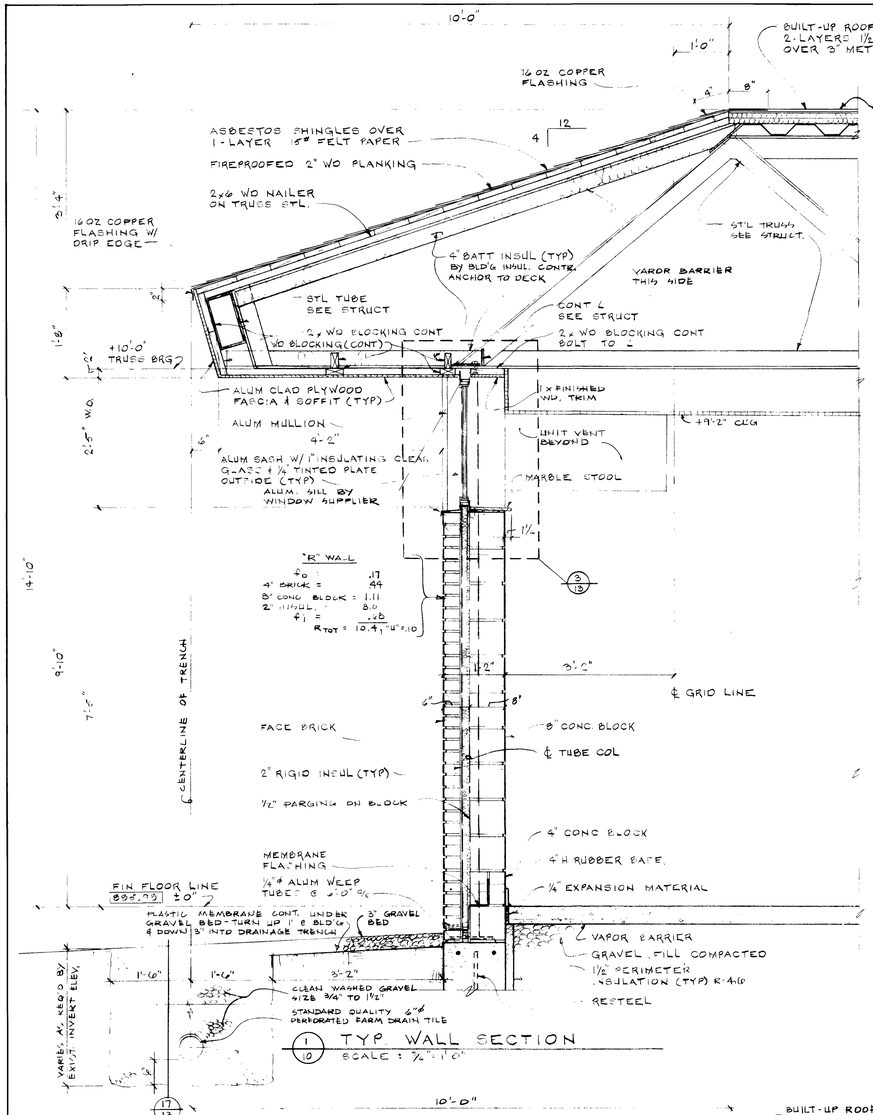
PROJECT TITLE:
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W. O. B. C.
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PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

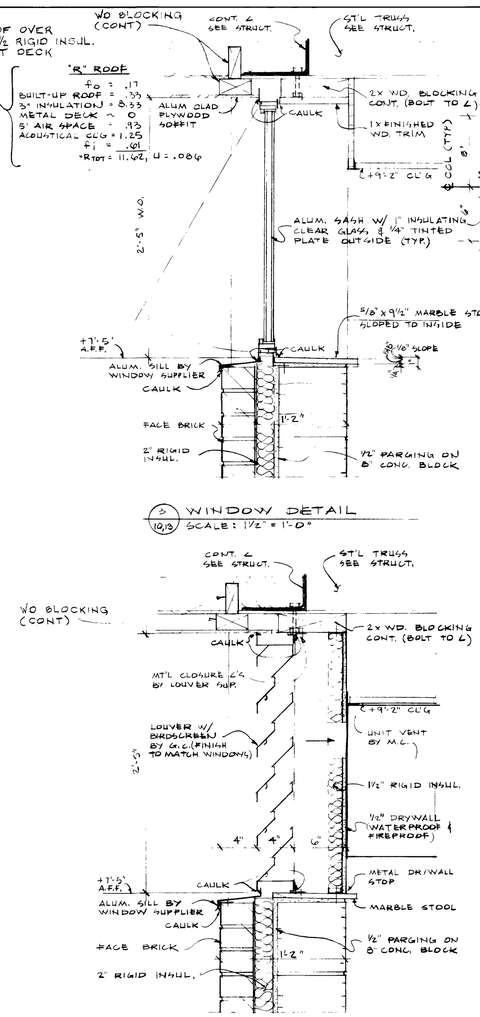
STRONG & HEFFELBOWER
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CHECKED BY: R.E.H
DRAWN BY: R.E.H. & B.E
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: CROSS-SECTIONS (BLDG "B") & DETAILS
SHEET NO. a-12
OF 19

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

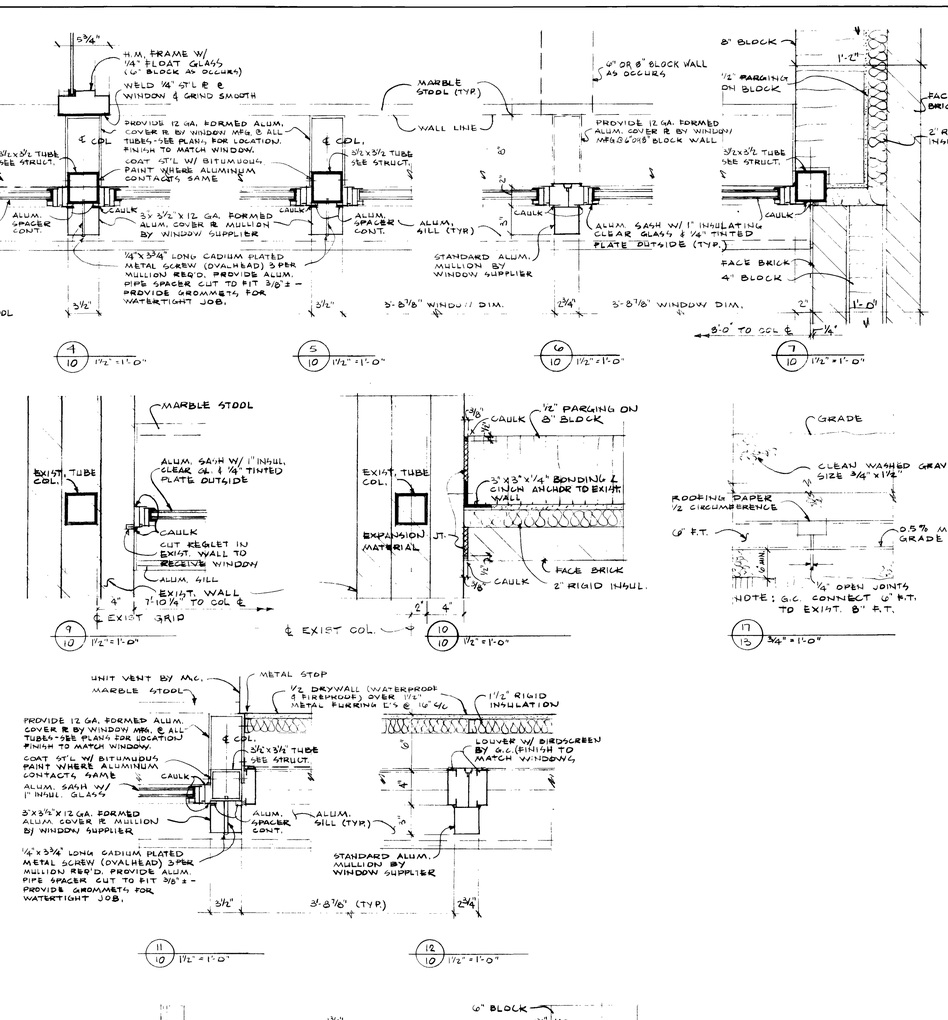


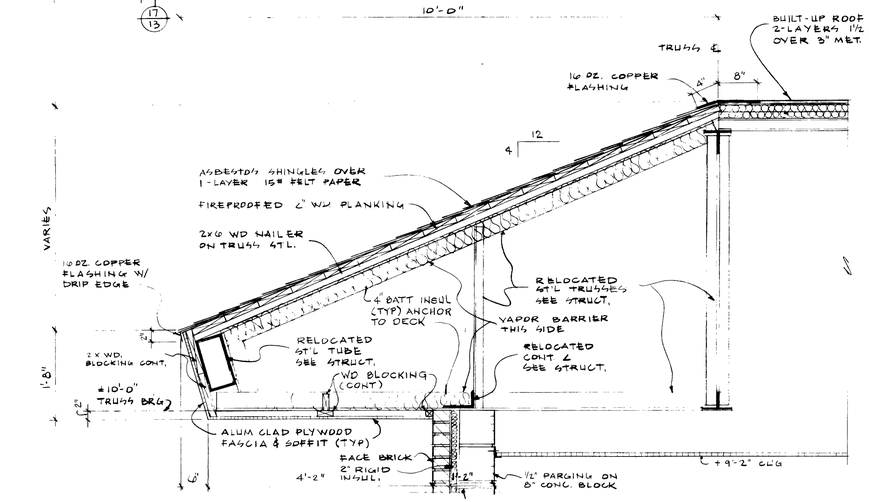
1 / 10 TYP WALL SECTION
SCALE: ¾" = 1'-0"



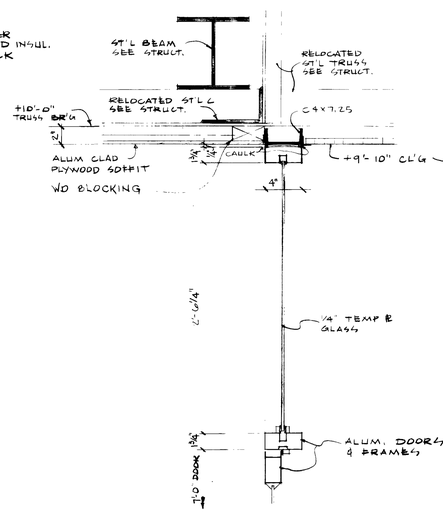
3 / 10,13 WINDOW DETAIL
SCALE: 1½" = 1'-0"

8 / 10 WINDOW DETAIL
SCALE: 1½" = 1'-0"

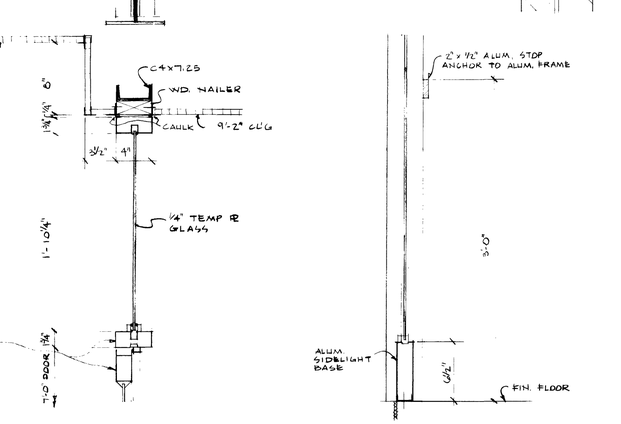




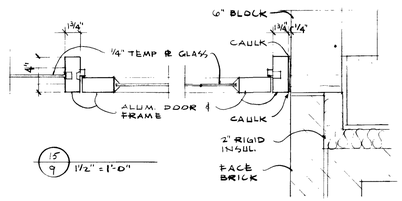
2 / 10 WALL SECTION
SCALE: 3/16" = 1'-0"



13 / 9,10 1½" = 1'-0"



14 / 9,10 1½" = 1'-0"



15 / 9 1½" = 1'-0"

16 / 9,10 1½" = 1'-0"

REVISIONS:

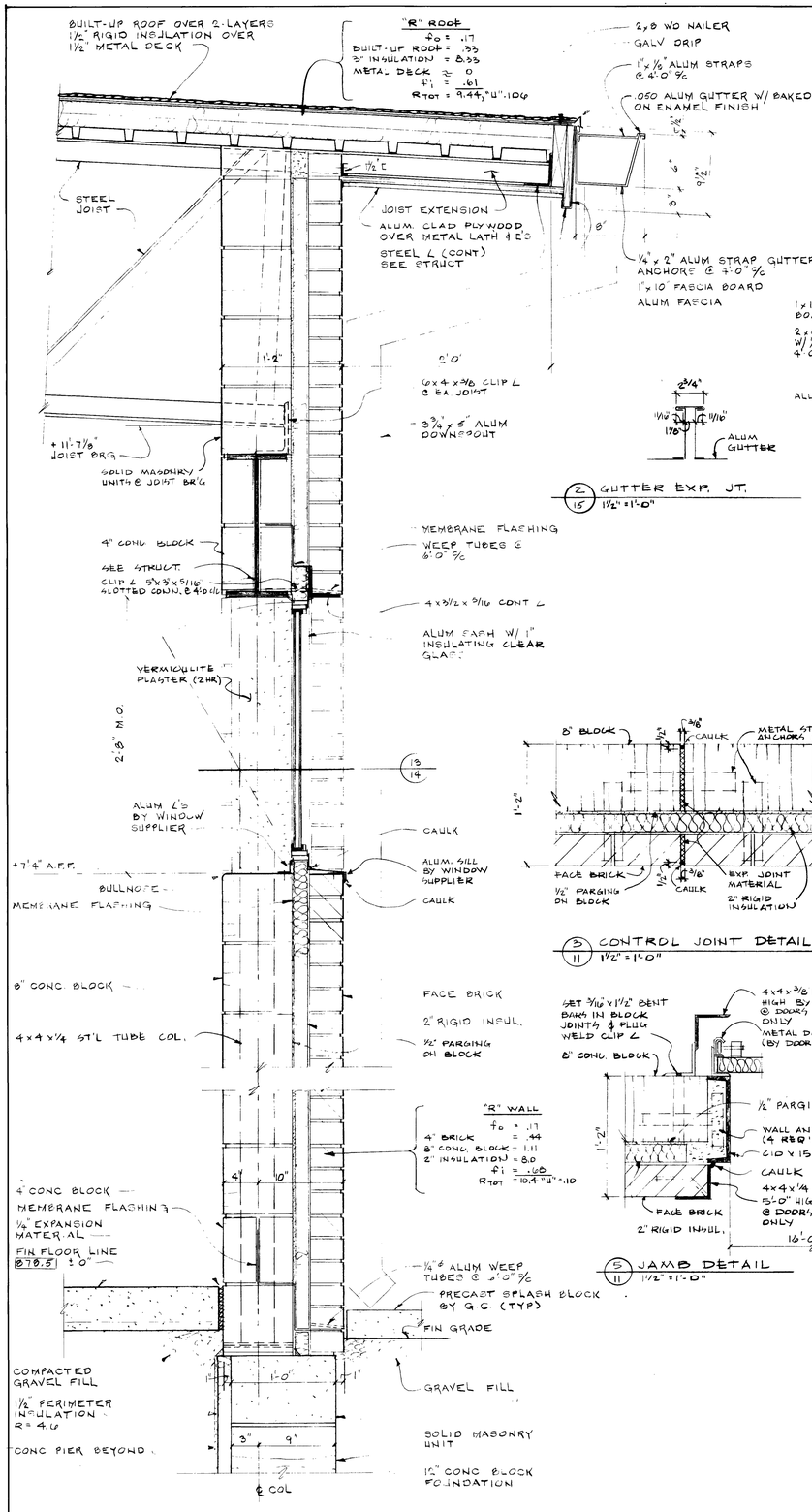
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C
CELINA, O.

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORK

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: REH
DRAWN BY: B.E & G.L.C.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: SECTIONS & DETAILS
SHEET NO. a-13
OF 19

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



1 TYP WALL SECTION
11,12 SCALE: 1½" = 1'-0"

2 GUTTER EXP. JT.
15 1½" = 1'-0"

3 CONTROL JOINT DETAIL
11 1½" = 1'-0"

4 WALL SECTION
11 1½" = 1'-0"

5 JAMB DETAIL
11 1½" = 1'-0"

6 JAMB DETAIL
11 1½" = 1'-0"

7 JAMB DETAIL
11 1½" = 1'-0"

8 SILL DETAIL
11 1½" = 1'-0"

9 HEAD DETAIL
11 1½" = 1'-0"

10 SILL DETAIL
11 1½" = 1'-0"

11 WINDOW DETAIL
11 1½" = 1'-0"

12 JAMB DETAIL
11 1½" = 1'-0"

13 MULLION DETAIL
11,14 1½" = 1'-0"

REVISIONS:

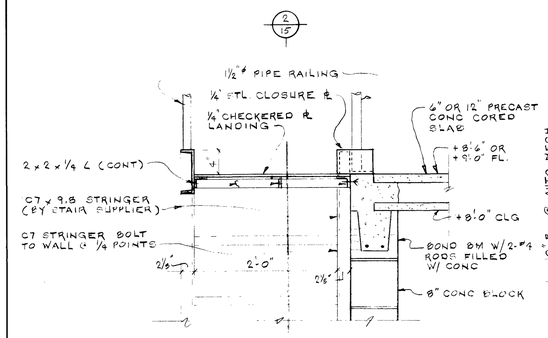
PROJECT TITLE:
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CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

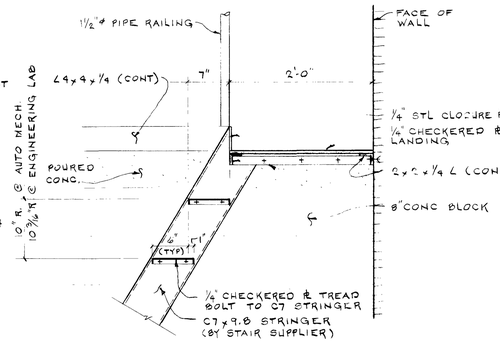
STRONG & HEFFELBOWER
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CHECKED BY: R.E.H
DRAWN BY: R.E. & G.L.G.
COMM. NO.: 78-245
DATE: 4-2-79
SHEET TITLE: SECTIONS & DETAILS
SHEET NO. a-14
OF 19

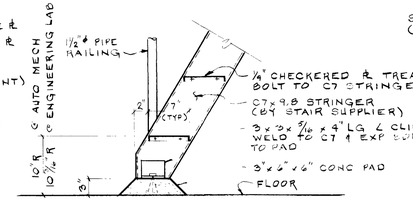
STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



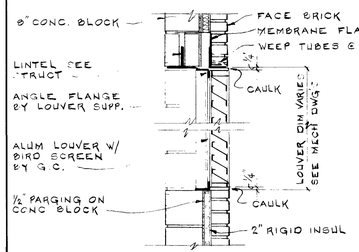
1/12 STEEL STAIR DETAIL
SCALE : 1" = 1'-0"



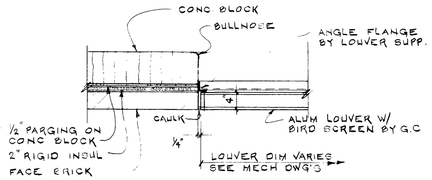
2/15 STEEL STAIR DETAIL
SCALE : 1" = 1'-0"



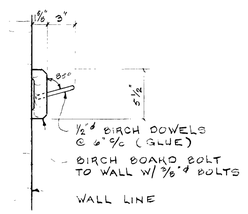
3/12 STEEL STAIR DETAIL
SCALE : 1" = 1'-0"



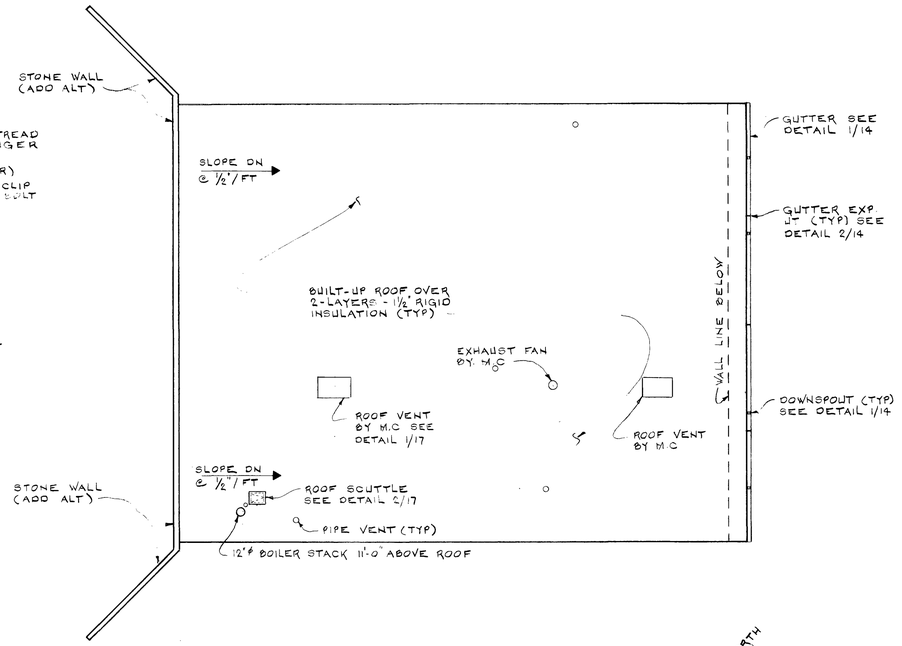
4/11 LOUVER DETAIL
SCALE : 3/4" = 1'-0"



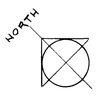
5/11 JAMB DETAIL
SCALE : 3/4" = 1'-0"

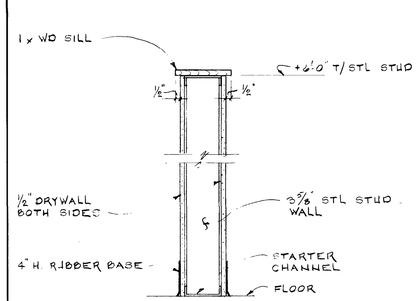


6/7 MOP HANGER (BY CARPENTRY)
SCALE : 1½" = 1'-0"

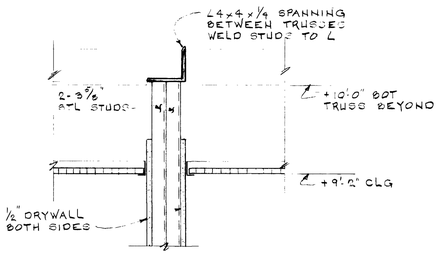


ROOF PLAN (BUILDING "B")
SCALE: 1/16" = 1'-0"

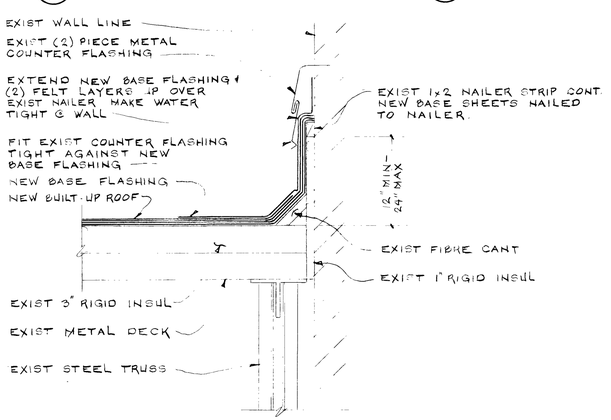




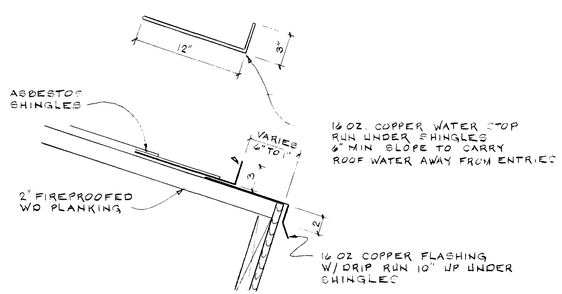
7/6,18 STUD PARTITION
SCALE : 1½" = 1'-0"



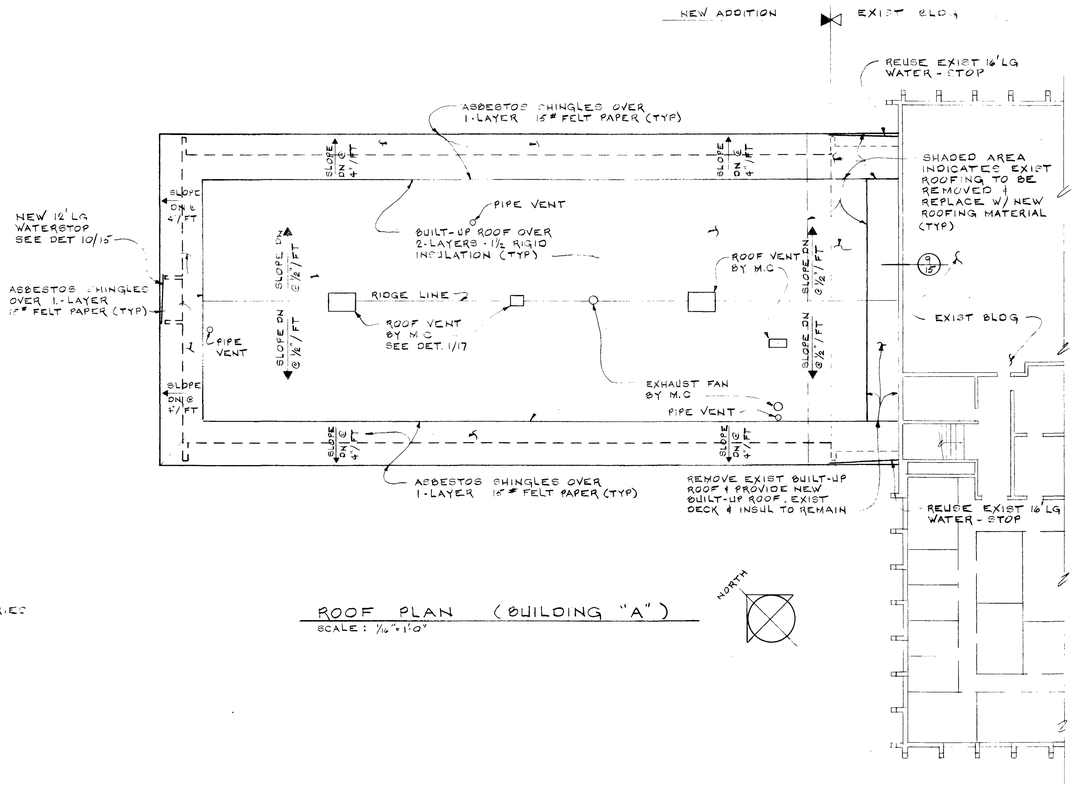
8/6,18 CORNER PARTITION @ CLG
SCALE : 1½" = 1'-0"



9/15 WALL - ROOF FLASHING
SCALE : 1½" = 1'-0"



10/15 WATER STOP DET. @ ENTRIES
SCALE : 1½" = 1'-0"



ROOF PLAN (BUILDING "A")
SCALE : 1/16" = 1'-0"

REVISIONS:

PROJECT TITLE :
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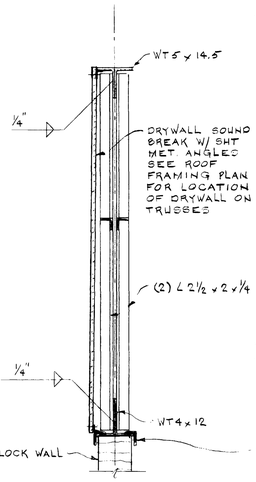
PREPARED FOR
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

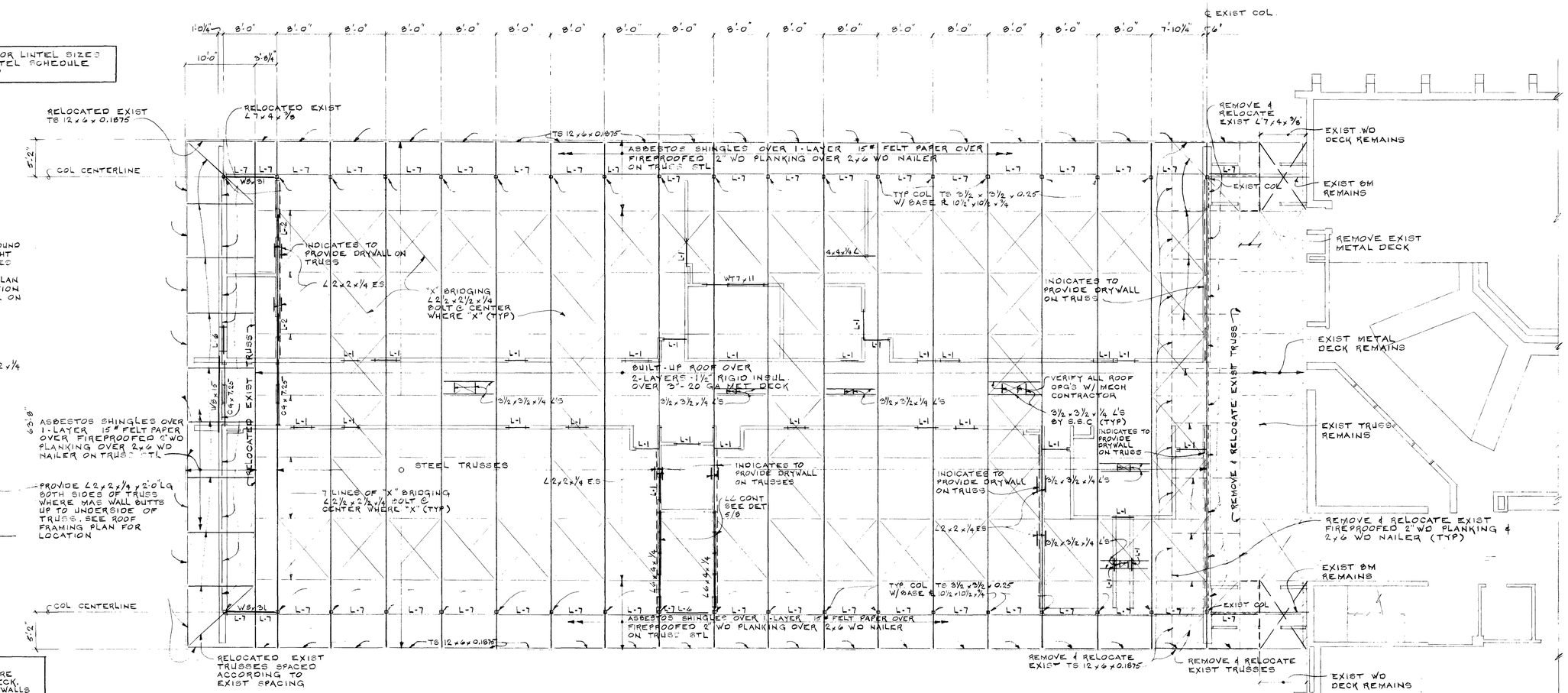
CHECKED BY: R.E.H.
DRAWN BY: D.E.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE : ROOF PLANS (BLDG "A" & "B") & DETAILS
SHEET NO. a-15
OF 19

STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3846 · REGISTERED ARCHITECTS

NOTE: FOR LINTEL SIZES SEE LINTEL SCHEDULE SHT A-17



1/16 TRUSS SECT.
SCALE: 1" = 1'-0"



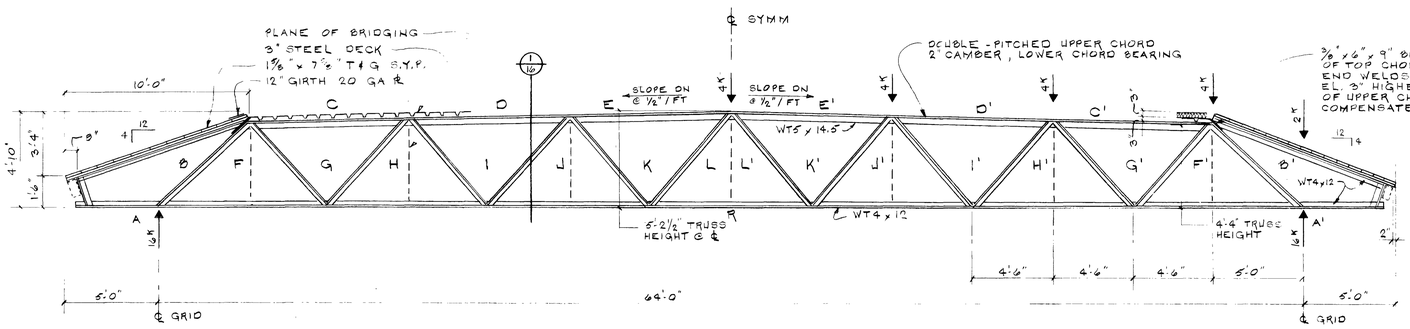
NOTE:
ALL WALLS SHADED IN ARE TO EXTEND TO ROOF DECK. ALL OTHER CONC BLOCK WALLS TO EXTEND TO 10'-0" ABOVE FL.

ROOF FRAMING PLAN (BUILDING "A")

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

NORTH

TYP COL. TS 3½ x 3½ x 0.25 W/ BASE PL 10½" x 10½" x ¾" BASE PL EL (-) @ 4 - ¾" ⌀ ANCHOR BOLTS W/ L 2 SETTING PL & 1" NON-SHRINK GROUT

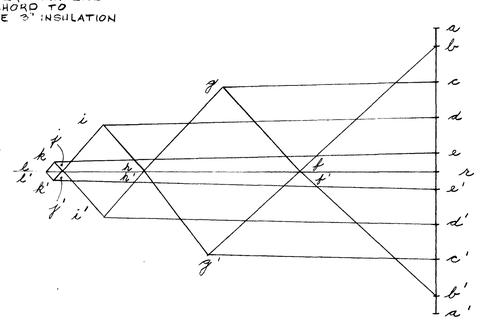


TYP. STEEL TRUSS

SCALE: ¼" = 1'-0"

MEMBER	T/C	MEMBER SIZES	
BF, B'F'	-21K	(2) L 2½" x 2" x ¼"	JL
GF, G'F'	+13K	(2) L 2" x 2" x ¼"	
IH, I'H'	+7K	(2) L 2" x 2" x ⅛"	
HG, H'G'	-12K	(2) L 2½" x 2" x ¼"	JL
KJ, K'J'	+2K	(2) L 2" x 2" x ¼"	
JI, J'I'	-7K	(2) L 2½" x 2" x ¼"	JL
KE, K'E'	-49K	WT5 x 14.5	
LR	+44K	WT4 x 12	

T - INDICATES (+)
C - INDICATES (-)



STRESS DIAGRAM 64'-0" TRUSS

SCALE: 1/8" = 1K

TOP CHORD INTERACTION FORMULA:

$$\frac{fa}{Fa} + \frac{fb}{\left(1 - \frac{fa}{F'e}\right)Fb} = .66 + .12 = .78 \leq 1 \quad \text{O.K.}$$

REVISIONS:

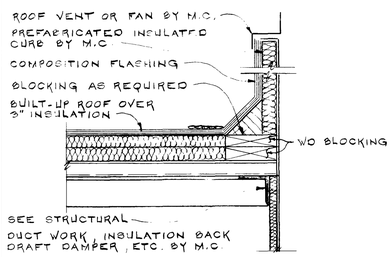
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
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WRIGHT STATE UNIVERSITY
W. O. E. C
CELINA, OHIO

PREPARED FOR
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DIVISION OF PUBLIC WORKS

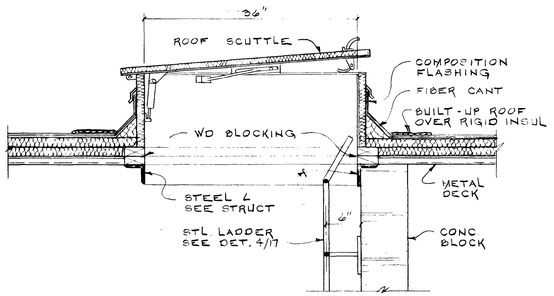
STRONG & HEFFELBOWER
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·PLANNERS
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45805
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CHECKED BY: R.E.H.
DRAWN BY: B.E.
COMM. NO.: 78-642
DATE: 9-2-79
SHEET TITLE: ROOF FRAMING PLAN (BLDG "A")
SHEET NO. a-16
OF 19

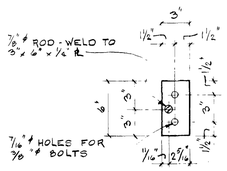
STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3946 · REGISTERED ARCHITECTS



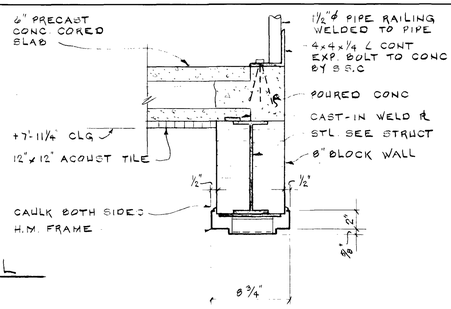
1/15 ROOF CURB DETAIL
SCALE : 1½" = 1'-0"



2 7,12 ROOF SCUTTLE DETAIL
SCALE : 1" = 1'-0"



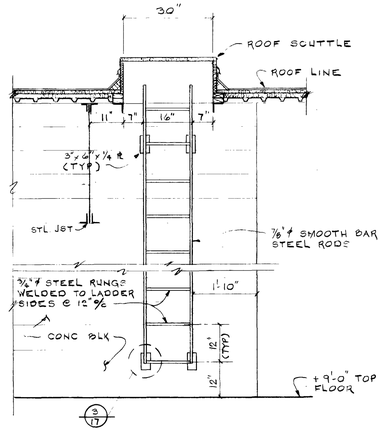
3 17 PLATE DETAIL
SCALE : 1½" = 1'-0"



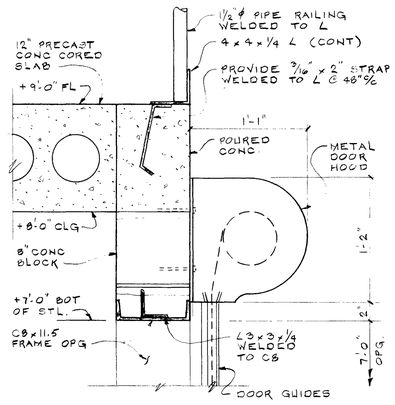
12 12 PIPE RAILING DETAIL
SCALE : 1½" = 1'-0"

LINTEL SCHEDULE

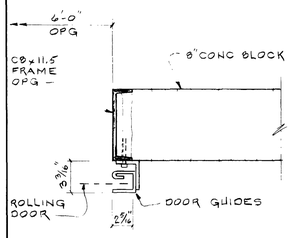
MARK	DESCRIPTION	SECTION	BEARING	REMARKS
L-1	2 L'S 3½ x 2½ x ¼	⊓	6" EA END	
L-2	2 L'S 3½ x 3½ x ¼	⊓	6" EA END	
L-3	3 L'S 3½ x 3½ x ¼	⊓ L	6" EA END	
L-4	2 L'S 3½ x 3½ x 5/16	⊓	8" EA END	
L-5	PL ¼" x 7½"	—	6" EA END	
L-6	2 L'S 5" x 3½ x 5/16	⊓ L	8" EA END	
L-7	1 L 7 x 4 x ⅜	L	—	WELDED TO TRUSS
L-8	1 L 3 x 3 x ¼ + CB x 11.5	L	6" EA END	L3x3x¼ WELDED TO CB x 11.5
L-9	3 L'S 4 x 3½ x 5/16	⊓ L	8" EA END	



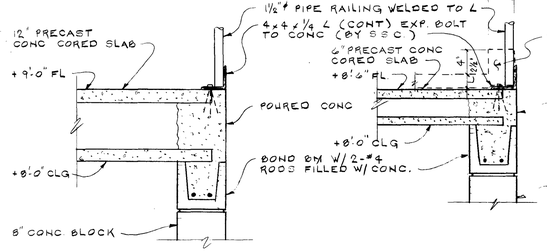
3 17
4 7,12 STEEL LADDER DET
SCALE : ½" = 1'-0"



5 12 HEAD DETAIL
SCALE : 1½" = 1'-0"

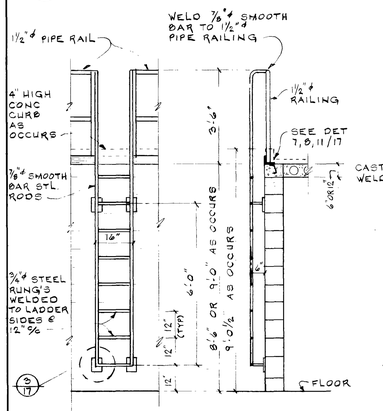


6 12 JAMB DETAIL
SCALE : 1½" = 1'-0"



7 12 PIPE RAILING DET.
SCALE : 1" = 1'-0"

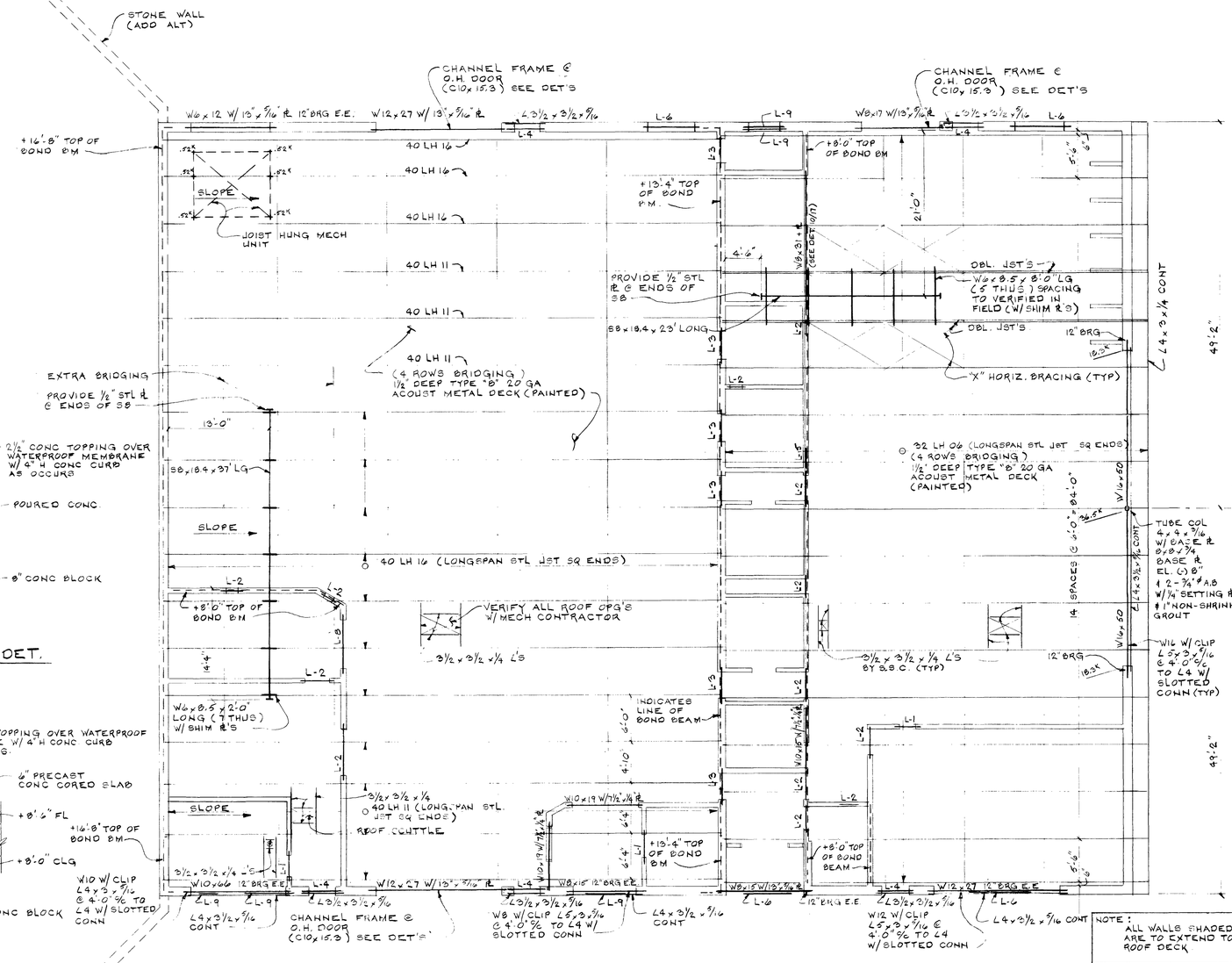
8 12 PIPE RAILING DET.
SCALE : 1" = 1'-0"



9 12 STL LADDER DET.
SCALE : ⅜" = 1'-0"

10 12 PIPE RAILING DET.
SCALE : 1" = 1'-0"

11 12 PIPE RAILING DET.
SCALE : 1" = 1'-0"



ROOF FRAMING PLAN (BUILDING "B")
SCALE : ⅛" = 1'-0"

NOTE : ALL WALLS SHADED IN ARE TO EXTEND TO ROOF DECK

NORTH

REVISIONS:

PROJECT TITLE:
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FOR
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WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

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45805
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CHECKED BY: R.E.H.
DRAWN BY: B.E.
COMM NO.: 78-642
DATE: 9-2-79

SHEET TITLE:
ROOF FRAMING PLAN (BLDG. "B") & DETAILS

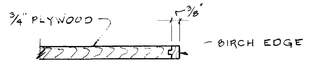
SHEET NO.
a-17
OF 19

STATE OF OHIO · LYMAN J. STRONG 1743 · RICHARD E. HEFFELBOWER 3846 · REGISTERED ARCHITECTS

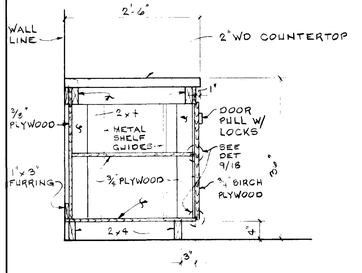
CASEWORK SCHEDULE

MARK	DESCRIPTION	WIDTH	DEPTH	HGT	CAT. NO	REMARKS
1	FILE CABINETS	—	—	—	—	BY OWNER
2	HINGED DOOR STORAGE UNIT	48"	24"	34½"	G-6	ADD ALT
3	HINGED DOOR STORAGE UNIT	36"	24"	34½"	G-5	ADD ALT
4	ALL DRAWER UNIT	18"	24"	34½"	K-7	ADD ALT
5	SINK UNIT	36"	24"	34½"	S-34	BASE BID
6	GENERAL STORAGE UNIT	30"	24"	34½"	G-25	ADD ALT
7	BLINDED STORAGE UNIT	42"	24"	34½"	H-24	ADD ALT
8	COUNTER PEDESTAL	1½"	24"	28½"	AM-7½	ADD ALT
9	APRON RAIL	3'-1½"	¾"	4"	A-AR	ADD ALT

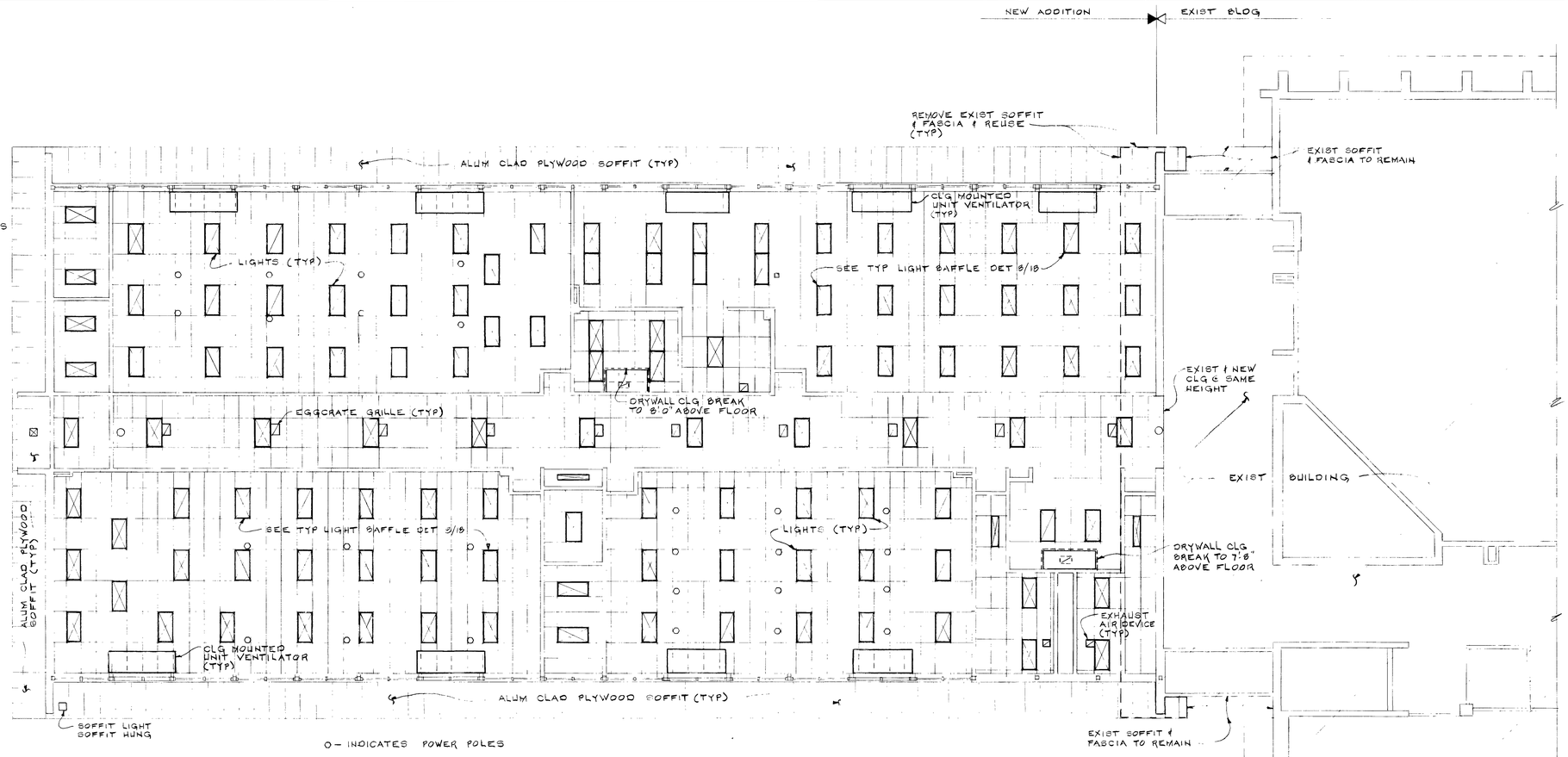
NOTE : LOCKS REQ'D AS SHOWN ON ELEVATIONS
ALL EQUIPMENT ITEMS INDICATED ARE TAKEN FROM YORKTOWNE'S MODULE-LINE CATALOG
SEE FLOOR PLAN & INTERIOR ELEVATIONS FOR QUANTITIES
ALL EXPOSED ENDS TO BE FINISHED



9/10 SHELF DETAIL
SCALE : 3" = 1'-0"

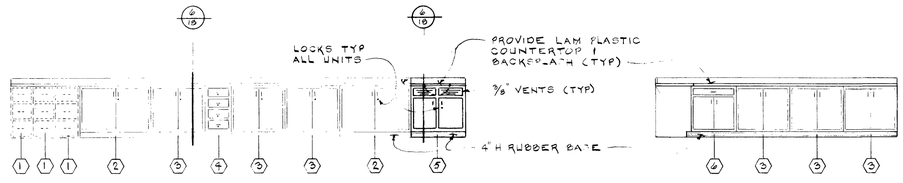


8/7 WORK BENCH DETAIL (ADD ALT)
SCALE : ¾" = 1'-0"
(TYP SECT OF WORK BENCH IN MOTOR PARTS LAB 203)



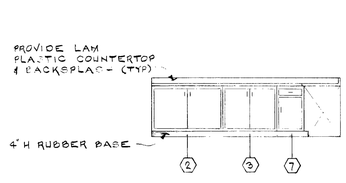
REFLECTED CEILING PLAN (BUILDING "A")
SCALE : ⅛" = 1'-0"

NORTH

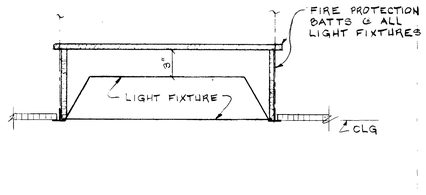


1/6 BUSINESS LAB #1 115
SCALE : ¼" = 1'-0"
BUSINESS LAB #2 (OPPOSITE HAND)

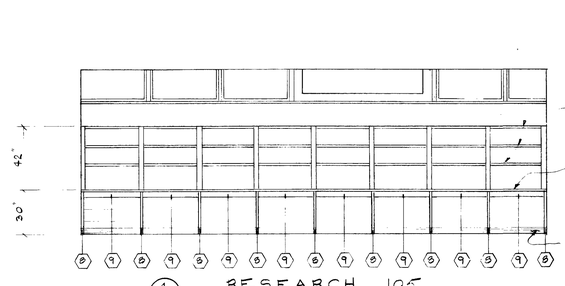
2/6 MODEL & TESTING 106
SCALE : ¼" = 1'-0"



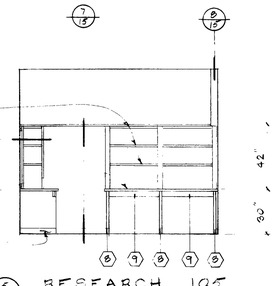
3/6 MODEL & TESTING 106
SCALE : ¼" = 1'-0"



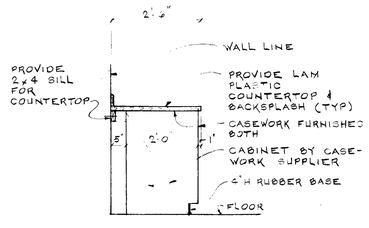
10/18 TYP LIGHT BAFFLE DETAIL
SCALE : 1½" = 1'-0"



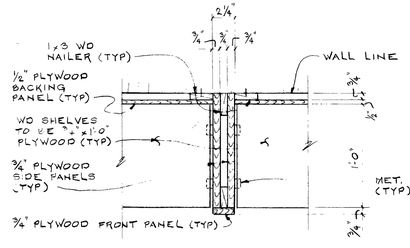
4/6 RESEARCH 105
SCALE : ¼" = 1'-0"



5/6 RESEARCH 105
SCALE : ¼" = 1'-0"



4/18 CAB'T SECT.
SCALE : ½" = 1'-0"
(TYP SECT OF CAB'T IN BUSINESS LAB #1 & #2)



7/18 TYP WD SHELF DETAIL
SCALE : 1½" = 1'-0"

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

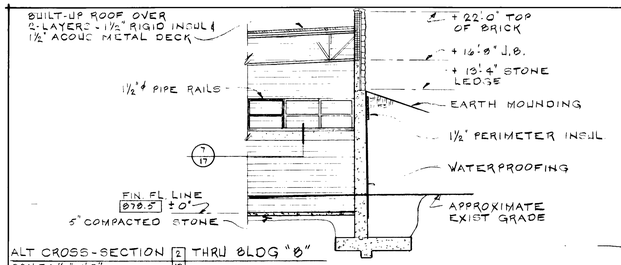
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·PLANNERS
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CHECKED BY: REH
DRAWN BY: B.E.
COMM. NO.: 78-642
DATE: 4-2-79

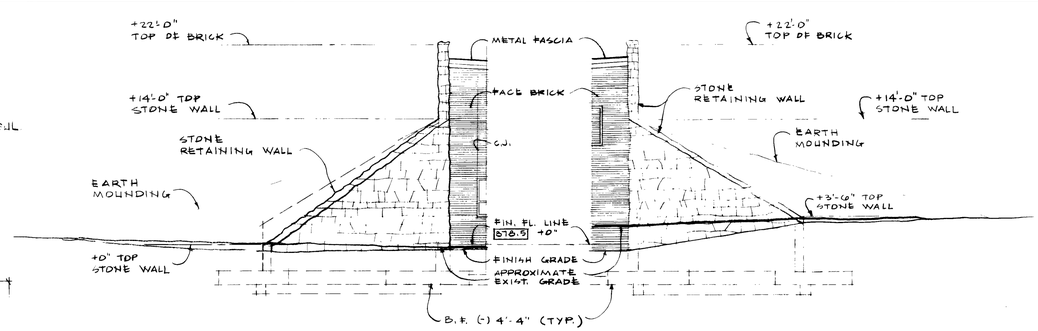
SHEET TITLE: REFLECTED CEILING PLAN (BLDG "A") & DETAILS

SHEET NO.
a-18
OF 19

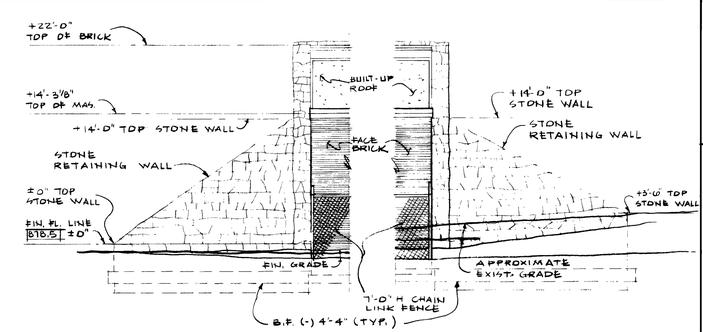
STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



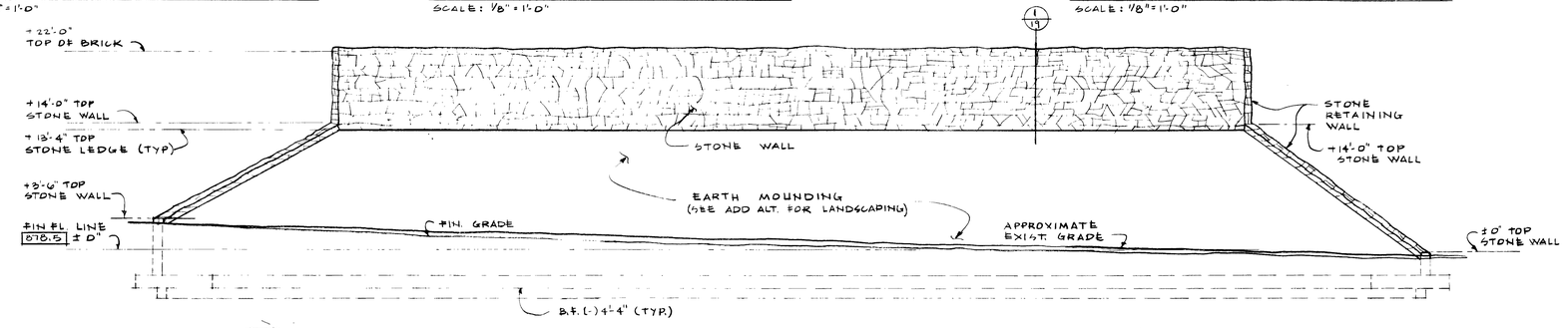
ALT CROSS-SECTION 2/19 THRU BLDG "B"
SCALE: ⅛" = 1'-0"



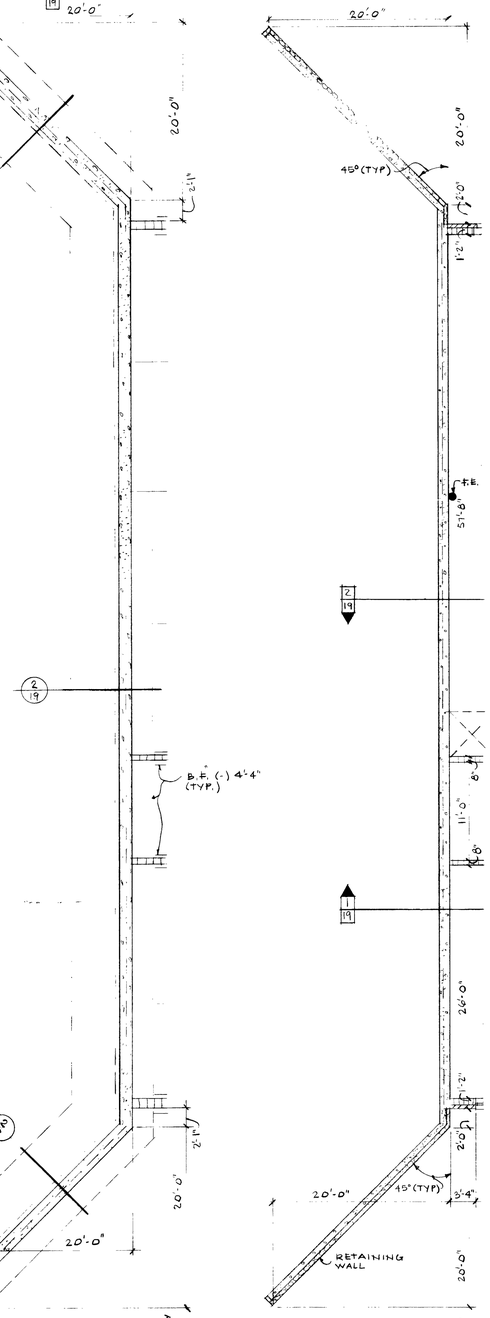
ALT. WEST ELEVATION (BUILDING "B")
SCALE: ⅛" = 1'-0"



ALT. EAST ELEVATION (BUILDING "B")
SCALE: ⅛" = 1'-0"

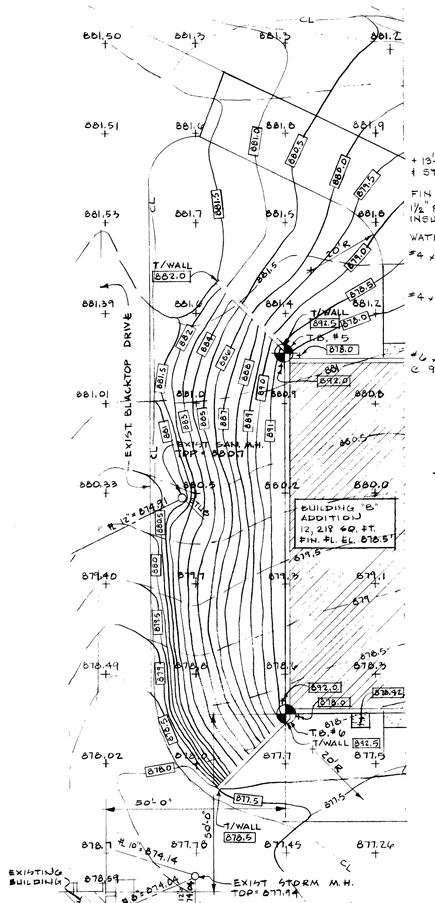


ALT. SOUTH ELEVATION (BUILDING "B")
SCALE: ⅛" = 1'-0"

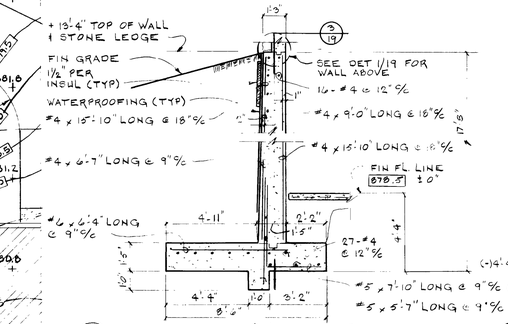


ALT. FOUNDATION PLAN (BUILDING "B")
SCALE: ⅛" = 1'-0"

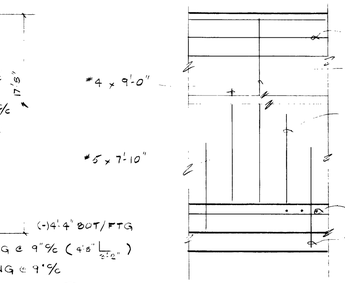
ALT. FLOOR PLAN (BUILDING "B")
SCALE: ⅛" = 1'-0"



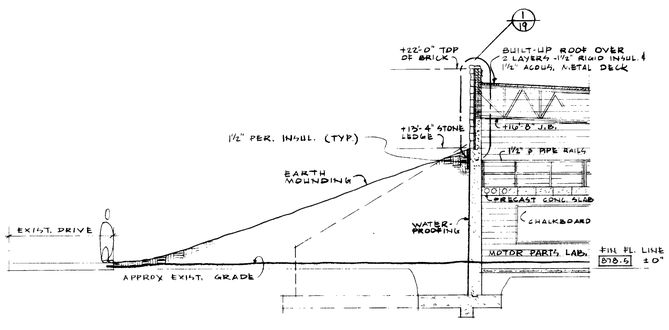
ALT. PARTIAL SITE PLAN (BUILDING "B")
SCALE: 1" = 20'-0"



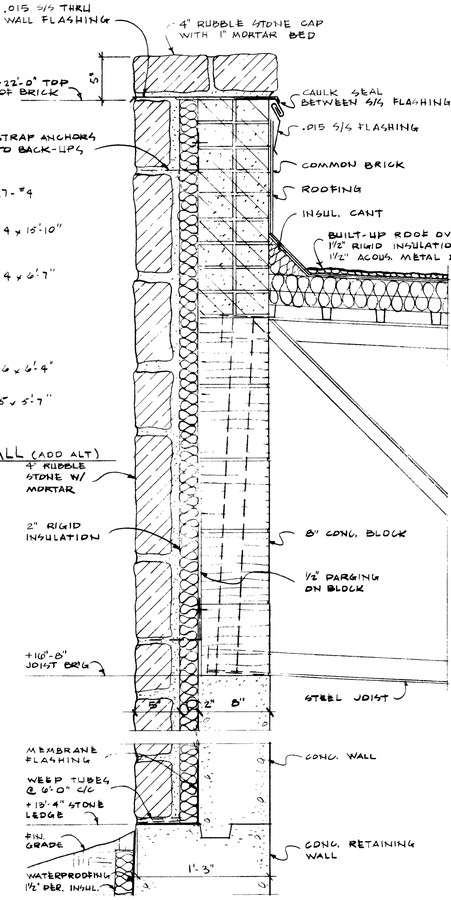
2/19 RETAINING WALL SECT. (ADD ALT)
SCALE: ¼" = 1'-0"



3/19 SECT. THRU RETAINING WALL (ADD ALT)
SCALE: ⅛" = 1'-0"



- ALT. CROSS SECTION 1/19 THRU BUILDING "B" -
SCALE: ⅛" = 1'-0"



1/19 ALT. WALL SECTION
1½" = 1'-0"

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FDR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
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·PLANNERS
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CHECKED BY:	REH
DRAWN BY:	G.L.C., B.E
COMM. NO.:	78-642
DATE:	4-2-79
SHEET TITLE:	ADD ALTERNATE (BLD'G "B")
SHEET NO.	a-19 OF 19

STATE OF OHIO · LYMAN · STRONG · REGISTERED ARCHITECT

DRAINS

SYMBOL	TYPE: ROOF	TYPE: FLOOR	TYPE: AREA	WADE CATALOG NUMBER	BODY: FLANGE CLAMPING DEVICE	BODY: UNDERDECK CLAMP	BODY: BEARING PAN	BODY: OUTLET	STRAINER/GRATE: SIZE	STRAINER/GRATE: ADJUSTABLE	STRAINER/GRATE: ROUND	STRAINER/GRATE: SQUARE	STRAINER/GRATE: RECTANGULAR	STRAINER/GRATE: CAST IRON	STRAINER/GRATE: NICKEL BRONZE	STRAINER/GRATE: POLISHED BRONZE	STRAINER/GRATE: STAINLESS STEEL	STRAINER/GRATE: FLAT	STRAINER/GRATE: RECESSED	STRAINER/GRATE: FUNNEL	STRAINER/GRATE: SEDIMENT BUCKET	STRAINER/GRATE: ROTATING STRAINER	STRAINER/GRATE: DOME	STRAINER/GRATE: VANDAL-PROOF	REMARKS	SCHEDULE NOTE REFERENCE NUMBER
FD-1		●		W-1103-5	●	●			6"	●	●			●				●								
FD-2		●		W-1203	●	●			8"	●	●			●				●								
FD-3		●		W-1243	●	●			8"	●	●			●				●								

PLUMBING FIXTURE SPECIFICATION SCHEDULE

SYMBOL	MOUNTING HEIGHT	DESCRIPTION	SUPPLY CONNECTIONS: COLD	SUPPLY CONNECTIONS: HOT (140°)	SUPPLY CONNECTIONS: TEMP	WASTE CONNECTIONS: OUTLET	WASTE CONNECTIONS: TRAP	WASTE CONNECTIONS: FUTURE DRAIN	WASTE CONNECTIONS: DIRECT WASTE	WASTE CONNECTIONS: VENT	SPECIFICATIONS: FIXTURE MANUFACTURE	SPECIFICATIONS: FIXTURE	SPECIFICATIONS: FAUCET/FLUSH VALVE	SPECIFICATIONS: OUTLET	SPECIFICATIONS: STOP	SPECIFICATIONS: TRAP	SPECIFICATIONS: FIXTURE DRAIN	WASTE CARRIER NUMBER	SCHEDULE NOTE REFERENCE NO.
A1	16" TO LIP	WATER CLOSET / WALL HUNG / FLUSH VALVE	1"	—	—	4"	INTEGRAL	4"	4"	2"	AMERICAN STANDARD	2477.016	SLOAN ROYAL 115 YB	UNIT	UNIT	INTEGRAL	CAST IRON	SEE SOIL & WASTE & VENT DIAGRAM ON SHEET P-3	3
A2	20" TO LIP	WATER CLOSET / WALL HUNG / FLUSH VALVE / HANDICAPPED	1"	—	—	4"					AMERICAN STANDARD	2477.016		UNIT	UNIT	INTEGRAL	CAST IRON		3
B1	——	WASHFOUNTAIN / SEMI-CIRCULAR / WHEELCHAIR	½"	½"	—	2"	2"	2"	2"	1½"	BRADLEY	CHC-596	UNIT	UNIT	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	——	1
B2	31"	LAVATORY / 20"x18" / WALL HUNG / SOAP DISPENSER	½"	½"	—	1¼"	1¼"	1¼"	1½"	1½"	AMERICAN STANDARD	0350.132	CHICAGO 406-E2.8	2411.015	2503.068	4401.014		W-521	2
B3	31"	LAVATORY / 20"x18" / WALL HUNG / SOAP DISPENSER	½"	½"	—	1¼"	1¼"	1¼"	1½"	1½"	AMERICAN STANDARD	0350.132	CHICAGO 785-E3	2411.015	2503.068	4401.014		W-522	
C1	21"	URINAL / WALL HUNG / FLUSH VALVE	1"	—	—	2"	INTEGRAL	2"	2"	1½"	AMERICAN STANDARD	6530.016	SLOAN ROYAL 180 YB	UNIT	UNIT	INTEGRAL	GALV. STEEL	W-452	
C2	18"																		
D1	SUPPLY 36"	PUMP SINK / 24"-Ø / AND SUPPLY FITTING	½"	½"	—	3"	3"	3"	3"	1½"	SILEN WILLIAMS	SB-502	CHICAGO 897	UNIT	UNIT	CAST IRON	CAST IRON	——	
E1	——	COUNTERTOP SINK / - STAINLESS STEEL / SELF-RIMMING	½"	½"	—	1½"	1½"	1½"	1½"	1½"	JUST	SL-2119-A-GR	CHICAGO 785-E3	J-35	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	——	
G1	36"	WATER COOLER / 1 LINKING FOUNTAIN	1/2"	——	——	1¼"	1¼"	1¼"	1¼"	1¼"	HALSEY TAYLOR	WC-7A-1	UNIT	UNIT	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	W-531-C2	4
J1	48"	EMERGENCY EYE WASH	½"	——	——	——	——	——	——	——	HAWS	SE-920	——	——	CHICAGO 948	——	——	——	

SCHEDULE NOTES:
1. TRIANGLE BASIN COLOR SELECTION BY ARCHITECT.
2. PROVIDE LIQUID SOAP DISPENSER-FOERICH B-829 (OWNER WILL SUPPLY LIQUID SOAP TO FILL UNIT)
3. WATER CLOSET SEAT-CHURCH 9331.112
4. CABINET COLOR SELECTION BY ARCHITECT

NOTES

1. VALVE & CONNECT NEW 3" GAS TO EXISTING GAS MAIN AHEAD OF EXISTING REGULATOR-NEW REGULATOR TO PASS 2,000 CFM. OF GAS @ 30" W.C.)
2. SUPPORT GAS PIPING ALONG EXISTING WALL (COORDINATE WITH E.C.) AND SLEEVE PIPE THRU EXISTING WALL.
3. NEW 3" UNDERGROUND GAS SERVICE-COORDINATE LOCATION WITH E.C.
4. NEW 2" UNDERGROUND WATER SERVICE.
5. UNDERGROUND FUEL OIL STORAGE TANK- SEE DETAIL ON THIS SHEET (ALT. P-1)
6. UNDERGROUND GASOLINE STORAGE TANK- SEE DETAIL ON THIS SHEET (ALT. P-1)
7. FUEL OIL PUMP-(ALT. P-1)
8. GASOLINE PUMP-(ALT. P-1)
9. PROTECTION BOLLARDS, PUMP BASE AND CONCRETE APRON BY G.C.
10. VALVE WITH EXTENSION AND GREASE BOX.
11. OFFSET GAS SERVICES TO AVOID EXISTING UNDERGROUND FUEL OIL STORAGE TANK
12. UNDERGROUND USED OIL STORAGE TANK-SEE DETAIL ON SHEET P-2 (ALT. P-5)
13. PIPING IN ALT. P-4 ONLY
14. PROVIDE CAST IRON DOWNSPOUT BOOT TO RECEIVE EXTERIOR SHEET METAL DOWNSPOUT PROVIDED BY G.C. BOOT TO EXTEND 12" ABOVE GRADE (COORDINATE BOOT RECEIVER OPENING WITH G.C. FOR PROPER SIZING AND PROVIDE 6" OUTLET ON BOOT)-ALTERNATE P-4 ONLY, STORM DISCHARGES TO GRADE UNDER BASE BID.
15. REFER TO DETAIL ON SHEET P-4.

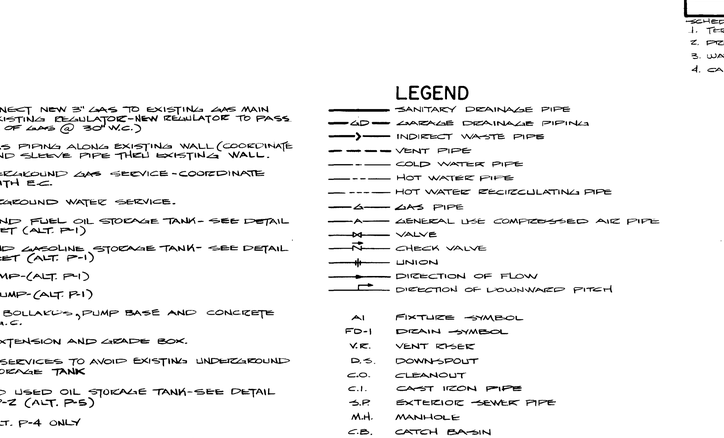
LEGEND

- SANITARY DRAINAGE PIPE
- GD — GARAGE DRAINAGE PIPING
- INDIRECT WASTE PIPE
- VENT PIPE
- COLD WATER PIPE
- HOT WATER PIPE
- HOT WATER RECIRCULATING PIPE
- G — GAS PIPE
- A — GENERAL USE COMPRESSED AIR PIPE
- VALVE
- CHECK VALVE
- UNION
- DIRECTION OF FLOW
- DIRECTION OF LOW/VAPED PITCH

A1	FIXTURE SYMBOL
FD-1	DRAIN SYMBOL
V.R.	VENT RISER
D.S.	DOWNSPOUT
C.O.	CLEANOUT
C.I.	CAST IRON PIPE
S.P.	EXTERIOR SEWER PIPE
M.H.	MANHOLE
C.B.	CATCH BASIN
T/F	TOP OF FOOTING ELEVATION
B/F	BOTTOM OF FOOTING ELEVATION
P.C.	PLUMBING CONTRACTOR
H.V.A.C.	HEATING, VENT. & AIR COND. CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR

(3) "NOTE" SYMBOL NUMBER APPLIES ONLY TO NOTES ON SHEET ON WHICH SYMBOL IS SHOWN.

CONNECTION SYMBOL-INDICATES LOCATION OF NEW PIPING CONNECTION TO EXISTING PIPING (VERIFY EXACT SIZE, LOCATION & ELEVATION BEFORE INSTALLATION OF ANY NEW PIPING.)

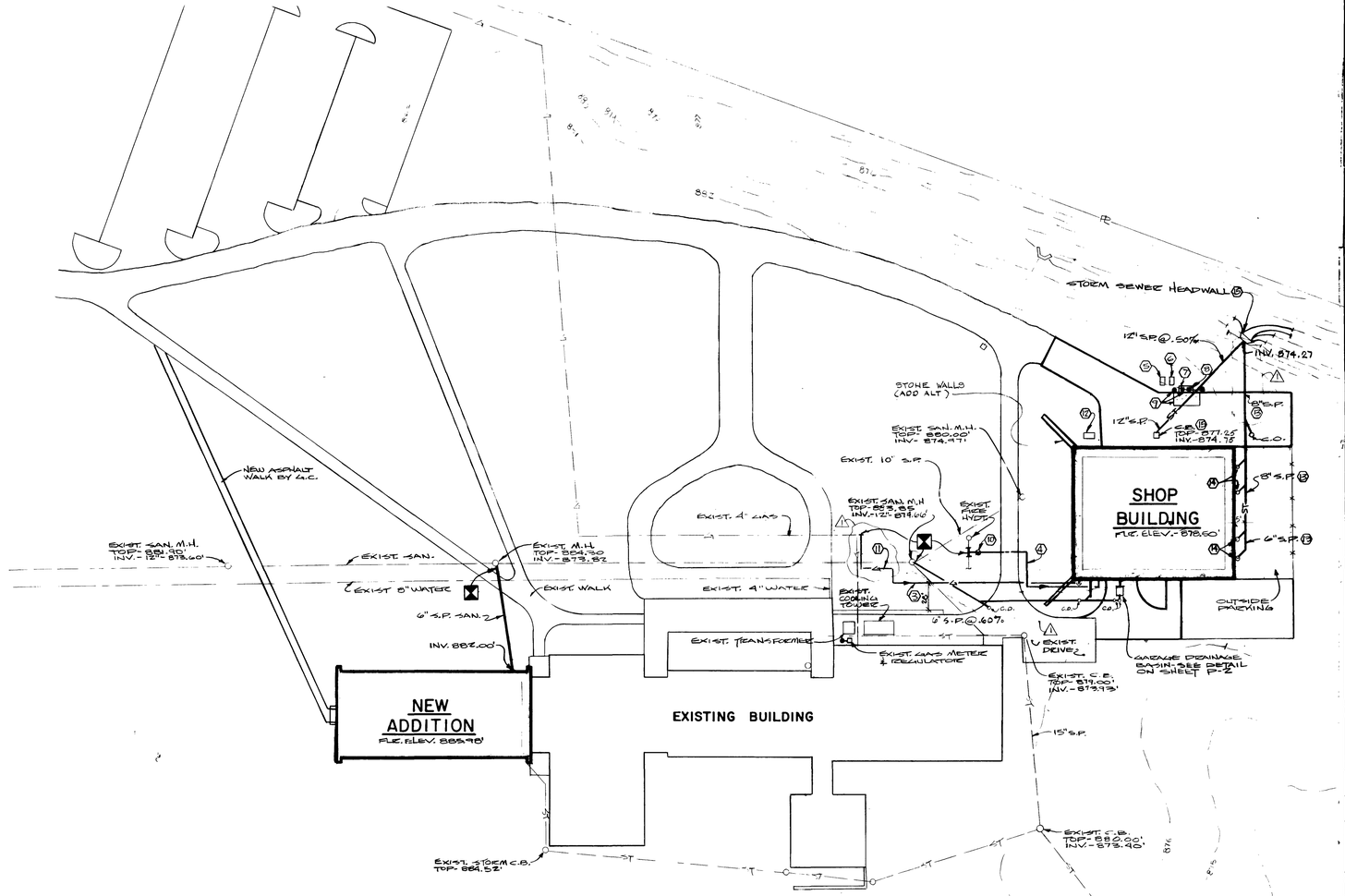


(ALTERNATE P-1)

UNDERGROUND FUEL STORAGE TANK

SCALE: 1/2"=1FT.-0"

TWO UNITS REQ'D-ONE FUEL OIL & ONE GASOLINE (TYPE AND GRADE OF FUEL AS SELECTED BY UNIVERSITY)



SITE PLAN

SCALE: 1" = 50 FT.

NOTE:
1. VERIFY EXACT SIZE, LOCATION & ELEVATION OF ALL EXISTING UTILITIES BEFORE PROCEEDING WITH INSTALLATION OF ANY NEW PIPING TO AVOID CONFUSION AT A LATER DATE.
2. REFER TO ARCHITECTURAL SITE PLANS FOR NEW & EXISTING GRADE ELEVATIONS - CONTRACT LIMIT LINE ON ARCHITECTURAL PLANS IS NOT APPLICABLE TO PLUMBING CONTRACT

ENERGY CODE COMPLIANCE - SERVICE WATER HEATING

Code Ref.	Insulation	
504.2	Electric storage water heaters comply: Yes X Exception ____	
504.2	Gas and oil fired storage water heaters comply: Yes ____ Exception NA	
	Unfired hot water storage tanks comply: Yes ____ Exception NA	
504.2	Combination service water heating comply: Yes ____ Exception NA	
504.2	Requirements of Section 504.2(b) temperature controls and Section	
504.3	504.2(b.2) pump controls comply: Yes X Exception ____	
504.4	Pipe insulation comply: Yes X Exception ____	
	Flow	
504.5	Shower head flow: Code 3 gpm. Design NA	
504.5	Lavatories in restrooms of public facilities comply: Yes X N/A____	
504.5	Hot water flow (max.): Code 0.5 gpm. Design .4	

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS:
⚠ "AS BUILT" 9/10/01

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
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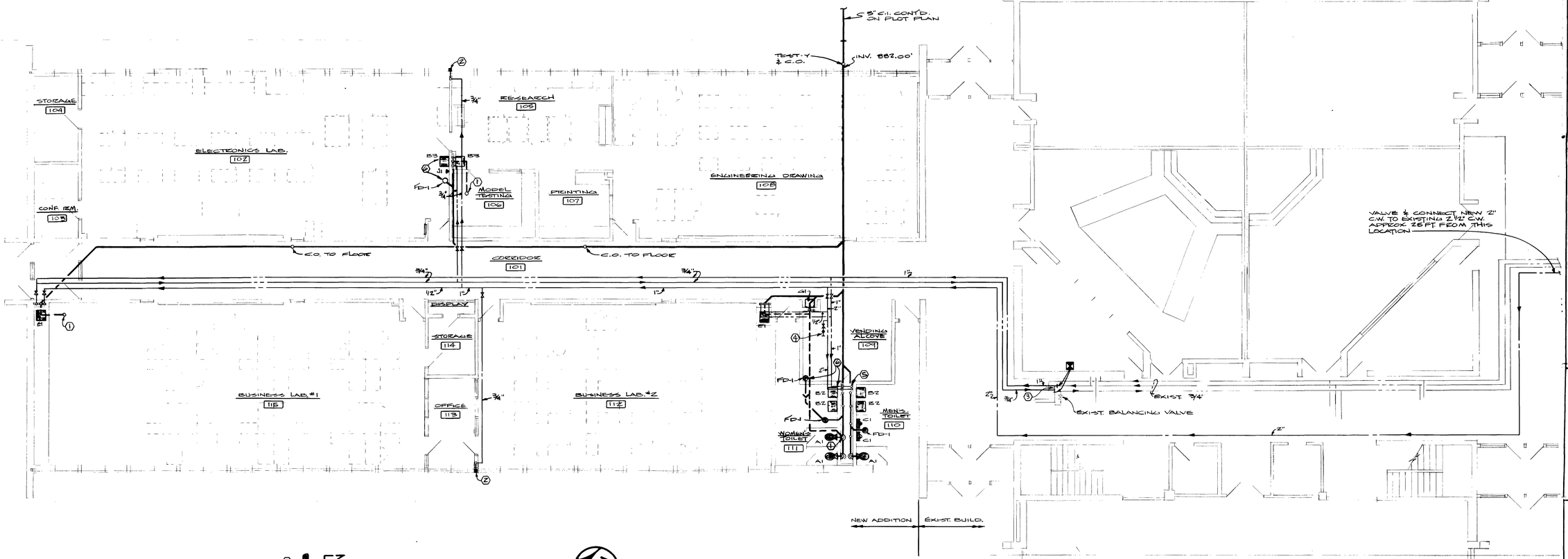
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
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45805
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CHECKED BY: P.L.B.
DRAWN BY: D.W.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: PLOT PLAN
SHEET NO. P-1 OF 4

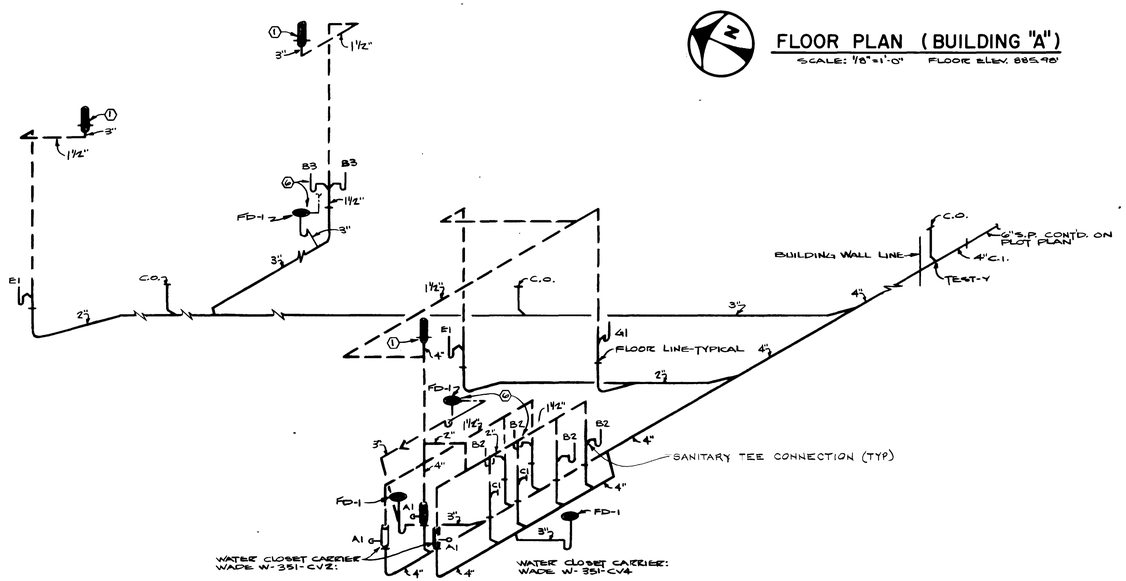
STATE OF OHIO 10231 M. O. HEAPY F. R. R. WEBER 41286 T. E. MONNIG 26796 R. J. PEARSON 34483 B. J. WERLING 33846 T. J. FERDELMAN 29963 REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 3846 REGISTERED ARCHITECTS



FLOOR PLAN (BUILDING "A")

SCALE: 1/8"=1'-0" FLOOR ELEV. 885.98'



SOIL, WASTE & VENT PIPING

GENERAL NOTES

1. ALL SUPPLY AND VENT PIPING IS ABOVE THE CEILING UNLESS OTHERWISE INDICATED.
2. ALL SOIL & WASTE PIPING IS BELOW THE FLOOR (IN GRADE) UNLESS OTHERWISE INDICATED.
3. REFER TO SCHEDULES AND DIAGRAMS FOR PIPING AND PIPE SIZES NOT INDICATED ON PLAN.

NOTES

(1) VENT THRU ROOF- FLASHING REQUIRED

(2) WALL HYDRANT 3.6" ABOVE GRADE: WADE W-8620 OR APPROVED EQUAL.

(3) REMOVE EXIST. 3/4" H.W. BETWEEN NEW CONNECTIONS.

(4) 1/2" VALVED STUB WITH VACUUM BREAKER ABOVE CEILING FOR VENDING MACHINES- CONTINUATION BY OWNER.

(5) DROP 1½" C.W. AND 3/4" H.W. ALONG EACH CHASE WALL AND MANIFOLD ALONG EACH WALL. SERVE EACH FIXTURE ALONG RELATIVE WALL INDIVIDUALLY FROM MANIFOLD.

(6) PROVIDE TRAP PRIMER ON LAVATORY C.W. SUPPLY (IN CHASE) AND PIPE 1/2" TYPE 'K' SOFT COPPER TO TRAP PRIMER CONNECTION ON FLOOR DRAIN.

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON – COLUMBUS, OHIO

REVISIONS:

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TECHNICAL EDUCATION BUILDINGS
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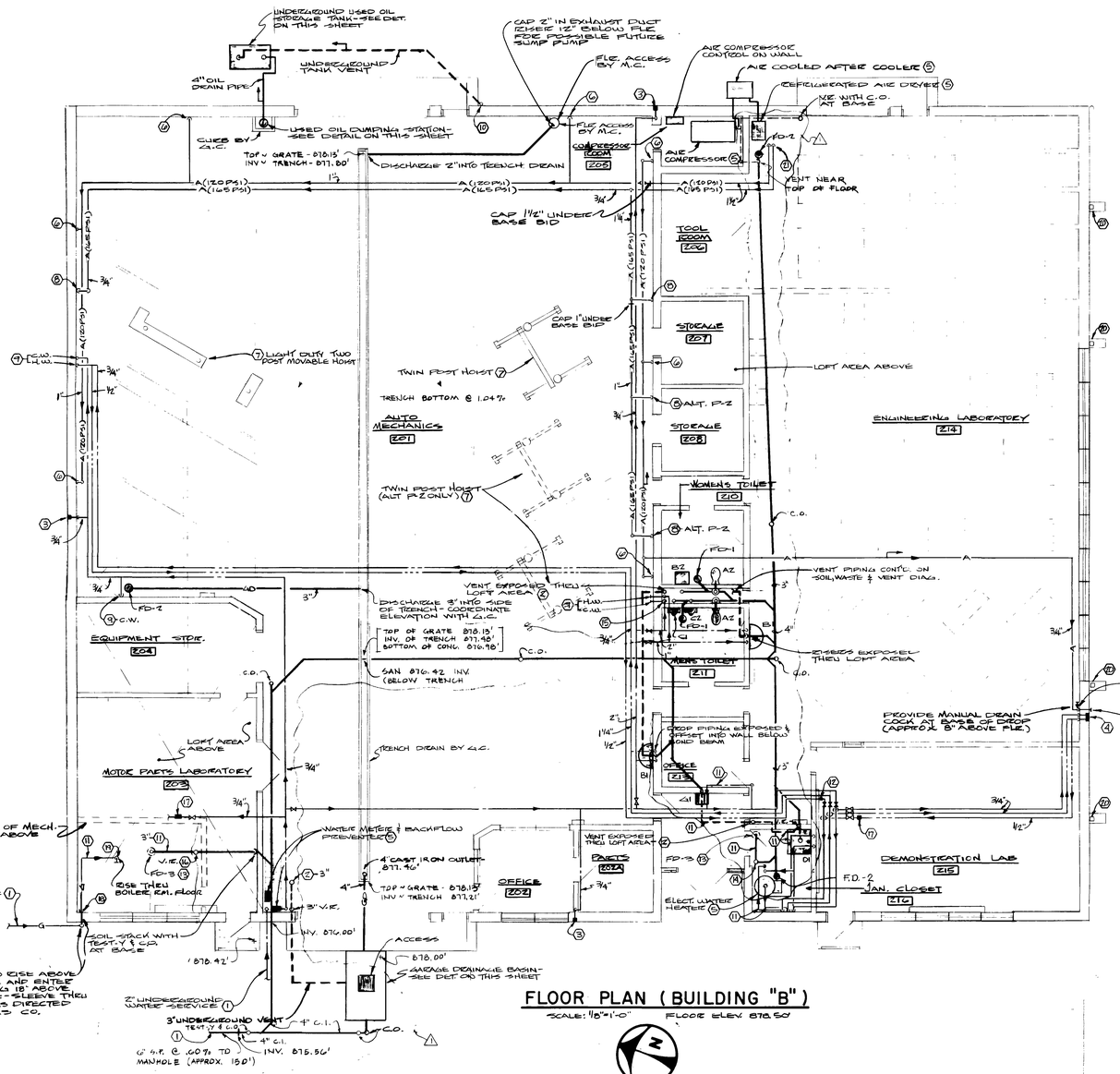
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CHECKED BY: P.L.B.
DRAWN BY: D.W.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING 'A'
SHEET NO. P·2 OF 4.

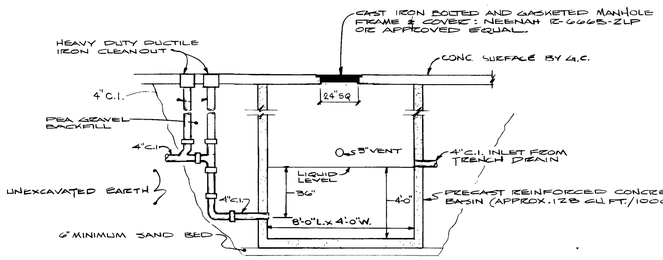
STATE OF OHIO
18231
M. O. HEAPY
R. R. WEBER 41286
T. E. MONNIG 28766
R. J. PEARSON 34482
D. J. WERLING 33948
T. J. FENDELMAN
REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS



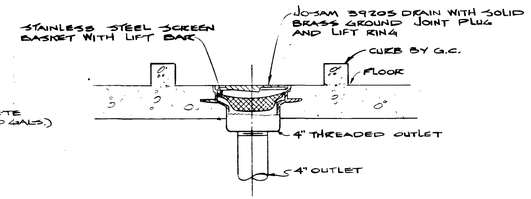
FLOOR PLAN (BUILDING "B")

SCALE: 1/8"=1'-0" FLOOR ELEV. 878.50



GARAGE DRAINAGE BASIN

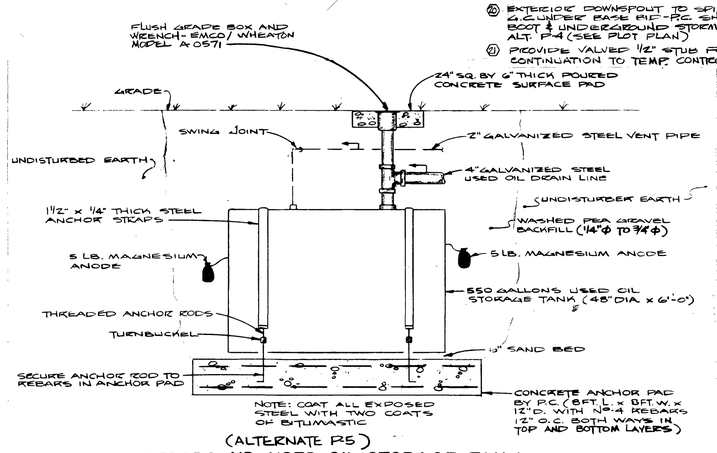
SCALE: 1/4"=1'-0"



(ALTERNATE P-5)

USED OIL DRAINAGE STATION

SCALE: 1"=1'-0"



(ALTERNATE P-5)

UNDERGROUND USED OIL STORAGE TANK

SCALE: 1/2"=1'-0"

GENERAL NOTES

1. ALL SUPPLY, AIR, GAS AND VENT PIPING IS ABOVE THE CEILING (AT THE CEILING IN EXPOSED STRUCTURE AREAS) UNLESS OTHERWISE INDICATED.
2. ALL DRAINAGE PIPING IS BELOW THE FLOOR SLAB IN GRADE UNLESS OTHERWISE INDICATED.
3. REFER TO SCHEDULES AND DIAGRAMS FOR PIPING AND PIPE SIZES NOT INDICATED ON PLAN.
4. HOIST AIR OIL TYPE - CONTROL VALVES, LIFTS, TANK AND ACCESSORIES FOR INSTALLATION WILL BE FURNISHED BY THE GENERAL CONT'R. THE PLUMBING CONTRACTOR SHALL FURNISH & INSTALL ALL OIL AND AIR PIPING AND INSTALL ACCESSORIES PROVIDED FOR HOIST INSTALLATION. GENERAL CONTRACTOR SHALL PROVIDE ALL EXCAVATION, BACKFILL & CONCRETE WORK AND SHALL SET TANKS AND HOIST POST ASSEMBLIES IN PLACE. THE PLUMBING CONT'R. SHALL PROVIDE PIPING, UNIONS AND FITTINGS AS REQUIRED / RECOMMENDED BY HOIST MANUFACTURER AND SHALL TEST COMPLETE SYSTEM AS DIRECTED BY HOIST MANUFACTURER, THIS TEST SHALL BE WITNESSED BY THE ARCHITECT OR THE ARCHITECTS REPRESENTATIVE.
5. 120 LB. COMPRESSED AIR PIPING AND RELATED AIR STATIONS ARE IN ALTERNATE P-3.

NOTES

1. PIPING CONTINUED ON PLOT PLAN.
2. VENT THRU ROOF - FLASHING REQUIRED
3. COLD WATER WALL HYDRANT 24" ABOVE GRADE: WADE W-8620.
4. HOT & COLD WATER WALL HYDRANT 24" ABOVE GRADE: WADE W-8625.
5. SEE DETAIL ON SHEET P-4.
6. VALVE 3/4" AIR 48" ABOVE FLOOR AND PROVIDE PLUGGED TEE ON VALVE OUTLET - CONTINUATION BY OWNER. (ALT. P-3)
7. REFER TO GENERAL NOTE No. 4.
8. CONNECT 3/4" TO AIR/OIL HOIST CONTROL VALVE.
9. 3/4" VALVE WITH HOSE END VACUUM BREAKER 36" ABOVE FLOOR.
10. EXTEND TANK VENT 12" ABOVE ROOF & TERMINATE WITH FLUSH ACCESS TOP.
11. PIPING BELOW LOFT FLOOR IS STRUCTURE.
12. 4 GPM FLOW CONTROL.
13. FLOOR DRAIN LOCATED IN LOFT FLOOR - COORDINATE LOCATION WITH H.V.A.C. & G.C.
14. VENT IS NEXT EXPOSED PAST LOFT AREA AND EXTENDED THRU ROOF - WASTE DROP TO BELOW FLOOR WITH C.O. AT BASE.
15. SUPPLY PIPING DROP EXPOSED THRU LOFT AREA INTO CHASE BELOW - MANIFOLD 1 1/2" C.W. AND 3/4" H.W. IN CHASE AND SERVE EACH FIXTURE SUPPLY INDIVIDUALLY FROM MANIFOLD.
16. EXTEND 3" V.E. THRU BOILER ROOM FLOOR ABOVE & THRU ROOF.
17. 3/4" WATTS MODEL 9D BACKFLOW PREVENTER IN BOILER ROOM (PIPE DISCHARGE TO FLOOR DRAIN) - PIPING CONTINUED FROM THIS LOCATION BY M.C.
18. VALVE 3" GAS 48" ABOVE FLOOR AND EXTEND TO CEILING
19. VALVE AND CONNECT 3" TO BOILER, COORDINATE LOCATION WITH H.V.A.C.
20. EXTERIOR DOWNSPOUT TO SPILL ON GRADE BY G.C. WATER BASE P.C. - P.C. SHALL PROVIDE C.I. BOOT & UNDERGROUND STORM SYSTEM UNDER ALT. P-4 (SEE PLOT PLAN)
21. PROVIDE VALVED 1/2" STUB FOR H.V.A.C. CONTINUATION TO TEMP. CONTROL SYSTEM

REVISIONS:
1 AS BUILT 9/10/81

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
· ARCHITECTS
· PLANNERS
505 N. CABLE RD.
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CHECKED BY: P.L.B.
DRAWN BY: D.W.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING 'B'
SHEET NO. P-3 OF 4

STATE OF OHIO
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DAYTON - COLUMBUS, OHIO

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

DATA

(1) AIR COMPRESSOR:
PUMP- 60.4 C.F.M. @ 175 P.S.I.
MOTOR- 15 H.P., 480V, 3Φ
TANK- 240 GALLON
WORTHINGTON 15 BN-24 OR APPROVED EQUAL

(2) AIR COOLED AFTER COOLER
CAPACITY- 70 CFM @ 175 P.S.I. (350° INLET TEMP)
ARROW PNEUMATICS INC. MODEL 120
MOTOR- 1/6 H.P., 120V, 1Φ

(3) REFRIGERATED AIR DRYER
CAPACITY- 70 C.F.M. @ 175 P.S.I.
MOTOR- 3/4 H.P., 480V, 3Φ
HANKISON - MODEL 8070

(4) AUTOMATIC TANK DRAIN - PIPE DISCHARGE OVER FLOOR DRAIN NEAR REFRIGERATED AIR DRYER.

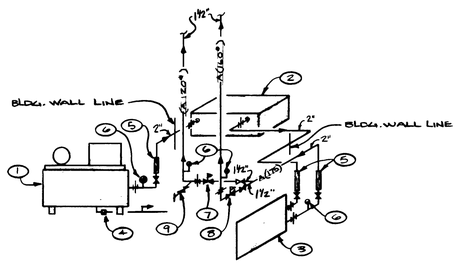
(5) FLEXIBLE CONNECTIONS - PIPE HANGERS SHALL BE SPECIAL OF VIBRATION NEOPRENE TYPE AT THESE LOCATIONS.

(6) PRESSURE GAUGE WITH SHUT-OFF COCK

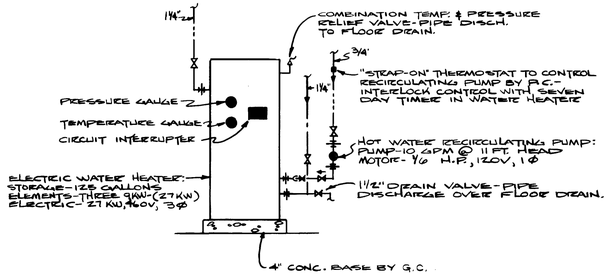
(7) ADJUSTABLE RANGE PRESSURE REGULATOR (175 P.S.I. - 120 P.S.I. OUTLET) TO PASS 60 C.F.M. OF 120 P.S.I. AIR

(8) ADJUSTABLE RANGE PRESSURE REGULATOR (175 P.S.I. TO 140 P.S.I.) TO PASS 60 CFM OF 140 P.S.I. AIR

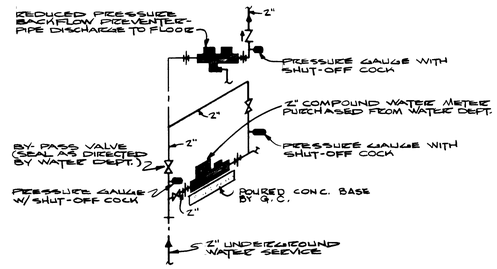
(9) VALVE 1/2" COMPRESSED AIR FOR AUTOMATIC TEMP. CONTROL SYSTEM - PIPING CONTINUED FROM THIS LOCATION BY H.V.A.C.



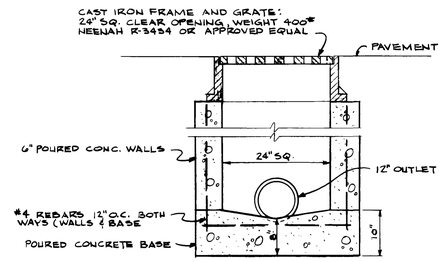
COMPRESSED AIR EQUIPMENT



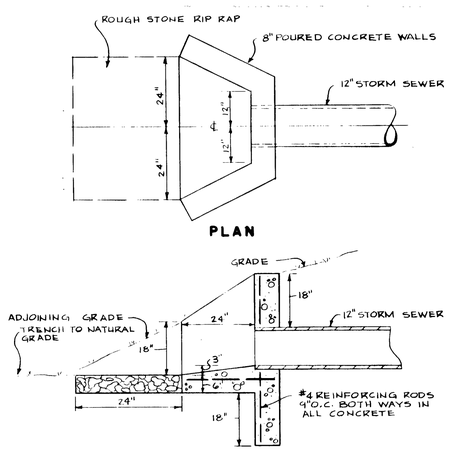
ELECTRIC WATER HEATER



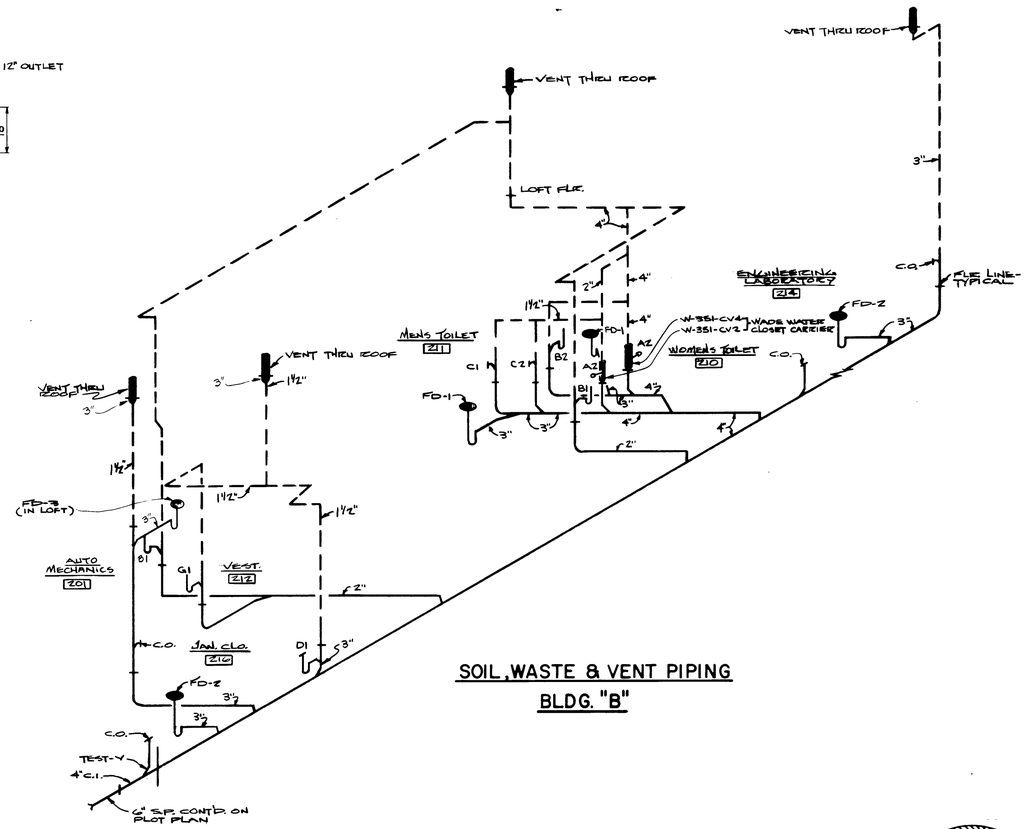
WATER SERVICE



CATCH BASIN
SCALE: 1/2" = 1'-0"



STORM SEWER HEADWALL
SCALE: 1/2" = 1'-0"



SOIL, WASTE & VENT PIPING
BLDG. "B"

REVISIONS:

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CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

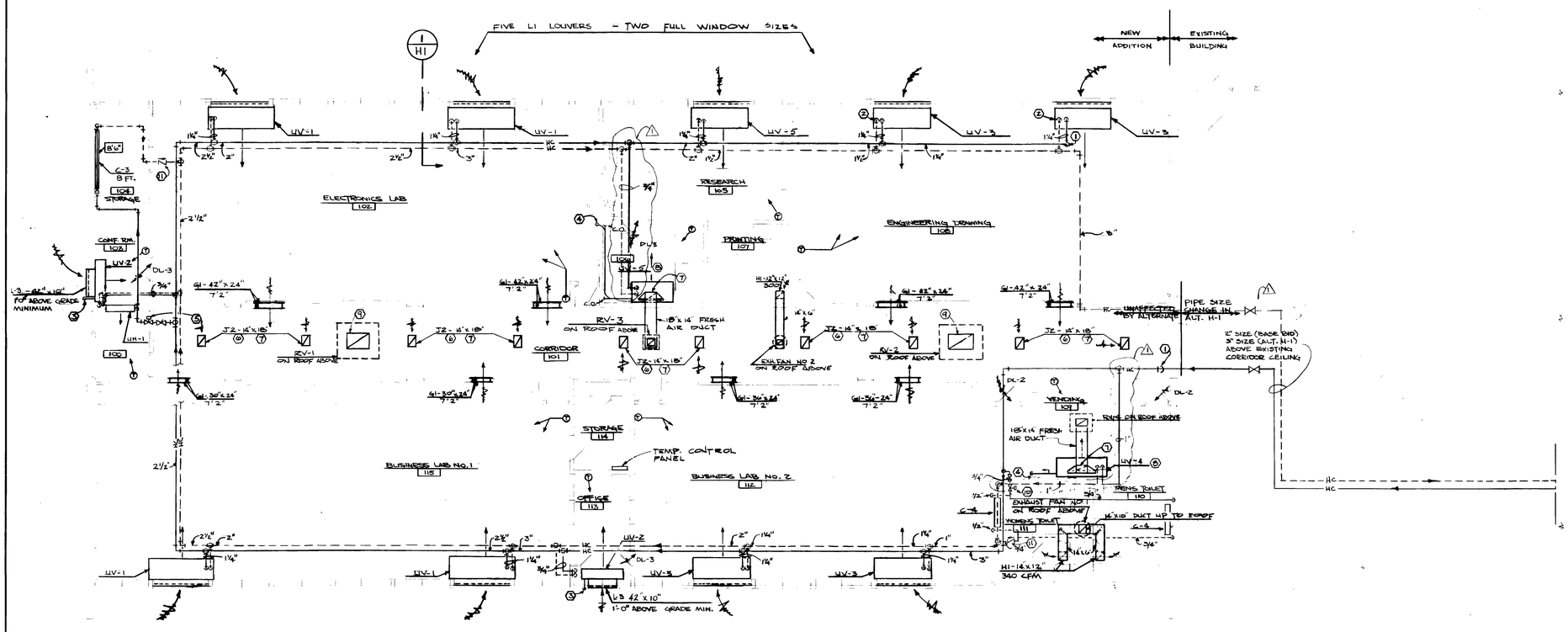
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CHECKED BY: P.L.B.
DRAWN BY: D.W
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: DIAGRAMS & DETAILS
SHEET NO. P-4 OF 4

STATE OF OHIO — REGISTERED PROFESSIONAL ENGINEERS
M. O. HEAPY 19221
R. R. WEBER 41286
T. E. MONNIG 28786
R. J. PEARSON 34483
B. J. WERLING 33945
T. J. PENDELMAN 28867

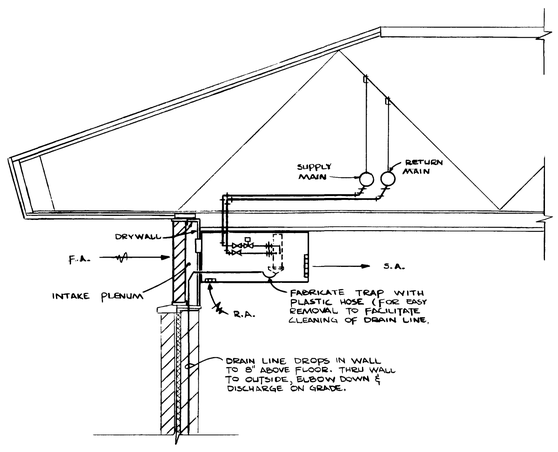
STATE OF OHIO — REGISTERED ARCHITECTS
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO



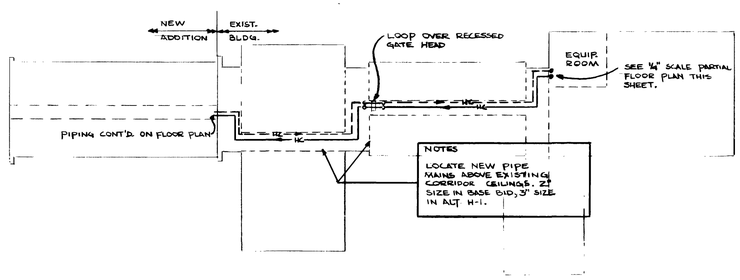
FLOOR PLAN (BUILDING "A")

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



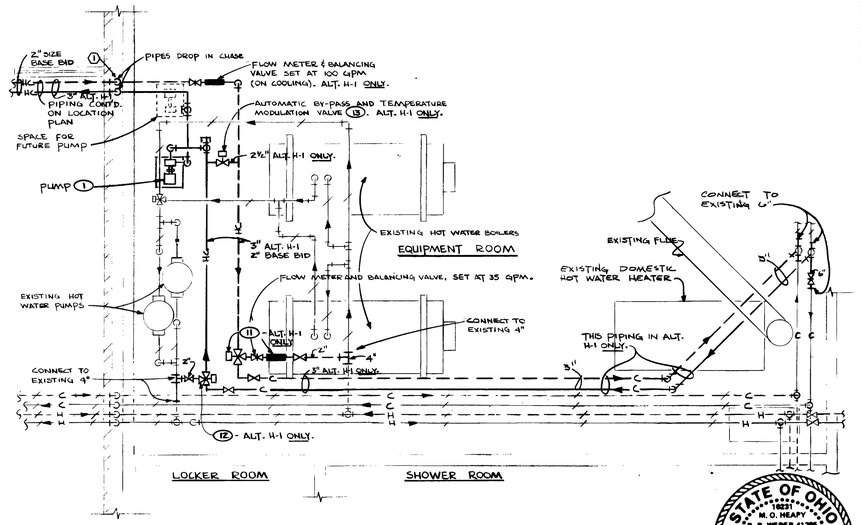
SECTION (1/H1)

SCALE 1/2" = 1'-0"
TYPICAL FOR UV-1,3,5



LOCATION PLAN

SCALE: 1" = 50'-0"



EQUIPMENT ROOM - PARTIAL PLAN

SCALE: ¼" = 1'-0"

NOTES

1. AUTOMATIC AIR VENT ON PIPE DROP
2. UNIT VENTILATORS TO HAVE THREE WAY CONTROL VALVES.
3. CONDENSATE DRAIN LINE THRU WALL @ 8" A.F.F. AND ELBOW DOWN. DISCHARGE ON GRADE.
4. CONDENSATE DRAIN LINE, DOWN WALL AND SPILL OVER FLOOR DRAIN.
5. AUTOMATIC SUMMER ISOLATION VALVE, 5 GPM@7 FT. HD. MAX. PRESSURE DROP. APPROX. ½" SIZE. PROVIDE IN ALT. H-1 ONLY.
6. AIR DEVICE OPEN TO VENT AIR PLENUM SPACE ABOVE CEILING.
7. PROVIDE A TYPE D FIRE DAMPER BEHIND AIR DEVICE OR IN DUCT AT CEILING WHERE DAMPER IS LOCATED IN DUCT. PROVIDE ACCESS DOOR. PROVIDE 1/16" THICK ASBESTOS PAPER, GLUED TO INSIDE & OUTSIDE THROAT OF ALL DUCTWORK.
8. UNIT VENTILATOR MOUNTED 18" BELOW CEILING. CONNECT 18"x16" FRESH AIR DUCT TO UNIT VENTILATOR WITH TRANSITION CONNECTION. GENERAL CONTRACTOR TO BLANK OFF 18" SPACE BETWEEN UNIT VENTILATOR AND CEILING.
9. DUCT STUBS DOWN FROM VENT HEAD ON ROOF, TO 24" BELOW ROOF DECK.
10. AUTOMATIC SUMMER ISOLATION VALVE, 1.0 G.P.M. @ MAXIMUM 7 FT. H.D. PRESSURE DROP. APPROX. ½" SIZE. PROVIDE IN ALT. H-1 ONLY.
11. SPRING LOADED CHECK VALVE. PROVIDE IN ALT. H-1 ONLY.

GENERAL NOTES

1. ALL PIPING, DUCTWORK, AND EQUIPMENT IS TO BE LOCATED ABOVE THE CEILING UNLESS OTHERWISE INDICATED.
2. PIPING TO RUN THROUGH TRUSS WEBBING.
3. UNIT VENTILATORS TO HAVE MODULATING CONTROL VALVES EXCEPT WHERE NOTED.

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS:
⚠ "AS BUILT" 9/10/81

PROJECT TITLE
TECHNICAL EDUCATION BUILDINGS
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WRIGHT STATE UNIVERSITY
W. O. B. C.
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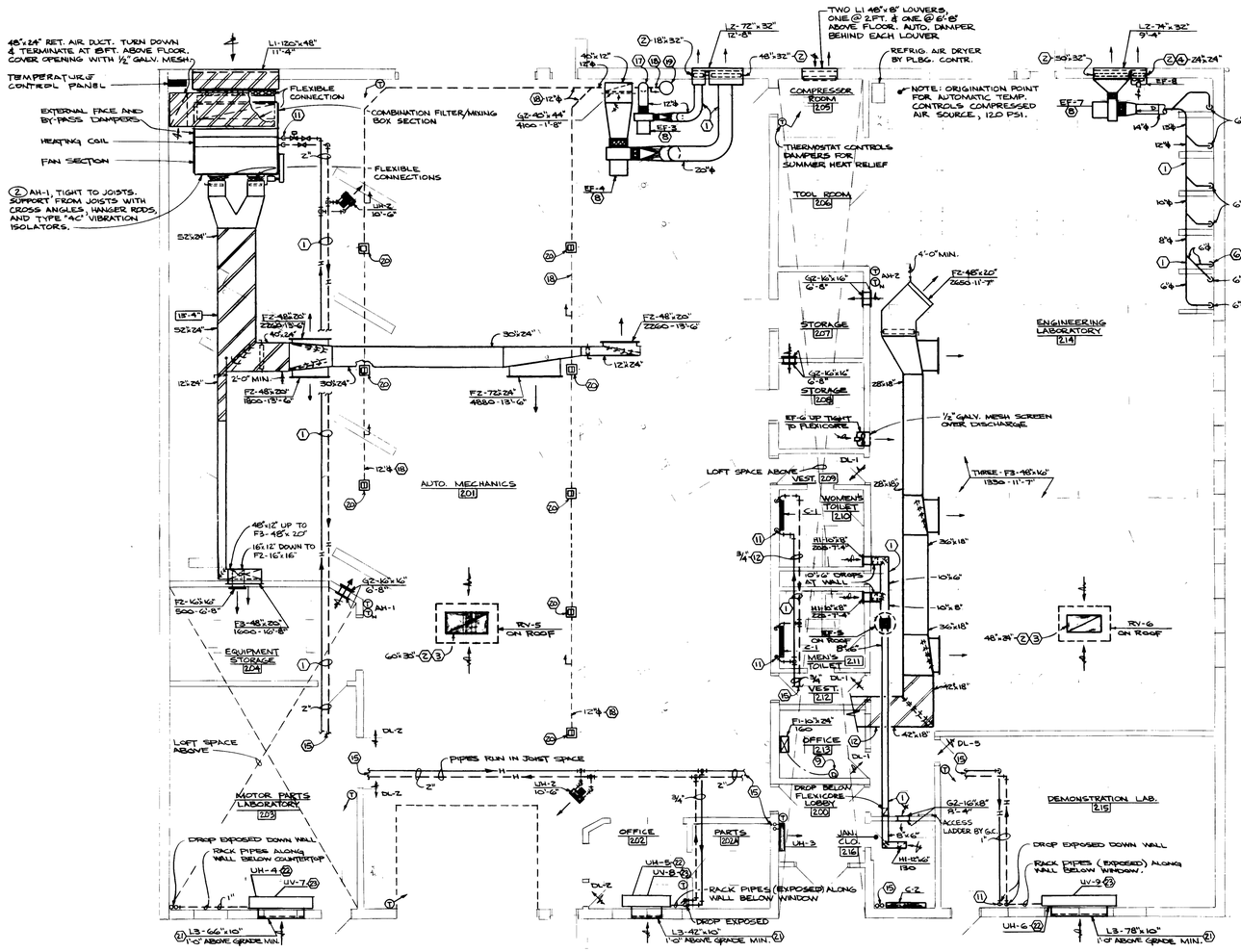
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

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DRAWN BY: M. N. & B. S.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING "A"
SHEET NO. h-1
OF 3

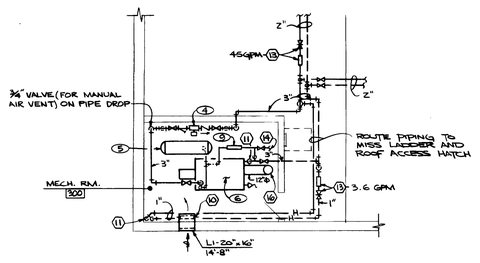
STATE OF OHIO
LYMAN J. STRONG 1743
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REGISTERED ARCHITECTS

STATE OF OHIO
16021 H. O. HEAPY
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T. J. FERDELMAN 29967
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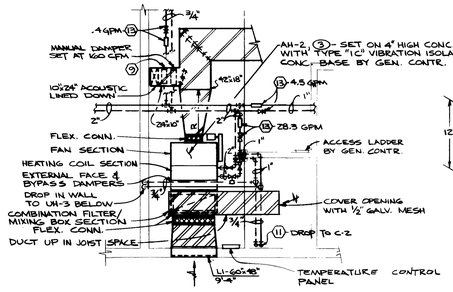
FLOOR PLAN (BUILDING B)

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



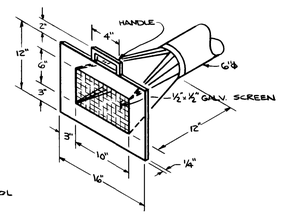
PARTIAL LOFT PLAN

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



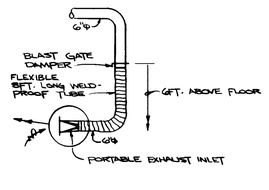
PARTIAL LOFT PLAN

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



WELDING STATION DUCT DROP

NO SCALE



NOTES

1. ROUTE DUCT / PIPE THRU JOIST WEBBING.
2. COUNTERBALANCED GRAVITY OPERATED BACKDRAFT DAMPER WITH FELTED EDGES FOR QUIET OPERATION.
3. DUCT STUB DOWN TO 16" BELOW ROOF DECK WITH ½" GALVANIZED MESH SCREEN OVER OPENING.
4. BLANK-OFF UNUSED PORTION OF LOUVER AROUND EF-8 WITH SHEETMETAL BACKED WITH 1" RIGID FIBERGLASS INSULATION.
5. 6"ø WELDING STATION EXHAUST DUCT DROP - SEE DETAIL.
6. THIS DROP TO HAVE LOCK COUPLER WITH CHAIN AND END CAP (CAR-MON NO. CM-GO) FOR USE WHEN FLEX. DUCT (PROVIDE COUPLER CONNECTOR ON THIS FLEX.) IS MOVED TO ADJACENT WELDING STATION.
7. 6"ø DUCT DROP DOWN TO 6FT. ABOVE FLOOR, TERMINATE WITH LOCK COUPLER WITH CHAIN AND END CAP (CAR-MON NO. CM-GO). THIS DROP TO PERMIT USE OF TWO WELDING EXHAUST DUCTS IN ONE STATION. USE FLEXIBLE DUCT AND FUME RECEPTOR FROM ADJACENT STATION.
8. EXHAUST FAN BELOW JOISTS. SUPPORT FROM JOISTS WITH CROSS ANGLES, HANGER RODS, AND TYPE "4C" VIBRATION ISOLATORS.
9. REMOTELY ADJUSTABLE OPPOSED BLADE DAMPER WITH WALL MOUNTED DIAL INDICATOR - TUTTLE AND BAILEY NO. 3000.
10. AUTOMATIC COMBUSTION AIR DAMPER BY AUTO. TEMP. CONTROL CONTRACTOR - INTERLOCK WITH BOILER.
11. AUTOMATIC AIR VENT ON PIPE DROP.
12. PIPE / DUCT LOCATED ABOVE LOFT SPACE.
13. FLOW METER AND BALANCING VALVE, SET AT GPM INDICATED.
14. ¾" COLD WATER MAKE-UP LINE CONTINUED BY PLBG. CONTRACTOR.
15. CONTINUED ON PARTIAL LOFT PLAN.
16. 12"ø BOILER STACK TO 11FT. ABOVE ROOF. PENETRATE ROOF WITH INSULATED METAL THIMBLE, 12" HIGH ROOF CURB, AND RAIN SKIRT. TERMINATE STACK WITH RAIN CAP PER ACGIH MANUAL, FIGURE 6-13. BRACE STACK ABOVE ROOF WITH GUY WIRES.
17. 12"ø UNDERFLOOR DUCT UP THRU FLOOR. PROVIDE 4" HIGH CURB AROUND DUCT, AND TRANSITION TO SHEET-METAL DUCT.
18. UNDERFLOOR CARBON MONOXIDE EXHAUST PIPE.
19. 18"x12" TEE. EXTEND BOTTOM 12" BELOW FLOW LINE OF DUCT AND PROVIDE 4" CONC. BOTTOM. EXTEND TO TOP OF FLOOR AND PROVIDE NEEHAM "R-GAGG-1A" BOLTED AND GASKETED MANHOLE FOR DRAINAGE OF ACCUMULATED WATER.
20. EXHAUST FLOOR OUTLET (DUAL TYPE), 100 CFM PER HOSE.
21. LOUVER IN ALT. #2. PROVIDE WALL BOX AND LOUVER TO MATCH UNIT HEATER IN BASE BID.
22. UNIT HEATER IN BASE BID.
23. UNIT VENTILATOR IN ALT. #2.

LEGEND

- RETURN PIPE
- EXISTING PIPE
- H — HOT WATER HEATING SUPPLY PIPE
- C — CHILLED WATER SUPPLY PIPE
- CW — CONDENSER WATER PIPE
- HC — HOT/CHILLED WATER SUPPLY PIPE
- D — DRAIN PIPE
- WATER MAKE-UP & FILL WATER
- DIRECTION OF FLOW
- DIRECTION OF PITCH
- RUNOUT OFF TOP OF MAIN
- RUNOUT OFF BOTTOM OF MAIN
- VALVE
- BALANCING VALVE
- COMBINATION SHUT-OFF & BALANCING VALVE
- CHECK VALVE
- 2-WAY & 3-WAY CONTROL VALVE
- UNION OR FLANGE
- STRAINER
- C.O. CLEAN OUT
- T DIAL THERMOMETER
- P PRESSURE GAUGE (STEAM)
- P PRESSURE GAUGE (WATER)
- T THERMOSTAT-MOUNTING HEIGHT 54".
- (1) EQUIPMENT NUMBER-REFER TO EQUIPMENT DATA.
- (1) PLAN NOTE-APPLIES ONLY TO SHEET ON WHICH NOTE IS SHOWN.
- 1 REVISION- SEE REVISION SCHEDULE.
- 123 ROOM NUMBER
- 8'-6" APPROXIMATE ELEVATION FROM FLOOR TO BOTTOM OF LISTED SIZE OF DUCT, PIPE, DEVICE OR EQUIPMENT ITEM. (TO BE USED AS AN AID IN COORDINATING THE VARIOUS TRADES.)
- 5 / H-3 SECTION DESIGNATION - KEY: 5 - DESIGNATION, H3 - SHEET NUMBER OF PLAN VIEW
- DUCT WITH 1" ACOUSTICAL LINER. DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
- DUCT (ALUMINUM OR STAINLESS, SEE SPECS.)
- SPLITTER DAMPER WITH LOCKING DEVICE.
- MANUAL VOLUME DAMPER WITH LOCKING DEVICE.
- AIR TURNING VANES
- FLEXIBLE CONNECTION
- R DUCT RISE
- D DUCT DROP
- 81-8" / 300-3 CEILING DIFFUSER 81 DESIGNATION REFERS TO AIR DEVICE SCHEDULE. 8"ø NECK SIZE. 300 REQUIRED CFM. 3 AIR DISCHARGE IF OTHER THAN 4-WAY. METHOD OF IDENTIFICATION ALSO APPLIES TO OTHER CEILING MOUNTED DEVICES.
- G1-24"x6" / 200-9'-4" WALL MOUNTED AIR DEVICE. G1 DESIGNATION REFERS TO AIR DEVICE SCHEDULE. 24"x6" DUCT CONNECTION SIZE. 200 CFM REQUIRED. 9'-4" MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF DEVICE.
- DL-1 DOOR LOUVER BY GENERAL CONTRACTOR - NUMBER INDICATES MINIMUM GROSS FACE AREA IN SQ. FT.
- U/C DOOR UNDERCUT 1" BY GENERAL CONTRACTOR.
- AIR VOLUME EXTRACTOR AT AIR DEVICE OR BRANCH DUCT TAP TO MAIN DUCT.

REVISIONS:

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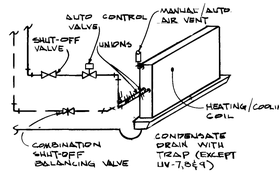
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DRAWN BY: M.N.
COMM. NO.: 78-642
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SHEET TITLE: FLOOR PLAN BLD'G. "B"
SHEET NO. h-2 OF 3

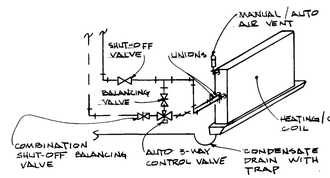
STATE OF OHIO
LYMA STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

STATE OF OHIO
18231 M.O.HEAPY
T.E.MONNIG 28788
R.J.PEARSON 34483
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T.J.FERDELMAN 29087
REGISTERED PROFESSIONAL ENGINEERS

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO



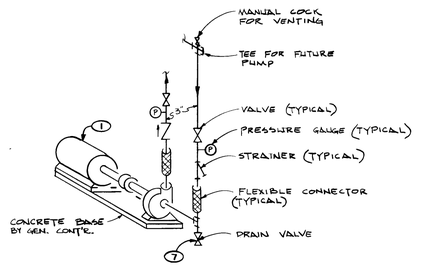
MODULATING CONTROL VALVE



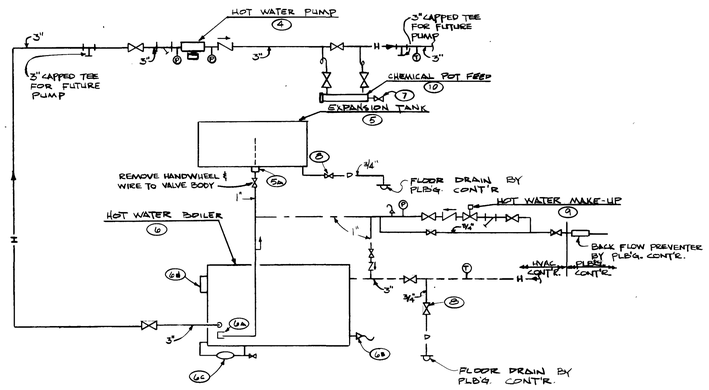
3 WAY CONTROL VALVE

PIPING SIMILIAR FOR AH-1 & AH-2 EXCEPT:
1) NO CONDENSATE DRAIN
2) PROVIDE PRESSURE/TEMP. TEST PLUGS IN & OUT OF HEATING COIL.
3) PROVIDE DRAIN COCKS ON COIL.

UNIT VENTILATORS
NO SCALE



HOT/CHILLED CIRCULATING PUMP
NO SCALE



BOILER ROOM PIPING SCHEMATIC
NO SCALE

HEATING & COOLING UNITS

UNIT NO.	DESCRIPTION	TYPE MOUNTING	NO REQ'D	C.F.M.	HEATING BTU/HR	COOLING BTU/HR SENSIBLE	COOLING BTU/HR TOTAL	MIN. E.A.	G.P.M.	PIPING SIZE	A.V. VALVE	MOTOR HP	MOTOR VOLTS	CAB. DIMENS. LENGTH	CAB. DIMENS. HEIGHT	REMARKS
UV-1	UNIT VENTILATOR	HORIZONTAL CEILING EXPOSED	4	1500	24,000	32,200	42,700	87%	12.0	1¼"	1"	1.05	36"	17"		HTG. E.A.T = 68°F
UV-2	UNIT VENTILATOR	FLOOR SET	2	750	4,000	6,000	8200	87%	2.0	¾"	½"	.69	17"	30"		
UV-3	UNIT VENTILATOR	HORIZONTAL CEILING EXPOSED	4	1250	20,000	25,600	30,600	87%	8.0	1¼"	¾"	.98	36"	17"		
UV-4	UNIT VENTILATOR	HORIZONTAL CEILING EXPOSED	1	1000	19,000	15,000	19,000	87%	4.0	1"	½"	.81	36"	17"		
UV-5	UNIT VENTILATOR	HORIZONTAL CEILING EXPOSED	1	1250	17,000	20,000	28,900	87%	6.0	1"	½"	.93	36"	17"		
UV-6	UNIT VENTILATOR	HORIZONTAL CEILING EXPOSED	1	750	4,000	6,200	10,800	87%	2.0	¾"	½"	.69	36"	17"		
UV-7	UNIT VENTILATOR	FLOOR SET	1	1250	26,000	—	—	87%	8.0	1"	½"	.93	17"	30"	ALT. H-2	
UV-8	UNIT VENTILATOR	FLOOR SET	1	750	16,000	—	—	87%	4.0	¾"	½"	.69	17"	30"	ALT. H-2	
UV-9	UNIT VENTILATOR	FLOOR SET	1	1500	45,000	—	—	87%	8.5	1"	½"	1.05	17"	30"	ALT. H-2	
UH-1	CABINET UNIT HTR.	WALL HUNG	1	300	20,000	—	—	—	2.0	¾"	½"	40"	9"	25"		AUTO. VALVE IS FOR SUMMER ISOLATION
UH-2	PROPELLER UNIT HTR.	SUSPENDED	2	600	20,000	—	—	—	2.0	¾"	—	20"	16"	14"		
UH-3	CABINET UNIT HTR.	WALL HUNG	1	300	20,000	—	—	—	2.0	¾"	—	40"	9"	25"		
UH-4	CABINET UNIT HTR.	FLOOR SET	1	600	36,000	—	—	100 CFM 60 CFM	3.6	¾"	½"	56"	9"	25"		SEE NOTE 5. HTG. BASED ON 57° ENT. AIR SEE NOTE 5. HTG. BASED ON 55° ENT. AIR
UH-5	CABINET UNIT HTR.	FLOOR SET	1	300	18,000	—	—	100 CFM	1.6	¾"	½"	40"	9"	25"		SEE NOTE 5. HTG. BASED ON 55° ENT. AIR
UH-6	CABINET UNIT HTR.	FLOOR SET	1	800	45,000	—	—	100 CFM	4.5	¾"	½"	60"	12"	28"		
C1	CABINET CONVECTOR	WALL HUNG	2	—	2,000	—	—	—	.12	½"	—	44"	6"	24"		
C2	CABINET CONVECTOR	WALL HUNG	1	—	3,000	—	—	—	.23	½"	—	56"	8"	30"		
C3	FIN TUBE CONVECTOR	WALL	1	—	6,500	—	—	—	.2	¾"	—	SEE PLANS	6"	4"		SEE NOTES 9&10
C4	CABINET CONVECTOR	WALL HUNG	2	—	2,600	—	—	—	.25	½"	½"	50"	8"	20"		AUTO VALVE COMMON W/ SUMMER ISOLATION

NOTES:
1. CONTRACTOR SHALL RECONCILE THE NUMBER OF UNITS REQ'D IN THE SCHEDULE WITH THOSE SHOWN ON THE FLOOR PLANS.
2. HEATING CAPACITY BASED ON 190° ENT. WATER & 70° ENT. AIR UNLESS OTHERWISE NOTED.
3. MAXIMUM PRESSURE DROP THRU HEATING/COOLING UNIT VENT COIL - 15 FT. ALL OTHER UNITS MAX. 7 FT. HD.
4. PROVIDE CONDENSATE DRAIN LINES FOR UV-1,2,3,4,5 & 6 TO BE SAME SIZE AS UNIT DRAIN PAN CONNECTION.
5. UNIT IN BASE BID. PROVIDE WITH WALL BOX, LOUVER, MINIMUM FRESH AIR DAMPER.
6. UNIT HEATERS & CONVECTORS: VALVE AND UNION ON INLET, UNION AND COMBINATION BALANCING/SHUT-OFF VALVE ON OUTLET OF COIL. PROVIDE MANUAL AIR VENT ON UNIT HEATER COIL.
7. COOLING CAPACITIES BASED ON 45° ENT. WATER & 70.6° DB & 64° WB ENT. AIR.
8. MOTORS: 115 VOLT - 1-Ø.
9. HEATING CAPACITY BASED ON 170° F EWT AND 65° EAT.
10. WIRE MESH ENCLOSURE WITH TOP OF CONVECTOR TO BE A MINIMUM OF 6' FROM CEILING.
11. MAX. 7 FT. HD. WATER PRESSURE DROP THRU ALL AUTO. VALVES.

EQUIPMENT DATA

(1) HOT/CHILLED CIRCULATING PUMP - CENTRIFUGAL END SUCTION. BASE MOUNTED TYPE.
BASE BID: 35 GPM @ 30 FT. HEAD, ¾ HP-460V-3Ø MOTOR.
ALT H-1: 100 GPM @ 77 FT. HEAD, 5 HP-460V-3Ø MOTOR. SET UNIT ON CONC. BASE.

(2) AIR HANDLING UNIT NO. 1 - LOW PRESSURE, HORIZONTAL DRAW THRU WITH HEATING COIL, FACE AND BYPASS DAMPERS AND COMBINATION FILTER/MIXING BOX.
SUPPLY FAN = 13,500 CFM @ 1½" TOTAL STATIC PRESSURE APPROX. 19" DIA. FORWARD CURVE FAN WHEEL (TWO).
HEATING COIL: HOT WATER TYPE, 900,000 BTU/HR WITH 13,500 CFM ENT. AIR @ 37° F AND 48 GPM WATER ENT @ 200 °F. COIL TO BE MIN. 24.05 SQ. FT. FACE AREA. 2 ROWS DEEP, MAX. WATER PRESSURE DROP 7 FT. HD., MAX. 0.38" S.P. AIR PRESSURE DROP.
MOTOR: 7½ H.P., 460V, 3Ø.
FILTERS: 2" THICK THROWAWAY TYPE, MIN. 37.50 SQ. FT. AREA.
HEATING COIL AUTO. VALVE, 43 GPM @ MAX. 7 FT. HD. WATER PRESSURE DROP. APPROX. 2" SIZE.

(3) AIR HANDLING UNIT NO 2 - LOW PRESSURE, HORIZONTAL DRAW THRU WITH HEATING COIL, FACE AND BYPASS DAMPERS AND COMBINATION FILTER/MIXING BOX.
SUPPLY FAN: 6,800 CFM @ 1½" TOTAL STATIC PRESSURE. APPROX. 19" DIA. FORWARD CURVE FAN WHEEL.
HEATING COIL: HOT WATER TYPE, 594,000 BTU/HR WITH 6,800 CFM ENT. AIR @ 26.6° F AND 26 GPM WATER ENT @ 200 °F. COIL TO BE MIN 11.0 SQ. FT. FACE AREA. 2 ROWS DEEP, MAX. WATER PRESSURE DROP 7 FT. HD., MAX. 0.4" S.P. AIR PRESSURE DROP.
MOTOR: 5.0 H.P., 460V, 3Ø.
FILTERS: 2" THICK THROWAWAY TYPE, MIN. 19 SQ. FT. AREA.
HEATING COIL AUTO. VALVE, 26 GPM @ MAX. 7 FT. HD. WATER PRESSURE DROP. APPROX. 1½" SIZE.

(4) HOT WATER CIRCULATING PUMP - PIPE MOUNTED.
CAPACITY: 85 GPM @ 30 FT. HD.
MOTOR: 1½ H.P. - 460V - 3Ø, 1750 RPM.

(5) EXPANSION TANK - 60 GALLON CAPACITY. APPROXIMATE DIMENSIONS: 16" DIA. X 78" LONG. PROVIDE SUPPORTS FROM STRUCTURE.

(5A) TANK AIR CONTROL FITTING WITH AIR INLET TUBE.

(6) HOT WATER BOILER - NATURAL GAS FIRED, FORCED DRAFT.
1,400,000 BTU/HR GROSS OUTPUT WITH 1,974 CFH NATURAL GAS INPUT.
BLOWER = 1/12 H.P., 220 V, 3Ø.
SET BOILER ON 4" HIGH CONC. BASE - BASE BY GEN. CONT'R.

(6A) BOILER DIP TUBE/INTEGRAL AIR ELIMINATOR.

(6B) PRESSURE RELIEF VALVE SET AT 30 PSI. EXTEND DISCHARGE TO FLOOR DRAIN.

(6C) LOW WATER CUT-OFF SWITCH.

(6D) COMBINATION PRESSURE, TEMPERATURE & ALTITUDE GAUGE.

(7) ¾" DRAIN VALVE WITH HOSE THREAD END.

(8) ¾" DRAIN VALVE - EXTEND PIPE TO FLOOR DRAIN.

(9) HOT WATER AUTO WATER MAKE-UP ASSEMBLY - VALVE STRAINER, UNION, AUTO MAKE-UP VALVE (SET @ 8 PSI) & VALVE - ALL ¾" SIZE, 1" VALVED BY-PASS. SAFETY RELIEF VALVE (SET @ 25 PSI) & PRESSURE GAUGE.

(10) POT FEEDER ¾" INLET AND OUTLET VALVES, ½" DRAIN VALVE

(11) AUTOMATIC CHANGEOVER VALVE, 100 GPM @ 7 FT. HD. MAX. DROP. APPROX. 2½" SIZE. PROVIDE IN ALT. H-1 ONLY.

(12) SAME AS (11) ABOVE.

(13) AUTO. BYPASS/TEMP. CONTROL VALVE, 75 GPM @ 7 FT. HD. MAX. DROP. APPROX. 2½" SIZE. ALT. H-1 ONLY.

AIR DISTRIBUTION DEVICES

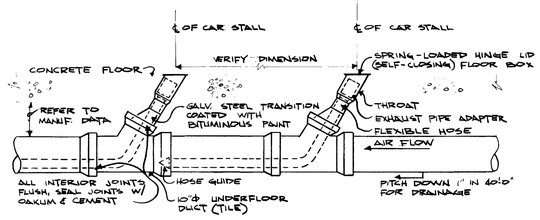
MARK	DESCRIPTION	TYPE MOUNTING: LAY IN	TYPE MOUNTING: LOUVER & MARGIN	MATERIAL: STEEL	MATERIAL: ALUM	FINISH: M.A.B.E.	FINISH: E.C.L.	FINISH: O.W.B.E.	TITUS CATALOG NUMBER	ACCESSORIES	REMARKS	SEE NOTE NO. 5
A	NOMINAL SQUARE CEILING DIFFUSER	●		●				●	TMS-3	AG-75 CENTER		
B	NOMINAL SQUARE CEILING DIFFUSER		●	●				●	TMS-	AG-75 CENTER		
C	NOMINAL SQUARE CEILING DIFFUSER											
D	STANDARD ROUND HARD CEILING DIFFUSER		●	●				●	TMA	AG-75 CENTER		
E	NOMINAL SQUARE CEILING DIFFUSER	●		●				●	TXE-3	AG-75 CENTER		
F	PERFORATED FACE SQUARE CEILING DIFFUSER		●	●				●	TXS-1	AG-75 CENTER		
F1	ADJ. CURVED BLADE REGISTER/DIFFUSER		●		●			●	4202-F		TWO-WAY DISCHARGE	●
F2	ADJUSTABLE BLADE REGISTER		●		●	●			272-F55	OPPOSED BLADE DAMPER		●
F3	ADJUSTABLE SPACE REGISTER		●		●	●			272-FL5	OPPOSED BLADE DAMPER		●
G1	[illegible]		●		●	●			[illegible]			●
G2	[illegible]		●			●			[illegible]			●
H1	[illegible]		●		●	●			3-F-5	OPPOSED BLADE DAMPER		●
J1	EGGCRATE CEILING GRILLE	●			●		●		52 MFR			
J2	EGGCRATE CEILING GRILLE		●		●		●		52-F		½" X ½" X 1" GRID	●
J3	[illegible] STATE CEILING REGISTER	●			●		●		52 MFR 5	OPPOSED BLADE DAMPER		
K	PERFORATED FACE CEILING GRILLE	●		●				●	TXR-3			
K1	PERFORATED FACE CEILING GRILLE	●		●				●	TXR-3	AG-45 DAMPER		
L1	LOUVER *	—	—	AIROLITE K-609 PROVIDED BY GEN. CONT'R.					BIRDSCREEN		* PROVIDE K-638 LOUVERS IN BLDG "A" ONLY	●
L2	LOUVER	—	—	AIROLITE K-609 PROVIDED BY GEN CONT'R					BIRDSCREEN			●
L3	LOUVER	—	—		●		●		PROVIDED BY UNIT VENT MANUF.	LOUVER, WALL BOX & FINISH GRILLE.	BIRDSCREEN	●

NOTES:
1. CATALOG NUMBERS LISTED ARE TITUS UNLESS OTHERWISE NOTED. REFER TO SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURERS.
2. FINISH KEY: M.A.B.E. - METALESCENT ALUMINUM BAKED ENAMEL.
E.C.L. - ETCHED FINISH WITH CLEAR LACQUER OR ANODIZED.
O.W.B.E. - OFF WHITE BAKED ENAMEL
3. PROVIDE AUXILIARY MOUNTING FRAME FOR DEVICES INSTALLED IN PLASTER, GLAZED TILE OR CERAMIC TILE SURFACES.
4. ALL LAY-IN AIR DEVICES SHALL FIT-INVERTED "T" BAR CEILING SYSTEMS
5. DOT DESIGNATES AIR DEVICE USED IN THIS PROJECT.

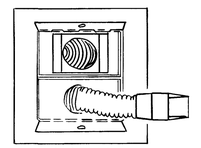
VENTILATING FANS

EQUIP NO	TYPE	SERVICE	C.F.M.	STATIC PRESSURE	WHEEL DIA	MAX SONES	MOTOR: H.P	MOTOR: VOLT	MOTOR: PHASE	APPROX ROOF OR WALL OPENING SEE NOTE 3	REMARKS
EF-1	POWER ROOF VENTILATOR	REST ROOMS	680	1/4"	10"	—	1/6	120	1Ø	15" X 15"	
EF-2	POWER ROOF VENTILATOR	PRINT ROOM	300	1/4"	9"	—	1/20	120	1Ø	11" X 11"	DIRECT DRIVE
EF-3	UTILITY SET	UNDERFLOOR AUTO EXH.	1000	2½"	12"	—	1	460	3Ø	———	SPARK PROOF CONST. TOP ANGULAR UP DISCH.
EF-4	UTILITY SET	GEN. EXH — AUTO AREA	4100	3/4"	22"	—	1½	460	3Ø	———	TOP ANGULAR UP DISCHARGE
EF-5	POWER ROOF VENT	TOILETS	550	1/4"	10"	—	1/4	115	1Ø	15" X 15"	
EF-6	PROPELLER WALL FAN	STORAGE	500	1/4"	12"	—	1/20	115	1Ø	18" X 18"	DIRECT DRIVE
EF-7	UTILITY SET	WELDING EXHAUST	3360	1½"	16"	—	3	460	3Ø	———	
EF-8	PROPELLER WALL FAN	HEAT TREAT FURN	2000	5/8"	16"	—	1/4	115	1Ø	22" X 22"	DIRECT DRIVE
RV-1	ROOF VENTILATOR HEAD	UNIT VENT. RELIEF AIR	5000	01"			24" X 42" NECK SIZE			24" X 42"	QUIET OPER. COUNTER-BALANCED GRAVITY DOOR.
RV-2	ROOF VENTILATOR HEAD	UNIT VENT. RELIEF AIR	5000	01"			24" X 42" NECK SIZE			24" X 42"	QUIET OPER. COUNTER-BALANCED GRAVITY DOOR.
RV-3	ROOF VENTILATOR HEAD	MODEL & TESTING FRESH AIR	750	01"			12" X 12" NECK SIZE			12" X 12"	UNIT TO HAVE 2 FT. HIGH ROOF CURB
RV-4	ROOF VENTILATOR HEAD	VENDING FRESH AIR	1000	01"			12" X 18" NECK SIZE			12" X 18"	UNIT TO HAVE 2 FT. HIGH ROOF CURB
RV-5	ROOF VENTILATOR HEAD	AH UNIT RELIEF AIR	10000	01"			30" X 60" NECK SIZE			30" 60"	
RV-6	ROOF VENTILATOR HEAD	AH UNIT RELIEF AIR	4400	01"			28" X 48" NECK SIZE			24" X 48"	

NOTES:
1. SOME VALUES BASED ON A.M.C.A BULLETINS 300 & 301 MEASURED AT 5 FT.
2. MOTOR H.P.'S LISTED ARE TO BE CONSIDERED MINIMUM.
3. ROOF OPENINGS ARE APPROXIMATE. ACTUAL ROOF OPENING SIZE SHALL BE SAME SIZE AS ROOF CURB FURNISHED. VERTICAL DUCT RISING UP TO ROOF CURB SHALL BE SAME SIZE AS INSIDE DIMENSIONS OF ROOF CURBS. COORDINATE SIZE & LOCATIONS OF OPENINGS THRU ROOF WITH GEN. CONT'R.
4. ALL GRAVITY OPERATED DAMPERS TO HAVE FELTED EDGES AND BLADES FOR QUIET OPERATION.



CARBON MONOXIDE EXHAUST
NO SCALE



PLAN VIEW
(NOT TO SCALE)

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON — COLUMBUS, OHIO

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

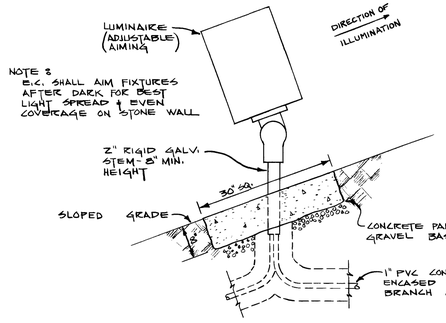
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

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·ARCHITECTS
·PLANNERS
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LIMA, OHIO
45805
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CHECKED BY: L.D.S.
DRAWN BY: M.N.
COMM. NO: 78-642
DATE: 4-2-79
SHEET TITLE: SCHEDULES & DETAILS
SHEET NO. h-3
OF 3

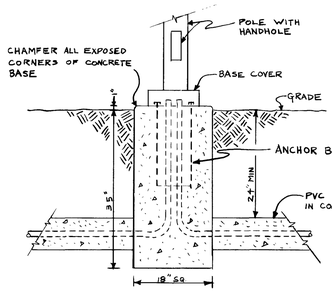
STATE OF OHIO
10231
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R.J. WERLING 33968
T.J. FERDELMAN 28867
REGISTERED PROFESSIONAL ENGINEERS

STATE OF OHIO
LYMAN J. STRONG
1743
RICHARD E. HEFFELBOWER
3846
REGISTERED ARCHITECTS



FL2 FIXTURE

NOT TO SCALE



PLI BASE

NOT TO SCALE

ENERGY CODE COMPLIANCE - ELECTRICAL

BUILDING ADD'N. "A"

(NOTE: REFER TO SHEET E-5 FOR BLDG. "B")

Code Ref.

505.2 Power factor requirements comply: Yes ✓ Exception ____

505.2 Voltage drop requirements comply: Yes ✓ Exception ____

LIGHTING POWER BUDGET (SEE SUMMARY BELOW)

505.3 Bldg. area applicable to budget 9360 SQ. FT.
Budget watts (summary calculations below) 31,145 Actual watts 23,265
Budget w/SF 3.33 Actual w/SF 2.49

Calculations based on:
1. IES fixture types: Fluor. IES No. 41, CU = .66 @ RCR of 1
Incan. IES No. 1, CU = .71 @ RCR of 1
Color Rendition: Moderate = M
Good = G
High = H

LIGHTING BUDGET SUMMARY

ROOM DESIGNATION (GROUP TYPE)	ROOM AREA	TOTAL TASK AREA	COLOR RENDITION	TASK LIGHTING LEVEL F.C.	% AREA FOR TASKS	WATTS/SF CALCULATED	TOTAL WATTS/RM	NUMBER OF ROOMS	TOTAL WATTS (GROUP)	REMARKS ACTUAL WATTS
BUSINESS LAB. #1	1638	1350	M	70	82	3.33	5446	1	5446	4600
OFFICE	113	100	M	70	85	4.73	534	1	534	400
BUSINESS LAB. #2	1235	1235	M	70	100	3.85	4755	1	4755	3000
ELECTRONICS LAB	1547	1547	M	70	100	3.85	5956	1	5956	4400
CONFERENCE	84	75	M	70	89	4.73	397	1	397	400
STORAGE	104	104	M	20	100	1.65	172	2	344	400
RESEACH	390	390	M	70	100	4.34	1693	1	1693	1840
MODEL & TESTING	142	142	M	100	100	7.5	1065	1	1065	800
PRINT	121	75	M	30	62	1.28	154	1	154	200
ENGINEERING DRAWING	1287	1287	M	100	100	5.5	7079	1	7079	3600
VENDING	181	150	M	20	83	.85	154	1	154	200
CORRIDOR	1368	1368	M	20	100	1.1	1505	1	1505	1100
TOILETS	170	170	M	20	100	1.4	238	2	476	600

COMPILED BY G. SNYDER

DATE 3-23-79

JOB NAME W.S.U.-CELINA BRANCH-ADDN. A

JOB NUMBER 78123

TOTAL INTERIOR	29,558
ADD 2% FACADE	187
FLOODLIGHTING	1,400
TOTAL LIGHTING POWER BUDGET	31,145

LIGHTING FIXTURES

PICTORIALS		FIXTURE SYMBOL	LAMPS QUANTITY FLUOR.	LAMPS QUANTITY INCAN.	LAMPS QUANTITY H.I.D.	LAMPS WATTS/LAMP	LAMPS G.E. LAMP CAT. NO.	MANUFACTURER & CATALOG NO.	EQUAL MANUFACTURERS & CATALOG NO.	DIFFUSING MEDIA	TRIM COLOR WHITE	TRIM COLOR BLACK	TRIM COLOR ALUMINUM	TRIM COLOR STANDARD	TRIM COLOR SPECIAL (SEE REMARKS)	MOUNTING TYPE	SIZE WIDTH OR DIA.	SIZE LENGTH	SIZE DEPTH	REMARKS
A1 & A2	A3	A1	4			40	F40CW	LITHONIA *ZM440MAIZ-Z77V	MILLER *ZQ-419Z-04-Z77V METALUX *ZMK440A-Z77V MILLER *ZP-2142-04-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					S		24"	48"	4"	
		A2	2			40	F40CW	LITHONIA *MZ140MAIZ-Z77V	METALUX *MKZ40A-Z77V MILLER *DA-1101-04-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					S		12½"	48"	4"	
		A3	1			40	F40CW	LITHONIA *CB140A-Z77V	METALUX *CBK-140A-Z77V	ACRYLIC WRAPAROUND PRISMATIC LENS	•					S		7"	48"	4½"	
B1, B2 & B4	B3 & B5	B1	4			40	F40CW	LITHONIA *Z4S440AIZ-Z77V	MILLER *TD4/1284N-277V METALUX *Z4S440A-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					R (LAY-IN)		24"	48"	5"	
		B2	2			40	F40CW	LITHONIA *Z4S240AIZ-Z77V	MILLER *TD2/1284N-277V METALUX *Z4S240A-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					R (LAY-IN)		24"	48"	5"	
		B3	2			40	F40CW	LITHONIA *ZPZ40AIZ-Z77V	MILLER *TL2/1284N-277V METALUX *ZPZ240A-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					R (LAY-IN)		12"	48"	5"	
		B4	2			40	F40CW	LITHONIA *Z4S240AIZ-120V	MILLER *TD2/1284N-120V METALUX *Z4S240A-120V	FLAT ACRYLIC PRISMATIC LENS	•					R (LAY-IN)		24"	48"	5"	CONNECTED TO 120V EMERG. CCT.
		B5	1			40	F40CW	40TH *FSIX4-1-4-F-1-0K-2-Z77V	MILLER *YA-1110-04-Z77V KEENE *K6ES140-Z77V	FLAT ACRYLIC PRISMATIC LENS	•					R (FLANGED)		6"	48"	5"	
C1 & C2	C3 & C4	C1	2			215	F96T12/CW/1500	LITHONIA *AF102796PQ-Z77V	MILLER *IC-2511-08 METALUX *DI-2796PQ-Z77V	INDUSTRIAL FLUOR. REFLECTOR-100% UPLIFT	•					CHAIN SUSPENDED (SEE PLANS)		3½"	96"	6½"	277V
		C2	2			90	F96CW	LITHONIA *AF102Z40-Z77V	MILLER *IC-2111-04-Z77V METALUX *DI-Z40PQ-Z77V	INDUSTRIAL FLUOR. REFLECTOR-100% UPLIFT	•					CHAIN SUSPENDED (SEE PLANS)		3½"	50"	6½"	277V
		C3	2			90	F96CW	LITHONIA *LINZ40-Z77V-WQ-9	KEENE *C240RS-Z77V-AWG3 METALUX *STN Z40-Z77V-WA99	BARE LAMP STRIP @ WIRE GUARD	•					S.		5"	48"	4½"	277V.
		C4	2			40	F40CW	LITHONIA *LINZ40-120V-WQ-9	KEENE *C240RS-120V-AWG3 METALUX *STNZ40-120V-WG99	BARE LAMP STRIP @ WIRE GUARD	•					S.		5"	48"	4½"	120V.
D1	E1	D1	1			20	F20T12-CW	ALKCO *320H-SW-120V	LIGHTRON *W70M-120D (120V)	ACRYLIC PLASTIC DIFFUSER	•					W.M. - UNDER SHELF		2½"	9⅝"	2½"	COORDINATE MTG. @ STUDY CARREL - SW. @ FIXTURE
		E1			1	100	H100DX 1/A23	KIRLIN *9206-10-46-58(Z77V)	PRESCOLITE *3605Y-277V.	TEMPERED FLAT GLASS LENS	•					S.		10½"	54"	43⅝"	DAMP LOCATION LABEL REQ'D.
F1	J1	F1			1	100	M100DX-1/A23	KIRLIN *Z208-10-45-46-97(120V) PRESCOLITE *1015H4F-8-120V-DL	McPHILBEN *26M-2231-RS(120V)	TEMPERED FLAT GLASS LENS	•					R.		10"	50"	10½"	DAMP LOCATION LABEL REQ'D.
		J1	1			150	PAR38/SP	KEENE *L8005-67-15	SWIVELIER *ZZ101 HUBBELL *309-206BC	BULLET SHADE REFLECTOR & GUARD			•			W.M. 5'-6" A.F.F.		7⅛"	10"	—	ADJUSTABLE
K1		K1			1	175	H175DX 39-ZZ	KIM *EK4-Z13-W(Z77V)	MOLDCAST *4021-FWM-Z77V HUBBELL *MFS-0176C-164-W2	CUT-OFF LUMINAIRE @ GLASS LENS		•				W.M. 14'-0" A.F.F.		11⅝"	27⅛"	10"	Z77V
FL1 & FLZ		FL1			1	175	H175DX 39-ZZ	KEENE *PHW-175MM-120V	HUBBELL *MGS-0135C-181(120V)MOG-HP KIM *DFC-175-PW-N3-120V HUBBELL *MGS-0400P-121(120V)*0419-HD	GLASS SHIELDED FLOODLIGHT			•			SOFFIT HUNG		9"	18"	11"	ADJUSTABLE
		FLZ			1	400	MV400V BD/1	KEENE *ZMA-400MA-SP-120V	HUBBELL *MGS-0400P-121(120V)*0419-HD	GLASS SHIELD FLOODLIGHT			•			SEE DETAIL THIS SHEET		15"	15"	12"	ADJUSTABLE
PL1		PL1			1	175	H175DX 39-ZZ	STERNER DWG *240-8148-A01-MOD-DP-1057-JW.	———	WHITE ACRYLIC DIFFUSER			•			POLE MTD. ON CONC. BASE		—	—	—	POLE & LUMINAIRE TO MATCH EXISTING
X1, XZ & X3	EXIT	X1		Z		20	20T12/HE DC	MOLDCAST *4Z1-G-120V	———	STENCIL "EXIT" @ GREEN LETTERS		•	•			S.		11⅝"	8⅝"	1⅝"	SINGLE FACE TO MATCH EXISTING
		XZ		Z		25	Z5A	PRESCOLITE *7121 & 7118(120V)	MARCO *XWZO-OR-DL-R1(120V) McPHILBEN *20W-BK1-M-120V(RECTIFIER)	STENCIL "EXIT" @ RED LETTERS				•		W.M. 8'-0" M.H.		11⅝"	8⅝"	1⅝"	SINGLE FACE
		X3		Z		25	Z5A	PRESCOLITE *7121 & 7118(120V)	MARCO *XWZO(L)OR(R)-SK-DF1(120V) McPHILBEN *20W-BK1-M(AL)HEAD(120V)RED	STENCIL "EXIT" RED LETTERS				•		W.M. 8'-0" M.H.		11⅝"	8⅝"	1⅝"	SINGLE FACE @ ARROWS

NOTES: 1. E.C. SHALL VERIFY TYPE OF CEILING CONSTRUCTION WITH LATEST ARCH. DWGS & SPECS. BEFORE ORDERING LIGHTING FIXTURES.

MOTORS, STARTERS, DISCONNECTS & CONTROLS

MOTOR NUMBER	PANEL & CCT. NO.	SERVICE	MOTOR CHARACTERISTICS HP OR KW	120V-1P	208V-1P	208V-3P	480V-3P	LOCATION	STARTER NEMA SIZE	STARTER TYPE MANUAL	STARTER TYPE MAGNETIC	STARTER LOCATION SEE NOTE	STARTER LOCATION MFR'S CATALOG NO.	STARTER LOCATION REMOTE CONTROL STATION	DISCONNECT MEANS FURNISHED BY	DISCONNECT MEANS TYPE DISC. SW.	DISCONNECT MEANS TYPE MANUAL STARTER	DISCONNECT MEANS TYPE RECEPT.	DISCONNECT MEANS LOCATION REMOTE SWITCH OR CONTACTOR	DISCONNECT MEANS LOCATION EQUIP. CONTROL PANEL	DISCONNECT MEANS LOCATION PANELBOARD	CONTROL THERMOSTAT	CONTROL INTERLOCK W/ MOTOR STARTER	CONTROL AUTO TEMP. CONT. BY M.C.	FEEDER NO. OF CONDUCTORS	FEEDER WIRE SIZE	FEEDER GND. WIRE SIZE	FEEDER CONDUIT SIZE	REMARKS
EF1	H51-26	EXH. FAN *1	¼	•				ROOF OVER TOILET CHASE (ADDN. A)	00		•		#3		EC			•			•		MC		2	12	12	¾	
EF2	H51-26	EXH. FAN *2	⅓30	•				ROOF OVER CORR. (ADDN. A)	00		•		#3		EC			•			•		MC		2	12	12	¾	
EF3	P1.1-19	EXH. FAN *3	1			•		AUTO. MECH. 201	00		•	•			EC	•					•		EC		•	3	12	12	¾	REFER TO NOTE #2 FOR CONTROL
EF4	P1.1-20	EXH. FAN *4	½			•		AUTO. MECH. 201	00		•	•			EC	•					•		EC		•	3	12	12	¾	REFER TO NOTE #2 FOR CONTROL
EF5	R1.1-17	EXH. FAN *5	¼	•				ROOF OVER ENG. LAB. 219	00		•		#1		EC			•			•		MC	AH2		2	12	12	¾	
EF6	R1.1-19	EXH. FAN *6	⅓20	•				STORAGE 208	00	•		•			EC		•				•		EC		•	2	12	12	¾	REFER TO NOTE #2 FOR CONTROL
EF7	P1.1-25	EXH. FAN *7	⅓				•	ENG. LAB. 219	0		•	•			EC	•					•		EC		•	3	12	12	¾	
EF8	R1.1-30	EXH. FAN *8	¼	•				ENG. LAB. 219	00	•		•			EC		•				•		EC		•	2	12	12	¾	
AH1	P1.1-8	A.H. UNIT *1	7½				•	AUTO. MECH. 201	1		•	•			EC	•					•		EC		•	3	12	12	¾	
AH2	P1.1-19	A.H. UNIT *2	5				•	STOR. AREA OF ENG. LAB. 219	0		•	•			EC	•					•		EC		•	3	12	12	¾	
BF1	R1.1-19	BOILER FAN	1½		•			MECH. RM. 300	00		•		•		MC	•					•		EC	HW2	•	3	12	12	¾	
HW2	P1.1-13	HOT WATER PUMP *2	1½				•	MECH. RM. 300	00		•	•			EC	•					•		EC	•		3	12	12	¾	
HW1	EXIST SWBD.	CIRC. WATER PUMP *1	¾ (SAME AS S-ALT. E-8)				•	EXIST. MECH. ROOM	0		•	•			EC	•					•		EC	•		3	12	12	¾	
AC1	P1.1-1	AIR COMPRESSOR	15				•	COMPR. RM. 205	Z		•	•			EC	•					•		EC		•	3	8	10	¾	REFER TO NOTE #4 BELOW
AD1	P1.1-2	AIR DRYER	¾				•	ENG. LAB. 219	00	•		•			EC		•				•		EC		•	3	12	12	¾	
C1	R1.1-31	AFTER COOLER	1/6	•				OUTDOORS	00		•	•			EC	• W.P.					•		EC	AC1		2	12	12	¾	
RC1	R1.1-15	RECIRC. PUMP	1/6	•				JAN. & STOR 216	00		•	•			EC	•					•		EC		•	2	12	12	¾	INTERLOCK @ WATER HEATER
G1	R1.1-23	O/H DOOR OPERATOR	⅓	•				AUTO MECH 201	00		•		•		GC	•					•		EC		•	2	12	12	¾	REMOTE MANUAL SW. STATION
G2	R1.1-25	O/H DOOR OPERATOR	⅓	•				AUTO MECH 201	00		•		•		GC	•					•		EC		•	2	12	12	¾	REMOTE MANUAL SW. STATION

NOTES: 1. LOCATE IN STOR AREA NEAR A.H. UNIT #2
2. MANUAL CONTROL FROM 12 HOUR TIMER.
3. STARTER LOCATED IN CORRIDOR 101 - KEY-OPERATED TYPE.
4. E.C. TO WIRE TO PRESSURE SW. & MOTOR OPERATED LOUVERS

LEGEND

HP	HORSEPOWER	KW	KILOWATT
CCT	CIRCUIT	BKR	BREAKER
SW	SWITCH	C	CONDUIT
WP	WEATHERPROOF	D	DESK MOUNTED EQUIPMENT
EM	EMERGENCY	W	WALL MOUNTED EQUIPMENT
EC	ELECTRICAL CONTRACTOR	WC	WATER COOLER
MC	MECHANICAL CONTRACTOR	EF	EXHAUST FAN
PC	PLUMBING CONTRACTOR	S	SURFACE MOUNTED
JB	JUNCTION BOX	GC	GENERAL CONTRACTOR
E	EXISTING	PB	PULL BOX
A.F.F.	ABOVE FINISHED FLOOR	U/G	UNDERGROUND

(7) NOTE SYMBOL - APPLIES ONLY TO SHEET ON WHICH NOTE SYMBOL IS SHOWN.

INDICATES NEW CONSTRUCTION

123 ROOM NUMBER

(1Z) MOTOR DESIGNATION NUMBER - REFER TO MOTOR AND STARTER SCHEDULE ON THIS SHEET

ELECTRICAL CONNECTION REQUIRED.

M.H. MOUNTING HEIGHT TO CENTERLINE OF OUTLET OR BOX. SUPERSEDES MOUNTING HEIGHT IN LEGEND WHEN INDICATED ON PLAN.

A-123 EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT. CAPITAL LETTER DENOTES PANEL, NUMBER DENOTES CIRCUIT.

CONDUIT IN WALL OR ABOVE CEILING.

CONDUIT IN OR BELOW FLOOR SLAB.

—EM— CONDUIT FOR EMERGENCY CIRCUITRY.

—T— CONDUIT FOR TELEPHONE SYSTEM.

—TV— CONDUIT FOR CABLE TELEVISION SYSTEM.

—FA— CONDUIT FOR FIRE ALARM SYSTEM.

—C— CONDUIT FOR CLOCK AND SYSTEM.

SINGLE POLE SWITCH (4'-0" M.H.) A.H. #1991.

THREE WAY WALL SWITCH (4'-0" M.H.) A.H. #1993.

FOUR WAY WALL SWITCH (4'-0" M.H.) A.H. #1994.

SWITCH WITH RECEPTACLE (4'-0" M.H.) A.H. STANDARD TWO GANG ASSEMBLY OF SWITCH AND RECEPTACLE.

FLUSH FRACTIONAL HP MOTOR STARTER WITH PILOT LIGHTS-TWO GANG ASSEMBLY (4'-0" M.H.) ALLEN BRADLEY SERIES "1200.

KEY OPERATED WALL SWITCH (4'-0" M.H.) A.H. #1991-L, 1993-L OR 1994-L.

JUNCTION BOX, AS NOTED.

PLUG-IN STRIP (OUTLETS 18" ON CENTER) (3'-9" M.H.) WIREMOLD #2061B.

SPECIAL RECEPTACLE - REFER TO NOTE ON FLOOR PLAN.

20A-120V-1Φ DUPLEX RECEPTACLE (1'-6" M.H.) A.H. #5735-S.

20A-120V-1Φ DUPLEX RECEPTACLE (3'-9" M.H.) A.H. #5735-S.

20A-120V-1Φ WEATHERPROOF DUPLEX RECEPTACLE (1'-6" M.H.) A.H. #5735-S-1590.

20A-120/208V-1Φ, 4WIRE SINGLE RECEPTACLE (1'-6" M.H.) A.H. #5759.

20A-208V-1Φ-3W SINGLE RECEPTACLE (1'-6" M.H.) A.H. #5861

20A COMBINATION 120V & 208V-1Φ DUPLEX RECEPT. (45" M.H.) A.H. #5890-S

TELEPHONE/POWER POLE WITH TELEPHONE OUTLET & 4 SINGLE RECEPTACLES - FLOOR TO CEILING SUPPORT.

CLOCK HANGER OUTLET (7'-6" M.H.) A.H. #5708

SINGLE FACE CLOCK (7'-6" M.H.).

DOUBLE FACE CLOCK, CEILING HUNG.

BLANK CABLE TELEVISION OUTLET (18" M.H.).

TELEPHONE OUTLET (1'-6" M.H.) (SUBSCRIPT "W" WHEN SHOWN INDICATES WALL OUTLET AT 5'-0" M.H.)

FA FIRE ALARM HORN WITH "FIRE" LIGHT (8'-0" M.H.).

FIRE ALARM SENDING STATION (5'-0" M.H.).

H HEAT DETECTOR.

B ALARM BELL FOR DOOR SECURITY SYSTEM (8'-0" M.H.)

B1 FLUORESCENT LIGHTING FIXTURE; CAPITAL LETTER DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT WHEN INDICATED.

F1 INCANDESCENT OR H.I.D. LIGHTING FIXTURE; DITTO ABOVE.

LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY CIRCUIT.

EXIT LIGHTING FIXTURE ON EMERGENCY CIRCUIT.

ELECTRIC MOTOR,

DISCONNECT SWITCH.

MOTOR STARTER.

COMBINATION MOTOR STARTER AND DISCONNECT SWITCH.

UH UNIT HEATER.

UV UNIT VENTILATOR.

STATE OF OHIO
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R. J. PEARSON 34483
B. J. WERLING 33948
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REGISTERED PROFESSIONAL ENGINEERS

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REVISIONS:

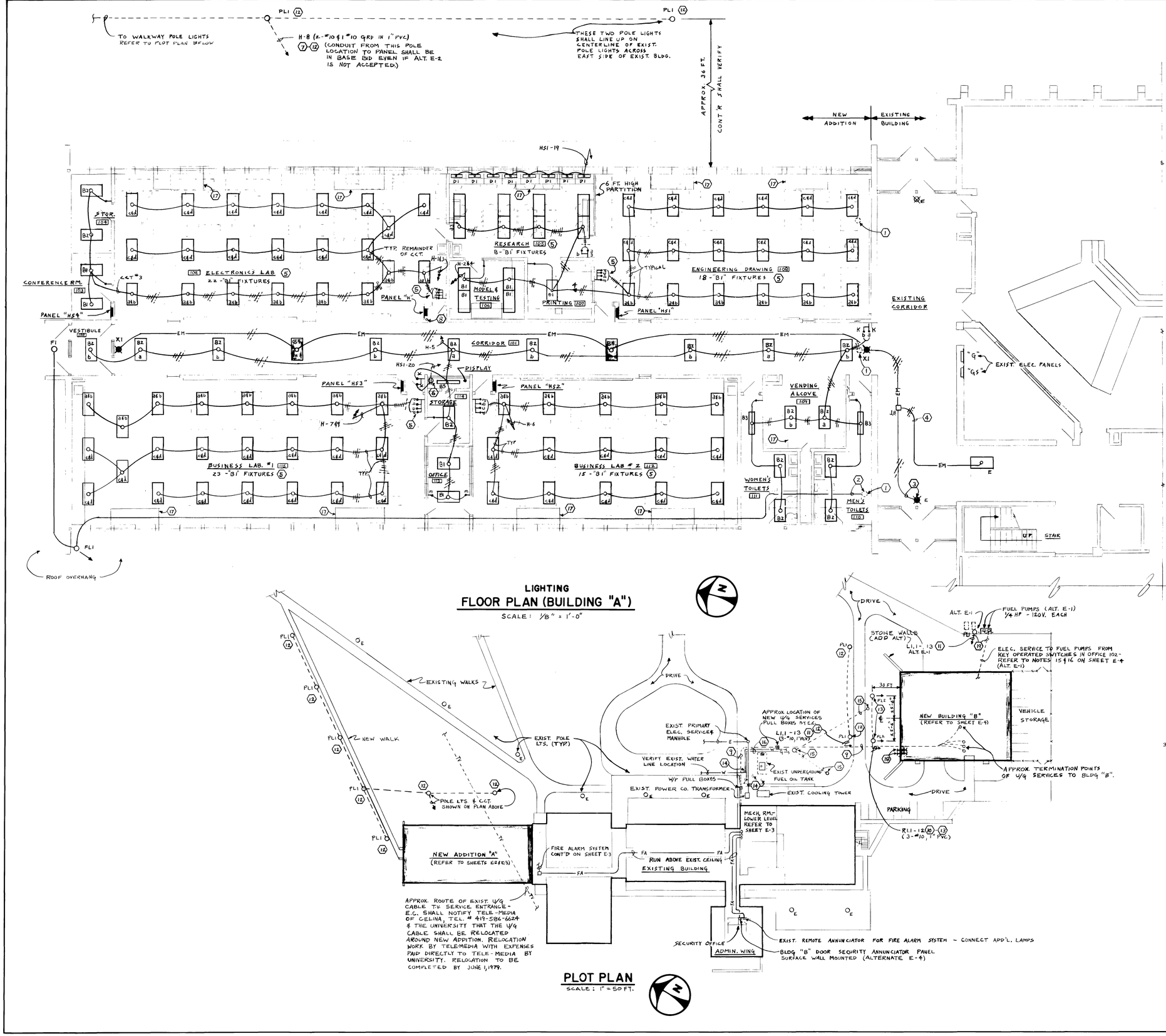
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
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·PLANNERS
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CHECKED BY: G.S.
DRAWN BY: G.S. & M.B.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: LEGEND & SCHEDULES
SHEET NO. e-1 OF 5

STATE OF OHIO
LYMAN J. STRONG
1743
RICHARD E. HEFFELBOWER
3846
REGISTERED ARCHITECTS



NOTES

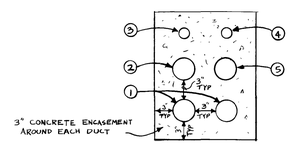
1. REMOVE EXISTING RECESSED DOWNLIGHT (120 VAC) - MAINTAIN EXISTING CIRCUIT CONTINUITY TO FIXTURES REMAINING DOWNLINE.
2. CONNECT NEW EXTERIOR LTG. CCT. TO EXISTING AT THIS POINT (CIRCUIT FED FROM EXIST. PANEL "GS".
3. EXTEND EXIST. 120 VAC EXIT LT. CCT. FROM THIS LOCATION TO NEW EXIT LTS.
4. EXTEND EXIST. 120 VAC EMERG. LT. CCT. FROM THIS LOCATION TO NEW EMERG. LTS.
5. ROOM LIGHTS SHALL BE CIRCUITED FOR 2 LEVEL LIGHTING.
6. OUTLET FLUSH MT'D IN CEILING NEAR FRONT OF DISPLAY AREA FOR FUTURE TRACK LTG. BY OWNER.
7. CCT. SHALL BE CONTROLLED BY PHOTO-CELL ON ROOF OVER AREA NEAR PANEL "H". REFER TO NOTE 8.
8. PHOTO-CELL CONTROL UNIT FOR POLE LIGHT CCT. MOUNTED 12" ABOVE ROOF LEVEL ON CONDUIT STEM. COORDINATE ROOF SEALING WITH GENERAL CONTRACTOR.
9. APPROX. ROUTE OF UNDERGROUND SERVICES CONSISTING OF: ELECTRIC POWER, TELEPHONE FIRE ALARMS, EMERG. POWER, CLOCK AND DOOR SECURITY. COORDINATE ROUTE WITH EXIST. UNDERGROUND UTILITIES & NEW UTILITIES. REFER TO DUCT BANK DETAIL BELOW.
10. CCT. SHALL PASS THRU LTG. CONTACTOR "B" - REFER TO NOTE 20 ON SHEET E-4. (ALTERNATE E-3)
11. CCT. SHALL PASS THRU LTG. CONTACTOR "A" - REFER TO NOTE 20 ON SHEET E-4 (ALTERNATES E-1 & E-2).
12. ALTERNATE E-2. - REFER TO NOTE 18.
13. ALTERNATE E-3. - REFER TO NOTE 18.
14. EXIST. PINE TREE.
15. EXIST. SANITARY LINE & MANHOLE.
16. NEW GAS & WATER LINE - E.C. SHALL COORDINATE WITH P.C. & WITH ALL PRESENT U/G UTILITIES IN AREA (TEL., ELEC., SAN. ETC.)
17. UNIT VENTILATOR AT CEILING.
18. IF ALT E-2 AND/OR ALT E-3 ARE NOT ACCEPTED THEN CCT. CONDUITS SHALL BE STUBBED & CAPPED AT THIS LOCATION IN BASE BID.
19. IF ALT E-1 IS NOT ACCEPTED THEN CCT. CONDUITS SHALL BE INSTALLED FROM PUMP ISLAND AREA TO STUB UP IN SE. CORNER OF AUTO MECH. 201 IN BASE BID FOR FUTURE. CAP ALL ENDS.

LIGHTING FLOOR PLAN (BUILDING "A")

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

PLOT PLAN

SCALE: 1" = 50 FT.



DATA

1. 4" DUCTS FOR MOTOR & BUS DUCT ELECTRIC SERVICES.
2. 4" DUCT FOR LIGHTING ELECTRIC SERVICES
3. 2" DUCT FOR EMERGENCY ELECTRIC SERVICES
4. 2" DUCT FOR TELEPHONE & FUTURE CABLE T.V. SERVICES
5. 4" DUCT FOR CLOCK SYSTEM, DOOR SECURITY SYSTEM & FIRE ALARM SYSTEM

UNDERGROUND DUCT BANK

NOT TO SCALE

REVISIONS:

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PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

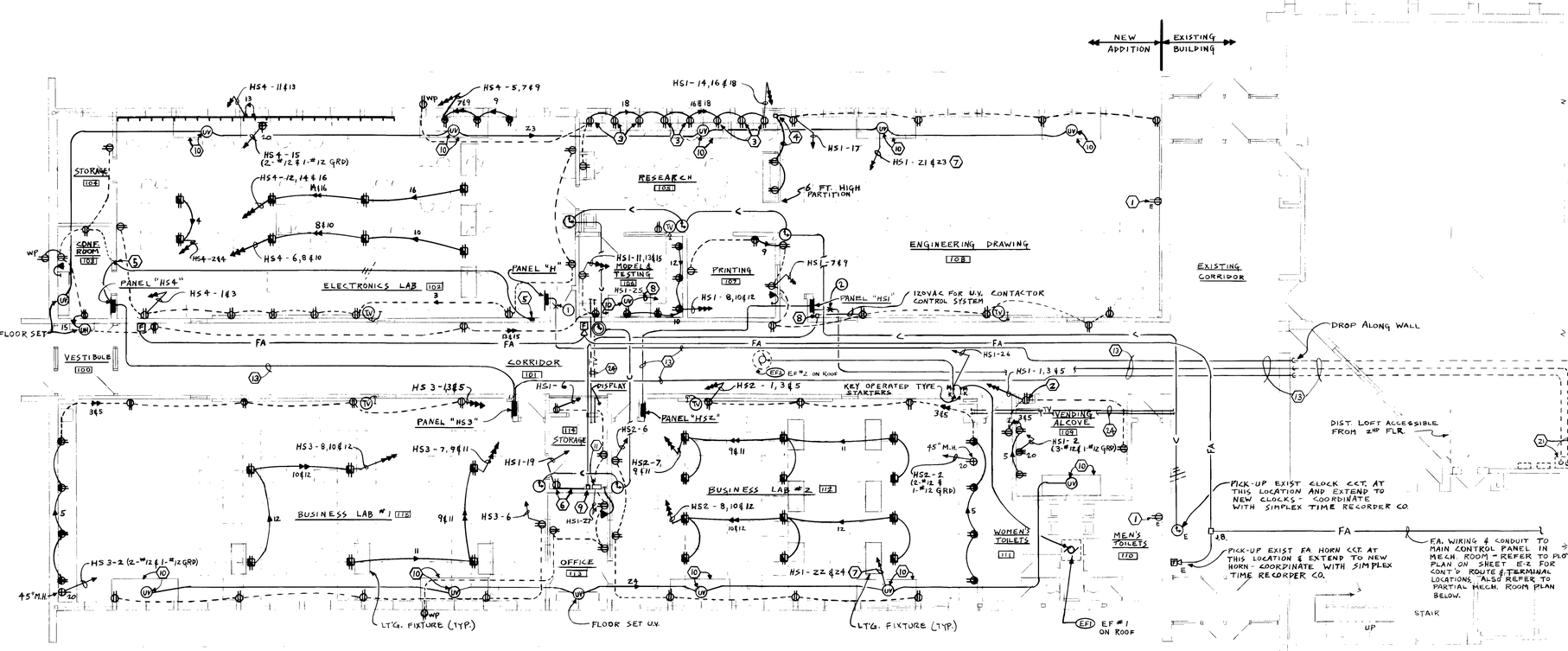
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CHECKED BY: G.S.
DRAWN BY: G.S. & R.R.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING "A" & PLOT PLAN
SHEET NO. E-2 OF 5

STATE OF OHIO 19237 H. O. HEAPY R. R. WEBER 41286 T. E. MONNIG 28706 R. J. PEARSON 24462 R. J. WERLING 33048 T. J. FERDELMAN 29067 REGISTERED PROFESSIONAL ENGINEER

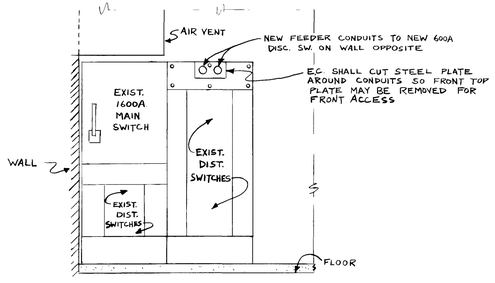
STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 1846 REGISTERED ARCHITECTS

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO



RECEPTACLES, MOTORS & SYSTEMS FLOOR PLAN (BUILDING "A")

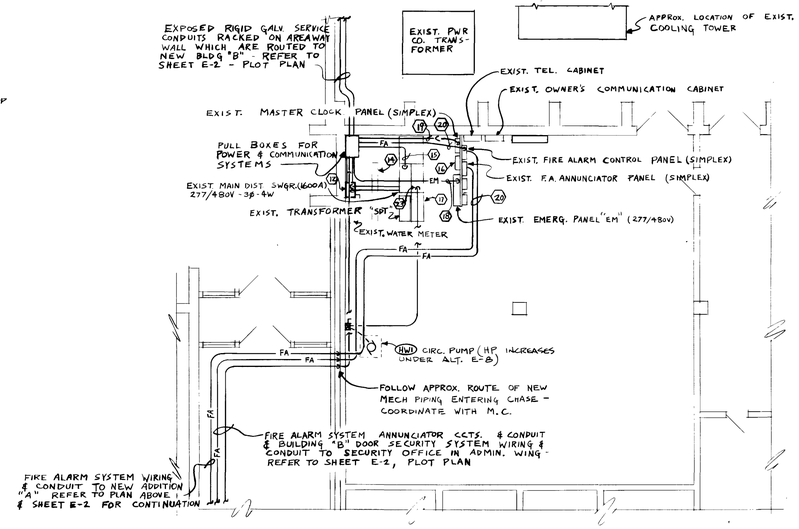
SCALE: 1/8" = 1'-0"



ELEVATION

EXIST. 277/480V. SWGR.

SCALE: 3/8" = 1'-0"



EXISTING MECH. ROOM PLAN

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

NOTES

1. REPLACE WEATHERPROOF COVERPLATE WITH STANDARD STAINLESS STEEL COVERPLATE.
2. WATER COOLER OUTLET - COORDINATE LOCATION WITH PLBG. CONTR.
3. SET AT 40" M.H. - SET OUTLETS IN 4" DEEP OUTLET BOXES.
4. OUTLET BOX FLUSH IN WALL AT 18" M.H. TO SERVE RECEPTACLES IN PARTITION.
5. ROOM POWER EMERGENCY SHUTDOWN PUSH BUTTON SWITCH (48" M.H.) SWITCHES WIRED IN PARALLEL WITH 120 VAC FROM LOCAL RECEPT. CCT. - (SQUARE D # KR-2SR RED MUSHROOM P/B & # KA-2 CONTACT BLOCK OR EQUIVALENTS) MOUNTED ON STAINLESS STEEL COVERPLATE ENGRAVED TO READ "EMERGENCY POWER SHUTDOWN."
6. 48" X 48" X 3/4" TEL. BACKBOARD BY E.C. LOCATE RECEPT. IN UPPER RIGHT HAND CORNER OF BOARD.
7. UV. CCTS. SHALL PASS THRU CONTACTOR NEAR PANEL HS1 FOR REMOTE CONTROL OF ON & OFF OF POWER.
8. 6 POLE - 20 AMP RATED MECH. HELD, ELEC. OPERATED CONTACTOR WITH 2 WIRE CONTROL RELAY LOCATED ABOVE ACCESSIBLE CEILING FOR CONTROL OF U.V. CCTS. (120VAC) (SQUARE D # LLG - 60 - R6 OR EQUIVALENT)
9. TIME CLOCK BY M.C. FOR CONTROL OF U.V. CONTACTOR - ALL 120VAC WIRING BY E.C.
10. UV. MOUNTED AT CEILING
11. A.T.C. PANEL BY M.C. - 120 VAC REQ'D. BY E.C.
12. 600A / 3P & 5N FUSED DISC. SWITCH WALL MT'D TO SERVE POWER SERVICE TO BLDG. "B" MOTORS & BUS DUCT. - REFER TO DIST. DIAGRAM ON SHEET E-5. E.C. SHALL RELOCATE 3 CHARTS AS DIRECTED BY OWNER. ALSO REFER TO EXIST. SWGR. ELEVATION ON THIS SHEET.
13. PANEL FEEDER RUN IN SPACE ABOVE CEILING.
14. E.C. SHALL LOWER LTG. FIXTURE, CHAIN SUSPENDED, ONLY IF REQUIRED TO PASS ELEC. CONDUITS.
15. FEEDER TO SPARE 200A/3P SWITCH SERVING LIGHTING IN NEW BUILDING "B" - REFER TO DIST. DIAGRAM ON SHEET E-5.
16. EXIST. EMERG. PANEL EMS (120/208Y)
17. EXIST. 120/208Y DIST. SWGR.
18. FEEDER TO SPARE 30A/3P SW. FOR EMERG. SERVICE TO NEW BLDG. "B" - REFER TO DIST. DIAGRAM ON SHEET E-5.
19. NEW CLOCK SYSTEM CCTS. & CONDUIT
20. NEW FIRE ALARM SYSTEM CCTS. & CONDUIT
21. NEW 120/208 V. FEEDERS SHALL BE SERVED FROM 2 SPARE 100A/3P SWITCHES IN EXIST. SUB-DIST. PANEL "PPS". INSTALL 100AMP - "KTN" FUSES IN EACH SW. - EACH FEEDER SHALL BE 4 - #2 THW, 1 - #8 GRD., 1½" C.
22. NEW 277/480V. FEEDER TO PANEL "H" SHALL BE SERVED FROM SPARE 100A/3P SW. IN EXIST. SUB-DIST PANEL "PP". INSTALL 100AMP - "KTS" FUSES - FEEDER SHALL BE 4 - #2 THW, 1 - #8 GRD., 1½" C.
23. UTILIZE EXIST. SPARE 30A/3P - 480V SW. TO SERVE NEW PUMP - INSTALL 10 AMP "LPS" FUSES.
24. TWO 2" CONDUITS WITH END BUSHINGS ABOVE ACCESSIBLE CEILING WHERE PLENUM SPACE IS USE FOR RETURN AIR.

FAULT CURRENT AT POINTS ON THE SYSTEM BASED ON UNLIMITED PRIMARY

	AVAILABLE	LET-THRU
(1)	6,459 A.	4,600 A.
(2)	4,399 A.	1,600 A.

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

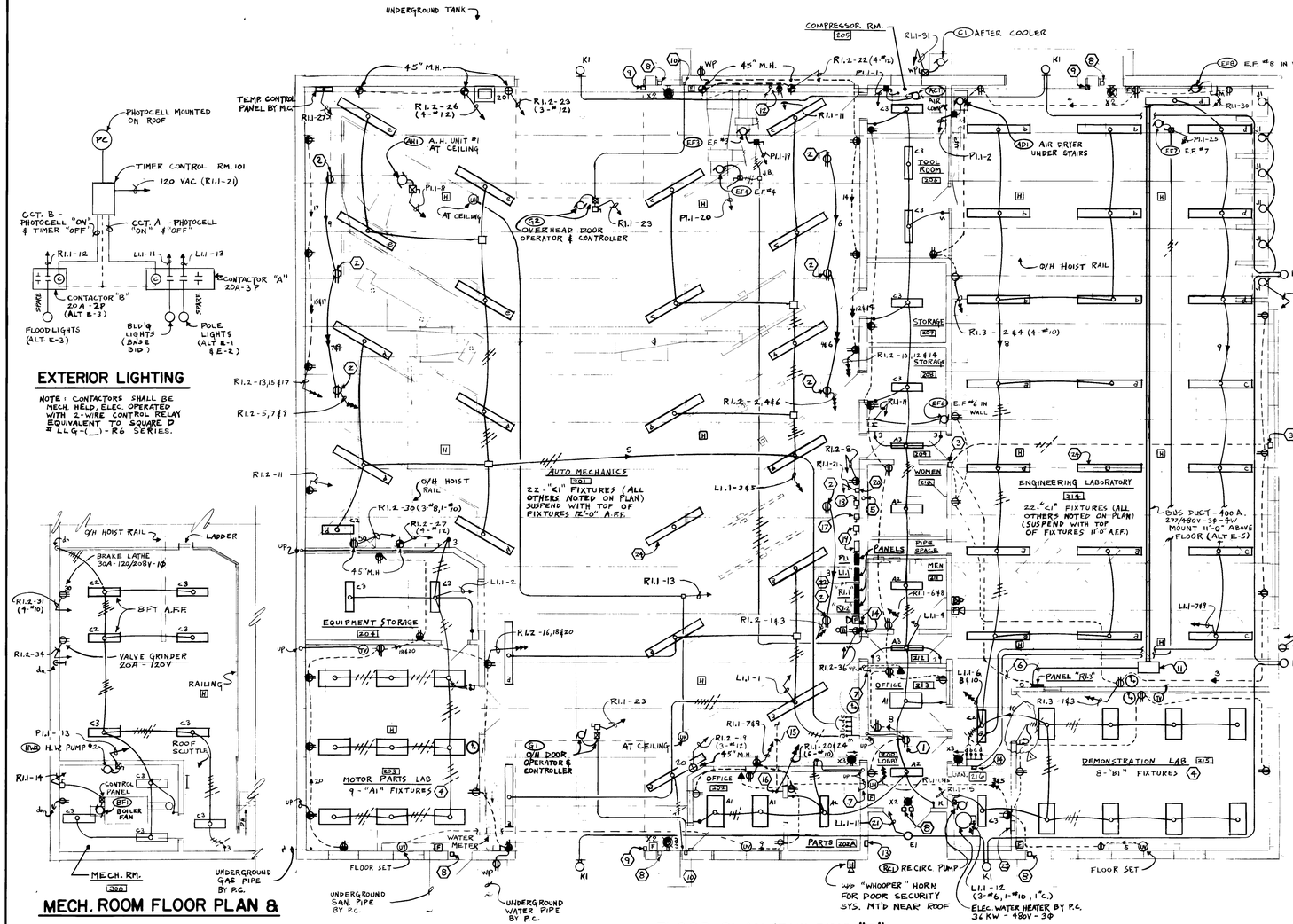
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY: G.S.
DRAWN BY: G.S. & R.R.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN - BUILDING "A" & EXIST. MECH. ROOM PLAN
SHEET NO. E-3 OF 5

STATE OF OHIO 10221 M. O. HEAPY R. R. WEBER 41296 T. E. MONNIG 26706 R. J. PEARSON 34483 B. J. WERLING 33948 T. J. FERDELMAN 29867 REGISTERED PROFESSIONAL ENGINEERS

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 3846 REGISTERED ARCHITECTS



MECH. ROOM FLOOR PLAN & PLAN OF STORAGE AREA

FLOOR PLAN (BUILDING "B")

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

PLAN OF STORAGE AREA (ENGINEERING LAB & AUTO MECHANICS)

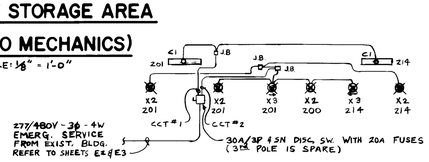
SCALE: 1/8" = 1'-0"

EXTERIOR LIGHTING

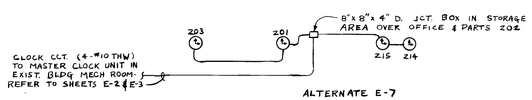
NOTE: CONTACTORS SHALL BE MECH. HELD, ELEC. OPERATED WITH 2-WIRE CONTROL RELAY EQUIVALENT TO SQUARE D # LL9-(_)-R6 SERIES.

PLAN OF STORAGE AREA (AUTO MECHANICS)

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

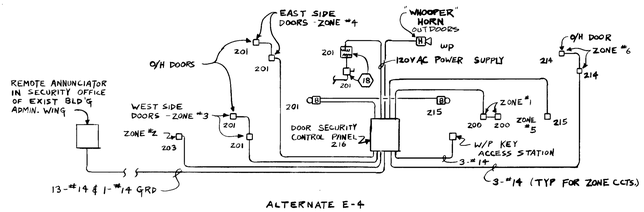


EXIT & EMERG. LIGHTS



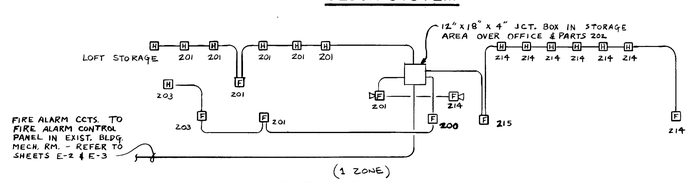
ALTERNATE E-7

CLOCK SYSTEM

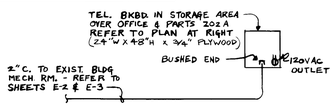


ALTERNATE E-4

DOOR SECURITY SYSTEM



FIRE ALARM SYSTEM



TELEPHONE SYSTEM

NOTES

1. WATER COOLER OUTLET - COORDINATE LOCATION WITH PLBG. CONTR.
2. OUTLET CEILING MOUNTED TO SERVE FUTURE O/H ELEC. REEL BY OWNER.
3. ROOM POWER EMERGENCY SHUTDOWN PUSHBUTTON SWITCH (48" M.H.) SWITCHES WIRED IN PARALLEL WITH 120VAC FROM LOCAL RECEPT. CCT. (EQUIVALENT TO SQUARE D #KK-25R RED MUSHROOM 1 N/O & 1 N/C CONTACT BLOCK) MOUNTED ON STAINLESS STEEL COVERPLATE ENGRAVED TO READ "EMERGENCY SHUTDOWN".
4. ROOM LTS. SHALL BE CIRCUITED FOR TWO-LEVEL LTG.
5. PHOTO-CELL CONTROL UNIT FOR BLDG. LTS. CCT. MOUNTED 12" ABOVE ROOF LEVEL ON CONDUIT STEM. COORDINATE ROOF SEALING WITH GEN. CONTR. - REFER TO DIAGRAM
6. SHUNT TRIP WIRING & CONDUIT TO PANEL MAIN & BUS DUCT BKR.
7. STUB OUT ABOVE STOR. LOFT ABOVE.
8. MAGNETIC DOOR SWITCH FLUSHED INTO DOOR FRAME FOR SECURITY SYSTEM. REFER TO DIAGRAM. (ALT. E-4)
9. SURFACE MT'D MAGNETIC SWITCH FOR O/H DOOR SERVING SECURITY SYSTEM - REFER TO DIAGRAM (ALT E-4)
10. O/H DOOR CONTROL SW. FURNISHED BY DOOR SUPPLIER & INSTALLED & WIRED BY E.C.
11. END CABLE BOX WITH 400 A/3P CCT. BKR. (30000 A I.C. MIN.) WITH SHUNT TRIP DEVICE. (ALT. E-5)
12. INSTALL 1" PLASTIC CONDUIT FROM SUMP TOP 1' TO WALL & RISE UP NEAR RECEPTACLE FOR FUTURE SUMP PUMP ELEC. CONNECTION.
13. FLUSH W/P KEY OPERATED ACCESS SWITCH SERVING DOOR SECURITY SYSTEM (ALT E-4)
14. FLUSH MOUNT 12 HOUR ADJUSTABLE ELAPSE TIME SWITCH (48" M.H.) TO CONTROL AN EXH. FAN. (12 HOUR SW. SHALL BE EQUIVALENT TO MARKTIME #90, 001 SERIES).
15. UNDERGROUND ELEC. SERVICE TO FUEL PUMPS CONT'D ON PLOT PLAN - SHEET E-2 (ALT E-1).
16. 20A-2 POLE KEY OPERATED SWITCH SERVING FUEL PUMPS - (EQUIVALENT TO ARROW HART #1192 & #1187 COVERPLATE) MT. AT 48" A.F.F. ENGRAVE COVERPLATE TO READ "FUEL PUMPS" (ALT E-1)
17. EXIT & EMERG. LTG. SWITCH - REFER TO DIST. DIAGRAM ON SHEET E-5.
18. 480V-1Φ FUSED DISC. SW. WITH 480V-1Φ TO 120/240V-1Φ TRANSFORMER "T2" ABOVE - REFER TO DIST. DIAGRAM ON SHEET E-5 (ALT E-4).
19. DIST. SWITCHES - REFER TO DIST. DIAGRAM ON SHEET E-5.
20. EXTERIOR LTG. CONTROL - REFER TO EXTERIOR LTG. CONTROL DIAGRAM ON THIS SHEET.
21. LTG. CCT. SHALL PASS THRU CONTACTOR "A".
22. TRANSFORMER T-1 - SUPPORT FROM WALL & BLDG. STRUCTURE WITH STEEL ANGLES - REFER TO DIST. DIAGRAM ON SHEET E-5.
23. DOOR SECURITY SYSTEM CONTROL PANEL (ALT E-4) REFER TO DIAGRAM ON THIS SHEET.
24. REFER TO EXIT & EMERG. LIGHTS DIAGRAM FOR CIRCUITING.

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS:
1. "AS BUILT" 7/17/81 (C3)

PROJECT TITLE:
TECHNICAL EDUCATION BUILDING
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
· ARCHITECTS
· PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

CHECKED BY:	G.S.
DRAWN BY:	G.S. & R.R.
COMM. NO.:	78-642
DATE:	4-2-79
SHEET TITLE:	FLOOR PLAN - BLDG. "B" & DIAGRAMS
SHEET NO.	E-4 OF 5

STATE OF OHIO 10221 M. O. HEAPY R. R. WEBER 41286 T. E. MONNIG 26706 R. J. PEARSON 34463 B. J. WERLING 33868 T. J. FERDELMAN 20867 REGISTERED PROFESSIONAL ENGINEERS

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 3846 REGISTERED ARCHITECTS

ELECTRIC PANELS

▲ - 277/480V - 3φ - 4W @ GROUND
● - 120/208 Y - 3φ - 4W @ GROUND

PANEL: H MOUNTING: FLUSH (ELECTRONICS LAB 102)
CONNECTED LOAD: 22.5 KW DEMAND LOAD: 22KW (29A)
MAINS: ▲ 100 A. M.L.O.

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	2.2-L	20-1	1 2	20-1	2.6-L	
	2.8-L		3 4		3.6-L	
	2.5-L		5 6	↓	3. -L	
	2.3-L		7 8	20-2	1.4-L	POLE LTS.
	2.3-L		9 10			
SPARE			11 12	20-1		SPARE
↓		↓	13 14	↓	↓	↓
		SPACE	21 22	SPACE		
			23 24	↓		
		↓	25 26			
			27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
↓		↓	41 42	↓	↓	↓

PANEL: HS1 MOUNTING: FLUSH (ENGINEERING DRAWING 108)
CONNECTED LOAD: 26.11 KW DEMAND LOAD: 18 KW (55 A.)
MAINS: ● 225 A. M.L.O.

REMARKS	KW	BKR.	CCT.NO.	BKR.	KW	REMARKS
	1.07-R	20-1	1 2	20-2	2. -R	
	1.5 -R		3 4			
	1.5 -R		5 6	20-1	1.2 -R	
	1.4 -R		7 8		1. -R	
	1. -R		9 10		1. -R	
	1. -R		11 12		1. -R	
U. H.	.9 -R/M		13 14		.6 -R	
	1. -R		15 16		.6 -R	
	1.2 -R		17 18		.6 -R	
TEL BKBD	.24 -R		19 20		1. -⅓R	DISPLAY CASE
U. V.	1.2 -M		21 22		1.2 -M	U. V.
U. V.	1.2 -M		23 24		1.2 -M	U. V.
U. V.	.4 -M		25 26		1. -M	EF1 | EF2
A.T.C.	.1 - C		27 28			SPARE
SPARE			29 30			↓
↓			31 32			
			33 34			
		SPACE	35 36	SPACE		
		↓	37 38			
			39 40			
			41 42	↓		

PANEL: HS2 MOUNTING: FLUSH (BUSINESS LAB #2 112)
CONNECTED LOAD: 11.6 KW DEMAND LOAD: 7 KW (21.6A)
MAINS: ● 100A - 3P MAIN CIRCUIT BREAKER

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	.6 -R	20-1	1 2	20-2	2. -R	
	.4 -R		3 4			
	.4 -R		5 6	20-1	1. -R	
	1.2 -R		7 8		1.2 -R	
	1.2 -R		9 10		1.2 -R	
	1.2 -R		11 12		1.2 -R	
SPARE			13 14			SPARE
			15 16			
			17 18			
			19 20			
			21 22			
		SPACE	23 24	SPACE		
			25 26			
		↓	27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

PANEL: HS3 MOUNTING: FLUSH (BUSINESS LAB #1 115)
CONNECTED LOAD: 11.8 KW DEMAND LOAD: 7 KW (21.6A)
MAINS: ● 100A-3P MAIN CIRCUIT BREAKER

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	.6 -R	20-1	1 2	20-2	2. -R	
	.4 -R		3 4			
	.8 -R		5 6	20-1	1. -R	
	1.2 -R		7 8		1.2 -R	
	1.2 -R		9 10		1.2 -R	
	1.2 -R		11 12		1.2 -R	
SPARE			13 14			SPARE
			15 16			
			17 18			
			19 20			
			21 22			
		SPACE	23 24	SPACE		
			25 26			
		↓	27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

PANEL: HS4 MOUNTING: FLUSH (CONFERENCE ROOM 103)
CONNECTED LOAD: 19.4 KW DEMAND LOAD: 12 KW (37A.)
MAINS: ● 100A-3P MAIN CIRCUIT BREAKER @ SHUNT TRIP DEVICE

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	1.2 -R	20-1	1 2	20-1	1.2 -R	
	.6 -R		3 4		1.2 -R	
	1. -R		5 6		1.2 -R	
	1. -R		7 8		1.2 -R	
	1. -R		9 10		1.2 -R	
	1.5 -R		11 12		1.2 -R	
	1.5 -R		13 14		1.2 -R	
	2. -R	20-2	15 16		1.2 -R	
			17 18			SPARE
SPARE		20-1	19 20			
			21 22			
			23 24			
			25 26			
			27 28			
			29 30			
		SPACE	31 32	SPACE		
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

PANEL: P1.1 MOUNTING: SURFACE (AUTO MECH 201)
CONNECTED LOAD: 39.68 KW DEMAND LOAD: 35 KW (47 A)
MAINS: ▲ 100A - 3P MAIN CIRCUIT BKR

REMARKS	KW	BKR.	CCT.NO.	BKR.	KW	REMARKS
AC1	15.2-M	40-3	1 2	20-3	1.07-M	AP
			3 4			
			5 6			
SPARE		20-3	7 8	20-3	8.38-M	AH
			9 10			
			11 12			
HW1	1.9 -M	20-3	13 14	20-3	5.72-M	AH2
			15 16			
EF1	1.33-M	20-3	17 18	20-3	1.9 -M	EF3
			19 20			
			21 22			
EF2	3.42 M	20-3	23 24	20-3		SPARE
			25 26			
			27 28			
SPARE		20-1	29 30	20-1		SPARE
SPARE		20-1	31 32	20-1		SPARE
		SPACE	33 34	SPACE		
			35 36			
		↓	37 38			
			39 40			
			41 42			

PANEL: L1.1 MOUNTING: SURFACE (AUTO MECH 201)
CONNECTED LOAD: 114.77 KW DEMAND LOAD: 77 KW (103 A)
MAINS: ▲ 200A-3P MAIN CIRCUIT BREAKER

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	2.73-L	20-1	1 2	20-1	3. -L	
	3.19 -L		3 4		1.6 -L	
	3.74 -L		5 6		3.39 -L	
	1.82 -L		7 8		2.73 -L	
	1.82 -L		9 10		1.7 -L	
EXT BLDG LTS	1.33-L		11 12	60-3	36. - H	WATER HEATER
POLE LTS.	.6 - L	20-2	13 14			
			15 16			
			17 18	70-3	51.-⅓R	TRANSF'R
SPARE		20-1	19 20			
			21 22			
			23 24	20-1		SPARE
			25 26			
			27 28			
			29 30			
			31 32			
		SPACE	33 34	SPACE		
			35 36			
		↓	37 38			
			39 40			
			41 42			

PANEL: R1.1 MOUNTING: SURFACE (AUTO MECH 201)
CONNECTED LOAD: 20.12 KW DEMAND LOAD: 13 KW (40 A.)
MAINS: ● 100 A-3P MAIN CIRCUIT BREAKER

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
U. H.	.5 -M	20-1	1 2	20-1	1.5 -R	
	1. -R		3 4		.9 -L	
U. V.	.5 -M		5 6		1.6 -R	
	1. -R		7 8		.87-R	W. C.
U. V.	1. -M		9 10		.2 -R	TEL BKBD
FUTURE PUMP	.2 -R		11 12	↓	.9 -L	FL. LTS.
U.H.	1. -M		13 14	20-3	1.91-M	EF1
RC1	.5 -M		15 16			
EF3	.67 -M		17 18			
EF4	.1 -M		19 20	20-1	.67-M	FUEL PUMP
LTG. CONT	.1 - C		21 22	NOTE #2		
G1	.83-M		23 24	20-1	.67-M	FUEL PUMP
G2	.83-M		25 26	NOTE #2		
TEMP CONTROL	.1 - C		27 28	20-1	.9 -L	
TEMP SWITCH	.1 - C		29 30		.67-M	EP2
C1	.5 -M		31 32			SPARE
SPARE			33 34			
			35 36			
			37 38			
			39 40			
↓		↓	41 42	↓	↓	↓

PANEL: R1.2 MOUNTING: SURFACE (AUTO MECH 201)
CONNECTED LOAD: 28.9 KW DEMAND LOAD: 12 KW (37 A.)
MAINS: ● 100A-3P MAIN CIRCUIT BREAKER

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	.5 -R	20-1	1 2	20-1	.5 -R	
	.5 -R		3 4		.5 -R	
	.5 -R		5 6		.5 -R	
	.5 -R		7 8		.2 -R	
	.5 -R		9 10		.2 -R	
	.2 -R		11 12		.2 -R	
	.2 -R		13 14		.4 -R	
	1. -R		15 16		1.2 -R	
	.2 -R		17 18		.6 -R	
	2. -R	20-2	19 20		.6 -R	
			21 22	20-2	2. -R	
	2. -R	20-2	23 24			
			25 26	20-2	2. -R	
	2. -R	20-2	27 28			
			29 30	50-2	5. -R	
	4. -R	30-2	31 32			
			33 34	20-1	1.5 -R	
SPARE		20-1	35 36		.2 -R	
			37 38			SPARE
↓		↓	39 40	↓	↓	↓
			41 42			

PANEL: R1.3 MOUNTING: SURFACE (ENG'R. LAB 214)
CONNECTED LOAD: 2.2 KW DEMAND LOAD: 2 KW (7A.)
MAINS: ●100A-3P MAIN CIRCUIT BREAKER WITH SHUNT TRIP

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
	.6 -R	20-1	1 2	20-1	.6 -R	
	.6 -R		3 4		.4 -R	
SPARE			5 6			SPARE
			7 8			
			9 10			
			11 12			
			13 14			
			15 16			
		SPACE	17 18	SPACE		
			19 20			
			21 22			
			23 24			
			25 26			
			27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

PANEL: MOUNTING:
CONNECTED LOAD: DEMAND LOAD:
MAINS:

REMARKS	KW	BKR.	CCT. NO.	BKR.	KW	REMARKS
			1 2			
			3 4			
			5 6			
			7 8			
			9 10			
			11 12			
			13 14			
			15 16			
			17 18			
			19 20			
			21 22			
			23 24			
			25 26			
			27 28			
			29 30			
			31 32			
			33 34			
			35 36			
			37 38			
			39 40			
			41 42			

NOTES:
1. SUFFIXING OF KW LOADS : L-LIGHTS, R- RECEPTACLES, M-MOTORS, C - CONTROLS & H - RESISTANCE HEATING.
2. CCT BKR. SHALL BE A 20A/1P TYPE Ⓢ SWITCHED NEUTRAL PER NEC 514-5 TO SERVE FUEL PUMPS.

FAULT CURRENT AT POINTS ON THE SYSTEM BASED ON UNLIMITED PRIMARY:

	AVAILABLE		LET-THRU
①	18,473 A		18,473 A
②	18,192 A		18,192 A
③	18,343 A	ALT. E-6	18,343 A
④	9,835 A		6,800 A
⑤	12,987 A	ALT. E-6	12,500 A
⑥	9,615 A	ALT. E-5 (WITHOUT ALT. E-6)	5,200 A
⑨	12,581 A	ALTS. E-5 & E-6	9,600 A
⑧	8,915 A		3,500 A
⑩	17,666 A		2,800 A
⑦	8,481 A		700 A

NOTES

① TAP EXIST. 1600 A. BUSSING WITH LUGS FOR NEW SUB-FEED. - INSTALL 2 LUGS PER PHASE, NEUTRAL & GROUND. IN BASE BID.

② UTILIZE SPARE 30A-3P SWITCH - INSTALL 3-30A "KTS" FUSES. 4-#8 THW & 1-#10 GRD., 1" C. FEEDER. - 2" C. WHEN UNDERGROUND.

③ UTILIZE SPARE 200A-3P SWITCH - INSTALL 3-200A "KTS" FUSES. 4-#4/0 THW, 2½" C. FEEDER - 4" C. WHEN UNDERGROUND.

④ FEEDER: BASE BID: 4-#350 MCM, THW IN 1 OF 2-3½" C. (4" C. UNDERGD) ALT. E-5: ADD'L. SET OF 4-350 MCM, THW.

⑤ 4-#2 THW, 1-#8 GRD, 1½" C. (10 FT. MAX. LENGTH CONDUCTORS)

⑥ 400A-3P & SN FUSIBLE DISC. SW. WITH 400A "LPS" FUSES - ALT E-5: IF ALT. E-5 IS ACCEPTED BUT ALT E-6 IS NOT THEN FUSES SHALL BE 200A.

⑦ 4-#500 MCM, THW, 1-#2 GRD., 3½" C. (10 FT. MAX. CONDUCTORS) ALT. E5.

⑧ 3-#6 THW, 1-#10 GRD., 1" C.

⑨ 4-#2 THW, 1-#8 GRD, 1½" C. (10 FT. MAX. LENGTH ON SECONDARY SIDE OF TRANSFORMER T1)

⑩ 30A-3P & SN DISC. SWITCH WITH 2-20A. "KTS" FUSES IN PHASE A & B FOR EXIT & EMERG. LTS. PHASE C IS SPARE.

⑪ 30A-2P & SN DISC. SWITCH WITH 2-20A. "LPS" FUSES. 2-#12 & 1-#12 GRD., 3/4" C. FEEDER (ALT. E-4)

⑫ TRANSFORMER T2 - 1500 WATT - 480V-1φ TO 120/240V-1φ-3W DRY TYPE - WALL MT'D. TO SERVE DOOR SECURITY SYSTEM (ALT. E-9).

ENERGY CODE COMPLIANCE - ELECTRICAL
NEW BUILDING "B"

Code Ref.

505.2 Power factor requirements comply: Yes ✓ Exception ____
505.2 Voltage drop requirements comply: Yes ✓ Exception ____

LIGHTING POWER BUDGET (SEE SUMMARY BELOW)

505.3 Bldg. area applicable to budget 14,254 SQ. FT.
Budget watts (summary calculations below) 38,434 Actual watts 30,500
Budget w/SF 2.70 Actual w/SF 2.14

Calculations based on:
1. IES fixture types: Fluor. IES No. 41, CU = .66 @ RCR of 1
Incan. IES No. 1, CU = .71 @ RCR of 1
Color Rendition: Moderate = M
Good = G
High = H

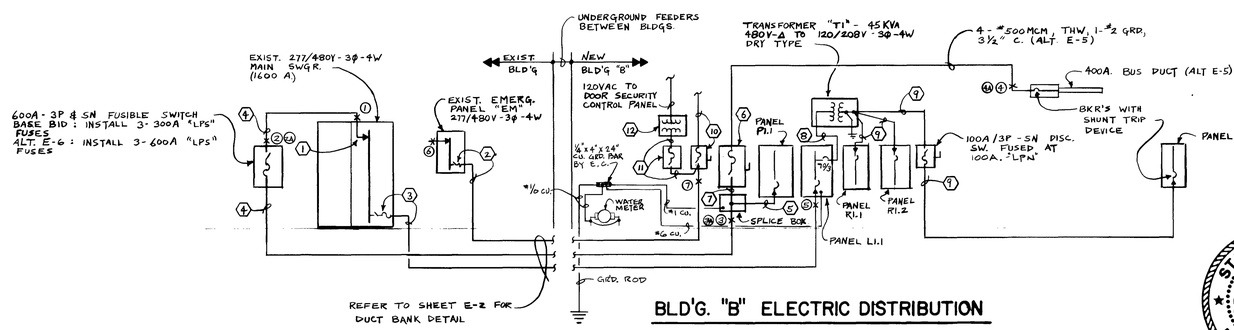
LIGHTING BUDGET SUMMARY

ROOM DESIGNATION (GROUP TYPE)	ROOM AREA	TOTAL TASK AREA	COLOR RENDITION	TASK LIGHTING LEVEL F.C.	% AREA FOR TASKS	WATTS/SF CALCULATED	TOTAL WATTS/RM	NUMBER OF ROOMS	TOTAL WATTS (GROUP)	REMARKS (ACTUAL WATTS)
AUTO MECHANICS	5494	4121	M	100	75	2.5	13,735	1	13,735	10,450
OFFICE	115	75	M	70	65	3.15	362	1	362	400
MOTOR PARTS LAB.	572	429	M	100	75	4.8	2746	1	2746	1800
EQUIP. STORAGE	242	182	M	20	75	1.06	257	1	257	200
STORAGE	90	90	M	20	100	1.7	153	3	459	300
JANITOR	70	70	M	20	100	1.76	123	1	123	100
OFFICE	80	75	M	70	94	4.9	392	1	392	200
TOILETS	90	90	M	20	100	1.7	153	2	306	300
TOOLS	160	120	M	20	75	1.1	176	1	176	200
COMPR. RM.	50	50	M	20	100	1.88	94	1	94	100
CLASSROOM	640	640	M	70	100	4.27	2733	1	2733	1600
ENGINEERING LAB	3040	2280	M	100	75	4.4	13376	1	13376	10450
LOFT	1104	1104	M	20	100	1.1	1214	1	1214	1100
LOFT	874	874	M	20	100	1.15	1006	1	1006	1000
ENTRY	90	90	M	20	100	1.7	170	1	170	100

COMPILED BY G. SNYDER
DATE 3-23-79
JOB NAME WSU - CELINA BRANCH - BLDG "B"
JOB NUMBER 78123

TOTAL INTERIOR ____ 37,149
ADD 2% FACADE ____ 285
FLOODLIGHTING ____ 1000
TOTAL LIGHTING POWER BUDGET ____ 38,434

NOTE:
REFER TO SHEET E-3, FLOOR PLAN FOR ELECTRIC DISTRIBUTION IN ADDITION "A"



BLD'G. "B" ELECTRIC DISTRIBUTION

STATE OF OHIO
10251 M. O. HEAPY
R. R. WEBER 41285
T. E. MONNIG 28798
R. J. PEARSON 34483
B. J. WERLING 33948
T. J. FERDELMAN 29867
REGISTERED PROFESSIONAL ENGINEER

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS. OHIO

STATE OF OHIO
LYMAN J. STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
(419) 228-2112

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

CHECKED BY: G.S.
DRAWN BY: R.R.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: ELECTRIC DISTRIBUTION & PANELBOARD
SHEET NO. e-5
OF 5

DRAINS

SYMBOL	TYPE: ROOF	TYPE: FLOOR	TYPE: AREA	WADE CATALOG NUMBER	BODY: FLANGE CLAMPING DEVICE	BODY: UNDERDECK CLAMP	BODY: BEARING PAN	BODY: OUTLET	STRAINER/GRATE: SIZE	STRAINER/GRATE: ADJUSTABLE	STRAINER/GRATE: ROUND	STRAINER/GRATE: SQUARE	STRAINER/GRATE: RECTANGULAR	STRAINER/GRATE: CAST IRON	STRAINER/GRATE: NICKEL BRONZE	STRAINER/GRATE: POLISHED BRONZE	STRAINER/GRATE: STAINLESS STEEL	STRAINER/GRATE: FLAT	STRAINER/GRATE: RECESSED	STRAINER/GRATE: FUNNEL	STRAINER/GRATE: SEDIMENT BUCKET	STRAINER/GRATE: ROTATING STRAINER	STRAINER/GRATE: DOME	STRAINER/GRATE: VANDAL-PROOF	REMARKS	SCHEDULE NOTE REFERENCE NUMBER
FD-1		●		W-1103-5	●	●			6"	●	●			●				●								
FD-2		●		W-1203	●	●			8"	●	●			●				●								
FD-3		●		W-1243	●	●			8"	●	●			●				●								

PLUMBING FIXTURE SPECIFICATION SCHEDULE

SYMBOL	MOUNTING HEIGHT	DESCRIPTION	SUPPLY CONNECTIONS: COLD	SUPPLY CONNECTIONS: HOT (140°)	SUPPLY CONNECTIONS: TEMP	WASTE CONNECTIONS: OUTLET	WASTE CONNECTIONS: TRAP	WASTE CONNECTIONS: FUTURE DRAIN	WASTE CONNECTIONS: DIRECT WASTE	WASTE CONNECTIONS: VENT	SPECIFICATIONS: FIXTURE MANUFACTURE	SPECIFICATIONS: FIXTURE	SPECIFICATIONS: FAUCET/FLUSH VALVE	SPECIFICATIONS: OUTLET	SPECIFICATIONS: STOP	SPECIFICATIONS: TRAP	SPECIFICATIONS: FIXTURE DRAIN	WASTE CARRIER NUMBER	SCHEDULE NOTE REFERENCE NO.
A1	16" TO LIP	WATER CLOSET / WALL HUNG / FLUSH VALVE	1"	—	—	4"	INTEGRAL	4"	4"	2"	AMERICAN STANDARD	2477.016	SLOAN ROYAL 115 YB	UNIT	UNIT	INTEGRAL	CAST IRON	SEE SOIL & WASTE & VENT DIAGRAM ON SHEET P-3	3
A2	20" TO LIP	WATER CLOSET / WALL HUNG / FLUSH VALVE / HANDICAPPED	1"	—	—	4"					AMERICAN STANDARD	2477.016		UNIT	UNIT	INTEGRAL	CAST IRON		3
B1	——	WASHFOUNTAIN / SEMI-CIRCULAR / WHEELCHAIR	½"	½"	—	2"	2"	2"	2"	1½"	BRADLEY	CHC-596	UNIT	UNIT	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	——	1
B2	31"	LAVATORY / 20"x18" / WALL HUNG / SOAP DISPENSER	½"	½"	—	1¼"	1¼"	1¼"	1½"	1½"	AMERICAN STANDARD	0350.132	CHICAGO 406-E2.8	2411.015	2503.068	4401.014		W-521	2
B3	31"	LAVATORY / 20"x18" / WALL HUNG / SOAP DISPENSER	½"	½"	—	1¼"	1¼"	1¼"	1½"	1½"	AMERICAN STANDARD	0350.132	CHICAGO 785-E3	2411.015	2503.068	4401.014		W-522	
C1	21"	URINAL / WALL HUNG / FLUSH VALVE	1"	—	—	2"	INTEGRAL	2"	2"	1½"	AMERICAN STANDARD	6530.016	SLOAN ROYAL 180 YB	UNIT	UNIT	INTEGRAL	GALV. STEEL	W-452	
C2	18"																		
D1	SUPPLY 36"	PUMP SINK / 24"-Ø / AND SUPPLY FITTING	½"	½"	—	3"	3"	3"	3"	1½"	SILEN WILLIAMS	SB-502	CHICAGO 897	UNIT	UNIT	CAST IRON	CAST IRON	——	
E1	——	COUNTERTOP SINK / - STAINLESS STEEL / SELF-RIMMING	½"	½"	—	1½"	1½"	1½"	1½"	1½"	JUST	SL-2119-A-GR	CHICAGO 785-E3	J-35	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	——	
G1	36"	WATER COOLER / 1 LINKING FOUNTAIN	1/2"	——	——	1¼"	1¼"	1¼"	1¼"	1¼"	HALSEY TAYLOR	WC-7A-1	UNIT	UNIT	ROUGH BRASS	ROUGH BRASS	ROUGH BRASS	W-531-C2	4
J1	48"	EMERGENCY EYE WASH	½"	——	——	——	——	——	——	——	HAWS	SE-920	——	——	CHICAGO 948	——	——	——	

SCHEDULE NOTES:
1. TRIANGLE BASIN COLOR SELECTION BY ARCHITECT.
2. PROVIDE LIQUID SOAP DISPENSER-FOERICH B-829 (OWNER WILL SUPPLY LIQUID SOAP TO FILL UNIT)
3. WATER CLOSET SEAT-CHURCH 9331.112
4. CABINET COLOR SELECTION BY ARCHITECT

NOTES

1. VALVE & CONNECT NEW 3" GAS TO EXISTING GAS MAIN AHEAD OF EXISTING REGULATOR-NEW REGULATOR TO PASS 2,000 CFM. OF GAS @ 30" W.C.)
2. SUPPORT GAS PIPING ALONG EXISTING WALL (COORDINATE WITH E.C.) AND SLEEVE PIPE THRU EXISTING WALL.
3. NEW 3" UNDERGROUND GAS SERVICE-COORDINATE LOCATION WITH E.C.
4. NEW 2" UNDERGROUND WATER SERVICE.
5. UNDERGROUND FUEL OIL STORAGE TANK- SEE DETAIL ON THIS SHEET (ALT. P-1)
6. UNDERGROUND GASOLINE STORAGE TANK- SEE DETAIL ON THIS SHEET (ALT. P-1)
7. FUEL OIL PUMP-(ALT. P-1)
8. GASOLINE PUMP-(ALT. P-1)
9. PROTECTION BOLLARDS, PUMP BASE AND CONCRETE APRON BY G.C.
10. VALVE WITH EXTENSION AND GREASE BOX.
11. OFFSET GAS SERVICES TO AVOID EXISTING UNDERGROUND FUEL OIL STORAGE TANK
12. UNDERGROUND USED OIL STORAGE TANK-SEE DETAIL ON SHEET P-2 (ALT. P-5)
13. PIPING IN ALT. P-4 ONLY
14. PROVIDE CAST IRON DOWNSPOUT BOOT TO RECEIVE EXTERIOR SHEET METAL DOWNSPOUT PROVIDED BY G.C. BOOT TO EXTEND 12" ABOVE GRADE (COORDINATE BOOT RECEIVER OPENING WITH G.C. FOR PROPER SIZING AND PROVIDE 6" OUTLET ON BOOT)-ALTERNATE P-4 ONLY, STORM DISCHARGES TO GRADE UNDER BASE BID.
15. REFER TO DETAIL ON SHEET P-4.

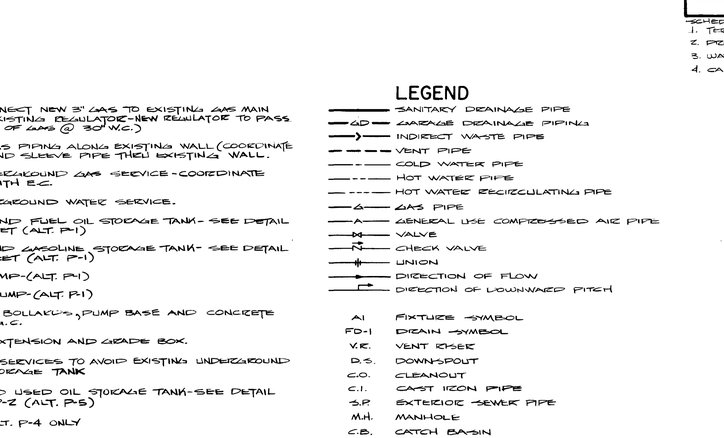
LEGEND

- SANITARY DRAINAGE PIPE
- GD — GARAGE DRAINAGE PIPING
- INDIRECT WASTE PIPE
- VENT PIPE
- COLD WATER PIPE
- HOT WATER PIPE
- HOT WATER RECIRCULATING PIPE
- G — GAS PIPE
- A — GENERAL USE COMPRESSED AIR PIPE
- VALVE
- CHECK VALVE
- UNION
- DIRECTION OF FLOW
- DIRECTION OF LOW/VAPED PITCH

A1	FIXTURE SYMBOL
FD-1	DRAIN SYMBOL
V.R.	VENT RISER
D.S.	DOWNSPOUT
C.O.	CLEANOUT
C.I.	CAST IRON PIPE
S.P.	EXTERIOR SEWER PIPE
M.H.	MANHOLE
C.B.	CATCH BASIN
T/F	TOP OF FOOTING ELEVATION
B/F	BOTTOM OF FOOTING ELEVATION
P.C.	PLUMBING CONTRACTOR
H.V.A.C.	HEATING, VENT. & AIR COND. CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR

(3) "NOTE" SYMBOL NUMBER APPLIES ONLY TO NOTES ON SHEET ON WHICH SYMBOL IS SHOWN.

CONNECTION SYMBOL-INDICATES LOCATION OF NEW PIPING CONNECTION TO EXISTING PIPING (VERIFY EXACT SIZE, LOCATION & ELEVATION BEFORE INSTALLATION OF ANY NEW PIPING.)

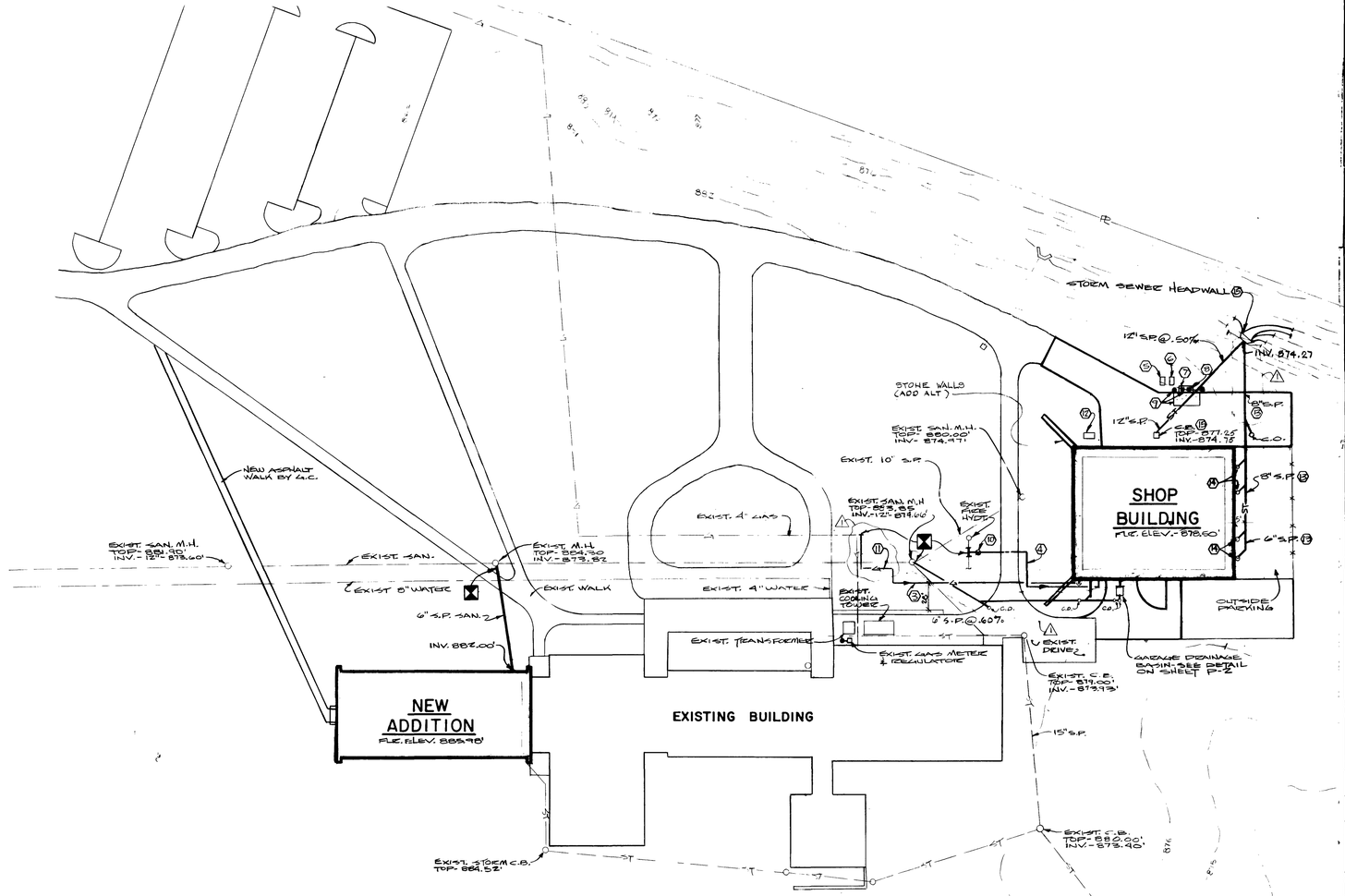


(ALTERNATE P-1)

UNDERGROUND FUEL STORAGE TANK

SCALE: 1/2"=1FT.-0"

TWO UNITS REQ'D-ONE FUEL OIL & ONE GASOLINE (TYPE AND GRADE OF FUEL AS SELECTED BY UNIVERSITY)



SITE PLAN

SCALE: 1" = 50 FT.

NOTE:
1. VERIFY EXACT SIZE, LOCATION & ELEVATION OF ALL EXISTING UTILITIES BEFORE PROCEEDING WITH INSTALLATION OF ANY NEW PIPING TO AVOID CONFUSION AT A LATER DATE.
2. REFER TO ARCHITECTURAL SITE PLANS FOR NEW & EXISTING GRADE ELEVATIONS - CONTRACT LIMIT LINE ON ARCHITECTURAL PLANS IS NOT APPLICABLE TO PLUMBING CONTRACT

ENERGY CODE COMPLIANCE - SERVICE WATER HEATING

Code Ref.	Insulation	
504.2	Electric storage water heaters comply: Yes X Exception ____	
504.2	Gas and oil fired storage water heaters comply: Yes ____ Exception NA	
	Unfired hot water storage tanks comply: Yes ____ Exception NA	
504.2	Combination service water heating comply: Yes ____ Exception NA	
504.2	Requirements of Section 504.2(b) temperature controls and Section	
504.3	504.2(b.2) pump controls comply: Yes X Exception ____	
504.4	Pipe insulation comply: Yes X Exception ____	
	Flow	
504.5	Shower head flow: Code 3 gpm. Design NA	
504.5	Lavatories in restrooms of public facilities comply: Yes X N/A____	
504.5	Hot water flow (max.): Code 0.5 gpm. Design .4	

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS:
⚠ "AS BUILT" 9/10/01

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

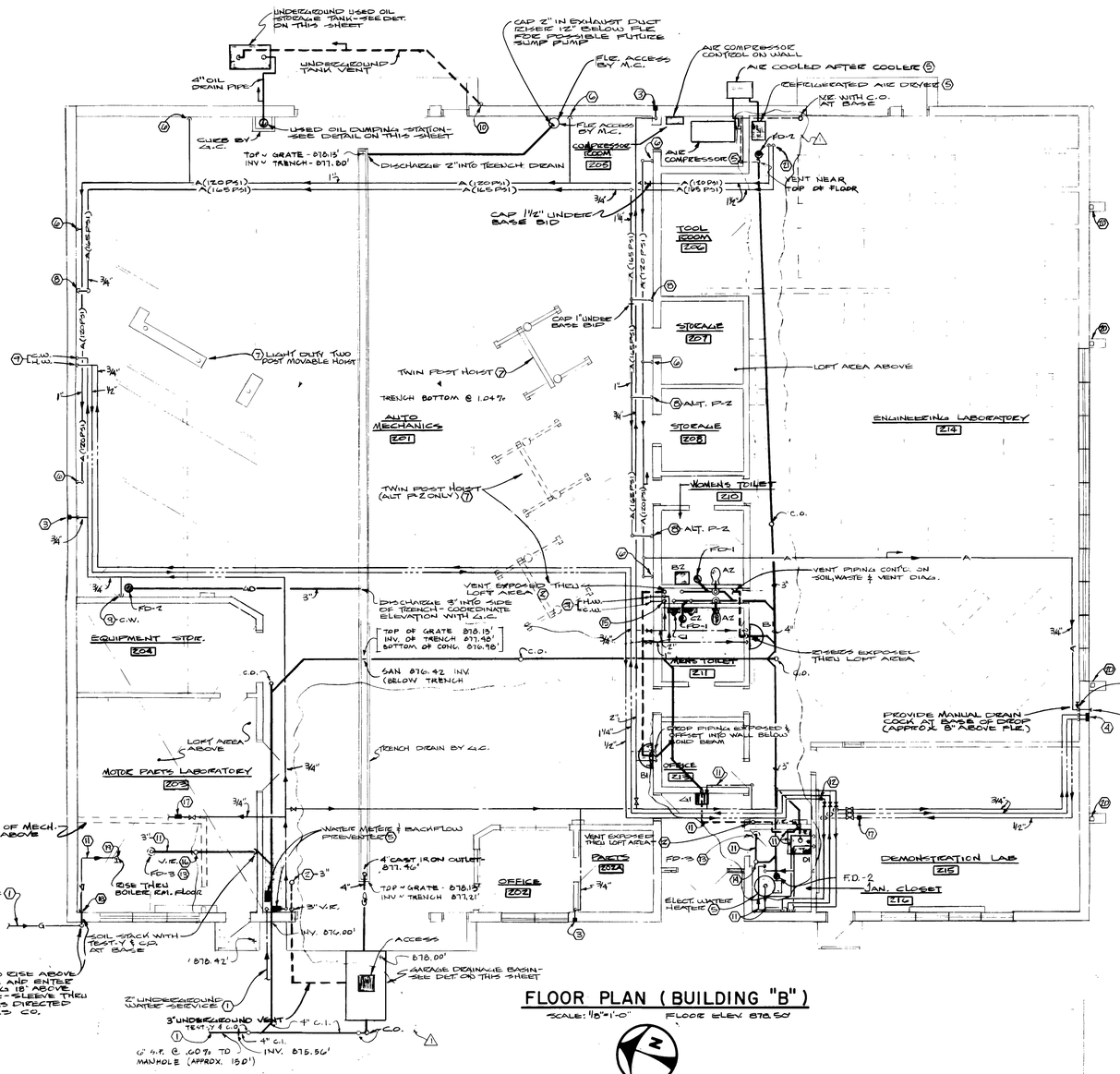
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
·ARCHITECTS
·PLANNERS
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45805
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CHECKED BY: P.L.B.
DRAWN BY: D.W.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: PLOT PLAN
SHEET NO. P-1 OF 4

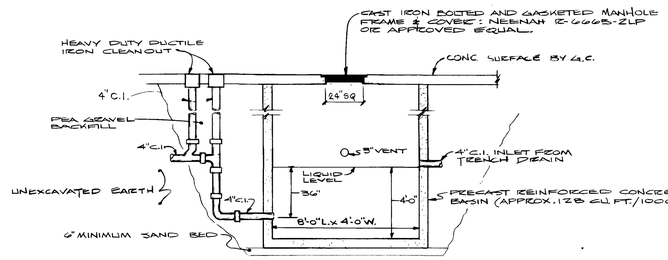
STATE OF OHIO 10231 M. O. HEAPY F. R. R. WEBER 41286 T. E. MONNIG 26796 R. J. PEARSON 34483 B. J. WERLING 33846 T. J. FERDELMAN 29963 REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 3846 REGISTERED ARCHITECTS



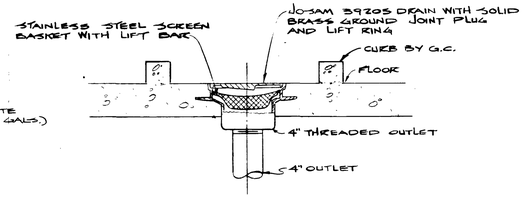
FLOOR PLAN (BUILDING "B")

SCALE: 1/8"=1'-0" FLOOR ELEV. 878.50



GARAGE DRAINAGE BASIN

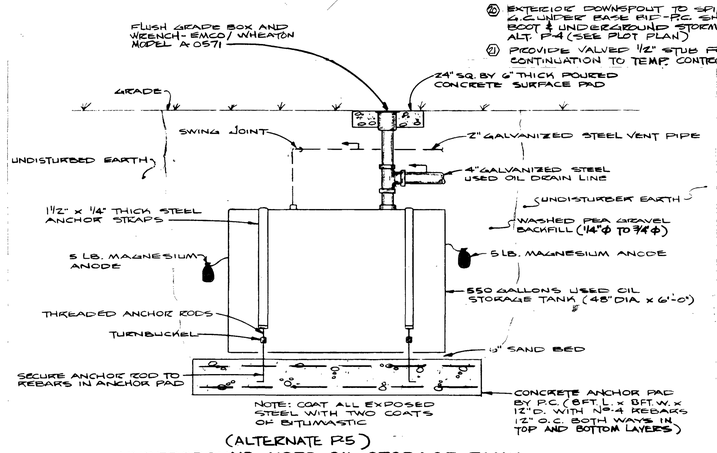
SCALE: 1/4"=1'-0"



(ALTERNATE P-5)

USED OIL DRAINAGE STATION

SCALE: 1"=1'-0"



(ALTERNATE P-5)

UNDERGROUND USED OIL STORAGE TANK

SCALE: 1/2"=1'-0"

GENERAL NOTES

1. ALL SUPPLY, AIR, GAS AND VENT PIPING IS ABOVE THE CEILING (AT THE CEILING IN EXPOSED STRUCTURE AREAS) UNLESS OTHERWISE INDICATED.
2. ALL DRAINAGE PIPING IS BELOW THE FLOOR SLAB IN GRADE UNLESS OTHERWISE INDICATED.
3. REFER TO SCHEDULES AND DIAGRAMS FOR PIPING AND PIPE SIZES NOT INDICATED ON PLAN.
4. HOIST AIR OIL TYPE - CONTROL VALVES, LIFTS, TANK AND ACCESSORIES FOR INSTALLATION WILL BE FURNISHED BY THE GENERAL CONT'R. THE PLUMBING CONTRACTOR SHALL FURNISH & INSTALL ALL OIL AND AIR PIPING AND INSTALL ACCESSORIES PROVIDED FOR HOIST INSTALLATION. GENERAL CONTRACTOR SHALL PROVIDE ALL EXCAVATION, BACKFILL & CONCRETE WORK AND SHALL SET TANKS AND HOIST POST ASSEMBLIES IN PLACE. THE PLUMBING CONT'R. SHALL PROVIDE PIPING, UNIONS AND FITTINGS AS REQUIRED / RECOMMENDED BY HOIST MANUFACTURER AND SHALL TEST COMPLETE SYSTEM AS DIRECTED BY HOIST MANUFACTURER, THIS TEST SHALL BE WITNESSED BY THE ARCHITECT OR THE ARCHITECTS REPRESENTATIVE.
5. 120 LB. COMPRESSED AIR PIPING AND RELATED AIR STATIONS ARE IN ALTERNATE P-3.

NOTES

1. PIPING CONTINUED ON PLOT PLAN.
2. VENT THRU ROOF - FLASHING REQUIRED
3. COLD WATER WALL HYDRANT 24" ABOVE GRADE: WADE W-8620.
4. HOT & COLD WATER WALL HYDRANT 24" ABOVE GRADE: WADE W-8625.
5. SEE DETAIL ON SHEET P-4.
6. VALVE 3/4" AIR 48" ABOVE FLOOR AND PROVIDE PLUGGED TEE ON VALVE OUTLET - CONTINUATION BY OWNER. (ALT. P-3)
7. REFER TO GENERAL NOTE No. 4.
8. CONNECT 3/4" TO AIR/OIL HOIST CONTROL VALVE.
9. 3/4" VALVE WITH HOSE END VACUUM BREAKER 36" ABOVE FLOOR.
10. EXTEND TANK VENT 12" ABOVE ROOF & TERMINATE WITH FLUSH ACCESS TOP.
11. PIPING BELOW LOFT FLOOR IS STRUCTURE.
12. 4 GPM FLOW CONTROL.
13. FLOOR DRAIN LOCATED IN LOFT FLOOR - COORDINATE LOCATION WITH H.V.A.C. & G.C.
14. VENT IS KEPT EXPOSED THRU LOFT AREA AND EXTENDED THRU ROOF - WASTE DROP TO BELOW FLOOR WITH C.O. AT BASE.
15. SUPPLY PIPING DROP EXPOSED THRU LOFT AREA INTO CHASE BELOW - MANIFOLD 1 1/2" C.W. AND 3/4" H.W. IN CHASE AND SERVE EACH FIXTURE SUPPLY INDIVIDUALLY FROM MANIFOLD.
16. EXTEND 3" V.E. THRU BOILER ROOM FLOOR ABOVE & THRU ROOF.
17. 3/4" WATTS MODEL 9D BACKFLOW PREVENTER IN BOILER ROOM (PIPE DISCHARGE TO FLOOR DRAIN) - PIPING CONTINUED FROM THIS LOCATION BY M.C.
18. VALVE 3" GAS 48" ABOVE FLOOR AND EXTEND TO CEILING
19. VALVE AND CONNECT 3" TO BOILER, COORDINATE LOCATION WITH H.V.A.C.
20. EXTERIOR DOWNSPOUT TO SPILL ON GRADE BY G.C. WATER BASE PIPE - P.C. SHALL PROVIDE C.I. BOOT & UNDERGROUND STORM SYSTEM UNDER ALT. P-4 (SEE PLOT PLAN)
21. PROVIDE VALVED 1/2" STUB FOR H.V.A.C. CONTINUATION TO TEMP. CONTROL SYSTEM

REVISIONS:
1 AS BUILT 9/10/81

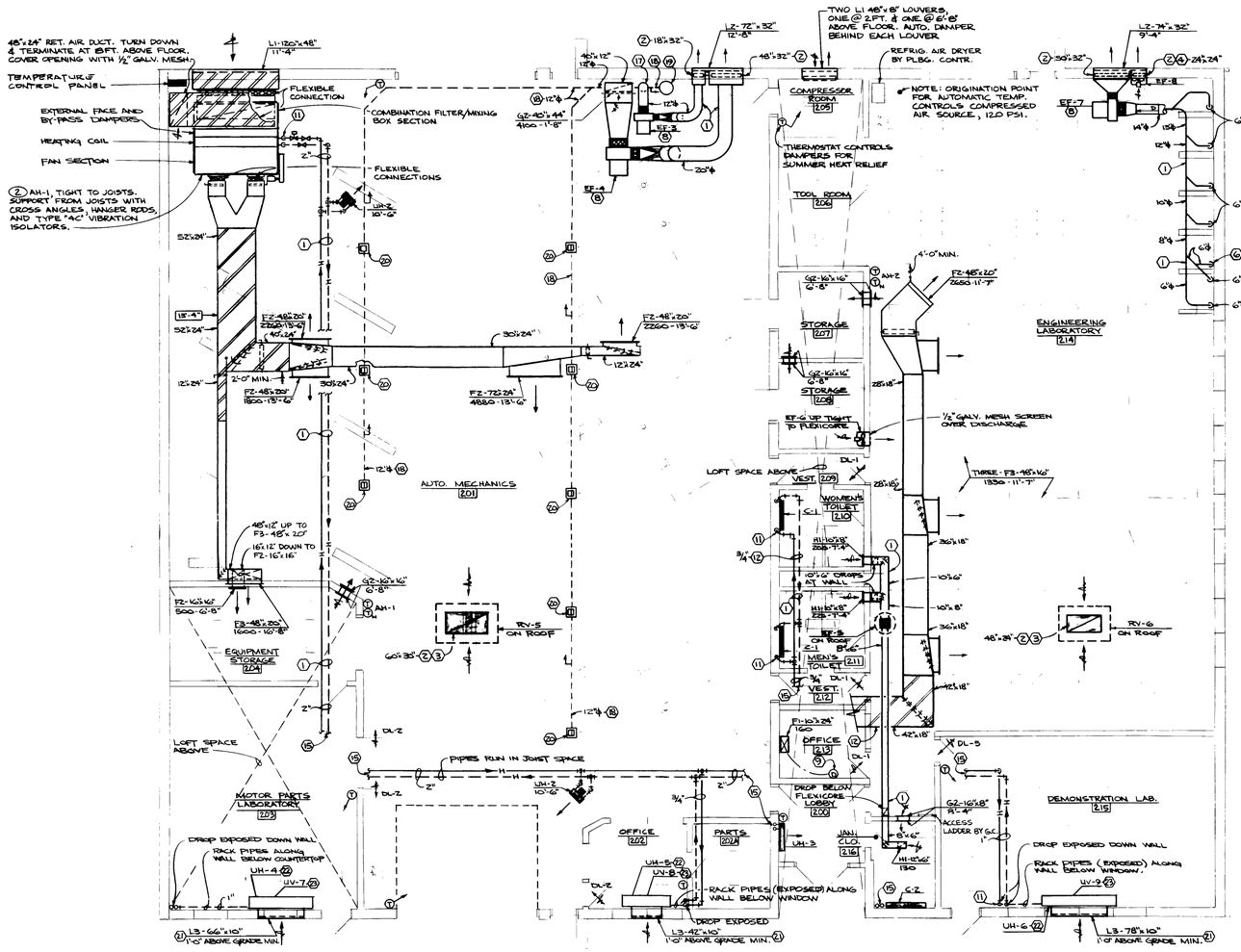
PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
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W. O. B. C.
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PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

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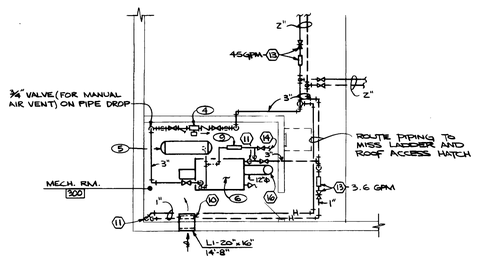
CHECKED BY: P.L.B.
DRAWN BY: D.W.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING 'B'
SHEET NO. P-3 OF 4

STATE OF OHIO
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T. J. FERDELMAN 29867
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REGISTERED ARCHITECTS
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DAYTON - COLUMBUS, OHIO



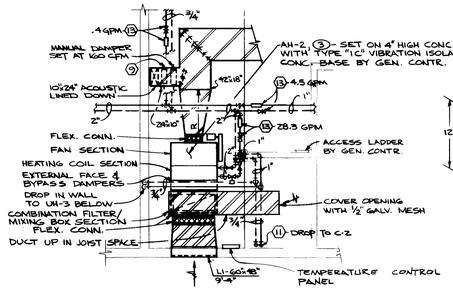
FLOOR PLAN (BUILDING B)

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



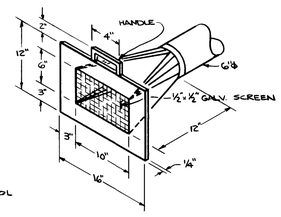
PARTIAL LOFT PLAN

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



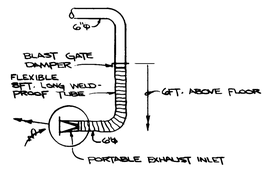
PARTIAL LOFT PLAN

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



WELDING STATION DUCT DROP

NO SCALE



NOTES

1. ROUTE DUCT / PIPE THRU JOIST WEBBING.
2. COUNTERBALANCED GRAVITY OPERATED BACKDRAFT DAMPER WITH FELTED EDGES FOR QUIET OPERATION.
3. DUCT STUB DOWN TO 16" BELOW ROOF DECK WITH ½" GALVANIZED MESH SCREEN OVER OPENING.
4. BLANK-OFF UNUSED PORTION OF LOUVER AROUND EF-8 WITH SHEETMETAL BACKED WITH 1" RIGID FIBERGLASS INSULATION.
5. 6"ø WELDING STATION EXHAUST DUCT DROP - SEE DETAIL.
6. THIS DROP TO HAVE LOCK COUPLER WITH CHAIN AND END CAP (CAR-MON NO. CM-GO) FOR USE WHEN FLEX. DUCT (PROVIDE COUPLER CONNECTOR ON THIS FLEX.) IS MOVED TO ADJACENT WELDING STATION.
7. 6"ø DUCT DROP DOWN TO 6FT. ABOVE FLOOR, TERMINATE WITH LOCK COUPLER WITH CHAIN AND END CAP (CAR-MON NO. CM-GO). THIS DROP TO PERMIT USE OF TWO WELDING EXHAUST DUCTS IN ONE STATION. USE FLEXIBLE DUCT AND FUME RECEPTOR FROM ADJACENT STATION.
8. EXHAUST FAN BELOW JOISTS. SUPPORT FROM JOISTS WITH CROSS ANGLES, HANGER RODS, AND TYPE "4C" VIBRATION ISOLATORS.
9. REMOTELY ADJUSTABLE OPPOSED BLADE DAMPER WITH WALL MOUNTED DIAL INDICATOR - TUTTLE AND BAILEY NO. 3000.
10. AUTOMATIC COMBUSTION AIR DAMPER BY AUTO. TEMP. CONTROL CONTRACTOR - INTERLOCK WITH BOILER.
11. AUTOMATIC AIR VENT ON PIPE DROP.
12. PIPE / DUCT LOCATED ABOVE LOFT SPACE.
13. FLOW METER AND BALANCING VALVE, SET AT GPM INDICATED.
14. ¾" COLD WATER MAKE-UP LINE CONTINUED BY PLBG. CONTRACTOR.
15. CONTINUED ON PARTIAL LOFT PLAN.
16. 12"ø BOILER STACK TO 11FT. ABOVE ROOF. PENETRATE ROOF WITH INSULATED METAL THIMBLE, 12" HIGH ROOF CURB, AND RAIN SKIRT. TERMINATE STACK WITH RAIN CAP PER ACGIH MANUAL, FIGURE 6-13. BRACE STACK ABOVE ROOF WITH GUY WIRES.
17. 12"ø UNDERFLOOR DUCT UP THRU FLOOR. PROVIDE 4" HIGH CURB AROUND DUCT, AND TRANSITION TO SHEET-METAL DUCT.
18. UNDERFLOOR CARBON MONOXIDE EXHAUST PIPE.
19. 18"x12" TEE. EXTEND BOTTOM 12" BELOW FLOW LINE OF DUCT AND PROVIDE 4" CONC. BOTTOM. EXTEND TO TOP OF FLOOR AND PROVIDE NEEHAM "R-GAGG-1A" BOLTED AND GASKETED MANHOLE FOR DRAINAGE OF ACCUMULATED WATER.
20. EXHAUST FLOOR OUTLET (DUAL TYPE), 100 CFM PER HOSE.
21. LOUVER IN ALT. #2. PROVIDE WALL BOX AND LOUVER TO MATCH UNIT HEATER IN BASE BID.
22. UNIT HEATER IN BASE BID.
23. UNIT VENTILATOR IN ALT. #2.

LEGEND

- RETURN PIPE
- EXISTING PIPE
- H — HOT WATER HEATING SUPPLY PIPE
- C — CHILLED WATER SUPPLY PIPE
- CW — CONDENSER WATER PIPE
- HC — HOT/CHILLED WATER SUPPLY PIPE
- D — DRAIN PIPE
- WATER MAKE-UP & FILL WATER
- DIRECTION OF FLOW
- DIRECTION OF PITCH
- RUNOUT OFF TOP OF MAIN
- RUNOUT OFF BOTTOM OF MAIN
- VALVE
- BALANCING VALVE
- COMBINATION SHUT-OFF & BALANCING VALVE
- CHECK VALVE
- 2-WAY & 3-WAY CONTROL VALVE
- UNION OR FLANGE
- STRAINER
- C.O. CLEAN OUT
- T DIAL THERMOMETER
- P PRESSURE GAUGE (STEAM)
- P PRESSURE GAUGE (WATER)
- T THERMOSTAT-MOUNTING HEIGHT 54".
- (1) EQUIPMENT NUMBER-REFER TO EQUIPMENT DATA.
- (1) PLAN NOTE-APPLIES ONLY TO SHEET ON WHICH NOTE IS SHOWN.
- 1 REVISION- SEE REVISION SCHEDULE.
- 123 ROOM NUMBER
- 8'-6" APPROXIMATE ELEVATION FROM FLOOR TO BOTTOM OF LISTED SIZE OF DUCT, PIPE, DEVICE OR EQUIPMENT ITEM. (TO BE USED AS AN AID IN COORDINATING THE VARIOUS TRADES.)
- 5 / H-3 SECTION DESIGNATION - KEY: 5 - DESIGNATION, H3 - SHEET NUMBER OF PLAN VIEW
- DUCT WITH 1" ACOUSTICAL LINER. DUCT SIZES ARE INSIDE CLEAR DIMENSIONS.
- DUCT (ALUMINUM OR STAINLESS, SEE SPECS.)
- SPLITTER DAMPER WITH LOCKING DEVICE.
- MANUAL VOLUME DAMPER WITH LOCKING DEVICE.
- AIR TURNING VANES
- FLEXIBLE CONNECTION
- R DUCT RISE
- D DUCT DROP
- 81-8" / 300-3 CEILING DIFFUSER 81 DESIGNATION REFERS TO AIR DEVICE SCHEDULE. 8"ø NECK SIZE. 300 REQUIRED CFM. 3 AIR DISCHARGE IF OTHER THAN 4-WAY. METHOD OF IDENTIFICATION ALSO APPLIES TO OTHER CEILING MOUNTED DEVICES.
- G1-24"x6" / 200-9'-4" WALL MOUNTED AIR DEVICE. G1 DESIGNATION REFERS TO AIR DEVICE SCHEDULE. 24"x6" DUCT CONNECTION SIZE. 200 CFM REQUIRED. 9'-4" MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF DEVICE.
- DL-1 DOOR LOUVER BY GENERAL CONTRACTOR - NUMBER INDICATES MINIMUM GROSS FACE AREA IN SQ. FT.
- U/C DOOR UNDERCUT 1" BY GENERAL CONTRACTOR.
- AIR VOLUME EXTRACTOR AT AIR DEVICE OR BRANCH DUCT TAP TO MAIN DUCT.

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W.O.B.C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

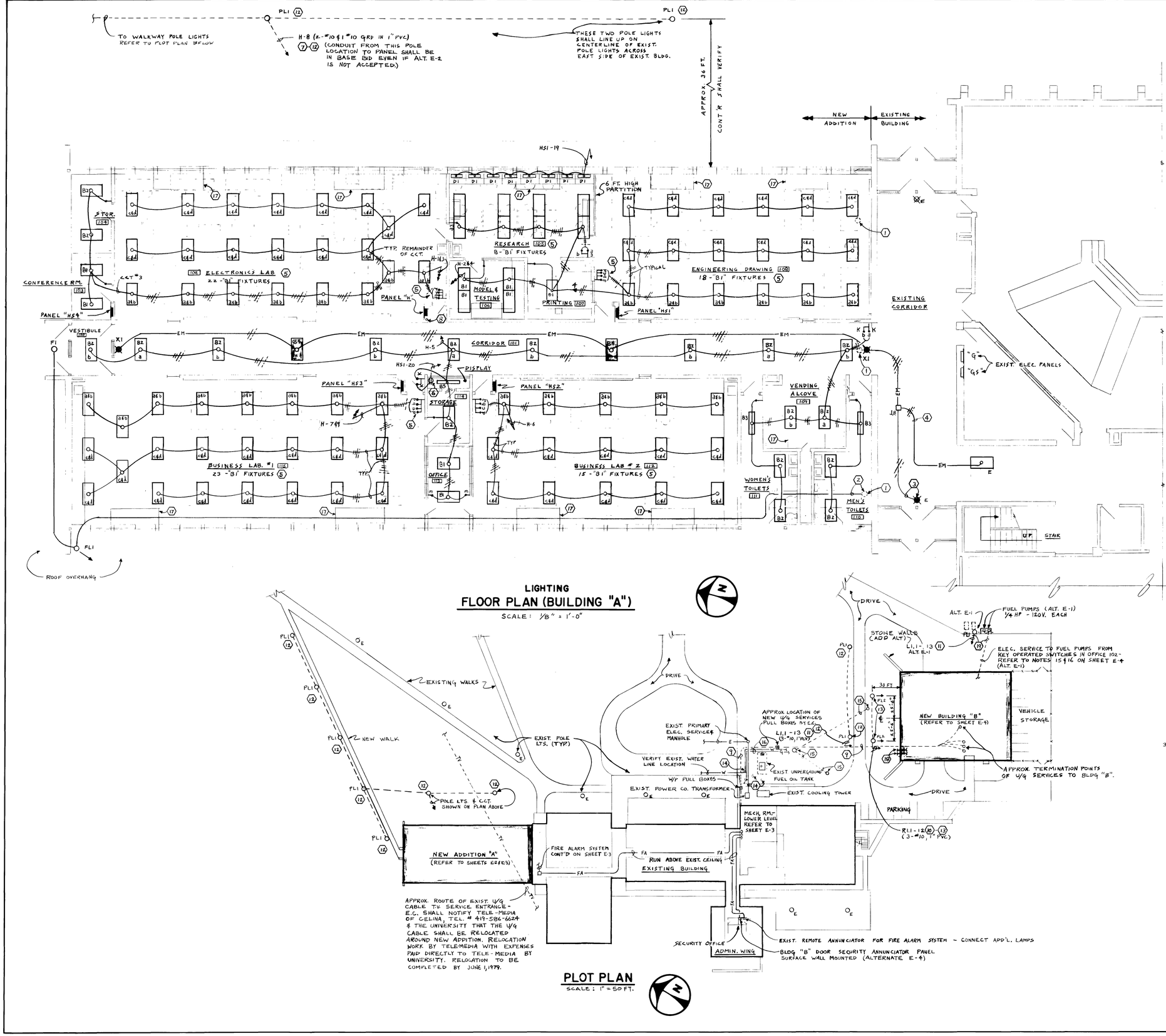
STRONG & HEFFELBOWER
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45805
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CHECKED BY: L.D.S.
DRAWN BY: M.N.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BLD'G. "B"
SHEET NO. h-2 OF 3

STATE OF OHIO
LYMA STRONG 1743
RICHARD E. HEFFELBOWER 3846
REGISTERED ARCHITECTS

STATE OF OHIO
18231 M.O.HEAPY
T.E.MONNIG 28788
R.J.PEARSON 34483
R.J.WERLING 33948
T.J.FERDELMAN 29087
REGISTERED PROFESSIONAL ENGINEERS

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO



NOTES

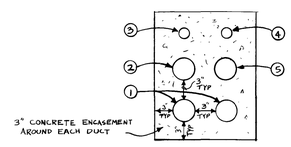
1. REMOVE EXISTING RECESSED DOWNLIGHT (120 VAC) - MAINTAIN EXISTING CIRCUIT CONTINUITY TO FIXTURES REMAINING DOWNLINE.
2. CONNECT NEW EXTERIOR LTG. CCT. TO EXISTING AT THIS POINT (CIRCUIT FED FROM EXIST. PANEL "GS".
3. EXTEND EXIST. 120 VAC EXIT LT. CCT. FROM THIS LOCATION TO NEW EXIT LTS.
4. EXTEND EXIST. 120 VAC EMERG. LT. CCT. FROM THIS LOCATION TO NEW EMERG. LTS.
5. ROOM LIGHTS SHALL BE CIRCUITED FOR 2 LEVEL LIGHTING.
6. OUTLET FLUSH MT'D IN CEILING NEAR FRONT OF DISPLAY AREA FOR FUTURE TRACK LTG. BY OWNER.
7. CCT. SHALL BE CONTROLLED BY PHOTO-CELL ON ROOF OVER AREA NEAR PANEL "H". REFER TO NOTE 8.
8. PHOTO-CELL CONTROL UNIT FOR POLE LIGHT CCT. MOUNTED 12" ABOVE ROOF LEVEL ON CONDUIT STEM. COORDINATE ROOF SEALING WITH GENERAL CONTRACTOR.
9. APPROX. ROUTE OF UNDERGROUND SERVICES CONSISTING OF: ELECTRIC POWER, TELEPHONE FIRE ALARMS, EMERG. POWER, CLOCK AND DOOR SECURITY. COORDINATE ROUTE WITH EXIST. UNDERGROUND UTILITIES & NEW UTILITIES. REFER TO DUCT BANK DETAIL BELOW.
10. CCT. SHALL PASS THRU LTG. CONTACTOR "B" - REFER TO NOTE 20 ON SHEET E-4. (ALTERNATE E-3)
11. CCT. SHALL PASS THRU LTG. CONTACTOR "A" - REFER TO NOTE 20 ON SHEET E-4 (ALTERNATES E-1 & E-2).
12. ALTERNATE E-2. - REFER TO NOTE 18.
13. ALTERNATE E-3. - REFER TO NOTE 18.
14. EXIST. PINE TREE.
15. EXIST. SANITARY LINE & MANHOLE.
16. NEW GAS & WATER LINE - E.C. SHALL COORDINATE WITH P.C. & WITH ALL PRESENT U/G UTILITIES IN AREA (TEL., ELEC., SAN. ETC.)
17. UNIT VENTILATOR AT CEILING.
18. IF ALT E-2 AND/OR ALT E-3 ARE NOT ACCEPTED THEN CCT. CONDUITS SHALL BE STUBBED & CAPPED AT THIS LOCATION IN BASE BID.
19. IF ALT E-1 IS NOT ACCEPTED THEN CCT. CONDUITS SHALL BE INSTALLED FROM PUMP ISLAND AREA TO STUB UP IN SE. CORNER OF AUTO MECH. 201 IN BASE BID FOR FUTURE. CAP ALL ENDS.

LIGHTING FLOOR PLAN (BUILDING "A")

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

PLOT PLAN

SCALE: 1" = 50 FT.



DATA

1. 4" DUCTS FOR MOTOR & BUS DUCT ELECTRIC SERVICES.
2. 4" DUCT FOR LIGHTING ELECTRIC SERVICES
3. 2" DUCT FOR EMERGENCY ELECTRIC SERVICES
4. 2" DUCT FOR TELEPHONE & FUTURE CABLE T.V. SERVICES
5. 4" DUCT FOR CLOCK SYSTEM, DOOR SECURITY SYSTEM & FIRE ALARM SYSTEM

UNDERGROUND DUCT BANK

NOT TO SCALE

REVISIONS:

PROJECT TITLE:
TECHNICAL EDUCATION BUILDINGS
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

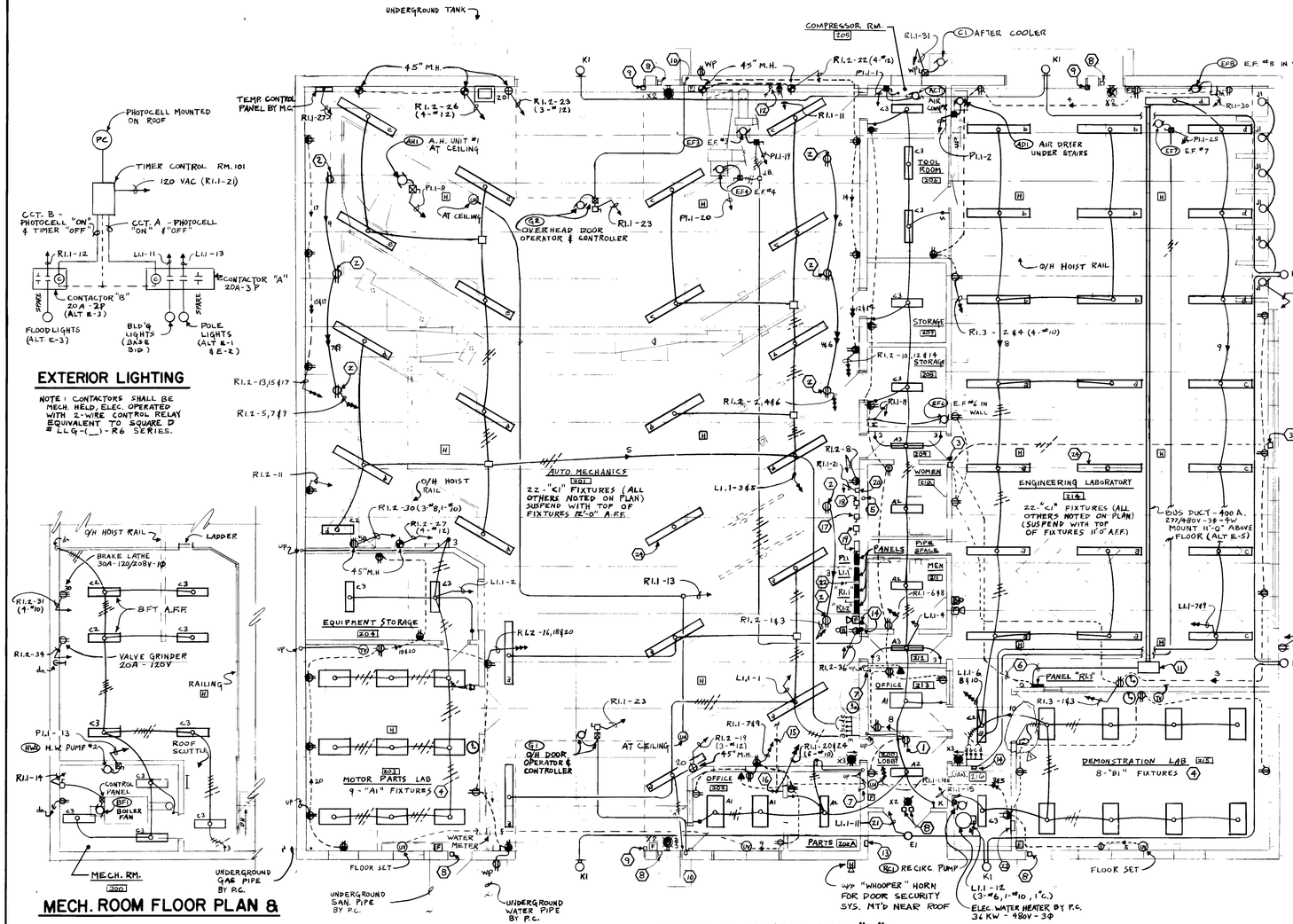
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CHECKED BY: G.S.
DRAWN BY: G.S. & R.R.
COMM. NO.: 78-642
DATE: 4-2-79
SHEET TITLE: FLOOR PLAN BUILDING "A" & PLOT PLAN
SHEET NO. E-2 OF 5

STATE OF OHIO 19237 H. O. HEAPY R. R. WEBER 41286 T. E. MONNIG 28706 R. J. PEARSON 24462 R. J. WERLING 33048 T. J. FERDELMAN 29067 REGISTERED PROFESSIONAL ENGINEER

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 1846 REGISTERED ARCHITECTS

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO



MECH. ROOM FLOOR PLAN & PLAN OF STORAGE AREA

FLOOR PLAN (BUILDING "B")

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

PLAN OF STORAGE AREA (ENGINEERING LAB & AUTO MECHANICS)

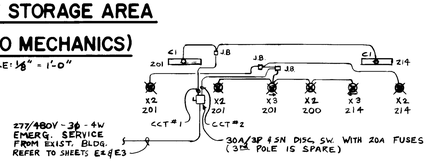
SCALE: 1/8" = 1'-0"

EXTERIOR LIGHTING

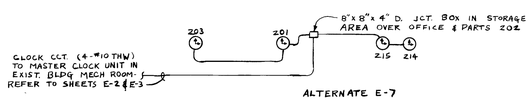
NOTE: CONTACTORS SHALL BE MECH. HELD, ELEC. OPERATED WITH 2-WIRE CONTROL RELAY EQUIVALENT TO SQUARE D # LL9-(_)-R6 SERIES.

PLAN OF STORAGE AREA (AUTO MECHANICS)

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

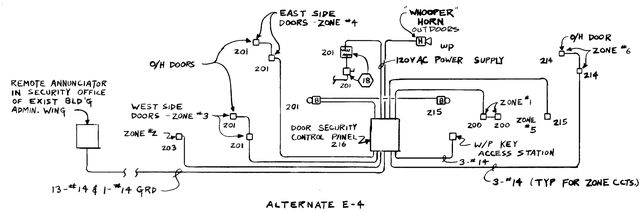


EXIT & EMERG. LIGHTS



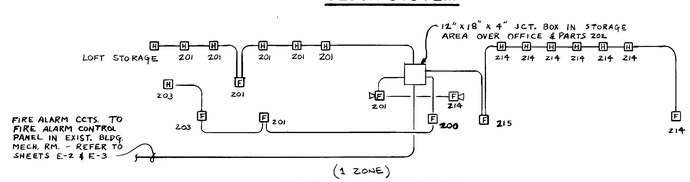
ALTERNATE E-7

CLOCK SYSTEM

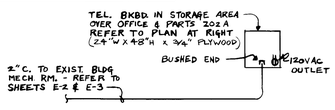


ALTERNATE E-4

DOOR SECURITY SYSTEM



FIRE ALARM SYSTEM



TELEPHONE SYSTEM

NOTES

1. WATER COOLER OUTLET - COORDINATE LOCATION WITH PLBG. CONTR.
2. OUTLET CEILING MOUNTED TO SERVE FUTURE O/H ELEC. REEL BY OWNER.
3. ROOM POWER EMERGENCY SHUTDOWN PUSHBUTTON SWITCH (48" M.H.) SWITCHES WIRED IN PARALLEL WITH 120VAC FROM LOCAL RECEPT. CCT. (EQUIVALENT TO SQUARE D #KK-25R RED MUSHROOM 1 N/O & 1 N/C CONTACT BLOCK) MOUNTED ON STAINLESS STEEL COVERPLATE ENGRAVED TO READ "EMERGENCY SHUTDOWN".
4. ROOM LTS. SHALL BE CIRCUITED FOR TWO-LEVEL LTG.
5. PHOTO-CELL CONTROL UNIT FOR BLDG. LTS. CCT. MOUNTED 12" ABOVE ROOF LEVEL ON CONDUIT STEM. COORDINATE ROOF SEALING WITH GEN. CONTR. - REFER TO DIAGRAM
6. SHUNT TRIP WIRING & CONDUIT TO PANEL MAIN & BUS DUCT BKR.
7. STUB OUT ABOVE STOR. LOFT ABOVE.
8. MAGNETIC DOOR SWITCH FLUSHED INTO DOOR FRAME FOR SECURITY SYSTEM. REFER TO DIAGRAM. (ALT. E-4)
9. SURFACE MT'D MAGNETIC SWITCH FOR O/H DOOR SERVING SECURITY SYSTEM - REFER TO DIAGRAM (ALT E-4)
10. O/H DOOR CONTROL SW. FURNISHED BY DOOR SUPPLIER & INSTALLED & WIRED BY E.C.
11. END CABLE BOX WITH 400 A/3P CCT. BKR. (30000 A I.C. MIN.) WITH SHUNT TRIP DEVICE. (ALT. E-5)
12. INSTALL 1" PLASTIC CONDUIT FROM SUMP TOP 1' TO WALL & RISE UP NEAR RECEPTACLE FOR FUTURE SUMP PUMP ELEC. CONNECTION.
13. FLUSH W/P KEY OPERATED ACCESS SWITCH SERVING DOOR SECURITY SYSTEM (ALT E-4)
14. FLUSH MOUNT 12 HOUR ADJUSTABLE ELAPSE TIME SWITCH (48" M.H.) TO CONTROL AN EXH. FAN. (12 HOUR SW. SHALL BE EQUIVALENT TO MARKTIME #90, 001 SERIES).
15. UNDERGROUND ELEC. SERVICE TO FUEL PUMPS CONT'D ON PLOT PLAN - SHEET E-2 (ALT E-1).
16. 20A-2 POLE KEY OPERATED SWITCH SERVING FUEL PUMPS - (EQUIVALENT TO ARROW HART #1192 & #1187 COVERPLATE) MT. AT 48" A.F.F. ENGRAVE COVERPLATE TO READ "FUEL PUMPS" (ALT E-1)
17. EXIT & EMERG. LTG. SWITCH - REFER TO DIST. DIAGRAM ON SHEET E-5.
18. 480V-1Φ FUSED DISC. SW. WITH 480V-1Φ TO 120/240V-1Φ TRANSFORMER "T2" ABOVE - REFER TO DIST. DIAGRAM ON SHEET E-5 (ALT E-4).
19. DIST. SWITCHES - REFER TO DIST. DIAGRAM ON SHEET E-5.
20. EXTERIOR LTG. CONTROL - REFER TO EXTERIOR LTG. CONTROL DIAGRAM ON THIS SHEET.
21. LTG. CCT. SHALL PASS THRU CONTACTOR "A".
22. TRANSFORMER T-1 - SUPPORT FROM WALL & BLDG. STRUCTURE WITH STEEL ANGLES - REFER TO DIST. DIAGRAM ON SHEET E-5.
23. DOOR SECURITY SYSTEM CONTROL PANEL (ALT E-4) REFER TO DIAGRAM ON THIS SHEET.
24. REFER TO EXIT & EMERG. LIGHTS DIAGRAM FOR CIRCUITING.

HEAPY & ASSOCIATES
CONSULTING ENGINEERS
DAYTON - COLUMBUS, OHIO

REVISIONS:
1. "AS BUILT" 7/17/81 (C3)

PROJECT TITLE:
TECHNICAL EDUCATION BUILDING
FOR
STATE OF OHIO
WRIGHT STATE UNIVERSITY
W. O. B. C.
CELINA, OHIO

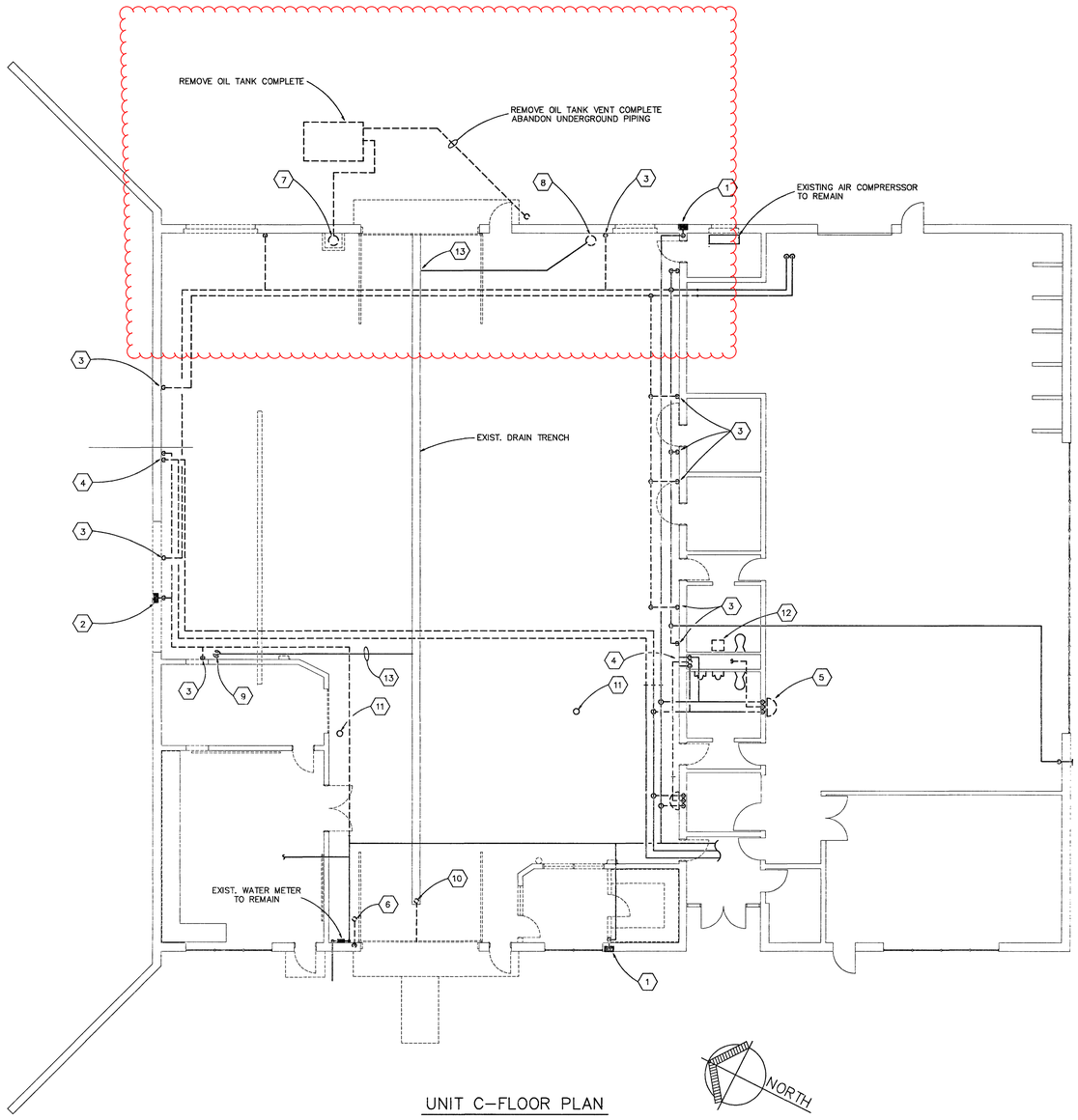
PREPARED FOR DEPARTMENT OF ADMINISTRATIVE SERVICES DIVISION OF PUBLIC WORKS

STRONG & HEFFELBOWER
· ARCHITECTS
· PLANNERS
505 N. CABLE RD.
LIMA, OHIO
45805
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CHECKED BY:	G.S.
DRAWN BY:	G.S. & R.R.
COMM. NO.:	78-642
DATE:	4-2-79
SHEET TITLE:	FLOOR PLAN - BLDG. "B" & DIAGRAMS
SHEET NO.	E-4 OF 5

STATE OF OHIO 10221 M. O. HEAPY R. R. WEBER 41286 T. E. MONNIG 26706 R. J. PEARSON 34463 B. J. WERLING 33868 T. J. FERDELMAN 20867 REGISTERED PROFESSIONAL ENGINEERS

STATE OF OHIO LYMAN J. STRONG 1743 RICHARD E. HEFFELBOWER 3846 REGISTERED ARCHITECTS



UNIT C–FLOOR PLAN

1/8"=1'-0"

GENERAL NOTES

1 INSTALLATIONS SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, CODES, ETC., AND SAME ARE MADE A PART OF THESE CONTRACT DOCUMENTS THE SAME AS IF REPEATED HEREIN.

2 CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

3 CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.

4 CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.

5 CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY – ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.

6 CONTRACTOR SHALL THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS PRIOR TO SUBMITTING A BID PROPOSAL.

7 PIPING. DUCTWORK, AND EQUIPMENT SHOWN IN LIGHT SOLID LINES INDICATE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

8 PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.

9 VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.

10 CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.

11 HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.

12 EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.

13 MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.

14 REMOVE ALL WORK MADE OBSOLETE BY NEW CONSTRUCTION.

15 DURING REMOVAL OF ITEMS SO INDICATED, CAUTION SHALL BE USED TO PREVENT DAMAGE TO ANY EQUIPMENT HAVING SALVAGE VALUE. ALL REUSABLE SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND BE RETAINED FOR HIS INSPECTION. ONLY ITEMS SO INSPECTED AND REJECTED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR. ALL OTHER ITEMS SHALL BE TURNED OVER AND DEPOSITED AS DIRECTED BY THE OWNER.

16 PIPING, DUCTWORK, AND EQUIPMENT SHOWN WITH DARK DASHED LINES INDICATE EXISTING PIPING, DUCTWORK, AND EQUIPMENT TO BE REMOVED UNLESS NOTED OTHERWISE.

PLAN NOTES

1 EXISTING CW HYDRANT TO REMAIN

2 REMOVE EXISTING CW HYDRANT COMPLETE, CAP PIPING AT MAIN.

3 REMOVE EXIST. COMPRESSED AIR OUTLET AND PIPING COMPLETE, CAP PIPING AT MAIN.

4 REMOVE EXIST. HOSE BIB COMPLETE

5 REMOVE EXIST. LAVATORY COMPLETE, CAP SANITARY AT FLOOR PATCH TO MATCH EXIST.

6 REMOVE EXIST. VENT CAP TOP OF VENT PIPE ABOVE ROOF

7 REMOVE EXIST. OIL DUMPING STATION COMPLETE

8 REMOVE EXIST. FLOOR ACCESS COMPLETE

9 REMOVE EXIST. FLOOR DRAIN COMPLETE

10 REMOVE DRAIN PIPE COMPLETE

11 EXISTING SANITARY FLOOR CLEANOUT TO REMAIN
RAISE EXIST. C.O. AS REQ'D TO MATCH NEW FLOOR ELEV.

12 REMOVE EXIST. LAV CAP CW,HW SAN & VENT
IN CHASE AS REQUIRED

13 ABANDON EXIST. PIPE UNDER FLOOR

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DURWOODY 4980 REGISTERED ARCHITECT

DRAWING OF RECORD

UNIT C–PLUMBING DEMO PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWN BY: JSH	DATE: JUNE 22, 1988	SET OF	SHEET
	COMM. NO.: 8776.00		P4

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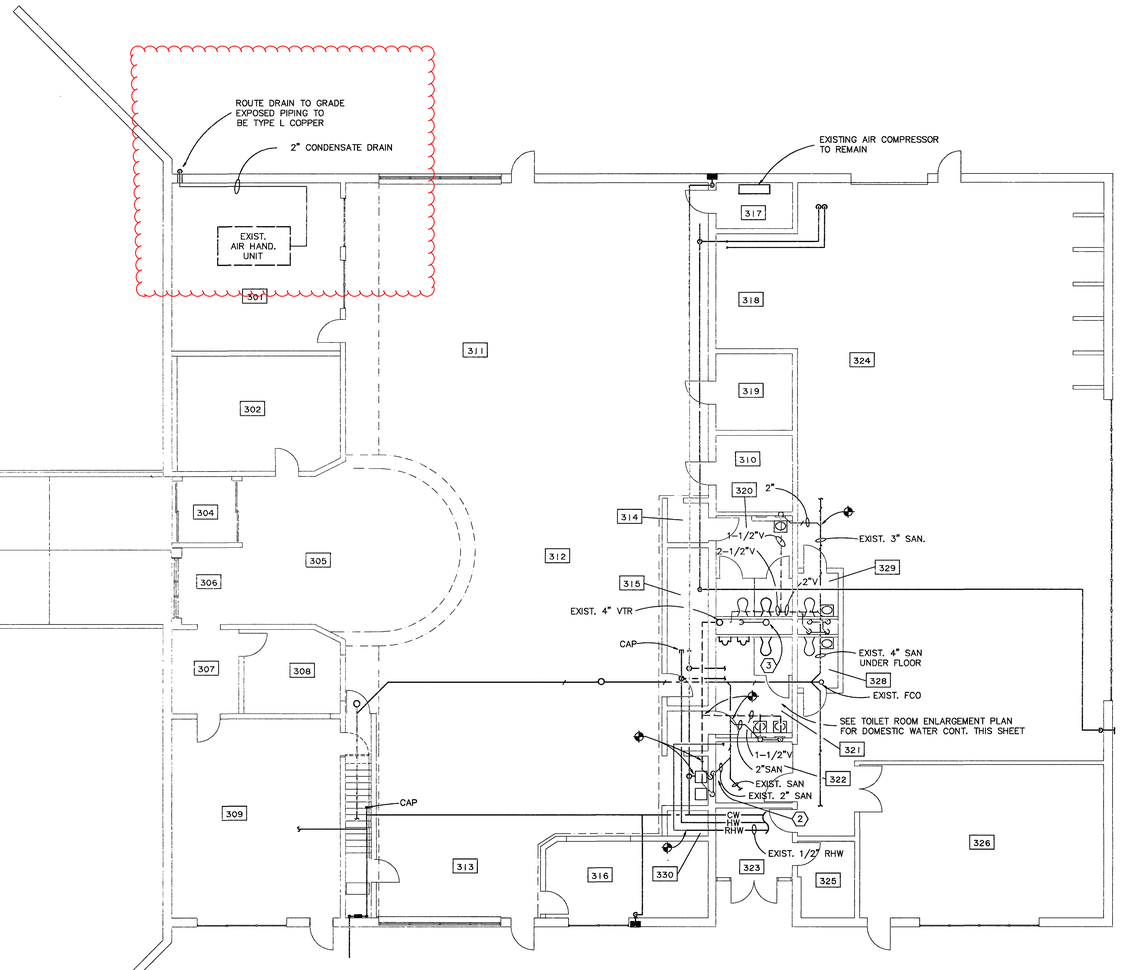
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13 MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.



UNIT–C PLUMBING PLAN

1/8"=1'–0"

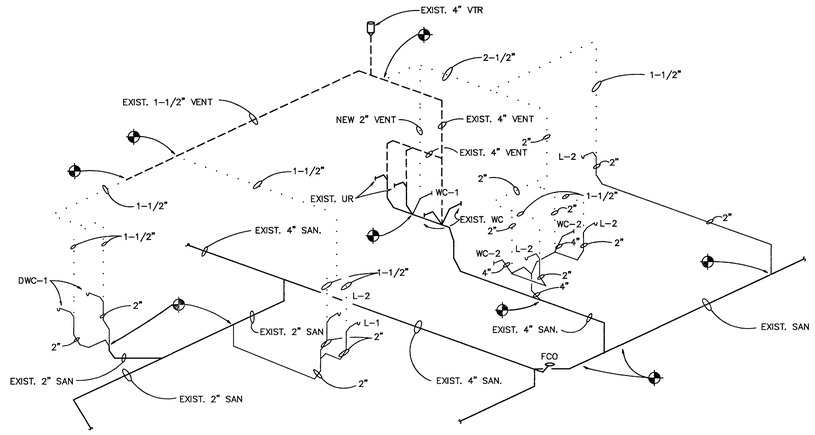
PLAN NOTES

1 EXISTING PLUMBING FIXTURES TO REMAIN

2 CONNECT 1–1/2" SAN. FROM DWC–1 TO EXIST. SAN. THRU FLOOR AS REQUIRED

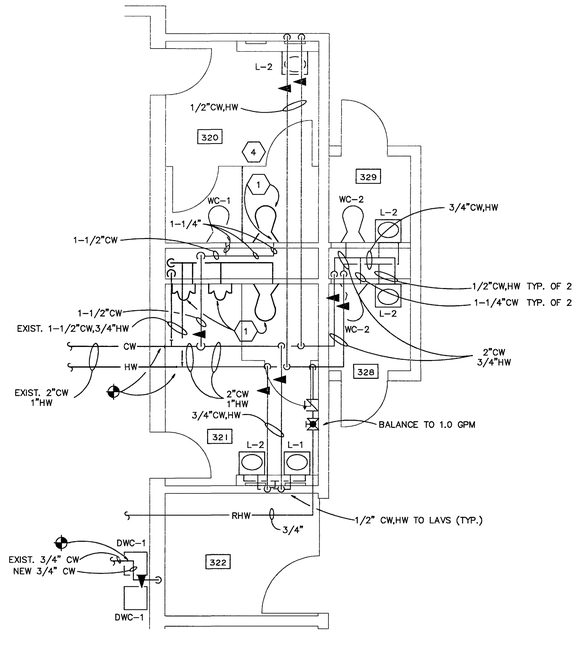
3 CONNECT 4" SAN. FROM NEW WC–1 TO EXIST. WATER CLOSET CARRIER 4" WASTE AS REQUIRED

4 DISCONNECT EXIST. CW SUPPLY TO EXIST. WATER CLOSET AND CONNECT NEW 1–1/4" CW SUPPLY TO EXIST. WC TRIM AS REQUIRED



SANITARY & VENT SCHEMATIC

NO SCALE



TOILET ROOM ENLARGEMENT PLAN

1/4"=1'–0"

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
301	TECH. RESOURCES	10'-0"		-
302	TOILET ROOM	9'-0"		-
303	TOILET ROOM			
304	VESTIBULE			
305	PASSAGE			
306	CIRCULATION DESK			
307	WORKROOM			
308	OFFICE			
309	WORKROOM			
310	DARKROOM			
311	READING AREA			
312	REFERENCE AREA			
313	READING AREA			
314	STACKS			
315	ELECTRICAL			
316	FACULTY			
317	JANITOR			
318	TOOLS			
319	PREVIEW ROOM			
320	TOILET ROOM			
321	TOILET ROOM			
322	TOOLS			
323	ENTRY			
324	MACHINE ROOM			
325	JANITOR			
326	CLASSROOM			

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWODY 4980 REGISTERED ARCHITECT

UNIT–C PLUMBING PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

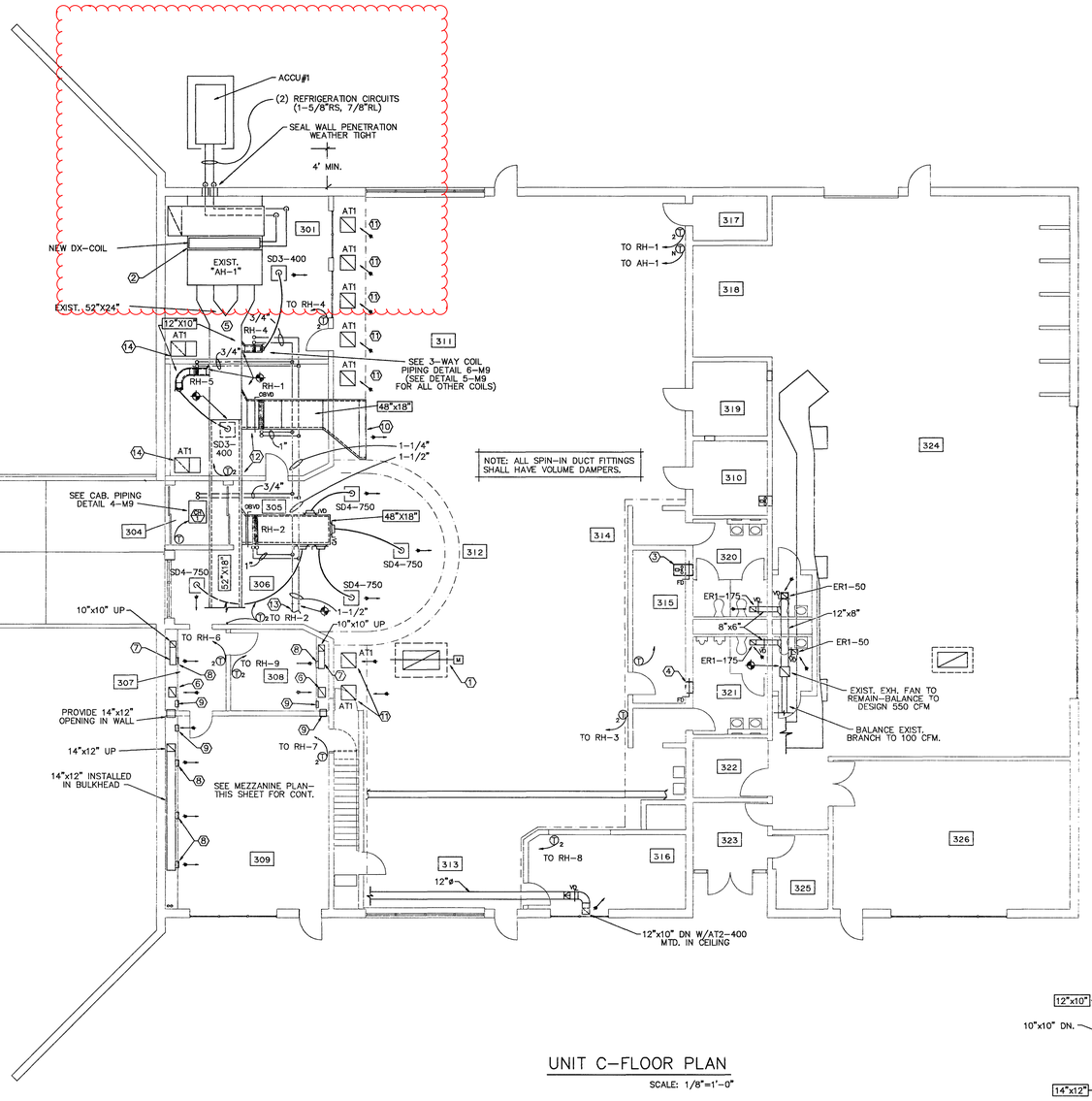
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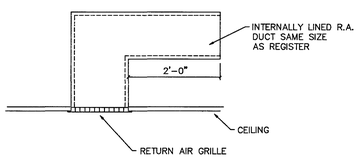
DRAWING OF RECORD

DRAWN BY: JSH | DATE: JUNE 22, 1988 | COMM. NO.: 8776.00 | SET OF | SHEET P5



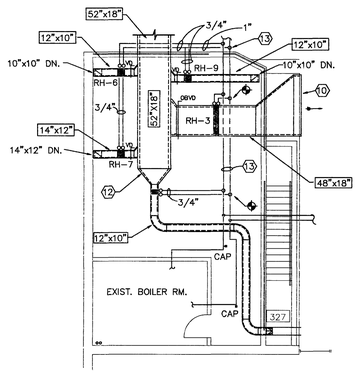
UNIT C-FLOOR PLAN

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



RETURN AIR REGISTER DETAIL

NO SCALE



MEZZANINE PLAN

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

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
301	TECH. RESOURCES	10'-0"		-
302	TOILET ROOM	9'-0"		-
303	TOILET ROOM	9'-0"		-
304	VESTIBULE			
305	PASSAGE			
306	CIRCULATION DESK			
307	WORKROOM			
308	OFFICE			
309	WORKROOM			
310	DARKROOM			
311	READING AREA		324	
312	REFERENCE AREA			
313	READING AREA			
314	STACKS			
315	ELECTRICAL			
316	FACULTY			
317	JANITOR			
318	TOOLS			
319	PREVIEW ROOM			
320	TOILET ROOM			
321	TOILET ROOM			
322	TOOLS			
323	ENTRY			
324	MACHINE ROOM			
325	JANITOR			
326	CLASSROOM			

GENERAL NOTES:

1 INSTALLATIONS SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, CODES, ETC., AND SAME ARE MADE A PART OF THESE CONTRACT DOCUMENTS THE SAME AS IF REPEATED HEREIN.

2 CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

3 CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.

4 CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.

5 CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY – ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.

6 CONTRACTOR SHALL THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS PRIOR TO SUBMITTING A BID PROPOSAL.

7 PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN LIGHT SOLID LINES INDICATE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

8 PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.

9 VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.

10 CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.

11 HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.

12 EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.

13 MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.

PLAN NOTES:

① T.C.C. TO PROVIDE NEW MOTORIZED DAMPER.

② T.C.C. TO SET EXIST. FACE & BY-PASS DAMPERS TO FULL OPEN POSITION ON EXIST. AH-1.

③ ELECTRICAL ROOM VENTILATION FAN, 1100 CFM, 1550 RPM, DIRECT DRIVE, 1/7 HP, 120V/60/1ø, 12" BLADE DIAMETER, .1" S.P., WALL MTD. PROP. FAN. MOUNT FAN IN WALL AS HIGH AS POSSIBLE. LIKE PENN MODEL P12R. M.C. SHALL BE RESPONSIBLE FOR MOVNG ELEC. CONDUIT FOR INSTALLATION OF FAN.

④ 24"x24" OPENING IN WALL AS HIGH AS POSSIBLE W/FIRE DAMPER AND EXPANDED METAL GRILLE. M.C. SHALL BE RESPONSIBLE FOR MOVING ELECTRICAL CONDUITS AS REQUIRED FOR INSTALLATION OF TRANSFER OPENING.

⑤ WRAP EXISTING SUPPLY DUCTWORK WITH INSULATION.

⑥ PROVIDE 16"x12" R.A. DUCT STUBBED INTO BULKHEAD UP 3' ABOVE MEZZ. FLOOR W/90° HORIZ. ELBOW. DUCTWORK SHALL BE INTERNALLY LINED.

⑦ 10"x10" INSTALLED IN BULKHEAD.

⑧ AT1-350 MTD. IN VERTICAL FACE OF BULKHEAD.

⑨ AT1-RETURN AIR REGISTER MTD. IN VERTICAL FACE OF BULKHEAD.

⑩ 8' OF WG1-3000 CFM. TOP OF GRILLE AT 15'-0" A.F.F.

⑪ AT1 RETURN AIR REGISTER MTD. IN HORIZ. FACE OF BULKHEAD.

⑫ INSTALL NEW DUCTWORK UP TIGHT TO ROOF STRUCTURE.

⑬ EXISTING 2" HHS, HHR.

⑭ PROVIDE INTERNALLY LINED SHEET METAL ELBOW ON AT1. SEE DETAIL THIS SHEET.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWOODY 4980 REGISTERED ARCHITECT

UNIT C-HVAC PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

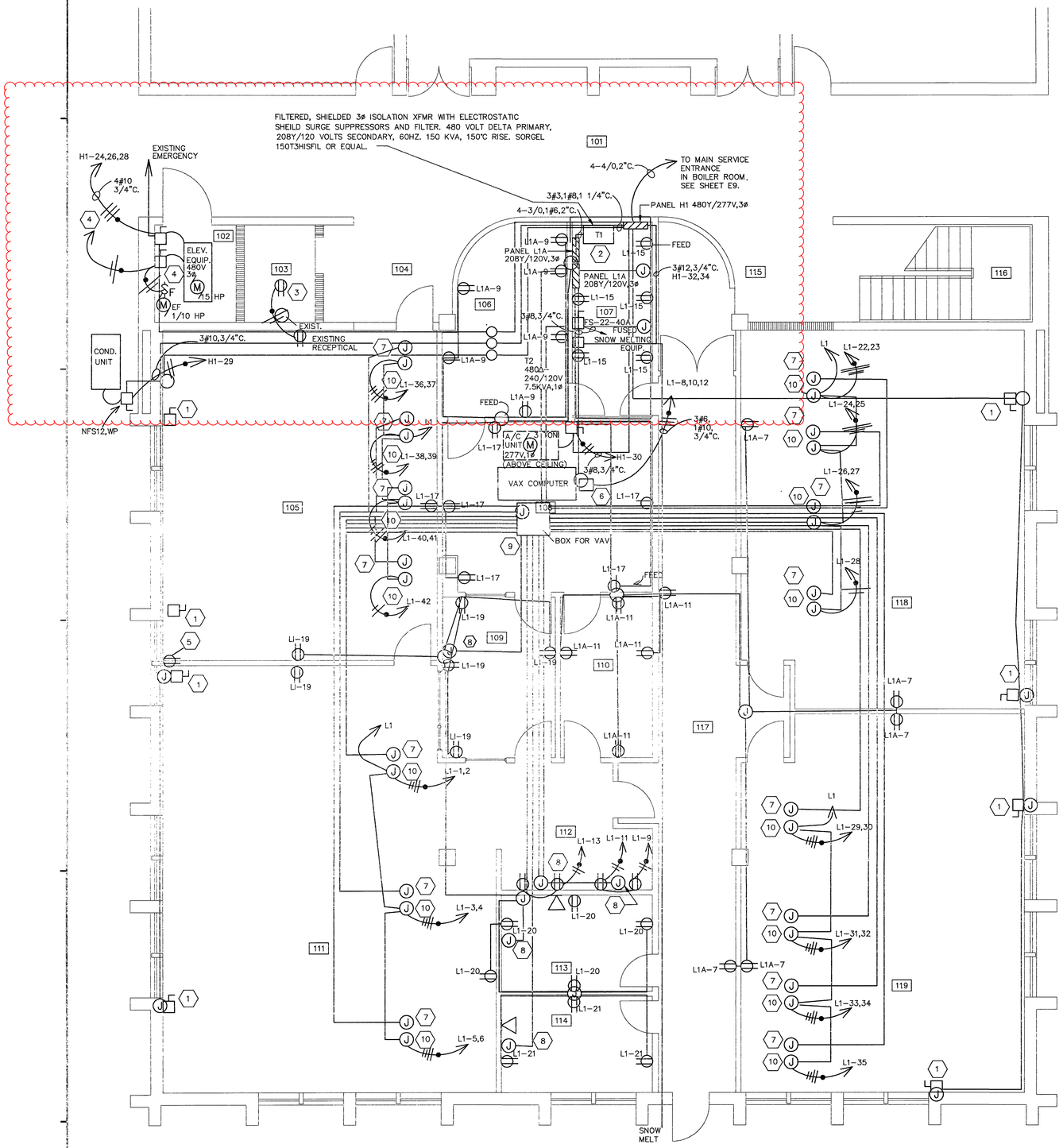
STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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POWER PLAN UNIT A

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

ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

PLAN NOTES

1. NONFUSED DISCONNECT SWITCH, NFS-12, FOR PTAC AIR CONDITIONERS. CONNECT WITH 3#12, 3/4"C TO 20A, 2P BREAKERS IN PANEL H1. (SEE SHEET E8). MAKE FINAL CONNECTIONS TO PTAC UNITS WITH FLEXIBLE CONDUIT. (ALL UNDER ALTERNATIVE BID). PTAC-PACKAGED TERMINAL AIR CONDITIONER.
2. FILTERED, SHIELDED 3ø ISOLATION XFMR WITH ELECTROSTATIC SHEILD SURGE SUPPRESSORS AND FILTER. 480 VOLT DELTA PRIMARY, 208Y/120 VOLTS SECONDARY, 60HZ. 150 KVA, 150°C RISE. SORGEL 150T3HISFIL OR EQUAL.
3. ELEVATOR PIT RECEPTACLE. CONNECT TO NEAREST EXISTING RECEPTACLE CIRCUIT.
4. ELEVATOR CAB LIGHTING CIRCUIT. CONNECT TO EMERGENCY LIGHTING CIRCUIT.
5. EXISTING RECEPTACLE TO BE REMOVED. MAINTAIN CONTINUITY OF CIRCUIT, INSTALL BLANK COVER BEFORE NEW WALL CONSTRUCTION.
6. EMMERSON MODEL 2500 POWER LINE CONDITIONER, 20KW, 3ø, 208V, WITH FOUR 30A, 125V LOCKING OUTPUT RECEPTACLES, PANEL MOUNTED.
7. DATA JUNCTION BOX (8"X8"X6" ABOVE CEILING LINE) WITH 1 1/2"C BACK TO 24"X24"X6" JUNCTION BOX ABOVE CEILING OVER VAX COMPUTER IN ROOM 108. FOR FUTURE USE BY OWNER. NEMA 1, SCREW COVER, ENAMEL. — SEPARATE RUNS TO 24"x24"x6" BOX
8. DATA JUNCTION BOX, 4 1/2"X5"X3", MOUNTED ON WALL AT RECEPTACLE HEIGHT WITH 3/4"C BACK TO 24"X24"X6" JUNCTION BOX IN ROOM 108. FOR FUTURE USE BY OWNER. NEMA 1, SCREW COVER, ENAMEL.
9. 24"X24"X6" JUNCTION BOX ABOVE CEILING OVER VAX COMPUTER.
10. 6"X6"X4" POWER JUNCTION BOX NEMA 1, SCREW COVER ENAMEL WITH CIRCUITS AS INDICATED. TERMINATE 12" PIGTAIL FOR EACH CIRCUIT AT JUNCTION BOX FOR FUTURE USE BY OWNER FOR PC AND VAX POWER. PC - PERSONAL COMPUTER VAX - BRAND NAME — - 3/4" C FOR POWER SEPARATE RUNS

○ - DENOTES "J" BOX

△ - DENOTES PHONE STUBS

* POWER FOR COMPUTER HAS 4 SEPARATE 3/4" EMT LINES; ROOMS 118, 119, 105, 111, HAS SEPARATE CONDUIT RUNS BUT THE WIRING IS COMPLETE AS SHOWN.

STATE OF OHIO — CLAIR E. HOWEY — 3962 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS R. DUPHOUSE — 4080 — REGISTERED ARCHITECT

POWER PLAN UNIT C

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

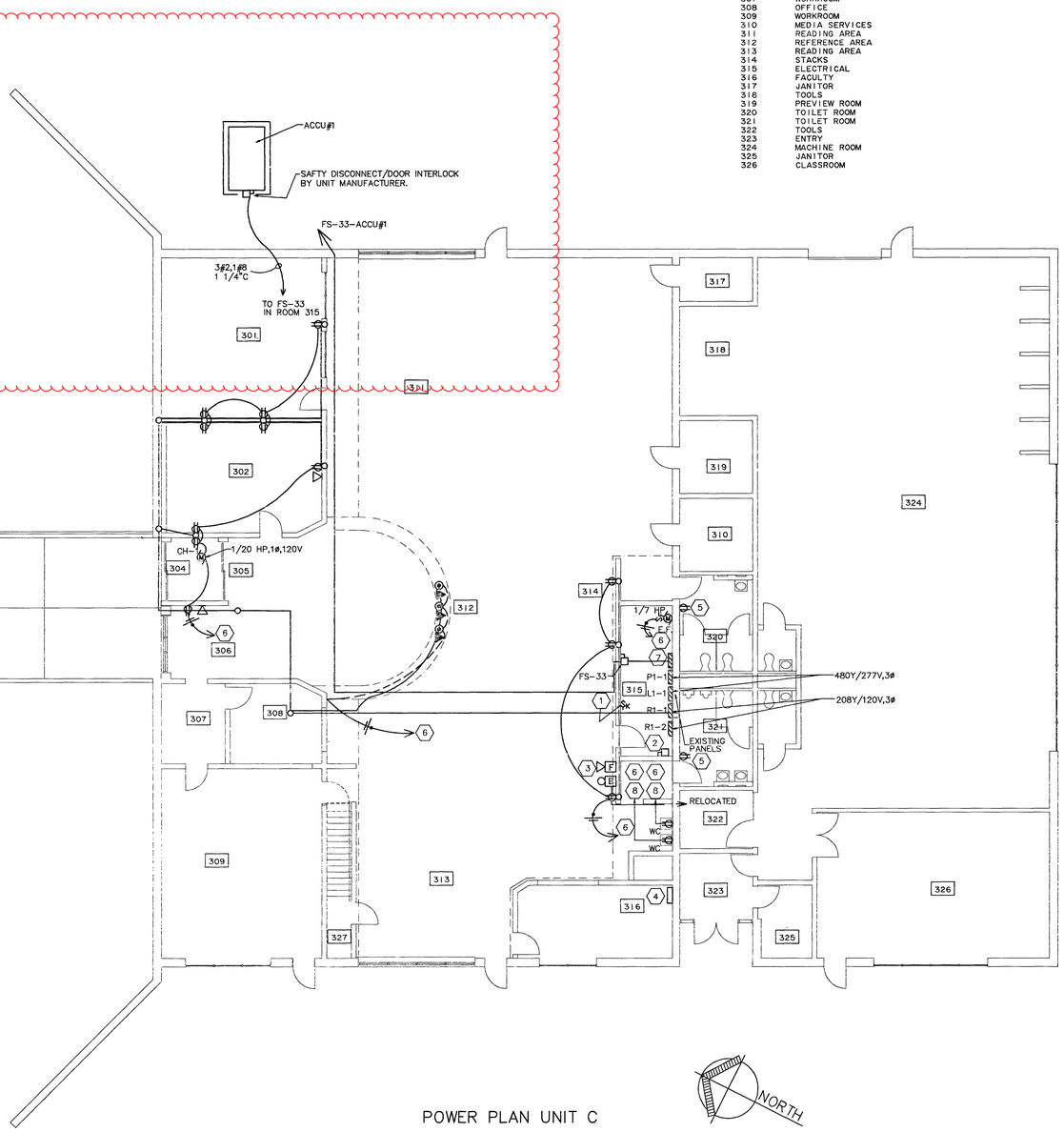
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ROOM NO	ROOM NAME
301	TECH. RESOURCES
302	CONFERENCE
303	NOT USED
304	VESTIBULE
305	PASSAGE
306	CIRCULATION DESK
307	WORKROOM
308	OFFICE
309	WORKROOM
310	MEDIA SERVICES
311	READING AREA
312	REFERENCE AREA
313	READING AREA
314	STACKS
315	ELECTRICAL
316	FACULTY
317	JANITOR
318	TOOLS
319	PREVIEW ROOM
320	TOILET ROOM
321	TOILET ROOM
322	TOOLS
323	ENTRY
324	MACHINE ROOM
325	JANITOR
326	CLASSROOM



POWER PLAN UNIT C

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

PLAN NOTES

1. RELOCATED FUEL PUMP SWITCH. SEE SHEET ED2.
2. RELOCATED 100A, 3P SAFTY SWITCH.SEE SHEET ED2.
3. RELOCATED FIRE ALARM HORN/STROBE AND DOOR SECURITY BELL AT 12' AFF.
4. EXISTING TELEPHONE TERMINAL BOARD ON MEZZANINE ABOVE 316.
5. RELOCATED RECEPTACLE. SEE SHEET ED2.
6. CIRCUIT TO SPARE 20A, 1P BREAKER IN PANEL R1-1.
7. INCOMING SERVICE JUNCTION BOX. DOUBLE LUG TO SERVICE; 3#2, 1#8, 1 1/4"C TO FS-33 FUSED AT 90A THEN TO ACCU#1.
8. IN SURFACE METAL RACEWAY.

0 - DENOTES "J" BOX

△ - TERMINATED IN "J" BOX ON TOP OF BLOCK

STATE OF OHIO · CLAIR E. HOWEY · 3952 · REGISTERED ARCHITECT

STATE OF OHIO · THOMAS L. DUNWOODY · 4980 · REGISTERED ARCHITECT

DRAWING OF RECORD

POWER PLAN UNIT C

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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PROJECT NO. 275-87-106

TRENARY LAB AND DWYER HALL RENOVATIONS

WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

CELINA. OHIO

FOR

STATE OF OHIO

WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

CELINA, OHIO

PREPARED FOR

DEPARTMENT OF ADMINISTRATIVE SERVICES

WILLIAM J. FLAHERTY — DIRECTOR

DIVISION OF PUBLIC WORKS

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	WRIGHT STATE UNIVERSITY (LAKE CAMPUS)	STATE ARCHITECT	DEPUTY DIRECTOR OF PUBLIC WORKS		

STATE OF OHIO CLAIR E. HOLLEY 3362 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWOODY 4980 REGISTERED ARCHITECT

ARCHITECTURAL AND STRUCTURAL ABBREVIATIONS

●	AT
A/C	AIR CONDITIONING
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFP	ACCORDION FOLDING PARTITION
ALT	ALTERNATIVE
ALUM	ALUMINUM
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
A/V	AUDIO-VISUAL
AWG	AMERICAN WIRE GAUGE
AWT	ACOUSTICAL WALL TREATMENT
∠	ANGLE
&	AND
BLDG	BUILDING
BLKG	BLOCKING
BM	BENCH MARK/BEAM
BOS	BOTTOM OF STEEL
BRG	BEARING
BRK	BRICK
BTWN	BETWEEN
BUR	BUILT-UP ROOF
CAB	CABINET
CAR	CARPET
CAT	CATALOG
CB	CHALKBOARD/CATCH BASIN
CFM	CUBIC FEET PER MINUTE
CH	CABINET HEATER
CI	CAST IRON
CJ	CONTROL JOINT
℄	CENTERLINE
CL	CLOSET
CLG	CEILING
CMP	CORRUGATED METAL PIPE
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS/CONTINUE
CORR	CORRIDOR/CORRUGATED
CT	CERAMIC TILE
CTBR	COUNTER BORE
CTSK	COUNTER SINK
CU. FT.	CUBIC FEET
CU. IN.	CUBIC INCH
CU. YD.	CUBIC YARD
CUSP	CUSPIDOR
CW	COLD WATER
CWF	CEMENTITIOUS WOOD FIBER
d	PENNY (NAILS, ETC.)
D	DEPTH/DEEP
°	DEGREE
DC	DISPLAY CASE
DEPT	DEPARTMENT
DTL	DETAIL
DF	DRINKING FOUNTAIN
DIA/Ø	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DL	DEAD LOAD
DRWG	DRAWING
DS	DOWNSPOUT
DT	DRAPERY TRACT
DWC	DRINKING WATER COOLER
E	EAST
EF	EACH FACE
EJ	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION/ELEVATOR
ENGR	ENGINEER
EP	ELECTRICAL PANELBOARD
EQUIP	EQUIPMENT
ESR	ELASTIC SHEET ROOFING
EW	EACH WAY
EWFS	EXTERIOR WALL FINISH SYSTEM
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR/EXTENSION

FD	FLOOR DRAIN
FH CAB	FIRE HOSE CABINET
FIN	FINISH
FIN.FL./FF	FINISH FLOOR
FL	FLOOR
FDN	FOUNDATION
FSSK	FLOOR SERVICE SINK
FT	FEET
FTG	FOOTING
FX	FIRE EXTINGUISHER
FX CAB	FIRE EXTINGUISHER CABINET
H	HEIGHT/HIGH
HB	HOSE BIBB
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HTG	HEATING
HVAC	HEATING/VENTILATING/AIR CONDITIONING
HW	HOT WATER
HWY	HIGHWAY
ID	INSIDE DIAMETER
IN "	INCH
INCL	INCLUDE(D), (ING)
INFO	INFORMATION
INSUL	INSULATION/INSULATE
INT	INTERIOR
INV	INVERT
JAN.CL.	JANITOR'S CLOSET
JB	JOIST BEARING
JS	JOIST SUBSTITUTE
JT	JOINT
KIT	KITCHEN
L	LENGTH/LONG
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
LB/#	POUND
LKR	LOCKER
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LVR	LOUVER
LW	LONG WAY
M	METER/THOUSAND
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MB	MASONRY BEARING
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MILLIMETER
MO	MASONRY OPENING
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NO./#	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFICE
OPNG	OPENING
OPP	OPPOSITE
OW	OPERABLE WALL
OZ	OUNCE

PA	PUBLIC ADDRESS
PL OR ℄	PLATE/PROPERTY LINE
PLAS	PLASTER
PLAS. LAM.	PLASTIC LAMINATE
PLBG	PLUMBING
PREFAB	PREFABRICATED
PS	PROJECT SCREEN
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSS	PENCIL SHARPENER SUPPORT
PVS	POLYVINYL CHLORIDE
PLYWD	PLYWOOD
QT	QUARRY TILE
R	RADIUS/RISER
RA	RETURN AIR
RB	RESILIENT BASE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCING
REQ'D	REQUIRED
REV	REVISION(S)
RM	ROOM
RO	ROUGH OPENING
RVB	RESILIENT VENTED BASE
R/W	RIGHT-OF-WAY
S	SOUTH
SA	SUPPLY AIR
SCH	SCHEDULE
SD	STORM DRAIN/SMOKE DETECTOR
SECT	SECTION
SF/	SQUARE FEET
SGFT	STRUCTURAL GLAZED FACING TILE
SHT	SHEET
SIM	SIMILAR
SLV	SHORT LEG VERTICAL
SPEC(S)	SPECIFICATION(S)
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STL	STEEL
STO	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SW	SHORT WAY
SYM	SYMMETRY(ICAL)
SYN	SYNTHETIC
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TA	TOILET ACCESSORY(IES)
TB	TACKBOARD
TEL	TELEPHONE
TERR	TERRAZZO
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TRANS	TRANSFORMER
TV	TELEVISION
TYP	TYPICAL
TWS	TACKABLE WALL SURFACE
UNO	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATOR
UR	URINAL
V. RET.	VAPOR RETARDER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VIT	VITREOUS
VOL	VOLUME
VS	VERSUS
VT	VINYL TILE
W	WEST/WIDE/WIDTH
W/	WITH
W/O	WITHOUT
WA	WARDROBE ACCESSORIES
WB	WOOD BASE
WC	WATER CLOSET/WND COLUMN
WD	WOOD
WH	WATER HEATER
WP	WORKING POINT
WSSK	WALL SERVICE SINK
WWF	WELDED WIRE FABRIC
YD	YARD/YARD DRAIN

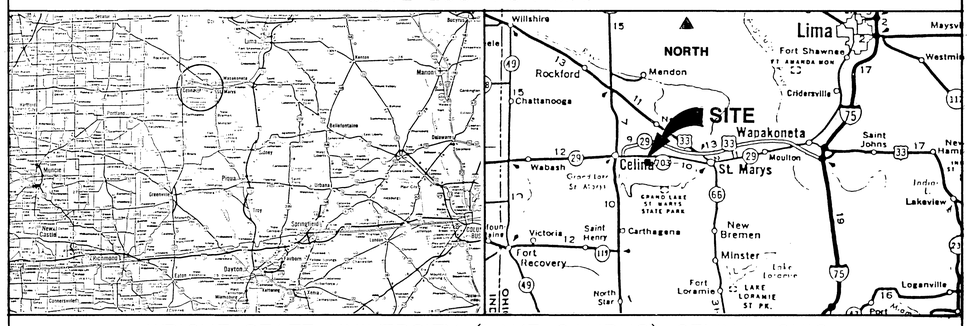
ARCHITECTURAL MATERIAL SYMBOL LEGEND

- ASPHALT
- EARTH
- GRAVEL OR STONE
- SAND, GROUT, PLASTER, OR GWB
- CONCRETE
- TERRAZZO
- CUT STONE
- RUBBLE
- MARBLE
- SLATE
- PRECAST CONCRETE
- FACE BRICK
- FIRE BRICK
- GLAZED BRICK
- CONCRETE MASONRY UNIT (PLAN)
- CONCRETE MASONRY UNIT (CORED, IN SECTION)
- CONCRETE MASONRY UNIT (SOLID, IN SECTION)
- SPRAY-ON INSULATION OR FIRE PROTECTION
- LIGHTWEIGHT INSULATING CONCRETE
- CERAMIC TILE, QUARRY TILE OR STRUCTURAL GLAZED TILE (LARGE SCALE)
- WIRE FENCE OR PARTITION
- CORRUGATED METAL FORMING
- METAL ROOF DECK
- REINFORCING BARS
- METAL (IN SECTION)
- METAL SHAPES
- WWF IN CONCRETE SLAB
- LAMINATED WOOD BEAM (SMALL SCALE, SECTION)
- BATT INSULATION
- RIGID INSULATION
- ROUGH WOOD
- FINISH WOOD
- WOOD OTHER THAN NOMINAL
- PLYWOOD
- GYPSUM WALLBOARD (LARGE SCALE)
- STUD WALL
- SOLID PANEL FOLDING PARTITION OR OPERABLE WALL
- FABRIC ACCORDION FOLDING PARTITION
- ACOUSTIC TILE CEILING
- CARPET

ARCHITECTURAL DRAWING SYMBOLS LEGEND

- LEVEL LINE
- TB#1 TEST BORING & NO.
- 881 EXISTING CONTOUR
- 881 NEW CONTOUR
- 811.5' EXISTING POINT ELEVATION
- 813.2' NEW POINT ELEVATION
- (K) WINDOW TYPE
- 101 A DOOR NUMBER
- A 3 STRUCTURAL GRID REFERENCE
- (012) CASEWORK NUMBER
- (E18) EQUIPMENT NUMBER
- A LOCKER TYPE
- 2-A15 DETAIL REFERENCE
- A15 ROOM NO. SEE SCHEDULE FOR ROOM AREA & CEILING HEIGHT
- 3-A12 WALL OR DETAIL SECTION
- A-A37 BUILDING SECTION
- 3-A12 DETAIL / 3/4"=1'-0" DETAIL OR SECTION TITLE

SITE LOCATION MAP



WRIGHT STATE UNIVERSITY (LAKE CAMPUS) CELINA, OHIO

INDEX OF DRAWINGS

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A3	UNIT C LIBRARY FLOOR PLAN
A4	ELEVATIONS
A5	SECTIONS
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M3	UNIT A MECHANICAL DEMOLITION PLAN
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M5	UNIT C MECHANICAL DEMOLITION PLAN
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STATE OF OHIO — CLAIR S. ENGLERT — 3912 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS DUNWOODY — 4980 — REGISTERED ARCHITECT

DRAWING OF RECORD

INDEX SHEET

PROJECT NUMBER:

275-87-106

TRENARY LAB / DWYER HALL RENOVATIONS

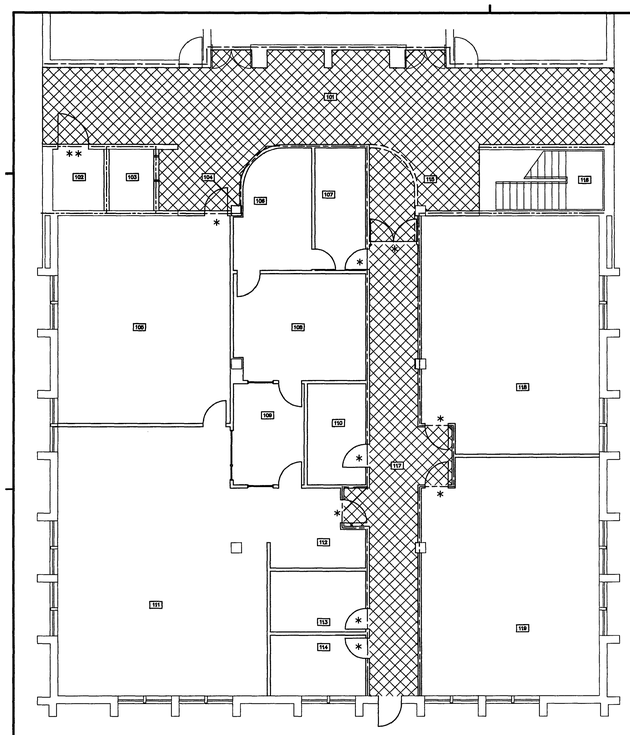
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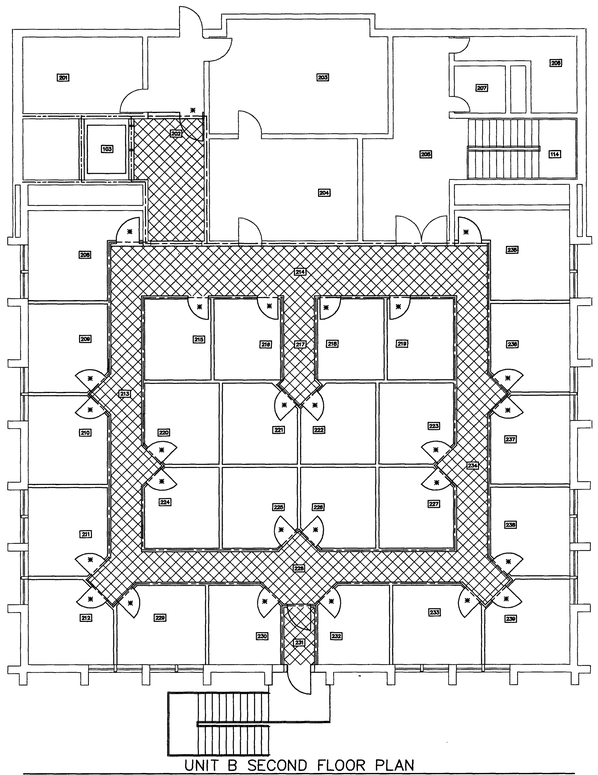
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DRAWN BY: KS	DATE: JUNE 22, 1988	SET OF	SHEET
	COMM. NO.: 8776.00		INDEX



UNIT A FIRST FLOOR PLAN

1/8"=1'-0"



UNIT B SECOND FLOOR PLAN

1/8"=1'-0"

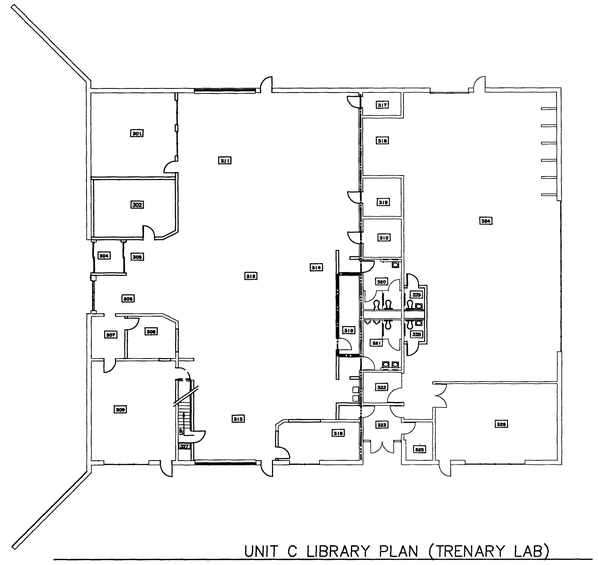
ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
301	TECH. RESOURCES	10'-0"		-
302	CONFERENCE ROOM			
303	NOT USED			
304	VESTIBULE			
305	PASSAGE			
306	CIRCULATION DESK			
307	WORKROOM			
308	OFFICE			
309	WORKROOM			
310	MEDIA SERVICES			
311	READING AREA			
312	REFERENCE AREA			
313	READING AREA			
314	STACKS			
315	ELECTRICAL			
316	FACULTY			
317	JANITOR			
318	TOOLS			
319	PREVIEW ROOM			
320	TOILET ROOM			
321	TOILET ROOM			
322	TOOLS			
323	ENTRY			
324	MACHINE ROOM			
326	JANITOR			
326	CLASSROOM			
327	STAIR			
328	TOILET ROOM			
329	TOILET ROOM			



UNIT C LIBRARY PLAN (TRENARY LAB)

1/16"=1'-0"

DWYER HALL

BUILDING AREA

FIRST FLOOR (EXIST) = 29,184 S.F.+ 9,367 S.F.
FIRST FLOOR (RENOV) = 5,184 S.F.
TOTAL FIRST FLOOR = 43,735 S.F.

SECOND FLOOR (EXIST) = 16,448 S.F.
SECOND FLOOR (RENOV) = 5,184 S.F.
TOTAL SECOND FLOOR = 21,632 S.F.

BUILDING MATERIALS

ROOF	STEEL TRUSS – METAL DECK
SECOND FLOOR	STEEL BM. FRAMING – 4" CONC. FLOOR
FIRST FLOOR	CONCRETE FLOOR
WALLS	MASONRY
CEILING	ACT

BUILDING CONSTRUCTION

EXISTING (2) STORY STRUCTURE WILL HAVE GROUP CLASSIFICATION "E". CONSTRUCTION CLASSIFICATION THROUGHOUT BUILDING HAS BEEN DESIGNED TO MEET OHIO CODE TYPE (2B) (NON-COMBUSTIBLE) CONSTRUCTION.

EXIT AND SHAFT ENCLOSURES SHALL HAVE FIRE-RESISTANT RATING OF NOT LESS THAN (1) HOUR

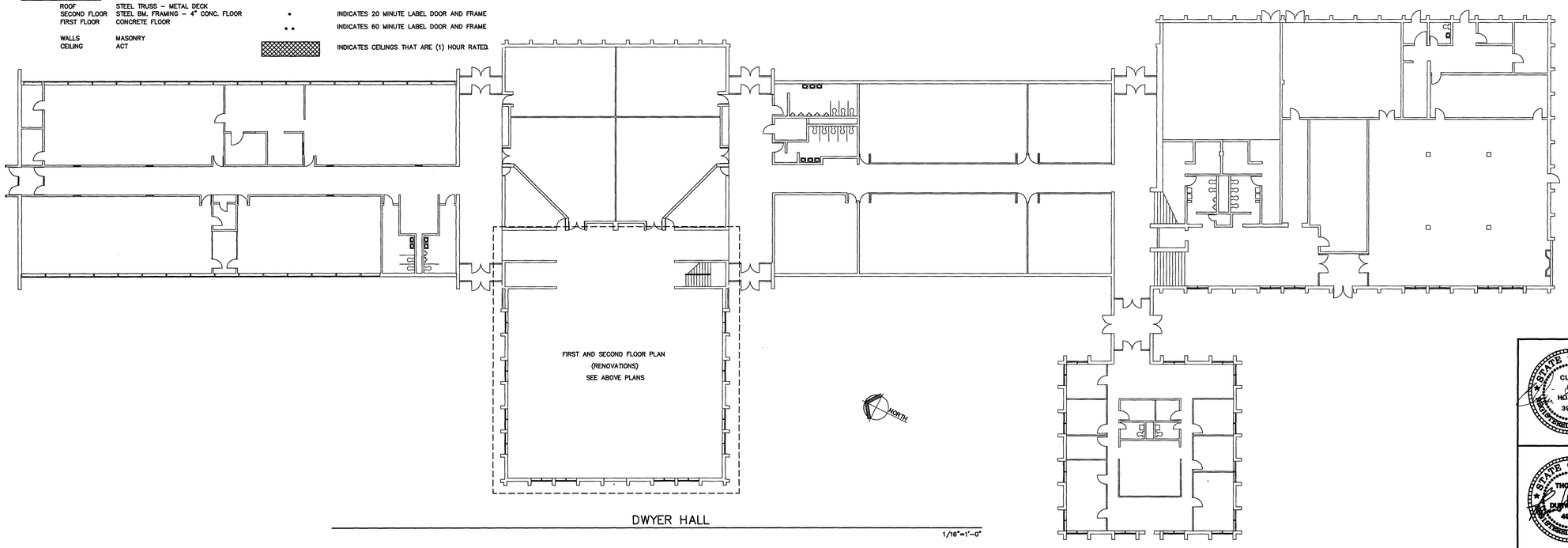
—— – —— INDICATES WALLS THAT ARE (1) HOUR RATED

—— – – —— INDICATES WALLS THAT ARE (2) HOUR RATED

* INDICATES 20 MINUTE LABEL DOOR AND FRAME

** INDICATES 60 MINUTE LABEL DOOR AND FRAME

INDICATES CEILINGS THAT ARE (1) HOUR RATED



DWYER HALL

1/16"=1'-0"

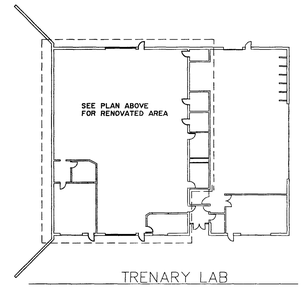
TRENARY LAB

BUILDING MATERIALS

ROOF	STEEL TRUSS – METAL DECK
FLOOR	CONCRETE
WALLS	MASONRY

TOTAL BUILDING SQUARE FOOTAGE = 12,193
ALTERATIONS FOR LIBRARY USE = 6,700 S.F.

NOTE
GROUP CLASSIFICATION A3



TRENARY LAB

GENERAL NOTES

1. WHERE DIFFERENT FLOOR MATERIALS MEET, THEY SHALL MEET UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
2. ALL MASONRY WALLS THAT RUN UP TO THE UNDERSIDE OF THE DECK SHALL HAVE A 2" JOINT AT THE DECK FILLED WITH MINERAL WOOL INSULATION TO ALLOW FOR DEFLECTION.
3. WALLS THAT DO NOT LAY OUT IN FULL OR HALF BLOCK LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES WITH LESS THAN A 4" EXPOSURE.
4. SEE DETAILS ON SHEET FOR TYPICAL CMU CONTROL JOINTS AND FOR TYPICAL GYPSUM WALLBOARD PARTITIONS.
5. SINGLE WIDTH MASONRY WALLS ARE INDICATED WITH A NOMINAL DIMENSION.

ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL STATE. EXAMPLE SEED LAWN AREAS, PATCH ASPHALTIC PAVING ETC.

STATE OF OHIO · CLAIR E. HOWEY · 3962 · REGISTERED ARCHITECT

STATE OF OHIO · THOMAS R. DUPKOSKY · 4980 · REGISTERED ARCHITECT

CODE SHEET PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

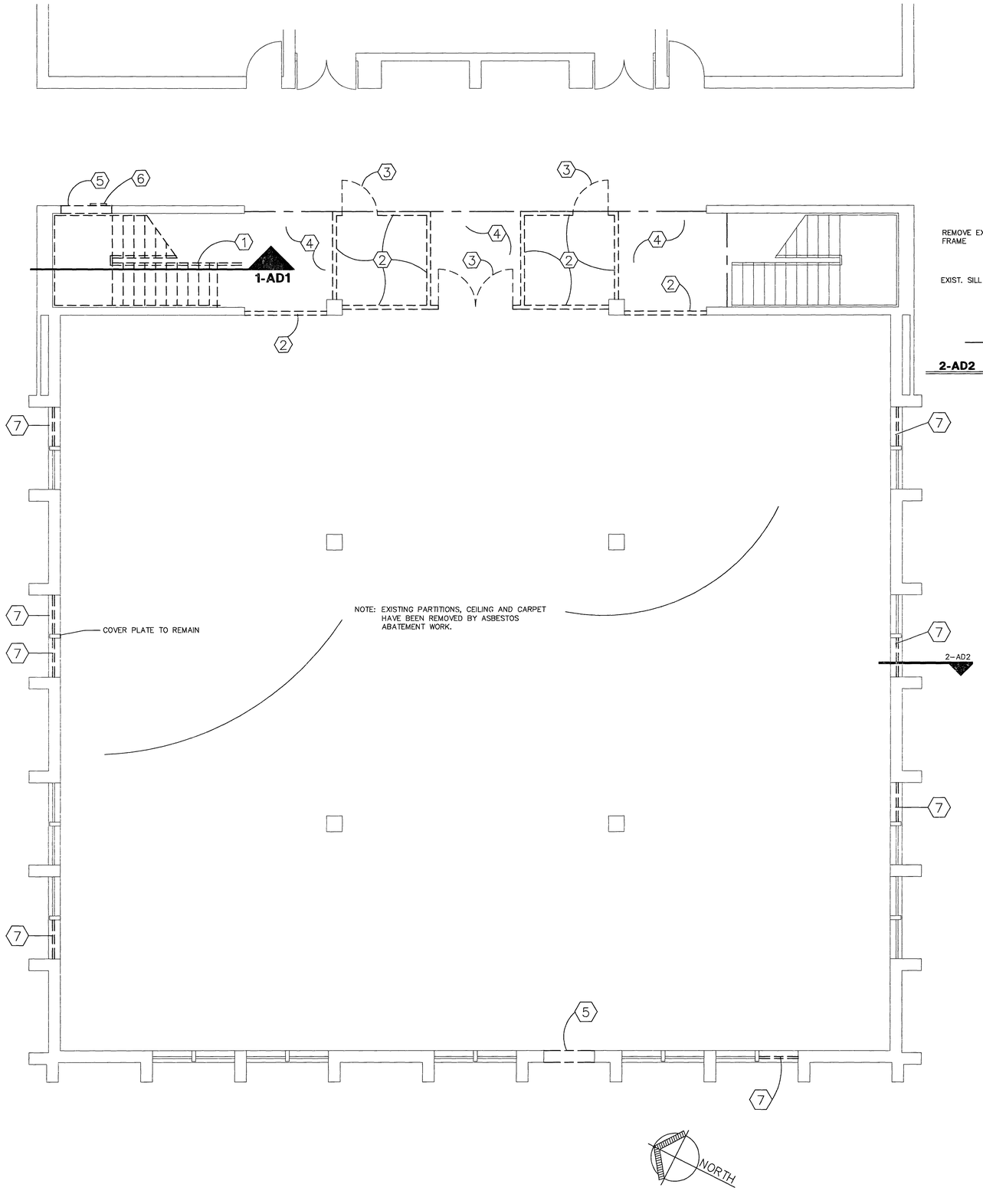
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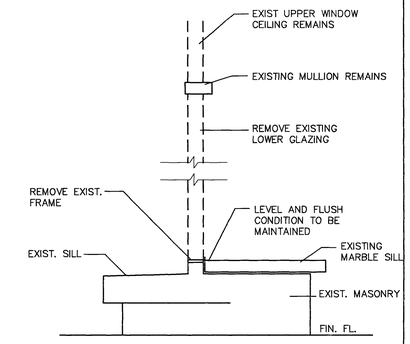
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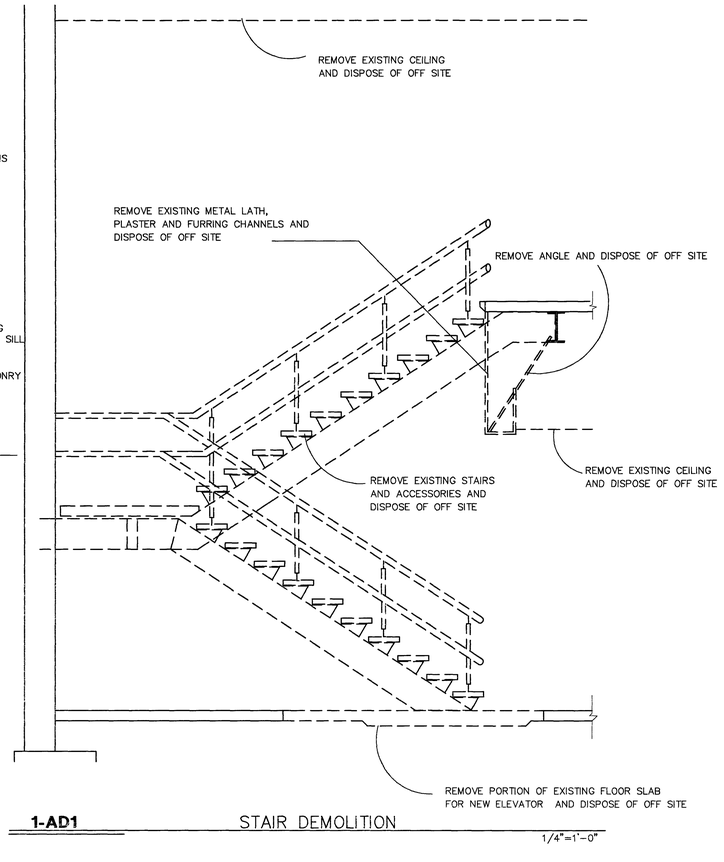
UNIT A DEMOLITION FLOOR PLAN

1/4"=1'-0"



2-AD2 WINDOW DEMOLITION

NO SCALE



1-AD1 STAIR DEMOLITION

1/4"=1'-0"

DEMOLITION NOTES

1. REMOVE STAIR AND ACCESSORIES FOR NEW ELEVATOR – SEE DETAIL 1–AD1.
2. REMOVE AND DISPOSE OF OFF SITE WALL AND ACCESSORIES IN THEIR ENTIRETY.
3. REMOVE AND DISPOSE OF OFF SITE DOOR, FRAME AND ACCESSORIES IN THEIR ENTIRETY.
4. REMOVE AND DISPOSE OF OFF SITE VINYL TILE IN ITS ENTIRETY.
5. REMOVE PORTION OF WALL AND DISPOSE OF OFF SITE FOR NEW DOOR(S) AND FRAME. SEE PLAN FOR EXACT LOCATION AND SIZE.
6. REMOVE FIRE EXTINGUISHER AND CABINET AND RELOCATE SEE A1 FOR NEW LOCATION. REMOVE ADDITIONAL MASONRY IF NECESSARY TO PROVIDE ENOUGH WIDTH FOR FULL WIDTH CMU TO MATCH COURSING.
7. REMOVE LOWER WINDOW FRAME, GLAZING, AND DISPOSE OF OFF SITE. SEE DETAIL 2–AD1

NOTE: THE OWNER HAS THE RIGHT TO REMOVE ITEMS. CALL FOR REMOVAL BY CONTRACT PRIOR TO CONSTRUCTION.

GENERAL DEMOLITION NOTES

A. UNLESS NOTED OTHERWISE, ALL DEMOLITION TO BE PART OF THE WORK BY GENERAL CONTRACTOR.

B. "FLOORING" DENOTES ALL FLOOR COVERING MATERIALS, INCLUDING BACKINGS, ADHESIVES, DOWN TO, BUT EXCLUSIVE OF, FLOOR SLABS, AND STRUCTURAL SLABS AND MATERIALS, UNLESS NOTED OTHERWISE.

C. "CEILING" DENOTES ALL CEILING MATERIALS SUSPENSION SYSTEMS, ADHESIVE RESIDUES, MOLDINGS, ETC., UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.

D. WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2" (MIN.) BELOW THE EXISTING FLOOR SLAB (UNLESS SETTING ON SLAB). PATCH WITH NEW CONCRETE TO FLUSH OUT WITH THE EXISTING FLOOR SLAB.

E. WHEN OPENINGS ARE CUT INTO AN EXISTING WALL, THE OPENING SHALL BE A MINIMUM OF 1'–4" LONGER THAN THE FINISHED OPENING REQUIRED TO ALLOW FOR 8" (MIN.) OF NEW CMU TOOTHED IN AT ALL EDGES.

F. AFTER THE DEMOLITION OF ANY MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.

G. ALL MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED SUCH AS TO BE BEHIND FINAL FINISH SYSTEMS.

H. SEE MECHANICAL AND ELECTRICAL PLAN FOR ADDITIONAL DEMOLITION ITEMS.

I. ALL MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF SITE UNLESS DIRECTED BY OWNER OTHERWISE.

STATE OF OHIO CLAIR HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS A. DERWOODY 4980 REGISTERED ARCHITECT

UNIT A DEMOLITION FLOOR PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

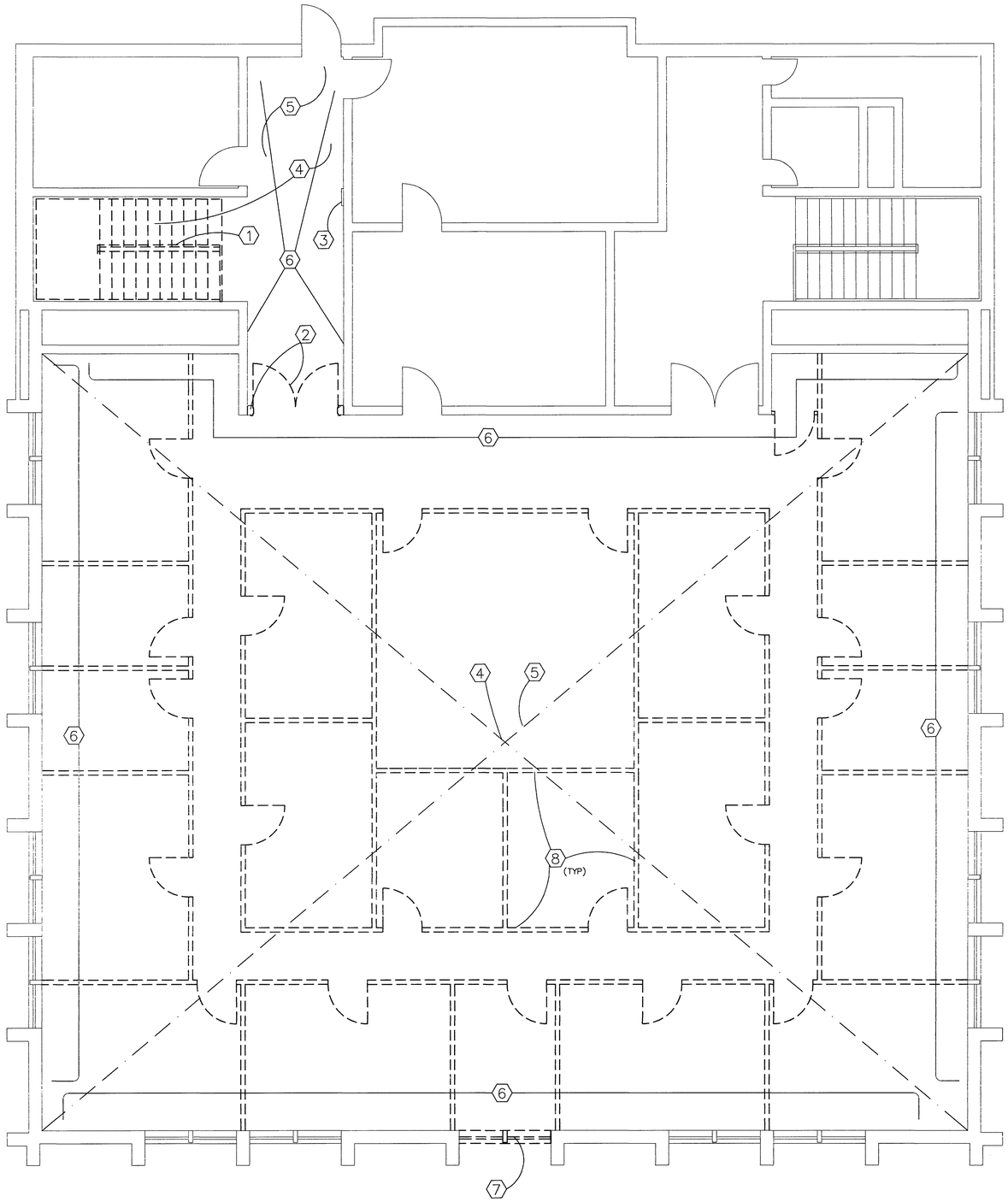
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UNIT B DEMOLITION FLOOR PLAN

1/4"=1'-0"

DEMOLITION NOTES

1. REMOVE STAIR AND ACCESSORIES FOR NEW ELEVATOR – SEE DETAIL 1–AD1.
2. REMOVE DOOR FRAME AND WALL ABOVE IN THEIR ENTIRETY AND DISPOSE OF OFF SITE.
3. REMOVE FIRE EXTINGUISHER AND CABINET AND RELOCATE – SEE PLAN FOR NEW LOCATION. REMOVE ADDITIONAL MASONRY IF NECESSARY TO PROVIDE ENOUGH WIDTH FOR FULL WIDTH CMU TO MATCH COURSING.
4. REMOVE AND DISPOSE OF OFF SITE EXISTING CEILING AND ITS ACCESSORIES IN ITS ENTIRETY.
5. REMOVE AND DISPOSE OF OFF SITE CARPET IN VARIOUS ROOMS. PREPARE EXISTING VINYL TILE TO ACCEPT NEW CARPET. REMOVE LOOSE TILE AND LATEX TO PROVIDE UNIFORM CARPET SUBSTRATE.
6. REMOVE AND DISPOSE OF OFF SITE EXISTING BASE AND PREPARE SURFACE TO RECEIVE NEW BASE.
7. REMOVE WINDOW FRAME GLAZING AND ACCESSORIES AND PORTION OF WALL FOR NEW STAIR, DOOR AND FRAME, AND DISPOSE OF OFF SITE. SEE PLAN AND DETAILS FOR EXACT LOCATION, SIZE, AND REQUIREMENTS.
8. EXISTING PARTITIONS AND DOORS TO BE REMOVED BY OWNER. CONTRACTOR TO REMOVE MISCELLANEOUS. ACCESSORIES LEFT BY OWNER.

GENERAL DEMOLITION NOTES

A. UNLESS NOTED OTHERWISE, ALL DEMOLITION TO BE PART OF THE WORK BY GENERAL CONTRACTOR.

B. "FLOORING" DENOTES ALL FLOOR COVERING MATERIALS, INCLUDING BACKINGS, ADHESIVES, DOWN TO, BUT EXCLUSIVE OF, FLOOR SLABS, AND STRUCTURAL SLABS AND MATERIALS, UNLESS NOTED OTHERWISE.

C. "CEILING" DENOTES ALL CEILING MATERIALS SUSPENSION SYSTEMS, ADHESIVE RESIDUES, MOLDINGS, ETC., UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.

D. WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2" (MIN.) BELOW THE EXISTING FLOOR SLAB (UNLESS SETTING ON SLAB). PATCH WITH NEW CONCRETE TO FLUSH OUT WITH THE EXISTING FLOOR SLAB.

E. WHEN OPENINGS ARE CUT INTO AN EXISTING WALL, THE OPENING SHALL BE A MINIMUM OF 1'–4" LONGER THAN THE FINISHED OPENING REQUIRED TO ALLOW FOR 8" (MIN.) OF NEW CMU TOOTHED IN AT ALL EDGES.

F. AFTER THE DEMOLITION OF ANY MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.

G. ALL MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED SUCH AS TO BE BEHIND FINAL FINISH SYSTEMS.

H. SEE MECHANICAL AND ELECTRICAL PLAN FOR ADDITIONAL DEMOLITION ITEMS.

I. ALL MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF SITE UNLESS DIRECTED BY OWNER OTHERWISE.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DUNWODDY 4980 REGISTERED ARCHITECT

DRAWING OF RECORD

UNIT B DEMOLITIOM FLOOR PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

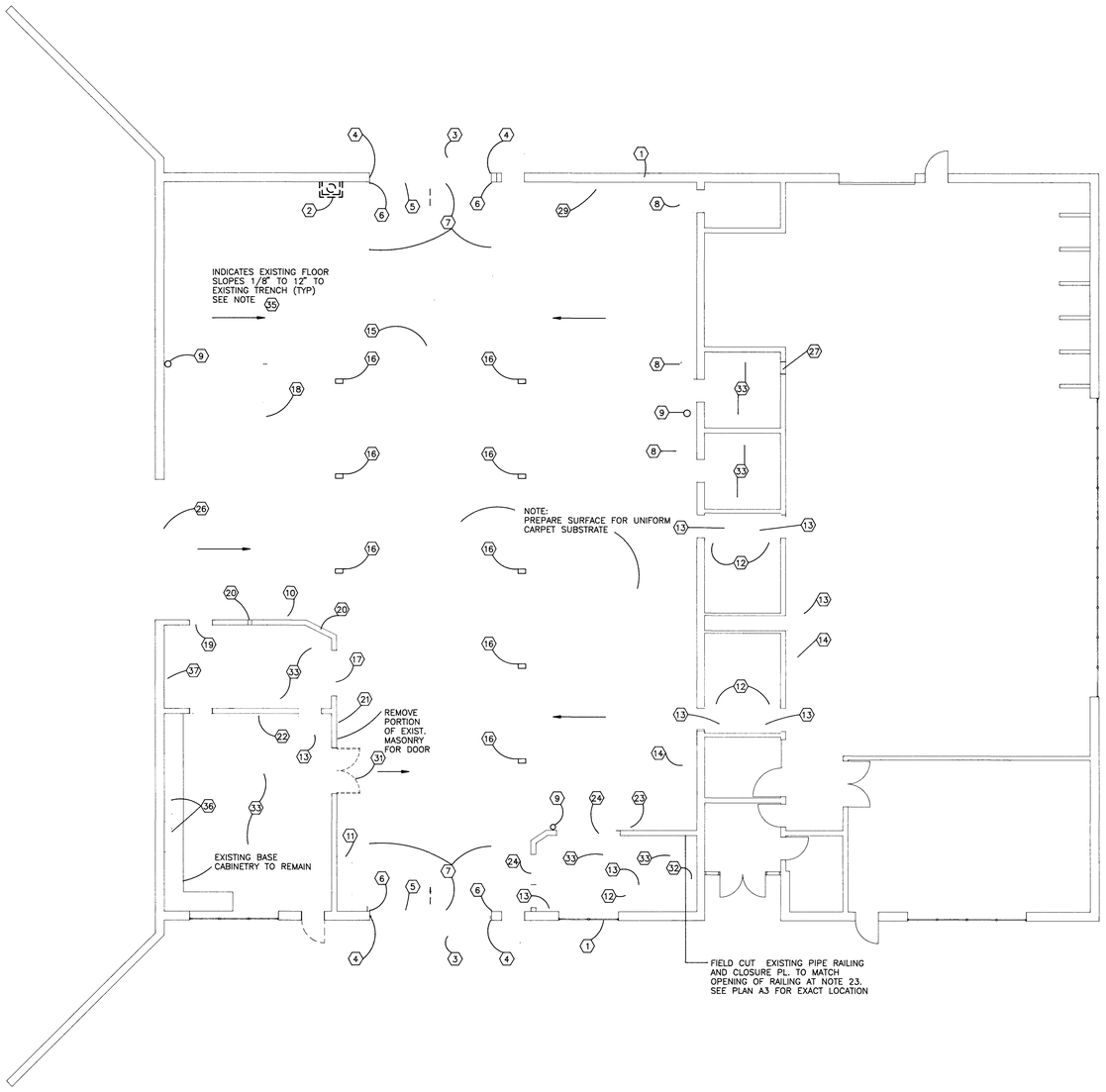
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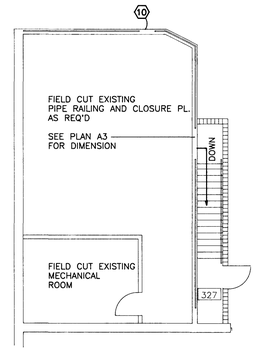
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GENERAL DEMOLITION NOTES

A UNLESS NOTES OTHERWISE, ALL DEMOLITION TO BE PART OF THE WORK BY GENERAL CONTRACTOR.

B "FLOORING" DENOTES ALL FLOOR COVERING MATERIALS, INCLUDING BACKINGS, ADHESIVES, DOWN TO, BUT EXCLUSIVE OF, FLOOR SLABS, AND STRUCTURAL SLABS AND MATERIALS, UNLESS NOTED OTHERWISE.

C "CEILING" DENOTES ALL CEILING MATERIALS SUSPENSION SYSTEMS, ADHESIVE RESIDUES, MOLDINGS, ETC., UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.

D WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2" (MIN.) BELOW THE EXISTING FLOOR SLAB (UNLESS SETTING ON SLAB). PATCH WITH NEW CONCRETE TO FLUSH OUT WITH THE EXISTING FLOOR SLAB.

E WHEN OPENINGS ARE CUT INTO AN EXISTING WALL, THE OPENING SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQUIRED TO ALLOW FOR 8" (MIN.) OF NEW CMU TOOTHED IN AT ALL EDGES.

F AFTER THE DEMOLITION OF ANY MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.

G ALL MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED SUCH AS TO BE BEHIND FINAL FINISH SYSTEMS.

H SEE MECHANICAL AND ELECTRICAL PLAN FOR ADDITIONAL DEMOLITION ITEMS.

I ALL MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF SITE UNLESS DIRECTED BY OWNER OTHERWISE.

DEMOLITION NOTES

1 REMOVE EXISTING LOUVER, TO BE REMOVED BY DIVISION 15. REMOVE ADDITIONAL MASONRY IF, NECESSARY TO PROVIDE ENOUGH WIDTH FOR FULL WIDTH CMU.

2 REMOVE EXISTING CONCRETE CURB AND OIL DRAIN AND DISPOSE OF OFF SITE. CLOSE OFF DRAIN HOLE AND FILL WITH CONCRETE TO EXISTING FLOOR LEVEL.

3 REMOVE EXISTING CONCRETE APRON AND GRAVEL TO EXISTING FACE BRICK AND DISPOSE OF OFF SITE. SAWCUT EXISTING CONCRETE APRON AT EXIST. FACE BRICK.

4 REMOVE EXISTING ANGLE GUARD, ANCHORS AND EXISTING FACE BRICK IF NECESSARY AND DISPOSE OF OFF SITE. FILL REMOVED BRICK IN WITH NEW BRICK AND MATCH NEW BRICK WITH EXISTING COURSING.

5 REMOVE EXISTING FLOOR ANGLE AND ANCHOR RODS AND DISPOSE OF OFF SITE.

6 REMOVE EXISTING ANGLE DOOR GUARDS AND CLIP ANGLES AND DISPOSE OF OFF SITE. PATCH CMU AS REQUIRED.

7 REMOVE EXISTING OVERHEAD DOOR, DOOR GUIDES, HOOD, MOTOR, DOOR TRACK, DOOR ANGLES, TRACK SUPPORT ANGLES AND ACCESSORIES AND DISPOSE OF OFF SITE.

8 REMOVE EXISTING HOLLOW METAL MANDOOR AND DISPOSE OF OFF SITE. (FRAME TO REMAIN AND BE REUSED).

9 REMOVE EXISTING FIRE EXTINGUISHER AND TURN OVER TO OWNER.

10 REMOVE EXISTING STEEL LADDER AND DISPOSE OF OFF SITE. PATCH DAMAGED CMU AS REQUIRED.

11 REMOVE EXISTING STEEL STAIRS, LANDING, RAILINGS, SUPPORT ANGLES, CONCRETE BASE AND DISPOSE OF OFF SITE.

12 REMOVE EXISTING CMU WALL AND DISPOSE OF OFF SITE. REFER TO GENERAL DEMOLITION NOTES.

13 REMOVE EXISTING HOLLOW METAL MANDOOR, FRAME HARDWARE AND DISPOSE OF OFF SITE.

14 REMOVE EXISTING WASH SINK AND DISPOSE OF OFF SITE. REFER TO PLUMBING DEMOLITION PLANS.

15 REMOVE EXISTING METAL GRATES AND DISPOSE OF OFF SITE. FILL EXISTING TRENCH WITH CONCRETE TO EXISTING FINISH FLOOR LEVEL.

16 REMOVE EXISTING EXHAUST COVER PLATES AND FRAME AND DISPOSE OF OFF SITE. CLOSE OFF EXHAUST PIPING AND FILL EXIST. OPENING WITH CONCRETE TO EXIST. FLOOR LEVEL.

17 REMOVE EXISTING ROLLING METAL DOOR, HOOD, FRAMES, ANGLES AND DISPOSE OF OFF SITE.

18 REMOVE EXISTING BEAM AND SUPPORT BEAMS AND DISPOSE OF OFF SITE.

19 REMOVE PORTION OF EXISTING 8" CMU WALL. SEE PLAN A3 FOR EXACT LOCATION AND SIZE.

20 REMOVE EXISTING LOUVER, LINTELS, ANGLES AND DISPOSE OF OFF SITE. REMOVE ADDITIONAL MASONRY IF, NECESSARY TO PROVIDE ENOUGH WIDTH FOR FULL WIDTH CMU.

21 REMOVE EXISTING TACK BOARD AND TURN OVER TO OWNER.

22 REMOVE EXISTING CHALKBOARD TO BE RELOCATED. SEE EQUIPMENT PLANS.

23 SALVAGE EXISTING LADDER & RELOCATE. SEE PLAN A3 FOR NEW LOCATION.

24 REMOVE EXISTING GLASS, FRAME, HARDWARE, AND DISPOSE OF OFF SITE. REMOVE ADDITIONAL MASONRY IF, NECESSARY TO PROVIDE ENOUGH WIDTH FOR FULL WIDTH CMU.

25 NOT USED.

26 REMOVE PORTION OF EXISTING CONCRETE RETAINING WALL, DIMENSION 20' WIDE X 8'-8" HIGH AND REINFORCING BARS AND DISPOSE OF OFF SITE. GRIND DOWN EXIST. EXPOSED REINFORCING BARS TO PROPER DEPTH FOR NEW GROUT FINISH ON WALL SURFACE.

27 NOT USED.

28 REMOVE EXISTING ACCESS DOOR AND RELOCATE TO NEW WALL OF NEW TOILETS, SEE FLOOR PLAN A3.

29 REMOVE EXISTING CONCRETE CURB AT SUMP PIT AND DISPOSE OF OFF SITE. CLOSE OFF OPENING AND FILL WITH CONCRETE TO EXISTING FLOOR LEVEL.

30 REMOVE EXISTING CONCRETE STOOP AND GRAVEL AND DISPOSE OF OFF SITE.

31 REMOVE EXISTING (2) HOLLOW METAL MANDOORS, FRAMES HARDWARE AND DISPOSE OF OFF SITE.

32 REMOVE EXISTING CASEWORK AND COORDINATE WITH OWNER FOR DISPOSAL OR SALVAGE.

33 REMOVE EXISTING BASE AND DISPOSE OF OFF SITE.

34 REMOVE EXISTING MANDOOR, FRAME, HARDWARE AND DISPOSE OF OFF SITE.

35 INDICATES EXISTING FLOOR TO BE MADE LEVEL BY USE OF CONCRETE TOPPING. SEE SPECIFICATIONS SECTION 03320.

36 REMOVE EXISTING BOOKSHELVES AND TURN OVER TO OWNER.

37 REMOVE EXISTING WOOD SLATS AND DISPOSE OF OFF SITE.

STATE OF OHIO CLAIR E. HOWEY 3982 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DURWOODY 4980 REGISTERED ARCHITECT

UNIT C DEMOLITION FLOOR PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

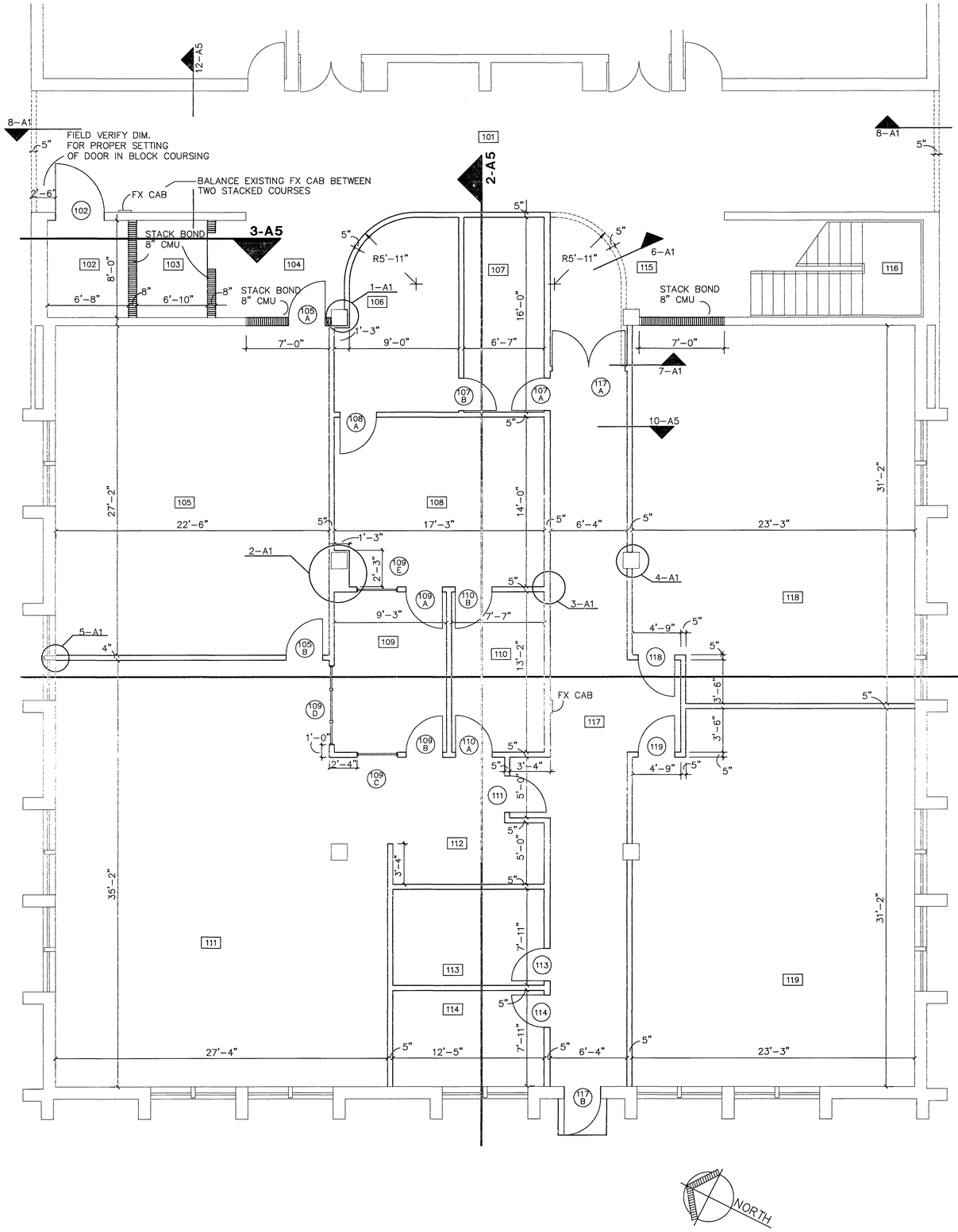
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

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DRAWING OF RECORD	DRAWN BY: KS/SPH	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET AD3



UNIT A FIRST FLOOR PLAN

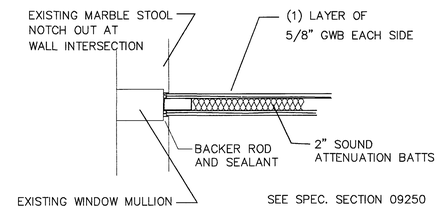
1/4"=1'-0"

INDICATES METAL STUD WALLS

INDICATES NEW CMU WALLS (STACK BOND)

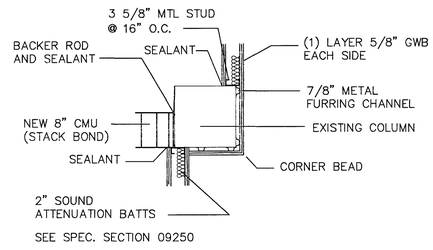
ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620



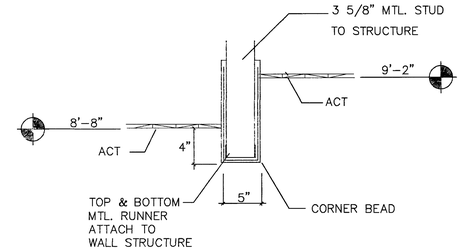
5-A1 DETAIL

3/4"=1'-0"



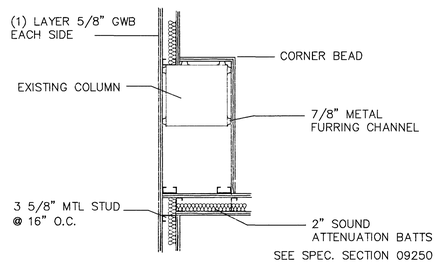
1-A1 DETAIL

3/4"=1'-0"



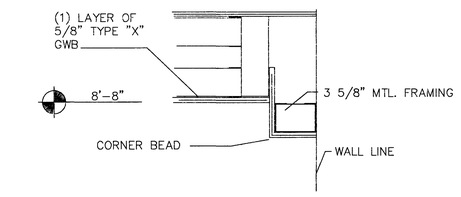
6-A1 BULKHEAD DETAIL

3/4"=1'-0"



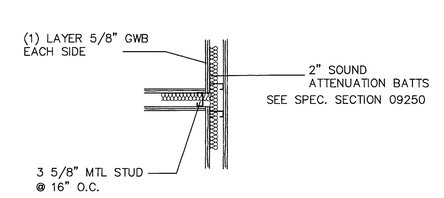
2-A1 DETAIL

3/4"=1'-0"



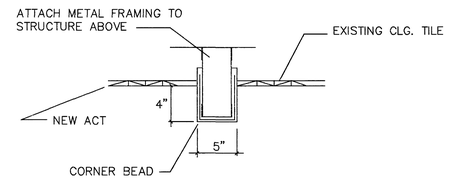
7-A1 BULKHEAD DETAIL

3/4"=1'-0"



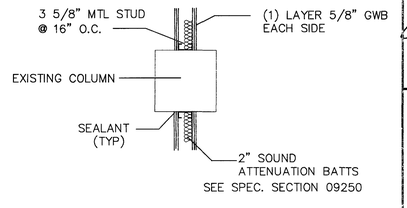
3-A1 DETAIL

3/4"=1'-0"



8-A1 BULKHEAD DETAIL

3/4"=1'-0"



4-A1 DETAIL

3/4"=1'-0"

STATE OF OHIO · CLAIR E. HOWEY · 3962 · REGISTERED ARCHITECT

STATE OF OHIO · THOMAS DUDWOODY · 4980 · REGISTERED ARCHITECT

UNIT A FIRST FLOOR PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

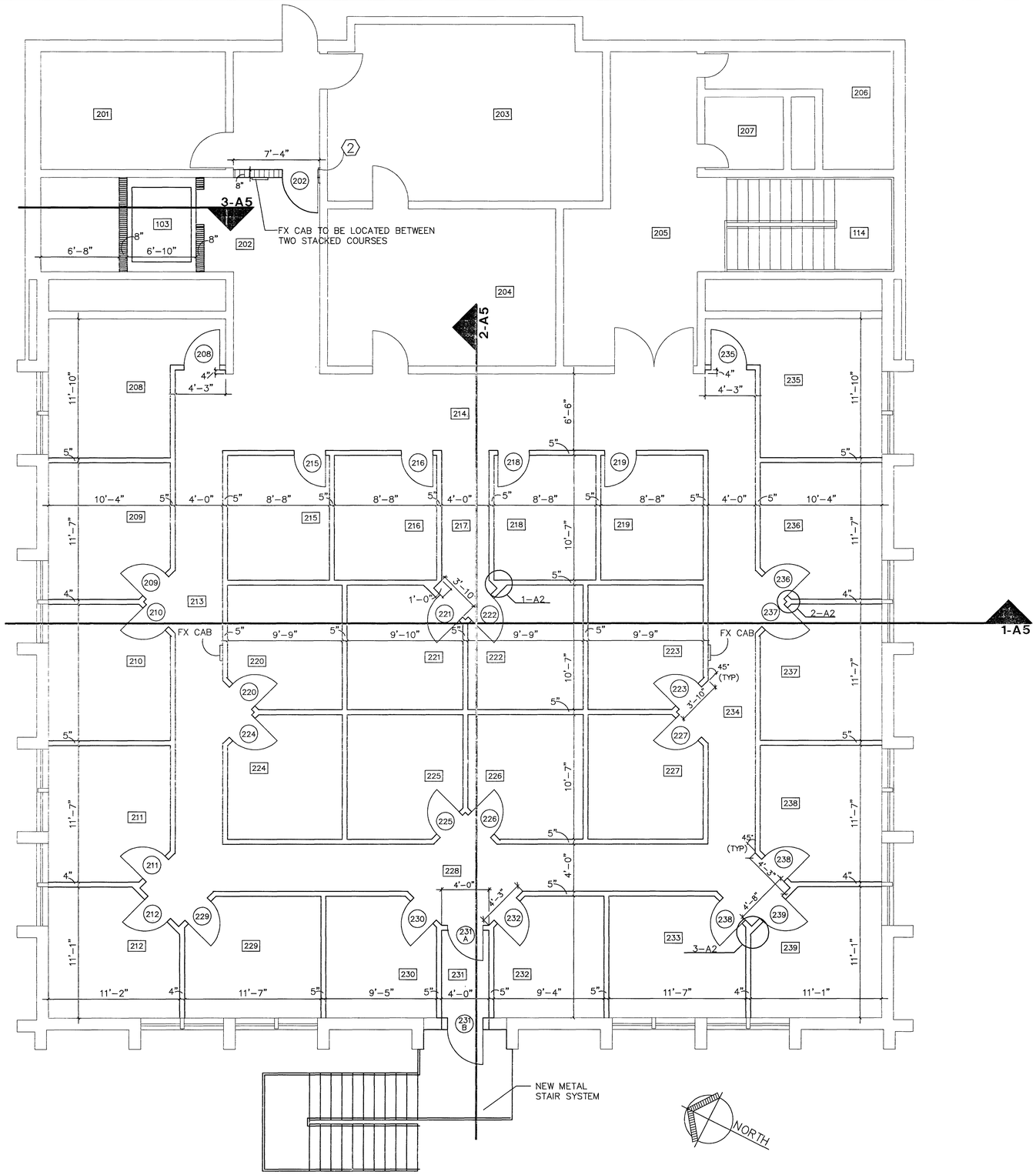
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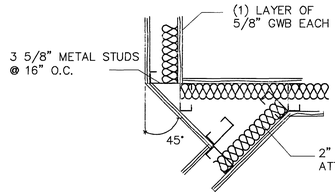
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UNIT B SECOND FLOOR PLAN

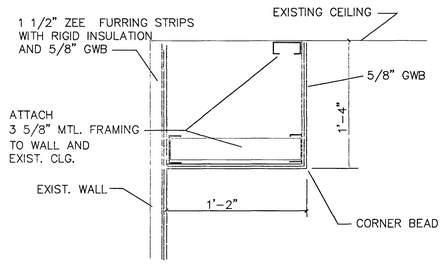
1/4"=1'-0"

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100



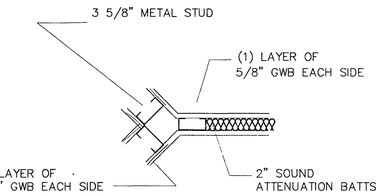
1-A2 DETAIL

3/4"=1'-0"



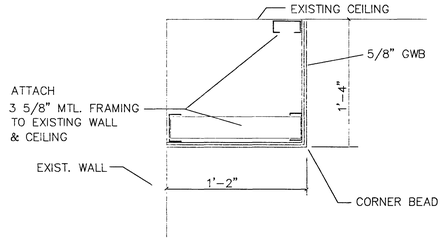
4-A2 BULKHEAD DETAIL

3/4"=1'-0"



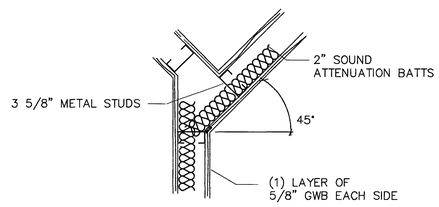
2-A2 DETAIL

3/4"=1'-0"



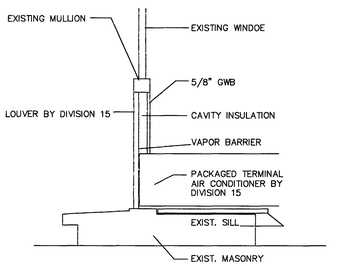
5-A2 BULKHEAD DETAIL

3/4"=1'-0"



3-A2 DETAIL

3/4"=1'-0"



6-A2 DETAIL

3/4"=1'-0"

STATE OF OHIO — CLAIR E. HOWEY — 3962 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS A. DUNWODY — 4980 — REGISTERED ARCHITECT

UNIT B SECOND FLOOR PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

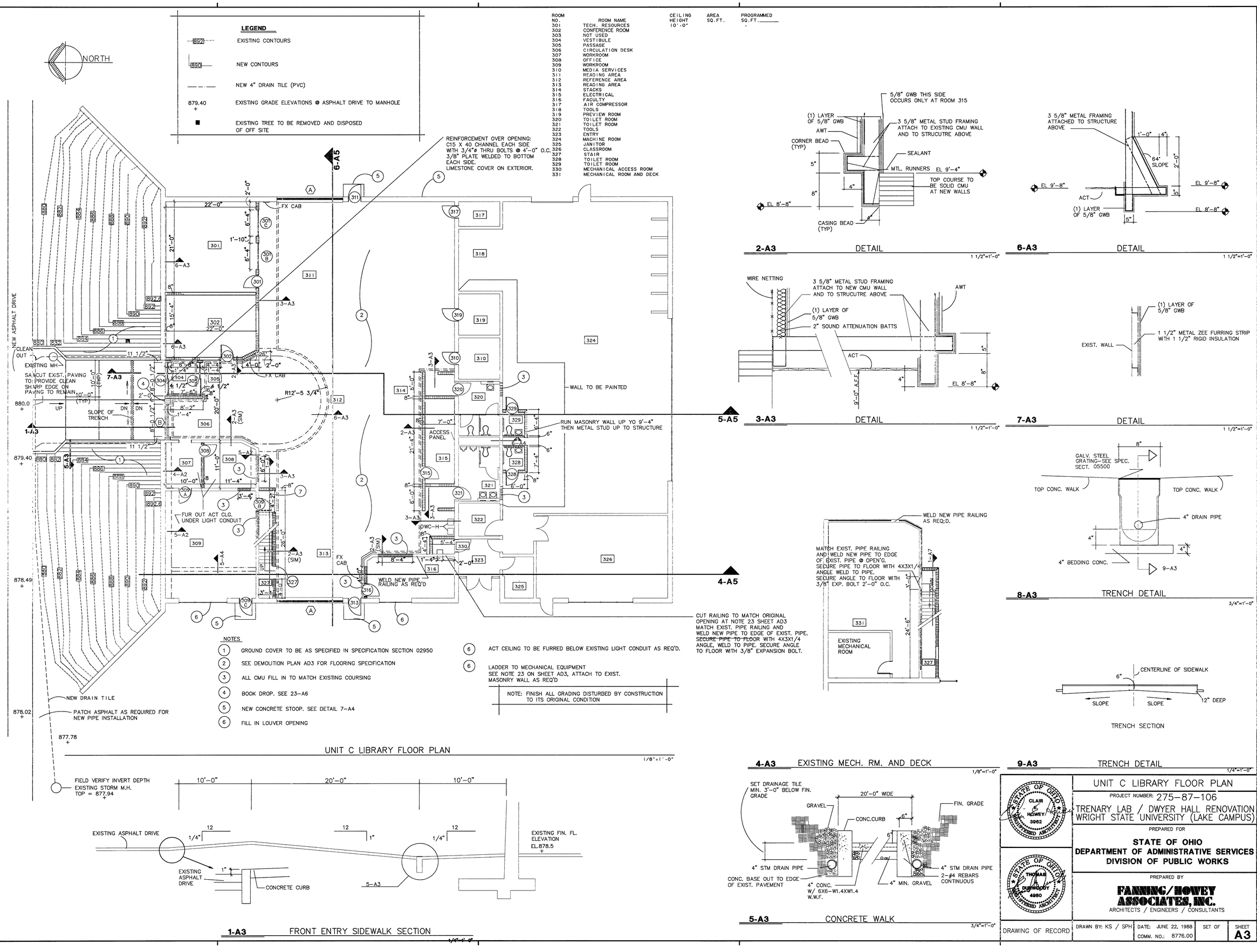
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UNIT C LIBRARY FLOOR PLAN

1/8"=1'-0"

1-A3 FRONT ENTRY SIDEWALK SECTION

1/4"=1'-0"

2-A3 DETAIL

1 1/2"=1'-0"

6-A3 DETAIL

1 1/2"=1'-0"

3-A3 DETAIL

1 1/2"=1'-0"

7-A3 DETAIL

1 1/2"=1'-0"

8-A3 TRENCH DETAIL

3/4"=1'-0"

4-A3 EXISTING MECH. RM. AND DECK

1/8"=1'-0"

TRENCH SECTION

5-A3 CONCRETE WALK

3/4"=1'-0"

9-A3 TRENCH DETAIL

1/4"=1'-0"

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS J. DURWOODY 4980 REGISTERED ARCHITECT

UNIT C LIBRARY FLOOR PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

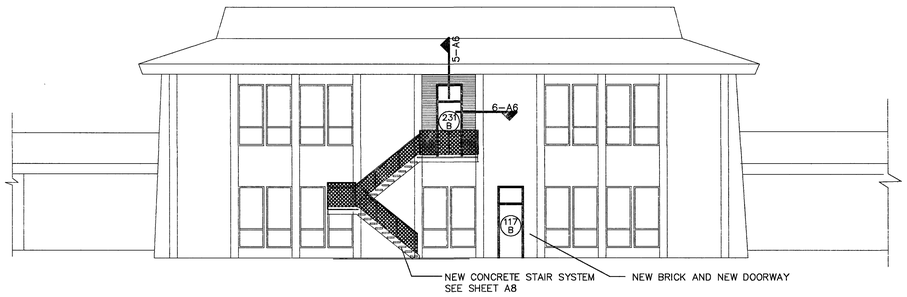
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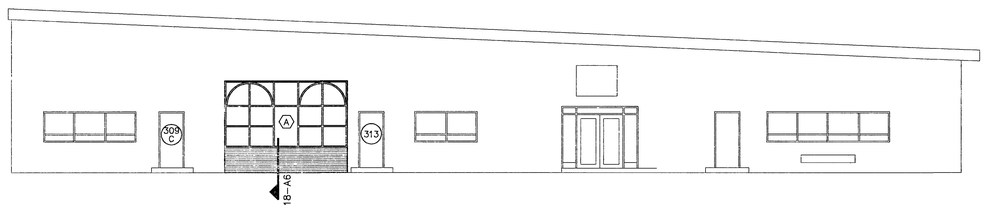
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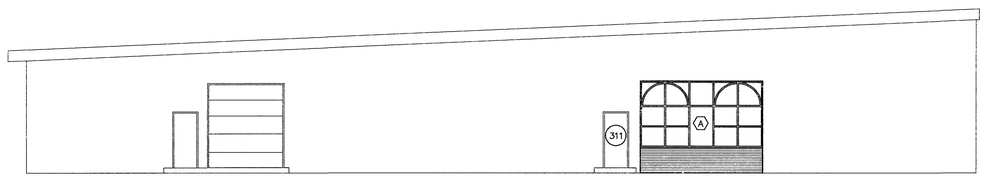
1-A4 WEST ELEVATION

1/8"=1'-0"



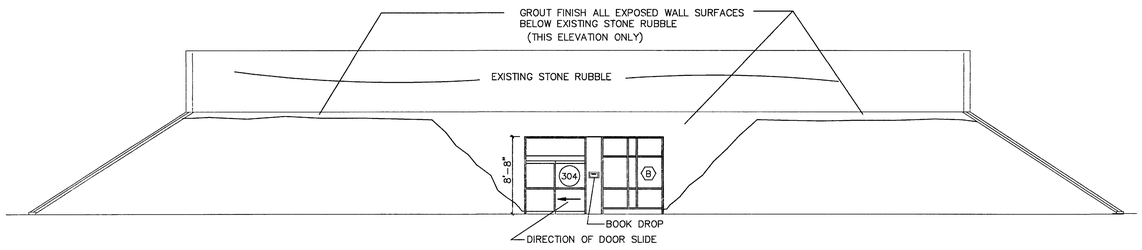
2-A4 WEST ELEVATION

1/8"=1'-0"



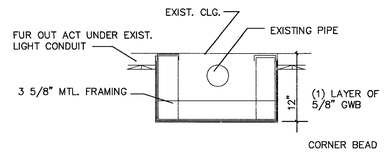
3-A4 EAST ELEVATION

1/8"=1'-0"



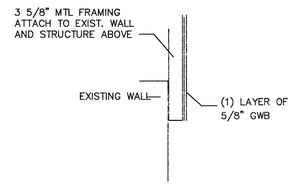
3-A4 NORTH ELEVATION

1/8"=1'-0"



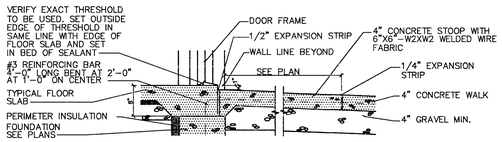
5-A4 BULKHEAD DETAIL

3/4"=1'-0"



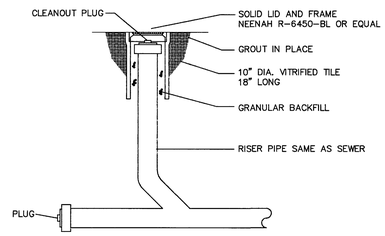
5-A4 BULKHEAD DETAIL

3/4"=1'-0"



6-A4 THRESHOLD CONCRETE STOOP

3/4"=1'-0"



"RH" RODDING HOLE

NO SCALE

STATE OF OHIO
CLAIR E. HOWEY
3982
REGISTERED ARCHITECT

STATE OF OHIO
THOMAS DURWOODY
4980
REGISTERED ARCHITECT

ELEVATIONS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

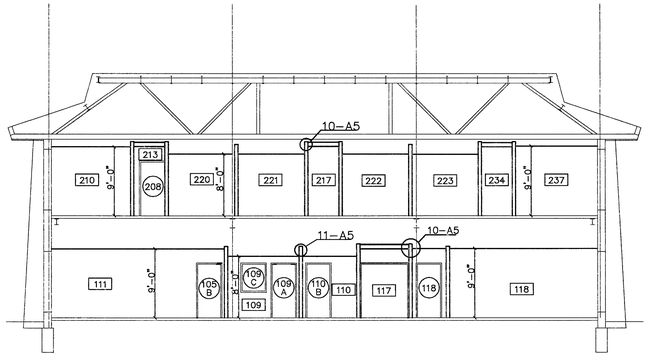
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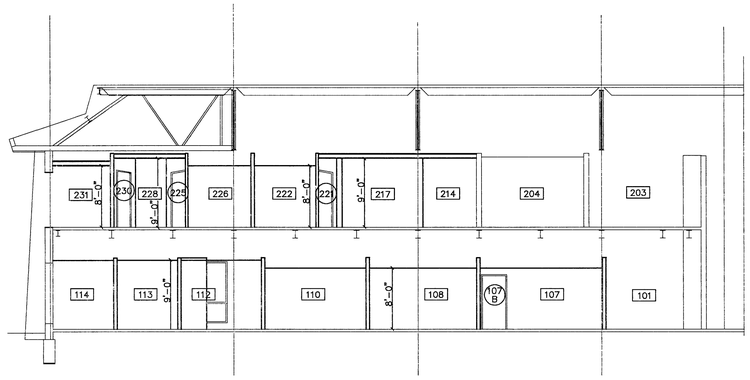
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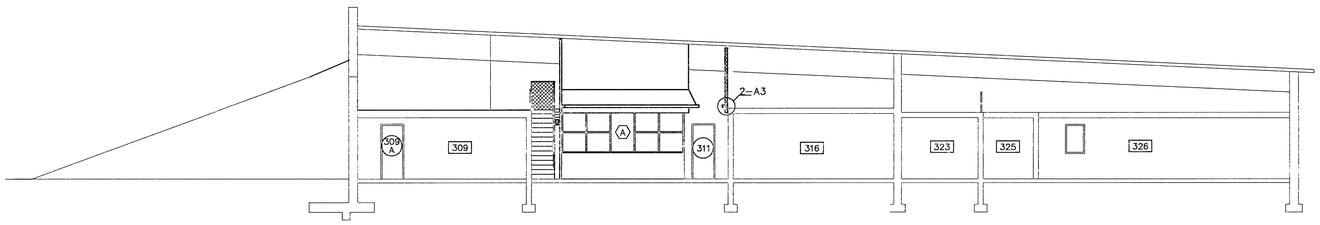
1-A5 BUILDING SECTION

1/8"=1'-0"



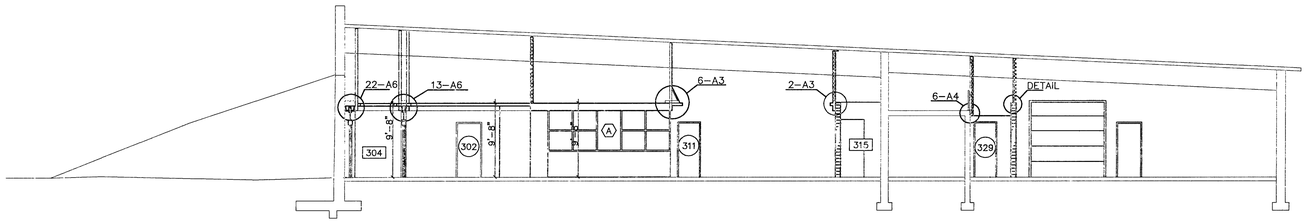
2-A5 BUILDING SECTION

1/8"=1'-0"



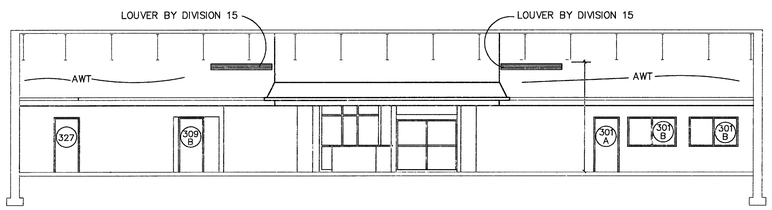
4-A5 BUILDING SECTION

1/8"=1'-0"



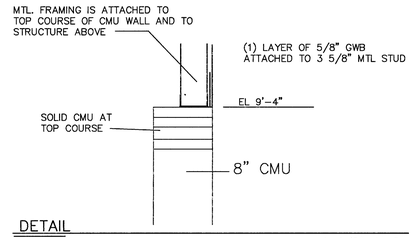
5-A5 BUILDING SECTION

1/8"=1'-0"



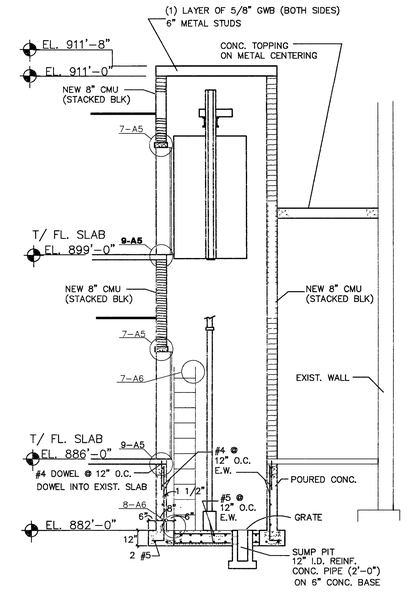
6-A5 BUILDING SECTION

1/8"=1'-0"



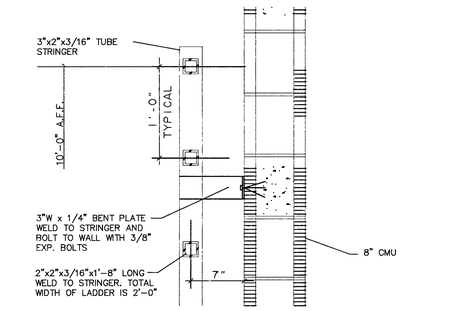
DETAIL

1-1/2"=1'-0"



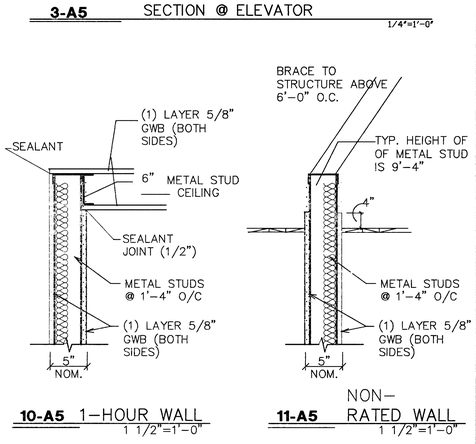
3-A5 SECTION @ ELEVATOR

1/4"=1'-0"



7-A5 STEEL LADDER

1-1/2"=1'-0"

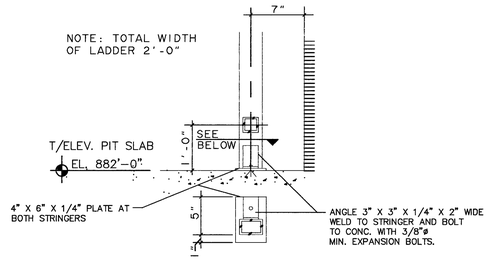


10-A5 1-HOUR WALL

1 1/2"=1'-0"

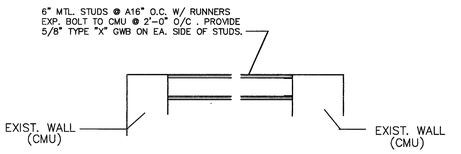
11-A5 NON-RATED WALL

1 1/2"=1'-0"



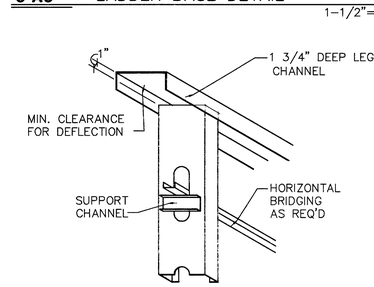
8-A5 LADDER BASE DETAIL

1-1/2"=1'-0"



12-A5 1 HOUR RATED CEILING

1"=1'-0"



9-A5 METAL STUDS

NO SCALE

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS M. DUDYCZ 4980 REGISTERED ARCHITECT

SECTIONS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

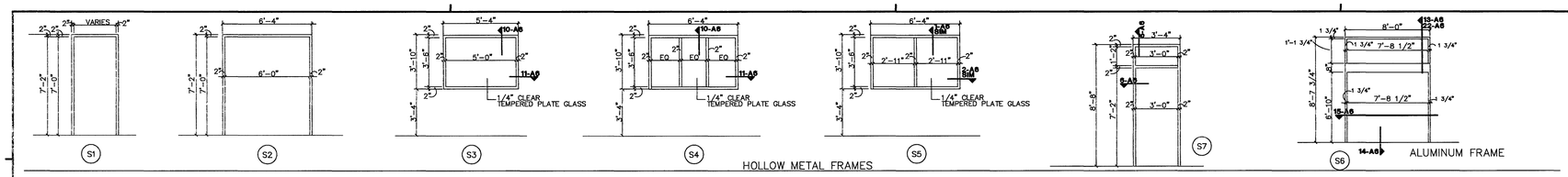
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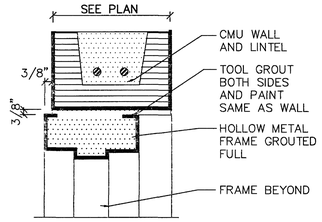
STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

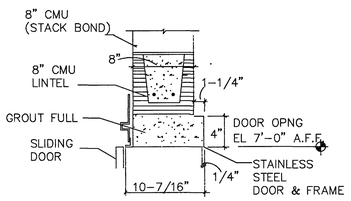
FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWING OF RECORD	DRAWN BY: KS / SPH	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET A5

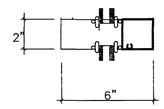




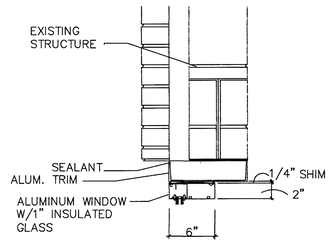
1-A6 DOOR HEAD
3"=1'-0"



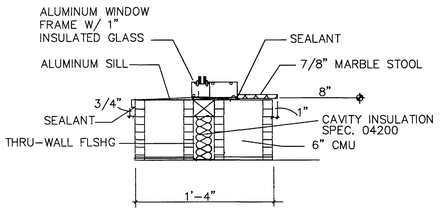
7-A6 DOOR HEAD
1 1/2"=1'-0"



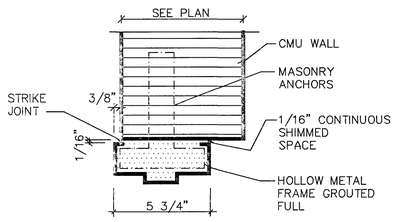
12-A6 WINDOW MULLION



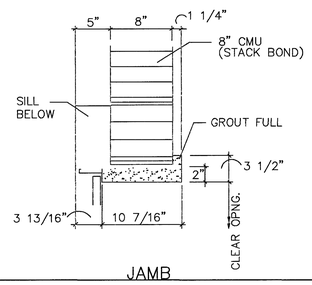
16-A6 WINDOW HEAD
1 1/2"=1'-0"



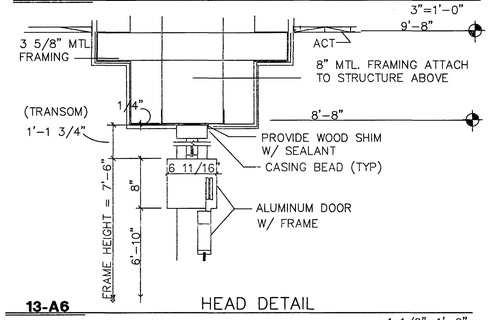
21-A6 WINDOW SILL
1 1/2"=1'-0"



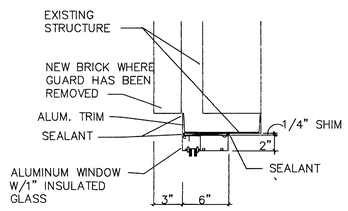
2-A6 DOOR JAMB
3"=1'-0"



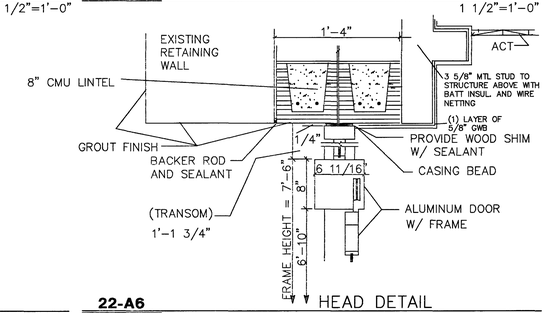
8-A6 JAMB
1 1/2"=1'-0"



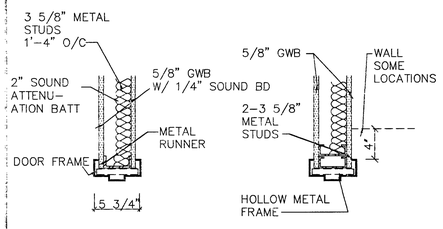
13-A6 HEAD DETAIL
1 1/2"=1'-0"



17-A6 WINDOW JAMB
1 1/2"=1'-0"

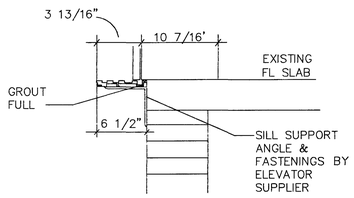


22-A6 HEAD DETAIL
1 1/2"=1'-0"

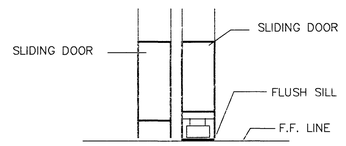


3-A6 DOOR HEAD
1 1/2"=1'-0"

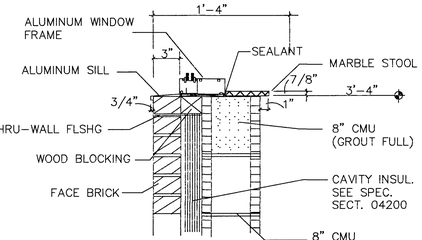
4-A6 DOOR JAMB
1 1/2"=1'-0"



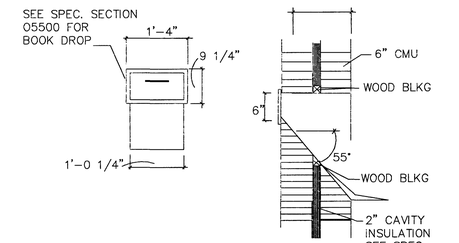
9-A6 SILL
1 1/2"=1'-0"



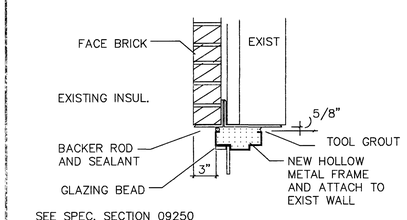
14-A6 DOOR SILL
1 1/2"=1'-0"



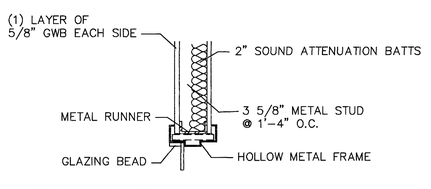
18-A6 WINDOW SILL
1 1/2"=1'-0"



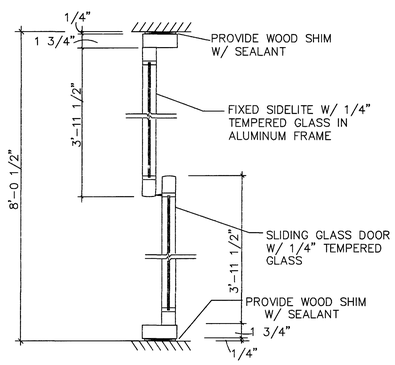
23-A6 BOOK DEPOSITORY
3/4"=1'-0"



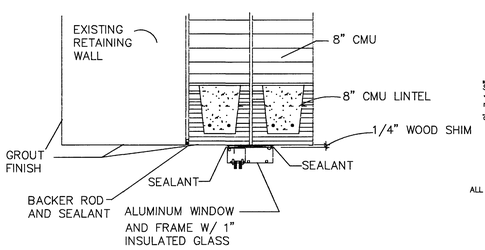
5-A6 DOOR HEAD (TRANSOM)
1 1/2"=1'-0"



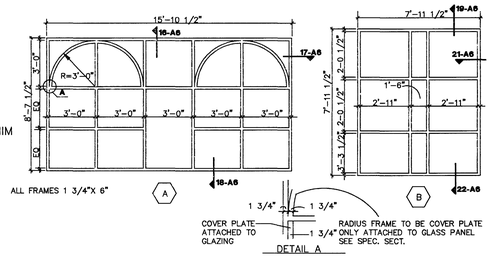
10-A6 WINDOW HEAD
1 1/2"=1'-0"



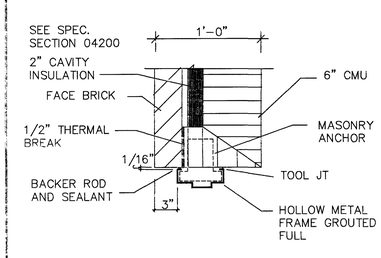
15-A6 JAMB DETAIL
1 1/2"=1'-0"



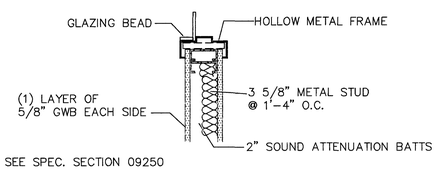
19-A6 WINDOW HEAD
1 1/2"=1'-0"



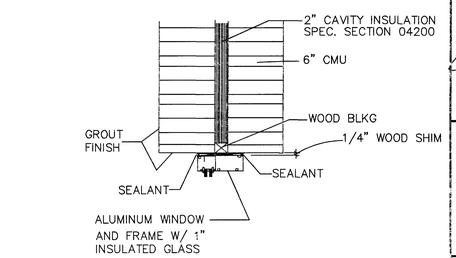
24-A6 WINDOW TYPES
NO SCALE



6-A6 DOOR JAMB
1 1/2"=1'-0"



11-A6 WINDOW JAMB
1 1/2"=1'-0"



20-A6 WINDOW JAMB
1 1/2"=1'-0"

STATE OF OHIO — CLAIR S. HOWEY — 3982 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS J. DURWOOD — 4980 — REGISTERED ARCHITECT

DETAILS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

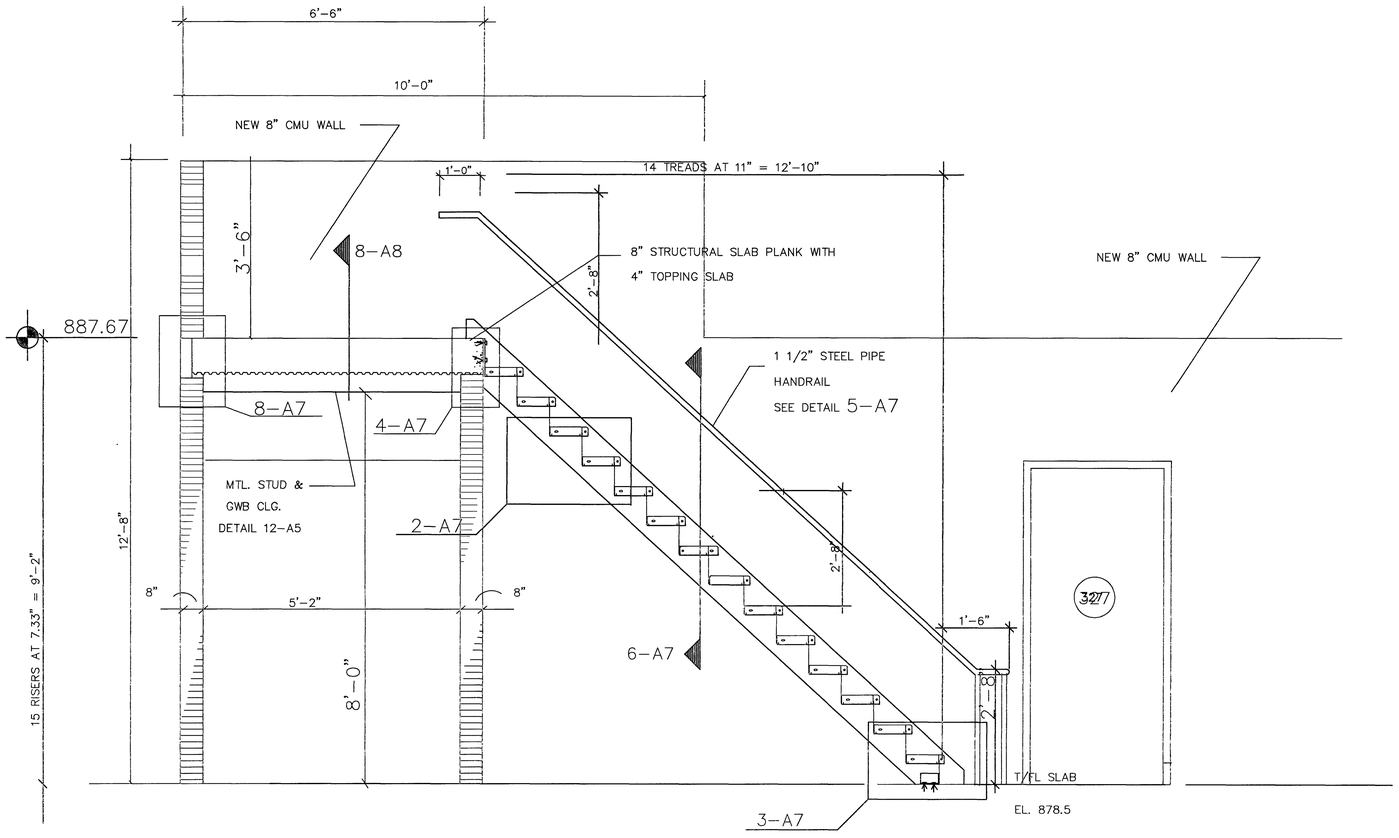
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

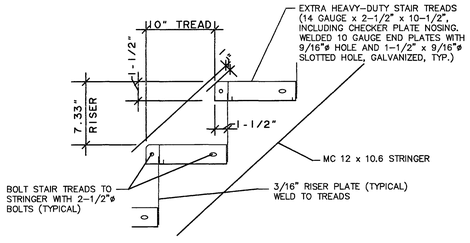
FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWING OF RECORD	DRAWN BY: KS	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET A6



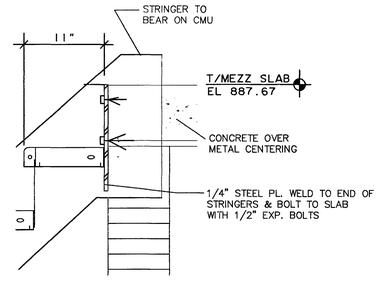
1-A7 STAIR DETAIL

3/8"=1'0"



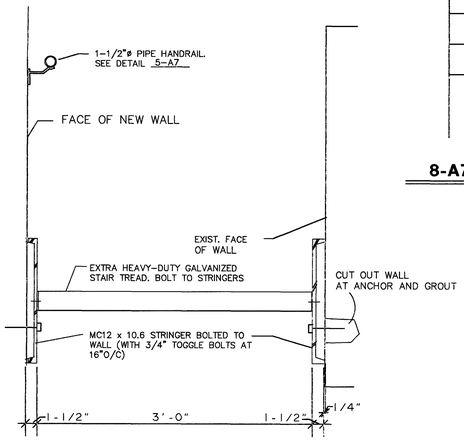
2-A7 DETAIL

1-1/2"=1'-0"



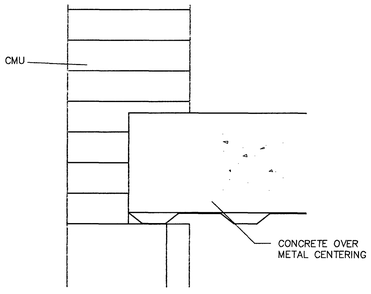
4-A7 DETAIL

3/4"=1'-0"



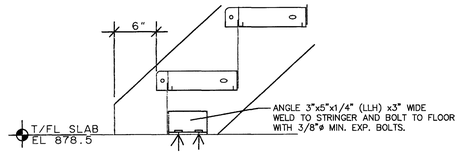
6-A7 DETAIL

1-1/2"=1'-0"



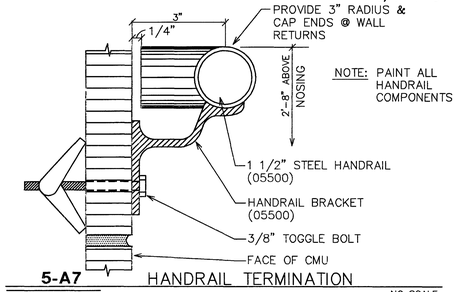
8-A7 DETAIL

1-1/2"=1'-0"



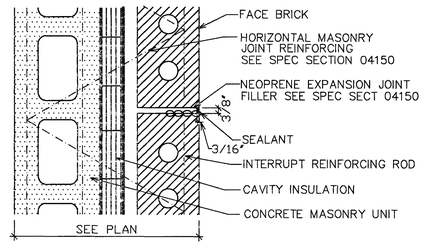
3-A7 DETAIL

1-1/2"=1'-0"



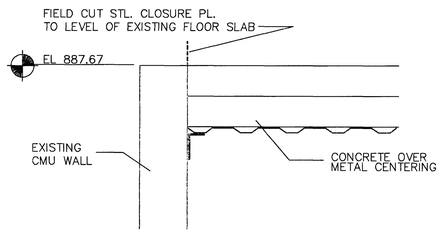
5-A7 HANDRAIL TERMINATION

NO SCALE



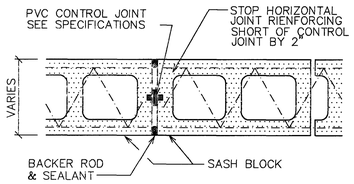
9-A7 BRICK EXPANSION JOINT

NO SCALE



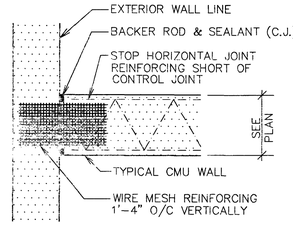
7-A7 DETAIL

3/4"=1'-0"



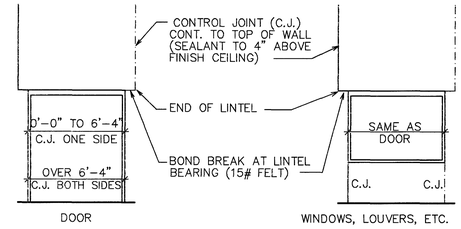
10-A7 TYPICAL CONTROL JOINT

NO SCALE



11-A7 TYPICAL CONTROL JOINT AT JUNCTION OF INTERIOR WALL TO EXTERIOR WALL

NO SCALE



12-A7 TYP. PLACEMENT OF CONTROL JOINTS IN CONC. MASONRY UNIT WALLS AT DOORS AND WINDOWS

NO SCALE

STATE OF OHIO CLAIR E. HOWEY 5963 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DURKWOOD 4980 REGISTERED ARCHITECT

DETAILS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

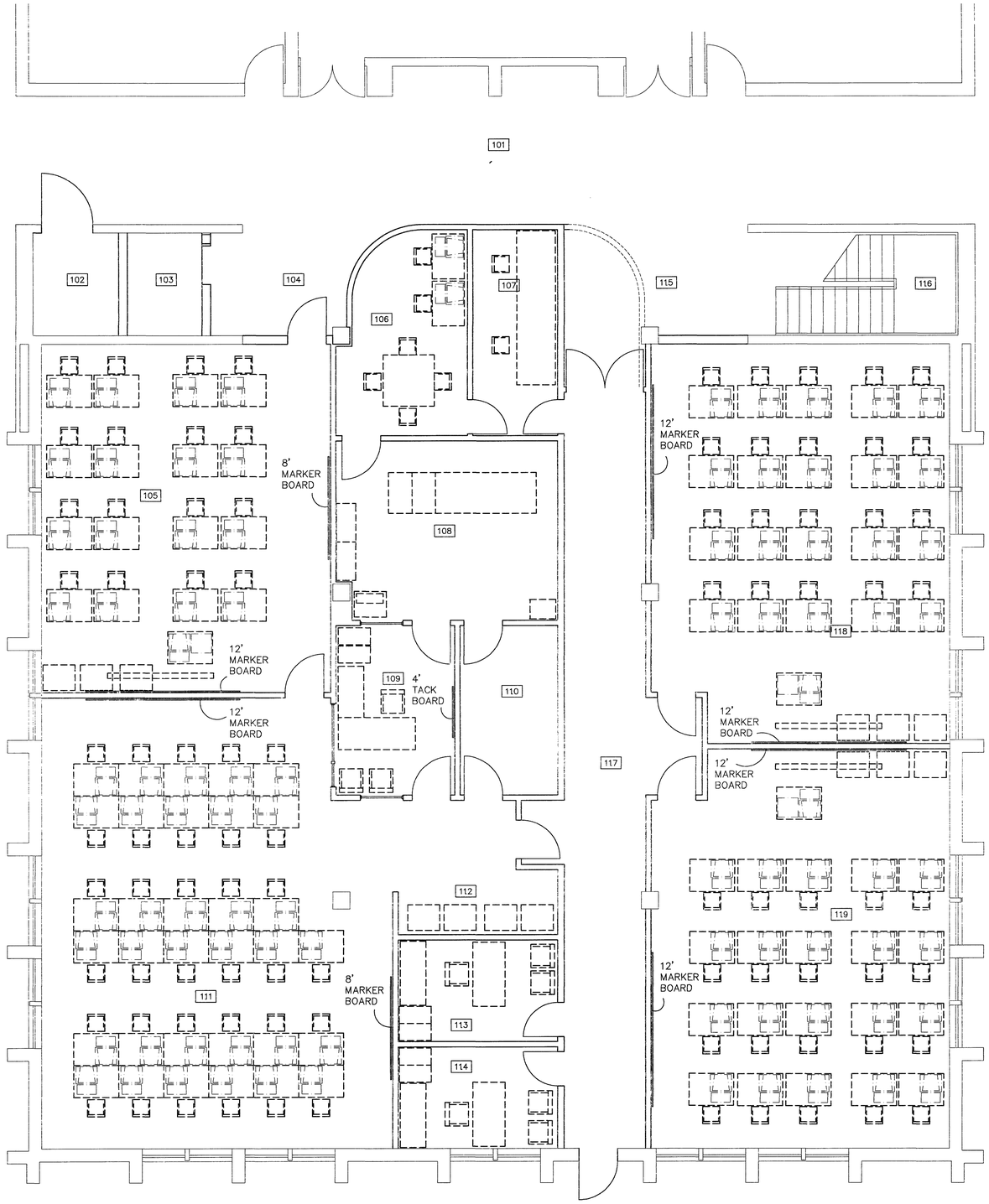
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

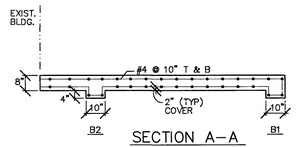
FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

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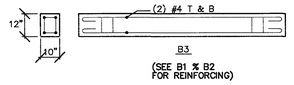


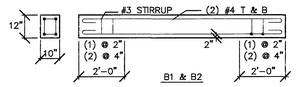
UNIT A COMPUTER EQUIPMENT PLAN

1/4"=1'-0"

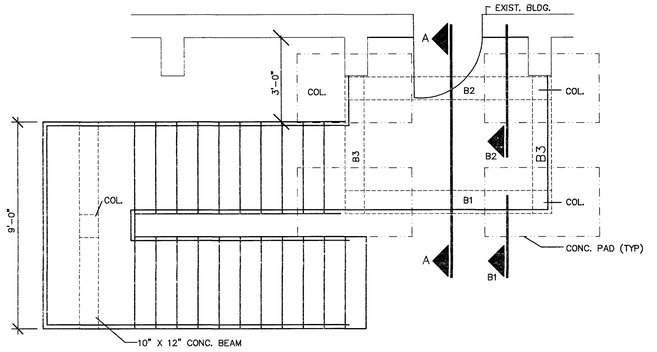


SECTION A-A



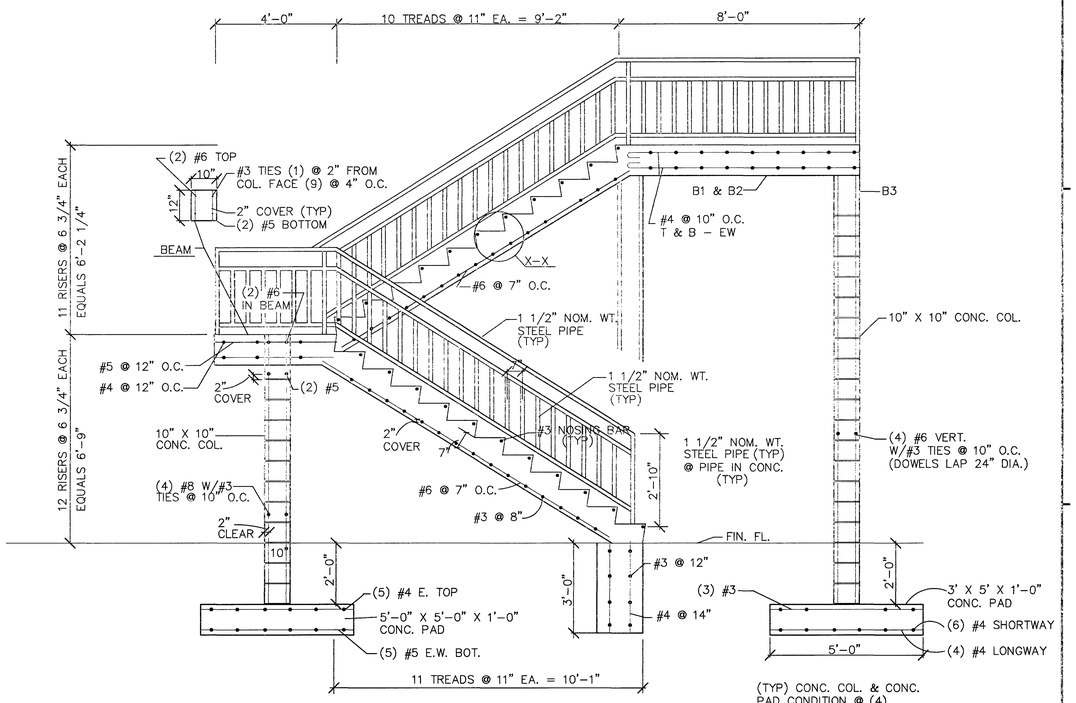


CONCRETE BEAMS



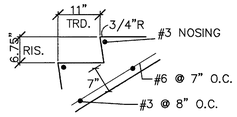
EXTERIOR STAIR PLAN

3/8"=1'-0"

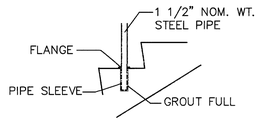


STAIR SECTION

(TYP) CONC. COL. & CONC. PAD CONDITION @ (4) CONC. COL'S. UNDER UPPER SLAB



DETAIL X-X



PIPE EMBEDIMENT

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS K. DUNWOODY 4980 REGISTERED ARCHITECT

UNIT A COMPUTER EQUIPMENT PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

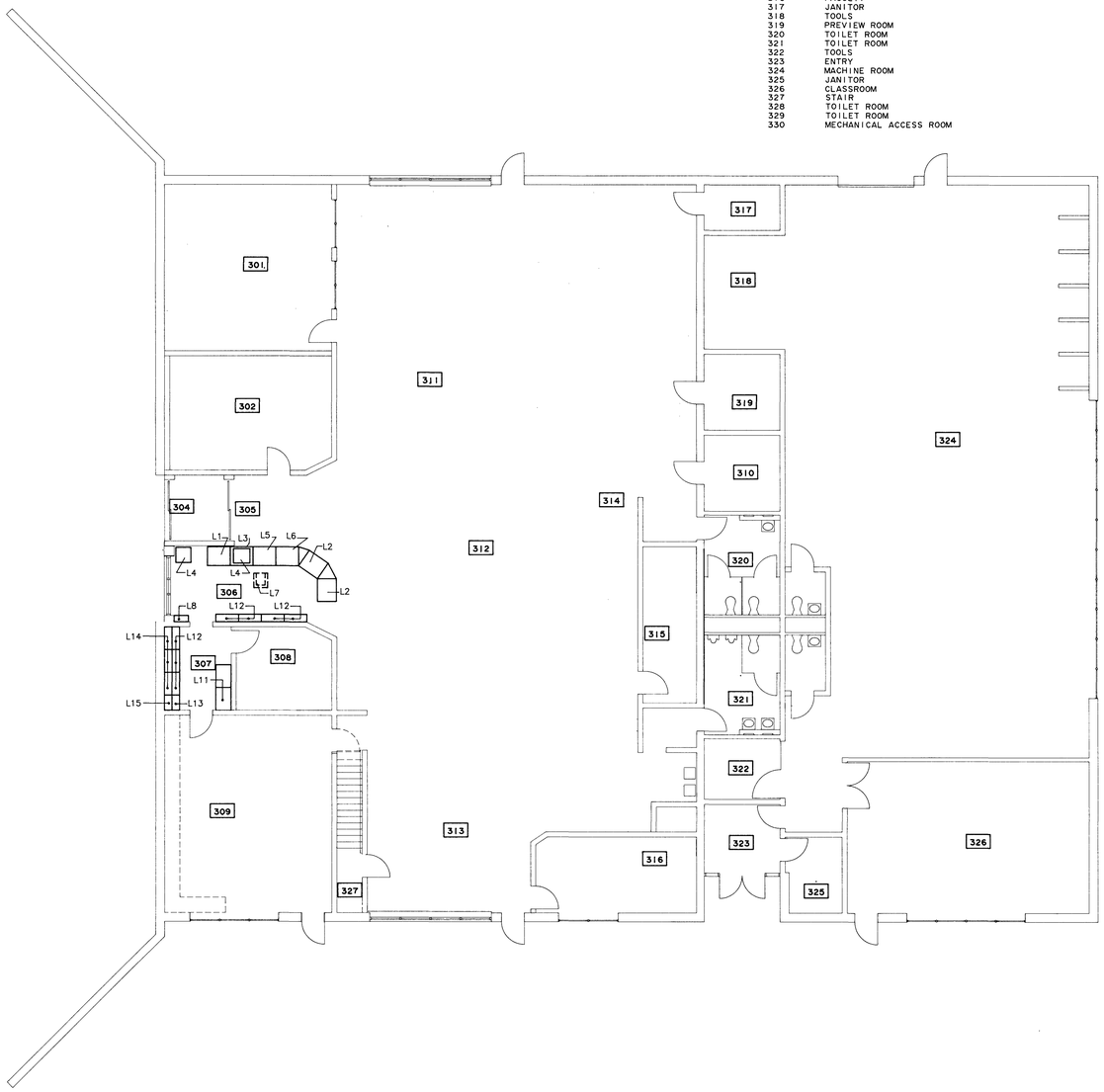
STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

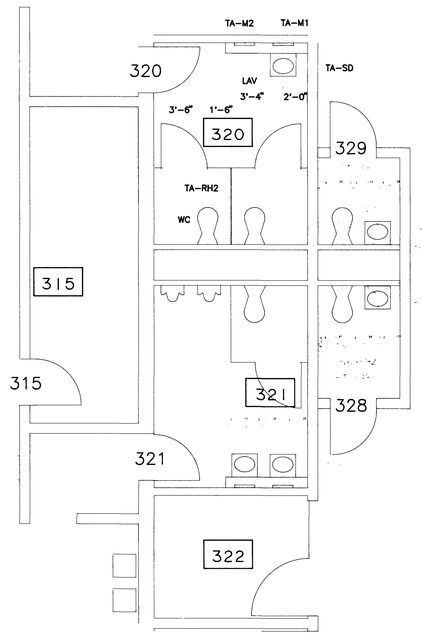
DRAWING OF RECORD	DRAWN BY: KS	DATE: JUNE 22, 1988	COMM. NO.: 8776.00	SET OF	SHEET A8

ROOM NO.	ROOM NAME
301	TECH. RESOURCES
302	CONFERENCE
303	NOT USED
304	VESTIBULE
305	PASSAGE
306	CIRCULATION DESK
307	WORKROOM
308	OFFICE
309	WORKROOM
310	MEDIA SERVICES
311	READING AREA
312	REFERENCE AREA
313	READING AREA
314	STACKS
315	ELECTRICAL
316	FACULTY
317	JANITOR
318	TOOLS
319	PREVIEW ROOM
320	TOILET ROOM
321	TOILET ROOM
322	TOOLS
323	ENTRY
324	MACHINE ROOM
325	JANITOR
326	CLASSROOM
327	STAIR
328	TOILET ROOM
329	TOILET ROOM
330	MECHANICAL ACCESS ROOM



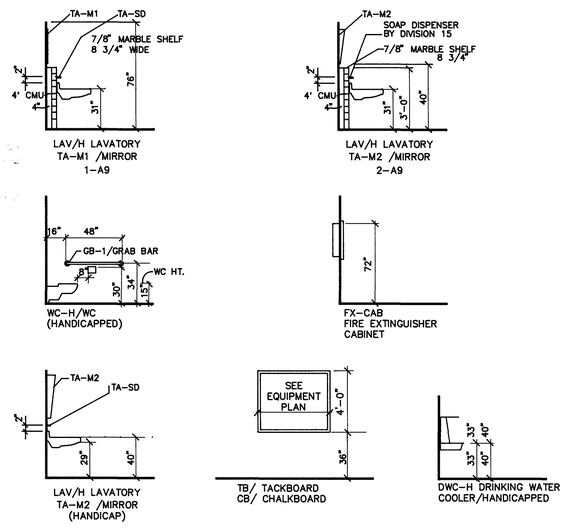
UNIT C LIBRARY EQUIPMENT PLAN

1/8"=1'-0"



TOILET ROOM ENLARGEMENT

1/4"=1'-0"



MOUNTING HEIGHTS

1/8"=1'-0"

STATE OF OHIO
CLAIR
HOWEY
3962
REGISTERED ARCHITECT

STATE OF OHIO
THOMAS
DUNWOODY
4980
REGISTERED ARCHITECT

UNIT C LIBRARY EQUIPMENT PLAN

PROJECT NUMBER:
275-87-106

TRENARY LAB / DWYER HALL RENOVATIONS

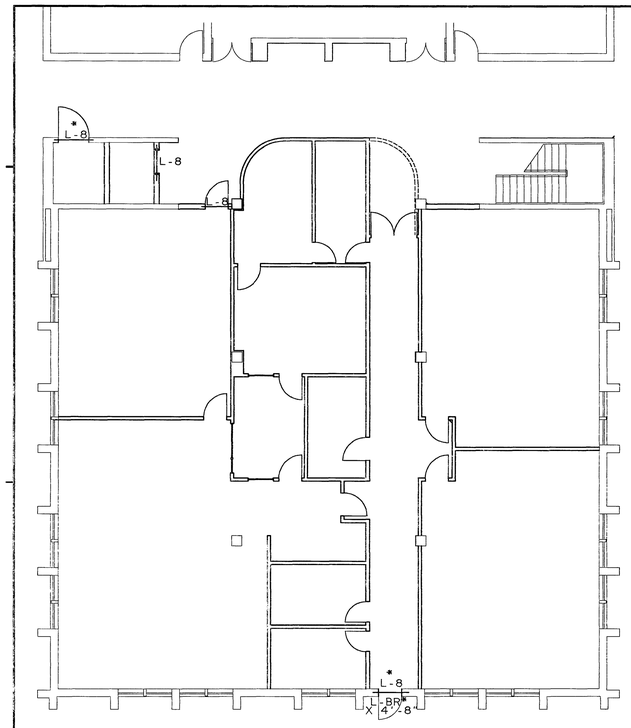
PREPARED FOR

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ARCHITECTS / ENGINEERS / CONSULTANTS

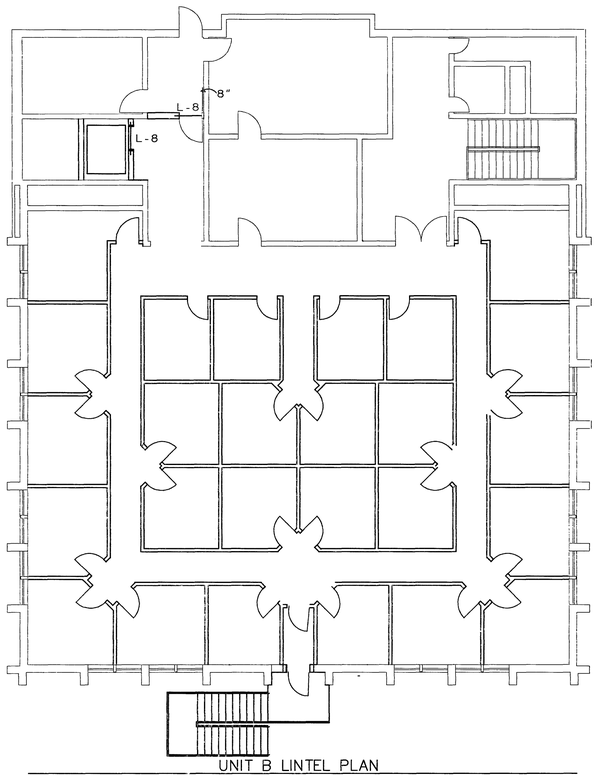
DRAWING OF RECORD	DRAWN BY: KS	DATE: JUNE 22, 1988	COMM. NO.: 8776.00	SET OF	SHEET A9



UNIT A LINTEL PLAN

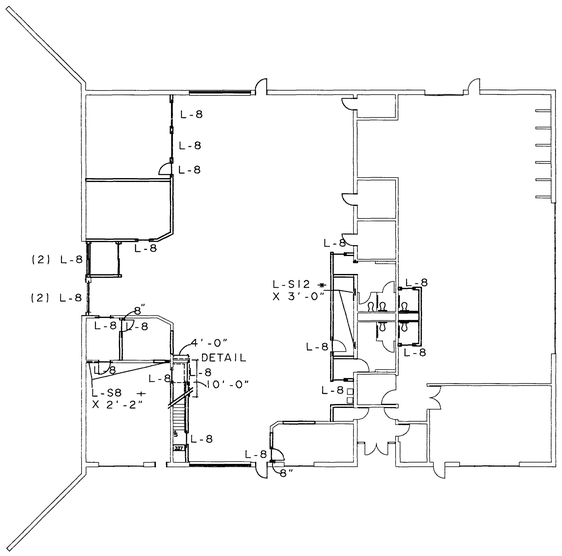
1/8"=1'-0"

* = POCKET INTO EXISTING MASONRY WALL FOR NEW LINTEL BEARING



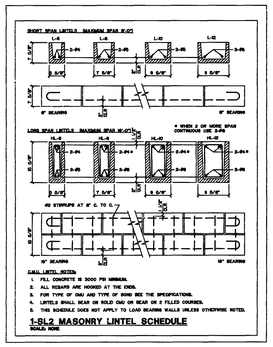
UNIT B LINTEL PLAN

1/8"=1'-0"



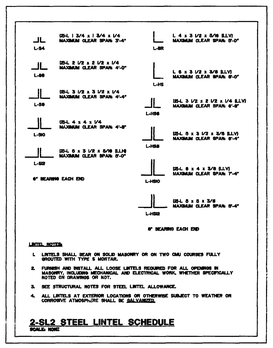
UNIT C LINTEL PLAN

1/16"=1'-0"



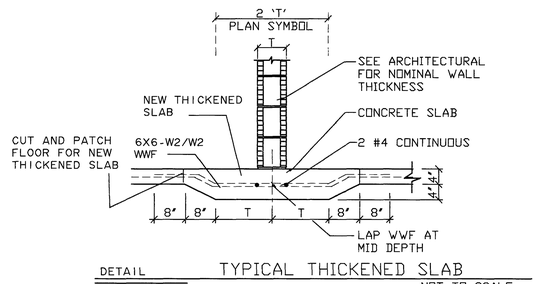
1-SL2 MASONRY LINTEL SCHEDULE

SCALE: NONE



2-SL2 STEEL LINTEL SCHEDULE

SCALE: NONE



DETAIL TYPICAL THICKENED SLAB

NOT TO SCALE

STATE OF OHIO
CLAIR E. HOWEY
3962
REGISTERED ARCHITECT

STATE OF OHIO
THOMAS L. DURWOODY
4980
REGISTERED ARCHITECT

LINTEL AND FOUNDATION PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

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DRAWING OF RECORD	DRAWN BY: KS	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET S1

PLUMBING ABBREVIATIONS AND SYMBOLS

A	COMPRESSED AIR
ACT	ACETYLENE
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AR	ACID RESISTANT
ARV	AIR RELIEF VENT
AP	ACID PROOF
BLDG	BUILDING
BT	BATH TUB
BTM	BOTTOM
CA	COMPRESSED AIR (MEDICAL)
CB	CATCH BASIN
CFH	CUBIC FEET PER HOUR
CO_2	CARBON DIOXIDE
CO	CLEANOUT
COL	COLUMN
CONTR	CONTRACTOR
CUSP	CUSPIDOR
D	DEPTH/DEEP
DF	DRINKING FOUNTAIN
DIA/⌀	DIAMETER
DISCH	DISCHARGE
DW	DISTILLED WATER
DWC	DRINKING WATER COOLER
DWC-H	DRINKING WATER COOLER - HANDICAP
DWG	DRAWING
DWV	DRAINAGE WASTE AND VENT
FD-1	FLOOR DRAIN TYPE
FH CAB	FIRE HOSE CABINET
FL	FLOOR
FOV	FUEL OIL VENT
FPM	FEET PER MINUTE
FS	FLOW SWITCH
FSSK	FLOOR SERVICE SINK
FCO	FLOOR CLEANOUT
G	NATURAL GAS
GC	GENERAL CONTRACTOR
H	HEIGHT/HIGH
ID	INSIDE DIAMETER
INV	INVERT
L	LENGTH/LONG
L-1	LAVATORY TYPE
MAX	MAXIMUM
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MB	MOP BASIN
N_2	NITROGEN
NIC	NOT IN CONTRACT
N_2O	NITROUS OXIDE
NTS	NOT TO SCALE
O_2	OXYGEN
OD	OUTSIDE DIAMETER
OPNG	OPENING
OR	OIL RETURN
OS	OIL SUPPLY
OSD	OPEN SITE DRAIN
PIV	POST INDICATING VALVE
PT	PERFORATED TILE
PRV	PRESSURE REDUCING VALVE
PVC	POLY VINYL CHLORIDE
PW	PROCESS WATER
PWR	PROCESS WATER RETURN
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RL	REFRIGERANT LIQUID
RM	ROOM
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
SAN	SANITARY
SH	SHOWER
SHT	SHEET
SK-1	SINK TYPE
SP-1	SPECIAL PLUMBING CONNECTION
SPEC(S)	SPECIFICATION(S)
STD	STANDARD
ST	STORM
TCC	TEMPERATURE CONTROL CABINET
TW	TEMPERED WATER
UR	URINAL
V	VENT
VA	VALVE
VAC	VACUUM (MEDICAL)
VB	VACUUM BREAKER
VS	VENT STACK
VT	VITRIFIED TILE
VTR	VENT THRU ROOF

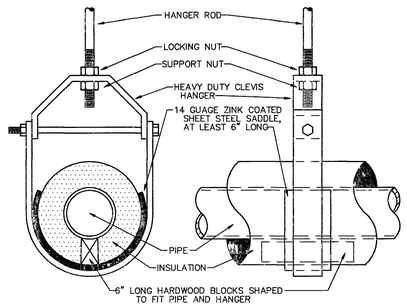
W/	WITH
WC	WATER CLOSET
WCO	WALL CLEANOUT
WF	WASH FOUNTAIN
W/O	WITHOUT
WSSK	WALL SERVICE SINK
	CONNECT NEW TO EXIST. VERIFY SIZE AND LOCATION OF EXIST. ON SITE
CW	COLD WATER
HW	HOT WATER
RHW	RETURN HOT WATER
V	VENT PIPING
	UNDER FLOOR PIPING
SAN	SANITARY PIPING
ST	STORM PIPING
FP	FIRE PROTECTION PIPING
G	NATURAL GAS
A	COMPRESSED AIR
FCO	FLOOR CLEANOUT
WCO	WALL CLEANOUT
RH	RODDING HOLE
DS	DOWNSPOUT
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
RD	ROOF DRAIN
CB	CATCH BASIN
S/MH	SANITARY MANHOLE
ST/MH	STORM MANHOLE
	SHUT-OFF VALVES
BV	MEMORY BALANCE VALVE
	SUPERVISORY SHUT-OFF VALVE
	FLOW INDICATOR
O_2	OXYGEN
N_2	NITROGEN
N_2O	NITROUS OXIDE
ACT	ACETYLENE
	CHECK VALVE
PT	PERFORATED TILE
WM	WATER MAIN
AW	ACID WASTE
AV	ACID VENT
	STRAINER
VAC	VACUUM
WH	EXTERIOR WALL HYDRANT
HB	HOSE BIBB
R	COMPRESSED AIR REGULATOR
A	COMPRESSED AIR OUTLET
G	NATURAL GAS OUTLET

TYPICAL AT EACH CHANGE OF DIRECTION IN PIPING (CW,HW,HWR) MIN (2) 90 ELBOWS

SIZE OF PIPE-8" @ .40%-% OF SLOPE
APPROX LENGTH OF PIPE-100'-.4'-APPROX HEIGHT OF SLOPE

E- "E" PREFIX INDICATES EXISTING PIPE OR EQUIPMENT

PIPE TURNED UP
PIPE TURNED DOWN
PIPE OUT TOP
PIPE OUT BOTTOM
DOUBLE CHECK VALVE ASSEMBLY
REDUCED PRESSURE BACKFLOW PREVENTER
ATOMSPHERIC VACUUM BREAKER
PRESSURE VACUUM BREAKER
SAFETY PRESSURE RELIEF VALVE
GAS PRESSURE REDUCING/ REGULATING VALVE
THERMOMETER
PRESSURE GAUGE
GAS SHUT-OFF COCK
LUBRICATED PLUG VALVE
DOM. HW TEMP. REG. VALVE
ECCENTRIC REDUCER
WATER PRESSURE REDUCING/ REGULATING VALVE
WATER PRESSURE RELIEF VALVE
SPRINKLER HEAD CONCEALED WITH COVER PLATE
SPRINKLER HEAD UPRIGHT TYPE
SPRINKLER HEAD PENDANT TYPE



PIPE HANGERS(6"AND SMALLER) 4-P1

NO SCALE

NOTE:

ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS J. DUNWOODY 4980 REGISTERED ARCHITECT

DRAWING OF RECORD

PLUMBING SYMBOLS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

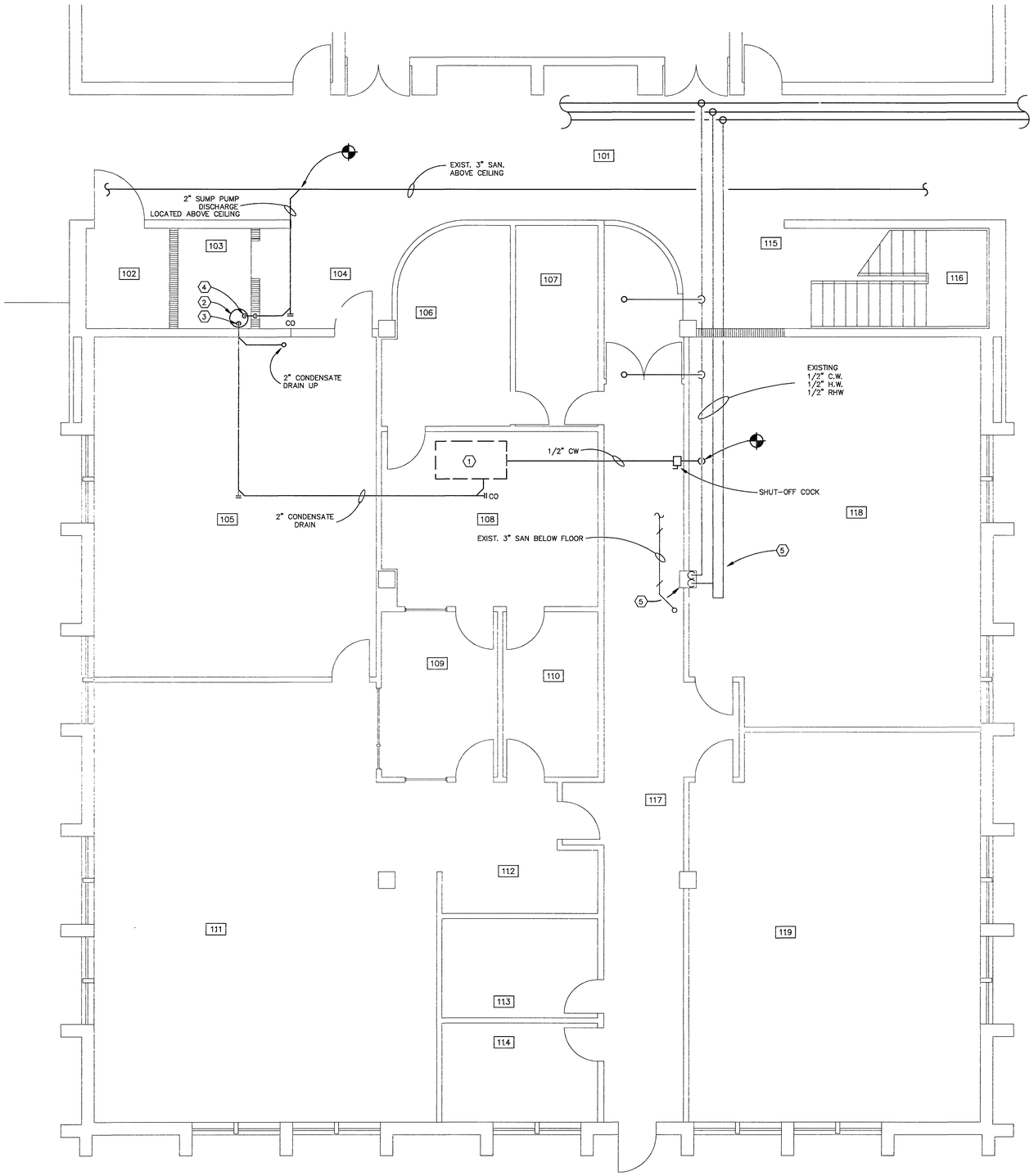
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

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ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWN BY: JSH	DATE: JUNE 22, 1988	SET OF	SHEET
	COMM. NO.: 8776.00		P1



UNIT A–FLOOR PLAN

SCALE: 1/4"=1'–0"

ROOM SCHEDULE

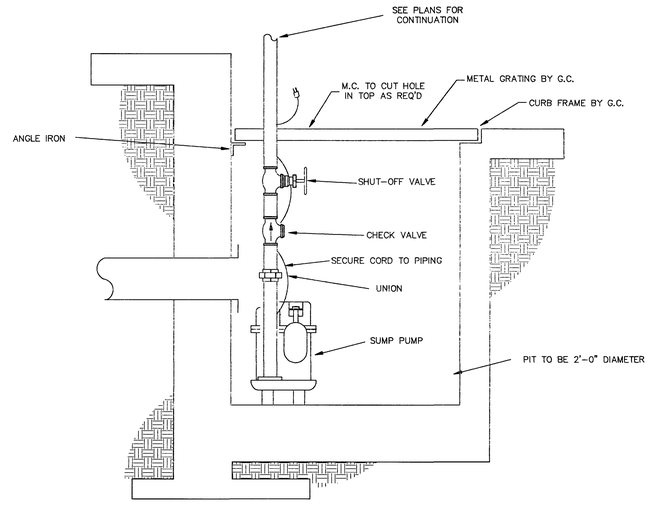
ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

PLAN NOTES:

1. COMPUTER ROOM UNIT BY M.C.
2. SUMP PUMP 36 GPM, 10 FT. OF HD. SUBMERSIBLE BRONZE LIKE HYDROMATIC MODEL SP–25B, 1/4HP, 1750RPM, 115V/1ø/60HZ. SEE DETAIL THIS SHEET
3. 2" CONDENSATE DRAIN DOWN TO SUMP PUMP
4. PROVIDE 4" CAST IRON STUB OUT OF SUMP PIT FOR FOOTING DRAIN TILE CONNECTION. FOOTING DRAINS BY OTHERS.
5. DISCONNECT AND CAP EXIST. DOMESTIC WATER AND VENT TO SINK ABOVE CEILING. DISCONNECT AND CAP EXIST. SANITARY BELOW FLOOR. PATCH FLOOR TO MATCH EXISTING.

GENERAL NOTES

1. INSTALLATIONS SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, CODES, ETC., AND SAME ARE MADE A PART OF THESE CONTRACT DOCUMENTS THE SAME AS IF REPEATED HEREIN.
2. CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.
3. CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.
4. CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.
5. CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY – ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
6. CONTRACTOR SHALL THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS PRIOR TO SUBMITTING A BID PROPOSAL.
7. PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN LIGHT SOLID LINES INDICATE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
8. PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.
9. VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.
11. HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.
12. EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.
13. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.



SUMP PUMP PIPING DETAIL

NO SCALE

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DURWOODY 4980 REGISTERED ARCHITECT

DRAWING OF RECORD

UNIT A–PLUMBING PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

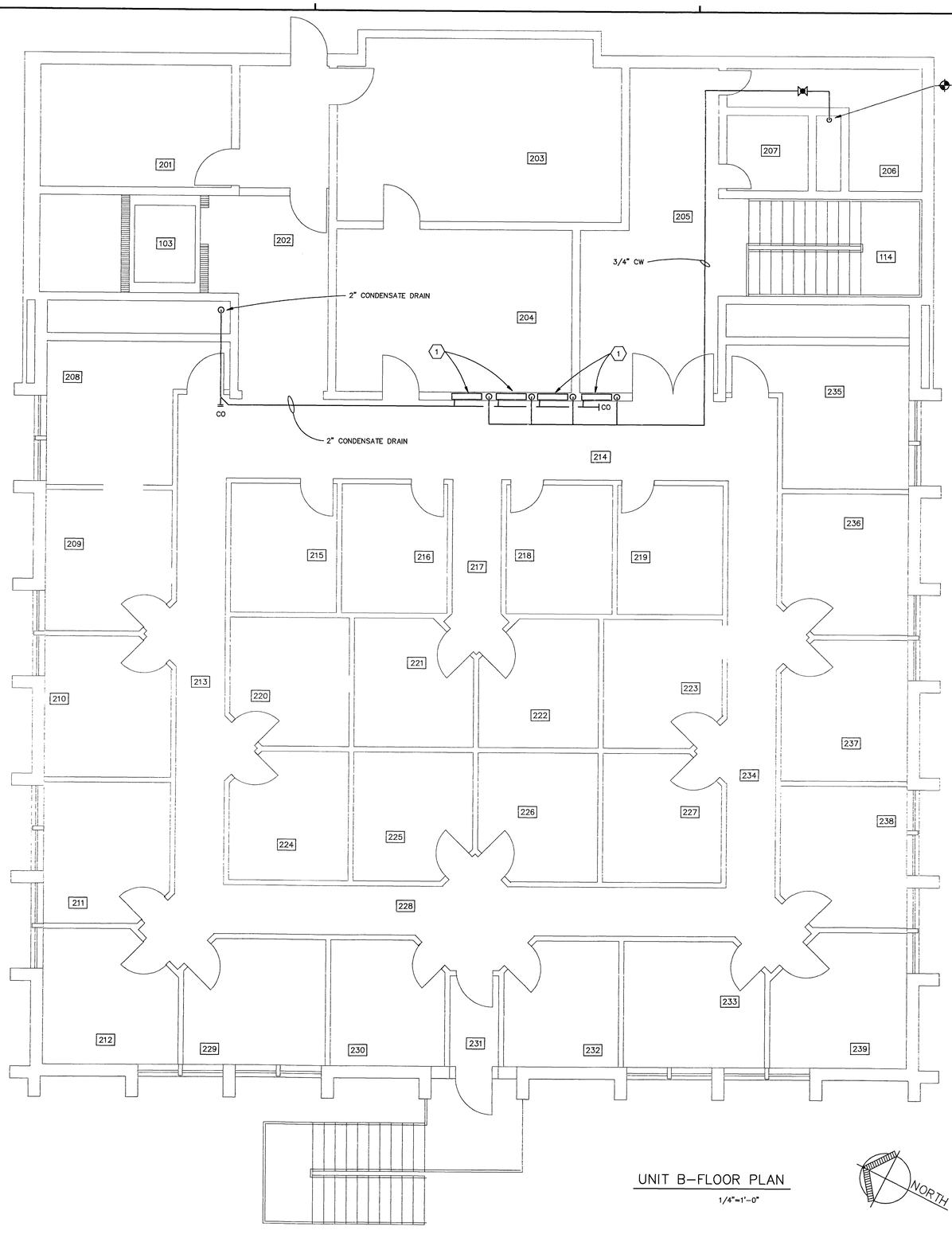
PREPARED FOR

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DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWN BY: JSH	DATE: JUNE 22, 1988	SET OF	SHEET
	COMM. NO.: 8776.00		P2



UNIT B–FLOOR PLAN

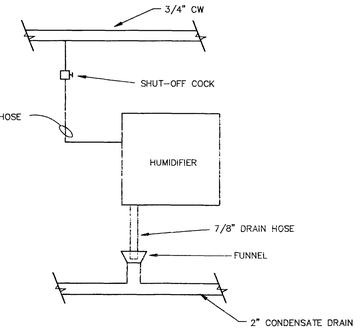
1/4"=1'-0"

NORTH

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100

PLAN NOTES:

(1) HUMIDIFIER BY M.C. SEE HUMIDIFIER DETAIL THIS SHEET



HUMIDIFIER DETAIL

NO SCALE

GENERAL NOTES

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8 PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.

9 VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.

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12 EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.

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STATE OF OHIO CLAIR HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUPWOODY 4980 REGISTERED ARCHITECT

UNIT–B PLUMBING PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

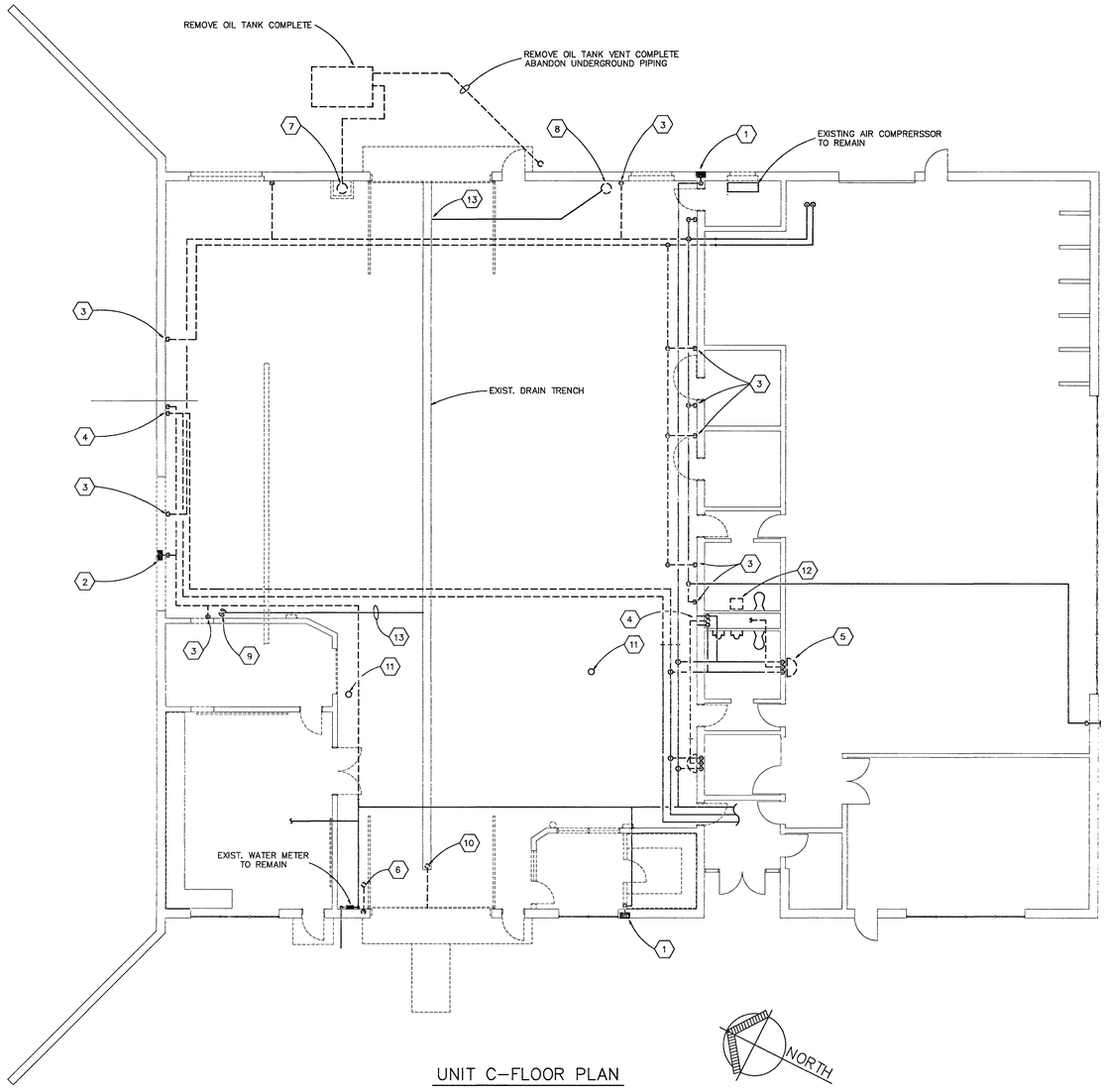
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PREPARED BY

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ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWING OF RECORD

DRAWN BY: JSH | DATE: JUNE 22, 1988 | COMM. NO.: 8776.00 | SET OF | SHEET P3



UNIT C–FLOOR PLAN

1/8"=1'-0"

GENERAL NOTES

1 INSTALLATIONS SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, CODES, ETC., AND SAME ARE MADE A PART OF THESE CONTRACT DOCUMENTS THE SAME AS IF REPEATED HEREIN.

2 CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

3 CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.

4 CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.

5 CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY – ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.

6 CONTRACTOR SHALL THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS PRIOR TO SUBMITTING A BID PROPOSAL.

7 PIPING. DUCTWORK, AND EQUIPMENT SHOWN IN LIGHT SOLID LINES INDICATE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

8 PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.

9 VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.

10 CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.

11 HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.

12 EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.

13 MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.

14 REMOVE ALL WORK MADE OBSOLETE BY NEW CONSTRUCTION.

15 DURING REMOVAL OF ITEMS SO INDICATED, CAUTION SHALL BE USED TO PREVENT DAMAGE TO ANY EQUIPMENT HAVING SALVAGE VALUE. ALL REUSABLE SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND BE RETAINED FOR HIS INSPECTION. ONLY ITEMS SO INSPECTED AND REJECTED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR. ALL OTHER ITEMS SHALL BE TURNED OVER AND DEPOSITED AS DIRECTED BY THE OWNER.

16 PIPING, DUCTWORK, AND EQUIPMENT SHOWN WITH DARK DASHED LINES INDICATE EXISTING PIPING, DUCTWORK, AND EQUIPMENT TO BE REMOVED UNLESS NOTED OTHERWISE.

PLAN NOTES

(1) EXISTING CW HYDRANT TO REMAIN

(2) REMOVE EXISTING CW HYDRANT COMPLETE, CAP PIPING AT MAIN.

(3) REMOVE EXIST. COMPRESSED AIR OUTLET AND PIPING COMPLETE, CAP PIPING AT MAIN.

(4) REMOVE EXIST. HOSE BIB COMPLETE

(5) REMOVE EXIST. LAVATORY COMPLETE, CAP SANITARY AT FLOOR PATCH TO MATCH EXIST.

(6) REMOVE EXIST. VENT CAP TOP OF VENT PIPE ABOVE ROOF

(7) REMOVE EXIST. OIL DUMPING STATION COMPLETE

(8) REMOVE EXIST. FLOOR ACCESS COMPLETE

(9) REMOVE EXIST. FLOOR DRAIN COMPLETE

(10) REMOVE DRAIN PIPE COMPLETE

(11) EXISTING SANITARY FLOOR CLEANOUT TO REMAIN
RAISE EXIST. C.O. AS REQ'D TO MATCH NEW FLOOR ELEV.

(12) REMOVE EXIST. LAV CAP CW,HW SAN & VENT
IN CHASE AS REQUIRED

(13) ABANDON EXIST. PIPE UNDER FLOOR

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWOODY 4980 REGISTERED ARCHITECT

DRAWING OF RECORD

UNIT C–PLUMBING DEMO PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWN BY: JSH	DATE: JUNE 22, 1988	SET OF	SHEET
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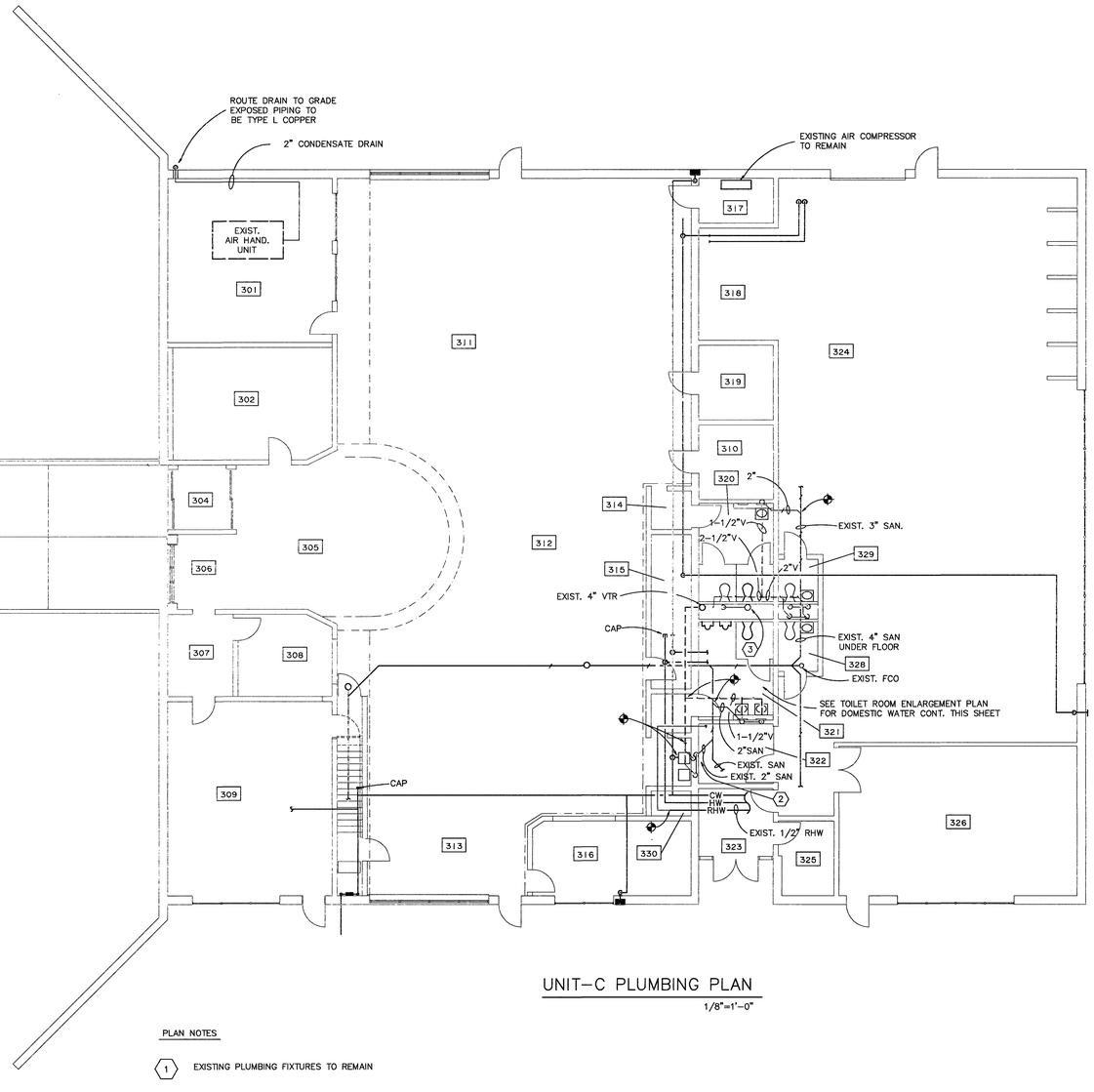
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UNIT–C PLUMBING PLAN

1/8"=1'–0"

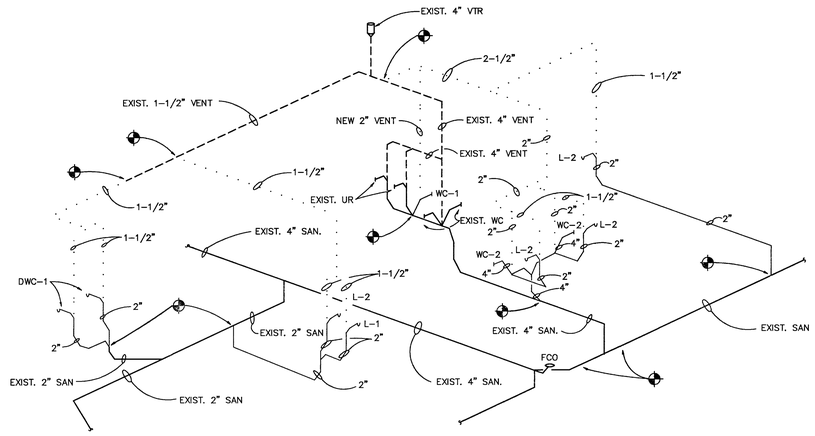
PLAN NOTES

1 EXISTING PLUMBING FIXTURES TO REMAIN

2 CONNECT 1–1/2" SAN. FROM DWC–1 TO EXIST. SAN. THRU FLOOR AS REQUIRED

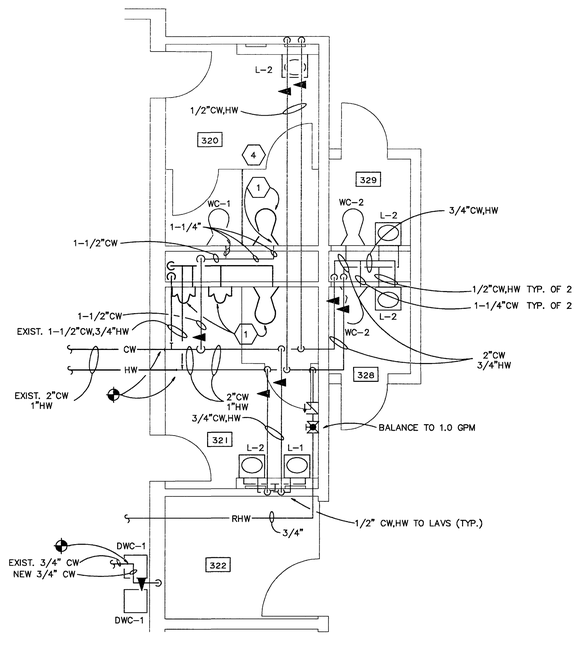
3 CONNECT 4" SAN. FROM NEW WC–1 TO EXIST. WATER CLOSET CARRIER 4" WASTE AS REQUIRED

4 DISCONNECT EXIST. CW SUPPLY TO EXIST. WATER CLOSET AND CONNECT NEW 1–1/4" CW SUPPLY TO EXIST. WC TRIM AS REQUIRED



SANITARY & VENT SCHEMATIC

NO SCALE



TOILET ROOM ENLARGEMENT PLAN

1/4"=1'–0"

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
301	TECH. RESOURCES	10'-0"		-
302	TOILET ROOM	9'-0"		-
303	TOILET ROOM	9'-0"		-
304	VESTIBULE			
305	PASSAGE			
306	CIRCULATION DESK			
307	WORKROOM			
308	OFFICE			
309	WORKROOM			
310	DARKROOM			
311	READING AREA			
312	REFERENCE AREA			
313	READING AREA			
314	STACKS			
315	ELECTRICAL			
316	FACULTY			
317	JANITOR			
318	TOOLS			
319	PREVIEW ROOM			
320	TOILET ROOM			
321	TOILET ROOM			
322	TOOLS			
323	ENTRY			
324	MACHINE ROOM			
325	JANITOR			
326	CLASSROOM			

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWODY 4980 REGISTERED ARCHITECT

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PROJECT NUMBER: 275–87–106

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MECHANICAL ABBREVIATIONS

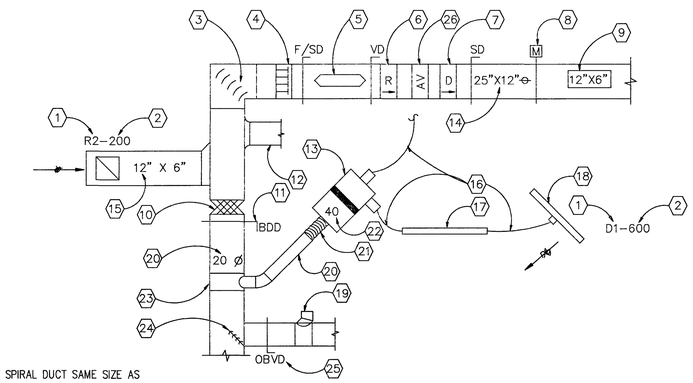
AC	AIR CONDITIONING
AP	ACCESS PANEL
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AFMS	AIR FLOW MEASURING STATION
AHU	AIR HANDLING UNIT
AMB	AMBIENT
AR	ACID RESISTANT
ARCH	ARCHITECT(URAL)
ARV	AIR RELIEF VALVE
AT	AIR TRANSFER
ATR	AIR TEMPERATURE RISE
ATV	AIR TURNING VANES
AUTO	AUTOMATIC
AVE	AIR VOLUME EXTRACTOR
BD	BAROMETRIC DAMPER
BDD	BACKDRAFT DAMPER
BHP	BREAK HORSE POWER
BLDG	BUILDING
BTM	BOTTOM
C	CONVECTOR
CAB	CABINET
CFM	CUBIC FEET PER MINUTE
CH	CABINET HEATER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CHWP	CHILLED WATER PUMP
CLG	CEILING
CMP	CORRUGATED METAL PIPE
COL	COLUMN
COMP	COMPRESSER
CONC	CONCRETE
COND	CONDENSER
CONSTR	CONSTRUCTION
CONTR	CONTRACTOR
CPD	CONDENSATE PUMP DISCHARGE
CW	COLD WATER (DOMESTIC)
CWP	CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
D	DEPTH/DEEP
DB	DRY BULB TEMPERATURE
DIA	DIAMETER
DIF	DIFFUSER
DISCH	DISCHARGE
DLR	DOUBLE LOUVER REGISTER
DWG	DRAWING
DUC	DOOR UNDER CUT
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ELEC	ELECTRIC
ELEV	ELEVATION
EMD	END OF MAIN DRIP
EMER	EMERGENCY
EP	ELECTRIC/PNEUMATIC
EQUIP	EQUIPMENT
EXH	EXHAUST AIR
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR/EXTENSION
F&T	FLOAT AND THERMOSTATIC
FCU	FAN COIL UNIT
F/SD	COMBINATION FIRE/SMOKE DAMPER
FD	FLOOR DRAIN
FDT	FIRE DAMPER TYPE
FIN FL/FF	FINISH FLOOR
FL	FLOOR
FOV	FUEL OIL VENT
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FT	FEET
FURN	FURNACE
G	GAS (NATURAL)
GA	GAUGE
GAL	GALLON
GC	GENERAL CONTRACTOR
H	HEIGHT/HIGH
HDG	HEAVY DUTY GRILLE
HDWR	HARDWARE
HHR	HEATING HOT WATER RETURN
HHS	HEATING HOT WATER SUPPLY
HHWP	HEATING HOT WATER PUMP
HP	HORSE POWER
HPR	HIGH PRESSURE STEAM RETURN
HPS	HIGH PRESSURE STEAM SUPPLY
HTR	HEATER
HW	HOT WATER (DOMESTIC)
ID	INSIDE DIAMETER
INCIN	INCINERATOR
INSUL	INSULATION/INSULATE
INT	INTERIOR
INV	INVERT
KEC	KITCHEN
KW	KILOWATT
L	LENGTH/LONG
LAB	LABORATORY
LAV	LAVATORY
LP	LIQUID PETROLEUM
LPR	LOW PRESSURE STEAM RETURN
LPS	LOW PRESSURE STEAM SUPPLY
LVR	LOUVER
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MPR	MEDIUM PRESSURE STEAM RETURN
MPS	MEDIUM PRESSURE STEAM SUPPLY
MTD	MOUNTED
NIC	NOT IN CONTRACT
NO/#	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED/OWNER INSTALLED
OPNG	OPENING
OR	OIL RETURN
OS	OIL SUPPLY
PE	PNEUMATIC/ELECTRIC
PREFAB	PREFABRICATED
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RA	RETURN AIR
RACU	ROOM AIR CONDITIONING UNIT
RAD	RADIATION
RAG	RETURN AIR GRILLE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REG	REGISTER
REQ'D	REQUIRED
RHW	RECIRCULATED HOT WATER (DOMESTIC)
RL	REFRIGERANT LIQUID
RL48	RETURN LINEAR SLOT DIFFUSER (48" LONG)
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
RSD	ROUND SUPPLY DIFFUSER
SA	SUPPLY AIR
SCH	SCHEDULE
SD	SUPPLY DIFFUSER
SG	SUPPLY GRILLE
SHT	SHEET
SIM	SIMILAR
SL48	SUPPLY LINEAR SLOT DIFFUSER (48" LONG)
SP	STATIC PRESSURE
SPEC(S)	SPECIFICATION(S)
SR	SUPPLY REGISTER
STD	STANDARD
TCC	TEMPERATURE CONTROL CONTRACTOR
TD	TEMPERATURE DIFFERENCE
TEMP	TEMPERATURE
TXV	THERMAL EXPANSION VALVE
TYP	TYPICAL
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATOR
V	VENT
VA	VALVE
VAC	VACUUM
VB	VACUUM BREAKER
VD	VOLUME DAMPER
VEL	VELOCITY
VIF	VERIFY IN FIELD
VT	VITRIFIED TILE
W	WIDE/WIDTH
W/	WITH
W/O	WITHOUT
WACO	ELECTRIC WATER COOLER
WB	WET BULB TEMPERATURE
WCO	WALL CLEAN OUT

MECHANICAL SYMBOLS

- PIPE TURNED UP
- PIPE TURNED DOWN
- PIPE OUT TOP
- PIPE OUT BOTTOM
- INDICATES DIRECTION OF DOWNWARD PITCH
- INDICATES EXPANSION LOOP
- PIPE ANCHOR
- PIPE ALIGNMENT GUIDE
- PIPE EXPANSION JOINT
- STRAINER
- UNION
- GATE (SHUT-OFF) VALVE
- BALL VALVE
- CHECK VALVE (ARROW TOWARD DIRECTION OF FREE FLOW)
- BALANCING VALVE
- MOTOR OPERATED VALVE
- PNEUMATIC OPERATED VALVE
- SOLENOID OPERATED VALVE
- 2-WAY TEMPERATURE CONTROL VALVE
- 3-WAY TEMPERATURE CONTROL VALVE
- BUTTERFLY VALVE
- NEEDLE VALVE
- WATER PRESSURE REDUCING/ REGULATING VALVE
- WATER PRESSURE RELIEF VALVE
- AIR RELIEF VENT
- CONNECT NEW TO EXISTING, VERIFY SIZE AND LOCATION OF EXISTING ON SITE
- (T) THERMOSTAT
- (T$_P$) PILOT THERMOSTAT
- (H) HUMIDISTAT
- (T$_2$) DUAL ELEMENT THERMOSTAT
- (T$_A$) ASPIRATING THERMOSTAT
- (T$_G$) THERMOSTAT WITH WIRE GUARD

- ECCENTRIC REDUCER
- FLOW CONTROL VALVE (G)
- THERMOMETER
- PRESSURE GAUGE
- GAS SHUT-OFF COCK
- LUBRICATED PLUG VALVE
- STEAM PRESSURE REDUCING VALVE
- SAFETY PRESSURE RELIEF VALVE (R)
- GAS PRESSURE REDUCING/ REGULATING VALVE
- CHAIN OPERATED VALVE
- DOUBLE CHECK VALVE ASSEMBLY
- REDUCED PRESSURE BACKFLOW PREVENTER
- ATOMSPHERIC VACUUM BREAKER
- PRESSURE VACUUM BREAKER
- STEAM TRAP (T)
- HHS — HEATING HOT WATER SUPPLY
- HHR — HEATING HOT WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- HIGH PRESSURE STEAM SUPPLY
- HIGH PRESSURE STEAM RETURN
- MEDIUM PRESSURE STEAM SUPPLY
- MEDIUM PRESSURE STEAM RETURN
- LOW PRESSURE STEAM SUPPLY

- SUPPLY AIR ELBOW UP
  DIMENSION DESCRIPTION:
  1ST FIGURE = SIDE SHOWN
  2ND FIGURE = SIDE NOT SHOWN
- SUPPLY AIR ELBOW DOWN
- EXHAUST/RETURN AIR ELBOW UP
- EXHAUST/RETURN AIR ELBOW DOWN
- DOUBLE SIDE TRANSITION
  TRANSITION SLOPE SPECIFICATION:
  MINIMUM SLOPE = 15°
  MAXIMUM SLOPE = 45°
- SINGLE SIDE TRANSITION
- TOP TRANSITION (SLOPE ON TOP)
- BOTTOM TRANSITION (SLOPE ON BOTTOM)
- ELBOW UP
  DIMENSION DESCRIPTION:
  14"ø = ROUND DUCT
  24"/12" FO = FLAT OVAL DUCT
- ELBOW DOWN
- ELBOW - RADIUS (R) = 1.5 TIMES DIAMETER OF DUCT
- LOW PRESSURE STEAM RETURN
- FOS — FUEL OIL SUPPLY
- FOR — FUEL OIL RETURN
- CS — CONDENSER WATER SUPPLY
- CR — CONDENSER WATER RETURN
- RD — REFRIGERANT DISCHARGE
- RS — REFRIGERANT SUCTION



1. INDICATES DIFFUSER, GRILL, OR REGISTER NUMBER
2. INDICATES AIR QUAN. IN CFM
3. TURNING VANES
4. AIR FLOW MEASURING STATION
5. SOUND ABSORBER
6. R (RISE)
7. D (DROP)
8. MOTORIZED DAMPER
9. DUCT SIZE SHOWN INSIDE RECTANGLE INDICATES CLEAR INSIDE DIMENSION FOR DUCT THAT IS INTERNALLY LINED WITH INSULATION.
10. FLEXIBLE CONNECTION
11. BACKDRAFT DAMPER
12. SPIN-IN CONNECTION
13. TERMINAL BOX
14. FLAT OVAL DUCT SIZE
15. RECTANGULAR DUCT SIZE
16. ROUND FLEX DUCT SAME SIZE AS DIFF. INLET
17. ROUND SPIRAL DUCT SAME SIZE AS DIFFUSER INLET
18. SLOT DIFFUSER INDICATING DIRECTION OF AIR DISCHARGE
19. 45-90 DEG TEE
20. ROUND SPIRAL DUCT SIZE
21. FLEXIBLE DUCT SAME SIZE AS TERMINAL BOX INLET
22. INDICATES TERMINAL BOX NUMBER
23. 90 DEG. CONICAL TEE
24. PADDLE TYPE EXTRACTOR
25. OPPOSED BLADE VOLUME DAMPER
26. AIR VALVE

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

STATE OF OHIO — CLAIR E. HOWEY — 3962 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS DUPWOODY — 4980 — REGISTERED ARCHITECT

MECHANICAL SYMBOLS & ABBREV.

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REGISTER AND GRILLE SCHEDULE

MARK	SERVICE	SIZE	REMARKS
ER1	EXHAUST REGISTER	10"x8"	LIKE TITUS MODEL 355–FL5 W/OPPOSED BLADE DAMPER
HDG1	RETURN AIR GRILLE	36"x18"	LIKE TITUS MODEL 33–GL
AT1	AIR TRANSFER REGISTER	22"x22"	LIKE TITUS MODEL 355–FL
AT2	AIR TRANSFER REGISTER	12"x10"	LIKE TITUS MODEL 355–FL

DIFFUSER SCHEDULE

MARK	NOMINAL SIZE	ARRANGEMENT	NECK SIZE	AIR INLET SIZE	NOTES
SD1	24"x24" PANEL	4–WAY BLOW	6"x6"	6"ø	LIKE TITUS MODEL TDC PROVIDE SQ. TO ø FITTING
SD2	24"x24" PANEL	4–WAY BLOW	9"x9"	9"ø	LIKE TITUS MODEL TDC PROVIDE SQ. TO ø FITTING
SD3	24"x24" PANEL	4–WAY BLOW	12"x12"	12"ø	LIKE TITUS MODEL TDC PROVIDE SQ. TO ø FITTING
SD4	24"x24" PANEL	4–WAY BLOW	15"x15"	12"ø	LIKE TITUS MODEL TDC PROVIDE SQ. TO ø FITTING
SLD1	2 FT.	1 SLOT		6"ø	LIKE TEMPMASTER FRD SUPPLY AIR
SLD2	2 FT.	2 SLOT		7"ø	LIKE TEMPMASTER FRD SUPPLY AIR
SLD3	4 FT.	2 SLOT		9"ø	LIKE TEMPMASTER FRD SUPPLY AIR
WG1	10 IN. WIDE	SEE PLANS FOR LENGTH		–	LIKE CARNES LINEAR WALL GRILLE MODEL C40H
RLD1	2 FT.	1 SLOT		6"ø	LIKE TEMPMASTER FRDR RETURN AIR
RLD2	2 FT.	2 SLOT		7"ø	LIKE TEMPMASTER FRDR RETURN AIR
RLD3	4 FT.	2 SLOT		9"ø	LIKE TEMPMASTER FRDR RETURN AIR

MISCELLANEOUS EQUIPMENT SCHEDULE

EQUIPMENT	TOTAL REQ'D	DESCRIPTION	REMARKS
HUMIDIFIERS (ALTERNATIVE BID)	4	ELECTRODE STEAM HUMIDIFIER 20 LBS. PER HOUR, 1 CYLINDER, 2 ELECTRODES, (1) 7/8" STEAM OUTLET, 480V/60/1ø ELECT. SERVICE, 6.8 KW, 13.5 FLA.	LIKE NORTEC MODEL MP–300
COMPUTER ROOM ENVIROMENTAL SYSTEM	1	30.5 TOTAL MBH COOLING, 23.5 SENSIBLE COOLING MBH, ON LOW FAN SPEED, FIT 2'x4' LAY–IN CEILING GRID, 4.5 LBS. PER HOUR HUMIDIFICATION CAPACITY, 22.1 MBH ELEC. HEATING CAPACITY. REMOTE PROPELLER FAN CONDENSING UNIT. UNIT TO ACCEPT 277/60/1ø ELEC. SERVICE	LIKE LIEBERT MINI–MATE PLUS NOMINAL 3 TON UNIT.
PACKAGED TERMINAL AIR CONDITIONER (ALTERNATIVE BID)	8	250 CFM, 0% O.A. ELECTRIC COOLING, 14,800 BTUH, 1930 WATTS, 9.6 F.L.A., 1–1/4 HP COMPRESSOR, COMPLETE WITH WALL SLEEVE, PAINTED ALUM. HORIZONTAL LOUVER COLOR AS SELECTED BY ARCHITECT., SELF CONTAINED CONTROLS, 265V., HARD WIRE CONNECTION.	LIKE TRANE MODEL PTEA 15
AIR COOLED CONDENSING UNIT #1 (ACCU #1)	1	40 TON COOLING CAPACITY, (2) 20 HP COMPRESSORS, (2) REFRIGERATION CIRCUITS, 42°F SUCTION TEMPERATURE, 95°F AMBIENT, (4) 26" DIA. CONDENSER FANS, 1.0 HP EACH, 480V/60/3ø ELEC. SERVICE	LIKE TRANE MODEL RAUB–C40

REHEAT COIL SCHEDULE

MARK	CFM	DUCT SIZE W x H (IN.)	FACE VEL.	HEATING MBH	GPM	E.A.T.	L.A.T.	E.W.T.	L.W.T.	REMARKS
RH–1	3000	36"x18"	670	194.4	8.0	55°	105°	200°	160°	SEE SPECS
RH–2	3000	36"x18"	670	194.4	8.0	55°	105°	200°	160°	SEE SPECS
RH–3	3000	36"x18"	670	194.4	8.0	55°	105°	200°	160°	SEE SPECS
RH–4	3000	36"x18"	670	194.4	8.0	55°	105°	200°	160°	SEE SPECS
RH–5	400	12"x10"	480	21.6	1.0	55°	105°	200°	160°	SEE SPECS
RH–6	400	12"x10"	480	21.6	1.0	55°	105°	200°	160°	SEE SPECS
RH–7	1000	16"x16"	600	64.8	2.7	55°	105°	200°	160°	SEE SPECS
RH–8	350	12"x10"	420	21.6	1.0	55°	105°	200°	160°	SEE SPECS
RH–9	350	12"x10"	420	21.6	1.0	55°	105°	200°	160°	SEE SPECS

AIR HANDLING UNIT SCHEDULE

UNIT	LOCATION/SERVICE	TOTAL AIR VOLUME (CFM)	NEW DX–COOLING COIL									FILTERS	MIN. O.A. %	REMARKS
			ENTERING AIR		LEAVING AIR		ROWS DEEP (MIN.)	FINS PER/IN. (MAX.)	FACE VEL. (FPM)	AIR PR. DROP (IN WG)	MIN. MBH			
			DB (F)	WB (F)	DB (F)	WB (F)								
EXIST. AHU–1	NEW LIBRARY / SINGLE ZONE A/C	12,000	76	66	53	53	6	15	500	1.0	480.0	30% PLEAT.	15%	EXIST. TRANE UNIT

CABINET HEATER SCHEDULE

UNIT DESIG.	NOMINAL UNIT CFM	HEATING (180°F E.W.T.)				ESP (IN W.G.)	UNIT SPEED	MOTOR TYPE	MOTOR LOAD 115V/60HZ 1 PHASE			REMARKS
		NOMINAL HTG. (MBH)	HTG. HOT WATER GPM	COIL TYPE	COIL PD FT.				AMPS	WATTS	HP	
CH-1	600	20.0	2.0	A–COIL	7.0	–	HIGH	G2	2.1	135	1/20	LIKE TRANE MODEL E, CEILING MTD., HORIZONTAL, FULLY RECESSED UNIT

STATE OF OHIO – CLAIR HOWEY – 3962 – REGISTERED ARCHITECT

STATE OF OHIO – THOMAS DUNWOODY – 4980 – REGISTERED ARCHITECT

DRAWING OF RECORD

MECHANICAL SCHEDULES

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

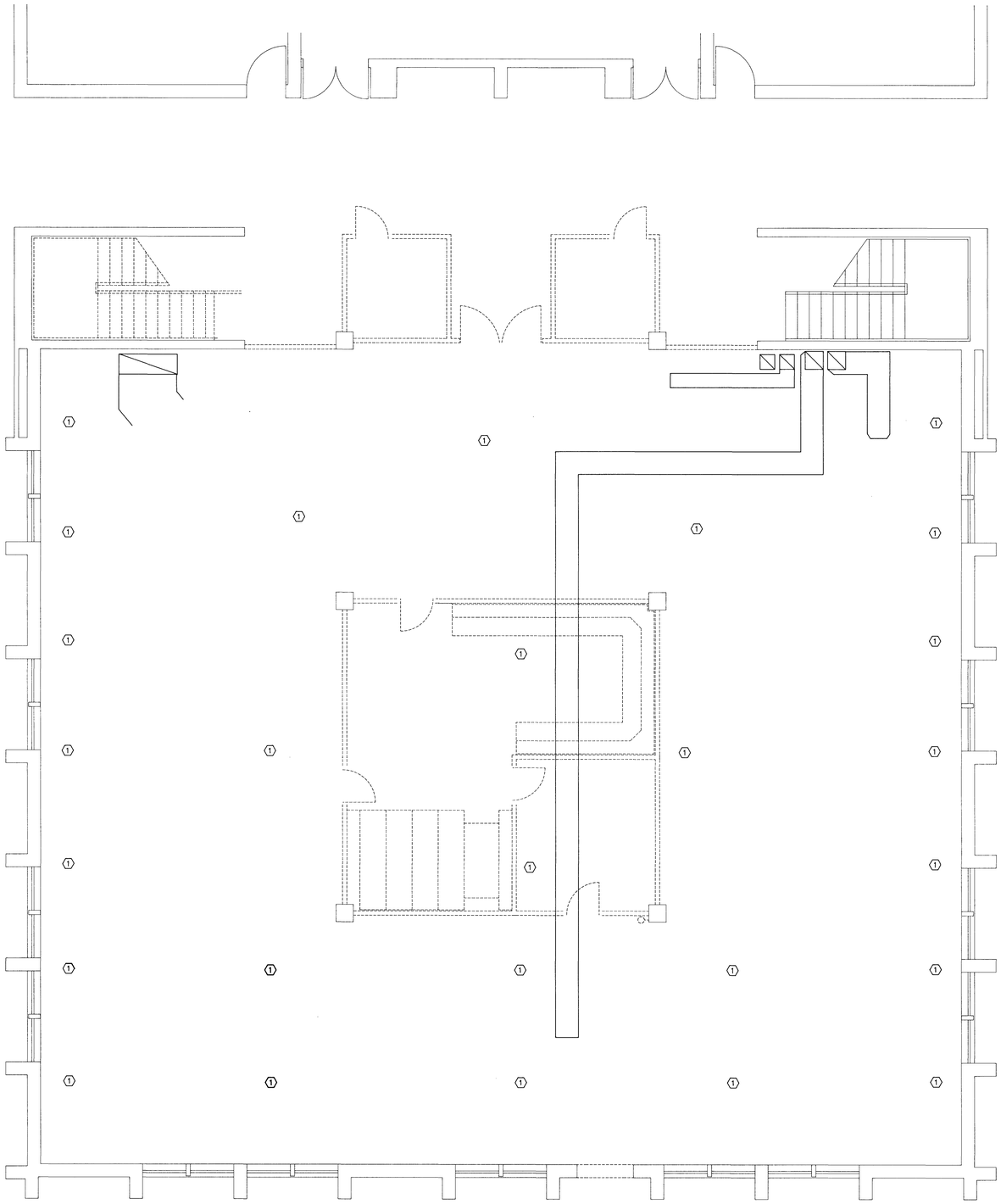
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

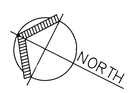
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ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWN BY: CJW	DATE: JUNE 22, 1988	SET OF	SHEET
	COMM. NO.: 8776.00		M2



UNIT A–FLOOR PLAN
SCALE: 1/4"=1'–0"



GENERAL NOTES:

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16 PIPING, DUCTWORK, AND EQUIPMENT SHOWN WITH DARK DASHED LINES INDICATE EXISTING PIPING, DUCTWORK, AND EQUIPMENT TO BE REMOVED UNLESS NOTED OTHERWISE.

PLAN NOTE:

(1) DIFFUSERS, FLEXIBLE DUCT, RETURN AIR REGISTER W/T–STATS., CEILING, AND LIGHTS WILL BE REMOVED BY OTHERS.

STATE OF OHIO
CLAIR E. HOWEY
3982
REGISTERED ARCHITECT

STATE OF OHIO
THOMAS DURWOODY
4980
REGISTERED ARCHITECT

UNIT A–HVAC DEMO PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

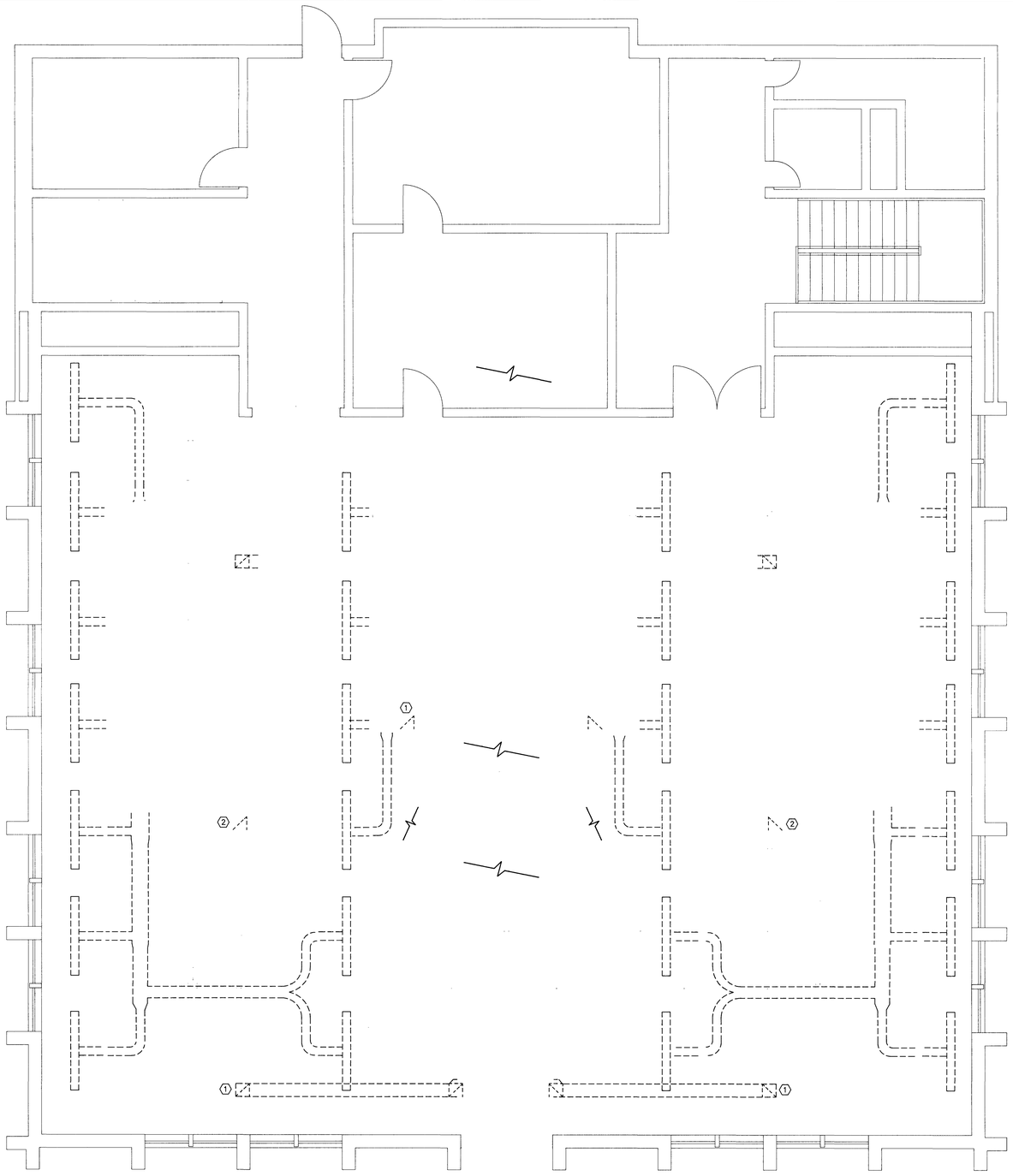
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STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
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UNIT B–HVAC DEMO PLAN

NORTH

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PLAN NOTES:

(1) REMOVE EXISTING ZONE T–STAT. FROM R.A. DUCT.

(2) CAP EXISTING REGISTER OPENING IN RETURN AIR DUCT.

STATE OF OHIO REGISTERED ARCHITECT

STATE OF OHIO THOMAS E. DUNWOODY 4980 REGISTERED ARCHITECT

UNIT B–MECH DEMO PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

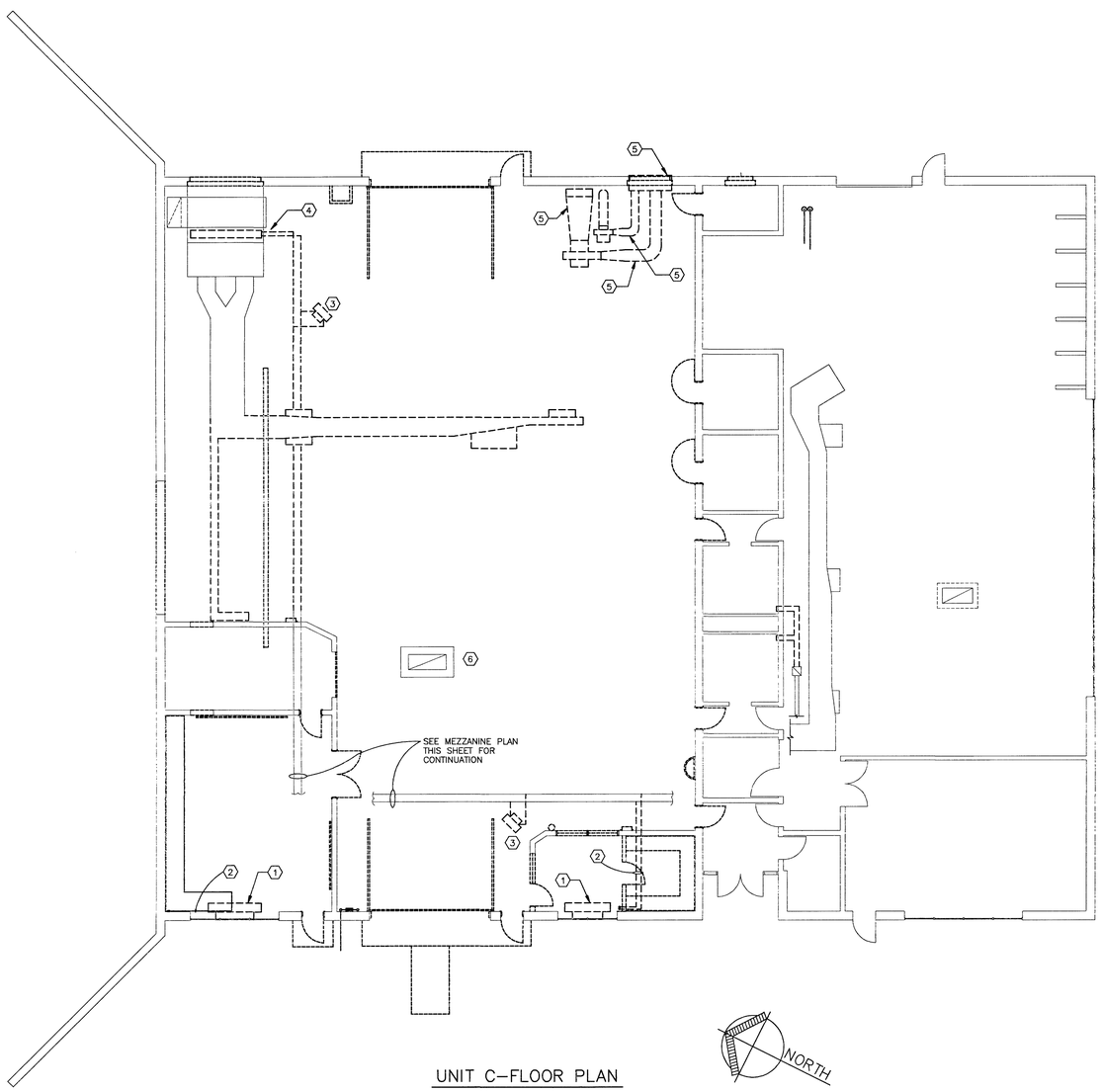
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UNIT C–FLOOR PLAN

GENERAL NOTES:

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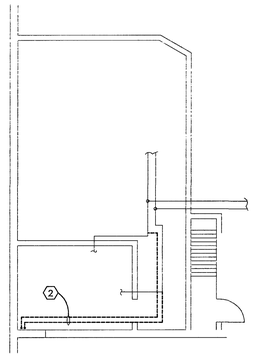
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PLAN NOTES:

(1) REMOVE EXIST. UNIT VENTILATOR AND CONTROLS COMPLETE.
(2) REMOVE HEATING HOT WATER PIPING TO U.V. COMPLETE. CAP PIPING AT MAIN.
(3) REMOVE EXIST. UNIT HEATER PIPING & CONTROLS COMPLETE. CAP PIPING AT MAIN.
(4) REMOVE EXIST. HOT WATER COIL, CONTROLS, AND PIPING COMPLETE.
(5) REMOVE EXIST. EXHAUST FAN, DUCTWORK, AND LOUVER COMPLETE.
(6) REMOVE BACKDRAFT DAMPER ON ROOF MOUNTED RELIEF AIR VENTILATOR.
(7) REMOVE EXIST. RETURN AIR DROP TO LEVEL OF 14'–0" A.F.F.



MEZZANINE PLAN
SCALE: 1/8"=1'–0"

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS J. CUSWORTH 4980 REGISTERED ARCHITECT

UNIT C–HVAC DEMO PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

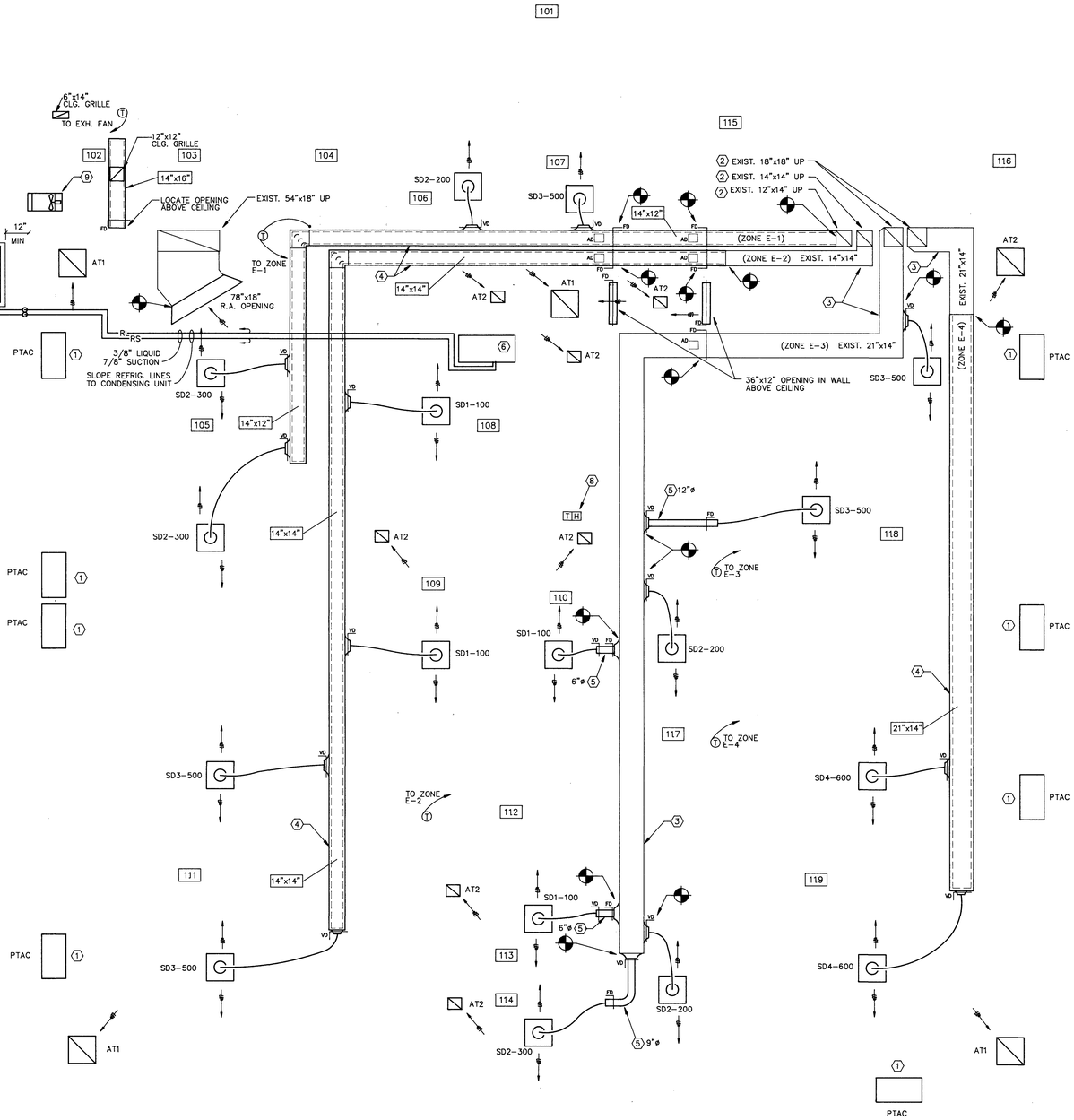
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PREPARED BY

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UNIT A-FLOOR PLAN

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

NORTH

ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

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PLAN NOTES:

(1) PACKAGED TERMINAL AIR CONDITIONERS ARE INCLUDED UNDER ALTERNATE BID PACKAGE.

(2) EXISTING SUPPLY DUCT RISER TO BE EXTERNALLY INSULATED.

(3) EXISTING SUPPLY DUCT TO BE EXTERNALLY INSULATED.

(4) NEW RECTANGULAR SUPPLY DUCT TO BE INTERNALLY LINED DUCTWORK.

(5) NEW ROUND SUPPLY DUCT TO BE EXTERNALLY INSULATED.

(6) COMPUTER ROOM ENVIROMENTAL SYSTEM EVAPORATOR SECTION.

(7) COMPUTER ROOM ENVIROMENTAL SYSTEM CONDENSING UNIT SECTION. INSTALL UNIT ON 6" REINFORCED CONCRETE PAD.

(8) THERMOSTAT/HUMIDISTAT FOR COMPUTER ROOM ENVIROMENTAL SYSTEM.

(9) ELEVATOR EXHAUST FAN LIKE PENN TYPE 'P', PROPELLER WALL FAN MODEL P-10R, 10" BLADE DIAMETER, 1/10 HP, 120/60/1ø, 1550 RPM, DIRECT DRIVE, 800 CFM, FAN GUARD, MODEL ASA/FB COMBINATION STATIONARY EXTRUDED LOUVER AND INTEGRAL BACK DRAFT DAMPER, MOUNT 8'-0" A.F.F. FAN TO BE CONTROLLED FROM WALL THERMOSTAT BY T.C.C. PATCH WALL TO MATCH EXISTING.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS J. DUMMODY 4980 REGISTERED ARCHITECT

UNIT A-HVAC PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

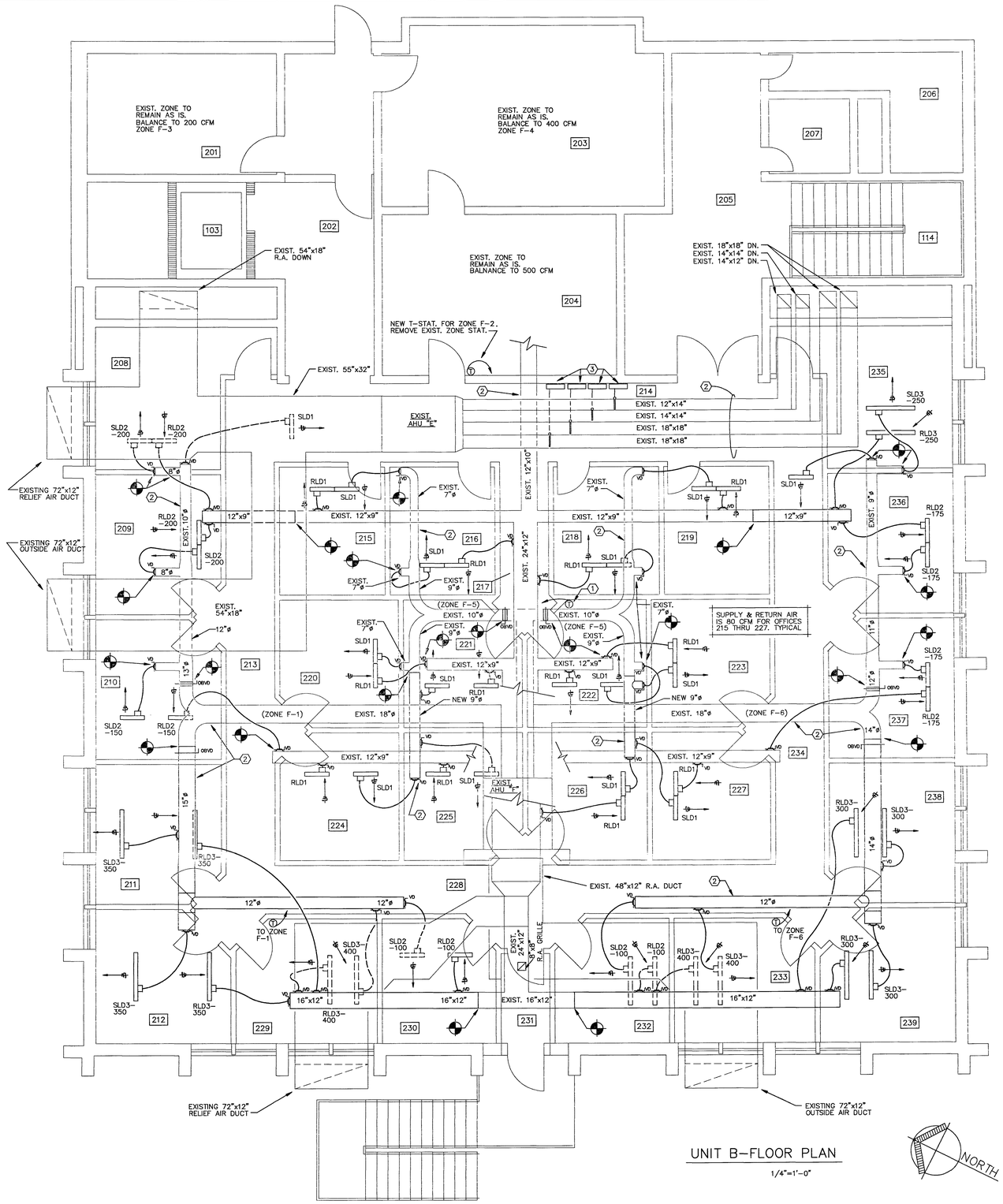
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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UNIT B–FLOOR PLAN

1/4"=1'-0"

NORTH

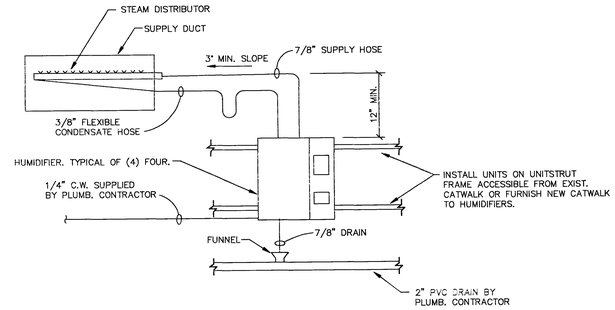
ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100

PLAN NOTES:

(1) TO ZONE F-5.

(2) EXTERNALLY INSULATE ALL EXISTING & NEW SUPPLY AIR DUCTWORK FROM EXISTING AHU TO FLEXIBLE DUCT CONNECTION. TYPICAL.

(3) HUMIDIFIERS SERVING SUPPLY AIR DUCTWORK TO COMPUTER CLASSROOMS. INSTALL HUMIDIFIERS SO THAT ACCESSIBILITY FOR MAINTENCE CAN BE DONE FROM EXISTING CATWALK. HUMIDIFIERS ARE TO BE FURNISHED UNDER ALTERNATE BID. EXISTING DUCTWORK SHALL BE REWORKED AS REQUIRED TO INSTALL NEW HUMIDIFIERS. SEE HUMIDIFIER DETAIL THIS SHEET.



HUMIDIFIER DETAIL

NO SCALE

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3. CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.
4. CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.
5. CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY – ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
6. CONTRACTOR SHALL THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS PRIOR TO SUBMITTING A BID PROPOSAL.
7. PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN LIGHT SOLID LINES INDICATE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
8. PIPING, DUCTWORK, AND EQUIPMENT SHOWN IN HEAVY SOLID LINES INDICATE NEW OR REROUTED PIPING, DUCTWORK, AND EQUIPMENT UNLESS OTHERWISE NOTED. CONNECT NEW PIPING, DUCTWORK, AND EQUIPMENT TO EXISTING AS SHOWN AND REQUIRED.
9. VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.
11. HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.
12. EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.
13. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.
14. ALL NEW ROUND DUCTWORK SHOWN IS SPIRAL DUCTWORK.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DUNWOODY 4980 REGISTERED ARCHITECT

UNIT B–HVAC PLAN

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS / ENGINEERS / CONSULTANTS

DRAWING OF RECORD

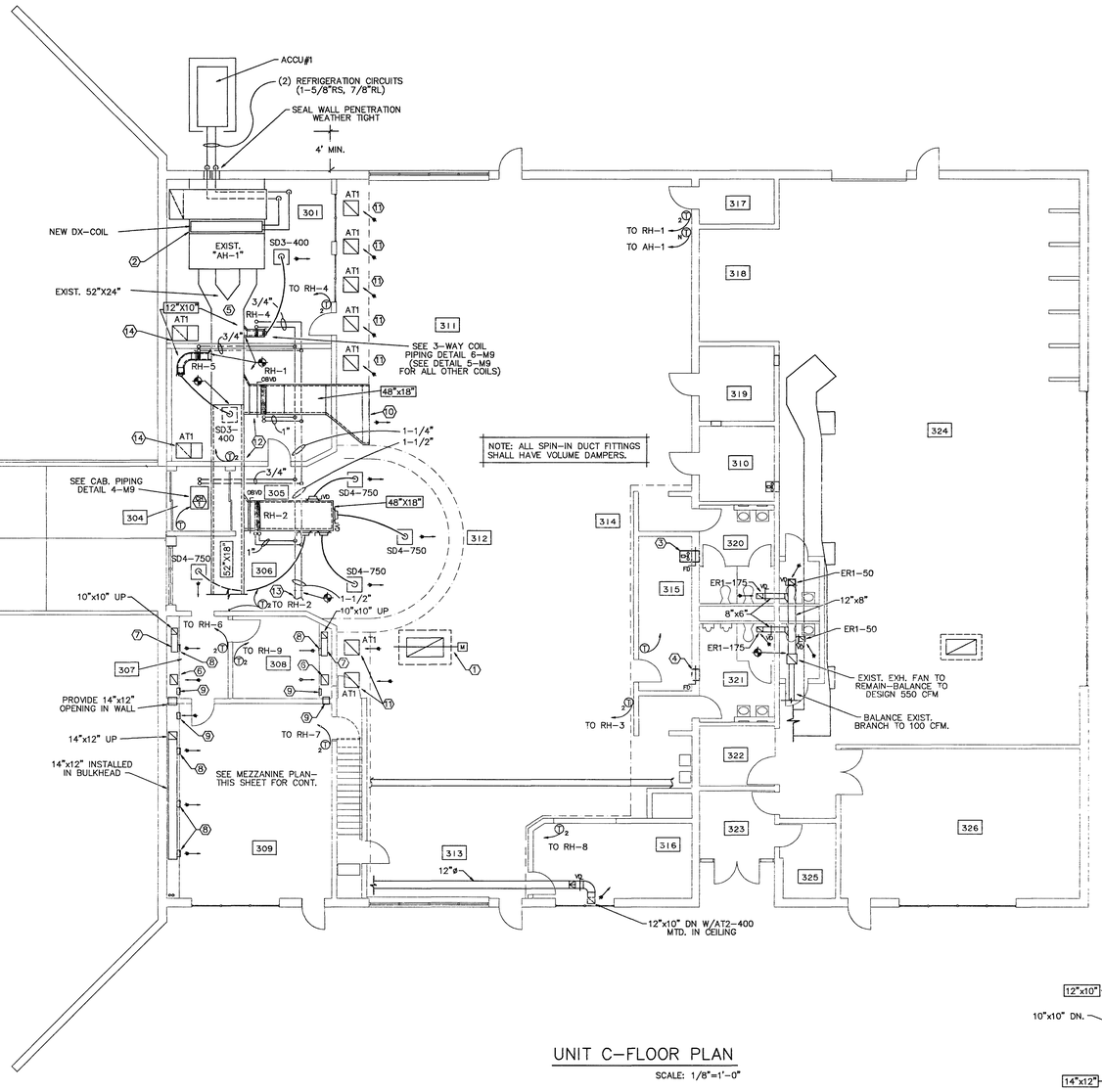
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DATE: JUNE 22, 1988

COMM. NO.: 8776.00

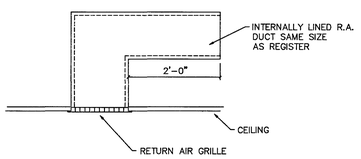
SET OF

SHEET M7



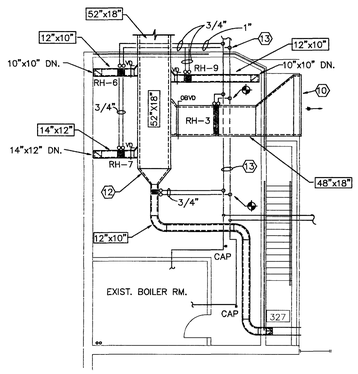
UNIT C-FLOOR PLAN

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



RETURN AIR REGISTER DETAIL

NO SCALE



MEZZANINE PLAN

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

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
301	TECH. RESOURCES	10'-0"		-
302	TOILET ROOM	9'-0"		-
303	TOILET ROOM	9'-0"		-
304	VESTIBULE			
305	PASSAGE			
306	CIRCULATION DESK			
307	WORKROOM			
308	OFFICE			
309	WORKROOM			
310	DARKROOM			
311	READING AREA		324	
312	REFERENCE AREA			
313	READING AREA			
314	STACKS			
315	ELECTRICAL			
316	FACULTY			
317	JANITOR			
318	TOOLS			
319	PREVIEW ROOM			
320	TOILET ROOM			
321	TOILET ROOM			
322	TOOLS			
323	ENTRY			
324	MACHINE ROOM			
325	JANITOR			
326	CLASSROOM			

GENERAL NOTES:

1 INSTALLATIONS SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, CODES, ETC., AND SAME ARE MADE A PART OF THESE CONTRACT DOCUMENTS THE SAME AS IF REPEATED HEREIN.

2 CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS REQUIRED TO COMPLETELY AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

3 CONRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.

4 CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.

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9 VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION.

10 CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING WORK, PRIOR TO CONSTRUCTION. ALL EXISTING WORK SHOWN INDICATES LOCATION ROUTING AS DERIVED EXISTING DRAWINGS. IN THE EVENT OF CONFLICT, CONTACT THE ARCHITECT/ENGINEER FOR A DECISION.

11 HOLD PIPING AND DUCTWORK AS HIGH AS POSSIBLE.

12 EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.

13 MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE EXISTING CEILING TO REMOVE EXISTING OR INSTALL NEW WORK.

PLAN NOTES:

① T.C.C. TO PROVIDE NEW MOTORIZED DAMPER.

② T.C.C. TO SET EXIST. FACE & BY-PASS DAMPERS TO FULL OPEN POSITION ON EXIST. AH-1.

③ ELECTRICAL ROOM VENTILATION FAN, 1100 CFM, 1550 RPM, DIRECT DRIVE, 1/7 HP, 120V/60/1ø, 12" BLADE DIAMETER, .1" S.P., WALL MTD. PROP. FAN. MOUNT FAN IN WALL AS HIGH AS POSSIBLE. LIKE PENN MODEL P12R. M.C. SHALL BE RESPONSIBLE FOR MOVNG ELEC. CONDUIT FOR INSTALLATION OF FAN.

④ 24"x24" OPENING IN WALL AS HIGH AS POSSIBLE W/FIRE DAMPER AND EXPANDED METAL GRILLE. M.C. SHALL BE RESPONSIBLE FOR MOVING ELECTRICAL CONDUITS AS REQUIRED FOR INSTALLATION OF TRANSFER OPENING.

⑤ WRAP EXISTING SUPPLY DUCTWORK WITH INSULATION.

⑥ PROVIDE 16"x12" R.A. DUCT STUBBED INTO BULKHEAD UP 3' ABOVE MEZZ. FLOOR W/90° HORIZ. ELBOW. DUCTWORK SHALL BE INTERNALLY LINED.

⑦ 10"x10" INSTALLED IN BULKHEAD.

⑧ AT1-350 MTD. IN VERTICAL FACE OF BULKHEAD.

⑨ AT1-RETURN AIR REGISTER MTD. IN VERTICAL FACE OF BULKHEAD.

⑩ 8' OF WG1-3000 CFM. TOP OF GRILLE AT 15'-0" A.F.F.

⑪ AT1 RETURN AIR REGISTER MTD. IN HORIZ. FACE OF BULKHEAD.

⑫ INSTALL NEW DUCTWORK UP TIGHT TO ROOF STRUCTURE.

⑬ EXISTING 2" HHS, HHR.

⑭ PROVIDE INTERNALLY LINED SHEET METAL ELBOW ON AT1. SEE DETAIL THIS SHEET.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DUNWOODY 4980 REGISTERED ARCHITECT

UNIT C-HVAC PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

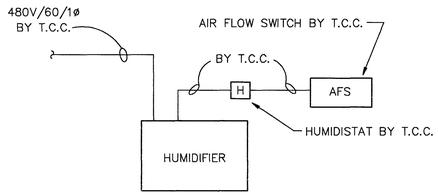
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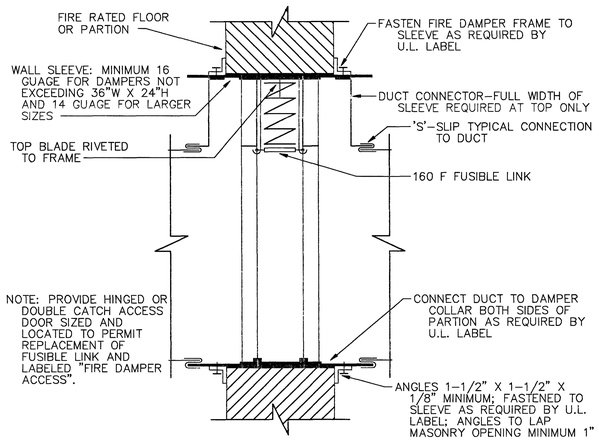
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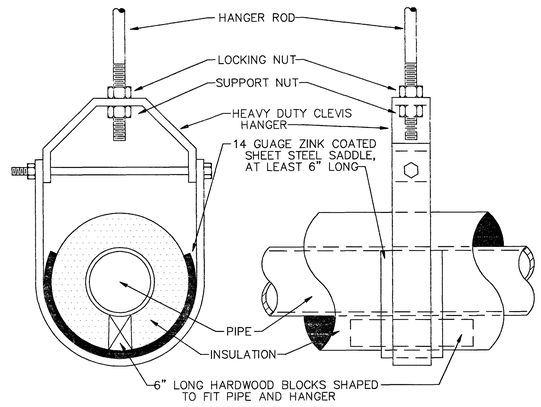
HUMIDIFIER CONTROL SCHEMATIC 1–M9

NO SCALE



FIRE DAMPER INSTALLATION DETAIL 2–M9

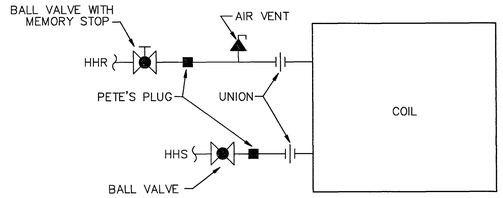
NO SCALE



DETAIL 3–M9

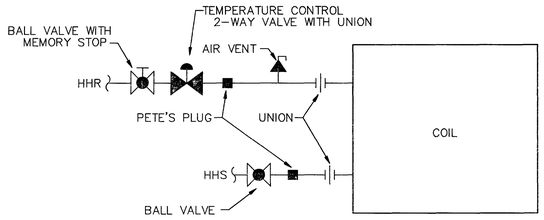
PIPE HANGERS (6" AND SMALLER)

NO SCALE



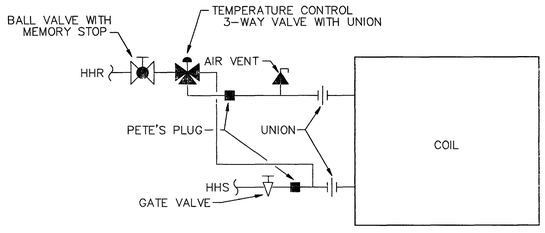
CABINET UNIT HEATER DETAIL 4–M9

NO SCALE



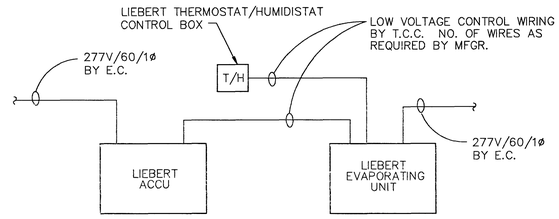
COIL PIPING DETAIL 5–M9

NO SCALE



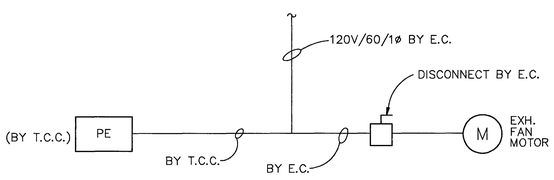
COIL PIPING DETAIL 6–M9

NO SCALE



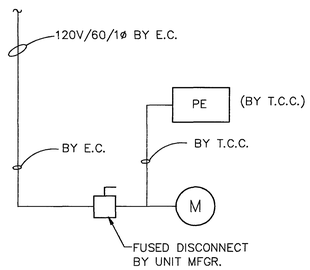
COMPUTER RM. ENVIROMENTAL CONTROL SYSTEM

NO SCALE



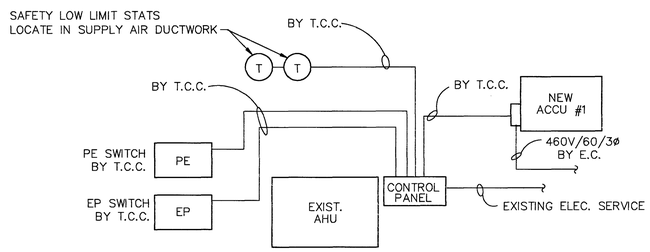
EXHAUST FANS (120V POWER)

NO SCALE



UNIT HEATERS CONTROL

NO SCALE



AHU & ACCU

NO SCALE

STATE OF OHIO · CLAIR E. HOWEY · 3962 · REGISTERED ARCHITECT

STATE OF OHIO · THOMAS DUNWOODY · 4980 · REGISTERED ARCHITECT

MECHANICAL DETAILS

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

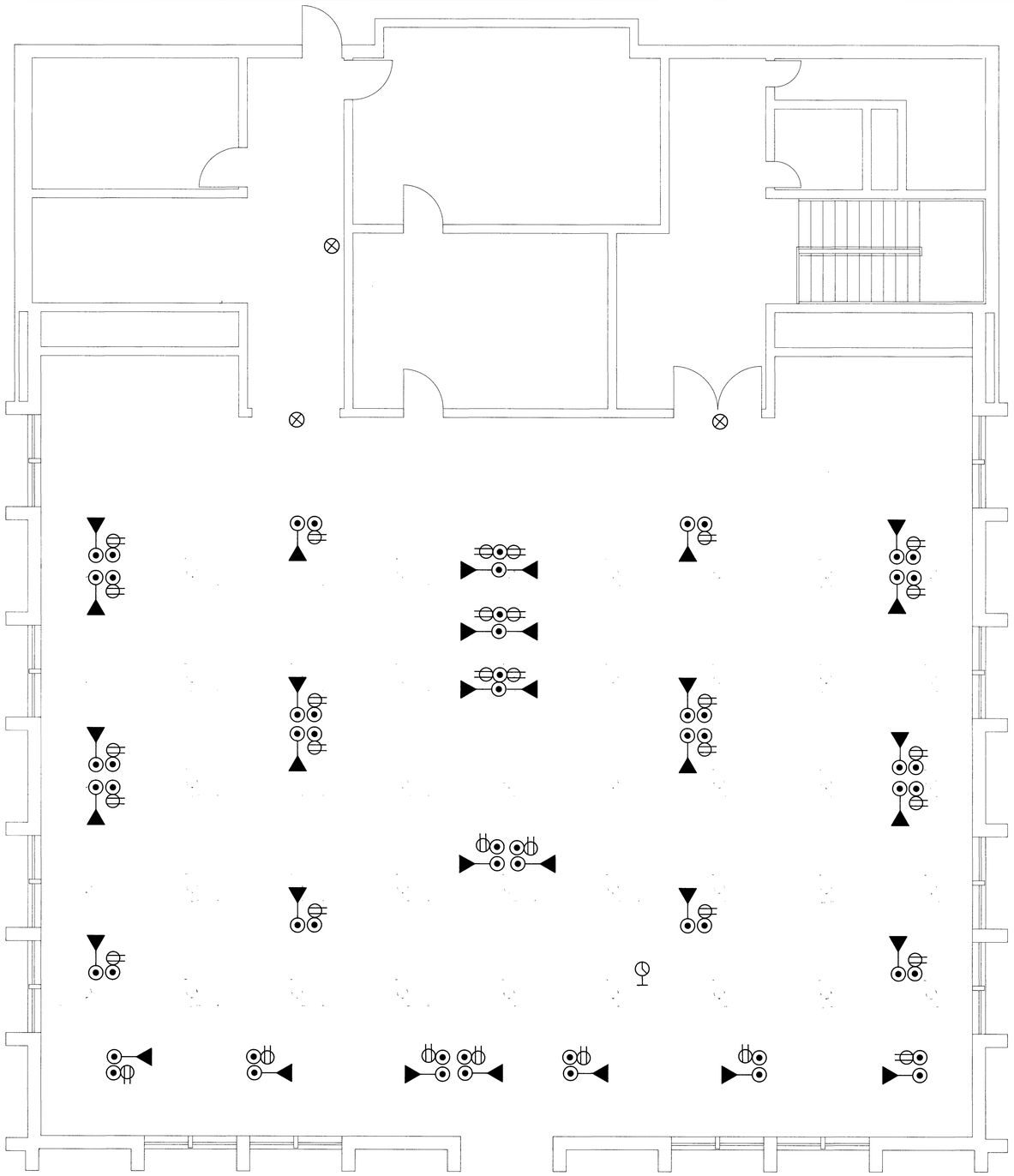
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

PREPARED BY

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ELEC. DEMO UNIT B

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

GENERAL NOTES

1. ALL FLOOR RECEPTACLES AND TELEPHONE OUTLETS ARE PEDESTAL TYPE TO BE REMOVED AND DISPOSED OF. WIRING TO BE REMOVED BACK TO PANELS. CONDUITS TO BE CUT AND CAPPED FLUSH WITH FLOOR. CIRCUITS TO BE REUSED FOR NEW RECEPTACLES AND TELEPHONE OUTLETS.(SEE SHEET E6.)
2. ALL LIGHT FIXTURES (COUNT SHOWN IS APPROXIMATE) ARE TO BE REMOVED AND REUSED IN NEW LAYOUT WITH EXCEPTION OF EXIT LIGHTS WHICH ARE TO BE REMOVED AND DISPOSED OF OFF SITE BY E.C. (SEE SHEET E3). CONTRACTOR TO VERIFY COUNT IN FIELD.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS D. LUPKOSKY 4990 REGISTERED ARCHITECT

ELEC. DEMO UNIT B

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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PREPARED BY

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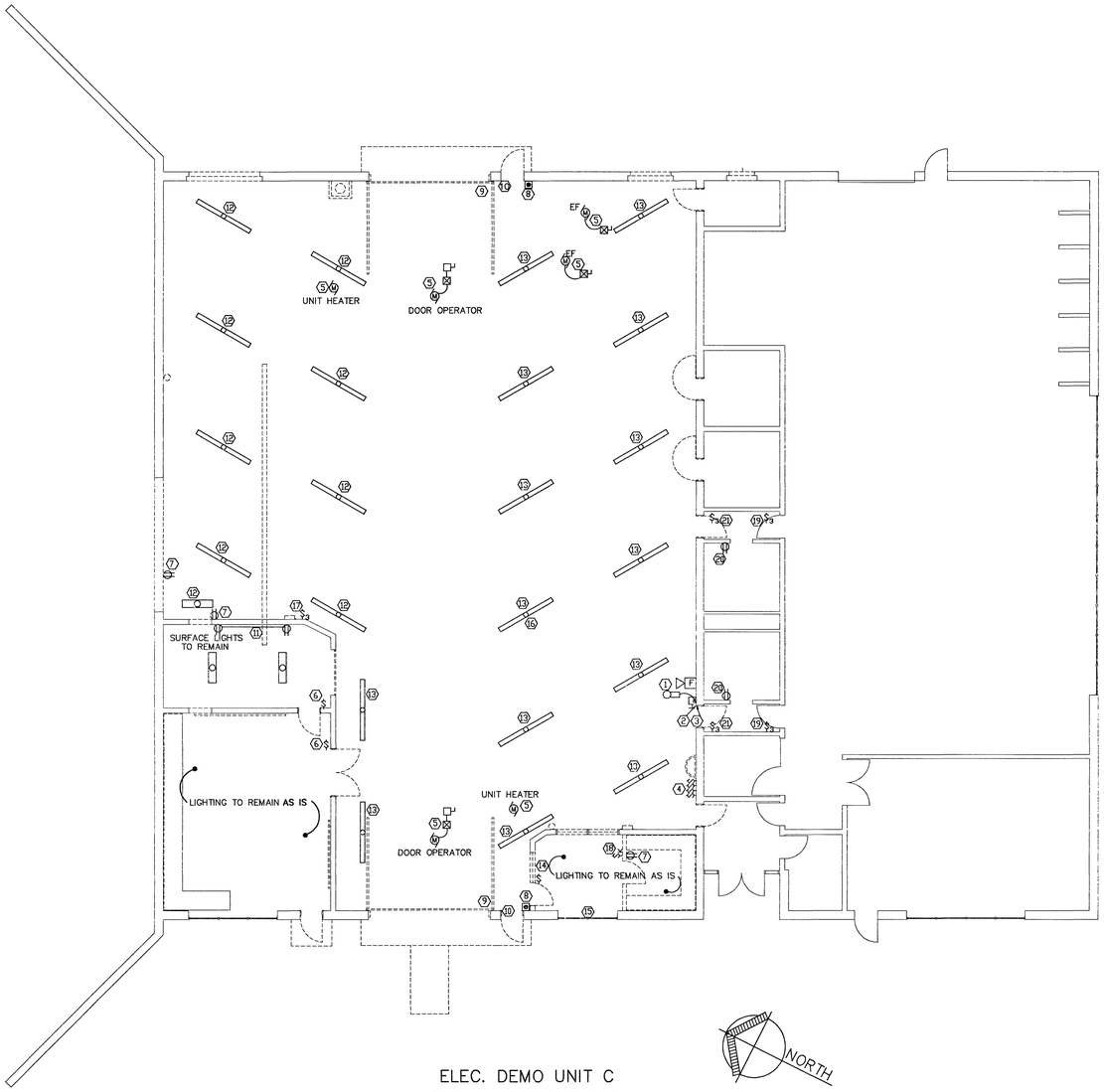
DRAWING OF RECORD	DRAWN BY: DLR/RDH	DATE: JUNE 22, 1988	SET OF	SHEET
		COMM. NO.: 8776.00		E D1

GENERAL NOTES

1. ALL FIXTURES ARE CHAIN HUNG WITH SURFACE CONDUIT ON STRUCTURE AND FLEXIBLE WHIPS UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO FIELD VERIFY ALL WORK.

PLAN NOTES

1. INSTALL EXTENSION RING AND EXTEND CIRCUITS AND RELOCATE FIRE ALARM HORN/STROBE WITH SURFACE METAL RACEWAY AND DOOR SECURITY BELL. SEE SHEET E-7 FOR NEW LOCATION.
2. EXTEND CIRCUIT AND RELOCATE 100A,3P SURFACE MOUNTED SAFETY SWITCH AND CONDUIT. SEE SHEET E-7 FOR NEW LOCATION.
3. REMOVE FLUSH MOUNTED SPRING WOUND TIMERS FOR EX. FANS. (2) TERMINATE WIRING, INSTALL FLUSH COVER.
4. INSTALL EXTENSION RING, EXTEND CIRCUITS (WITH SURFACE METAL RACEWAY) TO LOCATIONS SHOWN ON E-4. RECIRCUIT WITH NEW 3-WAY SWITCHING. SEE SHEET E-4.
5. REMOVE STARTERS AND DISCONNECTS, TERMINATE WIRING AND CAP CONDUITS AT CEILING STRUCTURE.
6. REMOVE SWITCH,BOX AND CONDUIT. EXTEND CIRCUIT (WITH SURFACE MOUNTED RACEWAY) TO NEW 3-WAY SWITCH LOCATIONS. CONCEAL RACEWAY ACROSS CEILING THEN DOWN TO NEW 3-WAY SWITCH LOCATION SHOWN ON SHEET E-4.
7. REMOVE DEVICE,BOX, CONDUIT AND WIRE. TERMINATE CIRCUIT AND CAP CONDUIT AT CEILING STRUCTURE.
8. REMOVE OVERHEAD DOOR PUSH BUTTON STATION. TERMINATE WIRING, INSTALL BLANK COVER.
9. REMOVE MAGNETIC SWITCH FOR OVERHEAD DOOR AND CIRCUITING ENTIRELY.
10. NOT USED.
11. REMOVE SURFACE DEVICES AND CONDUIT. TERMINATE CIRCUIT AND INSTALL FLUSH COVER PLATE.
12. REMOVE FIXTURES AND HANGING CHAINS. RETURN TO OWNER. EXTEND FLEXIBLE METAL CONDUIT AS NECESSARY TO CONNECT TO NEW FIXTURES. SEE SHEET E-4 FOR LOCATIONS AND REVISED SWITCHING.
13. REMOVE FIXTURES AND RETURN TO OWNER. EXTEND FLEXIBLE METAL CONDUITS AS NECESSARY TO CONNECT TO NEW FIXTURE HUNG ON EXISTING CHAINS AT SAME HEIGHT AS ORIGINAL FIXTURES. SEE SHEET E-4 FOR ADDITIONAL NEW FIXTURES LOCATIONS. ADDITIONAL NEW FIXTURES ON NEW CHAINS.
14. REMOVE AND REINSTALL SWITCH AFTER REMOVAL OF SIDE LIGHT.
15. TERMINATE CIRCUIT AND CAP CONDUIT TO UNIT VENTILATOR REMOVED BY DIV. 15.
16. EMERGENCY CIRCUIT CONNECTED FIXTURE. CIRCUIT TO BE EXTENDED TO NEW EMERGENCY FIXTURES. SEE SHEET E-4 FOR LOCATIONS.
17. REMOVE SWITCH AND WIRING. INSTALL COVER PLATE. SEE SHEET E-4 FOR NEW SWITCH AND CIRCUITING FOR MEZZANINE LIGHTING.
18. FUEL PUMP KEY SWITCH. RELOCATE TO NEW ELECTRICAL ROOM. SEE SHEET E-7.
19. REMOVE 3-WAY SWITCH AND WIRING,INSTALL BLANK COVER.
20. EXTEND TO NEW LOCATION. SEE SHEET E-7.
21. REMOVE 3-WAY SWITCH. RELOCATE SWITCH LOCATION (SEE SHEET E-4) AND RECIRCUIT AS NECESSARY.



ELEC. DEMO UNIT C

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

CLAIR HOWEY 3962 REGISTERED ARCHITECT — STATE OF OHIO

THOMAS R. DURWOODY 4980 REGISTERED ARCHITECT — STATE OF OHIO

ELEC. DEMO UNIT C

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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ELECTRICAL SYMBOL LEGEND

- CONDUIT CONCEALED ABOVE CEILING OR IN WALL WHEREVER POSSIBLE.
- CONDUIT CONCEALED IN OR BELOW FLOOR.
- CONDUIT EXPOSED ON CEILING, WALL OR BAR JOIST FOR EXPOSED TYPE BUILDING CONSTRUCTION.
- INDICATES NUMBER OF CONDUCTORS IN CONDUIT TO BE USED AS A GENERAL GUIDE TO SHOW INTENT OF CIRCUITING AND SWITCHING ARRANGEMENT... NOT SHOWN IN ALL CASES... CONTRACTOR SHALL VERIFY AND INSTALL ADDITIONAL CONDUCTOR WHERE REQUIRED.
- AL1-7 HOME-RUN TO PANELBOARD SHOWING CIRCUIT DESIGNATION. INDICATING PANEL (AL1) AND CIRCUIT BREAKER NUMBER (7) WITHIN THE PANEL.
- HUBBELL IG5362 ISOLATED DUPLEX GROUND RECEPTACLE.
- C.R.T. TWO GANG BLANK BOX. NO COVER PLATE.
- CTC COMPUTER TERMINAL CABINET. 24"x24"x6"-HC W/ 3/4" ACX PLYWOOD.
- WC 120V-20A WATER COOLER OUTLET. DIV. 16 SHALL VERIFY EXACT LOCATION OF WATER COOLER OUTLET WITH MANUF.'S DWGS.
- 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET.
- 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET, MOUNTED +48" A.F.F.
- SPECIAL PURPOSE OUTLET (AS NOTED ON PLAN OR SPECIFICATIONS).
- 120V-20A GROUNDED DUPLEXCONVENIENCE FLOOR OUTLET.
- 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET, MTD HORIZONTALLY AT +43" A.F.F.
- IG OR IG 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET WITH G.F.I. PROTECTION.
- 120V-20A GROUNDED DOUBLE DUPLEX CONVENIENCE OUTLET.
- 120V-20A GROUNDED DOUBLE DUPLEX CONVENIENCE OUTLET, MOUNTED @ +48" A.F.F.
- WP 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET WITH WP COVER PLATE.
- B 120V-20A GROUNDED DUPLEX CONVENIENCE CEILING OUTLET.
- 120V-20A GROUNDED DUPLEX CONVENIENCE OUTLET WITH FLEXIBLE CONNECTION TO EQUIPMENT.
- PLUG-IN STRIP. LENGTH PER DRAWING, SEE DETAIL THIS SHEET.
- INDICATING CLOCK OUTLET. "DF" DOUBLE FACE CLOCK.
- PROGRAMMABLE BELL.
- C.P.U. CENTRAL PROCESSING UNIT. SEE SPECS.
- TPR TRANSPONDER REMOTE CONTROL UNIT. SEE SPECS.
- F.A.P. FIRE ALARM PANEL. SEE SPECS FOR DETAILS.
- FA FIRE ALARM ANNUNCIATOR.
- F FIRE ALARM BREAK GLASS STATION.
- FIRE ALARM HORN/STROBE.
- F FIRE ALARM HORN/STROBE AND GLASS STATION.
- F_S OR F_D DUCT MOUNTED SMOKE DETECTOR. COORDINATE W/DIV. 15. DETECTORS SHALL BE MOUNTED IN RETURN & SUPPLY DUCTS OF EACH AIR HANDLER UNIT UNLESS NOTED OTHERWISE.
- F_S SMOKE DETECTOR.
- F_T HEAT DETECTOR.
- CS CENTRAL SOUND SYSTEM & TERMINAL CABINET. SEE SPECS FOR DETAILS.
- CAS MULTI-PURPOSE ROOM SOUND SYSTEM... SEE SPECS FOR DETAILS.
- MU FLUSH MOUNTED MICROPHONE OUTLET.
- A AUXILIARY OUTLET.
- S_W OR S FLUSH CEILING SPEAKER W/CEILING BAFFLE AND PROTECTIVE SPEAKER ENCLOSURE. SUFFIX "W" INDICATES WALL MTD. SPEAKERS.
- SK HORN TYPE WALL MOUNTED SPEAKER WITH MOUNTING BRACKET.
- CALL-IN SWITCH FOR CENTRAL SOUND SYSTEM. SEE SPECS FOR DETAILS.
- VC CALL-IN SWITCH WITH VOLUME CONTROL FOR CENTRAL SOUND SYSTEM.
- CUE INTERCOM OUTLET. SEE SPECS FOR DETAILS.
- ADMINISTRATIVE PHONE. REFER TO SPEC SECTION 16770.
- HORN SPEAKER OR LOUD SPEAKER SEE SPECS.
- T.T.C. TERMINAL TELEPHONE CABINET, W/PLYWOOD INTERIOR AND 120V DUPLEX CONVENIENCE OUTLET INSIDE.
- TELEPHONE FLOOR BOX - RUN 3/4"CONDUIT TO TELEPHONE CABINET.
- TELEPHONE BLANK BOX, NO COVER PLATE - RUN 3/4" CONDUIT TO TELEPHONE CABINET.
- TVC TELEPHONE AND VIDEO CONTROLS. UNDER SPEC SECT. 13100.
- DV DATA/VOICE/VIDEO OUTLET. UNDER SPEC SECT. 13100.
- VO VIDEO OUTLET. UNDER SPEC SECT. 13100.
- MATV OR CATV T.V. HEAD-END EQUIPMENT. SEE SPECS FOR DESCRIPTION.
- TV OR TV TELEVISION ANTENNA OUTLET.
- CAM T.V. CAMERA INPUT/AUDIO CAMERA INPUT.
- OR INCANDESCENT OR HID LIGHTING FIXTURE - LOWER CASE LETTER INDICATES SWITCHING OR CIRCUITING ARRANGEMENT.
- OR WALL MOUNTED INCANDESCENT OR HID LIGHTING FIXTURE.
- FLUORESCENT LIGHTING FIXTURE.
- (NL) FLUORESCENT LIGHTING FIXTURE CONNECTED TO EMERGENCY BATTERY PACK OR TO EMERGENCY PANELBOARD. "NL" INDICATES NIGHT LIGHT FIXTURES.
- EXIT LIGHTING FIXTURE.
- EMERGENCY BATTERY PACK FIXTURE.
- MD CEILING MOUNTED MOTION DETECTOR TO CONTROL LIGHTS IN SAME ROOM.
- S GENERAL PURPOSE 1-POLE SWITCH.
- S_3 GENERAL PURPOSE 3-WAY SWITCH.
- S_4 GENERAL PURPOSE 4-WAY SWITCH.
- S_K GENERAL PURPOSE KEY-OPERATED SWITCH
- S_{FP} FRACTIONAL HORSEPOWER FLUSH MANUAL STARTER W/PILOT LAMP, ASSEMBLY. +48" A.F.F.
- S_{IP} GENERAL PURPOSE 1-POLE SWITCH W/PILOT LIGHT. +48" A.F.F.
- S_{MC} MAINTAIN CONTACT SWITCH. (SUFFIX "KEY" INDICATES KEY OPERATED SWITCH.)
- S_F MANUAL, FUSIBLE, STARTING SWITCH. SCHEDULE "B" SECT. 16155, TYPE "BC-1" OR "BC-2".
- CL-3 etc. LIGHTING CONTACTOR. SEE SPEC SECT. 16155.
- D WALL DIMMER SWITCH. +48" A.F.F. (2000 WATT RATING UNLESS OTHERWISE NOTED.)
- S_{ST} SPRING WANG TIMER SWITCH (0-6). USE MARKTIME OR PARAGON.
- S_{ST-2} MANUAL STARTING SWITCH WITH THERMAL OVERLOAD PROTECTION. SCHEDULE "B" SECT. 16155, TYPE "ST-2".
- T TRANSFORMER.
- PE PNEUMATIC-ELECTRIC SWITCH.
- T THERMOSTAT
- OR ELECTRIC PANELBOARDS.
- A AQUASTAT CONNECTION.
- SV SUPERVISORY VALVE CONNECTION.
- FS FLOW SWITCH CONNECTION.
- M ELECTRIC MOTOR CONNECTION.
- MAGNETIC STARTER. SEE SPECS FOR DETAILS.
- MS MAGNETIC STARTER WITH HOA, 120V, 1hp. SQ.D #8536-SBG-1.
- COMBINATION MAGNETIC STARTER W/DISCONNECT SWITCH. SEE SPECS FOR DETAILS.
- H FUSIBLE DISCONNECT SWITCH. "R" INDICATES AMPERE RATING. SEE SPEC SECT. 16155.
- S MAGNETIC DOOR SWITCH DETECTOR. SEE SPECS.
- W WINDOW DETECTOR. SEE SPECS.
- MD MOTION DETECTOR ROUGH-IN. PROVIDE J-BOX W/ BLANK PLATE & CONDUIT STUBBED-UP ABOVE CEILING. MTG. 1' BELOW CEILING.
- JUNCTION BOX W/FLEXIBLE CONNECTION TO EQUIPMENT.
- J JUNCTION BOX.
- OR PUSH BUTTON STATION.
- CIRCUIT BREAKER.
- FUSED DISCONNECT.

ELECTRICAL ABBREVIATIONS

A	AMPS
AC	AIR CONDITIONING
A.F.	ABOVE FINISH FLOOR
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AHU	AIR HANDLER UNIT
BKR	BREAKER
C	CONDUIT
CATB	CABLE TV
CH	CABINET HEATER
CIRC	CIRCUIT
CL	LIGHTING CONTACTOR
CMF	COMBINATION MOTOR FUSIBLE STARTER
CPT	CONTROL POWER TRANSFORMER
CPU	CENTRAL PROCESSING UNIT
DIST	DISTRIBUTION
E.C.	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELECT	ELECTRICAL
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EXP	INDICATES EXPLOSION PROOF TYPE DEVICE
F	FUSE
F.A.A.	FIRE ALARM ANNUNCIATOR PANEL
F.A.P.	FIRE ALARM PANEL
FC	FAN COIL UNIT
FIXT	LIGHT FIXTURE
FLUOR	FLUORESCENT
FS	FUSIBLE SWITCH
G	GROUND
GFI	GROUND FAULT INTERRUPTING PROTECTION
GRC	GALVANIZED RIGID CONDUIT
HP	HORSEPOWER
HTP	HEAT PUMP
JB	JUNCTION BOX
KW	KILOWATTS
MATV	MASTER ANTENNA TV
M.C.	MECHANICAL CONTRACTOR
MECH	MECHANICAL
#TD.	MOUNTED
+N	INDICATES MOUNTING HEIGHT (N) TO BOTTOM OF DEVICE FROM FINISH FLOOR UNLESS OTHERWISE NOTED
NFS	NONFUSIBLE SWITCH
NL	NIGHTLIGHT
N.T.S.	NOT TO SCALE
P	POLE (PHASE)
P.C.V.	POLY VINYL CHLORIDE
PE	PNEUMATIC/ELECTRIC
PH	PROPELLER HEATER
PNL	PANEL
ø OR P	PHASE
SW	SWITCH
TCP	TEMPERATURE CONTROL PANEL
TPR	TRANSPONDER
TV	TELEVISION
TYP	TYPICAL IN ROOM AREA UNLESS OTHERWISE NOTED
U.O.N.	UNLESS OTHERWISE NOTED
UV	UNIT VENTILATOR
V	VOLTS
VAV	VARIABLE AIR VOLUME
VC	VOLUME CONTROL
W	WATTS
WC	WATER COOLER
WP	INDICATES WEATHERPROOF TYPE DEVICE
1/E1	MEANS DETAIL No. 1, DRAWING SHEET "E1"

GENERAL NOTES

1 ALL 2' X 4'FLUORESCENT LIGHT FIXTURES SHOWN ON LIGHTING PLANS SHALL BE STATIC TYPE "F-3", ALL 1'x4' SHALL BE TYPE "F-1", AND ALL 2'x2' SHALL BE TYPE "F-22" UNLESS NOTED OTHERWISE. FINAL CONNECTIONS TO ALL LAY-IN FIXTURES AND RECESSED INCANDESCENT FIXTURES IN LAY-IN CEILINGS ARE TO BE MADE WITH GREENFIELD FLEXIBLE CONDUIT.

2 E.C. SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHT FIXTURE LAY-OUT. CONTRACTORS TO CORRELATE LOCATIONS OF LIGHTING, SPEAKERS, AIR DIFFUSERS, GRILLES, AND THE LIKE, WITH REFLECTED CEILING LAY-OUTS AS REQUIRED AND DIRECTED BY THE ARCHITECT.

3 E.C. SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND/OR ROOM FINISH SCHEDULE TO DETERMINE PROPER TYPE OF LIGHT FIXTURE REQUIRED FOR THE CEILING CONSTRUCTION PRIOR TO ORDERING THE FIXTURES AND SHALL PROVIDE FIXTURES THAT ARE COMPATIBLE WITH THE CEILING SYSTEM.

4 ALL LAY-IN TYPE FIXTURES SHALL BE PROVIDED WITH SEISMIC CLIPS AND SAFETY CHAINS SUPPORTED FROM STRUCTURE OF THE BUILDING.

5 ALL EMERGENCY SYSTEM WIRING SHALL BE IN SEPARATE RACEWAY IN ACCORDANCE WITH ARTICLE 700 OF N.E.C.

6 ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ELECTRICAL BONDS OF THE METALIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.

7 E.C. SHALL REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT AND LOCATE DISCONNECT SWITCHES IN ACCORDANCE WITH THE N.E.C.

8 E.C. SHALL REFER TO DIV. 15 SPECIFICATIONS, HVAC PLANS AND PLUMBING PLANS FOR ADDITIONAL ELECTRICAL WORK AND REQUIREMENTS.

9 WHERE A FLOOR COVERING OR FINAL FLOOR FINISH IS OTHER THAN CARPET OR VINYL TILE, CONDUITS SHALL NOT BE RUN WITHIN CONCRETE SLABS. 1" OF CONCRETE OVER THE TOP OF CONDUITS IN SLABS MUST BE MAINTAINED. REFER TO THE SPECIFICATIONS. (1-1/2" OVER IS PREFERRED.)

10 UNLESS OTHERWISE DENOTED, ALL DEVICE ELEVATIONS REFER TO BOTTOM OF OUTLET BOX. (SEE SPECIFICATIONS.) ELECTRICAL CONTRACTOR SHALL VERIFY ALL OUTLET LOCATIONS WITH OTHER TRADES.

11 ALL RECEPTACLES SHOWN BACK-TO-BACK IN WALLS SHALL BE SEPARATED BY 8" MINIMUM.

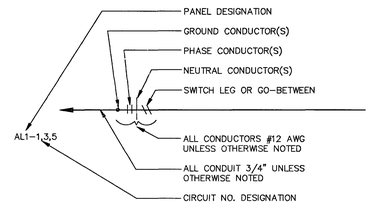
12 PROVIDE "SEAL-OFFS" WHEN PIPING PASSES THROUGH AREAS OF DIFFERENT AMBIENT TEMPERATURES AND/OR HAZARDOUS AREAS.

13 ALL WIRING FOR FIRE ALARM SYSTEM TO BE IN ACCORD WITH APPROVED MANUFACTURER'S SHOP DRAWINGS. RUN #14 GROUND WIRE TO ALL OUTLETS. IF NOT NOTED ON PLANS OR SPECIFICATIONS CONTACT MANUFACTURER FOR WIRING REQUIREMENTS BEFORE BIDDING.

14 LIGHT FIXTURE TYPE IS SHOWN ONLY ONCE, AS TYPICAL IN EVERY ROOM. PROVIDE SAME TYPE OF FIXTURE IN SAME ROOM UNLESS OTHERWISE NOTED.

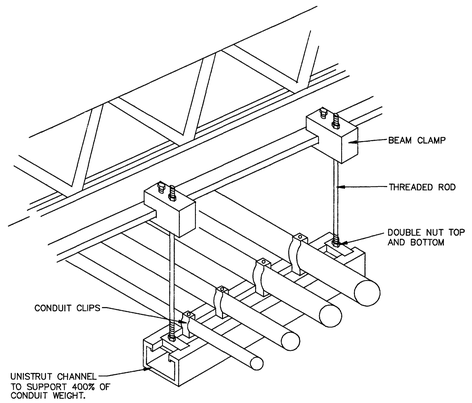
15 IF MORE THAN THREE DIFFERENT PHASE CONDUCTORS ARE RUN IN THE SAME CONDUIT DERATING SHALL BE TAKEN INTO ACCOUNT, INCREASING THE CONDUCTOR AMPACITY (BY INCREASING WIRE SIZE) TO COMPENSATE FOR THIS AS FOLLOWS:

NO. OF CONDUCTORS	AMPACITY INCREASE
4 THRU 6	125%
7 THRU 9 (MAX.)	145%

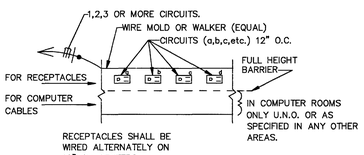


NOTES:
1. #12 AWG IS MIN. CONDUCTOR SIZE, EXCEPT AS NOTED.
2. 3/4" CONDUIT IS MIN. SIZE, EXCEPT AS CAPACITY PERMITTING 24 VOLT CONTROL CONDUCTORS AND SWITCHLEGS MAY BE IN 1/2" SIZE, OTHERS AS NOTED.
3. 1/2" IS MIN. FLEXSTEEL, GREENFIELD, AND SEALITE SIZE.

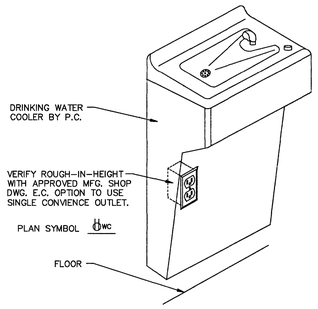
4 / E-1 KEY TO ELECTRICAL CIRCUIT WIRING
NO SCALE



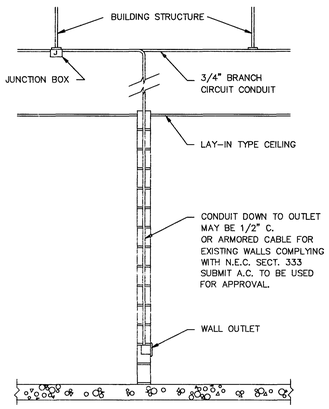
5 / E-1 2 1/2" AND LARGER CONDUIT SUPPORT DETAIL
NO SCALE



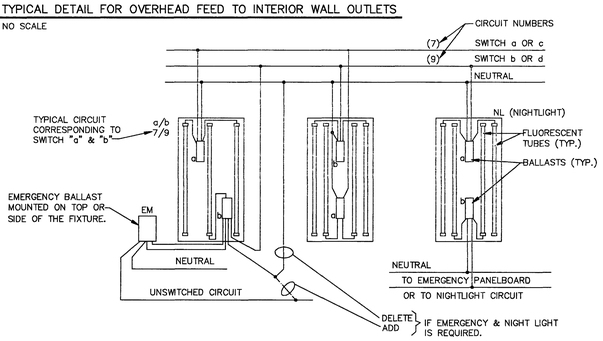
6 / E-1 PLUG IN STRIP
NO SCALE



1 / E-1 TYPICAL "WC" WIRING
NO SCALE



2 / E-1 TYPICAL DETAIL FOR OVERHEAD FEED TO INTERIOR WALL OUTLETS
NO SCALE



3 / E-1 TYP. WIRING DIAGRAM FOR 3 OR 4 TUBE FIXTURES
NO SCALE

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DURWOODY 4980 REGISTERED ARCHITECT

SYMBOLS & DETAILS

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

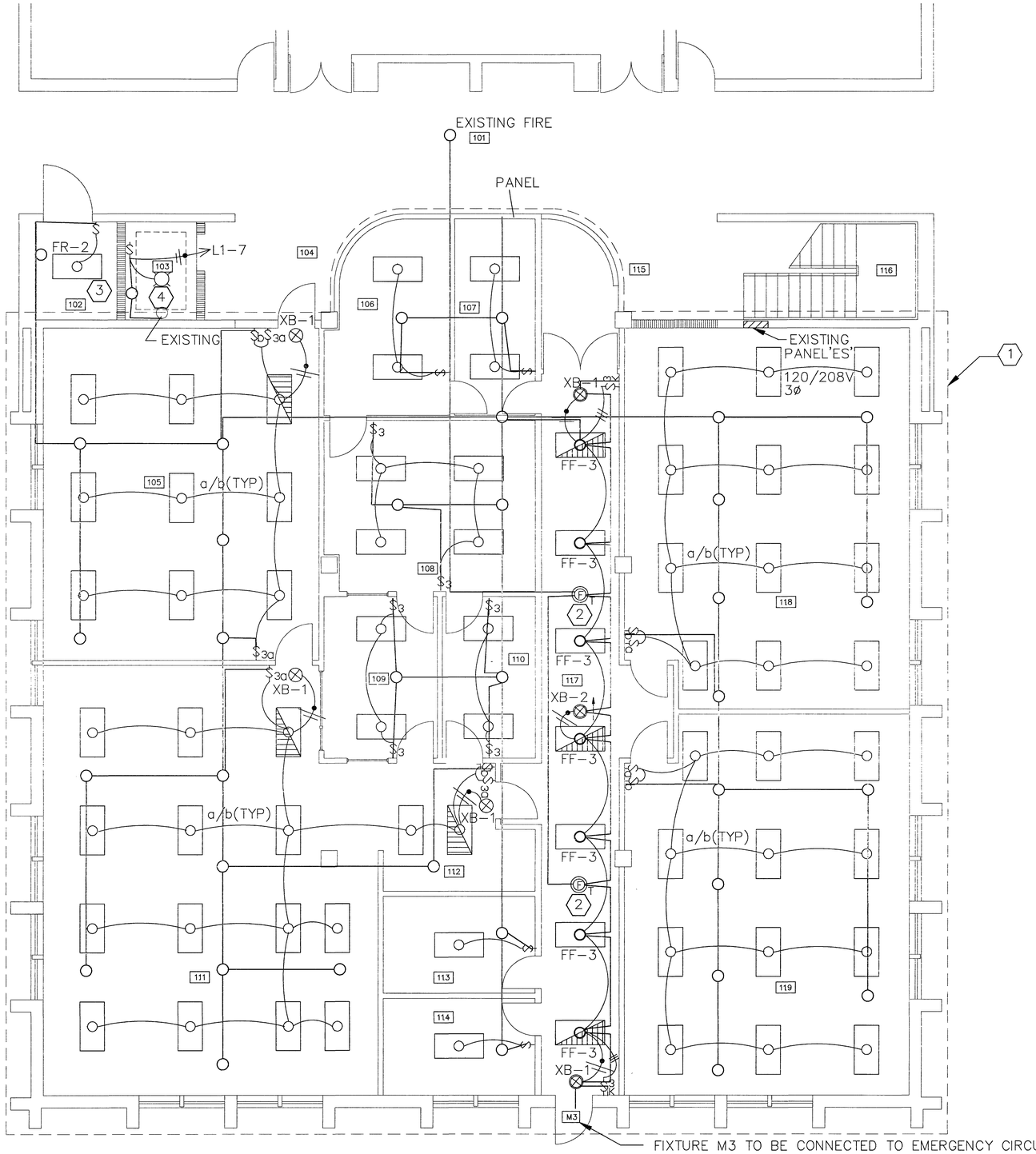
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DRAWING OF RECORD	DRAWN BY: DLR	DATE: JUNE 22, 1988	COMM. NO.: 8776.00	SET OF	SHEET E1



LIGHTING PLAN UNIT A

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

ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

GENERAL NOTES

1. ALL NEW LIGHT FIXTURES TO BE CONNECTED TO EXISTING CIRCUITS (NORMAL AND EMERGENCY) WHICH HAD ALL WIRING AND CONDUIT REMOVED BACK TO PANELS BY OTHERS. SEE SHEET E3 FOR OTHER PANEL LOCATIONS. NEW CONDUIT AND WIRING,(3/4" AND #12 MINIMUM) REQUIRED.
2. ALL FIXTURES ARE TYPE F-3 UNLESS OTHERWISE NOTED.
3. ALL EXIT LIGHTS TO BE ON EMERGENCY CIRCUIT.

PLAN NOTES

1. ALL EXISTING CONDUIT, WIRE AND FITTINGS, ABOVE CEILING LINE ARE BEING REMOVED BY OTHERS AS ARE CEILING, LIGHT FIXTURES, AND HEAT DETECTORS AS PART OF ANOTHER PROJECT.
2. CONNECT NEW HEAT DETECTORS (SIMPLEX 2098-9464 OR EQUAL) TO CIRCUITS REMOVED BY OTHERS BY EXTENDING TO NEAREST POINT OF DISCONNECTION.
3. CONNECT NEW FIXTURE TO EXISTING CIRCUITS.
4. ELEVATOR PIT INCANDESCENT FIXTURE, 200 WATT LAMP. APPLETON VPOBWIOG

◯ – DENOTE "J" BOX
– HALLWAY IS SEPARATE PIPE RUN
– FIRE IS SEPARATE PIPE RUN

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS DURWOODY 4980 REGISTERED ARCHITECT

LIGHTING PLAN UNIT A

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

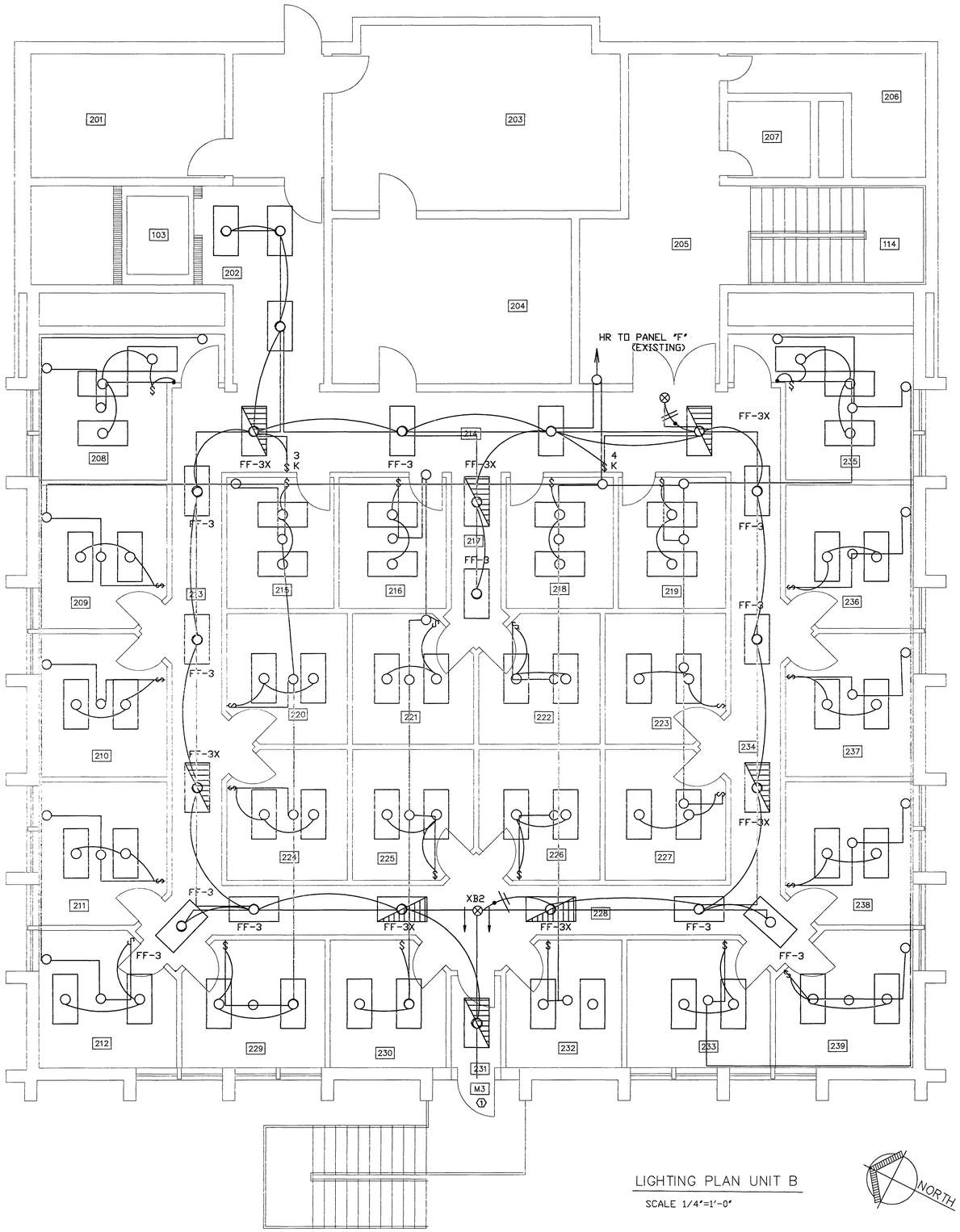
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LIGHTING PLAN UNIT B

SCALE 1/4"=1'-0"

NORTH

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100

◯ – DENOTES "J" BOX

– HALLWAY IS SEPARATE PIPE RUN

GENERAL NOTES

1. ALL NEW REUSED EXISTING LIGHT FIXTURES TO BE CONNECTED TO EXISTING CIRCUITS (NORMAL AND EMERGENCY) AFTER REMOVAL OF EXISTING FIXTURES. SEE SHEET ED1 FOR DEMOLITION.
2. ORIGINAL LIGHT FIXTURES ARE TO BE REUSED (SEE SHEET ED1) WITH THE EXCEPTION OF EXIT LIGHTS WHICH ARE TO BE NEW. ANY ADDITIONAL FIXTURES REQUIRED (CONTRACTOR TO FIELD VERIFY ORIGINAL FIXTURE COUNT) ARE TO BE TYPE F3.
3. ALL EXIT LIGHTS ARE TO BE ON EMERGENCY CIRCUITS.
4. ALL CORRIDOR FIXTURES ARE TO BE NEW. TYPE AS SHOWN.

PLAN NOTES

1. FIXTURE M3 TO BE CONNECTED TO EMERGENCY CIRCUIT.

STATE OF OHIO – CLAIR E. HOWEY – 3962 – REGISTERED ARCHITECT

STATE OF OHIO – THOMAS R. DUBROWSKY – 4980 – REGISTERED ARCHITECT

DRAWING OF RECORD

LIGHTING PLAN UNIT B

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

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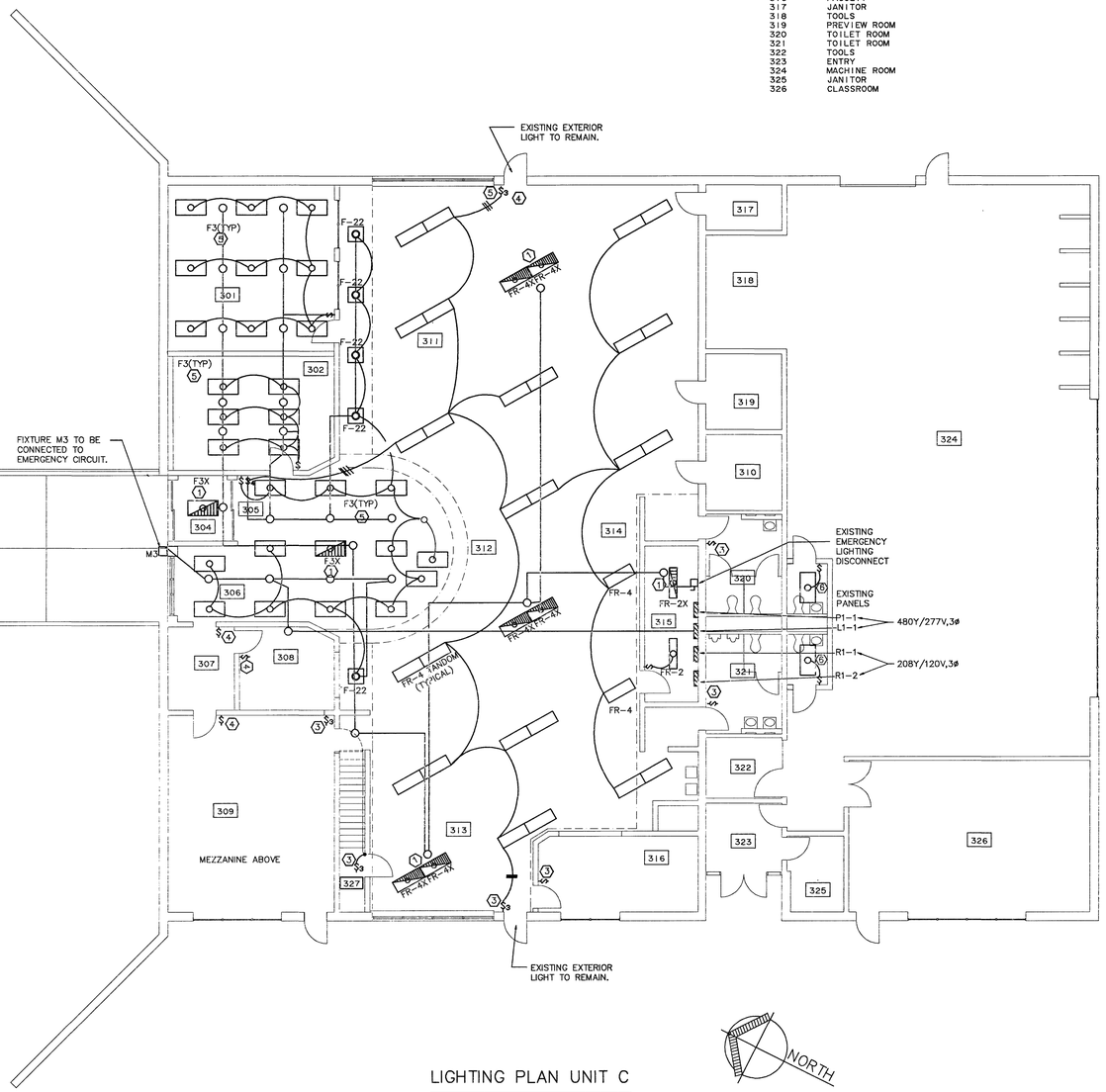
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	COMM. NO.: 8776.00		E3

304	VESTIBULE
305	PASSAGE
306	CIRCULATION DESK
307	WORKROOM
308	OFFICE
309	WORKROOM
310	MEDIA SERVICES
311	READING AREA
312	REFERENCE AREA
313	READING AREA
314	STACKS
315	ELECTRICAL
316	FACULTY
317	JANITOR
318	TOOLS
319	PREVIEW ROOM
320	TOILET ROOM
321	TOILET ROOM
322	TOOLS
323	ENTRY
324	MACHINE ROOM
325	JANITOR
326	CLASSROOM



LIGHTING PLAN UNIT C

SCALE 1/8"=1'-0"

PLAN NOTES

1. CIRCUIT TO EMERGENCY LIGHTING DISCONNECT.
2. ORIGINAL LOCATION OF ONLY EMERGENCY LIGHT FIXTURE.
3. RELOCATED SWITCH LOCATION SEE SHEET ED2.RECIRCUIT AS NECESSARY.
4. NEW SWITCH LOCATION.RECIRCUIT AS NECESSARY.
5. NEW FIXTURES AND SWITCHING. RECIRCUIT EXISTING CIRCUITS AS NECESSARY. SEE SHEET ED2. INSTALL ADDITIONAL 20A,1P BREAKERS IN PANEL L1-1 AS REQUIRED.
6. NEW FIXTURES AND SWITCHING. EXTEND EXISTING LIGHTING FROM ROOMS 320 AND 321.

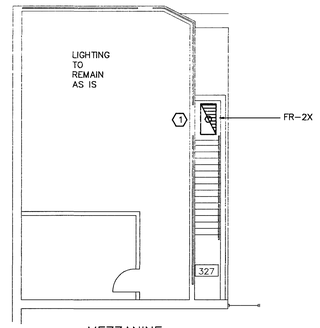
◯ – DENOTES "J" BOX

– READING AREA; EXISTING CONDUIT USED. NEW WIRE.

– 307, 308, 309, 316, 320, 321, 327 SWITCHES FOR THESE ROOMS WERE PIPED DIRECTLY INTO FIXTURE (NOT SHOWN)

GENERAL NOTES

1. ALL LIGHTS WITH THE EXCEPTION OF EMERGENCY LIGHTS ARE CIRCUITED TO PANEL L1-1. RECIRCUIT AS NECESSARY USING EXISTING WIRING AND CONDUIT AS MUCH AS POSSIBLE. .



MEZZANINE

STATE OF OHIO – CLAIR E. HOWEY – 3962 – REGISTERED ARCHITECT

STATE OF OHIO – THOMAS R. DUNWODY – 4990 – REGISTERED ARCHITECT

LIGHTING PLAN UNIT C

PROJECT NUMBER: 275–87–106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

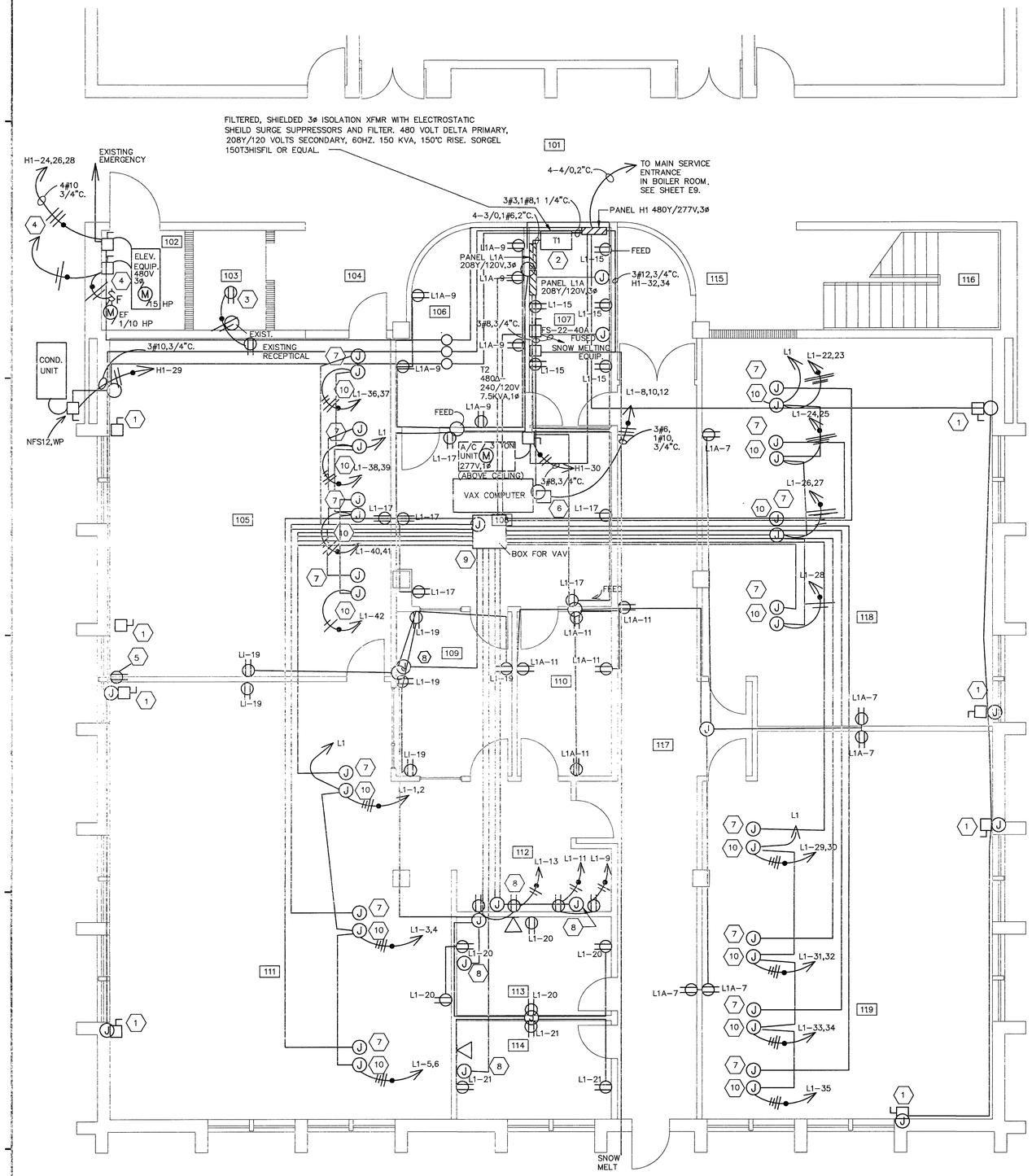
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		COMM. NO.: 8776.00		



POWER PLAN UNIT A

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

NORTH

ROOM SCHEDULE

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
101	CORRIDOR	9'-2"	-	-
102	ELEVATOR EQUIPMENT	8'-0"	53	-
103	ELEVATOR		46	
104	CORRIDOR	9'-2"		-
105	CLASSROOM	9'-0"	612	620
106	WORKROOM	8'-0"	145	130
107	REPAIR ROOM	8'-0"	105	150
108	VAX ROOM	8'-0"	230	200
109	OFFICE	8'-0"	122	120
110	P.C. EQUIPMENT/ LIBRARY	8'-0"	100	210
111	VAX LAB	9'-0"	974	1,450
112	INPUT/OUTPUT	9'-0"	59	160
113	OFFICE	9'-0"	98	100
114	OFFICE	9'-0"	98	100
115	CORRIDOR	9'-2"/8'-8"		-
116	STAIR			-
117	CORRIDOR	9'-0"	420	-
118	P.C. CLASSROOM	9'-0"	702	620
119	P.C. CLASSROOM	9'-0"	702	620

PLAN NOTES

1. NONFUSED DISCONNECT SWITCH, NFS-12, FOR PTAC AIR CONDITIONERS. CONNECT WITH 3ø12, 3/4"C TO 20A, 2P BREAKERS IN PANEL H1. (SEE SHEET E8). MAKE FINAL CONNECTIONS TO PTAC UNITS WITH FLEXIBLE CONDUIT. (ALL UNDER ALTERNATIVE BID). PTAC-PACKAGED TERMINAL AIR CONDITIONER.
2. FILTERED, SHIELDED 3ø ISOLATION XFMR WITH ELECTROSTATIC SHEILD SURGE SUPPRESSORS AND FILTER. 480 VOLT DELTA PRIMARY, 208Y/120 VOLTS SECONDARY, 60HZ. 150 KVA, 150°C RISE. SORGEL 150T3HISFIL OR EQUAL.
3. ELEVATOR PIT RECEPTACLE. CONNECT TO NEAREST EXISTING RECEPTACLE CIRCUIT.
4. ELEVATOR CAB LIGHTING CIRCUIT. CONNECT TO EMERGENCY LIGHTING CIRCUIT.
5. EXISTING RECEPTACLE TO BE REMOVED. MAINTAIN CONTINUITY OF CIRCUIT, INSTALL BLANK COVER BEFORE NEW WALL CONSTRUCTION.
6. EMMERSON MODEL 2500 POWER LINE CONDITIONER, 20KW, 3ø, 208V, WITH FOUR 30A, 125V LOCKING OUTPUT RECEPTACLES, PANEL MOUNTED.
7. DATA JUNCTION BOX (8"X8"X6" ABOVE CEILING LINE) WITH 1 1/2"C BACK TO 24"X24"X6" JUNCTION BOX ABOVE CEILING OVER VAX COMPUTER IN ROOM 108. FOR FUTURE USE BY OWNER. NEMA 1, SCREW COVER, ENAMEL. — SEPARATE RUNS TO 24"x24"x6" BOX
8. DATA JUNCTION BOX, 4 1/2"X5"X3", MOUNTED ON WALL AT RECEPTACLE HEIGHT WITH 3/4"C BACK TO 24"X24"X6" JUNCTION BOX IN ROOM 108. FOR FUTURE USE BY OWNER. NEMA 1, SCREW COVER, ENAMEL.
9. 24"X24"X6" JUNCTION BOX ABOVE CEILING OVER VAX COMPUTER.
10. 6"X6"X4" POWER JUNCTION BOX NEMA 1, SCREW COVER ENAMEL WITH CIRCUITS AS INDICATED. TERMINATE 12" PIGTAIL FOR EACH CIRCUIT AT JUNCTION BOX FOR FUTURE USE BY OWNER FOR PC AND VAX POWER. PC - PERSONAL COMPUTER VAX - BRAND NAME — - 3/4" C FOR POWER SEPARATE RUNS

○ - DENOTES "J" BOX

△ - DENOTES PHONE STUBS

* POWER FOR COMPUTER HAS 4 SEPARATE 3/4" EMT LINES; ROOMS 118, 119, 105, 111, HAS SEPARATE CONDUIT RUNS BUT THE WIRING IS COMPLETE AS SHOWN.

STATE OF OHIO CLAIR E. HOWEY 3962 REGISTERED ARCHITECT

STATE OF OHIO THOMAS R. DUPHORNE 4080 REGISTERED ARCHITECT

POWER PLAN UNIT C

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

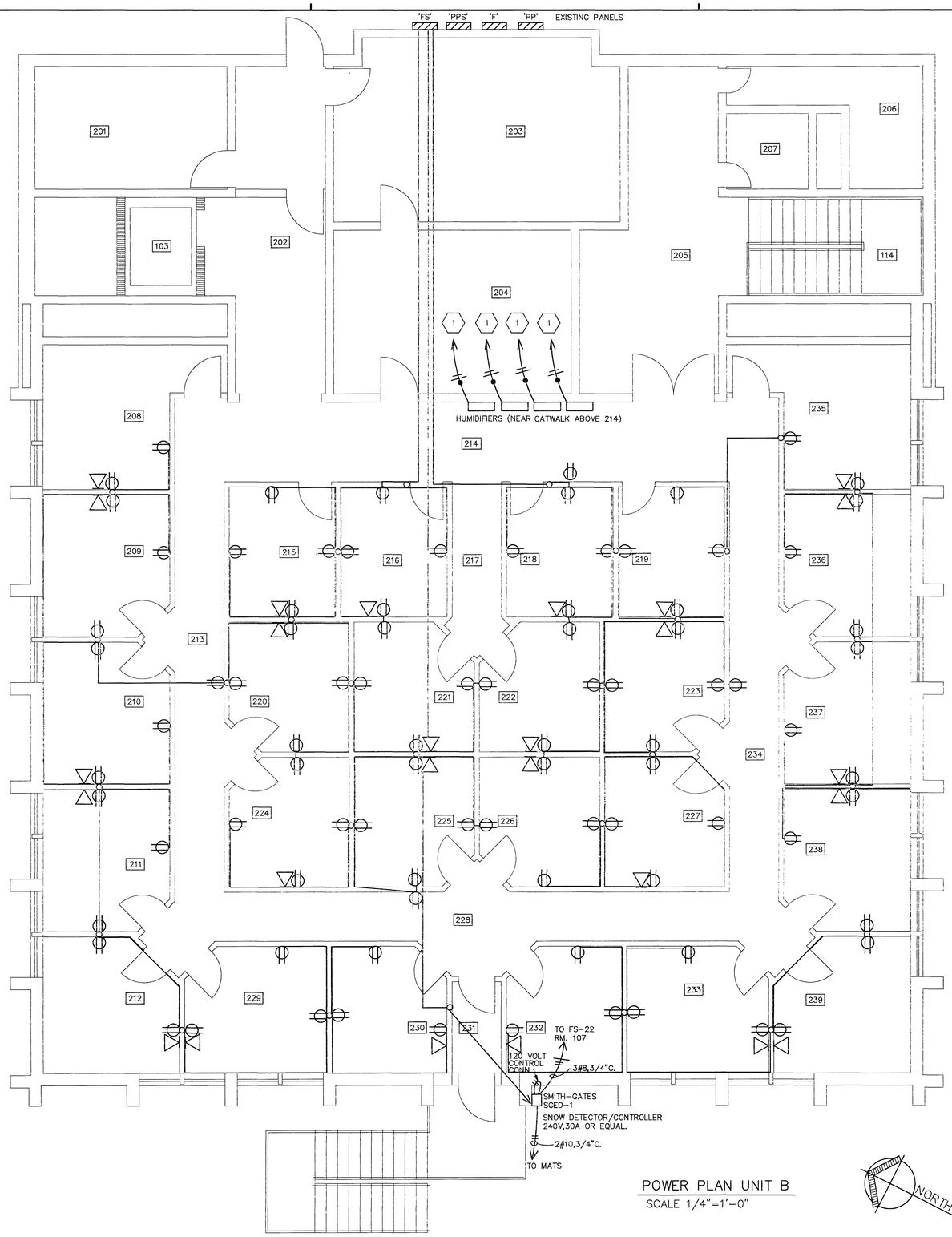
PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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POWER PLAN UNIT B

SCALE 1/4"=1'-0"

NORTH

ROOM NO.	ROOM NAME	CEILING HEIGHT	AREA SQ.FT.	PROGRAMMED SQ.FT.
201	EXIST. DARKROOM	9'-2"		
202	PASSAGE	9'-2"		
203	EXIST.	9'-2"		
204	EXIST.	9'-2"		
205	EXIST. CORRIDOR	9'-2"		
206	EXIST. TOILET	9'-2"		
207	EXIST. TOILET	9'-2"		
208	OFFICE	9'-0"	140	100
209	OFFICE	9'-0"	116	100
210	OFFICE	9'-0"	116	100
211	OFFICE	9'-0"	116	100
212	OFFICE	9'-0"	116	100
213	PASSAGE	9'-0"		-
214	PASSAGE	9'-0"		-
215	OFFICE	8'-0"	91	100
216	OFFICE	8'-0"	91	100
217	PASSAGE	9'-0"		-
218	OFFICE	8'-0"	91	100
219	OFFICE	8'-0"	91	100
220	OFFICE	8'-0"	99	100
221	OFFICE	8'-0"	99	100
222	OFFICE	8'-0"	99	100
223	OFFICE	8'-0"	99	100
224	OFFICE	8'-0"	99	100
225	OFFICE	8'-0"	99	100
226	OFFICE	8'-0"	99	100
227	OFFICE	8'-0"	99	100
228	PASSAGE	9'-0"		-
229	OFFICE	9'-0"	114	100
230	OFFICE	8'-0"	93	100
231	PASSAGE	9'-0"		-
232	OFFICE	8'-0"	93	100
233	OFFICE	9'-0"	114	100
234	PASSAGE	9'-0"		100
235	OFFICE	9'-0"	140	100
236	OFFICE	9'-0"	116	100
237	OFFICE	9'-0"	116	100
238	OFFICE	9'-0"	116	100
239	OFFICE	9'-0"	116	100

GENERAL NOTES

1. ALL NEW RECEPTACLES ARE TO BE CONNECTED TO CIRCUITS REMOVED FROM FLOOR PEDESTALS. (SEE SHEET ED1) MAXIMUM OF 6 TO A CIRCUIT. IF ADDITIONAL CIRCUITS ARE REQUIRED CONNECT TO EXISTING 20A, 1P SPARES (7) IN PANEL 'FS'.
2. ALL SNOW MELTING MATS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

PLAN NOTES

1. INSTALL 4 NEW 20A, 2P BREAKERS IN EXISTING PANEL 'F' (FEDERAL PACIFIC NHIB) AND CIRCUIT TO NEW HUMIDIFIERS. REMOVE AND REPLACE LAY-IN CEILING IN ROOMS 203 AND 204 AS NECESSARY. (ALL UNDER ALTERNATIVE BID).
2. EACH TWO(2) TREADS TO HAVE ONE(1) 3'X8 1/4" TWO STEP HEATING MAT, 240 VOLT, 360 WATTS EACH, SMITH-GATES 2M(2)-3-0X8 OR EQUAL. WATERPROOF JUNCTION BOXES AS REQUIRED.
3. LANDING TO HAVE FOUR(4) 6'X18" SNOW MATS, 240 VOLT, 538 WATTS EACH, SMITH-GATES LEM(2)-06 OR EQUAL. WATERPROOF JUNCTION BOXES AS REQUIRED.
4. LANDING TO HAVE TWO(2) 7'X18" SNOW MATS, 240 VOLT, 634 WATTS EACH, SMITH-GATES LEM(2)-07 OR EQUAL. WATERPROOF JUNCTION BOXES AS REQUIRED.

○ – DENOTES "J" BOX

△ – STUBS OUT OF WALL EXPOSED

STATE OF OHIO CLAIR E. HOWEY 5062 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DUNWOODY 4980 REGISTERED ARCHITECT

POWER PLAN UNIT B

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF PUBLIC WORKS

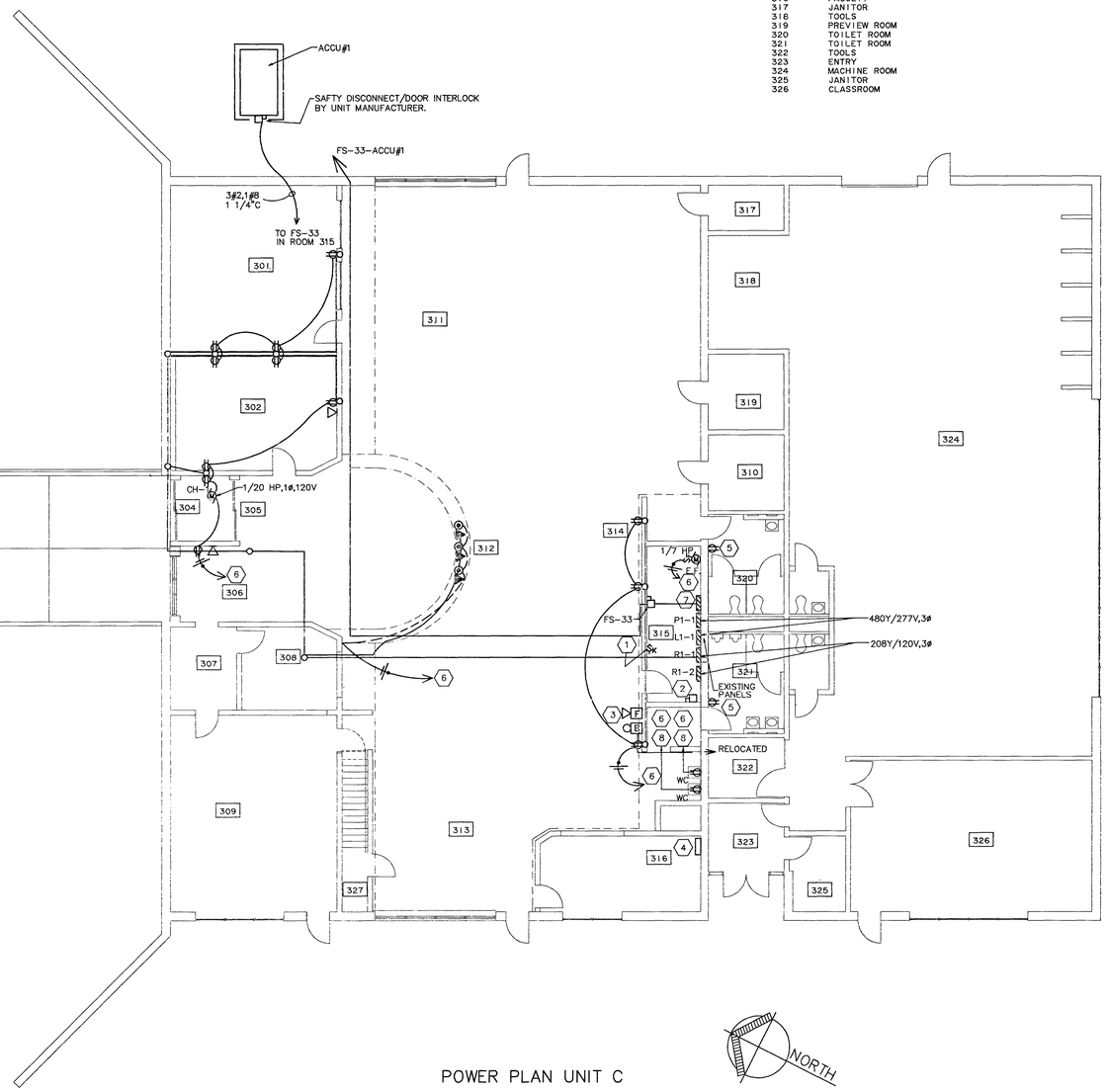
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DRAWING OF RECORD

DRAWN BY: DLR/RDH | DATE: JUNE 22, 1988 | COMM. NO.: 8776.00 | SET OF | SHEET E6

ROOM NO	ROOM NAME
301	TECH. RESOURCES
302	CONFERENCE
303	NOT USED
304	VESTIBULE
305	PASSAGE
306	CIRCULATION DESK
307	WORKROOM
308	OFFICE
309	WORKROOM
310	MEDIA SERVICES
311	READING AREA
312	REFERENCE AREA
313	READING AREA
314	STACKS
315	ELECTRICAL
316	FACULTY
317	JANITOR
318	TOOLS
319	PREVIEW ROOM
320	TOILET ROOM
321	TOILET ROOM
322	TOOLS
323	ENTRY
324	MACHINE ROOM
325	JANITOR
326	CLASSROOM



POWER PLAN UNIT C

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

PLAN NOTES

1. RELOCATED FUEL PUMP SWITCH. SEE SHEET ED2.
2. RELOCATED 100A, 3P SAFTY SWITCH.SEE SHEET ED2.
3. RELOCATED FIRE ALARM HORN/STROBE AND DOOR SECURITY BELL AT 12' AFF.
4. EXISTING TELEPHONE TERMINAL BOARD ON MEZZANINE ABOVE 316.
5. RELOCATED RECEPTACLE. SEE SHEET ED2.
6. CIRCUIT TO SPARE 20A, 1P BREAKER IN PANEL R1-1.
7. INCOMING SERVICE JUNCTION BOX. DOUBLE LUG TO SERVICE; 3#2, 1#8, 1 1/4"C TO FS-33 FUSED AT 90A THEN TO ACCU#1.
8. IN SURFACE METAL RACEWAY.

O - DENOTES "J" BOX

△ - TERMINATED IN "J" BOX ON TOP OF BLOCK

STATE OF OHIO CLAIR E. HOWEY 3952 REGISTERED ARCHITECT

STATE OF OHIO THOMAS L. DUNWOODY 4980 REGISTERED ARCHITECT

POWER PLAN UNIT C

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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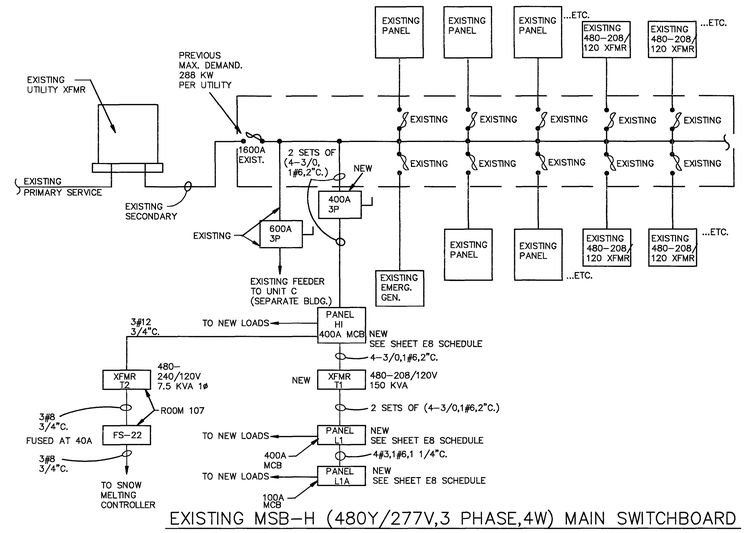
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DRAWING OF RECORD	DRAWN BY: DLR/RDH	DATE: JUNE 22, 1988	COMM. NO.: 8776.00	SET OF	SHEET E7

LIGHT FIXTURE SCHEDULE

PROJECT NAME : WRIGHT STATE UNIVERSITY

PLAN TYPE	MANUFACTURER	MOUNTING	LAMPS NO.	LAMPS WATTS	LAMPS TYPE/LU	APPLIED VOLTAGE	REMARKS
F-3 OR F-3X	BENJAMIN AGR-7234-4 KEENE NRTS-2-GVA-340 LITHONIA 2SPG340A12 DAY-BRITE MG243-MFS02D	REC	3	150 3150	F40CW	277	2'X4' LAY-IN FLUOR. FIXTURE WITH STEEL FRAME DOOR AND ACRYLIC PRISMATIC LENS PATTERN 12
F-22	BENJAMIN AGR-7224-2 KEENE NRTS-2-GVA-2U4 LITHONIA 2SPG2U40A12 DAY-BRITE MG222-MFS02C	REC	2	100 3150	F40CW	277	2'X2' LAY-IN FLUOR. FIXTURE WITH STEEL FRAME DOOR AND ACRYLIC PRISMATIC LENS PATTERN 12
FF-3 OR FF-3X	LITHONIA 2SPF340A12 BENJAMIN AF-7234-4 DAY-BRITE MF243-MFS02D KEENE NRTS-2F-VA-340	REC FLANGE	3	150 3150	F40CW	277	2'X4' FLANGE FLUOR. FIXTURE WITH STEEL FRAME DOOR AND ACRYLIC PRISMATIC LENS PATTERN 12
FR-2	BENJAMIN CD-2224-4 DAY-BRITE OW142 KEENE DA240 LITHONIA SB240A	SURF./ SUSP.	2	100 3150	F40CW	277	4' WRAP AROUND FLUORESCENT FIXTURE.
FR-4	BENJAMIN CD-7244-4 DAY-BRITE OW244 KEENE DB440 LITHONIA WA440A	SURF./ SUSP.	4	200 3150	F40CW	277	4' WRAP AROUND FLUORESCENT FIXTURE.
XB-1	PRESCOLITE 7911B MCPHILBEN 40W-BK1	WALL	2	15	15T6.5	277/120 AS REQD.	SINGLE FACE. ARROWS PER DRAWINGS.
XB-2	PRESCOLITE 7911B MCPHILBEN 40W-BK1	CEILING	2	15	15T6.5	277/120 AS REQD.	DOUBLE FACE. ARROWS PER DRAWINGS.
M-3	AAL ALS-178A-100HPS DAY-BRITE WL15HS HITEK TWH250S277SF	WALL	1	310 27500	LU 250	277	WALL MOUNTED HPS WITH LOW GLARE W/ PHOTO CELL.



EXISTING MSB-H (480Y/277V,3 PHASE,4W) MAIN SWITCHBOARD

N.T.S.

SINGLE LINE DIAGRAM

A

PANELBOARD PLAN TYPE : H1 — VOLTAGE; 3PH,4 WIRE + GRD 480Y/277V SURFACE — AMPS: 400A MCB — ROOM : 107

LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS	LOAD DESCRIPTION	C/B POLES	C/B AMPS	CIR. NO.	PHASE	CIR. NO.	C/B AMPS	C/B POLES	LOAD DESCRIPTION	LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS
				SPARE	1	20	1	A	2	20	1	SPARE				
				SPARE	1	20	3	B	4	20	1	SPARE				
				SPARE	1	20	5	C	6	20	1	SPARE				
	2.10			PTAC(ALT.)	2	20	7	A	8	20	2	PTAC(ALT.)		2.10		
							9	B	10							
	2.10			PTAC(ALT.)	2	20	11		12	20	2	PTAC(ALT.)		2.10		
							13	A	14							
	2.10			PTAC(ALT.)	2	20	15	B	16	20	2	PTAC(ALT.)		2.10		
							17		18							
	2.10			PTAC(ALT.)	2	20	19	A	20	20	2	PTAC(ALT.)		2.10		
							21	B	22							
		150.00		XFMR T1	3	200	23	C	24	80	3	ELEVATOR			11.20	
							25	A	26							
							27	B	28							
		5.30		COND.UNIT	1	35	29	C	30	40	1	A/C UNIT			7.60	
							31	A	32							
							33	B	34	20	2	XFMR T2			7.50	
							35	C	36							
							37	A	38							
							39	B	40							
							41	C	42							

TOTALS LITES	RECEP	MOTOR	MISC	FEED FROM : MAIN SERVICE FEED SIZE : 2 SETS OF (4-3/0,1 6,2"C) #PROJECT NAME : WRIGHT STATE CONNECTED LOAD KVA ;	TOTALS LITES	RECEP	MOTOR	MISC
0.00	0.00	13.70	150.00	204.40	0.00	20.20	0.00	7.50

GRAND TOTALS KVA;
0.00 LIGHTS
0.00 RECEPT
40.90 MOTORS
157.50 MISC LOAD
6.00 SPARE LOAD
204.40 TOTAL ALL

B

PANELBOARD PLAN TYPE : L1 — VOLTAGE; 3PH,4 WIRE + GRD 208Y/120V SURFACE — AMPS: 400A MCB — ROOM : 107

LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS	LOAD DESCRIPTION	C/B POLES	C/B AMPS	CIR. NO.	PHASE	CIR. NO.	C/B AMPS	C/B POLES	LOAD DESCRIPTION	LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS
0.50				VAX TERMS	1	20	1	A	2	20	1	VAX TERMS	0.50			
0.50				VAX TERMS	1	20	3	B	4	20	1	VAX TERMS	0.50			
0.50				VAX TERMS	1	20	5	C	6	20	1	VAX TERMS	0.50			
				SPARE	1	20	7	A	8	60	3	POWER CONDITIONER		20.00		
	0.70			LA-120	1	20	9	B	10							
1.20				INNOVATOR	1	20	11		12							
	0.70			RX02LA36	1	20	13	A	14	100	3	PANEL L1A			9.20	
1.00				RECPTS	1	20	15	B	16							
1.20				RECPTS	1	20	17		18							
1.20				RECPTS	1	20	19	A	20	20	1	RECPTS	1.00			
0.80				RECPTS	1	20	21	B	22	20	1	PC'S	1.60			
1.60				PC'S	1	20	23	C	24	20	1	PC'S	1.60			
1.60				PC'S	1	20	25	A	26	20	1	PC'S	1.60			
1.60				PC'S	1	20	27	B	28	20	1	PC'S	1.60			
1.60				PC'S	1	20	29	C	30	20	1	PC'S	1.60			
1.60				PC'S	1	20	31	A	32	20	1	PC'S	1.60			
1.60				PC'S	1	20	33	B	34	20	1	PC'S	1.60			
1.60				PC'S	1	20	35	C	36	20	1	PC'S	1.60			
1.60				PC'S	1	20	37	A	38	20	1	PC'S	1.60			
1.60				PC'S	1	20	39	B	40	20	1	PC'S	1.60			
1.60				PC'S	1	20	41	C	42	20	1	PC'S	1.60			

TOTALS LITES	RECEP	MOTOR	MISC	FEED FROM : XFMR T1 FEED SIZE : 2 SETS OF (4-3/0,1 6,2"C. #PROJECT NAME : WRIGHT STATE CONNECTED LOAD KVA ;	TOTALS LITES	RECEP	MOTOR	MISC
0.00	21.70	2.60	0.00	79.60	0.00	20.10	0.00	29.20

GRAND TOTALS KVA;
0.00 LIGHTS
41.80 RECEPT
2.60 MOTORS
29.20 MISC LOAD
6.00 SPARE LOAD
79.60 TOTAL ALL

B

PANELBOARD PLAN TYPE : L1A — VOLTAGE; 3PH,4 WIRE + GRD 208Y/120V SURFACE — AMPS: 100A MCB — ROOM : 107

LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS	LOAD DESCRIPTION	C/B POLES	C/B AMPS	CIR. NO.	PHASE	CIR. NO.	C/B AMPS	C/B POLES	LOAD DESCRIPTION	LITES LOADS	RECEP LOADS	MOTOR LOADS	MISC LOADS
				SPARE	1	20	1	A	2	20	1	SPARE				
				SPARE	1	20	3	B	4	20	1	SPARE				
				SPARE	1	20	5	C	6	20	1	SPARE				
1.0				RECEPTS	1	20	7	A	8			SPACE				
1.2				RECEPTS	1	20	9	B	10			SPACE				
1.0				RECEPTS	1	20	11		12			SPACE				
				SPACE			13	A	14			SPACE				
				SPACE			15	B	16			SPACE				
				SPACE			17		18			SPACE				
				SPACE			19	A	20			SPACE				
				SPACE			21	B	22			SPACE				
				SPACE			23		24			SPACE				

TOTALS LITES	RECEP	MOTOR	MISC	FEED FROM : PANEL L1 FEED SIZE : 4#3,1 6,1 1/4"C. PROJECT NAME : WRIGHT STATE CONNECTED LOAD KVA ;	TOTALS LITES	RECEP	MOTOR	MISC
0.00	3.20	0.00	0.00	9.20	0.00	0.00	0.00	0.00

GRAND TOTALS KVA;
0.00 LIGHTS
3.20 RECEPT
0.00 MOTORS
0.00 MISC LOAD
6.00 SPARE LOAD
9.20 TOTAL ALL

STATE OF OHIO — CLAIR E. HOWEY — 3982 — REGISTERED ARCHITECT

STATE OF OHIO — THOMAS R. DURNBAUGH — 4980 — REGISTERED ARCHITECT

SCHEDULE SHEET

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
DEPARTMENT OF ADMINISTRATIVE SERVICES
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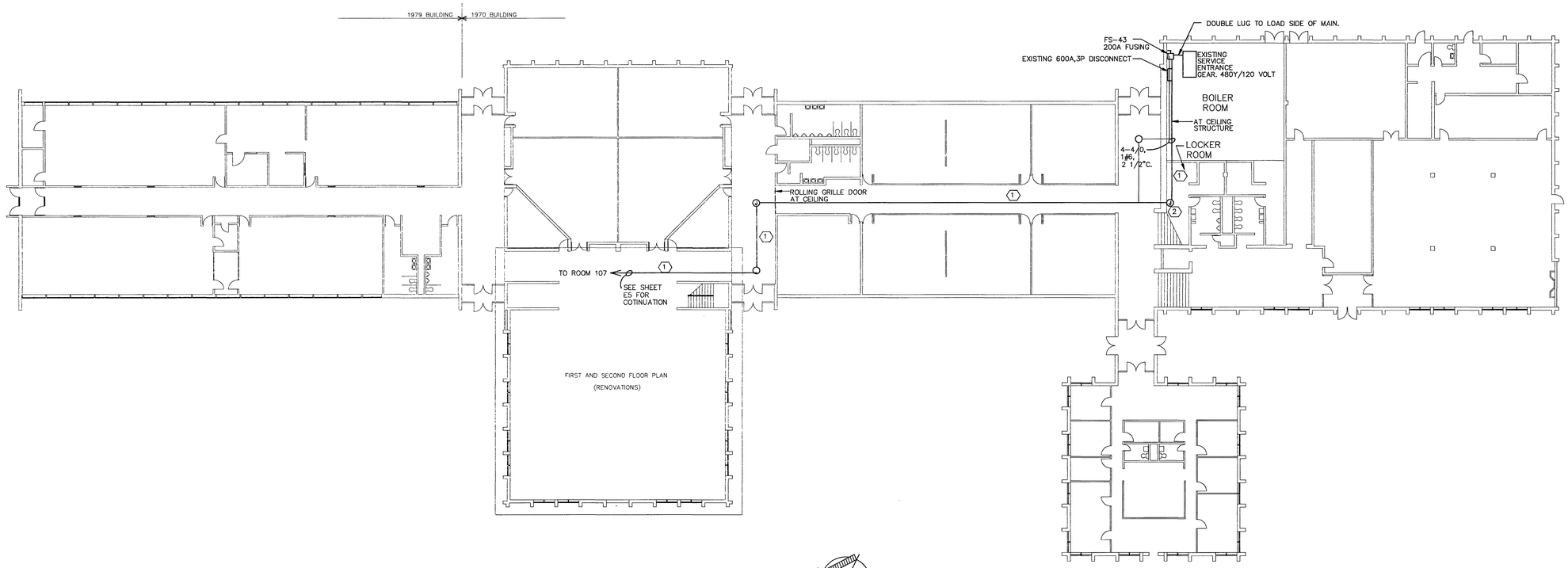
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DRAWING OF RECORD	DRAWN BY: DLR/RDH	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET E8

PLAN NOTES

1. ACOUSTICAL LAY-IN CEILING TO BE REMOVED AND REINSTALLED AS NECESSARY TO INSTALL NEW FEEDER.
2. ELEVATION CHANGE. RUN CONDUIT UP THRU CEILING OF LOCKER ROOM TO KILN ROOM ABOVE, THRU WALL AND INTO HALLWAY CEILING AREA.

◯ – DENOTES "J" BOX



OVERALL POWER PLAN
SCALE: 1/6"=1'-0"

OVERALL POWER PLAN

PROJECT NUMBER: 275-87-106

TRENARY LAB / DWYER HALL RENOVATION
WRIGHT STATE UNIVERSITY (LAKE CAMPUS)

PREPARED FOR

STATE OF OHIO
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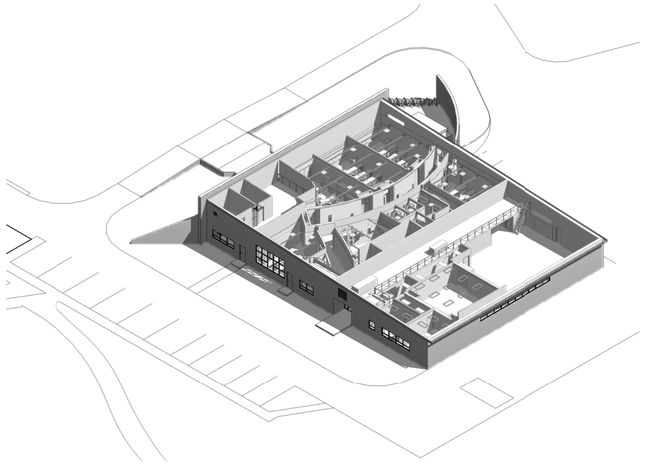
DRAWING OF RECORD	DRAWN BY: DLR/RDH	DATE: JUNE 22, 1988 COMM. NO.: 8776.00	SET OF	SHEET E9

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1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

PROJECT NUMBER: WSU 150001

WRIGHT STATE UNIVERSITY LAKE CAMPUS

TRENARY HALL INTERIOR RENOVATION

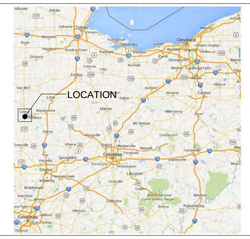


ARCHITECT:

SPGB ARCHITECTS
4333-B TULLER ROAD
DUBLIN, OHIO 43017

IN ASSOCIATION WITH:

PRATER ENGINEERING ASSOCIATES
6130 WILCOX ROAD
DUBLIN, OHIO 43016



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

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MECHANICAL	
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ED100	FIRST FLOOR ELEC DEMO PLAN
ELECTRICAL	
E100	FIRST FLOOR LIGHTING PLAN
E200	FIRST FLOOR POWER PLAN
E300	LIGHTING SCHEDULES AND NOTES
E301	ELECTRICAL SCHEDULES

RECORD DRAWINGS

WRIGHT STATE UNIVERSITY LAKE CAMPUS
CHANGING LIVES

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CHECKED BY:	TWG

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RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

COVER SHEET

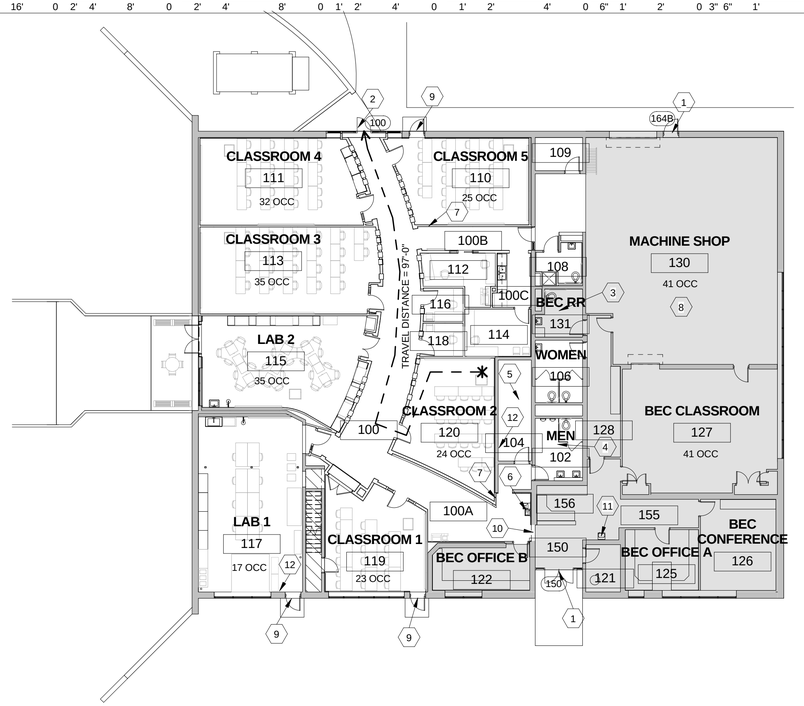
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G-000

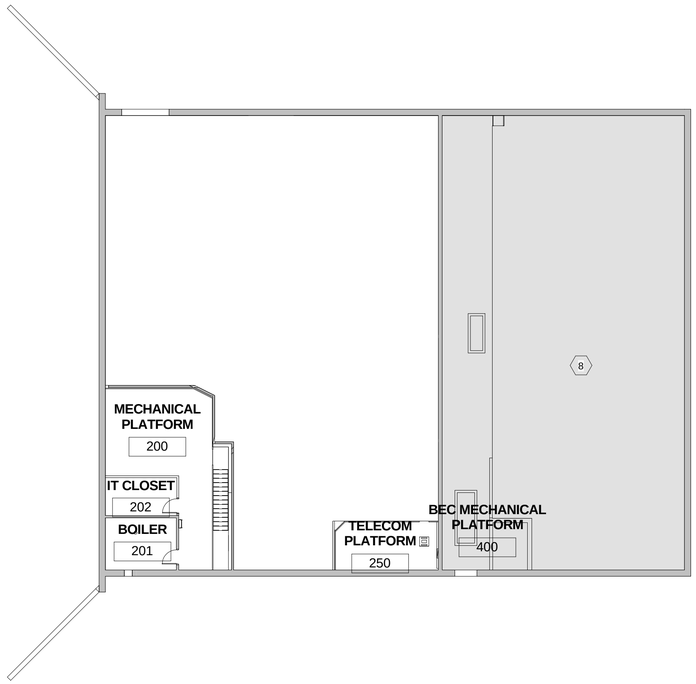
JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



1 FIRST FLOOR PLAN
1/16" = 1'-0"



2 MECHANICAL PLATFORM PLAN
1/16" = 1'-0"

FIRE RATED ASSEMBLY LEGEND

LIFE SAFETY TRAVEL DISTANCE

1 HR RATED ASSEMBLY

2 HR RATED ASSEMBLY

EXISTING CONSTRUCTION:	POURED CONCRETE FLOOR STRUCTURAL MASONRY WALLS STEEL TRUSS AND METAL DECK ROOF
CONSTRUCTION TYPE:	2B NON COMBUSTABLE, UNPROTECTED
FIRE PROTECTION:	FULLY - SPRINKLERED
HEIGHT LIMITATIONS:	3 STORIES AT 55'-0"
AREA LIMITATIONS:	23,000 SF / FLOOR (TABLE 503) 30,130 SF / FLOOR (506.2 Frontage increase)
MAXIMUM DISTANCE TO EXI[1016.1]	200' (300' W/ SPRINKLER)
EXIT STAIRWAYS:[1022.1]	1 HOUR (0 HOUR W/SPRINKLER)
EXIT ACCESS CORRIDORS:[1018.1]	1 HOUR (0 HOUR W/SPRINKLER)
BOILER & FURNACE ROOMS:	0 HOUR
SMOKE PARTITION:	0 HOUR
INTERIOR LOAD BEARING WALLS:	0 HOUR
NON-LOAD BEARING PARITIONS:	0 HOUR
EXTERIOR WALLS LOAD BEARING & NON-LOAD BEARING:	0 HOUR (GREATER THAN 10'-0" FIRE SEPARATION DISTANCE)
EXTERIOR WALLS LOAD BEARING & NON-LOAD BEARING:	0 HOUR (LESS THAN 10'-0" FIRE SEPARATION DISTANCE)
STRUCTURAL MEMBERS SUPPORTING WALLS:	0 HOUR
ROOF CONTRUCTION INCLUDING BEAMS TRUSSES, FRAMING, & ROOF DECK:	0 HOUR
FLOOR CONTRUCTION:	0 HOUR

CODED NOTES:

1 EXISTING EXIT TO REMAIN
2 NEW EXIT
3 EXISTING HANDICAP PUBLIC RESTROOM
4 RESTROOM
5 EXISTING ELECTRIC ROOM TO REMAIN
6 DRINKING FOUNTAIN
7 FIRE EXTINGUISHER AND CABINET. REFER TO DETAIL 3/A-540
8 EXISTING OCCUPIED SPACE TO REMAIN. NO CHANGE OF USE AT THE AREA HATCHED IN LIGHT GRAY.
9 EXISTING DOOR TO REMAIN. NOT TO BE USED FOR EGRESS EXIT.
10 40" WIDE WALL OPENING, TO BE AN EGRESS PATH EXIT
11 EXISTING DRINKING FOUNTAIN
12 FIRE EXTINGUISHER & BRACKET

EGRESS WIDTH / OCCUPANT

	EXISTING [BEC]	RENOVATED SPACE
OCCUPANCY	102	206
[1005.1.2] DOORS, AILES, RAMPS, & CORRIDORS (0.2" / PERSON) = [36" MIN DOOR] (2) EXITS PROVIDED FROM EACH AREA DOOR #100 103 OCCUPANTS 21" MIN REQ 36" PROVIDED DOOR #164B 51 OCCUPANTS 11" MIN REQ 36" PROVIDED DOOR #150 154 OCCUPANTS 32" MIN REQ 36" PROVIDED	[11"] PROVIDE 36"	[21"] PROVIDE 36"
[1005.1.1] STAIRS (0.3" / PERSON) (48" CLEAR MINIMUM) [1007.3]	48"	48"

PLUMBING FIXTURE ANALYSIS [TABLE 2902.1]

CODE REQUIREMENT	FIXTURES REQ'D	EXISTING	BASE BID DESIGN
144 MEN / 144 WOMEN			
B - WATER CLOSETS (1/50 EACH SEX)	M: 2 W: 3	M: 1 W: 3	M: 2 W: 3
URINALS (SUBSTITUTE MAX 50% OF REQ WATER CLOSETS)	M: 2	M: 2	M: 2
B - LAVATORIES (1/80)	M: 2 W: 2	M: 2 W: 2	M: 3 W: 2
B - DRINKING FOUNTAINS (1/100)	2	3	3
B - SERVIVE SINK (1 REQ)	1	1	1

STRUCTURAL LIVE LOADS [TABLE 1607.1]

	CODE REQUIREMENTS		DESIGN CRITERIA	
USE	UNIFORM	CONC.	UNIFORM	CONC.
LOBBY / 1ST FLR CORRIDORS	100 PSF	2,000 PSF	100 PSF	2,000 PSF
OFFICES	50 PSF	2,000 PSF	50 PSF	2,000 PSF
STAIRS & EXITS	100 PSF	300 PSF	100 PSF	300 PSF
STORAGE - LIGHT	125 PSF	-	125 PSF	-
ROOF	20 PSF	300 PSF	20 PSF	300 PSF

BULDING USE: B - BUSINESS

FLOOR	GROSS / NET BUILDING AREA	EXISTING SPACE [BEC] OCCUPANT LOAD [1, 2,3] CALCULATIONS [TABLE 1004.1.1]	TOTAL
FIRST FLOOR	2,010	#164 /SHOPS / VOC RM. SF / 50 NET	41
FIRST FLOOR	819	#160 /CLASS RM. SF / 20 NET	41
FIRST FLOOR	74	#152 /MECH. SF / 300 GROSS	1
FIRST FLOOR	1,409	[BEC] BUS. SF / 100 GROSS	15
MECH PLATFORM	1,116	#400 /MECH. SF / 300 GROSS	4
TOTAL	5,448	EXISTING SPACE [BEC] GROSS	102

BULDING USE: B - BUSINESS

FLOOR	GROSS / NET BUILDING AREA	RENOVATED SPACE OCCUPANT LOAD [1, 2,3] CALCULATIONS [TABLE 1004.1.1]	TOTAL
FIRST FLOOR	813	#115 /SHOPS / VOC RM. SF / 50 NET	17
FIRST FLOOR	694	#117 /SHOPS / VOC RM. SF / 50 NET	14
FIRST FLOOR	441	#113 /CLASS RM. SF / 20 NET	23
FIRST FLOOR	464	#110 /CLASS RM. SF / 20 NET	24
FIRST FLOOR	682	#119 /CLASS RM. SF / 20 NET	35
FIRST FLOOR	628	#121 /CLASS RM. SF / 20 NET	32
FIRST FLOOR	498	#120 /CLASS RM. SF / 20 NET	25
FIRST FLOOR	150	#104 /MECH. SF / 300 GROSS	1
FIRST FLOOR	70	#109 /MECH. SF / 300 GROSS	1
FIRST FLOOR	2,828	[RENOVATED] BUS. SF / 100 GROSS	29
MECH PLATFORM	692	#200 /MECH. SF / 300 GROSS	3
MECH PLATFORM	165	#201 /MECH. SF / 300 GROSS	1
MECH PLATFORM	224	#250 /MECH. SF / 300 GROSS	1
TOTAL	8,349	RENOVATED SPACE GROSS	206

BULDING USE: B - BUSINESS

FLOOR	GROSS / NET BUILDING AREA	TOTAL BUILDING OCCUPANT LOAD [1, 2,3] CALCULATIONS [TABLE 1004.1.1]	TOTAL
FIRST FLOOR	4,332	EXISTING SPACE [BEC]	98
MECH PLATFORM	1,116	EXISTING SPACE [BEC]	4
FIRST FLOOR	7,268	RENOVATED SPACE	201
MECH PLATFORM	1,081	RENOVATED SPACE	5
TOTAL	13,797	TOTAL BUILDING	308

1. OCCUPANT LOAD FOR B (BUSINESS) = 100 GROSS SQUARE FOOT / OCCUPANT
OCCUPANT LOAD FOR MECHANICAL & STORAGE = 300 GROSS SQUARE FOOT / OCCUPANT
OCCUPANT LOAD FOR SHOPS VOC RM = 50 NET SQUARE FOOT / OCCUPANT
2. FLOOR AREA QUANTITIES ARE FOR USE IN CODE ANALYSIS & ARE NOT TO BE USED FOR CONTRUCTION BIDDING PURPOSES.
3. AREA EXCLUDES EXTERIOR MECHANICAL EQUIPMENT & UNCOVERED SERVICE AREA.

RECORD DRAWINGS

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TRENARY HALL INTERIOR RENOVATION

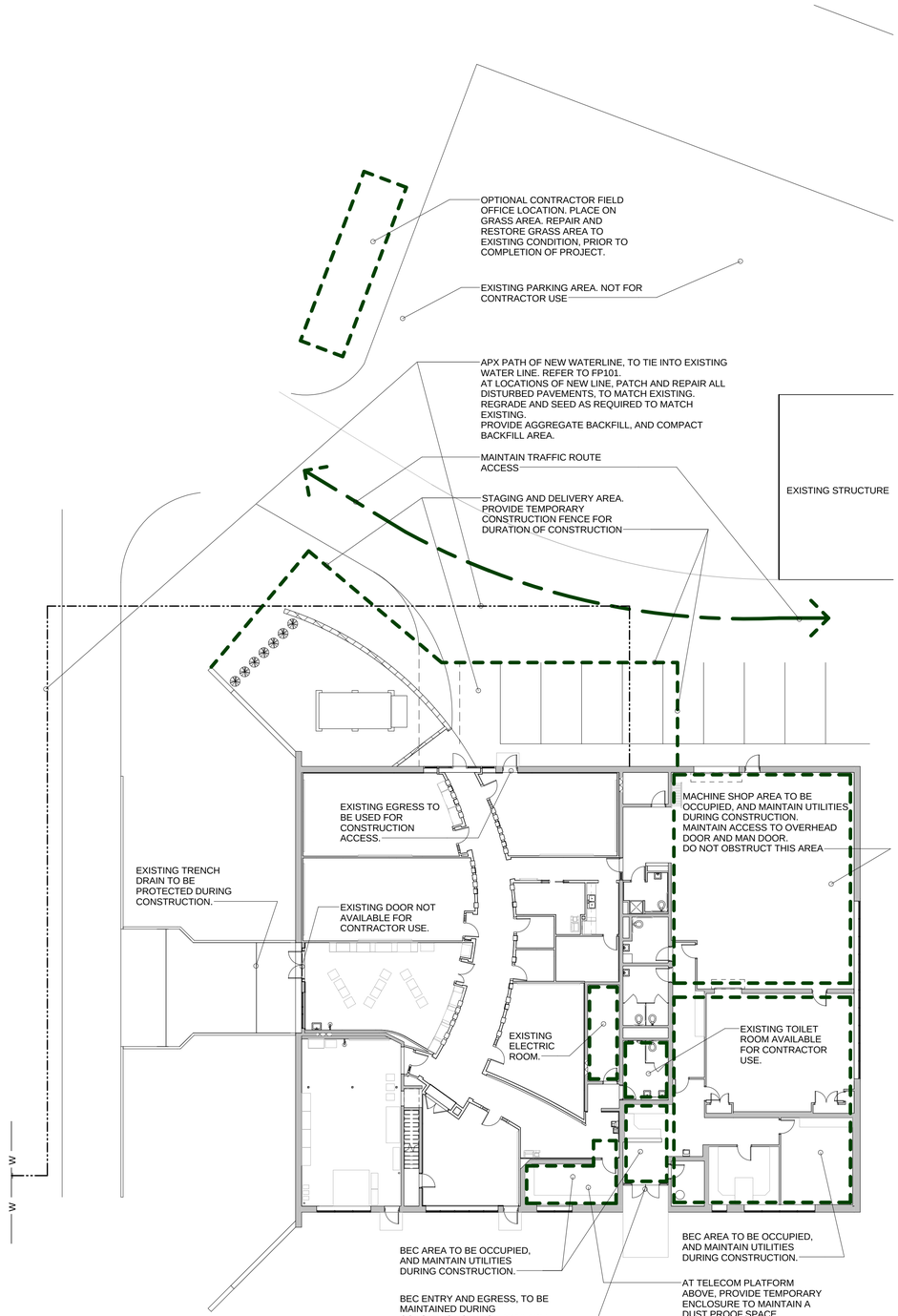
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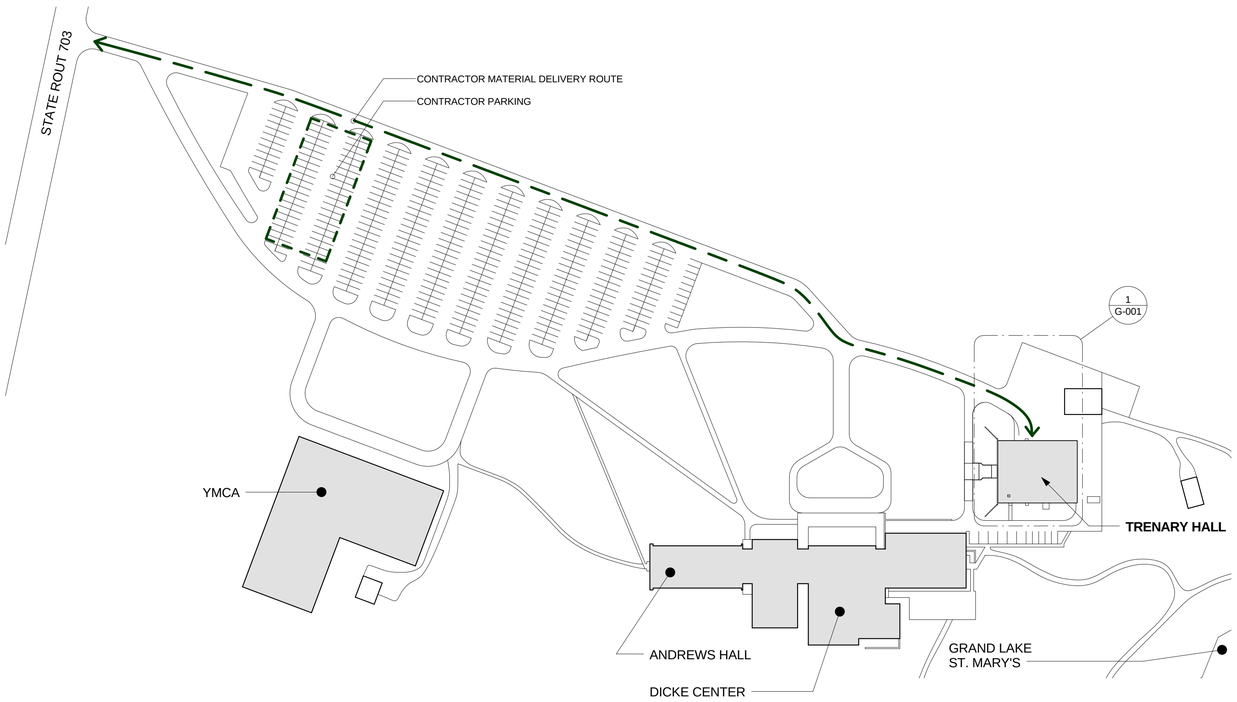
G-001

JOB NO.: 14022
DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 FIRST FLOOR CONTRACTOR PLAN
1/16" = 1'-0"



10 CONTRACTOR LAYDOWN AREA
1" = 120'-0"

PLAN NORTH SITE NORTH

RECORD DRAWINGS

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REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

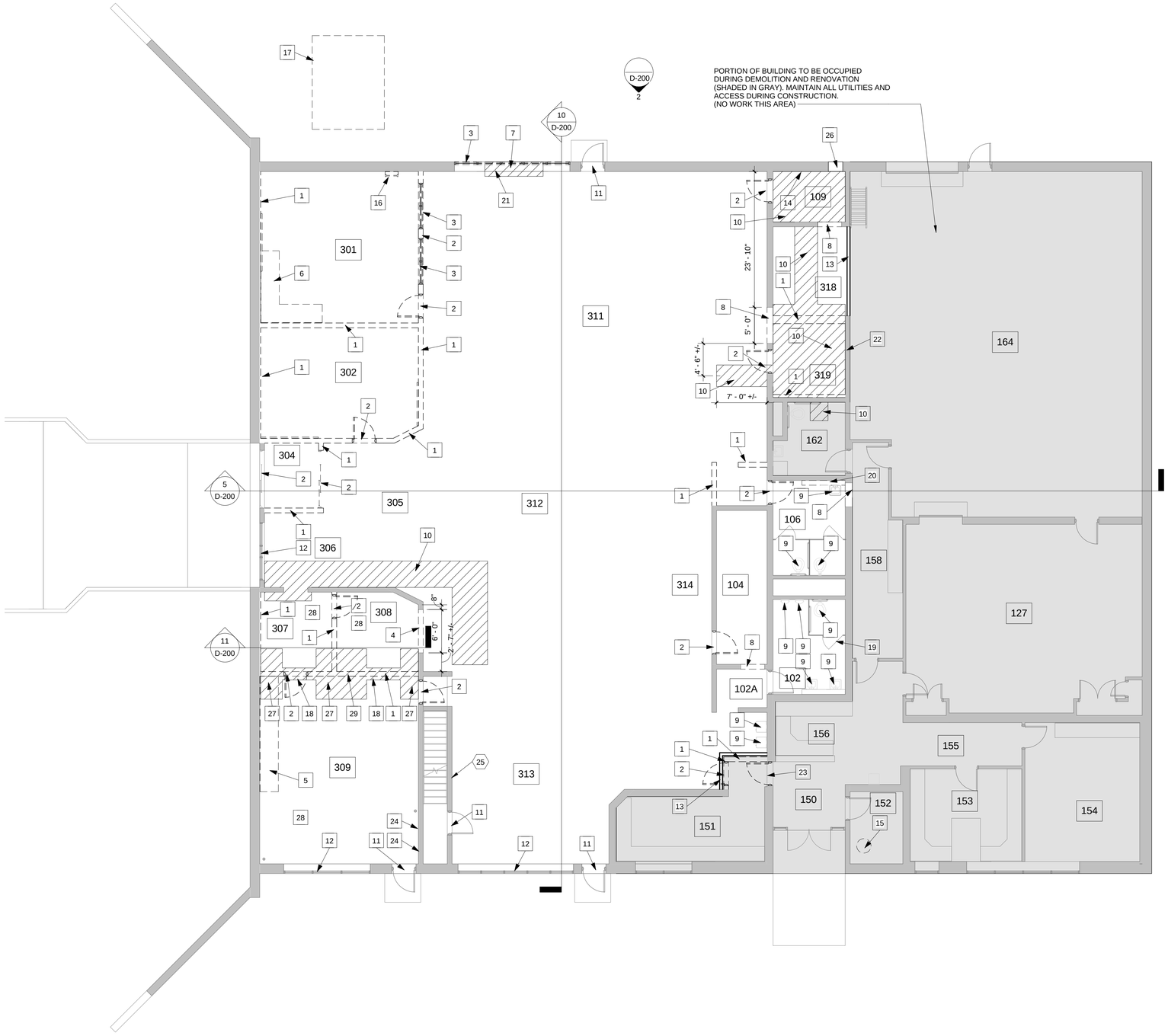
CONTRACTOR STAGING PLAN

SCALE: As indicated

G-002

JOB NO.:	14022
DATE:	12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



1 FIRST FLOOR DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET A-001 FOR DEMOLITION GENERAL NOTES.

B. ALL EXTERIOR WALLS TO REMAIN UON. REMOVE ALL EXISTING PARTITIONS TO FACE OF EXISTING MASONRY WALL.

C. ALL EXISTING CARPETING AND TILE, AND ANY SUB FLOOR SYSTEM,SHALL BE REMOVED TO THE EXISTING SLAB UON.

D. COORDINATE EXACT LOCATION OF REQUIRED PARTIAL EXISTING FLOOR SLAB REMOVAL FOR LOCATION OF NEW PLUMBING WITH PLUMBING DRAWINGS.

E. REFER TO ELECTRICAL, MECHANICAL, AND PLUMBING DEMOLITION DRAWINGS.

F. MAINTAIN EXISTING CEILINGS AT ROOMS 102 & 106. DEMOLISH ALL OTHER EXISTING CEILINGS UON.

G. AT ROOMS 102 & 106 SALVAGE & TURN OVER TO OWNER FOR REUSE; PAPER TOWEL DISPENSER, TOILET PAPER DISPENSER, SANITARY NAPKIN DISPENSER, SOAP DISH & TRASH BIN

H. AT ROOMS 102 & 106 REMOVE ALL MIRRORS.

CODED NOTES:

1 REMOVE EXISTING PARTITION
2 REMOVE EXISTING DOOR & FRAME
3 REMOVE EXISTING WINDOW
4 SELECTED DEMOLITION OF EXISTING WALL FOR NEW OPENING. REMOVE EXISTING INFILL PANEL TO UNDERSIDE OF EXISTING LINTEL. FIELD VERIFY CONDITIONS.
5 REMOVE & SALVAGE FOR REUSE - TURN OVER TO OWNER - EXISTING BUTCHER BLOCK TOP.
6 REMOVE EXISTING CASEWORK AND COUNTERTOP
7 SELECTED DEMOLITION OF EXISTING MASONRY WALL FROM 8" BELOW FLOOR TO EXISTING SILL, FOR NEW ENTRY. REFER TO STOREFRONT ELEVATION & PLANS FOR ROUGH OPENING.
8 SELECTED DEMOLITION OF EXISTING WALL FOR NEW INTERIOR MASONRY OPENING. REFER TO 33/A-602 FOR NEW HEADER REQUIRED
9 EXISTING PLUMBING FIXTURE TO BE REMOVED. REFER TO PLUMBING DRAWINGS
10 AT LOCATION OF ///// HATCH EXTENT OF EXISTING CONCRETE SLAB DENOTED REMOVE AND TRENCH TO ALLOW FOR NEW PLUMBING. REFER TO PLUMBING DRAWINGS.
11 EXISTING DOOR TO REMAIN
12 EXISTING WINDOW TO REMAIN
13 PROVIDE TEMPORARY PARTITION [SIM. TO PARTITION 2 ON SHEET A-520], DURING CONSTRUCTION. REMOVE PARTITION AT COMPLETION OF RENOVATION.
14 EXISTING COMPRESSOR & REFRIGERATED DRYER TO BE RELOCATED. REFER TO PLUMBING DEMOLITION PLAN.
15 REMOVE EXISTING WATER HEATER REFER TO PLUMBING DEMOLITION PLANS
16 EXISTING ACCESS LADDER AND STEEL PLATFORM ABOVE TO BE REMOVED
17 REMOVE EXISTING CONDENSING UNIT. REFER TO MECHANICAL DRAWINGS
18 AT LOCATION OF ///// HATCH EXTENT REMOVE CMU MIN. 1 CRS. BELOW SLAB. REMOVE CONC. SLAB 6" PAST EA. SIDE OF EXISTING CMU PARTITION FOR PREP. FOR NEW CONC. SLAB IN AREA.
19 REMOVE EXISTING TOILET PARTITION
20 REMOVE EXISTING LOW PARTITION & CAP.
21 SELECTED DEMOLITION OF EXIST. CONCRETE SLAB TO ALLOW FOR NEW ENTRY THRESHOLD. REFER TO STOREFRONT ELEV. & PLANS FOR ROUGH OPENINGS.
22 REMOVE EXISTING WALL LOUVER
23 REMOVE EXISTING DOOR & FRAME PRIOR TO COMPLETION OF RENOVATION. MAINTAIN IN PLACE, DURING DEMOLITION & CONSTRUCTION.
24 PROVIDE THRU WALL OPENING FOR NEW 36" X 12" VENT. SEE MECHANICAL DRAWINGS.
25 REMOVE AND SALVAGE FOR REUSE, EXISTING DEFIBRILLATOR
26 SELECTIVE DEMOLITION OF EXISTING WALL FOR NEW 24" X 24" LOUVER. REFER TO MECHANICAL DRAWINGS. SAW CUT EXISTING CMU AND BRICK VENEER WALL TO ALLOW FOR OPENING. PROVIDE NEW LINTEL PER SCHEDULE ON SHEET A-602. PATCH AND REPAIR BRICK VENEER AND CMU WALL AS REQUIRED TO MATCH EXISTING.
27 AT LOCATION OF ///// HATCH EXTENT REMOVE CMU. REMOVE CONC. SLAB 6" PAST EA. FACE OF NEW CONCRETE FOOTING FOR PREP. FOR NEW CONC FOOTING. REFER TO SHEET A-101 FOR EXACT SIZE AND LOCATION OF NEW CONCRETE FOOTING.
28 REMOVE EXISTING CEILING TILE TO FACE OF EXISTING GYP BD. REMOVE EXISTING LIGHTS, DIFFUSERS, MECHANICAL DEVICES AND OTHER CEILING FIXTURES. REFER TO MEP DEMOLITION DRAWINGS.
29 AT LOCATION OF LOAD BEARING CMU REMOVAL, PROVIDE TEMPORARY SHORING TO SUPPORT THE PRECAST SLABS ABOVE.



KEY PLAN
NOT TO SCALE

RECORD DRAWINGS

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TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR DEMOLITION PLAN

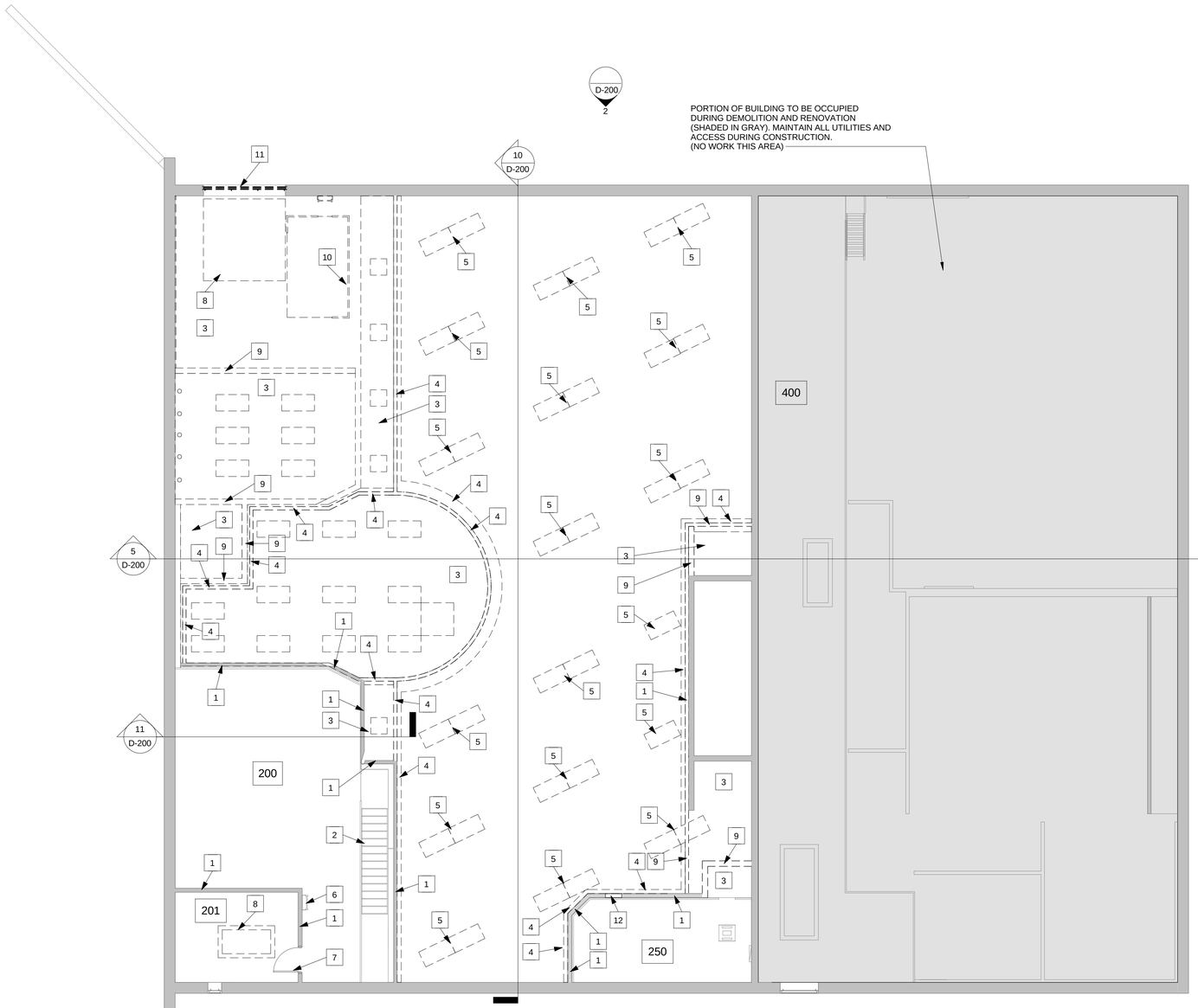
SCALE: As indicated

D-101

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 PLATFORM FLOOR & CEILING DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET A-001 FOR DEMOLITION GENERAL NOTES.

B. ALL EXTERIOR WALLS TO REMAIN UON. REMOVE ALL EXISTING PARTITIONS TO FACE OF EXISTING MASONRY WALL.

C. ALL EXISTING CARPETING AND TILE, AND ANY SUB FLOOR SYSTEM,SHALL BE REMOVED TO THE EXISTING SLAB UON.

D. COORDINATE EXACT LOCATION OF REQUIRED PARTIAL EXISTING FLOOR SLAB REMOVAL FOR LOCATION OF NEW PLUMBING WITH PLUMBING DRAWINGS.

E. REFER TO ELECTRICAL, MECHANICAL, AND PLUMBING DEMOLITION DRAWINGS.

F. DEMOLISH ALL EXISTING CEILINGS.

CODED NOTES:

1 EXISTING PARTITION TO REMAIN
2 EXISTING STAIRS AND RAIL TO REMAIN
3 REMOVE EXISTING CEILING, LIGHT, DIFFUSERS, MECHANICAL, AND OTHER CEILING FIXTURES. REFER TO MEP DEMOLITION DRAWINGS.
4 REMOVE EXISTING BULKHEAD
5 REMOVE EXISTING LIGHT FIXTURE. REFER TO ELECTRICAL DEMOLITION PLAN.
6 EXISTING ROOF ACCESS LADDER TO REMAIN
7 EXISTING DOOR AND FRAME TO REMAIN
8 REMOVE EXISTING MECHANICAL EQUIPMENT REFER TO MECHANICAL DEMOLITION PLANS
9 REMOVE EXISTING PARTITION
10 REMOVE EXISTING STEEL PLATFORM
11 REMOVE EXISTING VENT & PLYWOOD BLANK
12 SELECTED DEMOLITION OF EXISTING WALL FOR ACCESS PANEL. REFER TO SHEET A-102 FOR SIZE. PROVIDE NEW METAL STUD HEADER AT OPENING.



KEY PLAN
NOT TO SCALE

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TRENARY HALL INTERIOR RENOVATION

PLATFORM FLOOR DEMOLITION PLAN

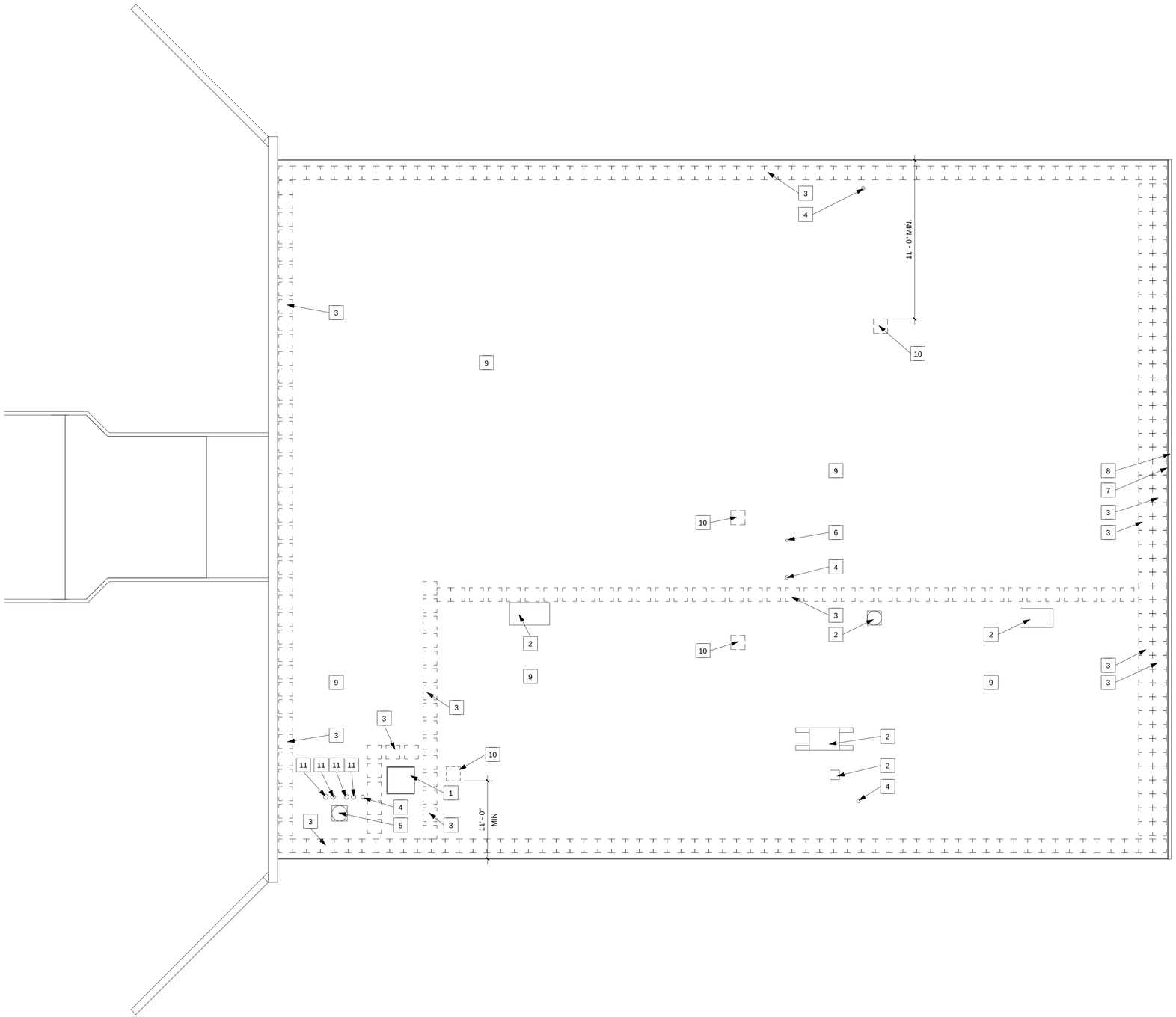
SCALE: As indicated

D-102

JOB NO.: 14022

DATE: 12/05/14

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1 ROOF DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET A-001 FOR DEMOLITION GENERAL NOTES.
B. ALL EXISTING DOWNSPOUTS AND GUTTERS ARE TO REMAIN UON

CODED NOTES:

1 EXISTING ROOF HATCH TO REMAIN
2 EXISTING MECHANICAL EQUIPMENT TO REMAIN
3 REMOVE EXISTING PAVERS
4 EXISTING VENT TO REMAIN
5 REMOVE EXISTING BOILER FLUE. REFER TO MECHANICAL DEMOLITION PLAN.
6 EXISTING CONDUIT AND OUTLET TO REMAIN
7 REMOVE EXISTING BALLAST STOP
8 EXISTING GUTTER TO REMAIN
9 REMOVE EXISTING ROOFING AND BALLAST DOWN TO TOP OF EXISTING INSULATION
10 PROVIDE CUT-OUT FOR NEW EF. REFER TO MECH DRAWINGS. AT UNDERSIDE OF DECK, PROVIDE 6X6X1/4 MAIN SUPPORT & 4X4X1/4 SECONDARY SUPPORT
11 PROVIDE CUT OUT FOR NEW BOILER INTAKE & EXHAUST VENT. REFER TO MECHANICAL DRAWINGS.

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TRENARY HALL INTERIOR RENOVATION

ROOF DEMOLITION PLAN

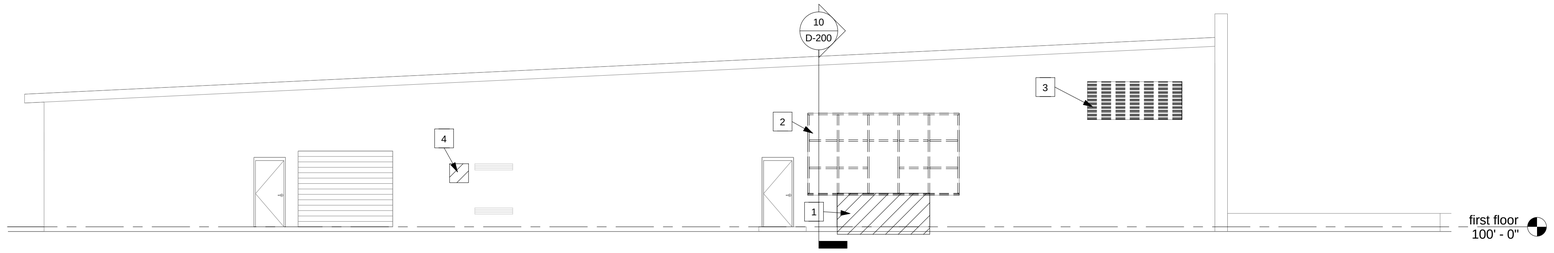
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D-120

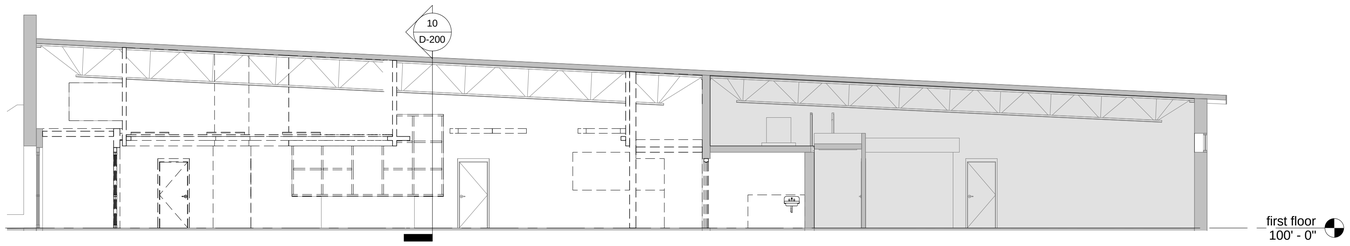
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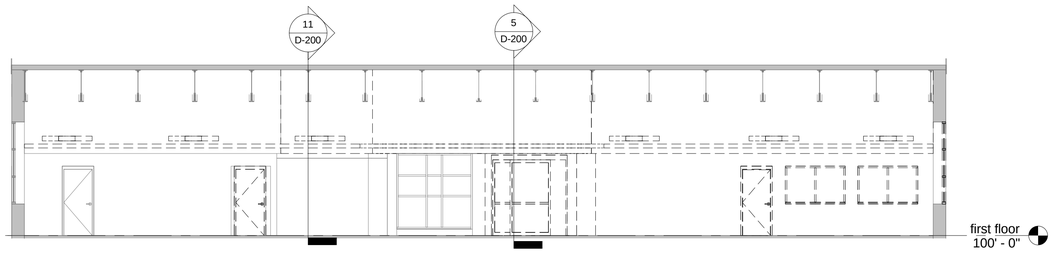
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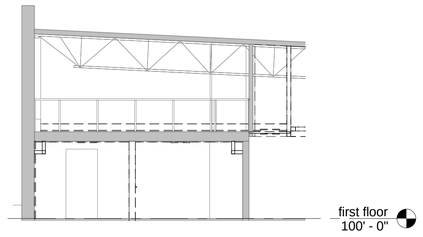
2 East Elevation Demolition
1/8" = 1'-0"



5 DEMOLITION SECTION A
1/8" = 1'-0"



10 DEMOLITION SECTION B
1/8" = 1'-0"



11 DEMOLITION SECTION C
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET A-001 FOR DEMOLITION GENERAL NOTES.
B. ALL EXTERIOR WALLS TO REMAIN UON.
C. ALL EXISTING WINDOWS ARE TO BE REMAIN UON
D. ALL EXISTING DOWNSPOUTS AND GUTTERS ARE TO REMAIN UON

CODED NOTES:

1 SELECTIVE DEMOLITION OF EXISTING WALL FOR NEW MASONRY OPENING FOR NEW DOOR. REFER TO STOREFRONT AND DOOR SCHEDULE FOR ROUGH OPENING. REMOVE MASONRY WALL TO 8" BELOW EXISTING SLAB.
2 REMOVE EXISTING STOREFRONT WINDOW
3 REMOVE EXISTING VENT & PLYWOOD BLANK
4 SELECTIVE DEMOLITION OF EXISTING WALL FOR NEW 24" X 24" LOUVER. REFER TO MECHANICAL DRAWINGS. SAW CUT EXISTING CMU AND BRICK VENEER WALL TO ALLOW FOR OPENING. PROVIDE NEW LINTEL PER SCHEDULE ON SHEET A-602. PATCH AND REPAIR BRICK VENEER AND CMU WALL AS REQUIRED TO MATCH EXISTING.

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REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

ELEVATIONS & SECTION DEMOLITION

SCALE: As indicated

D-200

JOB NO.: 14022
DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

ARCHITECTURAL ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
ACC	ACCESS
AP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJACENT
ADJT	ADJUSTABLE
AS	ADJUSTABLE SHELF
AGG	AGGREGATE
A/C	AIR CONDITIONING
ALT	ALTERNATE
AL	ALUMINUM
ANCH	ANCHOR(AGE)
AB	ANCHOR BELT
ANOD	ANODIZED
APX	APPROXIMATE
ARCH	ARCHITECT(URAL)
AD	AREA DRAIN
ASPH	ASPHALT
A/V	AUDIO VIDEO
AUTO	AUTOMATIC
BRG	BEARING
BPL	BEARING PLATE
BJT	BED JOINT
BM	BENCH MARK
BEL	BELOW
BTWN	BETWEEN
BVL	BEVELED
BIT	BITUMINOUS
BLK	BLOCK
BLKG	BLOCKING
BD	BOARD
BS	BOTH SIDES
B&T	BOTTOM & TOP
BW	BOTH WAYS
BOT	BOTTOM
BO	BOTTOM OF
BR	BRICK
BRK	BRONZE
BLDG	BUILDING
CPT	CARPET
CLG	CEILING
CHT	CEILING HEIGHT
CL	CENTER LINE
C-C	CENTER TO CENTER
CT	CERAMIC TILE
CIR	CIRCLE
CLR	CLEAR(ANCE)
CLS	CLOSURE
CW	COLD WATER
COL	COLUMN
CONC	CONCRETE
COORD	COORDINATE
CMU	CONCRETE MASONRY UNIT
CONST	CONSTRUCTION
CONT	CONTINUOUS
CJ	CONTROL JOINT
CG	CORNER GUARD
CTR	COUNTER
CFL	COUNTER FLASHING
CTSK	COUNTERSUNK SCREW
CRS	COURSE(S)
CF	CUBIC FEET
CY	CUBIC YARD
DP	DEEP
DEMO	DEMOLISH
D	DEPTH
DET	DETAIL
DIAG	DIAGONAL
DIAM	DIAMETER
DIM	DIMENSION
DPR	DISPENSER
DIV	DIVISION
DR	DOOR
DS	DOWN SPOUT
DWR	DRAWER
DWG	DRAWING
DF	DRINKING FOUNTAIN
EA	EACH
EF	EACH FACE
EN	EACH WAY
ELEC	ELECTRIC(AL)
EWC	ELECTRIC WATER COOLER
EL	ELEVATION
EMER	EMERGENCY
ENC	ENCLOSE, ENCLOSURE
EPX	EPOXY
EQ	EQUAL
EQP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
EJ	EXPANSION JOINT
EXP	EXPOSED
EIFS	EXTERIOR INSULATED FINISHING SYSTEM
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FAS	FASTEN(ER)
FN	FENCE
FGL	FIBERGLASS
FIN	FINISH(ED)
FF	FINISHED FLOOR
FE	FIRE EXTINGUISHER-BRACKET MT.
FEC	FIRE ENTINGUISHER & CABINET
FPC	FIRE PROTECTION CONTRACTOR
FP	FIREPROOF
FRD	FROSTED GLASS
FLG	FLASHING
FLX	FLEXIBLE
FLR	FLOOR(ING)
FLCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FJT	FLUSH JOINT
FT	FOOT
FTG	FOOTING
FND	FOUNDATION
FS	FULL SIZE
FBO	FURNISHED BY OTHERS
FUR	FURRED, FURRING
FUT	FUTURE
GA	GAGE, GAUGE
GALV	GALVANIZED
G	GAS
GKT	GASKET(ED)
GC	GENERAL TRADES CONTRACTOR
GL	GLASS, GLAZING
GLBK	GLASS BLOCK
GB	GRAB BAR
GD	GRADE, GRADING
GT	GROUT
GYP	GYPSUM
HC	HANDICAP
HDW	HARDWARE
HJT	HEAD JOINT
HDR	HEADER
HVAC	HEATING / VENTILATION / AIR CONDITIONING
HT	HEIGHT
HP	HIGH POINT
HM	HOLLOW METAL
HOR	HORIZONTAL
HB	HOSE BIBB
HW	HOT WATER
HWH	HOT WATER HEATER
IN	INCH
INCL	INCLUDE(D), INCLUDING
ID	INSIDE DIAMETER
IF	INSIDE FACE
INSUL	INSULATION
INT	INTERIOR
INTM	INTERMEDIATE
IJ	ISOLATION JOINT
JC	JANITOR'S CLOSET
J	JOINT
JT	JOINT
JF	JOINT FILLER
JST	JOIST
KPL	KICKPLATE
KO	KNOCKOUT
LBL	LABEL
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE(D)
LAV	LAVATORY
LH	LEFT HAND
L	LENGTH
LT	LIGHT
LS	LIMESTONE
LTL	LINTEL
LL	LIVE LOAD
LVR	LOUVER
LP	LOW POINT
MH	MANHOLE
MFR	MANUFACTURE(R)
MKBD	MARKERBOARD
MAS	MASONRY
MO	MASONRY OPENING
MAT	MATERIAL(S)
MAX	MAXIMUM
MECH	MECHANIC(AL)
MC	MECHANICAL CONTRACTOR
MED	MEDIUM
MTL	METAL
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLD	MOLDING, MOULDING
MT	MOUNT(ED), (ING)
MOV	MOVABLE
MULL	MULLION
NRCA	NATIONAL ROOFING CONTRACTORS ASSOCIATION
NAT	NATURAL
NR	NOISE REDUCTION
NOM	NOMINAL
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER(S)
OPG	OPENING
OPP	OPPOSITE
OPH	OPPOSITE HAND
OD	OUTSIDE DIAMTER OR OVERFLOW DRAIN
OF	OUTSIDE FACE
P	PAINT
PNL	PANEL
PTD	PAPER TOWEL DISPENSER
PTR	PAPER TOWEL RECEPTOR
PAR	PARALLEL
PBD	PARTICLE BOARD
PTN	PARTITION
PERI	PERIMETER
PLAM	PLASTIC LAMINATE
PC	PLUMBING CONTRACTOR
PWD	PLYWOOD
PCC	PRECAST CONCRETE
PFB	PREFABRICATE(D)
PFN	PREFINISHED
PRF	PREFORMED
RAD	RADIUS
RL	RAIL(ING)
REF	REFERENCE
RFL	REFLECT(ED), (IVE), (OR)
REINF	REINFORCE(D), REINFORCING
RES	RESILIENT
RESIN	RESINOUS
RET	RETURN
REV	REVISION(S), REVISED
RFG	ROOFING
RM	ROOM
RO	ROUGH OPENING
RH	RIGHT HAND
RD	ROOF DRAIN
REQD	REQUIRED
SCH	SCHEDULE
SNT	SEALANT
S	SEALED, SPANDREL
SEC	SECTION
SSK	SERVICE SINK
SHTH	SHEATHING
SHT	SHEET
SMACNA	SHEET METAL & AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION
SH	SHELF, SHELVING
SIM	SIMILAR
SLP	SLOPED
SP	SOUNDPROOF
SPA	SPACES
SPL	SPECIAL
SPEC	SPECIFICATION(S)
SQ	SQUARE
SF	SQUARE FOOT
SS	STAINLESS STEEL
STD	STANDARD
STA	STATION
STL	STEEL
STOR	STORAGE
SD	STORM DRAIN
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMMETRY, SYMMETRICAL
SYS	SYSTEM
TKBD	TACKBOARD
TEL	TELEPHONE
T	TEMPERED
TEMP	TEMPERED
TER	TERAZZO
THK	THICK(NESS)
THR	THRESHOLD
TPD	TOILET PAPER DISPENSER
TPRN	TOILET PARTITION
T&B	TOP & BOTTOM
TO	TOP OF
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TSL	TOP OF SLAB
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UC	UNDERCUT
UNF	UNFINISHED
UON	UNLESS OTHERWISE NOTED
VB	VAPOR BARRIER OR VINYL BASE
VERT	VERTICAL
VIN	VINYL
VCT	VINYL COMPOSITION TILE
WH	WALL HUNG
WTW	WALL TO WALL
WC	WATER CLOSET
WP	WATERPROOFING
WS	WATERSTOP
WHB	WHEEL BUMPER
W	WIDTH
WIN	WINDOW
WM	WIRE MESH
WG	WIRED GLASS
W/	WITH
WO	WITHOUT
WD	WOOD
WPT	WORKING POINT

MATERIALS LEGEND

- BRICK
- CONCRETE
- CONCRETE MASONRY UNIT
- EARTH
- GROUT
- GYPSUM BOARD
- INSULATION
- PLYWOOD
- RIGID INSULATION
- SAND
- WOOD BLOCKING
- EXISTING WALL

ARCHITECTURAL SYMBOLS LEGEND

- CODED NOTE
- DEMOLITION CODED NOTE
- COLUMN LINE BUBBLE
- DATUM MARKER
- DETAIL MARKER
- DOOR NUMBER
- ELEVATION MARKER
- NORTH ARROW
- ROOM NUMBER
- SECTION CUT MARKER
- TITLE MARKER
- WALL TYPE
- WINDOW ELEVATION MARKER

DEMOLITION GENERAL NOTES

I. GENERAL NOTES

A. THE CONTRACTOR SHALL COMPLETE ALL SELECTIVE DEMOLITION WORK REQUIRED IN ROOMS TO BE COMPLETELY REMODELED EXCEPT THAT WHICH IS NOTED OTHERWISE. WORK INCLUDES, BUT IS NOT LIMITED TO:
1. PARTITIONS INDICATED (COORDINATE LIMITS WITH FLOOR PLANS)
2. DOORS & FRAMES AND HARDWARE INDICATED.
3. EXISTING FLOORING & ADHESIVES.
4. EXISTING CEILINGS & ANCHORAGE DEVICES.
5. EXISTING WALL BASE
6. EXISTING PLUMBING SYSTEMS BACK TO POINT CONCEALED BY NEW CONSTRUCTION OR AS REQUIRED FOR NEW CONSTRUCTION FOR ALL CONTRACTORS INCLUDING, BUT NOT LIMITED TO VALVES, HANGERS, INSULATION, & FLOOR DRAINS.
7. EXISTING HVAC SYSTEMS BACK TO POINT CONCEALED BY NEW CONSTRUCTION OR AS REQUIRED FOR NEW CONSTRUCTION BY ALL CONTRACTORS INCLUDING, BUT NOT LIMITED TO:
   a. ALL DUCTS, DIFFUSERS, DAMPERS, GRILLES, THERMOSTATS, INSULATION, & HANGERS.
   b. ALL HOT WATER STEAM & CONDENSATE PIPING, INSULATION, VALVES, & HANGERS.
8. EXISTING ELECTRICAL SYSTEMS BACK TO A POINT CONCEALED BY NEW CONSTRUCTION OR AS REQUIRED FOR NEW CONSTRUCTION BY ALL CONTRACTORS INCLUDING, BUT NOT LIMITED TO:
   a. ALL LIGHTS, SWITCHES, RECEPTACLES, PANELBOARDS, SPEAKERS,TELEPHONE DEVICES, & CLOCKS.
   b. ABANDONED CONDUIT, WIRE, JUNCTION BOXES, & HANGERS.

B. THE CONTRACTOR SHALL SCHEDULE ALL INTERRUPTIONS OF UTILITIES WITH THE COLLEGE.

C. UNLESS OTHERWIDE DENOTED AS DEMOLISHED, MAINTAIN & PROTECT EXISTING EXTERIOR WINDOW SYSTEMS (GLAZING, FRAMES AND WINDOW SILLS) AND EXISTING EXTERIOR CURTAIN WALL SYSTEMS (GLAZING, INSULATED SPANDREL PANELS AND FRAMES).

D. CONTRACTOR, FOR THE PORTION OF THE WORK INDICATED ON PLAN, IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS & THOSE INDICATED ON DRAWINGS SHOULD BE REPORTED TO THE ARCHITECT IMMEDIATELY. DURING BIDDING NO CHANGE ORDER SHALL BE GRANTED FOR WORK DUE TO CONDITIONS THAT COULD HAVE BEEN ANTICIPATED AND RESOLVED DURING BIDDING.

E. ALL DAMAGE TO WALLS, FLOOR, & FIXTURES INCURRED BY REMOVAL OF ITEMS OR DEMOLITION WORK IS TO BE PATCHED & REFINISHED.

F. PROVIDE ALL SELECTIVE BUILDING DEMOLITION WORK REQUIRED TO COMPLETE ALL NEW WORK & REMODELING WORK WHETHER SPECIFICALLY NOTED OR NOT.

G. THE COLLEGE RETAINS THE RIGHT TO SALVAGE EXISTING BUILDING ITEMS INCLUDING, BUT NOT LIMITED TO DOORS, HARDWARE, EQUIPMENT, WINDOWS, SIGNAGE, FIRE EXTINGUISHERS, & LIGHTS.

H. IMMEDIATELY PRIOR TO THE START OF COMPLETE REMODELING OF ROOMS, THE COLLEGE WILL VACATE & REMOVE ALL LOOSE FURNISHINGS. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO TABLES, DESKS, & CHAIRS. CONTRACTOR TO COORDINATE REMODELING SCHEDULE WITH THE COLLEGE & NOTIFY THEM OF START DATE 2 WEEKS IN ADVANCE.

I. COORDINATE LIMITS OF SELECTIVE DEMOLITION OF MECHANICAL/ELECTRICAL SYSTEMS WITH THE RESPECTIVE CONTRACTORS. PLUMBING, HVAC, & ELECTRICAL CONTRACTORS ARE RESONSIBLE FOR:
1. IDENTIFYING TERMINATION POINTS OF DEMOLITION.
2.TEMPORARY SHUT DOWN & CAPPING EXISTING ACTIVE PIPE, DUCTS, OR ELECTRICAL CIRCUITS.
3. RECONFIGURATION OF EXISTING SYSTEMS.
4. DISCONNECTING ABANDONED ELECTRICAL CIRCUITS.
5.HOLES IN EXISTING CONSTRUCTION REQUIRED FOR NEW CONSTRUCTIONS, U.O.N.

J. PATCH AND REFINISH ALL LOCATIONS WHERE EQUIPMENT, DUCTS, CONDUITS ECT. HAVE BEEN REMOVED. COORDINATE WITH MEP DRAWINGS.

K. ABATEMENT IS NOT REQUIRED. IF CONTRACTOR COMES ACROSS SUSPICIOUS MATERIAL, NOTIFY OWNER IMMEDIATELY.

ARCHITECTURAL GENERAL NOTES

I. GENERAL NOTES
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE INSTALLATION OF STRUCTURAL, MECHANICAL, AND ELECTRICAL WORK. SHOULD THERE BE DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE ENGINEERING DRAWINGS THAT WOULD CAUSE AN AWKWARD OR IMPROPER INSTALLATION, IT SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK.
2. ALL WORK SHALL CONFORM TO THE CURRENT EDITIONS OF THE NATIONAL, STATE, AND LOCAL CODES, AND ANY OTHER REGULATORY AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK. ALL WORK PERFORMED BY ALL CONTRACTORS & SUBCONTRACTORS SHALL COMPLY WITH APPLICABLE SECTIONS OF THE CODES THAT HAVE JURISDICTION.
3. DO NOT SCALE THE DRAWINGS. CONTRACTORS ARE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS BEFORE PROCEEDING WITH ANY WORK. DISCREPANCIES BETWEEN FIELD CONDITIONS AND DRAWINGS SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK. FAILURE OF THE CONTRACTOR TO REVIEW THE CONTRACT DOCUMENTS AND VERIFY THE EXISTING CONDITIONS SHALL NOT BE SUFFICIENT CAUSE TO WARRANT A CHANGE IN CONTRACT AFTER CONTRACT IS AWARDED.
4. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
5. IN THE EVENT THERE ARE DISCREPANCIES OR AMBIGUITIES IN OR OMISSIONS FROM THE SPECIFICATIONS OR DRAWINGS, OR SHOULD THERE BE DOUBT AS TO THE MEANING OR THE INTENT OF THE SPECIFICATIONS OR DRAWINGS, THE ARCHITECT SHALL BE NOTIFIED BEFORE PROCEEDING WITH THE WORK.
6. FILL ANY MASONRY VOIDS WITH MORTAR OR GROUT WHERE ANCHORS OCCUR.
7. SEPARATE ALL DISSIMILAR METALS TO PREVENT CORROSION CAUSED BY DIALECTIC ACTION, OR BY OTHER CAUSES AS RECOMMENDED BY THE RESPECTIVE PRODUCT MANUFACTURER / SUPPLIER.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN APPROVAL BY THE BUILDING INSPECTOR FOR ALL CONCEALED WORK BEFORE CLOSING UP.
9. THERE SHALL BE NO EXPOSED PIPE, CONDUITS, DUCTS, VENTS, ETC. IN DESIGNATED FINISH SPACES, UNLESS NOTED AS EXPOSED CONSTRUCTION ON FINISH SCHEDULE.
10. PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED IN ORDER TO SECURE ALL EQUIPMENT ACCESSORIES, CASEWORK, ETC.
11. PROVIDE CONTROL JOINTS IN GYPSUM BOARD AT MAXIMUM DISTANCE OF 30 LINEAR FEET FOR VERTICAL SURFACES AND 50 LINEAR FEET OR 2,500 SQUARE FEET FOR CEILINGS. REFER TO REFLECTED CEILING PLANS, PLANS AND WALL ELEVATIONS FOR SPECIFIC LOCATIONS. PROVIDE CONTROL JOINT AT LATCH SIDE OF ALL DOORS BOTH SIDES. U.O.N. PROVIDE SEALANT AT ALL GYP BD CONTROLL JOINTS.
12. REFER TO STRUCTURAL DRAWINGS FOR ALL LINTEL MATERIALS AND SIZES.
13. REFER TO THE SPECIFICATIONS FOR DESCRIPTIONS OF INSULATION TYPES, GLASS TYPES, AND HARDWARE SETS.
14. ALL EXPOSED CONCRETE BLOCK OUTSIDE CORNERS ARE TO BE BULLNOSE.
15. ALL TACK BOARDS AND MARKER BOARDS ARE 4'-0" HIGH. MOUNT BOTTOM AT 4'-3" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED.
16. GENERAL TRADES CONTRACTOR TO COORDINATE FLOOR SLAB DEPRESSIONS REQUIRED BY FLOOR FINISH MATERIALS. PROVIDE LEVEL FINISH FLOOR.
17. WHERE CONTROL JOINT IS INDICATED IN MASONRY, KEEP HEAD JOINTS CLEAR OF ALL MORTAR. PROVIDE CONTINUOUS BEAD OF SEALANT WITH BACKER ROD.
18. ALL TOILET ACCESSORY ITEMS NOTED HANDICAP ARE TO BE INSTALLED PER I 117.1. ANY DEVIATION FROM STANDARDS SHOULD BE BROUGHT TO THE ATTENTION OF THE A/E PRIOR TO INSTALLATION.
19. SLOPE CONCRETE FLOOR TOPPING 1/8" PER FOOT TO FLOOR DRAINS WITH A MIN 12" SQUARE SUMP, UON.
20. PAINT ALL EXPOSED CONDUIT AND STEEL, ELECTRICAL RACEWAYS AND BOXES, MECHANICAL PIPING, DUCTS AND EQUIPMENT, & PLUMBING PIPING, WITH THE EXCEPTION OF PRE-FINISHED AND INSULATED ITEMS, UNLESS OTHERWISE NOTED.
21. PAINT ALL EXPOSED EXTERIOR STEEL, INCLUDING GALVANIZED STEEL, WITH THE EXCEPTION OF PRE-FINISHED, MATERIAL, UNLESS OTHERWISE NOTED.
22. PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR ACCESS. ACCESS PANELS LOCATED IN FINISHED SURFACES SHALL BE PAINTED TO MATCH ADJACENT SURFACES. LOCATION SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO PROCEEDING WITH INSTALLATION.

II. FIRE RESISTANCE RATING
1. FIRE RATING INDICATIONS ON A WALL SHALL MEAN THE ENTIRE LENGTH OF WALL IS TO BE FIRE RATED.
2. PIPING, DUCTS, ETC., THAT PENETRATE WALLS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE FIRE RESISTANCE RATING & STRUCTURAL INTEGRITY OF THE WALL.
3. RECESSED CABINETS, PANELS, BOXES AND CORNER GUARDS LOCATED IN FIRE RATED WALLS SHALL BE INSTALLED IN SUCH A WAY AS TO MAINTAIN THE FIRE RATED CONSTRUCTION.
4. WHERE REQUIRED FIREPROOFING IS REMOVED OR DAMAGED FOR THE PLACING OF CUP ANGLES, BRACES OR SUPPORTS, ETC. THE FIREPROOFING SHALL BE REPLACED BY THE CONTRACTOR REMOVING OR DAMAGING THE FIREPROOFING TO MAINTAIN THE INTEGRITY OF THE FIREPROOFING SYSTEM.

III. DIMENSIONS
1. INTERIOR PARTITIONS ARE DIMENSIONED TO THE FINISH FACE OF MASONRY OR GYPSUM BOARD, EXCLUDING FINISH MATERIALS SUCH AS CERAMIC TILE. THE CONTRACTOR SHALL COORDINATE FINISH DIMENSIONS WITH FINISH SCHEDULE WHEN CRITICAL TO THE INSTALLATION OF MILL WORK, CASEWORK, OR EQUIPMENT.
2. FIRST FLOOR ELEVATION OF 100'-0".
3. UNLESS SHOWN OTHERWISE, DOOR LOCATIONS NOT LOCATED BY DIMENSIONS SHALL BE CENTERED IN WALL OF BE LOCATED 4" FROM FINISH PERPENDICULAR WALL TO EDGE OF DOOR FRAME.

IV. CASEWORK
1. IF CASEWORK IS REFERENCED AS SIMILAR, CASEWORK MAY BE DIFFERENT DUE TO PLAN CONFIGURATION. COORDINATE DIFFERENCES WITH PLAN AS NEEDED. USE FILLERS, FINISHED ENDS, ETC.
2. REFER TO MOUNTING HEIGHT SHEET A-400 FOR TYPICAL MOUNTING HEIGHTS.
3. BACK SPLASHES & SIDE SPLASHES ARE TO LOCATED AT ALL SINK AREAS.
4. TO INSURE PROPER & ADEQUATE BLOCKING, ALL BLOCKING LOCATIONS FOR CASEWORK WILL BE THE RESPONSIBILITY OF THE PARTY OR PARTIES PROVIDING CASEWORK & SHALL COORDINATE WITH THE GENERAL TRADES CONTRACTOR WHO PROVIDES THE BLOCKING.

V. SIGNAGE
1. REFER TO SPECIFICATION SECTION #101400 "SIGNAGE".
2. PROVIDE SIGNAGE AT ALL FIRE EXTINGUISHER CABINETS & FIRE EXTINGUISHERS. REFER TO SPECIFICATION #101400.

RECORD DRAWINGS

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	DATE:
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

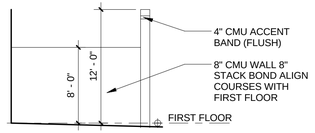
ARCHITECTURAL ABBREVIATIONS, SYMBOLS & NOTES

SCALE:	1/2" = 1'-0"

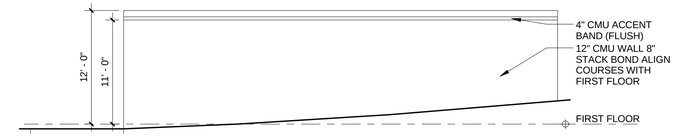
A-001

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1 1/2" = 1'-0" 0 3" 6" 1'
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6" = 1'-0" 0 1" 2" 3" 6"



1 SITE WALL SOUTH ELEVATION
1/8" = 1'-0"



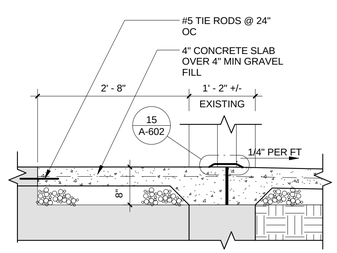
2 SITE WALL EAST ELEVATION
1/8" = 1'-0"

GENERAL NOTES:

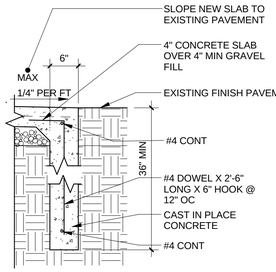
A. FOR DESIGNATED AREA "GRAVEL ACCESS AREA", WHERE "#304" IS DENOTED, EXISTING ROOF BALAST GRAVEL, IF SALVAGED, CAN BE SUBSTITUTED.

B. AT ALL NEW SLABS ON GRADE, PROVIDE 6X6-W1.4XW1.4WWR AT MID-THICKNESS OF SLAB.

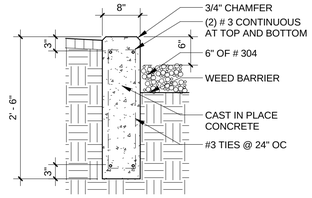
C. LAP WELDED WIRE REINFORCING 1 SPACE +2" AT ALL EDGES AND END OF WIRE SHEETS.



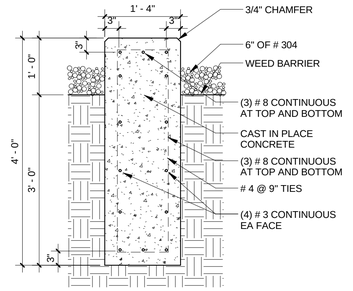
10 THRESHOLD SECTION
3/4" = 1'-0"



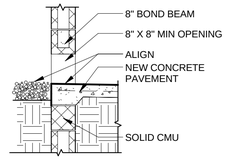
11 FROST SLAB SECTION
3/4" = 1'-0"



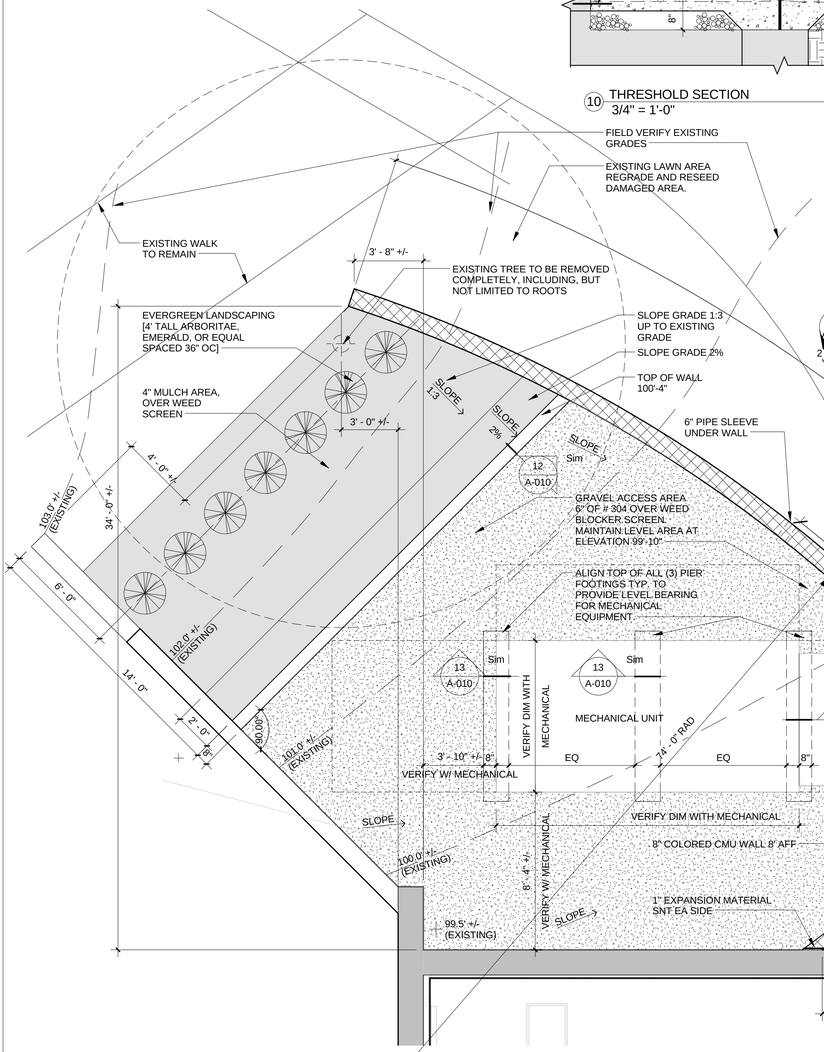
12 CONC CURB SECTION
3/4" = 1'-0"



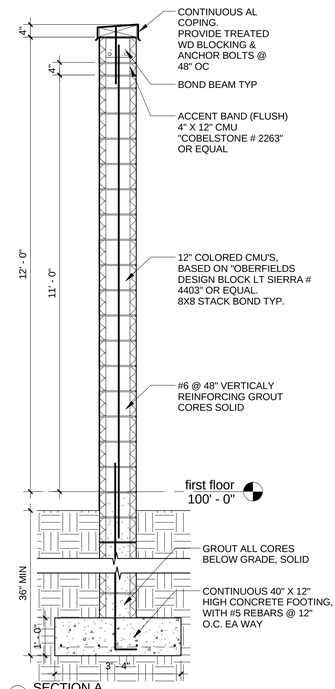
13 CONC PIER SECTION
3/4" = 1'-0"



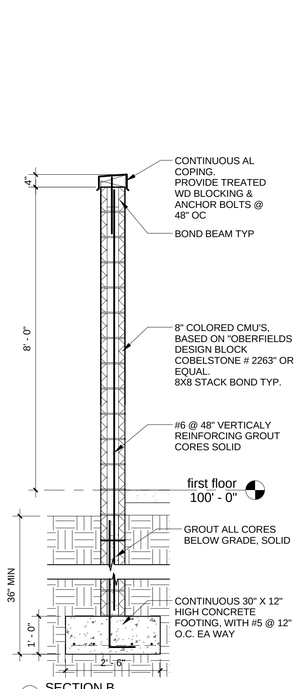
14 SECTION C
1/2" = 1'-0"



20 PARTIAL SITE PLAN EAST ENTRY
1/4" = 1'-0"



21 SECTION A
1/2" = 1'-0"



22 SECTION B
1/2" = 1'-0"

RECORD DRAWINGS

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

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DRAWN BY:	MS
CHECKED BY:	TWG

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RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

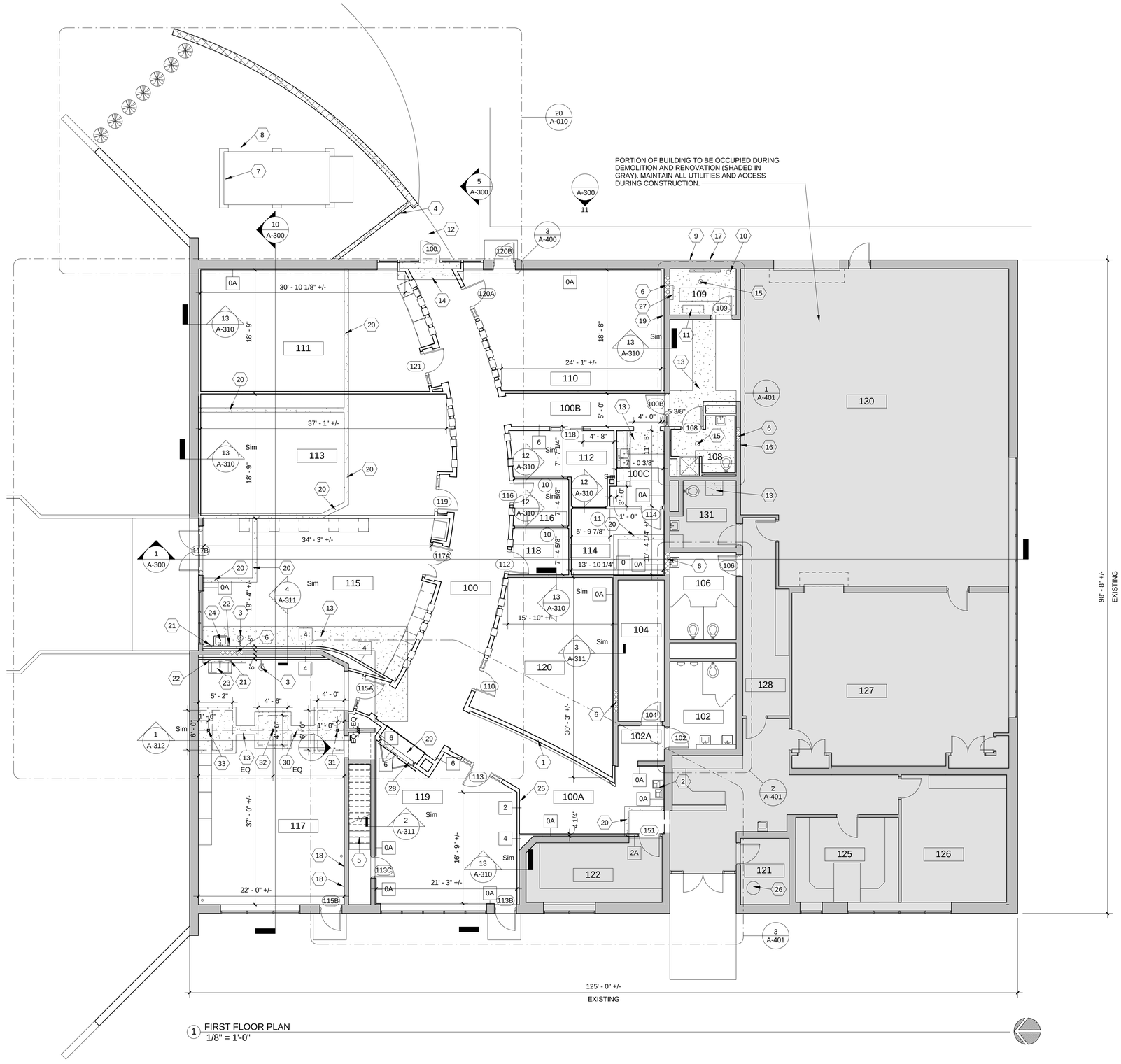
ARCHITECTURAL SITE

SCALE: As indicated

A-010

JOB NO.:	14022
DATE:	12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



1 FIRST FLOOR PLAN
1/8" = 1'-0"

KEY PLAN
NOT TO SCALE

GENERAL NOTES:

A. ALL INTERIOR PARTITIONS ARE TYPE 2, UNLESS OTHERWISE NOTED ON DRAWINGS.

B. SEE SHEET A-520 FOR PARTITION TYPES.

C. REFER TO CODE PLANS FOR FIRE EXTINGUISHER LOCATIONS.

D. SEE SHEET A-631 & A-634 FOR FLOOR PATTERNS, CASEWORK, & FURNITURE LAYOUTS.

E. PROVIDE MINI BLINDS AT ALL EXTERIOR WINDOWS EXCEPT STOREFRONT WINDOWS AT RM #100.

F. REFER TO FLOOR PATERN SHEETS AND INTERIOR ELEVATIONS FOR LOCATIONS OF PROJECTION SCREENS, MARKERBOARDS, AND TACKBOARDS.

F. REFER TO ENLARGED PLANS, SHEETS A-400 & A-401, FOR ADDITIONAL WALL TYPES, DENOTATIONS."

G. SEE SHEET A-601 FOR WINDOW TYPES.

H. AT ALL NEW SLABS ON GRADE, PROVIDE 6X6-W1.4XW1.4WWR AT MID-THICKNESS OF SLAB.

J. LAP WELDED WIRE REINFORCING 1 SPACE +2" AT ALL EDGES AND END OF WIRE SHEETS.

CODED NOTES:

1 PROVIDE 1/2" SOLID PLYWOOD BACKER ON CORRIDOR FACE OF PARTITION. REFER TO SECTION 1/A-311
2 DF REFER TO PLUMBING DRAWINGS
3 EMERGENCY SHOWER. REFER TO PLUMBING DRAWINGS
4 POWER DOOR OPERATOR ACTUATOR. SEE DETAIL 40A-602. ROUGH-IN FOR FUTURE USE.
5 EXISTING STAIRS TO REMAIN
6 NEW MASONRY WALL INFILL. PROVIDE 8" CMU TO MATCH EXISTING.
7 MECHANICAL EQUIPMENT (RTU-1). REFER TO MECHANICAL DRAWINGS
8 CONCRETE SUPPORT FOR MECHANICAL EQUIPMENT REFER TO DETAIL 13/A-010
9 F.D.I.C. REFER TO FIRE PROTECTION PLAN
10 SPRINKLER ALARM VALVE RISER. REFER TO FIRE PROTECTION PLAN
11 RELOCATE EXISTING AIR COMPRESSOR. REFER TO PLUMBING DRAWINGS
12 CONCRETE FROST SLAB. REFER TO DETAIL 11/A-010
13 NEW 4" CONC. SLAB INFILL TO ALIGN WITH FACE OF EXISTING SLAB. PROVIDE GRAVEL FILL AS REQUIRED.
14 NEW CONC. SLAB AT NEW DOOR OPENING. REFER TO 10/A-010
15 FLOOR DRAIN. REFER TO PLUMBING DRAWINGS
16 NEW 12 X 12 SUPPLY REGISTER IN WALL. REFER TO MECHANICAL DRAWINGS. TOP OF REGISTER AT 7'-4" AFF. PROVIDE LINTELS PER LINTEL SCHEDULE ON SHEET A-602. PATCH AND REPAIR CMU WALL AS REQUIRED TO MATCH EXISTING.
17 PATCH REPAIR AND SEAL ALL BRICK AND CMU WALL, TO MATCH EXISTING, AT LOCATIONS OF NEW PENETRATIONS; INCLUDING BUT NOT LIMITED TO, F.D.I.C & WALL INDICATOR VALVE.
18 NEW 12 X 36 REGISTER IN WALL. REFER TO MECHANICAL DRAWINGS. TOP OF REGISTER AT 7'-4" AFF. PROVIDE LINTELS PER LINTEL SCHEDULE ON SHEET A-602. PATCH AND REPAIR CMU WALL AS REQUIRED TO MATCH EXISTING.
19 OFFSET BACK FACE OF NEW PARTITION 2" FROM FACE OF EXISTING MASONRY WALL. PROVIDE SOUND ATTENUATION BLACKETS WITHIN NEW PARTITION.
20 PATCH AND REPAIR, OR PROVIDE NEW CONCRTE, AT LOCATION OF CMU REMOVAL, FOR A SMOOTH ALIGNED SURFACE.
21 PAPER TOWEL DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
22 SOAP DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
23 SK-4 SINK REFER TO 12/A-425 AND SPECIFICATIONS.
24 SINK. REFER TO PLUMBING DRAWINGS
25 RELOCATE, SALVAGED DEFIBRILLATOR
26 NEW WATER HEATER. REFER TO PLUMBING DRAWINGS.
27 UNIT HEATER. REFER TO MECHANICAL DRAWINGS.
28 PROVIDE OPENING IN WALL, 3' 0" WIDE X 3' 8" HIGH, TOP OF OPENING AT 7'-0" AFF, DRYWALL WRAPED, FOR ACCESS TO DISPLAY AREA.
29 PROVIDE RAISED PLATFORM LEDGE AT DISPLAY AREA. TOP OF FINISHED PLATFORM AT 3' 0" AFF. PROVIDE 5/8" GYP BD OVER 3/4" PLYWOOD DECKING, OVER 3 3/8" METAL STUDS AT 16" OC STUDWALL - CONTINUOUS UNDER THE EAST AND WEST FACES.
30 HSS 10 X 6 X 3/8 STEEL BEAM. REFER TO 3/A-312.
31 4 X 4 X 1/4" HHS STEEL COLUMN SET ON 4'-0" WIDE X 6'-0" LONG X 12" DEEP REINFORCED CONC FOOTING. TOP OF FOOTING TO BE 99'-4". REFER TO DETAILS ON SHEET A-312.
32 4 X 4 X 1/4" HHS STEEL COLUMN SET ON 4'-6" WIDE X 4'-6" LONG X 12" DEEP REINFORCED CONC FOOTING. TOP OF FOOTING TO BE 99'-4". REFER TO DETAILS ON SHEET A-312.
33 4 X 4 X 1/4" HHS STEEL COLUMN SET ON EXISTING FOUNDATION + 3'-0" WIDE X 6'-0" LONG X 12" DEEP REINFORCED CONC FOOTING EXTENSION. REFER TO DETAILS ON SHEET A-312.

RECORD DRAWINGS

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REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR PLAN

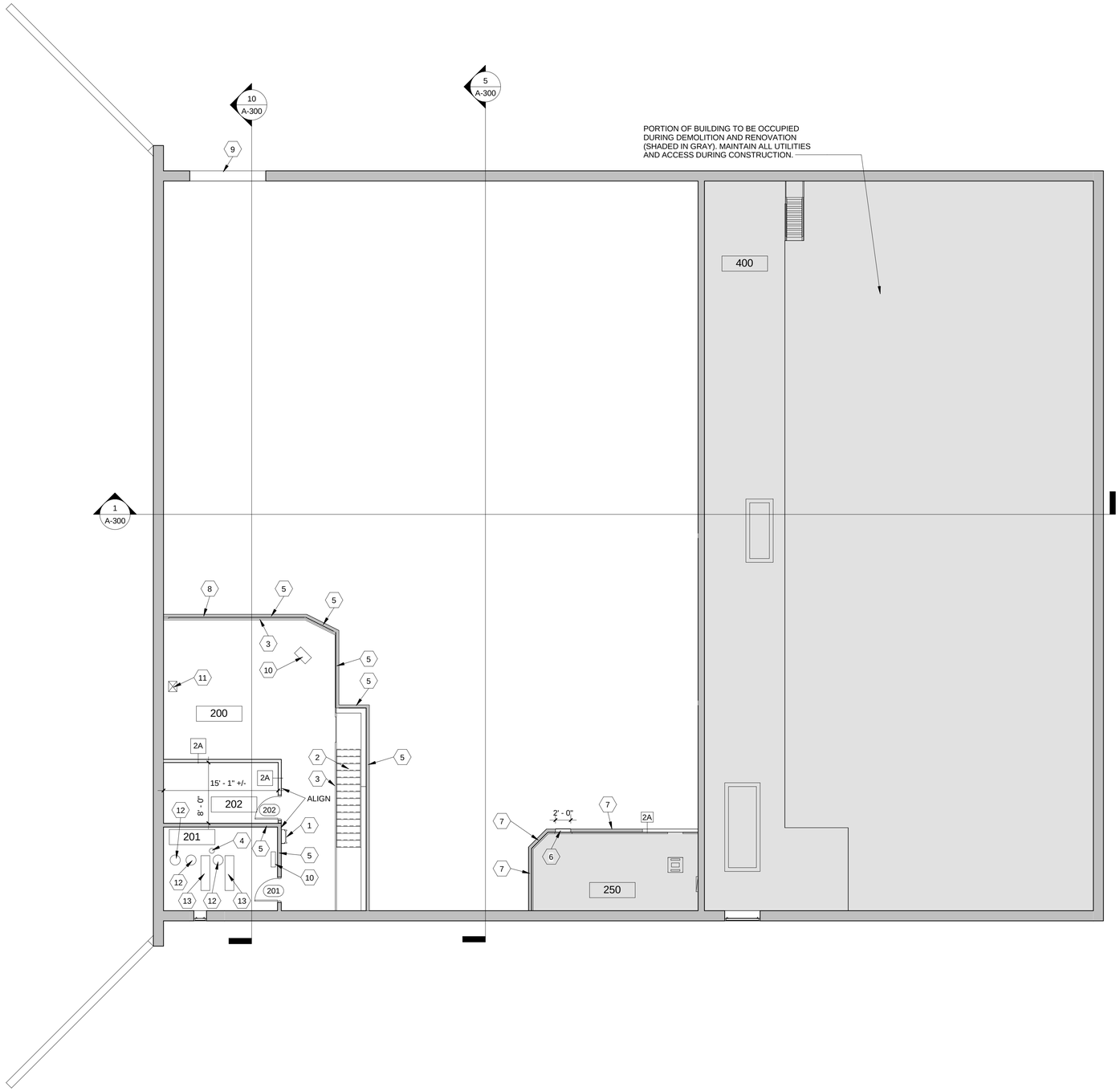
SCALE: As indicated

A-101

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 MECHANICAL PLATFORM PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. ALL INTERIOR PARTITIONS ARE TYPE 2, UNLESS OTHERWISE NOTED ON DRAWINGS.

B. SEE SHEET A-520 FOR PARTITION TYPES.

C. REFER TO CODE PLANS FOR FIRE EXTINGUISHER LOCATIONS.

CODED NOTES:

1 EXISTING ACCESS LADDER TO ROOF HATCH
2 EXISTING STAIRS TO REMAIN
3 EXISTING GUARDRAIL TO REMAIN
4 EXISTING FLOOR DRAIN TO REMAIN
5 EXISTING PARTITION TO REMAIN
6 RELOCATE ACCESS TO TELECOM PLATFORM. PROVIDE NEW 24" WIDE X 36" OPENING AT EXISTING PARTITION. LOCATE BOTTOM OF ACCESS 6" MIN ABOVE CEILING BELOW. REMOVE LIMITED SECTION OF EXISTING GUARD RAIL AS REQUIRED TO PROVIDE ACCESS.
7 EXISTING PARTITION TO REMAIN.
8 PATCH & REPAIR GYP PARTITION AS REQUIRED TO SEAL OPENINGS OF REMOVED MECHANICAL DUCTS.
9 MECHANICAL DUCTS SUPPLY, RETURN & BLANK OFF PANEL. REFER TO MECHANICAL DRAWINGS.
10 UNIT HEATER. REFER TO MECHANICAL DRAWINGS.
11 SUPPLY DUCT THRU EXISTING FLOOR OPENING. REFER TO MECHANICAL DRAWINGS.
12 MECHANICAL PUMP. REFER TO MECHANICAL DRAWINGS.
13 BOILER REFER TO MECHANICAL DRAWINGS.

KEY PLAN
NOT TO SCALE

RECORD DRAWINGS

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4333-B Tuller Road
Dublin, Ohio 43017
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DATE:	12/05/14	06/19/15		
REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

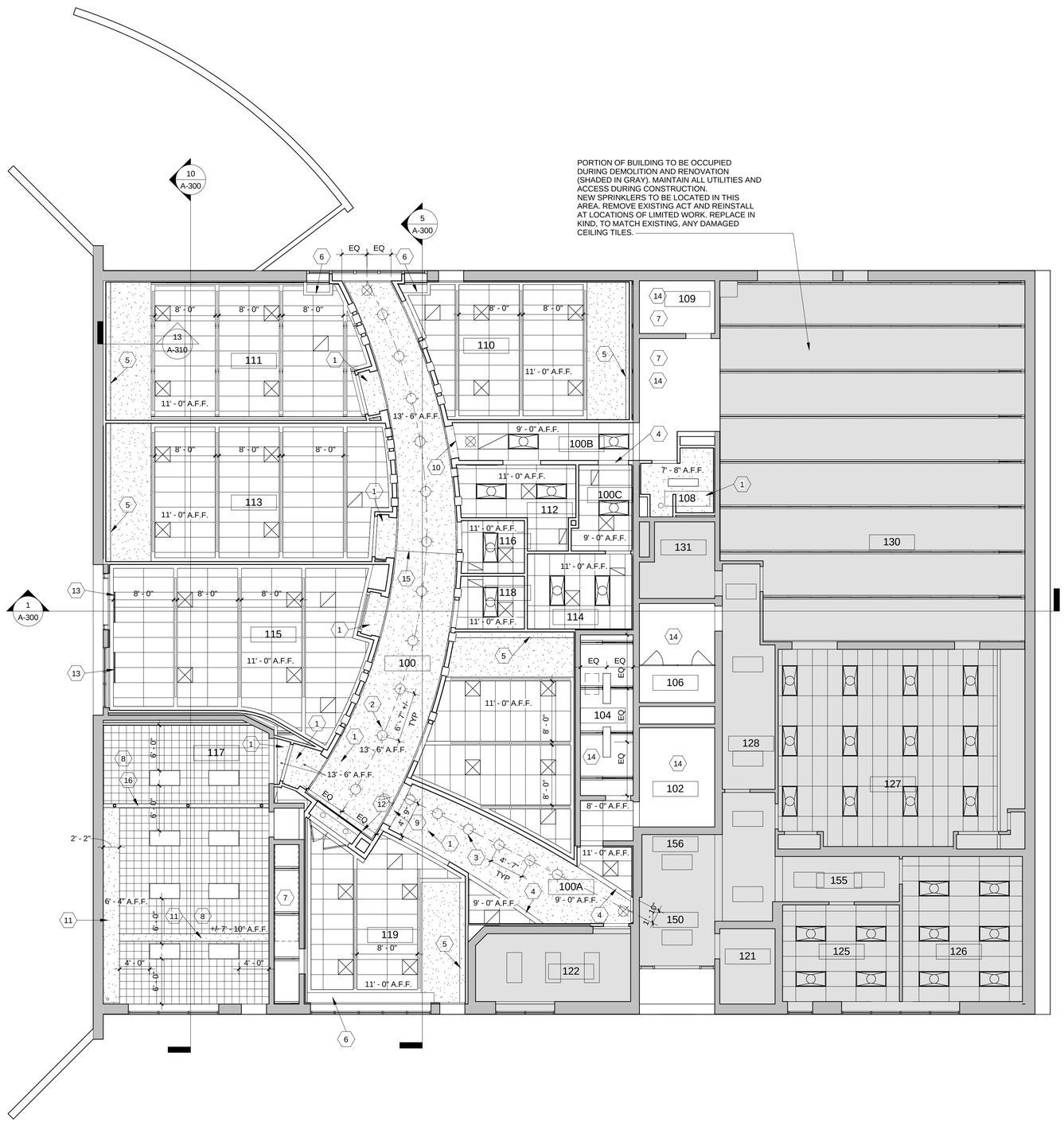
MECHANICAL PLATFORM PLAN

SCALE: As indicated

A-102

JOB NO.:	14022
DATE:	12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 FIRST FLOOR RCP
1/8" = 1'-0"

RCP LEGEND

- LAY-IN CEILING GRID (SEE ROOM FINISH SCHEDULE A-620)
- APPLIED CEILING (SEE ROOM FINISH SCHEDULE A-620)
- GYPSUM BOARD CEILING
- FLUORESCENT LIGHT FIXTURE IN GRID LINE
- FLUORESCENT LIGHT FIXTURE IN GRID
- RECESSED LIGHT FIXTURE
- EXIT LIGHT FIXTURE
- SUPPLY DIFFUSER
- RETURN DIFFUSER
- 1'-0" A.F.F. CEILING TAG WITH FINISH HEIGHT
- LINEAR DIFFUSER

GENERAL NOTES:

A. VERIFY QUANTITIES AND SIZES OF ALL MECHANICAL, ELECTRIC, AND FIRE PROTECTION EQUIPMENT SHOWN ON REFLECTED CEILING PLANS, WITH RESPECTIVE MECHANICAL, ELECTRICAL & FIRE PROTECTION DRAWINGS & SPECIFICATIONS.

B. VERIFY ALL FINISHES WITH FINISH SCHEDULE. REPORT ANY DISCREPENCIES PRIOR TO WORK.

C. LOCATE FIRE PROTECTION HEADS IN CENTER OF TILES EACH WAY UON.

D. PROVIDE CEILING TRIM AT ALL CEILING PENETRATIONS.

E. ALL MECHANICAL, & ELECTRICAL FIXTURES, IN CEILING, ARE TO BE LOCATED AS CLOSE AS POSSIBLE TO THE CONFIGERATION SHOWN. THE INTENT IS TO PROVIDE A UNIFORM AND SYMETRICAL LAYOUT WITHIN EACH ROOM, OR SPACE. THESE LOCATIONS ARE SUBJECT TO FIELD VERIFICATION, AND ARCHITECT APPROVAL.

F. AT LOCATION OF CORRIDOR 100 & CORRIDOR 100A, LOCATE SPRINKLER HEADS AT CENTERLINE OF PENDANT & WALL WASH LIGHT FIXTURES.

G. FLUORESCENT LIGHT FIXTURE IN GRIDLINE, IS TO BE SET ON 6" GRID SPACE (NON-STANDARD). REFER TO ELECTRICAL DRAWINGS. ALL FIXTURES ARE TO BE CENTERED ON ROOM AND BE PLACED END TO END. ANY OPEN SPACE AT ENDS IS TO BE INFILLED WITH ACT.

CODED NOTES:

1 SUSPENDED GYP BD CEILING. REFER TO DETAIL 2/A-535
2 PENDANT LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS
3 WALL WASH LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS. PAINT FIXTURE TO MATCH ADJACENT CEILING.
4 GYP BD BULKHEAD @ 7'-4" A.F.F. REFER TO DETAIL 13/A-535
5 TEACHING WALL GYP BULKHEAD. REFER TO DETAIL 13/A-310
6 GYP BD SOFFIT, REFER TO DETAIL 1/A-535
7 EXPOSED CEILING
8 ACT-2. SEE SHEET A-620. PATCH, REPAIR, AND OR REPLACE EXISTING GYP BD CEILING SURFACE AS REQUIRED TO PROVIDE PROPER SURFACE FOR ATTACHMENT OF NEW ACT-2
9 GYP BD BULKHEAD, REFER TO DETAIL 3/A-535
10 ACT BULKHEAD, REFER TO DETAIL 5/A-535
11 GYP BD BULKHEAD, REFER TO DETAIL 4/A-535
12 GLAZING REVEAL SEE 14/A-540
13 2 1/4" X 4'-0" LINEAR DIFFUSER. SEE MECHANICAL DRAWINGS
14 EXISTING CEILING TO REMAIN
15 CONTROL JOINT
16 EXPOSED STEEL BEAM

KEY PLAN
NOT TO SCALE

RECORD DRAWINGS

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DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	CONFORMED SET	RECORD DRAWINGS		
DATE:	12/05/14	06/19/15		

TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR RCP

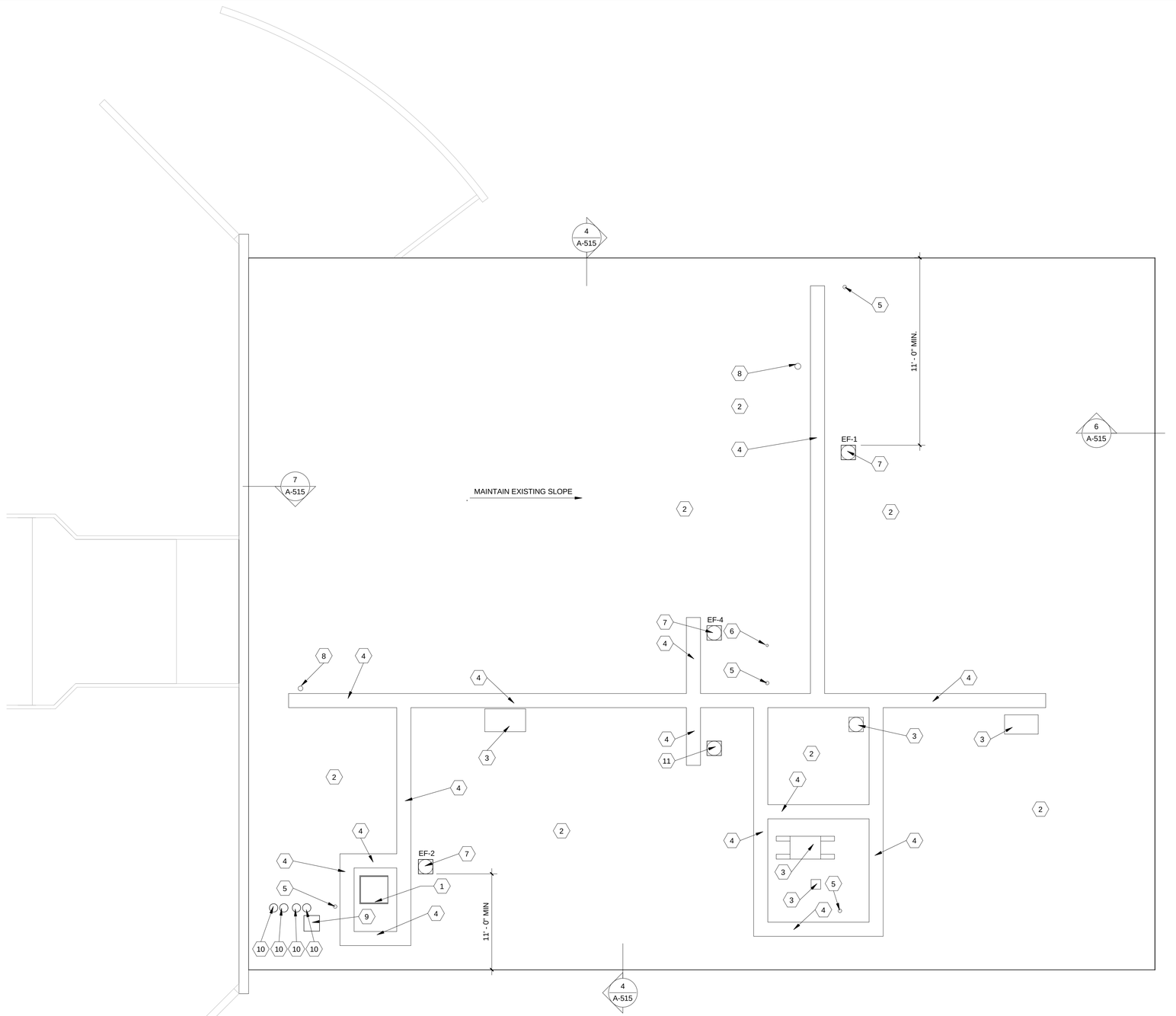
SCALE: As indicated

A-111

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



1 ROOF PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. PROVIDE FLASHING IN ACCORDANCE WITH THE SMACNA ARCHITECTURAL SHEET METAL MANUAL LATEST EDITION.

B. FIELD VERIFY ALL EXISTING CONDITIONS.

C. ALL FLASHING TO BE VERIFIED WITH THE MANUFACTURER DETAILS.

D. SEE SHEET A-515 FOR TYPICAL ROOFING DETAILS.

E. ALL WOOD BLOCKING AT ROOFING SHALL BE PRESSURE TREATED.

CODED NOTES:

1. EXISTING ROOF HATCH TO REMAIN. PROVIDE NEW CURB FLASHING TO TIE INTO NEW ROOFING SYSTEM.
2. NEW MEMBRANE ROOF SEE DETAIL 1/A-515
3. EXISTING MECHANICAL EQUIPMENT TO REMAIN. PROVIDE NEW CURB FLASHING TO TIE INTO NEW ROOFING SYSTEM.
4. PROTECTIVE PAVERS, SEE DETAIL 2/A-515
5. EXISTING VENT TO REMAIN. PROVIDE NEW FLASHING SEE DETAIL 3/A-515
6. EXISTING CONDUIT & OUTLET TO REMAIN. PROVIDE NEW FLASHING.
7. NEW EXHAUST FAN. REFER TO MECH DRAWINGS. PROVIDE NEW CURB - SEE DETAIL 10/A-515
8. NEW VENT PROVIDE FLASHING SEE DETAIL 3/A-515, REFER TO PLUMBING DRAWINGS
9. PATCH & REPAIR, INFILL ROOF DECK AT LOCATION OF REMOVED BOILER FLUE.
10. NEW BOILER INTAKE & EXHAUST VENT. REFER TO MECHANICAL DRAWINGS. SEE 3/A-515 SIM.
11. NEW AIR INTAKE. REFER TO MECH DRAWINGS. PROVIDE NEW CURB - SEE DETAIL 10/A-515

RECORD DRAWINGS

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REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

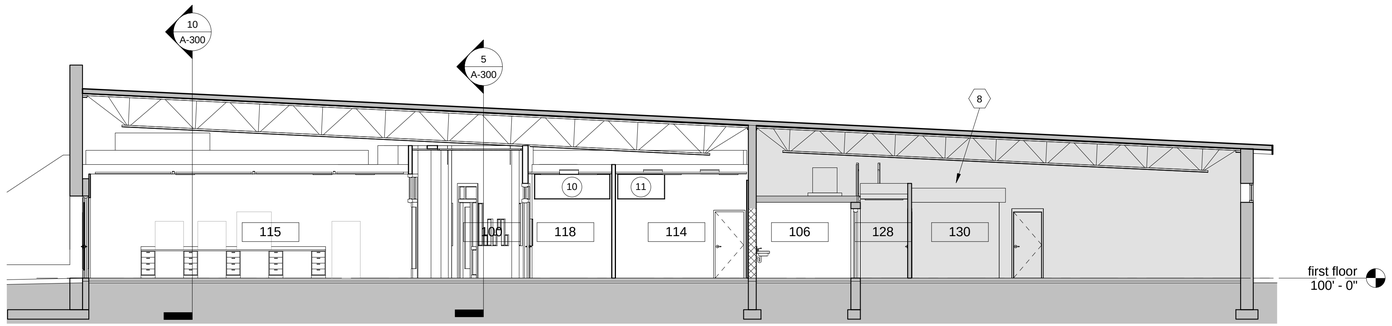
ROOF PLAN

SCALE: As indicated

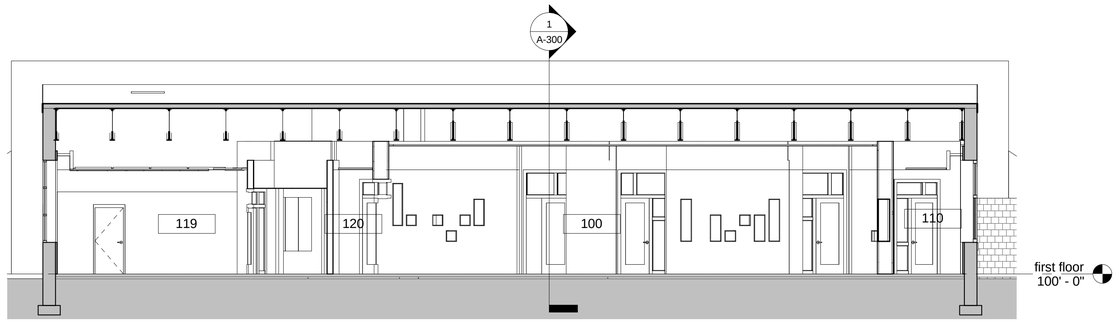
A-120

JOB NO.:	14022
DATE:	12/05/14

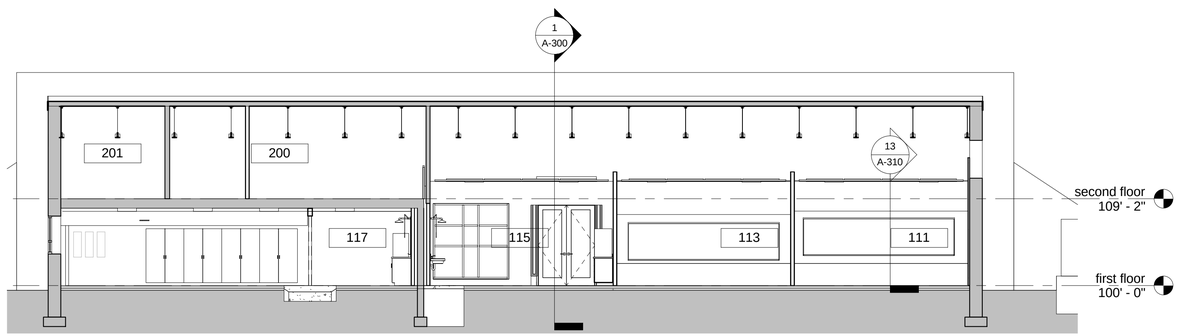
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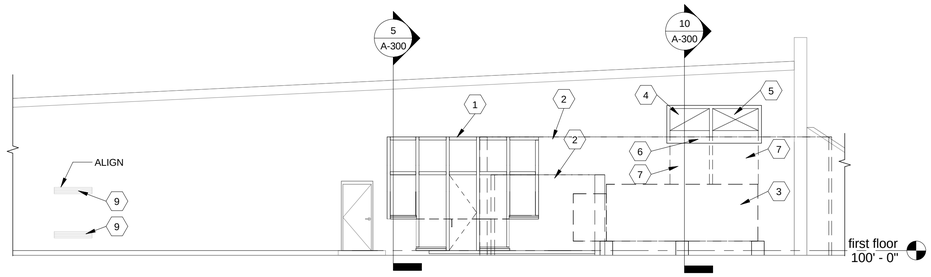
1 SECTION A NEW
1/8" = 1'-0"



5 Section B New
1/8" = 1'-0"



10 Section C New
1/8" = 1'-0"



11 PARTIAL EAST ELEVATION
1/8" = 1'-0"

GENERAL NOTES:

A. SEE SHEET A-601 FOR STOREFRONT ELEVATION.

CODED NOTES:

1 NEW STOREFRONT SYSTEM. REFER TO 13/A-601
2 SITE WALLS. REFER TO SHEET A-010
3 MECHANICAL EQUIPMENT IN FRONT OF ELEVATION. REFER TO MECHANICAL DRAWINGS
4 MECHANICAL DUCT RETURN. REFER TO MECHANICAL DRAWINGS
5 MECHANICAL DUCT SUPPLY. REFER TO MECHANICAL DRAWINGS
6 BLANK-OFF PANEL. REFER TO MECHANICAL DRAWINGS.
7 PAINT ALL MECHANICAL DUCTS, PIPES, EXPOSED INSULATION, AND OTHER EXPOSED MECHANICAL ITEMS, (EXCEPT RTU-1). PAINT COLOR TO MATCH EXISTING BRICK.
8 PORTION OF BUILDING TO BE OCCUPIED DURING DEMOLITION AND RENOVATION (SHADED IN GRAY). MAINTAIN ALL UTILITIES AND ACCESS DURING CONSTRUCTION.
9 EXISTING DAMPER TO REMAIN. REFER TO MECHANICAL DRAWINGS.

RECORD DRAWINGS

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RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

ELEVATION & BUILDING SECTIONS

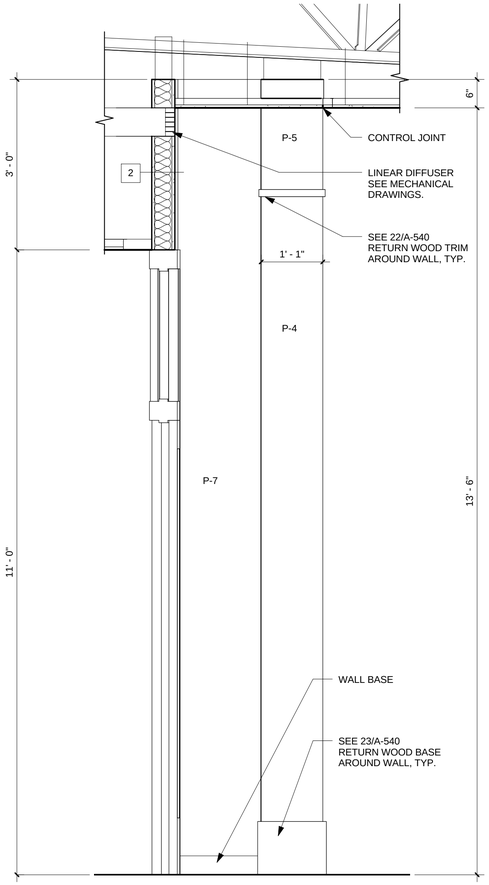
SCALE: As indicated

A-300

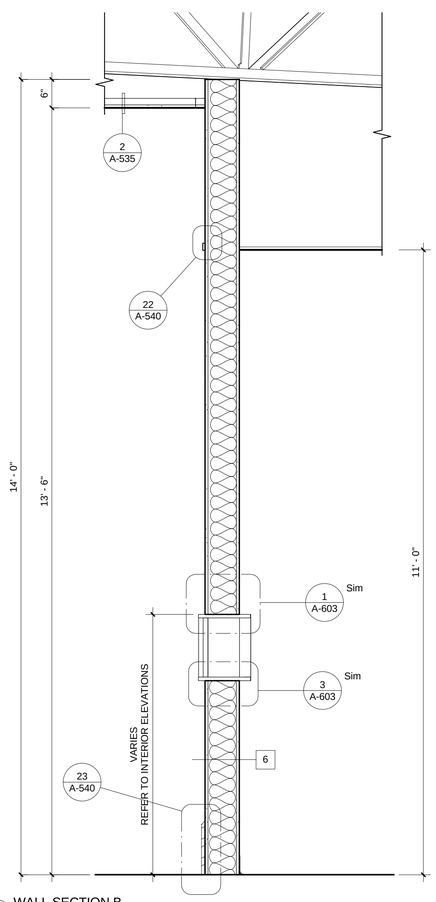
JOB NO.: 14022

DATE: 12/05/14

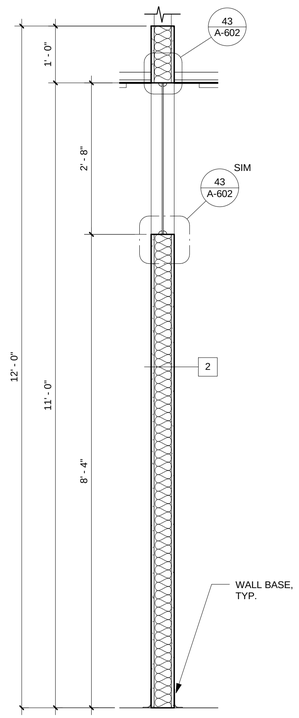
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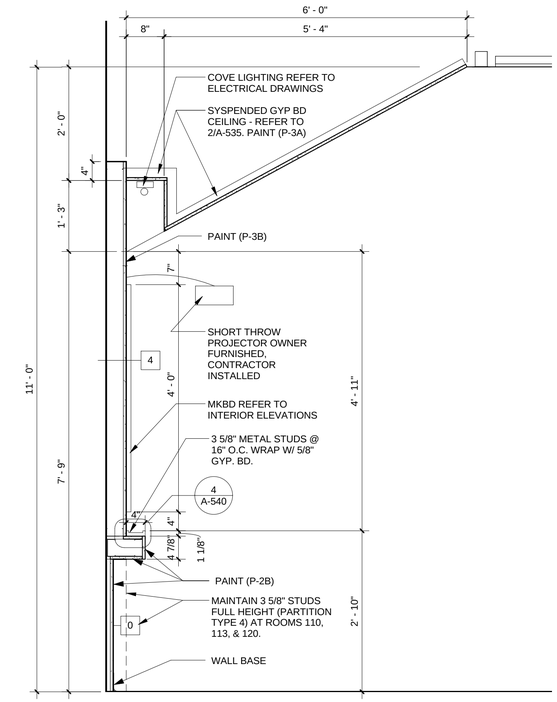
10 WALL SECTION A
3/4" = 1'-0"



11 WALL SECTION B
3/4" = 1'-0"



12 WALL SECTION C
3/4" = 1'-0"



13 TYP SECTION D
3/4" = 1'-0"

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RECORD DRAWINGS	

TRENARY HALL INTERIOR RENOVATION

WALL SECTIONS

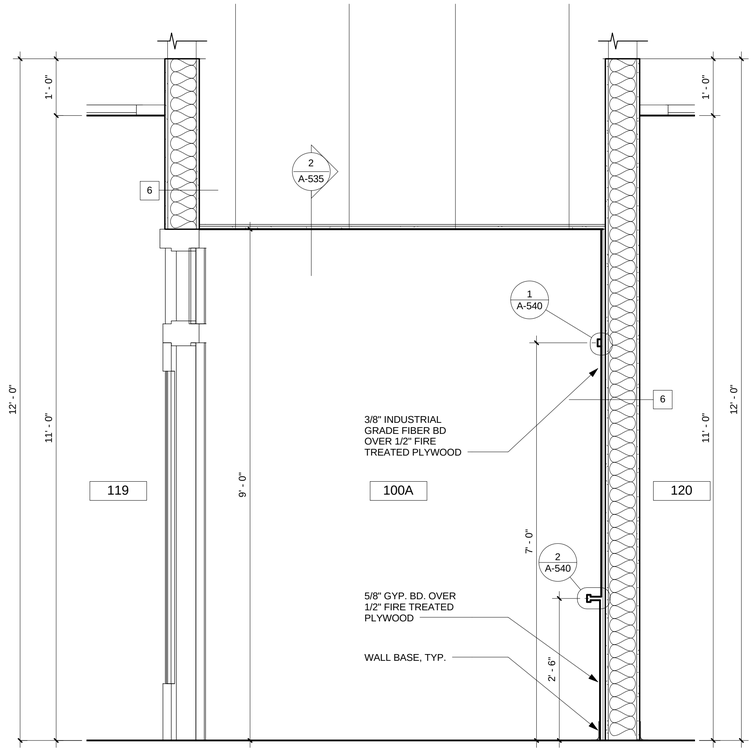
SCALE: 3/4" = 1'-0"

A-310

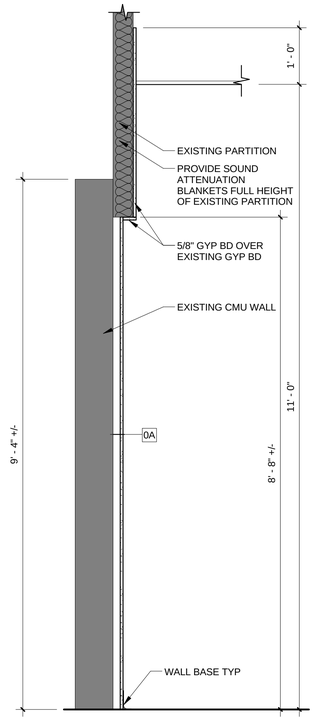
JOB NO.: 14022

DATE: 12/05/14

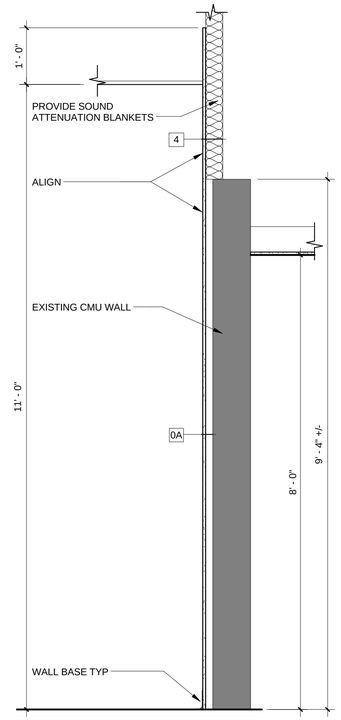
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



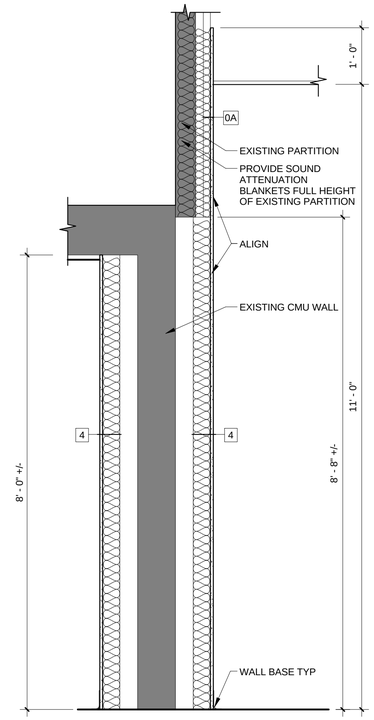
1 WALL SECTION E
3/4" = 1'-0"



2 WALL SECTION F
3/4" = 1'-0"



3 WALL SECTION H
3/4" = 1'-0"



4 WALL SECTION J
3/4" = 1'-0"

RECORD DRAWINGS

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

WALL SECTIONS

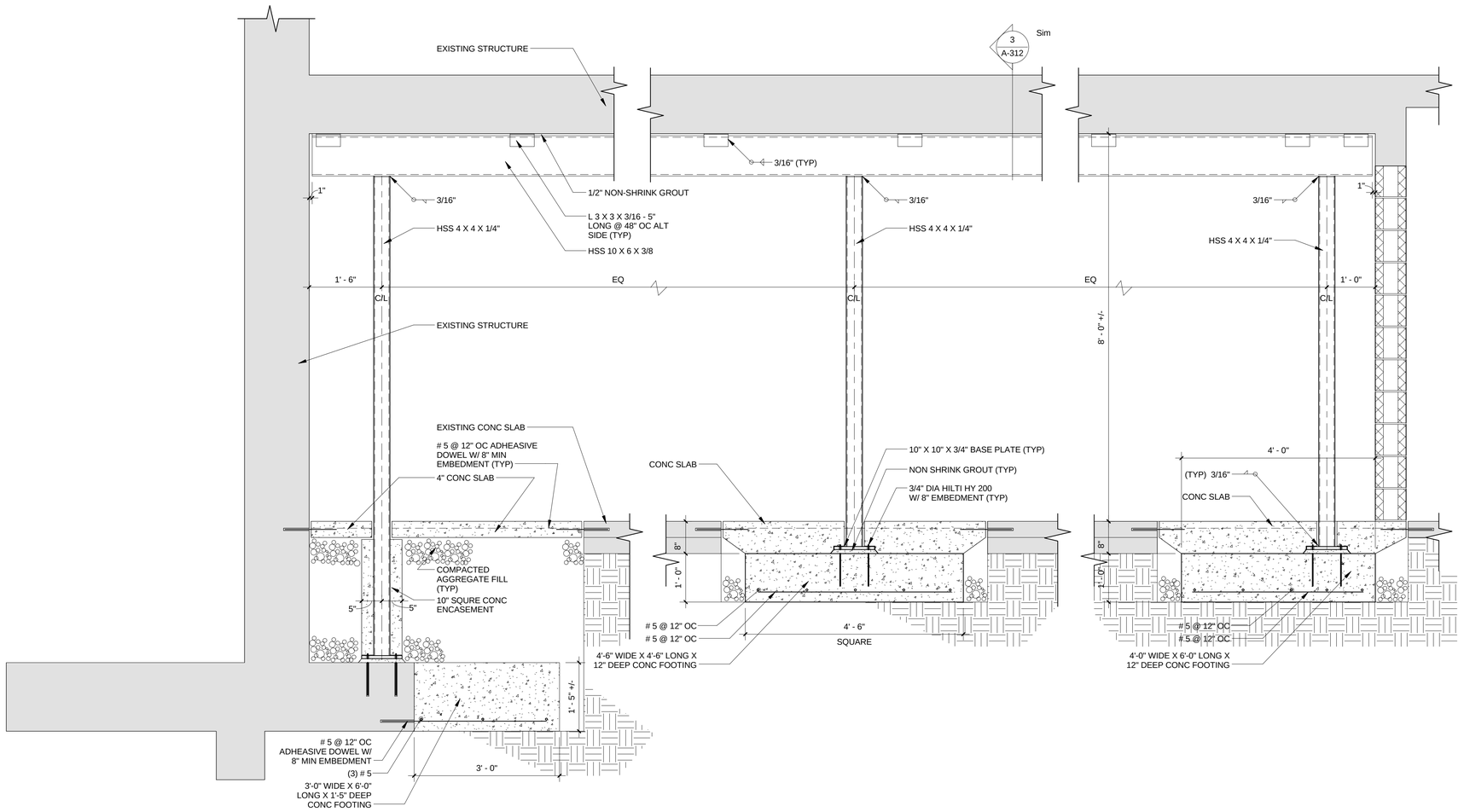
SCALE: 3/4" = 1'-0"

A-311

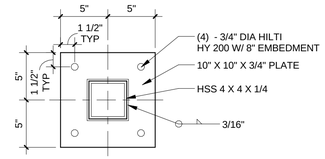
JOB NO.: 14022

DATE: 12/05/14

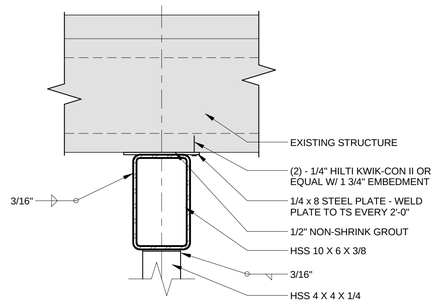
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



1 WALL SECTION
3/4" = 1'-0"



2 TYP BASE PLATE
1 1/2" = 1'-0"



3 BEAM SECTION
1 1/2" = 1'-0"

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TRENARY HALL INTERIOR RENOVATION

WALL SECTIONS

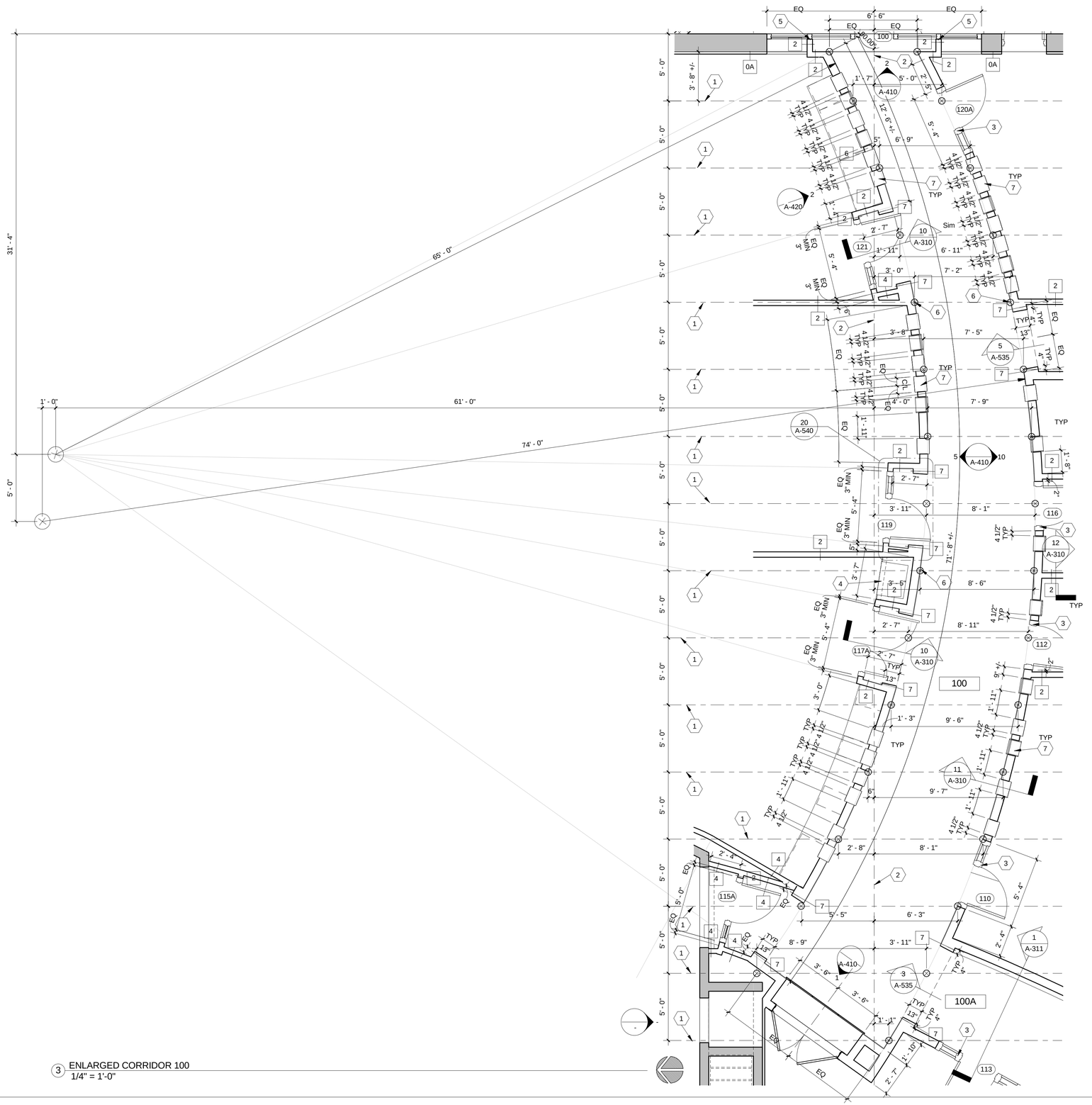
SCALE: As indicated

A-312

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 1/8" = 1'-0" 3/16" = 1'-0" 1/4" = 1'-0" 3/8" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0" 1" = 1'-0" 1 1/2" = 1'-0" 3" = 1'-0" 6" = 1'-0"



3 ENLARGED CORRIDOR 100
1/4" = 1'-0"

GENERAL NOTES:

A. ALL INTERIOR PARTITIONS ARE AT CORRIDOR 100 ARE TYPE 6, UNLESS OTHERWISE NOTED ON DRAWINGS.

B. SEE SHEET A-520 FOR PARTITION TYPES.

C. REFER TO CODE PLANS FOR FIRE EXTINGUISHER LOCATIONS.

D. SEE SHEET A-631 FOR FLOOR PATTERNS, CASEWORK, & FURNITURE LAYOUTS.

CODED NOTES:

1 REFERENCE LINE SET PARALLEL TO EAST WALL TYPICAL
2 REFERENCE LINE SET PARALLEL TO NORTH WALL AND CENTERED ON DOOR 100
3 ADJUST DOOR FRAME WIDTH AS REQUIRED TO ALLOW FOR THE CURVATURE OF WALL
4 PROVIDE PARTITION TYPE 4, FROM ABOVE TALL STORAGE CASEWORK, TO 12" ABOVE FINISHED CEILING
5 PROVIDE THERMAL BREAK BETWEEN PARTITION AND STOREFRONT SYSTEM
6 DENOTATION OF INTERSECTION BETWEEN REFERENCE LINE AND CURVED WALL SURFACE (AT CORRIDOR SIDE) TYPICAL
7 PUNCH WINDOW. REFER TO INTERIOR ELEVATIONS 5/A-410 AND 10/A-410 FOR VERTICAL PLACEMENT AND DENOTATION OF TYPES. REFER TO A-601 FOR PUNCH WINDOW TYPES AND PUNCH WINDOW SCHEDULE.

RECORD DRAWINGS

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TRENARY HALL INTERIOR RENOVATION

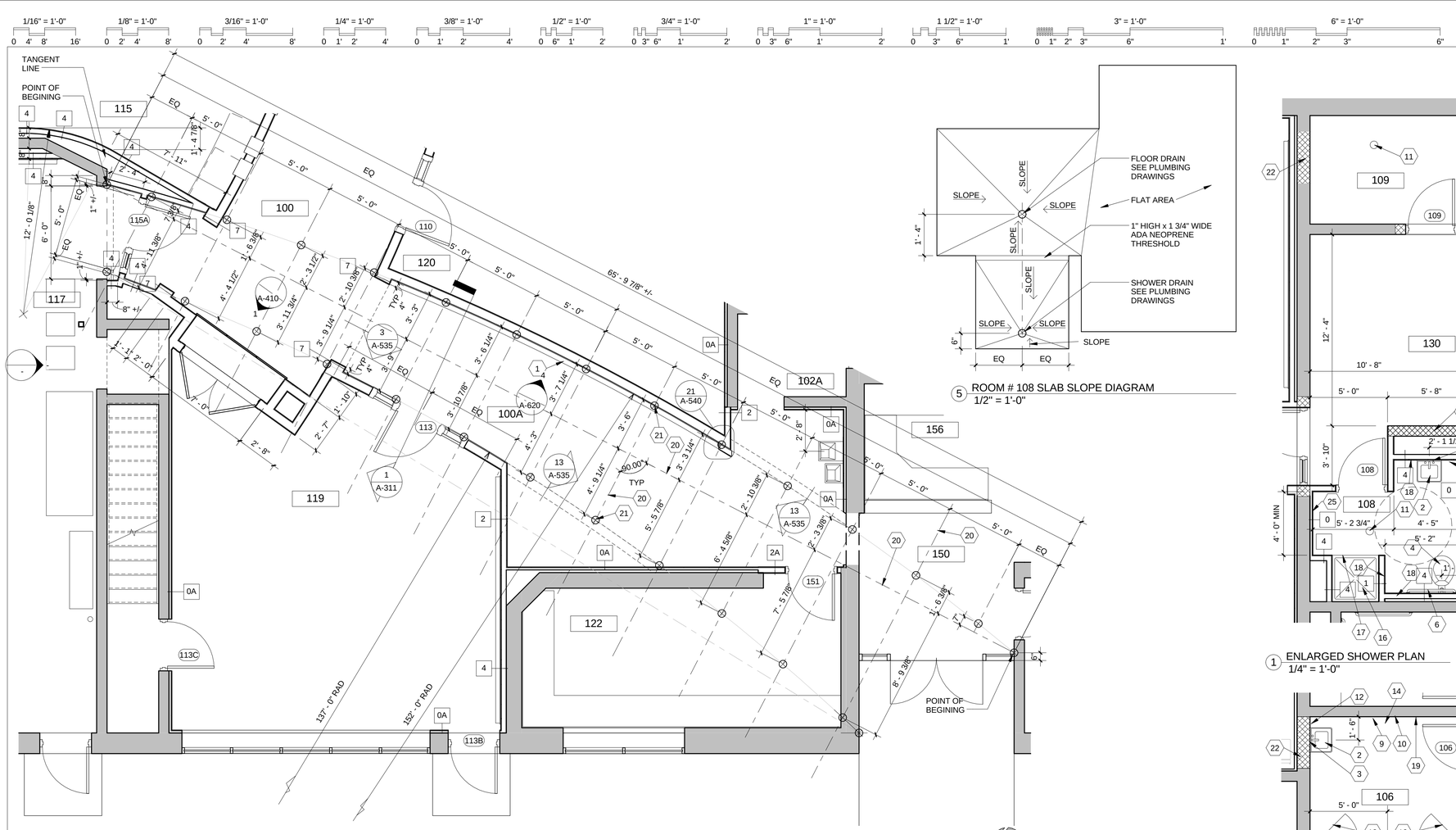
ENLARGED PLANS

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

A-400

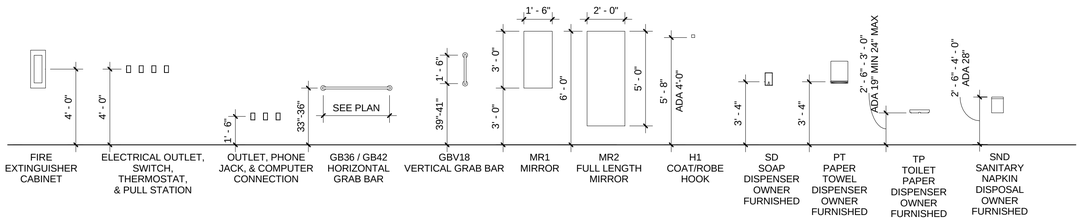
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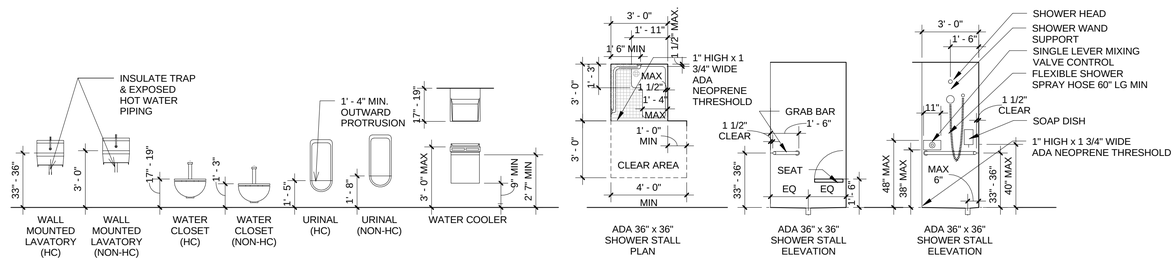
DATE: 12/05/14



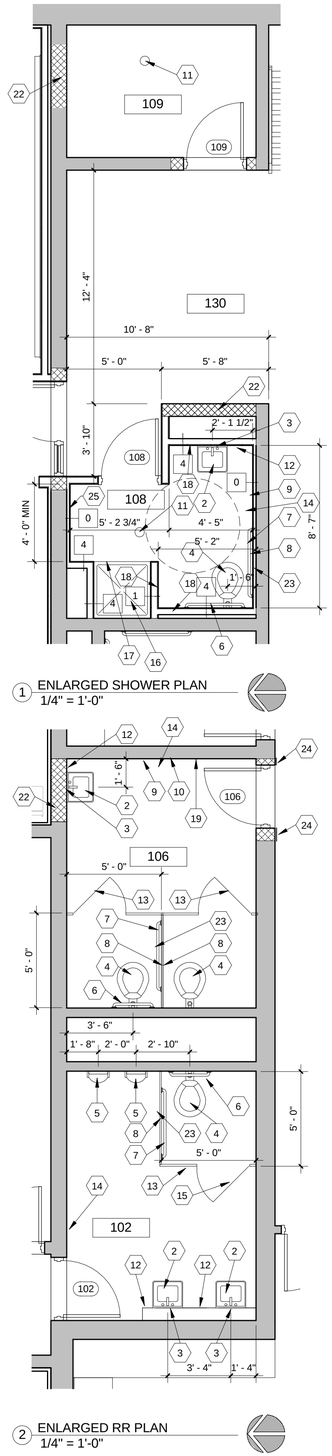
3 ENLARGED CORRIDOR 100A
1/4" = 1'-0"

5 ROOM # 108 SLAB SLOPE DIAGRAM
1/2" = 1'-0"





4 FIXTURE HEIGHTS LEGEND
1/4" = 1'-0"



1 ENLARGED SHOWER PLAN
1/4" = 1'-0"

2 ENLARGED RR PLAN
1/4" = 1'-0"

GENERAL NOTES:

A. ALL INTERIOR PARTITIONS AT CORRIDOR 100A ARE TYPE 6, ALL INTERIOR PARTITIONS IN ROOM 108 ARE TYPE 2, UNLESS OTHERWISE NOTED ON DRAWINGS.

B. SEE SHEET A-520 FOR PARTITION TYPES.

C. REFER TO CODE PLANS FOR FIRE EXTINGUISHER LOCATIONS.

D. SEE SHEET A-631 & A-634 FOR FLOOR PATTERNS, CASEWORK, & FURNITURE LAYOUTS.

CODED NOTES:

1 GALLERY TRAY REFER TO DETAIL 2/A-540
2 SINK REFER TO PLUMBING DRAWINGS
3 18" X 36" MIRROR MR1
4 WATER CLOSET REFER TO PLUMBING DRAWINGS
5 URINAL REFER TO PLUMBING DRAWINGS
6 36" GRAB BAR GB36
7 42" GRAB BAR GB42
8 TOILET PAPER DISPENSER. OWNER FURNISHED & CONTRACTOR INSTALLED
9 PAPER TOWEL DISPENSER. OWNER FURNISHED & CONTRACTOR INSTALLED
10 SANITARY NAPKIN DISPENSER. OWNER PROVIDED & CONTRACTOR INSTALLED.
11 FLOOR DRAIN REFER TO PLUMBING DRAWINGS
12 SOAP DISPENSER. OWNER FURNISHED & CONTRACTOR INSTALLED
13 NEW TOILET PARTITION
14 WASTE RECEPTACLE- OWNER FURNISHED
15 ROBE HOOK
16 SITE BUILT ADA 36" X 36" SHOWER, WITH GRAB BARS, SEAT, FLEXIBLE SPRAY HOSE, & SOAP DISH. REFER TO 4/A-401. PROVIDE TILE FLOOR, AND TILE WALLS, UP TO THE UNDERSIDE OF CEILING, AT ALL THREE SIDES.
17 SHOWER CURTAIN
18 18" X 18" ACCESS PANEL MOUNT 12" AFF
19 PATCH AND REPAIR WALL TO MATCH EXISTING
20 REFERENCE LINE TYPICAL
21 DENOTATION OF INTERSECTION BETWEEN REFERENCE LINE AND CURVED WALL SURFACE (AT CORRIDOR SIDE) TYPICAL
22 NEW MASONRY WALL INFILL. PROVIDE 8" CMU TO MATCH EXISTING
23 VERTICAL GRAB BAR GBV18
24 PATCH AND REPAIR DAMAGED GYP BD AND FURRING AT LOCATION OF NEW FRAME. MATCH EXISTING CONSTRUCTION AND PAINT TO MATCH EXISTING COLOR
25 PAINT WALL (P-8B) TO INSIDE CORNERS.

RECORD DRAWINGS

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DATE:	12/05/14	06/19/15		
REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

ENLARGED PLANS

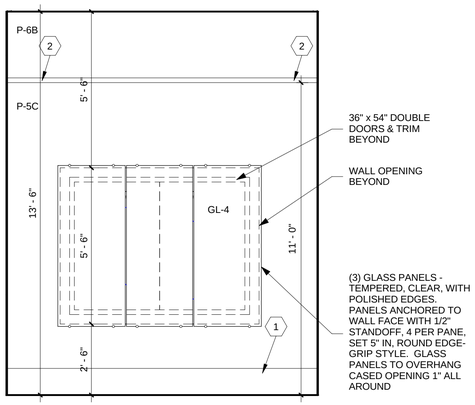
SCALE: As indicated

A-401

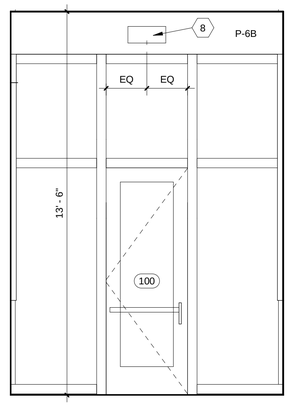
JOB NO.: 14022

DATE: 12/05/14

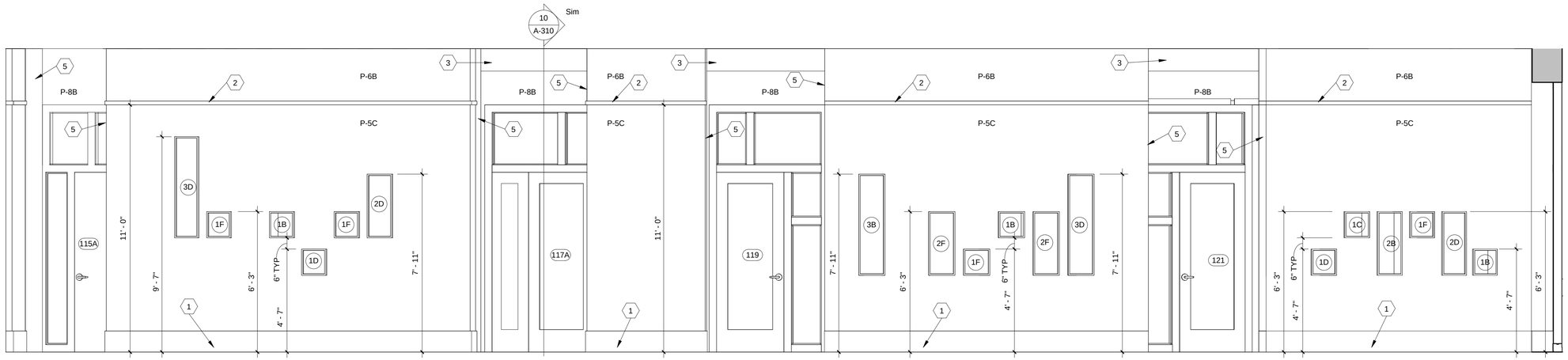
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6" = 1'-0" 0 1" 2" 3" 6"



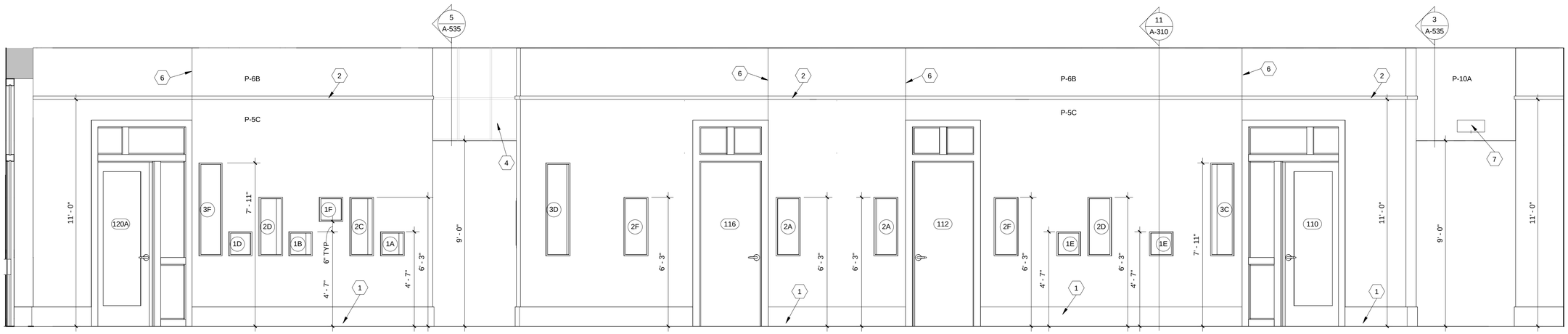
1 100 CORRIDOR WEST
3/8" = 1'-0"



2 100 CORRIDOR EAST
3/8" = 1'-0"



5 100 CORRIDOR NORTH
3/8" = 1'-0"



10 100 CORRIDOR SOUTH
3/8" = 1'-0"

GENERAL NOTES:

A. SEE SHEET A-601 FOR PUNCH WINDOW TYPES.

B. ALL DOORS AT #100 NORTH, DOORS # 115A, 117A, 119, & 121, NOT TO HAVE A VERTICAL CONTROL JOINT.

C. ALL DOORS AT #100 SOUTH, DOORS # 110, 112, 116, & 120A, TO HAVE A VERTICAL CONTROL JOINT AT BOTH SIDES OF LATCH LOCATION (OF FRAME).

D. PROVIDE SEALANT AT ALL CONTROL JOINTS.

CODED NOTES:

1 WOOD BASEBOARD SEE DETAIL 23/A-540
2 WOOD TRIM SEE DETAIL 22/A-540
3 HVAC HORIZONTAL DIFFUSER. SEE MECHANICAL DRAWINGS
4 TURN CEILING (ACT) VERTICAL ALIGN GRID WITH WOOD TRIM - SEE DETAIL 5/A-535
5 REFER TO DETAIL 1/A-620 FOR PAINT ASSIGNMENTS.
6 VERTICAL CONTROL JOINT
7 EXIT SIGN, REFER TO ELECTRICAL DRAWINGS. LOCATE ON FACE OF VERTICAL BULKHEAD, CENTER ON OPENING WIDTH.
8 EXIT SIGN, REFER TO ELECTRICAL DRAWINGS. LOCATE ON FACE OF GYP BD PARTITION, CENTER ABOVE CENTERLINE OF DOOR.

RECORD DRAWINGS

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REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

INTERIOR ELEVATIONS

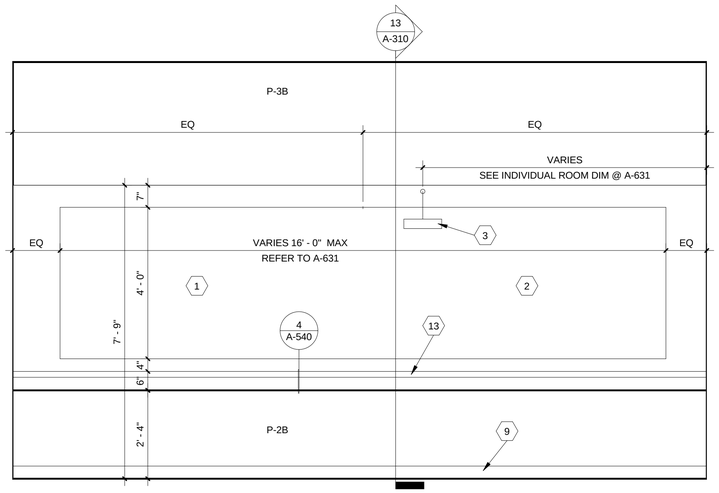
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A-410

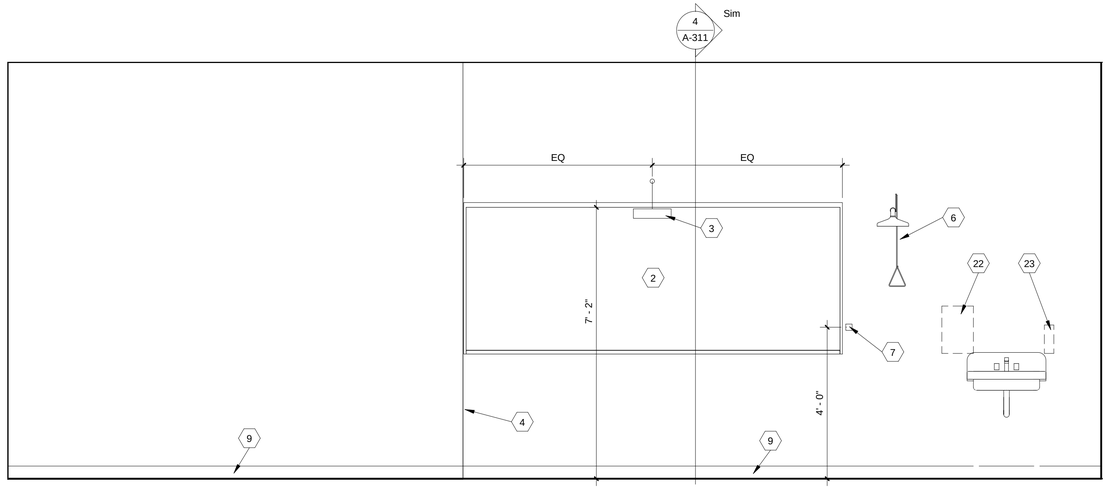
JOB NO.: 14022

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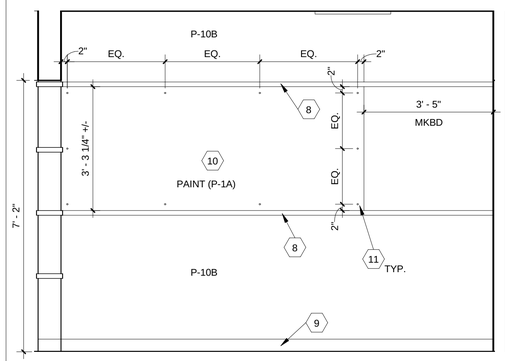
1 TYP TEACHING WALL ELEVATION
1/2" = 1'-0"



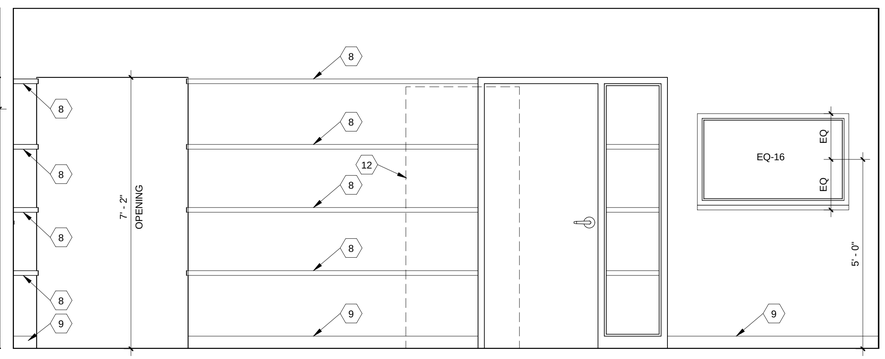
2 117 WEST
1/2" = 1'-0"

CODED NOTES:

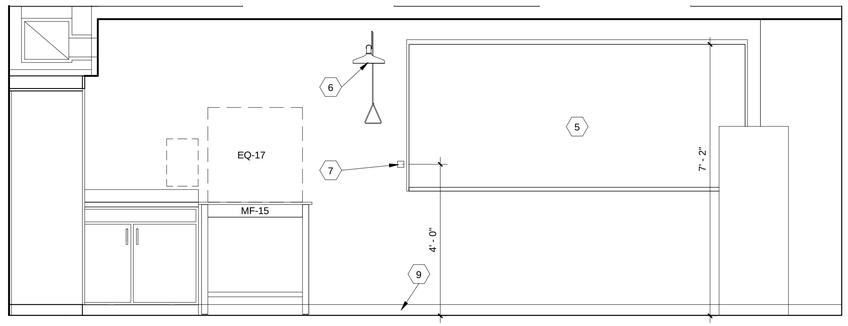
1 96"X48" MKBD
2 108"+/-X48" MKBD
3 LOW THROW PROJECTOR - OWNER FURNISHED, CONTRACTOR INSTALLED. PROVIDE FIRE TREATED WD BLOCKING AS REQUIRED.
4 GYP. CONTROL JOINT
5 144"X48" MKBD
6 EMERGENCY SHOWER - REFER TO PLUMBING DRAWINGS
7 ELECTRIC EMERGENCY SHUT OFF - REFER TO ELECTRIC DRAWINGS
8 1 1/2" X 1/2" WOOD TRIM - SEE 22/A-540
9 WALL BASE
10 3/8" INDUSTRIAL GRADE FIBER BOARD. PROVIDE FIRE TREATED WD BLOCKING FOR ATTACHMENT, AS REQUIRED.
11 SCREW PATTERN WITH WASHERS.
12 POCKET DOOR - REFER TO DOOR SCHEDULE
13 WOOD TRAY - SEE DETAIL 4/A-540
14 EXIST. PIPE - PAINT P-9
15 36"X12" REGISTER - REFER TO MECH. DRAWINGS
16 5/8" GYP. BD. OVER 1/2" FIRE TREATED PLYWOOD
17 3/8" INDUSTRIAL GRADE FIBER BOARD OVER 1/2" FIRE TREATED PLYWOOD
18 MAP RAIL SEE 1/A-540
19 GALLERY TRAY SEE 2/A-540
20 NEW MASONRY WALL INFILL. PROVIDE 8" CMU TO MATCH EXISTING.
21 SURFACE MOUNTED RACEWAY. REFER TO ELECTRICAL DRAWINGS.
22 PAPER TOWEL DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
23 SOAP DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED



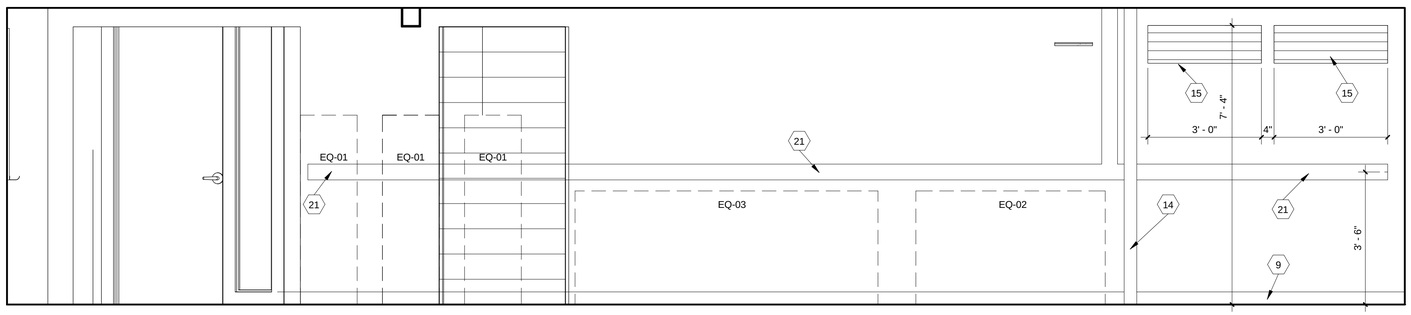
10 100C SOUTH
1/2" = 1'-0"



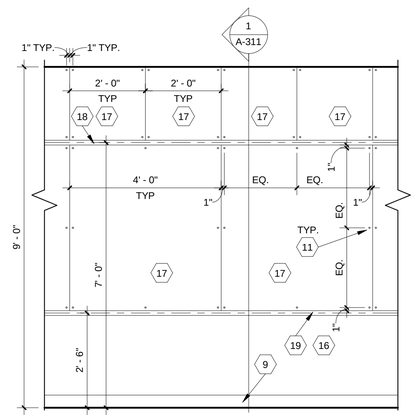
11 100B WEST
1/2" = 1'-0"



12 LAB 1 EAST
1/2" = 1'-0"



20 LAB 1 SOUTH
1/2" = 1'-0"



21 TYP GALERY WALL 100A
1/2" = 1'-0"

NOTE: REFER TO 4/A-620 FOR PAINT ASSIGNMENTS FOR THIS ELEVATION

RECORD DRAWINGS

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RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

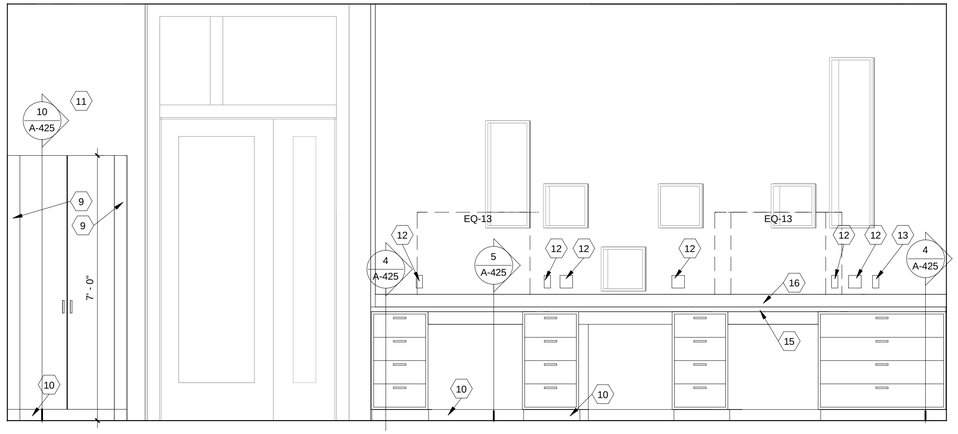
INTERIOR ELEVATIONS

SCALE: As indicated

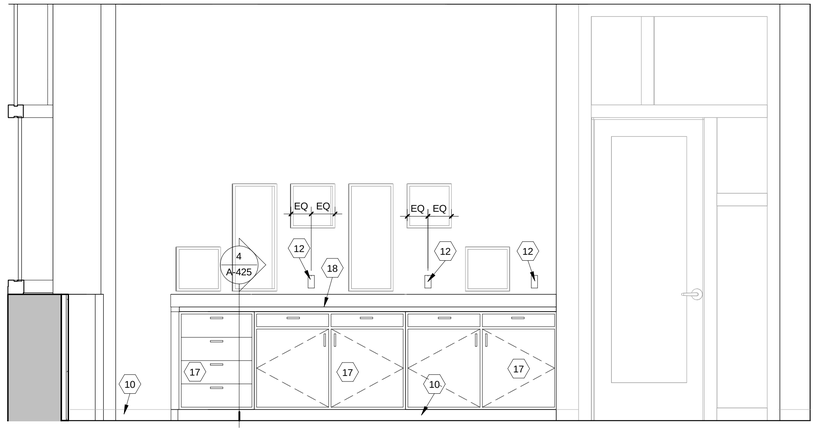
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JOB NO.:	14022
DATE:	12/05/14

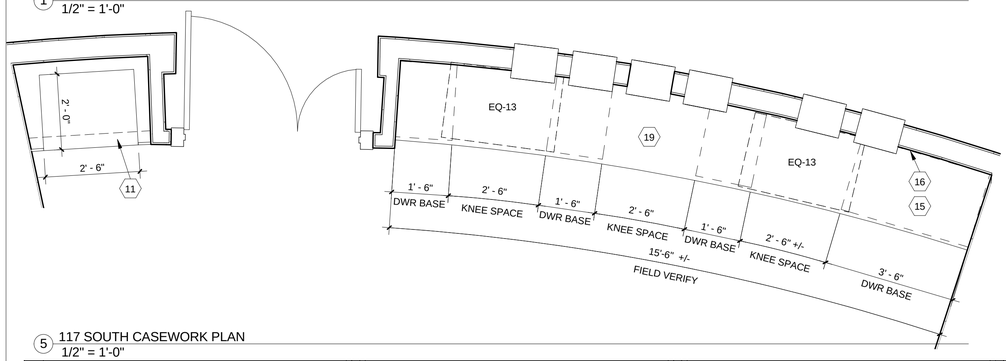
1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



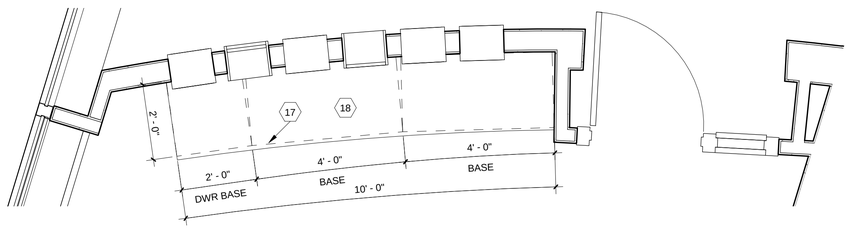
1 117 SOUTH
1/2" = 1'-0"



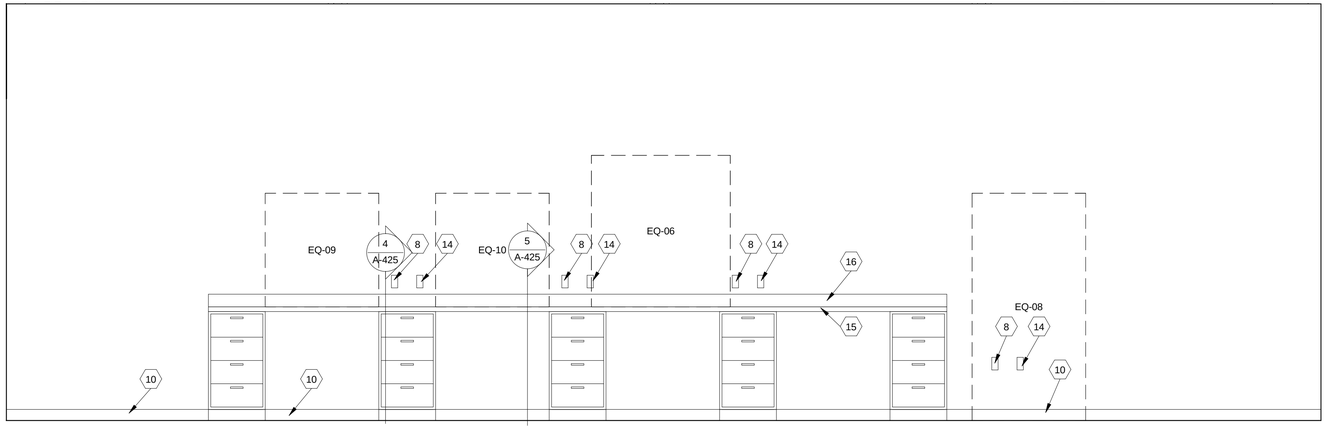
2 121 SOUTH
1/2" = 1'-0"



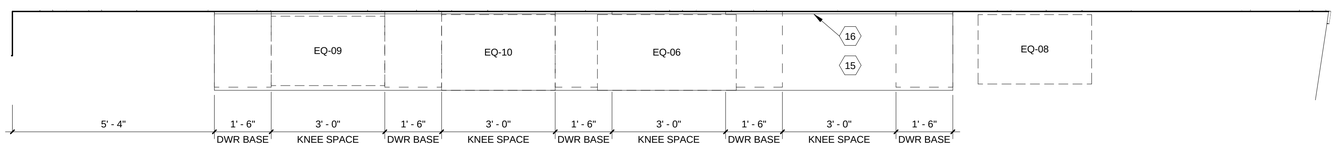
5 117 SOUTH CASEWORK PLAN
1/2" = 1'-0"



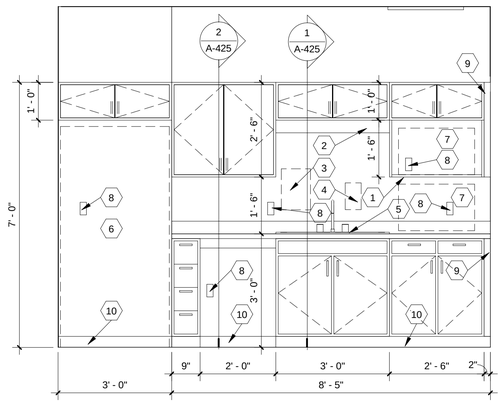
6 121 SOUTH CASEWORK PLAN
1/2" = 1'-0"



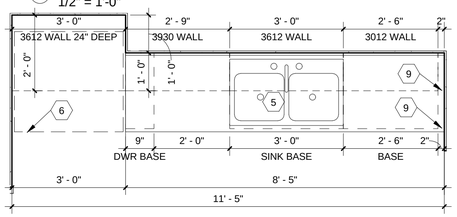
20 117 EAST
1/2" = 1'-0"



25 117 EAST CASEWORK PLAN
1/2" = 1'-0"



21 100C NORTH
1/2" = 1'-0"



26 100C NORTH CASEWORK PLAN
1/2" = 1'-0"

GENERAL NOTES:

A. REFER TO ELECTRICAL PLANS FOR WALL MOUNTED ELECTRICAL DEVICES.

B. ALL CABINET WIDTH DIMENSIONS ARE NOMINAL.

C. PROVIDE WALL BASE AT CASEWORK TO MATCH ADJACENT WALLS.

D. REFER TO SHEET A-601 FOR PUNCH WINDOW TYPES.

E. REFER TO A-631 FOR MOVABLE FURNITURE LEGEND AND OWNER PROVIDED EQUIPMENT SCHEDULE.

CODED NOTES:

1 16" DEEP MICROWAVE SHELF
2 4" LIGHT VALANCE. REFER TO ELECTRIC DRAWINGS
3 PAPER TOWEL DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
4 SOAP DISPENSER OWNER PROVIDED CONTRACTOR INSTALLED
5 SINK REFER TO PLUMBING DRAWINGS
6 RIFRIGERATOR OWNER FURNISHED
7 MICROWAVE OWNER FURNISHED
8 RECEPTACLE DEVICE. REFER TO ELECTRIC DRAWINGS
9 FILLER
10 WALL BASE
11 PROVIDE TYPE 4 PARTITION ABOVE TALL CASEWORK, TO 12" ABOVE CEILING.
12 RECEPTACLE DEVICE. COORDINATE LOCATIONS WITH PUNCH WINDOW OPENINGS. REFER TO ELECTRIC DRAWINGS.
13 DATA DEVICE. COORDINATE LOCATIONS WITH PUNCH WINDOW OPENINGS. REFER TO ELECTRIC DRAWINGS.
14 DATA DEVICE. REFER TO ELECTRIC DRAWINGS.
15 1 1/2" SOLID BUTCHER BLOCK TOP
16 4" MAPLE BACKSPLASH (WS-1)
17 PLAM-1 CASEWORK
18 PLAM-2 COUNTERTOP AND BACKSPLASH
19 COUNTERTOP MAY BE PLACED IN SEGMENTED PIECES, ALIGNED. THE SPAN OF THE SEGMENTS ARE TO ALIGN FROM CENTER OF DRAWER BASE TO CENTER OF DRAWER BASE , OR END OF CASEWORK. NO EDGE OF SEGMENT IS TO BE PLACED ABOVE THE KNEE SPACE, OR EDGE OF DRAWER BASE.

RECORD DRAWINGS

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

INTERIOR CASEWORK PLANS & ELEVATIONS

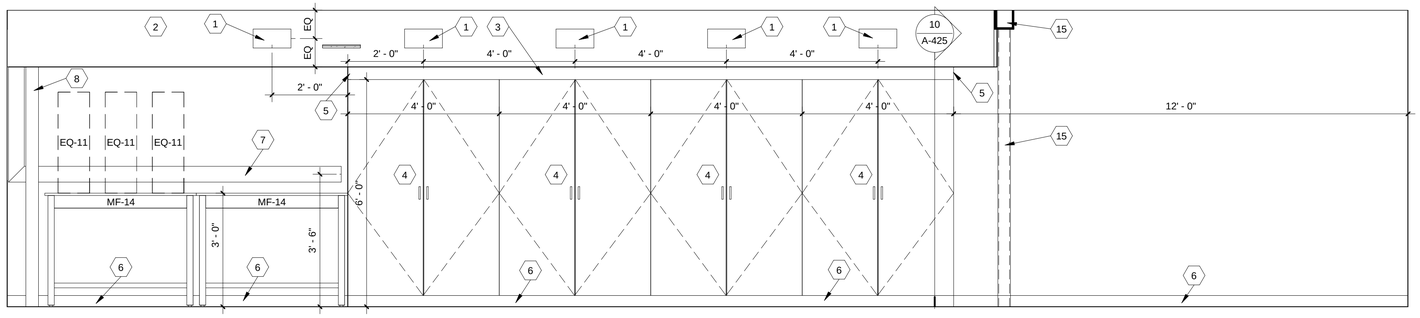
SCALE: As indicated

A-420

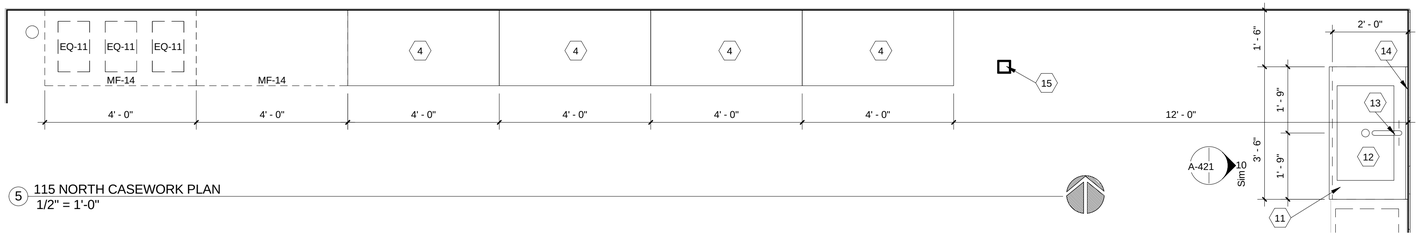
JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 115 NORTH
1/2" = 1'-0"



5 115 NORTH CASEWORK PLAN
1/2" = 1'-0"

10 115 EAST
1/2" = 1'-0"

GENERAL NOTES:

A. REFER TO ELECTRICAL PLANS FOR WALL MOUNTED ELECTRICAL DEVICES.

B. ALL CABINET WIDTH DIMENSIONS ARE NOMINAL.

C. PROVIDE WALL BASE AT CASEWORK TO MATCH ADJACENT WALLS.

D. REFER TO SHEET A-601 FOR PUNCH WINDOW TYPES.

E. REFER TO A-631 FOR MOVABLE FURNITURE LEGEND AND OWNER PROVIDED EQUIPMENT SCHEDULE.

CODED NOTES:

1 SUPPLY REGISTER REFER TO MECHANICAL DRAWINGS
2 GYP BULKHEAD REFER TO DETAIL 4/A-535
3 WOOD FILLER TOP TO INFILL TO UNDERSIDE OF BULKHEAD
4 TALL STORAGE CABINET 24" DEEP X 48" WIDE X 72" HEIGH. SEE 10/A-425
5 RETURN END OF WOOD FILLER ABOVE CABINET SIDE, TO FACE OF WALL
6 WALL BASE
7 SURFACE MOUNTED RACEWAY. REFER TO ELECTRICAL DRAWINGS.
8 EXPOSED PIPE. PAINT (P-10B)
9 PAPER TOWEL DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
10 SOAP DISPENSER. OWNER PROVIDED CONTRACTOR INSTALLED
11 EPOXY COUNTER. SEE 12/A-425.
12 SK-4 EPOXY SINK 18" X 30" X 18" DEEP.
13 FAUCET
14 4" EPOXY BACKSPLASH
15 EXPOSED STEEL COLUMN AND BEAM

RECORD DRAWINGS

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TRENARY HALL INTERIOR RENOVATION

INTERIOR CASEWORK PLANS & ELEVATIONS

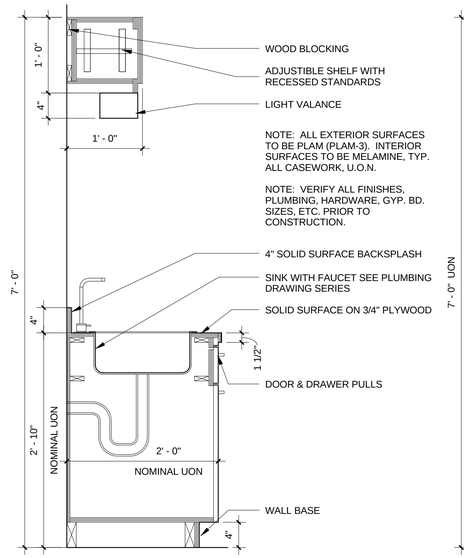
SCALE: As indicated

A-421

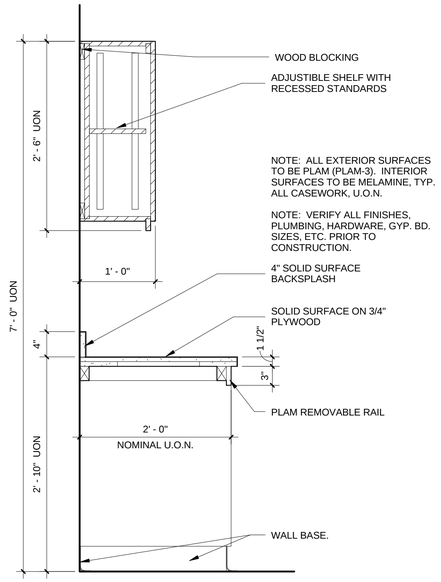
JOB NO.: 14022

DATE: 12/05/14

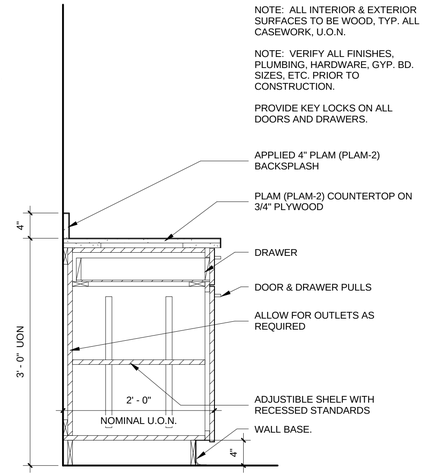
1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



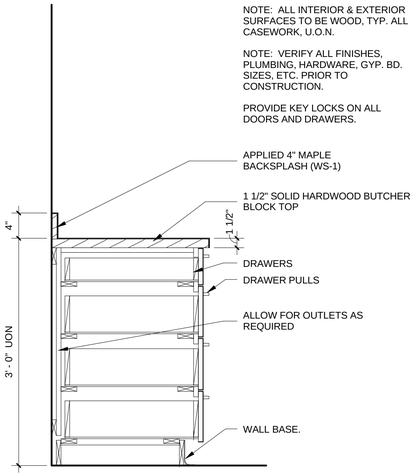
1 TYP SINK CABINET
1" = 1'-0"



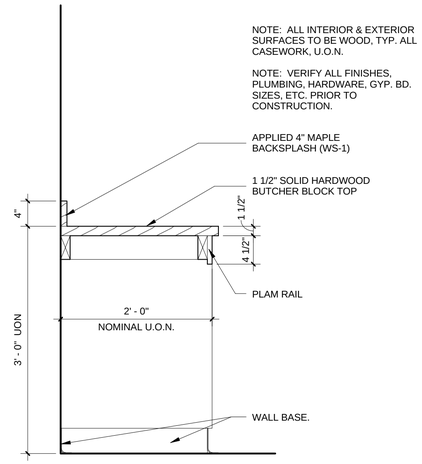
2 CASEWORK SECTION DETAIL E
1" = 1'-0"



3 CASEWORK SECTION DETAIL C
1" = 1'-0"

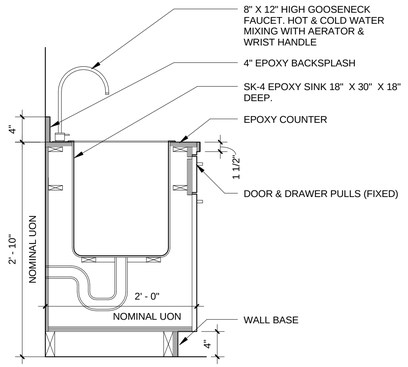


4 CASEWORK SECTION DETAIL D
1" = 1'-0"



5 CASEWORK SECTION DETAIL G
1" = 1'-0"

10 TALL STORAGE CABINET SECTION
1" = 1'-0"



12 SINK CABINET B
1" = 1'-0"

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TRENARY HALL INTERIOR RENOVATION

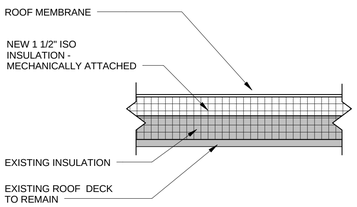
INTERIOR CASEWORK DETAILS

SCALE:	1" = 1'-0"

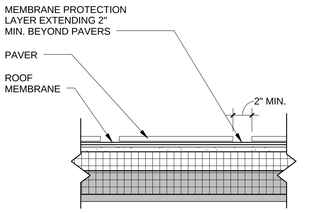
A-425

JOB NO.:	14022
DATE:	12/05/14

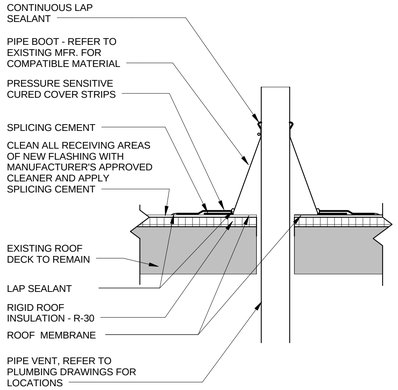
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



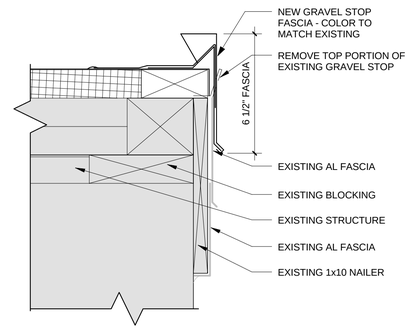
1 ROOF DETAIL M1
1 1/2" = 1'-0"



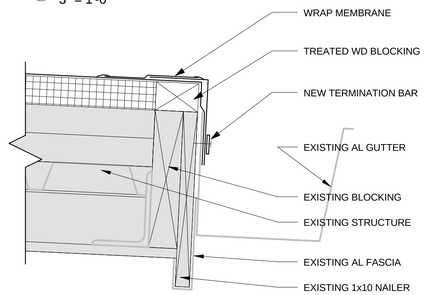
2 PAVER DETAIL
1 1/2" = 1'-0"



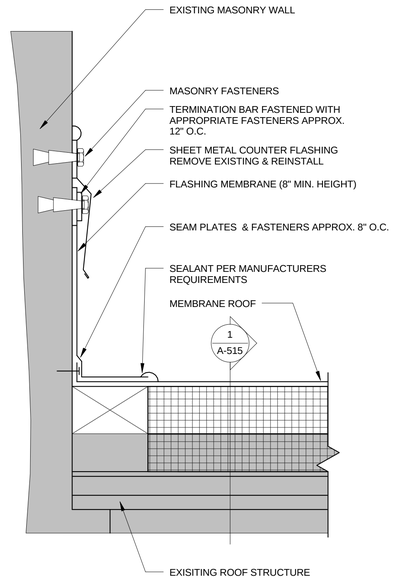
3 PIPE VENT DETAIL M
1 1/2" = 1'-0"



4 FASCIA DETAIL
3" = 1'-0"



6 GUTTER FASCIA DETAIL
3" = 1'-0"



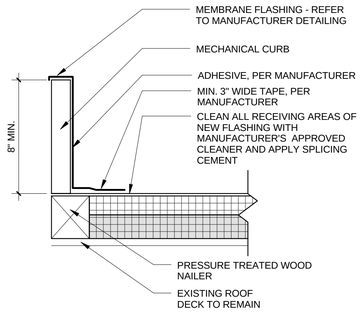
7 TERMINATION BAR DETAIL
3" = 1'-0"

GENERAL NOTES:

A. PROVIDE FLASHING IN ACCORDANCE WITH THE SMACNA ARCHITECTURAL SHEET MANUAL LATEST EDITION.

B. CONFORM TO MANUFACTURER'S INSTALLATION REQUIREMENTS AND DETAILS.

C. EXISTING ROOF COMPOSITION IS AS FOLLOWS: METAL DECK, 1/2" PERLITE, 1/2" BUILT-UP-ROOF, 2 1/2" POLYISOCYANURATE INSULATION, 1" FIBERBOARD, EPDM ROOFING AND BALLAST.



10 MECHANICAL CURB DETAIL
1 1/2" = 1'-0"

RECORD DRAWINGS

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TRENARY HALL INTERIOR RENOVATION

ROOF DETAILS

SCALE: As indicated

A-515

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

METAL STUD PARTITIONS

	TYPE	DETAILS HEAD	DETAILS CEILING	DETAILS FLOOR	RATING	UL NO	STC	STUDS GA	STUDS SIZE
2 1/8" @ 0A, 1 1/2" @ 0	0	-	25/A-520	35/A-520	-	-	-	20	7/8"
	0A	-	25/A-520	35/A-520	-	-	-	20	1 1/2"
4 7/8"	1	13/A-520	23/A-520	34/A-520	-	-	35	20	3 5/8"
4 7/8"	2	13/A-520	23/A-520	34/A-520			45	20	3 5/8"
	2A	14/A-520	-	34/A-520			45	20	3 5/8"
4 1/4"	4	13/A-520	21/A-520	31/A-520	-	-	-	20	3 5/8"
7 1/4"	6	13/A-520	22/A-520	34/A-520			45	20	6"
1' - 1"	7	13/A-520	4/A-520	3/A-520			45	20	6" 3 5/8"

NOTES:
1. 1 LAYER 5/8" GYP BD
2. 1 LAYER 5/8" GYP BD TYPE "X"
3. METAL STUDS @ 16" OC
4. HAT CHANNELS @ 16" OC
5. SOUND ATTENUATION BLANKET
6. BATT INSULATION

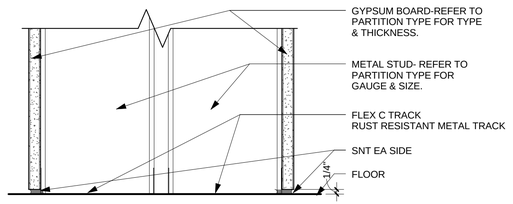
GENERAL NOTES:

A. ALL FLOOR TRACKS ARE TO BE RUST RESISTANT.

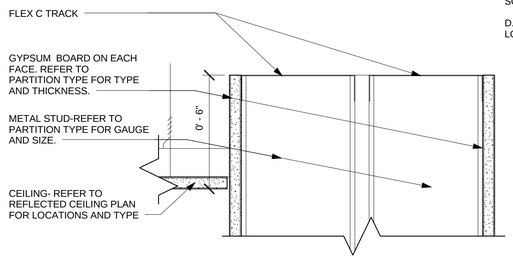
B. PROVIDE SEALANT AT FULL LENGTH OF ALL FLOOR TRACKS.

C. AT LOCATIONS OF WALL TILE PROVIDE 5/8" CEMENTIOUS BOARD IN LIEU OF GYPSUM BOARD. REFER TO FINISH SCHEDULE AND INTERIOR ELEVATIONS FOR LOCATIONS.

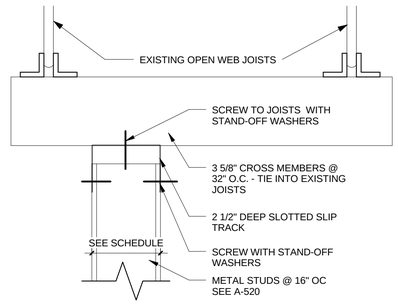
D. PROVIDE ABUSE RESISTANT GYP BD AT ALL PARTITIONS. LOCATE WITHIN 8' - 0" A.F.F. AND BELOW.



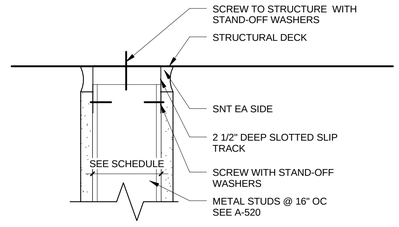
3 DETAIL AT FLOOR E
3" = 1'-0"



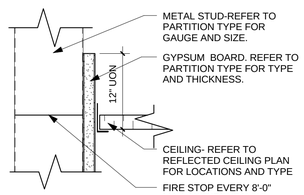
4 HEAD DETAIL AT CURVED WALL E
3" = 1'-0"



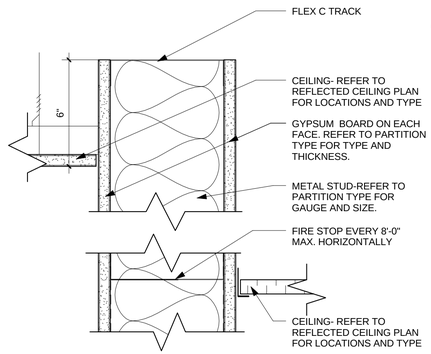
13 TYP FLEX HEAD (MTL STUD)
3" = 1'-0"



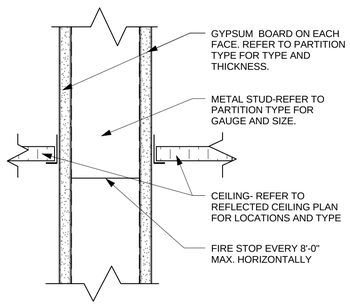
14 TYP FLEX HEAD (MTL STUD) B
3" = 1'-0"



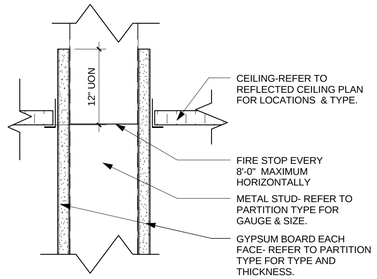
21 DETAIL AT CEILING C
3" = 1'-0"



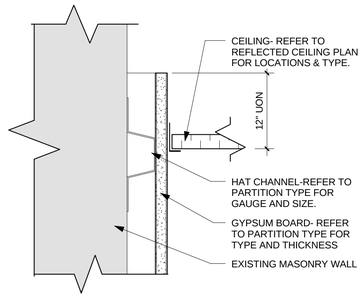
22 DETAIL AT CEILING B1
3" = 1'-0"



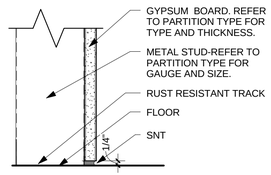
23 TYPICAL DETAIL AT CEILING 01
3" = 1'-0"



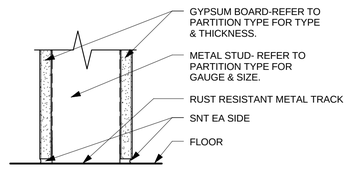
24 TYPICAL DETAIL AT CEILING 02
3" = 1'-0"



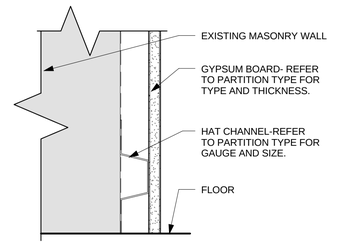
25 TYPICAL DETAIL AT CEILING 03
3" = 1'-0"



31 DETAIL AT FLOOR C
3" = 1'-0"



34 TYPICAL DETAIL AT FLOOR 02
3" = 1'-0"



35 TYPICAL DETAIL AT FLOOR 03
3" = 1'-0"

RECORD DRAWINGS

SPGB Architects
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CHECKED BY:	TWG

REVISIONS:	DATE:
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

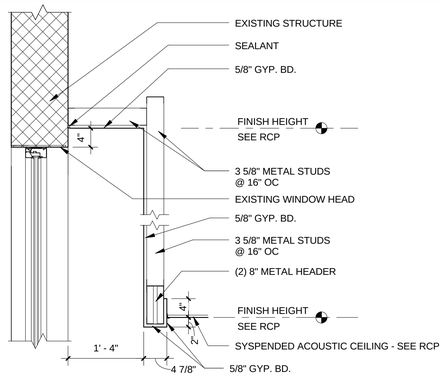
INTERIOR PARTITION TYPES

SCALE: As indicated

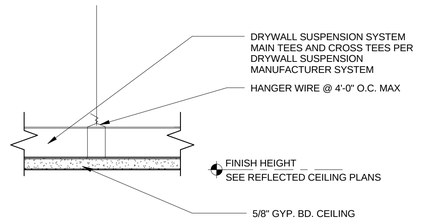
A-520

JOB NO.:	14022
DATE:	12/05/14

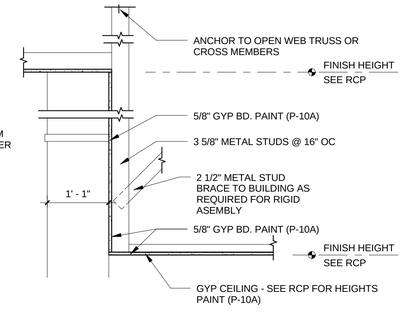
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



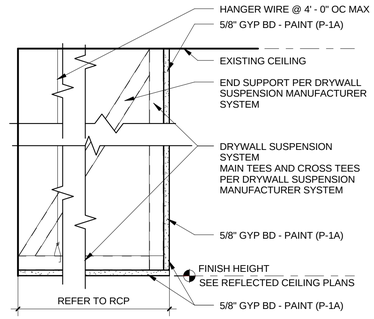
1 SOFFIT DETAIL C
3/4" = 1'-0"



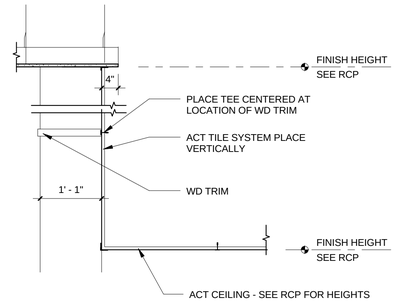
2 SUSPENDED GYP BD DETAIL B
3" = 1'-0"



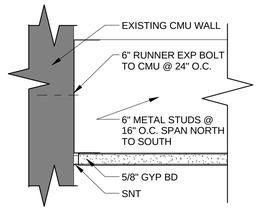
3 SOFFIT DETAIL (3-5-8-END A)
3/4" = 1'-0"



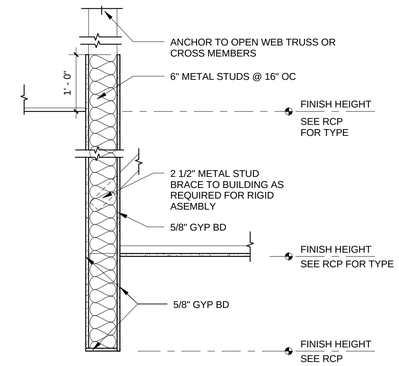
4 BULKHEAD DETAIL E
1 1/2" = 1'-0"



5 BULKHEAD DETAIL F
3/4" = 1'-0"



6 GYP BD DETAIL A
3" = 1'-0"



13 BULKHEAD DETAIL G
3/4" = 1'-0"

RECORD DRAWINGS

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Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

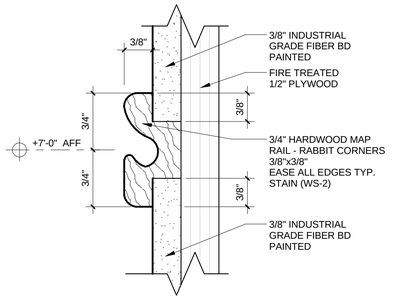
REFLECTED CEILING DETAILS

SCALE:	As indicated

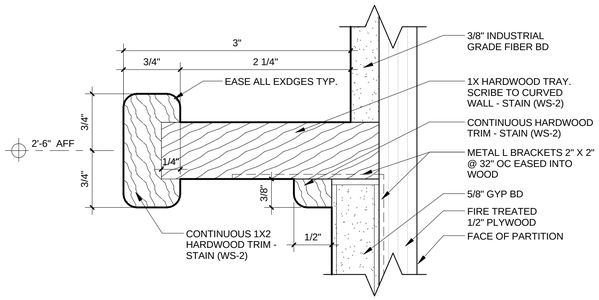
A-535

JOB NO.:	14022
DATE:	12/05/14

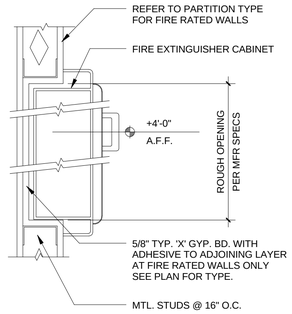
1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



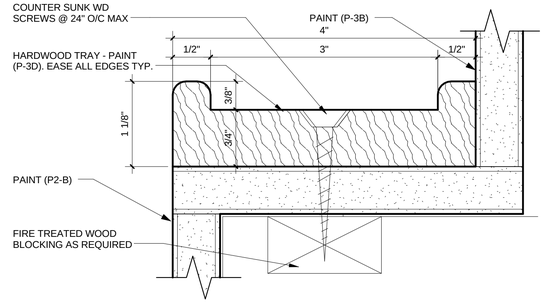
1 MAP RAIL DETAIL
12" = 1'-0"



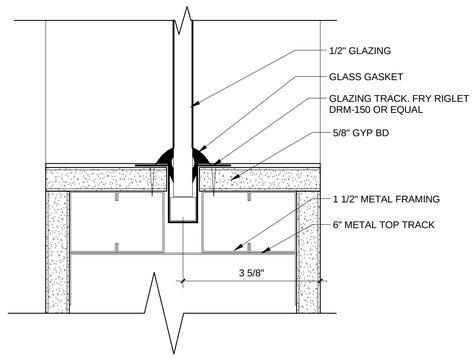
2 GALLERY TRAY DETAIL
12" = 1'-0"



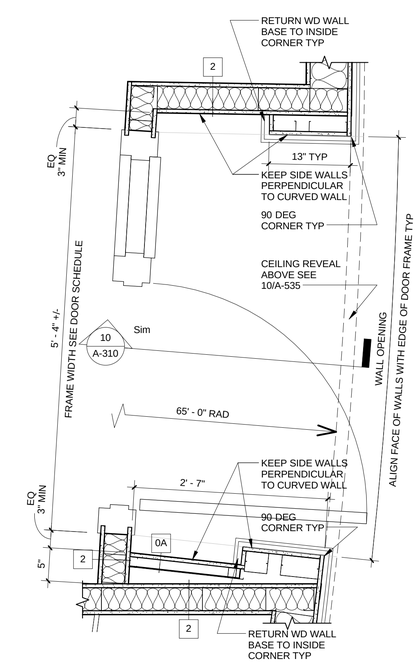
3 FEC IN STUD WALL
1 1/2" = 1'-0"



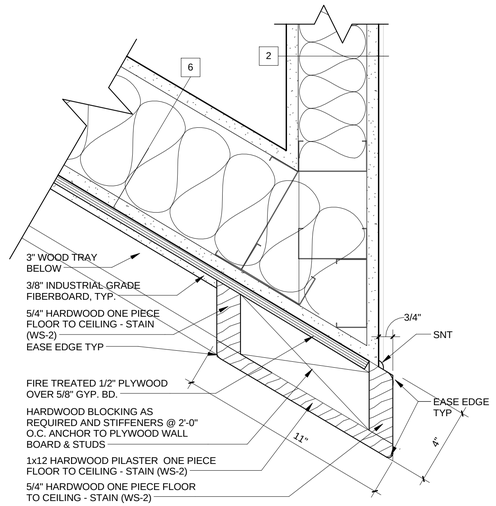
4 TRIM DETAIL
12" = 1'-0"



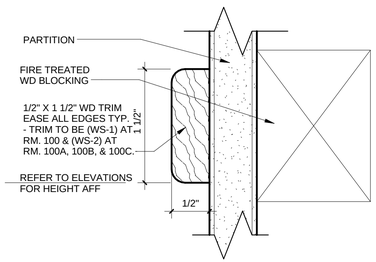
14 GLAZING SILL DETAIL
6" = 1'-0"



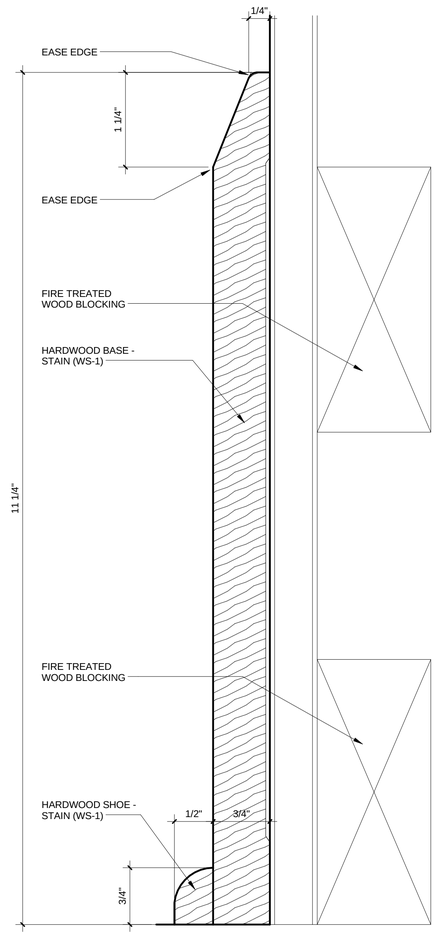
20 ENLARGED PLAN DETAIL
1" = 1'-0"



21 ENLARGED PLAN DETAIL
3" = 1'-0"



22 TRIM DETAIL A
12" = 1'-0"



23 BASE DETAIL A
12" = 1'-0"

RECORD DRAWINGS

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Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

INTERIOR DETAILS

SCALE: As indicated

A-540

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

FIRST FLOOR DOOR SCHEDULE

DOOR NO.	DOOR DIMENSIONS W	H	T	TYPE	MATERIAL	GLAZING	FRAME MATERIAL	TYPE	GLAZING	DETAIL HEAD	JAMB	SILL	HARDWARE	LABEL	REMARKS
100	3' - 0"	8' - 0"		B	AL	GL-11	AL		GL-11	45	35	15	01		6,9
100B	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	2A		33	34	15	02		9
102	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	-	-		03		3
104	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	33	34	15	04		
106	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	33	34		03		
108	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	20	21	14	05		
109	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	33	34	15	04		
110	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	6		23	24		06		4
112	3' - 0"	8' - 0"	1 3/4"	A	WD		MTL	5		23	24		07		4
113	3' - 0"	7' - 0"	1 3/4"	B	WD	GL-1	MTL	4		23	24		08		4
113B	3' - 0"	7' - 0"	1 3/4"	-	-		-	-		-	-		-		1,8
113C	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1	-	-	-		10		1,2
114	3' - 0"	7' - 0"	1 3/4"	A	WD		MTL	1	-	20	21		17		
115A	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	7A		22	24	15	12		4
115B	3' - 0"	7' - 0"	1 3/4"	-	-		-	-		-	-		-		1,8
116	3' - 0"	8' - 0"	1 3/4"	A	WD			5		23	24		11		4
117A	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	8		22	24		13		4
117B	6' - 0"	8' - 6"	.	D	AL	GL-11	AL		GL-11	45	35	15	CO-6		6
118	3' - 0"	7' - 0"	1 3/4"	A	WD		MTL	2		22	24		15		
119	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	7		22	24		16		4
120A	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	6		23	24		06		4
120B	3' - 0"	7' - 0"	1 3/4"	-	-		-	-		-	-		-		1,8
121	3' - 0"	8' - 0"	1 3/4"	B	WD	GL-1	MTL	7		22	24		06		4
151	3' - 0"	7' - 0"	1 3/4"	A	WD		MTL	1	-	20	21		17		

REMARKS:
1. EXISTING DOOR & FRAME TO REMAIN. PAINT FRAME AND DOOR.
2. PROVIDE NEW HARDWARE.
3. EXISTING FRAME TO REMAIN. PAINT FRAME.
4. SEE FRAME TYPES FOR FRAME GLAZING MARKS.
5. EXISTING DOOR & FRAME TO REMAIN.
6. ALUMINUM STOREFRONT SYSTEM
7. SECOND LEAF [W 1'-8" x H 8'-0" x T 1 3/4" , TYPE B , MATERIAL WD, GLAZING = GL-1]
8. EXISTING HARDWARE TO REMAIN.
9. PAINT DOOR (P-2D) ON ALL SIDES.
10. SEALED THRESHOLD

REFER TO SHEET A-620 FOR GLASS TYPES

MECHANICAL PLATFORM DOOR SCHEDULE

DOOR NO.	DOOR DIMENSIONS W	H	T	TYPE	MATERIAL	GLAZING	FRAME MATERIAL	TYPE	GLAZING	DETAIL HEAD	JAMB	SILL	HARDWARE	LABEL	REMARKS
201	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL		-	-	-				5,8
202	3' - 0"	7' - 0"	1 3/4"	A	MTL		MTL	1		20	21		04		10

PUNCH WINDOW SCHEDULE

TYPE	DIMENSIONS W	H	GLAZING	DETAILS (A-603) HEAD	JAMB	SILL	REMARKS
1A	1' - 2"	1' - 2"	GL-1	1	2, 4	3	1, 2
1B	1' - 2"	1' - 2"	GL-3	1	2, 4	3	1, 2
1C	1' - 2"	1' - 2"	GL-2	1	2, 4	3	1, 2
1D	1' - 2"	1' - 2"	GL-1	1	2, 4	3	1, 3
1E	1' - 2"	1' - 2"	GL-3	1	2, 4	3	1, 3
1F	1' - 2"	1' - 2"	GL-2	1	2, 4	3	1, 3
2A	1' - 2"	2' - 10"	GL-1	1	2, 4	3	1, 3
2B	1' - 2"	2' - 10"	GL-3	1	2, 4	3	1, 2
2C	1' - 2"	2' - 10"	GL-2	1	2, 4	3	1, 2
2D	1' - 2"	2' - 10"	GL-1	1	2, 4	3	1, 3
2F	1' - 2"	2' - 10"	GL-2	1	2, 4	3	1, 3
3B	1' - 2"	4' - 6"	GL-3	1	2, 4	3	1, 2
3C	1' - 2"	4' - 6"	GL-2	1	2, 4	3	1, 2
3D	1' - 2"	4' - 6"	GL-1	1	2, 4	3	1, 3
3F	1' - 2"	4' - 6"	GL-2	1	2, 4	3	1, 3
4F	0' - 8 1/4"	8' - 8"					

REMARKS:

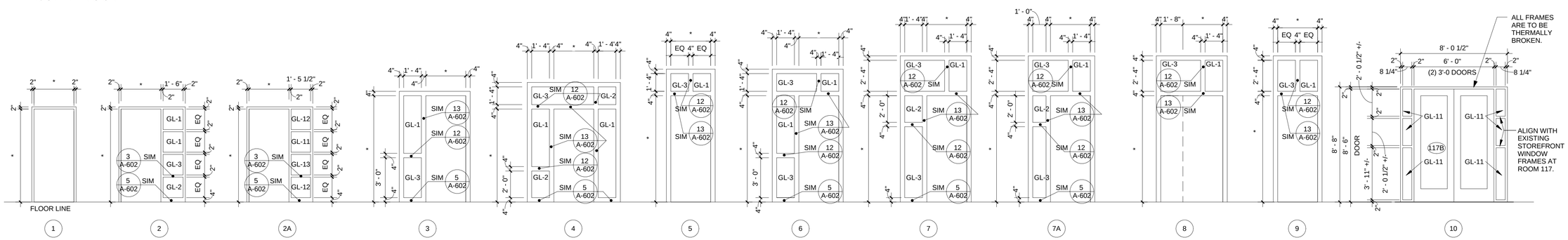
1. PROVIDE TEMPERED GLASS
2. PROVIDE GLASS FACE ON CLASS ROOM, OR OFFICE SIDE.
3. PROVIDE GLASS FACE ON CORRIDOR SIDE.

WINDOW SCHEDULE

TYPE	DIMENSIONS W	H	GLAZING	DETAILS (A-602) HEAD	JAMB	SILL	REMARKS
10	8' - 0"	2' - 8"	GL-1	43	44	43	1
11	5' - 0"	2' - 8"	GL-1	43	44	43	1

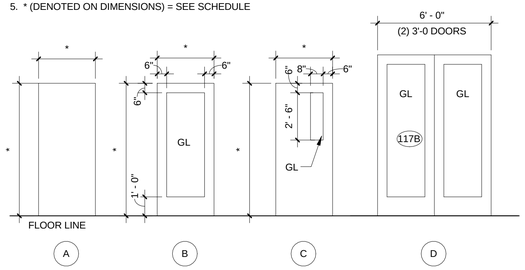
REMARKS:

1. PROVIDE TEMPERED GLASS



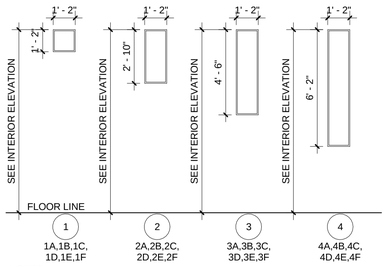
5 FRAME TYPES
1/4" = 1'-0"

NOTES:
1. SEE FLOOR PLANS FOR LOCATIONS
2. SEE DOOR SCHEDULE FOR GLAZING TYPE
3. ALL GLASS IS TEMPERED UON
4. UON DETAILS ON SHEET A-602
5. * (DENOTED ON DIMENSIONS) = SEE SCHEDULE



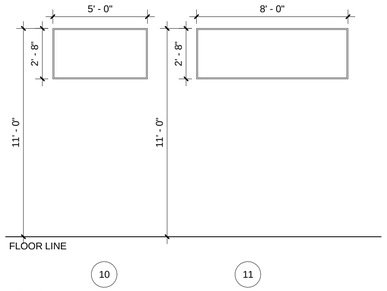
NOTES:
1. SEE FLOOR PLANS FOR LOCATIONS
2. SEE DOOR SCHEDULE FOR GLAZING TYPE
3. ALL GLASS IS TEMPERED UON
4. UON DETAILS ON SHEET A-602
5. * (DENOTED ON DIMENSIONS) = SEE SCHEDULE

10 DOOR TYPES
1/4" = 1'-0"



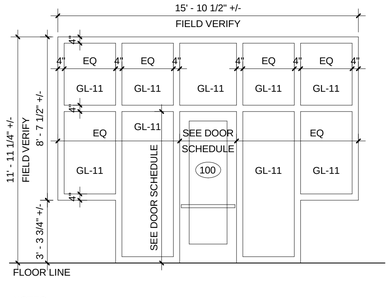
NOTES:
1. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS.
2. ALL GLASS IS TEMPERED UON.
3. UON SEE DETAILS ON SHEET A603.

11 PUNCH WINDOW TYPES
1/4" = 1'-0"



NOTES:
1. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS.
2. ALL GLASS IS TEMPERED UON.
3. UON SEE DETAILS ON SHEET A602.

12 WINDOW TYPES
1/4" = 1'-0"



NOTES:
1. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS.
2. ALL GLASS IS TEMPERED UON.
3. UON SEE DETAILS ON SHEET A602.

13 STOREFRONT SYSTEM
1/4" = 1'-0"

RECORD DRAWINGS

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DESIGNED BY: MS
DRAWN BY: MS
CHECKED BY: TWG

REVISIONS:	DATE:
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RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

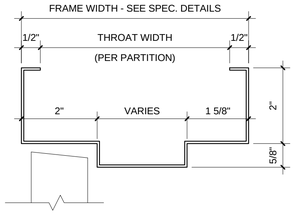
FRAME SCHEDULES

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

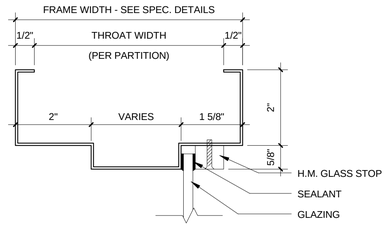
A-601

JOB NO.: 14022
DATE: 12/05/14

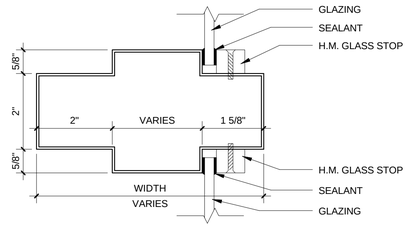
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



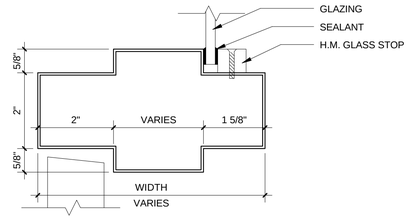
1 TYPICAL 2" HM DETAIL FRAME PROFILE
6" = 1'-0"



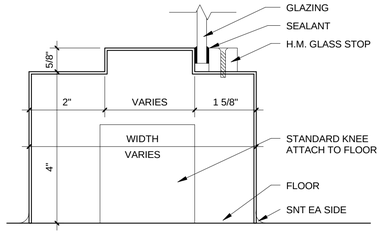
2 TYPICAL 2" HM GLASS STOP PROFILE
6" = 1'-0"



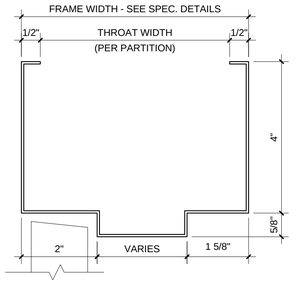
3 2" HM HORIZONTAL PROFILE
6" = 1'-0"



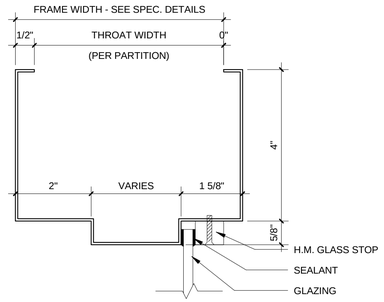
4 2" HM DOOR HEAD / JAMB PROFILE
6" = 1'-0"



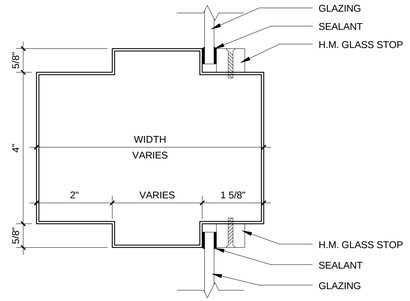
5 4" HM SILL PROFILE
6" = 1'-0"



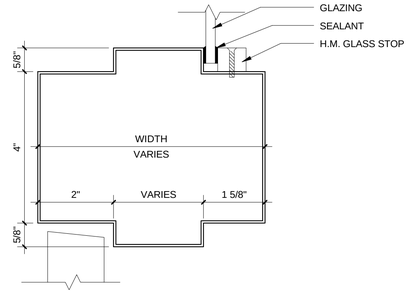
10 TYPICAL 4" HM DETAIL FRAME PROFILE
6" = 1'-0"



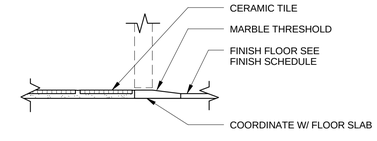
11 TYPICAL 4"HM GLASS STOP PROFILE
6" = 1'-0"



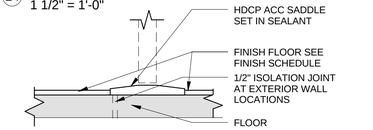
12 4" HM HORZ / VERT PROFILE
6" = 1'-0"



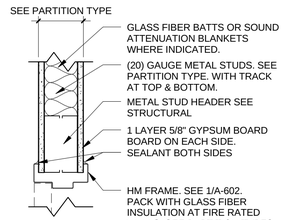
13 4" HM DOOR HEAD / JAMB PROFILE
6" = 1'-0"



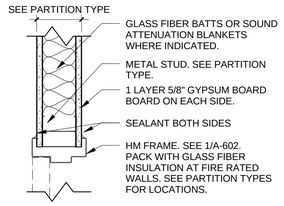
14 MARBLE THRESHOLD DETAIL
1 1/2" = 1'-0"



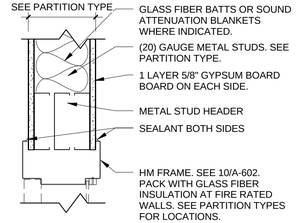
15 ADA THRESHOLD DETAIL
1 1/2" = 1'-0"



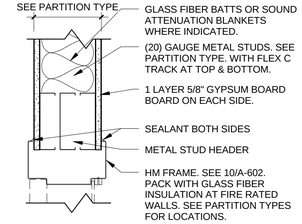
20 DOOR HEAD TYPE 1
1 1/2" = 1'-0"



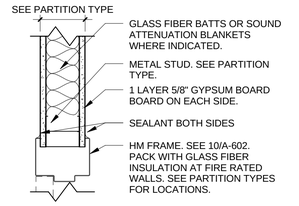
21 DOOR JAMB TYPE 1
1 1/2" = 1'-0"



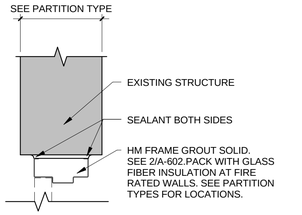
22 DOOR HEAD TYPE 2
1 1/2" = 1'-0"



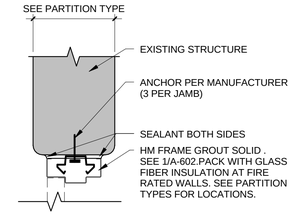
23 DOOR HEAD TYPE 3
1 1/2" = 1'-0"



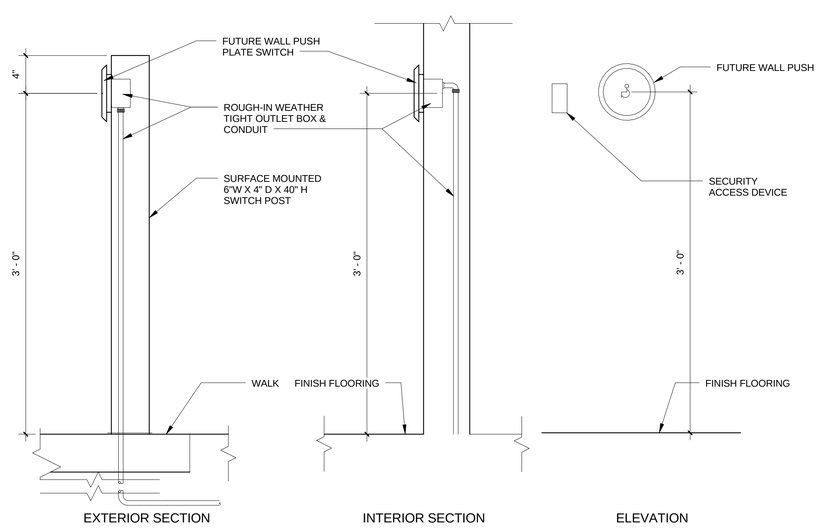
24 DOOR JAMB TYPE 2
1 1/2" = 1'-0"



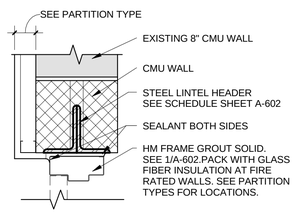
25 DOOR HEAD TYPE 4
1 1/2" = 1'-0"



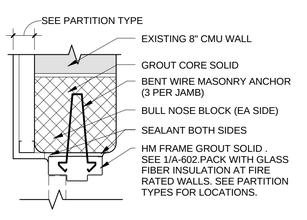
26 DOOR JAMB TYPE 4
1 1/2" = 1'-0"



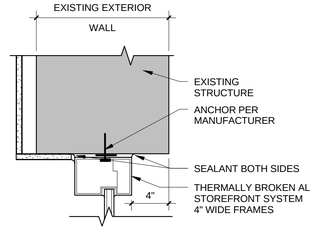
40 POWER DOOR OPERATOR DETAILS (ROUGH-IN FOR FUTURE USE)
1 1/2" = 1'-0"



33 DOOR HEAD TYPE 5
1 1/2" = 1'-0"



34 DOOR JAMB TYPE 5
1 1/2" = 1'-0"



35 STOREFRONT JAMB
1 1/2" = 1'-0"

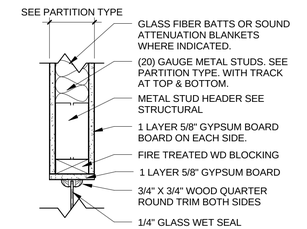
LINTELS SCHEDULE AND NOTES

A. LINTELS FOR EXTERIOR WALL OPENINGS - HOT DIPPED GALVANIZED.

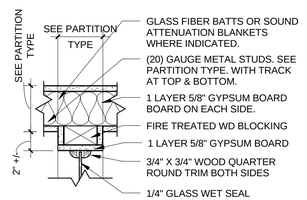
B. 8" BEARING EACH SIDE OF OPENING UON.

C. UNLESS SHOWN OTHERWISE; PROVIDE 1 ANGLE FOR EACH 4" WALL THICKNESS AS FOLLOWS:

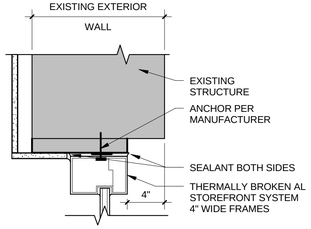
MASONRY OPENING	ANGLE SIZE
3'-6" OR LESS	L 3 1/2 X 3 1/2 X 1/4
3'-7" TO 5'-0"	L 4 X 3 1/2 X 1/4 LLV
5'-1" TO 8'-0"	L 5 X 3 1/2 X 5/16 LLV
8'-1" TO 10'-0"	L 6 X 3 1/2 X 5/16 LLV



43 WINDOW HEAD TYPE 1
1 1/2" = 1'-0"



44 WINDOW JAMB TYPE 1
1 1/2" = 1'-0"



45 STOREFRONT HEAD
1 1/2" = 1'-0"

RECORD DRAWINGS

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Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:					
DATE:	12/05/14	06/19/15			
	CONFORMED SET	RECORD DRAWINGS			

TRENARY HALL INTERIOR RENOVATION

DOOR & WINDOW DETAILS

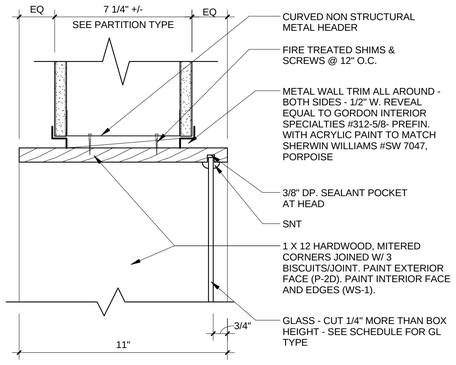
SCALE: As indicated

A-602

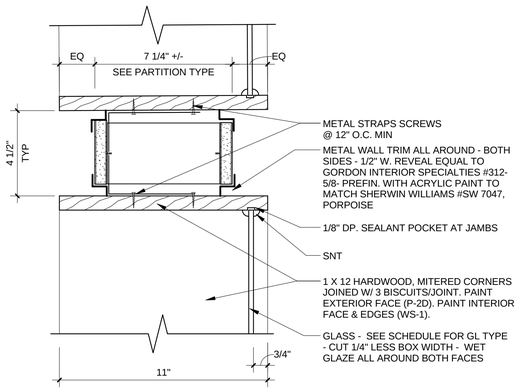
JOB NO.: 14022

DATE: 12/05/14

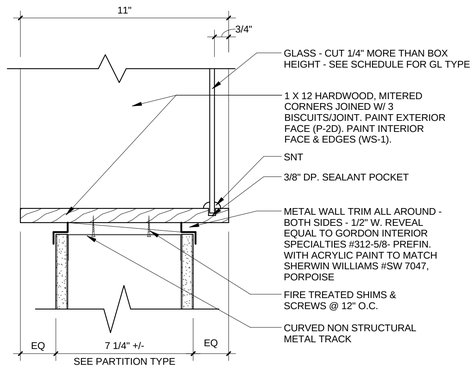
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



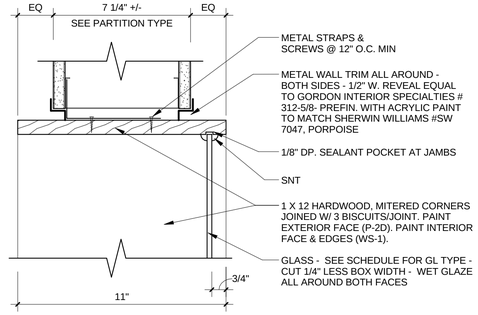
1 WINDOW HEAD
3" = 1'-0"



2 WINDOW JAMB B
3" = 1'-0"



3 WINDOW SILL
3" = 1'-0"



4 WINDOW JAMB A
3" = 1'-0"

RECORD DRAWINGS

SPGB Architects
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Dublin, Ohio 43017
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DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

DOOR & WINDOW DETAILS

SCALE: 3" = 1'-0"

A-603

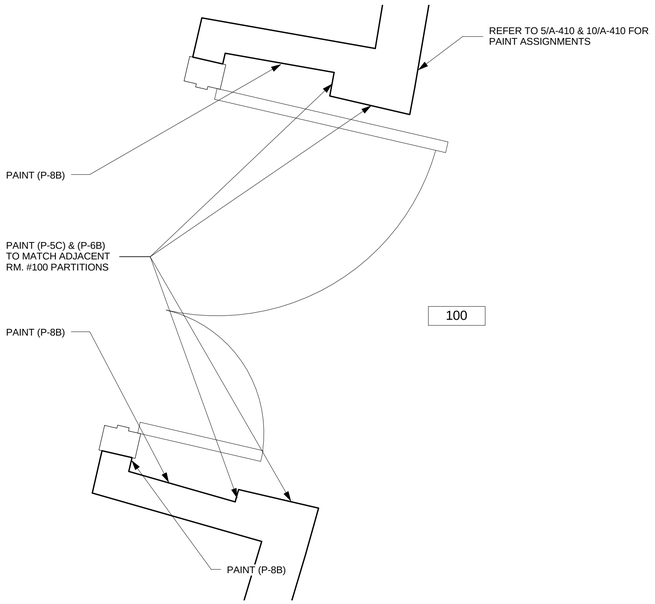
JOB NO.: 14022

DATE: 12/05/14

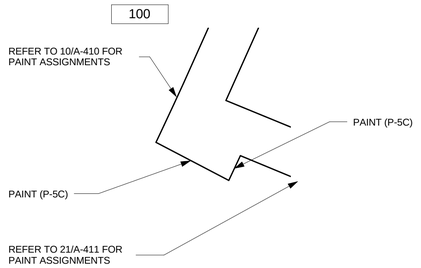
1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

FINISH SCHEDULE

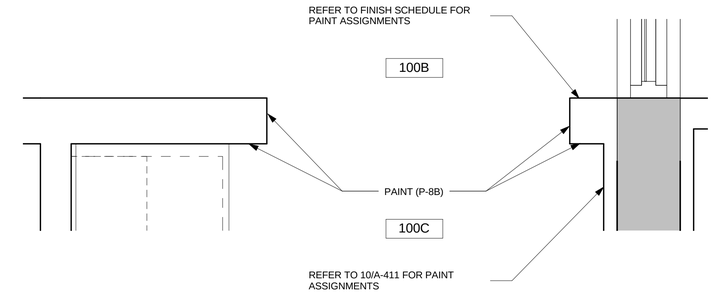
ROOM NO.	ROOM DESCRIPTION	FLOOR BASE	FLOOR MATERIAL	WALL FINISH				CEILING		REMARKS
				NORTH	EAST	SOUTH	WEST	MATERIAL	FINISH	
100	CORRIDOR	WD-1	CPT-1	P-5C, P-6B	P-5C, P-6B	P-5C, P-6B	P-5C, P-6B	GYP. BD.	P-1A	
100A	CORRIDOR	RB-3	CPT-1, CPT-2	P-8B	P-8B	P-8B	P-8B	GYP. BD., ACT-1	P-1A	
100B	CORRIDOR	RB-3	VCT-1, VCT-2, VCT-3, VCT-4	P-8B	P-8B	P-8B	P-8B	GYP. BD.	P-1A	
100C	KITCHENETTE	RB-1	VCT-1, VCT-3	P-10B	P-10B	P-10B	P-10B	ACT-1	-	
102	MEN	MATCH EXG.	MATCH EXG.	P-11B	P-11B	P-8B	P-11B	EXG.	EXG.	1, 2
102A	MEN'S VESTIBULE	RB-3	CPT-2	P-8B	P-8B	P-8B	P-8B	GYP. BD.	P-10A	
104	ELECTRIC	RB-1	EXG.	EXG.	EXG.	EXG.	EXG.	GYP. BD.	P-1A	
106	WOMEN	CT-1	CT-1,CT-2,CT-3	P-11B	P-8B	P-11B	P-11B	EXG.	EXG.	1, 2
108	SHOWER	CT-1	CT-1,CT-2,CT-3, CT-4	P-11B	P-11B	P-11B	P-11B	GYP. BD.	P-1A	3, 5
109	COMPRESSOR	RB-1	P-12B	P-10B	P-10B	P-10B	P-10B	EXP.	P-1A	
110	CLASSROOM 5	RB-1, RB-4	CPT-1, CPT-2, CPT-3	P-10B	P-10B	P-3B	P-10B	GYP. BD., ACT-1	P-3A	4
111	CLASSROOM 4	RB-1, RB-4	CPT-1, CPT-2, CPT-3	P-3B	P-10B	P-10B	P-10B	GYP. BD., ACT-1	P-3A	4
112	STAFF	RB-1	CPT-2	P-10B	P-10B	P-10B	P-10B	ACT-1	-	
113	CLASSROOM 3	RB-1, RB-4	CPT-1, CPT-2, CPT-3	P-3B	P-10B	P-10B	P-10B	GYP. BD., ACT-1	P-3A	4
114	OFFICE A	RB-1	CPT-2	P-10B	P-10B	P-10B	P-10B	ACT-1	-	
115	LAB 2	RB-1, RB-4	RFT-1, RFT-2, RFT-3, RFT-4	P-3B	P-10B	P-10B	P-10B	ACT-1	-	
116	OFFICE C	RB-1	CPT-1, CPT-2	P-10B	P-10B	P-10B	P-10B	ACT-1	-	
117	LAB 1	RB-1, RB-4	P-12B	P-10B	P-3B	P-10B	P-10B	ACT-2	-	6
118	OFFICE B	RB-1	CPT-1, CPT-2	P-10B	P-10B	P-10B	P-10B	ACT-1	-	
119	CLASSROOM 1	RB-1, RB-4	CPT-2, CPT-3	P-10B	P-10B	P-3B	P-10B	GYP. BD., ACT-1	P-3A	4
120	CLASSROOM 2	RB-1, RB-4	CPT-1, CPT-2, CPT-3	P-10B	P-3B	P-10B	P-10B	GYP. BD., ACT-1	P-3A	4
202	IT CLOSET	RB-1	EXG.	P-B	P-B	P-B	P-B	EXG.	-	



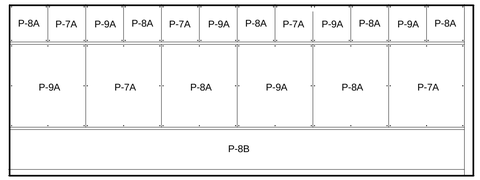
1 TYP. ENLARGED PAINTING PLAN AT CLASSROOM ENTRY ALCOVES
1" = 1'-0"



2 TYP. ENLARGED PAINTING PLAN AT RM. 100 OPENINGS TO RM. 100A & RM. 100B
1" = 1'-0"



3 ENLARGED PAINTING PLAN AT RM. #100C
1" = 1'-0"



4 GALLERY WALL PAINTING DETAIL AT RM. 100A
1/4" = 1'-0"

NOTE: REFER TO 21/A-411 FOR CONSTRUCTION INFORMATION FOR THIS ELEVATION

GENERAL NOTES:

A. REFER TO TECHNICAL SPECIFICATIONS FOR FINISH PALETTE REQUIREMENTS ON PREFINISHED MATERIALS.

B. PAINT EXTERIOR, EXISTING HM DOORS AT INTERIOR FACE. PAINT HM FRAME TO INSIDE CORNER OF DOOR RABBET.

C. ALL WOOD TRIM SHALL BE FINISHED WS-1, U.O.N.

D. EXISTING ROOM FINISHES TO REMAIN "AS IS" AT STAIRWELLS & MEZZANINES (ROOM NO. 200, 201, 250 & 400), U.O.N.

F. REFER TO ARCHITECTURAL DETAILS FOR PREFINISHED GYPSUM ACCESSORY COLORS. REFER TO SPECIFICATION FOR FINISH REQUIREMENTS.

G. REFER TO FLOOR PATTERN SHEET A-634 FOR INSTALLATION PATTERN AND COLOR LAYOUT OF CARPET TILE AND RESILIENT FLOOR TILE. REFER TO SPECIFICATIONS FOR PRODUCT INFORMATION USED AS THE BASIS-OF-DESIGN.

H. RESILIENT WALL BASE TO MATCH WALL COLOR AS SELECTED BY A/E, U.O.N. PROVIDE RB-1 AT P-10, RB-3 AT P-8, AND RB-4 AT P-2.

I. GLOSS LEVEL FOR ALL PAINT SHALL COMPLY WITH SPECIFICATION SECTION 09 91 23 INTERIOR PAINTING, U.O.N.

J. PAINT ALL HOLLOW METAL DOORS AND FRAMES TO MATCH COLOR OF ADJACENT WALLS, U.O.N.

K. PAINT ALL STEEL ACCESS PANELS TO MATCH ADJACENT SURFACES, U.O.N.

M. ALL TOILET PARTITIONS SHALL BE SELECTED BY THE A/E FROM THE MANUFACTURER'S FINISH PALETTE.

N. REFER TO SPECIFICATION SECTION 08 80 00 & 08 81 13 FOR GLAZING DESIGNATIONS.

O. REFER TO SHEET A-634 FOR INSTALLATION PATTERN & COLOR LAYOUT OF CARPET & RESILIENT FLOOR TILE.

P. SEAL ALL EXISTING CONCRETE FLOORS TO REMAIN & ALL NEW CONCRETE WORK AT DISTURBED AREAS OF CONCRETE.

Q. REFER TO 1/A-411 & 13/A-310 FOR COLOR ASSIGNMENTS AT FRONT TEACHING WALL.

R. REFER TO PLAN DETAILS & INTERIOR ELEVATIONS FOR COLOR ASSIGNMENT OF CORRIDOR WALLS.

S. REFER TO INTERIOR ELEVATIONS & DETAILS ON THIS SHEET FOR ADDITIONAL COLOR ASSIGNMENTS OF WALLS & TACKBOARDS.

T. ROOM 202 IT CLOSET WALLS, DOOR AND FRAME TO BE UNPAINTED. PROVIDE LEVEL 1 FINISH AT WALLS. PROVIDE SEALANT AT BOTTOM AND TOP OF WALLS.

REMARKS:

1. PATCH & REPAIR EXISTING. TILE FLOOR AT LOCATIONS OF NEW WORK & DAMAGE. FLOOR PATTERN TO MATCH EXISTING.
2. EXISTING CEILING TO REMAIN.
3. INSTALL TILE IN RANDOM PATTERN.
4. CEILING FINISH COLOR REFERS ONLY TO GYPSUM BOARD CEILING.
5. REFER TO 1/A-401 FOR ADDITIONAL PAINT ASSIGNMENTS.
6. PAINT NEW COLUMNS (3) AND STEEL BEAM (P-10).

RECORD DRAWINGS

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DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	DATE:
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

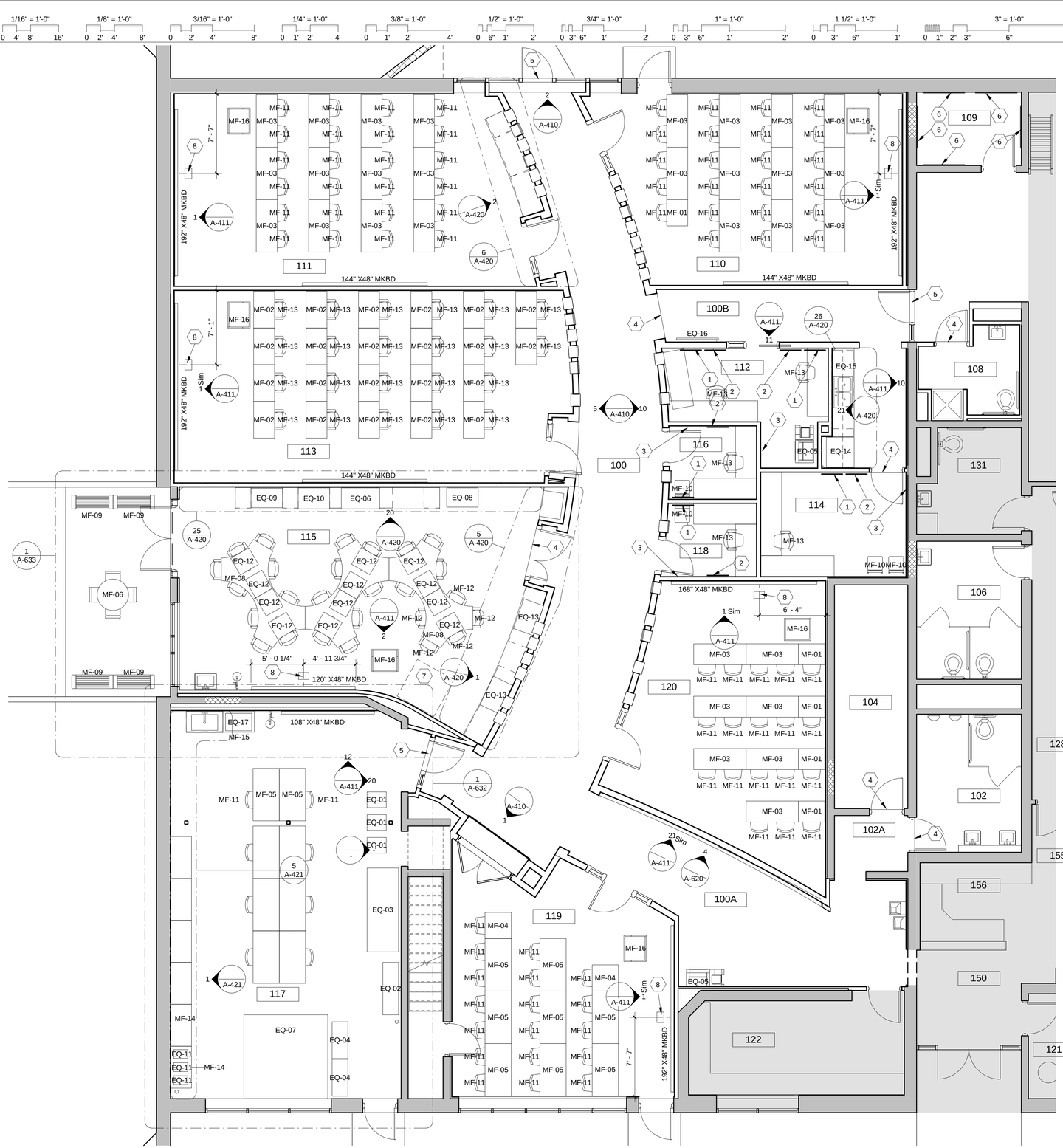
FINISH SCHEDULES

SCALE: As indicated

A-620

JOB NO.: 14022

DATE: 12/05/14



1 FIRST FLOOR FINISH PLAN
3/16" = 1'-0"

MOVABLE FURNITURE	
MARK	TYPE
MF-01	DESK 24" x 30" x 30"
MF-02	DESK 24" x 42" x 30"
MF-03	DESK 24" x 60" x 30"
MF-04	DESK 24" x 60" x 30"
MF-05	DESK 30" x 60" x 30"
MF-06	DESK 36" DIAMETER, 4 CHAIRS
MF-08	DESK DEWEY SIX STATION
MF-09	BENCH
MF-10	GUEST CHAIR
MF-11	STUDENT CHAIR
MF-12	TASK CHAIR
MF-13	TASK CHAIR
MF-14	WORK BENCH 24" X 48" X 36"
MF-15	MOVABLE TABLE 24" X 36" X 36"
MF-16	PODIUM

OWNER PROVIDED EQUIPMENT	
MARK	TYPE
EQ-01	BAND SAW
EQ-02	METAL BENDER
EQ-03	LATHE
EQ-04	TOOL CHEST
EQ-05	COPIER
EQ-06	CHARPY IMPACT MACHINE
EQ-07	MILLING MACHINE
EQ-08	TENSILE TESTER
EQ-09	FATIQUE TESTER
EQ-10	HARDNESS TESTER
EQ-11	DRILL PRESS
EQ-12	OSCILLOSCOPE
EQ-13	OVEN
EQ-14	REFRIGERATOR
EQ-15	MICROWAVE
EQ-16	FLAT PANEL DISPLAY
EQ-17	3D PRINTER WASH

GENERAL NOTES:

A. REFER TO FINISH SCHEDULE FOR FLOOR FINISH DESIGNATIONS.

B. REFER TO ENLARGED LAB PLANS, SHEETS A-632 TO A-633, FOR ADDITIONAL DENOTATIONS.

C. FURNITURE SHOWN FOR REFERENCE ONLY. NIC

CODED NOTES:

1 2' X 2' TKBD
2 2' X 2' MKBD
3 HOOK STRIP (3 HOOKS)
4 FLOOR MATERIAL TRANSITION
5 ADA THRESHOLD. SEE 15/A-602
6 PROVIDE (1) 24" X 48" ACT-1 TILE ATTACH TO EXISTING WALL. PLACE 24" DIM VERTICALLY, LOCATE TOP OF PANEL TO UNDERSIDE OF EXISTING CEILING.
7 LOCATION OF 4' X 4' TRACKS STORAGE (OWNER EQUIPMENT)
8 LOW THROW PROJECTOR. OWNER PROVIDED, CONTRACTOR INSTALLED. PROVIDE BLOCKING AS REQUIRED.

KEY PLAN
NOT TO SCALE

RECORD DRAWINGS

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4333-B Tuller Road
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DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

DATE:	12/05/14	06/19/15		
REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR FINISH PLAN

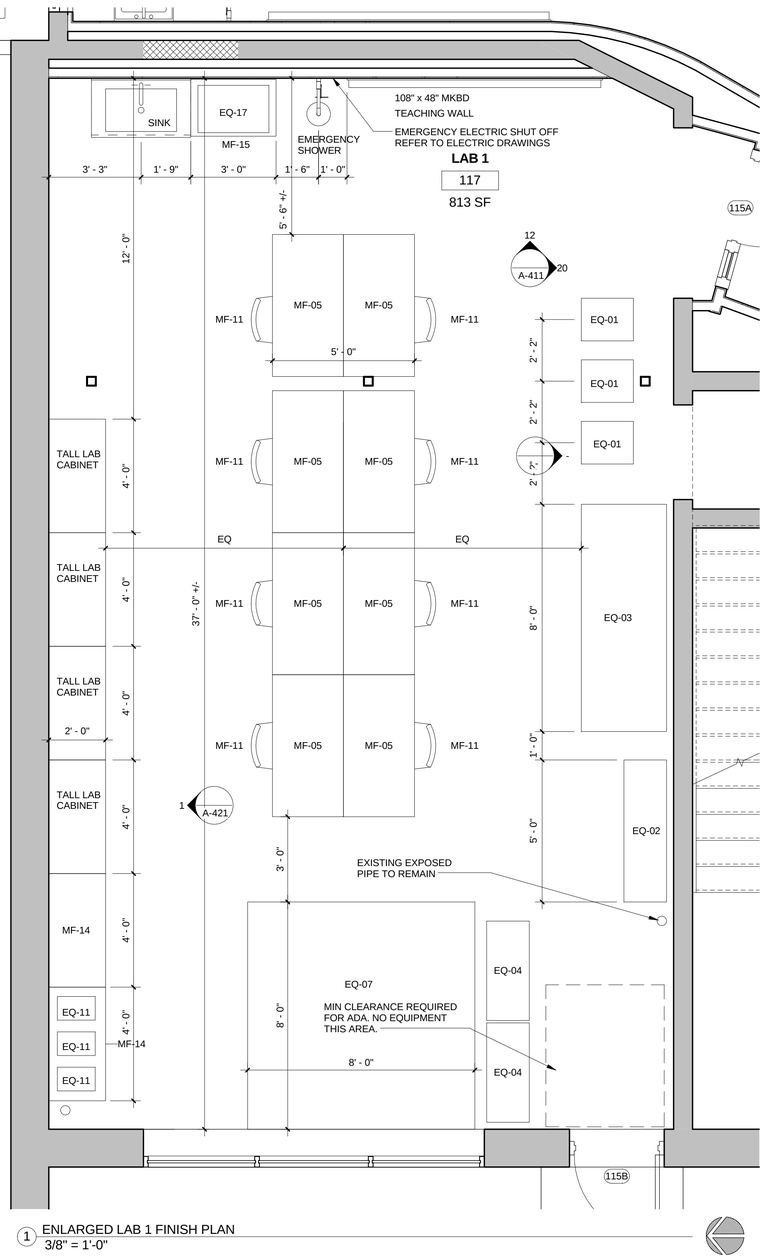
SCALE: As indicated

A-631

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



1 ENLARGED LAB 1 FINISH PLAN
3/8" = 1'-0"

MOVABLE FURNITURE	
MARK	TYPE
MF-01	DESK 24" x 30" x 30"
MF-02	DESK 24" x 42" x 30"
MF-03	DESK 24" x 60" x 30"
MF-04	DESK 24" x 60" x 30"
MF-05	DESK 30" x 60" x 30"
MF-06	DESK 36" DIAMETER, 4 CHAIRS
MF-08	DESK DEWEY SIX STATION
MF-09	BENCH
MF-10	GUEST CHAIR
MF-11	STUDENT CHAIR
MF-12	TASK CHAIR
MF-13	TASK CHAIR
MF-14	WORK BENCH 24" X 48" X 36"
MF-15	MOVABLE TABLE 24" X 36" X 36"
MF-16	PODIUM

OWNER PROVIDED EQUIPMENT	
MARK	TYPE
EQ-01	BAND SAW
EQ-02	METAL BENDER
EQ-03	LATHE
EQ-04	TOOL CHEST
EQ-05	COPIER
EQ-06	CHARPY IMPACT MACHINE
EQ-07	MILLING MACHINE
EQ-08	TENSILE TESTER
EQ-09	FATIQUE TESTER
EQ-10	HARDNESS TESTER
EQ-11	DRILL PRESS
EQ-12	OSCILLOSCOPE
EQ-13	OVEN
EQ-14	REFRIGERATOR
EQ-15	MICROWAVE
EQ-16	FLAT PANEL DISPLAY
EQ-17	3D PRINTER WASH

RECORD DRAWINGS

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

DATE:	12/05/14	06/19/15		
REVISIONS:	CONFORMED SET	RECORD DRAWINGS		

TRENARY HALL INTERIOR RENOVATION

ENLARGED FINISH PLAN

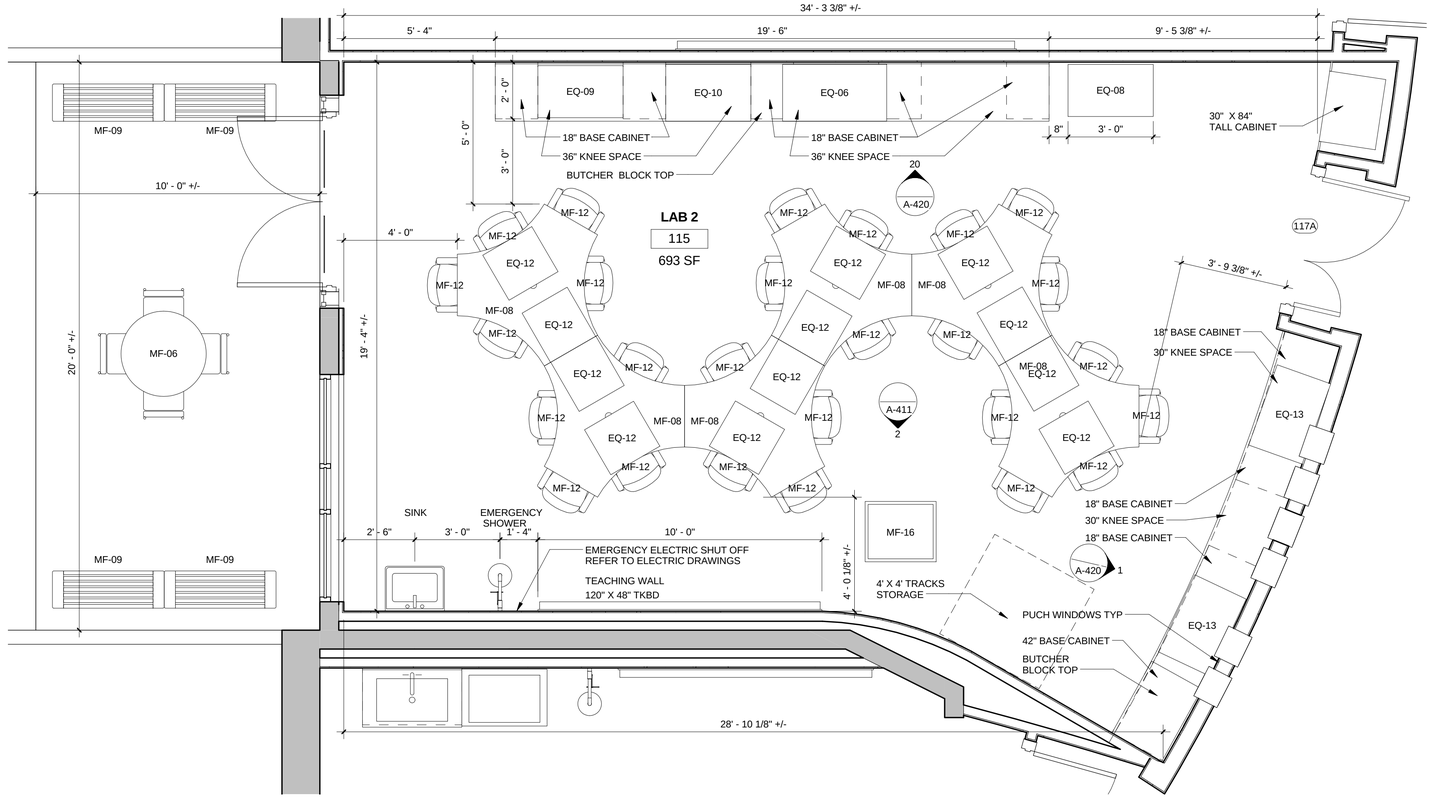
SCALE: 3/8" = 1'-0"

A-632

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



1 A633 ENLARGED LAB 2 FINISH PLAN
3/8" = 1'-0"

MOVABLE FURNITURE	
MARK	TYPE
MF-01	DESK 24" x 30" x 30"
MF-02	DESK 24" x 42" x 30"
MF-03	DESK 24" x 60" x 30"
MF-04	DESK 24" x 60" x 30"
MF-05	DESK 30" x 60" x 30"
MF-06	DESK 36" DIAMETER, 4 CHAIRS
MF-08	DESK DEWEY SIX STATION
MF-09	BENCH
MF-10	GUEST CHAIR
MF-11	STUDENT CHAIR
MF-12	TASK CHAIR
MF-13	TASK CHAIR
MF-14	WORK BENCH 24" X 48" X 36"
MF-15	MOVABLE TABLE 24" X 36" X 36"
MF-16	PODIUM

OWNER PROVIDED EQUIPMENT	
MARK	TYPE
EQ-01	BAND SAW
EQ-02	METAL BENDER
EQ-03	LATHE
EQ-04	TOOL CHEST
EQ-05	COPIER
EQ-06	CHARPY IMPACT MACHINE
EQ-07	MILLING MACHINE
EQ-08	TENSILE TESTER
EQ-09	FATIQUE TESTER
EQ-10	HARDNESS TESTER
EQ-11	DRILL PRESS
EQ-12	OSCILLOSCOPE
EQ-13	OVEN
EQ-14	REFRIGERATOR
EQ-15	MICROWAVE
EQ-16	FLAT PANEL DISPLAY
EQ-17	3D PRINTER WASH

RECORD DRAWINGS

SPGB Architects
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Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

ENLARGED FINISH PLAN

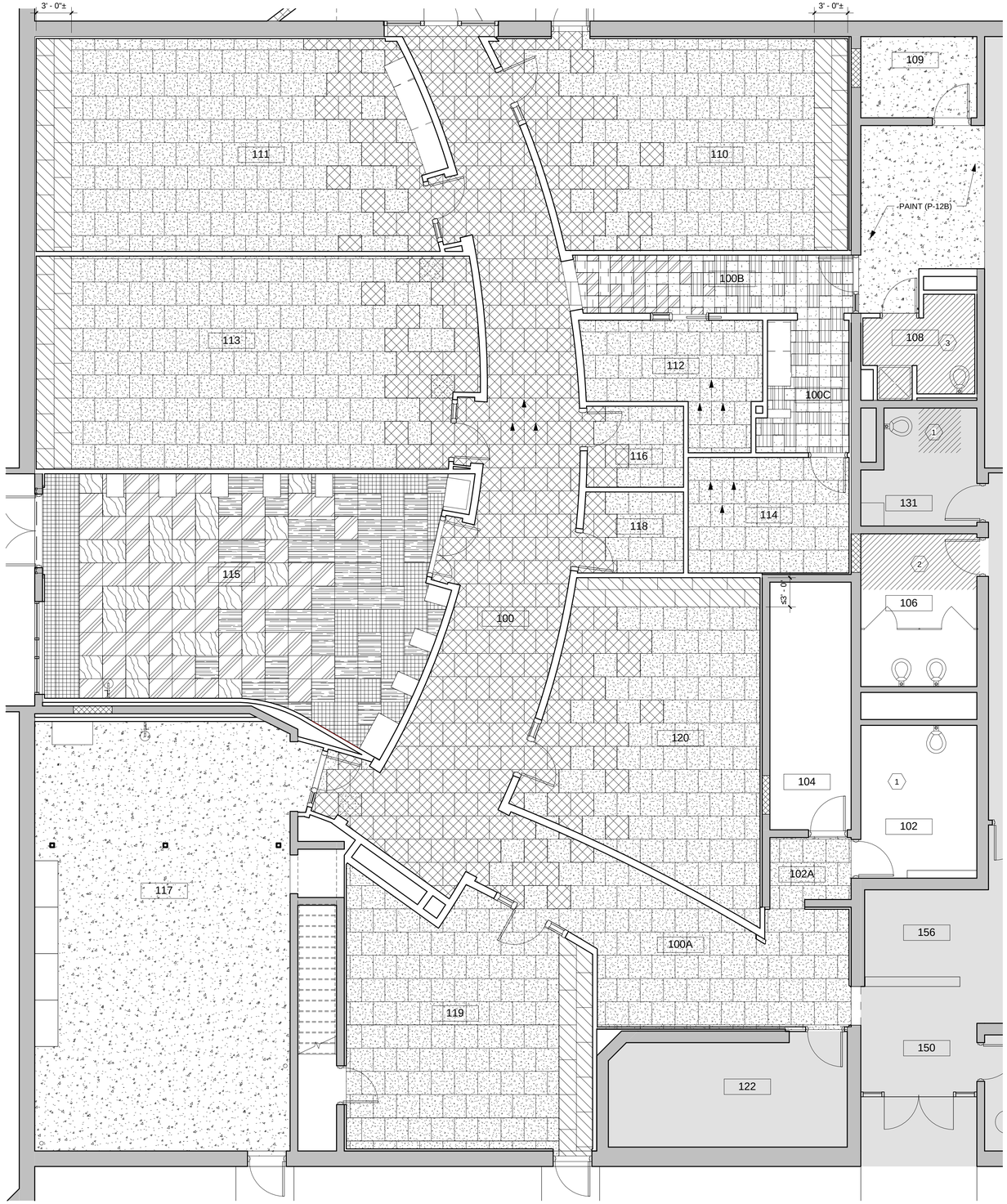
SCALE: 3/8" = 1'-0"

A-633

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 FLOOR PATTERN PLAN
3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO FINISH SCHEDULE FOR FLOOR FINISH DESIGNATIONS.

B. PAINT WALLS TO MATCH EXG, ADJACENT WALLS AT AREAS OF REPAIR & CONSTRUCTION. PAINT FULL FACE OF AFFECTED WALL.

C. INSTALL CPT IN BRICK PATTERN.

D. REPLACE WALL BASE THE ENTIRE LENGTH OF WALL WHERE EXISTING WALL BASE IS DISTURBED.

CODED NOTES:

1 PROVIDE TILE CT-1, CT-2, CT-3 AND T-4 TO MATCH EXISTING, AT LOCATIONS OF REMOVED, AND DAMAGED TILE.

2 PROVIDE TILE CT-1 TO MATCH EXISTING, AT LOCATIONS OF REMOVED, AND DAMAGED TILE.

3 PROVIDE TILE CT-1, CT-2, CT-3 AND CT-4 TO MATCH EXISTING PATTERN OF ROOM 102 FLOOR.

FLOOR PATTERN LEGEND

- CPT-1
- CPT-2
- CPT-3
- VCT-1
- VCT-2
- VCT-3
- VCT-4
- RFT-1
- RFT-2
- RFT-3
- RFT-4
- TILE
- SEALED CONCRETE (P-12B)
- CARPET TILE DIRECTION ARROW

RECORD DRAWINGS

SPGB Architects
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Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	EAM
CHECKED BY:	TWG

REVISIONS:	**DATE:**
CONFORMED SET	12/05/14
RECORD DRAWINGS	06/19/15

TRENARY HALL INTERIOR RENOVATION

ENLARGED FINISH PLAN

SCALE: As indicated

A-634

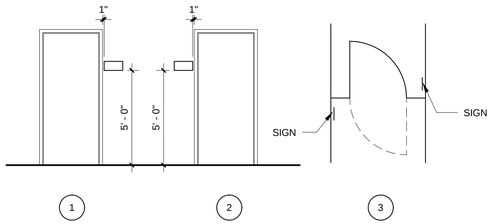
JOB NO.: 14022

DATE: 12/05/14

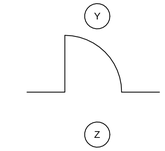
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

SIGNAGE SCHEDULE

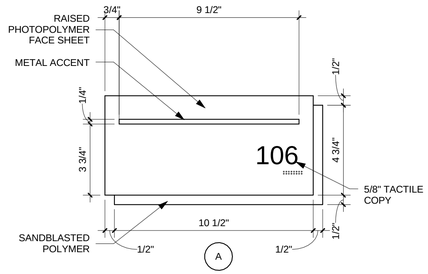
DOOR NO.	ROOM # ON SIGN	SIGN TYPE	SIGN LOCATION	SIDE OF DOOR	SIGNAGE COPY	REMARKS
102	-	B	1	Z	MEN'S	
106	-	B	2	Z	WOMEN'S	
108	-	B	1	Y	RESTROOM	
110	120	A	1	Z		
112	118	A	1	Z		
113	119	A	2	Z		
114	114	A	1	Z		
115A	117	A	3	Y		
116	116	A	2	Z		
117A	115	A	3	Y		
118	112	A	1	Z		
119	113	A	3	Y		
120A	110	A	2	Z		
121	111	A	3	Y		
151	122	A	1	Z		
202	202	A	1	Z		

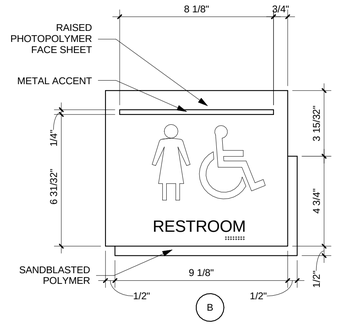


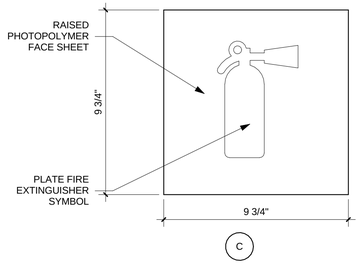
1 SIGN TYPES
1/4" = 1'-0"



2 SIDE OF DOOR
1/4" = 1'-0"







NOTE:
ALL SIGNS TO BE 7/8" TACTILE COPY, ALL CAPS, U.O.N. BRAILLE DIRECTLY BELOW COPY. BRAILLE SAME COLOR AS SIGN, U.O.N.

GENERAL NOTES:

A. ALL SIGNAGE IS TO BE FURNISHED & INSTALLED BY OWNER.

RECORD DRAWINGS

SPGB Architects
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Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	TWG

REVISIONS:	DATE:
CONFORMED SET	12/05/14
RELEASED FOR PERMITS	08/15/15

TRENARY HALL INTERIOR RENOVATION

SIGNAGE SCHEDULE & DETAILS

SCALE: As indicated

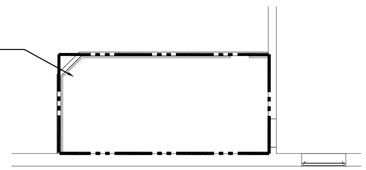
A-701

JOB NO.: 14022

DATE: 12/05/14

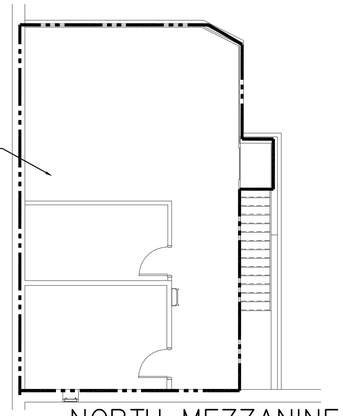
1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

FIRE PROTECTION NOTE:
PROVIDE SPRINKLER SYSTEM IN THIS AREA TO PROVIDE COMPLETE ORDINARY HAZARD GROUP 1 OCCUPANCY SPRINKLER PROTECTION/COVERAGE FOR THE TELECOM PLATFORM ABOVE ROOM 151.

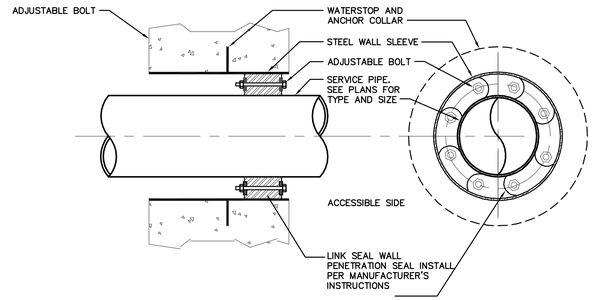


TELECOM PLATFORM FIRE PROTECTION PLAN
SCALE: 1/8"=1'-0"

FIRE PROTECTION NOTE:
PROVIDE SPRINKLER SYSTEM IN THIS AREA TO PROVIDE COMPLETE ORDINARY HAZARD GROUP 1 OCCUPANCY SPRINKLER PROTECTION/COVERAGE FOR THE MECHANICAL MEZZANINE.

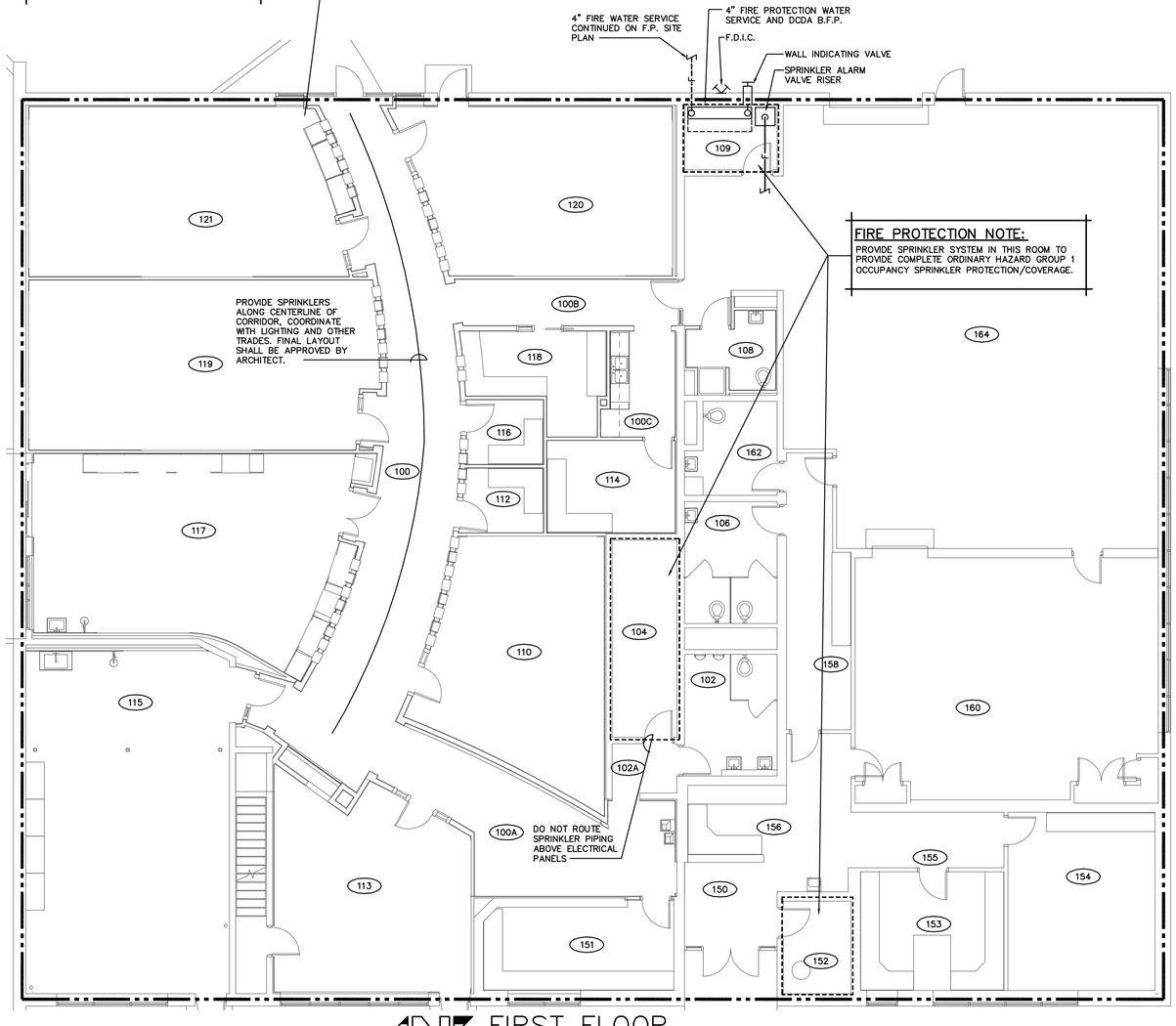


NORTH MEZZANINE FIRE PROTECTION PLAN
SCALE: 1/8"=1'-0"

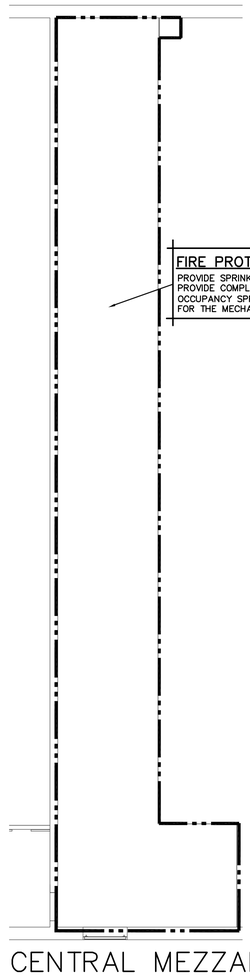


WATERTIGHT WALL PENETRATION FOR PIPES
NOT TO SCALE

FIRE PROTECTION NOTE:
PROVIDE SPRINKLER SYSTEM IN THIS AREA TO PROVIDE COMPLETE LIGHT HAZARD OCCUPANCY SPRINKLER PROTECTION/COVERAGE FOR THE PARTITION/STRUCTURAL LAYOUT. FINAL SPRINKLER HEAD LAYOUT IN THIS AREA TO BE APPROVED BY THE ARCHITECT.

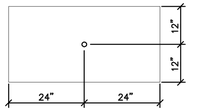


FIRST FLOOR FIRE PROTECTION PLAN
SCALE: 1/8"=1'-0"

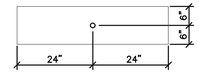


FIRE PROTECTION NOTE:
PROVIDE SPRINKLER SYSTEM IN THIS AREA TO PROVIDE COMPLETE ORDINARY HAZARD GROUP 1 OCCUPANCY SPRINKLER PROTECTION/COVERAGE FOR THE MECHANICAL MEZZANINE.

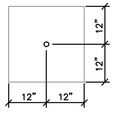
CENTRAL MEZZANINE FIRE PROTECTION PLAN
SCALE: 1/8"=1'-0"



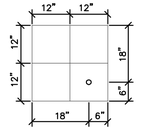
24"x48" CEILING TILE



12"x48" CEILING TILE



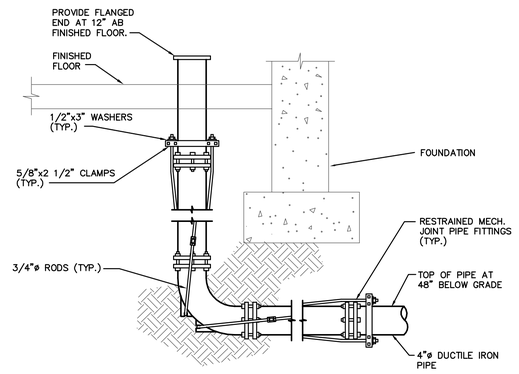
24"x24" CEILING TILE



12"x12" CEILING TILE

NOTE:
ALL LOCATIONS INDICATED ARE TO BE MAINTAINED WITHIN PLUS OR MINUS 1/2", AND ALIGNED WITH ADJACENT HEADS FOR A UNIFORM, EVEN APPERANCE OF COMPLETED INSTALLATION.

SPRINKLER HEAD LOCATION DETAIL
NOT TO SCALE



FIRE SERVICE ENTRANCE DETAIL
NOT TO SCALE

1-17

R These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

FP100-14165.DWG

PRATER
Engineering Associates, Inc.
6130 Wilcox Road (614) 766 4896
Dublin, Ohio 43016 FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
PNC	PNC	KCB	14165

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DESIGNED BY:	PNC
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CHECKED BY:	KCB

REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

FIRE PROTECTION PLAN

SCALE: AS NOTED

FP100

JOB NO.: 14022

DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

III. GRASS AND LANSCAPING NOTES (WORK INCLUDED UNDER THIS CONTRACT)

1.01 SCOPE

A. GENERAL: SPREAD AND CONDITION EXISTING STOCKPILED TOPSOIL; PROVIDE NEW, IF REQUIRED; LIME, TILL, DISTRIBUTE AND GRADE TOPSOIL; CLEAN UP AND DO RELATED WORK NECESSARY TO COMPLETE THE WORK SHOWN AND SPECIFIED ON THIS SHEET.

PART 2 PRODUCTS AND MATERIALS

2.01 TOPSOIL

A. ALL TOPSOIL SHALL BE SHREDDED, CLEAN, AND OF UNIFORM QUALITY FREE FROM HARD CLODS, STIFF CLAY, PARTIALLY DISINTEGRATED STONE, LIME, CEMENT, SLAG, OR OTHER UNDESIRABLE MATERIAL. TOPSOIL SHALL CONFORM TO THE FOLLOWING:

1. ORGANIC CONTENT: TOPSOIL SHALL CONTAIN BETWEEN 3% AND 10% ORGANIC MATTER AS DETERMINED BY LOSS OF IGNITION.
2. PH: TOPSOIL PH SHALL RANGE BETWEEN 6.0 AND 7.5
3. SOIL TEXTURE: TOPSOIL SHALL CONSIST OF THE FOLLOWING PERCENTAGES OF SAND, SILT, AND CLAY PASSING THROUGH A 2.00MM (#10) SIEVE:
   a.SAND: 30% TO 75%
   b.SILT: 15% TO 70%
   c.CLAY: 10% TO 30%

B. TOPSOIL MUST BE APPROVED BY THE GROUNDS MANGER PRIOR TO PLACEMENT. TOPSOIL TEST RESULTS SHALL SHOW RECOMMENDATION FOR SOIL ADDITIVES OR FERTILIZERS TO CORRECT NUTRIENT DEFICIENCIES AS NECESSARY.

2.02 SOD

A. GROUNDS MANAGER APPROVED NURSERY GROWN TURF-TYPE TALL FESCUE BLEND SUITABLE FOR JOB SPECIFIC EXPOSURE, WEARABILITY, AND DISEASE RESISTANCE CONFORMING TO THE FOLLOWING PERCENTAGES OF GRASS TYPE:

1. 100% – TURF TYPE TALL FESCUE

B. PROVIDE WELL-ROOTED, HEALTHY SOD, FREE OF DISEASES, NEMATODES, AND SOIL BORNE INSECTS. PROVIDE SOD IN UNIFORM COLOR, LEAF, TEXTURE, DENSITY, AND FREE OF WEEDS, UNDESIRABLE GRASSES, CAPABLE OF GROWTH AND DEVELOPMENT WHEN PLANTED. SOD IS CONSIDERED FREE OF WEEDS IF LESS THAN 5 WEEDS ARE FOUND PER 100 SQ. FT.

C. FURNISH SOD MACHINE STRIPPED AND OF SUPPLIER'S STANDARD WIDTH AND LENGTH; UNIFORMLY 1 TO 1-1/2" THICK WITH CLEAN CUT EDGES. SOD SHALL BE RELATIVELY FREE OF THATCH, UP TO ½" PERMISSIBLE. SOD SHALL BE MOWED UNIFORMLY BEFORE HARVESTING.

D. DELIVERY, STORAGE, AND HANDLING: SOD SHALL BE HARVESTED, DELIVERED, AND TRANSPORTED WITHIN A PERIOD OF TWENTY-FOUR (24) HOURS.

1. DO NOT HARVEST OR TRANSPORT SOD WHEN MOISTURE CONTENT MAY ADVERSELY AFFECT SOD SURVIVAL.
2. PROTECT SOD FROM SUN, WIND, AND DEHYDRATION PRIOR TO INSTALLATION.
3. DO NOT TEAR, STRETCH, OR DROP SOD DURING HANDLING AND INSTALLATION.

PART 3 EXECUTION

3.01 PREPARATION OF SEED BED/ SODDED AREAS

A. DE-COMPACTION: DE-COMPACT AREAS HEAVILY TRAFFICKED BY CONSTRUCTION ACTIVITIES WITH HOE OR OTHER PFD GROUNDS MANAGER APPROVED METHOD PRIOR TO ROUGH GRADING.

B. ROUGH GRADING: GRADE SURFACES TO ASSURE DRAINAGE AWAY FROM STRUCTURES AND TO PREVENT PONDING AND POCKETS OF SURFACE DRAINAGE. PROVIDE SUBGRADE FREE FROM IRREGULAR SURFACE CHANGES AND AS FOLLOWS:

1. ROUGH GRADE SHALL EQUAL PLUS/ MINUS 0.20 FT., SUB GRADE TOLERANCE SHALL BE FREE OF EXPOSED BOULDERS OR STONES EXCEEDING 1? IN GREATEST DIMENSION.
2. FILL IN ALL AREAS OF SETTLEMENT TO PROPER GRADE BEFORE SUBSEQUENT PLACEMENT OF TOPSOIL.

3.02 INSTALLATION OF GRASS SEED

A. GRASS SEED SHALL ONLY BE SOWN AT TIMES APPROVED BY THE GROUNDS MANAGER. GRASS SEED SHALL BE AS APPROVED BY THE GROUNDS MANAGER

B. PERFORM SEEDING WORK ONLY AFTER PLANTING AND OTHER WORK AFFECTING THE GROUND SURFACE HAVE BEEN COMPLETED. LIMIT PREPARATION OF SEED AREAS TO THOSE READY FOR IMMEDIATE SEEDING.

C. SEED IMMEDIATELY AFTER PREPARATION OF BED.

D. PERFORM SEEDING OPERATIONS WHEN SOIL IS DRY AND WHEN WINDS DO NOT EXCEED FIVE MILES PER HOUR VELOCITY.

E. SEED TO BE APPLIED AT APPROVED MANUFACTURED RATES IN CROSS DIRECTIONS WITH APPROVED SEED DRILLING OR SLICE SEEDING EQUIPMENT. APPLY 50% OF THE SEED IN EACH DIRECTION. SEED APPLICATION BY HYDRO-SEEDING METHODS ARE NOT ACCEPTABLE.

F. APPLY HYDRO-MULCH WITH APPROVED HYDRO-MULCH EQUIPMENT IMMEDIATELY AFTER SEEDING. SLURRY TO BE COMPOSED OF CLEAN WATER AND MULCH. APPLY MULCH SLURRY AT MINIMUM RATE OF 1,500 POUNDS TO 2,000 POUNDS PER ACRE ON SLOPES STEEPER THAN 4:1. DIRECT SLURRY TO EVENLY COVER DESIGNATED SEED AREAS. REPAIR RUTS, DEPRESSIONS AND ALL DAMAGE CAUSED BY HYDRO-MULCHING EQUIPMENT.

G. IMMEDIATELY RESEED AND REAPPLY HYDRO-MULCH TO AREAS THAT SHOW POOR GERMINATION.

3.03 INSTALLATION OF SOD

A. PERFORM SODDING WORK ONLY AFTER PLANTING AND OTHER WORK AFFECTING THE GROUND SURFACE HAVE BEEN COMPLETED. LIMIT PREPARATION OF SODDED AREAS TO THOSE READY FOR IMMEDIATE SODDING.

B. SOD IMMEDIATELY AFTER PREPARATION OF BED.

C. INSTALL INITIAL ROW OF SOD IN A STRAIGHT LINE, BEGINNING AT BOTTOM OF SLOPES, PERPENDICULAR TO DIRECTION OF THE SLOPED AREA. PLACE SUBSEQUENT ROWS PARALLEL TO AND TIGHTLY AGAINST PREVIOUSLY INSTALLED ROW.

D. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. SOD STRIPS SHALL BUTT CLOSE TOGETHER WITH NO VOIDS BETWEEN THE PIECES. CARE SHALL BE EXERCISED TO ENSURE THAT THE SOD IS NOT STRETCHED OR OVERLAPPED. LATERAL JOINTS SHALL BE STAGGERED. REMOVE EXCESS SOD TO AVOID SMOTHERING OF ADJACENT GRASS. PROVIDE SOD PAD TOP FLUSH WITH ADJACENT CURBS, SIDEWALKS, DRAINS, AND SEEDED AREAS.

E. TO ENHANCE ROOTING, MOISTEN THE SOIL TO A DEPTH OF FOUR (4) TO SIX (6) INCHES TWENTY-FOUR (24) HOURS BEFORE LAYING SOD. DO NOT LAY SOD ON A HOT DRY SOIL SURFACE.

F. DO NOT LAY, PLACE OR INSTALL DORMANT SOD PADS ON SATURATED OR FROZEN SOIL.

G. PEG SOD ON SLOPES GREATER THAN 3:1 TO PREVENT SLIPPAGE AT A RATE OF TWO STAKES PER YD. OF SOD.

H. WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER LAYING/INSTALLATION.

I. ROLL WITH LIGHT LAWN ROLLER TO ENSURE CONTACT WITH SUB-GRADE.

3.04 MAINTENANCE

A. WATERING AND MAINTENANCE ACTIVITIES MUST BE REVIEWED AND APPROVED WITH THE PFD GROUNDS MANAGER. UNLESS OTHERWISE APPROVED, THE FOLLOWING REQUIREMENTS ARE TO BE COMPLETED AT A MINIMUM:

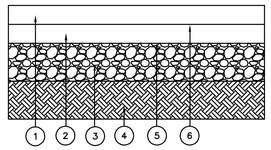
1. MAINTAIN NEW INSTALLED SEEDED/ SODDED LAWN AREAS IN AN ACCEPTABLE MANNER UNTIL FINAL ACCEPTANCE OF PROJECT, INCLUDING WATERING, SPOT WEEDING, MOWING, TRIMMING, REMOVAL OF CLIPPINGS, LEAF REMOVAL, APPLICATION OF HERBICIDES, FUNGICIDES, INSECTICIDES, AND RE-SEEDING UNTIL A FULL, UNIFORM STAND OF GRASS FREE OF WEED, UNDESIRABLE GRASS SPECIES, DISEASE, AND INSECTS IS ACHIEVED AND ACCEPTED BY THE PFD GROUNDS MANAGER.
2. WATER DAILY TO MAINTAIN ADEQUATE SURFACE SOIL MOISTURE FOR PROPER SEED GERMINATION. CONTINUE DAILY WATERING FOR NOT LESS THAN THIRTY (30) DAYS. THEREAFTER APPLY ONE-HALF (1/2) INCH WATER EVERY TWO OR THREE DAYS UNTIL ACCEPTED.
3. REPAIR, RE-WORK, RE-SEED, AND OR SOD ALL RESPECTIVE AREAS THAT HAVE WASHED OUT, ARE ERODED, OR DID NOT CATCH.
4. SET MOWER BLADES AT A MINIMUM HEIGHT OF TWO AND ONE-HALF (2-1/2) INCHES. NOT MORE THAN THIRTY (30) PERCENT OF THE GRASS LEAF/BLADE SHALL BE REMOVED AT THE INITIAL OR SUBSEQUENT MOWING. MOW ALL LAWNS BEFORE TURF REACHES A HEIGHT OF FOUR (4) INCHES.
5. IF INFESTATION OF WEEDS OR CRABGRASS DEVELOPS, TREAT INFESTATION BY HAND WEEDING OR HERBICIDAL CONTROL. FURNISH AND INSTALL WEED CHEMICAL CONTROL AS RECOMMENDED BY MANUFACTURER. HERBICIDAL CONTROLS, INCLUDING RENOVATION BEFORE SEEDING OPERATIONS, SHALL BE ACCEPTABLE TO THE PFD GROUNDS MANAGER.

3.05 ACCEPTANCE

A. INSPECTION TO DETERMINE ACCEPTANCE OF INSTALLED LAWNS WILL BE MADE BY THE GROUNDS MANAGER, UPON CONTRACTOR'S REQUEST. PROVIDE NOTIFICATION AT LEAST THREE (3) WORKING DAYS BEFORE REQUESTED INSPECTION DATE.

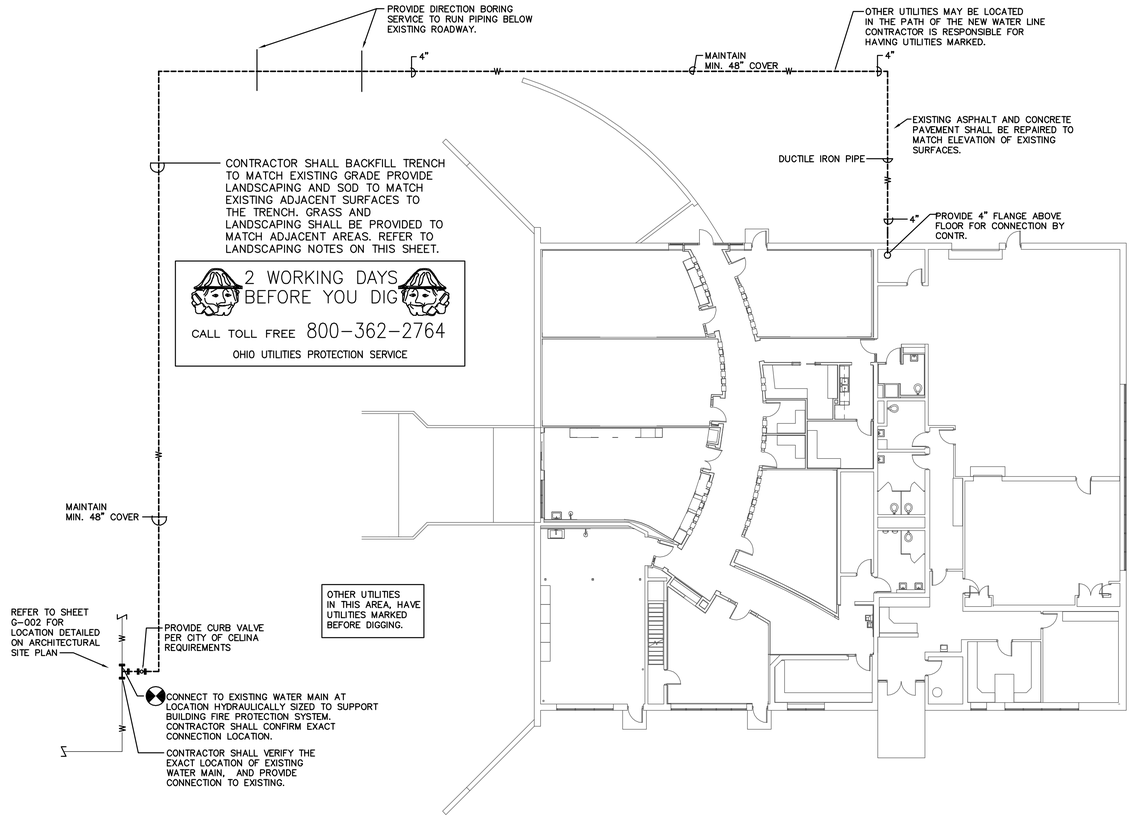
1. NEW LAWN AREAS WILL BE ACCEPTABLE PROVIDED ALL REQUIREMENTS, INCLUDING MAINTENANCE, HAVE BEEN COMPLIED WITH, AND A HEALTHY UNIFORM, CLOSE STAND OF GRASS IS ESTABLISHED FREE OF WEEDS, UNDESIRABLE GRASS SPECIES, DISEASE AND INSECTS.
2. NO INDIVIDUAL LAWN AREAS SHALL HAVE BARE SPOTS OR UNACCEPTABLE COVER TOTALING MORE THAN TWO (2) PERCENT OF THE INDIVIDUAL AREAS, IN THOSE AREAS REQUESTED FOR INSPECTION.
3. UPON ACCEPTANCE, THE UNIVERSITY WILL ASSUME LAWN MAINTENANCE.

CONTRACT NOTE:
ALL CUTTING, TRENCHING, BACKFILL, SODDING, AND LANDSCAPING, AND ASPHALT REPAIR REQUIRED UNDER THIS CONTRACT TO INSTALL THE NEW FIRE PROTECTION WATER SERVICE LINE AND REPAIR THE EXTERIOR GRADE TO PRE-CONTRACT CONDITIONS SHALL BE THE SOLE RESPONSIBILITY OF THIS CONTRACTOR AND COORDINATED WITH WRIGHT STATE UNIVERSITY IN ADVANCE OF WORK.



1. 1-1/2" ASPHALT CONCRETE, SURFACE COURSE
2. 1-1/2" ASPHALT CONCRETE, INTERMEDIATE COURSE
3. 10" AGGREGATE BASE
4. 12" MIN. SUB GRADE COMPACTION
5. BITUMINOUS PRIME COAT
6. TACK COAT (0.10 GAL/ SQ.YD.)

ASPHALT PAVEMENT SECTION



SITE FIRE PROTECTION PIPING PLAN

SCALE: 1/16"=1'-0"

SITE UTILITY NOTES

1. ALL PIPING SHOWN ON THIS DRAWING IS BELOW GRADE, UNLESS INDICATED OTHERWISE.
2. REFER TO ENGINEERING, ARCHITECTURAL, LANDSCAPING AND OTHER DOCUMENT-ATION (AS APPLICABLE) INCLUDED WITH PROJECT CONSTRUCTION PACKAGE FOR CON-FIRMATION OF ITEMS/CONDITIONS INDICATED, AND ADDITIONAL WORK IN THESE AREAS UNDER SEPARATE CONTRACT THAT IMPACTS/INTERFACES WITH WORK IN THIS CON-TRACT. COORDINATE ALL INFORMATION PROVIDED AS REQUIRED FOR PROPER INSTALL-ATION/OPERATION OF ITEMS/ELEMENTS.
3. NOTE THAT INFORMATION PROVIDED REGARDING EXISTING ITEMS/ELEMENTS IS FROM FIELD OBSERVATION AND EXISTING DOCUMENTATION AVAILABLE FOR THE AREAS INDIC-ATED. ACTUAL CONDITIONS, SIZES, LOCATIONS, ETC, TO BE FIELD VERIFIED BY THIS CONTRACTOR IN ADVANCE OF WORK.
4. COORDINATE INSTALLATION OF ALL ITEMS/WORK WITH SITE CONDITIONS (NEW AND EXISTING) AND WORK OF OTHER TRADES, BOTH IN AND AT GRADE. EXISTING SITE CONDITIONS TO BE CONFIRMED IN THE FIELD (WHETHER INDICATED ON PLANS OR NOT).
5. PRIOR TO START OF WORK, THIS CONTRACTOR SHALL CONTACT THE UNDERGROUND UTILITY INFORMATION SERVICE AT 800-362-2764 TO ARRANGE FOR CONFIRMATION OF EXISTING UNDERGROUND ELEMENTS (WHETHER INDICATED ON PLANS OR NOT).
6. WORK IMPACTING SPECIFIC UTILITIES TO BE COORDINATED/SCHEDULED WITH THE APPROPRIATE AUTHORITIES AND THE OWNER IN ADVANCE. INTERRUPTION OF OR IM-PAIRMENT TO SERVICE (IF REQUIRED) TO BE KEPT TO A MINIMUM.
7. UNLESS INDICATED OTHERWISE ON PLAN OR BY THE LOCAL AUTHORITIES (CONFIRMED IN ADVANCE) MAINTAIN MINIMUM COVER FOR UNDERGROUND SERVICES AS FOLLOWS:
   A. WATER SERVICE – 48"
8. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL OF ANY EXISTING FINISH SURFACE AND/OR STRUCTURES AS REQUIRED TO EXECUTE INSTALLATION OF NEW WORK AND ASSOCIATED ELEMENTS. THIS INCLUDES ELEMENTS THAT MAY NOT BE INDICATED ON THE PLANS WHICH SHALL BE IDENTIFIED BY FIELD VERIFICATION. REMOVAL OF EXISTING CONCRETE OR PAVED STRUCTURES TO BE TO THE NEAREST EXPANSION/CONSTRUCTION JOINT OR SEAM; OR PERIMETER OF STRUCTURE (AS APPLICABLE), PROVIDED THAT SUCH JOINTS, SEAMS OR PERIMETER DOES NOT EXCEED 10 LINEAR FEET DISTANCE IN ANY SINGLE DIRECTION FROM LIMITS OF REMOVAL REQUIRED FOR ACTUAL INSTALLATION OF NEW WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PATCHING AND REPAIR OF SURFACES. THIS CONTRACTOR IS RESPONSIBLE FOR ALL BACKFILLING TO A POINT THAT WILL COMPLIMENT THE GENERAL CONTRACTOR AND HIS BASE OF THE APPLIED SURFACES MATERIAL.
10. EXCAVATION AND ALL OTHER WORK ASSOCIATED WITH THIS PROJECT TO BE DONE IN SUCH A MANNER AS TO MINIMIZE POTENTIAL FOR DAMAGE TO EXISTING UNDERGROUND UTILITIES, STRUCTURES, AND OTHER ELEMENTS WITHIN AND ADJACENT TO THE CON-STRUCTION LIMITS, WHETHER INDICATED ON DRAWINGS OR NOT. DAMAGE TO ELEMENTS AS A RESULT OF WORK IN THIS CONTRACT SHALL BE REPAIRED TO THE OWNER'S AND/OR UTILITY AUTHORITY'S SATISFACTION, AT THIS CONTRACTORS EXPENSE.
11. ALL SITE GRADES/ELEVATIONS AND EXACT LOCATIONS OF ITEMS/ELEMENTS TO BE IN, AT OR FLUSH WITH FINISHED SURFACE OR SITE STRUCTURES (MANHOLES, CURBS, PITS, SLABS ON GRADE, ETC.) PROVIDED IN THIS CONTRACT, OR UNDER SEPARATE CON-TRACT TO BE CONFIRMED WITH THE SITE IMPROVEMENTS/MODIFICATIONS DOCUMENTAT-ION IN ADVANCE OF WORK, & INSTALLATION COORDINATED WITH THE APPROPRIATE CONTRACTOR(S) . THIS INCLUDES DRAIN INLETS, ACCESS FRAMES AND COVERS, CURB BOXES, INDICATING POST ASSEMBLIES, ETC.. SPECIAL CONSIDERATION IS TO BE GIVEN TO DRAIN INLETS IN SLOPED STRUCTURE/SURFACE TO INSURE PROPER PLACEMENT AND OPERATION.
12. ALL NEW AND/OR EXISTING SITE GRADES/ELEVATIONS RELATIVE TO MINIMUM COVER REQUIREMENTS FOR UNDERGROUND ITEMS/ELEMENTS INSTALLATION TO BE CONFIRMED IN FIELD AND/OR WITH SITE IMPROVEMENTS/MODIFICATIONS DOCUMENTATION IN AD-VANCE OF WORK, AND INSTALLATION COORDINATED AS REQUIRED.
13. ALL SITE GRADES/ELEVATIONS RELATIVE TO EXTENSION ASSEMBLIES REQUIRED FOR OPERATION OF OR ACCESS TO UNDERGROUND ITEMS/ELEMENTS TO BE CONFIRMED WITH THE SITE IMPROVEMENTS/MODIFICATIONS DOCUMENTATION IN ADVANCE OF WORK, AND INSTALLATION COORDINATED WITH THE APPROPRIATE CONTRACTOR. THIS IN-CLUDES OPERATION EXTENSIONS FOR UNDERGROUND VALVES, ACCESS EXTENSIONS FOR MANHOLE OR PIT FRAMES AND COVERS, ETC.
14. INSTALLATION OF UNDERGROUND WATER SERVICE AND APPURTENANCES TO COMPLY WITH THE REQUIREMENTS AND GUIDELINES OF THE CITY OF CELINA DIVISION OF WATER IN RESPECT TO MATERIALS, EXCEPT WHERE NOTED, AND METHODS, CONFIRMED IN ADV-ANCE OF WORK. THIS INCLUDES PROCUREMENT OF INSTALLATION DOCUMENTATION (STANDARD DETAILS, DRAWINGS, SPECIFICATIONS, ETC.) WHEN AND IF AVAILABLE FROM SAID AUTHORITIES. ALL WATER SERVICE MATERIALS TO BE AWWA, ASTM, AND NSF LISTED.
15. INSTALLATION OF SITE UTILITY ELEMENTS SUCH AS TAPS, CURB VALES, PIPING, ETC. TO BE IN ACCORDANCE WITH THE STANDARDS DEVELOPED BY THE CITY OF CELINA DIV-ISION OF WATER, INCLUDING MATERIALS AND METHODS. REQUIREMENTS TO BE COORD-INATED AND CONFIRMED IN ADVANCE OF WORK, INCLUDING PROCUREMENT OF INSTALL-ATION DOCUMENTATION, WHEN AVAILABLE.
15. CONTRACTOR SHALL REPAIR EXISTING PAVEMENT TRENCHED FOR INSTALLATION OF THE FIRE WATER SERVICE. REPAIR SHALL INCLUDE FULL DEPTH PAVEMENT REMOVAL AND PROOF ROLL OF SUB GRADE. IF REQUIRED CONTRACTOR SHALL UNDERCUT UNSUITABLE SOIL AND BACKFILL WITH GRANULAR MATERIAL, COMPACT AND REPLACE ASPHALT PAVEMENT PER DETAIL ON THIS SHEET.

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Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY: PNC
DRAWN BY: PNC
CHECKED BY: KCB

DATE:	REVISIONS:
12-05-14	CONFORMED SET
2-20-15	PROPOSAL REQUEST 009
6-19-15	RECORD DRAWINGS

TRENARY HALL INTERIOR RENOVATION

FIRE PROTECTION SITE PLAN

SCALE: AS NOTED

FP101

JOB NO.: 14022
DATE: 12/05/14

1-17

R These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

FP101-14165.DWG

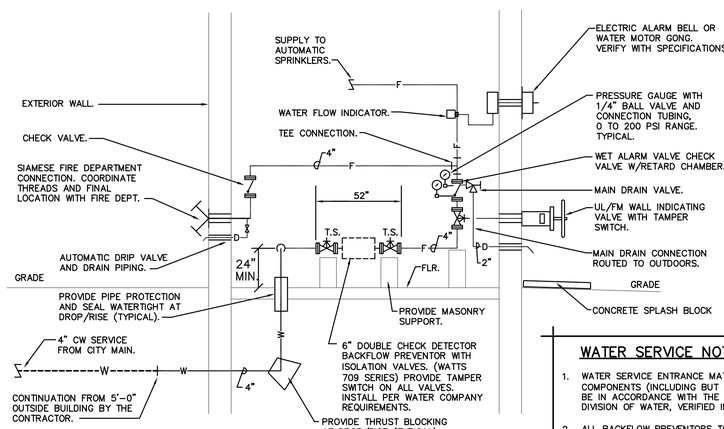
PRATER
Engineering Associates, Inc.
6130 Wilcox Road (614) 766 4896
Dublin, Ohio 43016 FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
PNC	PNC	KCB	14165

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

FIRE PROTECTION NOTES

1. ALL FIRE PROTECTION CONTRACT WORK IS TO COMPLY WITH THE APPLICABLE NFPA STANDARDS REFERENCED IN THE BUILDING CODE (OBC) AS ADMINISTERED BY THE LOCAL REVIEW/INSPECTION/APPROVAL AUTHORITIES, THE INSURANCE UNDERWRITER'S GUIDELINES, THE LOCAL FIRE PREVENTION AUTHORITY (FIRE MARSHALL'S OFFICE/FIRE DEPT.), AND ANY OTHER AUTHORITIES HAVING JURISDICTION, AS CONFIRMED AND VERIFIED IN ADVANCE BY THE LICENSED CONTRACTOR.
2. THE BUILDING IS TO BE TOTALLY SPRINKLED PER NFPA PAMPHLET NO. 13 AND PROVIDED WITH MANUAL WET STANDPIPES REQUIRED FOR COMPLETE COVERAGE/PROTECTION PER NFPA PAMPHLET NO. 14.
3. THE BUILDING SPRINKLER SYSTEM IS TO BE ZONED BY FLOORS AND AT OTHER SPECIFIC AREAS AS INDICATED ON THE DRAWINGS.
   A. LIGHT HAZARD OCCUPANCY = .10 GPM PER SQUARE FOOT OF FLOOR AREA WHEN ALL SPRINKLERS WITHIN THE MOST REMOTE 1,500 SQUARE FEET OF FLOOR AREA ARE OPERATING. MAXIMUM SPACING OF SPRINKLER HEADS SHALL BE 225 SQUARE FEET PER HEAD.
   B. ORDINARY HAZARD GROUP 1 OCCUPANCY = .15 GPM PER SQUARE FOOT OF FLOOR AREA WHEN ALL SPRINKLERS WITHIN THE MOST REMOTE 1,500 SQUARE FEET OF FLOOR AREA ARE OPERATING. MAXIMUM SPACING OF SPRINKLER HEADS SHALL BE 130 SQUARE FEET PER HEAD.
   C. ADD A TOTAL ALLOWANCE OF 100 GPM FOR SIMULTANEOUS USE OF INSIDE (IF ANY) AND OUTSIDE HOSE STREAMS FOR LIGHT HAZARD OCCUPANCY AND 250GPM FOR ORDINARY HAZARD OCCUPANCY CALCULATIONS AT THE APPROPRIATE CONNECTION POINT(S).
   D. DESIGN AREAS LISTED HEREIN MAY BE REDUCED IN ACCORDANCE WITH NFPA PAMPHLET NO. 13 ALLOWANCE FOR USE OF QUICK RESPONSE SPRINKLER HEADS, PROVIDED THE INSTALLATION COMPLIES WITH ALL SPECIFIED CONDITIONS.
4. THE SPRINKLER SYSTEMS SHALL BE SUPPLIED FROM THE BUILDING MANUAL WET STANDPIPES AS SHOWN ON THE DRAWINGS. THE STANDPIPES SHALL BE SIZED PER NFPA PAMPHLET NO. 14, AND THE APPLICABLE BUILDING CODE TO PROVIDE 500 GPM FOR THE FIRST STANDPIPE, AND 250 GPM PER EACH ADDITIONAL STANDPIPE, TO A MAXIMUM 1,250 GPM. TOTAL DEMAND FOR THE FIRE PROTECTION SYSTEM IS TO BE CALCULATED BASED ON EITHER THE STANDPIPE OR SPRINKLER (INCLUDING HOSE STREAMS) FLOW FLOW REQUIREMENT, WHICHEVER IS GREATER.
5. THE CONTRACTOR SHALL SIZE ALL FIRE PROTECITON SYSTEM PIPING, WITH THE EXCEPTION OF PIPING SIZES INDICATED ON THESE PLANS AT SPECIFIC LOCATIONS.
6. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL PIPING, EQUIP. AND ACCESSORIES WHETHER SHOWN ON DWG'S. OR NOT, WHICH IS REQ'D TO PROVIDE COMPLETE STANDPIPE, SPRINKLER & OTHER FIRE PROTECTION SYSTEMS FOR THE BUILDING.
7. ALL F.P. SPRINKLER HEADS SHALL BE INSTALLED IN A CONSISTANT, EVENLY SPACED MANNER, ALIGNED WITH ADJACENT HEADS IN EACH DIRECTION TO PRESENT A UNIFORM AND SYMMETRICAL APPEARANCE FROM WITHIN THE OCCUPIED SPACE. FINAL LAYOUT SHALL BE SUBJECT TO APPROVAL DURING REQUIRED PRELIMINARY REVIEW OF PLANS PRIOR TO FINAL SUBMISSION OF THESE PLANS TO CONSTRUCTION REVIEW/APPROVAL.
8. COORD. ALL DROPS FOR PENDANT SPRINKLER HEADS WITH CLG. GRIDS, STRUCTURE & WORK OF OTHER TRADES. VERIFY LOCATION OF ALL ITEMS/ELEMENTS PROVIDED BY OTHER TRADES FROM APPROPRIATE CONTRACT DOCUMENTATION INLCUDED WITH COMPLETE CONSTRUCTION DOCUMENTATOIN PACKAGE, AND COORDINATE WITH THE ASSOCIATED CONTRACTOR FOR PROPER INSTALLATION.
9. PROVIDE DRAIN VALVES AND AUXILLIARY DRAINS PER NFPA REQUIREMENTS, AND AT LOW AND/OR TRAPPED PIPING POINTS WHEN SUCH ARE UNAVOIDABLE, TO ALLOW COMPLETE DRAIN DOWN OF PIPING SYSTEM. PIPING SHALL BE INSTALLED TO DRAIN AT THE MAIN RISER(S) WHENEVER POSSIBLE.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, DRAINS ASSOCIATED WITH WORK/EQUIPMENT INCLUDED IN THE CONTRACT ARE TO BE EXTENDED FULL SIZE TO LOCATIONS SUBJECT TO APPROVAL DURING REVIEW OF REQUIRED LAYOUT PLANS. APPROPRIATE DRAIN DISCHARGE POINTS ARE AS FOLLOWS, LISTED IN ORDER OF PREFERENCE:
    A. BUILDING EXTERIOR, WITH CHROME FINISHED 45 DEGREE OUTLET & WALL FLANGE, AND SPLASHBLOCK AT GRADE/SURFACE IN RESTRICTED ACCESS AREAS (DISCHARGE NOT PERMITTED IN PEDESTRIAN OR PUBLIC ACCESS AREAS, INCLUDING ADJACENT SPACES/AREAS THAT COULD RECEIVE OVERSPRAY/OVERFLOW FROM SUCH DRAINS)
    B. IF DRIP PANS ARE REQUIRED AT FIRE PROTECTIOIN INSTALLATIONS, AND DRAIN DISCHARGE POINTS INDICATED ABOVE ARE NOT AVAILABLE/ACCESSIBLE, DRAIN(S) FROM DRIP PANS MAY EXTEND TO DISCHARGE 3" ABOVE FLOOR IN NON-CRITICAL RESTRICTED ACCESS AREAS OUTSIDE THE ENCLOSED AREA AS A FIRST PRIORITY, OR INSIDE THE ENCLOSURE AS SECOND PRIORITY
11. CONTRACTOR TO PROVIDE ALL ADDITIONAL STEEL, HANGER MATERIALS, RODS AND CLAMPS AS REQ'D. FOR COORD. AND APPROVED INSTALLATION.
12. PROVIDE INSPECTOR'S TEST CONNECTION ASSEMBLIES AS SHOWN ON DRAWINGS, AND ANY ADDITIONAL TEST ASSEMBLIES AS REQUIRED FY INSPECTION/APPROVAL AUTHORITIES. ASSEMBLIES TO COMPLY WITH THE REQUIREMENTS OF NFPA PAMPHLET NO. 13, AND THE FIRE PROTECTION AUTHORITY, INCLUDING MATERIALS AND CONFIGURATION. COORDINATE INSTALLATION WITH STRUCTURE AND WORK OF OTHER TRADES. CONCEAL ASSEMBLIES WHEN STRUCTURE IS PROVIDED TO DO SO, AND COORDINATE FOR APPROVED INSTALLATION, INCLUDING IDENTIFICATION ELEMENTS (SIGNAGE, TAG, ETC.) IN NORMALLY VISIBLE LOCATION.
13. CONTRACTOR TO PROVIDE SPRINKLER COVERAGE AT ALL SHAFTS AS REQUIRED.
14. PROVIDE PRESS. GAUGE WITH ISOLATION BALL VALVE AT TOP OF ALL STANDPIPE RISERS, AND AT EACH SPRINKLER SYSTEM ZONE CONTRO.L VALVE ASSEMBLY.
15. CONTRACTOR TO PROVIDE ADDITIONAL SPRINKLER HEADS BELOW DUCTS OR EQUIPMENT IN EXCESS OF 4 FEET WIDE, OR WHERE MULTIPLE DUCTS AND/OR EQUIPMENT INSTALLATIONS OBSTRUCT AN AREA IN EXCESS OF 4 FEET WIDE IN MECHANICAL ROOMS OR OTHER AREAS WITH EXPOSED STRUCTURE.
16. FIRE PROTECTION PIPING IS NOT PERMITTED TO RUN ABOVE ANY ELECTRICAL SWITCHGEAR, MOTOR CONTROL CENTERS OR PANELS (INCLUDING ACCESS/CLEARANCE SPACE 42" IN FRONT OF THESE ITEMS, AND MIN. 30" WIDE), UNDER ANY CIRCUMSTANCES.
   A. LOCATION OF NEW ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED FROM INDICATION BY THE PROJECT ELECTRICAL DOCUMENTATION, AND ACTUAL INSTALLATION CONFIRMED WITH THE CONSTRUCTION MANAGER PRIOR TO START OF WORK.
17. ALL VALVES CAPABLE OF INTERRUPTING FIRE PROTECTION SYSTEM FLOWS SHALL BE PROVIDED WITH A TAMPER SWITCH.
18. THE CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AT ALL FIRE PROTECTION RELATED PENETRATIONS OF FIRE, SMOKE, & ANY OTHER RATED FLOORS, WALLS, PARTITIONS & OTHER STRUCTURES. REFER TO ARCHITECTURAL FLOOR PLANS FOR LOCATIONS OF ALL RATED STRUCTURES.
19. WHERE FIRE DEPARTMENT HOSE CONNECTION VALVES ARE INDICATED ON PLANS, WHETHER EXPOSED OR IN CABINET/STRUCTURE, COORDINATE EXACT LOCATION AND ORIENTATION OF VALVE, OUTLET AND OPERATOR HANDLE WITH STRUCTURE AND WORK OF OTHER TRADES TO ALLOW PROPER ACCESS AND OPERATION, AND TO MINIMIZE INTRUSION TO EGRESS ELEMENTS. FINAL INSTALLATION TO BE CONFIRMED IN ADVANCE WITH THE CONSTRUCTION MANAGER. PLAN INDICATION OF FIRE DEPARTMENT VALVES IS SYMBOLIC ONLY FOR GENERAL LOCATION, AND IS NOT INTENDED TO SPECIFY ORIENTATION OF ITEMS. NOMINAL MOUNTING HEIGHT IS 48" FROM TOP OF FLOOR TO CENTERLINE OF VALVE OUTLET.
20. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING ARCHITECTURAL PROJECT DOCUMENTATION FOR ITEMS AFFECTING FIRE PROTECTION WORK, INCLUDING SPECIFIC DIRECTIONS AND ITEMS OF A GENERAL NATURE, WHICH MAY NOT BE REFERRED TO BY THE F.P. DOCUMENTATION. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, SPRINKLER REQUIREMENTS TO MAINTAIN RATED SEPARATION STRUCTURES (WALLS, WINDOWS, GLASS PARTITIONS/DOORS, ETC.), OR AT STRUCTURAL FEATURES SUCH AS DRAFTSTOPS, SOFFITS, SKYLIGHTS, PARTIAL HEIGHT PARTITIONS/WALLS, & OTHER ELEMENTS. THE ARCH. DOCUMENTATION MAY ALSO INCLUDE LOCATION/DIMENSION INFORMATION FOR SPECIFIC ITEMS SUCH AS STANDPIPES IN STAIR ENCLOSURES, OR F.P. EQUIPMENT CABINETS IN/AT WALLS OR OTHER STRUCTURES. WHERE THERE IS A DISCREPANCY IN LOCATIONS INDICATED BETWEEN THE TWO SETS OF DOCUMENTATION, THE LOCATION INDICATED BY THE ARCHITECTURAL SHALL TAKE PRECEDENT.
21. UNLESS DIRECTED OTHERWISE, WHERE CONCEALING/FINISH STRUCTURE IS PROVIDED ALL WORK IN THE FIRE PROTECTION CONTRACT NOT SPECIFICALLY INTENDED FOR EXPOSED/VISIBLE INSTALLATION SHALL BE INSTALLED WITHIN THE CONCEALING STRUCTURE.
22. THE CONTRACTOR SHALL CONFIRM AND COMPLY WITH SPECIFIC REQUIREMENTS FOR SPRINKLER SYSTEM INSTALLATION AT ALL ELEVATOR SHAFTS AND MACHINE ROOMS PER THE REVIEW/INSPECTION/APPROVAL AUTHORITIES. THIS MAY INCLUDE PROVISION OF ISOLATION VALVES, TAMPER SWITCHES, FLOW SWITCHES, ETC.
23. UNLESS INDICATED OTHERWISE, BUILDING FIRE PROTECTION WATER SERVICE TIE-IN IS PROVIDED AT 5 FT. BEYOND EXTERIOR FACE OF PERIMETER STRUCTURE, CONTINUED FROM SITE UTILITY ELEMENTS PROVIDED UNDER SEPARATE CONTRACT.



WATER SERVICE NOTES:

1. WATER SERVICE ENTRANCE MATERIALS, INSTALLATION, AND ALL COMPONENTS (INCLUDING BUT NOT LIMITED TO BACKFLOW PREVENTORS) TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF TOLEDO, DIVISION OF WATER, VERIFIED IN ADVANCE OF ANY WORK.
2. ALL BACKFLOW PREVENTORS TO BE COMPLETE APPROVED ASSEMBLIES INCLUDING BUT NOT LIMITED TO TEST COCKS. ASSEMBLIES TO BE AS LISTED IN ASSE 1048, APPROVED BY THE LOCAL BACKFLOW PREVENTION AUTHORITY.
3. PROVIDE FLOOR AND WALL SUPPORT ASSEMBLIES AS REQUIRED TO SECURE AND SUPPORT ITEMS INDICATED AT THE STRUCTURE. PIPE STANDS EQUAL TO GRINNELL FIG. 62, WALL BRACKETS EQUAL TO GRINNELL FIG. 199.

FIRE WATER SERVICE ENTRANCE DIAGRAM
N.T.S.

FIRE PROTECTION EQUIPMENT

LOCATION OF PENDANT AND CONCEALED TYPE HEADS TO BE COORDINATED WITH ARCHITECT AND STRUCTURE IN ADVANCE. FINAL LAYOUT OF ALL SPRINKLER HEADS SUBJECT TO APPROVAL BY ARCHITECT/OWNER.
FOR BIDDING: ALL SOLID SURFACE CEILINGS SHALL BE CONCEALED HEADS. ALL LAY-IN CEILINGS SHALL BE RECESSED HEADS.

FIRE DEPARTMENT VALVE (FDV)

EQUAL TO POTTER ROEMER NO. 4065-D 2 1/2" CAST BRASS ANGLE VALVE, FURNISHED WITH THREADED FEMALE INLET/MALE OUTLET, WHEEL HANDLE OPERATOR, 300 PSIG PRESSURE RATING AND POLISHED BRASS FINISH. OUTLET THREADS TO BE AS SPECIFIED BY THE LOCAL FIRE DEPARTMENT, VERIFIED IN ADVANCE BY THE CONTRACTOR. PROVIDE WITH NO. 4625-D BRASS CAP AND CHAIN WITH POLISHED BRASS FINISH.

ALARM BELL

SIMILAR TO POTTER ROEMER NO. 6230 10" ROUND BELL WITH 120V/1PH ELECTRIC DRIVE MOTOR AND STEEL CONSTRUCTION WITH RED ENAMEL FINISH.

EQUAL MANUFACTURER'S: RELIABLE, VIKING, AUTOMATIC, CENTRAL, GUARDIAN, VICTAULIC, POTTER-ROEMER OR GRINNELL MAY BE PROVIDED AT THE CONTRACTOR'S OPTION

DCDA: DOUBLE CHECK DETECTOR BACKFLOW PREVENTOR

PROVIDE A DOUBLE CHECK VALVE BACKFLOW PREVENTOR ASSEMBLY. UNIT BASED ON WATTS SERIES 709DCDA FOR FIRE PROTECTION SYSTEM SUPPLY MAINS. UNIT TO BE LISTED AND MEET THE STANDARDS OF ASSE 1048. UNIT TO BE CONSTRUCTED OF EPOXY COATED CAST IRON BODY WITH REPLACABLE BRONZE SEATS. UNIT RATED WORKING PRESSURE OF 175 PSI. COORDINATE EXACT MODEL WITH THE LOCAL MUNICIPAL WATER DEPARTMENT.

FIRE PROTECTION SPRINKLER HEADS

A. UPRIGHT HEADS: SIMILAR TO VIKING MODEL M WITH 1/2" STANDARD ORIFICE, 1/2" NPT INLET, OUTLET SPRAY DEFLECTOR, 5.5 "K" FACTOR AND NATURAL BRONZE FINISH. SIDEWALL HEAD (IF REQUIRED) TO BE SIMILAR, WITH VERTICAL OR HORIZONTAL DEFLECTOR. DRY BARREL HEADS TO BE SIMILAR TO BE SIMILAR WITH 1" INLET, ADJUSTABLE DRY BARREL AND CENTER STRUT ACTUATOR, AND STANDARD ORFICE. HEADS TO BE LISTED "QUICK RESPONSE" TYPE. FOR USE IN AREAS WITHOUT CONCEALING "FINISH" STRUCTURE WITH EXPOSED SUPPLY PIPING.

B. CONCEALED PENDENT HEADS: SIMILAR TO VIKING MODEL B-1 WITH 1/2" STD. ORIFICE, 1/2" NPT INLET, OUTLET SPRAY DEFLECTOR, 5.5 "K" FACTOR, ADJUSTABLE TWO-PIECE ESCUTCHEON AND COVERPLATE WITH MANUFACTURER APPLIED WHITE FINISH. HEAD TO BE LISTED "QUICK RESPONSE" TYPE. UNLESS NOTED OTHERWISE, FOR USE IN AREAS WITH DRYWALL, PANELBOARD OR OTHER DROP CEILING STRUCTURE WITH CONCEALED SUPPLY PIPING. HEADS LOCATED IN WOOD PANELS TO BE PROVIDED WITH MANUFACTURER APPLIED FINISH COLOR FOR COVERPLATE AS APPROVED BY THE OWNER'S REPRESENTATIVE IN ADVANCE OF INSTALLATION.

C. RECESSED PENDENT HEADS: SIMILAR TO VIKING MODEL M WITH 1/2" STD. ORIFICE, 1/2" NPT INLET, OUTLET SPRAY DEFLECTOR, 5.5 "K" FACTOR & ADJUSTABLE TWO-PIECE ESCUTCHEON. ESCUTCHEON & HEAD TO BE FURNISHED WITH MANUFACTURER APPLIED WHITE FINISH. HEAD TO BE LISTED "QUICK RESPONSE" TYPE. SIDEWALL HEADS (IF REQUIRED) TO BE SIMILAR, WITH HORIZONTAL DEFLECTOR. DRY PIPE BARREL HEADS (IF REQUIRED) TO BE SIMILAR, WITH 1" INLET, ADJUSTABLE DRY BARREL & COMPRESSED CENTER STRUT ACTUATOR. UNLESS NOTED OTHERWISE, PENDENT & SIDEWALL HEADS FOR USE IN AREAS WITH LAY-IN CEILING STRUCTURE WITH CONCEALED SUPPLY PIPING; DRY BARREL HEADS FOR USE IN AREAS SUBJECT TO FREEZING WITH ADJACENT CONDITIONED SPACE FOR INSTALLATION OF WET SUPPLY PIPING.

D. RECESSED PENDENT EXTENDED COVERAGE SPRINKLER HEAD; SIMILAR TO VIKING MODEL EC-ELO WITH LARGE ORIFICE, 3/4" INLET CONNECTION & SPRAY TYPE OUTLET/DEFLECTOR. "K" FACTOR OF 11.2. HEAD TO BE LISTED "QUICK RESPONSE" TYPE. FURNISH WITH ADJUSTABLE TWO-PIECE ESCUTCHEON. SPRINKLER HEAD & ESCUTCHEON TO BE PROVIDED WITH MANUFACTURER APPLIED WHITE FINISH. FOR USE IN "OPEN OFFICE" AREAS ONLY WITH CONCEALED SUPPLY PIPING.

FIRE PROTECTION ABBREVIATIONS

AB.	ABOVE	FLR.	FLOOR
ARCH.	ARCHITECT	F.D.	FLOOR DRAIN
CLG.	CEILING	F.P.	FIRE PROTECTION
CONN.	CONNECT	RM.	ROOM
CONTR.	CONTRACTOR	SHT.	SHEET
DRAIN	STANDPIPE DRAIN	T.S.	TAMPER SWITCH
CONT.	CONTINUATION	TYP.	TYPICAL
F	FIRE	W/	WITH

FIRE PROTECTION LEGEND

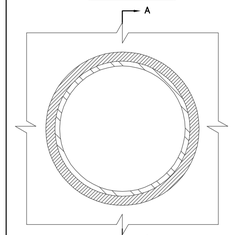
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
D	DRAIN LINE		ZONE LIMIT/BOUNDARY LINE
F	FIRE PROTECTION LINE		SUB-ZONE LIMIT/BOUNDARY LINE
W	DOMESTIC WATER SERVICE LINE		TEE WITH NIPPLE & CAP
	PENDANT TYPE SPRINKLER HEAD		PLUGGED TEE
	UPRIGHT TYPE SPRINKLER HEAD		BALL VALVE
	CONCEALED SPRINKLER HEAD		APPROVED TYPE DRAIN VALVE
	CAPPED LINE		GATE VALVE (FLANGED BODY)
	PIPE FLANGES		FLOOR DRAIN
	PIPE UNION		PRESSURE GAUGE
			FLOW SWITCH

UL/CUL SYSTEM NO. WL1085

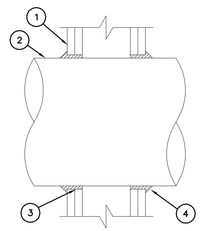
METAL PIPE THROUGH 1-HR. OR 2-HR. GYPSUM WALL ASSEMBLY

F RATING = 1-HR. OR 2-HR.
T RATING = 0-HR
L RATING AT AMBIENT = LESS THAN 1CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT..

FRONT VIEW



SECTION A-A



1. GYPSUM WALL ASSEMBLY (UL/ULC CLASSIFIED U300 OR U400 SERIES) (1-HR OR 2-HR FIRE-RATING) (2-HR SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 12" NOMINAL DIAMETER CAST IRON PIPE.
   C. MAXIMUM 6" NOMINAL DIAMTER COPPER PIPE.
   D. MAXIMUM 6" NOMINAL DIAMETER EMT.
   E. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
3. HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT FORCED INTO ANNULAR SPACE TO MAXIMUM EXTENT POSSIBLE.
4. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT TO BE INSTALLED AROUND PIPE, LAPPING 1/4" BEYOND PERIPHERY OF OPENING

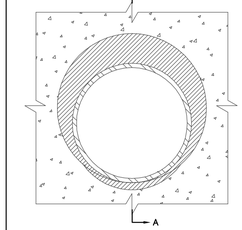
NOTES:
1. MAXIMUM DIAMTER OF OPENING = 13-1/4".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/4".

UL/CUL SYSTEM NO. CAJ1154

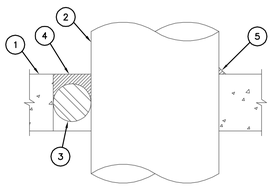
METAL PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

F RATING = 3-HR
T RATING = 1/4-HR
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.

TOP VIEW



SECTION A-A



1. CONCRETE FLOOR OR WALL ASSEMBLY (3-HR. FIRE-RATING):
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OR WALL (MINIMUM 4-1/2" THICK).
   B. ANY UL/ULC CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
   C. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. BACKER ROD, HILTI CF 128 FILLER FOAM, OR MINERAL WOOL TO BE USED AS BACKER.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES:
1. MAXIMUM DIAMTER OF OPENING = 14".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3-1/4".
3. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.

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Phone: (614) 771-8963

DESIGNED BY: PNC
DRAWN BY: PNC
CHECKED BY: KCB

DATE:	REVISIONS:
12-05-14	CONFORMED SET
2-20-15	PROPOSAL REQUEST 009
6-19-15	RECORD DRAWINGS

TRENARY HALL INTERIOR RENOVATION

FIRE PROTECTION NOTES AND DETAILS

SCALE: AS NOTED

FP200

JOB NO.: 14022
DATE: 12/05/14

FP200-14165.DWG

1-17

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6130 Wilcox Road (614) 766 4896
Dublin, Ohio 43016 FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
PNC	PNC	KCB	14165

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

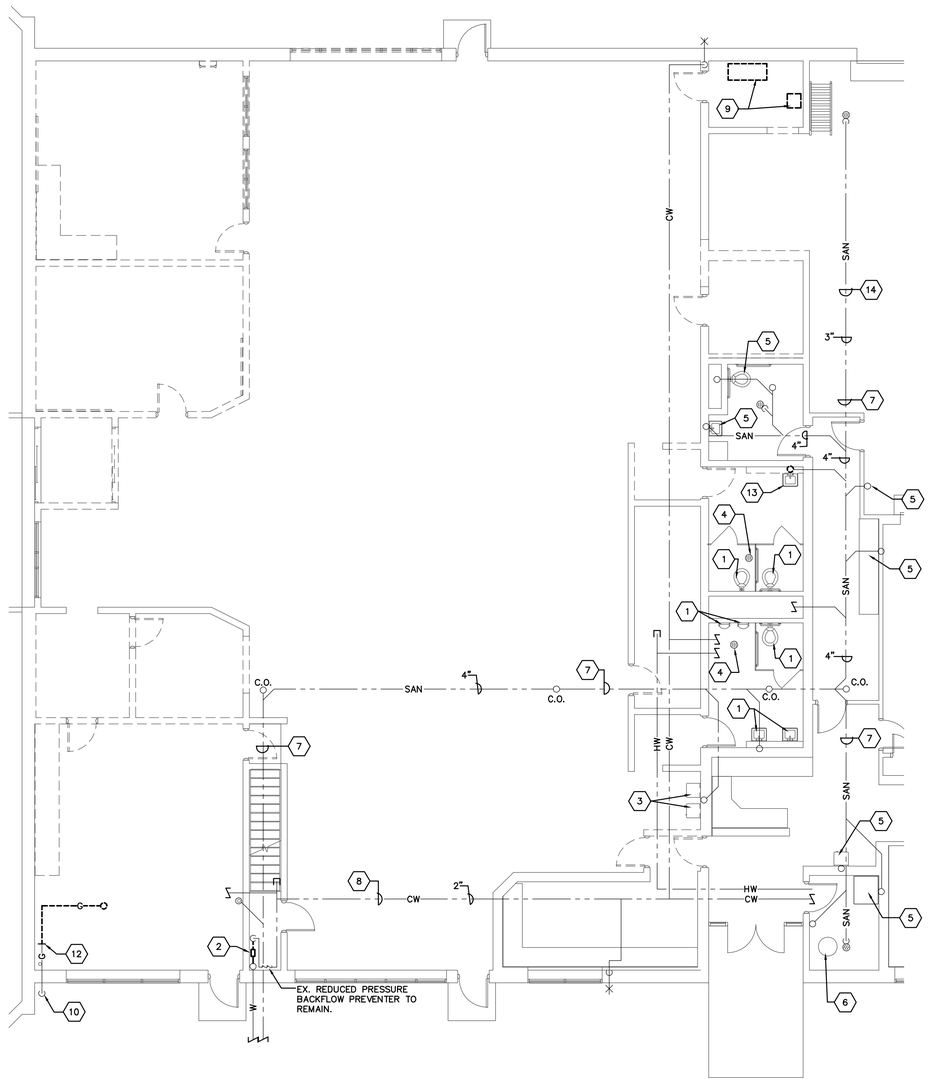
PLUMBING LEGEND

NOTE: NOT ALL SYMBOLS MAY BE USED

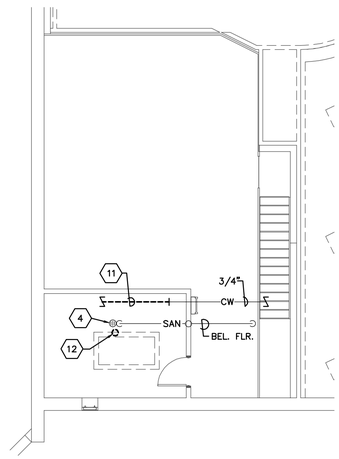
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
SAN	SANITARY (ABV. FLR.)		PLUG VALVE/GAS COCK
SAN	SANITARY (BEL. FLR.)		COMB. BALANCE/SHUTOFF VALVE
STM	STORM (ABV. FLR.)		CHECK VALVE
STM	STORM (BEL. FLR.)		Y-TYPE STRAINER
V	SANITARY VENT		PIPE FLANGES
IND	INDIRECT DRAIN (FROM WH PAN)		PIPE UNION
W	WATER SERVICE LINE		HOSE BIBB/WALL HYDRANT
CW	DOMESTIC COLD WATER		PIPE DOWN
HW	DOMESTIC HOT WATER (110°F. & ABOVE)		PIPE CONNECTION
HWR	DOMESTIC HOT WATER RETURN		PIPE BRANCH TOP CONN.
TW	TEMPERED WATER (85°F. TO 109°F.)		PIPE BRANCH BOTTOM CONN.
	EXISTING WORK TO REMAIN		PIPE CAP (OR PLUG)
	EXISTING WORK TO BE REMOVED		P-TRAP (PLAN VIEW)
	BALL VALVE	CO	WALL OR EXPOSED CLEANOUT
FD	FLOOR DRAIN	CO	FLOOR OR GRADE CLEANOUT
FS	FLOOR SINK	VTR	VENT-THRU-ROOF
	CURB BOX & VALVE	A / SHEET	STACK SYMBOL
	JANITOR OR SHOWER FAUCET/HEAD LOCATION	1 / SHEET	RISER SYMBOL
2	PIPE THRU FLOOR AS SHOWN		
	CONNECT TO EXISTING		

PLUMBING ABBREVIATIONS

ABV. OR AB.	ABOVE	FURN.	FURNISH
A.F.F.	ABOVE FINISHED FLOOR	G.D.	GARBAGE DISPOSER
APPROX.	APPROXIMATELY	GEN.	GENERAL
BEL.	BELOW	H.B.	HOSE BIBB
BLDG.	BUILDING	INV. ELEV.	INVERT ELEVATION
CLG.	CEILING	LAV.	LAVATORY
CONC.	CONCRETE	MFR.	MANUFACTURER
CO.	CLEAN OUT	MECH.	MECHANICAL
CONN.	CONNECT	PLBG.	PLUMBING
CONTR.	CONTRACTOR	SH.	SHOWER
DTL.	DETAIL	T.P.	TRAP PRIMER
DIA.	DIAMETER	TYP.	TYPICAL
D.F.	DRINKING FOUNTAIN	V.T.R.	VENT THRU ROOF
DN.	DOWN	W/	WITH
D.S.	DOWNSPOUT	WC	WATER CLOSET
ELEC.	ELECTRICAL	EXT.	EXTERIOR
E.W.C.	ELECTRIC WATER COOLER	FT. HD.	FEET OF HEAD
EX.	EXISTING	FLR.	FLOOR
		F.D.	FLOOR DRAIN



FIRST FLOOR
PLUMBING DEMOLITION PLAN
SCALE: 1/8"=1'-0"



MEZZANINE
PLUMBING DEMO PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES

A. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER IF ACCESS TO OTHER SPACES IS NECESSARY. SOME AREAS MAY NOT BE AVAILABLE FOR ACCESS. MAKE ALL NECESSARY ADJUSTMENTS TO AVOID ANY CONFLICTS WITH OTHER TENANTS.

B. ALL PLUMBING EQUIPMENT AND VALVES TO BE INSTALLED SUCH THAT CLEAR ACCESS IS AVAILABLE.

C. SANITARY PIPING SHOWN ON THIS FLOOR PLAN IS BELOW THE FIRST FLOOR SLAB.

D. SUPPLY PIPING (CW, HW, HWR) SHOWN ON THIS SHEET IS LOCATED ABOVE THE FIRST FLOOR CEILING OR AT FIRST FLOOR STRUCTURE.

CODED NOTES ⬡

1. REMOVE EXISTING PLUMBING FIXTURE, EXISTING ROUGH-IN AT WALL TO REMAIN FOR CONNECTION TO NEW WORK. IF FIXTURE CARRIER IS PRESENT EXISTING CARRIER MAY REMAIN FOR CONNECTION TO NEW WORK.
2. REMOVE EXISTING WATER METER AND RETURN TO CITY OF CELINA WATER DEPARTMENT.
3. REMOVE WATER COOLER, EXISTING WATER COOLER ROUGH-IN TO REMAIN FOR CONNECTION TO NEW WORK.
4. EXISTING FLOOR DRAIN TO REMAIN.
5. EXISTING FIXTURE TO REMAIN.
6. REMOVE EXISTING WATER HEATER AND ASSOCIATED HOT AND COLD WATER PIPING BACK TO A POINT FOR CONNECTION TO NEW WORK.
7. EXISTING SANITARY PIPING TO REMAIN.
8. EXISTING DOMESTIC WATER PIPING TO REMAIN.
9. REMOVE AND RELOCATE CONTROL/SHOP COMPRESSOR TO A TEMPORARY LOCATION FOR DURATION OF PROJECT. COMPRESSOR/DRYER SHALL REMAIN IN OPERATION FOR USE BY BUILDING TENANTS SHOP OPERATIONS AND FOR CONTROLS OF EXISTING AIR HANDLING EQUIPMENT THAT WILL REMAIN. COORDINATE TEMPORARY LOCATION WITH OWNER.
10. EXISTING 2-1/2" GAS SERVICE AND REGULATOR TO REMAIN.
11. REMOVE DOMESTIC MAKE-UP WATER SUPPLY BACK TO A POINT FOR CONNECTION TO NEW WORK.
12. REMOVE NATURAL GAS PIPING BACK TO A POINT BELOW MEZZANINE FOR CONNECTION TO NEW WORK.
13. REMOVE EXISTING FIXTURE, REMOVE SANITARY TO A POINT BELOW THE FLOOR FOR CONNECTION TO NEW WORK, REMOVE VENT AND HW/CW SUPPLY PIPING TO A POINT ABOVE CEILING FOR CONNECTION TO NEW WORK.
14. CAMERA EXISTING SANITARY LINE TO VERIFY DRAINS ARE CLEAN AND FREE OF DAMAGE. PROVIDE JET CLEANING SERVICE WHERE DRAINS LINES ARE DETERMINED TO BE OBSTRUCTED.

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DESIGNED BY: PNC
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CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR
PLUMBING DEMO PLAN

SCALE: AS NOTED

PD100

JOB NO.: 14022
DATE: 12/05/14

1-17 R

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PD100-14165.DWG

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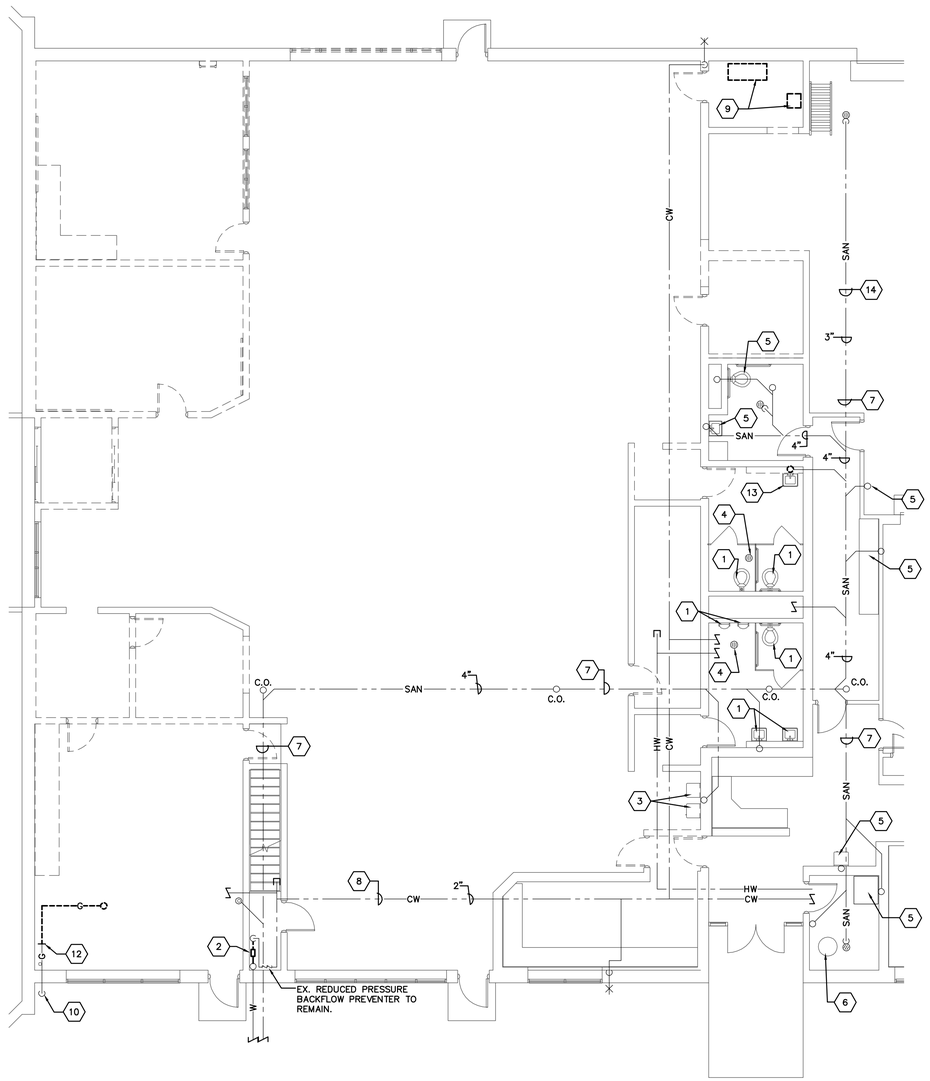
PLUMBING LEGEND

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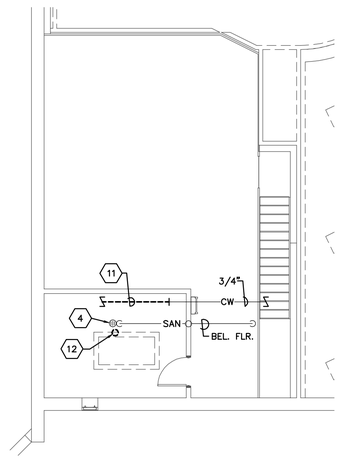
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IND	INDIRECT DRAIN (FROM WH PAN)		PIPE UNION
W	WATER SERVICE LINE		HOSE BIBB/WALL HYDRANT
CW	DOMESTIC COLD WATER		PIPE DOWN
HW	DOMESTIC HOT WATER (110°F. & ABOVE)		PIPE CONNECTION
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ABV. OR AB.	ABOVE	FURN.	FURNISH
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CONN.	CONNECT	PLBG.	PLUMBING
CONTR.	CONTRACTOR	SH.	SHOWER
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D.F.	DRINKING FOUNTAIN	V.T.R.	VENT THRU ROOF
DN.	DOWN	W/	WITH
D.S.	DOWNSPOUT	WC	WATER CLOSET
ELEC.	ELECTRICAL	EXT.	EXTERIOR
E.W.C.	ELECTRIC WATER COOLER	FT. HD.	FEET OF HEAD
EX.	EXISTING	FLR.	FLOOR
		F.D.	FLOOR DRAIN



FIRST FLOOR
PLUMBING DEMOLITION PLAN
SCALE: 1/8"=1'-0"



MEZZANINE
PLUMBING DEMO PLAN
SCALE: 1/8"=1'-0"

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TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR
PLUMBING DEMO PLAN

SCALE: AS NOTED

PD100

JOB NO.: 14022
DATE: 12/05/14

1-17 R

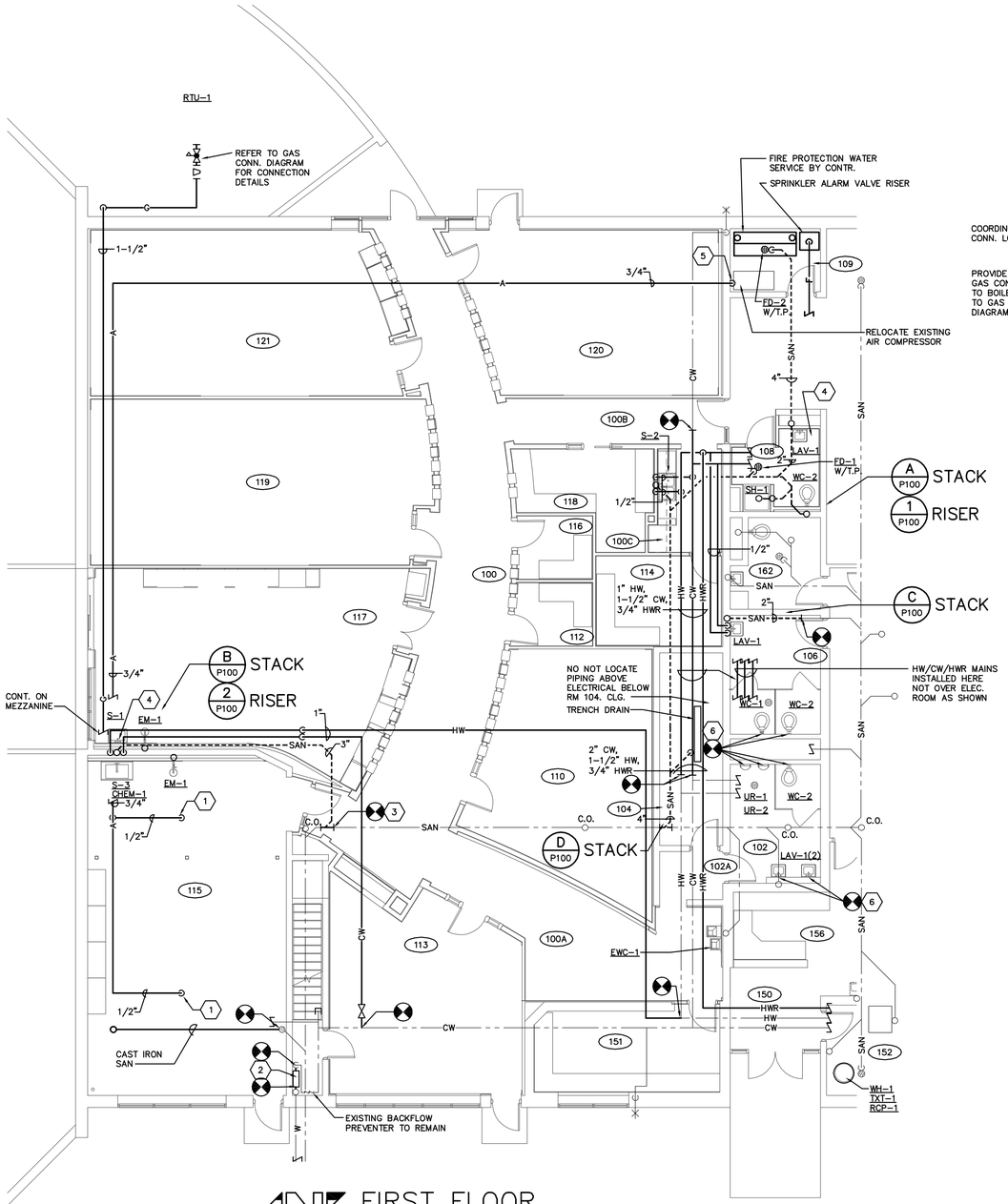
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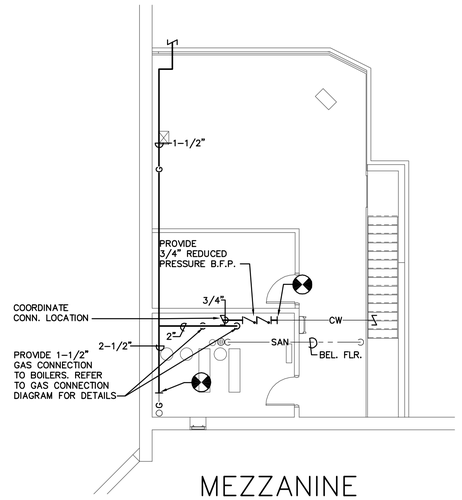
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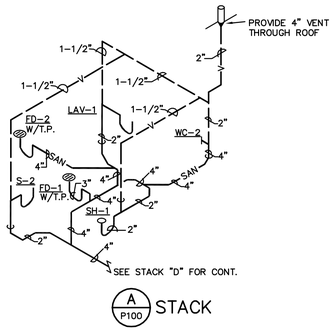
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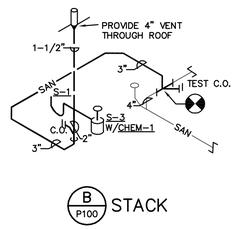


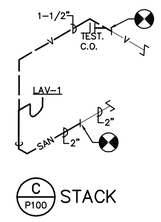
FIRST FLOOR PLUMBING PLAN
SCALE: 1/8"=1'-0"

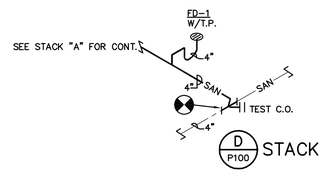


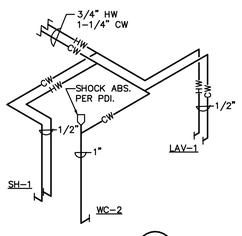
MEZZANINE PLUMBING PLAN
SCALE: 1/8"=1'-0"

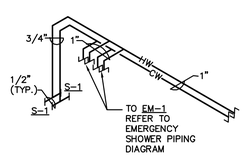












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These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

P100-14165.DWG

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PNC	PNC	KCB	14165

GENERAL NOTES

A. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER IF ACCESS TO OTHER SPACES IS NECESSARY. SOME AREAS MAY NOT BE AVAILABLE FOR ACCESS. MAKE ALL NECESSARY ADJUSTMENTS TO AVOID ANY CONFLICTS WITH OTHER TENANTS.

B. ALL PLUMBING EQUIPMENT AND VALVES TO BE INSTALLED SUCH THAT CLEAR ACCESS IS AVAILABLE.

C. SANITARY PIPING SHOWN ON THIS FLOOR PLAN IS BELOW THE FIRST FLOOR SLAB.

D. SUPPLY PIPING (CW, HW, HWR) SHOWN ON THIS SHEET IS LOCATED ABOVE THE FIRST FLOOR CEILING OR AT FIRST FLOOR STRUCTURE.

CODED NOTES ⬡

1. 1/2" AIR DROP TO CEILING MOUNTED HOSE REEL. PROVIDE INDUSTRIAL DUTY REELCRAFT POWDER COATED STEEL HOSE REEL MODEL # 4625 OLPSMR1 WITH SPRING RETURN, 25' 3/8" ID 300-PSI RATED HOSE WITH 1/4" MNPT END. PROVIDE MOUNTING BRACKET AND STRUCTURAL SUPPORT AS NECESSARY FOR MOUNTING AT CEILING. PROVIDE 1/2" BALL VALVE SHUT-OFF AT HOSE REEL INLET.
2. PROVIDE NEW 1-1/2" WATER METER IN PLACE OF EXISTING 3/4" METER. ADJUST METER SETTING TO FIT LARGER WATER METER. RETURN 3/4" WATER METER TO WATER UTILITY FOR CREDIT.
3. NOT USED.
4. REFER TO STACK DIAGRAM FOR SANITARY VENTING.
5. PROVIDE INGERSOL-RAND ARO MODEL FILTER REGULATOR COMBO. 5 MICRON FILTER WITH POLYCARBONATE BOWL AND MANUAL DRAIN, 0-140PSI PRESSURE REGULATOR WITH GAUGE. FR UNIT SHALL BE RATED FOR 10PSI MAXIMUM PRESSURE DROP AT 90PSI PRESSURE AND 20CFM CONSUMPTION RATE. REFER TO DRAWINGS FOR SET PRESSURE AND CONSUMPTION RATES AT EACH LOCATION. PROVIDES WITH LOCKING SHUT-OFF VALVE. FURNISH WITH BRACKETS FOR MOUNTING.
6. CONNECT TO EXISTING SANITARY AND WATER ROUGH-INS AT WALL.

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REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

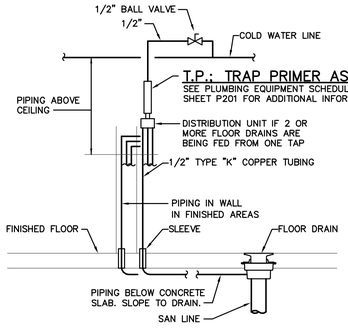
FIRST FLOOR PLUMBING PLAN

SCALE: AS NOTED

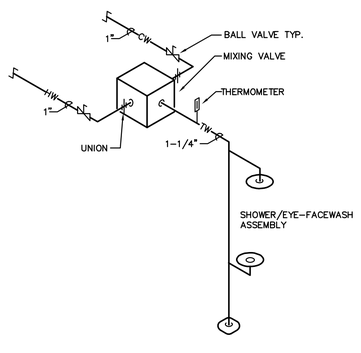
P100

JOB NO.: 14022
DATE: 12/05/14

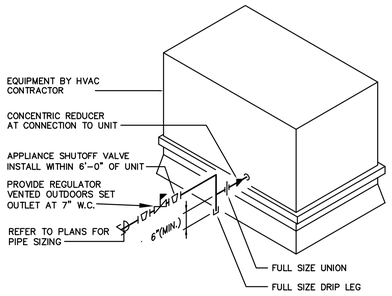
1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



TRAP PRIMER PIPING DIAGRAM



EM-1; PIPING DIAGRAM



INSTALLATION NOTE
MAINTAIN EQUIPMENT MANUFACTURER'S CLEARANCE REQUIREMENTS WHEN INSTALLING PIPING. COORDINATE EXACT REQUIREMENTS WITH CONTRACTOR INSTALLING EQUIP.

GAS CONNECTION DIAGRAM

PLUMBING FIXTURE SCHEDULE

PLUMBING FIXTURE NOTES:

1. UNLESS INDICATED OTHERWISE, THE ARCHITECT SHALL SELECT THE FIXTURE COLOR/FINISH FROM THE MANUFACTURER'S FULL RANGE OF STANDARD OPTIONS.
2. UNLESS INDICATED OTHERWISE, ALL EXPOSED METALLIC COMPONENTS TO BE FURNISHED WITH POLISHED CHROME FINISH, INCLUDING FAUCETS, TRAPS, STOPS, PIPING, ETC.
3. UNLESS INDICATED OTHERWISE, ALL EXPOSED PIPING SHALL BE FURNISHED WITH POLISHED CHROME FINISH BRASS ESCUTCHEONS AT ALL WALL/CABINET PENETRATIONS AND FIXTURE CONNECTIONS.

FIXTURE	MANUFACTURER	REMARKS	PIPE SIZE	
WC-1	AMERICAN STANDARD/SLOAN/BEMIS/ZURN	FIXTURE; AMERICAN STD. WALL HUNG; AFWALL NO. 2257.103 (1.6 GPF) CONTROLS; SLOAN REGAL FLUSH VALVE; NO. 111-XL (1.6 GPF, HANDLE ON "WIDE SIDE" OF ENCLOSURE) SEAT; BEMIS MODEL NO. 1655/SSC (SELF-SUSTAINING CHECK HINGE) CARRIER; ZURN SERIES 1200-XH HEAVY DUTY	1"	---
WC-2 (HANDICAP ACCESS-IBLE)	AMERICAN STANDARD/SLOAN/BEMIS/ZURN	FIXTURE; AMERICAN STD. WALL HUNG; AFWALL NO. 2257.103 (1.6 GPF) CONTROLS; SLOAN REGAL FLUSH VALVE; NO. 111-XL (1.6 GPF, HANDLE ON "WIDE SIDE" OF ENCLOSURE) SEAT; BEMIS MODEL NO. 1655/SSC (SELF-SUSTAINING CHECK HINGE) CARRIER; ZURN SERIES 1200-XH HEAVY DUTY FIXTURE ASSEMBLY TO COMPLY WITH HANDICAP ACCESS REQUIREMENTS.	1"	---
LAV-1 (HANDICAP ACCESS-IBLE)	AMERICAN STANDARD/McGUIRE	FIXTURE; AMERICAN STD. WALL HUNG; LUCERNE NO. 0355.012 CONTROLS; AMERICAN STD. SINGLE HANDLE MIXER; RELIANT 3 7385.003 (.5 GPM) WITH ;GRID DRAIN INCLUDED TRAP; McGUIRE MODEL 8902 1 1/4"x1 1/2" 17 GA. P-TRAP, CHROME PLATED STOP(S); McGUIRE MODEL 2165LK 1/2" LAVATORY SUPPLIES W/ LOOSE KEY BRASS ANGLE STOPS & COPPER FLEX TUBE RISERS. ALL CHROME PLATED CARRIER; ZURN SERIES 1230 COVER; McGUIRE PRO-WRAP SERIES FOR EXPOSED SUPPLY AND DRAIN PROVIDE A TV-1 ON CW AND HW TO LAVATORY AND SET AT 109°F. FIXTURE ASSEMBLY TO COMPLY WITH HANDICAP ACCESS REQUIREMENTS.	1/2"	1/2"
UR-1	AMERICAN STANDARD/SLOAN/ZURN	FIXTURE; AMERICAN STD. WALL HUNG; TRIMBROOK NO. 6561.017 (1 GPF) CONTROLS; SLOAN REGAL FLUSH VALVE; NO. 186-1-YB (1 GPF) CARRIER; ZURN SERIES 1221	3/4"	---
UR-2 (HANDICAP ACCESS-IBLE)	AMERICAN STANDARD/SLOAN/ZURN	FIXTURE; AMERICAN STD. WALL HUNG; TRIMBROOK NO. 6561.017 (1 GPF) CONTROLS; SLOAN REGAL FLUSH VALVE; NO. 186-1-YB (1 GPF) CARRIER; ZURN SERIES 1221 FIXTURE ASSEMBLY TO COMPLY WITH HANDICAP ACCESS REQUIREMENTS.	3/4"	---
EWC-1 (HANDICAP ACCESS-IBLE)	ELKAY, ZURN, McGUIRE	FIXTURE; ELKAY EZSTL8C TWO-LEVEL SURFACE MTD. ADA WATER COOLER. FINISH AS SELECTED BY ARCHITECT. CARRIER; ZURN SERIES 1225 TRAP; McGUIRE MODEL 8902 1 1/4"x1 1/2" 17 GA. P-TRAP, CHROME PLATED STOP(S); McGUIRE MODEL 2166 1/2" CLOSET SUPPLY W/ WHEEL HANDLE BRASS ANGLE STOP AND COPPER FLEX TUBE RISER. ALL CHROME PLATED FIXTURE ASSEMBLY TO COMPLY WITH HANDICAP ACCESS REQUIREMENTS.	1/2"	---
EM-1	BRADLEY	FIXTURE; BRADLEY HALO S19314 BARRIER-FREE DRENCH SHOWER WITH EYE-FACEWASH EMERGENCY FIXTURE. PROVIDE WITH 304 STAINLESS STEEL PIPING, STAY OPEN STINLESS STEEL BALL VALVE. STAINLESS STEEL SHOWER HEAD, STAINLESS STEEL EYE/FACEWASH WITH STAINLESS STEEL BOWL AND DUST COVER. EM-MIXER; BRADLEY NAVIGATOR S19-2100-EFX25 OR SIMILAR THERMOSTATIC WATER MIXING VALVE TO MEET ANSI Z358.1 REQUIREMENTS FOR EYE/FACE WASH, TEMPERATURE SETTING OF 75° F, INTEGRAL SUPPLY CHECKSTOPS, OUTLET PIPING WITH DIAL THERMOMETER, BUILT IN COLD WATER BY-PASS TO ALLOW COLD WATER TO FLOW IN CASE OF HOT WATER FAILURE. CONTRACTOR TO SUPPLY NECESSARY CONNECTIONS TO EMERGENCY SHOWER. MOUNT MIXING VALVE IN MFG APPROVED WALL BOX OR ABOVE ACCESSIBLE CEILING NEAR EYE/FACEWASH.	1"	1"
S-1	JUST CHICAGO	FIXTURE; 1-COMPARTMENT WALL MOUNTED WASH-UP SINK; JUST MFG. MODEL JS-122-T; OVERALL DIMENSIONS 25"x19.5"x10.5"D. CONTROLS; CHICAGO MODEL NO. 631-GN2AE3ABCP WALL MOUNTED 8" CENTER SET CHROME PLATED CAST BRASS FAUCET BODY. 5-1/4" GOOSENECK SPOUT. 2.2GPM SOFTFLOW AERATOR, 4" WRISTBLADE HANDLES, COMPRESSION CARTRIDGES. DRAIN; JUST J-35-SSF GRID DRAIN. TAILPEICE 17GA CHROME PLATED BRASS. TRAP; 1-1/2" X 1-1/2" P-TRAP IN 17GA CHROME PLATED BRASS W/ MECHANICAL COUPLINGS. PROVIDE CHROME PLATED BRASS WALL FLANGE STOP(S); McGUIRE HST04LK HEAVY DUTY CHROME PLATED CAST BRASS SUPPLY STOPS W/LOOSE KEY HANDLES AND 1/2" CHROME PLATED COPPER FLEX TUBE RISERS. PROVIDE WITH INLINE ASSE 1035 DUAL CHECK VACUUM BREAKERS, WATTS MODEL N9.	1/2"	1/2"

FIXTURE	MANUFACTURER	REMARKS	PIPE SIZE	
S-2 (BREAK ROOM)	ELKAY/CHICAGO/McGUIRE/ISE	FIXTURE; ELKAY MODEL LR3322 DOUBLE COMPARTMENT SELF RIMMING, 18 GAUGE, TYPE 304 STAINLESS STEEL, 33"x22" OVERALL SIZE. CONTROLS; ELKAY MODEL NO. LK3000 SINGLE METAL HANDLE MIXING VALVE, WASHERLESS CARTRIDGE, TUBULAR BRASS CHROME PLATED 9" TALL GOOSENECK WITH 8" REACH. HANDLE TO BE ADA COMPLIANT. SET LIMIT STOP FOR 120 DEG. F. OUTLET TEMP. DRAIN; McGUIRE MODEL NO. 151; BASKET STRAINER W/17 GA. SEAMLESS TAILPIECE, ALL CHROME PLATED BRASS. TRAP; McGUIRE MODEL 8912; 1 1/2"x1 1/2" 17 GA. P-TRAP W/ CLEANOUT, ALL CHROME PLATED BRASS. STOP(S); McGUIRE ANGLE SUPPLY STOP, 1/2" COMPRESSION INLET, 3/8" COMPRESSION OUTLET W/ WHEEL HANDLE & BRAIDED STAINLESS STEEL FLEXIBLE RISERS. PROVIDE (2) 1/2" TEES IN CW RISER WITH ST17 STRAIGHT SUPPLY STOPS W/ 3/8" COMPRESSION OUTLETS FOR COFFEE MAKER, AND REFRIGERATOR ICE MAKER. PROVIDE EACH LINE WITH A WATTS SD-3 B.F.P. PROVIDE SOFT TYPE 'K' COPPER SUPPLY LINE FOR CONNECTION TO COFFEE MAKER AND REFRIGERATOR. ROUTE B.F.P. DRAINS TO HUB DRAIN IN CASEWORK. DISPOSER; PROVIDE GD-1 ON SINK DRAIN WITH DISHWASHER DRAIN CONNECTION PORT.	1/2"	1/2"
S-3	McGUIRE CHICAGO	FIXTURE; PROVIDED AND INSTALLED IN RESIN COUNTERTOP BY CASEWORK PROVIDER. CONTROLS; CHICAGO 786-E29-XKCP 8" CENTER FAUCET WITH 4" WRIST BLADE HANDLES, PROVIDE WITH 2.2GPM PRESSURE COMPENSATING LAMINAR FLOW OUTLET. DRAIN; CHEMICAL RESISTANT DRAIN AND TAILPEICE PROVIDED LOOSE WITH CASEWORK. TRAP; SCHEDULE 40 CPVC LAB WASTE PIPED DIRECTLY TO BELOW SINK CHEMICAL NEUTRALIZATION TANK. TANK TO ACT AS TRAP. STOP(S); McGUIRE MODEL 2165 1/2" LAVATORY SUPPLIES W/ WHEEL HANDLE BRASS ANGLE STOPS & COPPER FLEX TUBE RISERS. ALL EXPOSED ELEMENTS TO BE POLISHED CHROME PLATED. CHEMICAL NEUTRILI-ZATION: CHEM-1 POINT OF USE NEUTRALIZATION BASIN MOUNTED IN CASEWORK. PROVIDE SCH. 40 CPVC LAB WASTE INLET PIPING.FILL WITH MANUFACTURERS RECOMMENDED AMOUNT AND TYPE OF LIMESTONE CHIPS.	1/2"	1/2"
SH-1 (HANDICAP ACCESS-IBLE)	KOHLER	ENCLOSURE; TILE ADA SHWOER ENCLOSURE BY OTHER TRADES, COORDINATE DRAIN AND BLOCKING LOCATIONS AND REQUIREMENTS. CONTROLS; FURNISH WITH KOHLER K-15621-4 VALVE TRIM, K-304-KS RITE-TEMP ASSE 1016 PRESSURE BALANCE MIXING VALVE WITH INTEGRAL STOPS. KOHLER K-8520-CP ADA HANDSHOWER KIT TO INCLUDE 24" SLIDE BAR, 60" FLEXIBLE METAL HANDSHOWER HOSE WITH MULTIFUNCTION HANDSHOWER, WALL SUPPLY ELBOW, 2.5 GPM HANDSHOWER W/INTEGRAL VACUUM BREAKER. SET LIMIT STOP AT 110 DEG. F. DRAIN: BRASS DRAIN McGUIRE 1266A. TRAP; CAST IRON OR COPPER 2" P-TRAP ENTIRE INSTALLATION TO BE HANDICAP ACCESS COMPLIANT. ENTRY THRESHOLD HEIGHT SHALL BE COORDINATED WITH ALL APPLICABLE OTHER CONTRACTORS TO MAINTAIN ADA REQUIREMENTS.	1/2"	1/2"

DRAIN & CLEANOUT SCHEDULE

DES.	LOCATION	DESCRIPTION
C.O.	WALLS OF FINISHED AREA	USE CLEANOUT TEE AND PROVIDE CLEANOUT AND ACCESS COVER SIMILAR TO ZURN ZURN Z-1446 WITH ROUND POLISHED STAINLESS STEEL ACCESS COVER AND ABS PLASTIC THREADED PLUG. SIZE TO SUIT CLEANOUT.
C.O.	FLOORS OF FINISHED AREA	PROVIDE FRAME AND ACCESS COVER SIMILAR TO ZURN ZN-1400 WITH GAS TIGHT BRONZE PLUG, ROUND SCREWDOWN ACCESS COVER BOX WITH POLISHED SCORIATED TOP AND ANCHOR LUGS.
C.O.	OUTSIDE	ZURN Z-1400-HD CAST IRON ADJUSTABLE CLEANOUT, COATED CAST IRON INTERNAL PLUG WITH LEAD SEAL AND HEAVY-DUTY LOOSE-SET SCORIATED ROUND CAST IRON TRACTOR COVER SIZE TO SUIT CLEANOUT.
C.O.	ALL OTHER CLEANOUTS	ZURN ZB-1470 FLUSH WITH FLOOR OR WALL AND HAVE COUNTER-SUNK BRASS HEADS.
FD-1	FINISHED AREA FLOOR DRAIN	ZURN Z415BZ CAST IRON FLOOR DRAIN WITH DOUBLE DRAINAGE FLANGE AND WEEPHOLES, BOTTOM CAULK OUTLET WITH TYPE BZ SIZE 6¾" DIAMETER POLISHED NICKEL BRONZE LEVELING STRAINER. FURNISH WITH CLAMPING COLLAR EXCEPT FLOOR DRAINS IN ON-GRADE LOCATIONS.
FD-2	MECH. RM. FLOOR DRAIN	ZURN Z1970 9" DIAMETER x 3" DEEP CAST IRON BODY AND ROUND SLOTTED MEDIUM DUTY GRATE FLOOR DRAIN, WHITE ACID RESISTING COATED INTERIOR AND TOP COMPLETE WITH ALUMINUM SECONDARY STRAINER. BOTTOM CAULK OUTLET. TRAP PRIMER INLET, FURNISH WITH CLAMPING COLLAR EXCEPT FLOOR DRAINS IN ON-GRADE LOCATIONS.

PLUMBING EQUIPMENT

TRAP PRIMER VALVE ASSEMBLY

SIMILAR TO SIOUX CHIEF PRIME PERFECT SERIES 695, PRESSURE ACTIVATED AT A MINIMUM OF 10 PSIG DIFFERENTIAL, 1/2" FEMALE INLET, 1/2" MALE OUTLET, INTEGRAL SEDIMENT SCREEN, DIAPHRAGM ADJUSTMENT NUT, VACUUM BREAKER, FIELD ADJUSTABLE WATER DISCHARGE RATE, CERTIFIED BY THE AMERICAN SOCIETY OF SANITARY ENGINEERING TO ASSE 1018-2001 SPECIFICATIONS. INSTALLATION TO BE PER MANUFACTURER'S RECOMMENDATIONS.

WH-1; ELECTRIC WATER HEATER

WATER HEATER SHALL BE ASME CONSTRUCTED AND LABELED WITH A 80 GALLON GLASS-LINED INTERIOR DESIGN, UNIT SHALL BE ELECTRICALLY HEATED, AND APPROVED BY THE UNDERWRITERS LABORATORY (UL). THE HEATER SHALL MEET ALL APPLICABLE ENERGY CODES, UNIT SHALL MEET THE REQUIREMENTS OF ASHRAE 90.1-1999, UNIT SHALL HAVE DUPLEX HEATING ELEMENTS OF 6 KW EACH. RATE OF RECOVERY AT 80 DEGREE TEMPERATURE RISE SHALL BE 49 GALLONS PER HOUR. UNIT SHALL HAVE A MANUAL RESET HIGH LIMIT. COLOR CODED CIRCUITRY, HEATER SHALL HAVE A WORKING PRESSURE OF 150 PSIG. AND SHALL BE EQUIPPED WITH AN ANODE ROD. ALL INTERNAL SURFACES OF THE HEATER EXPOSED TO THE WATER SHALL BE GLASS LINED. ELECTRIC HEATING ELEMENTS SHALL BE HEAVY DUTY MEDIUM WATT DENSITY WITH INCOLOY SHEATHING. POWER TO UNIT SHALL BE 480 VOLT 3 PHASE. CLOSE DIFFERENTIAL IMMERSION TYPE THERMOSTAT PROVIDES THE ACCURATE TEMPERATURE CONTROL REQUIRED FOR COMMERCIAL APPLICATIONS. THE OUTER JACKET SHALL BE OF BAKED ENAMEL FINISH WITH FRONT ACCESS PANEL OVER FOAM INSULATION OVER ELECTRICAL JUNCTION BOX WITH A HEAVY DUTY TERMINAL BLOCK SHALL BE PROVIDED. PROVIDE WITH ASME RATED TEMPERATURE AND PRESSURE RELIEF VALVE. WATER HEATER IS BASED ON A.O.SMITH MODEL DEN-80.

TXT-1; THERMAL EXPANSION TANK

AMTROL ST SERIES WITH STEEL SHELL, RIGID POLYPROPYLENE LINER AND HEAVY DUTY RUBBER DIAPHRAGM. LINER AND DIAPHRAGM MECHANICALLY BONDED TO SHELL TO FORM A SEPARATE AIR CHAMBER AND NON-CORROSIVE WATER RESERVOIR. AIR CHAMBER PRE-CHARGED TO 55 PSIG, AND PROVIDED WITH A STANDARD AIR VALVE FITTING TANKS TO BE ASME LISTED/APPROVED. THERMAL EXPANSION TANK CAPACITY TO BE 4.4 GAL. TOTAL VOLUME.

GD-1; GARBAGE DISPOSER

IN-SINK-ERATOR BADGER 5 PLUS MODEL, 5/8 HP, 120V/1PH. 3 YEAR WARRANTY, GALVANIZED STEEL GRINDING ELEMENTS, STAINLESS STEEL SWIVEL LUGS. PROVIDE WITH 3/4" CONNECTION PORT FOR DISHWASHER DRAIN.

RCP-1; HOT WATER RETURN RECIRCULATING PUMP

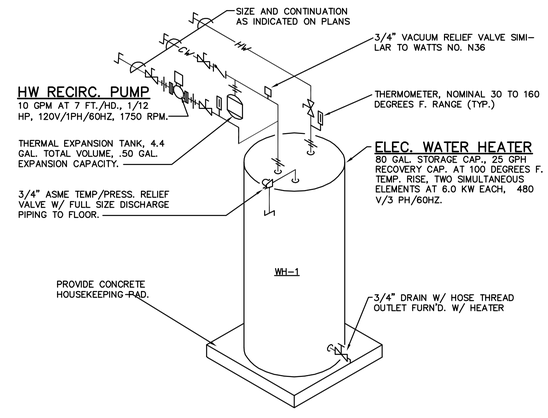
SIMILAR TO B & G MODEL NO. 100 IN-LINE CENTRIFUGAL TYPE PUMP WITH CLOSE COUPLED DRIVE MOTOR, ALL BRONZE CONSTRUCTION, LISTING FOR POTABLE WATER SERVICE AND 125 PSIG WORKING PRESSURE RATING. SEE PLANS FOR RATINGS AND CAPACITIES.

CHEM-1; CHEMICAL NEUTRILIZATION TANK

SCHIER PRODUCTS MODEL NO. LB-2 2.1-GALLON HDPE CHEMICAL NEUTRALIZATION BASIN. MOUNTED INSIDE CASEWORK BELOW LAB BENCH. PROVIDE WITH BOLTED REMOVABLE TOP, 2" INLET AND OUTLET WITH TOP CLEANOUT. OVERALL DIMENSIONS 12-5/8" x 14". FILL WITH MANUFACTURER RECOMMENDED AMOUNT AND TYPE OF HIGH PURITY LIMESTONE CHIPS.

TV-1; SUPPLY MIXING VALVE ASSEMBLY

SIMILAR TO POWERS HYDROGUARD SERIES E480 UNDER THE COUNTER THERMOSTATIC TEMPERING VALVE. UNIT SHALL BE ASSE 1070 LABELED FOR POINT OF USE TEMPERING. UNIT TO BE SOLID BRASS CONSTRUCTION, ADJUSTABLE TEMPERATURE SETTING AND HAVE INTEGRAL CHECKS. PROVIDE ONE UNIT PER LAVATORY. SET OUTLET NOT TO EXCEED 109°F. INSTALL UNIT PER MANUFACTURER'S RECOMMENDATIONS.



WH-1; WATER HEATER DIAGRAM

1-17

R These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

P200-14165.DWG

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RECORD DRAWINGS	6-19-15

DESIGNED BY: PNC
DRAWN BY: PNC
CHECKED BY: KCB

TRENARY HALL INTERIOR RENOVATION

PLUMBING SCHEDULES AND DETAILS

SCALE: AS NOTED

P200

JOB NO.: 14022
DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

PLUMBING NOTES

A. DESIGN DRAWINGS ARE SCHEMATIC. THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING OR AWARD OF CONTRACT TO INSPECT EXISTING FIELD CONDITIONS. THIS CONTRACT SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR FIELD MODIFICATIONS DUE TO EXISTING CONDITIONS.

B. THE CONTRACTOR SHALL CONTACT THE OWNER'S REP PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT. CLARIFICATIONS MADE BY THE OWNER'S REP AFTER BIDDING WILL BE FINAL AND SHALL BE IMPLEMENTED AT THE CONTRACTORS COST.

C. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS NOT WITHSTANDING. THE CONTRACTOR SHALL ALERT THE OWNER'S REPRESENTATIVE OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT.

D. NOTE THAT EXISTING CONDITIONS SHOWN ON PLANS ARE FROM PREVIOUS ENGINEERING DOCUMENTATION AND/OR FIELD OBSERVATION. ACTUAL CONDITIONS MAY VARY, AND MUST BE FIELD VERIFIED BY THIS CONTRACTOR (WHETHER SHOWN OR NOT). THIS CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSITATED BY ACTUAL CONDITIONS, REQUIRED TO COMPLETE INSTALLATION OF NEW ITEMS. IF EXISTING CONDITIONS PROHIBIT INSTALLATION OF NEW ITEMS, NOTIFY THE OWNER'S REPRESENTATIVE FOR REDIRECTION AS REQUIRED.

E. REFER TO ARCHITECTURAL DOCUMENTATION FOR ADDITIONAL SCOPE/INFORMATION REGARDING DEMOLITION/REMODELING WORK, INCLUDING IDENTIFICATION OF AREAS AND ITEMS INVOLVED, AS WELL AS INFORMATION OF BOTH A GENERAL AND SPECIFIC NATURE.

F. UNLESS DIRECTED OTHERWISE, WHEN EXISTING PLUMBING ITEMS THAT ARE IN USE PRIOR TO START OF THIS PROJECT DO NOT OBSTRUCT NEW WORK, THE ITEM SHALL REMAIN IN USE DURING THE EXECUTION OF NEW WORK AND AFTER PROJECT COMPLET-ION. EXISTING PLUMBING ITEMS THAT OBSTRUCT NEW WORK, AND/OR ARE IN EXP-OSED LOCATIONS IN REVISED/REMODELED AREAS WHERE NEW CONCEALING/FINISH STRUCTURE IS PROVIDED UNDER SEPERATE CONTRACT, SHALL BE REVISED/RELOCATED AS REQUIRED TO CLEAR NEW WORK, AND/OR BE IN A CONCEALED LOCATION.

G. UNLESS INDICATED OTHERWISE, WHEN EXISTING PLUMBING ITEMS ARE INDICATED TO BE REMOVED, OR ARE NOT TO REMAIN IN USE AFTER PROJECT COMPLETION AND OBS-STRUCT NEW WORK, THE ITEM (WHETHER SHOWN ON PLANS OR NOT) AND ALL ASS-OCIATED ACCESSORIES AND APPURTENANCE SHALL BE REMOVED. THIS INCLUDES ANY ITEMS ENCOUNTERED IN FIELD TO WHICH THESE DESCRIPTIVE CONDITIONS APPLY. THE FOLLOWING SHALL APPLY TO ITEMS REMOVAL:

1. PIPING (IF ANY) TO BE REMOVED BACK TO NEAREST ACTIVE MAIN/BRANCH RE-MAINING IN SERVICE AFTER PROJECT COMPLETION, AND OUTSIDE OF ALL EXPOSED LOCATIONS, OR TO WITHIN NEW CONCEALING/FINISH STRUCTURE PROVIDED UNDER SEPARATE CONTRACT, AND CAPPED/PLUGGED (AS APPROPRIATE) AT THAT POINT.

2. WHEN AN ISOLATION VALVE OCCURS IN REMOVED ITEMS SUPPLY PIPING AT THE ACTIVE MAIN/BRANCH TIE-IN POINT. THE VALVE SHALL REMAIN, AND THE CAP SHALL BE ON THE SIDE OF THE VALVE ASSOCIATED WITH THE ITEM BEING REM-OVED, IN THE VALVE OUTLET PIPING.

H. UNLESS DIRECTED OTHERWISE, WHERE CONCEALING/FINISH STRUCTURE IS PROVIDED UNDER SEPARETE CONTRACT, ALL WORK IN THE PLUMBING CONTRACT NOT SPECIFIC-ALLY INTENDED OR IDENTIFIED FOR EXPOSED/VISIBLE INSTALLATION SHALL BE IN-STALLED WITHIN THE CONCEALING STRUCTURE.

I. CUTTING/REMOVAL AND REPAIR/REPLACEMENT OF EXISTING STRUCTURES AND/OR SURFACES REQUIRED BY WORK IN THE PLUMBING CONTRACT IS BY THE CONTRACTOR, UNLESS INDICATED OTHERWISE. REPAIR/REPLACEMENT TO BE TO ORIG-INAL CONDITION, AND TO MATCH ADJACENT SURFACES IN TYPE, KIND AND FINISH. THIS INCLUDES CEILINGS, PARTITIONS, FLOORS, SOFFITS, ETC., BOTH WITHIN AND OUT-SIDE THE REVISED/REMODELED AREA(S) THAT ARE AFFECTED BY WORK IN THE PLUMBING CONTRACT. THIS CONDITION DOES NOT APPLY IF EXISTING STRUCTURES AND/OR SURFACES ARE BEING REVISED/REMOVED/REPLACED UNDER SEPARATE CON-TRACT.

J. ALL PIPING SHOWN IS ABOVE CEILING IN AREAS WITH DROPPED CEILINGS, OR AT BOTTOM OF OVERHEAD SUPPORT STRUCTURE IN EXPOSED STRUCTURE AREAS, UNLESS INDICATED OTHERWISE.

K. THE CONTRACTOR IS TO SECURE AND VERIFY ALL MEASUREMENTS AND CONDITIONS AT THE PROJECT IN ADVANCE OF WORK (INCLUDING FABRICATION).

L. THE CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AT ALL PLUMBING RELATED PENETRATIONS OF FIRE, SMOKE AND OTHER RATED STRUCTURES, INCLUDING FLOORS, WALLS, PARTITIONS, ETC.. REFER TO ARCHITECTURAL DOCUMENTATION FOR LOCATIONS OF ALL RATED STRUCTURES, AND SPECIFIC INFORMATION AND REQURE-MENTS PERTAINING TO SAME.

M. LAYOUT AND INSTALLATION OF PLUMBING CONTRACT PIPING, EQUIPMENT, ITEMS AND ELEMENTS INDICATED ON PLAN IS SCHEMATIC IN NATURE. EXACT LOCATION, ROUTING AND INSTALLATION TO BE COORDINATED WITH BUILDING STRUCTURE AND ALL OTHER WORK PROVIDED UNDER SEPARATE CONTRACT.

N. COORDINATE EXACT LOCATION AND INSTALLATION OF ALL PLUMBING UTILITIES RE-QUIRED AND PROVIDED FOR WORK UNDER SEPARATE CONTRACT WITH THE APPROP-RIATE CONTRACTOR(S) IN ADVANCE OF WORK. THIS INCLUDES SUPPLY AND DRAIN ELEMENTS, FOR DIRECT (PIPED) AND/OR INDIRECT (FLOOR/HUB DRAIN, AIR GAP, ETC.) CONNECTION/SERVICE.

O. RUN ALL WATER LINES LEVEL.

P. ROUGH IN ALL PIPING (SUPPLY, RETURN, WASTE, DRAIN, ETC.) FOR FIXTURES/EQUIP-MENT INSTALLATION THRU OR ON FACE OF WALL (AS APPLICABLE), AND TERMINATE WITH SHORT PIPE NIPPLE AND CAP. ROUGH INS AT EXTERIOR WALLS (IF ANY) TO BE ON "WARM" SIDE OF INSULATION ASSEMBLY, AS REQUIRED FOR NON-FREEZE INSTALL-ATION.

Q. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CELINA, OHIO BUILDING CODE, INCLUDING APPLICABLE PLUMBING, MECHANICAL AND HANDICAP ACC-ESSIBILITY PROVISIONS.

R. PROVIDE CLEANOUTS AS FOLLOWS:

1. AT THE BASE OF ALL SANITARY STACKS.

2. IN ALL HORIZONTAL SANITARY PIPING AT INTERVALS NOT TO EXCEED 100 L.F. IN LENGTH.

3. AT EACH CHANGE OF DIRECTION BY SANITARY PIPING BELOW GRADE OR AT THE LOWEST POINT OF THE HORIZONTAL DRAINAGE SYSTEM GREATER THAN 45 DEGREES, UNLESS ANOTHER CLEANOUT IS WITHIN 40 FT. DEVELOPED LENGTH.

4. AT CONNECTION POINTS TO EXISTING SANITARY AND VENT PIPING (TEST TYPE CLEANOUTS).

S. UNLESS INDICATED OTHERWISE, ALL FIXTURES AND EQUIPMENT PROVIDED WITH PLUMB-ING SUPPLY PIPING TO BE FURNISHED WITH APPROVED/LISTED STOPS IN ACCESSIBLE LOCATIONS.

T. SEE ARCHITECTURAL DRAWINGS FOR DETAILS OF CASEWORK, EQUIPMENT AND OTHER ITEMS PROVIDED UNDER SEPARATE CONTRACT, INCLUDING EXACT LOCATIONS AND UTILITY CONNECTION REQUIREMENTS. COORDINATE PLUMBING UTILITY WORK AS REQ-UIRED IN ADVANCE, INCLUDING PLACEMENT OF FITTINGS, ACCESSORIES, APPURTEN-ANCES, DRAINS, ETC.

U. VERIFY THE EXACT LOCATION AND INSTALLATION REQUIREMENTS FOR ALL DRAINS WITH THE ARCHITECTURAL AND STRUCTURAL DOCUMENTATION FOR PROPER PLACEMENT IN RESPECT TO SLOPES AND STRUCTURE AT EACH DRAIN. COORDINATE INSTALLTION WITH THE APPROPRIATE CONTRACTOR. FINAL INSTALLATION AND LOCATION SUBJECT TO APPROVAL.

V. PLUMBING PIPING IS NOT PERMITTED TO RUN ABOVE ANY ELECTRICAL SWITCH-GEAR, MOTOR CONTROL CENTERS OR PANELS (INCLUDING ACCESS/CLEARANCE SPACE 42" IN FRONT OF THESE ITEMS, AND MIN. 30" WIDE), UNDER ANY CIRCUMSTANCES.

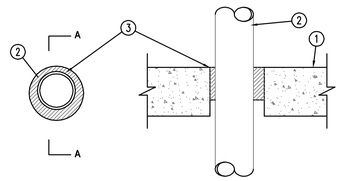
1. LOCATION OF NEW ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED FROM INDICATION BY THE PROJECT ELECTRICAL DOCUMENTATION, AND ACTUAL INSTALLATION CONFIRMED WITH THE INSTALLING CONTRACTOR PRIOR TO START OF WORK.

2. LOCATION OF EXISTING ITEMS OF THESE TYPES TO BE DETERMINED AND CONFIRMED IN THE FIELD PRIOR TO START OF WORK.

System No. C-AJ-2218

CAJ 2218

F Rating - 2 Hr
T Rating - 0 Hr



SECTION A-A

1. Floor or Wall Assembly - Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diameter of opening is 5 in. See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants - One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 1/2 in. to a max 1 in. The pipe or conduit to be rigidly supported on both sides of floor or wall. The following types and sizes of pipes may be used:
   A. Polyvinyl Chloride (PVC) Pipe - Nom 3 in. diameter (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems.
   B. Chlorinated Polyvinyl Chloride (CPVC) Pipe - Nom 3 in. diameter (or smaller) SDR 17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
3. Fill, Void or Cavity Material* - Sealant - Min 3 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI, Inc. - FS-ONE Sealant

*Bearing the UL Classification Marking

HILTI® FIRESTOP SYSTEMS

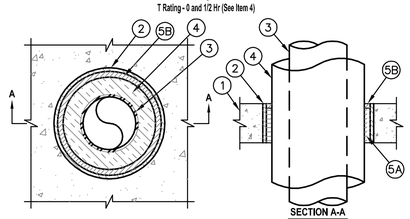
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CLASSIFIED C UL US

System No. C-AJ-5265

CAJ 5265

F Rating - 2 Hr
T Rating - 0 and 1/2 Hr (See Item 4)



SECTION A-A

1. Floor or Wall Assembly – Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor. Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 12 in. (305 mm).
2. Steel Sleeve – (optional) - Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Through-Penetrant – One metallic pipe, tube or conduit to be installed within the opening. The following types and sizes of metallic penetrants may be used:
   A. Steel Pipe – Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe – Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
4. Pipe Covering* – Nom 2 in. (51 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the pipe covering and perifpery of opening shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm).
   See Pipe and Equipment Covering – Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used
   The T Rating is 0 Hr when pipe covering is less than nom 2 in. (51 mm) thick.
5. Firestop System – The firestop system shall consist of the following:
   A. Packing Material – Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m3) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material – Sealant* – Min 1/2 in. (6 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP606 Sealant

*Bearing the UL Classification Mark

HILTI® FIRESTOP SYSTEMS

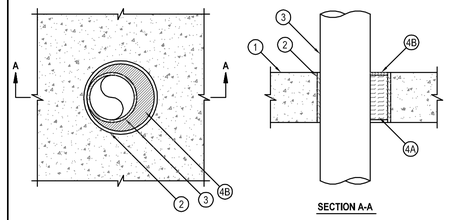
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CLASSIFIED C UL US

System No. C-AJ-1498

CAJ 1498

F Rating - 2 Hr
T Rating - 0 Hr
W Rating - Class I



SECTION A-A

1. Floor or Wall Assembly – Min 4-1/2 in. (114 mm) thick reinforced normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 10 in. (254 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve – (Optional) - Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with both floor or wall surfaces.
3. Through-Penetrant – One metallic pipe, tube or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between penetrant and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic penetrants may be used:
   A. Steel Pipe – Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe – Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe – Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing – Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
   E. Conduit – Nom 6 in. diam (152 mm) (or smaller) rigid steel conduit.
   F. Conduit – Nom 4 in. diam (102 mm) (or smaller) steel electrical metallic tubing (EMT).
4. Firestop System – The firestop system shall consist of the following:
   A. Packing Material – Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m3) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* - Sealant – Min 1/4 in. (6 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC – CP 601S Sealant

*Bearing the UL Classification Mark

HILTI® FIRESTOP SYSTEMS

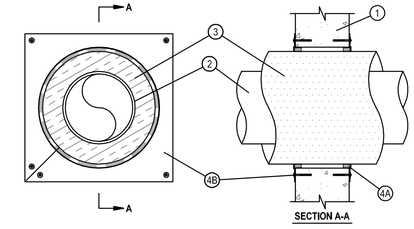
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CLASSIFIED C UL US

System No. W-J-5058

WJ 5058

F Rating – 2 Hr
T Rating – 0 and 1-1/2 hr (See Item 3)



SECTION A-A

1. Wall Assembly – Min 7-5/8 in. thick wall assembly constructed of any UL Classified Concrete Blocks*. Max diam of opening is 18 in.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants – One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe on tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. Steel Pipe – Nom 10 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe – Nom 10 in. diam (or smaller) cast or ductile iron pipe.
   C. Copper Tube – Nom 4 in. diam (or smaller) Type L (or heavier) copper tube.
   D. Copper Pipe – Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
   3. Pipe Covering* – Max 3 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space shall be min 1/2 in. to max 3/4 in.
   See Pipe and Equipment Covering – Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used. When pipe covering thickness is less than 3 in. T Rating is 0 Hr.
4. Firestop System – The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* – Wrap Strip – Nom 3/16 in. thick by 1 in. wide intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe covering three times and slid into annular space 7/8 in. such that 1/8 in. of the wrap strip protrudes from the wall surface. When multiple wrap strips are used to achieve the required total length, the ends are to be butted end-to-end and held in place with tape. Wrap strips are installed on each side of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC – CP648-E W25*1" Wrap Strip
   B. Steel Cover Plate – Min 0.021 in. thick (No 25 MSG) galv steel cover plates installed on both surfaces of wall and extending a min of 2 in. beyond the periphery of the opening. The steel cover plate is to be placed over the wrap strips and tightly fitted around the pipe covering. Seam of steel cover plate cut from one corner to the center of the plate. Seam of steel cover plate tightly butted together and secured to surfaces of wall by means of 1/8 in. diam by 3 in. long toggle bolts in conjunction with 3/16 in. by 3/4 in. and 1/4 in. by 1-1/4 in. steel fender washers.

*Bearing the UL Classification Mark

HILTI® FIRESTOP SYSTEMS

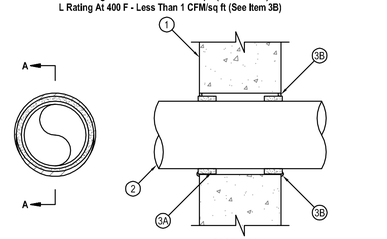
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CLASSIFIED C UL US

System No. W-J-2205

WJ 2205

F Ratings - 1 and 2 Hr (See Item 3B)
T Rating - 0 Hr
L Rating At Ambient - 1.2 CFM/sq ft (See Item 3B)
L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 3B)



SECTION A-A

1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. See Table under Item 3B for max diam of opening.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through-Penetrants — One nonmetallic pipe installed within the firestop system. See Table under Item 3B for annular space required in the firestop system. Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes may be used:
   A. Polyvinyl Chloride (PVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
   B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping system.
   C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

Nom Pipe Diam, in. (mm)	Wrap Strip	Wrap Strip Size, thick. x width, in. (mm)	Max Diam of Opening,in. (mm)	Annular Space, in. (mm)	
				Min.	Max.
1-1/2 (38)	CP 648S - 1.5" US	3/16 x 1 (5 x 25)	2-3/8 (60)	3/16 (5)	5/16 (8)
2 (51)	CP 648S - 2" US	3/16 x 1 (5 x 25)	3 (76)	3/16 (5)	5/16 (8)
3 (76)	CP 648S - 3" US	3/16 x 1-3/4 (5 x 44)	4 (102)	3/16 (5)	5/16 (8)
4 (102)	CP 648S - 4" US	3/8 x 1-3/4 (10 x 44)	5-3/8 (137)	3/8 (10)	1/2 (13)
6 (152)	CP 648S - 6" US	1/2 x 1-3/4 (13 x 44)	8 (203)	9/16 (14)	13/16 (21)

3. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Wrap Strip — See Table under Item 3B for min size of intumescent wrap strip. The wrap strip is continuously wrapped around the outer circumference of the pipe once and slid into the annular space such that approx 1/8 in. (3 mm) of the wrap strip protrudes from the wall surface. Wrap strip is held in place with integral fastening tape. Wrap strip installed on each surface of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF
   HILTI INC — CP 648S - 1.5" US, CP 648S - 2" US, CP 648S - 3" US, CP 648S - 4" US and CP 648S - 6" US
   B. Fill, Void or Cavity Material* — Caulk — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. For 2 hr fire-rated walls, 1/4 in. (6 mm) bead fill material also applied at wrap strip/wall interface. In 1 hr fire-rated walls, fill material is optional for nom 1-1/2, 2, 3 and 4 in. (38, 51, 76 and 102 mm) diam penetrants. In 2 hr fire-rated walls, fill material is optional for nom 1-1/2, 2 and 3 in. (38, 51 and 76 mm) diam penetrants. Fill material is required to be used to attain L Ratings.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant
   *Bearing the UL Classification Mark

HILTI® FIRESTOP SYSTEMS

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CLASSIFIED C UL US

FIRESTOPPING DETAILS

NTS

1–17

R

These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

P201–14165.DWG

PRATER
Engineering Associates, Inc.
6130 Wilcox Road (614) 766 4896
Dublin, Ohio 43016 FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
PNC	PNC	KCB	14165

SPGB Architects
4333-B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY: PNC
DRAWN BY: PNC
CHECKED BY: KCB

REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

PLUMBING NOTES AND DETAILS

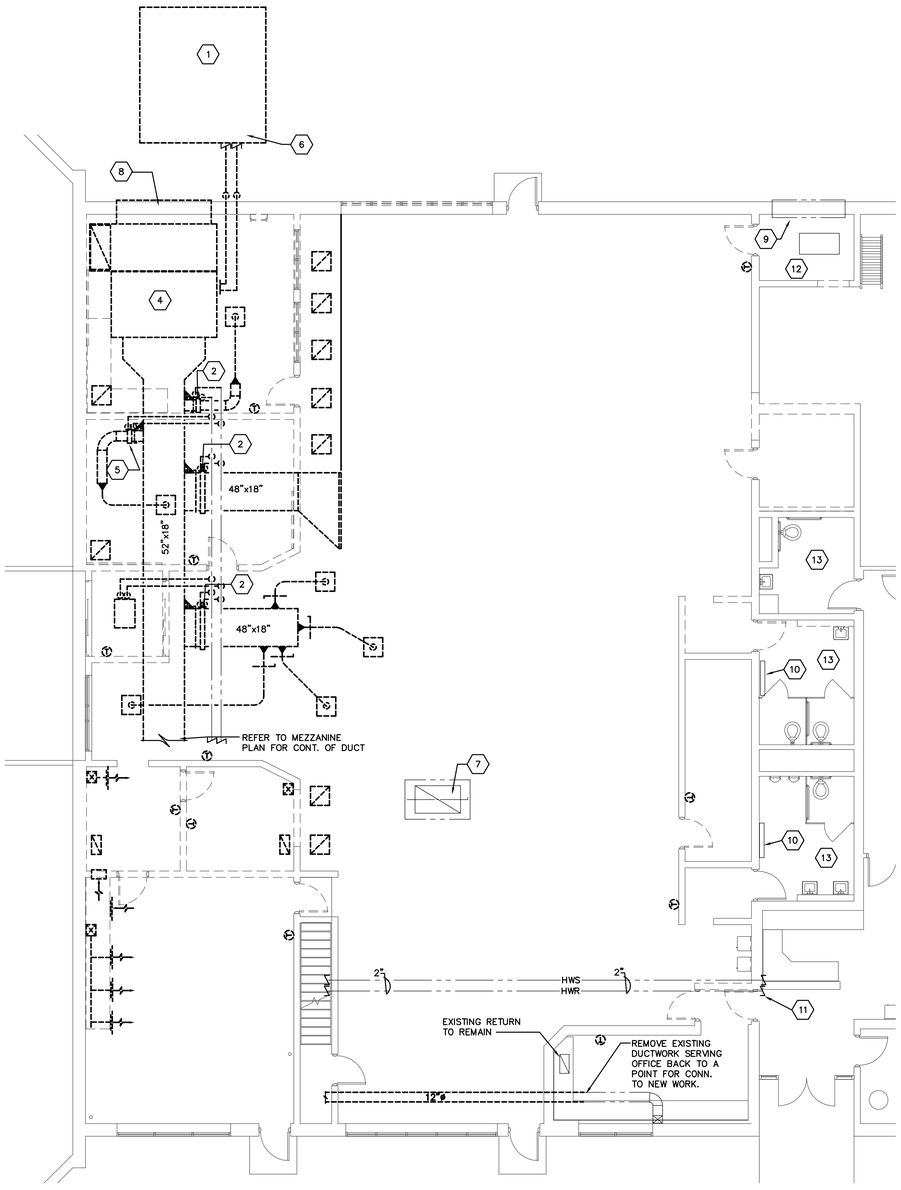
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P201

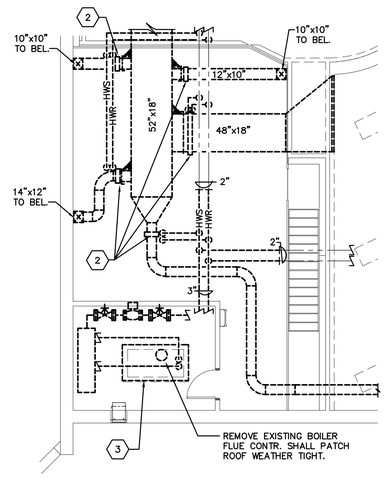
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DATE: 12/05/14

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



FIRST FLOOR
HVAC DEMOLITION PLAN
SCALE: 1/8"=1'-0"



MEZZANINE
HVAC DEMOLITION PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES

1. CONTRACTOR SHALL MAINTAIN THE EXISTING CONTROLS SYSTEM FOR THE (2) AIR HANDLERS THAT WILL REMAIN ON THE SOUTH SIDE OF THE BUILDING.

CODED NOTES ⬡

1. REMOVE EXISTING CONDENSING UNIT AND ASSOCIATED PIPING.
2. REMOVE EXISTING REHEAT COIL AND ASSOCIATED HEATING WATER PIPING TO NEAREST MAIN AND CAP.
3. REMOVE EXISTING BOILER, HEATING WATER PUMP, FLUE, AND EXPANSION TANK. REMOVE HEATING WATER PIPING BACK TO A POINT IN THE MECHANICAL ROOM FOR CONNECTION TO NEW WORK.
4. REMOVE EXISTING AIR HANDLER ABOVE CEILING, REFRIGERANT PIPING, AND ALL ASSOCIATED APPURTENANCES.
5. REMOVE EXISTING CEILING MOUNTED CABINET HEATER AND ASSOCIATED HEATING WATER PIPING. REMOVE PIPING BACK TO NEAREST MAIN AND CAP.
6. CONTRACTOR SHALL RECLAIM REFRIGERANT FROM EXISTING SYSTEM BEFORE DEMOLITION, AND PROVIDE WSU WITH DOCUMENTATION REFRIGERANT RECOVERY.
7. EXISTING ROOF RELIEF DAMPER TO REMAIN. CONTRACTOR SHALL DISABLE MOTORIZED DAMPER AND PERMANENTLY LOCK INTO CLOSED POSITION.
8. REMOVE EXISTING O.A. DUCTWORK AND LOUVER IN EX. 120"x48" OPENING. OPENING IN WALL SHALL REMAIN FOR USE IN NEW WORK.
9. EXISTING LOUVERS TO REMAIN. REMOVE DAMPER OPERATOR ON LOWER LOUVER AND LOCK DAMPER IN CLOSED POSITION FROM INSIDE AND APPLY RIDGID INSULATION OVER DAMPER OPENING FROM THE INSIDE. SEAL ALL OPENINGS WEATHER TIGHT. UPPER DAMPER SHALL REMAIN FOR USE IN NEW WORK.
10. EXISTING HOT WATER FINNED TUBE RADIANT HEAT TO REMAIN.
11. EXISTING EQUIPMENT AND PIPING SERVING SOUTH SIDE OF BUILDING TO REMAIN.
12. SHOP COMPRESSOR/ CONTROLS COMPRESSOR AND DRYER SHALL BE RELOCATED BY PLUMBING CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE ALL CONTROLS CONNECTIONS SERVING EXISTING EQUIPMENT TO REMAIN TO RELOCATED COMPRESSOR LOCATION. COORDINATE WITH P.C.
13. EXISTING RESTROOM EXHAUST TO REMAIN.

HEATING LEGEND

SYMBOL	DESCRIPTION
HR	EXIST. HEATING WATER RETURN
HS	EXIST. HEATING WATER SUPPLY
COND	LOW PRESSURE CONDENSATE
CPD	CONDENSATE PUMP DISCHARGE
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
CW	DOMESTIC COLD WATER LINE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
D	DRAIN LINE
FOG	FUEL OIL GAGE LINE
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
HCR	HOT / CHILLED WATER RETURN
HCS	HOT / CHILLED WATER SUPPLY
HG	HOT GAS LINE
HPS	HIGH PRESSURE STEAM
HRS	HEAT RECOVERY SUPPLY
HRR	HEAT RECOVERY RETURN
LIQ	LIQUID LINE
LPS	LOW PRESSURE STEAM
	RETURN RISER
	SUPPLY RISER
	AIR VENT - PLAN VIEW
	CAPPED LINE
	EXISTING WORK TO REMAIN
	EXISTING WORK TO BE REMOVED
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
	COLD AIR HIGH PRESSURE DUCT
	HOT AIR HIGH PRESSURE DUCT
G	RISE OR DROP
	PIPE BRANCH TOP CONNECTION
	PIPE BRANCH BOTTOM CONNECTION
	PIPE ANCHOR
	PIPE FLANGES
	PIPE GUIDE
	PIPE UNION
	FLEXIBLE PIPE CONNECTION
	FLEXIBLE DUCT
	SPIN-IN FITTING WITH BALANCE DAMPER

SYMBOL	DESCRIPTION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	TEE WITH NIPPLE & CAP
	PLUGGED TEE
	Y-TYPE STRAINER
	PETE'S PLUG
	COMB. BALANCE & STOP VALVE
	BALL VALVE
	BALL VALVE W/MEMORY STOP
	GATE VALVE (SCREWED BODY)
	DRAIN VALVE WITH HOSE END
	GLOBE VALVE
	GATE VALVE (FLANGED BODY)
	AUTO CONTROL VALVE
	SOLENOID VALVE
	CHECK VALVE
	GAS COCK OR BALANCE VALVE
	METERED BALANCE VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE W/MEMORY STOP
	TEMPERATURE SENSOR
F	FLOW SWITCH
T	THERMOSTAT
H	HUMIDISTAT
	THERMOMETER
	CONNECT TO EXISTING
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	R.A., O.A., OR EXH. DUCT UP
	R.A., O.A., OR EXH. DUCT DOWN
ø	ROUND DUCT
	FLAT OVAL DUCT
	45° BOOT BRANCH TAKEOFF
	ELBOW WITH TURNING VANES
	FIRE DAMPER
	MAN. DAMPER
	ACCESS DOOR

HVAC NOTES

1. PIPING AND DUCT LAYOUT IS ONLY SCHEMATIC, EXACT LOCATION OF PIPES AND DUCTS TO BE COORD. ON JOB W/BLDG. STRUCTURE, AND WORK OF OTHER CONTRS.

   RUN ALL WATER SUPPLY AND RETURN MAINS LEVEL UNLESS OTHERWISE NOTED.
3. RUNOUTS TO UNITS BELOW MAINS TO BE TAKEN FROM BTM. OF MAINS AT 45°, PITCH DN TO UNITS. RUNOUTS TO UNITS AB. MAINS TO BE TAKEN FROM TOP OF MAINS AT 45°, PITCH UP TO UNITS. PITCH -1" IN 10'-0".
4. RUN ALL DRAIN LINES INDIRECT TO NEAREST F.D.
5. INSTALL AIR VENTS AT HIGH POINTS OF SYSTEM, AS SHOWN ON DRAWINGS AND AS REQ'D. FOR PROPER AIR VENTING OF SYSTEM.
6. INSTALL WATER BALANCING DEVICES ON ALL WATER HEATING UNITS.
7. COORD. EXACT LOCATION OF DUCT RISERS IN PIPE SPACES W/PLBG. STACKS.
8. ALL DUCTS AND PIPES AB. CLG. UNLESS OTHERWISE NOTED.
9. OPNGS. THROUGH ROOF BY CONTR. FURN. AND SETTING OF PREFABRICATED CURBS AND FANS BY CONTR.
10. OFFSET DUCTS INTO BEAM SPACE FOR CLEARANCE WHERE SPACE AB. CLG. IS NOT SUFFICIENT FOR DUCTS TO CROSS OTHER DUCTS OR WORK OF OTHER CONTRS.
11. NOTIFY APPROPRIATE CONTR. OF SIZE AND LOCATION OF ALL RECESSES AND OPNGS. REQ'D FOR HTG. WORK WITHIN 60 DAYS AFTER NOTICE TO PROCEED.
12. INSTALL BALANCING DPRS. AS SHOWN AND AS REQ'D FOR PROPER BALANCING OF AIR HANDLING SYSTEMS.
13. CROSS-HATCHED DUCT TO BE SIMILAR TO UNITED McGILL K-27 WITH 1" THICK INSULATION, PERFORATED INNER LINER AND MYLAR LINER TO PREVENT EROSION OF THE INSULATION. DUCT DIMENSION GIVEN IS ACTUAL INSIDE OPENING. INSIDE OPENING OF THE DUCT SHALL NOT BE SMALLER THAN LISTED. CROSS-HATCHED RETURN AIR SOUND BOOTS DO NOT REQUIRE K-27. THE RETURN AIR BOOTS ARE ARE TO BE LINED WITH 1" THICK DUCT LINER.
14. PROVIDE AIRTIGHT A.D. IN DUCTS ADJACENT TO ALL AUTOMATIC DPRS. AND TEMP. CONTROL DEVICES.
15. REFER TO ARCH. REFLECTED CLG. PLAN FOR EXACT LOCATION OF DIFFUSERS, GRILLES, ETC.
16. "AUTO-CONTROL" DPRS. ARE TO BE PROVIDED BY AIR HANLDING UNIT MFGR. ALL OTHER DPRS. INCLUDING "MOTORIZED DPRS." ARE TO BE PROVIDED BY THE CONTR.
17. NOTE THAT EXISTING WORK SHOWN ON PLANS IS FROM PREVIOUS ENGINEERING DOCUMENTS AND FIELD OBERSERVATION. ACTUAL CONDITIONS MAY VARY, AND THIS CONTRACTOR SHALL FIELD VERIFY EXISTING WORK AND MAKE MINOR ADJUSTMENTS NECESSARY TO COMPLETE NEW WORK. IF EXISTING CONDITIONS PROHIBIT NEW WORK, NOTIFY THE ENGINEER FOR REDIRECTION.
18. ALL THERMOSTAT SENSORS SHALL BE COORDINATED WITH LIGHT SWITCHES, CASEWORK, ETC. COORDINATE LOCATIONS WITH CONSTRUCTION MANAGER PRIOR TO ROUGH-IN.
19. ALL MOTORS THAT ARE SERVED BY A VFD SHALL BE PROVIDED WITH AGEIS SRG SHAFT GROUNDING BRUSH OR MANUFACTURER PROVIDED GROUNDING SYSTEM.

1-17

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HD100-14165.DWG

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REVISIONS:	DATE:
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PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

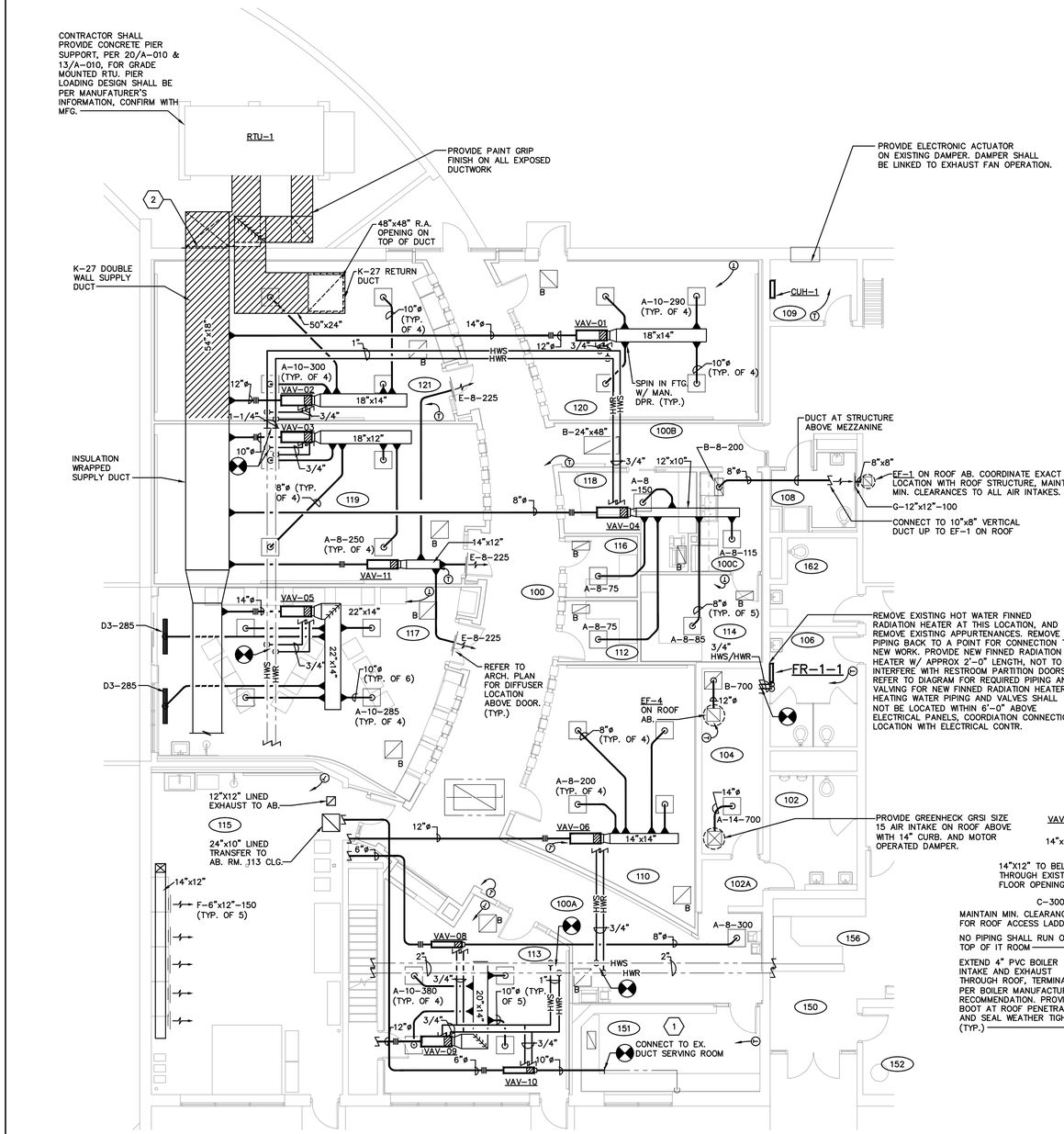
FIRST FLOOR
HVAC DEMO PLAN

SCALE: AS NOTED

HD100

JOB NO.: 14022

DATE: 12/05/14



FIRST FLOOR HVAC PLAN

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

MEZZANINE HVAC PLAN

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

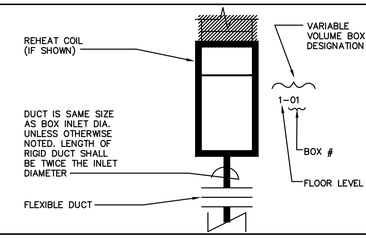
GENERAL NOTES

A. CONTRACTOR SHALL MAINTAIN THE EXISTING CONTROLS SYSTEM FOR THE (2) AIR HANDLERS THAT WILL REMAIN ON THE SOUTH SIDE OF THE BUILDING.

CODED NOTES ⬡

1. CONTRACTOR SHALL PROVIDE TEMPORARY HEATING AND COOLING TO ROOM 151, AND THE TELECOM PLATFORM ABOVE DURING CONSTRUCTION. ROOM 151 WILL REMAIN OCCUPIED DURING CONSTRUCTION. AT THE CONTRACTORS OPTION THE CONTRACTOR MAY PROVIDE A TEMPORARY HEATING/AIR CONDITIONING UNIT CONNECTED TO EXISTING DUCTWORK SERVING THESE ROOMS OR EXTEND TEMPORARY DUCTWORK TO SOUTH SIDE OF BUILDING AND CONNECT TO EXISTING SUPPLY DUCTWORK TO PROVIDE HVAC TO ROOM 151 AND TELECOM PLATFORM FOR THE DURATION OF CONSTRUCTION.
2. PROVIDE BLANK OFF PANEL AND INSULATION TO COVER EXISTING PORTION OF BUILDING OPENING AND AROUND PERIMETER OF NEW DUCT WORK.
3. COORDINATE EXACT LOCATION WITH IT EQUIPMENT. EXTEND 3/4" CONDENSATE DRAIN PIPING TO MOP SINK.
4. SIZE REFRIGERANT PIPING BETWEEN INDOOR & OUTDOOR UNITS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. SLEEVE & SEAL THE WALL PENETRATION WEATHER TIGHT. REFRIGERANT PIPING MAY BE PRE-CHARGED LINE SETS IF AVAILABLE IN REQUIRED LENGTHS. INSULATE SUCTION LINE WITH ELASTOMERIC TYPE INSULATION AND PROVIDE WEATHER COATING ON INSULATION.

VAV BOX DETAIL



VARIABLE AIR VOLUME BOX SCHEDULE

REHEAT COIL SELECTIONS BASED ON 40°F AIR TEMP. RISE, 30°F WATER TEMP. DROP, 180°F ENTERING WATER, 55°F ENTERING AIR

BOX NO.	SIZE	MAX CFM	MIN CFM COOLING	MIN CFM HEATING	NC	GPM	MBH	PIPE SIZE	REMARKS
VAV-01	12"	1160	350	425	26	1.4	21	3/4"	(1)
VAV-02	12"	1200	360	360	26	1.1	16.6	3/4"	
VAV-03	10"	1000	300	300	26	0.9	13	3/4"	
VAV-04	8"	500	150	150	26	0.5	6.5	3/4"	
VAV-05	12"	1550	465	750	26	2.2	33.5	3/4"	
VAV-06	10"	800	240	240	26	0.7	10.4	3/4"	
VAV-07	10"	1050	300	300	26	1.0	15	3/4"	
VAV-08	6"	300	90	150	26	0.5	6.5	3/4"	(1)
VAV-09	12"	1520	460	460	26	1.5	22.3	3/4"	
VAV-10	6"	200	60	100	26	0.3	4.3	3/4"	
VAV-11	8"	675	205	275	26	0.8	12.3	3/4"	

(1) PIPE REHEAT COIL WITH THREE-WAY AUTO CONTROL VALVE

IT ROOM EQUIPMENT NOTE

AC-1/CU-1

MITSUBISHI MODEL PKA-A24KA, WALL MOUNTED, DUCTLESS AIR CONDITIONER WITH MATCHING MODEL PUZ-A24NHA3 CONDENSING UNIT. 24,000 BTUH TOTAL COOLING CAPACITY, 17 SEER, 208/230V, 1ø, 25A MCA, 40A MAX OVERCURRENT PROTECTION DEVICE. CONTROL WIRING BY THE HVAC CONTRACTOR. PROVIDE WITH LOW AMBIENT CONTROLS TO 0° F AND LOCKING BRACKET FOR REMOTE THERMOSTAT. ROUTE CONDENSATE DRAIN TO FLOOR DRAIN IN ADJACENT MECHANICAL ROOM. PROVIDE ROOF MOUNTING FOR CONDENSING UNIT.

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TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR HVAC PLAN

SCALE: AS NOTED

H100

JOB NO.: 14022

DATE: 12/05/14

1-17

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1/16" = 1'-0" 1/8" = 1'-0" 3/16" = 1'-0" 1/4" = 1'-0" 3/8" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0" 1" = 1'-0" 1 1/2" = 1'-0" 3" = 1'-0" 6" = 1'-0"

ROOFTOP UNIT SCHEDULE

UNIT				EVAPORATOR FAN									COMPRESSOR				CONDENSER					COOLING COIL *CAPACITIES BASED ON 95°F AMBIENT AIR TEMP.							HEAT			ELECTRICAL							REMARKS
											OUTSIDE AIR																											
UNIT NUMBER	LOCATION	MFGR & MODEL NUMBER	UNIT WEIGHT POUNDS	NOM. TONS	HP	BHP REQ'D	FLA	SUPPLY CFM	ESP	RPM	MIN %	CFM	HP	NO. OF COMP.	RLA	NO. OF STAGES	HP	NO. OF FANS	SQ. FT. COILS	CFM	FLA	TYPE	EDB	EWB	NET SENS. MBH	NET LATENT MBH	NET TOTAL MBH	SQ. FT. COILS	FACE VEL.	MBTUH INPUT	MBTUH OUTPUT	STAGES OF CONTROL	VOLT	PHASE	CONTROL VOLTAGE	MINIMUM CIRCUIT AMPS	MOCP	MIN. DISCONNECT	
RTU-1	GRADE	TRANE MODEL YCH420	2300	35	15	9.35	18.9	12000	2.0"	1760	10	1600	–	3	14.1 / 19.2 (2)	3	1.1	3	51.3	24,800	3.5 EACH	DX	78	65	282	77	358	31.7	379	350	283	5	480	3	24	90.3	100A	98A	(1)(2)(3)(4)(5)(6)(7)

(1) REFER TO SPECIFICATION FOR FILTER REQUIREMENTS (2) PROVIDE UNIT WITH 18" HIGH GRADE MOUNT BASE, BASE TO BE INSTALLED ON CONCRETE PIER SUPPORTS PER MANUFACTURER'S RECOMMENDATIONS. (3) EXTEND CONDENSATION DRAIN PIPING FROM THE DRAIN PAN OF UNIT TO SPLASH BLOCK (4) FURNISH UNIT WITH 100% OUTSIDE AIR ECONOMIZER (5) CONTR. TO PROVIDE R.A. SMOKE DETECTOR. CONTR. TO INSTALL IN RETURN DUCT. (6) PROVIDE 120V-15A POWERED CONVENIENCE OUTLET AND LIGHT AT UNIT. (7) PROVIDE UNIT WITH FACTORY INSTALLED 100% POWERED EXHAUST, (2) 1-HP 460V 1.8 MOTORS.

FAN SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON GREENHECK UNLESS OTHERWISE NOTED.
KEY: CENT.-CENTRIFUGAL; PROP.-PROPELLER; F.C.-FORWARD CURVED; B.I.-BACKWARD INCLINE; A.F.-AIR FOIL; A.T.L.-ACROSS THE LINE; VFD-VARIABLE FREQUENCY DRIVE

FAN NO.	LOCATION	FUNCTION	MFGR. MODEL NUMBER	FAN TYPE	WHEEL TYPE & SIZE	CFM	TOTAL S.P. "W.G.	R.P.M.	TIP SPEED F.P.M.	OUTLET VELOCITY F.P.M	MAX. SOUND RATING	MOTOR H.P.	BHP REQ'D	VOLT / PHASE	TYPE MOTOR STARTING	DAMPER: GRAVITY	DAMPER: MOTOR OPERATED	DRIVE: ADJUST. SHEAVE	DRIVE: DIRECT	REMARKS
EF-1	RM-108	RESTROOM EXHAUST	GREENHECK G-085-VG	DOWNBLAST EXHAUST	B.I. 10.875	300	0.33"	1349	3841	612	5.8 SONES	1/6	.04	120 / 1	A.T.L.		●		●	(1)(3)(4)(7)
EF-2	RM-115	METAL SHOP EXHAUST	GREENHECK CUBE-101	UPBLAST EXHAUST	B.I. 11.125"	750	.30"	1311	3819	625	6.9 SONES	1/4	.15	120 / 1	A.T.L.		●	●		(2)(4)
EF-3	FIRE WATER ROOM	FIRE WATER EXHAUST	GREENHECK SE1-12-432-VG	SIDEWALL PROP	PROP 12"	450	.375"	1,282	4027	549	8.5 SONES	1/4	0.10	120 / 1	A.T.L.		●		●	(1)(3)(4)(6)
EF-4	ELEC. ROOM	ELECTRICAL RM EXHAUST	GREENHECK G-103-VG	DOWNBLAST EXHAUST	B.I. 11.125"	700	.30"	1088	3169	778	5.1 SONES	1/4	.07	120 / 1	A.T.L.		●		●	(1)(3)(4)(6)

(1) PROVIDE WITH ECM MOTOR. (2) PROVIDE WALL MOUNTED TIME CLOCK IN ROOM 115 AND WALL SWITCH TO OVERRIDE TO ON POSITION. (3) FAN TO BE FURNISHED W/ FACTORY MOUNTED VARIABLE SPEED SWITCH FOR BALANCING. (4) PROVIDE WITH 14" HIGH SOUND CURB.
(5) SUPPORT FROM STRUCTURE ABOVE. (6) CONTROLLED BY THERMOSTAT (7) RUNS CONTINOUSLY

PUMP SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON BELL & GOSSETT UNLESS OTHERWISE NOTED.
KEY: CC-CLOSE COUPLED END SUCTION; F.C.-FLEXIBLE COUPLED END SUCTION; A.T.L.-ACROSS THE LINE H.S.C.-FLEXIBLE COUPLED HORIZONTAL SPLIT CASE; I.L.-IN LINE; VFD-VARIABLE FREQUENCY DRIVE
ALL PUMPS FURNISHED WITH 1750 RPM MOTORS UNLESS OTHERWISE NOTED.

PUMP NO.	FUNCTION	LOCATION	MFGR. MODEL NUMBER	TYPE	GPM	FT. HD.	EFF. %	SUCT. SIZE	DISCH. SIZE	MOTOR H.P.	BHP REQ'D.	VOLT / PHASE	TYPE MOTOR STARTING	REMARKS
P-1	HEATING WATER PUMP	MECH. RM.	SERIES 80 1.5X1.5X7B	I.L.	45	30	57	1-1/2"	1-1/2"	1.0	0..66	460 / 3	A.T.L.	OPERATING DDC CONTROLLED
P-2	HEATING WATER PUMP	MECH. RM.	SERIES 80 1.5X1.5X7B	I.L.	45	30	57	1-1/2"	1-1/2"	1.0	0.66	460 / 3	A.T.L.	STANDBY DDC CONTROLLED

CABINET UNIT HEATER SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON TRANE UNLESS OTHERWISE NOTED.

UNIT NO.	FRAME TYPE	MFGR. MODEL NUMBER	KW	MBH	AMPS	VOLT / PHASE	REMARKS
CUH-1	SURFACE MOUNT	UHWA051	5.0	17.1	24	208 / 1	(1)(2)

(1) FURNISH WITH INTEGRAL THERMOSTAT. (2) FURNISH WITH CIRCUIT BREAKER.

BOILER SCHEDULE

MANUFACTURER'S MODEL NUMBER BASED ON LOCHNIVAR KNIGHT XL UNLESS OTHERWISE NOTED.

BOILER NO.	MFGR. MODEL NUMBER	INPUT MBH	OUTPUT MBH		VOLTS / PHASE	BOILER HORSEPOWER	BLOWER HORSEPOWER	REMARKS
1	KBN801	800	752		120 / 1ø	23.8	–	
							–	

NOTE:
1. FURNISH WITH GAS REGULATOR. GAS PRESSURE FOR BOILERS SHALL BE A MAXIMUM OF 10.5" W.C. AND A MINIMUM OF 4" W.C.
2. FURNISH WITH "SMART SYSTEM" CONTROLLER, OUTDOOR AIR SENSOR, AND SECONDARY WATER TEMPERATURE SENSOR.
3. FURNISH WITH BOILER CIRCULATOR (P-3) AS SIZED AND PROVIDED BY BOILER MANUFACTURER.
4. PROVIDE CPVC VENT/INTAKE PIPING PER MANUFACTURER'S RECOMMENDED SIZING RECOMMENDATIONS.

AIR TERMINAL SCHEDULE

ROUND AND SQUARE DIFFUSERS: TYPE OF OUTLET — SIZE OF OUTLET (NECK SIZE DIAMETER FOR DIFFUSERS) — A - 8 - 300 — AIR QUANTITY IN C.F.M. (DIFF. & REG. ONLY)

LINEAR DIFFUSERS: TYPE OF OUTLET — NUMBER OF SLOTS — C4 - 300 — AIR QUANTITY IN C.F.M. (DIFF. & REG. ONLY)

TYPE	DESCRIPTION
A	SUPPLY AIR DIFFUSER, LAY-IN, 24"x24", TITUS MODEL TMSA: DIFFUSERS SHALL HAVE ADJUSTABLE HORIZONTAL-TO-VERTICAL PATTERN WITH EQUALIZING GRID. WHITE FINISH.
B	RETURN/EXHAUST AIR GRILLE, LAY-IN, TITUS MODEL 350RL: 24"x24" UNLESS OTHERWISE NOTED. PROVIDE 6" PLENUM BOX WITH ROUND DUCT CONNECTION WHERE NOTED ON PLANS. WHITE FINISH,
C	SUPPLY AIR REGISTER, DUCT MOUNTED, TITUS MODEL 300RS: 24"x6" UNLESS OTHERWISE NOTED. FURNISH WITH OPPOSED BLADE BALANCE DAMPER.
D	LINEAR SUPPLY AIR DIFFUSER, SURFACE MOUNTED, TITUS MODEL ML-38, 3/4" SLOTS, 4'-0" LONG UNLESS OTHERWISE NOTED. FURNISH W/ LINED PLENUM W/ INLET CONNECTION SIZE EQUAL TO BRANCH DUCT SIZE.
E	LINEAR SUPPLY AIR DIFFUSER, VERTICAL SURFACE MOUNTED, TITUS MODEL ML-38, 3/4" SLOTS, LENGTH AS SHOWN IN ARCHITECTURAL ELEVATIONS UNLESS OTHERWISE NOTED. FURNISH W/ LINED PLENUM W/ INLET CONNECTION SIZE EQUAL TO BRANCH DUCT SIZE. WHITE FINISH.
F	SUPPLY AIR REGISTER, SURFACE MOUNTED, TITUS MODEL S300FS; 24"x12" UNLESS OTHERWISE NOTED. FURNISH WITH EXTRACTION DAMPER. WHITE FINISH.
G	RETURN/EXHAUST AIR GRILLE, SURFACE MOUNTED, TITUS MODEL 350RL: 24"x12" UNLESS OTHERWISE NOTED. PROVIDE 6" DEEP PLENUM BOX WITH DUCT CONNECTION WHERE NOTED ON PLANS. WHITE FINISH.

HEATING ABBREVIATIONS

AB.	ABOVE
A.D.	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
APPROX.	APPROXIMATELY
ARCH.	ARCHITECT
AUTO. CONT.	AUTOMATIC CONTROL
BSBD. RAD.	BASEBOARD RADIATION
BTM.	BOTTOM
BLDG.	BUILDING
CAB.	CABINET
CAP.	CAPACITY
CLG.	CEILING
CONC.	CONCRETE
CONN.	CONNECT
CONTR.	CONTRACTOR
CONT.	CONTINUATION
CONV.	CONVECTOR
COORD.	COORDINATE
DTL.	DETAIL
DIA.	DIAMETER
DIFF.	DIFFUSER
DISCH.	DISCHARGE
DN.	DOWN
ELEC.	ELECTRICAL
ELEM.	ELEMENT
ELEV.	ELEVATION
EXH	EXHAUST
EXIST.	EXISTING
FT. HD.	FEET OF HEAD
FIN. RAD.	FINNED RADIATION
F. DPR.	FIRE DAMPER
FLEX.	FLEXIBLE
F & T	FLOAT & THERMOSTATIC
FLR.	FLOOR
F.D.	FLOOR DRAIN
FURN.	FURNISH
GA.	GAGE
GEN.	GENERAL
GRAV.	GRAVITY
GR.	GRILLE
HTR.	HEATER
HTG.	HEATING
H & A/C	HEATING & AIR CONDITIONING
H & C	HEATING & COOLING
H & V	HEATING & VENTILATING
H.V.	HIGH VELOCITY
IND. U.	INDUCTION UNIT
MAN. DPR.	MANUAL DAMPER
MFR.	MANUFACTURER
MECH.	MECHANICAL
M. A.	MIXED AIR
MTD.	MOUNTED
NOM.	NOMINAL
OPNG.	OPENING
O.A.	OUTSIDE AIR
PLBG.	PLUMBING
PRESS.	PRESSURE
P.R.V.	PRESSURE REDUCING VALVE
PROP.	PROPELLER
RAD.	RADIATOR
REFG.	REFRIGERATION
REG.	REGISTER
RHC.	REHEAT COIL
REQD.	REQUIRED
REL.	RELIEF
R.A.	RETURN AIR
RM.	ROOM
SCHED.	SCHEDULE
SHT.MTL.	SHEET METAL
SQ.	SQUARE
STAT.	THERMOSTAT
S.A.	SUPPLY AIR
S & R	SUPPLY & RETURN
TEMP.	TEMPERATURE
THERM.	THERMOMETER
TYP.	TYPICAL
T.C.C.	TEMP. CONTROL CONTRACTOR
U.H.	UNIT HEATER
U.V.	UNIT VENTILATOR
VIB. ISOL.	VIBRATION ISOLATOR
W/W	WALL TO WALL
W/	WITH

EQUIPMENT NOTES

UH-1
HORIZONTAL UNIT HEATER - TRANE MODEL 'S' S-36 - 18.6 MBH TOTAL HEATING CAPACITY, 2.4 GPM, 180°F EWT, 150°F LWT, 0.09 FT. HD. W.P.D., 550 CFM AIRFLOW, 1550 RPM, 25 WATT MOTOR, 115/60/1 POWER. FURNISH WITH INTEGRAL DISCONNECT SWITCH, TOTALLY ENCLOSED MOTOR, COPPER TUBES, WALL MOUNTING BRACKET, AND LINE VOLTAGE THERMOSTAT. THERMOSTAT BY CONTRACTOR, WIRED BY ELEC. CONTRACTOR. CAPACITIES BASED ON 60°F ENTERING AIR TEMPERATURE.

UH-2
HORIZONTAL UNIT HEATER - TRANE MODEL 'S' S-36 - 18.6 MBH TOTAL HEATING CAPACITY, 2.4 GPM, 180°F EWT, 150°F LWT, 0.09 FT. HD. W.P.D., 550 CFM AIRFLOW, 1550 RPM, 25 WATT MOTOR, 115/60/1 POWER. FURNISH WITH INTEGRAL DISCONNECT SWITCH, TOTALLY ENCLOSED MOTOR, COPPER TUBES, WALL MOUNTING BRACKET, AND LINE VOLTAGE THERMOSTAT. THERMOSTAT BY CONTRACTOR, WIRED BY ELEC. CONTRACTOR. CAPACITIES BASED ON 60°F ENTERING AIR TEMPERATURE.

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TRENARY HALL INTERIOR RENOVATION

HVAC SCHEDULES AND NOTES

SCALE: AS NOTED

H200

JOB NO.: 14022

DATE: 12/05/14

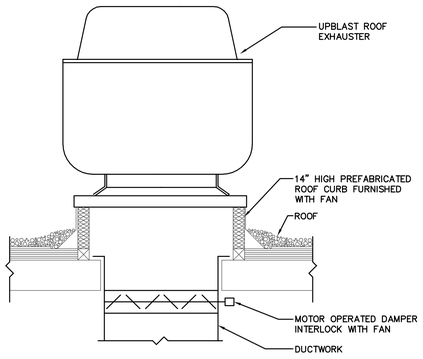
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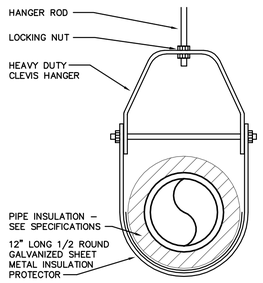
PRATER Engineering Associates, Inc.
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PNC	PNC	TP	14165

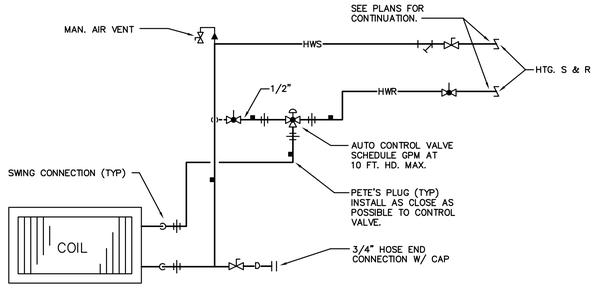
1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



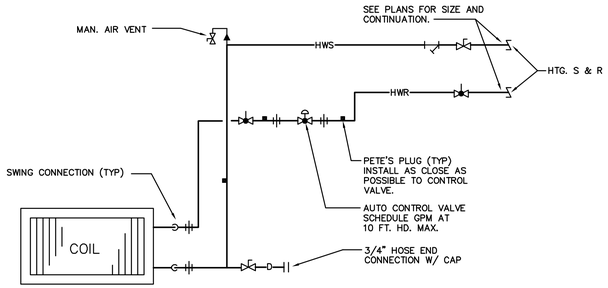
UPBLAST ROOF EXHAUSTER DETAIL
SCALE: N.T.S.



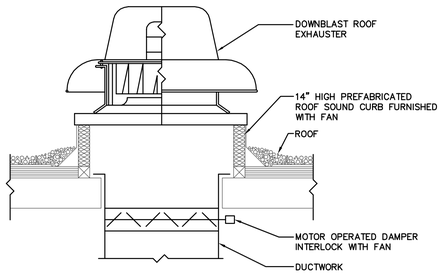
CLEVIS HANGER
N.T.S.



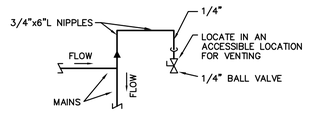
BOX REHEAT COIL PIPING
(3–WAY CONTROL VALVE)



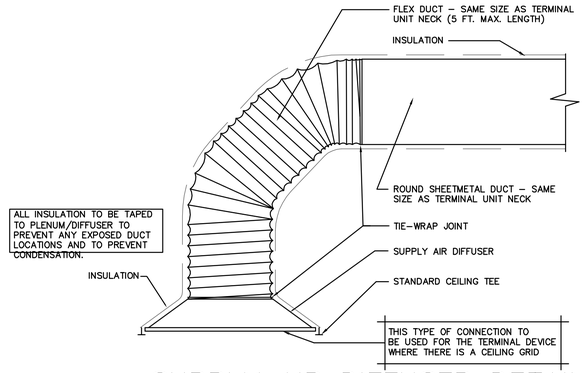
BOX REHEAT COIL PIPING
(2–WAY CONTROL VALVE)



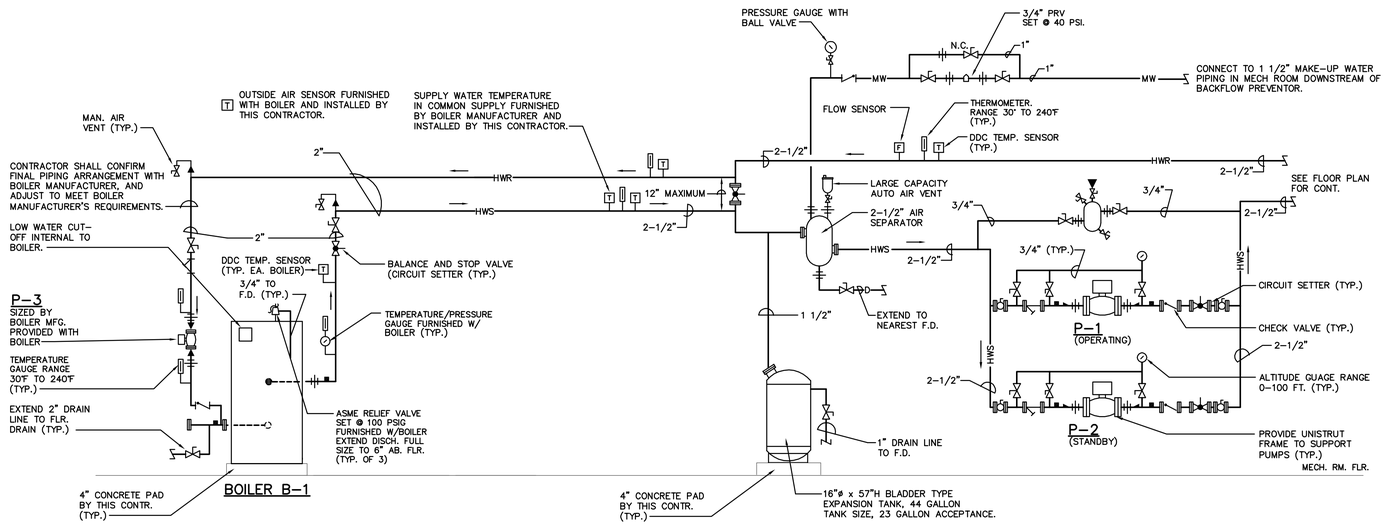
DOWNBLAST ROOF EXHAUSTER DETAIL
SCALE: N.T.S.



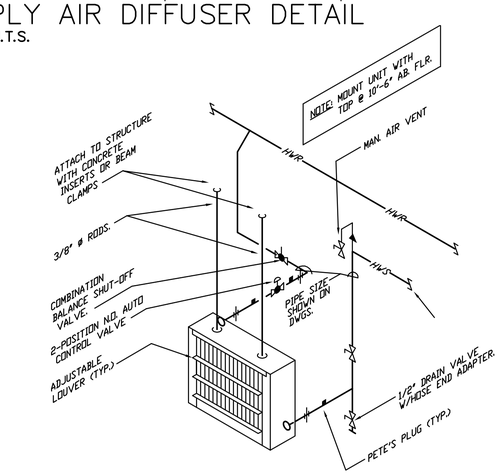
MANUAL AIR VENT PIPING
N.T.S.



SUPPLY AIR DIFFUSER DETAIL
SCALE: N.T.S.



BOILER PIPING SCHEMATIC
NO SCALE



HORIZONTAL PROJECTION UNIT HEATER PIPING
N.T.S.

1–17

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H201–14165.DWG

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CHECKED BY:	TP

REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

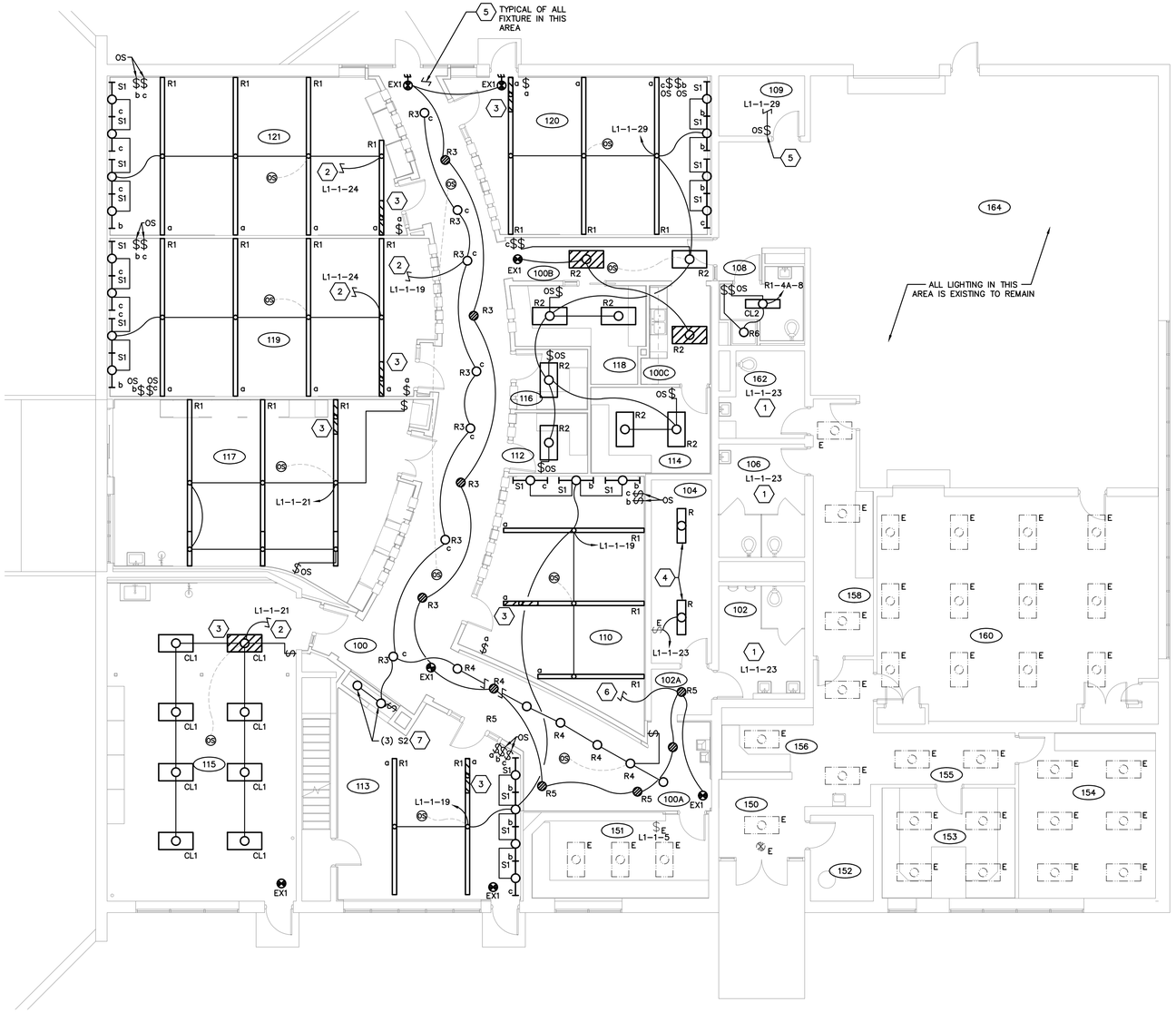
HVAC DETAILS AND DIAGRAMS

SCALE: AS NOTED

H201

JOB NO.: 14022

DATE: 12/05/14



FIRST FLOOR LIGHTING PLAN

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

GENERAL NOTES

A. LIGHTING FIXTURES SHALL BE MANUALLY CONTROLLED WITH A LOCAL WALL SWITCH AND AUTOMATICALLY CONTROLLED TO "OFF" WITH A CEILING MOUNTED OR WALL MOUNTED OCCUPANCY SENSOR. REFER TO THE OCCUPANCY SENSOR WIRING DIAGRAM FOR WIRING DETAILS, SENSOR SPECIFICATIONS AND ADDITIONAL DIRECTION.

B. UNLESS OTHERWISE NOTED, ALL HATCH FIXTURES AND EXIT SIGNS SHALL BE WIRED AHEAD OF THE ROOM SWITCHING TO MONITOR THE LOCAL LIGHTING CIRCUIT. HATCHED FIXTURES SHALL AUTOMATICALLY ILLUMINATE UPON THE LOSS OF UTILITY POWER. WIRE HATCH FIXTURES AND EXIT SIGNS TO REMAIN ILLUMINATED AS NIGHT LIGHTS.

C. LIGHTING FIXTURES NOTED TO BE REUSED OR RELOCATED IN THE NEW WORK PHASE SHALL BE PROTECTED DURING THE DEMOLITION PHASE AND NEW WORK PHASE OF CONSTRUCTION. WHERE COMPONENTS CAN NOT BE PROTECTED THROUGHOUT THE DEMOLITION PHASE OF CONSTRUCTION THEY SHALL BE STORED OFF SITE TO MAINTAIN THE INTEGRITY OF THE DEVICES UNTIL PERMANENTLY INSTALLED. PROVIDE NEW LAMPS IN ALL RELOCATED LIGHTING FIXTURES AND THOROUGHLY CLEAN THE FIXTURE PRIOR TO INSTALLATION.

CODED NOTES ⬡

1. LIGHTING FIXTURES AND CONTROLS IN THIS AREA ARE EXISTING TO REMAIN. MAINTAIN AND PROTECT THE EXISTING FIXTURES AND CIRCUITRY DURING CONSTRUCTION.
2. EXTEND EXISTING LIGHTING CIRCUIT TO THE NEW LIGHTING FIXTURES. MINIMUM WIRE SIZE SHALL BE 2–#12 AND 1–#12 GROUND IN 3/4" CONDUIT.
3. PROVIDE LIGHTING FIXTURE WITH A BODINE GTD, WIRE THE LIGHTING FIXTURE TO BE CONTROLLED WITH ROOM SWITCHING AND AUTOMATICALLY ILLUMINATE UPON LOSS OF THE UTILITY POWER.
4. EXISTING LIGHTING FIXTURE SHALL BE DISCONNECTED AND SURFACE MOUNTED TO THE UNDERSIDE OF THE NEW CEILING. EXTEND THE EXISTING CIRCUITRY TO THE NEW LOCATION, MAINTAIN THE EXISTING CIRCUITRY AND LIGHTING CONTROL.
5. LIGHTING FIXTURE LOCATIONS IN THIS AREA SHALL BE COORDINATED WITH THE ARCHITECT IN THE FIELD PRIOR TO ROUGH–IN AND APPROVED AFTER ROUGH–IN. THE LIGHTING FIXTURES SHALL BE CENTERED IN CONJUNCTION WITH ALL OTHER CEILING COMPONENTS AS DIRECTED BY THE ARCHITECT DURING CONSTRUCTION. PROVIDE ADDITIONAL FRAMING AND STRAPPING TO CENTER THE FIXTURES IN THE CORRECT LOCATION.
6. EXTEND EXISTING EMERGENCY LIGHTING CIRCUIT TO THE NEW EMERGENCY LIGHTING FIXTURES. MINIMUM WIRE SIZE SHALL BE 2–#10 AND 1–#10 GROUND IN 3/4" CONDUIT.
7. MOUNT LIGHTING FIXTURES VERTICALLY WITHIN THE CASE WORK, COORDINATE FINAL MOUNTING WITH THE ARCHITECTURAL DETAIL AND ARCHITECT PRIOR TO ROUGH–IN.

OCCUPANCY SENSOR LEGEND

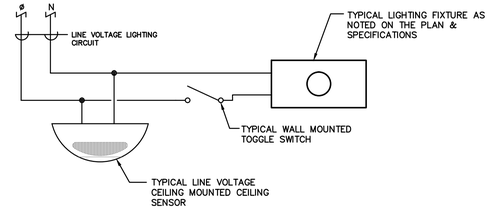
OS WALL MOUNTED SELF–ADJUSTING 600 SQ. FT. DUAL TECHNOLOGY SENSOR WITH 180° FIELD OF VIEW, SENSOR SWITCH MODEL# WSD–PDT & WSD–PDT–2P.

OS CEILING MOUNTED SELF–ADJUSTING 2000 SQ. FT. DUAL TECHNOLOGY SENSOR WITH 360° FIELD OF VIEW, SENSOR SWITCH MODEL# CMR–PDT & CMR–PDT–2P. LINE VOLTAGE

NOTES: IN ROOMS WHERE OCCUPANCY SENSORS AND TOGGLE SWITCHES ARE SHOWN FOR LIGHT FIXTURE CONTROL, OCCUPANCY SENSORS SHALL ACT AS AN AUTOMATIC CONTROL DEVICE TO OVERRIDE LIGHTS "OFF" UPON A PRESET TIME DELAY, REGARDLESS OF SWITCH POSITION. SEE WIRING DIAGRAM ON THIS SHEET. SET TIME DELAY FUNCTION TO 30 MINUTES UNLESS DIRECTED OTHERWISE BY THE OWNER.

WALL MOUNTED SENSORS ARE TWO–BUTTON SENSORS. IN ROOMS WHERE LUMINARES TYPES ARE SPECIFIED WITH AN ADDITIONAL BALLAST FOR DUAL/LEVEL SWITCHING, CONNECT SUCH THAT BUTTONS CONTROL LAMPS IN THIS FASHION. IF FIXTURES ARE NOT SPECIFIED WITH AN ADDITIONAL BALLAST, CONNECT SUCH THAT BUTTONS ARE 'ON' & 'OFF.'

ACCEPTABLE EQUIVALENT PRODUCTS SHALL BE SUBMITTED TO THE ENGINEER AND REVIEWED BY THE UNIVERSITY PRIOR TO BID DATE



CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAM

SCALE: NOT TO SCALE

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TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR LIGHTING PLAN

SCALE: AS NOTED

E100

JOB NO.: 14022

DATE: 12/05/14

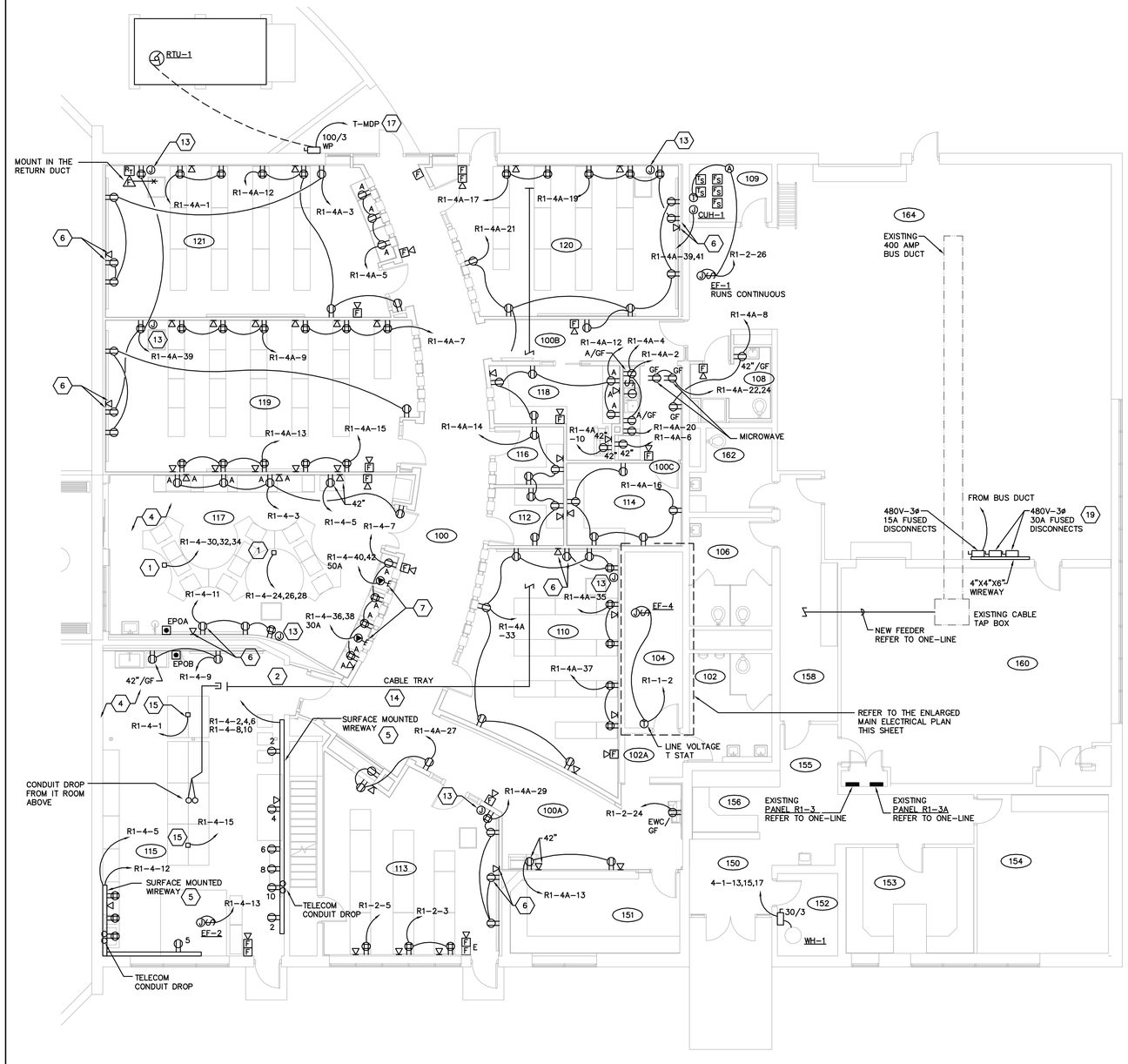
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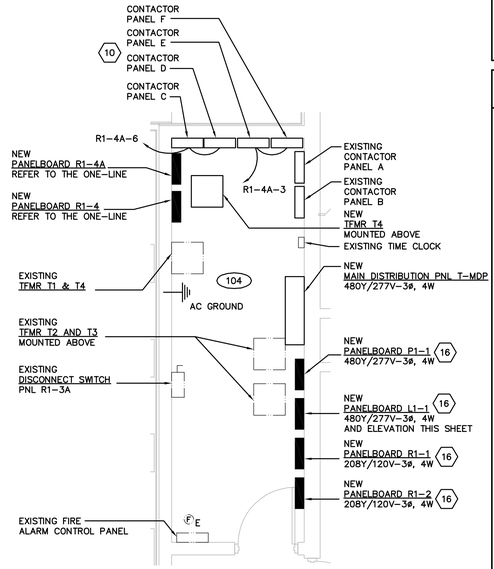
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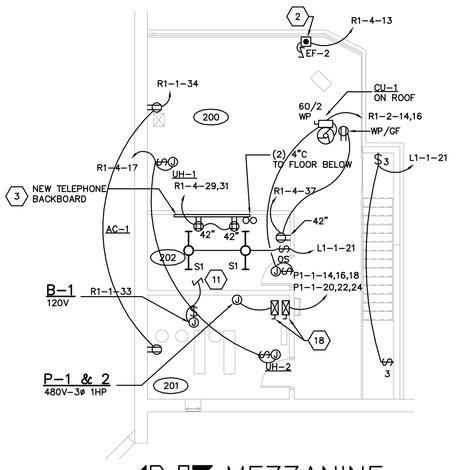
DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
NLC	NLC	DLP	14165



FIRST FLOOR POWER PLAN
SCALE: 1/8"=1'-0"



ENLARGED MAIN ELECTRICAL ROOM
SCALE: 1/4"=1'-0"



MEZZANINE POWER PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES

A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES WITH ALL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN. ALL RECEPTACLES LOCATED WITHIN SIX (6) FEET OF SINK SHALL BE GROUND FAULT INTERRUPTER (GFCI) TYPE RECEPTACLES. RECEPTACLES IN AREAS SUCH AS BREAK ROOMS, KITCHENETTES, ETC. SHALL BE GFCI PROTECTED. RECEPTACLES WHICH ARE NOT READILY ACCESSIBLE AND REQUIRE GFCI PROTECTION SHALL BE SO AT THE CIRCUIT BREAKER. DEVICES NOTED WITH THE SUBSCRIPT "A" SHALL BE MOUNTED ABOVE THE BASE CABINETRY.

B. RETAIN THE SERVICES OF THE EXISTING SIMPLEX FIRE ALARM MANUFACTURER FOR SYSTEM MODIFICATIONS, REMOVAL AND NEW DEVICES ADDED TO THE EXISTING SYSTEM. THE BUILDING SHALL REMAIN OCCUPIED THROUGHOUT CONSTRUCTION AND THE FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. AT NO TIME SHALL THE FIRE ALARM SYSTEM GO INTO ALARM DUE TO CONSTRUCTION MODIFICATIONS.

C. FINAL DEVICE LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT IN THE FIELD PRIOR TO ROUGH-IN AND APPROVED AFTER ROUGH-IN. ALL DEVICES SUCH AS RECEPTACLES, COMMUNICATIONS, FIRE ALARM, LIGHT SWITCHES SHALL BE CENTERED ON FURNITURE SYSTEM AND ARCHITECTURAL ELEMENTS AS DIRECTED BY THE ARCHITECT DURING CONSTRUCTION. PROVIDE ADDITIONAL FRAMING AND STRAPPING TO THE STUD WALLS TO INSTALL THE DEVICES IN THE CORRECT LOCATION.

CODED NOTES ⬡

1. PROVIDE ONE (1) FLOOR-TO-CEILING, STEEL POWER/DATA SERVICE POLE EQUAL TO HUBBELL SERIES #HBLPP. COORDINATE LENGTH OF POLE WITH HEIGHT OF CEILING. POLE SHALL HAVE 5 KNOCKOUTS – PROVIDE FOUR (4) DUPLEX RECEPTACLES AND ONE (1) COMMUNICATIONS OUTLET (BLANK PLATE). POWER POLE SHALL HAVE TWO INTERNAL CHANNELS TO SEPARATE POWER WIRING FROM COMMUNICATIONS CABLING. EXTEND TWO (2) 1.25" CONDUITS FROM THE POWER POLE BACK TO THE EXISTING TELECOMMUNICATIONS RACK.
2. PROVIDE A 120 VOLT, DIGITAL TIMER TO CONTROL NEW EXHAUST FAN. TIMER SHALL BE EQUAL TO TORK E101PB, SET TIMER AS DIRECTED BY THE UNIVERSITY. COORDINATE LOCATION WITH THE UNIVERSITY PRIOR TO ROUGH-IN.
3. THE ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE RETARDANT TYPE TELEPHONE BACKBOARD, 3/4" THICK THE LENGTH AND HEIGHT SHOWN. PAINT ALL SIDES WITH WHITE FIRE RETARDANT PAINT. PROVIDE GROUND BAR AND EXTEND #6 GROUND WIRE BACK TO THE MAIN BUILDING GROUNDING ELECTRODE. ALL NEW COMMUNICATIONS CONDUITS SHALL BE CONTINUES FROM THE JUNCTION BACK TO THIS LOCATION OR TO THE CABLE TRAY. REFER TO SHEET E300 FOR THE GROUND BAR DETAIL.
4. UNLESS OTHERWISE NOTED WIRE THE DEVICE CIRCUITRY THROUGH CONTACTOR PANEL A AND B. ALL CIRCUITS WITHIN ROOM 117 SHALL BE WIRED THROUGH CONTACTOR A AND CIRCUITS IN ROOM 115 SHALL BE WIRED THROUGH CONTACTOR B. PROVIDE A RED MUSHROOM TYPE EMERGENCY POWER OFF (EPO) SWITCH FOR EACH PANEL.
5. PROVIDE ONE (1) SURFACE MOUNTED RACEWAY THE LENGTH SHOWN ON THE DRAWINGS. RACEWAY SHALL BE STEEL TWO COMPARTMENT WIREMOLD #4000 SERIES. SURFACE RACEWAY SHALL BE MOUNTED 42" AFF WITH SURFACE MOUNTED EMT TYPE CONDUIT FEEDS. POWER WIRING SHALL BE ONE (1) 1" EMT CONDUIT AND THE COMMUNICATIONS SHALL BE TWO (2) 1" CONDUITS, EXTEND CONDUITS BACK TO EXISTING TELECOMMUNICATIONS RACK.
6. COORDINATE THE FINAL MOUNTING HEIGHT AND LOCATION OF THE WIRING DEVICE PRIOR TO ROUGH-IN. WIRING DEVICE FOR THE LOW THROUGH PROJECTOR, DEVICE TO BE MOUNTED ABOVE PROJECTOR.
7. PROVIDE A 30 AMP NEMA 5-30R TYPE RECEPTACLE FOR THE UNIVERSITY PROVIDED EQUIPMENT. FLUSH MOUNT DEVICE ABOVE THE COUNTER TOP, COORDINATE FINAL MOUNTING HEIGHT WITH THE ARCHITECT AND FINAL RECEPTACLE TYPE OF THE EQUIPMENT PRIOR TO ROUGH-IN.
8. DELETED.
9. DELETED.
10. PROVIDE FOUR (4) 8 POLE, 30 AMP LIGHTING CONTACTOR. WIRE COIL TO BE CONTROLLED BY THE REMOTE EPO SWITCH IN EACH ROOM.
11. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT, MINIMUM WIRE SIZE SHALL BE 2-#12 AND 1-#12 GROUND IN .5" CONDUIT FROM THE EXISTING CIRCUIT TO THE NEW EQUIPMENT. FIELD COORDINATE EXISTING CIRCUIT NUMBER.
12. PROVIDE ONE (1) NEW 600 VOLT 70 AMP 3ø BUS PLUG TO SERVE THE NEW 45KVA TRANSFORMER. EXTEND 3-#4 AND 1-#10 GROUND IN 1" CONDUIT FROM THE NEW BUS PLUG TO THE NEW TRANSFORMER. MOUNT TRANSFORMER ABOVE THE PANELBOARDS, COORDINATE FINAL LOCATION PRIOR TO ROUGH-IN.
13. PROVIDE ONE (1) 6" X 6" X 4" DEEP A/V JUNCTION BOX FLUSH MOUNTED AT 18" AFF. JUNCTION BOX FOR THE UNIVERSITY PROVIDED A/V CABLING BETWEEN THE TEACHER STATION AND PROJECTION SCREEN, COORDINATE FINAL LOCATION WITH THE UNIVERSITY PRIOR TO ROUGH-IN. EXTEND ONE (1) 2" CONDUIT FROM THE JUNCTION BOX TO THE PROJECTOR.
14. COORDINATE THE LOCATION OF THE CABLE TRAY ABOVE THE CEILING WITH ALL OTHER TRADES PRIOR TO ROUGH-IN. PROVIDE A #8 GROUND WIRE THE LENGTH OF THE TRAY. CABLE TRAY SHALL BE 18" X 4" DEEP, CONTINUES AND SHALL BRIDGE DUCT WORK PERPENDICULAR TO OR CROSSING THE TRAY.
15. PROVIDE STEEL CORD REEL EQUAL TO HUBBELL, WITH FULL SIZE 20 AMP DOUBLE DUPLEX GFCI TYPE RECEPTACLES, MINIMUM 15'-#12 SO CORD MODEL# HBL50123W. PROVIDE WITH PIVOT BASE, DIRECT CONNECT ON THE PRIMARY END, RATCHET RETURN AND ADJUSTABLE CORD STOP. MOUNT ELECTRIC CORD REEL ADJACENT TO THE MECHANICAL CORD REEL, COORDINATE FINAL LOCATION PRIOR TO ROUGH-IN.
16. DISCONNECT AND REMOVE THE EXISTING PANELBOARD, MAINTAIN AND PROTECT THE EXISTING BRANCH CIRCUITS AND FEEDER. PROVIDE A NEW PANELBOARD AS SHOWN ON THE SCHEDULE. CONNECT EXISTING BRANCH CIRCUITS AND FEEDER TO THE NEW PANELBOARD, SEAL ALL CONDUITS WEATHER TIGHT. REFER TO THE ELECTRICAL ROOM ELEVATION ON SHEET E301.
17. EXTEND 3-#1 AND 1-#8 GROUND IN 1.5" CONDUIT FROM THE NEW MECHANICAL EQUIPMENT TO THE EXISTING PANELBOARD. PROVIDE ONE (1) NEW 100/3 CIRCUIT BREAKER AT THE EXITING PANELBOARD, FIELD COORDINATE EXISTING PANELBOARD, CIRCUIT NUMBER AND MODEL NUMBER OF THE NEW CIRCUIT BREAKER.
18. PROVIDE NEMA 00 COMBINATION MAGNETIC MOTOR STARTER FOR THE MECHANICAL EQUIPMENT, MOTOR STARTER SHALL HAVE (2) NO, NC AUX CONTACTS, HOA, PILOT LIGHT. PROVIDE ALL CONTROL AND CONTROL WIRING.
19. PROVIDE ONE (1) 15/3 AND TWO (2) 30/3 CIRCUIT BREAKERS IN THE EXITING PANELBOARD . EXTEND 3-#10 AND 1-#10 GROUND IN 3/4" CONDUIT FROM THE CIRCUIT BREAKER TO THE NEW EQUIPMENT. COORDINATE THE FINAL LOCATION WITH THE UNIVERSITY PRIOR TO ROUGH-IN.

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TRENARY HALL INTERIOR RENOVATION

FIRST FLOOR
POWER PLAN

SCALE: AS NOTED

E200

JOB NO.: 14022

DATE: 12/05/14

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1-17

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NLC	NLC	DLP	14165

FIXTURE SCHEDULE

NOTE : FIXTURE NUMBER, LETTER PREFIX INDICATES TYPE OF MOUNTING AS FOLLOWS:
CL–CEILING MOUNTED; S–STEM SUSPENDED; W–WALL MOUNTED; R–CEILING RECESSED;
WR–WALL RECESSED; CV–COVE MOUNTED; UC–UNDER CABINET; RF–ROOF MOUNTED;
P–POST; GR–GROUND; H–MOUNTED IN HOOD; C–CHAIN MOUNTED.

FIXTURE NUMBER	DESCRIPTION	MANUFACTURER (EQUALS)	CATALOG NUMBER	LAMPS: GE CATALOG NUMBER	REMARKS
R1	6" LINIER SLOT FIXTURE WITH SOFT GLOW LENS	LITECONTROL (METALUX/LSI)	RD66N–24T8–SGL–CWM	(2) F32T8/ADV835/ XLL/ALTO IN CROSS SECTION	PROVIDE FIXTURE LENGHT AS SHOWN ON THE DRAWINGS
R2	2' X 4' RECESSED INDIRECT LENS	COLUMBIA (METALUX/LSI)	TRE–24–2–32–G–RFA–U	(2) F32T8/ADV835/ XLL/ALTO	
R3	DECORATIVE DOWN LIGHT	DECORE FS (VISA)	83–5001–2–83–5105–SC	(2) F26 PLT	
R4	6" DIAMETER RECESSED LED DOWNLIGHT WITH 3500K COLOR TEMPERATURE, 1400 LUMENS	PRESCOLITE (PORTFOLIO/ LSI)	LC6LED–120/277–DM–6LCLED 6–35–8–WT	(1) 39W LED (INCLUDED)	PROVIDE WITH WALL WASH TRIM REFLECTOR
R5	6" DIAMETER RECESSED LED DOWNLIGHT WITH 3500K COLOR TEMPERATURE, 1400 LUMENS	PRESCOLITE (PORTFOLIO/ LSI)	LC6LED–120/277–DM–6LCLED 6–35–8–WT	(1) 39W LED (INCLUDED)	
R6	6" DIAMETER SURFACE LED DOWNLIGHT WITH 3500K COLOR TEMPERATURE, 900 LUMENS	PRESCOLITE (PORTFOLIO/ LSI)	LC6LED–120/277–DM–6LCLED 6–35–8–WT	(1) 26W LED (INCLUDED)	FIXTURE SHALL BE UL LISTED FOR WET LOCATION
S1	4' INDUSTRIAL STRIP	COLUMBIA (METALUX/ LSI)	CH4–232–U	(2) F32T8/ADV835/ XLL/ALTO	SURFACE MOUNT IN COVE
S2	4' INDUSTRIAL STRIP STAGGERED STRIP	COLUMBIA (METALUX/ LSI)	SS–12–132–U 12' EACH SIDE	(1) F32T8/ADV835/ XLL/ALTO	SURFACE MOUNT IN CASEWORK
EX1	LED EXIT SIGN SINGLE FACE	DUAL LITE (SURE LITE / LSI)	LX–U–R–WE	LED W/FIXTURE	REFER TO DRAWINGS FOR DIRECTIONAL ARROWS, WALL MOUNT ABOVE DOOR / CEILING MOUNT
EX2	LOW VOLTAGE REMOTE EGRESS HEAD WITH 12W SEALED BEAM HALOGEN LAMP	DUAL LITE (SURE LITE / LSI)	0MSSB0605	5W HALOGEN LAMP INCLUDED W/FIXTURE	WALL MOUNT ABOVE DOOR OR AS NOTED ON PLAN
UC1	UNDER COUNTER WITH WHITE DIFFUSER	COLUMBIA (METALUX/LSI)	UC48–132–120	(1) F32T8/ADV835/ XLL/ALTO	REFER TO THE ARCHITECTS CASE WORK PLANS
CL1	2' X 4' PRISMATIC LENS SURFACE MOUNTED	COLUMBIA (METALUX/LSI)	SM24–332–FS	(3) F32T8/ADV835/ XLL/ALTO	
CL2	2' X 4' PRISMATIC LENS SURFACE MOUNTED	COLUMBIA (METALUX/LSI)	SM12–232–FS	(2) F32T8/ADV835/ XLL/ALTO	

ADDITIONAL SPECIFICATIONS: REFER TO THE SPECIFICATION FOR BALLAST AND LENS TYPE. SUBMIT BALLAST CUT SHEETS FOR RAPID START TYPE BALLAST ALONG WITH FIXTURE SUBMITTAL. SHOP DRAWING WILL BE REJECTED WITHOUT BALLAST SUBMITTAL. CLEARLY NOTE LENS INFORMATION AS LISTED IN THE SPECIFICATION. PROVIDE ALL LAMPS PER THE DIRECTION OF THE MANUFACTURERS RECOMBINATION AND EXACT SPECIFICATIONS.

Panel ID: P1–1
Voltage: 480 / 277
Phase: 3
Wire: 4

BRANCH CIRCUIT DESCRIPTION	CKT NO.	PHASE	CKT NO.	BRANCH CIRCUIT DESCRIPTION
EF–7	1	A	2	NEW RTU
EF–7	3	B	4	NEW RTU
EF–7	5	C	6	NEW RTU
AH–7	7	A	8	AH–2
AH–7	9	B	10	AH–2
AH–7	11	C	12	AH–2
HOT WATER HEATER	13	A	14	NOT WATER PUMP 1
HOT WATER HEATER	15	B	16	NOT WATER PUMP 1
HOT WATER HEATER	17	C	18	NOT WATER PUMP 1
	19	A	20	NOT WATER PUMP 2
	21	B	22	NOT WATER PUMP 2
	23	C	24	NOT WATER PUMP 2
AIR COMP	25	A	26	
AIR COMP	27	B	28	
AIR COMP	29	C	30	
POLE LTG	31	A	32	
POLE LTG	33	B	34	
OUTSIDE BUILDING LTG	35	C	36	
	37	A	38	
	39	B	40	
	41	C	42	

Panel ID: R1–2
Voltage: 208 / 120
Phase: 3
Wire: 4

BRANCH CIRCUIT DESCRIPTION	CKT NO.	PHASE	CKT NO.	BRANCH CIRCUIT DESCRIPTION
RECEPTACLE	1	A	2	RECEPTACLE
ROOM 119 RECEPTACLE	3	B	4	RECEPTACLE
ROOM 119 RECEPTACLE	5	C	6	BATHROOM RFCI
	7	A	8	RECEPTACLE
	9	B	10	RECEPTACLE
	11	C	12	CONTACTOR A+B
CORRIDOR TV RECP	13	A	14	DATA ROOM 202
RECEPTACLE	15	B	16	DATA ROOM 202
RECEPTACLE	17	C	18	
	19	A	20	DATA ROOM 202
	21	B	22	
OUTSIDE BUILDING LTG	23	C	24	WATER COOLER CORR
RECEPTACLE	25	A	26	BATHROOM EF–1
RECEPTACLE	27	B	28	
OUTSIDE RECEP	29	C	30	
SHOP RECEP	31	A	32	
	33	B	34	
	35	C	36	
SHOP COMPR	37	A	38	
SPRINKLER ROOM HEAT	39	B	40	
SPRINKLER ROOM HEAT	41	C	42	

Panel ID: R1–1
Voltage: 208 / 120
Phase: 3
Wire: 4

BRANCH CIRCUIT DESCRIPTION	CKT NO.	PHASE	CKT NO.	BRANCH CIRCUIT DESCRIPTION
OUTSIDE 60 208	1	A	2	ELECTRIC RM EF–4
OUTSIDE 60 208	3	B	4	
OUTSIDE 50 208	5	C	6	
OUTSIDE 50 208	7	A	8	RECEPTACLE
	9	B	10	
RECEPTACLE WEST	11	C	12	
RECEPTACLE WEST	13	A	14	
RECEPTACLE WEST	15	B	16	
OUTSIDE 50 208	17	C	18	
OUTSIDE 50 208	19	A	20	SHOP WELDER OUTLET
	21	B	22	SHOP WELDER OUTLET
	23	C	24	
	25	A	26	
	27	B	28	
	29	C	30	
JOHNSON PNL	31	A	32	
BOILER	33	B	34	RECEP UPPER LEVEL
	35	C	36	
BARN PNL	37	A	38	208 VOLT 30 RECEP
BARN PNL	39	B	40	208 VOLT 30 RECEP
BARN PNL	41	C	42	

Panel ID: R4–1
Voltage: 208 / 120
Phase: 3
Wire: 4

BRANCH CIRCUIT DESCRIPTION	CKT NO.	PHASE	CKT NO.	BRANCH CIRCUIT DESCRIPTION
ROOM 117 CR	1	A	2	ROOM 117 RECEPTACLE
ROOM 115 RECEPTACLE	3	B	4	ROOM 117 RECEPTACLE
ROOM 115 RECEPTACLE	5	C	6	ROOM 117 RECEPTACLE
ROOM 115 RECEPTACLE	7	A	8	ROOM 117 RECEPTACLE
ROOM 117 RECEPTACLE	9	B	10	ROOM 117 RECEPTACLE
ROOM 115 RECEPTACLE	11	C	12	ROOM 117 RECEPTACLE
EF–2	13	A	14	ROOM 117 RECEPTACLE
ROOM 117 CR	15	B	16	
MECHANICAL RM HEAT	17	C	18	
	19	A	20	
	21	B	22	
	23	C	24	ROOM 115 P–POLE 1
	25	A	26	ROOM 115 P–POLE 1
	27	B	28	ROOM 115 P–POLE 1
DATA RM 202	29	C	30	ROOM 115 P–POLE 2
DATA RM 202	31	A	32	ROOM 115 P–POLE 2
	33	B	34	ROOM 115 P–POLE 2
	35	C	36	ROOM 115 208V 30A
	37	A	38	ROOM 115 208V 30A
	39	B	40	ROOM 115 208V 50A
	41	C	42	ROOM 115 208V 50A

Panel ID: R1–4 Voltage: 208 / 120 Panel Type: SEE SPEC
Location: ELEC RM Phase: 3 Enclosure: NEMA–1
Mounting: SURFACE Wire: 4
Main Type: F.T.L. / M.C.B Main Size: 150 Amps

All phases to be balanced to within 7% using connected loads.
All circuit breakers shall be standard bolt–on type, unless noted otherwise.
** = Refer to one line diagram for wire sizes.

GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CKT BKR SIZE	CKT BKR OPTION	CONN. LOAD (KVA)	CKT NO.	PHASE	CKT NO.	CONN. LOAD (KVA)	CKT BKR OPTION	CKT BKR SIZE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE
12	12	115 POWER POLE	20/3	––	0.720	1	A	2	1.000	––	20/1	115 RACEWAY REC	10	10
–	12	–––	––	––	0.720	3	B	4	1.000	––	20/1	115 RACEWAY REC	10	10
–	12	–––	––	––	0.720	5	C	6	1.000	––	20/1	115 RACEWAY REC	10	10
12	12	117 REC	20/1	––	1.260	7	A	8	1.000	––	20/1	115 RACEWAY REC	10	10
12	12	115 REC	20/1	––	0.360	9	B	10	1.000	––	20/1	115 RACEWAY REC	10	10
12	12	110,113,117 REC	20/1	––	0.540	11	C	12	1.080	––	20/1	115 RACEWAY REC	10	10
–	–	SPARE	20/1	––	0.000	13	A	14	0.000	––	20/1	SPARE	–	–
–	–	SPARE	20/1	––	0.000	15	B	16	0.000	––	20/1	SPARE	–	–
–	–	SPARE	20/1	––	0.000	17	C	18	0.000	––	20/1	SPARE	–	–
–	–	SPARE	20/1	––	0.000	19	A	20	0.000	––	20/1	SPARE	–	–
–	–	SPARE	20/1	––	0.000	21	B	22	0.000	––	20/1	SPARE	–	–
–	–	SPARE	20/1	––	0.000	23	C	24	0.720	––	20/3	117 POWER POLE	12	12
–	–	SPARE	20/1	––	0.000	25	A	26	0.720	––	–––	–––	12	–
–	–	SPARE	20/1	––	0.000	27	B	28	0.720	––	–––	–––	12	–
12	12	IT RECEPTACLE	20/1	––	0.000	29	C	30	0.720	––	20/3	117 POWER POLE	12	12
12	12	IT RECEPTACLE	20/1	––	0.000	31	A	32	0.720	––	–––	–––	12	–
–	–	SPARE	20/1	––	0.000	33	B	34	0.720	––	–––	–––	12	–
–	–	SPARE	20/1	––	0.000	35	C	36	1.500	––	30/2	117 EQUIPMENT	10	10
12	12	IT ROOM LTG	20/1	––	0.000	37	A	38	1.500	––	–––	–––	10	–
10	8	AC–1 / CU–1	40/2	––	0.000	39	B	40	1.500	––	30/2	117 EQUIPMENT	10	10
–	8	–	–	––	0.000	41	C	42	1.500	––	–––	–––	10	–

Connected Load Panel Summary

Breaker Options (If Used):
E – Existing Circuit
NC – New Circuit / Exist CB
NB – New Circuit / New CB
IG – Isolated ground
SH – Shunt Trip Breaker

Total: 20.7 KVA 57.6 AMPS

Note: Minimum breaker AIC to be 22,000 amps symmetrical

Panel ID: R4–1A Voltage: 208 / 120 Panel Type: SEE SPEC
Location: ELEC RM Phase: 3 Enclosure: NEMA–1
Mounting: SURFACE Wire: 4
Main Type: M.L.O. Main Size: 150 Amps

All phases to be balanced to within 7% using connected loads.
All circuit breakers shall be standard bolt–on type, unless noted otherwise.
** = Refer to one line diagram for wire sizes.

GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CKT BKR SIZE	CKT BKR OPTION	CONN. LOAD (KVA)	CKT NO.	PHASE	CKT NO.	CONN. LOAD (KVA)	CKT BKR OPTION	CKT BKR SIZE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE
12	12	ROOM 111 RECEPTACLE	20/1	––	1.080	1	A	2	1.200	––	20/1	ROOM 100C SINK DISP	12	12
12	12	ROOM 111 RECEPTACLE	20/1	––	1.080	3	B	4	0.720	––	20/1	ROOM 100C COUNTER R	12	12
12	12	ROOM 111 RECEPTACLE	20/1	––	0.540	5	C	6	0.500	––	20/1	ROOM 100C FRIDGE	12	12
12	12	ROOM 113 RECEPTACLE	20/1	––	0.720	7	A	8	0.540	––	20/1	BATHROOM 108 LIGHTS	12	12
12	12	ROOM 113 RECEPTACLE	20/1	––	1.080	9	B	10	0.500	––			12	12
12	12	ROOM 111 RECEPTACLE	20/1	––	1.080	11	C	12	0.900	––	20/1	ROOM 112 RECEPTACLE	12	12
12	12	ROOM 113 RECEPTACLE	20/1	––	1.080	13	A	14	1.080	––	20/1	ROOM 116/118 RECEP	12	12
12	12	ROOM 113 RECEPTACLE	20/1	––	0.720	15	B	16	0.900	––	20/1	ROOM 114 RECEPTACLE	12	12
12	12	ROOM 110 RECEPTACLE	20/1	––	0.720	17	C	18	0.500	––	20/1	ROOM 112 RECEPTACLE	12	12
12	12	ROOM 110 RECEPTACLE	20/1	––	0.720	19	A	20	0.000	––	20/1	ROOM 100C DISHWASHER	–	–
12	12	ROOM 110 RECEPTACLE	20/1	––	1.080	21	B	22	0.000	––	20/1	ROOM 100C MICRO	–	–
12	12		20/1	––	0.540	23	C	24	0.000	––	20/1	ROOM 100C MICRO	–	–
12	12		20/1	––	0.360	25	A	26	0.000	––			–	–
12	12	ROOM 119 RECEPTACLE	20/1	––	0.720	27	B	28	0.000	––				
12	12	ROOM 119 RECEPTACLE	20/1	––	0.720	29	C	30	0.000	––				
12	12		20/1	––	0.500	31	A	32	0.000	––				
12	12	ROOM 120 RECEPTACLE	20/1	––	0.900	33	B	34	0.000	––				
12	12	ROOM 120 RECEPTACLE	20/1	––	0.720	35	C	36	0.000	––				
12	12	ROOM 120 RECEPTACLE	20/1	––	0.720	37	A	38	0.000	––				
				––	0.720	39	B	40	0.000	––				
				––	0.000	41	C	42	0.000	––				

Connected Load Panel Summary

Breaker Options (If Used):
E – Existing Circuit
NC – New Circuit / Exist CB
NB – New Circuit / New CB
IG – Isolated ground
SH – Shunt Trip Breaker

Total: 21.9 KVA 60.9 AMPS

Note: Minimum breaker AIC to be 22,000 amps symmetrical

Panel ID: L1–1 Voltage: 480 / 277 Panel Type: SEE SPEC
Location: ELEC RM Phase: 3 Enclosure: NEMA–1
Mounting: SURFACE Wire: 4
Main Type: M.C.B. Main Size: 200 Amps

All phases to be balanced to within 7% using connected loads.
All circuit breakers shall be standard bolt–on type, unless noted otherwise.
** = Refer to one line diagram for wire sizes.

GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CKT BKR SIZE	CKT BKR OPTION	CONN. LOAD (KVA)	CKT NO.	PHASE	CKT NO.	CONN. LOAD (KVA)	CKT BKR OPTION	CKT BKR SIZE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE
12	12		20/1	––	1.080	1	A	2						
12	12		20/1	––	1.080	3	B	4	0.720	––	20/1	OFFICE LTG	12	12
12	12	ROOM 122 LTG	20/1	––	0.540	5	C	6	0.500	––	20/1	OFFICE LTG	12	12
12	12	ROOM 122 LTG	20/1	––	0.720	7	A	8	0.540	––	20/1	SHOP LTG	12	12
12	12			––		9	B	10	0.500	––	20/1	BATHRM HALL LTG	12	12
10	10			––		11	C	12						
–	10			––		13	A	14						
–	10			––		15	B	16						
12	12			––		17	C	18						
12	12	ROOM 119 120 LTG	20/1	––	0.720	19	A	20						
12	12	ROOM 115 117 LTG	20/1	––	1.080	21	B	22						
12	12	ELEC ROOM BATH LTG	20/1	––	0.540	23	C	24	0.000	––	20/1	ROOM 111,113 LTG	12	12
12	12			––	0.360	25	A	26						
12	12			––	0.720	27	B	28						
12	12			––	0.720	29	C	30	0.000	––	20/1	LIGHTS	12	12
12	12			NB	0.500	31	A	32						
–	12			––	0.900	33	B	34						
–	12			––	0.720	35	C	36						
–	–			––	0.720	37	A	38						
–	–			––	0.720	39	B	40						
–	–			––	0.000	41	C	42						

Connected Load Panel Summary

Breaker Options (If Used):
E – Existing Circuit
NC – New Circuit / Exist CB
NB – New Circuit / New CB
IG – Isolated ground
SH – Shunt Trip Breaker

Total: 21.9 KVA 60.9 AMPS

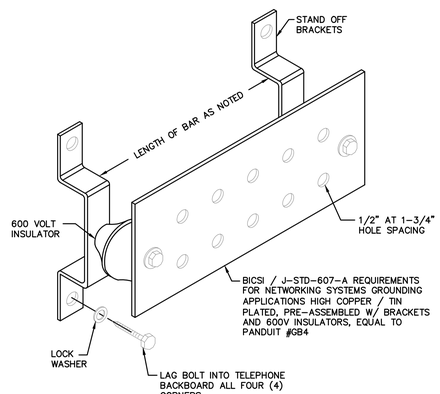
Note: Minimum breaker AIC to be 22,000 amps symmetrical

ELECTRICAL ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE	G.C.	GENERAL CONTRACTOR
A	AMPERE	GRD	GROUND
AFF	ABOVE FINISHED FLOOR	H.C.	MECHANICAL CONTROACTOR
CLG	CEILING	LTG	LIGHTING
C	CONDUIT	MECH	MECHANICAL
E.C.	ELECTRICAL CONTRACTOR	P.C.	PLUMBING CONTRACTOR
E	EXISTING TO REMAIN	PNL	PANEL
FIX	FIXTURE	RECEPT	RECEPTACLE
		TYP	TYPICAL

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HGT. TO CENTER UNLESS OTHERWISE NOTED
a R1 / a R1 / a R1	FLUORESCENT LIGHT FIXTURE: TYPE "R1" SEE LIGHTING FIXTURE SCHEDULE; WIRED TO SWITCH "a"	SEE DRAWINGS
	CEILING OR WALL MOUNTED LIGHTING FIXTURE TYPE "R2", "W2"; SEE LIGHTING FIXTURE SCHEDULE	SEE DRAWINGS
	FLUORESCENT STRIP/INDUSTRIAL LIGHT FIXTURE; SEE LIGHTING FIXTURE SCHEDULE	SEE DRAWINGS
	LIGHTING FIXTURE CONNECTED TO EMERGENCY POWER & WIRED AS NIGHT LIGHT TO BE ILLUMINATED CONTINUOUSLY	SEE DRAWINGS
	EXIT SIGN FIXTURE (WITH DIRECTIONAL ARROWS AS SHOWN) (TYPE AND MOUNTING AS NOTED: SEE LIGHTING FIXTURE SCHEDULE)	94"
$a	SINGLE POLE SWITCH; a = SWITCH "a"	42"
$2;3;4;K;P	SPECIAL SWITCH: 2–WAY; 3–WAY; 4–WAY; KEY OPERATED; SWITCH WITH PILOT LIGHT	42"
$O	OCCUPANCY SENSOR; WALL MOUNTED LINE VOLTAGE	42"
	DUPLEX RECEPTACLE; 3 WIRE GROUND TYPE	18"
WP	DUPLEX RECEPTACLE WEATHERPROOF	18"
GF	DUPLEX RECEPACLE W/ GROUND FAULT INTERRUPTER	18"
	DOUBLE DUPLEX RECEPTACLE	18"
F	SPECIAL OUTLET WALL / FLOOR MOUNTED	SEE DRAWINGS
J F	JUNCTION BOX; WALL / CEILING MOUNTED: FLOOR MOUNTED	SEE DRAWINGS
	COMMUNICAITONS / DATA OUTLET	18"
48" 48"	WALL PHONE	
	MOTOR – 1 PHASE	AS REQUIRED
	MOTOR – 3 PHASE	AS REQUIRED
	ELECTRICAL PANEL – SURFACE MOUNT, FLUSH MOUNT	6'–0" TO TOP
F	FIRE ALARM PULL STATION	42"
F	FIRE ALARM SIGNAL – SPEAKER/STROBE	80"



GROUNDING BUS DETAIL

SCALE: N.T.S.

TMGB – 1/4" X 4" X 24" W/16 1/2" HOLES, SPACED 1–3/4"
A/C – 1/4" X 4" X 24" W/16 1/2" HOLES, SPACED 1–3/4"

1–17

R These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

E300–14165.DWG

PRATER
Engineering Associates, Inc.
6130 Wilcox Road (614) 766 4896
Dublin, Ohio 43016 FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
NLC	NLC	DLP	14165

SPGB Architects
4333–B Tuller Road
Dublin, Ohio 43017
Phone: (614) 771–8963

DESIGNED BY: NLC
DRAWN BY: NLC
CHECKED BY: DLP

REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

ELECTRICAL SCHEDULES

SCALE: AS NOTED

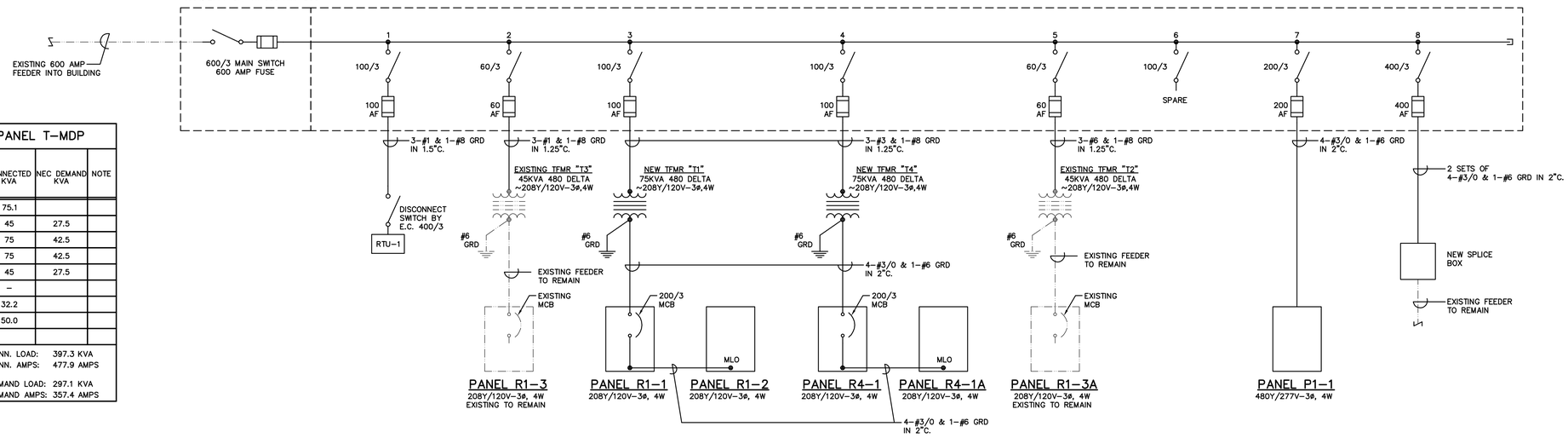
E300

JOB NO.: 14022
DATE: 12/05/14

1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"

MAIN DISTRIBUTION PANEL "T-MDP"

480Y/277V-3ø, 4W 600 AMP BUS



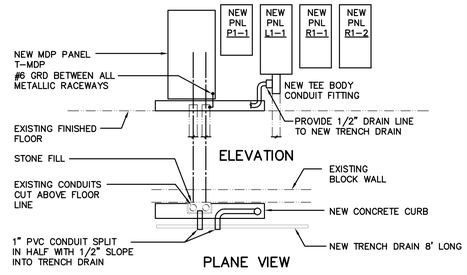
MAIN DISTRIBUTION PANEL T-MDP

SWITCH NO.	DESCRIPTION	CONNECTED KVA	NEC DEMAND KVA	NOTE
1	RTU-1	75.1		
2	TFMR T3 / PANEL RP3-1	45	27.5	
3	TFMR T1 / PANEL R1-1 & 2	75	42.5	
4	TFMR T4 / PANEL R4-1 & 2	75	42.5	
5	TFMR T2 / PANEL	45	27.5	
6	SPARE	-		
7	PANEL P1-1	32.2		
8	EXISTING BUS DUCT	50.0		

VOLTAGE: 480Y/277VV-3ø,4W
AIC RATTING: 65K AIC
CONN. LOAD: 397.3 KVA
CONN. AMPS: 477.9 AMPS
DEMAND LOAD: 297.1 KVA
DEMAND AMPS: 357.4 AMPS

ELECTRICAL ONE-LINE

SCALE: NONE



MDP CURB DETAIL

SCALE: NONE

1-17

R These Record Drawings have been prepared based on information provided by the installing contractor. The Engineer has not verified the accuracy of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

E301-14165.DWG

PRATER
Engineering Associates, Inc.
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FAX: (614) 766 2354

DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUM.
NLC	NLC	DLP	14165

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DRAWN BY: NLC
CHECKED BY: DLP

REVISIONS:	DATE:
CONFORMED SET	12-05-14
PROPOSAL REQUEST 009	2-20-15
RECORD DRAWINGS	6-19-15

TRENARY HALL INTERIOR RENOVATION

ELECTRICAL SCHEDULES

SCALE: AS NOTED

E301

JOB NO.: 14022

DATE: 12/05/14

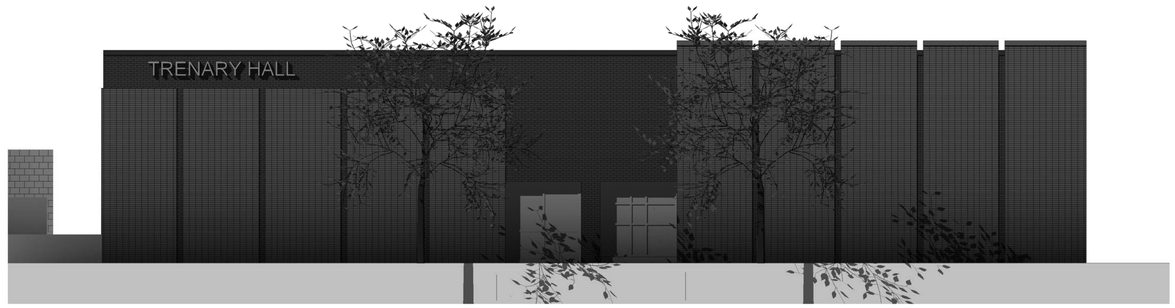
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PROJECT NUMBER: WSU-170048

WRIGHT STATE UNIVERSITY - LAKE CAMPUS

TRENARY HALL FACADE RENOVATION

BID SET 03/22/2019



ARCHITECT:

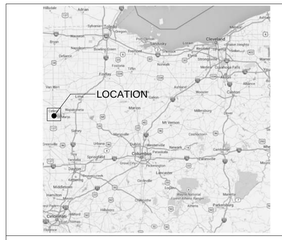
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4333-A TULLER ROAD
DUBLIN, OHIO 43017

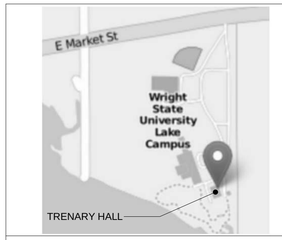
IN ASSOCIATION WITH:

Jezerinac Geers Structural Engineering

5640 FRANTZ ROAD
DUBLIN, OHIO 43017



VICINITY MAP
NOT TO SCALE
N



LOCATION MAP
NOT TO SCALE
N

SHEET INDEX

Sheet Number	Sheet Name
GENERAL	
G-000	COVER SHEET
G-001	CODE DATA & CONTRACTOR STAGING PLAN
DEMOLITION	
D-100	ELEVATIONS & SECTION DEMOLITION
ARCHITECTURAL	
A-001	ARCHITECTURAL ABBREVIATIONS, SYMBOLS & NOTES
A-101	FIRST FLOOR PLAN
A-301	EXTERIOR ELEVATION
A-501	EXTERIOR WALL SECTIONS
A-502	EXTERIOR WALL SECTIONS
A-503	EXTERIOR PLAN DETAILS

WRIGHT STATE UNIVERSITY LAKE CAMPUS CHANGING LIVES

SPGB Architects
4333-A Tuller Road
Dublin, Ohio 43017
Phone: (614) 771-8963

DESIGNED BY:	CW
DRAWN BY:	CW
CHECKED BY:	TG

DATE:

REVISIONS:

TRENARY HALL FACADE RENOVATION
7600 Lake Campus Drive
Celina, OH, 45822

COVER SHEET

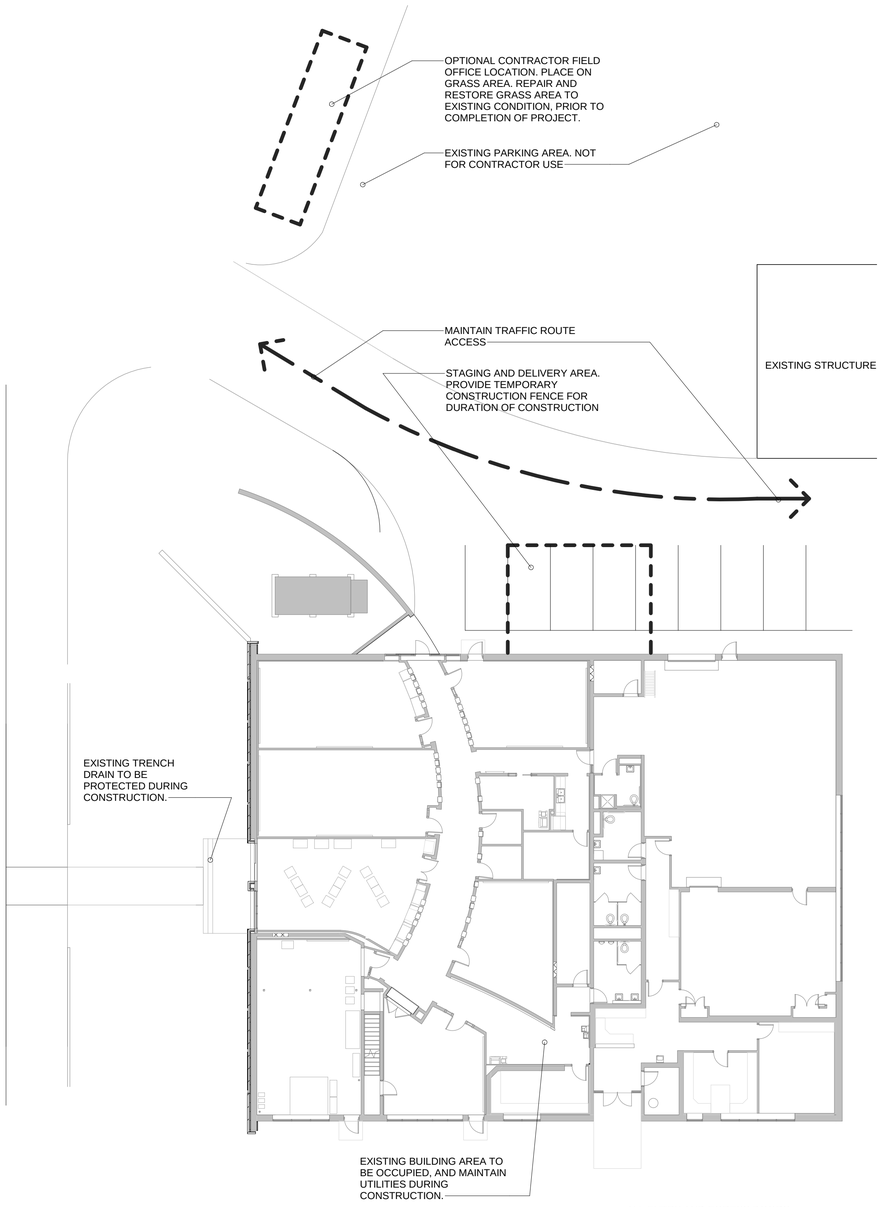
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G-000

JOB NO.: 18025

DATE: 03/22/2019

1/16" = 1'-0" 0 4' 8' 16' | 1/8" = 1'-0" 0 2' 4' 8' | 3/16" = 1'-0" 0 2' 4' 8' | 1/4" = 1'-0" 0 1' 2' 4' | 3/8" = 1'-0" 0 1' 2' 4' | 1/2" = 1'-0" 0 6" 1' 2' | 3/4" = 1'-0" 0 3" 6" 1' 2' | 1" = 1'-0" 0 3" 6" 1' 2' | 1 1/2" = 1'-0" 0 3" 6" 1' | 3" = 1'-0" 0 1" 2" 3" 6" 1' | 6" = 1'-0" 0 1" 2" 3" 6"



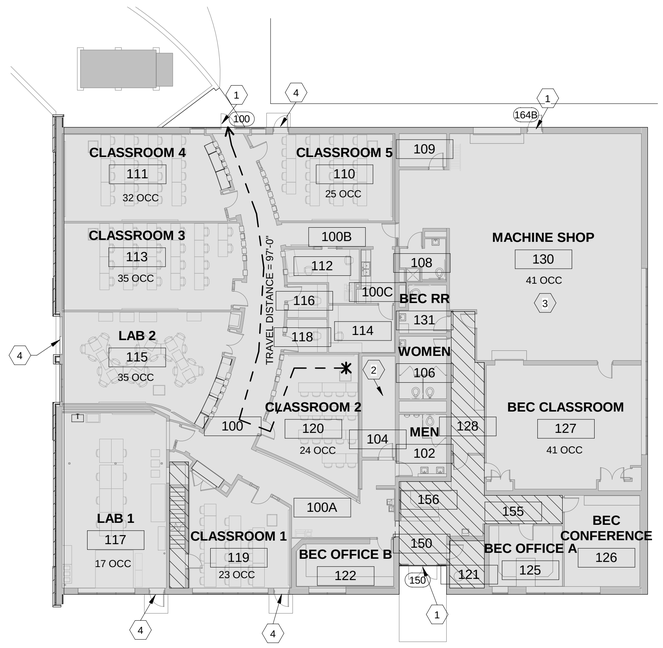
1 FIRST FLOOR CONTRACTOR PLAN
1/16" = 1'-0"

OHIO BUILDING CODE (OBC) 2017 WITH AUGUST 2018 UPDATES
BULDING USE: B - BUSINESS

FLOOR	GROSS / NET BUILDING AREA	TOTAL BUILDING OCCUPANT LOAD [1, 2,3] CALCULATIONS [TABLE 1004.1.1]	TOTAL
FIRST FLOOR	11,600	EXISTING SPACE	299
MECH PLATFORM	2,197	EXISTING SPACE	9
TOTAL	13,797	TOTAL BUILDING	308

1. OCCUPANT LOAD FOR B (BUSINESS) = 100 GROSS SQUARE FOOT / OCCUPANT
   OCCUPANT LOAD FOR MECHANICAL & STORAGE = 300 GROSS SQUARE FOOT / OCCUPANT
   OCCUPANT LOAD FOR SHOPS VOC RM = 50 NET SQUARE FOOT / OCCUPANT
2. FLOOR AREA QUANTITIES ARE FOR USE IN CODE ANALYSIS & ARE NOT TO BE USED FOR CONSTRUCTION BIDDING PURPOSES.
3. AREA EXCLUDES EXTERIOR MECHANICAL EQUIPMENT & UNCOVERED SERVICE AREA.

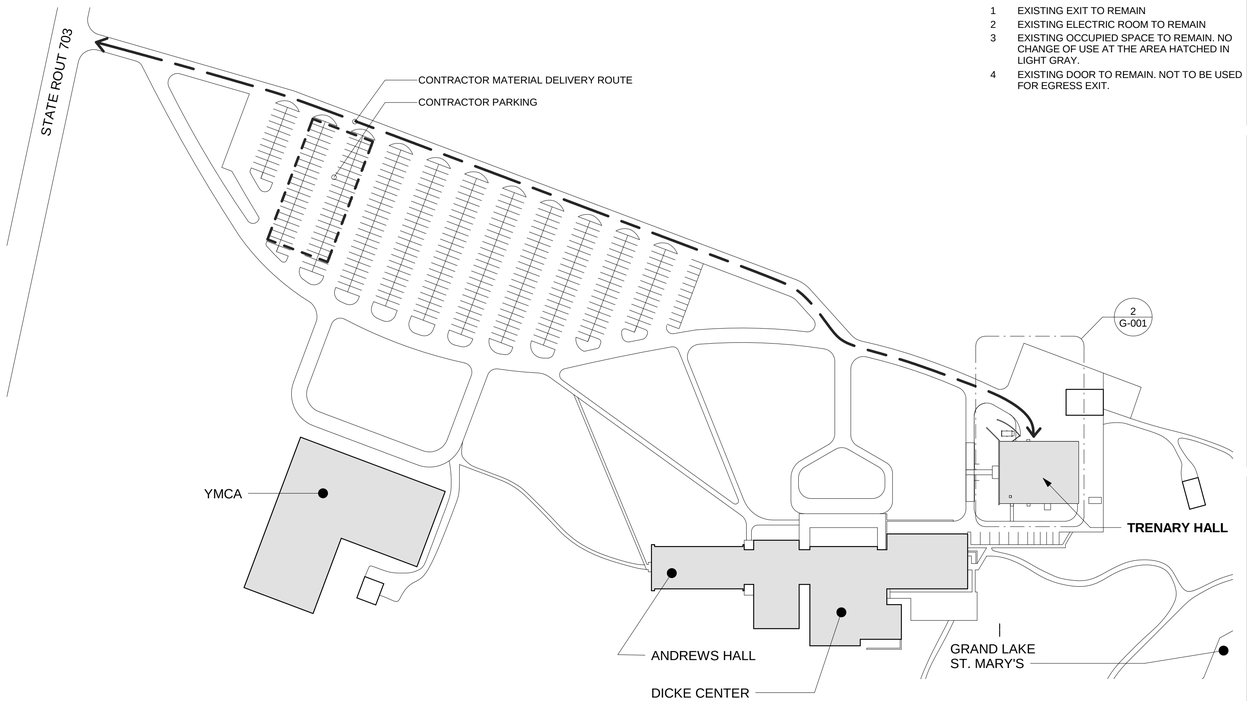
EXISTING CONSTRUCTION:	POURED CONCRETE FLOOR STRUCTURAL MASONRY WALLS STEEL TRUSS AND METAL DECK ROOF
CONSTRUCTION TYPE:	2B NON COMBUSTABLE, UNPROTECTED
FIRE PROTECTION:	FULLY - SPRINKLERED
HEIGHT LIMITATIONS:	3 STORIES AT 55'-0"
AREA LIMITATIONS:	23,000 SF / FLOOR (TABLE 503) 30,130 SF / FLOOR (506.2 Frontage increase)
EXTERIOR WALLS LOAD BEARING & NON-LOAD BEARING:	0 HOUR (GREATER THAN 10'-0" FIRE SEPARATION DISTANCE)
EXTERIOR WALLS LOAD BEARING & NON-LOAD BEARING:	0 HOUR (LESS THAN 10'-0" FIRE SEPARATION DISTANCE)
STRUCTURAL MEMBERS SUPPORTING WALLS:	0 HOUR
ROOF CONTRUCTION INCLUDING BEAMS TRUSSES, FRAMING, & ROOF DECK:	0 HOUR
FLOOR CONTRUCTION:	0 HOUR



2 FIRST FLOOR PLAN
1/16" = 1'-0"

X CODED NOTES

1 EXISTING EXIT TO REMAIN
2 EXISTING ELECTRIC ROOM TO REMAIN
3 EXISTING OCCUPIED SPACE TO REMAIN. NO CHANGE OF USE AT THE AREA HATCHED IN LIGHT GRAY.
4 EXISTING DOOR TO REMAIN. NOT TO BE USED FOR EGRESS EXIT.



3 CONTRACTOR LAYDOWN AREA
1" = 120'-0"

PLAN NORTH

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CODE DATA & CONTRACTOR STAGING PLAN

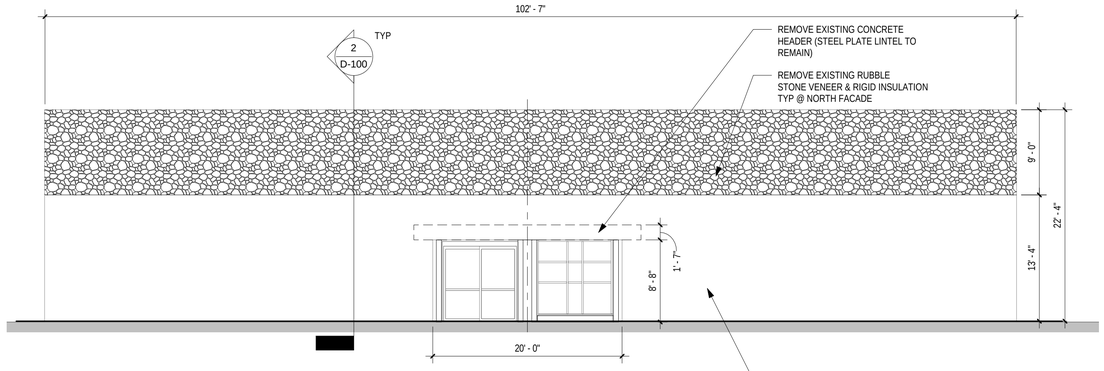
SCALE: As indicated

G-001

JOB NO.: 18025

DATE: 03/22/2019

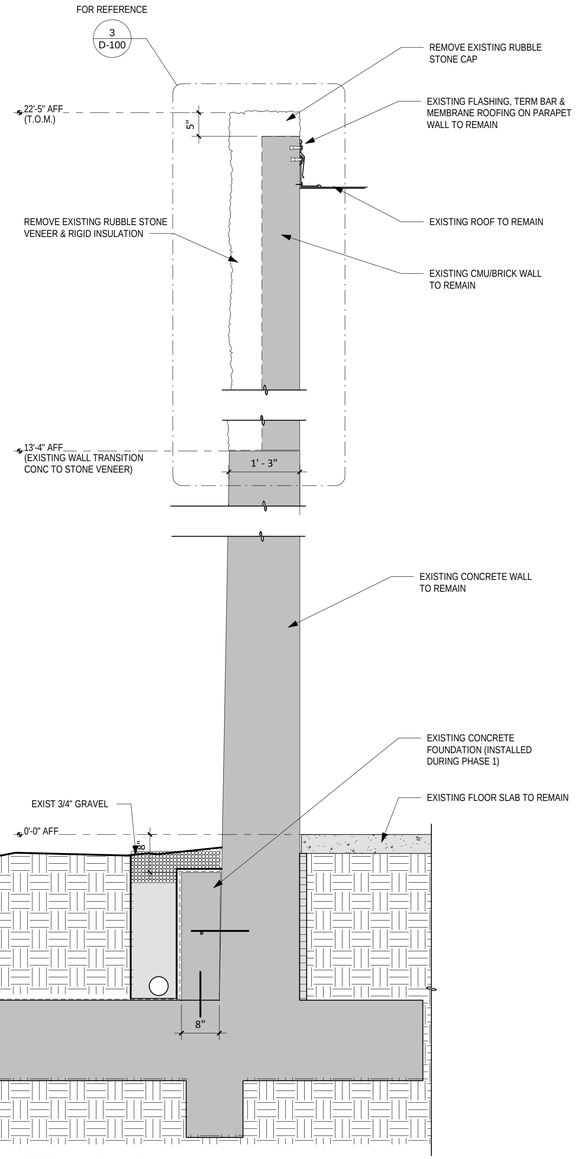
1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



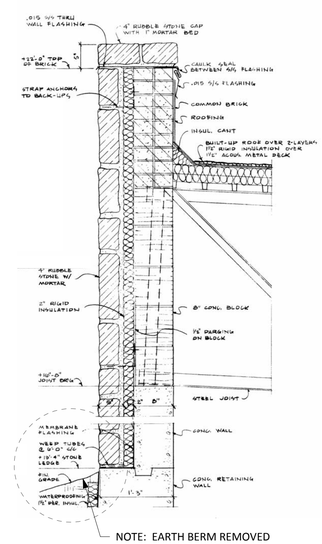
1 EXISTING NORTH ELEVATION DEMOLITION
1/8" = 1'-0"

GENERAL NOTES

A. REFER TO SHEET A-001 FOR DEMOLITION GENERAL NOTES.
B. ALL EXTERIOR WALLS TO REMAIN UON.
C. ALL EXISTING DOORS & WINDOWS ARE TO REMAIN UON
D. ALL EXISTING ROOF COPINGS, GRAVELSTOPS, DOWNSPOUTS AND GUTTERS ARE TO REMAIN UON



2 TYPICAL WALL SECTION DEMOLITION
3/4" = 1'-0"



3 EXISTING WALL SECTION (FOR REFERENCE)
3/4" = 1'-0"

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ELEVATIONS & SECTION DEMOLITION

SCALE: As indicated

D-100

JOB NO.: 18025

DATE: 03/22/2019

1/16" = 1'-0" 0 4' 8' 16'

1/8" = 1'-0" 0 2' 4' 8'

3/16" = 1'-0" 0 2' 4' 8'

1/4" = 1'-0" 0 1' 2' 4'

3/8" = 1'-0" 0 1' 2' 4'

1/2" = 1'-0" 0 6" 1' 2'

3/4" = 1'-0" 0 3" 6" 1' 2'

1" = 1'-0" 0 3" 6" 1' 2'

1 1/2" = 1'-0" 0 3" 6" 1'

3" = 1'-0" 0 1" 2" 3" 6" 1'

6" = 1'-0" 0 1" 2" 3" 6"

DEMOLITION GENERAL NOTES:

A. THE GENERAL CONTRACTOR SHALL COMPLETE ALL SELECTIVE BUILDING DEMOLITION WORK REQUIRED TO COMPLETE ALL NEW WORK & REMODELING WORK WHETHER SPECIFICALLY NOTED OR NOT.

B. THE CONTRACTOR SHALL SCHEDULE ALL INTERRUPTIONS OF UTILITIES WITH THE OWNER WITH A MINIMUM OF 72 HOURS NOTICE.

C. MAINTAIN & PROTECT EXISTING EXTERIOR DOOR & WINDOW SYSTEMS (GLAZING, FRAMES, & WINDOW SILLS).

D. THE OWNER WILL OCCUPY ALL BUILDING AREAS DURING CONSTRUCTION PERIOD. CONTRACTOR TO COORDINATE ACCESS TO ANY RESTRICTED AREAS WITH THE OWNER.

E. CONTRACTOR FOR THE PORTION OF THE WORK INDICATED ON PLAN, IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS & THOSE INDICATED ON DRAWINGS SHOULD BE REPORTED TO THE A/E IMMEDIATELY.

F. ALL DAMAGE TO WALLS, ROOFS & COPINGS INCURRED BY REMOVAL OF ITEMS OR DEMOLITION WORK IS TO BE PATCHED & REFINISHED. ROOF WARRANTY IS TO BE MAINTAINED.

G. THE OWNER RETAINS THE RIGHT TO SALVAGE EXISTING BUILDING ITEMS.

H. PATCH & REFINISH ALL LOCATIONS WHERE EQUIPMENT, DUCTS, CONDUITS, ETC. HAVE BEEN REMOVED. COORDINATE WITH DRAWINGS.

GENERAL NOTES

A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE INSTALLATION OF STRUCTURAL AND ELECTRICAL WORK. SHOULD THERE BE DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE ENGINEERING DRAWINGS THAT WOULD CAUSE AN AWKWARD OR IMPROPER INSTALLATION, IT SHALL BE BROUGHT TO THE A/E'S ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK.

B. THIS IS A SINGLE PRIME CONTRACT. ANY AND ALL REFERENCE TO MULTIPLE CONTRACTORS ARE FOR TRADE SPECIFIC CONTRACTOR'S INFORMATION. ALL CONTRACTOR WORK DESCRIBED IN THESE CONSTRUCTION DOCUMENTS IS THE RESPONSIBILITY OF THE LEAD CONTRACTOR.

C. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE A/E BEFORE PROCEEDING WITH THE WORK.

D. FILL ANY MASONRY VOIDS WITH MORTAR OR GROUT WHERE ANCHORS OCCUR.

E. SEPARATE ALL DISSIMILAR METALS TO PREVENT CORROSION CAUSED BY DIALECTIC ACTION, OR BY OTHER CAUSES AS RECOMMENDED BY THE RESPECTIVE PRODUCT MANUFACTURER / SUPPLIER.

F. THERE SHALL BE NO EXPOSED PIPE, CONDUITS, DUCTS, VENTS, ETC. IN DESIGNATED FINISH SPACES, UNLESS NOTED AS EXPOSED CONSTRUCTION ON FINISH SCHEDULE.

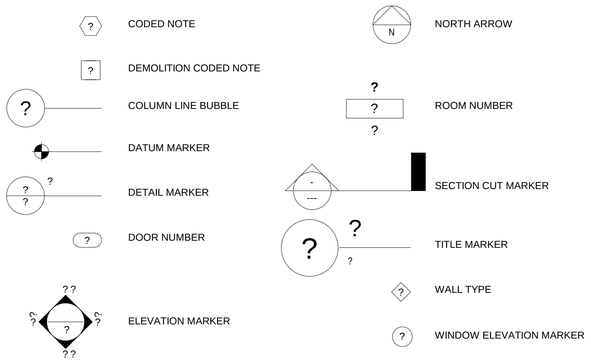
G. PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED IN ORDER TO SECURE ALL FLASHINGS OR COPINGS AS REQUIRED FOR A COMPLETE INSTALLATION.

H. PROVIDE CONTROL JOINTS IN BRICK MASONRY AT MAXIMUM DISTANCE OF 25 LINEAR FEET FOR VERTICAL SURFACES. REFER TO ELEVATIONS FOR SPECIFIC LOCATIONS. WHERE CONTROL JOINT IS INDICATED IN MASONRY, KEEP HEAD JOINTS CLEAR OF ALL MORTAR. PROVIDE CONTINUOUS BEAD OF SEALANT WITH BACKER ROD.

I. REFER TO DRAWINGS FOR ALL LINTEL MATERIALS AND SIZES.

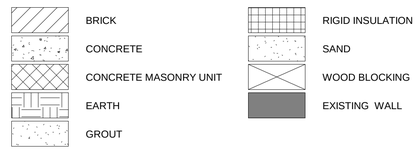
J. REFER TO THE SPECIFICATIONS FOR DESCRIPTIONS OF WATER PROOFING AND INSULATION TYPES.

K. REFER TO ATTACHED PROJECT WSU-0100220 STORM WATER IMPROVEMENT SITE RENOVATIONS (PHASE 1 WORK) INCLUDED "FOR REFERENCE ONLY" TO COORDINATE WITH SITE WORK AND CONCRETE FOUNDATIONS CONSTRUCTED PRIOR TO THIS WORK.



ARCHITECTURAL SYMBOLS LEGEND

1 1/2" = 1'-0"



MATERIALS LEGEND

2 1/2" = 1'-0"

ARCHITECTURAL ABBREVIATIONS

ABBREV	DEFINITION
&	AND
@	AT
A/C	AIR CONDITIONING
A/E	ARCHITECT ENGINEER
A/V	AUDIO VIDEO
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITES ACT
ADD	ADDENDUM
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
AS	ADJUSTABLE SHELF
AUTO	AUTOMATIC
AWP	ACOUSTICAL WALL PANEL
BD	BOARD
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BO	BOTTOM OF
BOT	BOTTOM
BTWN	BETWEEN
CG	CORNER GUARD
CHT	CEILING HEIGHT
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CPT	CARPET
CT	CERAMIC TILE
CW	COLD WATER
D	DEPTH
DEMO	DEMOLISH
DIM	DIMENSION
DP	DEEP
DS	DOWN SPOUT
DWG(S)	DRAWING(S)
EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATED FINISHING SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC(AL)
EMER	EMERGENCY
EQ	EQUAL
EXG	EXISTING
EXIST	EXISTING
EXP	EXPOSED
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER-BRACKET MT
FEC	FIRE EXTINGUISHER & CABINET
FF	FINISHED FLOOR
FLR	FLOOR(ING)
FTG	FOOTING
G	GAS
GA	GAGE, GAUGE
GB	GRAB BAR
GC	GENERAL TRADES CONTRACTOR
GL	GLASS, GLAZING
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HB	HOSE BIB
HC	HANDICAP
HDW	HARDWARE
HM	HOLLOW METAL
HT	HEIGHT
HVAC	HEATING / VENTILATION / AIR CONDITIONING
HW	HOT WATER
IJ	ISOLATION JOINT
IN	INCH

ARCHITECTURAL ABBREVIATIONS

ABBREV	DEFINITION
INCL	INCLUDE(D), INCLUDING
INSUL	INSULATION
INT	INTERIOR
JC	JANITOR'S CLOSET
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANIC(AL)
MFR	MANUFACTURE(R)
MIN	MINIMUM
MISC	MISCELLANEOUS
MKBD	MARKERBOARD
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OC	ON CENTER(S)
OD	OUTSIDE DIAMETER OR OVERFLOW DRAIN
OPH	OPPOSITE HAND
OPP	OPPOSITE
P	PAINT
PC	PLUMBING CONTRACTOR
PLAM	PLASTIC LAMINATE
PNL	PANEL
PTD	PAPER TOWEL DISPENSER
PTR	PAPER TOWEL RECEPTOR
PW	PURIFIED WATER
PWD	PLYWOOD
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCE(D), REINFORCING
REQ'D	REQUIRED
RES	RESILIENT
RESIN	RESINOUS
RFG	ROOFING
RM	ROOM
RO	ROUGH OPENING
SEC	SECTION
SF	SQUARE FOOT
SIM	SIMILAR
SMACNA	SHEET METAL & AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SPEC	SPECIFICATION(S)
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK(NESS)
TKBD	TACK BOARD
TO	TOP OF
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TSL	TOP OF SLAB
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
W	WIDTH
W/	WITH
WC	WATER CLOSET
WD	WOOD
WIN	WINDOW
WM	WIRE MESH
WO	WITHOUT

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ARCHITECTURAL ABBREVIATIONS, SYMBOLS & NOTES

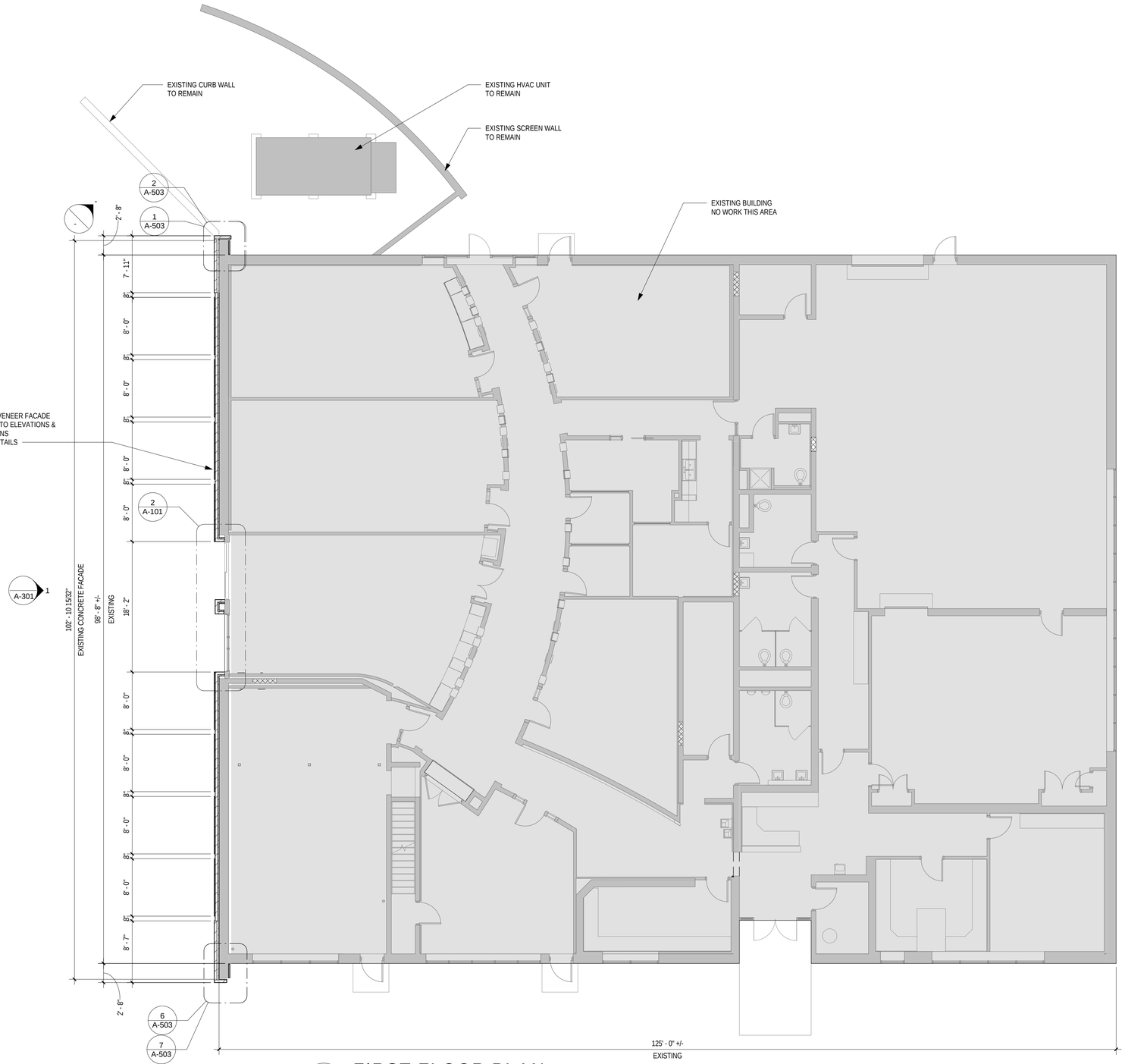
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JOB NO.: 18025

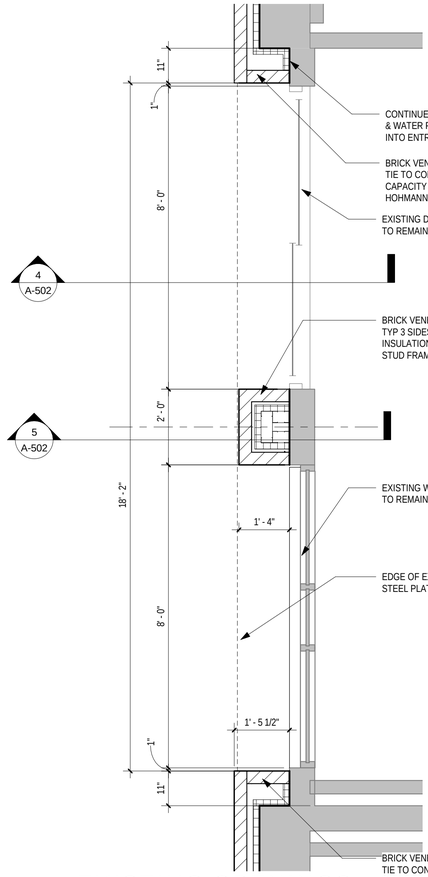
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1 FIRST FLOOR PLAN

1/8" = 1'-0"



2 EXISTING OPENINGS ENLARGED PLAN

1/2" = 1'-0"

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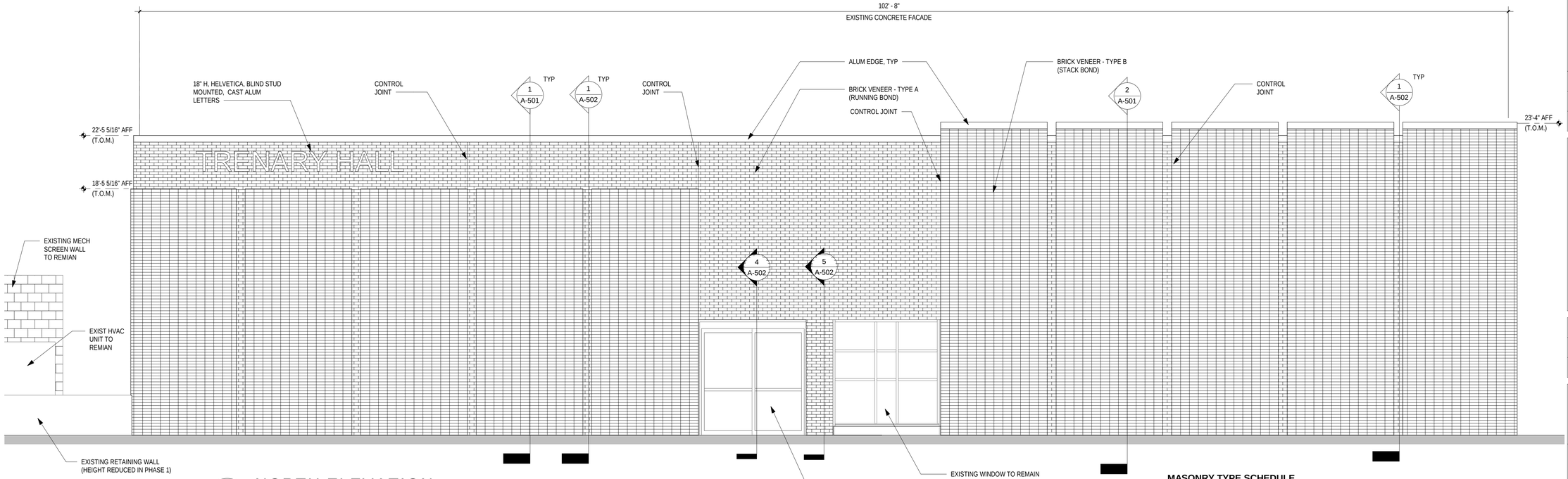
FIRST FLOOR PLAN

SCALE: As indicated

A-101

JOB NO.:	18025
DATE:	03/22/2019

1/16" = 1'-0" | 1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 NORTH ELEVATION

1/4" = 1'-0"

MASONRY TYPE SCHEDULE

TYPE A - MATCH BASIS OF DESIGN "BOWERSTON, OLD CHEYENNE MODULAR" RUNNING BOND PATTERN

TYPE B - MATCH BASIS OF DESIGN "BELDEN, MODULAR EBONY BLACK A" STACK BOND PATTERN

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EXTERIOR ELEVATION

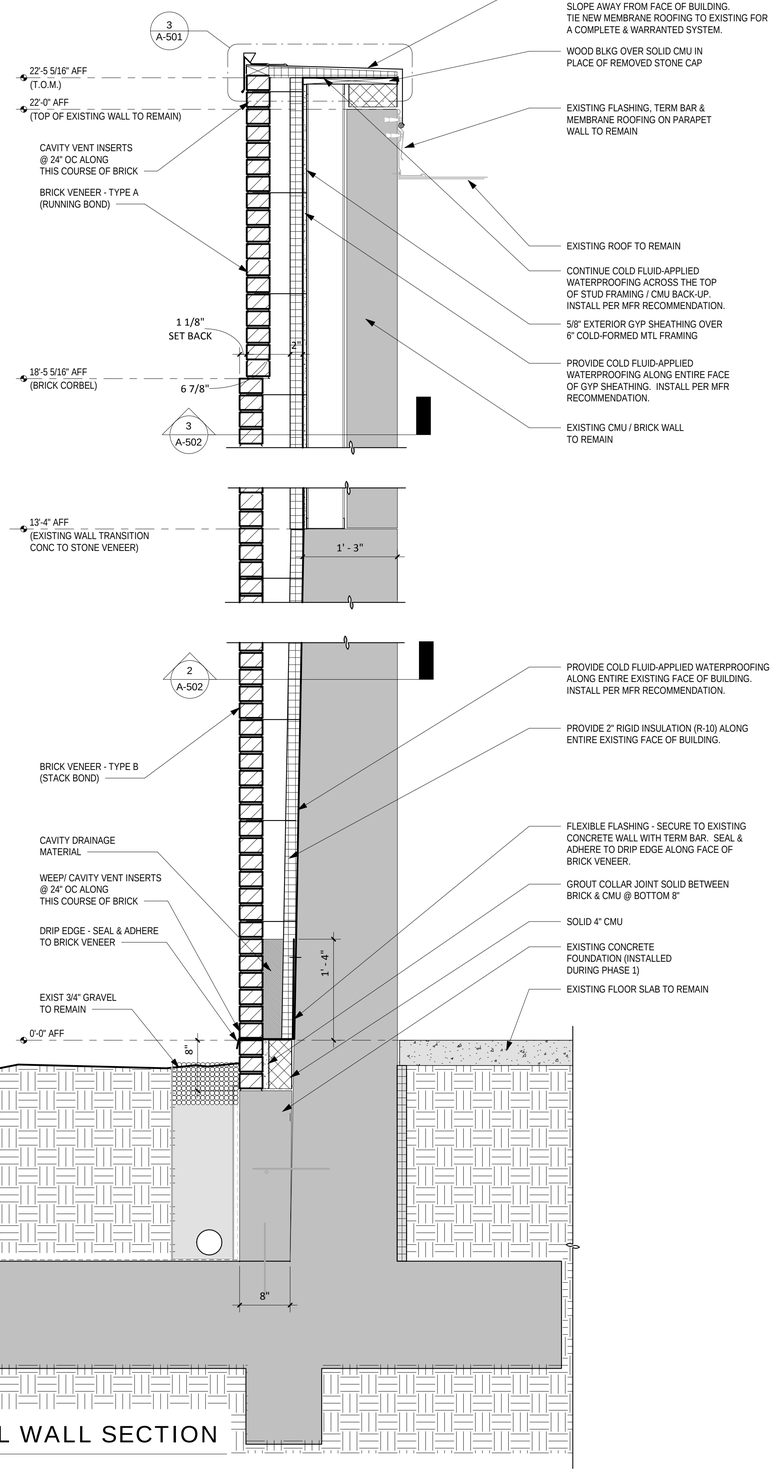
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A-301

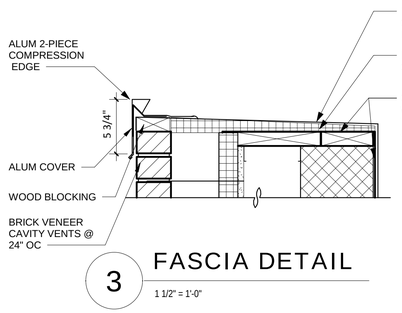
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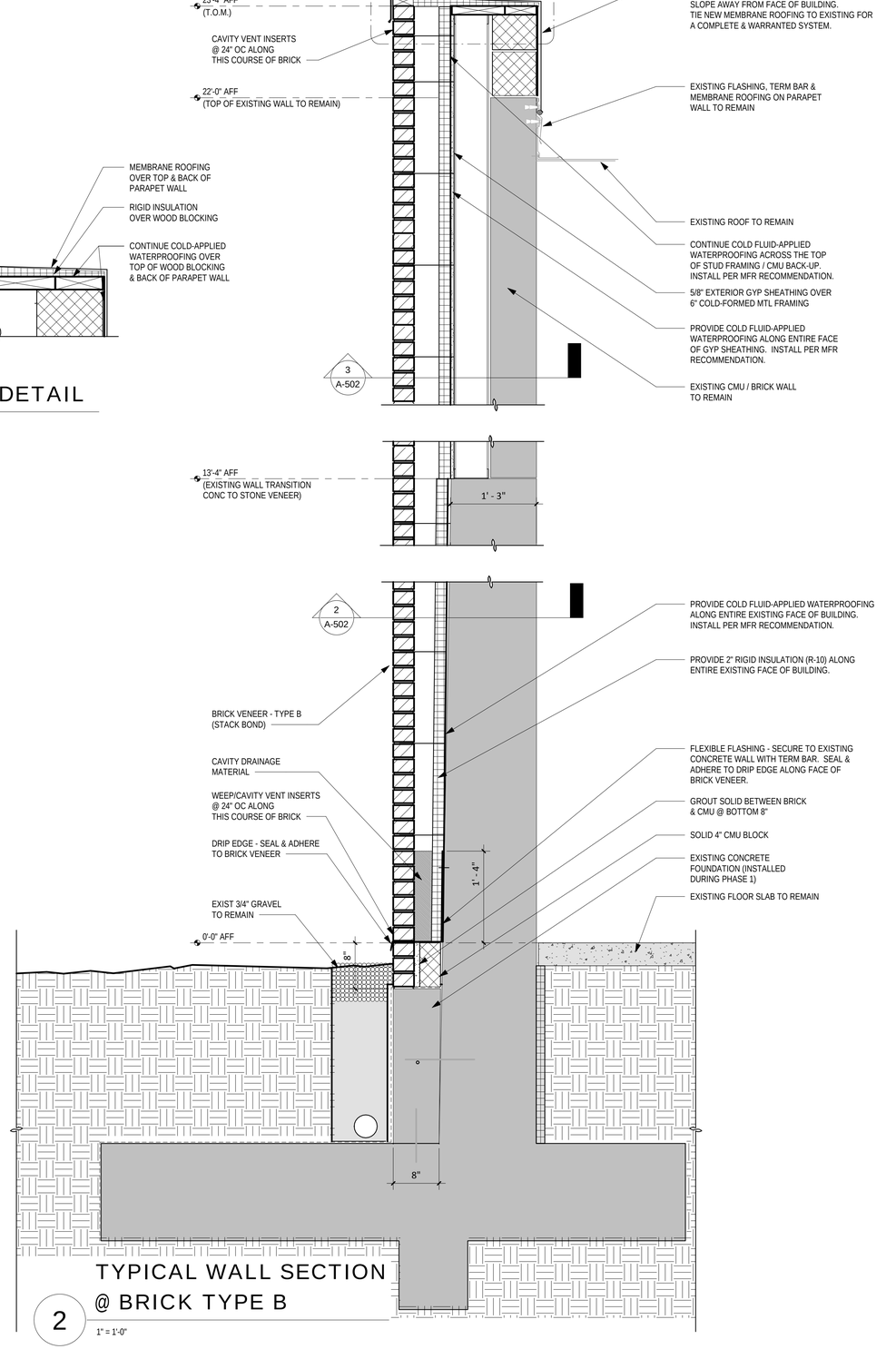
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1 TYPICAL WALL SECTION
1" = 1'-0"



3 FASCIA DETAIL
1 1/2" = 1'-0"



2 TYPICAL WALL SECTION
@ BRICK TYPE B
1" = 1'-0"

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EXTERIOR WALL SECTIONS

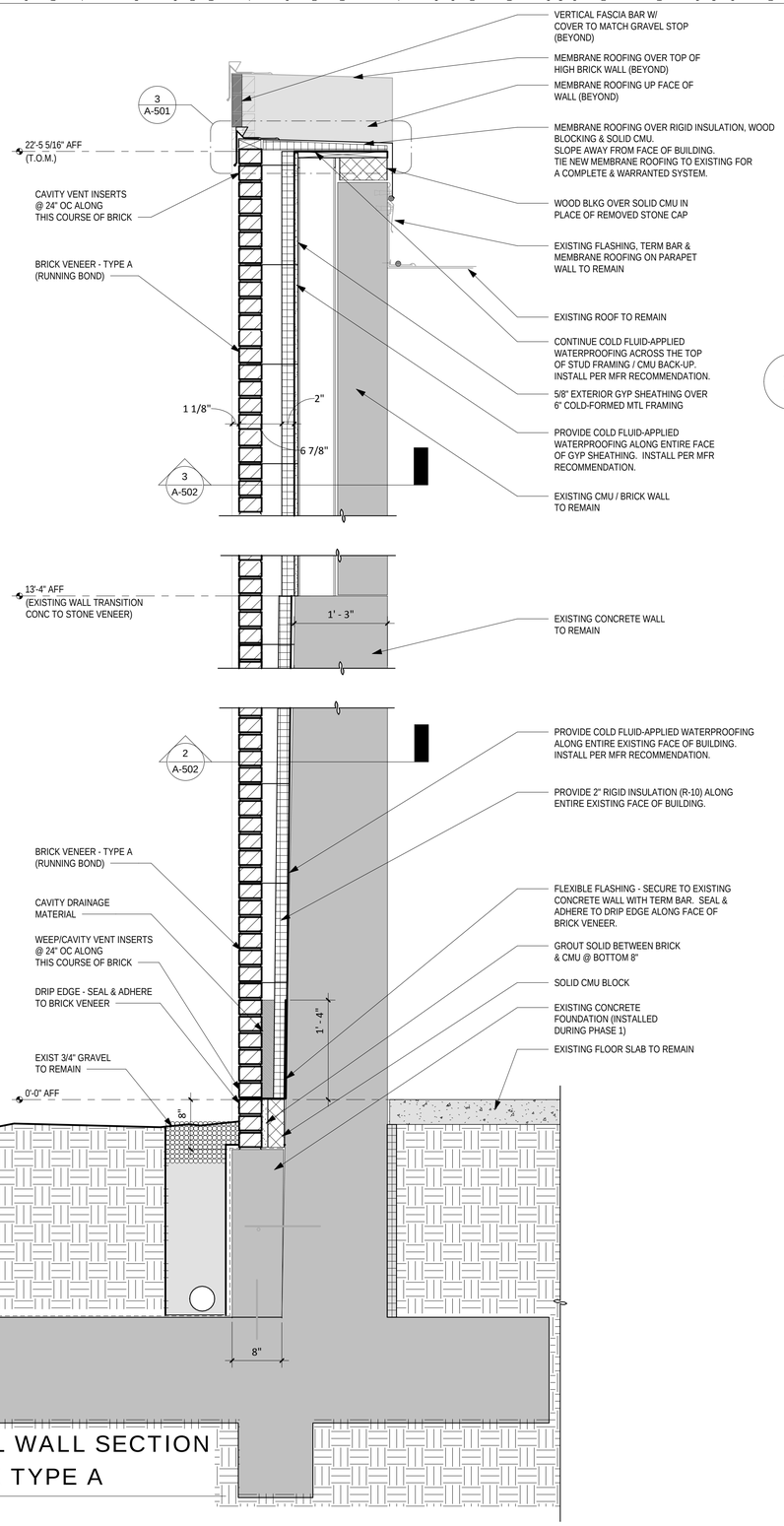
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JOB NO.: 18025

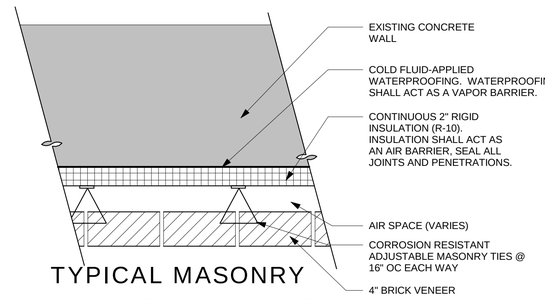
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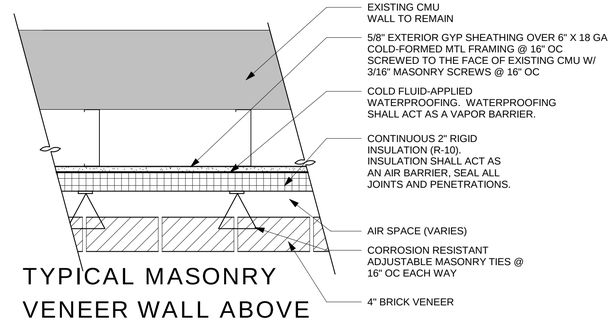
TYPICAL WALL SECTION @ BRICK TYPE A

1 — 1" = 1'-0"



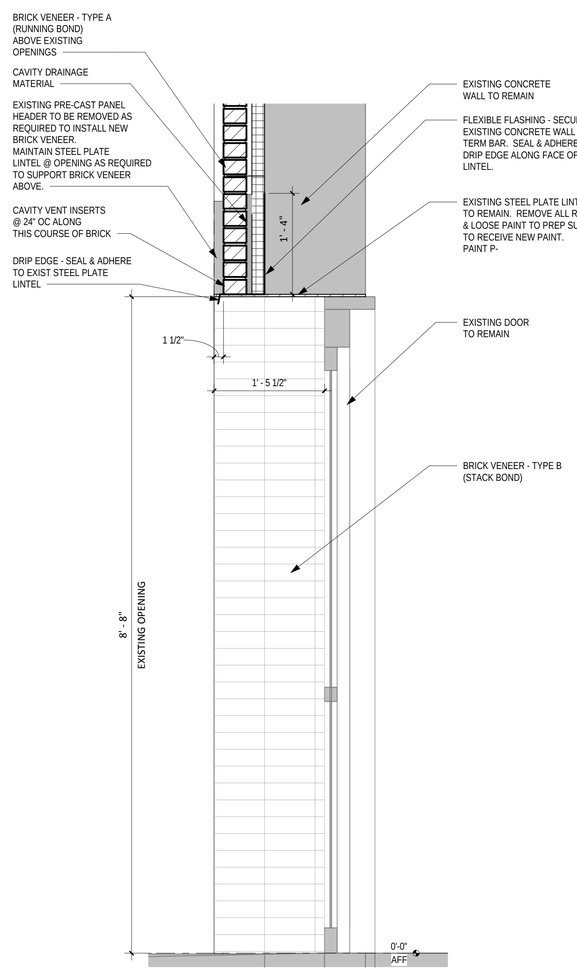
TYPICAL MASONRY VENEER WALL BELOW 13'-4" AFF

2 — 1 1/2" = 1'-0"



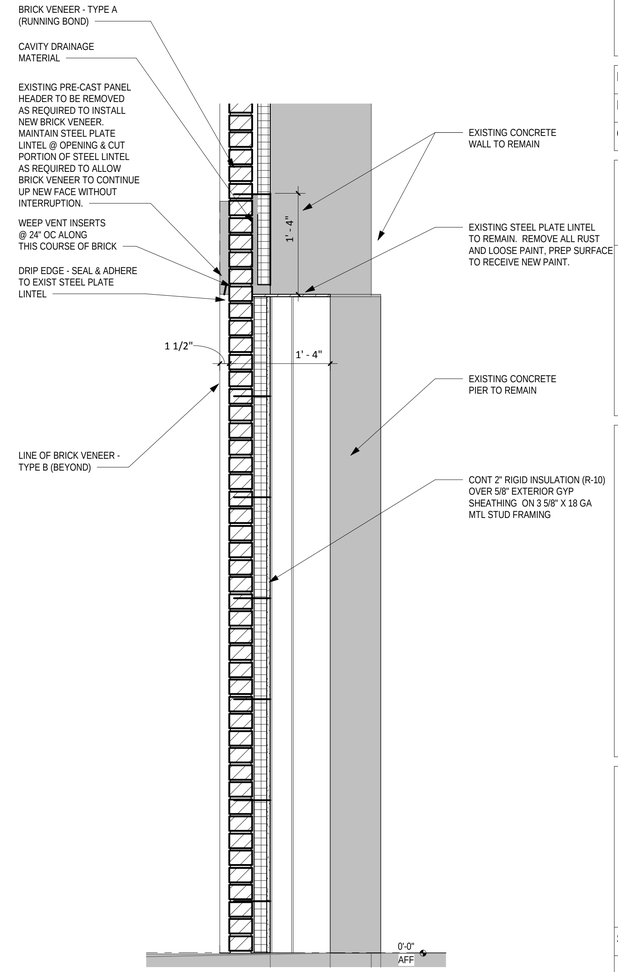
TYPICAL MASONRY VENEER WALL ABOVE 13'-4" AFF

3 — 1 1/2" = 1'-0"



SECTION THRU EXISTING DOOR

4 — 1" = 1'-0"



SECTION THRU PIER BETWEEN DOOR & WINDOW

5 — 1" = 1'-0"

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EXTERIOR WALL SECTIONS

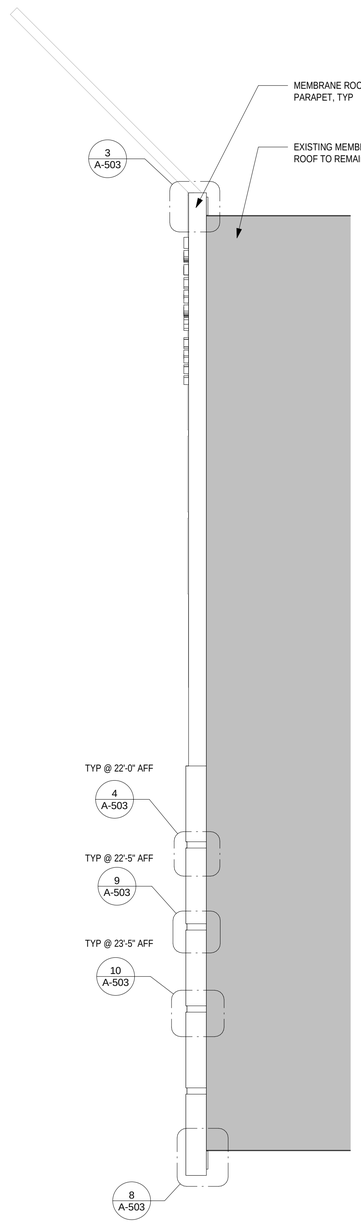
SCALE: As indicated

A-502

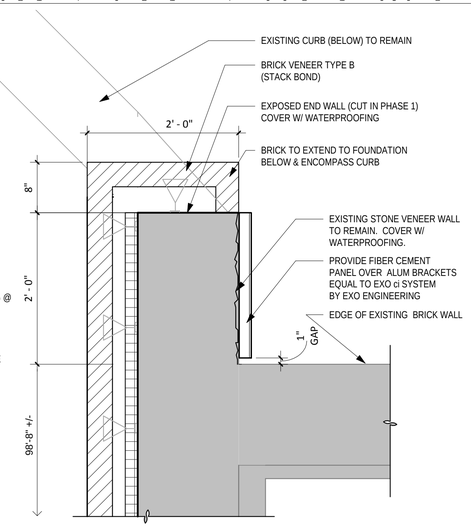
JOB NO.: 18025

DATE: 03/22/2019

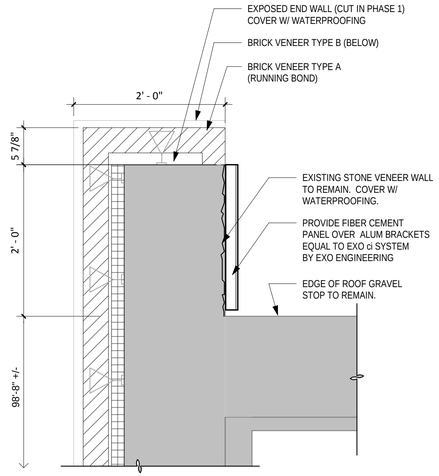
1/16" = 1'-0" 0 4' 8' 16'
1/8" = 1'-0" 0 2' 4' 8'
3/16" = 1'-0" 0 2' 4' 8'
1/4" = 1'-0" 0 1' 2' 4'
3/8" = 1'-0" 0 1' 2' 4'
1/2" = 1'-0" 0 6" 1' 2'
3/4" = 1'-0" 0 3" 6" 1' 2'
1" = 1'-0" 0 3" 6" 1' 2'
1 1/2" = 1'-0" 0 3" 6" 1'
3" = 1'-0" 0 1" 2" 3" 6" 1'
6" = 1'-0" 0 1" 2" 3" 6"



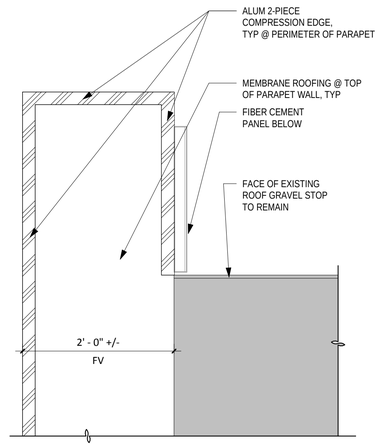
5 PARTIAL ROOF PLAN
1/8" = 1'-0"



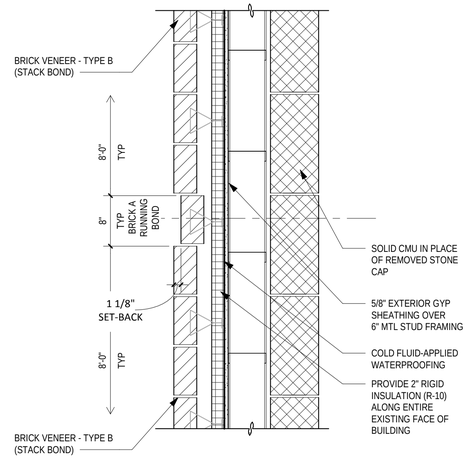
1 NORTHEAST CORNER - PLAN DETAIL
1" = 1'-0"



2 NORTHEAST CORNER - PLAN DETAIL @ 19'-0" AFF
1" = 1'-0"



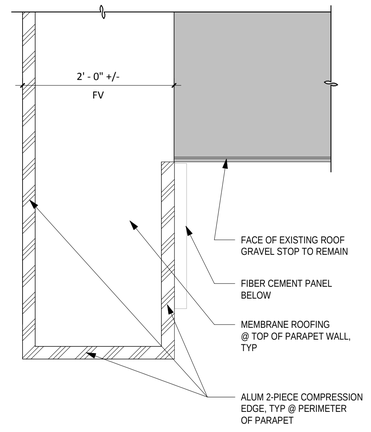
3 NORTHEAST CORNER - ROOF PLAN DETAIL
1" = 1'-0"



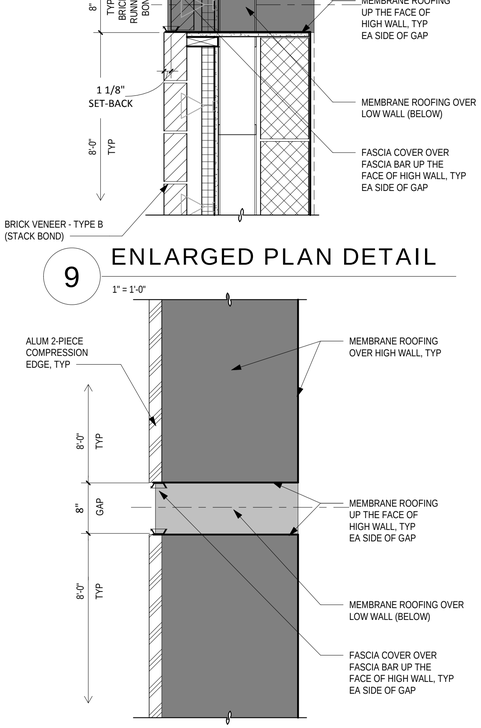
4 ENLARGED PLAN DETAIL
1" = 1'-0"

6 NORTHWEST CORNER - PLAN DETAIL
1" = 1'-0"

7 NORTHWEST CORNER - PLAN DETAIL @ 19'-0" AFF
1" = 1'-0"



8 NORTHWEST CORNER - ROOF PLAN DETAIL
1" = 1'-0"



9 ENLARGED PLAN DETAIL
1" = 1'-0"

10 ENLARGED PLAN DETAIL
1" = 1'-0"

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DRAWN BY:	CW
CHECKED BY:	TG

DATE:

REVISIONS:

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Celina, OH, 45822

EXTERIOR PLAN DETAILS

SCALE: As indicated

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JOB NO.:	18025
DATE:	03/22/2019

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