CROWN - 24TH STREET WAREHOUSE

2220 24th STREET, DETROIT, MI 48216

OWNER: CROWN ENTERPRISES, LLC

12225 STEPHENS WARREN, MI 48089

PROJECT LOCATION 2220 24th STREET

DETROIT, MI 48216

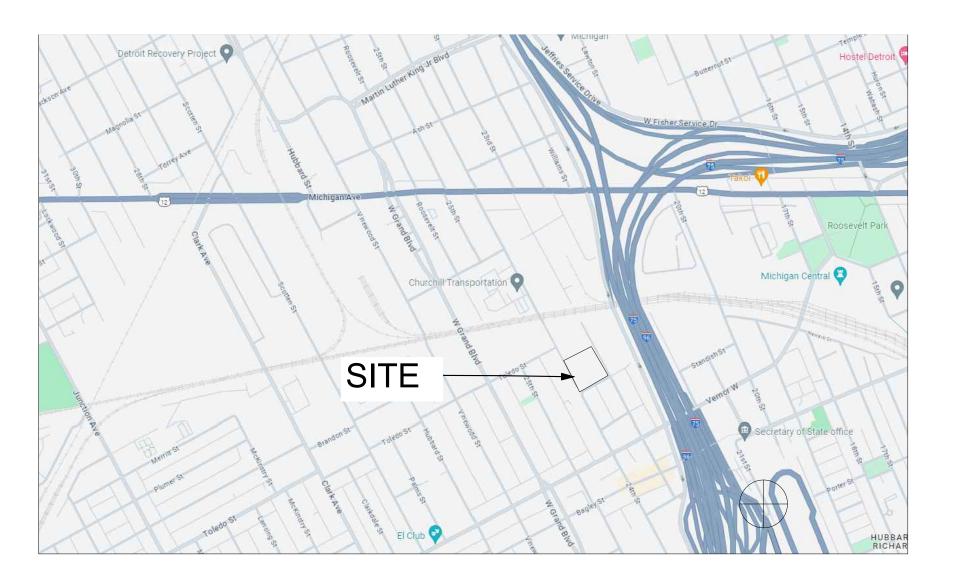
ARCHITECT FORMSURFACES DESIGN GROUP, LLC

10913 MARCELLO LANE

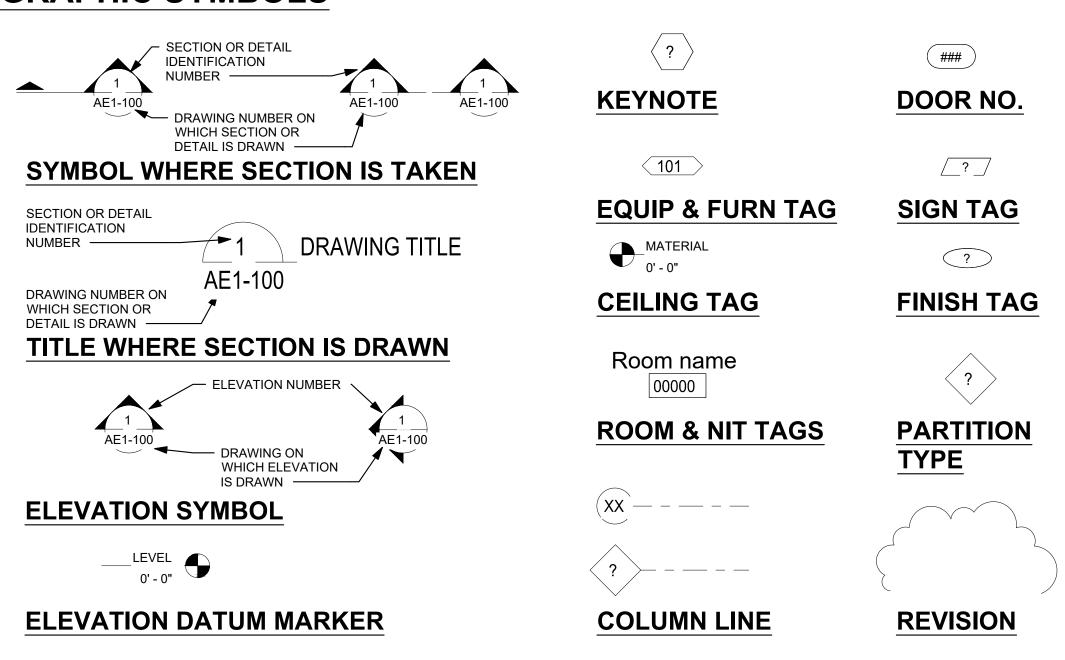
WHITMORE LAKE, MI 48189

MEP ENGINEER: UNIFIED BUILDING SYSTEMS, LLC

75 N. MAIN ST. SUITE 221 MT. CLEMENS, MI 48043

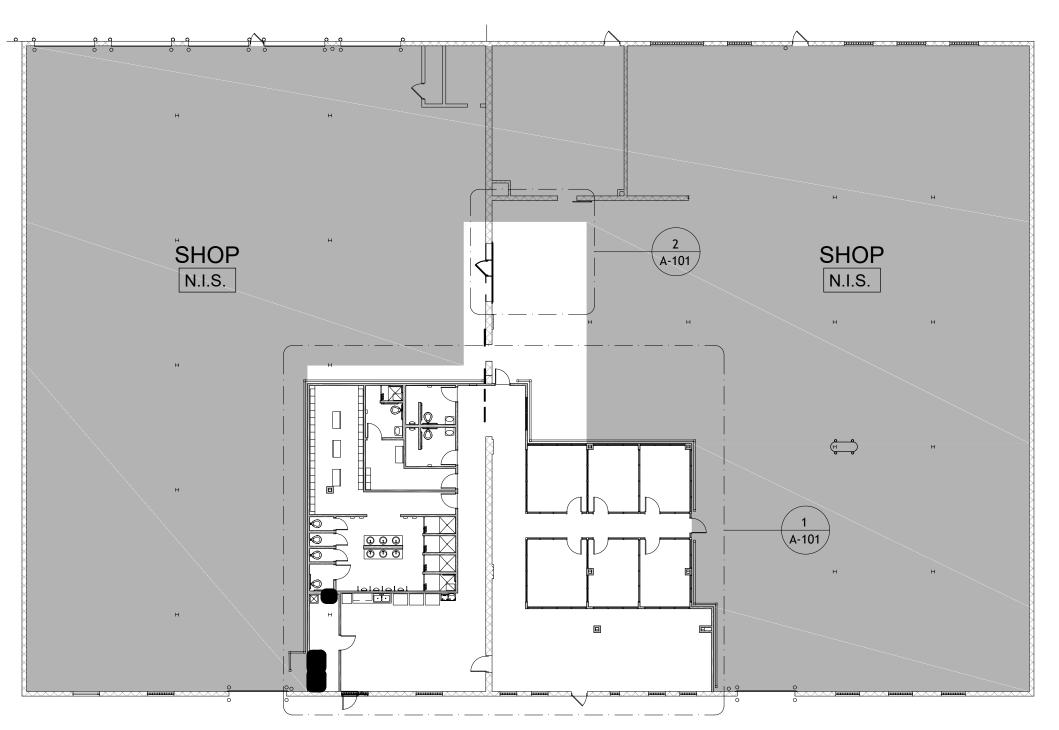


GRAPHIC SYMBOLS

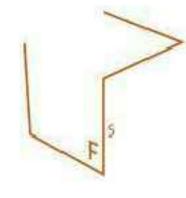


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CU-100	OVERALL PROPERTY		
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Angle Design & Engineering 22417 Cranbrooke Drive. Novi, Michigan. 48375 Phone: (313) 258-2036 Email: Fadi@AngledesignLLC.com

CLIENT



PROJECT

24th Street Warehouse

2220 24th Street Detroit, MI 48216

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No.	DESCRIPTION	DATE
1	90% Owner Review	12/19/2024
2	Permit	01/31/2025

20240604

FSDG PROJECT NO.

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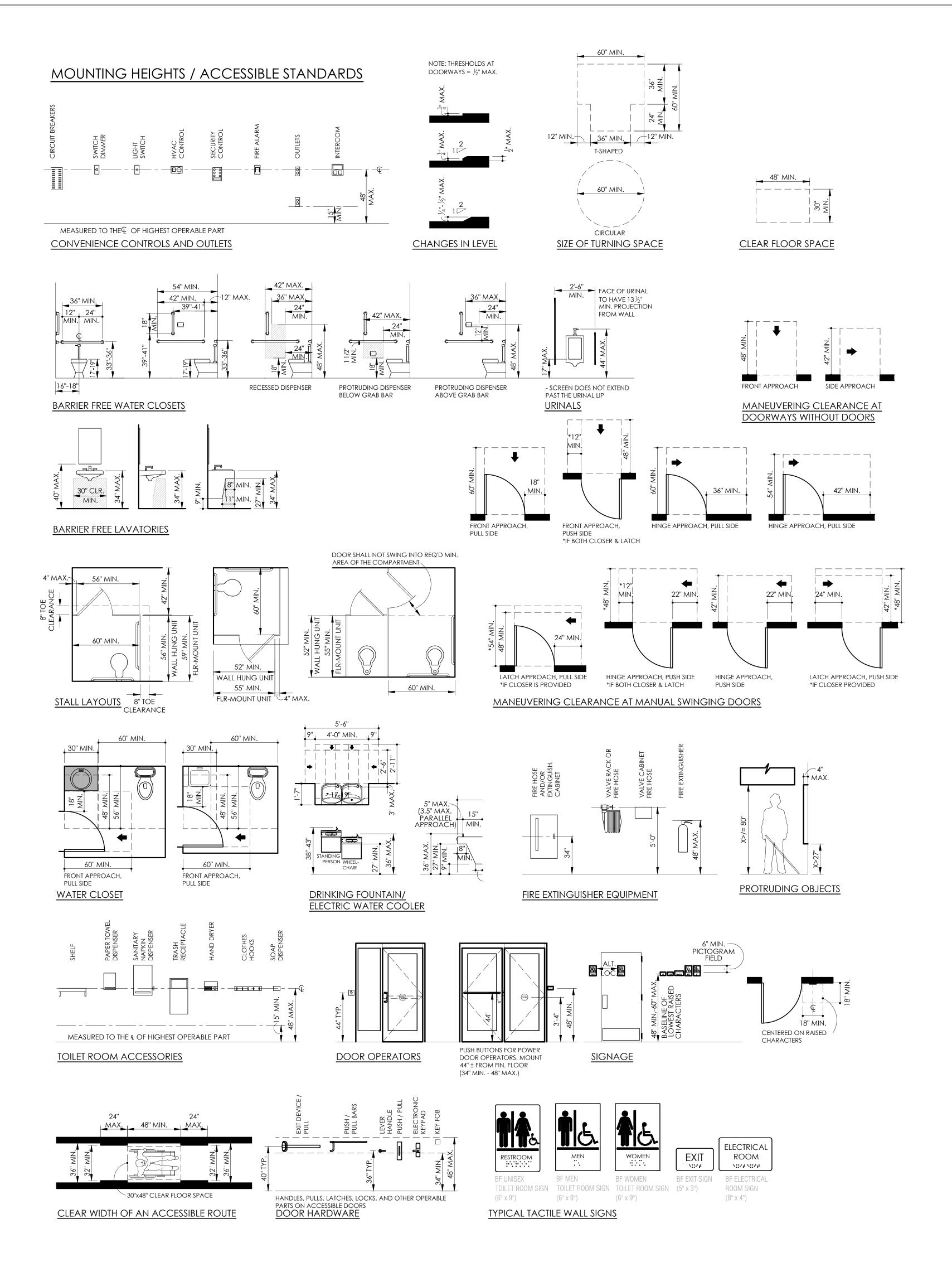
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SHEET TITLE

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GENERAL NOTES

CONSTRUCTION SITE NOTES

- 1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY AND CONSTRUCTION MEANS AND METHODS IN THE PERFORMANCE OF THE WORK. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKERS AND OTHER PERSONS DURING CONSTRUCTION OPERATIONS.
- 2. CONTRACTOR TO COMPLY WITH ALL OSHA REGULATIONS, AND ANY OTHER SITE SAFETY REQUIREMENTS OF THE OWNER IN THE PERFORMANCE OF THE WORK. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER AND ALL CONTRACTOR EMPLOYEES SHALL AT ALL TIMES WORK IN COMPLIANCE WITH THE OWNER'S SAFETY REGULATIONS AND ANY GENERAL CONTRACTOR SAFETY REQUIREMENTS.
- 3. PROVIDE ADEQUATE BRACING AND SHORING FOR CONSTRUCTION EQUIPMENT AND FOR THE BUILDING. PROVIDE SCAFFOLDING, TEMPORARY BARRIERS, AND OTHER TEMPORARY SUPPORTS AS REQUIRED. DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON FLOORS OR ROOFS IN EXCESS OF 80 PERCENT OF THE SPECIFIED DESIGN LIVE LOAD. MINIMIZE DYNAMIC IMPACT TO EXISTING STRUCTURES WHEN PLACING MATERIALS ON FLOORS OR ROOFS.

 4. DO NOT OBSTRUCT EXISTING BUILDING DOORS OR EGRESS PATHS DURING THE PERFORMANCE OF THE WORK.
- 5. CONTRACTOR SHALL CLEAN THE SITE OF CONSTRUCTION DEBRIS TO MAINTAIN A SAFE ENVIRONMENT ON A DAILY BASIS. LEGALLY DISPOSE OF ALL HAZARDOUS MATERIALS

GENERAL COORDINATION NOTES

- 1. CONFORM TO ALL OWNER'S GENERAL AND SPECIAL CONDITIONS IN THE PERFORMANCE OF THE WORK OR AS HEREIN SPECIFIED
- 2. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE AND ALL APPLICABLE STATE AND LOCAL CODES, ACCESSIBILITY STANDARDS AS WELL AS ANY APPLICABLE OWNER'S CORPORATE STANDARDS. THE LOCAL CODE AUTHORITY HAS THE AUTHORITY TO INTERPRET CODE REQUIREMENTS AND THESE INTERPRETATIONS MAY VARY FROM NORMAL INTERPRETATION AND INFORMATION REPRESENTED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OR THE ARCHITECT-ENGINEER OF ANY DISCREPANCIES OR DIFFERENCES AND SHALL PROCEED WITH THE WORK ONLY UPON RECEIVING WRITTEN AUTHORIZATION.
- 3. THE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT, OR CONTRACTOR TO THE AUTHORITY HAVING
- JURISDICTION.
 4. CONTRACTOR TO OBTAIN ALL REQUIRED CONSTRUCTION PERMIT FORMS, PAY ALL RELATED FEES, AND ARRANGE FOR ALL REQUIRED INSPECTIONS AND
- 5. BIDDER/CONTRACTOR SHALL VISIT THE SITE, EXAMINE AND VERIFY EXISTING CONDITIONS UNDER WHICH THE WORK SHALL BE CONDUCTED AND ACCOUNT FOR EXISTING FIELD CONDITIONS AND ACTUAL FIELD DIMENSIONS IN ALL BIDS SUBMITTED AND ALL WORK PERFORMED. REPORT ANY DISCREPANCIES IN THE EXISTING CONDITIONS IMMEDIATELY TO THE OWNER'S REPRESENTATIVE OR ARCHITECT/ ENGINEER.
- 6. CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS, INCLUDING SPECIFICATIONS, OF INTERFACING TRADES AND OTHER RELATED CONTRACTS PRIOR TO BIDDING AND COMMENCEMENT OF WORK TO ENSURE COMPLETE COORDINATION OF FINISHED WORK
- BIDDING AND COMMENCEMENT OF WORK TO ENSURE COMPLETE COORDINATION OF FINISHED WORK.

 7. EACH SUBCONTRACTOR IS RESPONSIBLE TO COORDINATE AND SCHEDULE THEIR WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WHO'S
- WORK WILL BE AFFECTED. SPECIFICATIONS ARE APPLICABLE AND BINDING TO ALL CONTRACTORS AND SUBCONTRACTORS. REPORT ALL DISCREPANCIES, PRIOR TO CONSTRUCTION, TO THE OWNER'S REPRESENTATIVE OR ARCHITECT/ ENGINEER FOR REVIEW AND CLARIFICATION.

 8. BEFORE AWARD OF CONTRACT, IF THERE ARE QUESTIONS ABOUT INTENT, CLARITY, APPLICATION OF NOTES, OR WORK SHOWN OR SPECIFIED, OR IF CONFLICTING
- DIRECTIONS ARE FOUND IN THE DOCUMENTS, THE GENERAL CONTRACTOR SHALL REQUEST WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE OR ARCHITECT/ENGINEER. ANY CLARIFICATIONS OR INTERPRETATIONS OF THE CONTRACT DOCUMENTS PROVIDED AFTER CONTRACT AWARD SHALL BE AT NO ADDITIONAL COST.
- 9. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. IN THE EVENT OF AN OMISSION OF NECESSARY DIMENSIONS OR INFORMATION, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OR ARCHITECT/ ENGINEER. FIGURED AND CALCULATED DIMENSIONS TAKES PRECEDENCE OVER SCALED MEASUREMENTS. DETAIL DRAWINGS AND LARGER SCALE DRAWINGS TAKES PRECEDENCE OVER SMALLER SCALE DRAWINGS. ALL PLAN DETAILS AND WALL SECTIONS ARE ASSUMED TO BE TYPICAL CONDITIONS UNLESS DETAILED OR NOTED OTHERWISE.
- 10. SOME STANDARD SYMBOLS, ABBREVIATIONS AND DETAILS INDICATED IN CONTRACT DOCUMENTS MAY NOT BE APPLICABLE TO THIS SPECIFIC CONTRACT ISSUE.

 11. DRAWING DETAILS ARE CONCEPTUAL IN NATURE AND ACTUAL FIELD CONDITIONS MAY VARY SLIGHTLY FROM CONCEPTUAL DEPICTIONS. DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION.
- 12. SUBSTITUTIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER. IF A SUBSTITUTION IS PROPOSED, SUBMIT COMPLETE SPECIFICATION AND PERFORMANCE DETAILS FOR EVALUATION. IF SUBSTITUTIONS ARE APPROVED, NOTIFY ALL OTHER CONTRACTORS AND SUBCONTRACTORS AFFECTED BY THE CHANGE AND FULLY
- COORDINATE ALL RELATED WORK. ANY COSTS RESULTING FROM THE SUBSTITUTION AND CHANGE IS THE RESPONSIBILITY OF THE CONTRACTOR.

 13. COORDINATE AND PERFORM WORK BASED ONLY ON REVIEWED/ CERTIFIED SHOP DRAWINGS, A FIELD CHECK OF EXISTING CONDITIONS, AND INSPECTION OF NEWLY INSTALLED WORK. VERIFY THE LATEST REVISION OF CONTRACT DOCUMENTS, INCLUDING ALL INTERFACING DISCIPLINE DRAWINGS, BEFORE PROCEEDING WITH THE PROCUREMENT, DETAILING, FABRICATION OR INSTALLATION OF THE WORK. ANY SYSTEMS OR EQUIPMENT INSTALLED PRIOR TO REVIEW OF SHOP DRAWINGS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- 14. ALL EQUIPMENT SHALL BE INSTALLED IN FULL ACCORDANCE WITH MANUFACTURER'S DATA AND INSTALLATION INSTRUCTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK AND CONFORM TO MANUFACTURER SPECIFICATIONS AND REQUIREMENTS PRIOR TO STARTING THE WORK. VERIFY SIZE, LOCATIONS AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED WITH MANUFACTURER OR SUPPLIERS BEFORE COMMENCEMENT OF CONSTRUCTION. VERIFY SIZE AND LOCATIONS OF ALL OPENINGS AND SUPPORTS WITH ACTUAL EQUIPMENT PURCHASED. REFER TO MANUFACTURERS STANDARD DETAILS FOR INSTALLATION.

 15. ALL EQUIPMENT AND SYSTEMS SHALL BE COMPLETE AND OPERATIONAL IN ALL RESPECTS, SECURED IN LOCATION AND PROPERLY ADJUSTED. PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR THE OWNER AT THE COMPLETION OF THE WORK.
- 16. FULLY WARRANT ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE, UNLESS OTHERWISE SPECIFIED. REPAIR OR REPLACE WITHOUT CHARGE TO THE OWNER ALL ITEMS FOUND DEFECTIVE DURING THE WARRANTY PERIOD.
- 17. BEFORE PENETRATING EXISTING CONCRETE OR SOIL SURFACES FOR THE AREA OF WORK, VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES BY USE OF "ELECTRONIC" OR SIMILAR NON-INVASIVE DETECTOR DEVICES. IF POTENTIAL INTERFERENCES ARE DISCOVERED, PROPOSE ALTERNATE ROUTING AND ASSOCIATED COSTS TO THE OWNER'S REPRESENTATIVE OR ARCHITECT/ENGINEER FOR APPROVAL BEFORE PROCEEDING.
- 18. MAINTAIN MINIMUM CLEARANCE REQUIREMENTS OF EQUIPMENT MANUFACTURER'S SPECIFICATIONS OR RECOMMENDATIONS, OWNER STANDARDS, NATIONAL ELECTRICAL CODE (NEC), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, AND REGULATIONS.
- 19. MAINTAIN A MINIMUM OF 6'-8" HEADROOM CLEARANCE FOR BULKHEADS, SUPPORTS AND UTILITIES PASSING OVER WALKWAYS, PLATFORMS OR CATWALKS.

 20. COMPLY WITH ALL HORIZONTAL AND VERTICAL CLEARANCE DIMENSIONS BETWEEN MILLWORK, FIXTURES, FURNISHINGS AND ADJACENT BUILDING SURFACES TO COMPLY WITH ANSI A117.1 ACCESSIBILITY CODE AND ADA, AMERICANS WITH DISABILITIES ACT.
- 21. OFFSET STUDS WHERE REQUIRED TO ACHIEVE A FLUSH FINISH WALL SURFACE.
 22. INSTALL METAL CORNER GUARDS AT ALL EXPOSED WALL BOARD EDGES. INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR
- FINISH MATERIAL AND PROVIDE SEALANT AS REQUIRED.
 23. ALL WOOD TRIM, SPACER, FILLER, ETC. THROUGHOUT JOB SHALL BE FIRE RETARDANT TREATED.
- 23. ALL WOOD TRIM, SPACER, FILLER, ETC. THROUGHOUT JOB SHALL BE FIRE RETARDANT TREATED.

 24. CONTACT BETWEEN DISSIMILAR METALS SHALL BE PROTECTED.
- 25. ABSOLUTELY NO SMOKING OR ALCOHOL CONSUMPTION IS TO BE ALLOWED ON THIS JOB SITE. IT IS THE GENERAL CONTRACTOR RESPONSIBILITY TO INSURE THAT ALL EMPLOYEES, VENDORS, AND SUBCONTRACTORS COMPLY WITH THIS RESTRICTION.
- ALL EMPLOYEES, VENDORS, AND SUBCONTRACTORS COMPLY WITH THIS RESTRICTION.

 26. ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET METAL UNTIL THE FINAL START UP

 OF THE HEATING AND COOLING EQUIPMENT.
- 27. NO WORK MAY TAKE PLACE IN THE ROOM ABOVE, BELOW, OR DIRECTLY ADJACENT TO THE SPACE UNLESS SPECIFICALLY REQUESTED IN WRITING, MIN. OF 24 HRS. IN ADVANCE. COORDINATE WITH ONSITE INSPECTION STAFF & FACILITIES MANAGEMENT DEPT. PROVIDE THROUGH RATED WALL PENETRATION DETAIL. PROVIDE THROUGH DECK PENETRATION DETAIL.

ARCHITECTURAL NOTES

- 1. ALL FINISH FLOOR ELEVATIONS ARE FOR ARCHITECTURAL PURPOSES ONLY. REFER TO CIVIL AND STRUCTURAL DRAWINGS FOR ACTUAL ELEVATIONS AND RELATIONSHIP TO SITE BENCHMARKS.
- 2. COORDINATE WITH MECHANICAL CONTRACTOR THE LOCATIONS OF ALL FLOOR DRAINS.
- 3. TRANSITION OF DIFFERENT FLOORING MATERIALS AT DOORWAYS SHALL OCCUR AT CENTERLINE OF DOORS AND SHALL BE ½" HIGH MAXIMUM.
 4. ALL PLAN DIMENSIONS ARE TO FINISHED FACE OF FINISHED WALLS, FACE OF MASONRY, AND CENTERLINE OF COLUMNS, UNLESS NOTED OTHERWISE.
- 5. PARTITIONS ARE TO EXTEND AND SEAL AGAINST THE BOTTOM OF THE DECK ABOVE UNLESS OTHERWISE NOTED.
 6. INSTALL METAL TRIM ON ALL GYPSUM BOARD EDGES ABUTTING OTHER MATERIALS OR STOPS SHORT OF OTHER MATERIALS TO FORM A REVEAL OR RECESS. USE
- METAL CORNER BEADS ON ALL GYPSUM BOARD EXTERIOR CORNERS.

 7. ADD SUFFICIENT BLOCKING IN STUD WALLS TO SUPPORT ALL ITEMS, MILLWORK OR EQUIPMENT SHOWN OR SPECIFIED TO BE ATTACHED TO WALLS. PROVIDE
- ADDITIONAL STRUCTURAL SUPPORT (PLATES, ANGLES, CHANNELS, ETC.) WITHIN WALLS WHERE WEIGHT OF ATTACHED ITEMS EXCEED WALL CAPACITY. PROVIDE BACKING PLATES OR BLOCKING FOR ANY OWNER FURNISHED OR INSTALLED ITEMS.
- 8. PAINT ALL WALL SURFACES, DOOR FRAMES, BULKHEADS AND CEILINGS IN ROOMS WHERE INDICATED ON PLANS OR ROOM FINISH SCHEDULE. PAINT BEHIND ALL MOVEABLE ITEMS ADJACENT TO WALLS RECEIVING PAINT AND RELOCATE ITEMS AS NECESSARY.
- 9. ALL EXTERIOR SURFACES TO HAVE A TEMPORARY OR PERMANENT WEATHER RESISTIVE BARRIER DURING CONSTRUCTION OPERATIONS TO PROTECT THE
- BUILDING INTERIOR AND WALL SURFACES. EXTERIOR OPENINGS SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF.
- 10. THE AREA OF WORK SHALL BE MAINTAINED WEATHER TIGHT AND IN A SECURED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SECURE THE AREA OF WORK.
- 11. REFER TO FLOOR AND REFLECTED CEILING PLANS AND MECHANICAL AND ELECTRICAL DRAWINGS FOR SPACE ALLOCATIONS IN ROUTING OF ALL MECHANICAL AND ELECTRICAL WORK INCLUDING DIFFUSERS, REGISTERS, GRILLES, SPRINKLERS, LIGHTS, ETC. THE REFLECTED CEILING PLAN LOCATIONS SHALL BE ADHERED TO UNLESS OTHERWISE NOTED ON DRAWINGS. EXCEPTIONS SHALL REQUIRE SPECIFIC WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE OR ARCHITECT/ENGINEER. NOTE THAT ELECTRIC LIGHT FIXTURE LOCATIONS AND FIRE SPRINKLER HEADS SHALL TAKE PRECEDENCE OVER OTHER UTILITY ITEMS IN ANY AND ALL
- COORDINATION ISSUE, CONTACT THE OWNER'S REPRESENTATIVE OR ARCHITECT-ENGINEER FOR A RESOLUTION.

 12. REFER TO STRUCTURAL DRAWINGS FOR SUPPORT STRUCTURE INFORMATION, DETAILS AND DIMENSIONS NOT INDICATED ON THE ARCHITECTURAL DRAWINGS.

 REPORT ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS TO THE ARCHITECT/ ENGINEER OR OWNER'S REPRESENTATIVE, PRIOR

LOCATIONS FOR AREAS WITH OR WITHOUT CEILINGS; THE CONTRACTOR SHALL COORDINATE AS REQUIRED, AND IF THERE IS NO APPARENT SOLUTION TO

- TO CONSTRUCTION.

 13. COORDINATE MECHANICAL AND ELECTRICAL EQUIPMENT CONCRETE PADS AND ROOF CURB LOCATIONS, SIZES, SUPPORTS AND CONSTRUCTION REQUIREMENTS,
- ONLY WITH REVIEWED AND CERTIFIED SHOP DRAWINGS OF THE RELATED TRADES.

 14. REFER TO AND COORDINATE WITH STRUCTURAL DRAWINGS FOR ALL FLOOR AND EXTERIOR WALL PENETRATIONS. INSULATE AND WATERTIGHT SEAL ALL
- EXTERIOR WALL PENETRATIONS.

 15. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS AND THE SPECIFICATIONS FOR WALL, FLOOR AND BUILDING SURFACES PENETRATION AND SEALING
- REQUIREMENTS. FIRE STOP ALL PENETRATIONS OF FIRE RATED WALL OR FIRE RATED FLOOR OPENINGS PER TESTED UL ASSEMBLIES AND AS REQUIRED BY CODE.
- 16. PROVIDE WALL AND CEILING ACCESS DOORS OR AS MAY BE REQUIRED BY CODE OR TO PROPERLY SERVICE OR ADJUST ALL VALVES, DAMPERS, CLEAN-OUTS, ELECTRICAL JUNCTION BOXES AND OTHER DEVICES.

EMOLITION NOTES

- 1. PLAN AND SCHEDULE CONSTRUCTION AND DEMOLITION ACTIVITIES TO AVOID INTERFERENCE AND TO MINIMIZE DISRUPTION OF THE OWNER'S OPERATIONS.

 2. SCHEDULE AND COORDINATE ALL DEMOLITION WORK AND UTILITY SHUT DOWNS AND TIE-INS WITH THE OWNERS REPRESENTATIVE. PROCEED WITH WORK ONLY
- AFTER RECEIPT OF WRITTEN AUTHORIZATION.

 3. DEMOLISHED MATERIALS, UNLESS OTHERWISE DIRECTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE BEFORE THE END OF EACH WORKDAY. OWNER RETAINED SALVAGED EQUIPMENT SHALL BE PROPERLY PROTECTED FOR REUSE OR CRATED FOR PROTECTION AND DELIVERED TO THE OWNER'S SITE STORAGE. ALL HAZARDOUS MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE AND PER ALL APPLICABLE FEDERAL,
- STATE AND LOCAL CODES.

 4. PERFORM CONSTRUCTION AND SELECTIVE DEMOLITION IN A MANNER TO PREVENT DAMAGE TO ANY EXISTING AND NEW STRUCTURES, UTILITIES AND OTHER
- 5. ALL CUTTING AND CHASING OF BUILDING CONSTRUCTION SHALL BE IN A NEAT AND WORKMANLIKE MANNER. NEATLY SAWCUT ALL RECTANGULAR OPENINGS, SET SLEEVES THROUGH OPENINGS, AND FINISH PATCH OR PROVIDE TRIM AROUND OPENINGS. CORE DRILL AND SLEEVE ALL ROUND OPENINGS.
- 6. REPAIR SURFACES THAT HAVE BEEN DAMAGED BY THE WORK. REPAIR DAMAGE TO MATCH EXISTING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO WEATHER AND FIRE SEALING, INSULATING, PATCHING AND PAINTING TO MATCH.
- AND FIRE SEALING, INSULATING, PATCHING AND PAINTING TO MATCH.

 7. PROVIDE ADEQUATE BRACING AND SHORING BETWEEN AREA OF WORK AND OTHER AREAS OF THE FACILITY.
- 7. PROVIDE ADEQUATE BRACING AND SHOKING BETWEEN AREA OF WORK AND OTHER AREAS OF THE FACILITY.

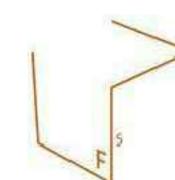
MISCELLANEOUS SUPPORT RELATED NOTES

- 1. PROVIDE SUPPLEMENTARY OR MISCELLANEOUS STEEL FOR SUPPORT, SWAY BRACING, CROSS-BRACING, AND ANCHORAGE OF BUILDING SYSTEMS OR UTILITIES, IN
- ORDER TO MEET SITE SEISMIC AND SYSTEM SPECIFIC INSTALLATION AND OPERATING CONDITIONS.

 2. COORDINATE SUPPLEMENTARY OR MISCELLANEOUS STEEL WITH THE PRIMARY STRUCTURAL STEEL WORK. SUPPORT, BRACE, CROSS-BRACE, GUIDE AND ANCHOR AS REQUIRED SO AS TO IMPOSE NO OVER STRESSING OF THE BUILDING STRUCTURE BEYOND STATED LOADS INDICATED ON THE STRUCTURAL DRAWINGS.

 REQUIRED SO AS TO IMPOSE NO OVER STRESSING OF THE BUILDING STRUCTURE BEYOND STATED LOADS INDICATED ON THE STRUCTURAL DRAWINGS.
- 3. DO NOT WELD TO, CUT OR DRILL BUILDING STEEL.

 4. DO NOT WELD SUPPLEMENTARY OR MISCELLANEOUS STEEL TO BUILDING STEEL WITHOUT PRIOR WRITTEN APPROVAL OF PROPOSED DETAIL BY THE STRUCTURAL ENGINEER. WELDING TO SUPPLEMENTARY STEEL IS DEPARTED.
- ENGINEER. WELDING TO SUPPLEMENTARY STEEL IS PERMITTED.
 5. DO NOT HANG SUPPORTS FROM TOP CHORD OF TRUSS. USE ONLY APPROVED BEAM CLAMPS, C-CLAMPS ARE PROHIBITED.



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CLIENT



Warren, MI 48089

PROJECT

24th Street Warehouse

2220 24th Street Detroit, MI 48216

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ISSUE	NO.								
No.	DESCRIPTION	DATE							
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FSDG PROJECT NO. 20240604

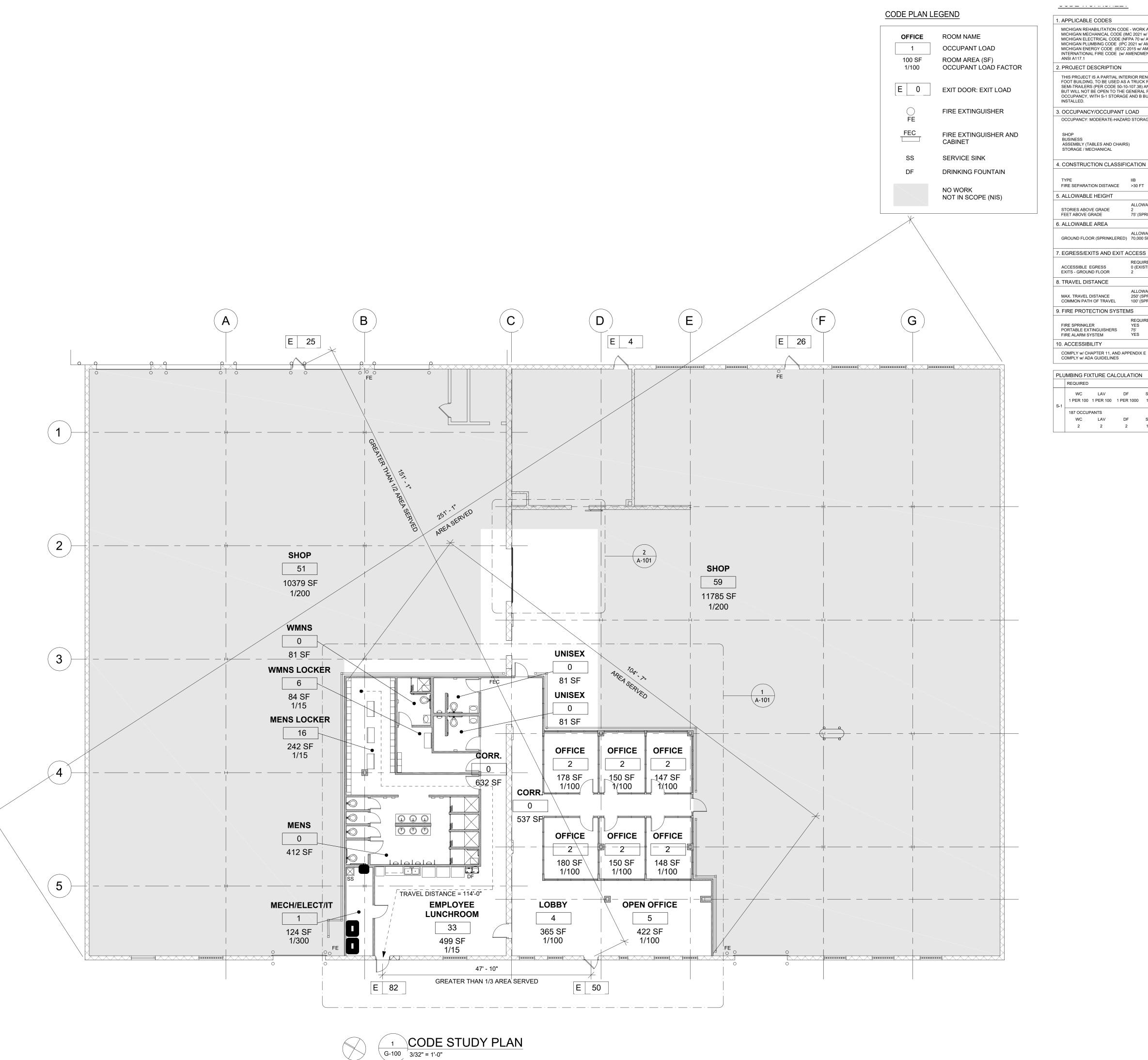
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GENERAL NOTES AND DETAILS

ISSUE

SHEET NUMBER

G-001



		<u>-</u>			
	1. APPLICABLE CODES				REFERENCE
NAME PANT LOAD AREA (SF)	MICHIGAN REHABILITATION COD MICHIGAN MECHANICAL CODE (I MICHIGAN ELECTRICAL CODE (N MICHIGAN PLUMBING CODE (IPC MICHIGAN ENERGY CODE (IECC INTERNATIONAL FIRE CODE (W/ ANSI A117.1	MC 2021 w/ AMENDMENTS FPA 70 w/ AMENDMENTS) 2021 w/ AMENDMENTS) 2015 w/ AMENDMENTS)		L 2	2015 2021 2023 2021 2017 2015 2009
PANT LOAD FACTOR	2. PROJECT DESCRIPTION				
OOOR: EXIT LOAD	THIS PROJECT IS A PARTIAL INTI FOOT BUILDING, TO BE USED AS SEMI-TRAILERS (PER CODE 50-11 BUT WILL NOT BE OPEN TO THE OCCUPANCY, WITH S-1 STORAG INSTALLED.	A TRUCK REPAIR GARAG 0-107.38) AND/OR MOTOR ' GENERAL PUBLIC. THE BL	E, INCLUDING OPEN ARI VEHICLE SERVICES, MIN JILDING WILL BE A SING	EAS FOR THE PARI NOR (PER CODE 50 LE STORY MIXED-L	KING OF -10-106.25), ISE
XTINGUISHER	3. OCCUPANCY/OCCUPANT	LOAD			
EXTINGUISHER AND ET CE SINK	OCCUPANCY: MODERATE-HAZAF SHOP BUSINESS ASSEMBLY (TABLES AND CHAIR STORAGE / MECHANICAL	OCCUF 1/200 1/100	CCESSORY BUSINESS (I PANT LOAD FACTOR TOTAL	OCCUPANTS 110 21 55 1 187	MBC 311.2 MBC 508.2 MBC 1004.1.2
02 0	4. CONSTRUCTION CLASSIF	ICATION			
ING FOUNTAIN			PROVIDED		MBC 601
ORK	TYPE FIRE SEPARATION DISTANCE	IIB >30 FT	EXISTING EXISTING		MBC 602
N SCOPE (NIS)	5. ALLOWABLE HEIGHT				
	STORIES ABOVE GRADE FEET ABOVE GRADE	ALLOWABLE 2 75' (SPRINKLERED)	PROVIDED EXISTING-1 EXISTING- 27'		MBC 504
	6. ALLOWABLE AREA				1
	GROUND FLOOR (SPRINKLERED	ALLOWABLE) 70,000 SF	EXISTING 28,759 SF		MBC 506.2
	7. EGRESS/EXITS AND EXIT	ACCESS			1
	ACCESSIBLE EGRESS EXITS - GROUND FLOOR	REQUIRED 0 (EXISTING BLDG)	PROVIDED 2 5		MBC 1009.1.1 MBC 1006.3.1

	REQUIRED				PROVID	ED				
S-1	WC 1 PER 100	LAV 1 PER 100	DF 1 PER 1000	SS 1						MPC 403.1
٠.	187 OCCUF						1			
	wc	LAV	DF	SS	wc	U	LAV	DF	SS	
	2	2	2	1	7	6	9	2	1	

PROVIDED COMPLIANT COMPLIANT

PROVIDED

S1 COMPLIANT COMPLIANT

MBC 1017.2 MBC 1006.2.1

MBC 903.2.9.1 MBC 906.3 (1) MBC 907.1

MBC Ch. 11 ANSI 117.1

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PROJECT

24th Street Warehouse

2220 24th Street Detroit, MI 48216

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FSDG PROJECT NO.

20240604

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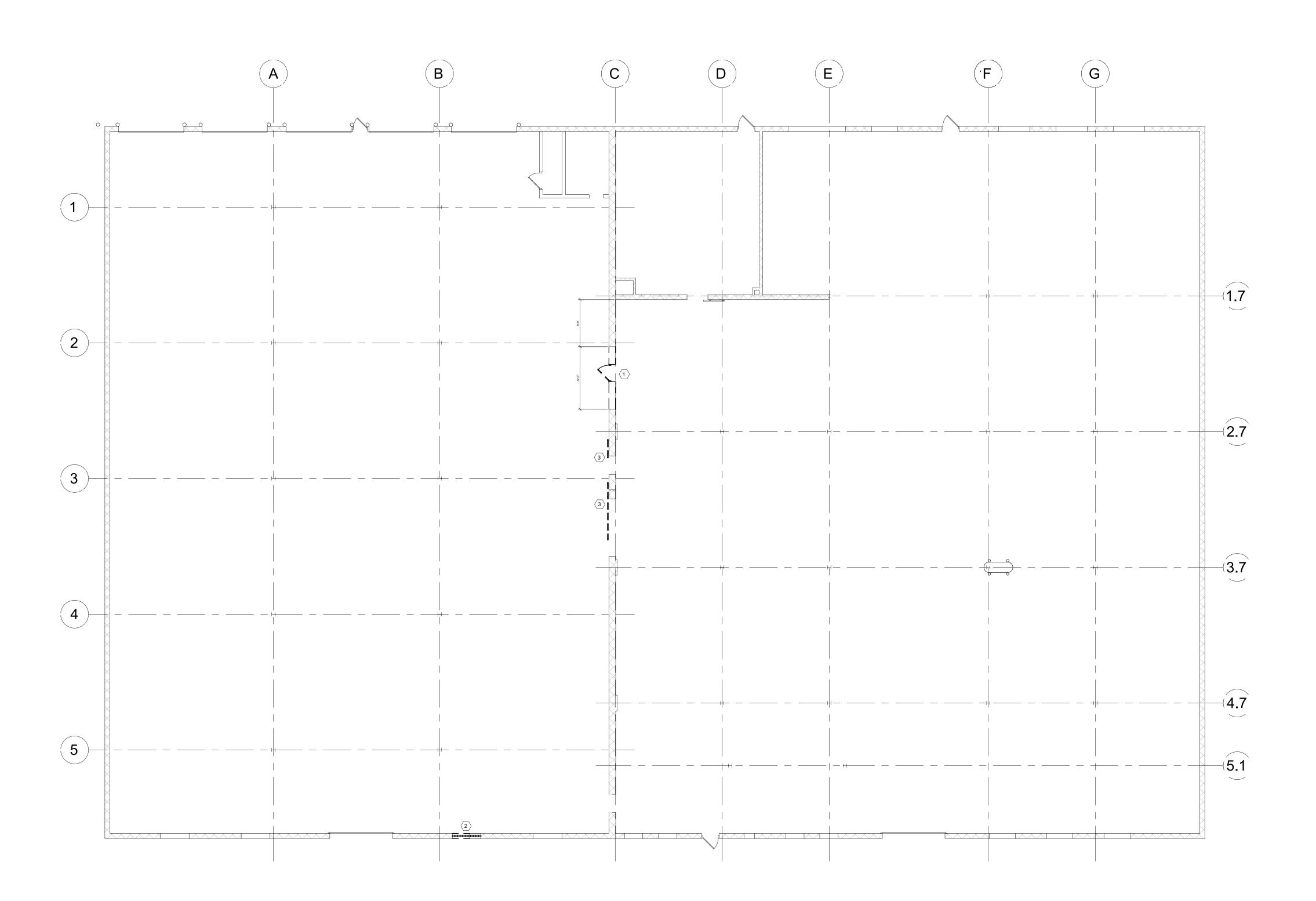
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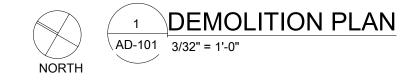
G-100

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DEMOLITION GENERAL NOTES

- A. ALL EXISTING DIMENSION SHOWN ON DRAWINGS APPROXIMATE. CONTRACTOR TO VERIFY IN
- B. ALL NOTES NOT APPLICABLE TO THIS PAGE.
 C. PORTIONS OF THE BUILDING WILL BE OCCUPIED IMMEDIATELY ADJACENT TO AREAS OF SELECTIVE DEMOLITION. CONDUCT WORK IN A MANNER THAT WILL MINIMIZE DISRUPTION TO ADJACENT TENANTS AND/OR OPERATIONS. REFER TO SPECIFICATIONS FOR MINIMUM ADVANCE NOTICE TO AIRPORT AND/OR ADJACENT TENANT OPERATIONS.
- PROVIDE CONSTRUCTION BARRICADE WITH MEMBRANE AT TOP OF BARRICADE (NEATLY INSTALLED WITH NO EXPOSED GAPS FOR THE ENTIRE LENGTH TO PROTECT EXISTING CONSTRUCTION AND OPERATIONS FROM EXCESS NOISE, DUST AND/OR ODORS.
- E. GC TO VERIFY PROPOSED BARRICADE WILL NOT OBSTRUCT THE REQUIRED CLEARANCES, SPRAY AREA OF THE SPRINKLER HEADS PER NFPA CODE.
- PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION INCLUDING ALL PENETRATIONS, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ECT. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING DEMOLITION WORK.
- G. ALL DEMOLITION SHALL COMPLY WITH ALL APPLICABLE STATE, LOCAL CODES, AND ORDINANCES.
- H. ALL PERMITS, USER FORMS, EMERGENCY
 CONTACT DIRECTORY, AND CONSTRUCTION
 ALERTS SHALL BE PROMINENTLY DISPLAYED AS
 REQUIRED BY AHJ.
 I. ALL UNUSED AND ABANDONED FLOOR AND WALL
- WHERE REQUIRED.

 DEBRIS/TRASH SHALL BE DEPOSITED IN

 COVERED TRASH RECEPTACLES AND REMOVED

 FROM SITE. NO LOOSE DEBRIS OR TRASH IS TO

 BE LEFT ON ROOFS, SPACES OPEN TO OWNER

OPENINGS SHALL BE SEALED AND FIRE STOPPED

OPERATIONS, NEAR CONVEYANCE SYSTEMS OR IN ANY OPEN TRASH CONTAINERS.

K. DEMOLITION BARRICADE TO BE DEMOLISHED AT CONCLUSION OF PROJECT.

DEMOLITION LEGEND

— — EXISTING TO BE REMOVED

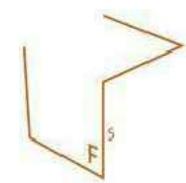
EXISTING TO REMAIN

EXISTING TO BE REMOVED

EXISTING TO REMAIN

DEMOLITION FLOOR PLAN KEYNOTES

- 1 PROVIDE ROUGH OPENING FOR NEW DOOR AS SCHEDULED; SEE PROPOSED FLOOR PLAN AND DOOR SCHEDULE
- 2 DEMO EXISTING WINDOW AND PARTIAL SILL FOR DOOR OPENING
- 3 DEMO EXISTING DOOR AND FRAME (TYP)



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Warren, MI 48089

PROJECT

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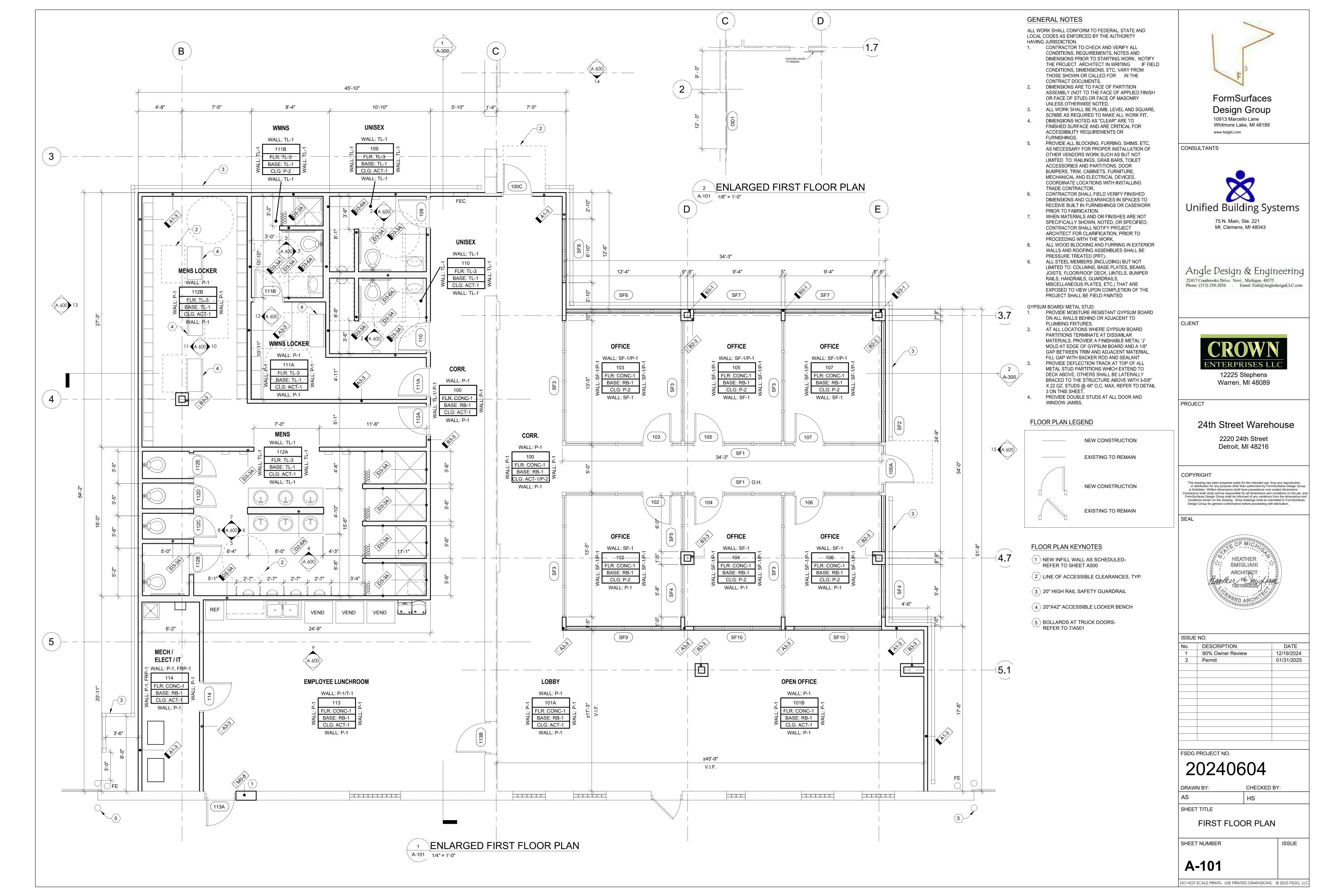
DEMOLITION PLAN

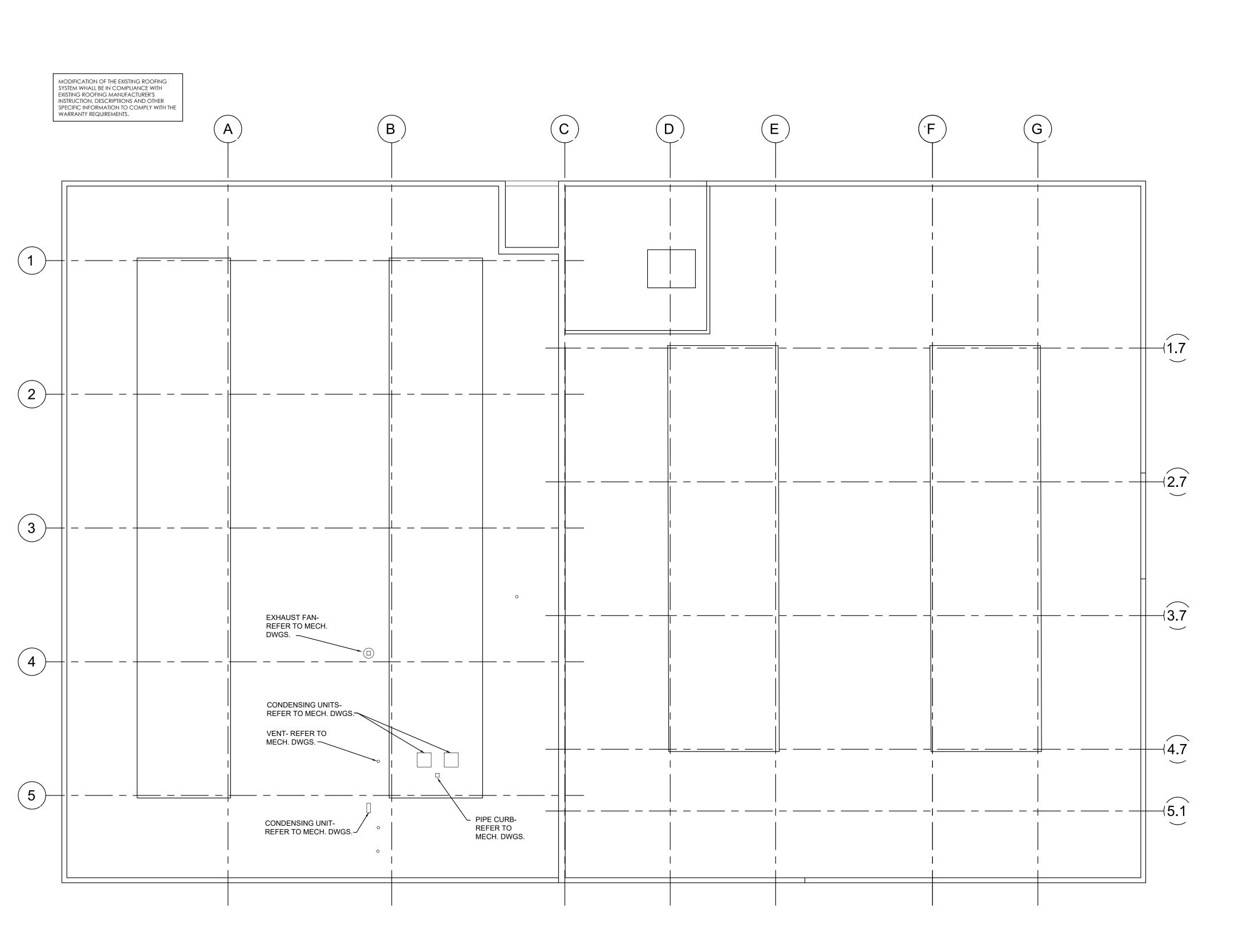
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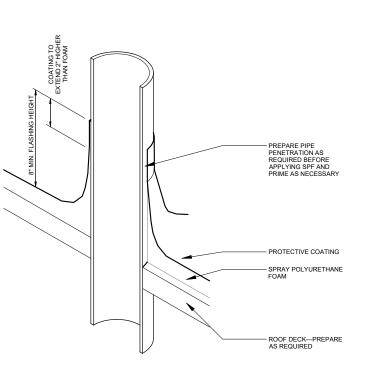
AD-101

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ISSUE

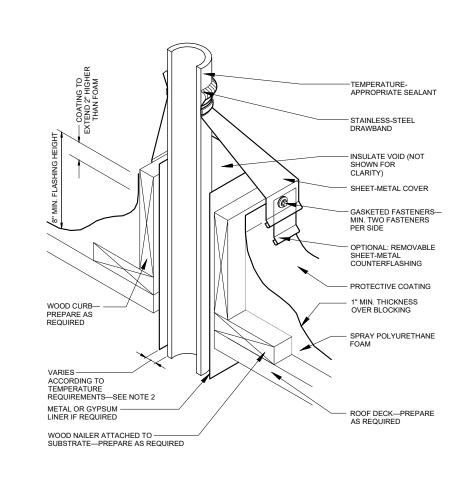




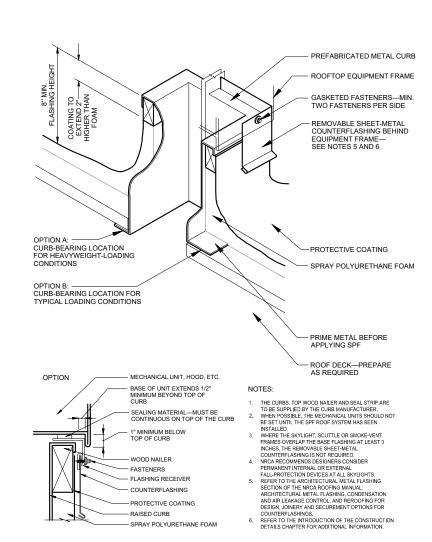


VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS AND OTHER PROJECTIONS TO PACLITATE PROPER FLASHING.

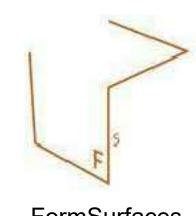
TYPICAL PIPE _PENETRATION SCALE: 1 1/2" = 1'-0"











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Detroit, MI 48216

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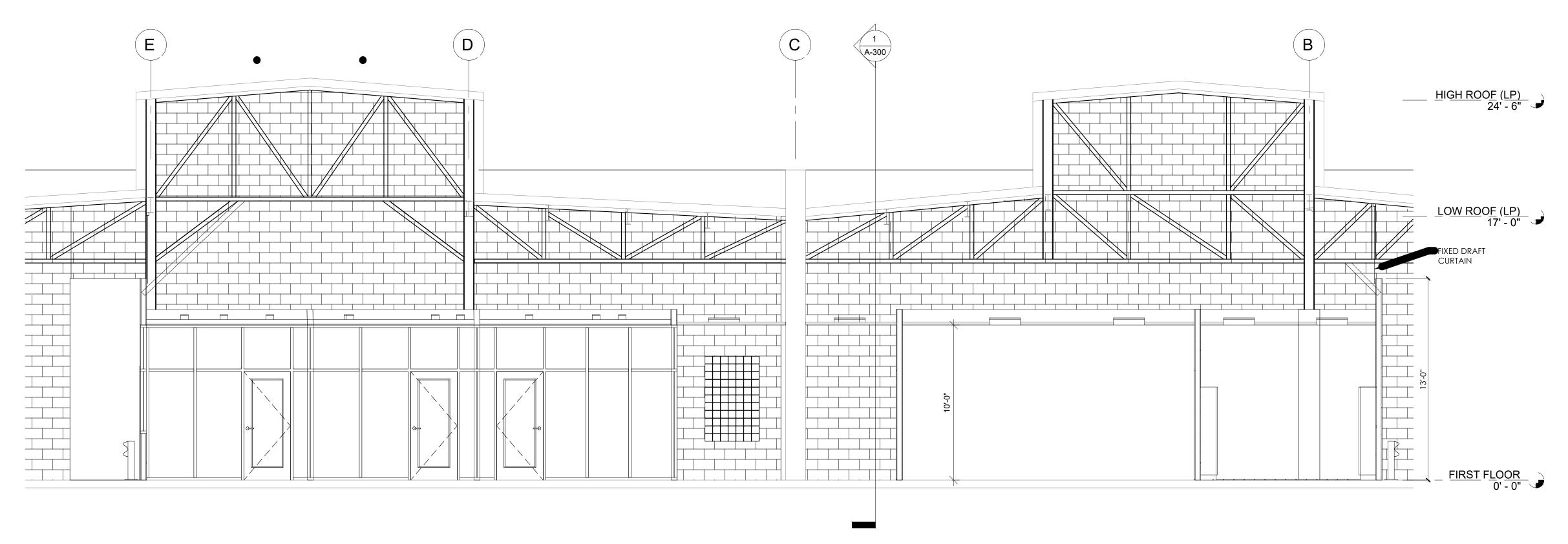


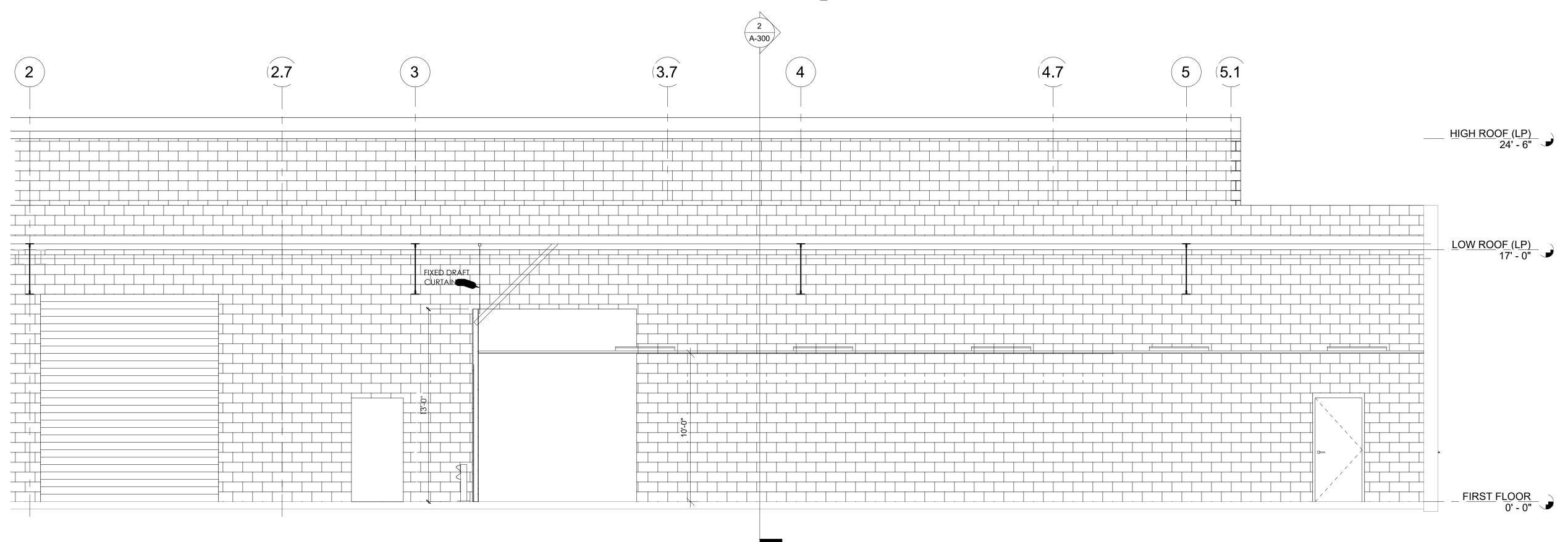
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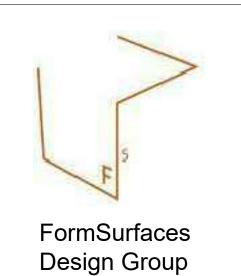
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ROOF PLAN

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PIRST FLOOR 0' - 0"

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BUILDING SECTIONS

ISSUE

A-300

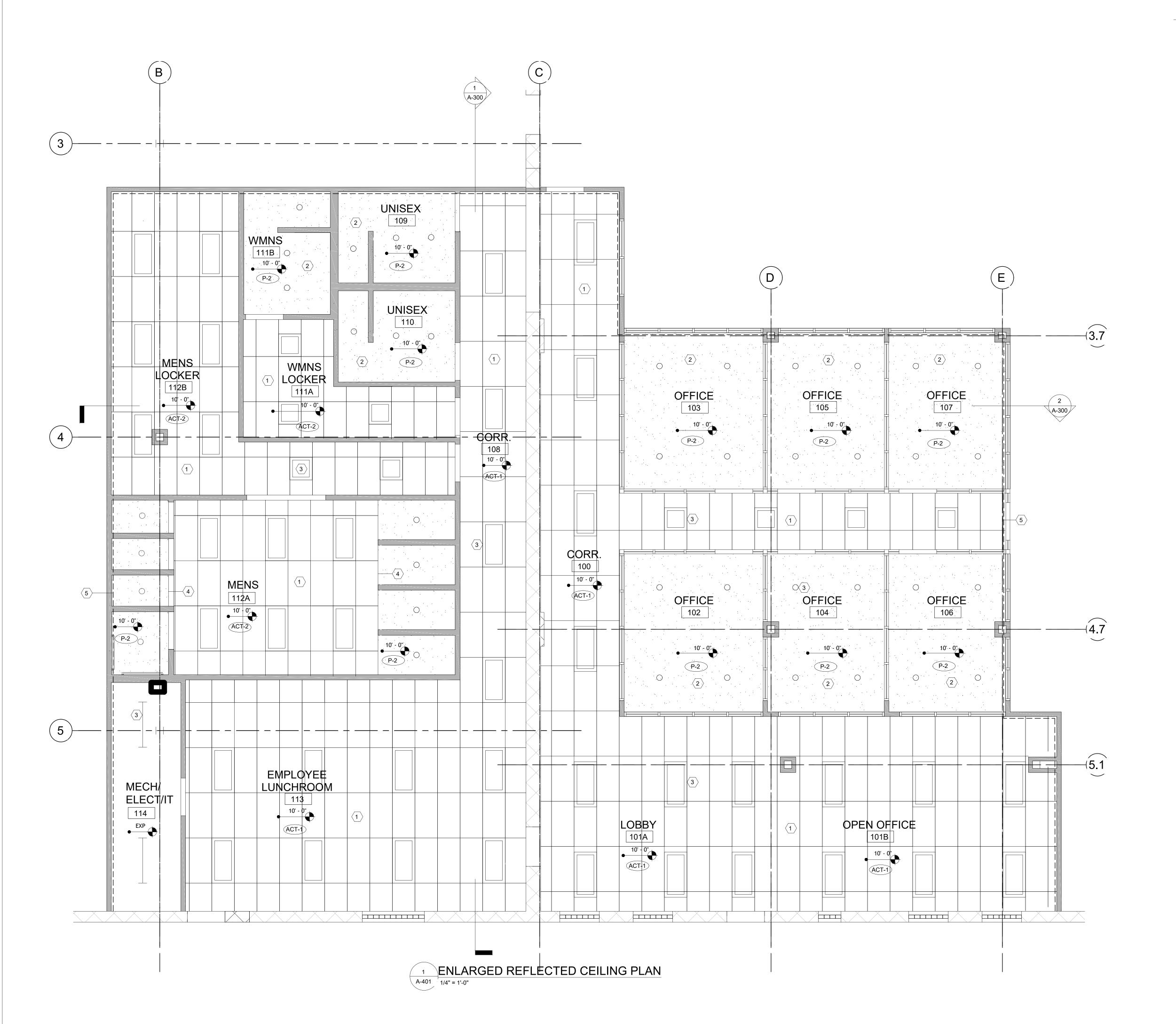
A-300

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1 BUILDING SECTION - N-S 1/4" = 1'-0"

BUILDING SECTION - E-W

A-300 1/4" = 1'-0"



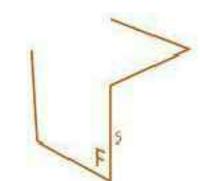
REFLECTED CEILING LEGEND

----- NEW CONSTRUCTION

——— EXISTING TO REMAIN

PROPOSED CEILING PLAN KEYNOTES

- 1 NEW A.C.T. AND GRID AS SCHEDULED
- 2 NEW GYP BD CEILING; PRIME AND PAINT A SCHEDULED
- 3 NEW LIGHT FIXTURE REFER TO ELECTRICAL DWGS
- 4 PROVIDE NEW GYP SOFFIT; PRIME AND PAINT FACE OF SOFFIT TO MATCH ADJACENT CEILING
- 5 NEW VERTICAL FIXED DRAFT CURTAIN FROM TOP OF WALL TO EXISTING ROOF DECK.



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CEILING PLAN

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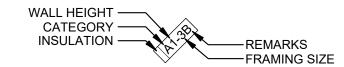
ISSUE

A-401

FINISH LEGEND

MARK	PRODUCT	APPLICATION (CLASS	MANUFACTURER	PRODUCT	PRODUCT #	COLOR	COLOR#	SIZE	FINISH	REMARKS
ACT-1	ACOUSTIC CEILING TILE	CEILING	Α	USG	RADAR OPEN PLAN	22325	WHITE	-	24" x 48"	-	PROVIDE HOLD DOWN CLIPS WITHIN 20'-0" OF EXTERIOR DOORS
ACT-2	ACOUSTIC CEILING TILE, VINYL	CEILING	Α	ARMSTRONG	KITCHEN ZONE		WHITE		24" x 48"		
CONC-	1 SEALED CONCRETE	FLOORING	-	LATICRETE	L&M SEAL HARD	-	CLEAR	-	-	SLIP-RESISTANT	PROVIDE POLYUREA SEALANT, FULL DEPTH AT ALL JOINTS
FRP-1	FIBER REINFORCED PLASTIC	WALLS	-	-	-	-	WHITE	-	-	FACTORY	HEIGHT: UP TO 72" AFF; WIDTH: 48" SIDE EXTENSIONS AT MOP SINK
GR-1	GROUT	FLOORING	-	TEC	POWER GROUT	-	RAVEN	941	-	SLIP-RESISTANT	PROVIDE AT TL-1 & TL-2
GR-2	GROUT	FLOORING	-	CUSTOM BUILDING PRODUCTS	-	-	DRIFTWOOD	543	-	-	PROVIDE AT TL-3
P-1	PAINT	WALLS	-	SHERWIN WILLIAMS	SUPER PAINT	LATEX ENAMEL	PASSIVE	SW7064	-	SATIN	1 COAT PRIMER AND 2 COATS FINISH
P-2	PAINT	CEILING	-	SHERWIN WILLIAMS	SUPER PAINT	INTERIOR EPOXY - FLAT	EXTRA WHITE	SW7006	-	FLAT	1 COAT PRIMER AND 2 COATS FINISH
P-3	PAINT	DOOR EXTERIOR	-	SHERWIN WILLIAMS	INDUSTRIAL ENAMEL	EXTERIOR - HIGH GLOSS	PASSIVE	SW7064	-	HIGH GLOSS	1 COAT PRIMER AND 2 COATS FINISH
P-4	PAINT	DOOR INTERIOR	-	SHERWIN WILLIAMS	INDUSTRIAL ENAMEL	-	GRIZZLY GRAY	SW7068	-	SEMI-GLOSS	1 COAT PRIMER AND 2 COATS FINISH
P-5	PAINT	WALLS	-	SHERWIN WILLIAMS	INDUSTRIAL ENAMEL	-	SAFETY YELLOW	SW4084	-	SEMI-GLOSS	ALL STEEL RAIL, GUARDSM BOLLARD, ROOFTOP EQUIPMENT SUPPORTS, ;ADDERS, GAS PIPING, ETC. 1 COATE PRIMER AND 2 COATS FINISH
P-6	PAINT	MISC.	-	SHERWIN WILLIAMS	INDUSTRIAL ENAMEL	-	EXTRA WHITE	SW7006	-	SEMI-GLOSS	ALL EPOSED STEEL LOCATIONS; 1 COAT PRIMER AND 2 COATS FINISH
RB-1	RUBBER BASE	WALLS	Α	ROPPE	700 SERIES	-	BY OWNER	TBD	4"	FACTORY	-
SF-1	INTERIOR STOREFRONT	WALLS	-	-	-	BLACK	-	-	2" x 4 1/2"	-	-
TL-1	PORCELAIN TILE	WALLS	Α	FLORIDA TILE	MALTESE	ROMAN GRAY	ROMAN GRAY	-	12" x 24"	FACTORY	GR-1 GROUT
TL-2	STONE TILE	FLOORING/ WALLS	Α	ERGON	STONE PROJECT	CONTROFALDA	GREY	-	12" x 24"	SLIP-RESISTANT	GR-1 GROUT
TL-3	MOSAIC TILE	FLOORING	-	VITL	FOUNDATION	VTL FOSH	SHADOW	-	1" x 1"	MATTE	GR-2 GROUT

WALL TYPE CLASSIFICATION KEY



<u>CATEGORY</u>

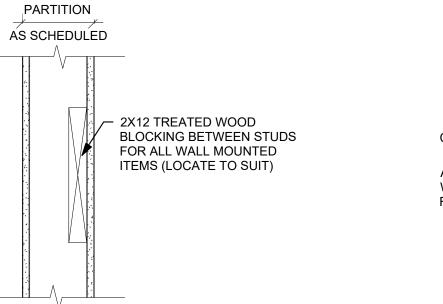
- A TWO SIDED GYP B - ONE SIDED GYP D - CEMENT BACKER BOARD
- F FURRING M - CONCRETE MASONRY UNITS
- FRAMING SIZE 0 - NO FRAMING
- 1 7/8" METAL STUD 2 - 1 1/2" METAL STUD 3 - 3 5/8" METAL STUD
- 4 4" MASONRY 6 - 6" METAL STUD 8 - 8" MASONRY

WALL HEIGHT

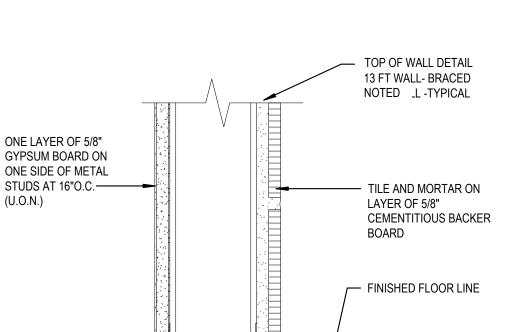
- 0 INFILL DEMO'D AREA 1 - UP TO 13'-0" AFF 2 - UP TO 7'-0" AFF 3 - UP TO 6" ABOVE CEILING 4 - PARTIAL HEIGHT
- (REFER TO FLOOR PLANS) <u>REMARKS</u> A - TILE FINISH
- <u>INSULATION</u>
- SHADED ACCOUSTIC INSULATION

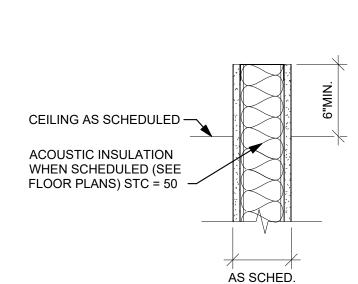
ROOM FINISH SCHEDULE

	FLOOR	BASE		WALL	FINISH	CEILING		
NAME	FINISH	FINISH	NORTH	EAST	SOUTH	WEST	FINISH	HEIGHT
100 CORRIDOR	CONC-1	RB-1	P-1	P-1		P-1	ACT-1	10' - 0"
101A LOBBY	CONC-1	RB-1	P-1	P-1	P-1	P-1	ACT-1	10' - 0"
101B OPEN OFFICE	CONC-1	RB-1	P-1	P-1	P-1	P-1	ACT-1	10' - 0"
102 OFFICE	CONC-1	RB-1	SF-1	SF-1/P-1	P-1	SF-1/P-1	P-2	10' - 0"
103 OFFICE	CONC-1	RB-1	SF-1/P-1	SF-1/P-1	SF-1	SF-1/P-1	P-2	10' - 0"
104 OFFICE	CONC-1	RB-1	SF-1	SF-1/P-1	P-1	SF-1/P-1	P-2	10' - 0"
105 OFFICE	CONC-1	RB-1	SF-1/P-1	SF-1/P-1	SF-1	SF-1/P-1	P-2	10' - 0"
106 OFFICE	CONC-1	RB-1	SF-1	SF-1/P-1	P-1	SF-1/P-1	P-2	10' - 0"
107 OFFICE	CONC-1	RB-1	SF-1/P-1	SF-1/P-1	SF-1	SF-1/P-1	P-2	10' - 0"
108 CORRIDOR	CONC-1	RB-1	P-1	P-1		P-1	ACT-1	10' - 0"
109 UNISEX	TL-3	TL-1	TL-1	TL-1	TL-1	TL-1	P-2	10' - 0"
110 UNISEX	TL-3	TL-1	TL-1	TL-1	TL-1	TL-1	P-2	10' - 0"
111A WMNS LOCKER	TL-3	TL-1	P-1	P-1	P-1	P-1	ACT-2	10' - 0"
111B WMNS	TL-3	TL-1	TL-1	TL-1	TL-1	TL-1	P-2	10' - 0"
112A MENS	TL-3	TL-1	TL-1	TL-1	TL-1	TL-1	ACT-1	10' - 0"
112B MENS LOCKER	TL-3	TL-1	P-1	P-1	P-1	P-1	ACT-2	10' - 0"
113 EMPLOYEE LUNC	HROOM CONC-1	RB-1	TL-1/P-1	P-1	P-1	P-1	ACT-1	10' - 0"
114 MECH / ELECT / I	CONC-1	RB-1	P-1	P-1	P-1	P-1	EXP	

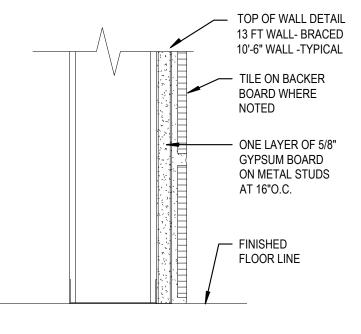


WALL MOUNTED ITEMS TYP. BLOCKING DETAIL

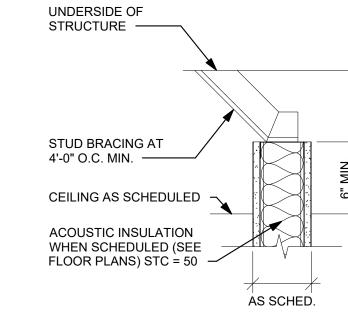




NON-RATED PARTITION CONSTRUCTION- TYPICAL

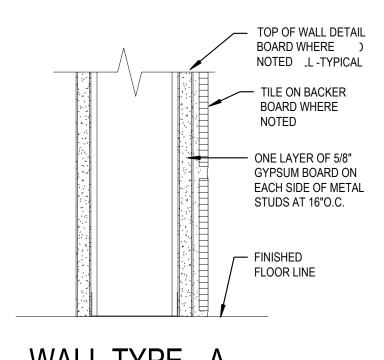


WALL TYPE - B

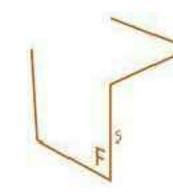


NON-RATED PARTITION CONSTRUCTION -BRACED

NTS



WALL TYPE - A



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PROJECT

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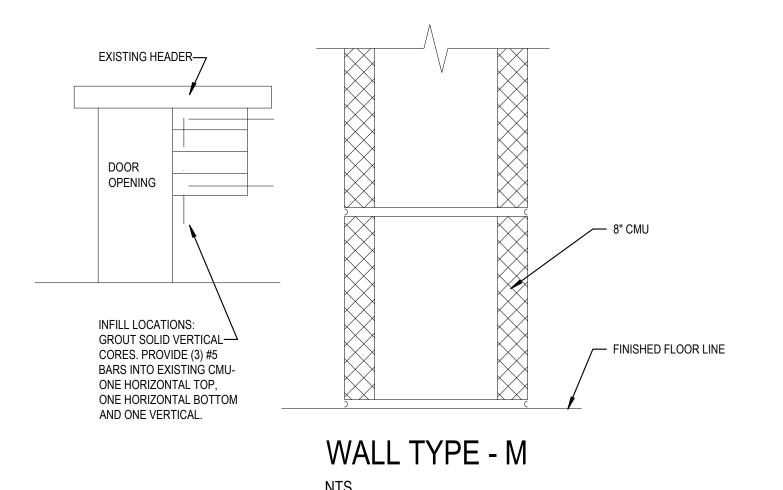
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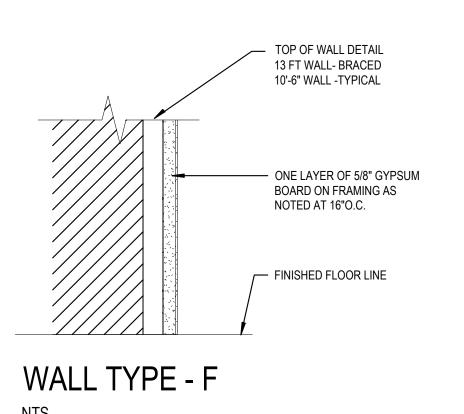
AS HS SHEET TITLE FINISH SCHEDULES, WALL TYPES AND DETAILS

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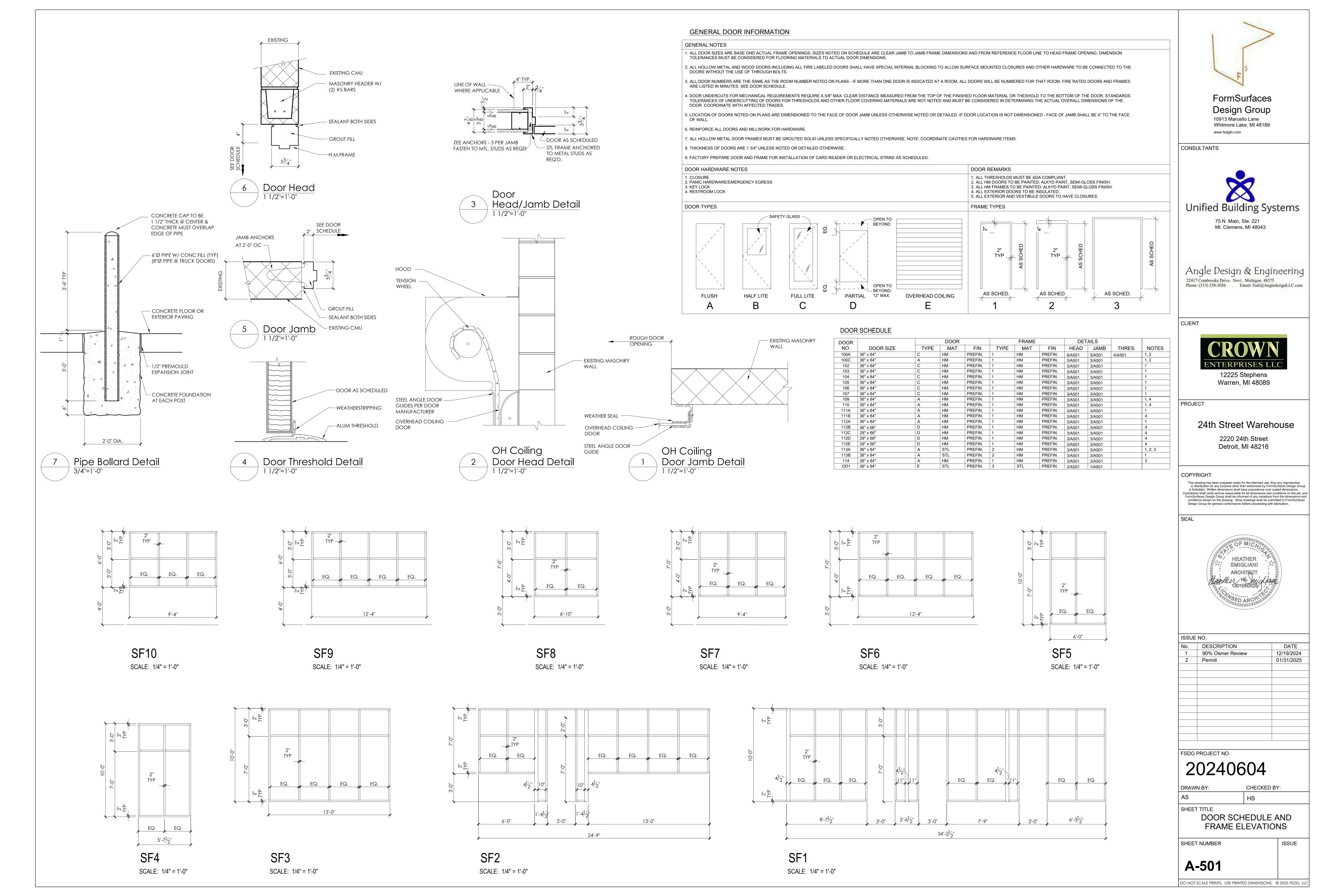
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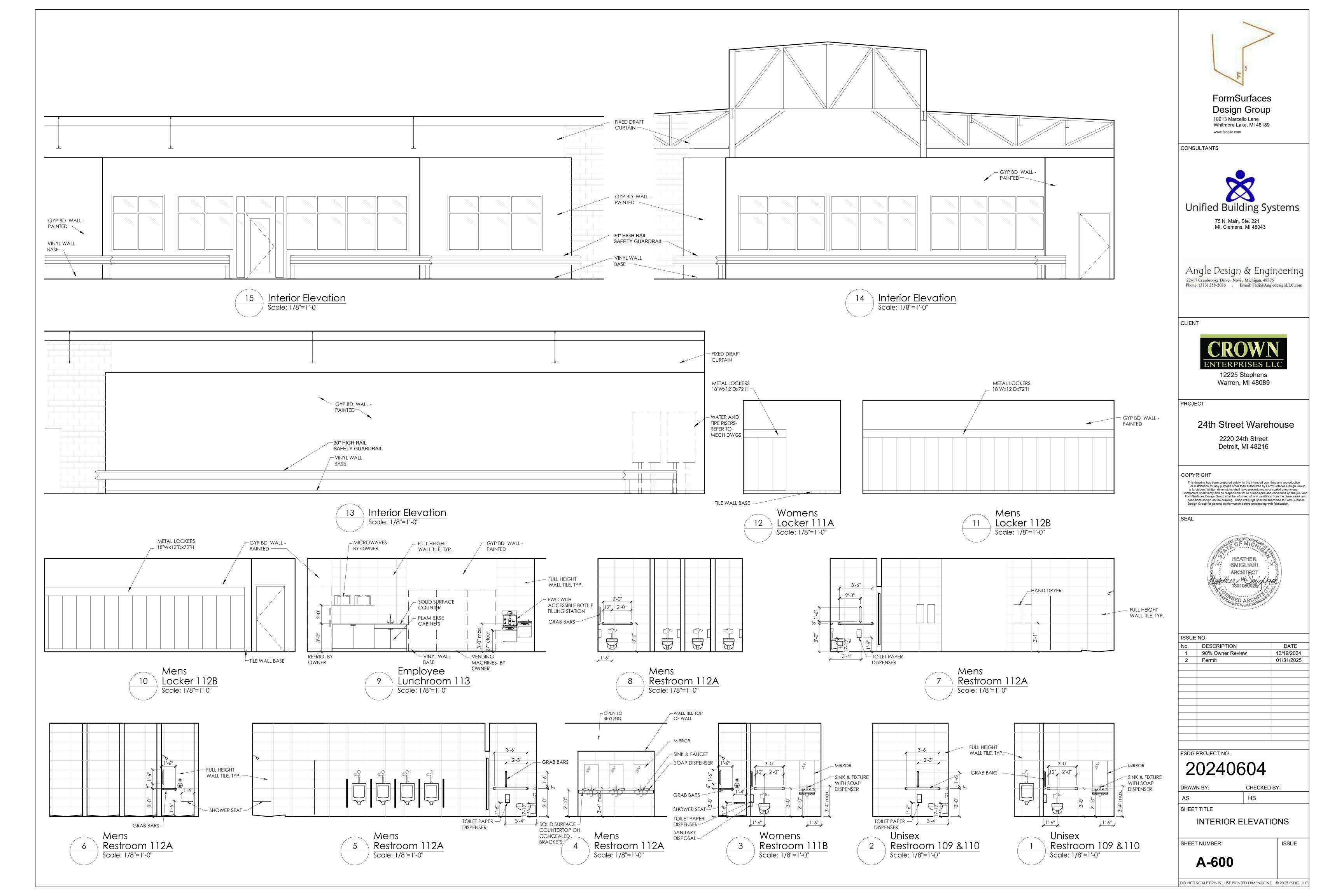
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ONE LAYER OF 5/8" GYPSUM BOARD ON ONE SIDE OF METAL STUDS AT 16"O.C.— (U.O.N.) WALL TYPE - D





MECHANICAL ABBREVIATIONS		MECI	HANICAL ABBREVIATIONS	MECH	HANICAL ABBREVIATIONS	MECHANICAL SYMBOLS		
BBREV.	DESCRIPTION	ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION	
AAV	AUTOMATIC AIR VENT / AIR ADMITTANCE VALVE	HR	HOUR	UR	URINAL	<u></u> (RECTANGULAR TAKE—OFF (SINGLE LINE)	
AD	ACCESS DOOR	HTG	HEATING	VD	VOLUME DAMPER (MANUALLY ADJUSTABLE)	, , ,	RECTANGULAR TARE-OFF (SINGLE LINE)	
ΑE	AIR EXTRACTOR	HYD	HYDRANT	VTR	VENT THRU ROOF		RECTANGULAR TAKE-OFF (DOUBLE LINE)	
AFF	ABOVE FINISHED FLOOR	HZ	HERTZ	W	WASTE	, , ,	ROUND TAKE-OFF (SINGLE LINE)	
APD	AIR PRESSURE DROP	ID	INSIDE DIAMETER	W&V	WASTE AND VENT	<u></u>		
ASR	AUTOMATIC SPRINKLER RISER	IE	INVERT ELEVATION	WB	WET BULB TEMPERATURE		ROUND TAKE-OFF (DOUBLE LINE)	
BFP	BACKFLOW PREVENTER	IN	INCHES	WC	WATER CLOSET		SPIN-IN FITTING (WITH VOLUME DAMPER)	
BHP	BRAKE HORSEPOWER	INST	INSTALLED	WG	WATER GAUGE	<u>γ</u> .		
BOD	BOTTOM OF DUCT	INV	INVERT	WH	WALL HYDRANT		ELBOW (WITH TURNING VANES)	
BTU	BRITISH THERMAL UNIT	ISP	INTERNAL STATIC PRESSURE				RADIUS RECTANGULAR ELBOW	
BTUH	BRITISH THERMAL UNITS PER HOUR	IW	INDIRECT WASTE			1	RADIUS ROUND ELBOW	
3WV	BACKWATER VALVE	KW	KILOWATT	MECH	IANICAL PIPING SYMBOLS		RADIOS ROUND ELDOW	
CAP	CAPACITY	LAT	LEAVING AIR TEMPERATURE	ABBREV.	DESCRIPTION		RECTANGULAR ELBOW UP	
CAV	CONSTANT AIR VOLUME	LAV	LAVATORY	ABBILE V.		6	ROUND ELBOW UP	
FH	CUBIC FEET PER HOUR	LBS/HR	POUNDS PER HOUR		PIPE ELBOW UP		NOOND ELBOW OF	
FM	CUBIC FEET PER MINUTE	LDB	LEAVING DRY BULB TEMPERATURE		PIPE ELBOW DOWN		RECTANGULAR ELBOW DOWN	
RC	CIRCULATING	LRA	LOCKED ROTOR AMPS		PIPE TEE DOWN		ROUND ELBOW DOWN	
LG	COOLING	LWB	LEAVING WET BULB TEMPERATURE		DIRECTION OF FLOW		MOOND ELDON DOWN	
00	CLEAN OUT	MAV	MANUAL AIR VENT	——————————————————————————————————————	UNION		CONCENTRIC TRANSITION (DOUBLE LINE)	
DNT	CONTINUATION OR CONTINUED	MAX	MAXIMUM		STRAINER	\	CONCENTRIC TRANSITION (SINGLE LINE)	
VNC	CONVECTOR	MBH	1000 BRITISH THERMAL UNITS PER HOUR		CONCENTRIC REDUCER	,	CONCLIMING INAMOTHON (SINGLE LINE)	
UH	CABINET UNIT HEATER	MCA	MINIMUM CIRCUIT AMPACITY		ECCENTRIC REDUCER		ECCENTRIC TRANSITION (DOUBLE LINE)	
CV	CONTROL VALVE	MECH	MECHANICAL		EXPANSION JOINT	\$\$	ECCENTRIC TRANSITION (SINGLE LINE)	
)B	DRY BULB TEMPERATURE	MFR	MANUFACTURER		FLEXIBLE CONNECTION		,	
EG	DEGREES	MH	MANHOLE		PIPE ANCHOR	R	INCLINED RISE IN DIRECTION OF AIR FLOW (DOUBLE LINE)	
OC	DIRECT DIGITAL CONTROL	MIN	MINIMUM		PIPE GUIDE	5 <u>R</u>	INCLINED RISE IN DIRECTION OF AIR FLOW	
N	DOWN	MISC	MISCELLANEOUS		PIPE CAP OR PLUG	, , , , ,	(SINGLE LINE)	
ГС	DRAIN TILE CONNECTION	MOD	MOTOR OPERATED DAMPER (AUTOMATIC)	──	ISOLATION VALVE		INCLINED DROP IN DIRECTION OF AIR FLOW (DOUBLE LINE)	
VH	DOMESTIC WATER HEATER	MOP	MAXIMUM OVER-CURRENT PROTECTION	————	CIRCULATING PUMP	D	INCLINED DROP IN DIRECTION OF AIR FLOW	
Ξ)	EXISTING	N.C.	NOISE CRITERIA	——————————————————————————————————————	GLOBE VALVE	\$ \$	(SINGLE LINE)	
ΈΧΗ	EXHAUST AIR	NIC	NOT IN CONTRACT	<u></u> Ю	BALL VALVE		FLEXIBLE CONNECTION	
Α Τ	ENTERING AIR TEMPERATURE	NC	NORMALLY CLOSED	—— / ——	BUTTERFLY VALVE	TT-	FLEXIBLE DUCT CONNECTION TO SUPPLY	
)B	ENTERING DRY BULB TEMPERATURE	NO	NORMALLY OPEN	∑	ANGLE VALVE		DIFFUSER	
F	EXHAUST FAN	NOM	NOMINAL	──	CHECK VALVE (SWING)		SUPPLY DIFFUSER	
J	EXPANSION JOINT	OA	OUTSIDE AIR	—— ≯ %——	CHECK VALVE (SPRING)	-	SUPPLY DIFFUSER	
L	ELEVATION	OBD	OPPOSED BLADE DAMPER	—— √——	PLUG VALVE		LINEAR SLOT DIFFUSER	
CT	ELECTRICAL	OC	ON CENTER / CENTER TO CENTER		NEEDLE VALVE	S	RETURN OR EXHAUST GRILLE	
//S	ENERGY MANAGEMENT SYSTEM	OD	OUTSIDE DIAMETER	—— Ā ——	OUTSIDE SCREW AND YOKE VALVE (OS&Y)	,	RETURN OR EXHAUST GRILLE	
SP	EXTERNAL STATIC PRESSURE	OED	OPEN ENDED DUCT		PRESSURE REGULATING VALVE	1	TRANSFER GRILLE	
V B	ENTERING WET BULB TEMPERATURE	ORS	OVERFLOW ROOF SUMP		SOLENOID VALVE		CROSS SECTION OF SUPPLY AIR DUCT	
VC	ELECTRIC WATER COOLER	OS&Y	OUTSIDE SCREW AND YOKE		CONTROL VALVE (2-WAY / 3-WAY)			
=	DEGREES FAHRENHEIT	PD	PRESSURE DROP (FEET OF WATER)	\mathcal{C}	CENTRIFUGAL FAN		CROSS SECTION OF EXHAUST OR RETURN DUCT	
A	FACE AREA (COIL) / FREE AREA (LOUVER)	PRV	PRESSURE REDUCING VALVE	0	AUTOMATIC GAS SHUT-OFF VALVE		EXISTING	
C	FLEXIBLE CONNECTION	PSIA	POUNDS PER SQUARE INCH — ABSOLUTE	œ <u> </u>	TRAP (PLAN VIEW)		FIRE DAMPER (HORIZONTAL)	
D	FLOOR DRAIN	PSIG	POUNDS PER SQUARE INCH — GAUGE		FLOOR DRAIN / FUNNEL FLOOR DRAIN (PLAN VIEW)		NEW	
)C	FIRE DEPARTMENT CONNECTION	PT	PRESSURE / TEMPERATURE PORT		FLOOR DRAIN / FUNNEL FLOOR DRAIN (ELEVATION)		EXISTING FIRE DAMPER (VERTICAL)	
-	FIRE HYDRANT	RA	RETURN AIR	——(Ô)	ROOF SUMP	_	NEW	
IC	FIRE HOSE CABINET	RH	RELATIVE HUMIDITY	——→ CO	CLEAN OUT (IN FLOOR)		EXISTING	
IR 	FIRE HOSE RACK	REQD	REQUIRED	(CO	CLEAN OUT (IN LINE)		SMOKE DAMPER NEW	
łV	FIRE HOSE VALVE	REL.A	RELIEF AIR	wco	CLEAN OUT (WALL)		FYISTING	
_A	FULL LOAD AMPS	RPM	REVOLUTIONS PER MINUTE	BFP	BACKFLOW PREVENTER	7	COMBINATION FIRE/SMOKE DAMPER	
.R	FLOOR	RPZ	REDUCED PRESSURE ZONE	M/M-M	WATER METER ASSEMBLY	•	NEW (VERTICAL)	
M	FEET PER MINUTE	RS	ROOF SUMP	+	HOSE BIBB, WALL HYDRANT	9	EXISTING COMBINATION FIRE/SMOKE DAMPER	
D	FUNNEL FLOOR DRAIN	SA	SUPPLY AIR		DIRECTION OF PIPE PITCH		NEW (HORIZONTAL)	
Ē	FINISHED FLOOR ELEVATION	SH	SHOWER	<u> </u>	SPRINKLER HEAD (UPRIGHT)		VOLUME DAMPER (MANUALLY ADJUSTABLE	
5	FLOOR SINK	SP	STATIC PRESSURE		SPRINKLER HEAD (SIDEWALL)		. Journal Stand En (minitalization Appropriate	
Γ	FEET	SqFt / SF	SQUARE FOOT/SQUARE FEET	—FS ∼	FLOW SWITCH	— – — M	MOTORIZED DAMPER	
RN	FURNISHED	SS	SERVICE SINK	<	SIAMESE CONNECTION (YARD)	SD	SMOKE DETECTOR	
V	FACE VELOCITY	TC	TEMPERATURE CONTROL	→	SIAMESE CONNECTION (WALL MOUNTED)	<u>50</u>	SMONE DETECTOR	
/C	FIRE VALVE CABINET	Т&Р	TEMPERATURE AND PRESSURE	⊢	FIRE HYDRANT	(CO2)	CO2 SENSOR	
AL	GALLON	TSP	TOTAL STATIC PRESSURE	— <u> </u>	FLOW MEASURING DEVICE	$\overline{\uparrow}$	THERMOSTAT OR	
PH	GALLONS PER HOUR	TYP	TYPICAL		BALANCING VALVE	T	TEMPERATURE SENSOR	
PM	GALLONS PER MINUTE	UG	UNDERGROUND	₫	COMBINATION FLOW MEASURING AND BALANCING DEVICE	(H)	HUMIDISTAT OR HUMIDITY SENSOR	
В	HOSE BIBB	UH	UNIT HEATER	∏AAV —	AUTOMATIC AIR VALVE			
Ю	HUB OUTLET	UL	UNDERWRITERS LABORATORY	∟ <mark></mark> ∰MAV	MANUAL AIR VALVE	√ →	RETURN OR EXHAUST / SUPPLY AIR FLOW	
10				•				

DRAWING INDEX										
SHT NO	DESCRIPTION									
M000	MECHANICAL GENERAL INFORMATION									
FP101	FIRE PROTECTION NEW WORK LOWER LEVEL PLAN									
FP102	FIRE PROTECTION NEW WORK UPPER LEVEL PLAN									
P100	PLUMBING NEW WORK UNDERGROUND PLAN									
P101	PLUMBING NEW WORK LOWER LEVEL PLAN									
P102	PLUMBING NEW WORK UPPER LEVEL PLAN									
M101	MECHANICAL NEW WORK LOWER LEVEL PLAN									
M102	MECHANICAL NEW WORK UPPER LEVEL PLAN									
M201	MECHANICAL NEW WORK ROOF PLAN									
P400	ENLARGED PLUMBING NEW WORK UNDERGROUND PLAN									
P401	ENLARGED PLUMBING NEW WORK LOWER LEVEL PLAN									
M401	ENLARGED MECHANICAL NEW WORK LOWER LEVEL PLAN									
M501	MECHANICAL DETAILS									
M502	MECHANICAL DETAILS									
M601	MECHANICAL SCHEDULES									

MECHANICAL SCHEDULES

PIPING LEGEND

—— CA —— COMPRESSED AIR PIPING

———F—— FIRE PROTECTION PIPING

——FOR—— FUEL OIL RETURN PIPING

——FOS—— FUEL OIL SUPPLY PIPING

——BCW—— BOOSTED-DOMESTIC COLD WATER PIPING

----BHW---- BOOSTED-DOMESTIC HOT WATER PIPING

——TW—— TEMPERED WATER PIPING

----ST---- STORM SEWER PIPING

----PST---- PUMPED STORM PIPING

----ORC---- OVERFLOW RAIN CONDUCTOR PIPING

----CHWR---- CHILLED WATER RETURN PIPING

----CHWS---- CHILLED WATER SUPPLY PIPING

——HHWR—— HEATING HOT WATER RETURN PIPING

——HHWS—— HEATING HOT WATER SUPPLY PIPING

-----RL------ REFRIGERANT LIQUID PIPING

----HGB---- HOT GAS BY-PASS PIPING

-----RS------ REFRIGERANT SUCTION PIPING

----GXHS---- GEO HEAT EXCHANGE SUPPLY

----LPS---- LOW PRESSURE STEAM PIPING

——LPC—— LOW PRESSURE CONDENSATE PIPING

——PCR—— PUMPED STEAM CONDENSATE RETURN PIPING

----STM---- STEAM PIPING

-----MA----- MEDICAL AIR PIPING

-----O2----- OXYGEN GAS PIPING

-----N------ NITROGEN GAS PIPING

-----V------ VENT PIPING

----PSAN---- PUMPED SANITARY PIPING

——HW—— DOMESTIC HOT WATER PIPING

----NPCW---- NON POTABLE COLD WATER PIPING

—HW(140°F)— DOMESTIC 140°F HOT WATER PIPING

——HWR—— DOMESTIC HOT WATER RETURN PIPING

————G——— NATURAL GAS PIPING

——DT—— DRAIN TILE

ABBREV.

DESCRIPTION

DRAWING NOTATION

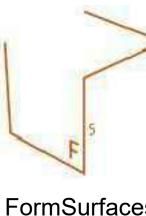
DESCRIPTION

SYMBOL

NEW WORK KEY NOTE NO. 1 DEMOLITION KEY NOTE NO. 1 EQUIPMENT TAG <u>AHU-1</u> AIR TERMINAL TAG: S = SUPPLYR = RETURN12x12 IE: DIFFUSER TYPE = S-1E = EXHAUST150-2 NECK SIZE = 12x12T = TRANSFERCFM = 150 (TYPICAL FOR 2)----- EXISTING DEVICES OR EQUIPMENT NEW OR MODIFIED DEVICES OR EQUIPMENT EXISTING SYSTEM COMPONENT TO BE REMOVED

POINT OF NEW CONNECTION

	APPLICABLE CODES AND REGULATIONS												
YEAR	CODE												
2015	MICHIGAN BUILDING CODE												
2015	MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS												
2021	MICHIGAN PLUMBING CODE												
2021	MICHIGAN MECHANICAL CODE												
2015	MICHIGAN UNIFORM ENERGY CODE												
2015	INTERNATIONAL FUEL GAS CODE												
2012	NFPA 101 WITH BFS AMENDMENTS												



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PROJECT

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SEAL



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FSDG PROJECT NO. 20240604

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MPH DJL

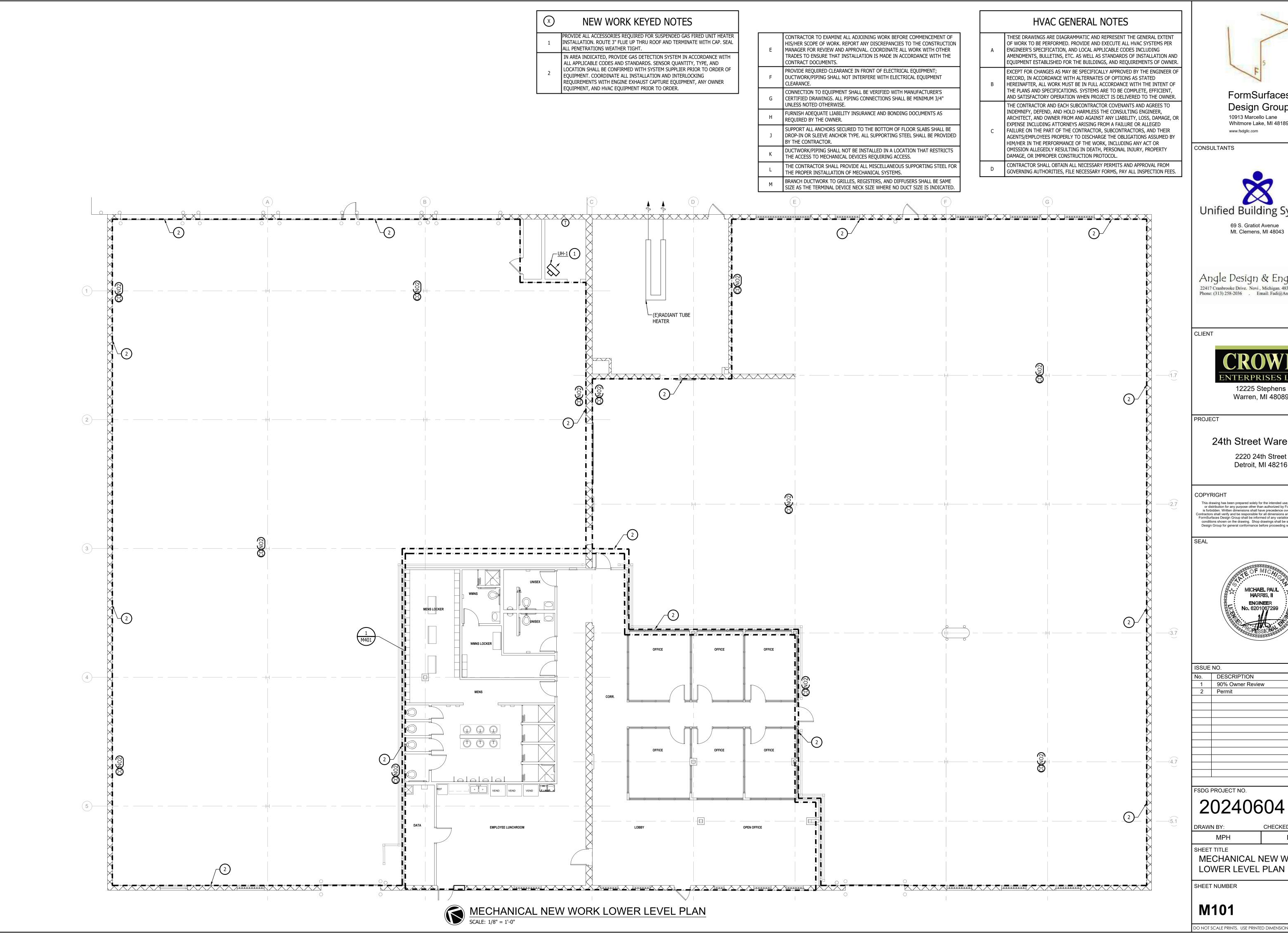
SHEET TITLE
MECHANICAL GENERAL
INFORMATION

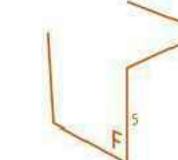
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M000

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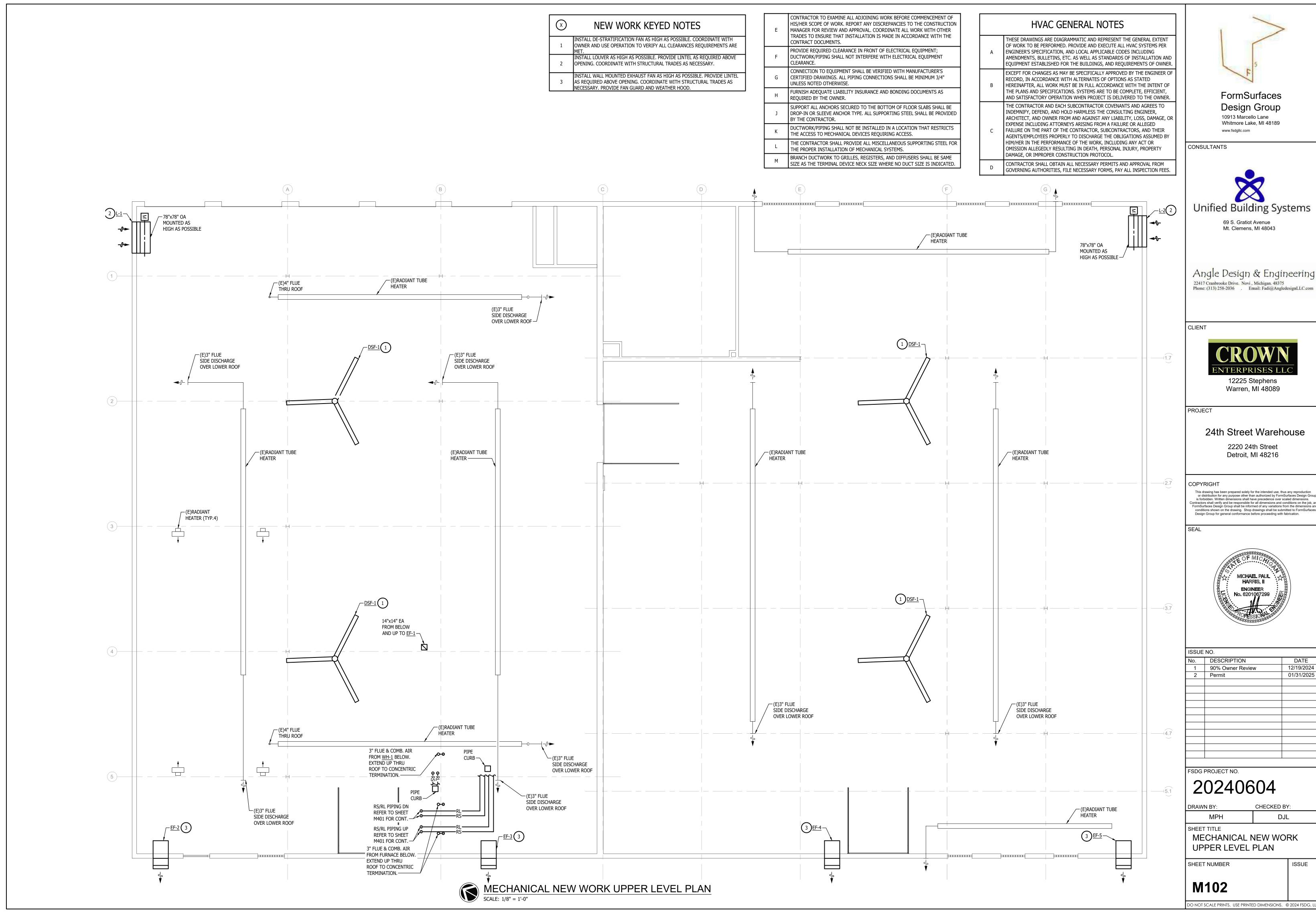


No. DESCRIPTION 12/19/2024 90% Owner Review

20240604

DJL MECHANICAL NEW WORK

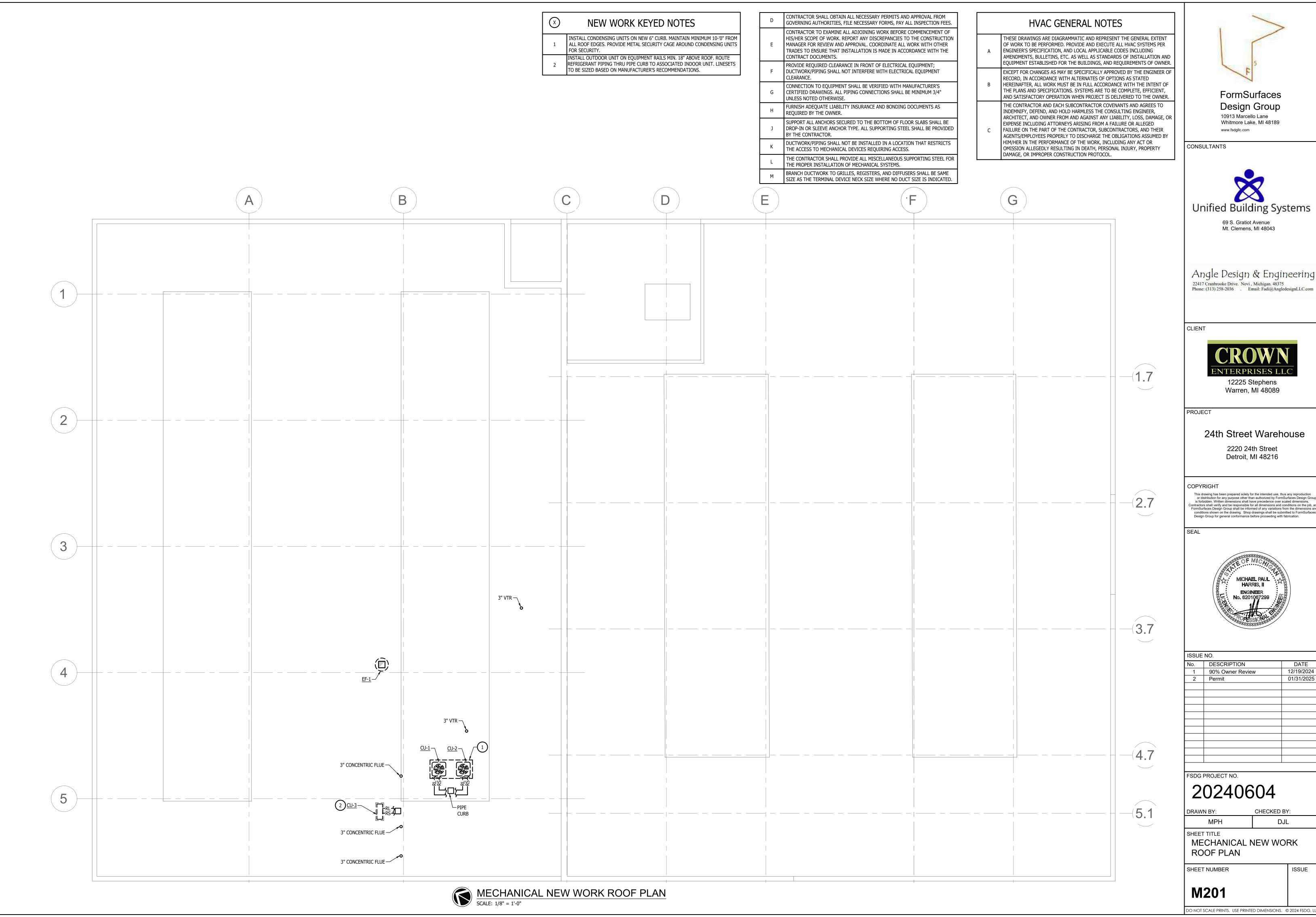
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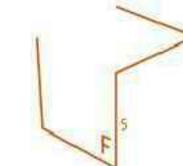




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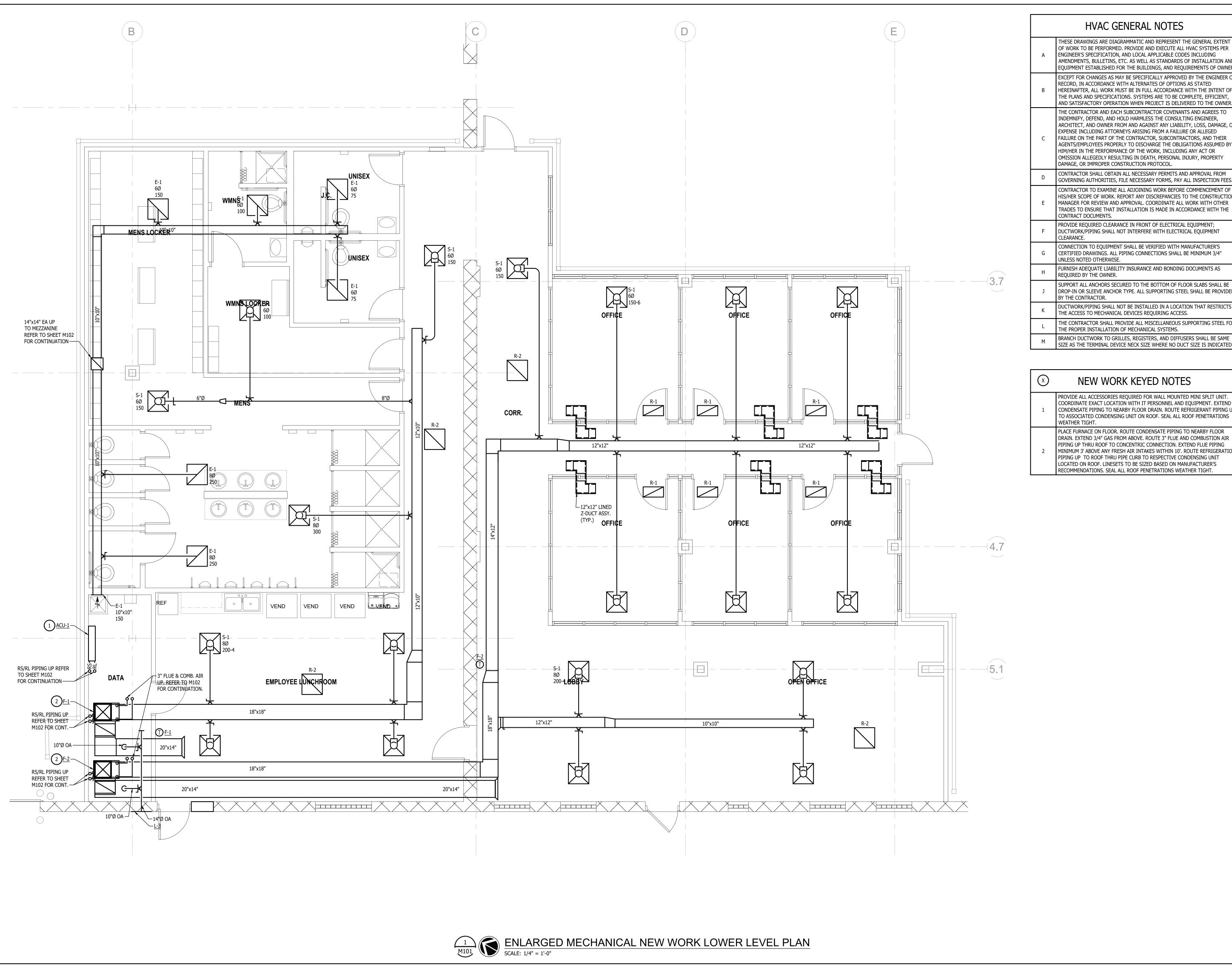


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MECHANICAL NEW WORK



HVAC GENERAL NOTES

- THESE DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE GENERAL EXTENT OF WORK TO BE PERFORMED. PROVIDE AND EXECUTE ALL HVAC SYSTEMS PER ENGINEER'S SPECIFICATION, AND LOCAL APPLICABLE CODES INCLUDING AMENDMENTS, BULLETINS, ETC. AS WELL AS STANDARDS OF INSTALLATION AND EQUIPMENT ESTABLISHED FOR THE BUILDINGS, AND REQUIREMENTS OF OWNER.
- EXCEPT FOR CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD, IN ACCORDANCE WITH ALTERNATES OF OPTIONS AS STATED HEREINAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. SYSTEMS ARE TO BE COMPLETE, EFFICIENT, AND SATISFACTORY OPERATION WHEN PROJECT IS DELIVERED TO THE OWNER. THE CONTRACTOR AND EACH SUBCONTRACTOR COVENANTS AND AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CONSULTING ENGINEER, ARCHITECT, AND OWNER FROM AND AGAINST ANY LIABILITY, LOSS, DAMAGE, OR
- EXPENSE INCLUDING ATTORNEYS ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF THE CONTRACTOR, SUBCONTRACTORS, AND THEIR AGENTS/EMPLOYEES PROPERLY TO DISCHARGE THE OBLIGATIONS ASSUMED BY HIM/HER IN THE PERFORMANCE OF THE WORK, INCLUDING ANY ACT OR OMISSION ALLEGEDLY RESULTING IN DEATH, PERSONAL INJURY, PROPERTY DAMAGE, OR IMPROPER CONSTRUCTION PROTOCOL.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FROM OVERNING AUTHORITIES, FILE NECESSARY FORMS, PAY ALL INSPECTION FEES. CONTRACTOR TO EXAMINE ALL ADJOINING WORK BEFORE COMMENCEMENT OF
- HIS/HER SCOPE OF WORK. REPORT ANY DISCREPANCIES TO THE CONSTRUCTION MANAGER FOR REVIEW AND APPROVAL. COORDINATE ALL WORK WITH OTHER TRADES TO ENSURE THAT INSTALLATION IS MADE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT; DUCTWORK/PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT
- CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. ALL PIPING CONNECTIONS SHALL BE MINIMUM 3/4" JNLESS NOTED OTHERWISE.
- FURNISH ADEQUATE LIABILITY INSURANCE AND BONDING DOCUMENTS AS REOUIRED BY THE OWNER.
- DROP-IN OR SLEEVE ANCHOR TYPE. ALL SUPPORTING STEEL SHALL BE PROVIDED BY THE CONTRACTOR. DUCTWORK/PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS
- THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL FOR
- BRANCH DUCTWORK TO GRILLES, REGISTERS, AND DIFFUSERS SHALL BE SAME SIZE AS THE TERMINAL DEVICE NECK SIZE WHERE NO DUCT SIZE IS INDICATED.

NEW WORK KEYED NOTES

- PROVIDE ALL ACCESSORIES REQUIRED FOR WALL MOUNTED MINI SPLIT UNIT. COORDINATE EXACT LOCATION WITH IT PERSONNEL AND EQUIPMENT. EXTEND CONDENSATE PIPING TO NEARBY FLOOR DRAIN. ROUTE REFRIGERANT PIPING UP TO ASSOCIATED CONDENSING UNIT ON ROOF. SEAL ALL ROOF PENETRATIONS
- PLACE FURNACE ON FLOOR. ROUTE CONDENSATE PIPING TO NEARBY FLOOR DRAIN. EXTEND 3/4" GAS FROM ABOVE. ROUTE 3" FLUE AND COMBUSTION AIR PIPING UP THRU ROOF TO CONCENTRIC CONNECTION. EXTEND FLUE PIPING MINIMUM 3' ABOVE ANY FRESH AIR INTAKES WITHIN 10'. ROUTE REFRIGERATION PIPING UP TO ROOF THRU PIPE CURB TO RESPECTIVE CONDENSING UNIT LOCATED ON ROOF. LINESETS TO BE SIZED BASED ON MANUFACTURER'S



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PROJECT

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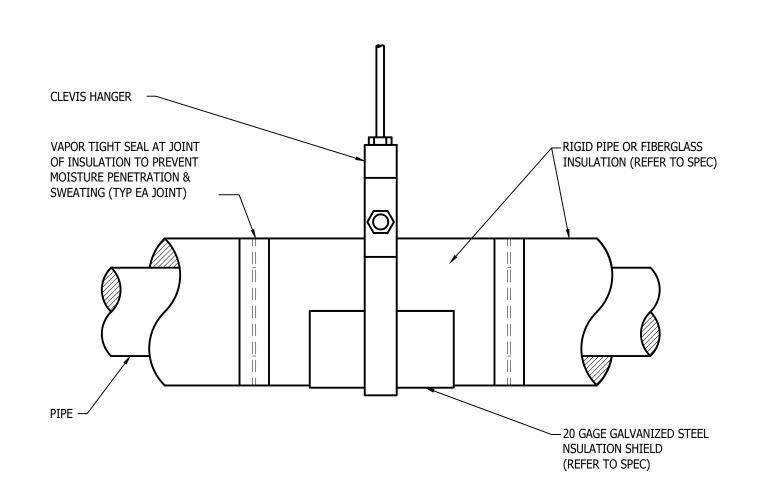
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SHEET NUMBER

ENLARGED MECHANICAL NEW WORK LOWER LEVEL PLAN

M401



ELEVATION

PRE-INSULATED PIPE SUPPORTS SHALL BE USED TO ALLOW PROPER ALIGNMENT OF PIPING DURING INSTALLATION. PRE-INSULATED HANGERS SHALL BE PIPE

SHIELDS INCORPORATED OR APPROVED EQUAL, REFER TO SPECIFICATIONS.

INSULATED PIPE HANGER DETAIL

-RIGID PIPE OR FIBERGLASS INSULATION

(REFER TO SPEC)

CLEVIS HANGER

20 GAGE GALVANIZED

SHIELD (REFER TO SPEC)

NOTES:

NO SCALE

STEEL INSULATION



NOTE:
MECHANICAL AND ARCHITECTURAL TRADES SHALL COORDINATE ALL

REQUIREMENTS TO ASSURE PROPER WATERTIGHT INSTALLATION.

12" MIN.

-WATER TIGHT

-ROOF DECKING

-REFRIGERANT PIPING THROUGH CURB

CURB PENETRATION

GALVANIZED CURB CAP

INSULATED

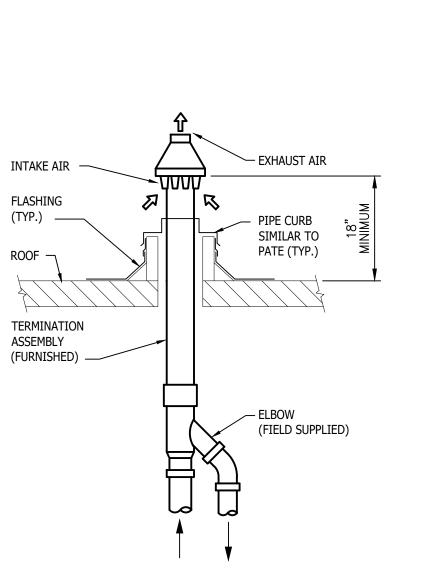
FLASHING-

ROOF MEMBRANE-

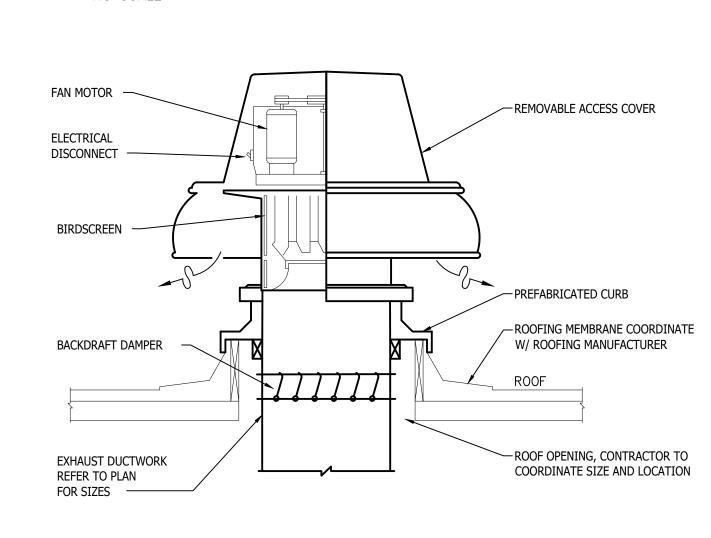
FRAMING MEMBERS

REFER TO ARCHITECTURAL DRAWING

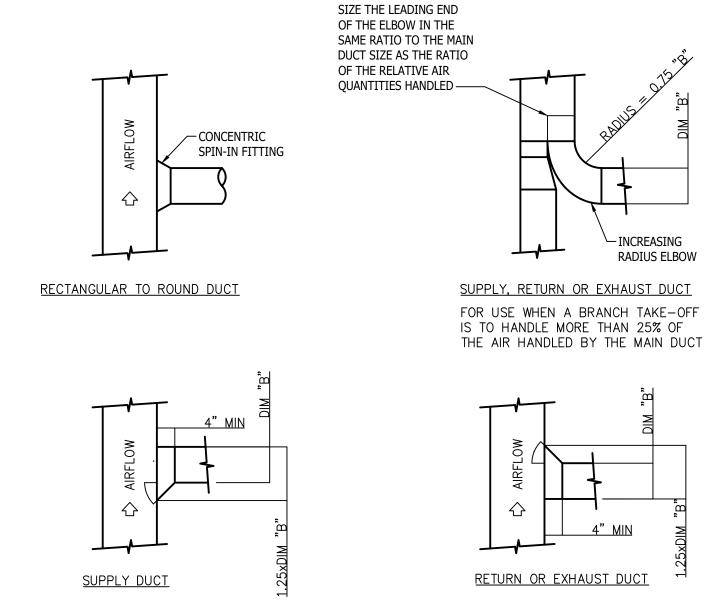
ROOF CURB-



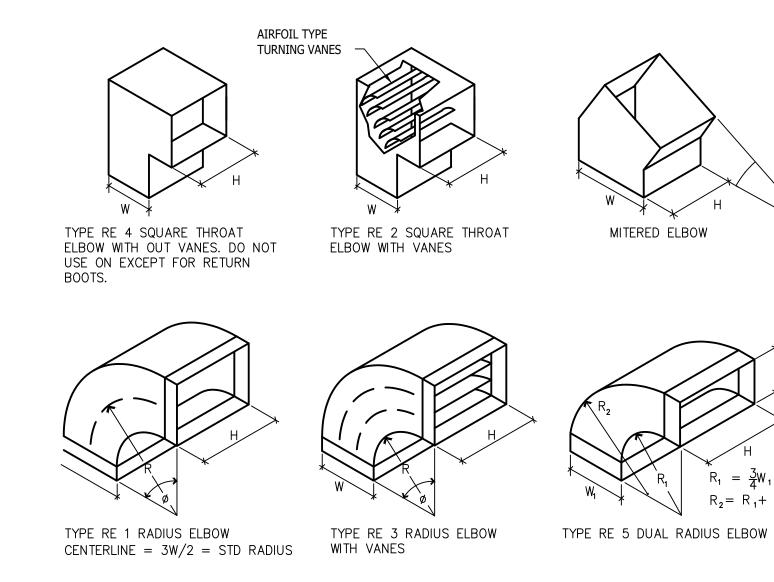
CONCENTRIC VENT TERMINATION DETAIL NO SCALE



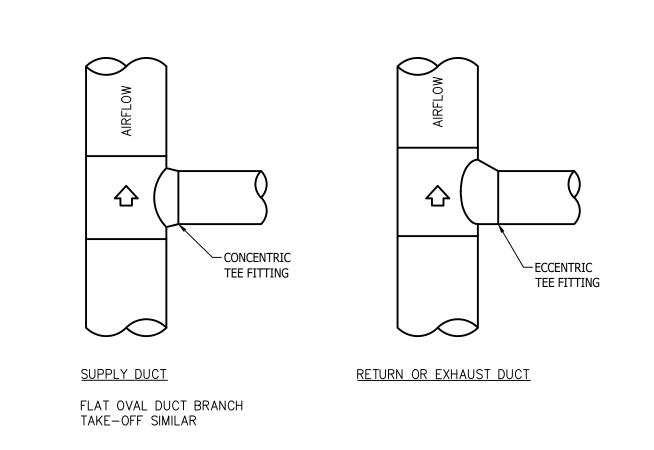
ROOF EXHAUST FAN MOUNTING DETAIL NO SCALE



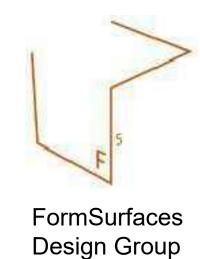
RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS NO SCALE



RECTANGULAR SHEET-METAL ELBOWS NO SCALE



ROUND DUCT BRANCH TAKE-OFF DETAILS NO SCALE



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MECHANICAL DETAILS

M501

SHEET NUMBER

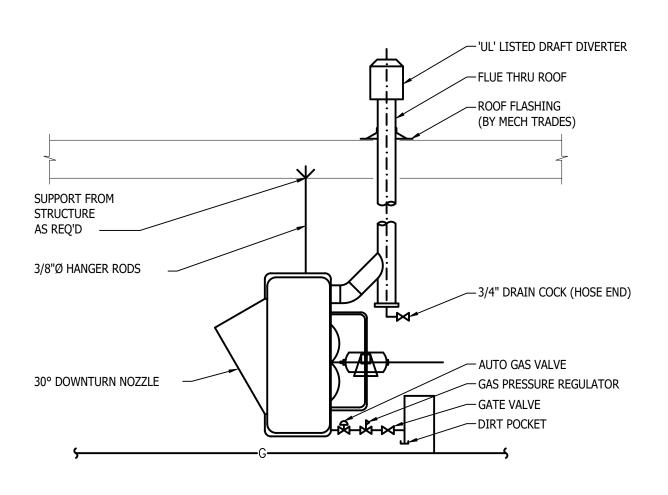
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SIDEWALL EXHAUST FAN DETAIL NO SCALE

WALL HOUSING DAMPER-

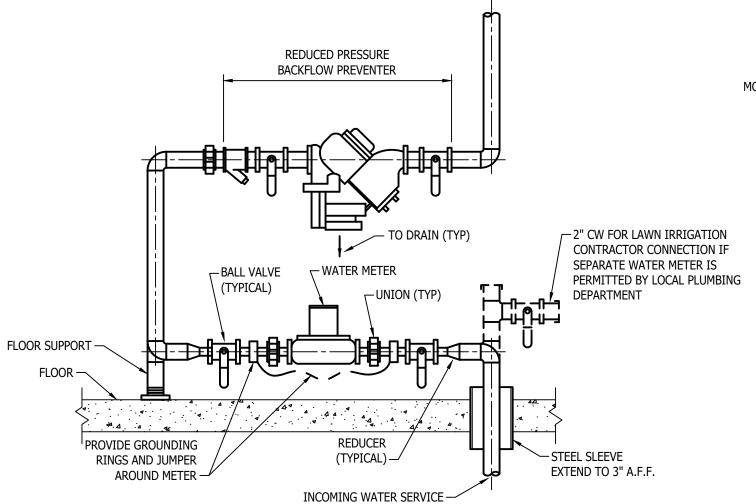
-WEATHERHOOD

EXHAUST AIRFLOW



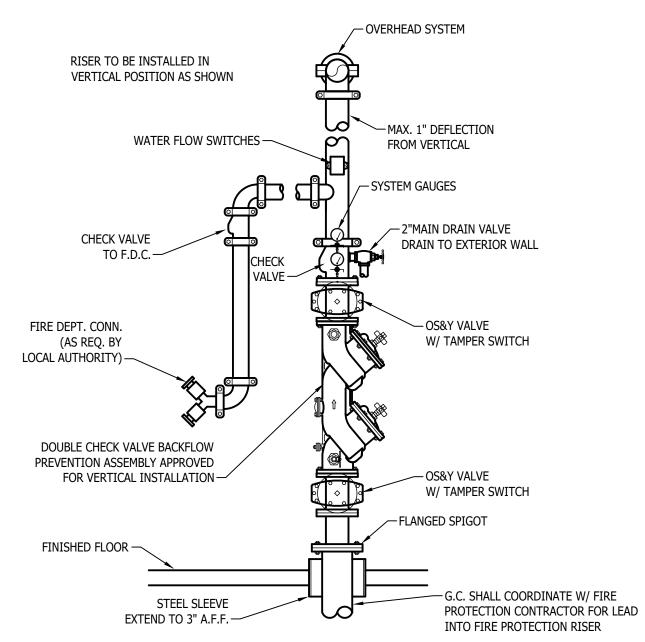
GAS UNIT HEATER DETAIL

NO SCALE

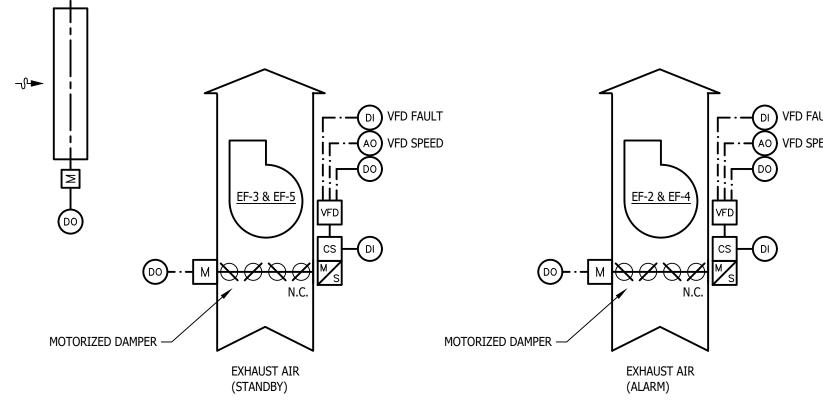


. WATER METER & BFP SHALL BE SUPPORTED FROM THE FLOOR AND/OR WALL. 2. BACKFLOW PREVENTER SHALL BE EQUAL TO WATTS LF909 (LEAD FREE) WITH SHUT-OFF VALVES, TEST COCKS AND STRAINER.

WATER METER DETAIL



AUTOMATIC SPRINKLER RISER DIAGRAM



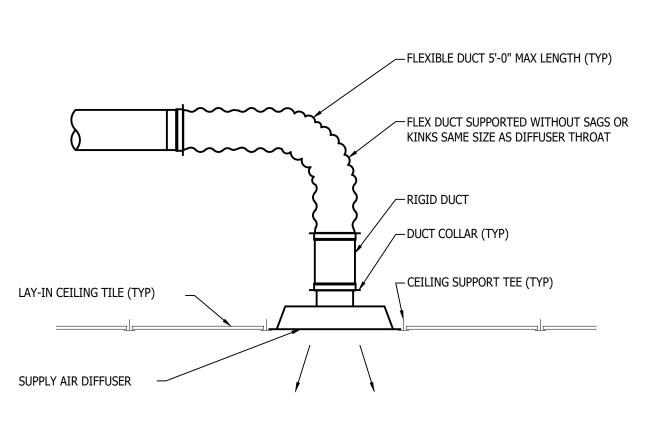
GAS DETECTION EXHAUST FAN CONTROL DIAGRAM

NOTE: ALL SETPOINTS AND TIME INTERVALS SHALL BE ADJUSTABLE BY THE SYSTEM OPERATOR.

- WITH THE EXHAUST FAN'S HAND/OFF/AUTO SWITCHES IN THE "AUTO" POSITION, THE SUPPLY FAN SHALL BE
- UPON A SIGNAL TO ENERGIZE THE STANDBY VENTILATION FAN, THE ISOLATION DAMPERS SHALL OPEN FULLY.
- FAN STATUS SHALL BE CONFIRMED BY A CURRENT SWITCH. UPON A FAN FAILURE, THE DDC SYSTEM SHALL ISSUE AN ALARM TO THE DDC SYSTEM.

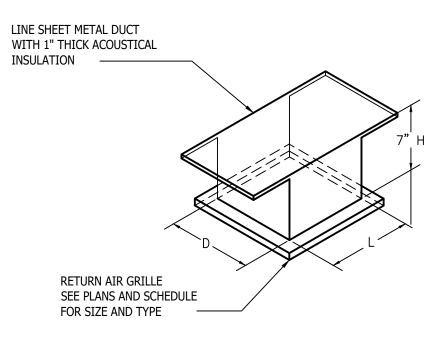
WHEN THE GAS DETECTION SYSTEM IS NOT IN ALARM, THE STANDBY EXHAUST FAN SHALL RUN AT ITS

- REQUIRED SPEED TO ACHIEVE ITS MINIMUM AIRLFOW. FAN SHALL RUN CONTINUOUSLY DURING OCCUPANCY SCHEDULE. THE ALARM EXHAUST FAN SHALL BE DE-ENERGIZED.
- UPON AN ALARM FROM THE GAS DETECTION SYSTEM, THE STANDBY EXHAUST FAN SHALL BE DE-ENERGIZED AND THE ALARM EXHAUST FAN SHALL MODULATE TO ITS MAXIMUM SPEED SETTING TO ACHIEVE THE AIRFLOW INDICATED IN THE MECHANICAL SCHEDULE.
- 6. ONCE THE ALARM STATUS HAS BEEN CLEARED, THE ALARM EXHAUST FAN SHALL BE DE-ENERGIZED. THE STANDY BY EXHAUST FAN SHALL ENERGIZE AND MODULATE TO IT'S REQUIRED SPEED SETPOINT.
- 7. WHEN A FAN IS DE-ENERGIZED, THE ISOLATION DAMPERS WILL MODULATE FULLY CLOSED.



SUPPLY AIR DIFFUSER DETAIL

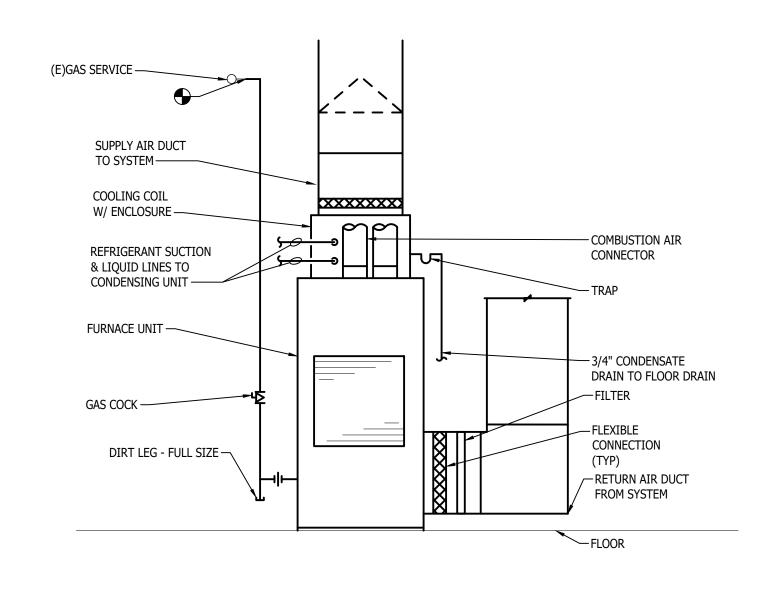
NO SCALE



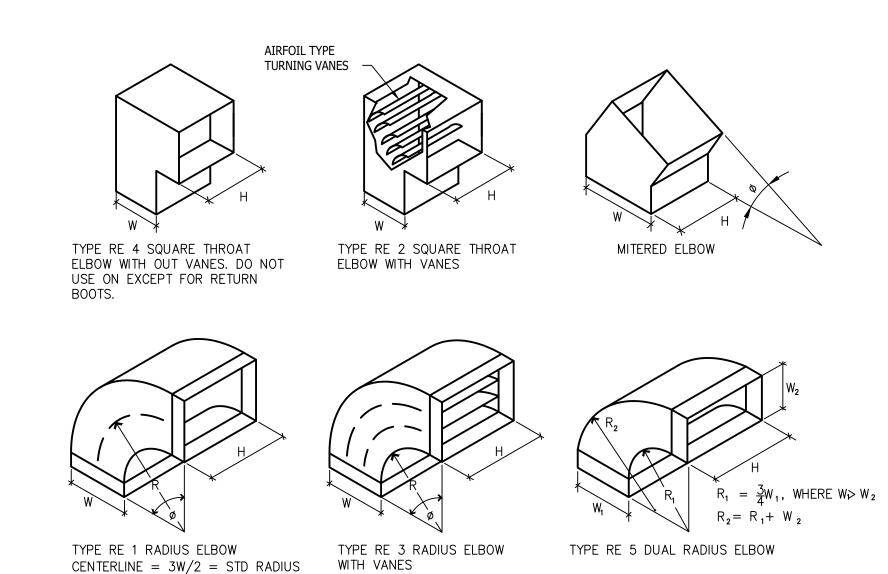
* REFER TO PRICE MODEL RAC OR SIMILAR

PLENUM RETURN GRILLE CANOPY DETAIL

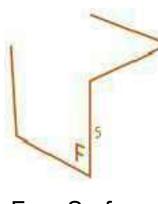
NO SCALE



GAS FURNACE DETAIL NO SCALE



RECTANGULAR SHEET-METAL ELBOWS NO SCALE



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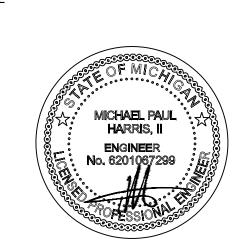
PROJECT

24th Street Warehouse

2220 24th Street Detroit, MI 48216

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No.	DESCRIPTION	DATE
1	90% Owner Review	12/19/2024
2	Permit	01/31/2025

20240604

CHECKED BY: DRAWN BY: MPH DJL

MECHANICAL DETAILS

SHEET NUMBER

M502

ISSUE

					GAS	S FIRE	D UNIT I	HEATE	ER S	CHE	DULI	Ξ		
UNIT ID	SERVICE	AIRFLOW (CFM)	EAT (°F)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)	GAS PRESS. MIN MAX. (IN WG)	BURNER TYPE	HP	ELECTR VOLTS	RICAL PHASE	FLA	MODEL NO.	REMARKS
UH-1	UH-1 SEE PLANS 1,616 60 120 105 86.1 4/14/2021 DIRECT 1/10 120 1 6.4 GG-105													

NOTES:

1. MODEL NUMBERS ARE STERLING.

2. PROVIDE FACTORY REMOTE THERMOSTAT. 3. PROVIDE GAS REGULATOR AS REQUIRED FOR EQUIPMENT OPERATION.

4. PROVIDE BACNET MSTP INTERFACE.

	LOUVER SCHEDULE														
UNIT ID	CFM	FACE SIZE WxH (IN)	MIN. SQ. FT. FREE AREA	MOUNTING	MATERIAL	TYPE	MODEL NO.	REMARKS							
L-1	10,000	78x72	24.5	WALL	ALUMINIUM	DRAINABLE	ESD-635	NORTH GARAGE VENTILATION							
L-2	12,000	78x72	24.5	WALL	ALUMINIUM	DRAINABLE	ESD-635	SOUTH GARAGE VENTILATION							
L-3	500	24x18	1.1	WALL	ALUMINUM	DRAINABLE	ESD-635	FURNACE VENTILATION							

NOTES:

1. BASIS OF DESIGN: GREENHECK, FURNISHED AND INSTALLED BY MC.

2. LOUVER SHALL BE DESIGNED TO PREVENT MOISTURE CARRYOVER BELOW 1000 FPM.

PROVIDE WITH ALUMINUM BIRD SCREEN.

4. PROVIDE ALL ALUMINUM CONSTRUCTION. 5. REFER TO ARCHITECTURAL TRADES FOR FINISHES.

	GRILLE, REGISTER AND DIFFUSER SCHEDULE													
UNIT ID	FACE SIZE	NECK SIZE	MOUNTING	FINISH	MATERIAL	PRICE/ MODEL NO.	REMARKS							
S-1	24"x24"	SEE PLANS	CEILING	WHITE	STEEL	SPD								
R-1	24"x12"	22"x10"	CEILING	WHITE	STEEL	PDDR	PROVIDE WITH CANOPY							
R-2	24"x24"	22"x22"	CEILING	WHITE	STEEL	PDDR	PROVIDE WITH CANOPY							
E-1	24"x24"	SEE PLANS	CEILING	WHITE	STEEL	PDDR								
E-2	NECK+2"	SEE PLANS	WALL	WHITE	STEEL	510								

1. COORDINATE WITH LIGHTING AND FRAME TYPE ACCORDINGLY WITH ARCHITECTURAL CEILING LAYOUT.

						M	IINI-SPI	LIT IN	DOOR	UNIT	SCHI	EDUL	.E						
LINIT ID	UNIT	ASSOCIATED	AREA	SUPPLY	OA	TOTAL	SENSIBLE	[DIMENSIONS	6		ELEC	TRICAL		[DISCONNE	СТ	MAN /MODEL:	DEMANIC
UNIT ID	ТҮРЕ	OUTDOOR UNIT ID	SERVED	(WET COIL) (CFM)	OA (CFM)	CAPACITY (MBH)	CAPACITY (MBH)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	МОСР	MCA	VOLTS	PHASE	FURN. BY	INST. BY	TYPE	MAN. /MODEL:	REMARKS
ACU-1	WALL MOUNTED	CU-3	DATA CLOSET	706	-	18	-	40	9	14	N/A	N/A	N/A	N/A	EC	EC	SWITCH	LG/KSUAK181A	POWER FED FROM OUTDOOR UNIT

1. WIRING AND DISCONNECT BY DIVISION 26.
2. PROVIDE INDOOR AND OUTDOOR COMPONENTS FULLY CHARGED WITH R-454B REFRIGERANT AND INTERCONNECTING REFRIGERANT PIPING FOR

FIELD INSTALLATION. 3. PROVIDE WITH WALL MOUNTED LOW VOLTAGE THERMOSTAT.

	MINI-SPLIT OUTDOOR UNIT SCHEDULE																		
	ASSOCIATED		COOL	ING		HEA	ATING	FAN	COMP	RESSOR		ELEC	TRICAL		[DISCONNE	ст		
UNIT ID	INDOOR UNIT ID	NOMINAL TONNAGE	MINIMUM SEER	DESIGN AMBIENT (°F)	NO. OF FANS	CAPACITY (MBH)	DESIGN AMBIENT (°F)	CFM	NO.	TYPE	МОСР	MCA	VOLTS	PHASE	FURN. BY	INST. BY	TYPE	MAN. /MODEL:	REMARKS
CU-3	ACU-1	1.5	23.0	95	1	15.1	5	2119	1	PROP	30.0	19.0	208	1	EC	EC	SWITCH	LG/KSUAK181A	

1. UNIT/SYSTEM EFFICIENCY MUST MEET OR EXCEED ASHRAE 90.1. PROVIDE INDOOR AND OUTDOOR COMPONENTS FULLY CHARGED WITH R-454B REFRIGERANT AND INTERCONNECTING REFRIGERANT PIPING

FOR FIELD INSTALLATION.

PROVIDE WITH LOW AMBIENT CONTROLS DOWN TO ZERO DEGREES. 3. PROVIDE WITH WIND BAFFLE.

4. INSTALL ON NEW 18" EQUIPMENT RAILS.

	EXHAUST FAN SCHEDULE															
				ESP. (IN			MO ⁻	TOR			ELECTRICAL	L	CURB			
UNIT ID	SERVING	TYPE	CFM	WG)	FAN RPM	ВНР	НР	RPM	DRIVE TYPE	VOLTS	PHASE	МОСР	HEIGHT (IN.)	MODEL NO.	REMARKS	
EF-1	SEE PLANS	ROOF	1050	0.5	1,138	.14	1/4	1800	DIRECT	115	1	15.0	18	G-120-VG		
EF-2	NORTH GARAGE - GAS DETECTION ALARM	SIDEWALL	10,000	0.25	1,013	1.66	2.0	1800	BELT	480	3	15.0	N/A	BAER-30-02-0325	PROVIDE WITH WALL HOUSING/GUARD ACCESSORY AND WEATHER HOOD.	
EF-3	NORTH GARAGE - STANDBY OPERATION	SIDEWALL	1,500	0.25	709	.13	1.0	1800	DIRECT	480	3	15.0	N/A	AER-30-03-0605-VG	PROVIDE WITH WALL HOUSING/GUARD ACCESSORY AND WEATHER HOOD.	
EF-4	SOUTH GARAGE - GAS DETECTION ALARM	SIDEWALL	12,000	0.25	1,636	1.58	2.0	1800	BELT	480	3	15.0	N/A	BAER-36-02-0320	PROVIDE WITH WALL HOUSING/GUARD ACCESSORY AND WEATHER HOOD.	
	SOUTH GARAGE -										_				PROVIDE WITH WALL HOUSING/GUARD	

1800 DIRECT 480

EF-5

1. MODEL NUMBERS ARE GREENHECK UNLESS OTHERWISE NOTED.

STANDBY

OPERATION

2. PROVIDE WITH GRAVITY BACKDRAFT DAMPER. 3. CONTROL BE CONTINUOUS OCCUPANCY AND TIMER OPERATION.

SIDEWALL

	FURNACE SCHEDULE														
							HE	EATING SECTION	ON		ELECTRICA	L			
UNIT ID	SERVICE	SUPPLY CFM	OA CFM	ESP	BLOWER HP	CONDENSER TAG	INPUT (MBH)	OUTPUT (MBH)	EFF AFUE	UNIT AMPACITY	FUSE SIZE (AMPS)	VOLTS	PHASE	MODEL NO.	REMARKS
F-1	OFFICE - EAST	1500	250	0.5	1.0	CU-1	84	82	92%	15.0	20.0	120	1	R962V0855A21M4SCAP	
F-2	OFFICE - WEST	1850	250	0.5	1.0	CU-2	84	82	92%	15.0	20.0	120	1	R962V0855A21M4SCAP	

1. MODEL NUMBERS ARE RUUD UNLESS OTHERWISE NOTED.

2. 2 STAGE GAS BURNER.

	CONDENSING UNIT SCHEDULE										
LINIT ID	NOMINAL	MINIMUM	ELECTRICAL COMPRESSORS								
UNIT ID	TONNAGE	SEER	MCA	MAX FUSE SIZE	VOLTS	PHASE	NO.	TYPE	MODEL NO.	REMARKS	
CU-1	4.0	13.8	24.0	40.0	230	1	1	SCROLL	RA14AZ48		
CU-2	4.0	13.8	24.0	40.0	230	1	1	SCROLL	RA14AZ48		

3 15.0

N/A

AER-30-03-0605-VG

1,500 0.25 709 .13 1.0

1. MODEL NUMBERS ARE RUUD UNLESS OTHERWISE NOTED. 2. PROVIDE DISCONNECT SWITCH.

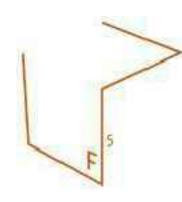
	DE-STRATIFICATION FAN SCHEDULE															
		INSTALLATION		COVERAGE	MAX FAN		MOTOR			ELECTRICAL			PHYSICAL			
UNIT ID	SERVING	TYPE		AREA (SQ.FT)	RPM	НР	RPM	DRIVE TYPE	VOLTS	PHASE	МОСР	DIAMETER (FT.)	DROP LENGTH (IN.)	WEIGHT (LBS)	MODEL NO.	REMARKS
DSF-1	SEE PLANS	I-BEAM	44,327	6,365	76	3/4	26	DIRECT	480	3	15.0	20	40.5	154	DS-3-20	

NOTES:

1. MODEL NUMBERS ARE GREENHECK UNLESS OTHERWISE NOTED.

2. PROVIDE WITH MOUNTING ACCESSORIES.

3. PROVIDE WITH FIELD CONTROLLER.



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PROJECT

PROVIDE WITH WALL HOUSING/GUARD

ACCESSORY AND WEATHER HOOD.

24th Street Warehouse

2220 24th Street

Detroit, MI 48216

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ISSUE NO. No. DESCRIPTION DATE 12/19/2024 1 90% Owner Review 01/31/2025 Permit

FSDG PROJECT NO.

20240604

CHECKED BY: DRAWN BY: MPH DJL

MECHANICAL SCHEDULES

SHEET NUMBER

M601

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ISSUE

	DOMESTIC WATER HEATER SCHEDULE (TANKLESS GAS)																			
UNIT ID	LOCATION/ AREA SERVED	CAF FLOW (GPM)	PACITY TEMP RISE (°F)	FUEL TYPE	GAS PRESS MIN - MAX (IN WG)	INPUT (MBH)	THERMAL EFFICIENCY	HEAT EXCHANGER MATERIAL	SIZE (IN)	VENTII MATERIAL	NG MAX. ALLOWED LENGTH (FT)	МОСР	ELEC FLA	TRICAL VOLTS	PHASE	DISCOR FURN. BY	NNECT INST. BY	WEIGHT (LBS)	MANUFACTURER/ MODEL NO.	REMARKS
WH-1	SEE PLANS	4.9	80	NAT. GAS	3.5 - 10.5	199.9	-	STAINLESS	0'-3"	PVC	150	15.0	.83	120	1	DIV. 26	DIV. 26	73	NAVIEN/NPE-240S2	

NOTES:
1. PROVIDE WALL MOUNTING ACCESSORIES.
2. DISCONNECT PROVIDED DIVISION 26.

	PLUMBING PUMP SCHEDULE											
UNIT ID	SERVICE	TYPE	GPM	HEAD (FT)	MIN % EFF	MOTOR BHP	HP	RPM	VOLTS	PHASE	MODEL NO.	REMARKS
CP-1	DOMESTIC HOT WATER RE-CIRCULATION	INLINE	15.0	10.0	14.1	-	1/4	4600	120	1	UPS 43-100 SF	INTERNAL AQUASTAT SMART TECHNOLOGY

NOTES:

1. MODEL NUMBERS ARE GRUNDFOS UNLESS NOTED OTHERWISE.

2. PERFORMAN

3. PUMPS SHALL BE NON-OVERLOADING.

IANCE BASED ON WATER,	UNLESS OTHERWISE INDICATED.	

	1	<u> </u>	_				i	
TAG	BARRIER FREE	ITEM	WASTE	VENT	CTION SIZES	HW	MANUFACTURER & MODEL NO.	ACCESSORIES
EWC-1	Y	FILTERED BI-LEVEL WATER COOLER WITH BOTTLE FILLER	2"	1 1/2	1/2"	-	ELKAY: EZSTL8WSLK EZH20	
SK-1	-	SINGLE COMPARTMENT SINK	1 1/2"	1 1/2"	1/2"	1/2"	ELKAY LUSTERTONE: LR33224	FAUCET: CHICAGO 8" CENTER DECK MOUNTED SERIES 431, CHROME PLATED P-TRAP AND 1070 ASSE MIXING VALVE. PROVIDE WITH GARBAGE DISPOSAL IN-SINK-ERATOR BAGDER 5 1/2 HP
FD-1	-	HEAVY DUTY FLOOR DRAIN	3"	-	-	-	ZURN: Z508	
GD-1	-	EXTRA HEAVY DUTY GARAGE FLOOR DRAIN	4"	-	-	-	ZURN: Z673	CAST IRON BODY AND REMOVABLE GRATE
TD-1	-	HEAVY DUTY GARAGE TRENCH DRAIN	3"	-	-	-	ZURN: Z665	CAST IRON BODY AND REMOVABLE GRATE
LAV-1	-	DROP IN LAVATORY SINK	1 1/2"	1 1/2"	1/2"	1/2"	KOHLER: MEMOIRS K-2337-8-0	FAUCET: SLOAN SF-230 SENSOR OPERATED W/GRID STRAINE DRAIN, CHROME PLATED P-TRAP, AND ASSE 1070 MIXING VALVE. FAUCET SHALL BE HARD WIRED
LAV-2	Y	WALL MOUNTED LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	KOHLER: LUCERNE WALL MOUNTED 3 HOLE 4" CENTERS	FAUCET: SLOAN SF-230 SENSOR OPERATED W/GRID STRAINE DRAIN, CHROME PLATED P-TRAP, AND ASSE 1070 MIXING VALVE. FAUCET SHALL BE HARD WIRED
WC-1	Y	FLOOR MOUNTED WATER CLOSET	4"	2"	1"	-	KOHLER: HIGHCLIFF K-96057-B	FLUSH VA: SLOAN ROYAL 111 ES-1.28 FOR 1.28 GPF. FLUSH VALVE SHALL BE HARDWIRED
UR-1	Y	WALL MOUNTED URINAL	3"	1 1/2"	3/4"	-	KOHLER: K-5452-ET	FLUSH VA: SLOAN ROYAL 186 ESS-0.125 FOR 0.125 GPF. FLUS VALVE SHALL BE HARDWIRED.
MS-1	-	FLOOR MOUNTED MOP SINK	3"	-	1/2"	1/2"	ZURN Z1996-36	FURNISH VACUUM BREAKER, HOSE AND BRACKET, MOP HANGER, AND DRAIN KIT.

	OIL INTERCEPTOR SCHEDULE										
	FLOW	WATER	DIM	ENSIONS (IN	CH)						
UNIT ID	RATE GPM	CAPACITY (LBS)	HEIGHT	LENGTH	WIDTH	MODEL NO.	ACCESSORIES				
OI-1	150	190	30.75	56	42	Z1188	HEAVY DUTY TRAFFIC COVER				
OI-2	150	100	30.75	56	42	71188	HEAVY DUTY TRAFFIC COVER				

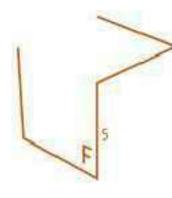
NOTES:
1. PROVIDE ALL ACCESSORIES NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
2. ALL FIXTURES SHALL MEET MICHIGAN DEPT. OF PUBLIC HEALTH REQUIREMENTS, AND SHALL BE SUITABLE FOR FOOD PREPARATION AREAS.

NOTES:

1. MODEL NUMBER IS ZURN UNLESS OTHERWISE NOTED.

2. OIL INTERCEPTOR TO BE INSTALLED IN GRADE. RECESSED WITH FLOOR.

3. 4" THREADED INLET/OUTLET.



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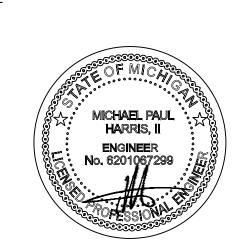
PROJECT

24th Street Warehouse 2220 24th Street

Detroit, MI 48216

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No.	DESCRIPTION	DATE
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2	Permit	01/31/2025

FSDG PROJECT NO. 20240604

CHECKED BY:

SHEET NUMBER

MECHANICAL SCHEDULES

M602

		LUMINAIRE S	CHEDULE		
FIXTURE SYMBOL	FIXTURE TAG	DESCRIPTION	MANUFACTURER(S)	LAMP SOURCE	WATTS
	A	2'x4' LOW PROFILE BACK LIT FLAT PANEL LED LUMINAIRE. A FULLY LUMINOUS APPEARANCE GLARE FREE. SUITABLE FOR RETROFIT IN LAY-IN TYPE GRID CEILING, ALUMINUM FRAME WITH SATIN WHITE LENS, 5000 LUMENS, ELECTRONIC DRIVER, 4000K. 0-10V DIMMING CAPABLE, UNIVERSAL VOLTAGE.	TCPI — #DTF4UZD39CCT OR APPROVED EQUAL	LP840 80CRI 3000 LUMENS	39
o	B	SELF FLANGED SEMI SPECULAR, MATTE-DIFFUSER OR SPECILAR, LOWER REFLECTOR, POLYCARBONATE LENS	GOTHAM EVO #EVO6-35/25-AR-MVOLT OR APPROVED EQUAL	LED 85CRI 2500 LUMENS	11.8
0	0	LUMERICA HIGH—BAY LED, IP65 RATED, 70% LUMEN MAINTENANCE AT 50,000 HOURS, INPUT VOLTAGE OF 110—277 VAC, UNIVERSAL DRIVER FOR 0—10 VOLT DIMMING, OVERLOAD AND SHORT CIRCUIT PROTECTED.	LUMERICA LM-OPS-A5 OR APPROVED EQUAL	LED 80CRI 28,000 LUMENS	200
I	D	4' LED LINEAR STRIP FIXTURE. 8'L X 3.4"W X 2.7"D. ROLLED STEEL HOUSING, END CAPS, WHITE FINISH, FLAT DIFFUSED LENS. LED ELECTRONIC DRIVER. 0-10V DIMMING TO 10%. 4000 LUMENS, 4000K, 80 CRI, MVOLT. CABLE HUNG.	LITHONIA CLX L48 OR APPROVED EQUAL	LED 80CRI 4000 LUMENS	25.4
Image: Control of the	P	OUTDOOR PARKING LOT LED LIGHTING, SELF-CLEANING HOUSING WITH ROTATABLE LENS, 70% LUMEN MAINTENANCE AT 50,000 HOURS, INPUT VOLTAGE 110-277 VAC, 5,000K	LUMERICA LM-OPS-A5 SERIES OR APPROVED EQUAL	LED 75CRI 26,100 LUMENS	180
	P1	OUTDOOR PARKING LOT LED LIGHTING, SELF-CLEANING HOUSING WITH ROTATABLE LENS, 70% LUMEN MAINTENANCE AT 50,000 HOURS, INPUT VOLTAGE 110-277 VAC, 5,000K	LUMERICA LM-OPS-A5 SERIES OR APPROVED EQUAL	LED 75CRI 26,100 LUMENS	180
	F	2'x2' LED VOLUMETRIC RECESSED LIGHTING FIXTURE, COUPLED WITH HIGH EFFIENCY DRIVER, CURVED, SMOOTHED. 4,000 LUMENS, 3500K	LITHONIA 2BLT2-40L-ADSM-MVOLT-GZ10-LP835 OR APPROVED EQUAL	LED 82CRI 4,000 LUMENS	31
1⊗	X	EXIT LIGHT EMERGENCY LIGHT SHALL BE UNIVERSAL MOUNT, DIECAST ALUMINUM, HIGH OUTPUT LED DIFFUSE LIGHT PANEL, RED LETTERS WITH MAINTENANCE FREE NICKEL CADIUM BATTERY CAPABLE OF PROVIDING 90 MINUTE FULL LIGHT	 LITEALARMS GRANDE SERIES SURE-LITES CX SERIES 	120-277V	2.3
2	(X1)	PMERGENCY LIGHT REMOTE HEAD TO BE CONNECTED TO EXIT SIGN WITH HIGH OUTPUT BATTERY	 LITEALARMS GRANDE SERIES SURE-LITES CX SERIES 	120-277V	2.3
	#	SAME AS TYPE # EXCEPT THIS FIXTURE WILL BE CONNECTED THROUGH BUILT—IN BATTERY PACK, WIRE SUCH THAT IT OPERATES NORMAL WITH SWITCH AND ACT AS EMERGENCY FIXTURE UPON LOSS OF NORMAL POWER.			

LIGHTING SYMBOL LIST

DESCRIPTION

	LIGHT FIXTURE — CEILING/GRID MOUNT
\vdash	LIGHT FIXTURE - INTERIOR WALL MOUNT LINEAR
$\hat{\bigcirc}$	LIGHT FIXTURE - DOWNLIGHT WITH WALLWASH DIST
	LIGHT FIXTURE - INTERIOR WALL SCONCE
	LIGHT FIXTURE - INTERIOR SURFACE MOUNT
Ot	LIGHT FIXTURE - INTERIOR WALL MOUNTED
igoplus	LIGHT FIXTURE - INTERIOR PENDANT MOUNT
•	LIGHT FIXTURE - INTERIOR PENDANT MOUNT CYLINDER
\triangleleft —	TRACK AND TRACK MOUNTED LIGHT FIXTURES
8	EXIT LIGHT — CEILING MOUNTED — ARROWS AS INDICATED ON PLAN (SHADED AREA INDICATES FACE(S) OF FIXTURE)
9	EXIT LIGHT — WALL MOUNTED — ARROWS AS INDICATED ON PLAN (SHADED AREA INDICATES FACE(S) OF FIXTURE)
	EMERGENCY LIGHT FIXTURE - EMERGENCY BATTERY UNIT
484	EMERGENCY LIGHT FIXTURE - BATTERY UNIT/EXIT SIGN
⊶ □	LIGHT FIXTURE - EXTERIOR POLE MOUNT TYPE
早	LIGHT FIXTURE - EXTERIOR WALL MOUNT TYPE
M	LIGHT FIXTURE - EXTERIOR POST TOP TYPE
left	LIGHT FIXTURE - EXTERIOR BOLLARD TYPE

NOTES:

1. LIGHTING SYMBOLS AS INDICATED ON PLANS ARE NOT DRAWN
TO SCALE UNLESS NOTED OTHERWISE.

LIGHTING CONTROLS LEGEND

SYMBOL	DESCRIPTION
\$	SWITCH SINGLE POLE
\$ _o	OCCUPANCY SENSOR SWITCH
\$ _V	VACANCY SENSOR SWITCH
\$ _D	LOW VOLTAGE DIMMER SWITCH
\$ _{VD}	VACANCY DIMMER SENSOR SWITCH
(S)	CEILING MOUNTED OCCUPANCY SENSOR
(vs)	CEILING MOUNTED VACANCY SENSOR
\$3	SWITCH THREE-WAY
\$ _K	SINGLE POLE KEY SWITCH

ELECTRICAL ABBREVIATIONS ABBREV. DESCRIPTION

ISOLATED GROUND

KILOVOLT AMPERE

KILOWATT HOUR

LIGHTING PANEL

MAIN LUG ONLY

MAIN CIRCUIT BREAKER

MAIN DISTRIBUTION PANEL

POLYVINYL CHOLRIDE (PLASTIC)

REMOVE AND REINSTALL

RELOCATED EXISTING ELECTRICAL EQUIPMENT

KILOVOLT

KILOWATT

SYMBOL	DESCRIPTION	ABBREV.	DESCRIPTION
•	CONDUIT DOWN	AFF	ABOVE FINISHED FLOOR
0	CONDUIT UP	А	AMPERE
С	CONTACTOR	AF	AMPERE FUSE/AMPERE FRAME
	DISCONNECT SWITCH - NON FUSED	AWG	AMERICAN WIRE GAUGE
	DISCONNECT SWITCH - FUSED	AT	AMPERE TRIP
	DISCONNECT SWITCH - COMB. MOTOR STARTER	ATS	AUTOMATIC TRANSFER SWITCH
	ELECTRICAL PANEL - 208/240 VOLTS	AIC	AVAILABLE INTERRUPTING CURRENT (AMPS)
	ELECTRICAL PANEL - 480 VOLTS	С	CONDUIT OR CEILING MOUNTED
•	GROUNDING ROD	СВ	CIRCUIT BREAKER
_	GROUND	CU	COPPER
	GROUNDING BAR	СТ	CURRENT TRANSFORMER
J	JUNCTION BOX	DIA	DIAMETER
	JUNCTION BOX WITH HARDWIRED CONNECTION	DISC	DISCONNECT
M	METER	EMT	ELECTRICAL METALLIC TUBING
\searrow	MOTOR - SINGLE PHASE	EWC	ELECTRIC WATER COOLER
\ <u>\</u>	MOTOR - THREE PHASE	EPO	EMERGENCY POWER OFF

\setminus	MOTOR - SINGLE PHASE	EWC	ELECTRIC WATER COOLER
\setminus	MOTOR - THREE PHASE	EPO	EMERGENCY POWER OFF
М	MOTOR RATED SWITCH	(E)	EXISTING ELECTRICAL EQUIPMENT OR WORK
)	POWER RECEPTACLE - SIMPLEX TYPE	FA	FIRE ALARM
)	POWER RECEPTACLE - DUPLEX TYPE	FACP	FIRE ALARM CONTROL PANEL

POWER RECEPTACLE — DUPLEX TYPE FACP FIRE ALARM CONTRO POWER RECEPTACLE — DUPLEX 6" ABOVE COUNTER FLA FULL LOAD AMPS POWER RECEPTACLE — USB/DUPLEX COMBO. DEVICE F FUSE POWER RECEPTACLE — QUADRUPLEX TYPE G/GRD GROUND)	POWER RECEPTACLE - SIMPLEX TYPE	FA	FIRE ALARM
POWER RECEPTACLE - USB/DUPLEX COMBO. DEVICE F FUSE)	POWER RECEPTACLE - DUPLEX TYPE	FACP	FIRE ALARM CONTROL PA
luse ,	}	POWER RECEPTACLE - DUPLEX 6" ABOVE COUNTER	FLA	FULL LOAD AMPS
POWER RECEPTACLE — QUADRUPLEX TYPE G/GRD GROUND) USB	POWER RECEPTACLE - USB/DUPLEX COMBO. DEVICE	F	FUSE
	\rightarrow	POWER RECEPTACLE - QUADRUPLEX TYPE	G/GRD	GROUND

lacktriangle	POWER RECEPTACLE - RECESSED FLOOR TYPE	GFCI/GFI	GROUND FAULT CIRCUIT INTERRUPTER
\odot	POWER RECEPTACLE - SPECIALTY TYPE	НОА	HAND-OFF-AUTO
SPD	SURGE PROTECTION DEVICE	HP	HORSEPOWER

TC	TIME CLOCK	
Т	TRANSFORMER (REFER TO SCHEDULES FOR INFO)	
VSD	VARIABLE SPEED DRIVE	

POWER SYMBOL LIST

NOTES:									
1.		DEVICE SCHEDI	·	IZES S	HALL	BE	COORDINATED	WITH	PLANS

AUXILIARY SYST. SYMBOL LIST

		MAX	MAXIMUM
	CAMERA	MIN	MINIMUM
CR	CARD READER	NEC	NATIONAL ELECTRICAL CODE
₩-	COMMUNICATIONS DEVICE - 6" ABOVE COUNTER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
lacktriangledown	COMMUNICATIONS DEVICE - FLOOR	N/NEU	NEUTRAL
▼	COMMUNICATIONS DEVICE - WALL	NF	NON-FUSIBLE
DH	MAGNETIC DOOR HOLDER	NC	NORMALLY CLOSED
•	PUSH BUTTON	NO	NORMALLY OPEN
S	SPEAKER	NIC	NOT IN CONTRACT
$\vdash \bigcirc$	WALL CLOCK - SINGLE FACE	OF/CI	OWNER FURNISHED / CONTRACTOR INSTALLED
$\vdash \bigcirc$	WALL CLOCK - DOUBLE FACE	OF/OI	OWNER FURNISHED / OWNER INSTALLED
	WALL CLOCK AND SPEAKER UNIT	PH. OR Ø	PHASE
		PH. UK Ø	
NOTES: 1 FLECTRICAL	CONTRACTOR SHALL BE RESPONSIBLE FOR BOX AND	Р	POLE
CONDUIT FO	OR ALL DEVICES INDICATED. GE CONTRACTOR SHALL PROVIDE EXACT	PF	POWER FACTOR
	ONE AND LOCATIONS OF ALL DEVICES	51.40	

FIRE ALARM SYMBOL LIST

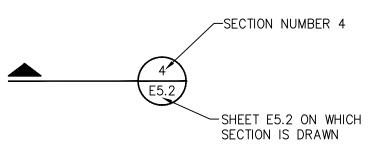
SPECIFICATIONS AND LOCATIONS OF ALL DEVICES.

SYMBOL	DESCRIPTION	RMC	RIGID METALLIC CONDUIT
^		RP	RECEPTACLE PANEL
S	DETECTION DEVICE	SPEC/SPECS	SPECIFICATIONS
<u>\$</u>	DETECTION DEVICE - DUCT MOUNTED	TBB	TELEPHONE BACKBOARD
FS	DETECTION DEVICE - FLOW SWITCH	TYP.	TYPICAL
TS	DETECTION DEVICE - TAMPER SWITCH	UC	UNDER COUNTER
FAA	FIRE ALARM ANNUNCIATOR PANEL	UL	UNDERWRITERS LABORATORIES
FACP	FIRE ALARM CONTROL PANEL	UPS	UNINTERRUPTIBLE POWER SUPPLY
√FD	FIRE DEPARTMENT COMMUNICATION OUTLET	USB	UNIVERSAL SERIAL BUS
F	MANUAL DEVICE - PULL STATION	V	VOLT
$ar{\mathbb{F}} \triangleleft$	NOTIFICATION DEVICE - WALL MOUNTED	VA	VOLT AMPERE
E	NOTIFICATION DEVICE: STROBE - CEILING MOUNTED	W	WATT
F	NOTIFICATION DEVICE: SPEAKER STROBE - CEILING MOUNTED		WIRE GUARD
NOTES: 1. DRAWINGS IN	<u>ES:</u> DRAWINGS INDICATE DESIGN INTENT ONLY, FINAL LOCATIONS AND		WEATHERPROOF
DEVICE SPE	CIFICATIONS SHALL BE PROVIDED BY FIRE ALARM	WP	WEATHERFROOF
	RER. REFER TO PROJECT SPECIFICATIONS FOR MANUFACTURERS.	XFMR	TRANSFORMER

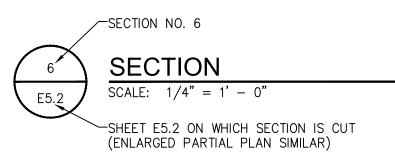
DRAWING INDEX			
SHT NO	DESCRIPTION		
E000	ELECTRICAL GENERAL INFORMATION AND LIGHTING SCHEDULE		
EDSP100	ELECTRICAL DEMOLITION SITE PLAN		
ESP100	ELECTRICAL NEW WORK SITE PLAN		
EPD101	ELECTRICAL POWER DEMOLITION LOWER LEVEL PLAN		
ELD101	ELECTRICAL LIGHTING DEMOLITION LOWER LEVEL PLAN		
EPD102	ELECTRICAL POWER DEMOLITION UPPER LEVEL PLAN		
EP101	ELECTRICAL POWER NEW WORK LOWER LEVEL PLAN		
EL101	ELECTRICAL LIGHTING NEW WORK LOWER LEVEL PLAN		
EP102	ELECTRICAL POWER NEW WORK UPPER LEVEL PLAN		
EL102	ELECTRICAL LIGHTING NEW WORK UPPER LEVEL PLAN		
EP201	ELECTRICAL POWER NEW WORK ROOF PLAN		
EP401	ENLARGED ELECTRICAL POWER NEW WORK LOWER LEVEL PLAN		
E501	ELECTRICAL DETAILS		
E601	ELECTRICAL PANEL SCHEDULES		
E701	ONE-LINE RISER DIAGRAMS		

DRAWING NOTATION

SYMBOL	DESCRIPTION
LA	LIGHTING FIXTURE TAG
	CONSTRUCTION KEY NOTE NUMBER 1
1	DEMOLITION KEY NOTE NUMBER 1
1	FEEDER SIZE TAG (REFER TO FEEDER SCHEDULE ON THIS SHEET)
<u>EF-1</u>	EQUIPMENT DESIGNATION, (I.E. EXHAUST FAN NUMBER 1)
	EXISTING DEVICES OR EQUIPMENT
	NEW OR MODIFIED DEVICES OR EQUIPMENT
	NEW OR MODIFIED UNDERGROUND WIRING

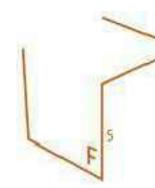


SY///////S EXISTING SYSTEM COMPONENT TO BE REMOVED



LIGHTING CONTROL TAG SCENE SCHEDULE ID 'A' LIGHTING CONTROL SPACE TYPE '1' DAYLIGHTING CONTROL ZONE '1' (MAY NOT APPEAR ON EVERY TAG)

APPLICABLE CODES AND REGULATIONS				
YEAR	CODE			
2015	MICHIGAN BUILDING CODE			
2015	MICHIGAN ENERGY CODE			
2023	MICHIGAN ELECTRICAL CODE RULES, PART 8			
2023	NATIONAL ELECTRICAL CODE (NFPA 70)			
2013	NFPA 20			
2013	NFPA 72			
2012	NFPA 101			
2013	NFPA 110			
2009	ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS & FACILITIES			



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PROJECT

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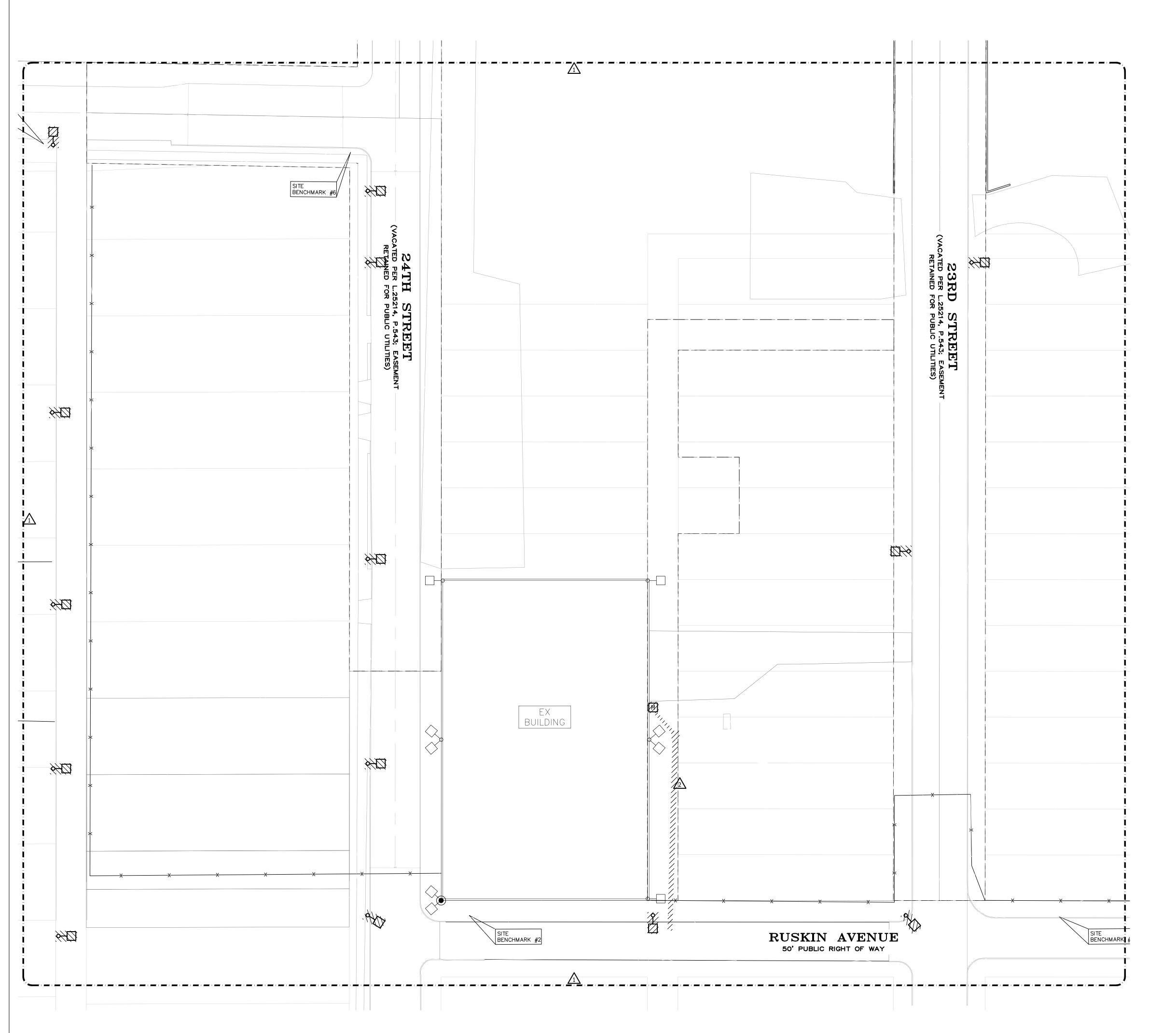
FSDG PROJECT NO. 20240604

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ELECTRICAL GENERAL
INFORMATION AND
LIGHTING SCHEDULE

SHEET NUMBER

E000



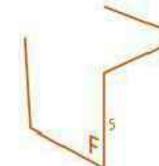
SITE PLAN GENERAL NOTES

- FIELD VERIFY LOCATIONS OF EXISTING UNDERGROUND SERVICES TO COORDINATE ALL POLE BASE LOCATIONS AND UNDERGROUND SERVICES BEING INSTALLED UNDER THIS CONTRACT WITH CIVIL DRAWINGS PRIOR TO INSTALLATION OF POLE BASES AND CONDUIT.
- B ALL THREE PHASE WIRES, NEUTRAL, AND GROUND SHALL BE RUN TO LAST LIGHTING FIXTURE AND CAPPED FOR FUTURE EXPANSION.
- ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE

 D SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD

 VERIFY ALL LENGTHS OF FEEDERS.

- ALL DTE FURNISHED SITE LIGHTING ON POLES IN THIS AREA SHALL BE REMOVED COMPLETE BACK TO SOURCE. IF THE LIGHT FIXTURE IS THE ONLY PURPOSE FOR THE UTILITY POLE, REMOVE THE UTILITY POLE. COORDINATE THE REMOVAL WITH DTE
- OVERHEAD SERVICE AND METER TO BE REMOVED COMPLETE. PREPARE FOR THE INSTALLATION OF A NEW UNDERGROUND SERVICE. REFER TO NEW WORK PLANS FOR FURTHER INFORMATION.



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SHEET TITLE
ELECTRICAL DEMOLITION
SITE PLAN

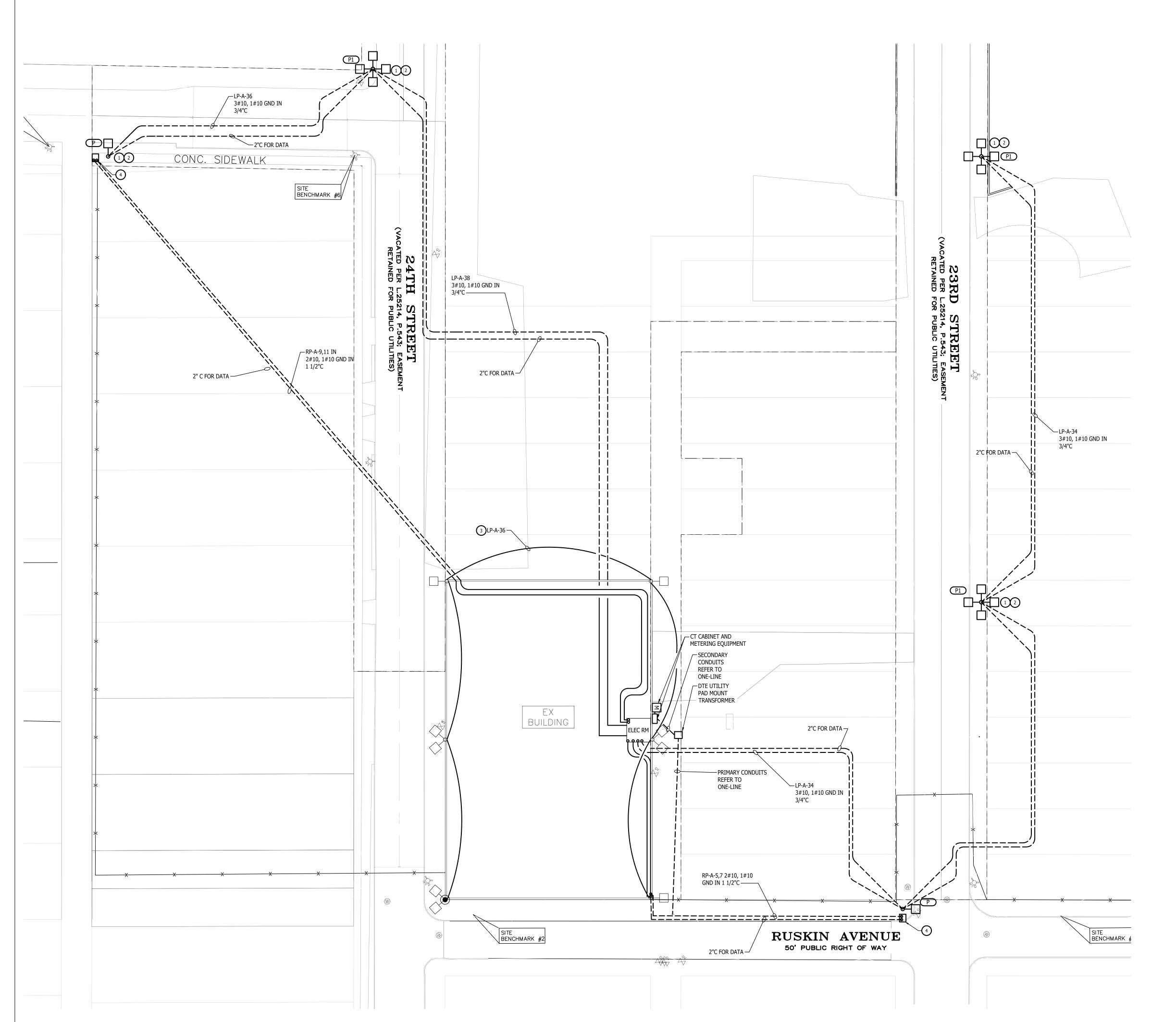
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ELECTRICAL DEMOLITION SITE PLAN

SCALE: 1"=30'-0"



SITE PLAN GENERAL NOTES

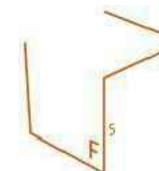
- FIELD VERIFY LOCATIONS OF EXISTING UNDERGROUND SERVICES TO COORDINATE ALL POLE BASE LOCATIONS AND UNDERGROUND SERVICES BEING INSTALLED UNDER THIS CONTRACT WITH CIVIL DRAWINGS PRIOR TO INSTALLATION OF POLE BASES AND CONDUIT. ALL THREE PHASE WIRES, NEUTRAL, AND GROUND SHALL BE RUN TO LAST
- IGHTING FIXTURE AND CAPPED FOR FUTURE EXPANSION.
- ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD
- ALL ELECTRICAL DEVICES ON THIS SHEET SHALL BE NEW UNLESS OTHERWISE

NEW WORK KEYED NOTES

VERIFY ALL LENGTHS OF FEEDERS.

1	NEW SITE LIGHTING. REFER TO E0.00 FOR FIXTURE SCHEDULE INFORMATION.
2	REFER TO DETAILS E5.00 FOR BASE HEIGHT REQUIREMENTS.
3	EXISTING SITE LIGHTING TO BE REFED FROM NEW CIRCUIT. REFER TO E600 F MORE INFORMATION.

NEW FENCE CONTROL PANEL (PROVIDED BY OWNER: LIFTMASTER INSL24UL, OR OWNER APPROVED EQUAL) TO BE FED FROM NEW PANEL AS SHOWN. PROVIDE NEW 15A 2P BREAKER FOR FENCE CONTROL PANEL AS SHOWN ON E600 PANEL SCHEDULES. VERIFY CONNECTIONS WITH MANUFACTURER PRIOR TO



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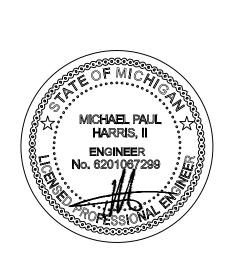
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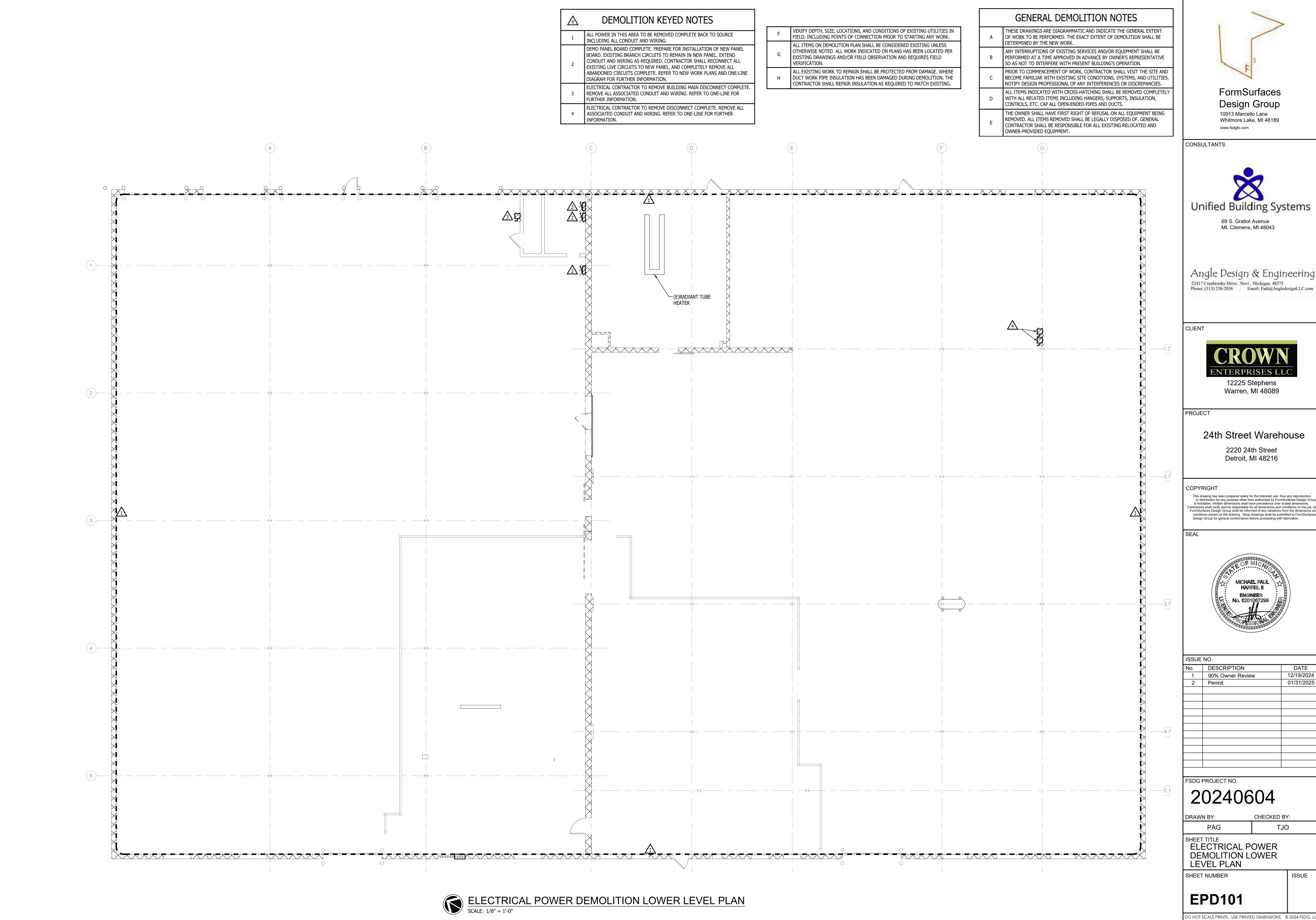
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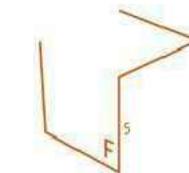
ELECTRICAL NEW WORK SITE PLAN

SHEET NUMBER

ESP100









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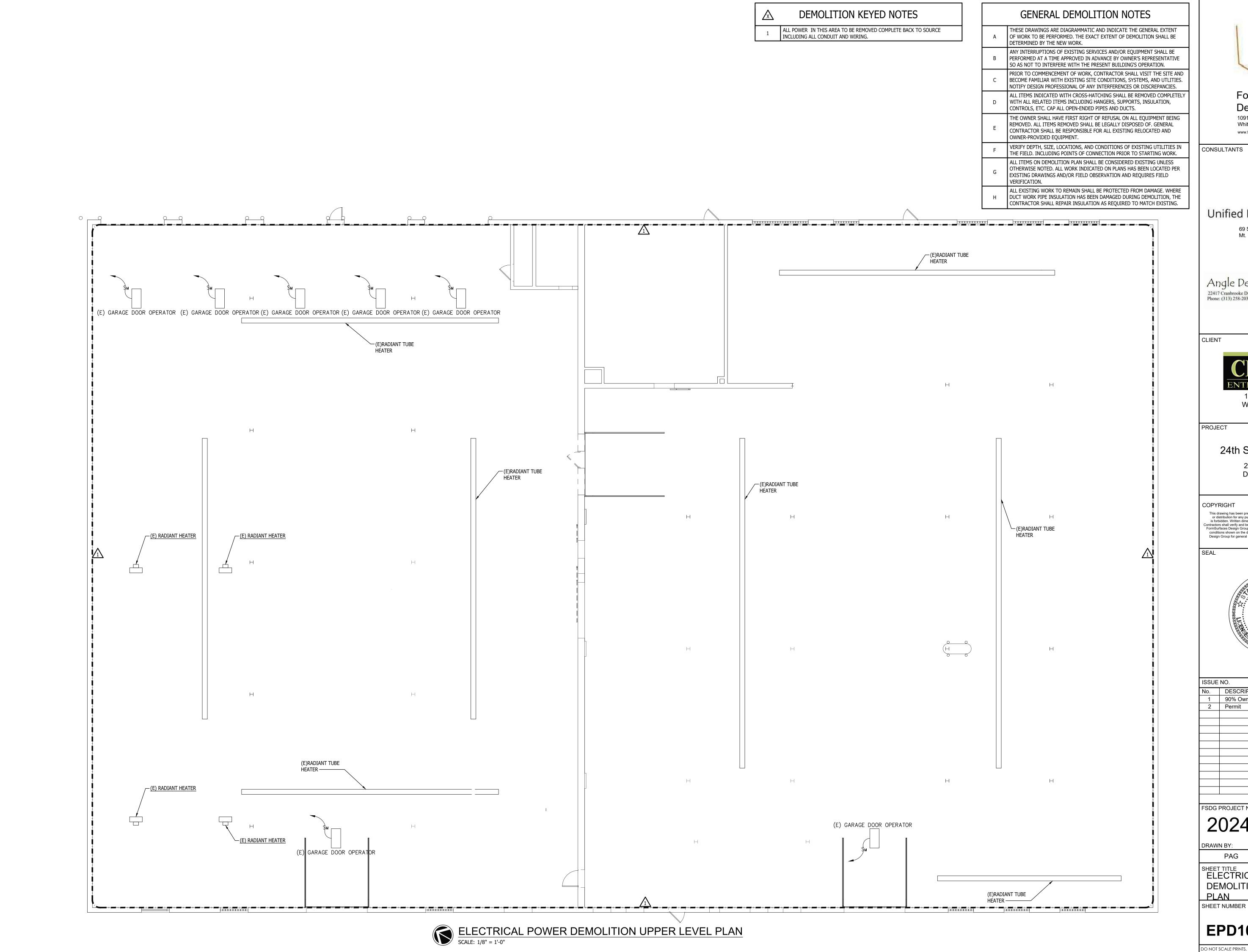
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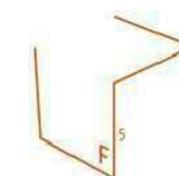
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ELECTRICAL POWER DEMOLITION LOWER

EPD101





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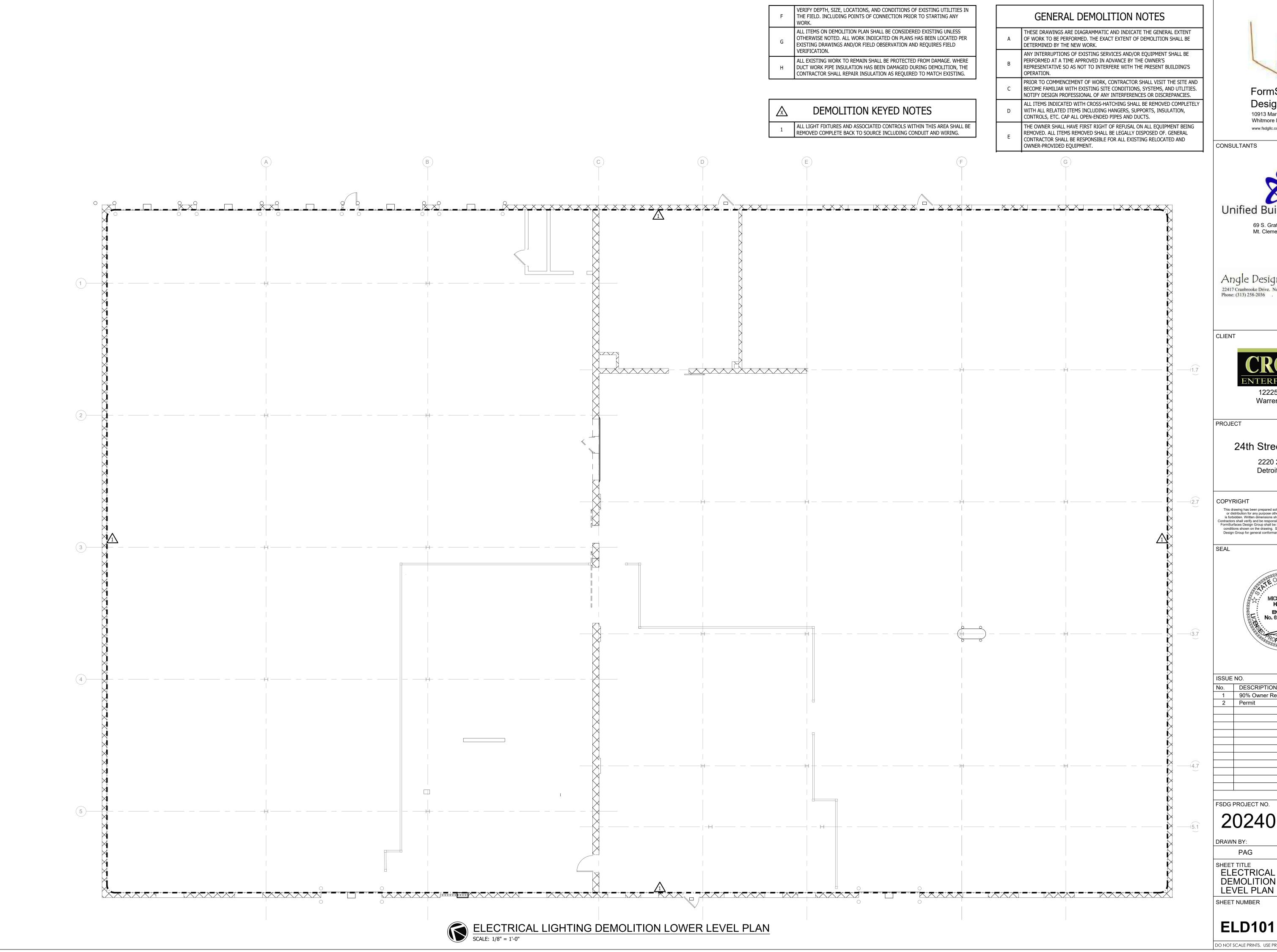
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SHEET TITLE ELECTRICAL POWER DEMOLITION UPPER LEVEL

EPD102





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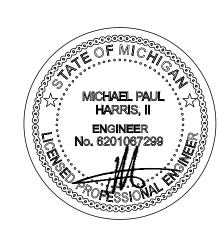
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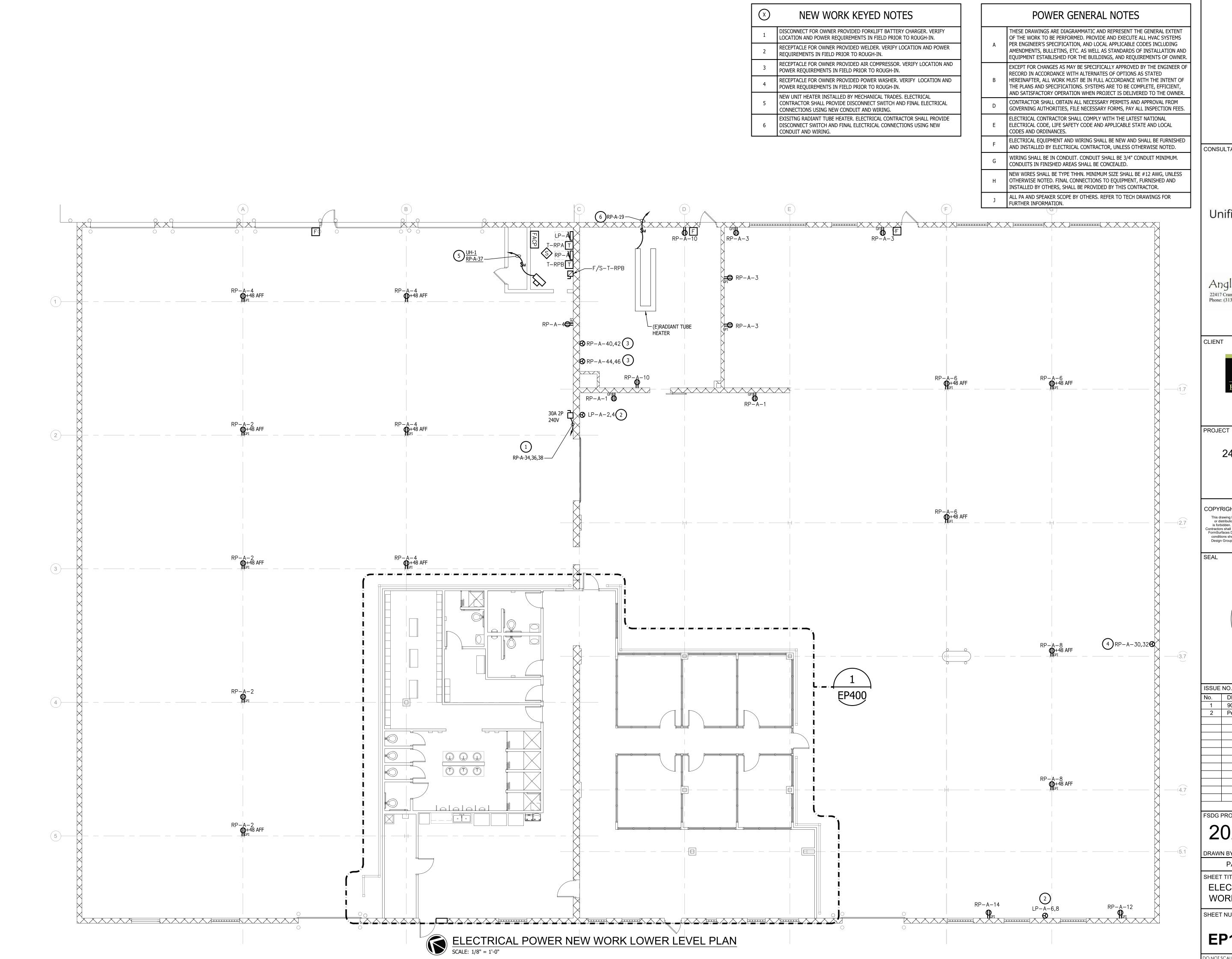
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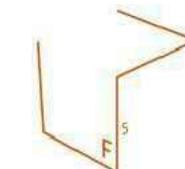
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SHEET TITLE
ELECTRICAL LIGHTING
DEMOLITION LOWER LEVEL PLAN

SHEET NUMBER

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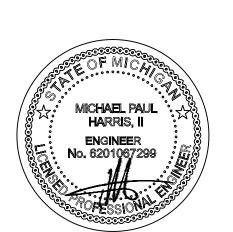
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ELECTRICAL POWER NEW WORK LOWER LEVEL PLAN

SHEET NUMBER

EP101

X	NEW WORK KEYED NOTES	
1	NEW DESTRAT FANS INSTALLED BY MECHANICAL TRADES. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.	
2	NEW EXHAUST FAN INSTALLED BY MECHANICAL TRADES. ELECTRICAL CONTRACTOR SHALL PROVIDE PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.	
3	EXISTING RADIANT HEATER. ELECTRICAL CONTRACTOR SHALL PROVIDE PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.	
4	EXISTING GARAGE DOOR OPERATOR. ELECTRICAL CONTRACTOR SHALL PROVIDE PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.	
5	EXISTING RADIANT TUBE HEATER. ELECTRICAL CONTRACTOR SHALL PROVIDE PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.	
6	CEILING MOUNTED RECEPTACLE FOR OWNER PROVIDED VEHICLE HOIST. VERIFY LOCATION AND POWER REQUIREMENTS IN THE FIELD PRIOR TO ROUGH IN.	

POWER	GENERAL	NOTE

- THESE DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE GENERAL EXTENT OF WORK TO BE PERFORMED. PROVIDE AND EXECUTE ALL HVAC SYSTEMS PER ENGINEER'S SPECIFICATION, AND LOCAL APPLICABLE CODES INCLUDING AMENDMENTS, BULLETINS, ETC. AS WELL AS STANDARDS OF INSTALLATION AND EQUIPMENT ESTABLISHED FOR THE BUILDINGS, AND REQUIREMENTS OF OWNER. EXCEPT FOR CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD IN ACCORDANCE WITH ALTERNATES OF OPTIONS AS STATED HEREINAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. SYSTEMS ARE TO BE COMPLETE, EFFICIENT, AND SATISFACTORY OPERATION WHEN PROJECT IS DELIVERED TO THE OWNER. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FROM GOVERNING AUTHORITIES, FILE NECESSARY FORMS, PAY ALL INSPECTION FEES. ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE, LIFE SAFETY CODE AND APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. ELECTRICAL EQUIPMENT AND WIRING SHALL BE NEW AND SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE 3/4" CONDUIT MINIMUM.
- CONDUITS IN FINISHED AREAS SHALL BE CONCEALED.

 NEW WIRES SHALL BE TYPE THHN. MINIMUM SIZE SHALL BE #12 AWG, UNLESS OTHERWISE NOTED. FINAL CONNECTIONS TO EQUIPMENT, FURNISHED AND INSTALLED BY OTHERS, SHALL BE PROVIDED BY THIS CONTRACTOR.



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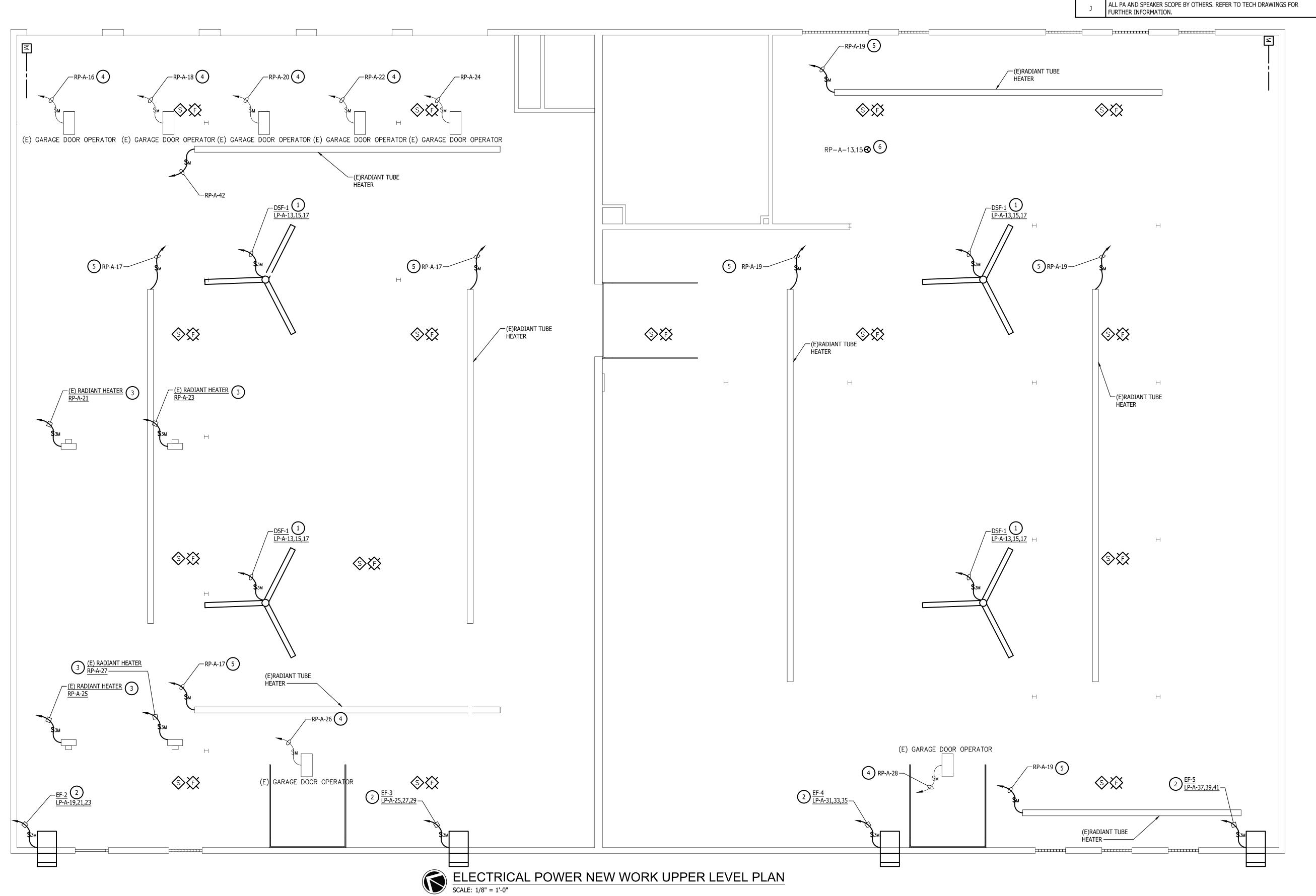
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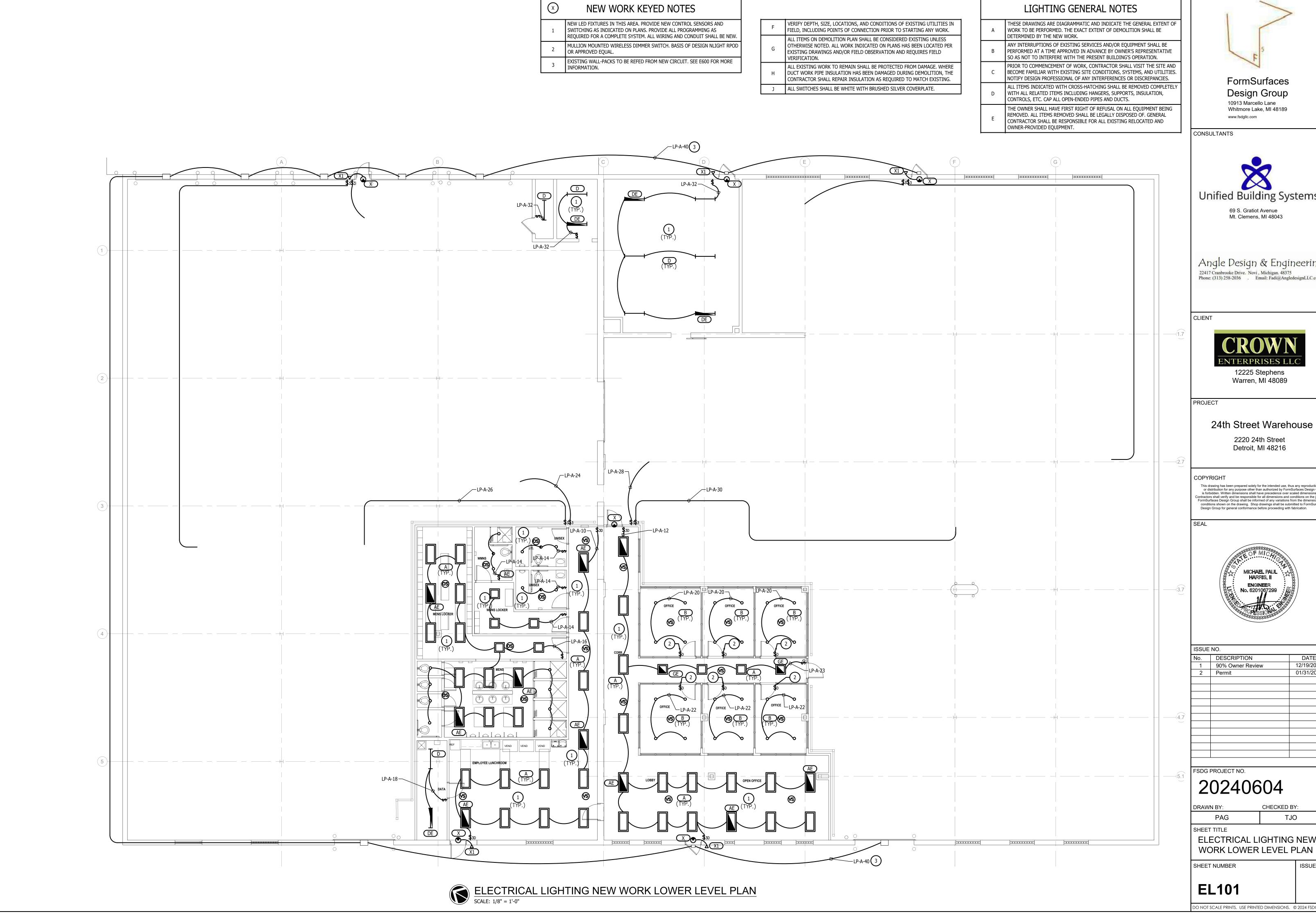
ELECTRICAL POWER NEW

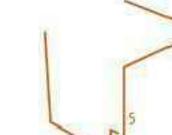
WORK UPPER LEVEL PLAN

SHEET NUMBER

EP102







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No. DESCRIPTION 12/19/2024 90% Owner Review

20240604

TJO PAG

SHEET TITLE **ELECTRICAL LIGHTING NEW**

SHEET NUMBER

EL101

NEW WORK KEYED NOTES

NEW LED FIXTURES IN THIS AREA. PROVIDE NEW CONTROL SENSORS AND SWITCHING AS INDICATED ON PLANS. PROVIDE ALL PROGRAMMING AS REQUIRED FOR A COMPLETE SYSTEM. ALL WIRING AND CONDUIT SHALL BE NEW.

Е	THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING RELOCATED AND OWNER-PROVIDED EQUIPMENT.

F	VERIFY DEPTH, SIZE, LOCATIONS, AND CONDITIONS OF EXISTING UTILITIES IN FIELD, INCLUDING POINTS OF CONNECTION PRIOR TO STARTING ANY WORK.
G	ALL ITEMS ON DEMOLITION PLAN SHALL BE CONSIDERED EXISTING UNLESS OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER EXISTING DRAWINGS AND/OR FIELD OBSERVATION AND REQUIRES FIELD VERIFICATION.
Н	ALL EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DAMAGE. WHERE DUCT WORK PIPE INSULATION HAS BEEN DAMAGED DURING DEMOLITION, THE

CONTRACTOR SHALL REPAIR INSULATION AS REQUIRED TO MATCH EXISTING.

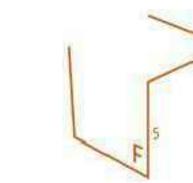
ALL SWITCHES SHALL BE WHITE WITH BRUSHED SILVER COVERPLATE.

T OF REFUSAL ON ALL EQUIPMENT BEING
L BE LEGALLY DISPOSED OF. GENERAL
FOR ALL EXISTING RELOCATED AND

А	THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE DETERMINED BY THE NEW WORK.
В	ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING'S OPERATION.
С	PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING SITE CONDITIONS, SYSTEMS, AND UTILITIES. NOTIFY DESIGN PROFESSIONAL OF ANY INTERFERENCES OR DISCREPANCIES.
6	ALL ITEMS INDICATED WITH CROSS-HATCHING SHALL BE REMOVED COMPLETELY

D WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, INSULATION, CONTROLS, ETC. CAP ALL OPEN-ENDED PIPES AND DUCTS.

LIGHTING GENERAL NOTES



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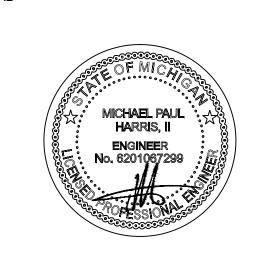
PROJECT

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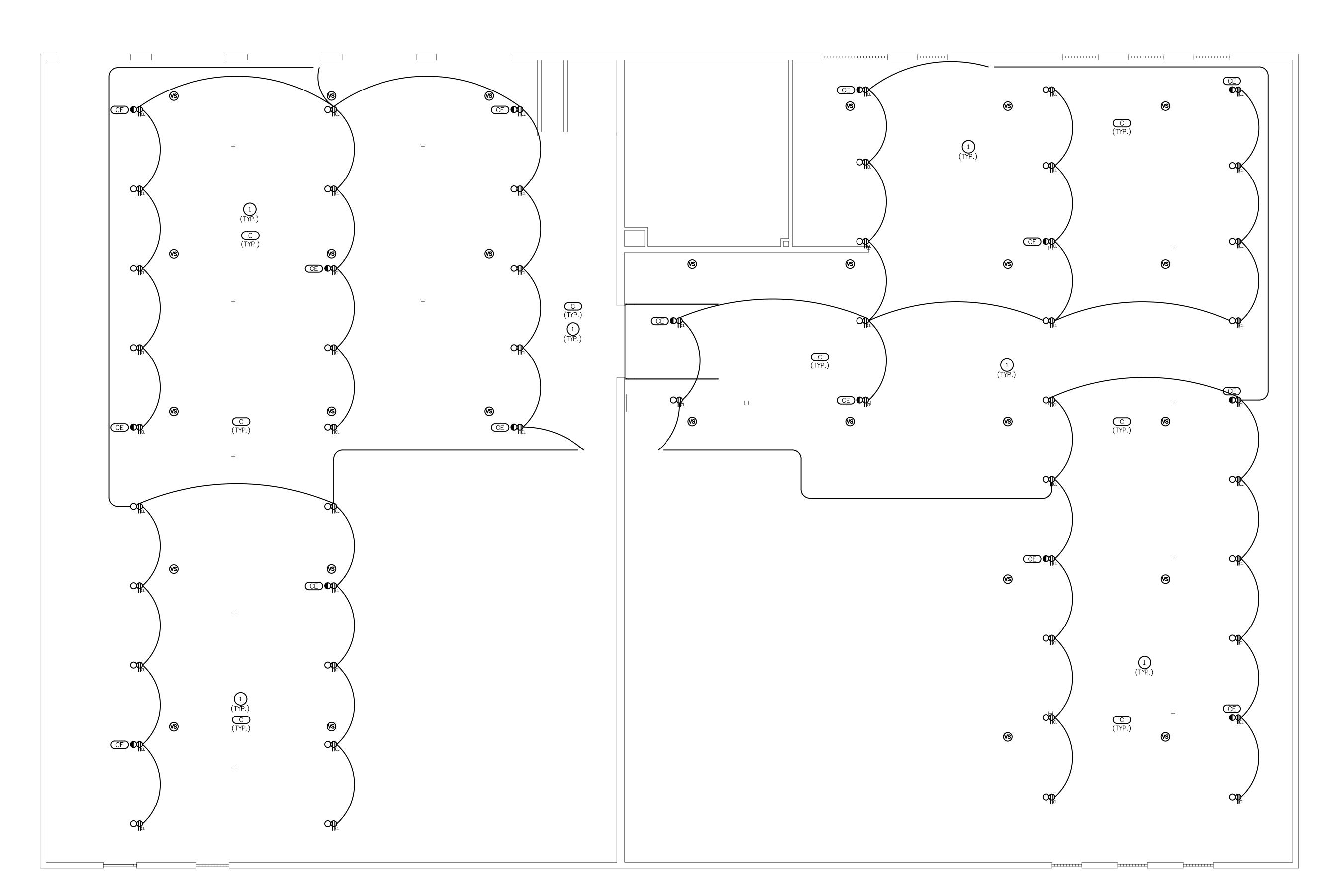
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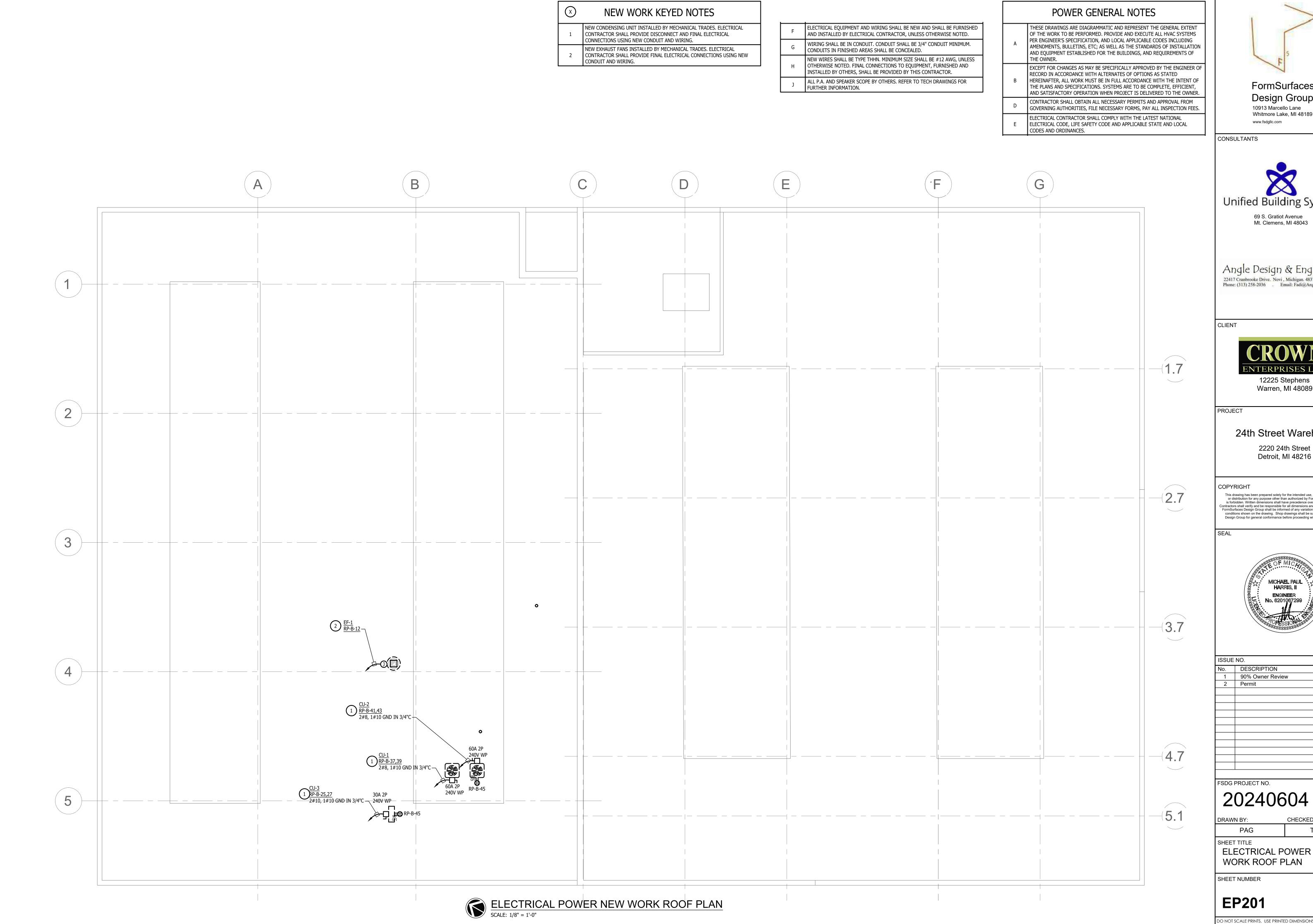
TJO

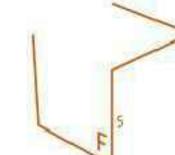
ELECTRICAL LIGHTING NEW WORK UPPER LEVEL PLAN

SHEET NUMBER

EL102







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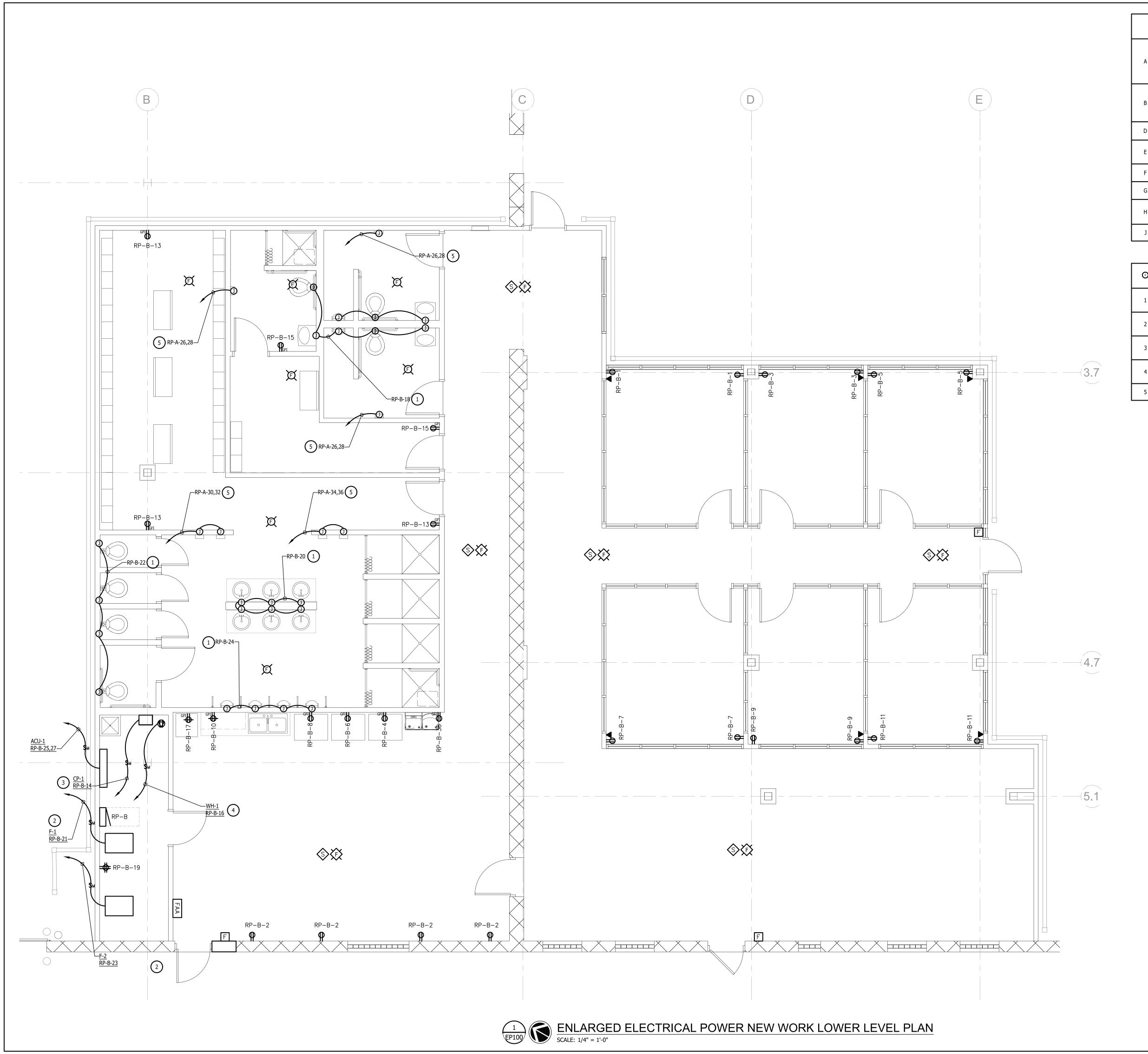


INO.	DESCRIPTION	DATE
1	90% Owner Review	12/19/2024
2	Permit	01/31/202

20240604

TJO

ELECTRICAL POWER NEW



POWER GENERAL NOTES

- THESE DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE GENERAL EXTENT OF THE WORK TO BE PERFORMED. PROVIDE AND EXECUTE ALL HVAC SYSTEMS PER ENGINEER'S SPECIFICATION, AND LOCAL APPLICABLE CODES INCLUDING AMENDMENTS, BULLETINS, ETC; AS WELL AS THE STANDARDS OF INSTALLATION AND EQUIPMENT ESTABLISHED FOR THE BUILDINGS, AND REQUIREMENTS OF THE OWNER.
- EXCEPT FOR CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD IN ACCORDANCE WITH ALTERNATES OF OPTIONS AS STATED

 HEREINAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. SYSTEMS ARE TO BE COMPLETE, EFFICIENT,
- AND SATISFACTORY OPERATION WHEN PROJECT IS DELIVERED TO THE OWNER.

 CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FROM GOVERNING AUTHORITIES, FILE NECESSARY FORMS, PAY ALL INSPECTION FEES.
- ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE, LIFE SAFETY CODE AND APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.
- F ELECTRICAL EQUIPMENT AND WIRING SHALL BE NEW AND SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.

 WIRING SHALL BE IN CONDUIT CONDUIT SHALL BE 3/4" CONDUIT MINIMUM

OTHERWISE NOTED. FINAL CONNECTIONS TO EQUIPMENT, FURNISHED AND

G WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE 3/4" CONDUIT MINIMUM. CONDUITS IN FINISHED AREAS SHALL BE CONCEALED.

NEW WIRES SHALL BE TYPE THHN. MINIMUM SIZE SHALL BE #12 AWG, UNLESS

INSTALLED BY OTHERS, SHALL BE PROVIDED BY THIS CONTRACTOR.

ALL P.A. AND SPEAKER SCOPE BY OTHERS. REFER TO TECH DRAWINGS FOR FURTHER INFORMATION.

NEW WORK KEYED NOTES

- PROVIDE COMPLETE CONNECTION TO AUTO VALVE. ONE CONTROLLER/
 TRANSFORMER PER TOILET ROOM. TRANSFORMER AND SENSORS ARE PROVIDED BY PLUMBING CONTRACTOR. COORDINATE WITH PLUMBING CONTRACTOR.

 NEW FURNACE INSTALLED BY MECHANICAL TRADES. ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.

 NEW CIRCULATING WATER PUMP BY MECHANICAL TRADES. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.
- CONNECTIONS USING NEW CONDUIT AND WIRING.

 NEW WATER HEATER BY MECHANICAL TRADES. ELECTRICAL CONTRACTOR SHALL
 PROVIDE DISCONNECT SWITCH AND FINAL ELECTRICAL CONNECTIONS USING
 NEW CONDUIT AND WIRING.
- HAND DRYER BY OTHERS. ELECTRICAL CONTRACTOR TO PROVIDE ALL FINAL ELECTRICAL CONNECTIONS USING NEW CONDUIT AND WIRING.

F

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FSDG PROJECT NO.

20240604

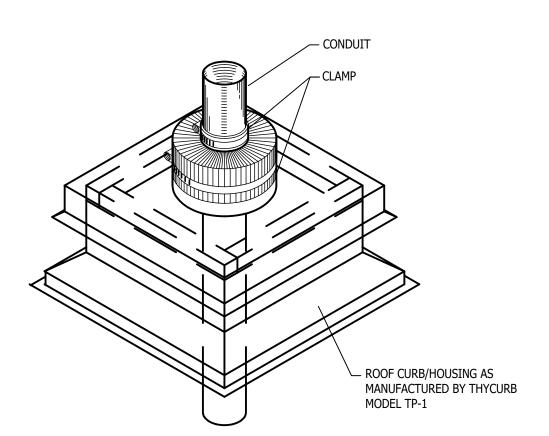
DRAWN BY:

TJO

SHEET TITLE
ENLARGED ELECTRICAL
POWER NEW WORK LOWER
LEVEL PLAN

SHEET NUMBER

EP401



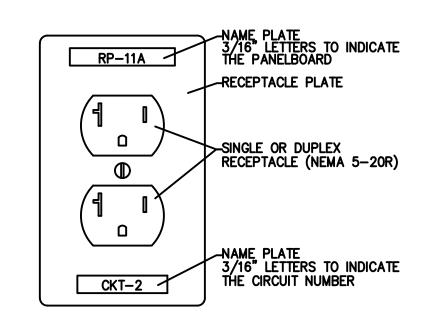
CONDUIT PENETRATION AT ROOF DETAIL

NOT TO SCALE

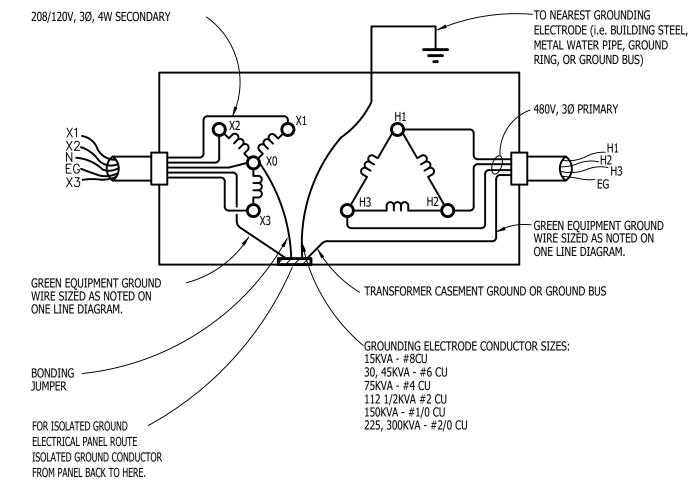
NEW CEILING TYPE COMBINATION

SPEAKER/STROBE

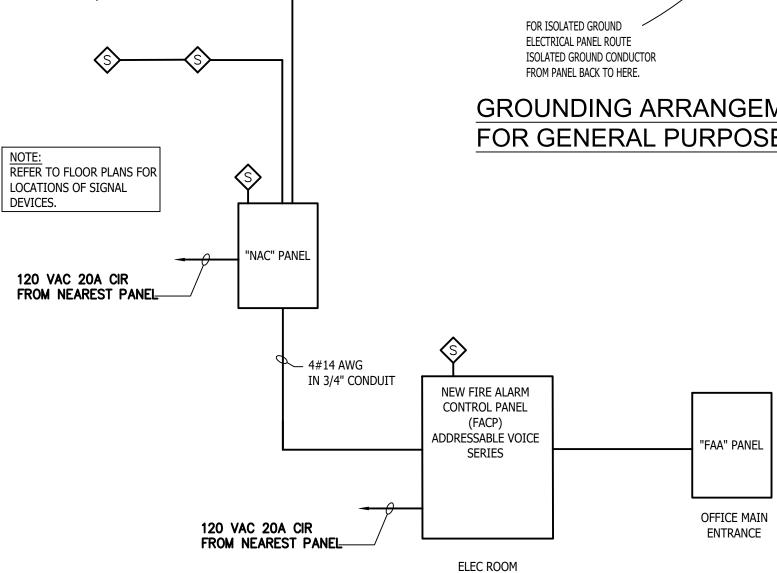
COORDINATE WITH MECHANICAL TRADES. ROOF FLASHING SHALL BE PER THE OWNERS SPECIFICATIONS.



DETAIL OF BRANCH CIRCUIT NUMBER ON RECEPTACLE PLATE NO SCALE



GROUNDING ARRANGEMENT FOR GENERAL PURPOSE (NON-SHIELDED) TRANSFORMERS



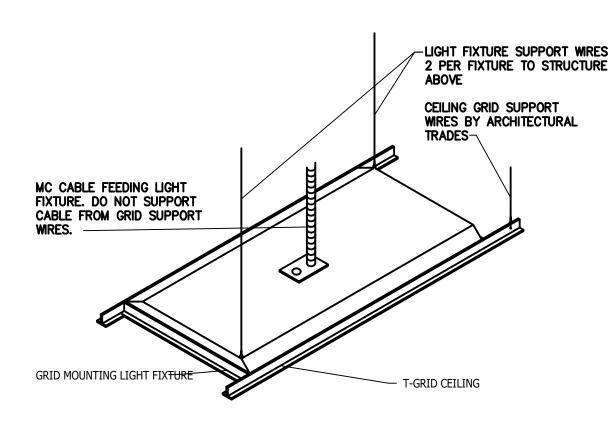
NOTES:

- 1. FOR FIRE ALARM EQUIPMENT SPECIFICATION AND ADDITIONAL REQUIREMENTS, SEE SPECIFICATIONS.
- 2. ALL DUCT DETECTORS SHALL BE WIRED TO ACTIVATE ALARM SYSTEM AND SHUT DOWN FAN. PROVIDE INDICATOR LIGHT WHERE SMOKE DETECTORS ARE INSTALLED IN CONCEALED LOCATIONS OR ARE MORE THAN 10FT. ABOVE THE FINISHED FLOOR.
- 3. CANDELA RATING ARE INTENDED TO BE 15cd UNLESS NOTED OTHERWISE. ALL AUDIO AND VISUAL RATINGS SHALL MEET OR EXCEED NFPA REQUIREMENTS. MINOR DEVIATIONS SUCH AS STROBE RATING, MISSING OF AUDIO/VISUAL UNITS, SMOKE DETECTORS UNITS, PULL STATION, ETC. (MAX OF 10) SHALL BE INCLUDED AS PART OF THIS BID.
- 4. PROVIDE REMOTE POWER SUPPLIES AS REQUIRED FOR NOTIFICATION APPLIANCE CIRCUITS, NOT TO EXCEED 80% OF CAPACITY.
- 5. PROVIDE SMOKE DETECTOR ABOVE EACH REMOTE POWER SUPPLY PANEL.
- 6. PROVIDE BATTERY, CURRENT LOAD AND VOLTAGE DROP CALCULATIONS PER SPECIFICATIONS.
- 7. SEAL AROUND ALL PIPES & CONDUITS IN MASONRY AND DRYWALL WALLS.
- 8. ALL FIRE ALARM WIRING SHALL BE MINIMUM #14 AWG AND IN CONDUIT MIN 3/4" IN EXPOSED CEILING AREAS, CABLE IS ACCEPTABLE ABOVE LAY-IN
- CÉILINGS IN J-HOOKS.

 9. FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHARGES

FIRE ALARM RISER NO SCALE

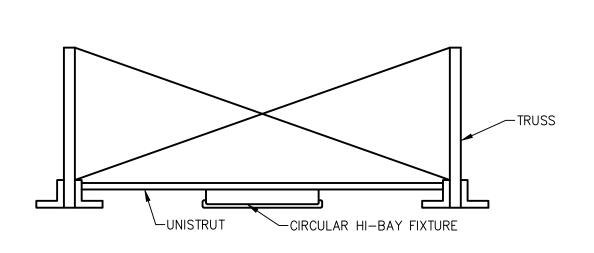
- INVOLVED IN OBTAINING APPROVAL AND CERTIFICATION FROM STATE ELECTRICAL INSPECTOR FOR A COMPLETE SYSTEM. CERTIFIED CONTRACTOR TO PAY ALL FEES REQUIRED.
- 10. THE ELEVATION DIAGRAM IS FOR REFERENCE PURPOSES. EXACT QUANTITIES OF DEVICES AND LOCATIONS SHALL COMPLY WITH NFPA GUIDELINES AND MEET APPROVAL OF THE STATE ELECTRICAL INSPECTOR. FIRE ALARM CONTRACTOR SHALL HAVE SHOP DRAWINGS APPROVED BY THE STATE ELECTRICAL INSPECTOR PRIOR TO COMMENCEMENT OF WORK.
- 11. FOR FIRE ALARM SYMBOL LEGEND SEE DRAWING E100.
- 12. PROVIDE COVER WITH SIREN FEATURE TO ALL FIRE ALARM MANUAL PULL STATION
- 13. FIRE ALARM VENDOR TO PROVIDE INSTALLATION DRAWINGS AS PART OF
- 14. THE FIRE ALARM SYSTEM SHOWN ON THE DRAWINGS AND SPECIFICATIONS ARE A PERFORMANCE SPECIFICATION SYSTEM WITH DEVICE LOCATIONS. FIRE ALARM VENDOR AND CONTRACTOR MUST PROVIDE A COMPLETE SYSTEM PER CODE.
- 15. ALL STROBES EXISTING AND NEW SHALL BE SYNCHRONIZED.



T-GRID FIXTURE MOUNTING DETAIL NO SCALE

ELECTRICAL FIXTURES

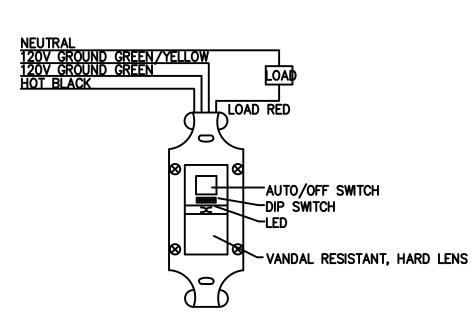
- 1. PENDANT MOUNTED FIXTURES SHALL BE DIRECTLY SUPPORTED FROM THE STRUCTURE ABOVE USING A 9 GAUGE WIRE OR AN APPROVED ALTERNATE SUPPORT WITHOUT USING THE CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT.
- 2. TANDEM FIXTURES MAY UTILIZE COMMON WIRES.



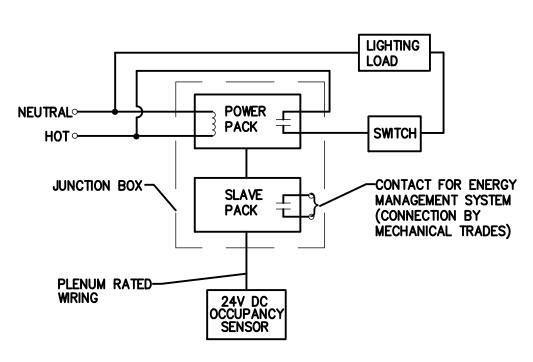
NOTES:

1. FIXTURE SHALL BE MOUNTED SO IT IS EVEN WITH THE BOTTOM OF THE TRUSS.

HI-BAY FIXTURE MOUNTING DETAIL



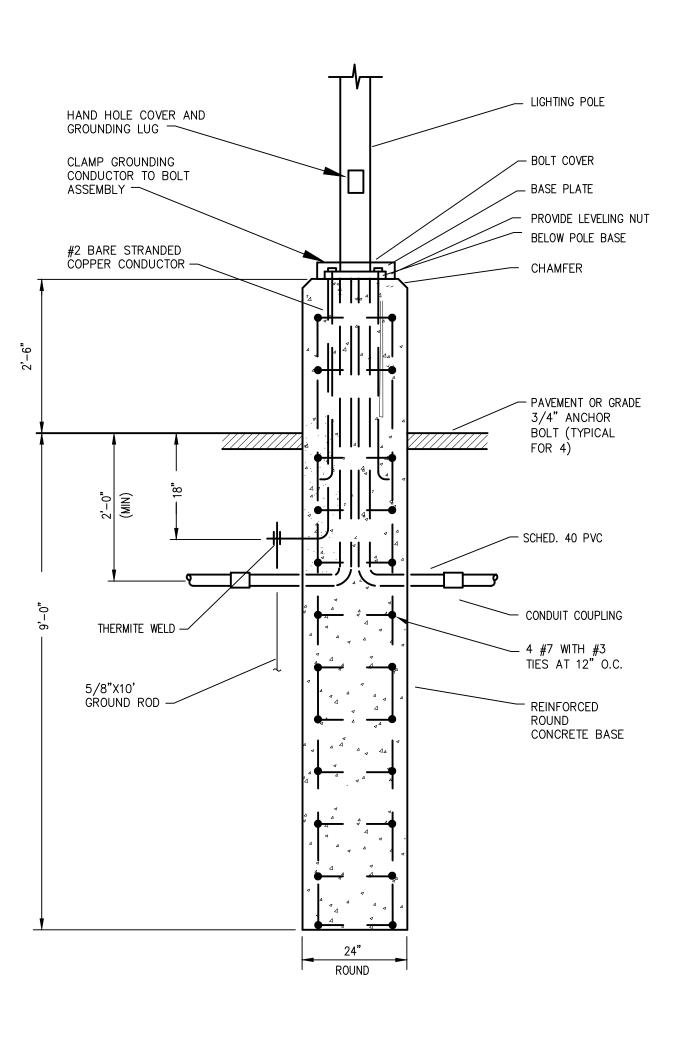
OFFICE VACANCY SENSOR SCHEMATIC NO SCALE



CEILING MOUNTED OCCUPANCY SENSOR DETAIL

NO SCALE

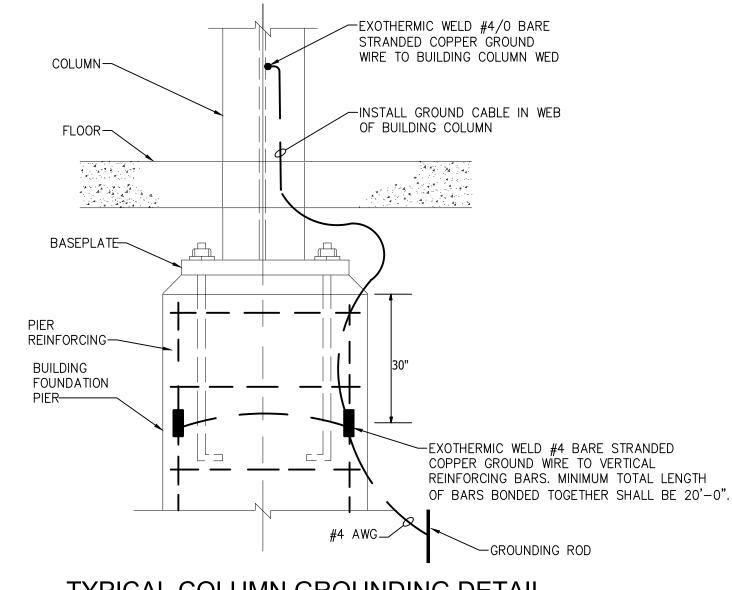
ROOT SCALE ROOT SENSOR DETAIL



APPLY TO FIXTURE TYPE: P1 AND P3.

BOTTOM OF FIXTURE SHALL BE MOUNTED AT 20FT AFF MODIFY POLE HEIGHT AS REQUIRED.

LIGHTING HIGH POLE BASE DETAIL NO SCALE



TYPICAL COLUMN GROUNDING DETAIL

NO SCALE

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SDG PROJECT NO.

20240604

PAG CHECKED BY:

ELECTRICAL DETAILS

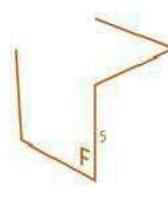
SHEET NUMBER

E501

Panel Designa	tion: LP-A					Main: MCB P-P Voltage:							480		
Panel Location: MAIN ELEC RM							Bussing: 400A P-N Volto						oltage:	277	
Fed From: MDP							_		AND	ARD	Phase: 3				
	Size: SEE ON	ELINEDI	A C D A A A						JRFAC						
		E LINE DIA	AGRAM								Wire:				
NEW SERVICE ENTRANCE RATED PA							utra				Min SC Interrupting Rating:				42,000
Remarks	Light	Recept Load	Cont Load	nonC Load	OC Prot	СКТ	Ø Ø	Ø Ø	СКТ	OC Prot	nonC Load	Load	Recept Load	Light Load	Remarks
	0	2160	8892	2580		_	X		2	80	15870				MILLER A.C. ARC WELDER
T-RPA	0	1440	6600	2580	100	3)	(4	00	15870				MILLER A.C. ARC WELDER
	0	1220	6561	2352		5		X	6	80	15870				MILLER A.C. ARC WELDER
	0	2160	8892	2580		7	Х		8	00	15870				MILLER A.C. ARC WELDER
T-RPB	0	1440	6600	2580	100	9)	(10	20				545	LITES- WEST OFFICE CORRIDOR
	0	1220	6561	2352		11		X	12	20				622	LITES- EAST OFFICE CORRIDOR
				1024		13	X		14	20				140	LITES- BATHROOMS
DESTRAT FANS				1024	20	15)	(16	20				436	LITES- MENS LOCKER ROOM
				1024		17		X	18	20				78	LITES- DATA ROOM
				544		19	X		20	20				142	LITES - OFFICES
EF-2				544	15	21)	(22	20				142	LITES- OFFICES
				544		23		X	24	20				3200	LITES- WEST GARAGE
				336		25	X		26	20					LITES- WEST GARAGE
EF-3				336	15	27)	(28	20					LITES- EAST GARAGE
				336		29		X	30	20					LITES- EAST GARAGE
				544		31	X		32	20					LITES, ELEC RM & I.T. RM
EF-4				544	15	33)	<u> </u>	34	20					LITES- PARKING LOT & SOUTH GATE
				544		35		X	36	20					LITES- PARKING LOT & NORTH GATE
				336		37	x	+	38	20					LITES- WAREHOUSE SITE LITES
EF-5				336	15	39)	(40	20					LITES-WALLPACKS
				336		41	H	X		20				1070	SPARE
						43	X	-	44	20					SPARE
SP ARE					20	45)	<u> </u>	46	20					SPARE
017,412						47	H	X	48						SPACE
SPACE						49	X	+	50						SPACE
SPACE						51)	<u> </u>	52						SPACE
SPACE						53	 	X							SPACE
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			500			/ 1		X	12						SPACE
		Connect	led Load				Dem	nand	l			Demand	Load]
Load Description	ØA	ØB	ØС	Total				tor			ØA	ØB	ØС	Total	
Lighting or Continous Load (Volt-Amps)	4652	7032	7200	18885				00			4652	7032	7200	18885	
180VA Receptacle Load (Volt-Amps)	4670	2880	2440	9990		1.0			kVA)		4670	2880	2440	9990	Receptacle Demand Factor per Article 220.44
(Amount over 10kVA 0			1.00 (First 10kVA) 0.50 (> 10kVA)				0	0	0	0	the National Electrical Code.		
Continuous Load (Volt-Amps)	18284	13699	13622	45605			-	00			18284	13699	13622	45605	
Non-Continuous Load (Volt-Amps)	39684	23814	23358	86856							35716	21433	21022	78170	
		47.43	46.62	161.34	0.90		63.32	45.04	44.28	152.65					
Total Load (kVA)	6/.79	4/ 4.)			125% of Light/Cont and Recept (<10kVA) load plus other load										
Total Load (kVA) Total Ampacity (Amps)	67.29 242.8	171.1	168.2	194.1							228.5	162.5	159.8	183.6	•

Panel Designation: RP-A							Main: 200A MCB						P-P Voltage: 208			
Panel Location: MAIN ELECTRICAL ROOM							ssing	225	5A			P-N Voltage: 120				
	Fed From: T-RPA				G	rounc	d Bus	STA	AND	ARD				Phase	: 3	
Fe	eder Size: SEE ON	IE LINE DI	AGRAM			Mour	nting	: SUF	RFAC	CE				Wire	: 4	
	EW PANEL					Ne	utral	: 100	0%			Min SC Interrupting Rating: 22,000				
R emarks	Light	Recept		nonC	ОС	СКТ	ØØ	Ø	CKT	ОС	nonC	Cont	Recept Load	Light	Remarks	
C- VEHICLE REPAIR AREA	Load	Load	Load	Load	Prot	1	A B	С		PIOI	Load	Load	720	Load	REC-V&ESTORAGE	
EC- WORK BENCHES		360 720			20	3	^ x	+	4	20			900		REC- V & E STORAGE	
C- WORK BLINCHES		720		187	20	5	- ^	X	6	20			540		REC- PALLET RACKING	
OTORIZED GATE SOUTH				187	15	7	Y	^	8	20			360		REC- WASH BAY AREA	
				187		9	^ x	+	10	20			360		REC- TOOL ROOM	
OTORIZED GATE NORTH				187	15	11	- ^	X	12	20			180		REC- FAB/WELDING AREA	
			-	1560	(g	13	X		14	20	-		180		REC- STEEL RACKS	
HICLE HOIST	<u> </u>		-	1560	20	15	^ x		16	20	520		100		GARAGE DOOR OPENER	
DIANT TUBE HEATER WEST			900	1000	20	17	+	X	18	20	520				GARAGE DOOR OPENER	
ADIANT TUBE HEATER EAST			900		20	19	X		20	20	520				GARAGE DOOR OPENER	
RADIANT HEATER			768		20	21	X	+	22	20	520				GARAGE DOOR OPENER	
RADIANT HEATER			768		20	23		X	24	20	520				GARAGE DOOR OPENER	
RADIANT HEATER			768		20	25	X		26	20	520				GARAGE DOOR OPENER	
) RADIANT HEATER			768		20	27	X		28	20	520				GARAGE DOOR OPENER	
						29		X	30		2600				Co. C. (1981) Agrana San Paga Calabida Calabi Calab	
PARE					20	31	X		32	30	2600				POWER WASHER	
) ADE					00	33	X		34		2288					
PARE					20	35		X	36	30	2288				FORKLIFT CHARGER	
H-1				768	20	37	X		38		2288				1	
PACE						39	X		40	//	2912				ALD COAMDDESCOD	
PACE						41	\top	X	42	60	2912				AIR COMPRESSOR	
PACE						43	X	\Box	44	/0	2912				AIR COMPRESSOR	
PACE						45	X		46	60	2912				AIR COMPRESSOR	
PACE						47		X	48	20					SPARE	
PACE						49	X		50	20					SPARE	
PACE						51	X		52						SPACE	
PACE						53		X	54						SPACE	
		Connoc	ted Load	,			Dem	an d			· I	Demand	Lload		1	
oad Description	ØA	ØB	ØC ØC	Total			Fac				ØA	ØB	ØC ØC	Total	-	
ghting or Continous Load (Volt-Amps)	0	0	0	0			1.0				0	0	0	0	=	
30VA Receptacle Load (Volt-Amps)	1620	1980	720	4320		1.00) (First		VA)		1620	1980	720	4320	Receptacle Demand Factor per Article 220.44 of the	
		mount ove		0					-		0	0	0	0	National Electrical Code.	
ontinuous Load (Volt-Amps)	1668	1536	1668	4872	0.50 (> 10kVA) 1.00		1668	1536	1668	4872	Transmar Electrical Code.					
on-Continuous Load (Volt-Amps)	11355	11419	9214	31989			0.9				10220	10277	8293	28790	†	
tal Load (kVA)	14.64	14.94	11.60	41.18	125%	of Lig			nd Re	ecept	13.51	13.79	10.68	37.98	=	
tal Ampacity (Amps)	121.9	124.4	96.6	114.3	L	(VA) l					112.5	114.9	88.9	105.4	1	
inimum Feeder Sizing (Amps)	125.3	128.5	98.1		<						115.8	119.0	90.4	108.4	+	

Panel D	esignation: RP-B					Mo	ain: 1	00A N	NCB			P-P V	/oltage:	208
Pan	el Location: DATA R	MOO				Bussi	ng: 1	00A				P-N V	/oltage:	120
	Fed From: T-RPB				G	round E	Bus: S	TAND	ARD				Phase:	3
F	eeder Size: SEE ON	E LINE DIA	AGRAM			Mounti	ng: S	URFA	CE				Wire:	4
	NEW PANEL					Neut				M	in SC In	terrupting	Ratina:	22,000
	Light	Recept	Cont	nonC	ОС				ОС	nonC		Recept	_	
Remarks	Load	Load	Load	Load	Prot	CKT	B	о скт	Prot	Load	Load	Load	Load	Remarks
EC- OFFICE	ĺ	360			20	1 X		2	20			720		REC- EMPLOYEE LUNCHROOM
EC- OFFICE		360			20	3	X	4	20		540			REC-LUNCHROOM VENDING
EC- OFFICE		360			20	5		X 6	20		540			REC-LUNCHROOM VENDING
EC- OFFICE		360			20	7 X		8	20		540			REC-LUNCHROOM VENDING
EC- OFFICE		360			20	9	X	10	20			180		rec - lunchroom sink
EC- OFFICE		360			20	11	1	X 12	20		1725			EF-1
EC- MENS LOCKER ROOM		360			20	13 X		14	20		696			CP-1
EC- WOMENS LOCKER ROOM		180			20	15	X	16	15		100	1		WH-1
EC- EMPLOYEE FRIDGE		500			20	17		X 18	20	240				women's autolav
EC- DATA QUAD		360			20	19 X		20	20	240				men's autolav
- 1			1800		20	21	X	22	20	240		1		men's autolav
- 2			1800		20	23		X 24	20	240				men's autolav
CU-3			1664		20	25 X		26	20	1404				WOMEN'S HAND DRYERS
			1664		30	27	X	28	20	1404				WOMENS HAND DRIERS
PARE					20	29		X 30	200	936				men's hand dryers
					20	31 X		32	20	936				IMENS HAND DRIEKS
PARE					20	33	X	34	200	936				A A FA HC LLAND DOVEDC
PARE					20	35	1 7	X 36	20	936				MEN'S HAND DRYERS
CU-1			2496		40	37 X		38	20		1000			EWC-1
JU-1			2496		40	39	X	40	20					SPARE
			2496		40	41		X 42	20					SPARE
CU-2			2496		40	43 X		44						SPACE
ERVICE RECEPTACLE - ROOF		360			20	45	X	46				†		SPACE
PARE					20	47		X 48				1		SPACE
PACE						49 X		50						SPACE
PACE						51	X	52	1					SPACE
PACE						53		X 54				<u> </u>		SPACE
	I								4			1		
		Connec					eman				Demand			
Load Description	ØA	ØB	ØC	Total			acto			ØA	ØB	ØC	Total	
ighting or Continous Load (Volt-Amps)	0	0	0	0			1.00			0	0	0	0	
80VA Receptacle Load (Volt-Amps)	2160	1440	1220	4820		1.00 (2160	1440	1220	4820	Receptacle Demand Factor per Article 220.44 of the
	Am	ount ove		0		0.50		kVA)		0	0	0	0	National Electrical Code.
Continuous Load (Volt-Amps)	8892	6600	6561	22053			1.00			8892	6600	6561	22053	
Ion-Continuous Load (Volt-Amps)	2580	2580	2352	7512			0.90			2322	2322	2117	6761	
otal Load (kVA)	13.63	10.62	10.13	34.38		of Light				13.37	10.36	9.90	33.63	
otal Ampacity (Amps)	113.5	88.4	84.4	95.4	(<10k	(AV) loc	ıd plu	s othe	r load	111.4	86.3	82.4	93.4	
Minimum Feeder Sizing (Amps)	118.0	91.4	86.9	98.8	< p					115.9	89.3	85.0	96.7	- 1



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CLIENT



12225 Stephens Warren, MI 48089

PROJECT

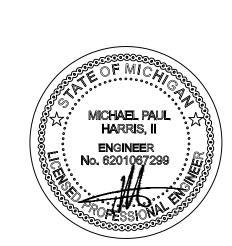
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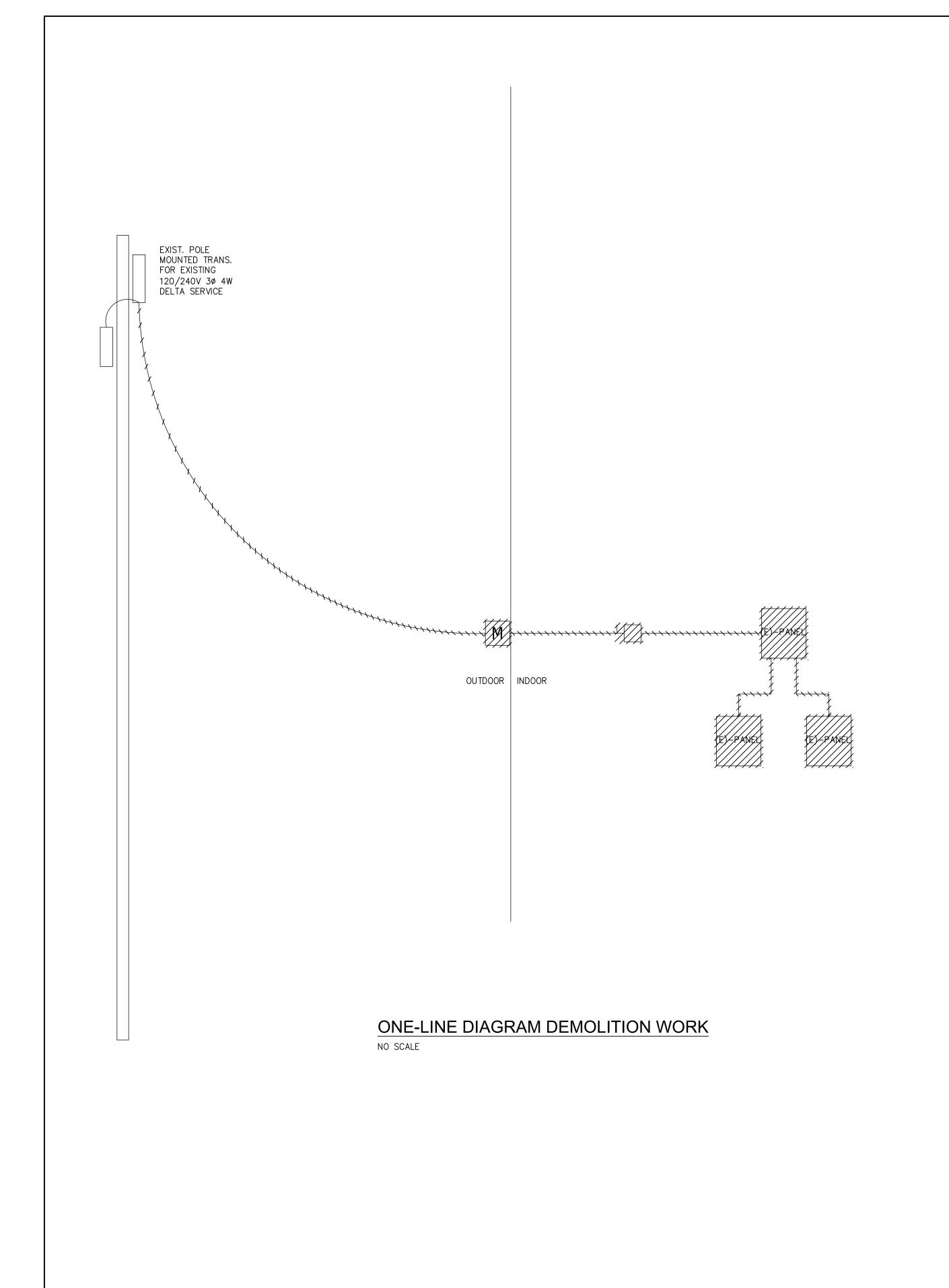
20240604

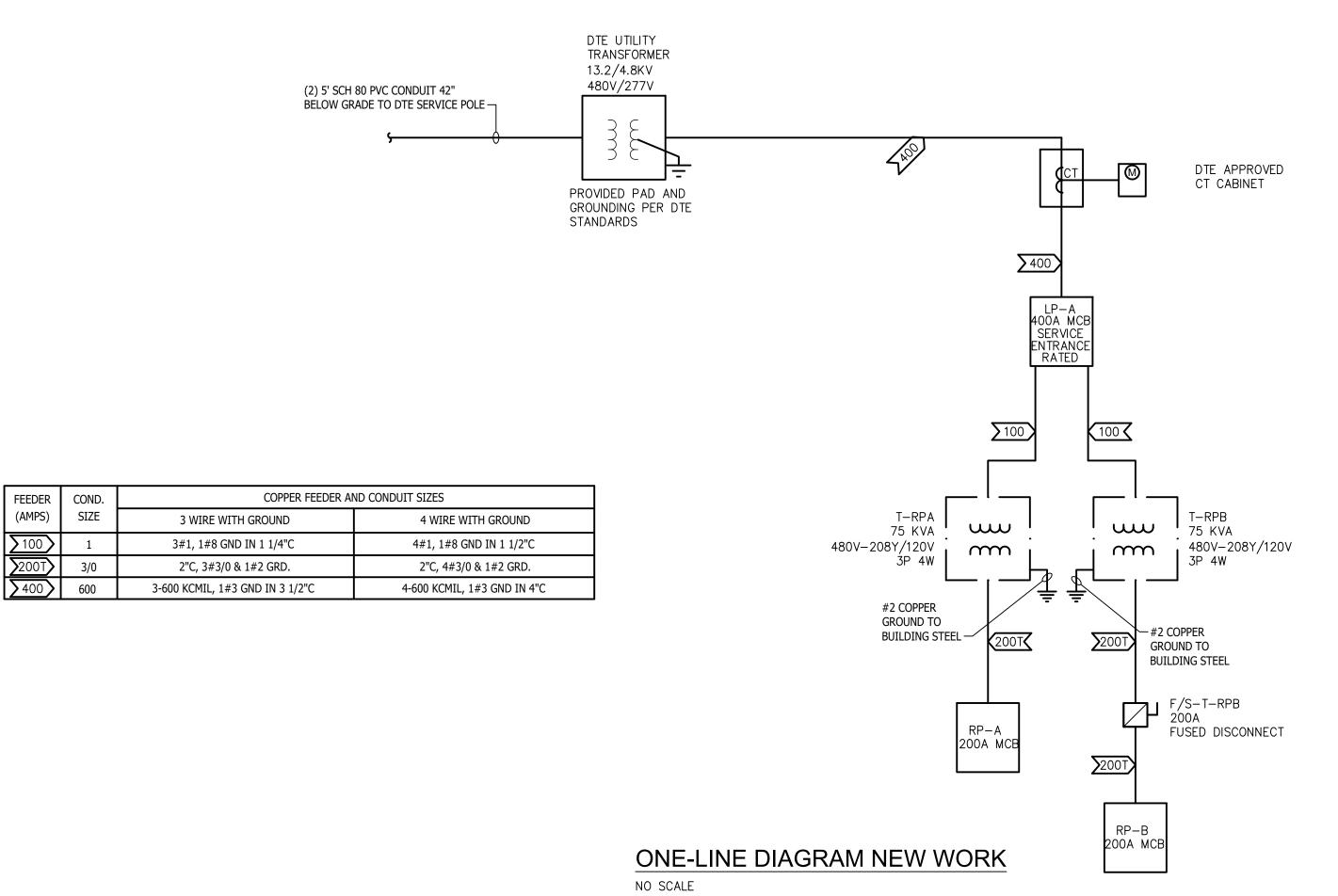
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SHEET TITLE

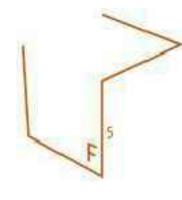
ELECTRICAL PANEL SCHEDULES

SHEET NUMBER

E601







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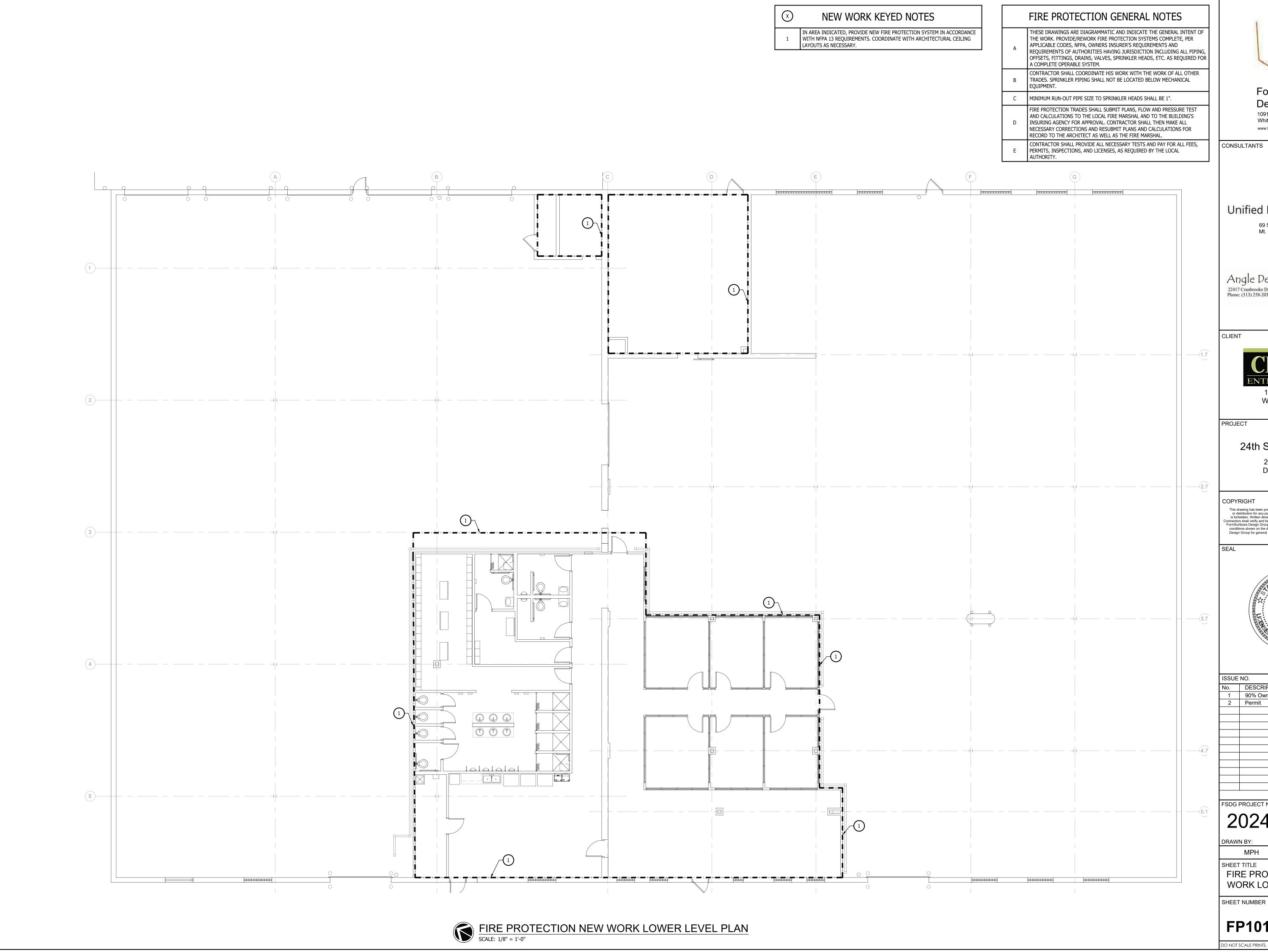
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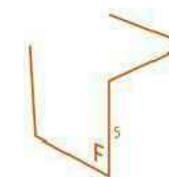
SHEET TITLE

ONE-LINE RISER DIAGRAMS

E701

SHEET NUMBER





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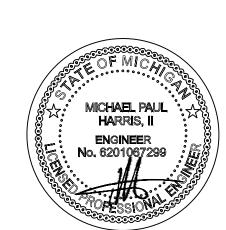
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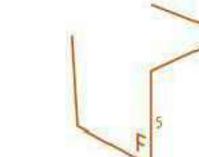
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FIRE PROTECTION NEW WORK LOWER LEVEL PLAN

FP101

NEW WORK KEYED NOTES FIRE PROTECTION GENERAL NOTES THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF IN AREA INDICATED, PROVIDE NEW FIRE PROTECTION SYSTEM IN ACCORDANCE WITH NFPA 13 REQUIREMENTS. COORDINATE WITH ARCHITECTURAL CEILING THE WORK. PROVIDE/REWORK FIRE PROTECTION SYSTEMS COMPLETE, PER LAYOUTS AS NECESSARY. APPLICABLE CODES, NFPA, OWNERS INSURER'S REQUIREMENTS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, VALVES, SPRINKLER HEADS, ETC. AS REQUIRED FOR A COMPLETE OPERABLE SYSTEM. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER TRADES. SPRINKLER PIPING SHALL NOT BE LOCATED BELOW MECHANICAL MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1". FIRE PROTECTION TRADES SHALL SUBMIT PLANS, FLOW AND PRESSURE TEST AND CALCULATIONS TO THE LOCAL FIRE MARSHAL AND TO THE BUILDING'S INSURING AGENCY FOR APPROVAL. CONTRACTOR SHALL THEN MAKE ALL NECESSARY CORRECTIONS AND RESUBMIT PLANS AND CALCULATIONS FOR RECORD TO THE ARCHITECT AS WELL AS THE FIRE MARSHAL. CONTRACTOR SHALL PROVIDE ALL NECESSARY TESTS AND PAY FOR ALL FEES, PERMITS, INSPECTIONS, AND LICENSES, AS REQUIRED BY THE LOCAL AUTHORÍTY. CLIENT PROJECT Xref ..\Arch\0562403_n_fp02 mezz.dwg SHEET NUMBER FIRE PROTECTION NEW WORK UPPER LEVEL PLAN

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



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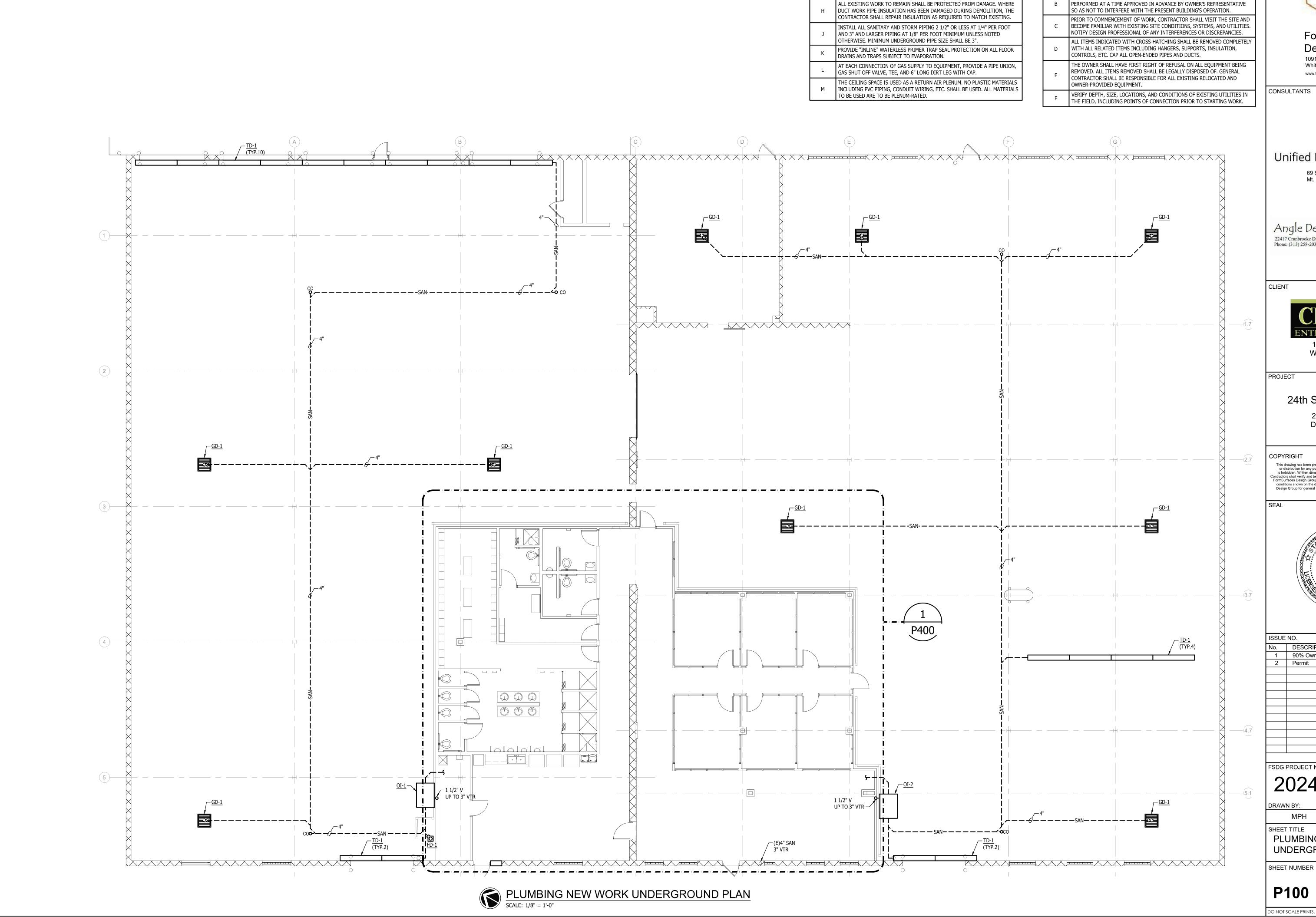
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FIRE PROTECTION NEW WORK UPPER LEVEL PLAN

DJL

FP102



PLUMBING GENERAL NOTES

THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE DETERMINED BY THE NEW WORK.

ALL ITEMS ON DEMOLITION PLAN SHALL BE CONSIDERED EXISTING UNLESS

VERIFICATION.

OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER EXISTING DRAWINGS AND/OR FIELD OBSERVATION AND REQUIRES FIELD

> ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY OWNER'S REPRESENTATIVE

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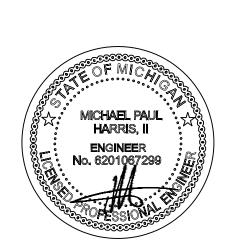
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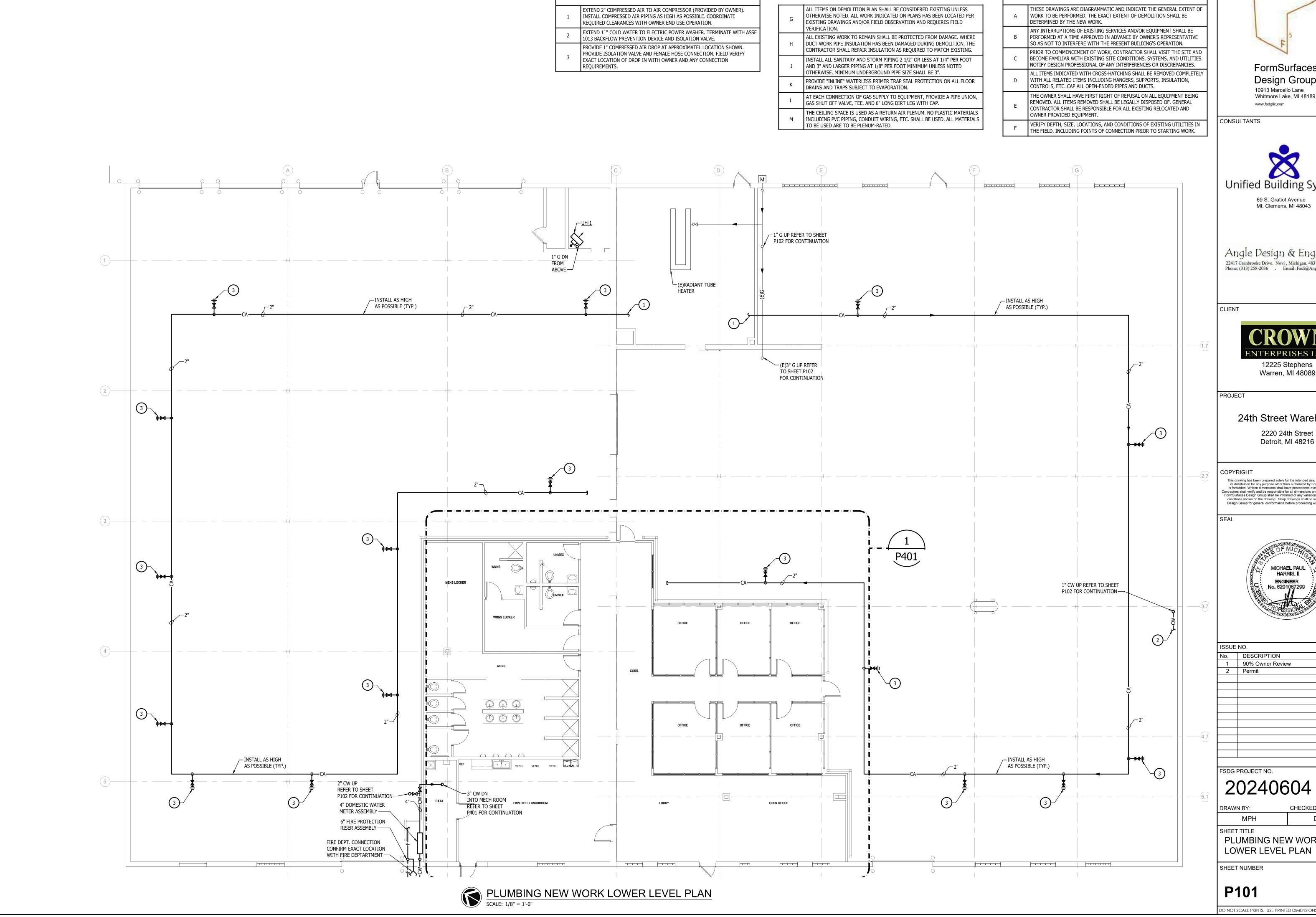
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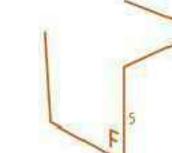
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PLUMBING NEW WORK UNDERGROUND PLAN

P100



NEW WORK KEYED NOTES



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PLUMBING GENERAL NOTES



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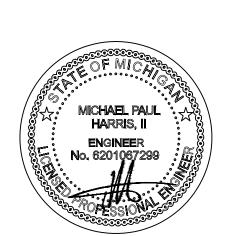
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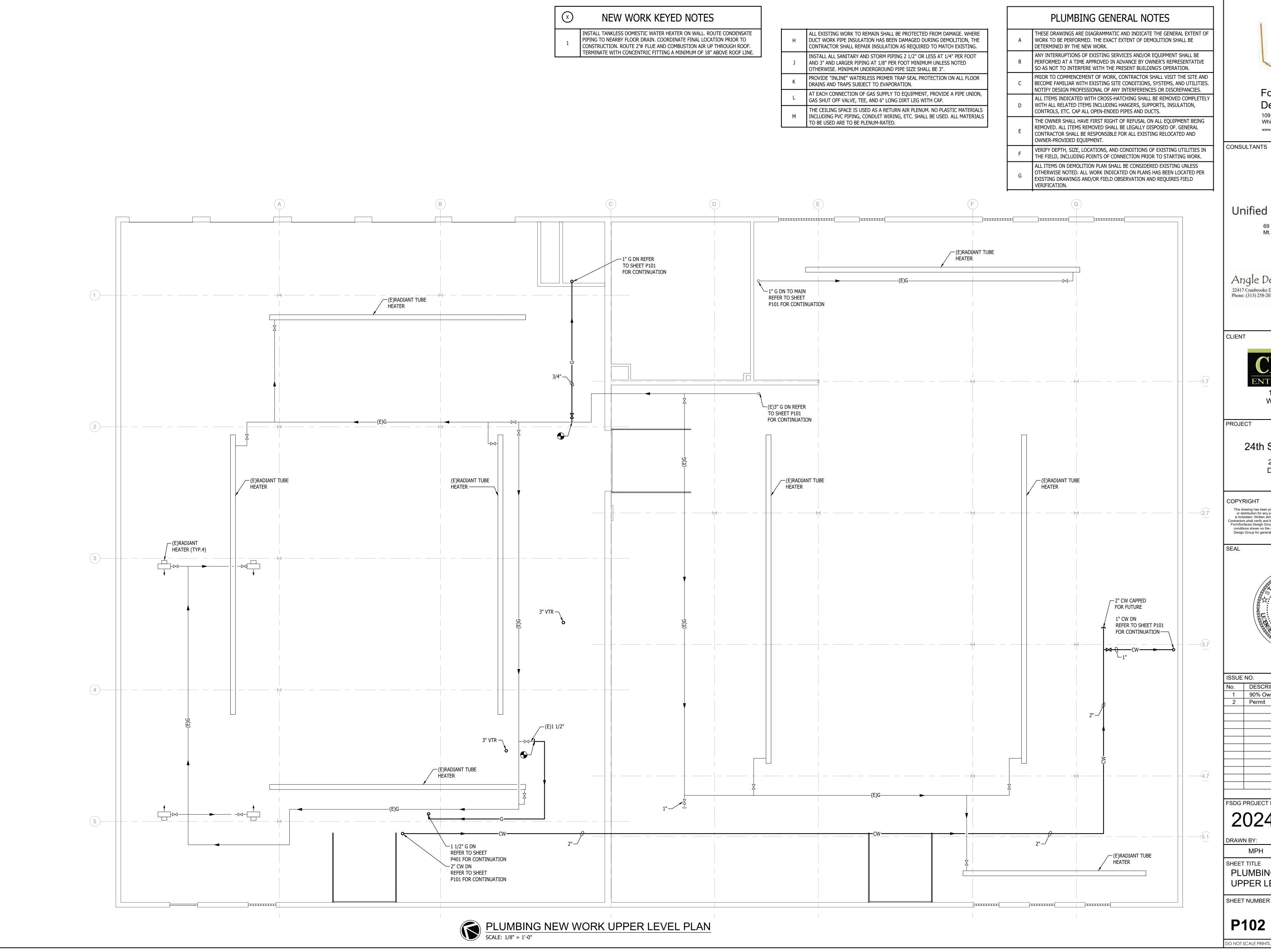
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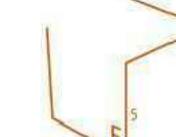
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PLUMBING NEW WORK





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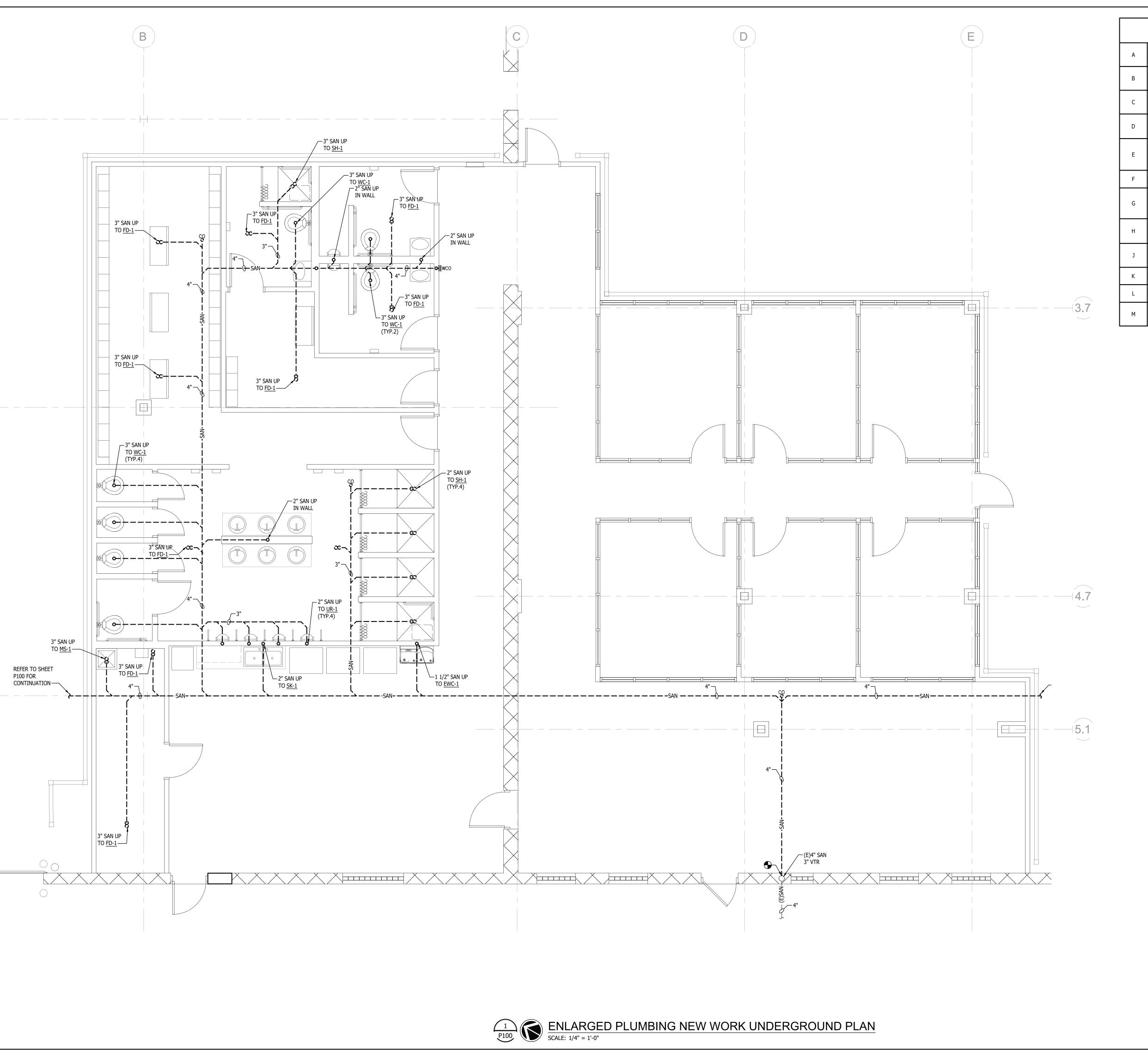
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PLUMBING NEW WORK UPPER LEVEL PLAN



PLUMBING GENERAL NOTES

THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE DETERMINED BY THE NEW WORK.

ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE

B PERFORMED AT A TIME APPROVED IN ADVANCE BY OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING'S OPERATION.

PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING SITE CONDITIONS, SYSTEMS, AND UTILITIES. NOTIFY DESIGN PROFESSIONAL OF ANY INTERFERENCES OR DISCREPANCIES.

ALL ITEMS INDICATED WITH CROSS-HATCHING SHALL BE REMOVED COMPLETELY WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, INSULATION, CONTROLS, ETC. CAP ALL OPEN-ENDED PIPES AND DUCTS.

THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING RELOCATED AND OWNER-PROVIDED EQUIPMENT.

VERIFY DEPTH, SIZE, LOCATIONS, AND CONDITIONS OF EXISTING UTILITIES IN THE FIELD, INCLUDING POINTS OF CONNECTION PRIOR TO STARTING WORK.

ALL ITEMS ON DEMOLITION PLAN SHALL BE CONSIDERED EXISTING UNLESS OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER EXISTING DRAWINGS AND/OR FIELD OBSERVATION AND REQUIRES FIELD

ALL EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DAMAGE. WHERE DUCT WORK PIPE INSULATION HAS BEEN DAMAGED DURING DEMOLITION, THE CONTRACTOR SHALL REPAIR INSULATION AS REQUIRED TO MATCH EXISTING.

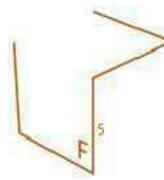
INSTALL ALL SANITARY AND STORM PIPING 2 1/2" OR LESS AT 1/4" PER FOOT AND 3" AND LARGER PIPING AT 1/8" PER FOOT MINIMUM UNLESS NOTED

OTHERWISE. MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".

K PROVIDE "INLINE" WATERLESS PRIMER TRAP SEAL PROTECTION ON ALL FLOOR DRAINS AND TRAPS SUBJECT TO EVAPORATION.

AT EACH CONNECTION OF GAS SUPPLY TO EQUIPMENT, PROVIDE A PIPE UNION, GAS SHUT OFF VALVE, TEE, AND 6" LONG DIRT LEG WITH CAP.

THE CEILING SPACE IS USED AS A RETURN AIR PLENUM. NO PLASTIC MATERIALS INCLUDING PVC PIPING, CONDUIT WIRING, ETC. SHALL BE USED. ALL MATERIALS TO BE USED ARE TO BE PLENUM-RATED.



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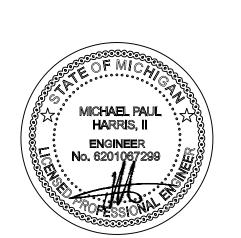
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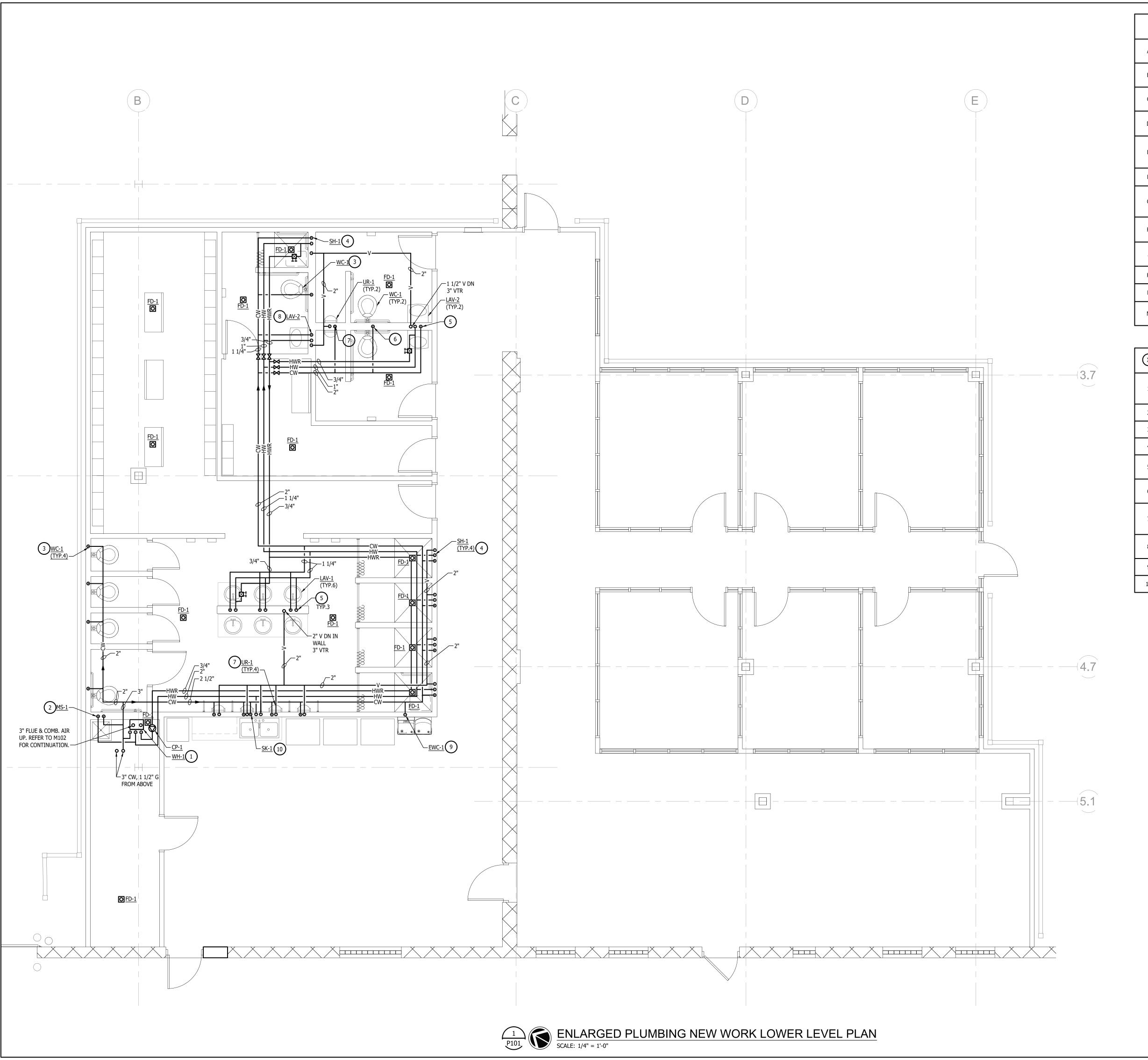
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SHEET NUMBER

P400



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- WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE DETERMINED BY THE NEW WORK.

 ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE
- B PERFORMED AT A TIME APPROVED IN ADVANCE BY OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING'S OPERATION.

 PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING SITE CONDITIONS, SYSTEMS, AND UTILITIES. NOTIFY DESIGN PROFESSIONAL OF ANY INTERFERENCES OR DISCREPANCIES.
- ALL ITEMS INDICATED WITH CROSS-HATCHING SHALL BE REMOVED COMPLETELY

 WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, INSULATION,
 CONTROLS, ETC. CAP ALL OPEN-ENDED PIPES AND DUCTS.
 - THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING RELOCATED AND OWNER-PROVIDED EQUIPMENT.
- F VERIFY DEPTH, SIZE, LOCATIONS, AND CONDITIONS OF EXISTING UTILITIES IN THE FIELD, INCLUDING POINTS OF CONNECTION PRIOR TO STARTING WORK.

 ALL ITEMS ON DEMOLITION PLAN SHALL BE CONSIDERED EXISTING UNLESS OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER
- G OTHERWISE NOTED. ALL WORK INDICATED ON PLANS HAS BEEN LOCATED PER EXISTING DRAWINGS AND/OR FIELD OBSERVATION AND REQUIRES FIELD VERIFICATION.

 ALL EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DAMAGE. WHERE

AND 3" AND LARGER PIPING AT 1/8" PER FOOT MINIMUM UNLESS NOTED

- H DUCT WORK PIPE INSULATION HAS BEEN DAMAGED DURING DEMOLITION, THE CONTRACTOR SHALL REPAIR INSULATION AS REQUIRED TO MATCH EXISTING.

 INSTALL ALL SANITARY AND STORM PIPING 2 1/2" OR LESS AT 1/4" PER FOOT
- OTHERWISE. MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".

 PROVIDE "INLINE" WATERLESS PRIMER TRAP SEAL PROTECTION ON ALL FLOOR DRAINS AND TRAPS SUBJECT TO EVAPORATION.
- AT EACH CONNECTION OF GAS SUPPLY TO EQUIPMENT, PROVIDE A PIPE UNION, GAS SHUT OFF VALVE, TEE, AND 6" LONG DIRT LEG WITH CAP.

 THE CEILING SPACE IS USED AS A RETURN AIR PLENUM. NO PLASTIC MATERIALS
- THE CEILING SPACE IS USED AS A RETURN AIR PLENUM. NO PLASTIC MATERIALS INCLUDING PVC PIPING, CONDUIT WIRING, ETC. SHALL BE USED. ALL MATERIALS TO BE USED ARE TO BE PLENUM-RATED.
 - USED ARE TO BE PLENUM-RATED.

 22417 Cranbrooke
 Phone: (313) 258-2

NEW WORK KEYED NOTES

- INSTALL TANKLESS DOMESTIC WATER HEATER ON WALL. ROUTE CONDENSATE PIPING TO NEARBY FLOOR DRAIN. COORDINATE FINAL LOCATION PRIOR TO CONSTRUCTION. ROUTE 2"Ø FLUE AND COMBUSTION AIR UP THROUGH ROOF. TERMINATE WITH CONCENTRIC FITTING A MINIMUM OF 18" ABOVE ROOF LINE.

 ROUTE 1/2" CW, 1/2" HW DOWN ALONG WALL, 3" SAN UP FROM BELOW AND
- CONNECT TO FLOOR MOUNTED MOP SINK.

 ROUTE 1" CW DOWN IN WALL, 3" SAN UP FROM BELOW AND CONNECT TO WATER CLOSET. TERMINATE WITH STOPS.
- 4 ROUTE 1/2" CW, 1/2" HW, 1 1/2" V DOWN IN WALL, 2" SAN UP FROM BELOW AND CONNECT TO SHOWER.
- ROUTE 3/4" CW, 3/4" HW, 1 1/2" V DOWN IN WALL. 2" SAN UP FROM BELOW.

 EXTEND AND CONNECT 1/2" CW, 1/2" HW, 1 1/2" SAN TO LAVATORIES.

 TERMINATE WITH STOPS. PROVIDE ASSE 1070 MIXING VALVE AT EACH FIXTURE.

 ROUTE 1 1/4" CW DOWN IN WALL, EXTEND AND CONNECT 1" CW TO EACH

 WATER CLOSET. ROUTE 3" SAN UP FROM BELOW AND CONNECT TO EACH
- ROUTE 1" CW, 1 1/2" V DOWN IN WALL. 2" SAN UP FROM BELOW IN WALL.

 EXTEND AND CONNECT 3/4" CW, 2" SAN FROM IN WALL TO EACH FIXTURE.

 TERMINATE WITH STORE PROVIDE ALL HANGARS AND ACCESSORIES PROVIDE.
- TERMINATE WITH STOPS. PROVIDE ALL HANGARS AND ACCESSORIES REQUIRED FOR INSTALLATION.

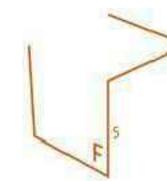
 ROUTE 1/2" CW, 1/2" HW, 1 1/2" V DOWN IN WALL. 1 1/2" SAN UP FROM BELOW
- MIXING VALVE.

 ROUTE 1/2" CW, 1 1/2" V DOWN IN WALL. 1 1/2" SAN UP FROM BELOW AND

AND CONNECT TO LAVATORY. TERMINATE WITH STOPS. PROVIDE ASSE 1070

CONNECT TO ELECTRIC WATER COOLER. TERMINATE WITH STOPS.

ROUTE 1/2" CW, 1/2" HW, 1 1/2" V DOWN IN WALL. 2" SAN UP FROM BELOW IN WALL AND CONNECT TO SINK. PROVIDE STOPS.



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Whitmore Lake, MI 48189

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CONSULTANTS



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CLIENT



12225 Stephens Warren, MI 48089

PROJECT

24th Street Warehouse

2220 24th Street Detroit, MI 48216

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ISSUE NO.

No. DESCRIPTION

INO.	DESCRIPTION	DAIL
1	90% Owner Review	12/19/2024
2	Permit	01/31/202

SDG PROJECT NO.

20240604

DRAWN BY:

MPH DJL

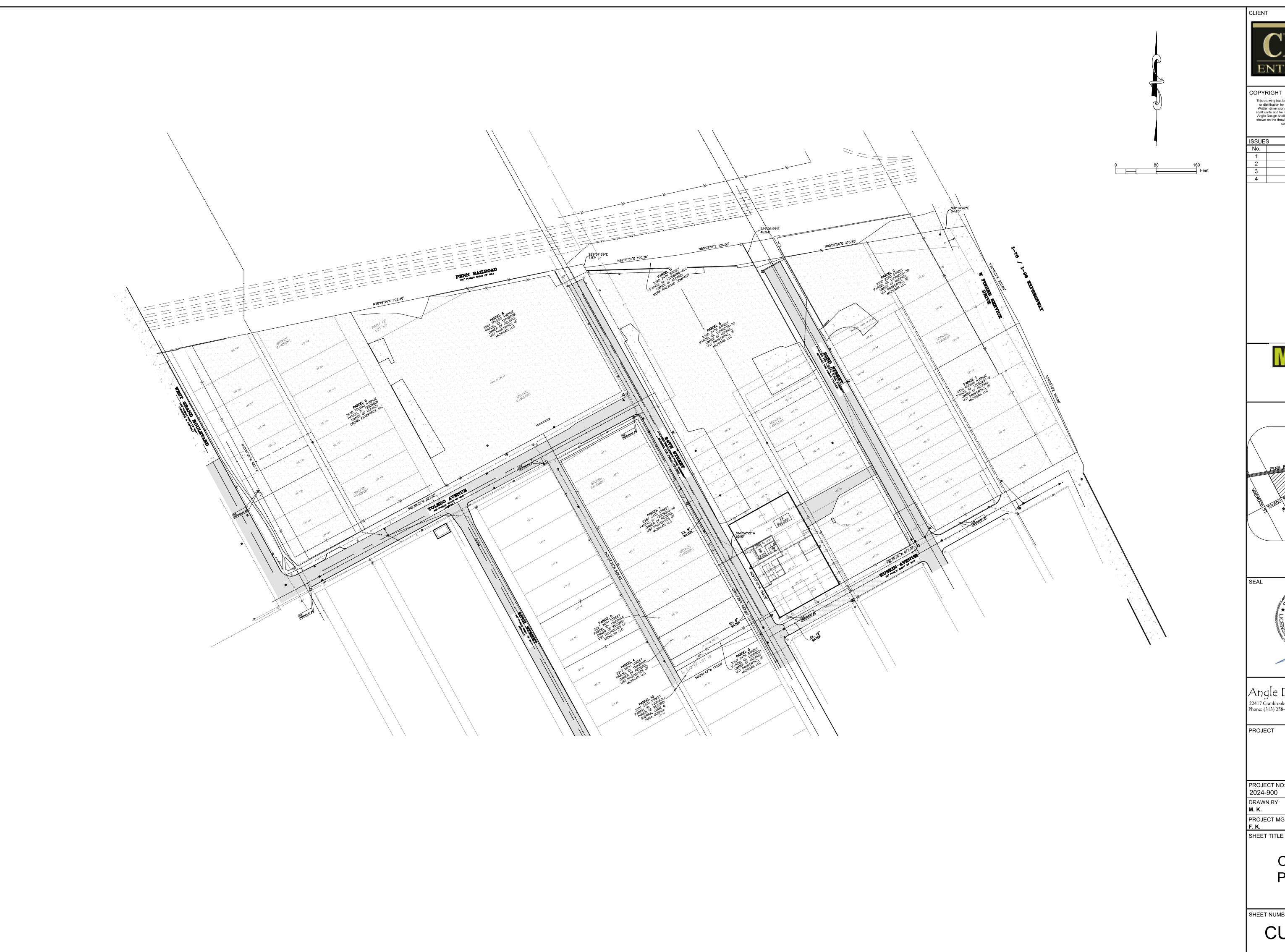
SHEET TITLE
ENLARGED PLUMBING NEW

WORK LOWER LEVEL PLAN

CHECKED BY:

SHEET NUMBER

P401



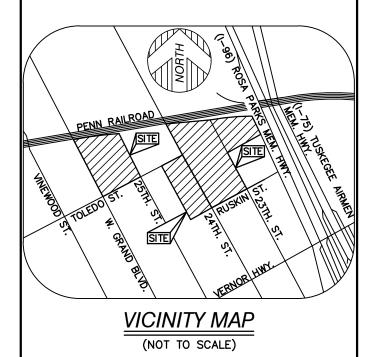


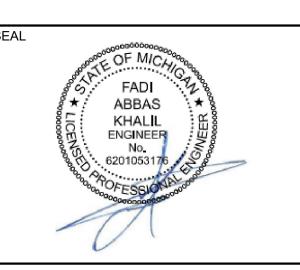
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ISSUE	S	
No.	DESCRIPTION	DATE
1	SITE PLAN	10-07-2024
2	WATER PLAN	01-30-2025
3		









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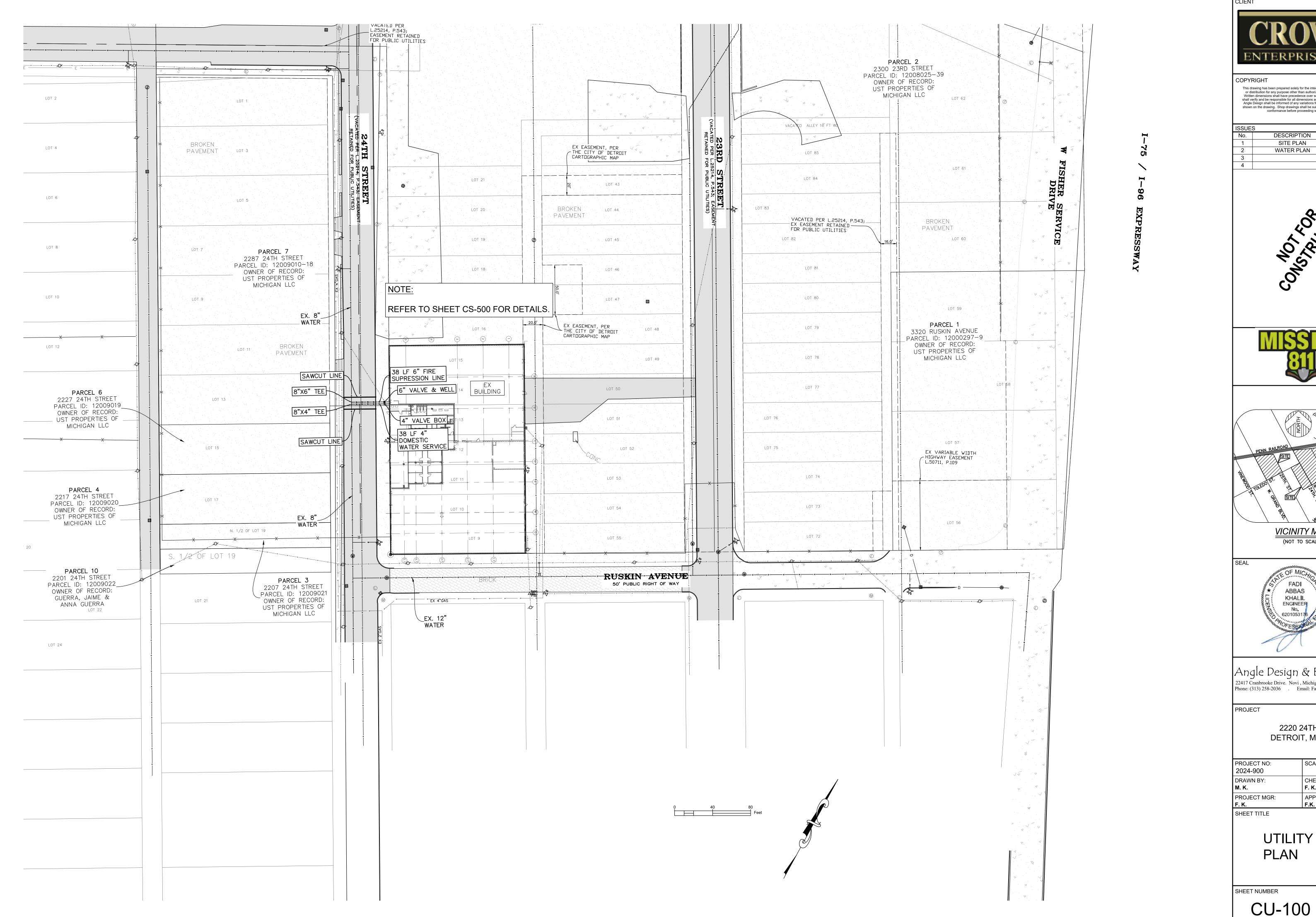
2220 24TH ST. DETROIT, MI 48216

PROJECT NO: 2024-900	SCALE: 1"=80'
DRAWN BY: M. K.	CHECKED BY: F. K.
PROJECT MGR: F. K.	APPROVED BY: F.K.
SHEET TITI E	

OVERALL PROPERTY

SHEET NUMBER

CU-100

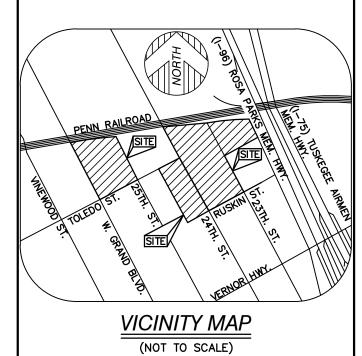


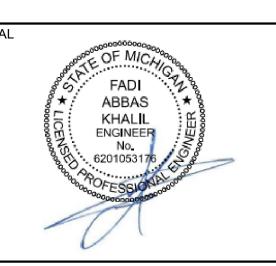
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DESCRIPTION DATE SITE PLAN 10-07-2024 WATER PLAN 01-30-2025









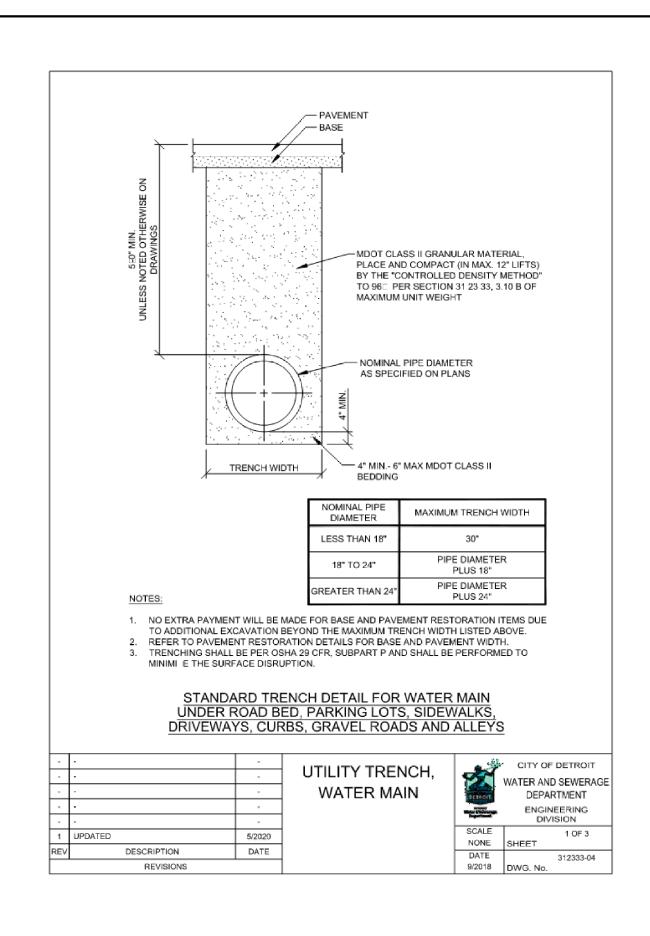
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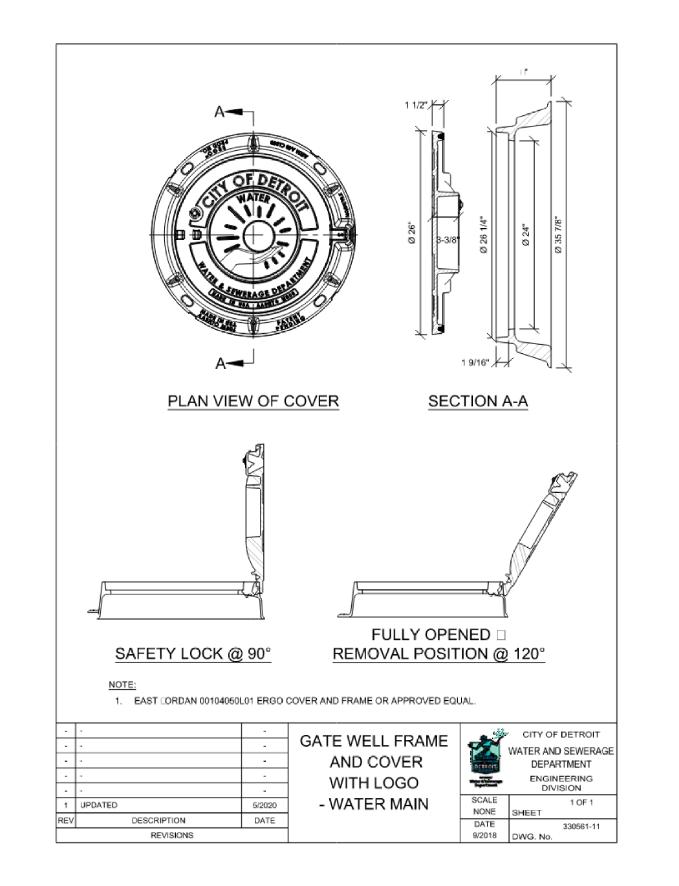
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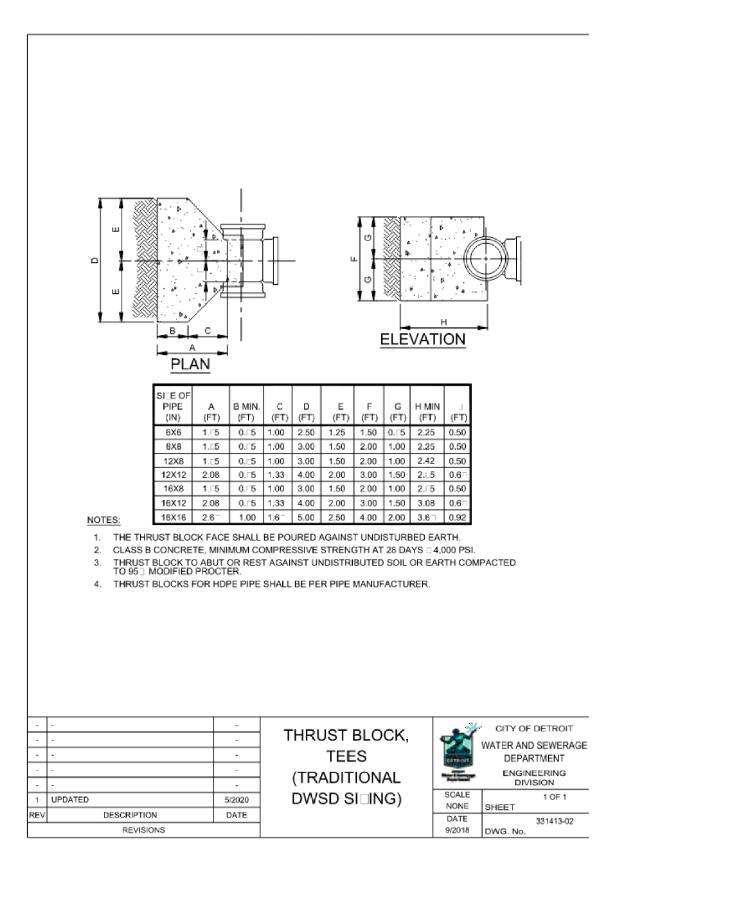
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DRAWN BY:	CHECKED BY:
M. K.	F. K.
PROJECT MGR:	APPROVED BY:
F. K.	F.K.
SHEET TITLE	

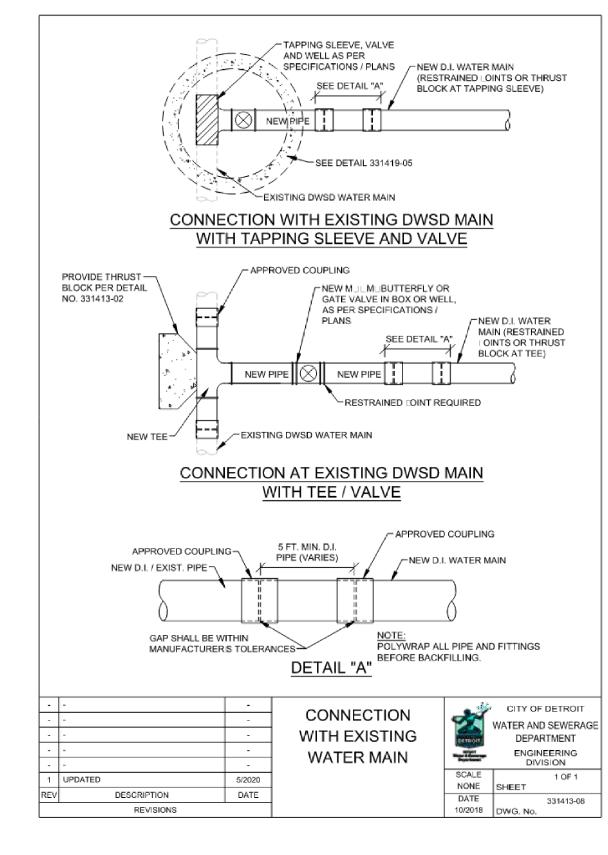
UTILITY **PLAN**

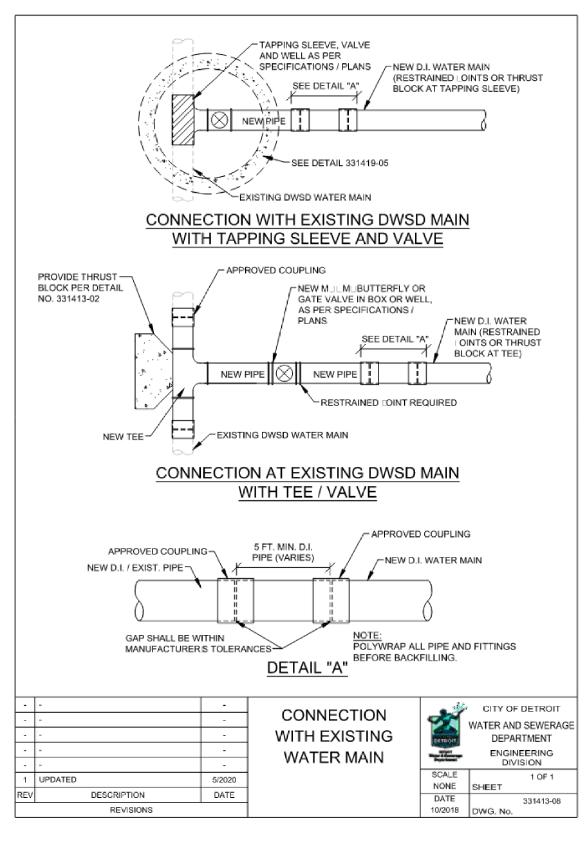
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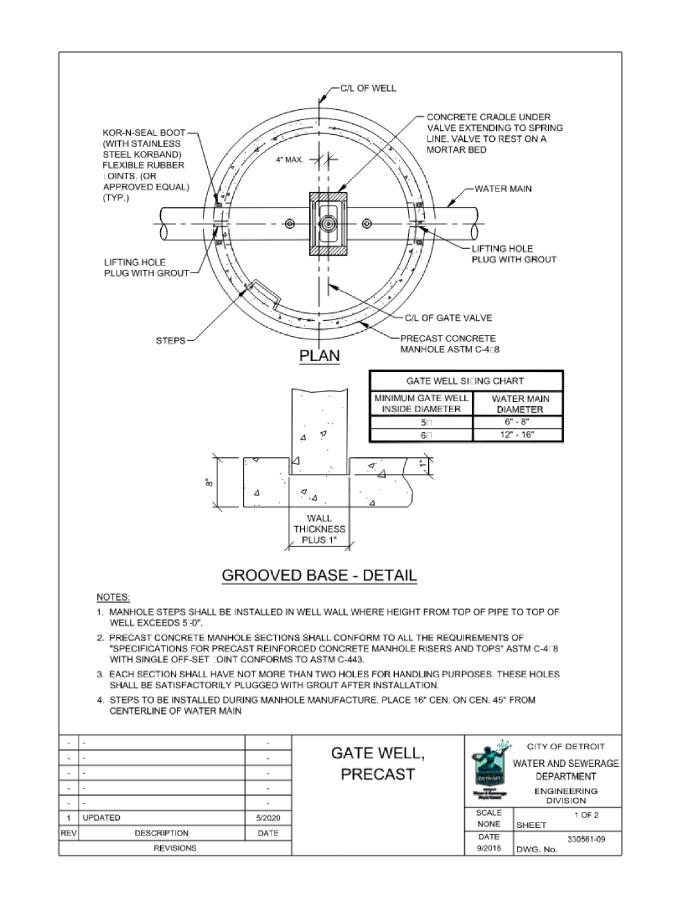


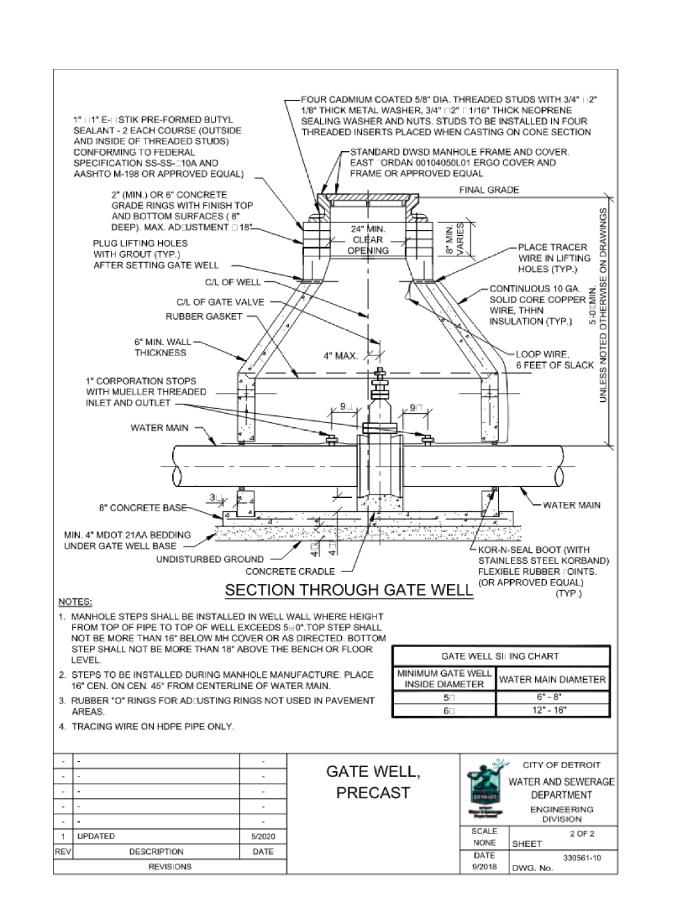


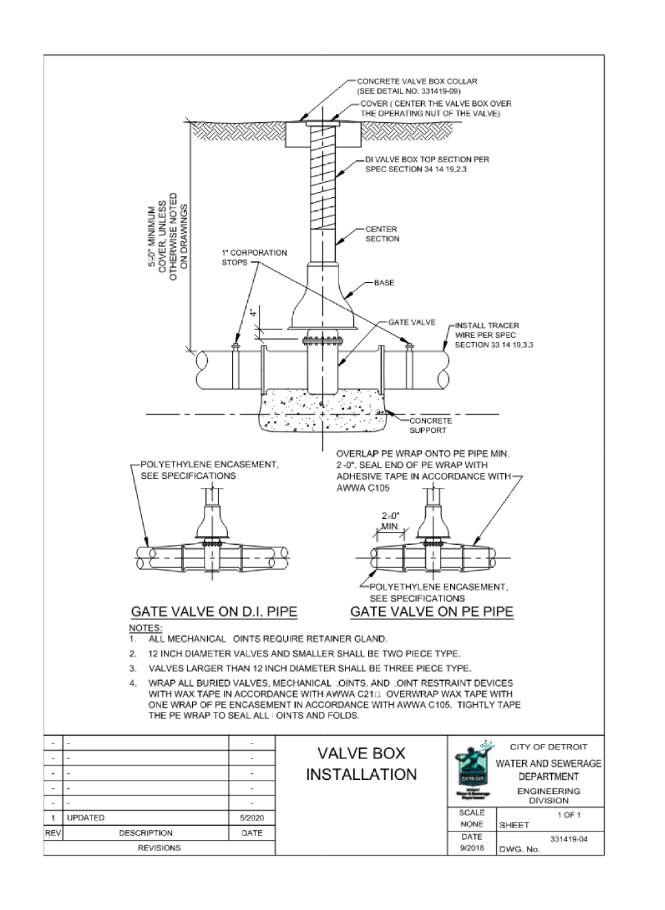














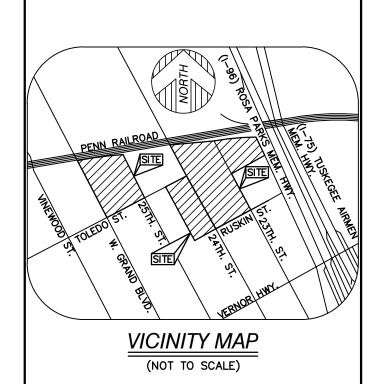
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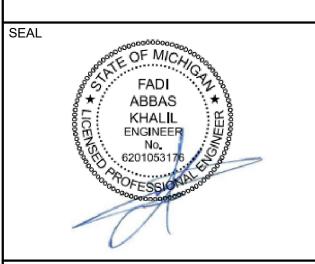
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ISSUES DESCRIPTION DATE 10-07-2024 SITE PLAN WATER PLAN 01-30-2025









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PROJECT

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PROJECT NO: 2024-900	SCALE: NTS
DRAWN BY: M. K.	CHECKED BY: F. K.
PROJECT MGR: F. K.	APPROVED BY: F.K.
SHEET TITLE	

DETAILS

SHEET NUMBER

ISSUE

CS-500