

UPPER VALLEY CAREER CENTER

HEALTH SCIENCE BUILDING ADDITION EARLY SITE AND RESTROOM RENOVATION

8811 Career Dr, Piqua, OH

BID / PERMIT SUBMITTAL

DRAWING INDEX

SHEET NO.	SHEET NAME
GENERAL	
G001	TITLE SHEET
G002	GENERAL NOTES AND SYMBOLS
ARCHITECTUR	RAL
ASR100	OVERALL SITE PLAN
ARCHITECTUR	RAL
AR101	NOTED FLOOR PLAN - AREA B
FIRE PROTEC	TION
FR001	LEGENDS, SCHEDULES, & PLAN
PLUMBING	
PR001	LEGENDS AND SCHEDULES
PR200	SITE PLAN
PR201	AREA B WORK PLAN
HVAC	
HR001	LEGENDS, SCHEDULES, & PLAN
ELECTRICAL	
E101	WORK PLANS

EXIT 7 EXIT 8 (EXIST) EXIT 9 EXIT 10 (EXIST) EXIT 14 (EXIST)

VICINITY MAP

1 LIFE SAFETY PLAN
SCALE | 1/32" = 1'-0"

SCOPE

PRESCRIPTIVE COMPLIANCE PATH ALTERATION- LEVEL 1

MAINTAINS EXISTING LEVELS OF UNCHANGED AND UNALTERED

KEY PLAN

DESIGN TEAM



PLUMBING, MECHANICAL, ELECTRICAL ENGINEER:



204 S. LUDLOW STREET, STE. 400 O: 937.223.3821 DAYTON, OHIO 45402

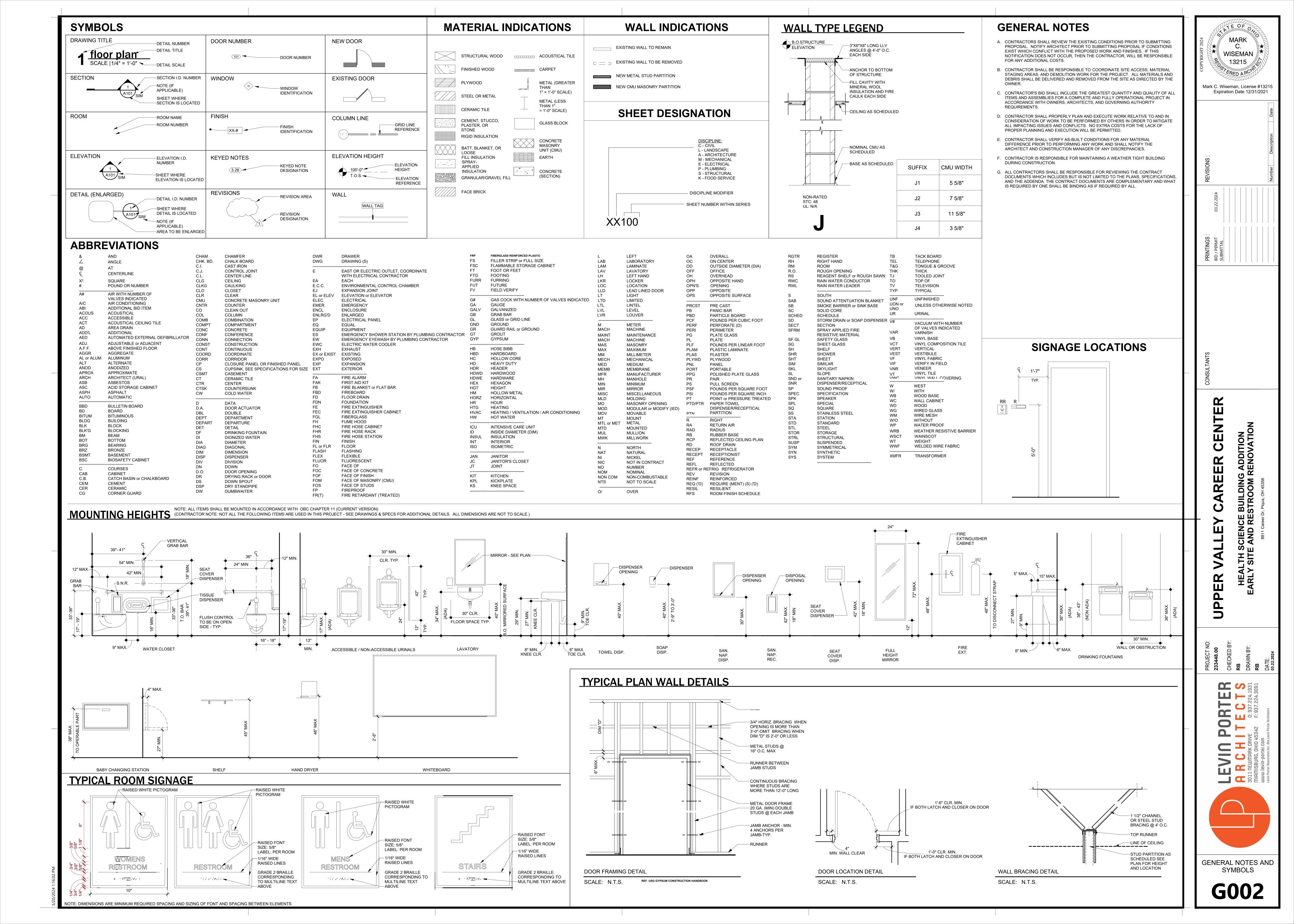
WWW.NZENGINEERING.COM

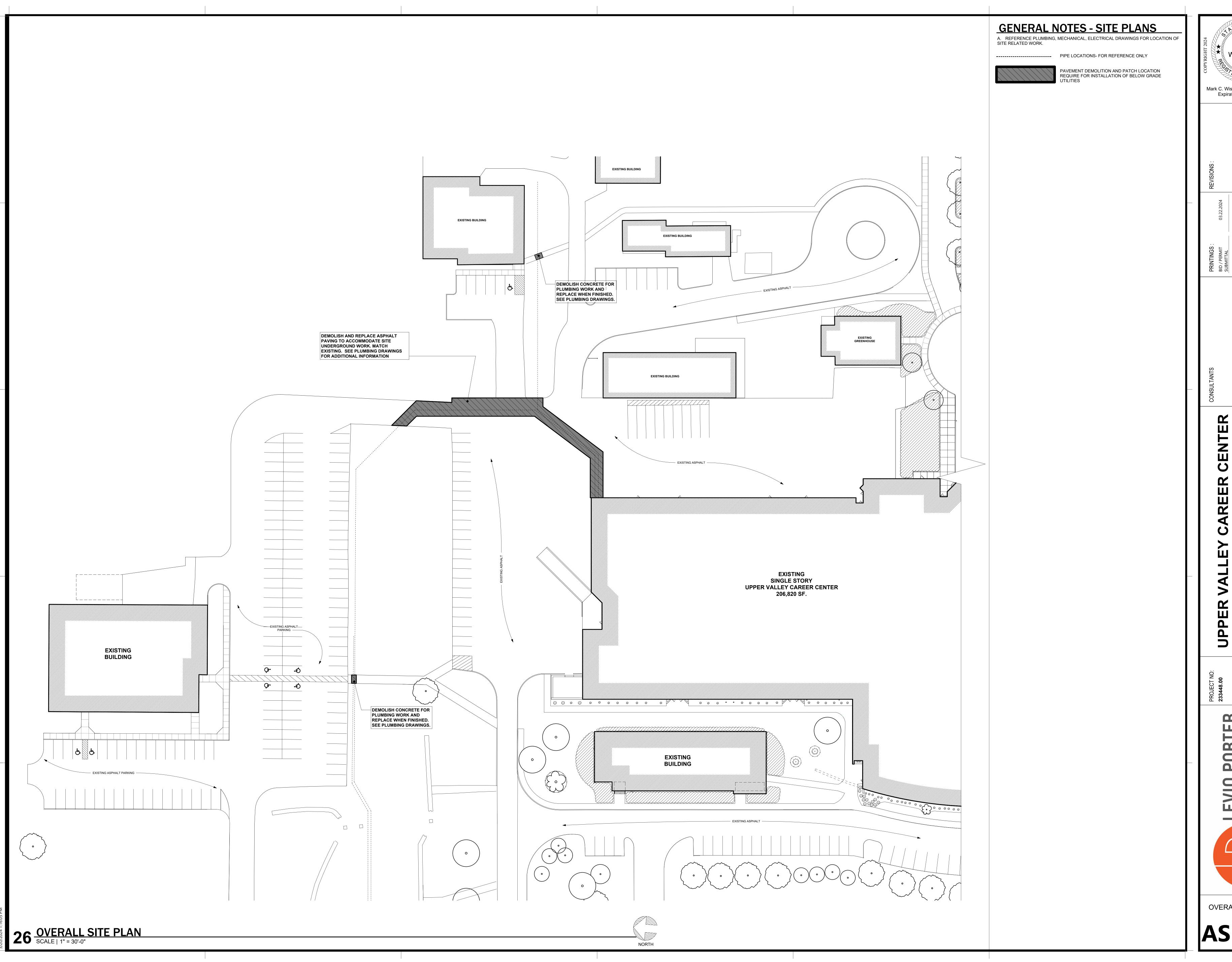
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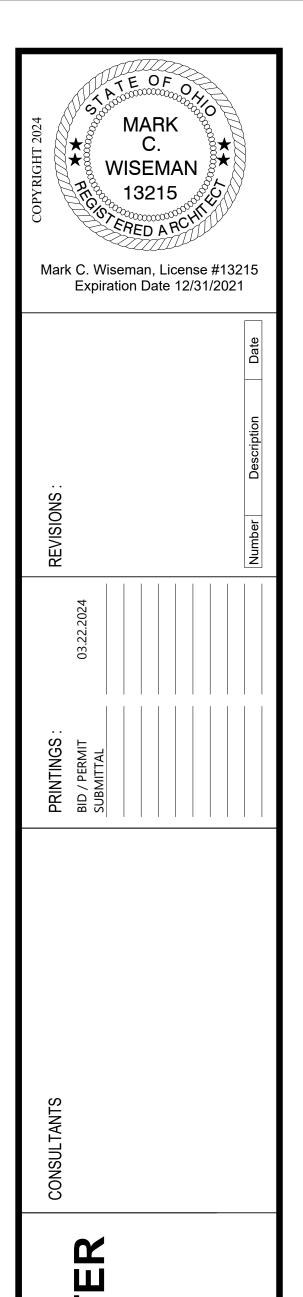
CENTER

CAREER

SCIENCE BUILDING ADDITION E AND RESTROOM RENOVATION

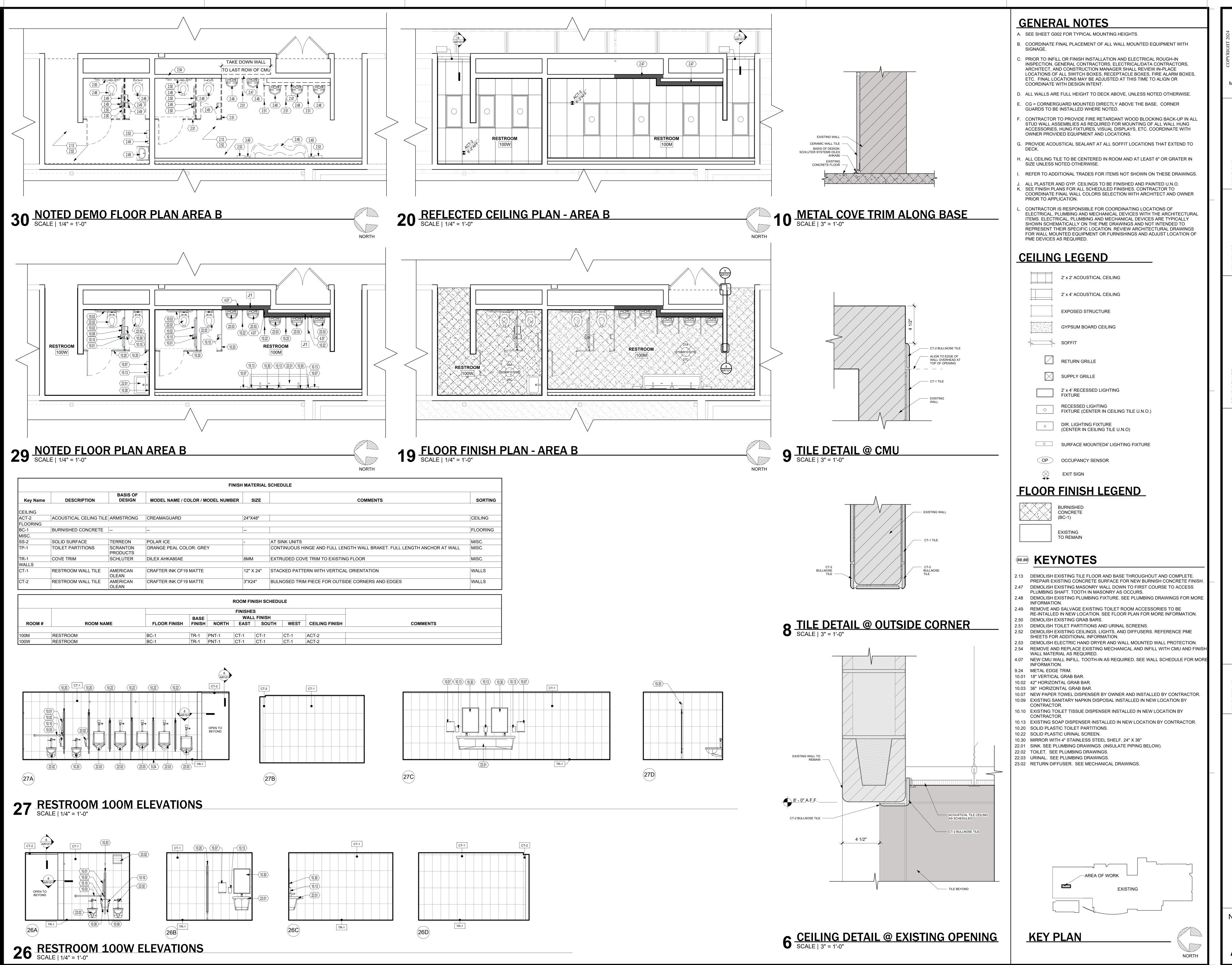






BUILDING ADDITION STROOM RENOVATIO





MARK
C.
WISEMAN

13215

Mark C. Wiseman, License #13215

Expiration Date 12/31/2021

PRINTINGS:
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SUBMITTAL

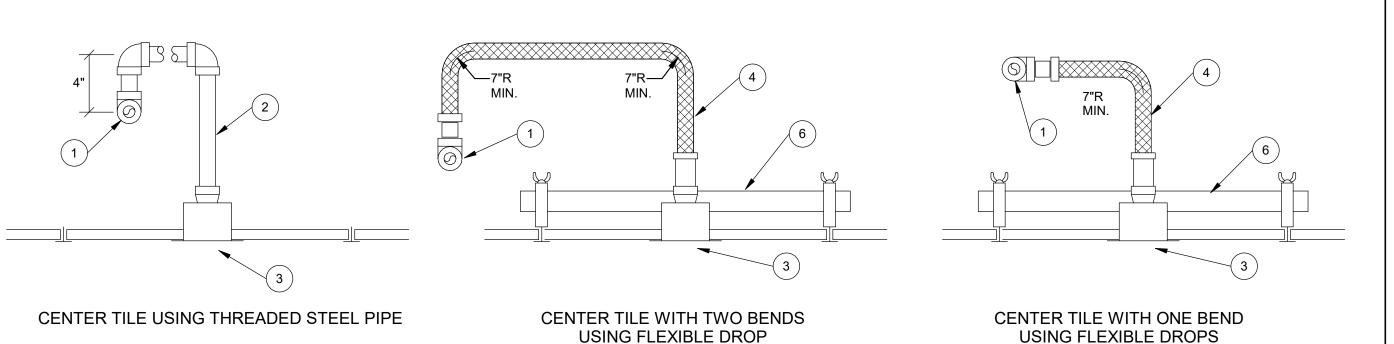
NSULTANTS

CENTER

VALLEY CAREER CENTERITY STEEN STEEN

UPPER VALLEY (HEALTH SCIENCE)

EARLY SITE AND RES



TYPICAL 2'x2' CEILING TILE INSTALLATION



(2) THREADED STEEL PIPING. (3) SPRINKLER HEAD. SEE DESIGN CRITERIA FOR HEAD TYPE.

(4) FLEXIBLE SPRINKLER HOSE.

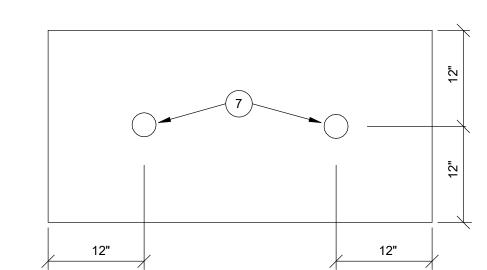
(5) SPRINKLER HEAD MOUNTED IN CENTER

OF 2'x2' CEILING TILE. (6) MOUNTING BRACKET PROVIDED WITH

(7) SPRINKLER HEAD MOUNTED AT EITHER QUARTER POINT OF CEILING TILE.

SPRINKLER HEAD FINAL CONNECTIONS

FLEXIBLE HOSE.



TYPICAL 2'x4' CEILING TILE INSTALLATION

GENERAL NOTES:

FLEXIBLE SPRINKLER PIPING SHALL MEET UL STANDARDS FOR MINIMUM BEND RADIUS AND MAXIMUM NUMBER OF BENDS.

ONE BEND IS EQUAL TO ONE 90° DEGREE CHANGE IN PIPING DIRECTION.

TWO BENDS IS EQUAL TO TWO 90° DEGREE, TOTAL OF 180°,

CHANGE IN PIPE DIRECTION. REFER TO FLEXIBLE HOSE MANUFACTURERS SPECIFICATION FOR

THE ALLOWABLE NUMBER OF BENDS IN PROVIDED LENGTHS OF THE FIRE SUPPRESSION CONTRACTOR IS RESPONSIBLE FOR

COORDINATING SPRINKLER PIPING BRANCH RUNS TO ALLOW FOR FM APPROVED INSTALLATION OF FLEXIBLE HOSES. FLEXIBLE HOSES SHALL BE CONSTRUCTED WITH ANNULAR CORRIGATIONS. HELICAL CORRUGATIONS ARE NOT ACCEPTED.

FIRE SUPPRESSION PIPING

GENERAL NOTES:

PIPING SHALL CONFORM TO OBC REQUIREMENTS.

PIPING INSTALLATION AND TESTING SHALL COMPLY WITH NFPA 13 (2016 EDITION).

PROVIDE PIPING SLEEVES AT WALLS IN NEW CONSTRUCTION.

PIPING SHALL BE PITCHED FOR DRAINAGE. PROVIDE DIELECTRIC FITTINGS FOR TRANSITIONS BETWEEN FERROUS AND NON-FERROUS PIPING SYSTEMS.

CLOSE OPEN ENDS OF PIPING DURING CONSTRUCTION.

PIPE AND TUBING SHALL BE CUT AND FABRICATED TO FIELD MEASUREMENTS AND RUN PARALLEL TO NORMAL BUILDING LINES. PIPE INTERIOR SHALL BE CLEANED OF FOREIGN MATTER AND BURRS BEFORE ERECTION OF PIPE.

PIPING SHALL NOT BE RUN ABOVE ELECTRICAL SWITCHGEAR OR PANELBOARDS, NOR ABOVE THE ACCESS SPACE OF SUCH EQUIPMENT - NEC ARTICLE 384.

FLEXIBLE HOSES SHALL BE CONSTRUCTED WITH ANNULAR CORRIGATIONS. HELICAL CORRUGATIONS ARE NOT ACCEPTED. **PIPING SYSTEM**

F	INAL CONNECTION TO SPRINKLER HEA	AD.	F1
TYPE	DESCRIPTION	TYPE	DESCRIPTION
F1	FLEXIBLE SPRINKLER HOSE FITTING 36" LENGTH MAXIMUM FULLY STAINLESS STEEL FLEXIBLE HOSE WITH CEILING BRACKET UL 2443 AND FM 1637 175 PSI RATING FOLLOW UL STANDARDS FOR BEND RADIUS AND NUMBER OF BENDS		

DESIGN CRITERIA

GENERAL REQUIREMENTS

LAWS, ORDINANCES AND REGULATIONS.

LICENSED AND BE BONDED FOR THE WORK.

PERMIT AND INSPECTION FEES.

RETAINAGE.

A 10% SAFETY FACTOR.

CONTRACTORS.

CONSTRUCTION ACTIVITIES.

MATERIAL AND EQUIPMENT.

AIR AND WATER TIGHT.

WARRANTY OF ALL WORK.

PROVIDE COMPLETE AND FUNCTIONAL FIRE SUPPRESSION SYSTEMS

PER FIRE PLANS INCLUDING FURNISHING, INSTALLING, TESTING AND

WORK SHALL BE IN ACCORDANCE WITH THE 2024 OHIO BUILDING

AND MECHANICAL CODES INCLUDING REFERENCED CODES AND

BIDDERS ON FIRE SUPPRESSION WORK SHALL BE REGULARLY

PRACTICE BY A QUALIFIED TRADE CONTRACTOR AND THEIR

OWNER SAFETY STANDARDS AND PRACTICES. ALL ON SITE

THE AUTHORITY HAVING JURISDICTION SHALL INSPECT AND

QUALIFIED SUBCONTRACTORS. ALL CONTRACTORS SHALL BE

STANDARDS, ALL FEDERAL AND LOCAL CODES AND ALL APPLICABLE

ENGAGED IN SPRINKLER SYSTEM WORK AND BE CERTIFIED BY THE

WORK SHALL BE PERFORMED USING BEST QUALITY INSTALLATION

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA AND

PERSONNEL SHALL BE SAFETY TRAINED AND OWNER CERTIFIED.

OBTAIN REQUIRED PERMITS RELATED TO THE WORK AND PAY ALL

APPROVE ALL WORK. PROVIDE A FINAL CERTIFICATE OF APPROVAL FROM THE AUTHORITY HAVING JURISDICTION AND PRESENT TO THE

OWNER BEFORE REQUESTING FINAL PAYMENT AND RELEASE OF

PERFORM A FLOW TEST TO SERVE AS THE BASIS FOR HYDRAULIC

INSTALLATION DRAWINGS NEEDED TO OBTAIN APPROVAL FROM

AUTHORITY HAVING JURISDICTION. CALCULATIONS SHALL INCLUDE

PROTECT ALL FURNISHED MATERIAL AND EQUIPMENT FROM THEFT

. REMOVE ALL CONSTRUCTION DEBRIS FROM SITE. RECYCLE DEBRIS

WHERE POSSIBLE. DISPOSE OF ALL HAZARDOUS MATERIAL IN

2. PROVIDE ALL CUTTING AND PATCHING REQUIRED TO INSTALL

3. PROVIDE APPROPRIATE FIRESTOPPING SYSTEM FOR ANNULAR

14. MATERIALS AND EQUIPMENT SHALL BE ONE OF THE BRAND OR

FOR THE ENGINEER'S APPROVAL FOR ALL MATERIALS AND

SPECIFICS FOR THE MATERIAL AND EQUIPMENT PROVIDED.

PROVIDED WITH OTHER TRADES AND NEW OR EXISTING

RECOMMENDATIONS AND MAINTENANCE SERVICE.

OPERATING AND MAINTENANCE MANUAL.

EQUIPMENT.

19. ALL WORK AREAS SHALL BE CLEANED TO MATCH ORIGINAL

MANUFACTURERS LISTED OR AN APPROVED EQUAL.

SPACE OPENINGS AROUND PIPE PENETRATIONS THROUGH FIRE

RESISTANCE RATED CONSTRUCTION. ANNULAR SPACE OPENINGS AT

PIPE PENETRATIONS IN NON RATED CONSTRUCTION TO BE CLOSED

5. ELECTRONIC SHOP DRAWINGS SHALL BE PROVIDED IN .PDF FORMAT

EQUIPMENT. SHOP DRAWINGS SHALL BE SPECIFICALLY EDITED TO

16. COORDINATE INSTALLATION OF ACTUAL EQUIPMENT AND SYSTEMS

7. INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH

MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

18. INSTALL ALL MATERIAL AND EQUIPMENT TO PROVIDE REQUIRED

LEARANCES TO MEET CODE REQUIREMENTS, MANUFACTURER'S

20. MAINTAIN RECORD DRAWINGS AND PROVIDE TO THE OWNER OR HIS

. PROVIDE TWO (2) BOUND. PAPER COPIES OF ALL OPERATING AND

MAINTENANCE MANUALS. PROVIDE AN ELECTRONIC COPY OF THE

2. PROVIDE WARRANTY FOR ALL WORKMANSHIP, EQUIPMENT AND

AS IDENTIFIED OR AS STANDARD FOR CERTAIN ITEMS OF

MATERIAL. WARRANTY SHALL BE 1 YEAR FOR PARTS AND LABOR, PROVIDE EXTENDED WARRANTY PERIOD FOR PARTS AND/OR LABOR

ELIMINATE SUPERFLUOUS INFORMATION AND SHALL CLEARLY SHOW

AND DETERIORATION OR CONTAMINATION DUE TO WEATHER OR

0. PROTECT OWNER'S PROPERTY AND PROPERTY OF OTHER

ACCORDANCE WITH ENVIRONMENTAL LAWS.

CALCULATIONS. DEVELOP HYDRAULIC CALCULATIONS AND

- DESIGN AND INSTALLATION OF WET PIPE SPRINKLER SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF THE 2024 OHIO BUILDING CODE, N.F.P.A. 13 (2016 EDITION), AND ALL AUTHORITIES HAVING JURISDICTION (AHJ).
- WORKING PLANS AND HYDRAULIC CALCULATIONS SHALL BE PREPARED, SUBMITTED, AND APPROVED PRIOR TO INSTALLATION. BY THE FIRE SUPPRESSION CONTRACTOR. PLANS SHALL INCLUDE ALL ITEMS LISTED IN N.F.P.A. 13.
- WATER SUPPLY DATA: THE FIRE SUPPRESSION CONTRACTOR IS
- RESPONSIBLE FOR CONDUCTING A FLOW TEST TO OBTAIN CURRENT WATER SUPPLY DATA FROM THE NEW WATER DISTRIBUTION SYSTEM FOR USE IN THE HYDRAULIC CALCULATIONS.
- HYDRAULIC DESIGN CRITERIA FOR LIGHT HAZARD AREAS: (ALL AREAS EXCEPT WHERE NOTED OTHERWISE)

DENSITY: 0.10 GPM/SQ.FT. MOST DEMANDING 1500 SQ. FT.

DESIGN AREA: HEADS PERMITTED)

MAX SPRINKLER

HOSE DEMAND:

COVERAGE:

225 SQ. FT./HEAD 100 GPM

130 SQ. FT./HEAD

(REDUCTION WITH QUICK RESPONSE

DURATION: 30 MINUTES HYDRAULIC DESIGN CRITERIA FOR ORDINARY HAZARD (GROUP 1) AREAS: (STORAGE ROOMS, MECHANICAL ROOMS, JANITOR'S ROOMS

KITCHEN, COMMUNICATION ROOMS) DENSITY: 0.15 GPM/SQ.FT. MOST DEMANDING 1500 SQ. FT. DESIGN AREA:

MAX SPRINKLER COVERAGE: HOSE DEMAND:

250 GPM 60 MINUTES DURATION:

HYDRAULIC DESIGN CRITERIA FOR ORDINARY HAZARD (GROUP 2) AREAS: (ADD SPECIFIC ROOM).

DENSITY: **DESIGN AREA:** MAX. SPRINKLER COVERAGE: HOSE DEMAND:

DURATION:

130 SQ. FT./HEAD 250 GPM **60 MINUTES**

0.2 GPM/SQ.FT.

MOST DEMANDING 1500 SQ.FT.

ALL SPRINKLER HEADS SHALL BE QUICK RESPONSE TYPE.

SPRINKLER HEADS IN AREAS WITH FINISHED CEILINGS SHALL BE CONCEALED PENDENT TYPE WITH FLAT PLATE AND CUSTOM COLOR TO MATCH THE ADJACENT CEILING COLOR OR FINISH. / WHITE

SPRINKLER HEADS IN AREAS WITH NO CEILINGS SHALL BE BRASS/ CUSTOM COLOR UPRIGHTS. SIDEWALL SPRINKLER HEADS MAY ALSO BE USED IN STAIRWELLS WHERE PROPER COVERAGE CAN BE

GENERAL NOTES

- A. BUILDING IS CURRENTLY FULLY SUPPRESSED. MODIFY/EXTEND THE EXISTING SPRINKLER SYSTEM THROUGHOUT THE AREA(S) OF RENOVATION TO PROVIDE PROPER COVERAGE. BUILDING SHALL BE CONSIDERED FULLY SUPPRESSED AT COMPLETION OF PROJECT.
- ALL FIRE SUPPRESSION EQUIPMENT SHALL BE UL LISTED FOR FIRE SUPPRESSION SERVICE.
- PROVIDE A FIRE WATCH IN ACCORDANCE WITH "AHJ"
- REQUIREMENTS. ALL FIRE SUPPRESSION SYSTEMS (SERVICE MAIN, FIRE DEPT.
- CONNECTION, SPRINKLER SYSTEM, INSPECTOR TEST, DRAIN, ETC.) SHALL BE HYDROSTATICALLY TESTED AT 200 PSI FOR 2 HOURS WITH NO VISIBLE LEAKAGE. ALL CONCEALED PIPING SHALL BE AIR TESTED. WITH NO LEAKAGE. PRIOR TO FILLING SYSTEM WITH WATER. THE FIRE PROTECTION CONTRACTOR SHALL NOTIFY ALL AUTHORITIES HAVING JURISDICTION 24 HOURS PRIOR TO THE TEST TO ALLOW AHJ TO WITNESS ALL TESTS.
- ALL VALVES CONTROLLING WATER SUPPLIES ARE CURRENTLY PROVIDED WITH TAMPER SWITCHES (SEE NOTE E).
- THE FIRE SPRINKLER SYSTEM IS CURRENTLY SUPERVISED BY AN APPROVED CENTRAL STATION FIRE ALARM SYSTEM IN ACCORDANCE WITH O.B.C. AND N.F.P.A. 72.
- THE FIRE SUPPRESSION CONTRACTOR SHALL COORDINATE WIRING OF ELECTRICAL FIRE SUPPRESSION DEVICES AND EQUIPMENT WITH THE ELECTRICAL AND/OR FIRE ALARM CONTRACTOR. ALL FIRE ALARM WIRING BY ELECTRICAL CONTRACTOR. ALL DEVICES SHALL BE FURNISHED AND INSTALLED BY THE FIRE SUPPRESSION CONTRACTOR.
- THE FIRE SUPPRESSION CONTRACTOR SHALL COORDINATE THE LAYOUT OF THE FIRE SUPPRESSION SYSTEM WITH ALL TRADES PRIOR TO INSTALLATION.
- THE FIRE SUPPRESSION CONTRACTOR SHALL CENTER (WITHIN 1") ALL CONCEALED SPRINKLER HEADS INSTALLED IN ACOUSTICAL LAY-IN CEILING TILES. ALL PENDENT SPRINKLER HEADS IN CEILINGS SHALL BE SYMMETRICAL WITH LIGHTING AND AIR DEVICES.
- VERIFY THE LOCATION AND TYPE OF FIRE DEPARTMENT CONNECTION WITH THE FIRE DEPARTMENT.
- LOCAL SPRINKLER ALARM AND REMOTE ALARM AND SUPERVISION SHALL BE THRU THE FIRE ALARM SYSTEM PROVIDED BY THE E.C.
- CONCEALED, NONCOMBUSTIBLE ATTIC SPACES DO NOT REQUIRE SPRINKLERS.
- M. FINAL APPROVAL IS SUBJECT TO ACCEPTANCE AND TESTING BY ALL

GENERAL LEGEND

- ELECTRICAL CONTRACTOR. FIRE PROTECTION CONTRACTOR. GENERAL CONTRACTOR.
- HVAC CONTRACTOR.

PLUMBING CONTRACTOR.

JEFFREY D.

ZELINSKI

63822

JEFFERY D. ZELINSKI, LICENSE #63822

EXPIRATION DATE 12/31/2025

- TEMPERATURE CONTROLS CONTRACTOR. NOT IN CONTRACT.
- ABOVE FINISHED FLOOR TO BOTTOM OF ITEM UNLESS INDICATED OTHERWISE IN DRAWING.
- EXISTING. EQUIPMENT SUPPLIER.
- EMERGENCY. MOUNTING HEIGHT. SURFACE MOUNTED.
- WEATHER PROOF. NOTE SYMBOL - APPLIES ONLY TO SHEET ON WHICH IS SHOWN.
- DETAIL NOTE SYMBOL APPLIES ONLY TO DETAIL ON WHICH IS SHOWN. EQUIPMENT REFERENCE SYMBOL. ELECTRICAL
- CONNECTION REQUIRED. EQUIPMENT REFERENCE SYMBOL. NO ELECTRICAL
- CONNECTION REQUIRED. 123 ROOM NUMBER.
- DETAIL "B" SHOWN ON SHEET H2.
- SECTION "A" DESIGNATION, SHOWN ON SHEET H1. CONNECTION, NEW TO EXISTING.
 - UP TO "FD1", SHOWN ON FLOOR ABOVE 1 HOUR FIRE PROTECTION SEE SPECIFICATION FOR PENETRATION DETAILS 2 HOUR FIRE PROTECTION _____ SEE SPECIFICATION FOR PENETRATION DETAILS
 - 3 HOUR FIRE PROTECTION SEE SPECIFICATION FOR PENETRATION DETAILS — — — ITEM TO BE REMOVED.

EXISTING TO REMAIN. NEW ITEM.

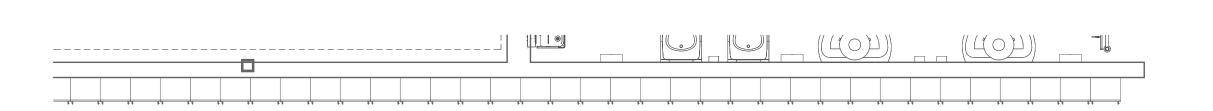
SHEET DRAWING TITLE FR001 LEGENDS, SCHEDULES, & PLAN

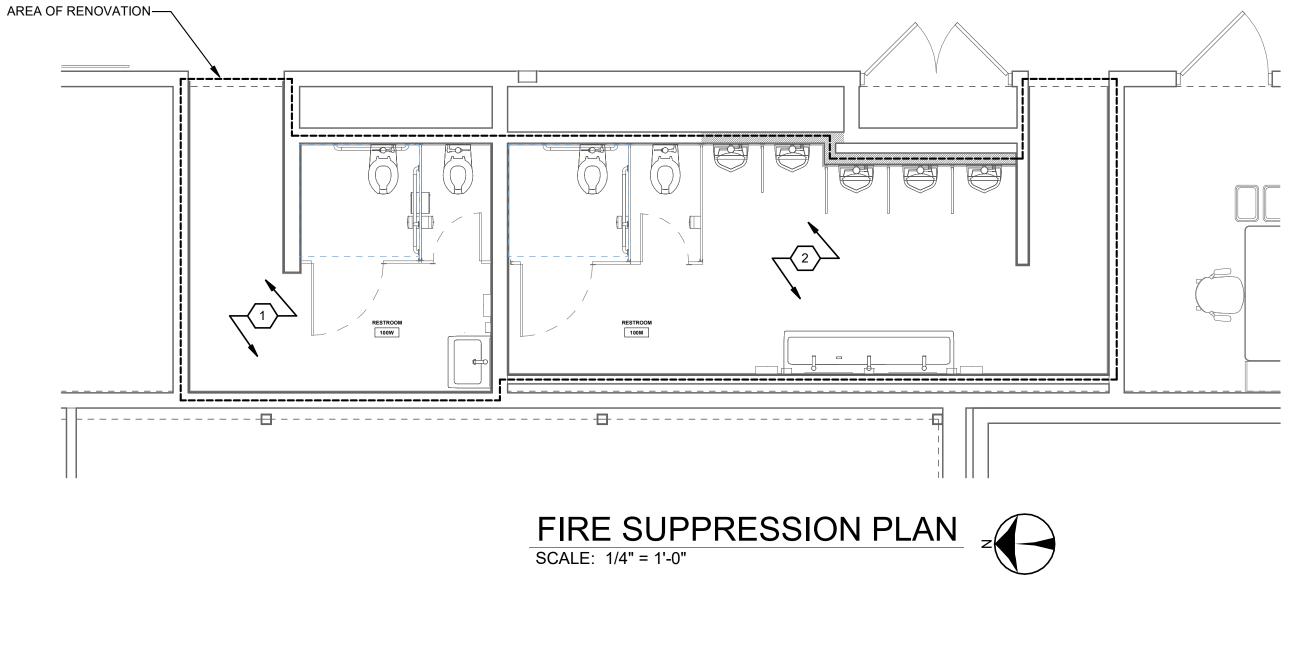
INDEX OF DRAWINGS

CONSTRUCTION NOTES

WOMEN'S RESTROOM: RELOCATE EXISTING FIRE SUPPRESSION ARM-OVERS TO COORDINATE WITH NEW CEILING GRID.

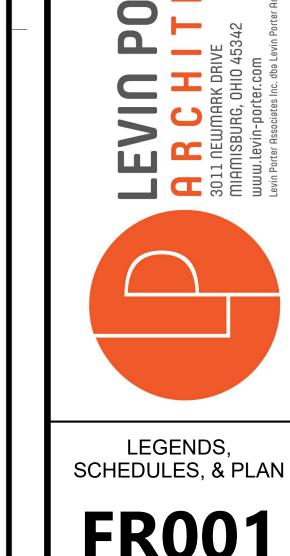
MEN'S RESTROOM: REMOVE UPRIGHT PENDANT SPRINKLER HEADS AND PROVIDE NEW ARM-OVERS TO SPRINKLER HEADS IN NEW LAY-IN CEILING.

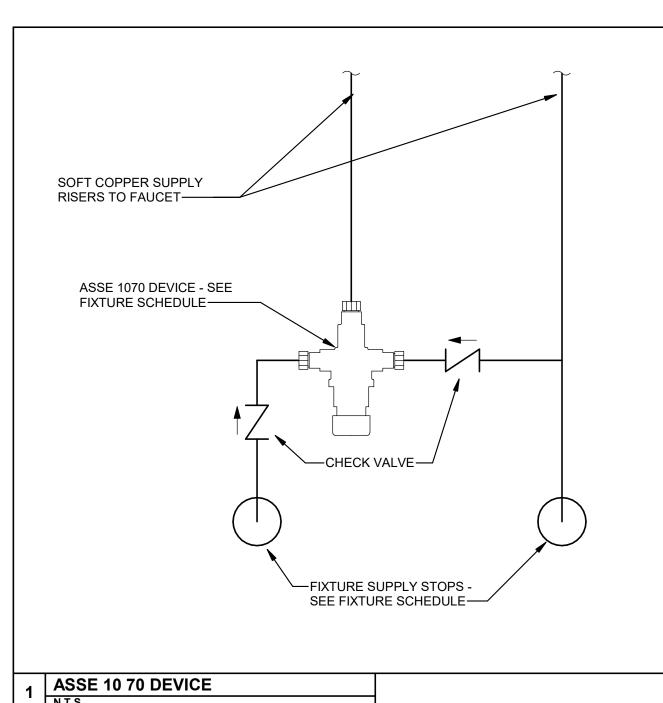




SCALE: 1/4"=1'-0"

KEY PLAN





TEM ENTURE RECORDED ION		FIVELDE	SERVICES			MTG.	TRIM REQUIREMENTS					NOTES		
ITEM	FIXTURE DESCRIPTION	FIXTURE	H.W.	C.W. SAN.	SAN.	VENT	HGT.	SUPPLY	STOPS	WASTE	TRAP	CARRIERS	ACCESSORIES	NOTES
<u>W1</u>	WATER CLOSET/ VIT. CHINA/ WALL HUNG/ MANUAL FLUSH VALVE/ 1.6 GPF/ ELONGATED BOWL/ 16 1/2" RIM HEIGHT/ 1,000 MG MaP SCORE/ OPEN FRONT SEAT WITH LID	AM. STANDARD # 3043.001	-	NOTE 3	NOTE 3	NOTE 3	15"	SLOAN # SLOAN 111-1.6	UNIT	UNIT	INTEGRAL	EXISTING	SEAT BEMIS #1950SS	
<u>W2</u>	WATER CLOSET/ VIT. CHINA/ WALL HUNG/ MANUAL FLUSH VALVE/ 1.6 GPF/ ELONGATED BOWL/ 16 1/2" RIM HEIGHT/ 1,000 MG MaP SCORE/ OPEN FRONT SEAT WITH LID/ ACCESSIBLE	AM. STANDARD # 3043.001	-	NOTE 3	NOTE 3	NOTE 3	17"	SLOAN # SLOAN 111-1.6	UNIT	UNIT	INTEGRAL	EXISTING	SEAT BEMIS #1950SS	
<u>U1</u>	URINAL / VIT. CHINA / WALL HUNG / WASHOUT / MANUAL FLUSH VALVE/ 0.25 GPF	AM. STANDARD # 6590.001	-	0.75"	2"	1.5"	NOTE 1	SLOAN # SLOAN 186-0.25	UNIT	UNIT	INTEGRAL	NOTE 1		1
<u>L1</u>	LAVATORY SYSTEM / THREE FAUCETS / CONTINUOUS SOLID SURFACE / INFRARED SENSORS / WALL HUNG / MIXING VALVE / INTEGRAL P-TRAPS / THERMOSTATIC MIXING VALVE	BRADLEY TLX-3-C1-S53-3300-R-T 5-PC-AC-NSD-COAL-C W-CHROME	NOTE 3	NOTE 3	NOTE 3	NOTE 3	34"	W/ FIXTURE	EXISTING	INTEGRAL	INTEGRAL	W / FIXTURE	W/ FIXTURE	2, 3
<u>L2</u>	LAVATORY SYSTEM / ONE FAUCET / ELECTRONIC FAUCET / WALL HUNG / MIXING VALVE / INTEGRAL P-TRAP / THERMOSTATIC MIXING VALVE	BRADLEY TLX-1-CI-S53-3300-R-T- S-PC-AC-NSD-COAL-	NOTE 3	NOTE	NOTE 3	NOTE 3	34"	W/ FIXTURE	EXISTING	INTEGRAL	INTEGRAL	W / FIXTURE	W/ FIXTURE	2, 3

AMERICAN STANDARD CHINA - KOHLER, ZURN, SLOAN SLOAN FLUSH VALVES - ZURN, DELANEY WATTS - LEONARD, ZURN

THERMOSTATIC MIXING VALVE

1. INSTALL NEW URINALS ON EXISTING CARRIERS. MODIFY HANGER HEIGHT TO NEW FIXTURE AS REQUIRED FOR 2. COLOR SELECTIONS BY ARCHITECT.

PIPE INSULATION SCHEDULE - PLUMBING

GENERAL NOTES:

<u>QUALITY ASSURANCE</u> FIRE, SMOKE RATINGS: FLAME SPREAD RATING OF 25 OR LESS, SMOKE DEVELOPED RATING OF 50 OR LESS. THICKNESSES SHALL CONFORM TO ASHRAE 90.1-2010 MINIMUMS

GREEN GUARD INDOOR AIR QUALITY CERTIFIED.

INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.

SLEEVES AT ALL PIPE DEVICES AND PUMP CASINGS.

COLD SERVICE PIPE INSULATION AND VAPOR BARRIER/JACKET TO BE CONTINUOUS THRU FLOOR AND WALL

INSULATION AND VAPOR BARRIER TO BE CONTINUOUS AT PIPE HANGERS AND SUPPORTS ON HORIZONTAL PIPING. PROVIDE HARDWOOD INSERT SUPPORT FOR PIPES 2.5" AND LARGER.

VERTICAL PIPE SUPPORTS SHALL ATTACH DIRECTLY TO PIPE. INSULATE SUPPORT AND OTHER SURFACES WITH

FLEXIBLE CLOSED CELL INSULATION, SAME THICKNESS AS SYSTEM INSULATION ON COLD SERVICE PIPES TO PREVENT CONDENSATION. INSULATION THICKNESS TYPE

	0.0.1	IIIOOZXIIIOII IIIIOIIIIZ	–	100,11011
DOMES	STIC COLD WATER 1.5" & SMALLER	0.5"	F1	INTERIOR
DOM	ESTIC COLD WATER 2" & LARGER	1"	F1	INTERIOR
TYPE	BASIS OF DESIGN	APPROVED EQUALS		DESCRIPTION
F1	OWENS-CORNING SSL1-ASJ	KNAUF 1000° PIPE, JOHNS MANVILLE MICRO-LOK HP	* K=0.24 * 3.5 - 5.3 * PREFC * WHITE * LONGI * ELBOW PIECE, F WITH HI INSERTS	ANIC GLASS FIBER WITH RESIN BONDING. @ 100 DEG. F. 5 PCF. RMED TUBULAR. FSRK JACKET. FUDINAL LAP WITH SELF-SEALING ADHESIVE. S, TEES, VALVES, CAPS, ETC., WHITE ONE REMOLDED 25/50 0.20" PVC FITTING COVERS GH DENSITY FIBERGLASS INSULATION S SAME THICKNESS, K=0.26 EQUAL TO OR PROTO.

VALVE SCHEDULE

GENERAL NOTES FOR VALVES:

VALVES SHALL COMPLY WITH ANSI, ASTM AND ASME.

VALVES ON DOMESTIC WATER SYSTEMS SHALL BE "LEAD FREE" IN ACCORDANCE WITH THE FEDERAL SAFE WATER ACT (S3874) DEFINITION AND CONFORM TO NSF 61.

GROOVED END VALVES SHALL CONFORM TO ANSI/AWWA C-606.

WORKING PRESSURES SHALL EXCEED THOSE IMPOSED BY THE SERVICE APPLIED.

VALVES WHICH ARE INSULATED SHALL HAVE EXTENDED SHAFTS.

PROVIDE FLOW MEASURING GAUGES WITH COCKS, HOSES & CONNECTORS FOR BALANCING VALVES. PROVIDE

PROVIDE HOSE ADAPTORS ON DRAIN VALVES.

SWEAT END VALVES OF EQUAL CONSTRUCTION ARE ACCEPTABLE IN LIEU OF SCREWED ENDS.

IN MECHANICALLY JOINED SYSTEMS, VALVES OF EQUAL CONSTRUCTION WITH COMPATIBLE ENDS ARE ACCEPTABLE AND MAY BE MANUFACTURED BY THE COUPLING MANUFACTURER.

VALVE MANUFACTURERS:

BALL VALVES - NIBCO, WATTS, MILWAUKEE, APOLLO, CRANE. BALANCING VALVES - BELL & GOSSETT, ARMSTRONG, WATTS.

CHECK VALVES - NIBCO, STOCKHAM, WATTS. LUB. PLUG VALVES - NORDSTROM, DURCO, HOMESTEAD, DEZURICK, NEWMAN-MILLIKEN

VALVES SHALL BE INSTALLED WITH STEM ABOVE CENTERLINE OF PIPE.

PIPING SYSTEM				VALV	E TYPE		PERSONNEL REGULARLY ENGAGED IN THE PERFORMANCE OF THIS SERVICE.					
			BUTTERFLY BALL CHECK		GATE	GATE BALANCING		EXTERIOR NATURAL GAS PIPING SHALL BE PAINTED WITH 2 LAYERS OF GRAY PAINT. INTERIOR NATURAL GAS PIPING SHALL BE PAINTED WITH 2 LAYERS OF WHITE PAINT.				
DOM	DOMESTIC WATER (CW, HW, & HWR) 2" AND SMALLER		B11	C11		E11		TESTING				
INTERIOR NATURAL GAS 3" AND SMALLER			B17					DOMESTIC WATER PIPING - 125 PSI FOR MIN. 6 HOURS AT THE LOW POINT IN TH SYSTEM.				
	INTERIOR NATURAL GAS 4" AND LARGER						P11	NATUR	RAL GAS PIPING - 100 PSI COMPRESSEI	O AIR FOR	6 HOURS.	
	EXTERIOR NATURAL GAS 3" AND SMALLER		B18						PIPING SYSTEM		TYPE	
								DOME	ESTIC COLD, HOT AND RECIRCULATING	WATER	C5	
	EXTERIOR NATURAL GAS 4" AND LARGER						P11		NATURAL GAS ABOVE GRADE		S1	
TYPE	DESCRIPTION	TYPE	DESC	RIPTION	TYPE	DESCRIP	TION		NATURAL GAS BELOW GRADE		PE1	
B11	NIBCO T-585-80-LF, 150 W.S.P., TWO-PIECE BRONZE	B18	NIBCO T-585(OR 600 PSI NON-SHO			BELL & GOSSETT CI 400 PSI, BRONZE BO		TYPE	DESCRIPTION	TYPE	DESCRIPTION	
	BODY, SCREWED ENDS, BRONZE BALL AND BRONZE STEM, TFE SEAT AND SEAL, HANDLE. NSF/ASME 61		ENDS, FULL POR TFE SEAT, HAND FOR GAS. ASME	LE. UL LISTED B16.33		BRASS BALL, SCREY CONNECTION, REAL PORTS, TFE SEATS, NAMEPLATE, HANDI MEMORY STOP, NSI	OOUT & DRAIN CALIBRATED LE WITH F/ASME 61	C5	PRESS-FIT COPPER TYPE "L" HARD COPPER ASTM B88 COPPER OR BRONZE FITTINGS ASTM B16.18 OR B16.22	S1	WELDED BLACK STEEL SCHEDULE 40, ASTM A53 TYPE E WROUGHT-STEEL WELDING FITTINGS: ASTM A 234/A 234M 1	
B17	NIBCO T-FP-600A, 600 PSI NON-SHOCK COLD., 2 PIECE, BRASS BODY, SCREWED ENDS, FULL PORT, BRASS BALL, TFE SEAT, HANDLE. UL LISTED FOR GAS. ASME B16.44	C11	NIBCO T-413-Y-LI 125 W.S.P., BROI SCREWED ENDS BRONZE SWING SEAT RING. NSF 61	IZE BODY, , RENEWABLE		NORDSTROM NO. 14 IRON BODY, ST. ST. FLANGED ENDS, WF	STEM,		250 DEG. F. EPDM SEALS	PE1	LB. C.I. FITTINGS POLYETHYLENE PE 2708 ASTM D2513 HEAT FUSION JOINTS - ASTM D2	

BUILDING SUPPLY SYSTEMS SCHEDULE WATER, COMPRESSED AIR, & GAS

DEFINITION AND CONFORM TO NSF 61.

GENERAL NOTES:

PIPING SHALL CONFORM TO OBC & IFGC REQUIREMENTS.

CHROME

ALL COMPONENTS OF DOMESTIC WATER SYSTEMS (CW. HW. & HWR) SHALL BE ■ "LEAD FREE" IN ACCORDANCE WITH THE FEDERAL SAFE WATER ACT (\$3874)

PIPING SHALL COMPLY WITH ASME B31.9 "BUILDING SERVICES PIPING".

CONTACT THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) OR (811) WELL IN ADVANCE OF THE START OF UNDERGROUND UTILITY WORK.

DIELECTRIC CONNECTORS SHALL BE PROVIDED AT CONNECTIONS BETWEEN FERROUS & COPPER PIPING.

GAS PRESSURE REGULATORS SHALL BE CAST IRON SELF-OPERATING SPRING LOADED TYPE. VALVE 125 PSI. SPRING AND DIAPHRAGM CASINGS SHALL BE ALUMINUM. REGULATOR SHALL HAVE AN INTERNAL RELIEF VALVE ASSEMBLY, TAPPED VENT CONNECTION WITH REMOVABLE SCREEN ON THE SPRING CASING AND AN EXTERNAL PILOT OPERATOR TO AFFORD A 5% MAXIMUM DROOP. OVER-PRESSURE PROTECTION SHALL BE TEN TIMES THE INLET PRESSURE (OR HIGHER AS MAY BE REQUIRED BY THE GAS COMPANY). FISHER TYPE S102 OR S202 OR EQUAL BY SPRAGUE OR EQUIMETER.

COPPER TUBING - WROUGHT OR CAST COPPER, CLASS 150, SOLDERED ENDS THREADED STEEL PIPE - MALLEABLE IRON W/GROUND SEAT, 300 LB SCREWED

MECHANICALLY FORMED TEES AND COUPLINGS (T-DRILL) ARE NOT PERMITTED. EXECUTION
PIPE AND TUBING SHALL BE CUT AND FABRICATED TO FIELD MEASUREMENTS AND

RUN PARALLEL TO NORMAL BUILDING LINES. PIPE INTERIOR SHALL BE CLEANED OF FOREIGN MATTER AND BURRS BEFORE ERECTION OF PIPE. ANNULAR SPACE AROUND PIPING THRU ALL WALLS SHALL BE SEALED OFF WITH

PERMANENT PLIABLE CAULKING OR APPROVED PATCHING SEALANT. PROVIDE PIPING SLEEVES AT FLOORS, WALLS & ROOFS IN NEW CONSTRUCTION. EXISTING WALLS TO BE SAW CUT TO PASS NEW PIPING.

PIPING SHALL NOT BE RUN ABOVE ELECTRICAL SWITCHGEAR OR PANELBOARDS. NOR ABOVE THE ACCESS SPACE OF SUCH EQUIPMENT - NEC ARTICLE 384. PIPING SHALL BE PITCHED FOR DRAINAGE.

CLOSE OPEN ENDS OF PIPING DURING CONSTRUCTION.

MECHANICAL JOINT PIPING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

GAS PRESSURE REGULATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PROVIDE VALVED GAUGE TAPS UPSTREAM AND DOWNSTREAM OF THE REGULATOR VENT PIPING SHALL BE EXTENDED INDIVIDUALLY FROM EACH REGULATOR AND GAS VENTING DEVICE TO OUTSIDE THE BUILDING IN AN APPROVED LOCATION.

SUPPORT PIPING FROM BUILDING STRUCTURE WITH RODS, ANGLES & CLAMPS ATTACHED TO STRUCTURE. HANG PIPING WITH CLEVIS HANGER OR ROLLER SUPPORTS. HANGERS SHALL BE INSTALLED ON CENTERS AS RECOMMENDED BY MANUFACTURER.

CLEAN INTERIOR WATER PIPING AFTER INSTALLATION BY FLUSHING WITH CLEAN POTABLE WATER TO CLEAR ALL INTERNAL DEBRIS.

ALL NEW AND EXISTING DOMESTIC WATER PIPING SHALL BE DISINFECTED IN CONFORMANCE WITH AWWA C651-86. DOMESTIC WATER PIPING SHALL BE SANITIZED PRIOR TO PUTTING SYSTEM IN OPERATION BY A COMPANY OR PERSONNEL REGULARLY ENGAGED IN THE PERFORMANCE OF THIS SERVICE. EXTERIOR NATURAL GAS PIPING SHALL BE PAINTED WITH 2 LAYERS OF GRAY PAINT.

	PIPING SYSTEM	TYPE	
DOMES	STIC COLD, HOT AND RECIRCULATING	C5	
	NATURAL GAS ABOVE GRADE	S1	
	NATURAL GAS BELOW GRADE	PE1	
TYPE	DESCRIPTION	TYPE	DESCRIPTION
C5	PRESS-FIT COPPER TYPE "L" HARD COPPER ASTM B88 COPPER OR BRONZE FITTINGS ASTM B16.18 OR B16.22 250 DEG. F. EPDM SEALS	S1	WELDED BLACK STEEL SCHEDULE 40, ASTM A53 TYPE E WROUGHT-STEEL WELDING FITTINGS: ASTM A 234/A 234M 150 LB. C.I. FITTINGS
		PE1	POLYETHYLENE PE 2708 ASTM D2513 HEAT FUSION JOINTS - ASTM D2513

PIPE HANGER SCHEDULE - PLUMBING

GENERAL NOTES FOR PIPE HANGERS:

VESSEL CODE: SECTION IX.

FITTING SHALL BE SUPPORTED.

3. REUSE EXISTING SERVICES. MODIFY AS REQUIRED TO INSTALL NEW FIXTURE.

DESIGN SUPPORTS FOR MULTIPLE PIPES CAPABLE OF SUPPORTING COMBINED WEIGHT OF SUPPORTED SYSTEMS, SYSTEM CONTENTS, AND TEST WATER.

DESIGN SEISMIC-RESTRAINT HANGERS AND SUPPORTS FOR PIPING AND OBTAIN APPROVAL FROM AUTHORITIES HAVING JURISDICTION. WELDING: QUALIFY PROCEDURES AND PERSONNEL ACCORDING TO ASME BOILER AND PRESSURE

ATTACHMENT OF PIPE HANGER RODS TO THE STRUCTURE SHALL BE WITH: 1. PRE-SET CONCRETE INSERTS.

2. AFTER-SET STEEL EXPANSION TYPE CONCRETE INSERTS. 3. BEAM CLAMPS FOR STEEL CONSTRUCTION EQUAL TO ANVIL FIG. 92, 93, OR 94. UTILIZE SWIVEL TYPE IN SLOPED STEEL CONSTRUCTION TO PROVIDE VERTICAL SUPPORT OF PIPE WITHOUT BENDING

HANGER RODS. 4. SIDE BEAM BRACKET FOR WOOD CONSTRUCTION EQUAL TO ANVIL FIG. 206. 5. CHANNEL SUPPORT SYSTEM EQUAL TO UNISTRUT OR HILTI.

ATTACHMENT TO MANUFACTURED TRUSSES AND OTHER ENGINEERED STRUCTURAL MEMBERS AND SUPPORTS SHALL BE DONE IN ACCORDANCE WITH THE STRUCTURAL MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR TYPE OF ENGINEERED STRUCTURAL SYSTEMS BEING USED. CONNECTIONS TO THESE STRUCTURAL MEMBERS SHALL BE MADE WITH CONNECTION DEVICES AND METHODS APPROVED BY THE STRUCTURAL MANUFACTURER. PROVIDE ADDITIONAL SUPPORTS WITH SUPPLEMENTAL STEEL SHAPES WHEN SPACING BETWEEN STRUCTURAL MEMBERS EXCEEDS SPECIFIED DISTANCES.

ADJUST PIPE HANGERS TO PROPER ELEVATION AND SET HANGER RODS IN A VERTICAL POSITION BEFORE PIPE INSULATION IS INSTALLED.

THE FIRST TWO HANGERS ON PIPING CONNECTING TO MOTOR DRIVEN EQUIPMENT SHALL BE FITTED WITH A STEEL SPRING AND NEOPRENE VIBRATION ISOLATION SECTION SIMILAR TO MASON INDUSTRIES,

TRAPEZE HANGERS FOR NUMEROUS PIPES RUN IN PARALLEL MAY BE UTILIZED. HORIZONTAL SUPPORT MEMBERS SHALL BE UNISTRUT TYPE SECTION WITH PIPE ROLLERS (TO ALLOW FOR EXPANSION TRAVEL) AND SPRING AND NUT CONNECTORS, SUSPENDED WITH HANGER RODS AND ATTACHMENTS SIMILAR TO INDIVIDUAL PIPE HANGER SUSPENSION.

SHORTENED EXTENDED LEGS OF PIPE RISER CLAMPS AS NEEDED TO MAINTAIN CONCEALMENT OF THE CLAMP WITHIN THE PIPE CHASE. INSURE THAT ADEQUATE SUPPORT IS STILL MAINTAINED.

HANGER ASSEMBLIES EXPOSED ON COMPLETION OF THE PROJECT SHALL BE PAINTED BEFORE

PIPE SUPPORTS FOR PIPE RUNNING ACROSS THE ROOF SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND AS DETAILED. INSTALL PROTECTIVE SLIP SHEETS OF ROOFING MEMBRANE UNDER THE BASES TO SATISFY REQUIREMENTS OF BOTH THE ROOFING MANUFACTURER

AND THE SUPPORT SYSTEM MANUFACTURER. IN PIPING SYSTEMS WITH MECHANICAL JOINT COUPLINGS, PIPE HANGERS SHALL BE PROVIDED ON HORIZONTAL PIPING AT NORMAL SPECIFIED INTERVALS AND, IN ADDITION, SO THAT NO PIPE SHALL BE LEFT UNSUPPORTED BETWEEN ANY TWO COUPLINGS NOR LEFT UNSUPPORTED WHENEVER A CHANGE IN DIRECTION TAKES PLACE. VERTICAL PIPING SHALL BE SUPPORTED AT NORMAL SPECIFIED INTERVALS OR EVERY OTHER PIPE LENGTH, WHICH EVER IS MORE FREQUENT. THE BASE OF THE RISER OR BASE

SYSTEM & SIZE	ORIENTATION & SIZE	SPACING
STEEL PIPING	VERTICAL	AT BASE AND 15 FT MAXIMUM
	HORIZONTAL 2" & SMALLER	8 FT.
	HORIZONTAL 2.5" - 6"	10 FT.
	HORIZONTAL 8" & LARGER	12 FT.
CAST IRON	VERTICAL	AT BASE AND 15 FT MAXIMUM
	HORIZONTAL	AT 10 FT. INTERVALS. SUPPORT EACH LENGTH OF PIPE NOT MORE THAN 18" FROM THE JOINT. SUPPORT TERMINAL ENDS OF HORIZONTAL RUNS AND BRANCHES AND EACH CHANGE IN DIRECTION. 5" AND LARGER PROVIDE BRACING TO PREVENT HORIZONTAL MOVEMENT IN ACCORDANCE WITH CISPI "SOIL PIPE AND FITTINGS HANDBOOK"
COPPER TUBING	VERTICAL	AT BASE AND 15 FT MAXIMUM
	HORIZONTAL 1.25" & SMALLER	6 FT.
	HORIZONTAL 1.5" - 2"	8 FT.
	HORIZONTAL 2.5" & LARGER	10 FT.
PLASTIC PIPING	VERTICAL	PER MANUFACTURER'S RECOMMENDATION

PER MANUFACTURER'S RECOMMENDATION

GENERAL REQUIREMENTS

PROVIDE COMPLETE AND FUNCTIONAL PLUMBING SYSTEMS PER PLANS INCLUDING FURNISHING, INSTALLING, TESTING AND

WARRANTY OF ALL WORK.

WORK SHALL BE IN ACCORDANCE WITH THE 2024 OHIO BUILDING AND OHIO PLUMBING CODES INCLUDING REFERENCED CODES AND STANDARDS, ALL FEDERAL AND LOCAL CODES AND ALL APPLICABLE LAWS, ORDINANCES AND REGULATIONS.

WORK SHALL BE PERFORMED USING BEST QUALITY INSTALLATION PRACTICE BY A QUALIFIED TRADE CONTRACTOR AND THEIR QUALIFIED SUBCONTRACTORS. ALL CONTRACTORS SHALL BE LICENSED AND BE BONDED FOR THE WORK.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA AND OWNER SAFETY STANDARDS AND PRACTICES. ALL ON SITE

PERSONNEL SHALL BE SAFETY TRAINED AND OWNER CERTIFIED. 5. OBTAIN REQUIRED PERMITS RELATED TO THE WORK AND PAY ALL PERMIT AND INSPECTION FEES.

6. THE AUTHORITY HAVING JURISDICTION SHALL INSPECT AND

APPROVE ALL WORK. PROVIDE A FINAL CERTIFICATE OF APPROVAL FROM THE AUTHORITY HAVING JURISDICTION AND

PRESENT TO THE OWNER BEFORE REQUESTING FINAL PAYMENT AND RELEASE OF RETAINAGE. PROTECT ALL FURNISHED MATERIAL AND EQUIPMENT FROM

THEFT AND DETERIORATION OR CONTAMINATION DUE TO WEATHER OR CONSTRUCTION ACTIVITIES.

PROTECT OWNER'S PROPERTY AND PROPERTY OF OTHER CONTRACTORS.

REMOVE ALL CONSTRUCTION DEBRIS FROM SITE. RECYCLE

DEBRIS WHERE POSSIBLE. DISPOSE OF ALL HAZARDOUS MATERIAL IN ACCORDANCE WITH ENVIRONMENTAL LAWS.

. PROVIDE ALL CUTTING AND PATCHING REQUIRED TO INSTALL MATERIAL AND EQUIPMENT. 11. CUT EXISTING FLOOR SLAB AND REPLACE TO MATCH EXISTING

GRADE, MATERIALS, AND FINISH. EXCAVATE FOR ALL IN GRADE UNDERFLOOR PIPING. BACKFILL AND REPLACE SLAB TO MATCH ADJACENT SURFACE OR GRADE. PUMP WATER FROM EXCAVATIONS AND TRENCHES DURING CONSTRUCTION. EXISTING SERVICES ENCOUNTERED DURING EXCAVATION WORK SHALL BE PROTECTED. ANY SERVICES DAMAGED SHALL BE REPAIRED OR REPLACED. PIPE SHALL BE LAID ON A 6" MINIMUM SAND BED. BACKFILLING OF TRENCHES SHALL BE WITH GRADED PEA GRAVEL OR GRADED COURSE SAND. EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.

PROVIDE APPROPRIATE FIRESTOPPING SYSTEM FOR ANNULAR SPACE OPENINGS AROUND PIPE PENETRATIONS THROUGH FIRE RESISTANCE RATED CONSTRUCTION. ANNULAR SPACE OPENINGS AT PIPE PENETRATIONS IN NON RATED CONSTRUCTION TO BE CLOSED AIR AND WATER TIGHT.

13. MATERIALS AND EQUIPMENT SHALL BE ONE OF THE BRAND OR MANUFACTURERS LISTED OR AN APPROVED EQUAL.

14. ELECTRONIC SHOP DRAWINGS SHALL BE PROVIDED IN .PDF FORMAT FOR THE ENGINEER'S APPROVAL FOR ALL MATERIALS AND EQUIPMENT. SHOP DRAWINGS SHALL BE SPECIFICALLY EDITED TO ELIMINATE SUPERFLUOUS INFORMATION AND SHALL CLEARLY SHOW SPECIFICS FOR THE MATERIAL AND EQUIPMENT PROVIDED.

15. COORDINATE INSTALLATION OF ACTUAL EQUIPMENT AND SYSTEMS PROVIDED WITH OTHER TRADES AND NEW OR

PROVIDE FINAL COORDINATION/INSTALLATION DRAWINGS TO THE OWNER IN BOUND PAPER AS WELL AS ELECTRONIC FORMAT FOR RECORD.

17. INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

18. INSTALL ALL MATERIAL AND EQUIPMENT TO PROVIDE REQUIRED CLEARANCES TO MEET CODE REQUIREMENTS. MANUFACTURER'S RECOMMENDATIONS AND MAINTENANCE

19. ALL WORK AREAS SHALL BE CLEANED TO MATCH ORIGINAL

20. MAINTAIN RECORD DRAWINGS AND PROVIDE TO THE OWNER OR HIS AGENT.

21. PROVIDE TWO (2) BOUND, PAPER COPIES OF ALL OPERATING AND MAINTENANCE MANUALS. PROVIDE AN ELECTRONIC COPY OF THE OPERATING AND MAINTENANCE MANUAL. 22. PROVIDE WARRANTY FOR ALL WORKMANSHIP, EQUIPMENT AND

EQUIPMENT.

MATERIAL. WARRANTY SHALL BE 1 YEAR FOR PARTS AND LABOR,

LABOR AS IDENTIFIED OR AS STANDARD FOR CERTAIN ITEMS OF

PROVIDE EXTENDED WARRANTY PERIOD FOR PARTS AND/OR

FIRE PROTECTION CONTRACTOR. JEFFERY D. ZELINSKI, LICENSE #63822 EXPIRATION DATE 12/31/2025 TEMPERATURE CONTROLS CONTRACTOR. ABOVE FINISHED FLOOR - TO BOTTOM OF ITEM UNLESS INDICATED OTHERWISE IN DRAWING. NOTE SYMBOL - APPLIES ONLY TO SHEET ON DETAIL NOTE SYMBOL - APPLIES ONLY TO DETAIL EQUIPMENT REFERENCE SYMBOL. ELECTRICAL EQUIPMENT REFERENCE SYMBOL. NO ELECTRICAL DETAIL "B" SHOWN ON SHEET H2. SECTION "A" DESIGNATION, SHOWN ON SHEET H1. CONNECTION, NEW TO EXISTING. UP TO "FD1", SHOWN ON FLOOR ABOVE. SEE SPECIFICATION FOR PENETRATION DETAILS SEE SPECIFICATION FOR PENETRATION DETAILS SEE SPECIFICATION FOR PENETRATION DETAILS

JEFFREY D.

ZELINSKI

63822

EXISTING TO REMAIN.

PLUMBING LEGEND

NEW ITEM.

— — — ITEM TO BE REMOVED.

GENERAL LEGEND

ELECTRICAL CONTRACTOR.

GENERAL CONTRACTOR.

PLUMBING CONTRACTOR.

HVAC CONTRACTOR.

NOT IN CONTRACT.

EQUIPMENT SUPPLIER.

MOUNTING HEIGHT.

SURFACE MOUNTED.

WEATHER PROOF

WHICH IS SHOWN.

ON WHICH IS SHOWN.

CONNECTION REQUIRED.

CONNECTION REQUIRED.

1 HOUR FIRE PROTECTION

2 HOUR FIRE PROTECTION

3 HOUR FIRE PROTECTION

ROOM NUMBER.

DETAIL SYMBOL

SECTION SYMBOL

123

EMERGENCY.

------ COLD WATER — G — NATURAL GAS SHUT-OFF VALVE, SEE SCHEDULE FOR TYPE CHECK VALVE BALANCING VALVE ₩ VALVE ON RISER ───├── UNION, SCREWED REGULATOR PRESSURE GAUGE CONNECTION, BOTTOM

CONNECTION, TOP

PLUMBING INDEX OF DRAWINGS

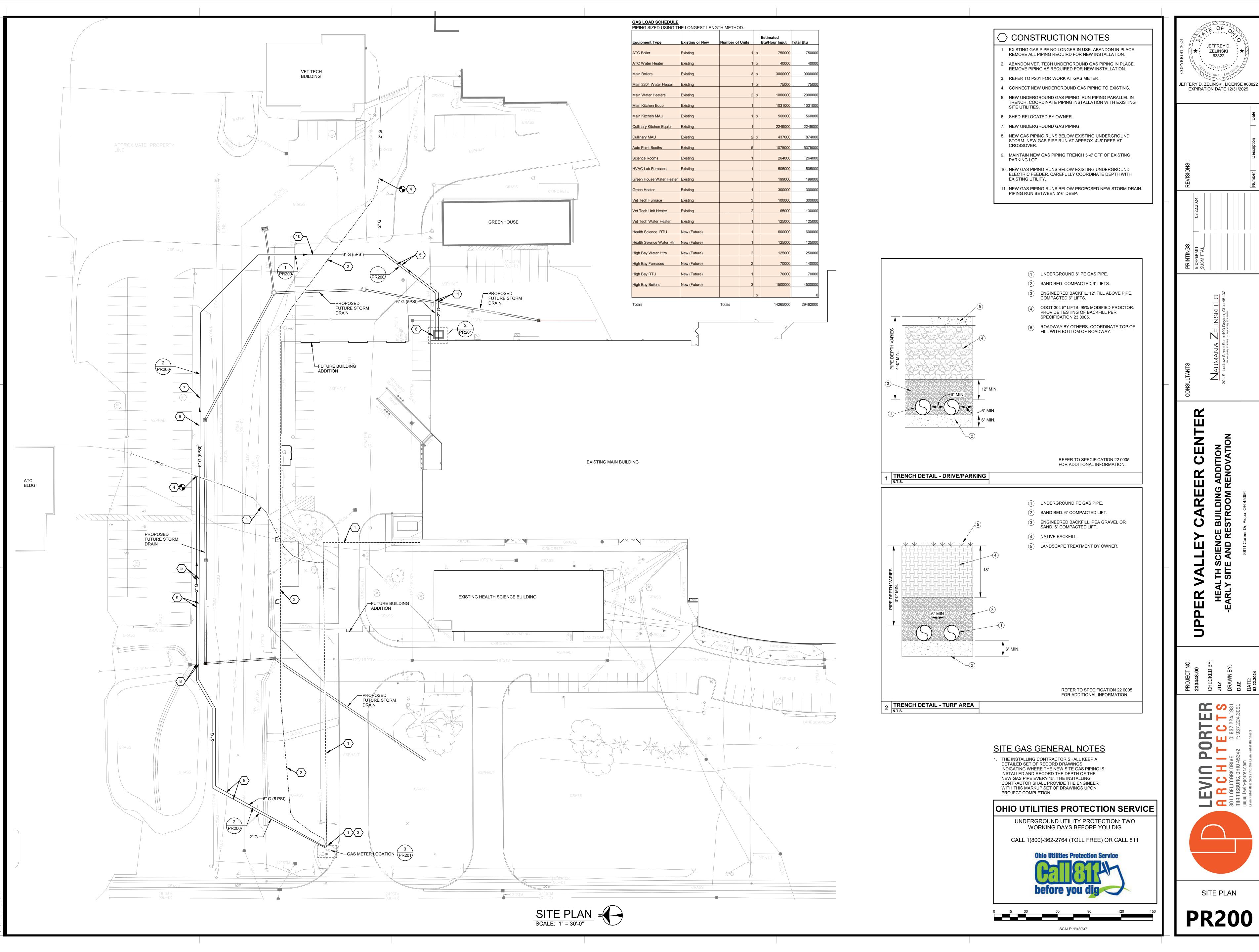
PR001 LEGENDS AND SCHEDULES

PR200 SITE PLAN

PR201 AREA B WORK PLAN

DIRECTION OF FLOW

301 MIR **LEGENDS AND SCHEDULES**

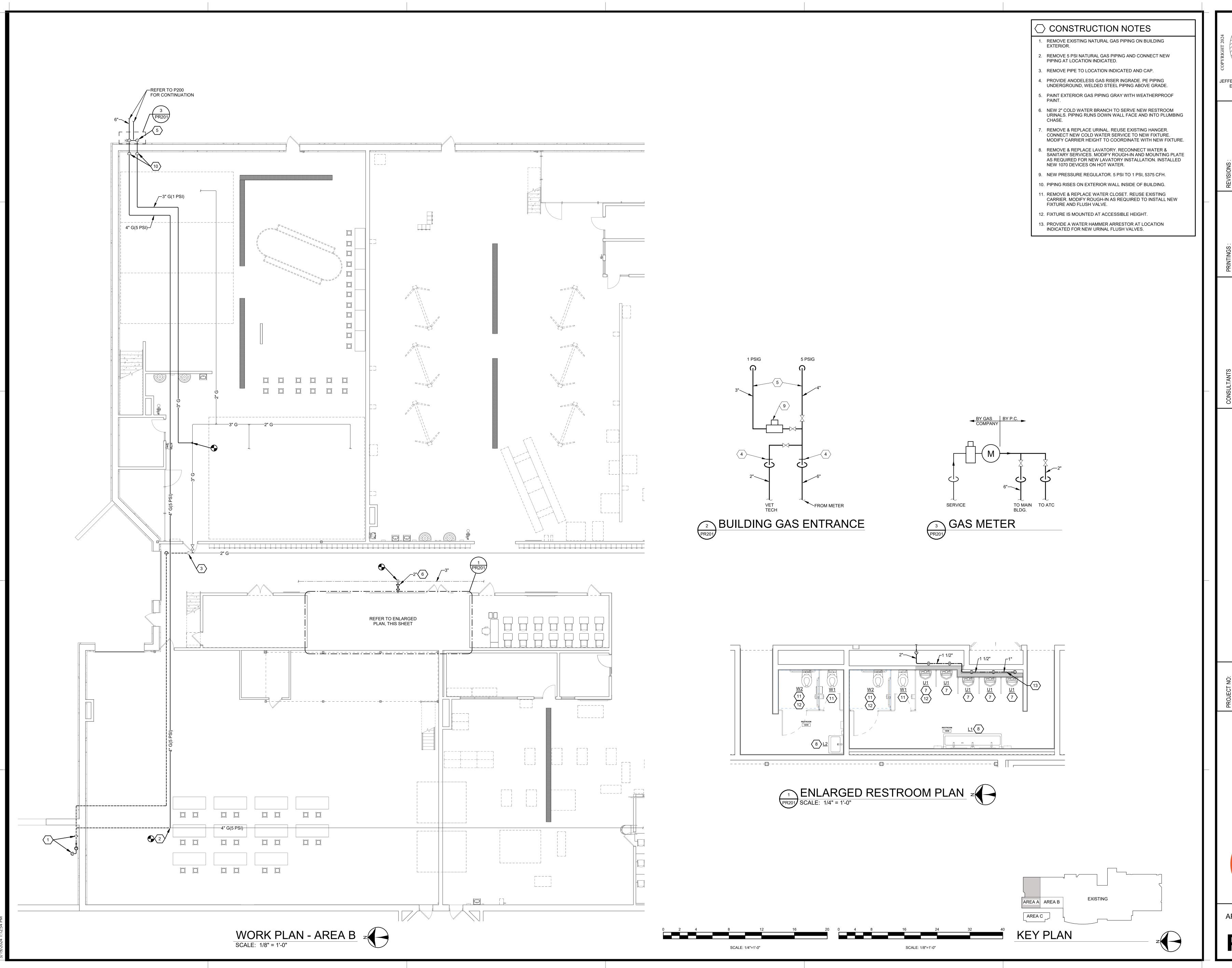


JEFFREY D. ZELINSKI 63822

JEFFERY D. ZELINSKI, LICENSE #63822 EXPIRATION DATE 12/31/2025

P B 3011 NEU MIBMISBI WWW.levir

SITE PLAN





REVISIONS:

BID/PERMIT 03.22.2024
SUBMITTAL

MAUMAN& ZELINSKI LLC.
204 S. Ludlow Street Suite 400 Dayton, Ohio 45402
Phone: (937) 223-3821 ~ Fax: (937) 223-3849

Y CAREER CENTER

CE BUILDING ADDITION

RESTROOM RENOVATION

UPPER VALLEY CAREE

HEALTH SCIENCE BUILDING A

-EARLY SITE AND RESTROOM RE

TER CHECKED BY:

CTS JDZ

37.224.1931

DATE:

DATE:

LEVIN PORFIER

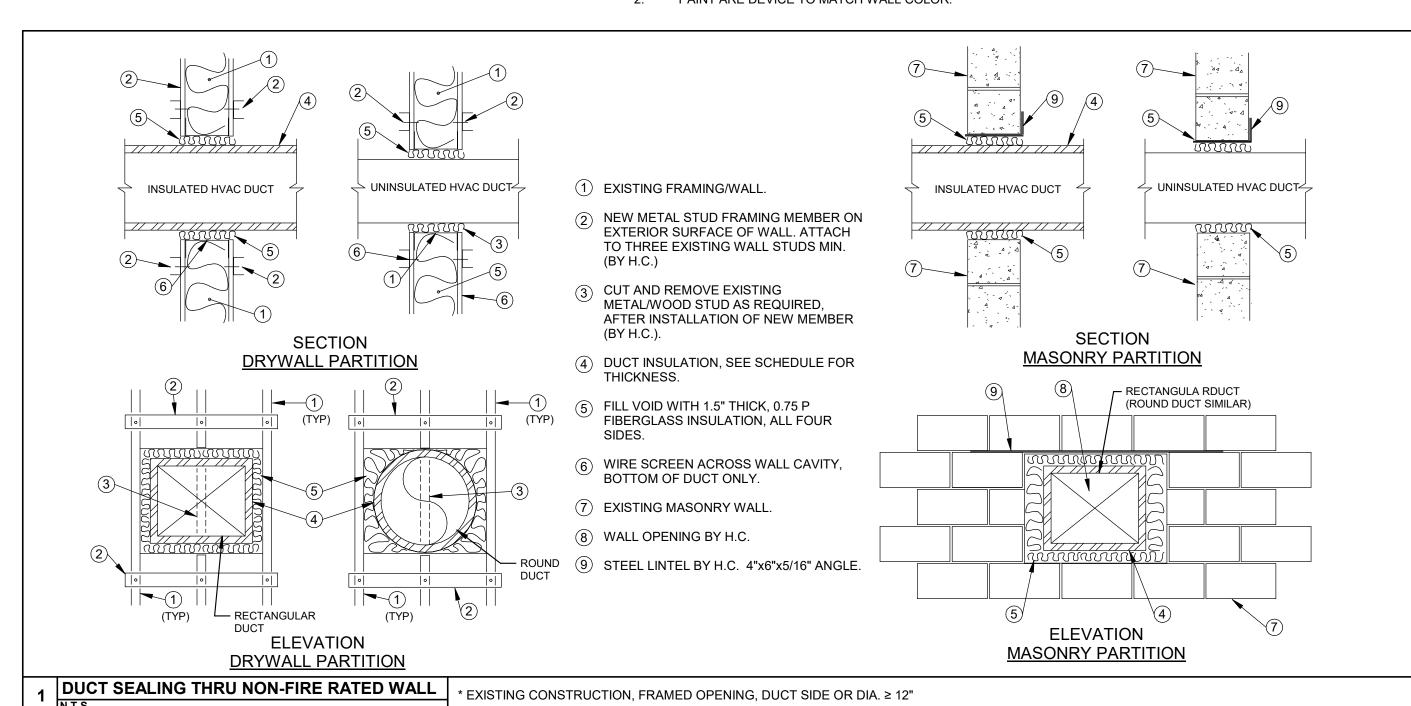
RECHITECTS
3011 nEWMARK DRIVE
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Levin Porter Associates Inc. dba Levin Porter Architects

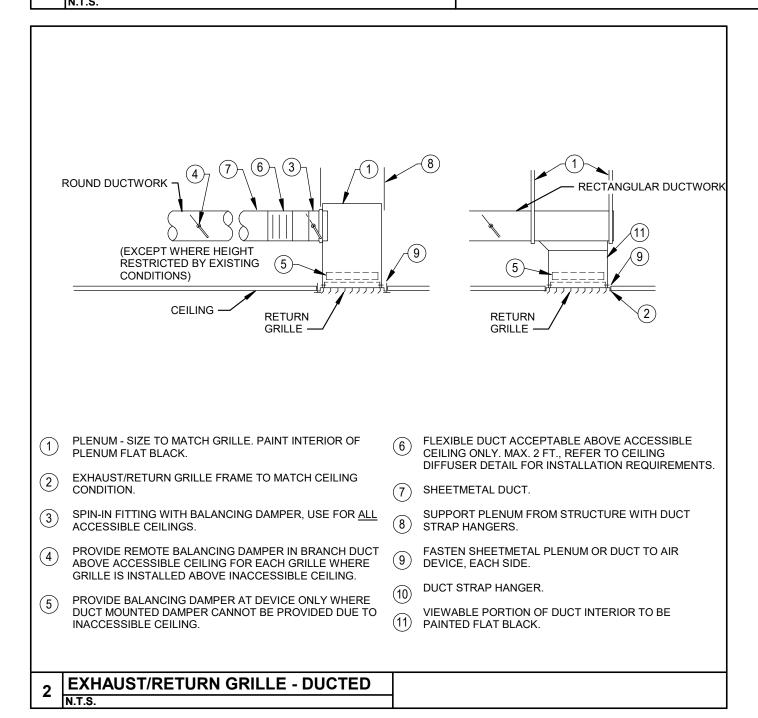
AREA B WORK PLAN

PR201

TAG	DESCRIPTION	MODEL NO.	MATERIAL	ACCESSORIES	NOTES
E1	EXHAUST GRILLE DEVICE SIZE - 24" X 24" 45° HORIZONTAL BLADES 1/2" SPACING	635	ALUMINUM		
E2	RETURN GRILLE DEVICE SIZE - 16" X 16" 45° HORIZONTAL BLADES 1/2" SPACING BLADES PARALLEL TO LONG DIMENSION	635	ALUMINUM	BALANCING DAMPER	1, 2

VERIFY AIR DEVICE SIZE PRIOR TO ORDERING. PAINT ARE DEVICE TO MATCH WALL COLOR.





DUCT CONSTRUCTION AND SEALING

- QUALITY ASSURANCE COMPLY WITH GENERAL WELDING PERSONNEL & PROCEDURES UNDER AWS D1.1/D1.1M, AWS D1.2/D1.2M & AWS D9.1/D9.1M.
- COMPLY WITH GENERAL DUCT CONSTRUCTION STANDARDS UNDER SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE - THIRD EDITION AND MOST CURRENT VERSION OF
- APPLICABLE ASHRAE 90.1 SECTION 6.4.4 AND ASHRAE 62.1 SECTIONS 5 & 7. COMPLY WITH SEISMIC REQUIREMENTS PRESCRIBED UNDER SMACNA DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE THIRD EDITION & ASCE/SEI 7.
- ROUND OR FLAT OVAL SINGLE WALL DUCTWORK 2" S.P. AND HIGHER
- CONTINUOUS HELICAL (SPIRAL) LOCK SEAM CONSTRUCTION.
- SLIP CONNECTIONS; GASKETED FLANGES ARE NOT ACCEPTABLE.
- USE 45 DEG. LATERAL TEES WHEREVER POSSIBLE
- 90 DEG. TEES SHALL BE CONICAL SPIN-IN TYPE. DIE STAMPED ELBOWS, r/D = 1.5 (MIN.)
- RADIUSED, ANGLED (15° MAX.) OR MITERED (15° MAX.) OFFSETS.
- CONCENTRIC TRANSITIONS, 0 = 45° MAX.
- ECCENTRIC TRANSITIONS, 0 = 30° MAX.
- ROUND OR FLAT OVAL DOUBLE WALL DUCTWORK 2" S.P. AND HIGHER (SAME AS ABOVE EXCEPT:) • INSULATION THICKNESS PER INSULATION SCHEDULE FOR INTENDED SERVICE.
- PERFORATED INNER LINER/SOLID INNER LINER. OUTER PRESSURE SHELL.
- ROUND DUCTWORK 1" S.P. OR LESS (SAME AS ABOVE EXCEPT:)
- LONGITUDINAL SEALED SEAM CONSTRUCTION ACCEPTABLE AT FINAL AIR DEVICE ONLY.
- STANDARD TEES ALLOWED. SEGMENTED ELBOWS ALLOWED.
- RECTANGULAR DUCTWORK 2" S.P. AND HIGHER
- FLAT SLIP, STANDING DRIVE OR GASKETED FLANGE DUCT SYSTEM CONNECTIONS.
- RADIUS OR SQUARE THROAT WITH DOUBLE WALL TURNING VANES ELBOW. 45 DEG. ENTRY OR CONICAL SPIN-IN BRANCH CONNECTIONS.
- RADIUSED, ANGLED (15° MAX.) OR MITERED (15° MAX.) OFFSETS.
- CONCENTRIC TRANSITIONS, 0 = 45° MAX. ECCENTRIC TRANSITIONS, 0 = 30° MAX.
- BRANCH DUCTS SHALL BE CONICAL TEE FITTINGS.
- SQUARE THROAT, RADIUS HEEL 90° ELBOWS ARE NOT PERMITTED.
- RECTANGULAR DUCTWORK 1" S.P. OR LESS (SAME AS ABOVE EXCEPT:) TURNING VANES IN ELBOWS NOT REQUIRED FOR AIR VELOCITIES LESS THAN 800 FPM.
- STRAIGHT TAP AND STANDARD SPIN-IN BRANCH CONNECTIONS PERMITTED.
- FLEXIBLE DUCTWORK SUPPLY/RETURN/TRANSFER/EXHAUST PROVIDE MANUFACTURED DUCT SUPPORTS AT 90 DEGREE ELBOWS TO CEILING AIR DEVICES.
- FLAME SPREAD LESS THAN 25, SMOKE DEVELOPMENT LESS THAN 50. DUCT SEALANT & GASKETS GALVANIZED DUCT SEALANT - WATER BASED SYNTHETIC LATEX EMULSION, GRAY IN COLOR.
- FLANGE GASKETS BUTYL RUBBER, NEOPRENE, OR EPDM POLYMER W/ POLYISOBUTYLENE PLASTICIZER.
- ALUMINUM DUCT SEALANT ALUMINUM SILICONE, GRAY IN COLOR.
- PVC COATED DUCT SEALANT PVS SEALANT OR CAULK/MINERAL IMPREGNATED FIBER TYPE. DUCT HANGER SUPPORTS
- DUCT HANGER SUPPORTS SHALL DIRECTLY ATTACH TO DUCTWORK.
- EXTERIOR DUCT INSULATION WRAP SHALL BE APPLIED OVER DUCT AND HANGER SUPPORTS. ANGLE OR UNISTRUT SUPPORTS SHALL BE INSULATED A MINIMUM OF 4" BEYOND DUCT BEARING POINT
- TO PREVENT CONDENSATION.
- DRAWINGS INDICATE GENERAL LOCATION OF DUCTWORK. COORDINATE DUCT LAYOUT CAREFULLY WITH OTHER TRADES TO AVOID CONFLICT. PROVIDE OFFSETS AS REQUIRED.
- SPAN DUCTWORK FROM STRUCTURAL CONCRETE/STEEL MEMBERS OR SUPPLEMENTARY STEEL
- FOR EXPOSED DUCTWORK, GRIND WELDS SMOOTH AND POLISH AND TRIM SEALANTS FLUSH WITH DUCT
- PROTECT DUCTWORK DURING CONSTRUCTION AND CLEAN PRIOR TO SYSTEM OPERATION.
- ROUTE DUCTWORK TO AVOID PASSING THRU TRANSFORMER VAULTS OR ABOVE ELECTRICAL SWITCHGEAR OR PANELBOARDS PER NEC REQUIREMENTS.
- SEAL DUCTS ACCORDING TO SMACNA SEAL CLASS NOTED IN SCHEDULE. SYSTEMS OPERATING AT 3" S.P. OR HIGHER AND ALL EXTERIOR DUCTWORK SHALL REQUIRE DUCT
- PRESSURE TESTING. WET DUCT SYSTEMS SHALL BE PITCHED FOR DRAINAGE. PROVIDE TRAPPED DRAIN AT SYSTEM LOW
- POINTS AND PIPE TO LOCAL DRAIN POINT.

DUCTWORK	SYSTEM SCHEDULE							
				SMACNA				
DUCT	WORK SYSTEMS	LOCATION	MATERIAL	SP. CONSTR.	SEAL CLASS	NOTES	14	
E	XHAUST AIR	CONCEALED	G1	-2"	С			
DUCTWORK I	MATERIALS SCHEDULE							
TYPE	MATERIAL	DESCRIPTION						
G1	GALVANIZED STEEL	24 GA. MIN., HOT DIF A653.	24 GA. MIN., HOT DIPPED, GALVANIZED BOTH SIDES, G90 PER ASTM A653.					

GENERAL NOTES - HVAC

- PROVIDE COMPLETE AND FUNCTIONAL HVAC SYSTEMS PER HVAC PLANS INCLUDING FURNISHING, INSTALLING, TESTING AND WARRANTY OF ALL WORK.
- WORK SHALL BE IN ACCORDANCE WITH THE 2024 OHIO BUILDING AND MECHANICAL CODES INCLUDING REFERENCED CODES AND STANDARDS, ALL FEDERAL, STATE, AND LOCAL CODES AND ALL APPLICABLE LAWS, ORDINANCES AND REGULATIONS.
- WORK SHALL BE PERFORMED USING BEST QUALITY INSTALLATION PRACTICE BY A QUALIFIED TRADE CONTRACTOR AND THEIR QUALIFIED SUBCONTRACTORS. ALL CONTRACTORS
 - SHALL BE LICENSED AND BE BONDED FOR THE WORK. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA AND OWNER SAFETY STANDARDS AND PRACTICES. ALL ON
 - SITE PERSONNEL SHALL BE SAFETY TRAINED AND OWNER OBTAIN REQUIRED PERMITS RELATED TO THE WORK AND PAY

APPROVAL FROM THE AUTHORITY HAVING JURISDICTION AND

ALL PERMIT AND INSPECTION FEES. . THE AUTHORITY HAVING JURISDICTION SHALL INSPECT AND APPROVE ALL WORK. PROVIDE A FINAL CERTIFICATE OF

PRESENT TO THE OWNER BEFORE REQUESTING FINAL

PAYMENT AND RELEASE OF RETAINAGE.

ALL EQUIPMENT AND MATERIAL REQUIRED FOR COMPLETE AND FUNCTIONAL HVAC SYSTEMS ARE INCLUDED IN THE

GENERAL REQUIREMENTS - HVAC

- PROTECT ALL FURNISHED MATERIAL AND EQUIPMENT FROM THEFT AND DETERIORATION OR CONTAMINATION DUE TO WEATHER OR CONSTRUCTION ACTIVITIES.
- PROTECT OWNERS PROPERTY AND PROPERTY OF OTHER CONTRACTORS.
- REMOVE ALL CONSTRUCTION DEBRIS FROM SITE. RECYCLE DEBRIS WHERE POSSIBLE. DISPOSE OF ALL HAZARDOUS MATERIAL IN ACCORDANCE WITH ENVIRONMENTAL LAWS.
- PROVIDE ALL CUTTING AND PATCHING REQUIRED TO INSTALL MATERIAL AND EQUIPMENT.
- PROVIDE APPROPRIATE FIRESTOPPING SYSTEM FOR ANNULAR SPACE OPENINGS AROUND DUCT AND PIPE PENETRATIONS THROUGH FIRE RESISTANCE RATED CONSTRUCTION. ANNULAR SPACE OPENINGS AT DUCT OR PIPE PENETRATIONS IN NON RATED CONSTRUCTION TO BE CLOSED AIR AND WATER TIGHT.
- MATERIALS AND EQUIPMENT SHALL BE ONE OF THE BRAND OR MANUFACTURERS LISTED OR AN APPROVED EQUAL.
- ELECTRONIC SHOP DRAWINGS SHALL BE PROVIDED IN .PDF FORMAT FOR THE ENGINEER'S APPROVAL FOR ALL MATERIALS AND EQUIPMENT. SHOP DRAWINGS SHALL BE SPECIFICALLY EDITED TO ELIMINATE SUPERFLUOUS INFORMATION AND SHALL CLEARLY SHOW SPECIFICS FOR THE MATERIAL AND EQUIPMENT PROVIDED.
- COORDINATE INSTALLATION OF ACTUAL EQUIPMENT AND SYSTEMS PROVIDED WITH OTHER TRADES AND NEW OR EXISTING CONDITIONS.
- INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. PROVIDE REQUIRED CLEARANCES TO MEET CODE REQUIREMENTS, MANUFACTURER'S RECOMMENDATIONS AND MAINTENANCE SERVICE.
- 10. ALL WORK AREAS SHALL BE CLEANED TO MATCH ORIGINAL CONDITION.
- I. PROVIDE TESTING, ADJUSTING AND BALANCING (TAB) REPORTS FOR AIR AND WATER SYSTEMS. A CERTIFIED AABC OR NEBB FIRM SHALL PROVIDE THE BALANCE.
- 2. MAINTAIN RECORD DRAWINGS AND PROVIDE TO THE OWNER OR HIS AGENT.
- AND MAINTENANCE MANUALS. PROVIDE AN ELECTRONIC COPY OF THE OPERATING AND MAINTENANCE MANUAL.
- 14. PROVIDE WARRANTY FOR ALL WORKMANSHIP, EQUIPMENT AND MATERIAL. WARRANTY SHALL BE 1 YEAR FOR PART AND LABOR, PROVIDE EXTENDED WARRANTY PERIOD FOR PARTS AND/OR LABOR AS IDENTIFIED OR AS STANDARD FOR CERTAIN ITEMS OF EQUIPMENT.

GENERAL LEGEND ELECTRICAL CONTRACTOR. FIRE PROTECTION CONTRACTOR.

PLUMBING CONTRACTOR. TEMPERATURE CONTROLS CONTRACTOR.

GENERAL CONTRACTOR.

HVAC CONTRACTOR.

NOT IN CONTRACT. ABOVE FINISHED FLOOR - TO BOTTOM OF ITEM UNLESS INDICATED OTHERWISE IN DRAWING.

- EQUIPMENT SUPPLIER. EMERGENCY.
- SURFACE MOUNTED. WEATHER PROOF.

MOUNTING HEIGHT

- NOTE SYMBOL APPLIES ONLY TO SHEET ON WHICH IS SHOWN. DETAIL NOTE SYMBOL - APPLIES ONLY TO DETAIL ON WHICH IS SHOWN.
- EQUIPMENT REFERENCE SYMBOL. ELECTRICAL H-1 CONNECTION REQUIRED.
- **(H-1)** EQUIPMENT REFERENCE SYMBOL. NO ELECTRICAL CONNECTION REQUIRED. ROOM NUMBER.
- DETAIL SYMBOL DETAIL "B" SHOWN ON SHEET H2.





CONNECTION, NEW TO EXISTING. UP TO "FD1", SHOWN ON FLOOR ABOVE.

> 1 HOUR FIRE PROTECTION SEE SPECIFICATION FOR PENETRATION DETAILS 2 HOUR FIRE PROTECTION SEE SPECIFICATION FOR PENETRATION DETAILS

> > 3 HOUR FIRE PROTECTION

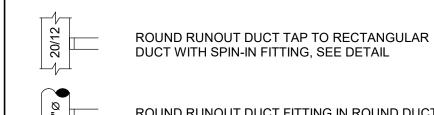
SEE SPECIFICATION FOR PENETRATION DETAILS

__ _ _ _ ITEM TO BE REMOVED. EXISTING TO REMAIN.

- RECTANGULAR DUCT
- 13. PROVIDE TWO (2) BOUND, PAPER COPIES OF ALL OPERATING

DUCTWORK LEGEND

- FIRST FIGURE IS SIDE SHOWN 10"Ø ROUND DUCT
- DIAMETER INDICATED CHANGE OF ELEVATION **→** | \ R = RISE, D = DROP
- ELBOW WITH TURNING VANES



VOLUME DAMPER

ROUND RUNOUT DUCT FITTING IN ROUND DUCT

SUPPLY DUCT SECTION - RISE, DROP

RETURN DUCT SECTION - RISE, DROP SUPPLY AIR DEVICE S1 SEE SCHEDULE AND DETAIL 8" NECK SIZE

TRANSFER AIR DEVICE R1 DEVICE TAG, SEE SCHEDULE AND DETAIL RETURN/EXHAUST DEVICE TAG: R=RETURN, E=EXHAUST 300 = REQUIRED AIR FLOW (CFM)

300 = REQUIRED AIR FLOW (CFM)

DEVICE SIZE AS INDICATED IN AIR DEVICE SIDEWALL AIR DEVICE SEE AIR DEVICE SCHEDULE 24/12 = DEVICE SIZE 300 = AIR FLOW (CFM)8' 6" = MOUNTING HEIGHT (AFF)

HVAC INDEX OF DRAWINGS

REBALANCE TO AIR FLOW INDICATED

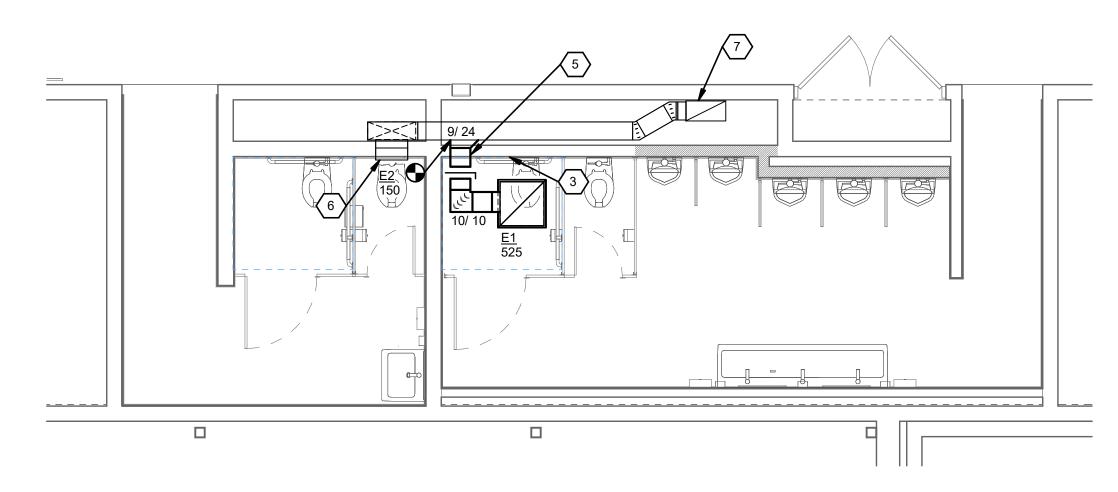
DRAWING TITLE <u>SHEET</u>

HR001 LEGENDS, SCHEDULES, & PLAN

EXISTING AIR DEVICE

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

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



NEW WORK PLAN
SCALE: 1/4" = 1'-0"

CONSTRUCTION NOTES

REMOVE DUCTWORK TO LOCATION INDICATED.

. REMOVE AND REPLACE EXISTING EXHAUST GRILLE.

H.C. SHALL REMOVE AND REINSTALL ALL MASONRY WALL BLOCKS REQUIRED TO REMOVE AND INSTALL NEW

NEW DUCTWORK. RECONNECT TO EXISTING EXHAUST DUCT IN CHASE. REUSE EXISTING MASONRY WALL OPENING, RUN TIGHT TO TOP OF OPENING ABOVE CEILING. PATCH WALL AREA UP TO

NEW DUCT PENETRATION WITH NEW MASONRY BLOCK.

6. NEW EXHAUST GRILLE. INSTALL ON EXISTING DUCTWORK.

DUCTWORK UP TO EXISTING EXHAUST FAN ON ROOF.

REMOVE EXISTING EXHAUST GRILLE.

COORDINATE WITH NEW CEILING.

DUCTWORK.

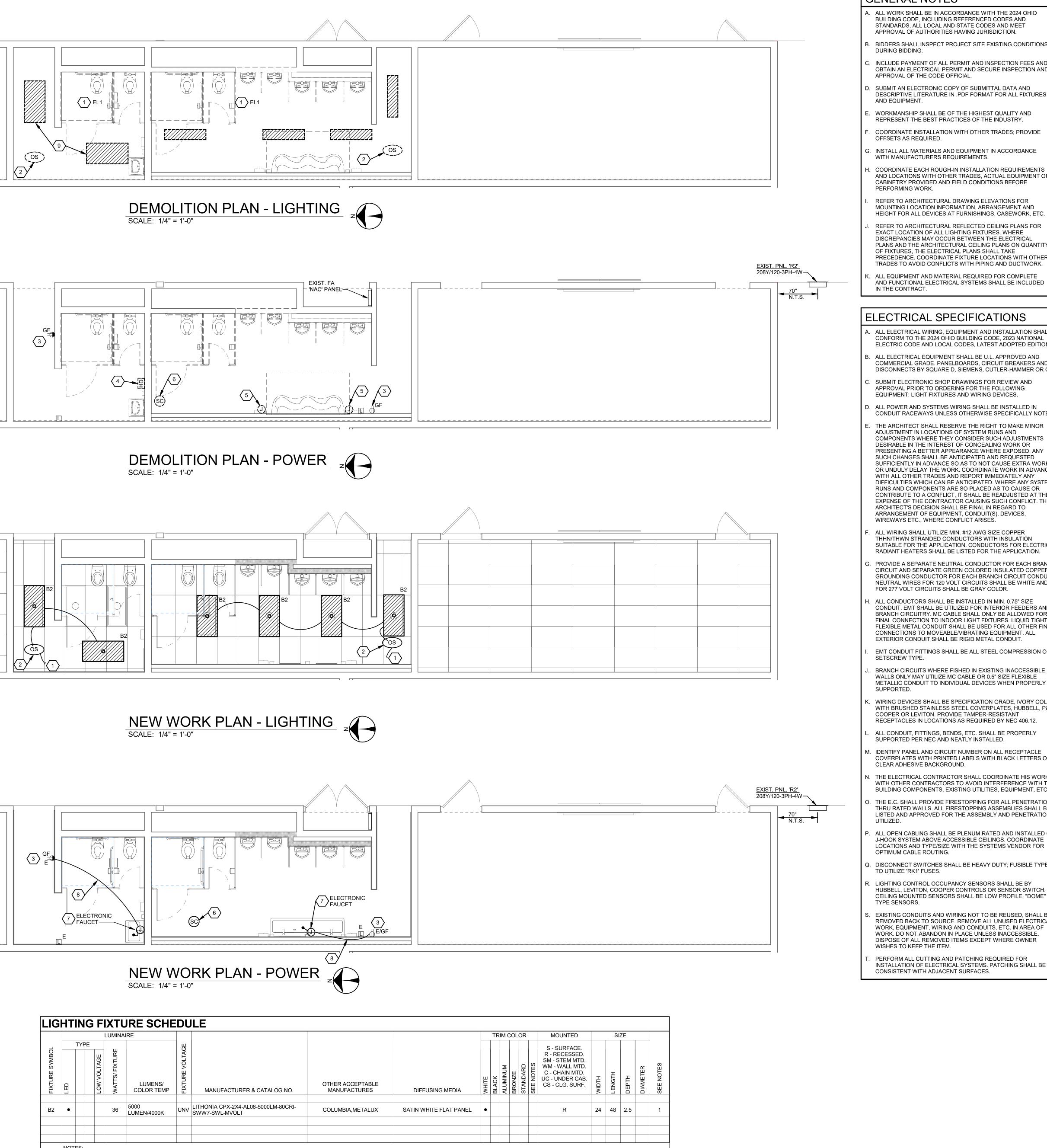
JEFFERY D. ZELINSKI, LICENSE #63822 EXPIRATION DATE 12/31/2025

JEFFREY D.

ZELINSKI

63822

LEGENDS, SCHEDULES, & PLAN



1 FIXTURE TO INCLUDE CONFIGURABLE LUMEN OUTPUT (4000/5000/6000 LUMEN) AND SWITCHABLE COLOR TEMPERATURE

GENERAL NOTES

- . ALL WORK SHALL BE IN ACCORDANCE WITH THE 2024 OHIO BUILDING CODE, INCLUDING REFERENCED CODES AND STANDARDS, ALL LOCAL AND STATE CODES AND MEET APPROVAL OF AUTHORITIES HAVING JURISDICTION.
- BIDDERS SHALL INSPECT PROJECT SITE EXISTING CONDITIONS DURING BIDDING.
- INCLUDE PAYMENT OF ALL PERMIT AND INSPECTION FEES AND OBTAIN AN ELECTRICAL PERMIT AND SECURE INSPECTION AND APPROVAL OF THE CODE OFFICIAL.
- SUBMIT AN ELECTRONIC COPY OF SUBMITTAL DATA AND DESCRIPTIVE LITERATURE IN .PDF FORMAT FOR ALL FIXTURES
- WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND REPRESENT THE BEST PRACTICES OF THE INDUSTRY.
- COORDINATE INSTALLATION WITH OTHER TRADES; PROVIDE
- OFFSETS AS REQUIRED. . INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE
- WITH MANUFACTURERS REQUIREMENTS. COORDINATE EACH ROUGH-IN INSTALLATION REQUIREMENTS AND LOCATIONS WITH OTHER TRADES, ACTUAL EQUIPMENT OR CABINETRY PROVIDED AND FIELD CONDITIONS BEFORE
- REFER TO ARCHITECTURAL DRAWING ELEVATIONS FOR MOUNTING LOCATION INFORMATION, ARRANGEMENT AND HEIGHT FOR ALL DEVICES AT FURNISHINGS, CASEWORK, ETC.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES. WHERE DISCREPANCIES MAY OCCUR BETWEEN THE ELECTRICAL PLANS AND THE ARCHITECTURAL CEILING PLANS ON QUANTITY OF FIXTURES, THE ELECTRICAL PLANS SHALL TAKE PRECEDENCE. COORDINATE FIXTURE LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS WITH PIPING AND DUCTWORK.
- ALL EQUIPMENT AND MATERIAL REQUIRED FOR COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT.

ELECTRICAL SPECIFICATIONS

- ALL ELECTRICAL WIRING, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE 2024 OHIO BUILDING CODE, 2023 NATIONAL ELECTRIC CODE AND LOCAL CODES, LATEST ADOPTED EDITIONS.
- ALL ELECTRICAL EQUIPMENT SHALL BE U.L. APPROVED AND COMMERCIAL GRADE. PANELBOARDS, CIRCUIT BREAKERS AND DISCONNECTS BY SQUARE D, SIEMENS, CUTLER-HAMMER OR G.E.
- SUBMIT ELECTRONIC SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING FOR THE FOLLOWING EQUIPMENT: LIGHT FIXTURES AND WIRING DEVICES.
- ALL POWER AND SYSTEMS WIRING SHALL BE INSTALLED IN CONDUIT RACEWAYS UNLESS OTHERWISE SPECIFICALLY NOTED.
- THE ARCHITECT SHALL RESERVE THE RIGHT TO MAKE MINOR ADJUSTMENT IN LOCATIONS OF SYSTEM RUNS AND COMPONENTS WHERE THEY CONSIDER SUCH ADJUSTMENTS DESIRABLE IN THE INTEREST OF CONCEALING WORK OR PRESENTING A BETTER APPEARANCE WHERE EXPOSED. ANY SUCH CHANGES SHALL BE ANTICIPATED AND REQUESTED SUFFICIENTLY IN ADVANCE SO AS TO NOT CAUSE EXTRA WORK, OR UNDULY DELAY THE WORK. COORDINATE WORK IN ADVANCE WITH ALL OTHER TRADES AND REPORT IMMEDIATELY ANY DIFFICULTIES WHICH CAN BE ANTICIPATED. WHERE ANY SYSTEM RUNS AND COMPONENTS ARE SO PLACED AS TO CAUSE OR CONTRIBUTE TO A CONFLICT. IT SHALL BE READJUSTED AT THE EXPENSE OF THE CONTRACTOR CAUSING SUCH CONFLICT. THE ARCHITECT'S DECISION SHALL BE FINAL IN REGARD TO ARRANGEMENT OF EQUIPMENT, CONDUIT(S), DEVICES, WIREWAYS ETC., WHERE CONFLICT ARISES.
- ALL WIRING SHALL UTILIZE MIN. #12 AWG SIZE COPPER THHN/THWN STRANDED CONDUCTORS WITH INSULATION SUITABLE FOR THE APPLICATION. CONDUCTORS FOR ELECTRIC RADIANT HEATERS SHALL BE LISTED FOR THE APPLICATION.
- PROVIDE A SEPARATE NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT AND SEPARATE GREEN COLORED INSULATED COPPER GROUNDING CONDUCTOR FOR EACH BRANCH CIRCUIT CONDUIT. NEUTRAL WIRES FOR 120 VOLT CIRCUITS SHALL BE WHITE AND FOR 277 VOLT CIRCUITS SHALL BE GRAY COLOR.
- ALL CONDUCTORS SHALL BE INSTALLED IN MIN. 0.75" SIZE CONDUIT. EMT SHALL BE UTILIZED FOR INTERIOR FEEDERS AND BRANCH CIRCUITRY. MC CABLE SHALL ONLY BE ALLOWED FOR FINAL CONNECTION TO INDOOR LIGHT FIXTURES. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED FOR ALL OTHER FINAL CONNECTIONS TO MOVEABLE/VIBRATING EQUIPMENT. ALL EXTERIOR CONDUIT SHALL BE RIGID METAL CONDUIT.
- EMT CONDUIT FITTINGS SHALL BE ALL STEEL COMPRESSION OR SETSCREW TYPE.
- WALLS ONLY MAY UTILIZE MC CABLE OR 0.5" SIZE FLEXIBLE METALLIC CONDUIT TO INDIVIDUAL DEVICES WHEN PROPERLY SUPPORTED. WIRING DEVICES SHALL BE SPECIFICATION GRADE, IVORY COLOR,
- WITH BRUSHED STAINLESS STEEL COVERPLATES, HUBBELL, P&S, COOPER OR LEVITON. PROVIDE TAMPER-RESISTANT RECEPTACLES IN LOCATIONS AS REQUIRED BY NEC 406.12.
- ALL CONDUIT, FITTINGS, BENDS, ETC. SHALL BE PROPERLY SUPPORTED PER NEC AND NEATLY INSTALLED.
- 1. IDENTIFY PANEL AND CIRCUIT NUMBER ON ALL RECEPTACLE COVERPLATES WITH PRINTED LABELS WITH BLACK LETTERS ON CLEAR ADHESIVE BACKGROUND.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS TO AVOID INTERFERENCE WITH THE BUILDING COMPONENTS, EXISTING UTILITIES, EQUIPMENT, ETC.
- THE E.C. SHALL PROVIDE FIRESTOPPING FOR ALL PENETRATIONS THRU RATED WALLS. ALL FIRESTOPPING ASSEMBLIES SHALL BE LISTED AND APPROVED FOR THE ASSEMBLY AND PENETRATION
- ALL OPEN CABLING SHALL BE PLENUM RATED AND INSTALLED ON J-HOOK SYSTEM ABOVE ACCESSIBLE CEILINGS. COORDINATE LOCATIONS AND TYPE/SIZE WITH THE SYSTEMS VENDOR FOR OPTIMUM CABLE ROUTING.
- DISCONNECT SWITCHES SHALL BE HEAVY DUTY; FUSIBLE TYPE TO UTILIZE 'RK1' FUSES.
- R. LIGHTING CONTROL OCCUPANCY SENSORS SHALL BE BY HUBBELL, LEVITON, COOPER CONTROLS OR SENSOR SWITCH. CEILING MOUNTED SENSORS SHALL BE LOW PROFILE, "DOME" TYPE SENSORS.
- EXISTING CONDUITS AND WIRING NOT TO BE REUSED, SHALL BE REMOVED BACK TO SOURCE. REMOVE ALL UNUSED ELECTRICAL WORK, EQUIPMENT, WIRING AND CONDUITS, ETC. IN AREA OF WORK. DO NOT ABANDON IN PLACE UNLESS INACCESSIBLE. DISPOSE OF ALL REMOVED ITEMS EXCEPT WHERE OWNER WISHES TO KEEP THE ITEM.
- PERFORM ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF ELECTRICAL SYSTEMS. PATCHING SHALL BE CONSISTENT WITH ADJACENT SURFACES.

GENERAL LEGEND

- ELECTRICAL CONTRACTOR. FIRE PROTECTION CONTRACTOR. GENERAL CONTRACTOR. HVAC CONTRACTOR. PLUMBING CONTRACTOR.
- NOT IN CONTRACT.
- ABOVE FINISHED FLOOR TO BOTTOM OF ITEM UNLESS INDICATED OTHERWISE IN DRAWING.
- EXISTING.
- EQUIPMENT SUPPLIER.
- EMERGENCY. MOUNTING HEIGHT.
- SURFACE MOUNTED
- WEATHER PROOF. NOTE SYMBOL - APPLIES ONLY TO SHEET ON
- WHICH IS SHOWN. 123 ROOM NUMBER.
- __ _ ITEM TO BE REMOVED. EXISTING TO REMAIN

ELECTRICAL LEGEND

- ELECTRICAL CONNECTION REQUIRED. H1 B1
- CAPITAL LETTER DENOTES FIXTURES TYPE. LOWER CASE LETTER DENOTES SWITCHING
- LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY
- WIRE & CONDUIT FOR EMERGENCY CIRCUITRY. EXISTING WIRE & CONDUIT.
- EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT; CAPITAL LETTER DENOTES PANEL; NUMBER DENOTES CIRCUIT.
- WIRE & CONDUIT IN WALL OR ABOVE CEILING
- WIRE & CONDUIT UNDERGROUND
- JUNCTION BOX.
- DASHED SYMBOL INDICATES THAT PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.
- EXISTING OUTLET OR DEVICE TO REMAIN, MAINTAIN EXISTING CIRCUITRY. 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18"
- 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, (46"
- 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" M.H.).
- SINGLE POLE WALL SWITCH (46" M.H.) OCCUPANCY SENSOR, CEILING MOUNTED.

M.H.) D = DOUBLE DUPLEX.

FIRE ALARM SIGNALING LIGHT (80" A.F.F.), # WHEN SHOWN INDICATES CANDELA RATING OF STROBE. WHEN A # IS NOT SHOWN, THE STROBE SHALL BE RATED 110 CANDELA.

CONSTRUCTION NOTES

BAY AREA).

- EXISTING FIXTURES SERVED BY EXISTING 277V 'EMERGENCY' CIRCUIT FROM EXISTING EMERGENCY PANEL 'EL1' IN MAIN ELECTRIC ROOM. (EXISTING CIRCUITS EL1-1,3+5 SERVE HIGH
- DISCONNECT OCCUPANCY SENSOR; RELOCATE TO NEW LAY-IN CEILING AND RECONNECT TO EXISTING ROOM LIGHTING SUPPLY CIRCUIT AND NEW FIXTURES TO MATCH EXISTING.
- EXISTING RESTROOM RECEPTACLES SERVED FROM EXISTING CIRCUITS R2-11+13; TO REMAIN. REMOVE HAND DRYER AND TRACE OUT AND REMOVE 208V-20A
- SUPPLY CIRCUIT WIRING BACK TO SOURCE (PANEL R2; BREAKER 10/12). OUTLET BOX SERVING PREVIOUSLY REMOVED 208V-20A HAND
- DRYER TRACE OUT AND REMOVE 208V-20A SUPPLY CIRCUIT WIRING BACK TO SOURCE (PANEL R2; BREAKER 5/7). DISCONNECT AND REMOVE SPEAKER; REINSTALL IN NEW LAY-

MANUFACTURER INSTALLATION INSTRUCTIONS PRIOR TO

- IN CEILING AND RECONNECT TO MATCH EXISTING. CONNECT 120V CIRCUIT TO ELECTRONIC FAUCET -COORDINATE EXACT ROUGH-IN AND FINAL CONNECTION WITH
- ROUGH-IN. CONNECT TO EXISTING RECEPATCLE CIRCUIT IN ACCESSIBLE LOCATION AND FISH 'MC' CABLE IN WALL CHASE TO FEED ELECTRONIC FAUCET.
- 9. REMOVE 2'x4' LED LAY-IN FIXTURES.

ELECTRICAL INDEX OF DRAWINGS

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

SHEET DRAWING TITLE E101 WORK PLANS

WORK PLANS

UILDING AD

JEFFREY D.

ZELINSKI

63822

JEFFERY D. ZELINSKI, LICENSE #63822

EXPIRATION DATE 12/31/2025