

Fire Damage Reconstruction 1875 -1877 South Limestone Street Springfield, Ohio 45505

Owner: Westerville Square, Inc.
2000 Henderson Road Suite 500
Columbus, Ohio 43220

General Contractor: Transamerica Building Co. Inc.
2000 W. Henderson Road
Columbus, Ohio 43220
614-457-8322

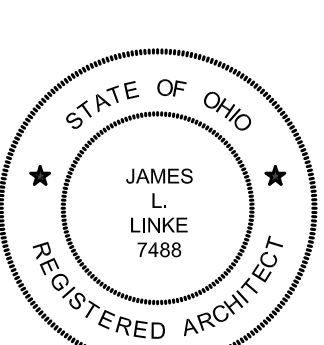
Architect: James Linke, Architect
1772 Ridgecliff Road
Columbus, Ohio 43221
614-486-6383

2011 OBC DATA

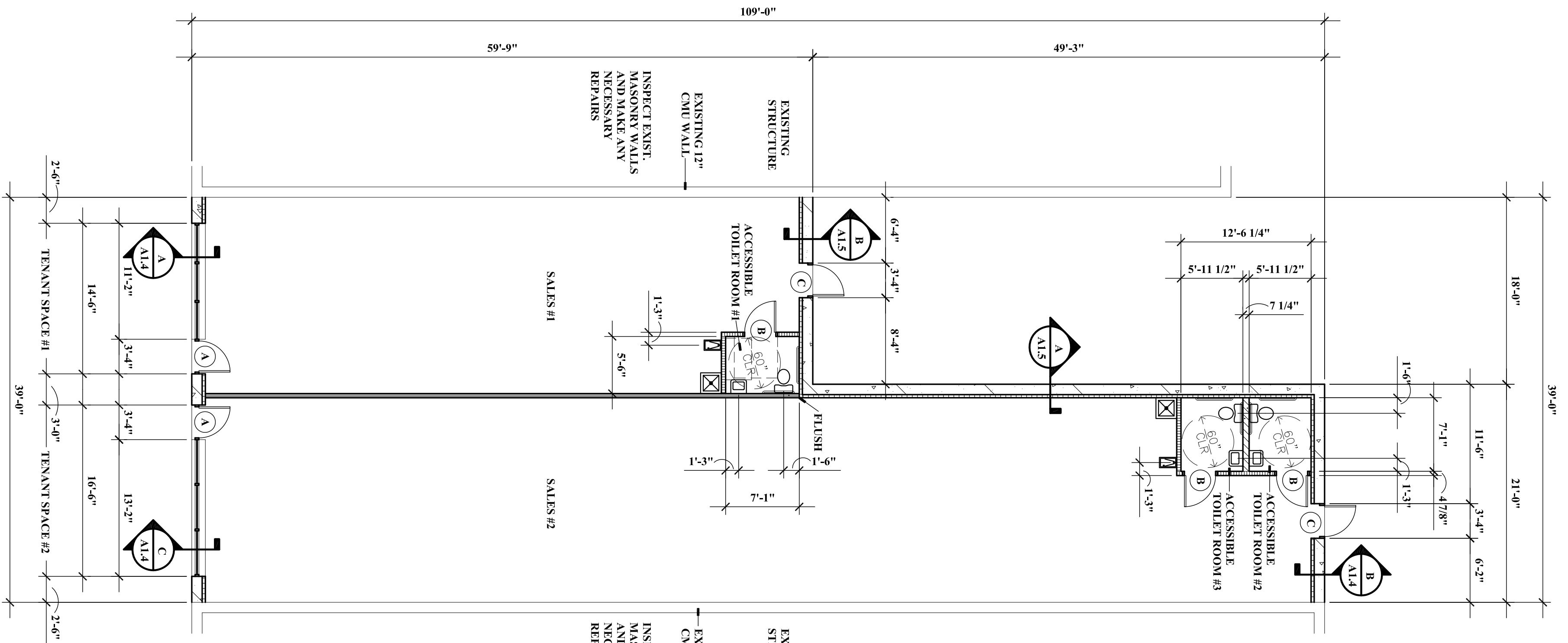
TYPE OF CONSTRUCTION: HB
USE GROUP: M
GROSS SQUARE FEET TENANT SPACE #1 1141 SF
GROSS SQUARE FEET TENANT SPACE #2 2214 SF
TOTAL GROSS SQUARE FEET TENANT: 3365 SF
MAXIMUM DESIGN OCCUPANT LOAD: 114
NON-SPRINKLERED
BUILDING AREAS SHOWN ONLY IN AREAS OF FIRE DAMAGE RECONSTRUCTION
MINIMUM OCCUPANT LOAD
3001 MERCHANTILE PER TABLE 1004.1.1
3001 STORAGE, STOCK, SHIPPING PER TABLE 1004.1.1
OCCUPANCY CALCULATION
SPACE AREA SF/OCCUPANT OCCUPANT LOAD
TENANT SPACE #1 1141 SF 30/1 39
TENANT SPACE #2 2214 SF 30/1 75
TOTAL RECONSTRUCTION 3365 SF 30/1 114
CAPACITY MEANS OF EGRESS
OCCUPANCY LOAD * EGRESS WIDTH PER PERSON SECTION 1006.1 114 * 0.20' = 22.80'
MEANS OF EGRESS PROVIDED * EGRESS WIDTH PROVIDED 2 * 3.6" = 7.2" > 22.80"
NUMBER OF REQUIRED EXITS PER 101.5.1 2
DISTANCE TO EXIT ALLOWED WITH SPRINKLER SYSTEM PER TABLE 1016.1 200'

INDEX

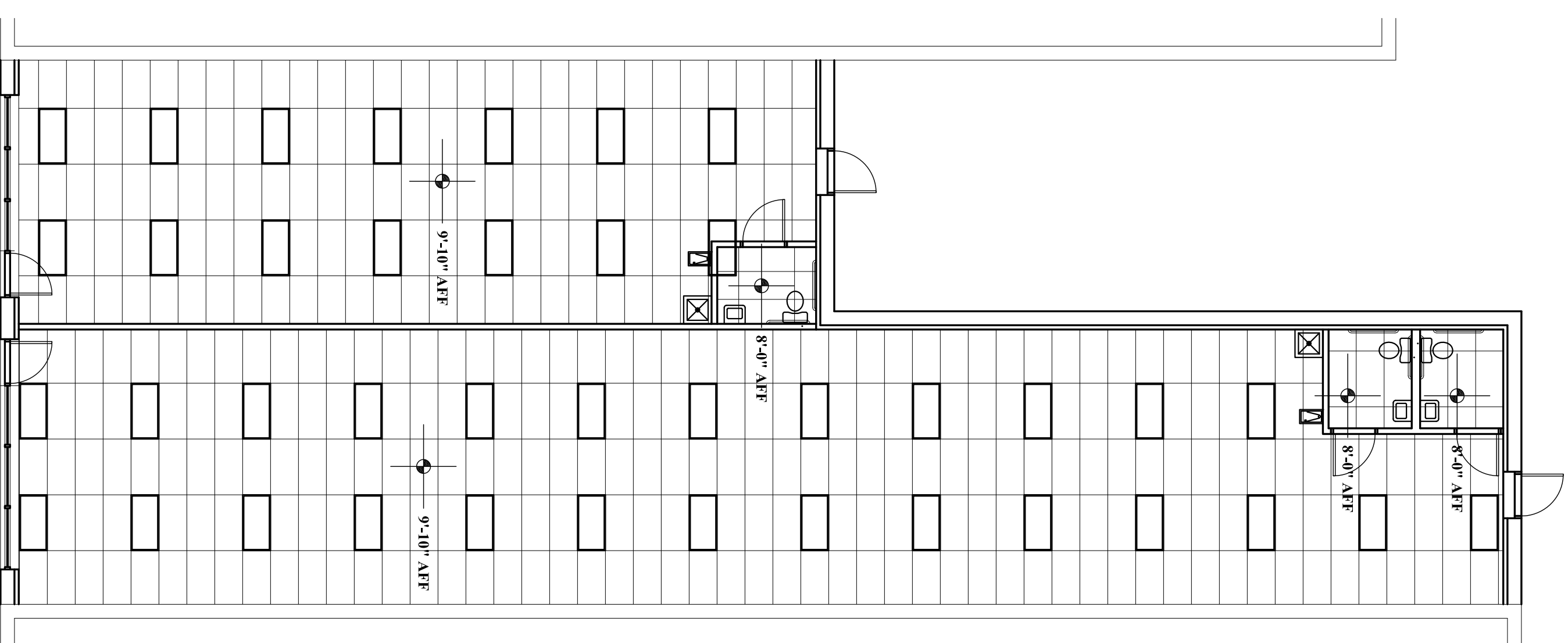
A1.1 FLOOR PLAN & REFLECTED CEILING
A1.2 ROOF PLAN & EXTERIOR ELEVATIONS
A1.3 SECTIONS
A1.4 SECTIONS
A1.5 SECTIONS
S1 FOUNDATION PLAN
S2 ROOF FRAMING
XP.1 PLUMBING PLAN
H1.0 HVAC PLAN
E1.1 ELECTRICAL PLAN



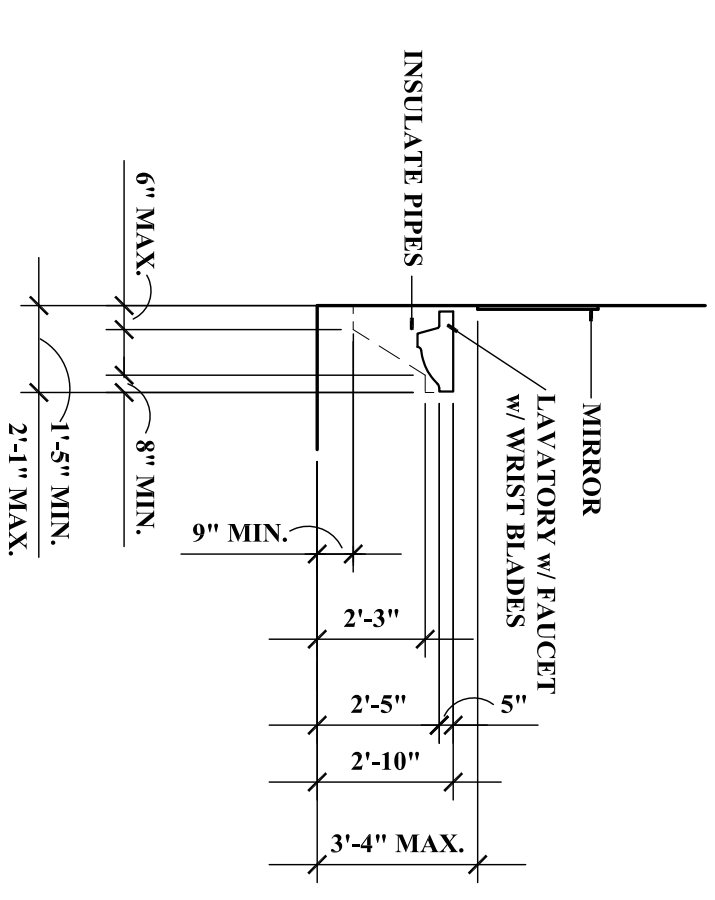
James L. Linke, License #7486
Expiration Date 12/31/2017



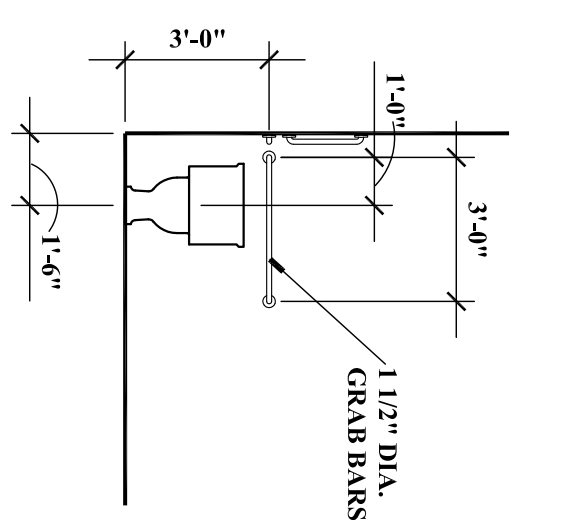
FLOOR PLAN
SCALE 1/8" = 1' - 0"



REFLECTED CEILING
SCALE 1/8" = 1' - 0"



LAVATORY CLEARANCES
SCALE 1/4" = 1' - 0"



TOILET CLEARANCES
SCALE 1/4" = 1' - 0"

FINISH SCHEDULE

DOOR & FRAME SCHEDULE

WALL TYPES LEGEND

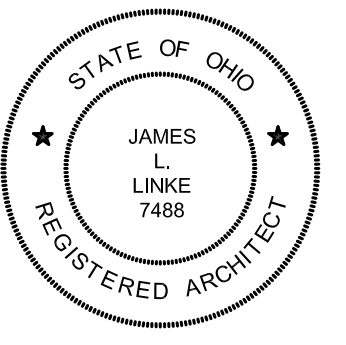
- EXISTING TO REMAIN
- NEW 5/8" GYP. BD. EACH SIDE ON 3/8" 20 GA. 362512-33 METAL STUDS @ 24" O.C. 4-7/8" EXTEND TO ROOM DECK ABOVE. SEAL AGAINST DECK ABOVE. SEE TYPICAL WALL SECTION 1 SH1. A13
- NEW 5/8" GYP. BD. EACH SIDE ON 3/8" 20 GA. 362512-33 METAL STUDS @ 24" O.C. 4-7/8" EXTEND ABOVE NEW ACOUSTICAL TILE CEILING. SEE TYPICAL WALL SECTION 2 SH1. A13
- NEW 5/8" GYP. BD. EACH SIDE ON 3/8" 20 GA. 6068125-33 METAL STUDS @ 24" O.C. 4-7/8" EXTEND ABOVE NEW ACOUSTICAL TILE CEILING. SEE TYPICAL WALL SECTION 3 SH1. A13
- 1 1/2" HOLLOW CMU w/ HORIZ. JT. REIN. @ 16" O.C. VERT. PAINT EXTERIOR. INTERIOR R-15 2 LAYERS 1 1/2" THICK FOAMULAR INSULATION/XPIS OR EQUIV. RIGID FOAM INSULATION. CHANNELS MOUNTED VERTICALLY 24" O.C. w/ CONT. 6 MIL. POLYETHYLENE FILM VAPOR BARRIER w/ 5/8" GYP. BD. SEE WALL SECTIONS A&B/A14 & A&B/A15

- A ALL DOORS SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. EXIST. FINISH HARDWARE MAY BE REUSED PROVIDED IT IS LEVER TYPE HARDWARE AND HAS THE PROPER FUNCTION. PROVIDE LEVER TYPE FINISH HARDWARE. FINISH TO MATCH BUILDING STANDARD FINISH.
- ALL DOOR OPENING FRAMING TO BE 2 - 3/8" 20 GA. METAL STUDS
- ALL KEYING MUST COMP X WITH THE BUILDING MASTER SYSTEM AND TENANT KEYING REQUIREMENTS.
- 3'-0" x 7'-0" ALUMINUM DOOR WITH CLEAR PROVIDE: 1 PUSH PULL SET 1 EXIT DEVICE CONCEALED ROD 1 CLOSER 1 CYLINDER 1 THRESHOLD WEATHERSTRIPPING
- B 3'-0" x 7'-0" x 1 3/4" SOLID CORE WOOD DOOR w/ HOLLOW METAL FRAME 5 3/4" DEEP & 2" FACE PROVIDE: 3 HINGES 3 PUSH/PULL LOCK (VERIFY FUNCTION w/ TENANT & LANDLORD) 1 WALL STOP
- C 3'-0" x 7'-0" x 1 3/4" HOLLOW METAL DOOR w/ HOLLOW METAL FRAME 5 3/4" DEEP & 2" FACE PROVIDE: 3 HINGES 1 HINGE / OPERC LOCK (VERIFY FUNCTION w/ TENANT & LANDLORD) 1 CLOSER 1 LATCH GUARD 1 THRESHOLD WEATHERSTRIPPING

GENERAL NOTES

1. ALL INTERIOR PARTITION DIMENSIONS ARE TO FACE OF GYP. BD. UNLESS NOTED OTHERWISE.
2. ALL LUMBER TO BE FIRE RETARDANT TREATED.
3. REPAIR ALL WALLS AFTER DEMOLITION OR REMOVAL OF AN OBJECT PATCH HOLES SMOOTH WALL.
4. EXAMINE SUBSTRATE SURFACES AND INSTALLATION CONDITIONS DO NOT PROCEED WITH WORK UNTIL CORRECTED. INSTALLATION CONDITIONS ACCEPTANCE OF EXISTING CONDITIONS AND RESPONSIBILITY FOR SATISFACTORY PERFORMANCE.

9-30-16



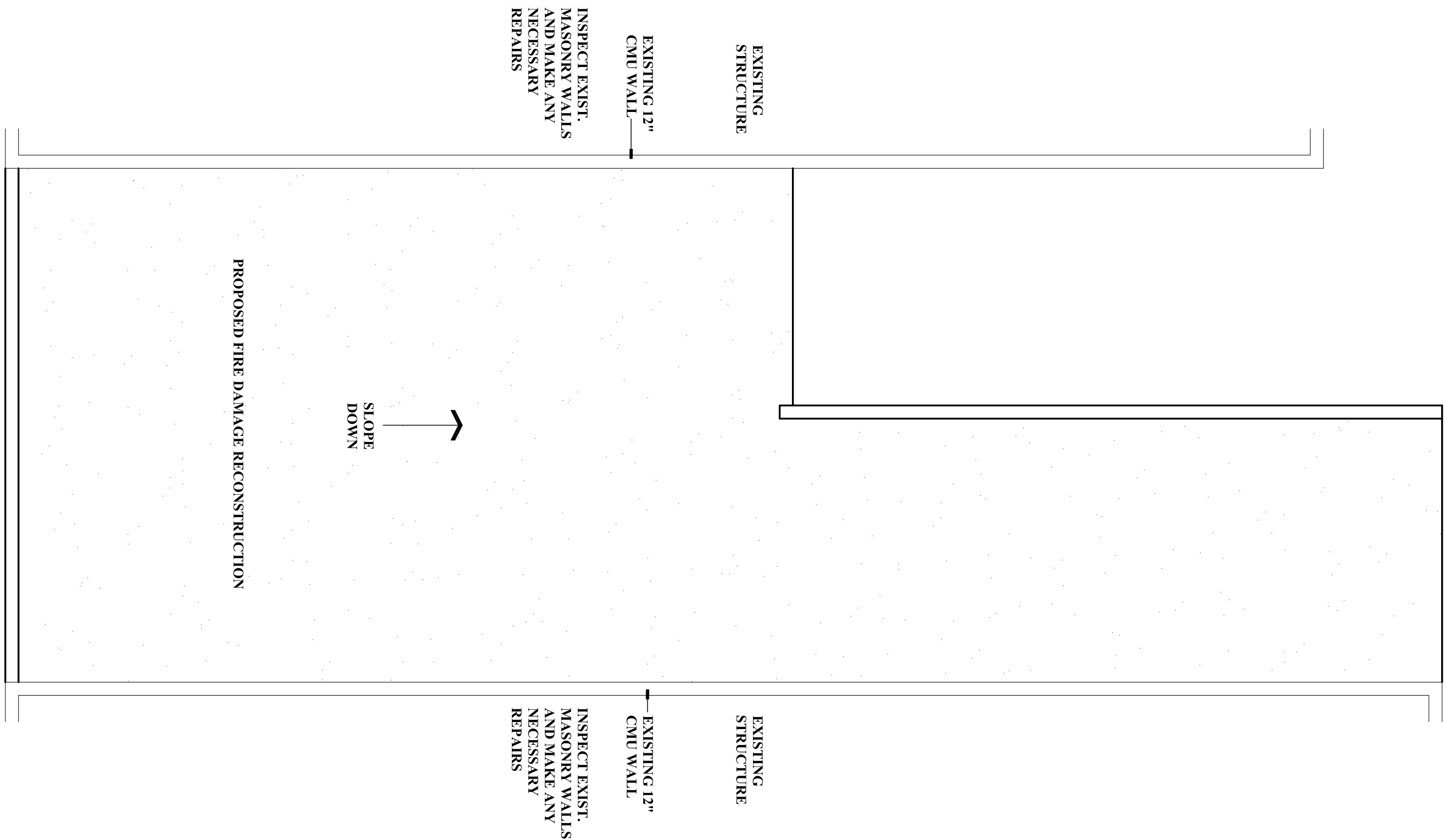
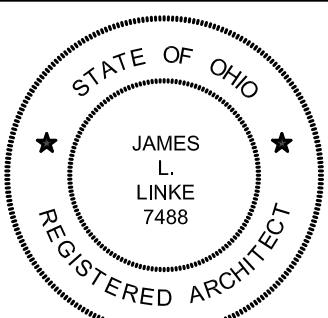
James L. Linke, License #7488
Expiration Date 12/31/2017



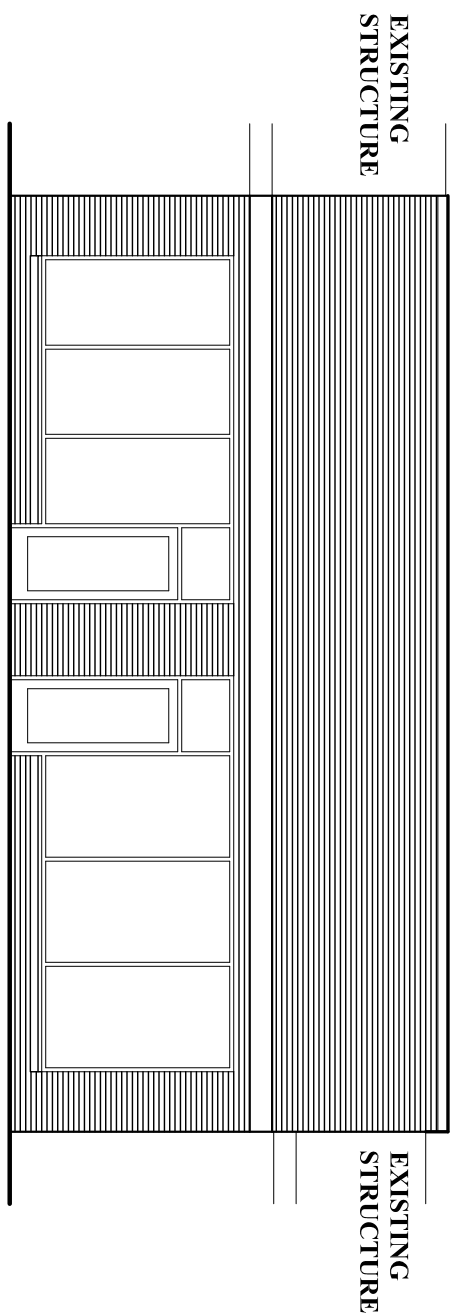
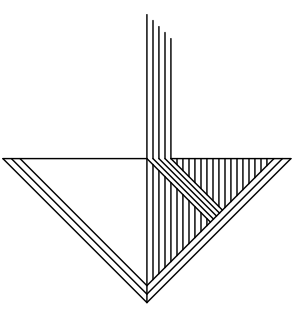
Fire Damage Reconstruction
1875 - 1877 South Limestone Street
Springfield, Ohio 45505

Owner: Westerville Square, Inc. 2000 W. Henderson Road Suite 500 Columbus, Ohio 43220
James Linke, Architect 1772 Ridgecliff Road Columbus, Ohio 43221 614-486-6383

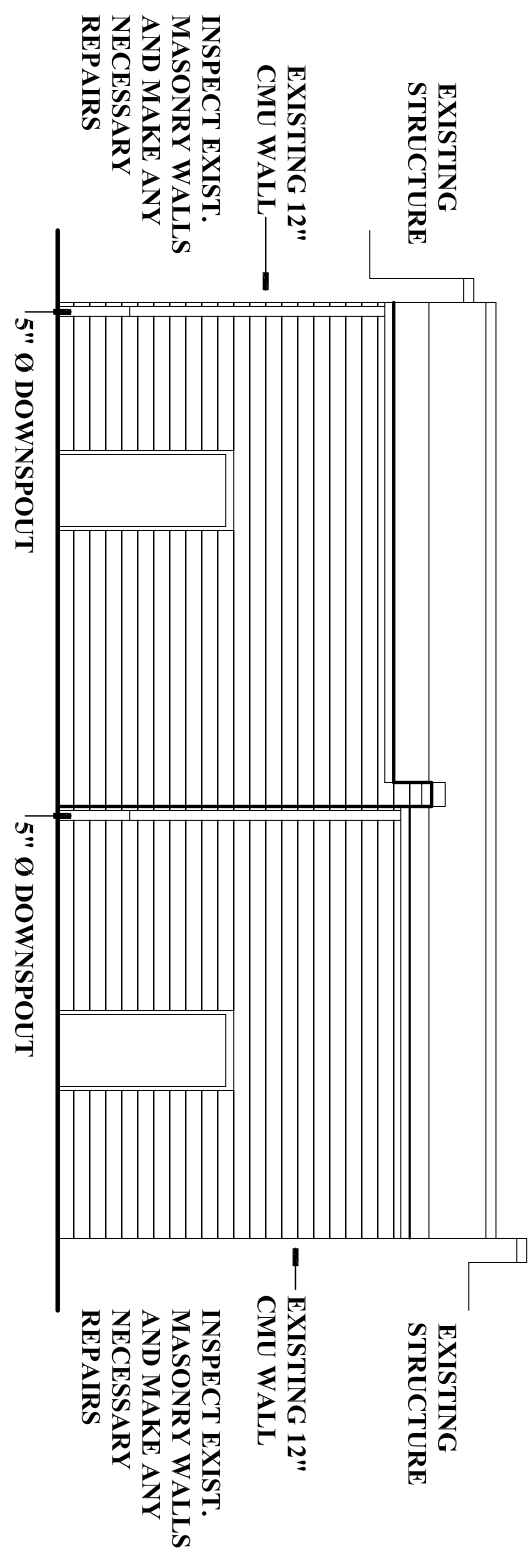
A1.1



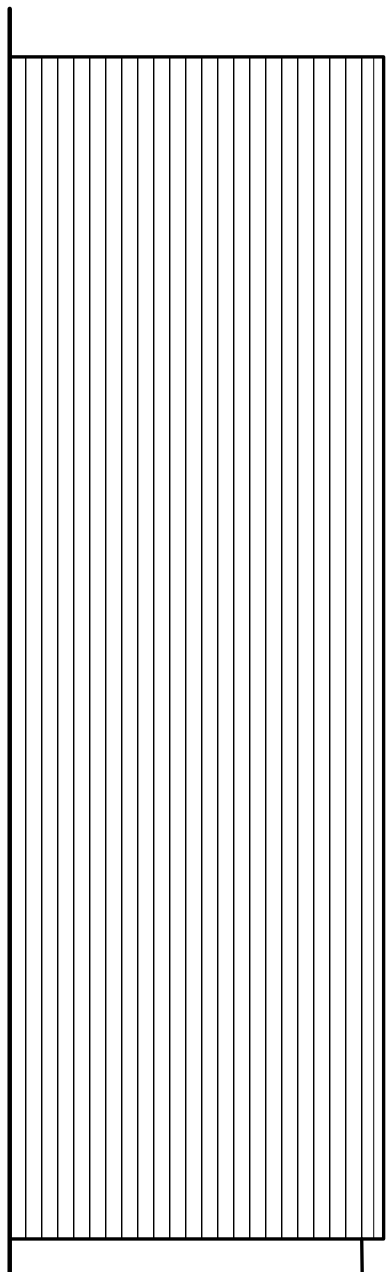
ROOF PLAN
SCALE 1/8" = 1' - 0"



EAST ELEVATION
SCALE 1/8" = 1' - 0"



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



SOUTH ELEVATION
SCALE 1/8" = 1' - 0"

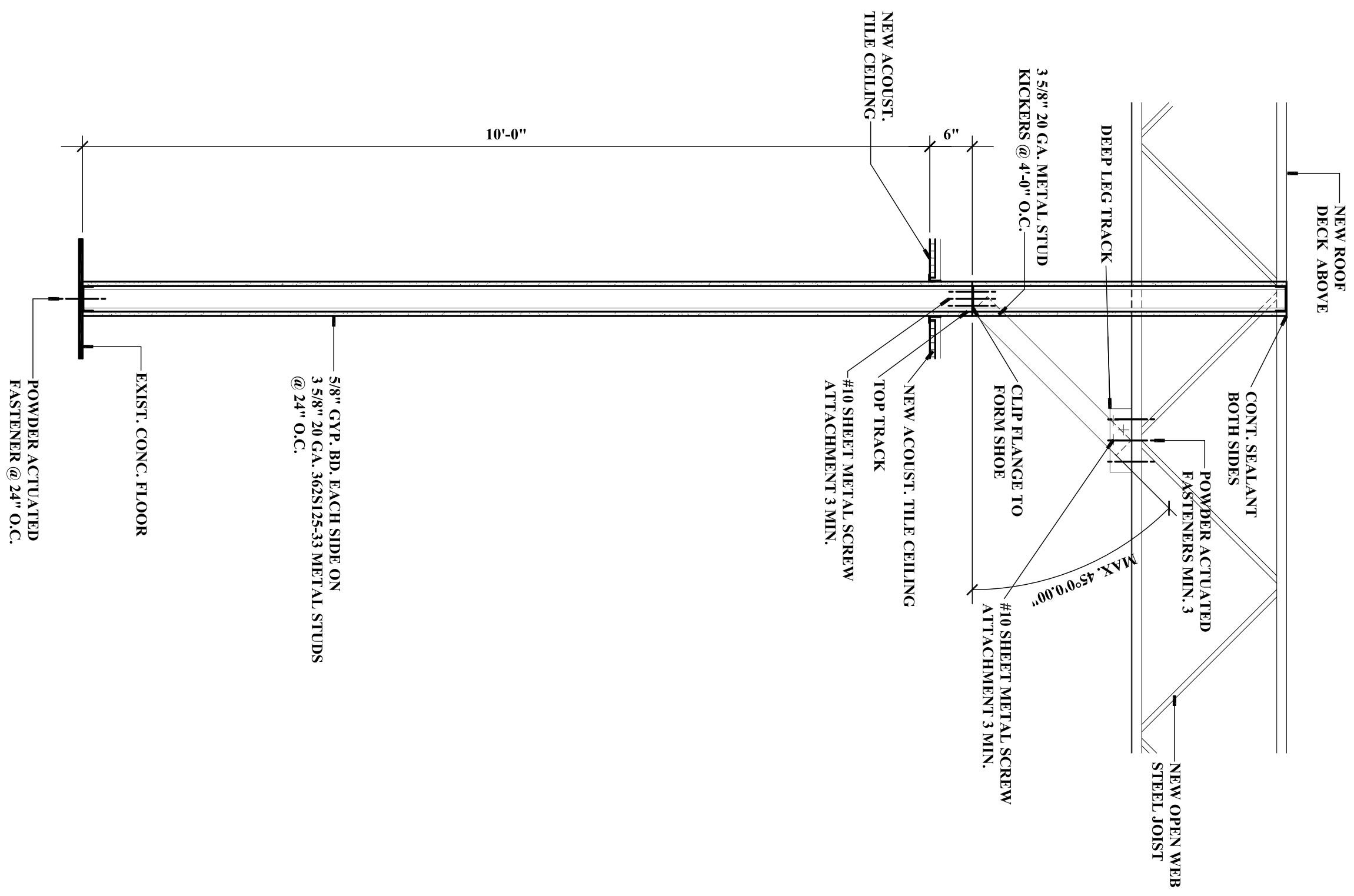
Fire Damage Reconstruction

1875 - 1877 South Limestone Street
Springfield, Ohio 45505

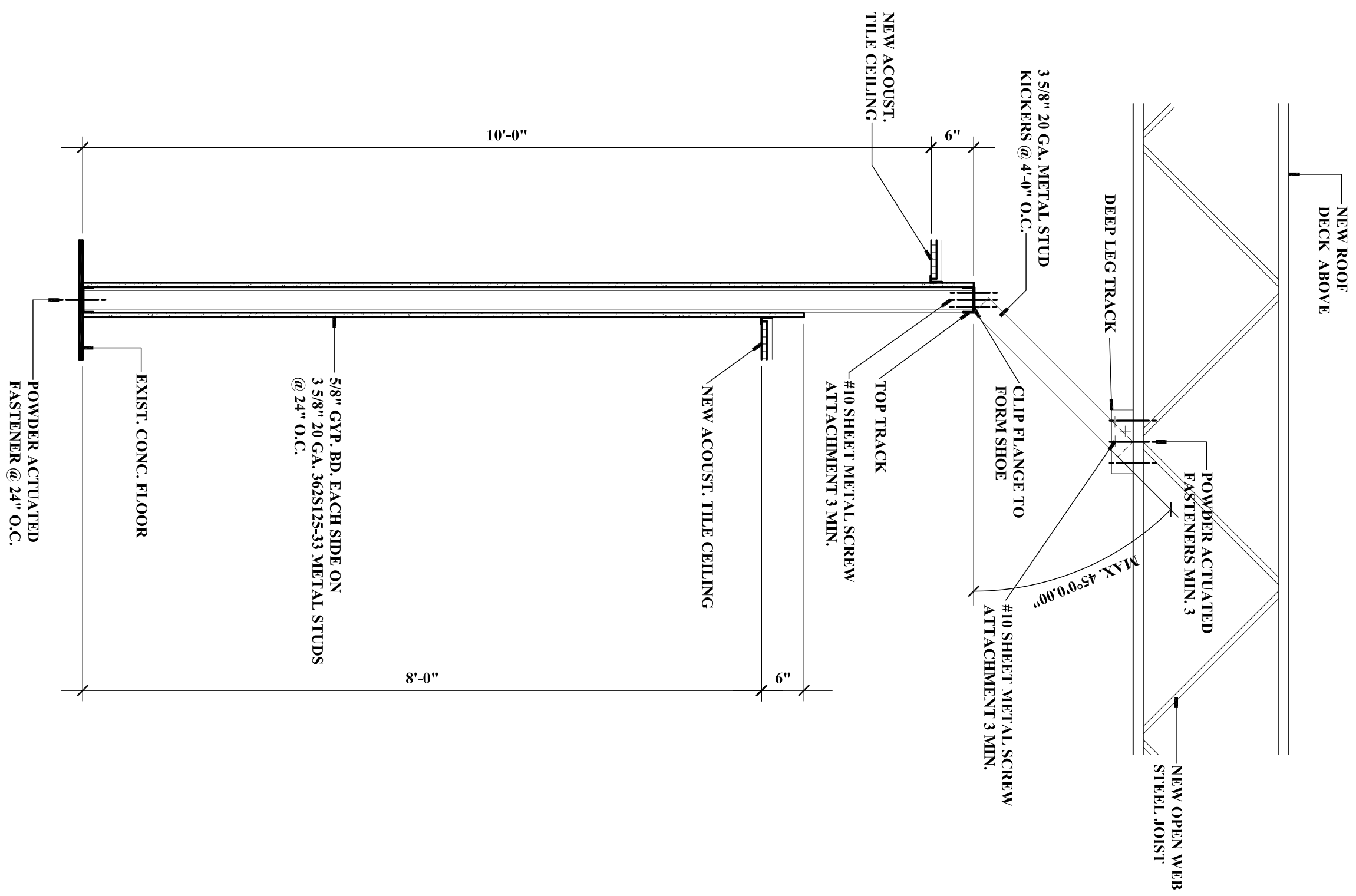
Owner: Westerville Square, Inc. 2000 W. Henderson Road Suite 500 Columbus, Ohio 43220

James Linke, Architect 1772 Ridgecliff Road Columbus, Ohio 43221 614-486-6383

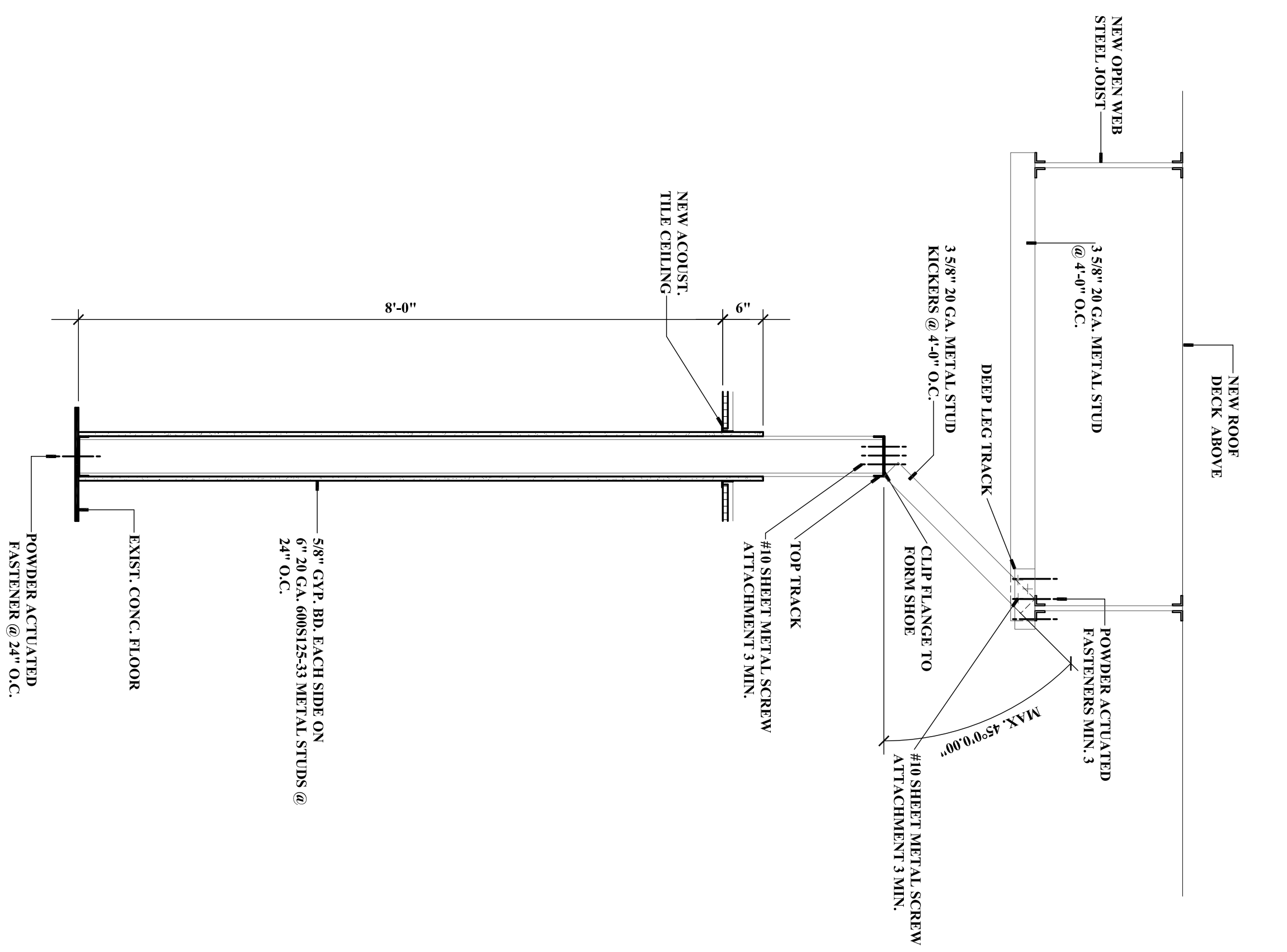




TYPICAL WALL SECTION 1
SCALE 3/4" = 1' - 0"



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



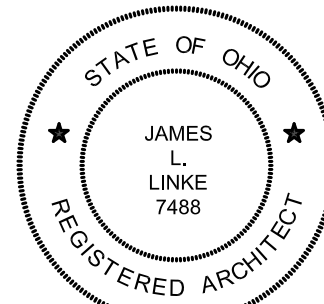
TYPICAL WALL SECTION 3
SCALE 3/4" = 1' - 0"

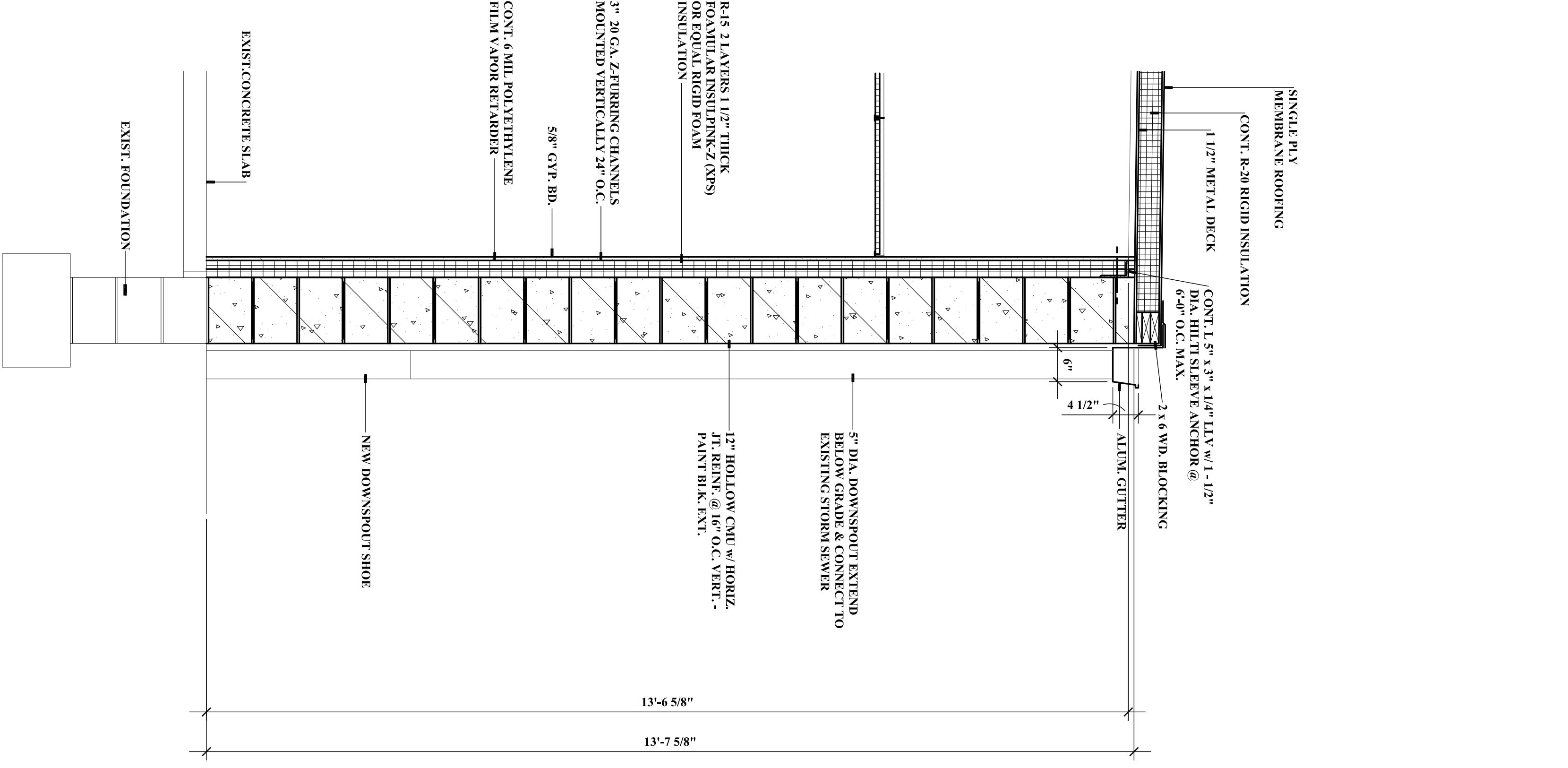
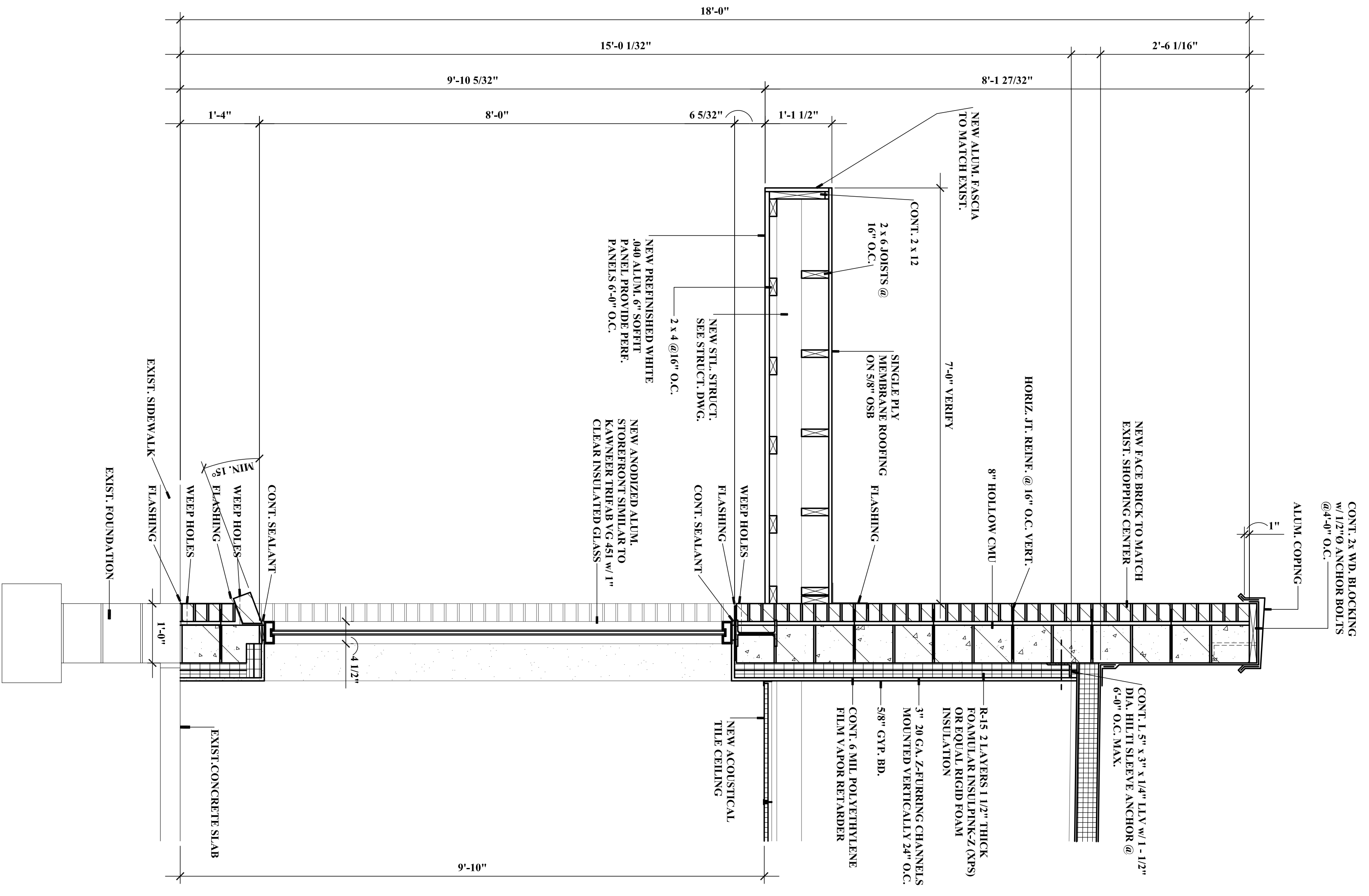
Fire Damage Reconstruction

1875 - 1877 South Limestone Street
Springfield, Ohio 45505

Owner: Westerville Square, Inc. 2000 W. Henderson Road Suite 500 Columbus, Ohio 43220

James Linke, Architect 1772 Ridgecliff Road Columbus, Ohio 43221 614-486-6383





SECTION A
SCALE 3/4" = 1' - 0"

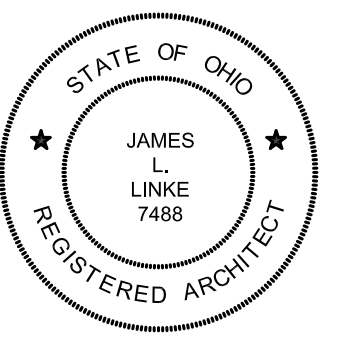
SECTION B
SCALE 3/4" = 1' - 0"

SECTION C
SCALE 3/4" = 1' - 0"

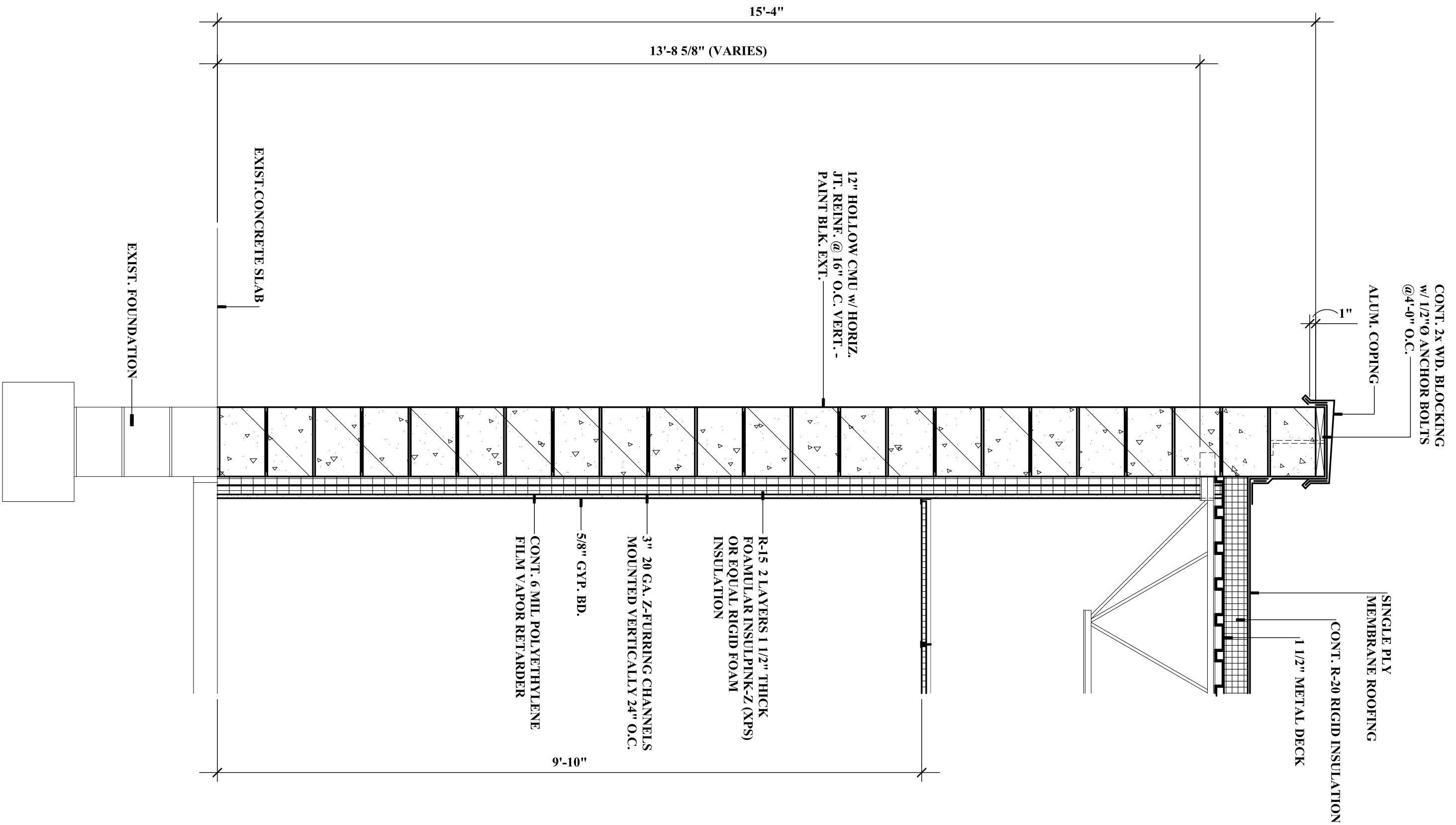
Fire Damage Reconstruction

1875 - 1877 South Limestone Street
Springfield, Ohio 45505

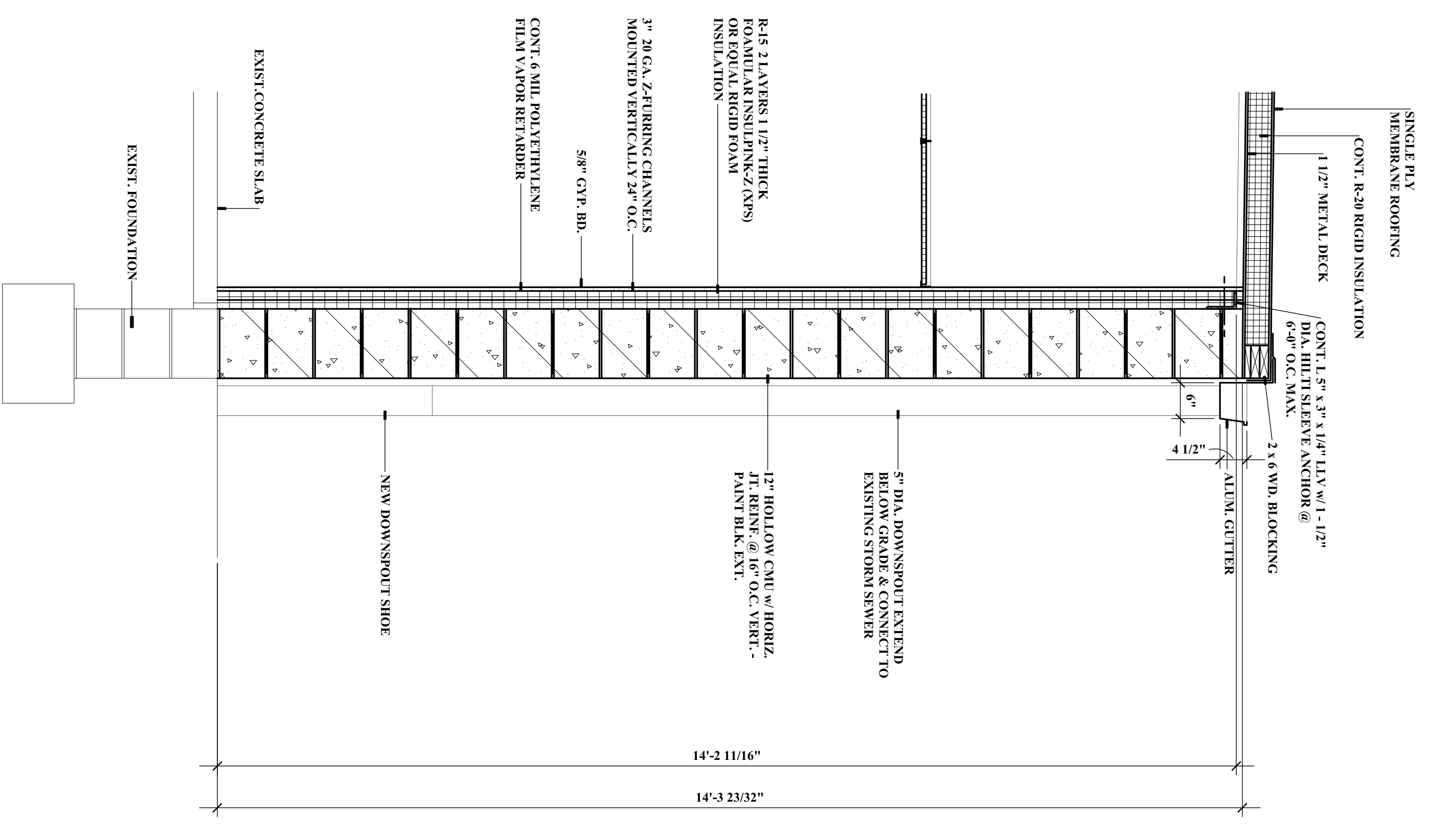
Owner: Westerville Square, Inc. 2000 W. Henderson Road Suite 500 Columbus, Ohio 43220
James Linke, Architect 1772 Ridgecliff Road Columbus, Ohio 43221 614-486-6383



James L. Linke, License #7488
Expiration Date 12/31/2017



SECTION A
SCALE 3/4" = 1' - 0"



SECTION B
SCALE 3/4" = 1' - 0"

PANEL: SG1									
MAINS: 225A		VOLTAGE: 208Y/120V, 3ø, 4W.							
200A MAIN CB MOUNTING: SURFACE									
REMARKS	KVA	BKR.	CIRCUIT NO. AND PHASE		BKR.	KVA	REMARKS		
RTU	5.2-M	25/3	1	A	2	20/1	1.0-R	PANEL RECPTCLE	
	5.2-M	3	B	4	20/1	0.18-L	NIGHT LIGHTS		
	5.2-M	5	C	6	20/1	0.66-L	LIGHTING		
ROOF OUTLET	0.36-R	20/1	7	A	8	20/1	0.36-R	RESTROOM RCPT	
WATER FOUNTAIN	0.36-R	20/1	9	B	10	20/1	SPARE		
TIME CLOCK	0.18-A	20/1	11	C	12	20/1	SPARE		
RESTROOM FAN	0.05-M	20/1	13	A	14	20/1	SPARE		
SPARE	20/1	15	B	16	20/1	SPARE			
RECEPTACLE	0.72-R	20/1	17	C	18	SPARE			
RECEPTACLE	0.54-R	20/1	19	A	20	SPARE			
RECEPTACLE	0.72-R	20/1	21	B	22	SPARE			
SPARE	20/1	23	C	24	SPARE				
SPARE	20/1	25	A	26	SPARE				
SPARE	20/1	27	B	28	SPARE				
SPARE	20/1	29	C	30	SPARE				
SPARE	20/1	31	A	32	SPARE				
SPARE	20/1	33	B	34	SPARE				
SPARE	20/1	35	C	36	SPARE				
SPARE	20/1	37	A	38	SPARE				
SPARE	20/1	39	B	40	SPARE				
SPARE	20/1	41	C	42	SPARE				

PANEL: SG2									
MAINS: 225A		VOLTAGE: 208Y/120V, 3ø, 4W.							
200A MAIN CB MOUNTING: SURFACE									
REMARKS	KVA	BKR.	CIRCUIT NO. AND PHASE		BKR.	KVA	REMARKS		
RTU	8.4-M	40/3	1	A	2	20/1	1.0-R	PANEL RECPTCLE	
	8.4-M	3	B	4	20/1	0.24-L	NIGHT LIGHTS		
	8.4-M	5	C	6	20/1	1.30-L	LIGHTING		
ROOF OUTLET	0.36-R	20/1	7	A	8	20/1	0.36-R	RESTROOM RCPT	
WATER FOUNTAIN	0.36-R	20/1	9	B	10	20/1	SPARE		
TIME CLOCK	0.18-A	20/1	11	C	12	20/1	SPARE		
RESTROOM FAN	0.05-M	20/1	13	A	14	20/1	SPARE		
SPARE	20/1	15	B	16	20/1	SPARE			
RECEPTACLE	0.72-R	20/1	17	C	18	SPARE			
RECEPTACLE	0.72-R	20/1	19	A	20	SPARE			
RECEPTACLE	0.54-R	20/1	21	B	22	SPARE			
RECEPTACLE	0.72-R	20/1	23	C	24	SPARE			
RECEPTACLE	0.72-R	20/1	25	A	26	SPARE			
SPARE	20/1	27	B	28	SPARE				
SPARE	20/1	29	C	30	SPARE				
SPARE	20/1	31	A	32	SPARE				
SPARE	20/1	33	B	34	SPARE				
SPARE	20/1	35	C	36	SPARE				
SPARE	20/1	37	A	38	SPARE				
SPARE	20/1	39	B	40	SPARE				
SPARE	20/1	41	C	42	SPARE				

LEGEND: L-LIGHTING, R-RECEPTACLES, M-MOTORS, H-HVAC REHEAT, A-APPLIANCE, MLO-MAIN LUGS ONLY, MCB-MAIN BREAKER, GF-GROUND FAULT, LC-LOCKING CLIP.

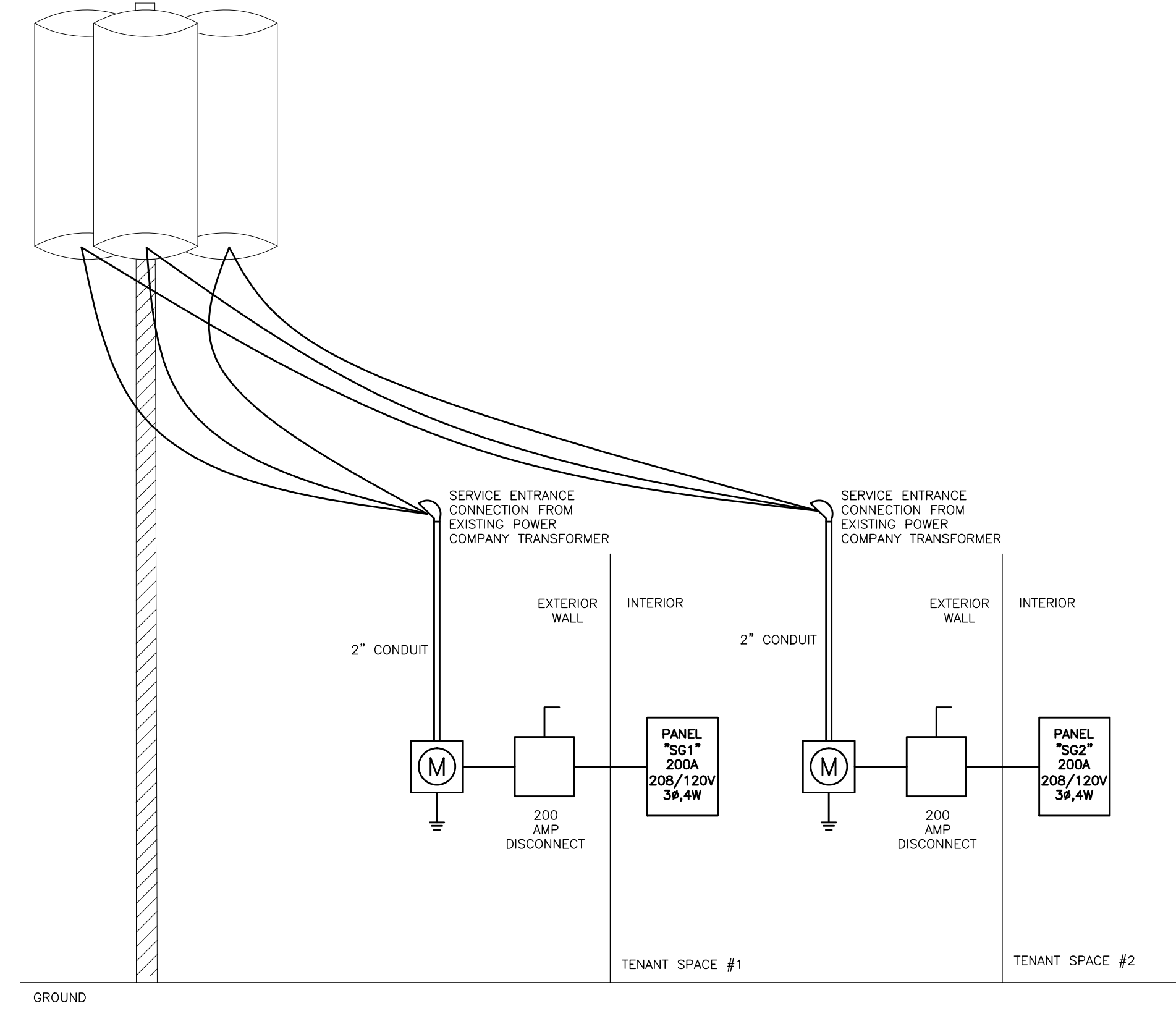
CONNECTED LOADS DEMAND LOADS:
 LIGHTING: 0.84 KW @ 100% = 0.84 KW
 RECEPCTS: 4.06 KW @ 100% TO 10 KW + 50% REMAIN = 4.06 KW
 MOTOR: 15.65 KW @ 80% = 12.52 KW
 APPLIANCE: 0.18 KW @ 80% = 0.14 KW
 HVAC: 0.00 KW @ 80% = 0.00 KW
 SUBTOTAL: 20.73 KW SUBTOTAL: = 17.56 KW
 DEMAND TOTAL: 17.56 KW / (208V x √3) = 48.79 AMPS

LEGEND: L-LIGHTING, R-RECEPTACLES, M-MOTORS, H-HVAC REHEAT, A-APPLIANCE, MLO-MAIN LUGS ONLY, MCB-MAIN BREAKER, GF-GROUND FAULT, LC-LOCKING CLIP.

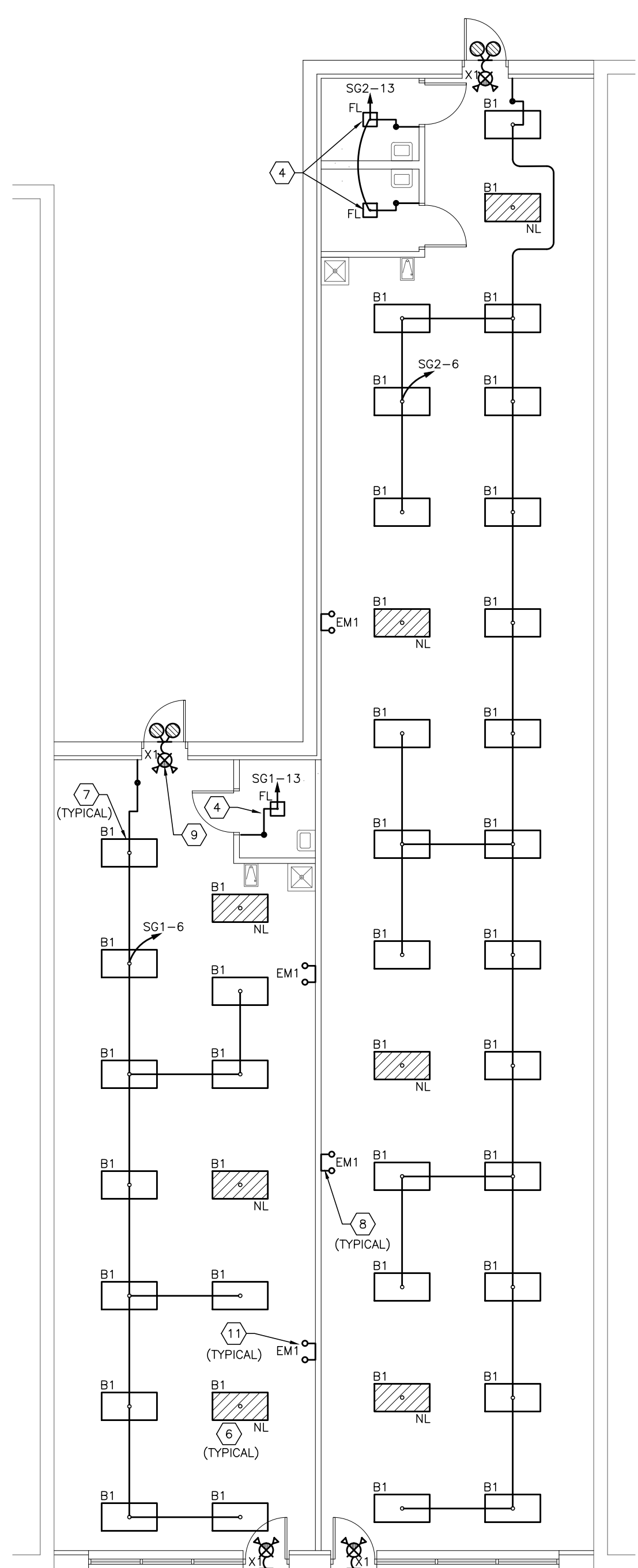
CONNECTED LOADS DEMAND LOADS:
 LIGHTING: 1.54 KW @ 100% = 1.54 KW
 RECEPCTS: 5.50 KW @ 100% TO 10 KW + 50% REMAIN = 5.50 KW
 MOTOR: 25.25 KW @ 80% = 20.2 KW
 APPLIANCE: 0.18 KW @ 80% = 0.14 KW
 HVAC: 0.00 KW @ 80% = 0.00 KW
 SUBTOTAL: 32.47 KW SUBTOTAL: = 27.38 KW
 DEMAND TOTAL: 27.38 KW / (208V x √3) = 76.08 AMPS

*PROVIDE LOCKING CLIP. PROVIDE RED LABEL "FIRE ALARM CIRCUIT" ON CIRCUIT BREAKER PER NFPA 70 PARAGRAPH 760.41(B).
 INSTALL AN ARC FLASH WARNING LABEL ON THE PANEL TRIM.

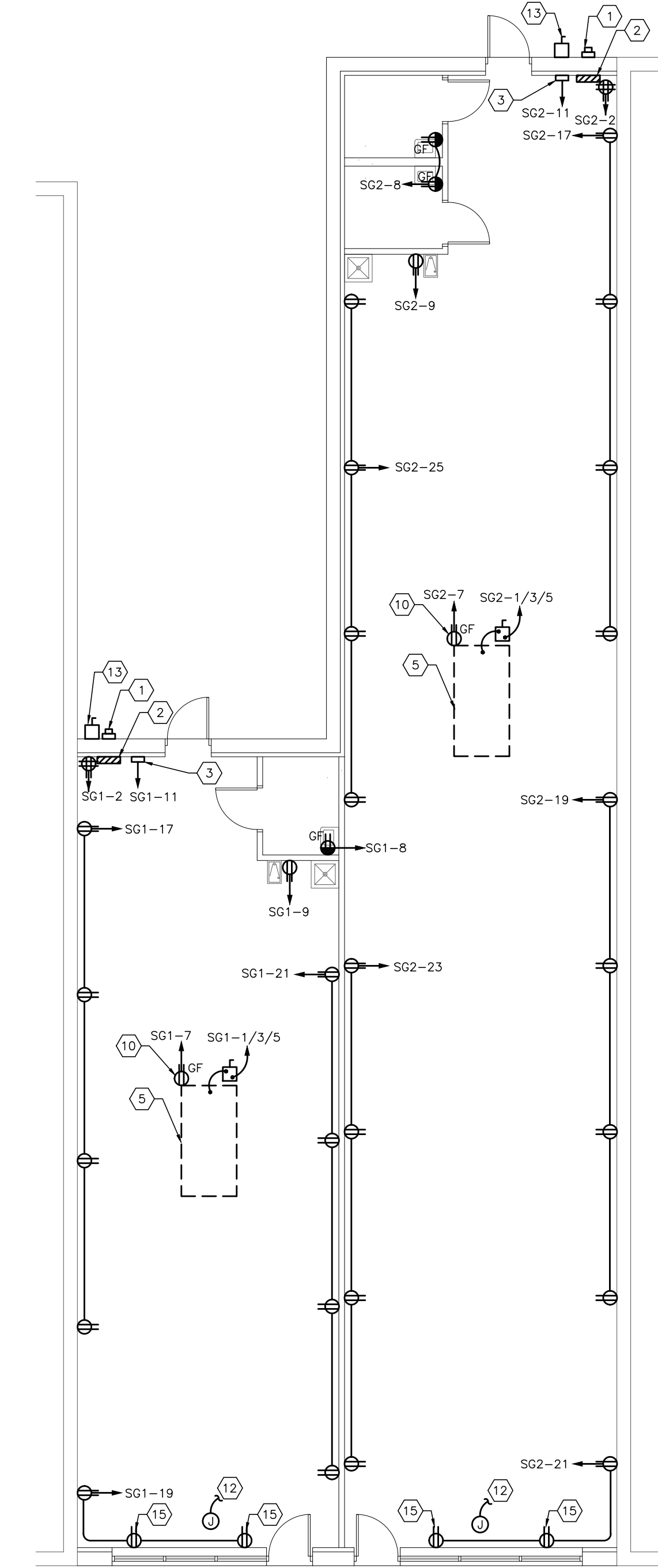
*PROVIDE LOCKING CLIP. PROVIDE RED LABEL "FIRE ALARM CIRCUIT" ON CIRCUIT BREAKER PER NFPA 70 PARAGRAPH 760.41(B).
 INSTALL AN ARC FLASH WARNING LABEL ON THE PANEL TRIM.



RISER DIAGRAM
SCALE: NTS



LIGHTING PLAN
SCALE: 1/8"=1'-0" NORTH



POWER PLAN
SCALE: 1/8"=1'-0" NORTH

- ### GENERAL NOTES
- EVERYTHING SHOWN ON THIS DRAWING AND/OR IDENTIFIED IN THE DIVISION 26, 27, AND 28 SPECIFICATIONS IS FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. IF ANY DEVICE, EQUIPMENT, FEEDERS, ETC. IS FURNISHED AND/OR INSTALLED BY ANYONE OTHER THAN THE ELECTRICAL CONTRACTOR, IT WILL BE SPECIFICALLY NOTED.
 - E.C. SHALL REVIEW OTHER TRADES DRAWINGS, AND COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS WITH THE E.C.'S INSTALLATIONS. FAILURE TO COORDINATE WILL RESULT IN THE E.C. REMEDYING HIS CONFLICT(S) AT HIS EXPENSE.
 - FOR VOLTAGE DROP ON 120V CIRCUITS, THE MAXIMUM LENGTHS ARE AS FOLLOWS: #12=85 FEET, #10=108 FEET, AND #8=142 FEET. THESE DISTANCES MUST BE FOLLOWED TO MAINTAIN 3% VOLTAGE DROP.
 - ALL BACKBOXES LOCATED IN RATED WALLS MUST BE ENCASED IN FIRE PUTTY SEALANT. ALL CONDUITS THAT PASS THRU RATED WALLS MUST BE FIRE SEALED ON BOTH SIDES OF THE WALL. COORDINATE WITH THE ARCHITECT'S DRAWINGS FOR LOCATIONS OF THE RATED WALLS.
 - LOCATION OF DEVICES ARE SCHEMATIC. REFER TO THE ARCHITECT'S INTERIOR ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL DEVICES. LOCATING ON THE NEAREST STUD IS NOT ACCEPTABLE. COORDINATE WITH THE GC TO INSTALL ADDITIONAL BRACING/SUPPORTS, ETC. SO THAT THE ARCHITECT'S DIMENSIONS ARE MAINTAINED.

- ### PLAN NOTES
- NEW METER BOX. COORDINATE WITH POWER COMPANY REQUIREMENTS.
 - PROVIDE 200 AMP, 3 PHASE, SURFACE MOUNT 42 CIRCUIT PANEL. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH IN.
 - NEW TIMECLOCK FOR SIGNAGE. MODEL #1101 TORK TIME CLOCKS. COORDINATE EXACT LOCATION WITH OWNER.
 - PROVIDE NEW COMBINATION FAN/LIGHT "FL". WIRE SO THAT LIGHT AND FAN COME ON WITH SINGLE SWITCH.
 - NEW ROOFTOP UNIT. COORDINATE EXACT LOCATION WITH OWNER.
 - CONNECT ALL "NL" FIXTURES TO NIGHT LIGHT CIRCUIT.
 - PROVIDE FIXTURE "B1" - 2"x4", T-8, 2 LAMP TROFFER, 60 WATTS - TO BE SELECTED BY OWNER (TYPICAL).
 - PROVIDE FIXTURE "EM1" - TWO HEAD, BATTERY BACKUP EMERGENCY LIGHT - TO BE SELECTED BY OWNER (TYPICAL).
 - PROVIDE FIXTURE "X1" - TWO HEAD, BATTERY BACKUP EXIT SIGN WITH REMOTE, DUAL HEAD, WEATHERPROOF, BATTERY BACKUP EMERGENCY LIGHT - TO BE SELECTED BY OWNER.
 - PROVIDE GFI CONVENIENCE OUTLET IN WEATHERPROOF JUNCTION BOX. COORDINATE EXACT LOCATION WITH OWNER.
 - CONNECT ALL EXIT SIGNS & EMERGENCY LIGHTS TO LOCAL UNSWITCHED LIGHTING CIRCUIT IN AREA.
 - PROVIDE JUNCTION BOX IN CEILING FOR CONNECTION TO SIGNAGE. CIRCUIT THROUGH TIMECLOCK. COORDINATE EXACT LOCATION WITH OWNER & SIGNAGE CONTRACTOR.
 - PROVIDE NEW WEATHERPROOF DISCONNECT. COORDINATE EXACT LOCATION WITH OWNER.
 - PROVIDE FIXTURE "B2" - TO BE SELECTED BY OWNER TO MATCH EXISTING CANOPY FIXTURES. RECONNECT IN SAME MANNER AS ORIGINAL FIXTURES.
 - RECEPTACLES INSTALLED IN CEILINGS ABOVE STROFRONTS.

- ### ELECTRICAL LEGEND
- ALL HEIGHTS INDICATED ARE TO CENTERLINE OF ITEM UNLESS INDICATED OTHERWISE ON DRAWINGS.
- E EXISTING DEVICE
 - PLAN NOTE SYMBOL - APPLIES ONLY TO SHEET ON WHICH NOTE IS SHOWN.
 - 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (18" MH). HUBBELL 8300-1/-R.
 - 20A-125V DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R (18" MH). TWO-GANG ASSEMBLY OF TWO HUBBELL 8300-1/-R.
 - 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R (46" MH). HUBBELL 8300-1/-R.
 - 20A-125V DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER (18" MH). HUBBELL GF8300GFCI-1/-R.
 - SINGLE POLE WALL SWITCH (46" MH). HUBBELL 1221-W.
 - ELECTRICAL CONNECTION REQUIRED
 - DOUBLE FACE EXIT LIGHTING FIXTURE. ARROWS AS INDICATED. CEILING MOUNTED.
 - COMBINATION EXIT / EM LIGHTING FIXTURE w/ 2 HEADS AND BATTERY. ARROWS AS INDICATED. CEILING MOUNTED.
 - SINGLE FACE EXIT LIGHTING FIXTURE. ARROWS AS INDICATED. CEILING MOUNTED.
 - EACH ARROWHEAD REPRESENTS ONE COMPLETE CIRCUIT WITH FULL SIZE NEUTRAL AND GROUND; CAPITAL LETTER DENOTES PANEL; NUMBER DENOTES CIRCUIT.
 - WIRE & CONDUIT IN WALL OR ABOVE CEILING
 - EXISTING LIGHT FIXTURE TO BE REMOVED AND/OR RELOCATED. LINE TYPE TYPICAL FOR ALL DEVICES TO BE REMOVED AND/OR RELOCATED.
 - DASHED SYMBOL INDICATES THAT PARTICULAR OUTLET OR DEVICE TO BE REMOVED AND CIRCUITRY MADE CONTINUOUS WHERE REQUIRED.
 - CIRCUIT BREAKER PANEL (FLUSH MOUNTED). 6'-0" TO TOP.
 - EMERGENCY LIGHT FIXTURE w/ 2 HEADS AND BATTERY. SURFACE MTD. (8'-0" MH).
 - LIGHTING FIXTURE; CAPITAL LETTER DENOTES FIXTURE TYPE. LOWER CASE LETTER DENOTES SWITCHING ARRANGEMENT.
 - DUAL HEAD LOW VOLTAGE EMERGENCY REMOTE HEAD LIGHT FIXTURE. SURFACE MTD. ABOVE DOOR.
 - HEAVY DUTY DISCONNECT SWITCH. 5'-0" TO TOP.
 - CIRCUIT BREAKER PANEL (SURFACE MOUNTED). 6'-0" TO TOP.
 - DUCT MOUNTED SMOKE DETECTOR. INSTALL LABEL ON CEILING GRID T-RUNNER.



VMP ENGINEERING INC.
 6225 Emerald Pkwy
 Dublin, Ohio 43016
 Phone: (614) 408-3862
 Fax: (614) 408-3869

FIRE DAMAGE RECONSTRUCTION
1881 S. LIMESTONE ST., SPRINGFIELD, OHIO 45505

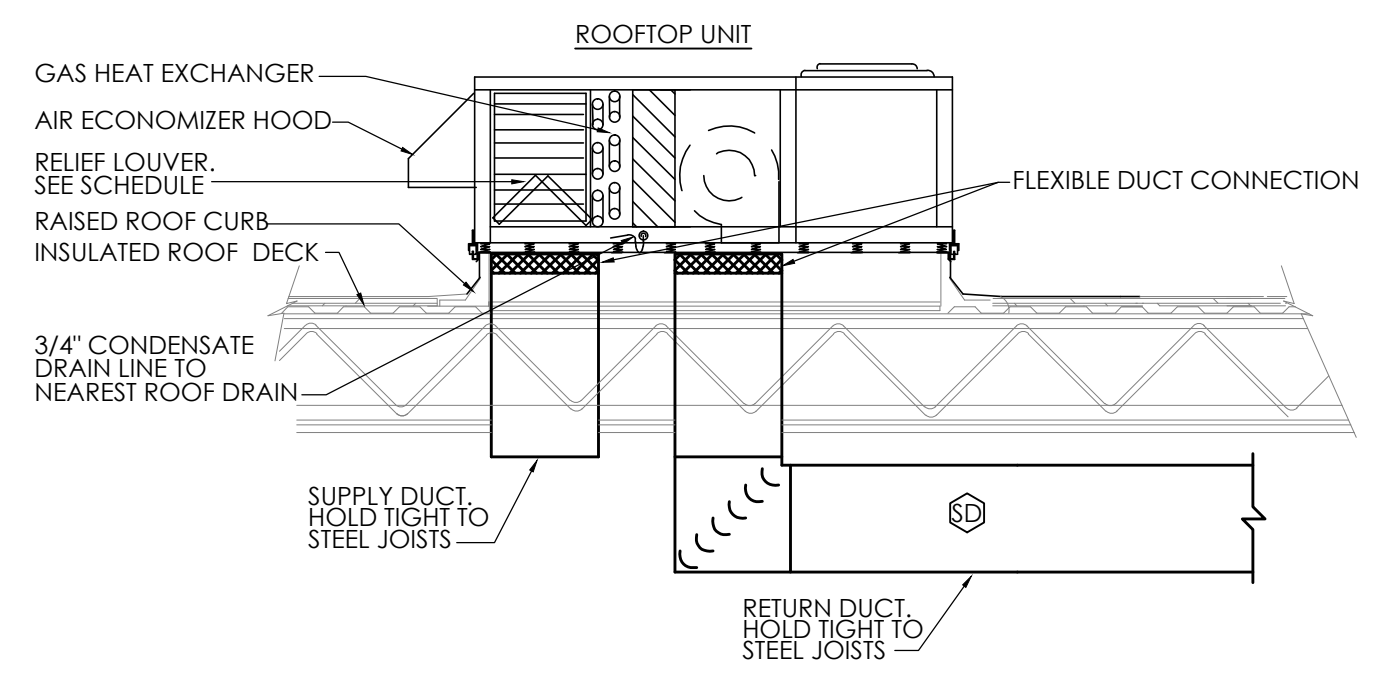
DATE: 09/28/2016
 VMP COMM: 16176

REVISIONS	
REV. NO./DATE	DESCRIPTION

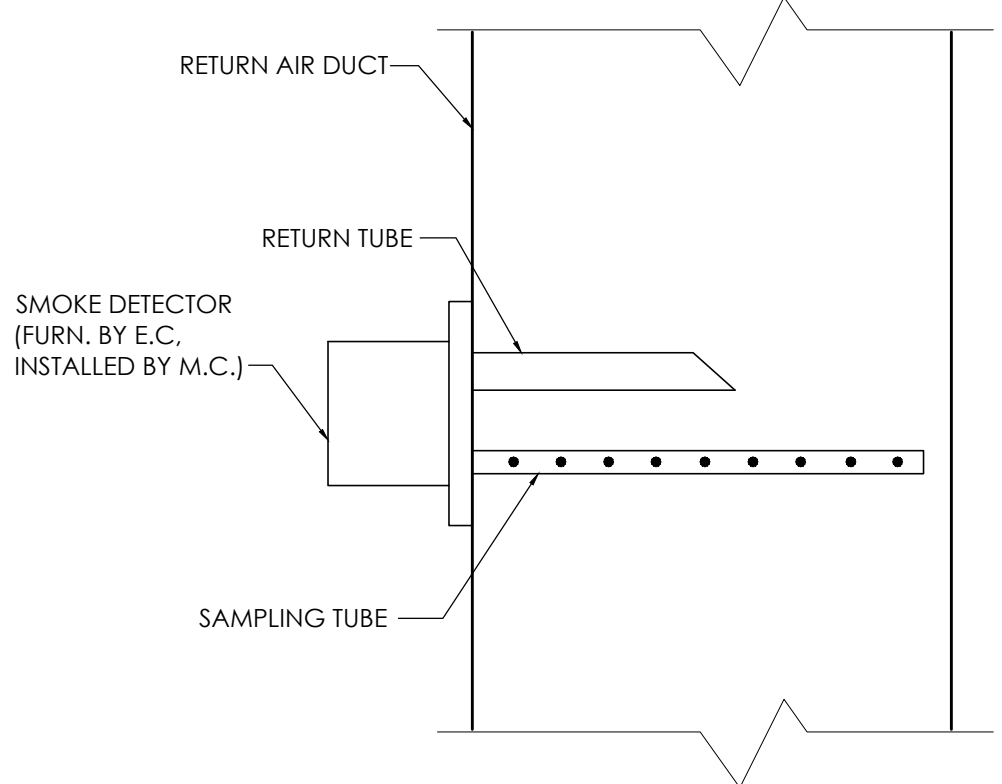
SHEET NUMBER
E1.1

HVAC GENERAL NOTES

- HVAC CONTRACTOR TO PROVIDE 1 YR PARTS AND LABOR WARRANTY ON ALL WORK. PROVIDE 5 YEAR COMPRESSOR WARRANTY AND 10 YEAR HEAT EXCHANGER WARRANTY ON ALL HVAC EQUIPMENT.
- HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL TRADES. LANDLORD REQUIREMENTS, CEILING HEIGHTS AND EXISTING STRUCTURAL CONDITIONS PRIOR TO FABRICATION OF ANY DUCTWORK OR ORDERING OF ANY EQUIPMENT.
- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
- FURNISH ALL LABOR, MATERIALS, TOOLS, INCIDENTALS AND DETAILS NECESSARY TO PROVIDE A COMPLETE HEATING, VENTILATING, AIR CONDITIONING SYSTEM, INCLUDE ANY LABOR AND MATERIAL NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO PROVIDE A COMPLETE AND OPERATING SYSTEM. ALL WORK SHALL BE INSTALLED IN A PROFESSIONAL MANNER AND SHALL MEET ALL THE REQUIREMENTS OF THE STATE BUILDING CODE, CITY BUILDING CODE, SAFETY AND HEALTH CODES, NFPA CODES AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. ALL COSTS FOR SAID REQUIREMENTS SHALL BE INCLUDED IN THIS CONTRACTORS BID PRICE.
- HVAC CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS AND PERFORM ALL TESTS CALLED FOR OR REQUIRED AS A PART OF HIS WORK. FURNISH APPROVED CERTIFICATE OF FINAL INSPECTION, AND TURN OVER TO OWNER AT COMPLETION OF PROJECT.
- HVAC PLANS ARE DIAGRAMMATIC, NOT SHOWING EVERY ITEM IN EXACT LOCATION OR DETAIL. MEASUREMENTS AND LOCATIONS MUST BE FIELD VERIFIED AND COORDINATED WITH ARCHITECTURAL, HVAC, FIRE PROTECTION, STRUCTURAL, ELECTRICAL AND OTHER BUILDING DRAWINGS.
- HVAC CONTRACTOR TO PROVIDE TENANT WITH AS-BUILT DRAWINGS, ALL EQUIPMENT SHOP DRAWINGS, INFORMATION ON THERMOSTATS, CONTROL WIRING DIAGRAMS AND OTHER PERTINENT INFORMATION AT COMPLETION OF PROJECT.
- PROVIDE AN AIR BALANCE ON ALL HVAC EQUIPMENT FOR MINIMUM AND ECONOMIZER OA OPERATION, AND FANS.
- NEW DUCTS USED TO CONVEY THE CONDITIONED AIR SUPPLY AND VENTILATION AIR ARE TO BE MADE OF CONTINUOUS SHEET METAL. PROVIDE SPIRAL DUCT IN OPEN CEILING AREAS.
- DUCT LININGS (THERMAL AND ACOUSTICAL), VIBRATION ISOLATION CONNECTORS, FLEXIBLE DUCT CONNECTORS, AND DUCT TYPE TO BE APPROVED BY LOCAL CODE.
- ALL RECTANGULAR RETURN AIR, AND SUPPLY AIR AND OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH 1-1/2" THICK, 1.5 LBS. DENSITY FOIL FACED FIBERGLASS INSULATION TO EQUAL MINIMUM OF R-5 OR GREATER AS REQUIRED BY LOCAL CODES AND AUTHORITIES. IN GENERAL, INSTALL DUCTWORK TIGHT TO UNDERSIDE OF STRUCTURE UNLESS OTHERWISE NOTED OR REQUIRED BY FIELD CONDITIONS. COORDINATE EXACT MOUNTING HEIGHT IN FIELD WITH GENERAL CONTRACTOR. SPIRAL ROUND DUCT WORK IN CONDITIONED SPACES DOES NOT REQUIRE INSULATION UNLESS OTHERWISE NOTED.
- ALL DUCTWORK SHALL BE SHEET METAL FABRICATED IN ACCORDANCE WITH ASHRAE GUIDELINES AND SMACNA MANUAL LATEST EDITIONS.
- ALL BRANCH TAKE-OFFS SHALL BE PROVIDED WITH MANUAL BALANCING DAMPERS.
- 1" INSULATED FLEXIBLE DUCTS SHALL BE MAXIMUM 10'-0" LONG AND SHALL MEET INSTALLATION AND MATERIAL REQUIREMENTS OF LOCAL CODES. INSULATED DUCT TO BE 1" THICK 1-1/2 LBS DENSITY W/ FOIL FACE TO EQUAL MINIMUM OF R-5 OR GREATER AS REQUIRED BY LOCAL CODES AND AUTHORITIES.
- THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE TEMPERATURE CONTROL SYSTEM TO INCLUDE SEVEN DAY PROGRAMMABLE THERMOSTAT COMPATIBLE WITH UNIT.
- ALL TEMPERATURE CONTROLS, FIRE ALARM COMPONENTS, EQUIPMENT NAMEPLATES, LABELS, OR COLOR CODED COMPONENTS SHALL BE MASKED DURING PAINTING TO PREVENT DAMAGE FROM OVER-SPRAY OR OBSCURING INFORMATION.
- ALL LOW VOLTAGE WIRING AND CONDUIT REQUIRED FOR HVAC EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY HVAC CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL CONTRACTOR ALL WIRING AND CONDUIT REQUIRED FOR EQUIPMENT OPERATION AND CONTROL.
- PROVIDE OPERATIONAL MANUALS, INSTRUCT OWNER ON EQUIPMENT USE, AND TEST ALL UNITS AND CONTROLS FOR PROPER SEQUENCING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE HVAC EQUIPMENT COMPONENTS ARE INSTALLED AT LOCATIONS AND ELEVATIONS WHICH MAKE THEM READILY ACCESSIBLE FOR ROUTINE MAINTENANCE WITHOUT REQUIRING ANY EXTRAORDINARY MEASURES.
- ALL ROOF WORK TO BE PERFORMED BY APPROVED ROOFING CONTRACTOR @ HVAC CONTRACTOR'S EXPENSE. SEAL ALL ROOF PENETRATIONS WEATHER TIGHT.
- MAINTAIN 10' MINIMUM SEPARATION BETWEEN ALL OA OPENINGS AND EXHAUST OR VENT OPENINGS.
- MANUFACTURERS LISTED ON THE DRAWINGS WERE USED AS THE BASIS OF DESIGN. THE CONTRACTOR MAY PROVIDE AN APPROVED EQUAL MANUFACTURED PRODUCT. THE CONTRACTOR IS ENTIRELY RESPONSIBLE FOR ANY AND ALL COSTS REQUIRED TO ALTER THE SYSTEM DESIGN, WHETHER IDENTIFIED OR NOT IDENTIFIED BY THE ENGINEER OR ARCHITECT, SHOULD AN APPROVED EQUAL MANUFACTURER BE SUPPLIED.
- THE HVAC CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL HANGERS, SUPPORTS & ACCESSORIES AS REQUIRED BY ALL CODES.



A ROOFTOP UNIT INSTALLATION DETAIL
SCALE: NTS



B DUCT SMOKE DETECTOR DETAIL
SCALE: NTS

MINIMUM EXHAUST RATE
TABLE 6-4
ASHRAE STANDARD 62.1-2010

UNIT	SPACE	AREA SQ. FT.	CFM/UNIT	EXHAUST (UNIT)	CFM/SQFT	EXHAUST (CFM)	TOTAL REQUIRED	TOTAL PROVIDED
EF-1	WOMEN'S RESTROOM	60	70	---	-	---	70	75
EF-1	MEN'S RESTROOM	60	70	---	-	---	70	75
EF-1	UNISEX RESTROOM	45	70	---	-	---	70	75

REQUIRED OUTDOOR VENTILATION AIR
TABLE 6-1
ASHRAE STANDARD 62.1-2010

UNIT	SPACE	MAX. OCCUPANCY PERSONS/1000 SQFT	AREA SQ. FT.	NO. PEOPLE	OA CFM /PERSON	OA CFM /SQFT	OA CFM PEOPLE	OA CFM SQFT	MINIMUM CFM OUTSIDE AIR REQUIRED
RTU-1	RETAIL SPACE	15	1070	16	7.5	0.12	120	128	248
TOTAL									248
VENTILATION EFFECTIVENESS RATE FACTOR (0.8):									310
320 CFM OA PROVIDED BY ROOFTOP, RTU-1									

REQUIRED OUTDOOR VENTILATION AIR
TABLE 6-1
ASHRAE STANDARD 62.1-2010

UNIT	SPACE	MAX. OCCUPANCY PERSONS/1000 SQFT	AREA SQ. FT.	NO. PEOPLE	OA CFM /PERSON	OA CFM /SQFT	OA CFM PEOPLE	OA CFM SQFT	MINIMUM CFM OUTSIDE AIR REQUIRED
RTU-2	RETAIL SPACE	15	2090	31	7.5	0.12	233	251	484
TOTAL									484
VENTILATION EFFECTIVENESS RATE FACTOR (0.8):									605
610 CFM OA PROVIDED BY ROOFTOP, RTU-2									

TITUS AIR DISTRIBUTION DEVICES (OR APPROVED EQUAL)

NOTES: 1. SYMBOL KEY - FIRST LETTER: S-SUPPLY R-RETURN E-EXHAUST F-FLOOR * SEE PLANS
SECOND LETTER: D-DIFFUSER R-REGISTER G-GRILLE
2. CATALOG NUMBERS REFER TO TITUS AIR DEVICES. SEE PLANS FOR DUCT NECK SIZES.
3. 1,2,3, AND 4-WAY AIR DEVICES ARE DETERMINED BY DIRECTIONAL ARROWS ON DRAWINGS.
4. DAMPERS SHALL BE OPERABLE FROM FACE.
"A" YOUNG'S REGULATOR WITH REMOTE SWITCH
"C" BUTTERFLY (BDS)
5. FINISH
"B" GOLDEN SAND
"C" BAKED WHITE ENAMEL FINISH STANDARD
"D" ANODIZED
6. BORDER STYLE
"A" SURFACE MOUNTED
"B" LAY-IN MOUNTING
"C" LAY-IN PLASTER FRAME

SYMBOL	CATALOG #	SIZE		MOUNTING			MATERIAL		FINISH	ACCESSORIES			BORDER STYLE	REMARKS
		MOD.	NECK	SIDE-WALL	CEILING	DUCT	FLOOR	STEEL		ALUM.	DPR.	EQUAL GRID		
SD-1	TMS	12"x12"	6"Ø		●				"C"				"B"	
SD-2	TMS	24"x24"	8"Ø		●				"C"				"B"	
SD-3	TMS	24"x24"	10"Ø		●				"C"				"B"	
RG-1	355 RL	24"x24"	16"Ø		●				"C"				"B"	
RG-2	355 RL	24"x48"	(2) 16"Ø		●				"C"				"B"	

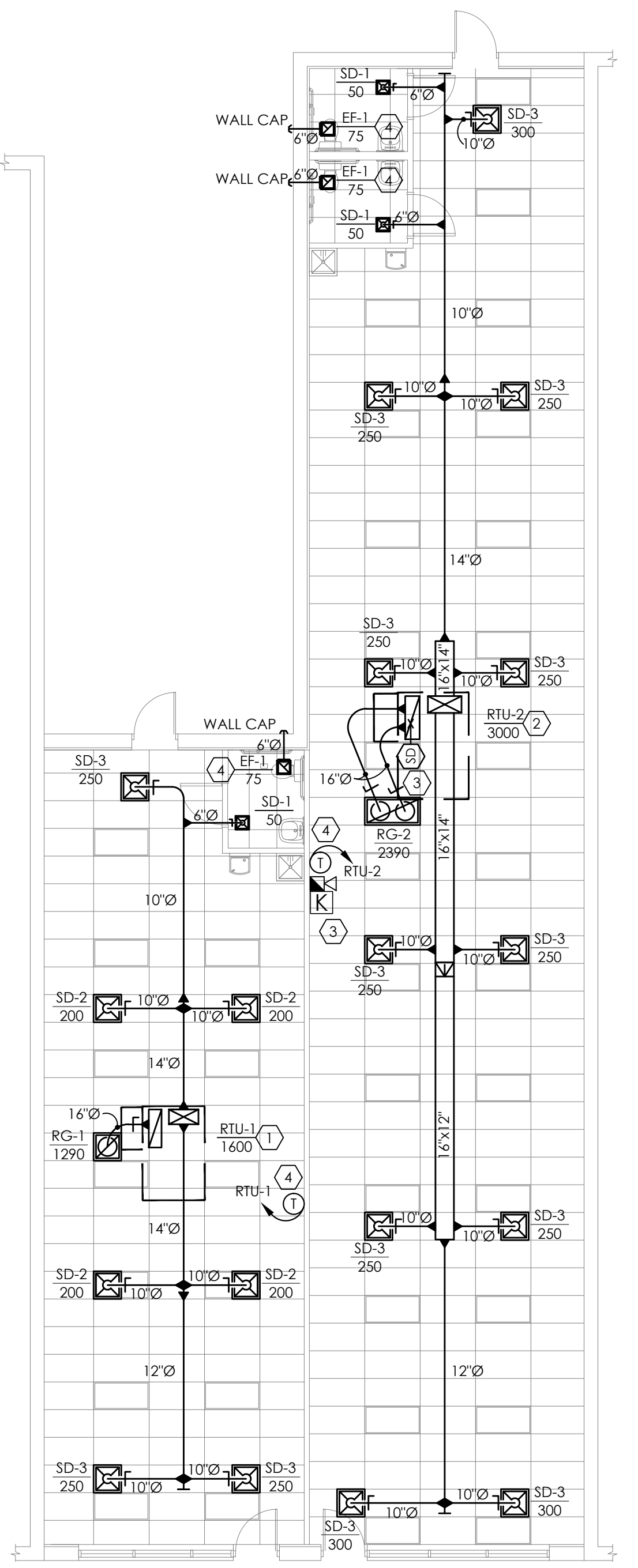
ROOFTOP UNIT SCHEDULE

TAG	AREA SERVED	TYPE	HEATING INPUT (BTUH)	HEATING OUTPUT (BTUH)	HEATING EFFICIENCY (%)	EER	CAPACITY CFM	MIN O.A. CFM	EXT. S.P.	MOTOR HP	ELECTRICAL			COOLING COIL DATA		MANUFACTURER	MODEL	WEIGHT (LBS)	ACCESSORIES
											VOLT/PHASE	MCA	MOCF	S.H. MBH	TTL MBH				
RTU-1	DINING RM	CV	827/115	66/89	82	12.6	1600	320	1.2"	1.0	208/3Ø	29.0	40	36.6	47.1	CARRIER OR APPROVED EQUAL	48TEA05A2A5	759	1,2,3
RTU-2	DINING RM	CV	120/180	98/148	82	11.0	3000	610	1.2"	2.9	208/3Ø	41.1	50	64.72	87.29	CARRIER OR APPROVED EQUAL	48ICED08A2A5	835	1,2,3

ACCESSORIES
1. 14" ROOF CURB
2. MANUFACTURERS 7-DAY PROGRAMMABLE THERMOSTAT WITH SENSOR.
3. RAIN HOOD WITH ECONOMIZER AND CONTROLS.
4. UNIT MANUFACTURER 7-DAY PROGRAMMABLE THERMOSTAT COMPATIBLE WITH UNIT.
5. ALL REQUIRED STRUCTURAL STEEL FOR RTU SUPPORT FURNISHED AND INSTALLED BY G.C., COORDINATED WITH HVAC CONTRACTOR.

HVAC LEGEND

SD-1 300	TYPE CFM	DIFFUSER DESIGNATION	DUCT SMOKE DETECTOR
		EXHAUST FAN	
		S.A. DIFFUSER	DUCT TRANSITION/ BRANCH DUCT TAKEOFF
		R.A. DIFFUSER	TURNING VANE
		MANUAL DAMPER	THERMOSTAT X-UNIT #
		CONNECT TO EXISTING	REMOTE A/V WITH KEY TEST SWITCH
		OUTSIDE/SUPPLY/RETURN AIR	EXISTING/RELOCATED/ NEW
		CONNECT TO EXISTING	ROOF MOUNTED EQUIPMENT



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

HVAC CODED NOTES

- THE HVAC CONTRACTOR SHALL PROVIDE AND INSTALL A NEW GAS HEATING ELECTRIC COOLING PACKAGED ROOFTOP UNIT WITH ROOF CURB AT NEW OPENING. CONTRACTOR SHALL PROVIDE ALL SUPPORT STEEL AS REQUIRED TO SUPPORT UNIT. BALANCE SUPPLY AIR TO 1600 CFM AND SET MINIMUM OUTDOOR AIR TO 320 CFM. REFER TO EQUIPMENT SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
- HVAC CONTRACTOR SHALL PROVIDE AND INSTALL A NEW GAS HEATING ELECTRIC COOLING PACKAGED ROOFTOP UNIT WITH ROOF CURB AT NEW OPENING. CONTRACTOR SHALL PROVIDE ALL SUPPORT STEEL AS REQUIRED TO SUPPORT UNIT. BALANCE SUPPLY AIR TO 3000 CFM AND SET MINIMUM OUTDOOR AIR TO 610 CFM. REFER TO EQUIPMENT SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
- CONTRACTOR TO PROVIDE 24V IONIZATION TYPE SMOKE DETECTOR IN RETURN AIR DUCT AHEAD OF ANY RETURN AIR CONNECTION W/ REMOTE KEYED TEST SWITCH & AUDIO/ VISUAL DEVICE ADJACENT TO THERMOSTAT. UPON ACTIVATION THE DETECTOR SHALL SHUT DOWN RTU AND SIGNAL REMOTE A/V DEVICE. PROVIDE MARKING ON CEILING GRID INDICATING "SMOKE DETECTOR ABOVE". PLACE IN LOCATION PER AUTHORITY HAVING JURISDICTION.
- CEILING EXHAUST FAN EQUAL TO NUTONE, 75 CFM @ .25" SP WITH BACKDRAFT DAMPER 120V/1PH, 59 WATTS. EXTEND 6"Ø DUCT FROM FAN AND TERMINATE IN ALUMINUM 6"Ø WALL CAP W/ BACKDRAFT DAMPER.

ENGINEERINGGROUP, LTD.
425 EAST NORTH BROADWAY STREET
COLUMBUS, OHIO 43214
614-225-1580
EMENGINEERINGGROUP.COM

It is a violation of the law for any person, unless acting under the direction of a registered engineer, to alter these plans and specifications. This document contains proprietary information and shall not be used or reproduced, or its contents disclosed, in whole or in part, without the written consent of EM Engineering Group.

© EM Engineering Group, Ltd.

PROJECT NUMBER: **160333**
DESIGN BY: JBU

SOUTHGATE CENTER
FIRE DAMAGE RECONSTRUCTION

1881 SOUTH LIMESTONE ST
SPRINGFIELD, OHIO

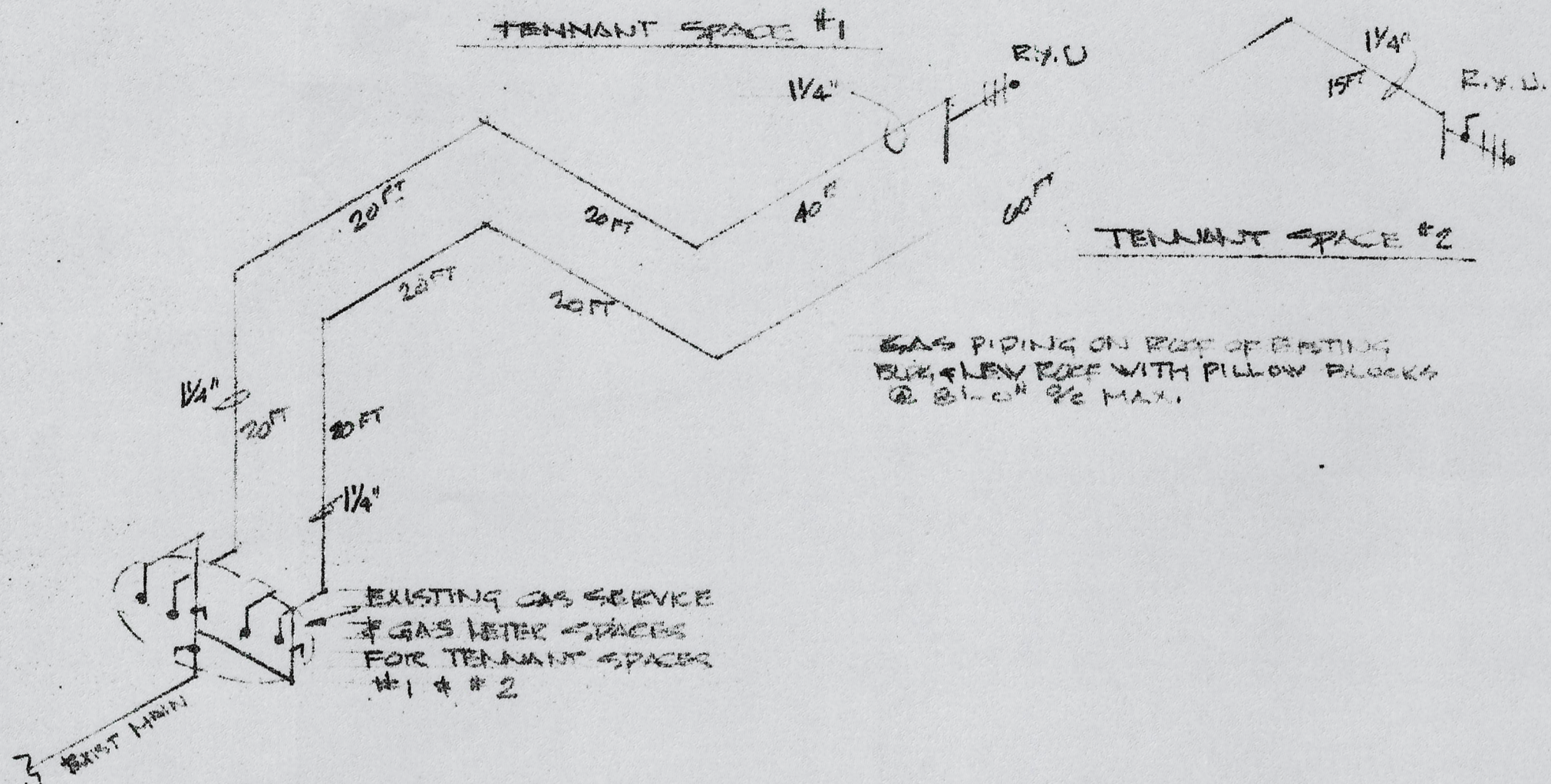
DATE
SEPTEMBER 26, 2016

REV#	DATE	DESCRIPTION

STATE OF OHIO
DAVID W. MULLEN
E-51424
REGISTERED PROFESSIONAL ENGINEER

HVAC PLAN

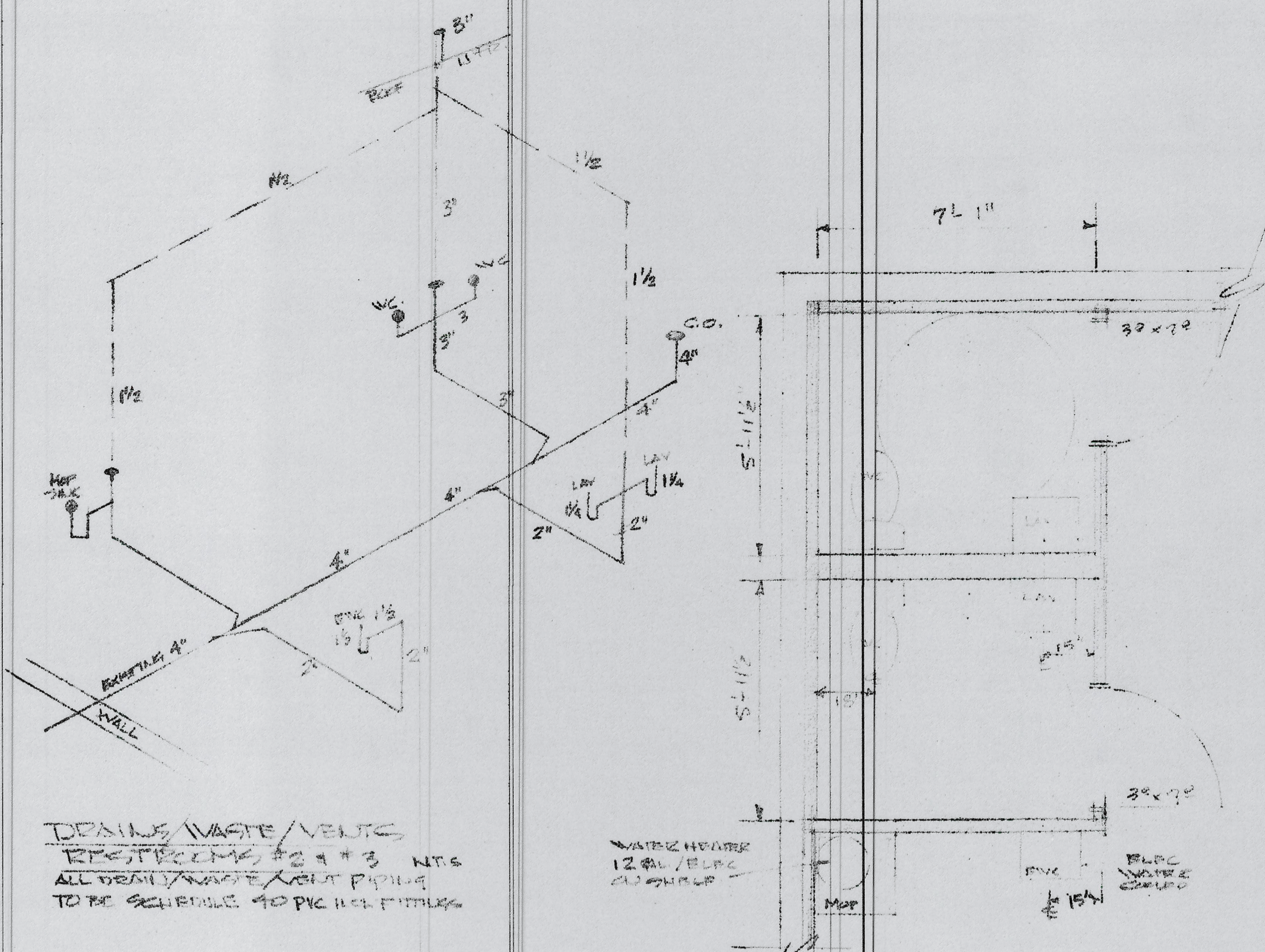
H1.0



GAS PIPING FOR TENANT SPACES #1 + #2 NTS

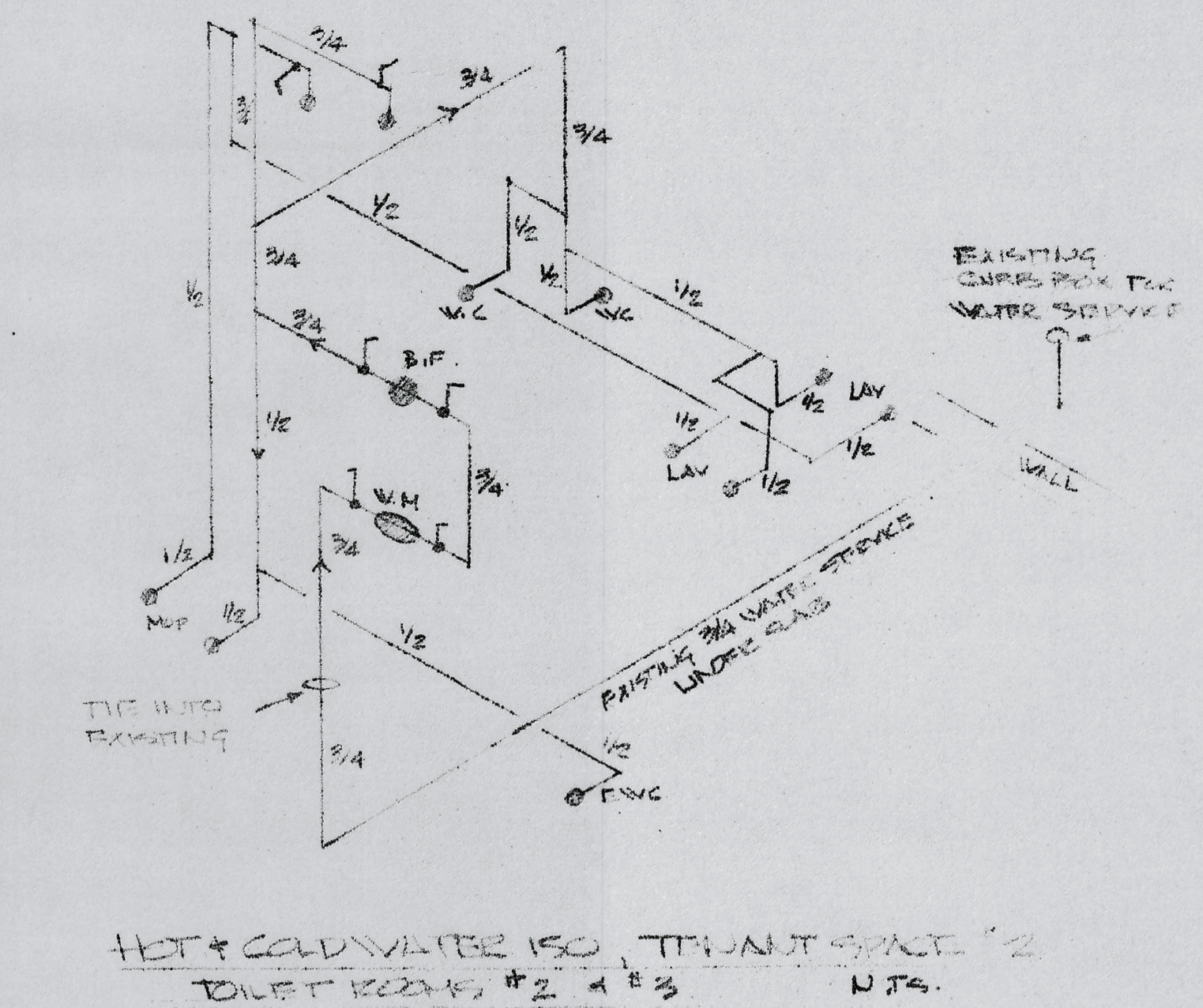
NOTES:

- GAS PIPING TO BE INSTALLED PER 2007 INTERNATIONAL FIRE & CITY CODE.
- 125,000 BTU TOTAL LOAD @ 7" WATER COLUMN OPERATING PRESSURE SYSTEM.
- ALL PIPING TO BE BLACK IRON PIPE/MALLEABLE FITTINGS.
- PIPE SIZE BASED ON TABLE 402.4(1) AT 100 FT FOR TENANT #1.
- PIPE SIZE BASED ON TABLE 402.4(1) AT 125 FT FOR TENANT #2.



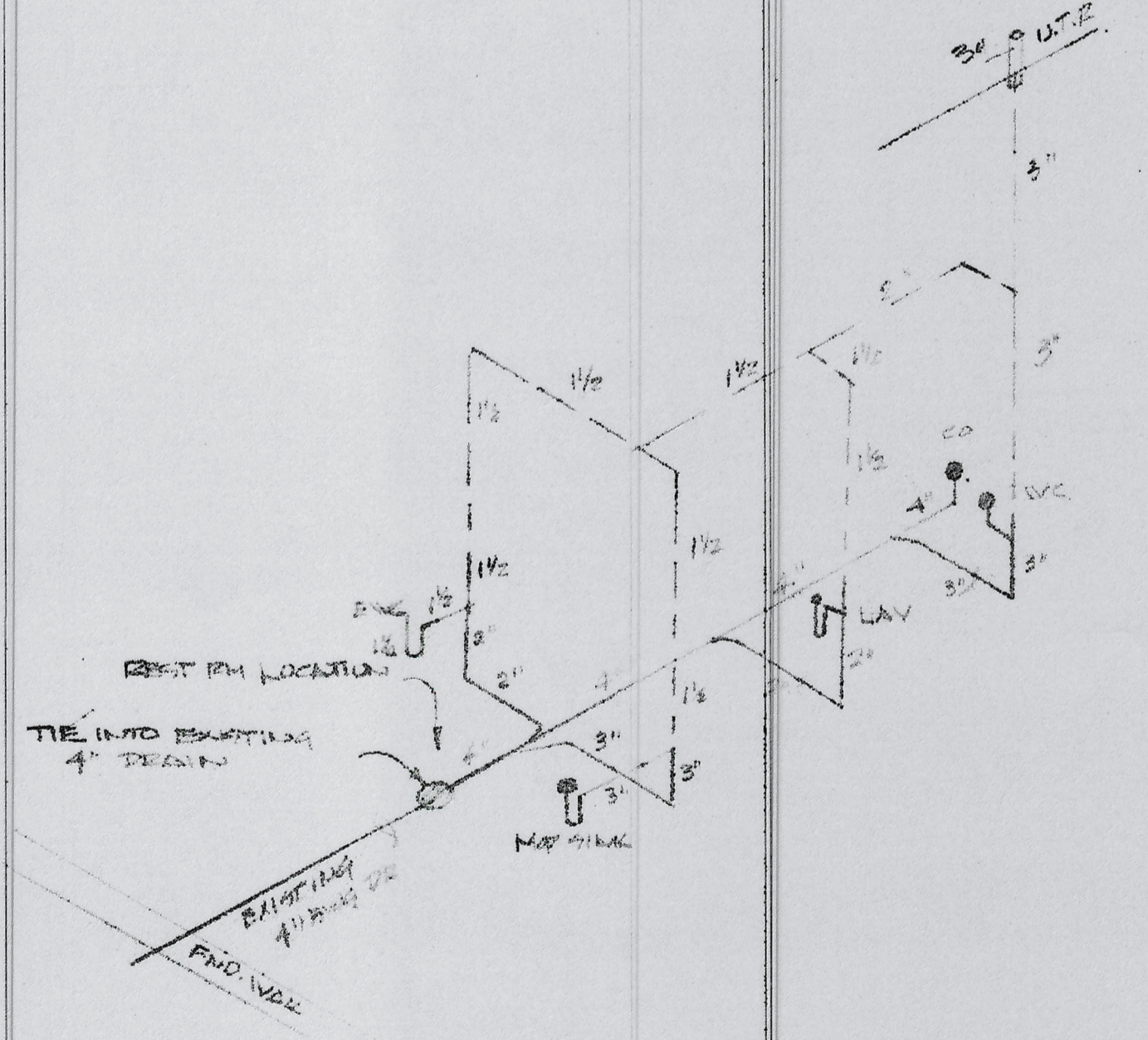
DESIGN/WASTE/VENTS - RESTROOMS #2 + #3 NTS

ALL DESIGN/WASTE/VENT PIPING TO BE SCHEDULE 40 PIPE WITH FITTINGS



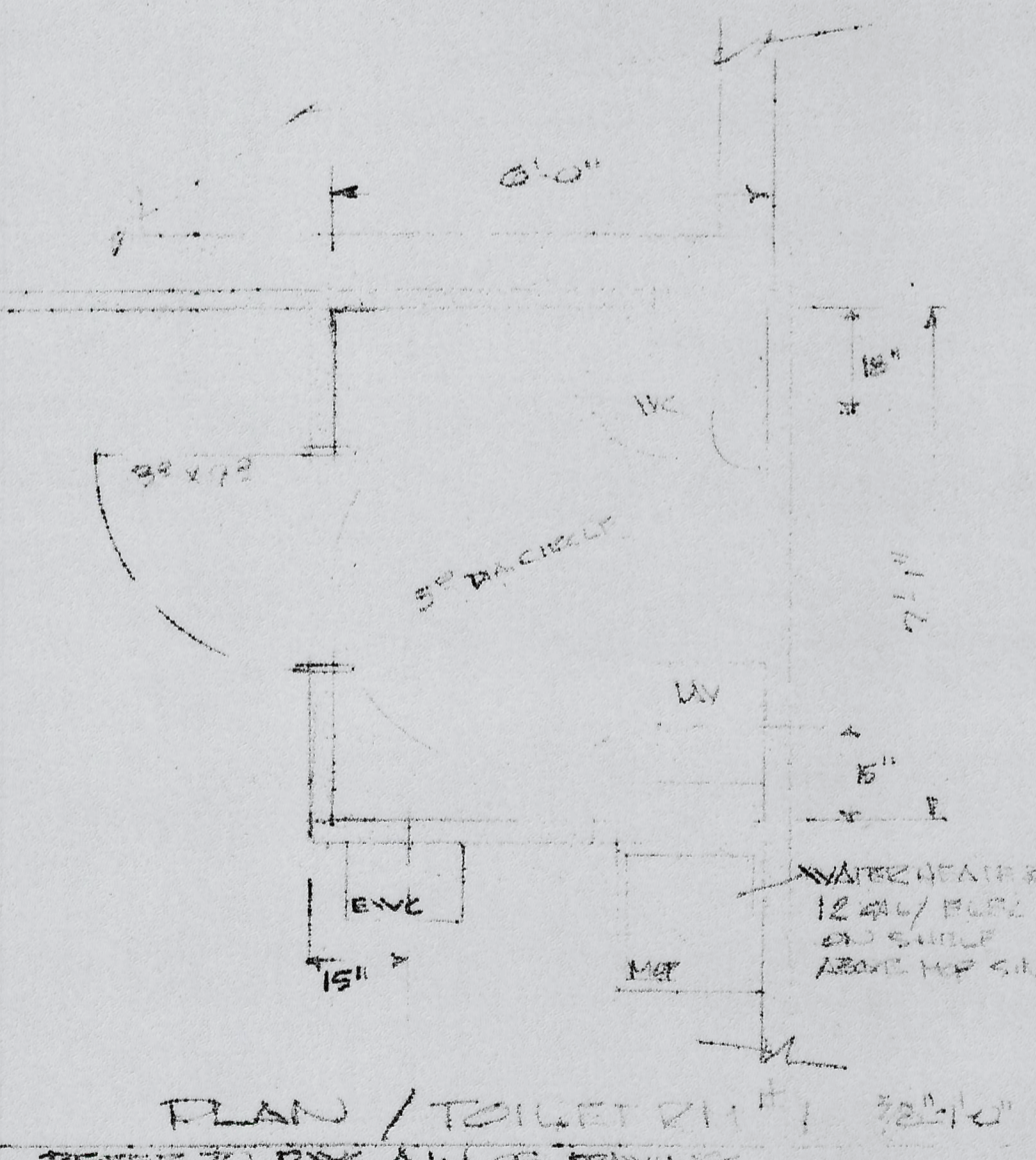
HOT + COLD WATER ISO, RESTROOM #2 NTS

ALL PIPING TO BE SCHEDULE 40 PIPE WITH FITTINGS



DESIGN/WASTE/VENTS - RESTROOM #1 NTS

ALL DESIGN/WASTE/VENT PIPING TO BE SCHEDULE 40 PIPE WITH FITTINGS



HOT + COLD WATER ISO, RESTROOM #1 NTS

ALL PIPING TO BE SCHEDULE 40 PIPE WITH FITTINGS

PLUMBING FIXTURES

- P.1. WATER CLOSET:**
 AMERICAN STANDARD JADET PEO
 RIGHT HAND SIDE FINISHED
 FROSTED TOILET (W/AT. CROWN)
 #215AA, 104 #597A, 101 BLACK GLOSS
 WITH SEAT, #4188A, 104 TANK.
- P.2. LAVATORY:**
 18" SPIN, LUCERLE WALSHVILLE
 LAVATORY (W/AT. CROWN) BARBER FIVE,
 (2012-1812), #0344, 015-4" CERAMIC,
 1/2" OVERSIZ. WALL MOUNTED.
 #21045 FLECTS (P/PLA HANDLES)
 STANDARD SEAT & FLUSH VALVE.
- P.3. MIRROR:**
 MIRROR - M/11-63M, 24" X 36" X 1/2"
 (W/ITE), #65, 700 HESSE & HOLLERS,
 68,401 (2012) GUNWASH, P/PLA 24" X 36" FLECT.

- P.4. WATER CLOSET:**
 CERAMIC, #P/5AC, 3 GAL./W.C.
 ELWC (110V/60 HZ/1.44A, 150W)
 W/ GUNWASH FLUTE.
- P.5. HOT WATER HEATER:**
 AMERICAN WATER HEATERS,
 "TINY TRAIL" (TEMPORARY)
 15LW, (E01-12U-0155W)
 12 GALLON, ELWC, 120V, 1500W
 3/4" WATER CONNECTIONS
 (MOUNTED ON BRICK OR CONCRETE WALL)
- P.6. FLOOR DRAIN:**
 W/ITE CERAMIC 9" X 9" X 1/2"
 W/ 1 1/2" AC RISE 5/8"
 (MOUNTED ON WALL ABOVE FLOOR)

NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST PLUMBING CODE BY LICENSED SKILLED IN THE TRADE.
- CONTRACTOR SHALL OBTAIN A PLUMBING PERMIT AND NECESSARY INSPECTIONS.
- ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST PLUMBING CODE BY LICENSED SKILLED IN THE TRADE.
- WATER HEATER (34") TO BE INSTALLED IN RESTROOM #1 AREA. (TIE INTO EXISTING 3/4" WATER SERVICE LINE IN RESTROOM #1 AREA).
- WATER HEATER (34") TO BE INSTALLED IN RESTROOM #2 AREA. (TIE INTO EXISTING 3/4" WATER SERVICE LINE IN RESTROOM #2 AREA).
- WATER HEATER (34") TO BE INSTALLED IN RESTROOM #3 AREA. (TIE INTO EXISTING 3/4" WATER SERVICE LINE IN RESTROOM #3 AREA).
- PLUMBING FIXTURES/PERMITS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST PLUMBING CODE BY LICENSED SKILLED IN THE TRADE.

ARCHITECT'S NOTE:

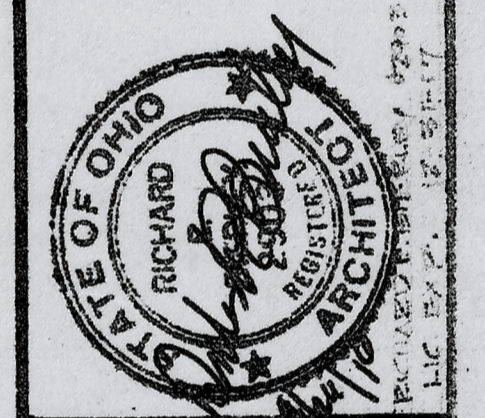
- PLUMBING IS REFERENCED TO THE PLUMBING CODE (2007) IN THIS DRAWING. REFER TO VARIOUS DEPARTMENTS ALL BY REFLECT ARCHITECT JAMES LINKS (#7488) FOR TOILET ROOM LAYOUT AND DIMENSIONS, INCLUDING GENERAL LAYOUT, FINISH SCHEDULE, ETC.
- CEILING - 8'0" 2011, 8'0" 2011.

Contractors shall visit the site and determine all existing conditions in the field to assess the extent of work required to produce a complete workable project.

All work shall be done in a good workmanlike manner by skilled workers in each trade.

All work shall be done in strict accordance with OBC, Local Codes, Building Regulations, Federal Codes and Utility Regulations.

Contractors shall comply with all requirements of OSHA and other authorities in connection with the performance of this project.



Richard E. Berley
 ARCHITECT
 1970 Crystal Lane, Springfield, OH
 605-388-8882
 15302-8887

DATE
 09/20/10

NEW PLUMBING SYSTEMS FOR
 FIRE DAMAGE RECONSTRUCTION
 1851 S. HURON ST., SPRINGFIELD, OH
 RICHARD E. BERLEY, P.E., CONSULTANT

SHEET
 10/17

