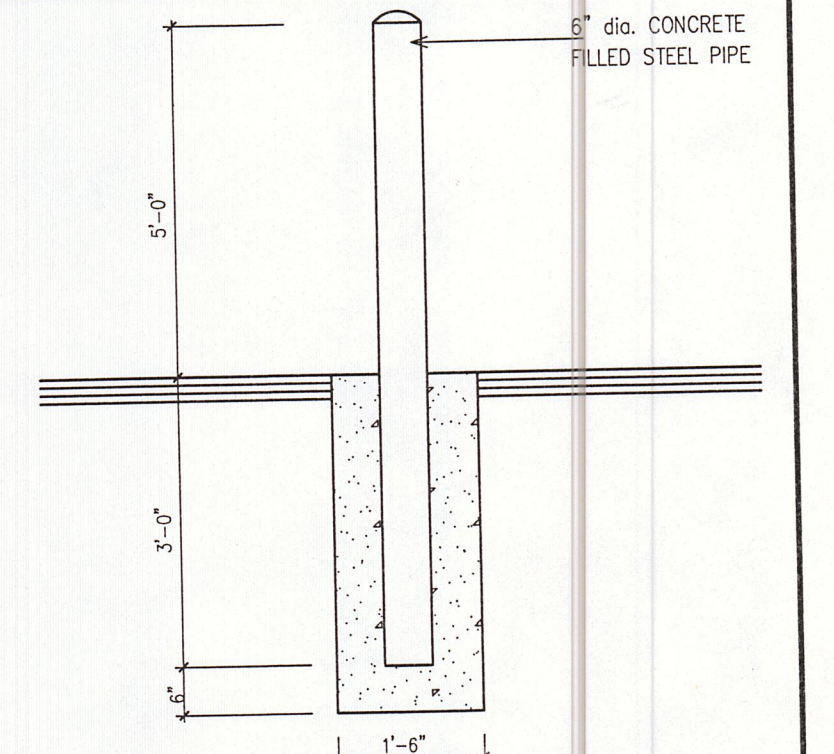
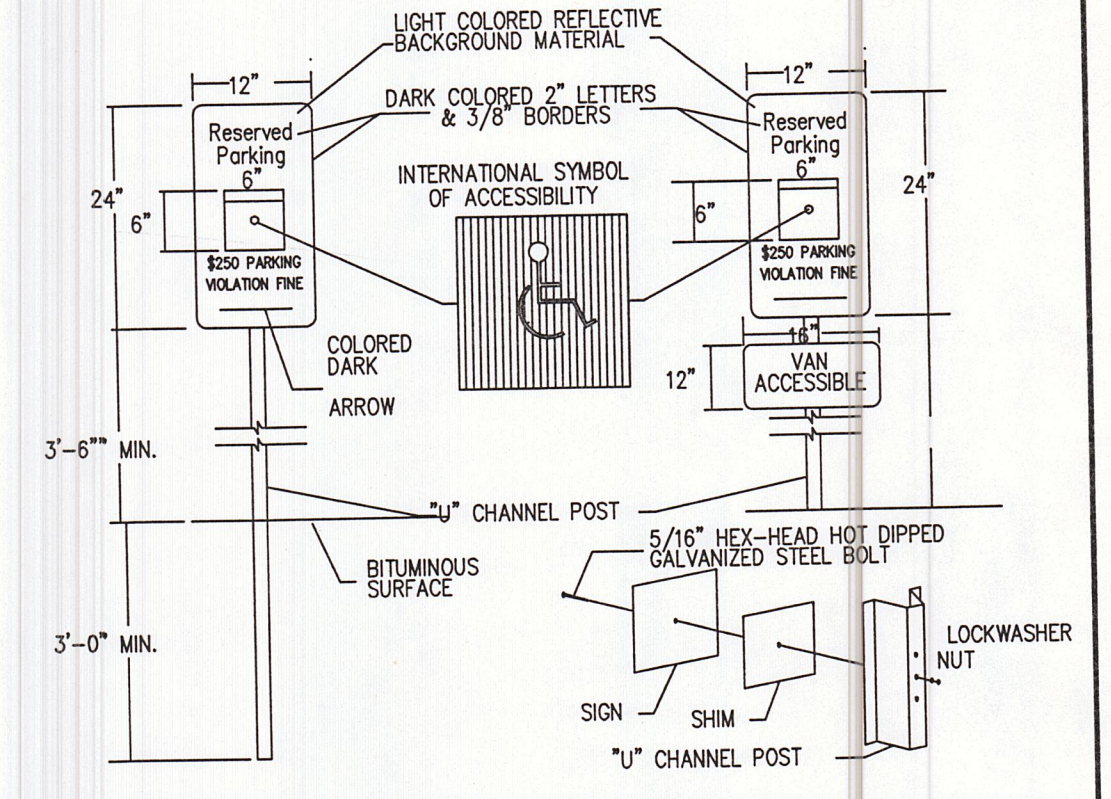




SITE PLAN
SCALE - 1" = 40'-0"



BOLLARD
NO SCALE
(TYPICAL BOTH SIDES OF UPWARD ACTING DOORS)



HANDICAP SIGN INSTALLATION DETAIL
NO SCALE

CODE COMPLIANCE TABLE - OBC 2011

SECT.	CODE REQUIREMENTS	B / S1
303	USE GROUP- MIXED USE GROUP	NON-SEPARATED
603.1	CONSTRUCTION CLASSIFICATION:	2-B COMBUSTIBLE
503.1	HEIGHT AND AREA LIMITATIONS: ALLOWABLE AREA: AREA FRONTAGE INCREASE TOTAL ALLOWABLE AREA: FIRST FLOOR AREA SECOND FLOOR / MEZZANINE AREA TOTAL ACTUAL AREA: ALLOWABLE HEIGHT: ACTUAL HEIGHT:	17,500 S.F. 13,125 S.F. 30,625 SQ. FT. 12,775 SQ. FT. 2,972 SQ. FT. 15,747 SQ. FT. 3 ST. OR 55 FT. MAX. 2 STORY - 27'-0" HIGH
601	FIRE RATINGS OF ELEMENTS: EXTERIOR WALLS ROOF CONSTRUCTION INTERIOR LOAD BEARING WALLS EXIT CORRIDORS / STAIRWELLS STRUCTURAL MEMBERS: SUPPORTING WALLS SUPPORTING ROOF	0 HR. 0 HR. 0 HR. 1 HR. 0 HR. 0 HR.
1016.1	LENGTH OF EXIT TRAVEL: ALLOWABLE:	200 FT.
106.1.1	SPRINKLERS:	NONE
903.0	CODES USED:	2011 OHIO MECHANICAL CODE 2014 NATIONAL ELECTRICAL CODE ICC A117.1
1004.1.1	CALCULATED OCCUPANT LOAD "R" USE OCCUPANTS "S1" USE OCCUPANTS TOTAL CALCULATED LOAD POSTED OCCUPANT LOAD	42 23 65 65
-	RACK STORAGE	NONE
-	BUILDING FIRE ALARM	NONE
-	BUILDING FIRE DETECTION	NONE
-	BUILDING SMOKE DETECTION	NONE
-	STORAGE AISLE WIDTH	6'

INDEX TO DRAWINGS:

1. SITE PLAN
2. FOUNDATION PLAN & SCHEDULES
3. FLOOR PLANS
4. EXTERIOR ELEVATIONS & FIRE DETAILS
5. BUILDING SECTIONS
6. PLUMBING
7. MECHANICAL
8. ELECTRICAL

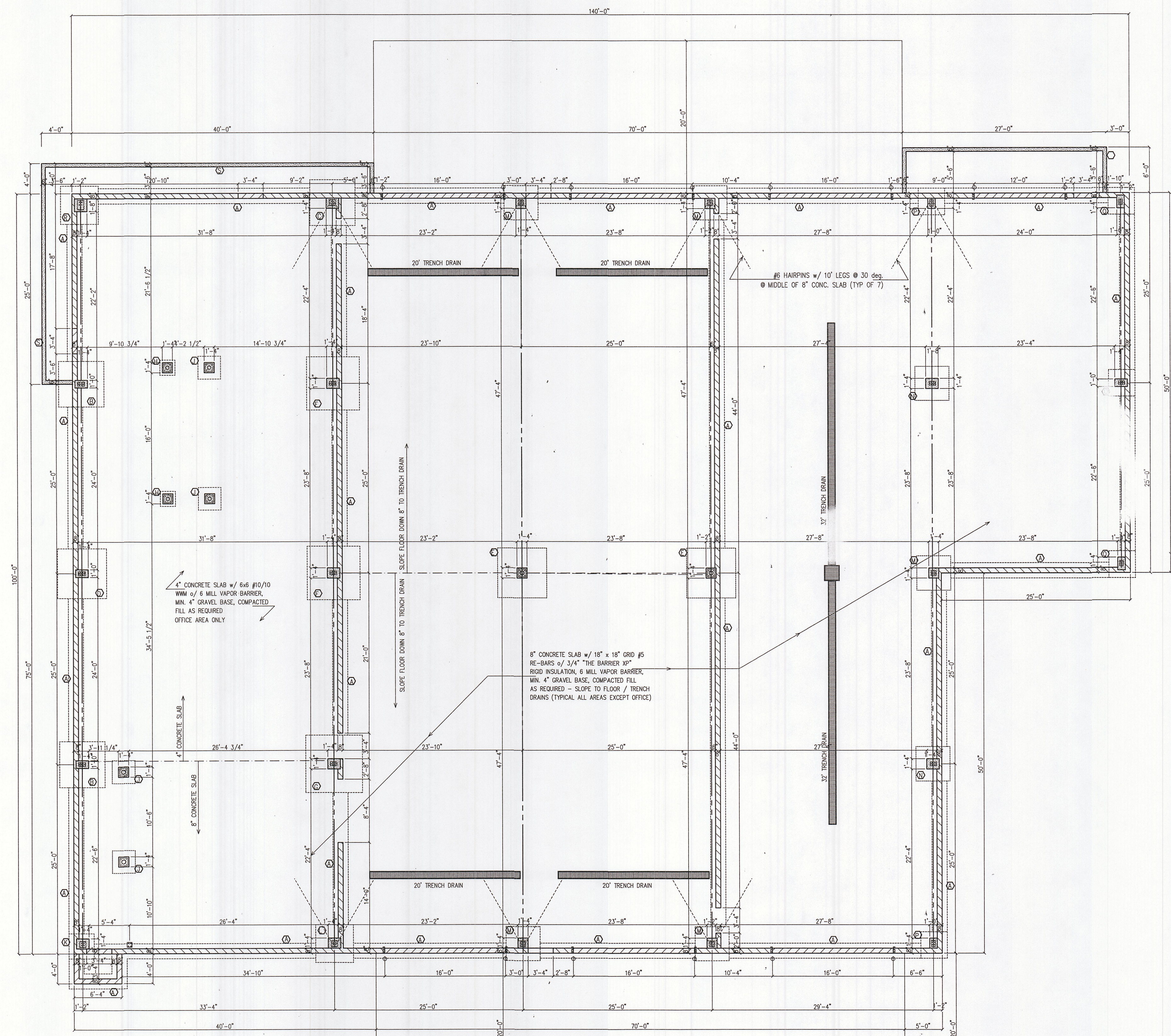
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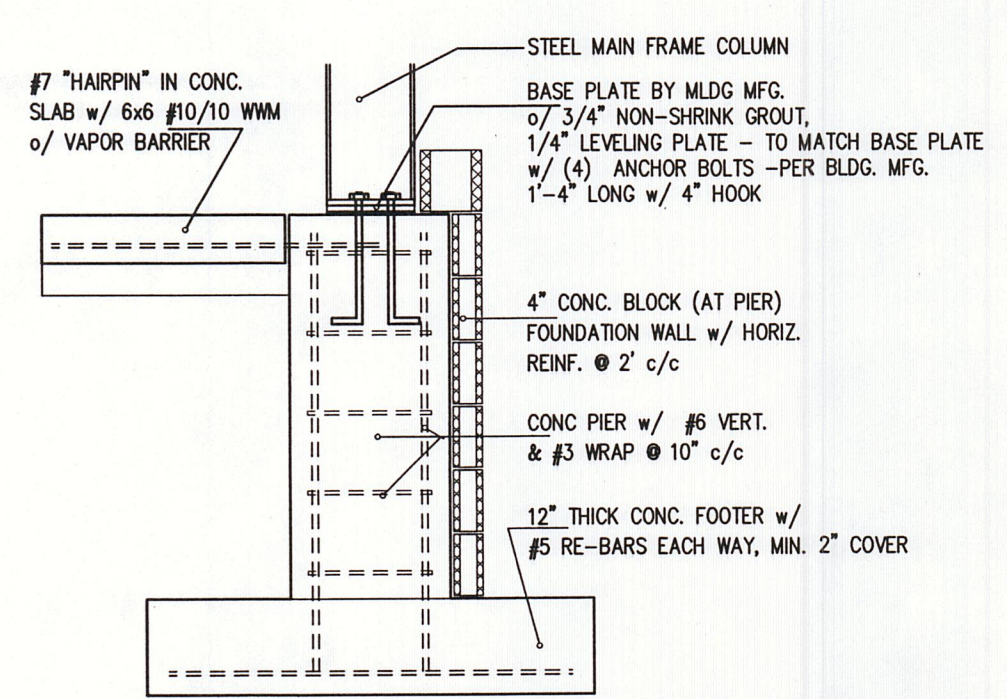
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Milton Studer Inc. # 8308
expires 12/31/15

15-307
PERMIT



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



ANCHOR BOLT DETAIL
SCALE - 1/2" = 1'-0"

FOUNDATION CONSTRUCTION NOTES

- SOIL BEARING CAPACITY, DESIGN LOADING = 3,000 POUNDS PER SQUARE FOOT
- IF CONTRACTOR UNCOVERS ANY AREAS OF FILL, DEBRIS, SOFT OR WET GROUND, THE EXCAVATION WILL CONTINUE TO FIRM UNDISTURBED BEARING SOIL.
- ALL CONCRETE STRENGTH SHALL BE AS FOLLOWS: FLOORS = 3,000 PSI; FOOTERS = 2,500 PSI; WALL GROUT = 3,500 PSI EXTERIOR CONCRETE SLABS TO BE AIR-ENTRAINED PER AC 308, SECT. 4.2.1
- ALL REINFORCING STEEL INDICATED ON THE DRAWINGS SHALL BE INSTALLED PER THE RECOMMENDATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE
- BOTTOM OF ALL FOOTERS SHALL BE A MINIMUM OF 3'-0" BELOW FINISHED GRADE
- IF THE CONTRACTOR DISCOVERS A SOIL TYPE AT FOOTER BEARING DEPTH INCONSISTENT WITH THE SOIL TYPE UNCOVERED BY THE ARCHITECT, AND USED TO DETERMINE THE PRESUMPTIVE BEARING CAPACITY, CONTACT THE ARCHITECT TO REVIEW THE CONDITIONS AND RE-DESIGN THE FOUNDATION AS REQUIRED.
- INTERIOR AND EXTERIOR FLOOR SLAB ELEVATIONS TO MATCH AT MAN DOORS, SLOPE EXTERIOR SLAB AWAY FROM BUILDING @ 1/4" / 1'-0"
- OFFICE FINISH FLOOR ELEVATION = 100'-0" - MINIMUM TOP OF FOOTER ELEVATION FOR INTERIOR FOOTERS IN HEATED AREAS = 99'-4" MINIMUM TOP OF FOOTER ELEVATION FOR EXTERIOR WALLS = 97'-4"

SITE INVESTIGATION BY ARCHITECT REVEALED A SAND / GRAVEL SOIL COMPOSITION AT FOOTER BEARING DEPTH WITH A PRESUMPTIVE LOADING VALUE PER TABLE 1804.2 OBC OF 3,000 PSF.

MARK	FOOTER SIZE	REINFORCING	PIER
A	2'-0" x 12' CONT.	(3) #4 CONT.	8" BLOCK WALL
B	6' x 6' x 1'	(9) #5 E.W.	1'-8" x 1'-0" w/ (4) #6 VERT
C	6' x 6' x 1'	(9) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
D	6'-6"x6'-6"x1'-2"	(9) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
E	6'-6"x6'-6"x1'-2"	(9) #5 E.W.	1'-4" x 1'-4" w/ (4) #6 VERT
F	7'-0"x7'-0"x1'-2"	(10) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
G	7'-6"x7'-6"x1'-2"	(10) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
H	2' x 2' x 1'	(3) #4 E.W.	1'-4" x 1'-0" w/ (4) #6 VERT
J	3' x 3' x 1'	(4) #5 E.W.	1'-4" x 1'-4" w/ (4) #6 VERT
K	3'-4" x 3'-4" x 1'	(4) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
L	5' x 5' x 1'	(7) #5 E.W.	1'-8" x 1'-4" w/ (4) #6 VERT
M	4'-6"x4'-6" x 1'	(6) #5 E.W.	1'-4" x 1'-4" w/ (4) #6 VERT
N	4'-6"x4'-6" x 1'	(6) #5 E.W.	1'-4" x 1'-8" w/ (4) #6 VERT
P	3'-6" x 3'-6" x 1'	(4) #5 E.W.	1'-0" x 1'-4" w/ (4) #6 VERT
Q	3'-6" x 3'-6" x 1'	(4) #5 E.W.	1'-0" x 1'-8" w/ (4) #6 VERT
R	5' x 5' x 1'	(7) #5 E.W.	1'-8" x 1'-8" w/ (4) #6 VERT
S	INTEGRAL FROST FOOTER @ SIDEWALKS - 6" WIDE w/ #5 RE-BARS @ TOP & BOTTOM - BOTTOM @ MINIMUM 3" BELOW FINISH GRADE		

NOTES:

INTERIOR & EXTERIOR FLOOR SLAB ELEVATIONS TO MATCH - SLOPE EXTERIOR SLAB AWAY FROM BUILDING @ 1:50

COORDINATE & VERIFY ALL DIMENSIONS AND DETAILS WITH BUILDING MANUFACTURER ENGINEERED DRAWINGS AND SPECIFICATIONS. FOLLOW BUILDING MFG. SPECIFICATIONS FOR TEMPORARY AND PERMANENT BRACING FLOOR LIVE LOAD = 250 PSF

POST DURABLE, PERMANENT SIGN, MIN. 8" x 10" NOTING LIVE LOAD CAPACITY

ROOMS #106, 107, 108, 213 - HANDICAP LAVATORIES TO HAVE NAME ADJACENT DOOR / OPENING, W/ RAISED LETTERS MIN. 1/32" & GRADE 2 BRILLE, SEALED CONCRETE FLOOR, 6" VINYL COSE BASE, w/ WATER CLOSET 18" FROM WALL, TOP OF SEAT @ 18" AFF, FLUSH CONTROLS ON OPEN SIDE, GRAB BARS AS SHOWN @ 36" AFF, 42" LONG SIDE BAR, 36" LONG REAR BAR STARTING 6" FROM SIDE WALL (STAINLESS STEEL), LAVATORY TOP OF RW @ 34" AFF w/ LEVER OPERATED FAUCET, INSULATE EXPOSED HOT WATER & DRAIN PIPES UNDER LAVATORY, TOILET PAPER DISPENSER 19" FROM FLOOR & NO MORE THAN 36" FROM REAR WALL, BOTTOM EDGE OF MIRROR NO HIGHER THAN 40" AFF, FRP WALL COVERING

DOOR SCHEDULE									
ALL DOORS TO BE ALWAYS UNLOCKED FROM THE INSIDE w/ ADA APPROVED LEVER, EASY OPERATING HARDWARE, THRESHOLD HEIGHT < 1/2"									
NO.	TO	FROM	SIZE	MTL	TYPE	FRAME	MTL	SIZE	REMARKS
1	116	118	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
2	EXT	114	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
3	EXT	114	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
4	EXT	113	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
5	EXT	103	3' x 7' x 1 3/4"	ALUM	B	ALUM	B	4 1/2"	
6	EXT	102	3' x 7' x 1 3/4"	ALUM	B	ALUM	B	4 1/2"	
7	EXT	116	12' x 14' H.	METAL	C				
8	EXT	115	16' x 14' H.	METAL	C				
9	EXT	114	16' x 14' H.	METAL	C				
10	EXT	114	16' x 14' H.	METAL	C				
11	EXT	115	16' x 14' H.	METAL	C				
12	EXT	114	16' x 14' H.	METAL	C				
13	EXT	114	16' x 14' H.	METAL	C				
14	116	115	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
15	115	114	3' x 7' x 1 3/4"	HM	A	3HR	HM	5 3/4"	
16	115	114	3' x 7' x 1 3/4"	HM	A	3HR	HM	5 3/4"	
17	114	102	3' x 7' x 1 3/4"	HM	A	3HR	HM	5 3/4"	
18	112	114	3' x 7' x 1 3/4"	HM	A	3HR	HM	5 3/4"	
19	115	114	(2) - 3' x 7' x 1 3/4"	HM	A	3HR	HM	5 3/4"	
20	101	103	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
21	103	102	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
22	104	103	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
23	102	105	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
24	108	105	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
25	107	105	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
26	108	105	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
27	110	105	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
28	109	111	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
29	113	111	3' x 7' x 1 3/4"	HM	A	HM	A	5 3/4"	
40	A	202	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
41	209	A	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
42	211	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
43	212	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
44	210	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
48	807	802	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
47	208	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
48	205	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
49	203	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
50	204	202	3' x 7' x 1 3/4"	WOOD	C		HM	5 3/4"	
51	213	202	3' x 7' x 1 3/4"	WOOD	C	45M	HM	5 3/4"	
52	201	114	6' x 8' ROLL-UP	METAL	D				

FINISH SCHEDULE									
INDICATES MATERIALS TO BE USED									
INDICATES MATERIALS TO BE PAINTED AND / OR FINISHED PER SPEC'S									
INDICATES MATERIAL TO BE SEALED									
NO.	NAME	FLOOR	BASE	WALLS	CEILING	MISC.	REMARKS		
101	DISPATCH								
102	DRIVER LOUNGE								
103	EXIT CORRIDOR								
104	OFFICE								
105	LOCKER ROOM								
106	MEN SHOWER / LAV.								
107	MEN HANDICAP LAV.								
108	WOMEN SHOWER / LAV.								
109	PARTS								
110	CLOSET								
111	FILES								
112	SHOP OFFICE								
113	MECH. WAREHOUSE								
114	TRUCK BAY								
115	WASH BAY								
116	EQUIPMENT								
A	STAIRS								
201	MEZZANINE STORAGE								
202	HALL								
203	OFFICE								
204	DRIVER TRAINING								
205	OFFICE								
206	PLC OFFICE								
207	CLOSET								
208	OFFICE								
209	OFFICE								
210	INVENTORY								
211	OFFICE								
212	OFFICE								
213	UNISEX LAV.								

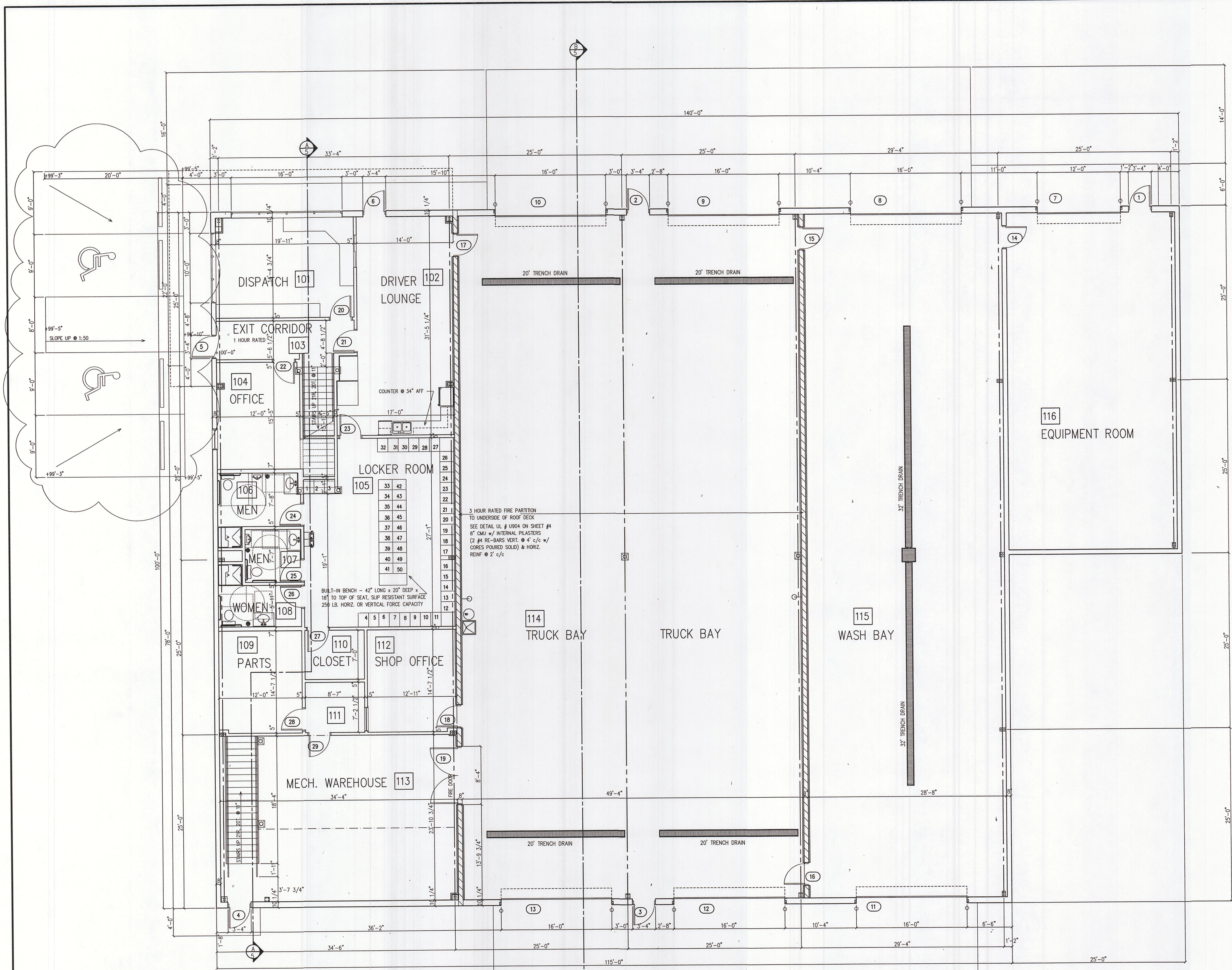
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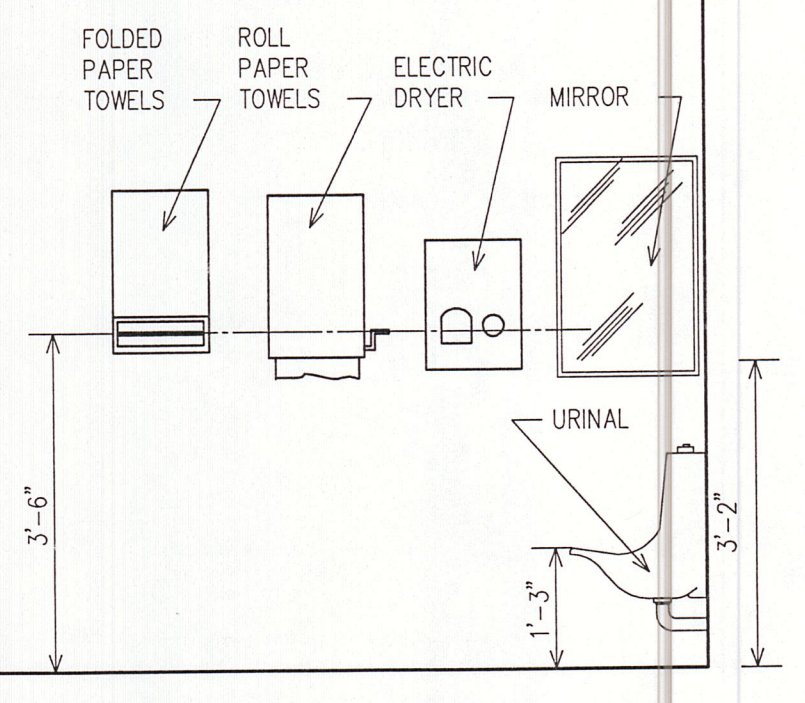
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MAIN FLOOR PLAN
 SCALE - 1/8" = 1'-0"
 AREA = 12,775 SQ. FT.

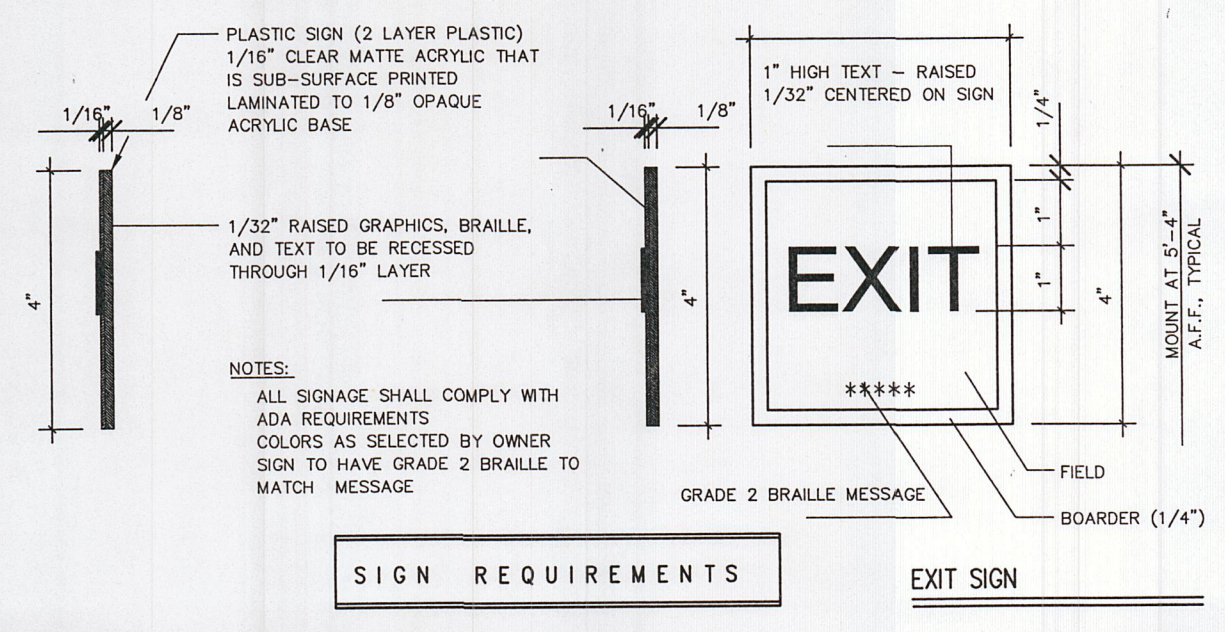
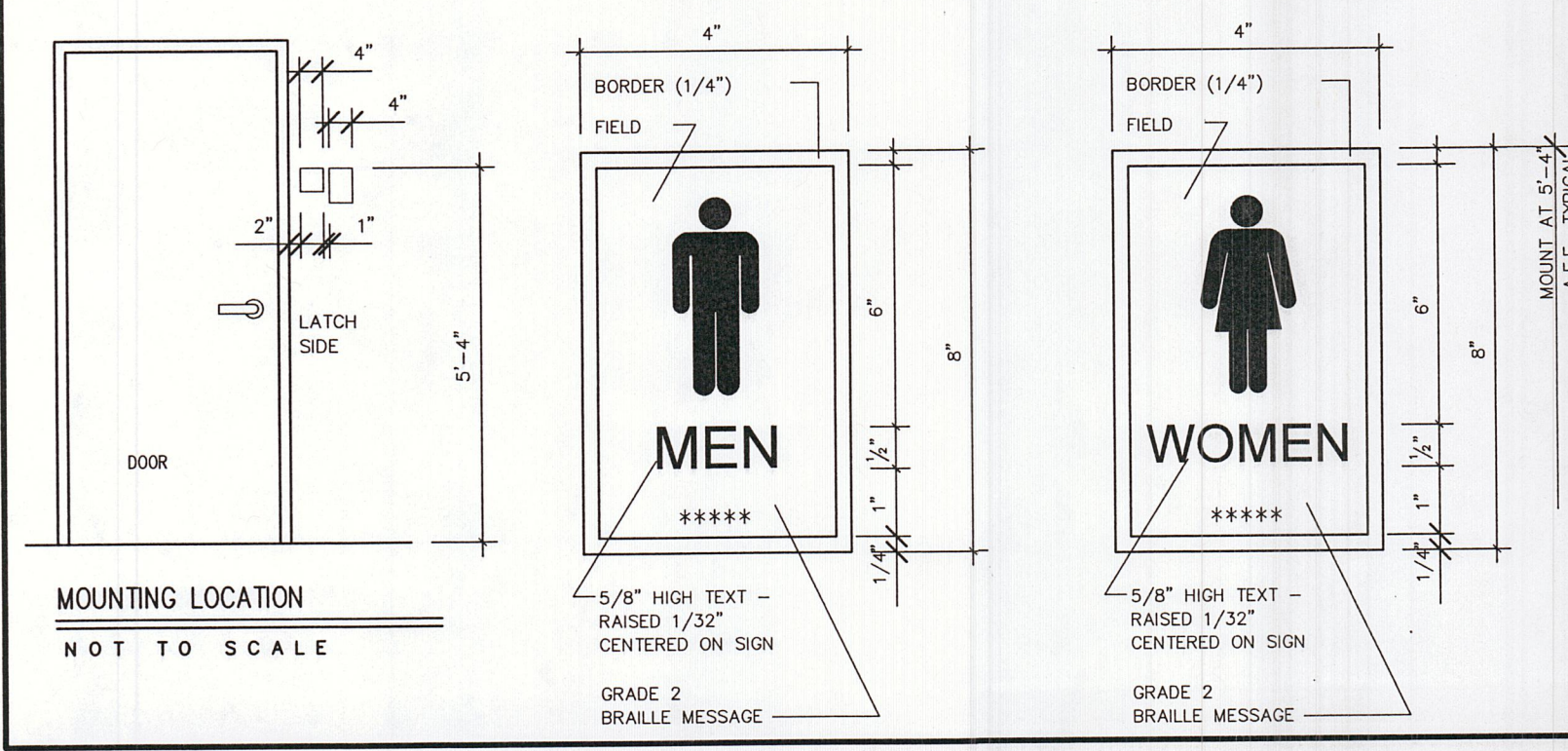
SECOND FLOOR / MEZZANINE PLAN
 SCALE - 1/8" = 1'-0" 12'-0" F/F
 SECOND FLOOR AREA = 2,014 SQ. FT. (20 OCCUPANTS)
 MEZZANINE AREA = 958 SQ. FT. (2 OCCUPANTS) (125 PSF LIVE LOAD)
 TOTAL AREA = 2,972 SQ. FT.



AMERICAN with DISABILITIES ACT ACCESSIBILITY GUIDELINES
 all areas to comply with ANSI A117.1-2009

TOILET	Mounting Height - 18" AFF Location - 18" from wall Controls on open side or automatic Rear grab bar @ 36" AFF, Min. 36" long, no more than 6" from rear wall. ADAAG 4.26 compliant. Side grab bar @ 36" AFF, Min. 42" long, no more than 12" from rear wall. ADAAG 4.26 compliant.
LAVATORY	Mounting Height - 31" AFF Knee Space - 29" h x 8" d Clear Floor Space - 30" w x 48" d Exposed hot water and drain lines to be insulated.
FAUCETS	To be lever operated, push type, or electronically controlled mechanisms that shall be operable w/ 1 hand, not requiring tight grasping, pinching or wrist twisting. Maximum force required < 5 lbs.
URNAL	Mounting Height - 17" AFF Clear Floor Space - 30" w x 48" d
DRINKING FOUNTAIN	Mounting Height - 34" AFF Knee Space - 27" h x 8" d Clear Floor Space - 30" w x 48" d
TOILET ACCESSORIES:	MIRROR - 36" AFF BOTTOM TOILET PAPER DISPENSER - 19" AFF, no more than 36" from rear wall. TOWEL DISPENSER - 54" AFF
DOORS:	CLEAR OPENING - 32" between face of door & opposite stop when open 90 deg. THRESHOLD - height not to exceed 1/2", interior and exterior grade elevations to match w/ 1:50 slope away from door. HARDWARE - shape to allow easy operation without tight grasping, pinching, or wrist twisting.
SIGNAGE:	Interior signage to have letters & numbers raised 1/32" min. & accompanied by grade 2 Braille. Mount on wall @ latch side of door. 60" AFF. Comply w/ ANSI A117.1-229 Chapter 7. Provide tactile "EXIT" sign adjacent each egress door.

All required accessible elements to be identified by "International Symbol of Accessibility" at required locations.



RESTROOM SIGNS

PLASTIC SIGN (2 LAYER PLASTIC) 1/16" CLEAR MATTÉ ACRYLIC THAT IS SUB-SURFACE PRINTED LAMINATED TO 1/8" OPAQUE ACRYLIC BASE

1/32" RAISED GRAPHICS, BRAILLE, AND TEXT TO BE RECESSED THROUGH 1/16" LAYER

NOTES:

- ALL SIGNAGE SHALL COMPLY WITH ANSI REQUIREMENTS
- COLORS AS SELECTED BY OWNER
- SIGN TO HAVE GRADE 2 BRAILLE TO MATCH MESSAGE
- LETTER STYLE SHALL BE UPPER CASE
- ALL RESTROOMS AND TOILET ROOMS
- THROUGHOUT ENTIRE PROJECT SHALL RECEIVE A PICTURE AND WORD SIGN DISABLED SYMBOL
- FOR DISABLED ACCESSIBLE ROOMS

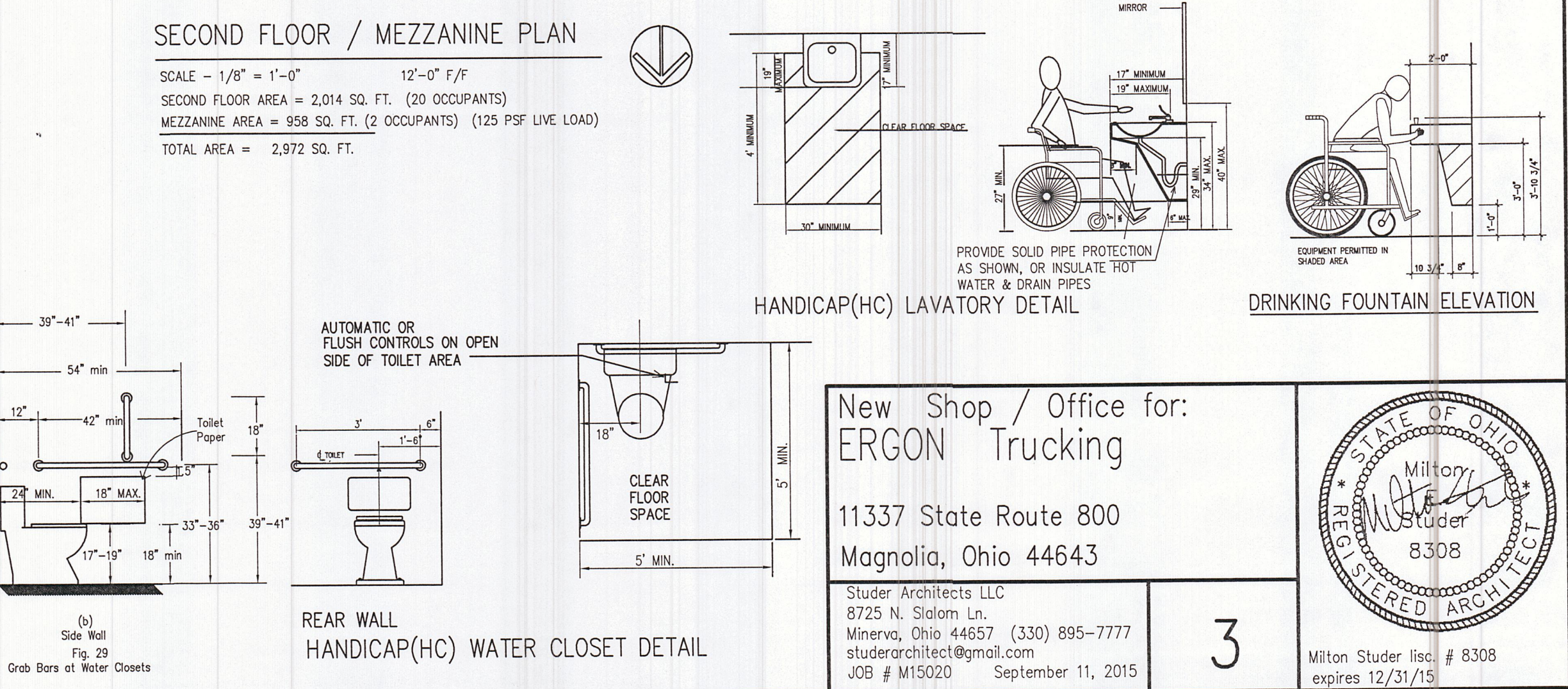
INSTALLATION OF 15 lb - A.B.C DRY CHEMICAL FIRE EXTINGUISHERS
 Comply with manufacturers written instructions for installing fire extinguishers and mounting brackets.

Install fire extinguishers mounted on hangers or brackets attached to a wall so that the top of the fire extinguisher is not more than 3 ft. above the floor. In no case shall the clearance between the bottom of the fire extinguisher and the floor be less than 4 inches.

Install fire extinguishers at locations specified on the drawings or as directed by the authority having jurisdiction.

Fire extinguishers shall be conspicuously located, along normal paths of travel, including exits from areas. Extinguishers shall not be obstructed or obscured from view.

Install portable fire extinguishers on the hanger or in the bracket supplied, or place in the fire extinguisher cabinets provided. Verify that the extinguisher operating instructions face outward.



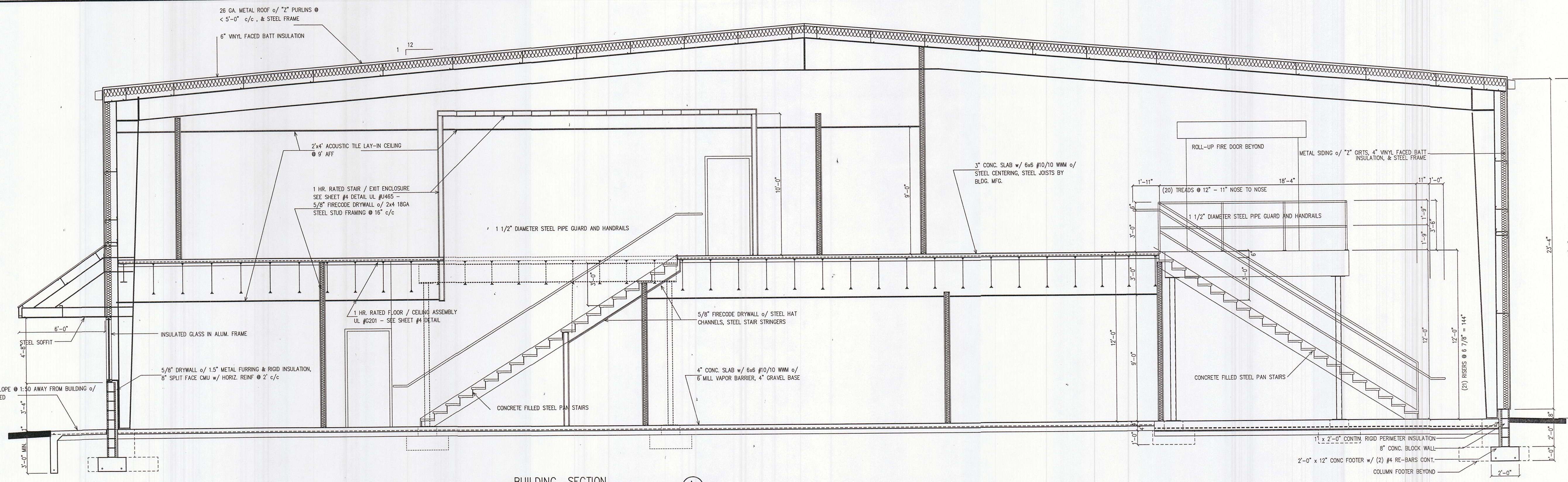
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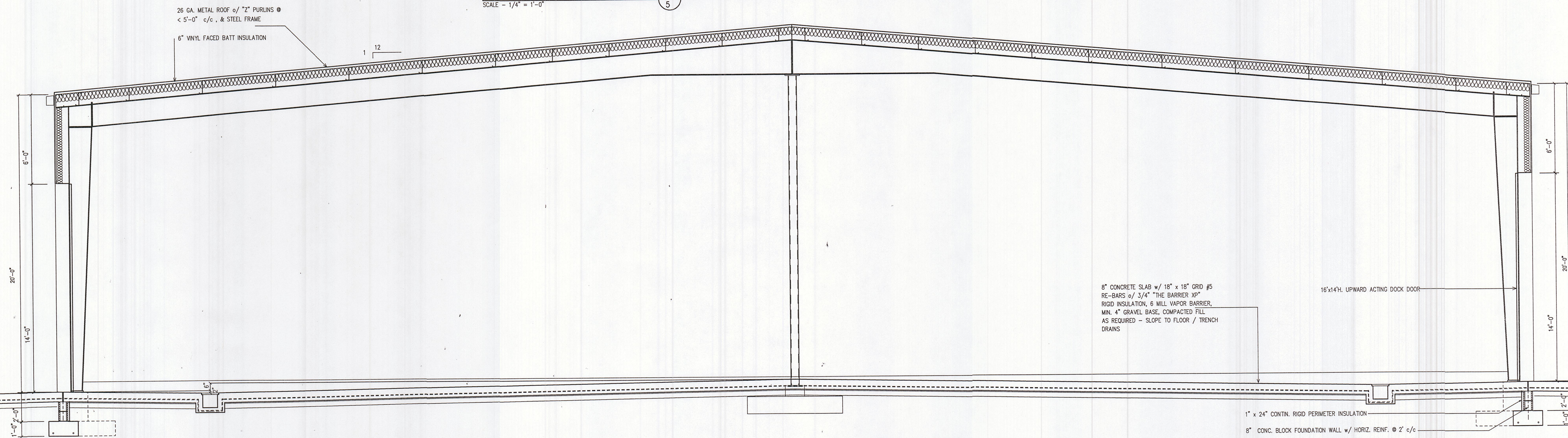
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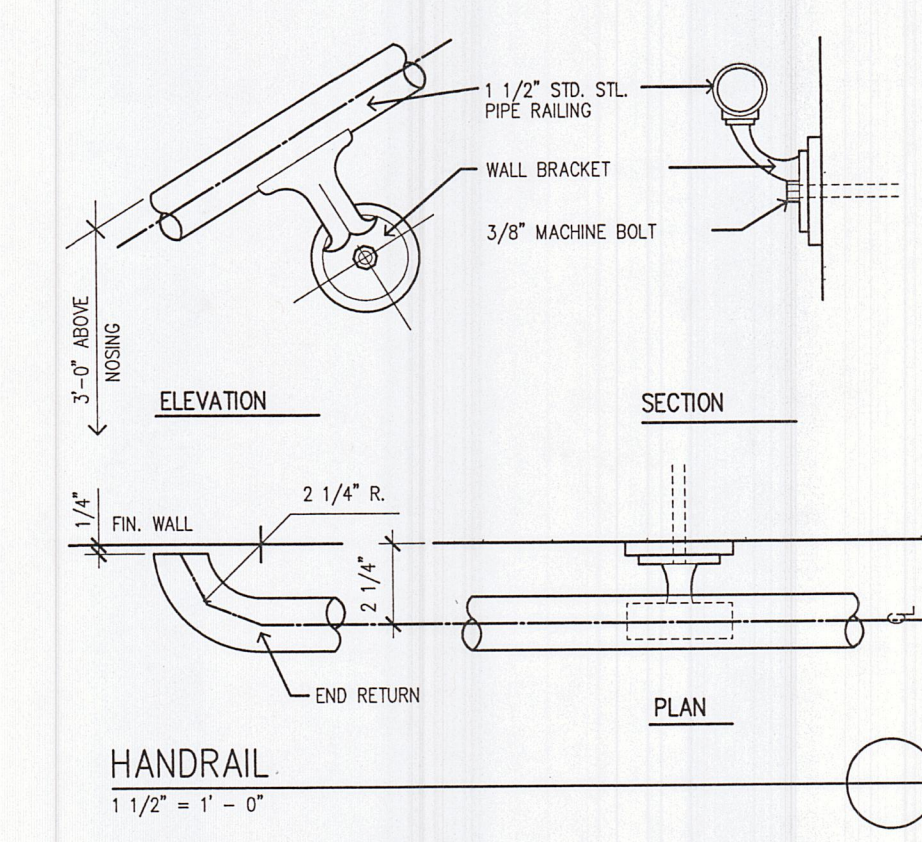
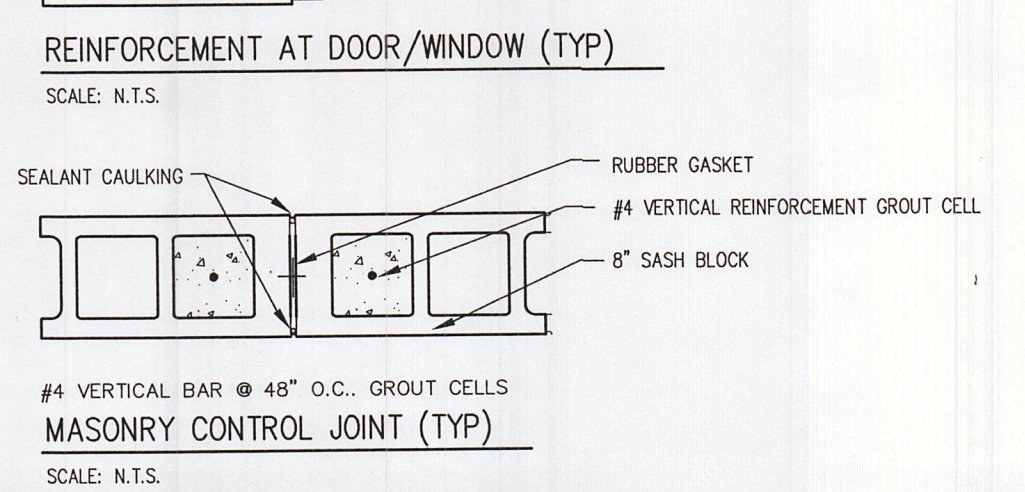
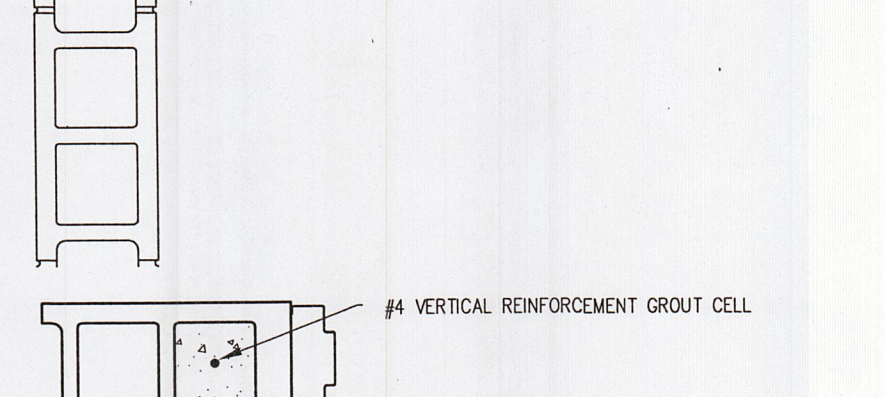
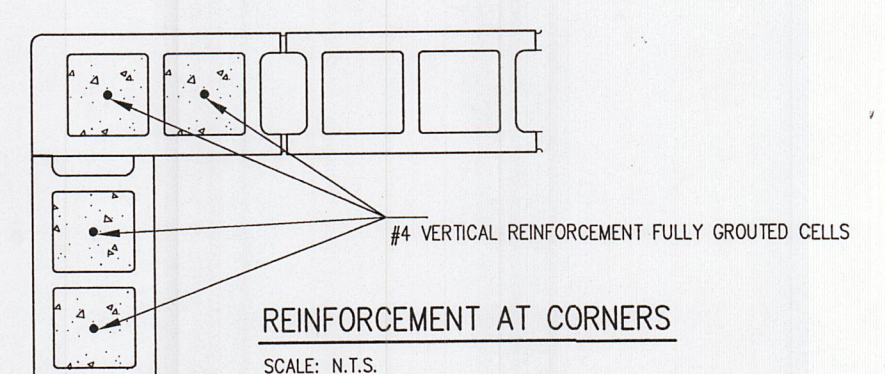
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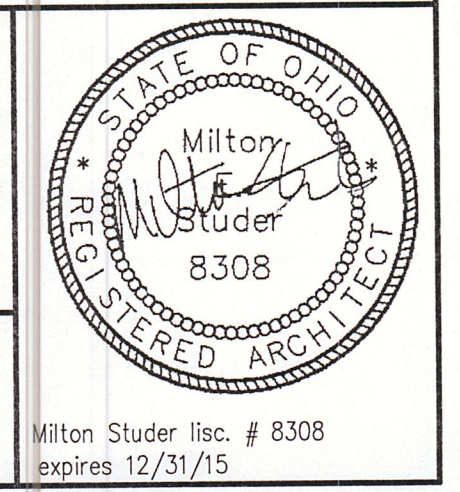
BUILDING SECTION
SCALE - 1/4" = 1'-0"

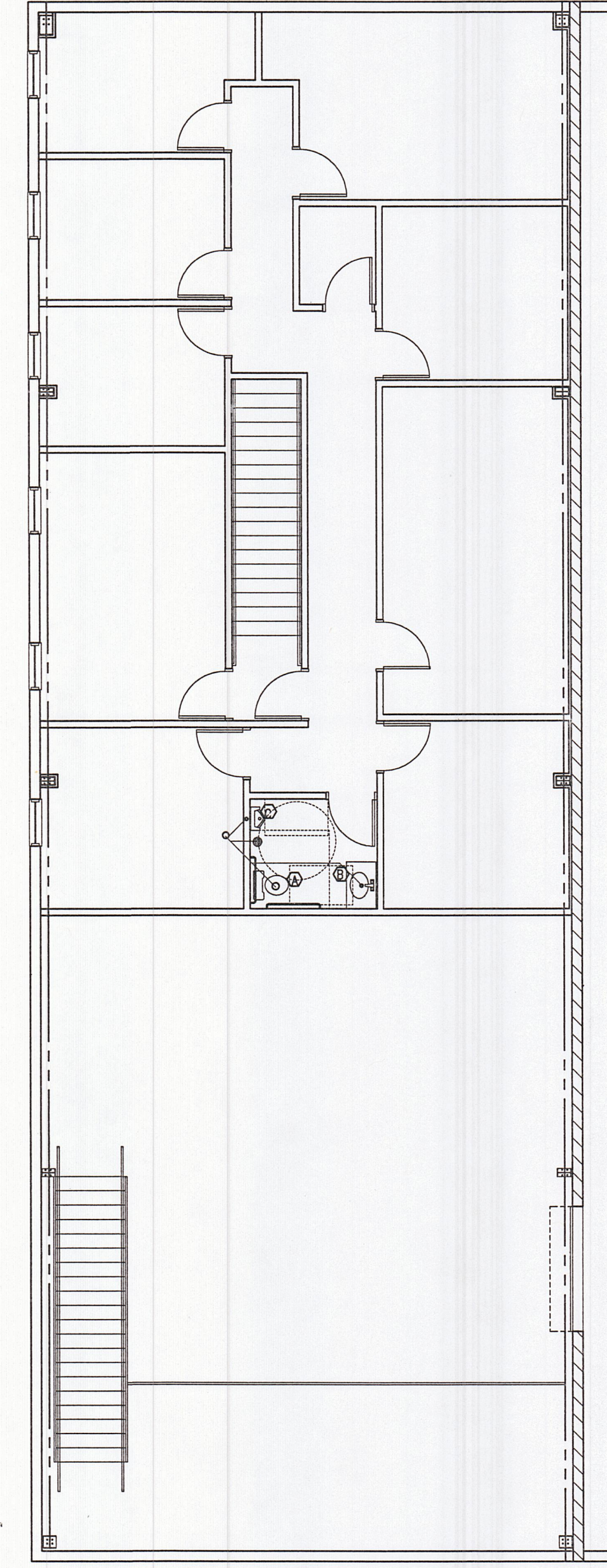
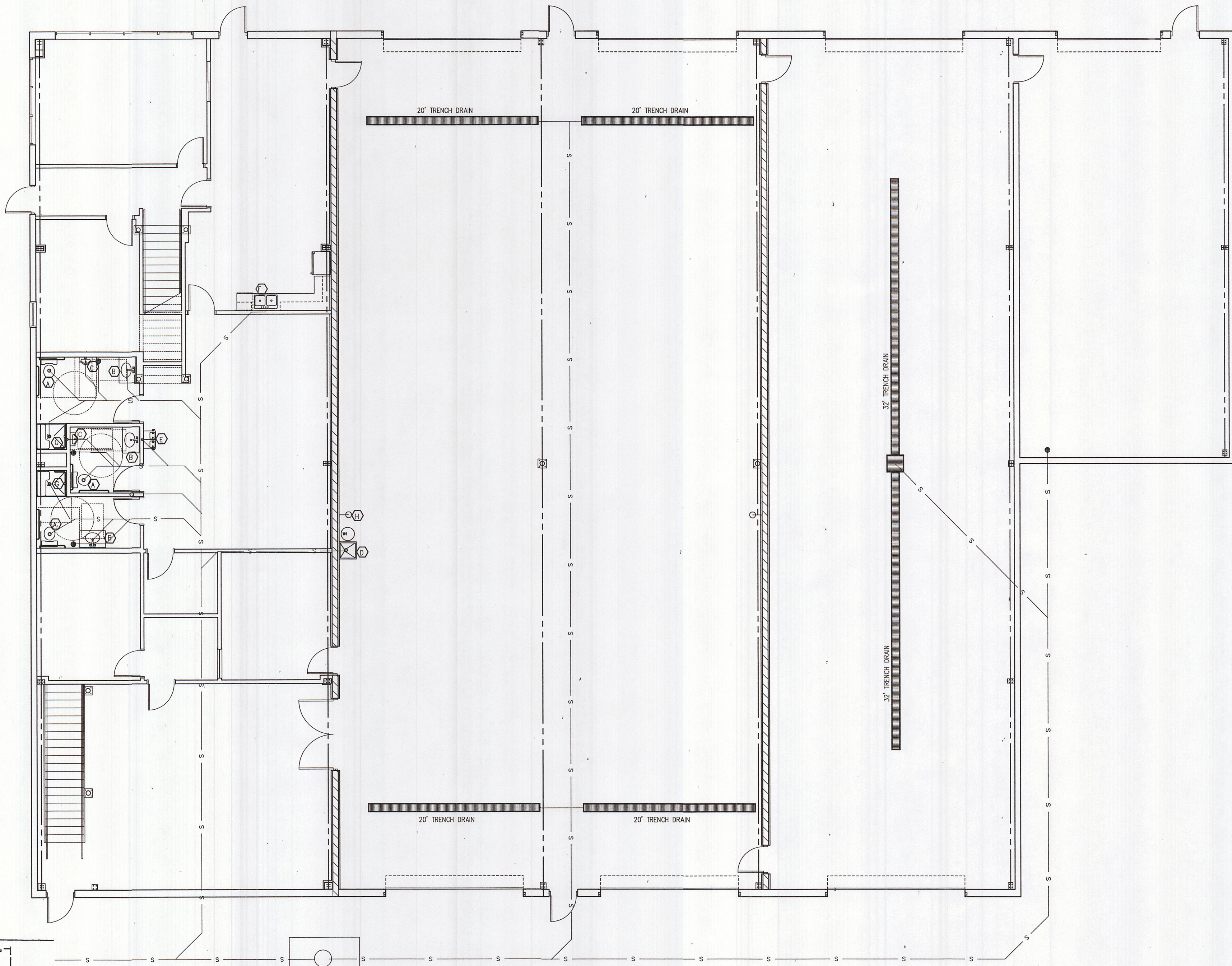


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JOB # M15020 September 11, 2015





GENERAL CONDITIONS:

ALL WORK PERFORMED TO BE IN ACCORDANCE WITH THE STATE OF OHIO PLUMBING CODE AND OTHER APPLICABLE REQUIREMENTS PER THE AUTHORITY HAVING JURISDICTION.

ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS.

ALL MATERIALS AND EQUIPMENT PROVIDED TO BE WARRANTED FOR ONE YEAR FROM DATE OF OWNER ACCEPTANCE.

ALL MATERIALS INSTALLED TO BE NEW AND FREE OF DEFECTS.

ALL INSTALLATIONS TO BE COORDINATED WITH THE ARCHITECTURAL CONSTRAINTS AND OTHER TRADES INVOLVED LEAVING ACCESS FOR REPAIRS AND MAINTENANCE.

PROVIDE ACCESS PANELS FOR REPAIRABLE ITEMS INSTALLED IN INACCESSIBLE LOCATIONS.

PROVIDE SUBMITTALS FOR APPROVAL BY OWNER BEFORE PURCHASING ANY EQUIPMENT.

DOMESTIC WATER PIPING SYSTEMS:

ALL DOMESTIC HOT AND COLD WATER PIPING ABOVE GRADE 3" AND BELOW SHALL BE TYPE L COPPER COMPLYING WITH ASTM B 88 WITH WROUGHT COPPER SOLDER JOINT FITTINGS. ALL DOMESTIC HOT AND COLD WATER PIPING BELOW GRADE 3" AND BELOW SHALL BE TYPE K SOFT COPPER BUREL IN SANDS COMPLYING WITH ASTM B 88 WITH WROUGHT COPPER SOLDER JOINT FITTINGS. SHUTOFF VALVES TO BE 2-PIECE FULL PORT BRONZE BODY BALL TYPE WITH SOLDERED JOINTS. ALL JOINTS TO BE MADE WITH A LEAD FREE SOLDER CONFORMING TO ASTM B 32 AND A WATER SOLUBLE FLUX CO. INFORMING TO ASTM B 814. ALL CUT ENDS SHALL BE REAMED TO FULL INSIDE DIAMETER OF PIPE. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS TO DISSIMILAR METALS. PIPING SUPPORTS TO BE COPPER CLEVIS HANGERS WITH ALL THREAD ROD AND APPROPRIATE BUILDING ATTACHMENT TO MATCH SPECIFIC CONSTRUCTION. HANGER SPACING TO BE 10 FEET HORIZONTAL TO FEET VERTICAL FOR 1-1/2" AND LARGER, 8 FEET HORIZONTAL TO FEET VERTICAL FOR 1-1/4" AND SMALLER.

PROVIDE SLEEVES FOR ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS. INSTALL UL LISTED PREFORMING SYSTEMS AT ALL RATED PENETRATIONS EQUAL TO THE "T" AND "T" RATING OF FLOOR WALL OR CEILING. PROVIDE ESCUTCHEONS AT PENETRATIONS IN EXPOSED AREAS.

PROVIDE METHODS OF STRESS AND STRAIN RELIEF IN PIPING WITH ANCHORS AND EXPANSION COMPENSATION JOINTS. AVOID CREATING STRESS OR STRAIN TO BUILDING COMPONENTS.

PROTECT ALL COPPER PIPING PASSING THROUGH CORNER WALLS AND FLOORS WITH A PROTECTIVE SHEATHING OR WRAPPING THAT WILL WITHSTAND ANY REACTION FROM LIME AND ADD OF CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL.

ANY COPPER PIPE INSTALLED THROUGH HOLES OR NOTCHES IN STUDS, JOISTS RAFTERS, OR SIMILAR MEMBERS LESS THAN 1-1/2" FROM THE NEAREST EDGE OF THE MEMBER SHALL BE PROTECTED WITH STEEL PROTECTIVE SHIELD PLATES A MINIMUM OF 1/16" THICK AND SHALL EXTEND 2" ABOVE AND BELOW THE AREA OF PIPE PENETRATION.

HYDROSTATICALLY TEST ALL PIPING SYSTEMS AT 1.5 TIMES THE SYSTEM WORKING PRESSURE BUT NOT LESS THAN 100 PSI BEFORE COVERING WITH INSULATION. DISCONNECT ALL COILS AND EQUIPMENT WHILE CONDUCTING TEST. SYSTEM TO REMAIN PRESSURIZED FOR 24 HOUR PERIOD WITH LESS THAN 2% TOTAL DROP IN PRESSURE.

THE DOMESTIC WATER PIPING SYSTEM SHALL BE FLUSHED WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT POINTS OF OUTLET. THE SYSTEM SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION CONTAINING AT LEAST 50 PPM OF CHLORINE AND ALLOWED TO STAND FOR 24 HOURS. FOLLOWING THE REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM. THIS PROCEDURE SHALL BE REPEATED WHERE SHOWN BY A BACTERIOLOGICAL EXAMINATION THAT CONTAMINATION REMAINS PRESENT IN THE SYSTEM. PROVIDE A CERTIFIED TEST OF WATER SYSTEM POTABILITY AND PROVIDE A COPY TO THE OWNER BEFORE ALLOWING BUILDING OCCUPATION.

SANITARY DRAINAGE AND VENT PIPING SYSTEMS:

ALL SANITARY DRAIN AND VENT PIPING ABOVE GRADE LOCATED WITHIN CEILING PLenums SHALL BE NO-HUB DWV CAST IRON WITH DRAINAGE PATTERN CAST IRON FITTINGS. COUPLINGS TO BE STAINLESS STEEL BAND WITH RUBBER GASKET.

ALL SANITARY DRAIN AND VENT PIPING ABOVE AND BELOW GRADE SHALL BE SCHEDULE 40 PVC TYPE DWV PIPE AND END FITTINGS CONFORMING TO ASTM D 2865 AND ASTM D 2919 WITH PVC DWV TYPE SOCKET JOINT FITTINGS.

CONFORMING TO ASTM D 3311. SOLVENT CEMENT JOINTS SHALL BE CLEANED A NO FREE FROM MOISTURE WITH A PRIMER CONFORMING TO ASTM F 656 LEAVING A VISIBLE PURPLE COLOR AFTER DRYING. SOLVENT CEMENT SHALL CONFORM TO ASTM D 2246 AND BE APPLIED TO ALL JOINTS AND JOINTS MADE WHILE SURFACES ARE WET IN ACCORDANCE WITH ASTM D 2855.

ALL PIPING TO BE PITCHED AT A MINIMUM SLOPE OF 1/4" PER FOOT FOR SIZES 2-1/2" OR LESS, 1/8" PER FOOT FOR SIZES 3" TO 6" AND 1/6" PER FOOT FOR SIZES 8" AND LARGER.

NO PLASTIC PIPING SHALL BE INSTALLED WITHIN AIR PLenums. PROVIDE CAST IRON PIPE AS SPECIFIED.

PROVIDE SLEEVES FOR ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS. INSTALL UL LISTED PREFORMING SYSTEMS AT ALL WATER PENETRATIONS EQUAL TO THE "T" AND "T" RATING OF FLOOR WALL OR CEILING. PROVIDE ESCUTCHEONS AT PENETRATIONS IN EXPOSED AREAS.

PROVIDE METHODS OF STRESS AND STRAIN RELIEF IN PIPING WITH ANCHORS AND EXPANSION COMPENSATION JOINTS. AVOID CREATING STRESS OR STRAIN TO BUILDING COMPONENTS.

ANY PLASTIC PIPE INSTALLED THROUGH HOLES OR NOTCHES IN STUDS, JOISTS RAFTERS, OR SIMILAR MEMBERS LESS THAN 1-1/2" FROM THE NEAREST EDGE OF THE MEMBER SHALL BE PROTECTED WITH STEEL PROTECTIVE SHIELD PLATES A MINIMUM OF 1/16" THICK AND SHALL EXTEND 2" ABOVE AND BELOW THE AREA OF PIPE PENETRATION.

DRAINAGE AND VENT SYSTEM SHALL BE WATER OR AIR TEST INCLUDING FINAL TEST AS CALLED FOR IN OBC SECTION 312.2, 312.3 AND 313.4. PROVIDE FOUR DAYS NOTICE TO BUILDING INSPECTOR BEFORE PROCEEDING WITH WORK.

PROVIDE EXCAVATION AND BACKFILL FOR ALL UNDERGROUND PIPING WITH CONTINUOUS SUPPORT THROUGHOUT ENTIRE LENGTH OF PIPE. PROVIDE BACKFILL OF LOOSE EARTH FREE FROM ROCKS, BROKEN CONCRETE OR OTHER RUBBLE IN 6" COMPACTED LAYERS. UNDERCUT ALL TRENCHES WHERE ROCK OR UNSUITABLE MATERIAL IS ENCOUNTERED AND PROVIDE PREMIUM BACKFILL CONSISTING OF SAND OR BANK RUN GRAVEL IN 6" COMPACTED LAYERS.

HYDRONIC PIPING SYSTEMS:

CONDENSATE DRAIN PIPING TO BE SDR 40 PVC WITH SOLVENT WELD JOINTS. PIPING INSTALLED WITHIN RETURN AIR PLenums TO BE TYPE L COPPER COMPLYING WITH ASTM B 88 WITH WROUGHT COPPER SOLDER JOINT FITTINGS. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS. TOP-SIMILAR METALS. PROVIDE VENTED P-TRAPS AT ALL COOLING COILS WITH DEPTH OF TRAP TO BE 2" AND THE STATIC PRESSURE OF THE UNIT FAN FROM ALL PIPING TOWARD POINT OF DISCHARGE. INCLUDE CLEANOUTS WITH REMOVABLE PLUGS OR CAPS AT CHANGES IN DIRECTION EXCEPT FOR 90 DEGREE ELBOWS. PROVIDE PIPING SUPPORTS TO BE STEEL DECKS FOR PLASTIC AND COPPER CLEVIS FOR COPPER PIPING WITH ALL THREAD ROD AND APPROPRIATE BUILDING ATTACHMENT TO MATCH SPECIFIC CONSTRUCTION. UNDRIFT SUPPORTS TO BE STEEL CLAMP WITH RUBBER ISOLATOR W/REINFORCED CLAMP HANGER SPACING TO BE 4 FEET HORIZONTAL, 4 FEET VERTICAL FOR ALL SIZES OF PLASTIC AND 6 FEET HORIZONTAL, 15 FEET VERTICAL FOR ALL COPPER PIPING.

PLUMBING FIXTURES:

ALL PUBLIC HANDWASHING FACILITIES TO BE PROVIDED WITH HOT WATER AT A TEMPERATURE NOT GREATER THAN 110° F. AS PROVIDED BY A THERMOSTATIC MIXING VALVE CONFORMING TO ASSE 1016 OR ASSE 1017.

ALL FIXTURES AND SUPPLY LINES TO BE INSTALLED AS TO PREVENT BACKFLOW.

INSTALL ALL FIXTURES WITH SERVICE SHUTOFF VALVES FOR REPAIR OR REPLACEMENT.

PROVIDE WATER TIGHT JOINTS WHERE FIXTURE COMES IN CONTACT WITH WALL OR FLOOR WITH A WATER RESISTANT CAULK. INSULATION SYSTEMS:

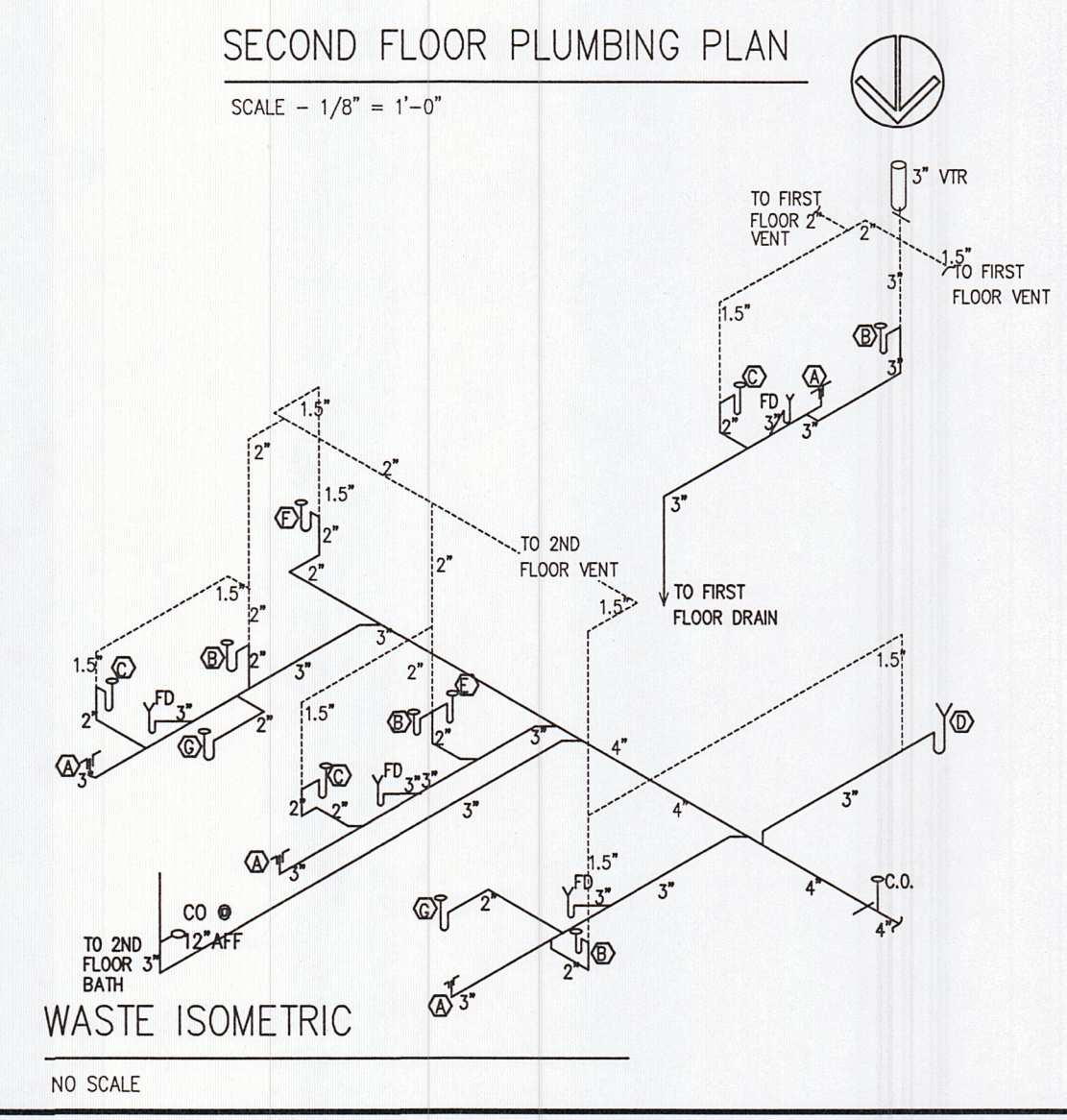
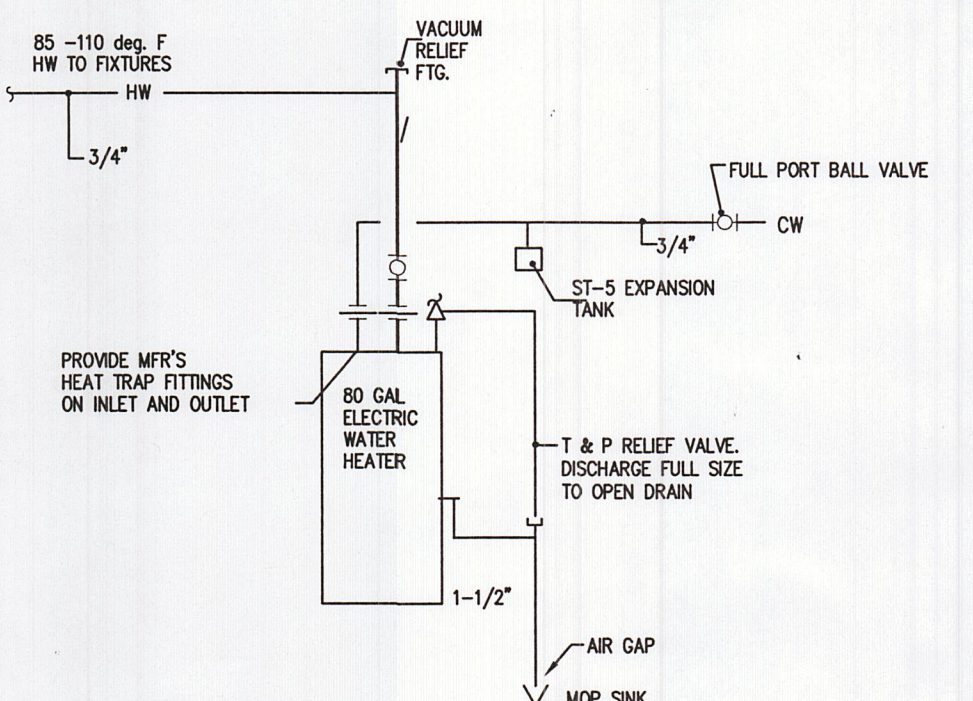
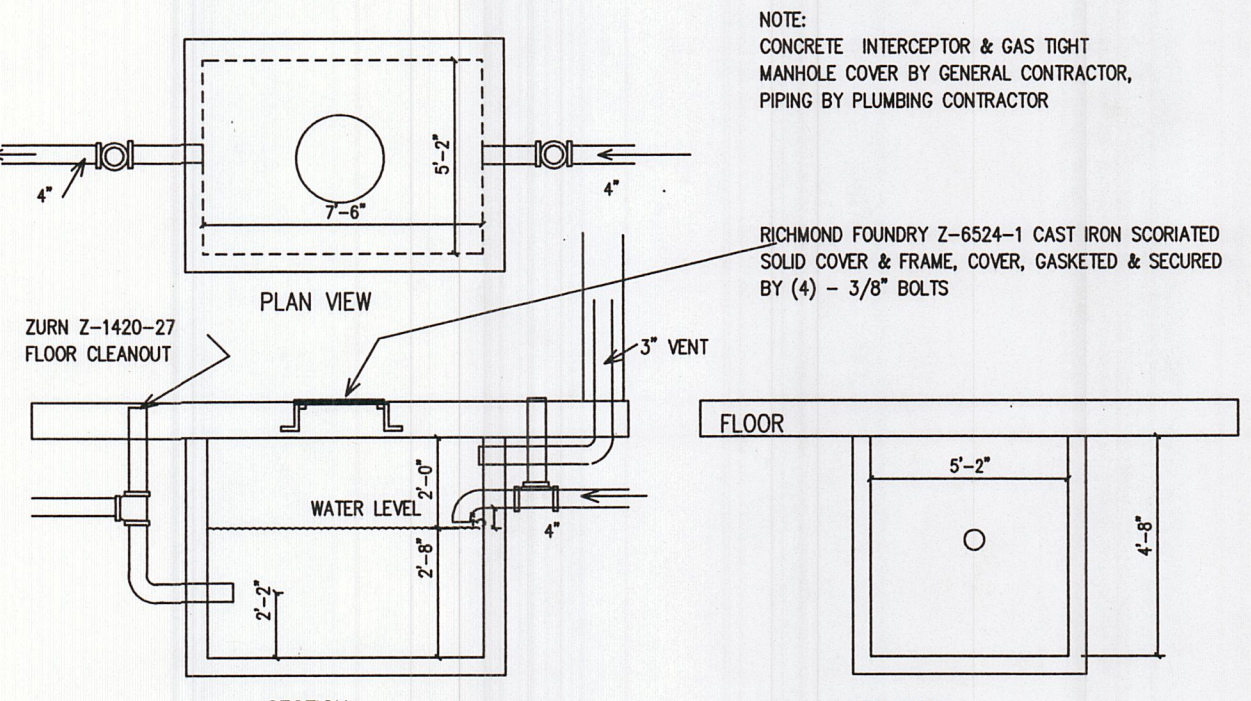
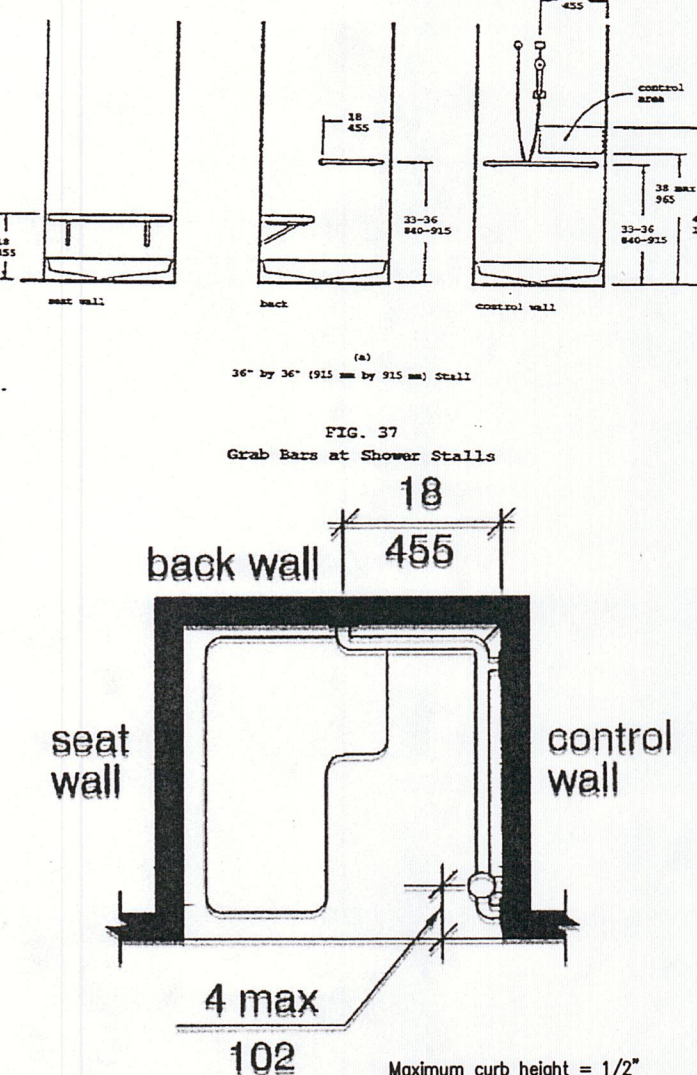
INSULATE ALL CONCEALED DOMESTIC HOT, COLD, AND RECIRCULATION WATER PIPING WITH 3/4" ARMAFLEX. SEAL ALL JOINTS VAPOR TIGHT. PAINT ALL INSULATION EXPOSED TO WEATHER WITH A U.V. RESISTANT PAINT.

INSULATE ALL EXPOSED DOMESTIC HOT, COLD, AND RECIRCULATION WATER PIPING WITH 1" FIBERGLASS WITH ALL SERVICE JACKET FINISH. SEAL ALL JOINTS LEAVING VAPOR TIGHT BARRIER.

DO NOT COVER PIPING SYSTEMS BEFORE PIPE HAS BEEN HYDROSTATICALLY TESTED.

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

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



PLUMBING FIXTURE SCHEDULE					
SYMBOL	DESCRIPTION	PIPING CONNECTIONS			MOUNT'G HEIGHT
		HW	CW	TRAP WASTE	
A	WATER CLOSET - AMERICAN STANDARD "CADET J" RIGHT HEIGHT # 2388-012, FLOOR MOUNTED, VITREOUS CHINA, ELONGATED BOWL, PRESSURE-ASSISTED SPRING LET FLUSH ACTION. COMPLETE WITH BOWLS NO. 1995CT SEAT WITH CHECK HINGE, SLUAM "FLUSHMATE", LOCKE KEY ANGLE STOP AND 3/8" O.D. FLEXIBLE RISER AND WALL FLANGE.	-	1/2"	INT	4" FLOOR 17" TO RIM ADA
B	LAVATORY - KOHLER NO. K-2005 VITREOUS CHINA, FRONT OVERFLOW FAUCET LEUGE, 8" CENTERS. COMPLETE WITH DELTA FAUCET NO. 561-ALPU-DST CHROME DRUM WITH 1-1/4" TAPERED CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT, LOCKE KEY ANGLE STOP AND 1/2" LONG 3/8" O.D. FLEXIBLE RISER AND WALL FLANGE. PROVIDE PLUMBERX PRO-2000 TRAP, VALVE AND SUPPLY COVERS. PROVIDE UNDER SINK QUADRANT WATTS SBUS50-B M1 MIXING VALVE FOR 105 DEGREE HOT WATER	1/2"	1/2"	1-1/4" 1-1/2"	34" TO RIM ADA
C	URINAL - AMERICAN STANDARD "WASHROOM" WALL MOUNTED, VITREOUS CHINA, SPRING LET FLUSH ACTION 3/8" TOP SPUD. COMPLETE WITH SLUAM "REAL" NO. 186-1.0 FLUSH VALVE AND JIC-SMITH NO. 537 GARDNER	-	3/4"	INT	2" (1) @ 17" TO RIM (2) @ 24" TO RIM ADA
D	MOP DRAIN - WATTEE NO. 63 - 24" x 24" DRAIN, 3" STAINLESS STEEL STRAINER, COMPLETE WITH NO. 889-CC MOP HANGER, NO. 832-AA HOSE AND HOSE BRACKET, AND CHICAGO FAUCETS NO. 897 SERVICE SINK FAUCET WITH VACUUM BREAKER, WALL BRACE AND HOSE THREAD SPOUT WITH PAL HOOK.	1/2"	1/2"	3"	5" FAUCET AT 30" AFF
E	BASE (PACED, SPILT-LEVEL) WALL MOUNTED HANDICAPPED ACCESS. ELECTRIC WATER COOLER TO COOL 20 GPM OF 80 DEGREE HOT WATER TO 50 DEGREES AT 90 DEGREE FROM TEMPERATURE. BUBBLERS TO BE ACTIVATED BY ANY FOUR TOUCH PADS. TANK TYPE COLD WATER STORAGE TO HAVE COPPER RETRIENTANT COILS AND TEMPERATURE TO BE CONTROLLED BY AN ADJUSTABLE THERMOSTAT 1/2 HP 5.0 AMP/15/100	-	1/2"	1-1/4" 1-1/2"	RIM 40" AFF ADA
F	SINK - DAYTON #D23322-4 SELF RIMMING DOUBLE BOWL, STAINLESS STEEL SINK, SELF-RIMMING, w/ DELTA 400 FAUCET w/ SPRAY	1/2"	1/2"	1 1/2"	2" COUNTER 60" AFF
G	AKER S42 BARRIER FREE SHOWER UNIT, 42"x36"x77" H. WITHOUT TOP. ACRYLIC TYPE (CALL ACCESSORIES TO BE FACTORY SUPPLIED). L-SHAPED CUSHION SEAT, L-SHAPED GRAB BAR, HAND HELD SHOWER w/ 24" SLIDE BAR, PRESSURE / TEMP ANTI-SKID MIXING VALVE, SUPPLY ELBOW w/ VACUUM BREAKER, STAINLESS STEEL CURTAIN ROD, MOORE 1264A2 FIP CAST BRASS STAINLESS STEEL ROD SHOWER DRAIN, RECESS INTO FLOOR AS REQUIRED	1/2"	1/2"	2"	2" ADA
H	EMERGENCY SHOWER - GUARDIAN #G135 VERTICALLY MOUNTED, 105" HIG SHOWER HEAD w/ 24" STAINLESS STEEL WALL ROD HEAD @ 80" AFF, SPRAY PATTERN - MIN. 20" @ 60" AFF, CENTER > 16" FROM ANY OBSTRUCTION. FLOW RATE = 20 GPM @ 30 PSI	-	-	-	-
FD-1	SMITH 3" FLOOR DRAIN w/ ADJUSTABLE STRAINER HEAD, NICKEL BRONZE GRATE, CAST IRON BODY, AND TRAP. PRIMER CONNECTION FOR FINISHED FLOORS. MINIMUM CAPACITY - 20 GPM @ 15 MINUTES	-	-	-	3"
WH	GAS POWER VENT, 50 GAL. WATER HEATER	3/4"	3/4"	1/2"	-

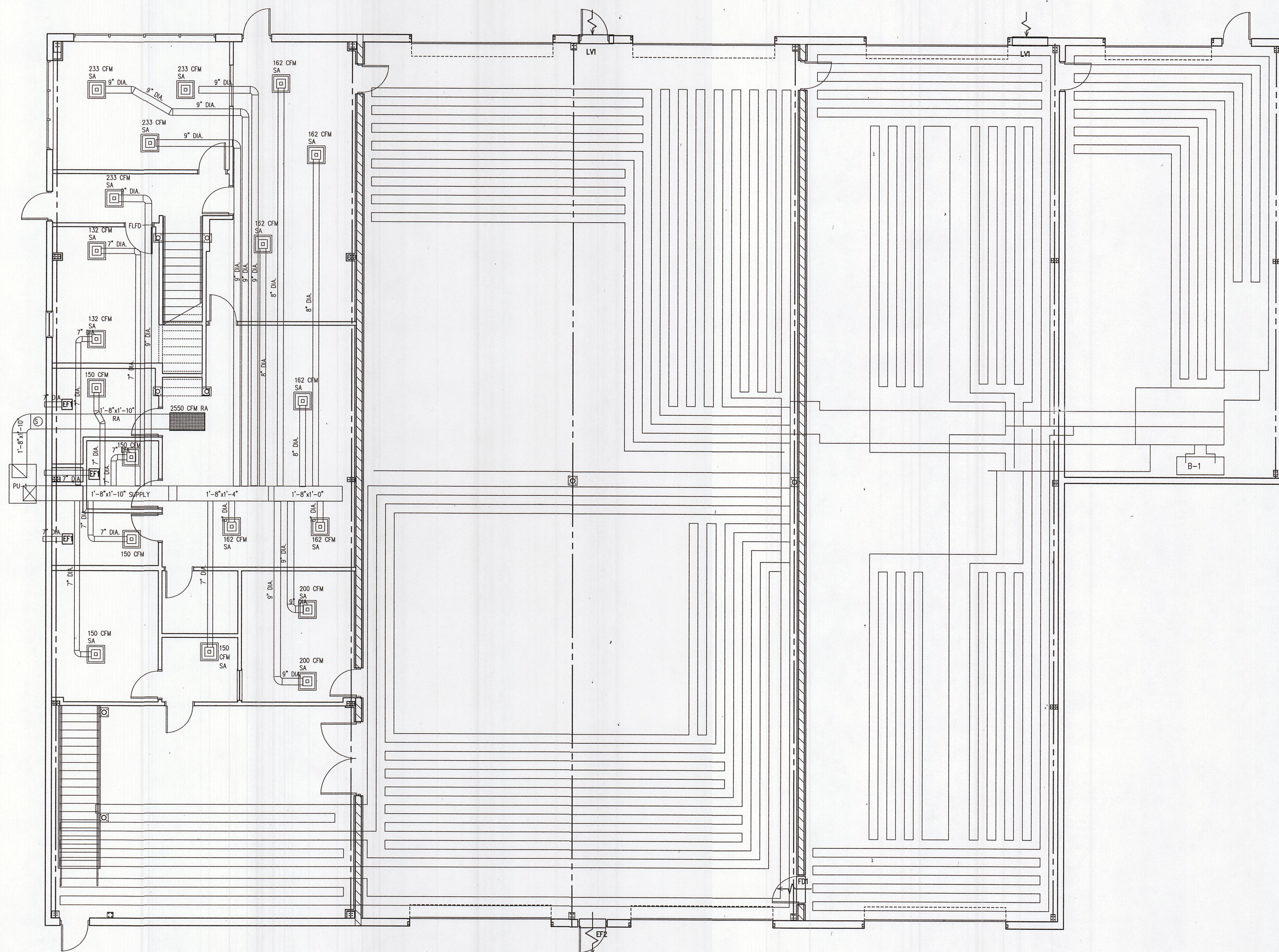
New Shop / Office for:
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JOB # M15020 September 11, 2015

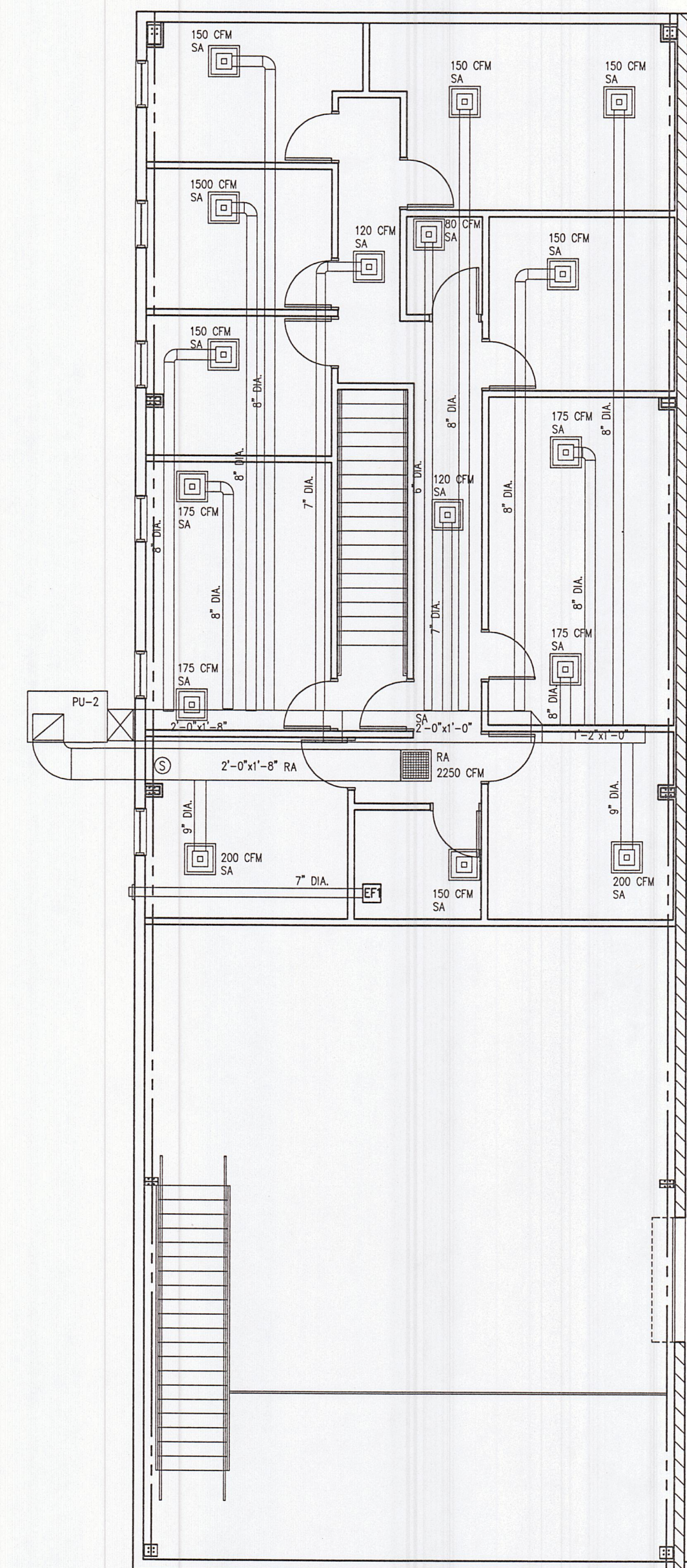
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Milton Studer, Inc. # 8308
expires 12/31/15



MAIN FLOOR MECHANICAL PLAN

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



SECOND FLOOR MECHANICAL PLAN

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



GAS PIPING SYSTEMS:

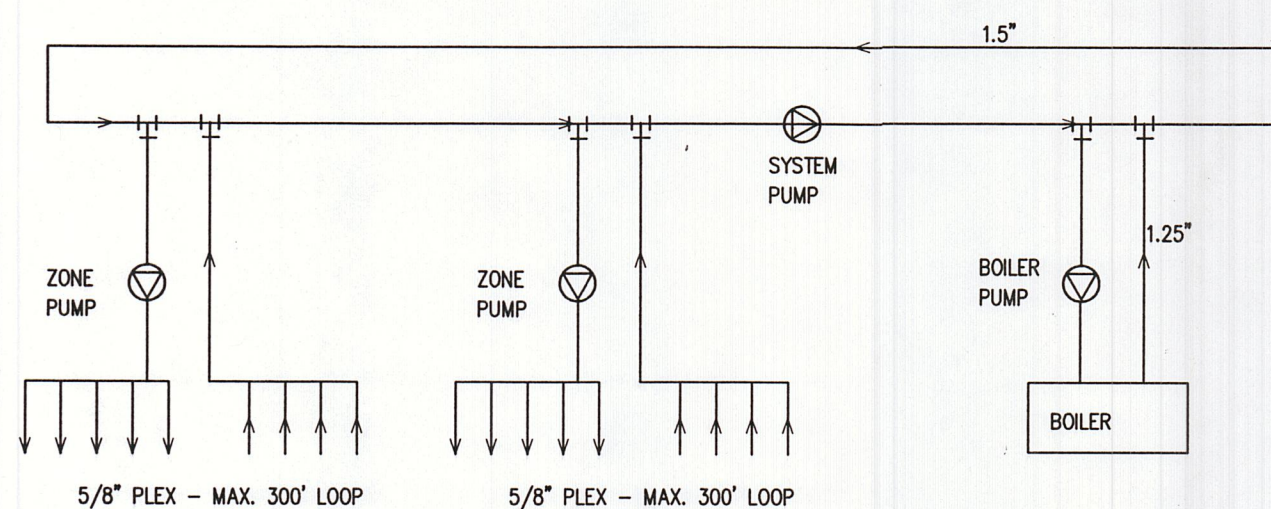
PROVIDE AND INSTALL ALL GAS PIPING SYSTEMS INCLUDING SERVICE LINE, RISER KIT, METER MANIFOLD AND GAS METER PER THE LOCAL GAS COMPANY REQUIREMENTS. CONTACT GAS COMPANY BEFORE COMMENCING WITH ANY PORTION OF GAS PIPING SYSTEM TO VERIFY SYSTEM REQUIREMENTS.

ALL NATURAL GAS PIPING 2" AND BELOW SHALL BE SCHEDULE 40 BLACK STEEL THREAD AND COUPLING COMPLYING WITH ASTM A 53 WITH 150 LB MALLEABLE IRON THREADED JOINT FITTINGS. ALL THREADED JOINTS SHALL CONFORM TO ANSE B 1.201 WITH PIPE-JOINT COMPOUND OR TAPE APPLIED ON THE MALE THREADS ONLY. PIPING 2-1/2" AND LARGER SHALL BE SCHEDULE 40 BLACK STEEL BEVELED END COMPLYING WITH ASTM A 53 WITH STANDARD HEIGHT WELD JOINT FITTINGS. SHUTOFF VALVES 2" AND SMALLER TO BE BRONZE BODY LUBRICATED PLUG COCKS WITH THREADED ENDS. SHUTOFF VALVES LARGER THAN 2" TO BE DUCTILE IRON LUBRICATED PLUG COCKS WITH 150 LB FLANGED ENDS. PROVIDE FLANGE GASKETS COMPATIBLE WITH NATURAL GAS SYSTEMS. ALL (90°) ENDS SHALL BE REAMED TO FULL INSIDE DIAMETER OF PIPE. PIPING SUPPORTS TO BE STEEL CLEVIS HANGERS WITH ALL THREAD ROD AND APPROPRIATE BUILDING ATTACHMENT TO MATCH SPECIFIC CONSTRUCTION. HANGER SPACING TO BE 12 FEET HORIZONTAL, 15 FEET VERTICAL.

PROVIDE SLEEVES FOR ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILING. INSTALL AS LISTED. PRESTOPPING SYSTEMS AT ALL RATED PENETRATIONS EQUAL TO THE "T" AND "T" RATING OF FLOOR WALL OR CEILING. REFER TO DETAIL DRAWINGS OF VARIOUS PENETRATIONS. PROVIDE E SCUTCHIONS AT PENETRATIONS IN EXPOSED AREAS.

PROVIDE METHODS OF STRESS AND STRAIN RELIEF IN PIPING WITH ANCHORS AND EXPANSION COMPENSATION JOINTS. AVOID CREATING STRESS OR STRAIN TO BUILDING COMPONENTS.

TEST ALL LOW PRESSURE PIPING SYSTEMS AT 1.5 TIMES THE SYSTEM WORKING PRESSURE BUT NOT LESS THAN 3 PSIG. DISCONNECT ALL EQUIPMENT WHILE CONDUCTING TEST. SYSTEM TO REMAIN PRESSURIZED FOR 24 HOUR PERIOD WITH LESS THAN 2% TOTAL DROP IN PRESSURE OR AS REQUIRED BY LOCAL GAS COMPANY.



NOTES:

MAXIMUM HEAT OUTPUT OF CONCRETE SLAB ~ 50 BTU / SQ. FT. HEAT LOSS W/ 65 DEG. INDOOR TEMP, 0 DEG OUTDOOR TEMP, 1 AIR CHANGE / HOUR 179K BTU

SERVICE AREA - 5,000 SF x 50 = 250K BTU 92K BTU

WASH BAY - 3,000 SF x 50 = 150K BTU 41K BTU

EQUIP. AREA - 1,250 SF x 50 = 62.5K BTU 13K BTU

MECH. STOR. - 884 SF x 50 = 44.2K BTU

TOTAL = 506,700 BTUH 321,000 BTUH

B1 - BOILER - NEIL McLAN ULTRA 399, 91.7% CONDENSING, MODULATING, NATURAL GAS FIRED BOILER 399K BTU INPUT, 365K BTU OUTPUT, 317K BTU NET 1 BR

PUMPS:
TACO 0012 - 1.5" PRIMARY LOOP
TACO 009 - 1.25" MECH. BAY
TACO 009 - 1" WASH BAY

EF1 NUTONE QTVEN150 CEILING RECESS MOUNTED 150 CFM EXHAUST FAN 7" DUCT THROUGH SIDE WALL

EF2 THERMO CYCLER #BME-36E, 1 HP WALL FAN, 10K CFM EXHAUST

LVI THERMO CYCLER #VP240031-04848 FRESH AIR INTAKE LOUVER

FD1 GREENHECK DFD-350 DYNAMIC RATED FIRE DAMPER 36" W. x 24" H. - 3 HR RATED

PU-1 - PACKAGE UNIT # 48TCEA81A1AS, 7.5 TON NOMINAL A/C 208-230/60/3PH, GAS HEAT - 180 MBH INPUT

PU-2 - PACKAGE UNIT # 48TCEA07A1AS, 6 TON NOMINAL A/C 208-230/60/3PH, GAS HEAT - 18015 MBH INPUT

DUCT WORK:
ALL DUCTS PER LATEST S.M.A.C.H.A.

ALL DUCTS TO BE WRAPPED W/ 1" DUCT WRAP

SUPPLY REGISTERS - AIRTEC MV4

RETURN AIR GRILLS - AIRTEC MV2

Ⓢ THERMOSTAT

Ⓢ RETURN AIR DUCT SMOKE DETECTOR

New Shop / Office for:
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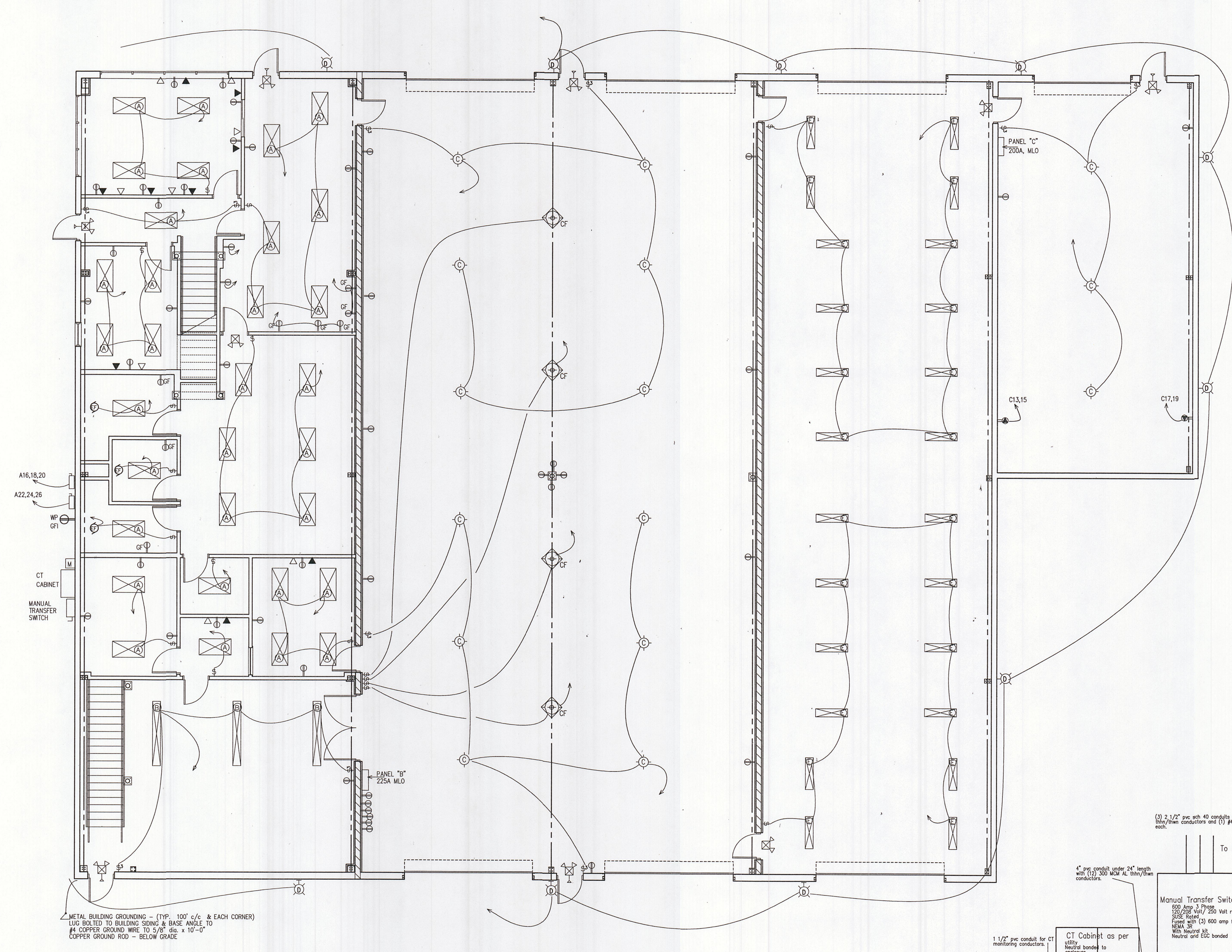
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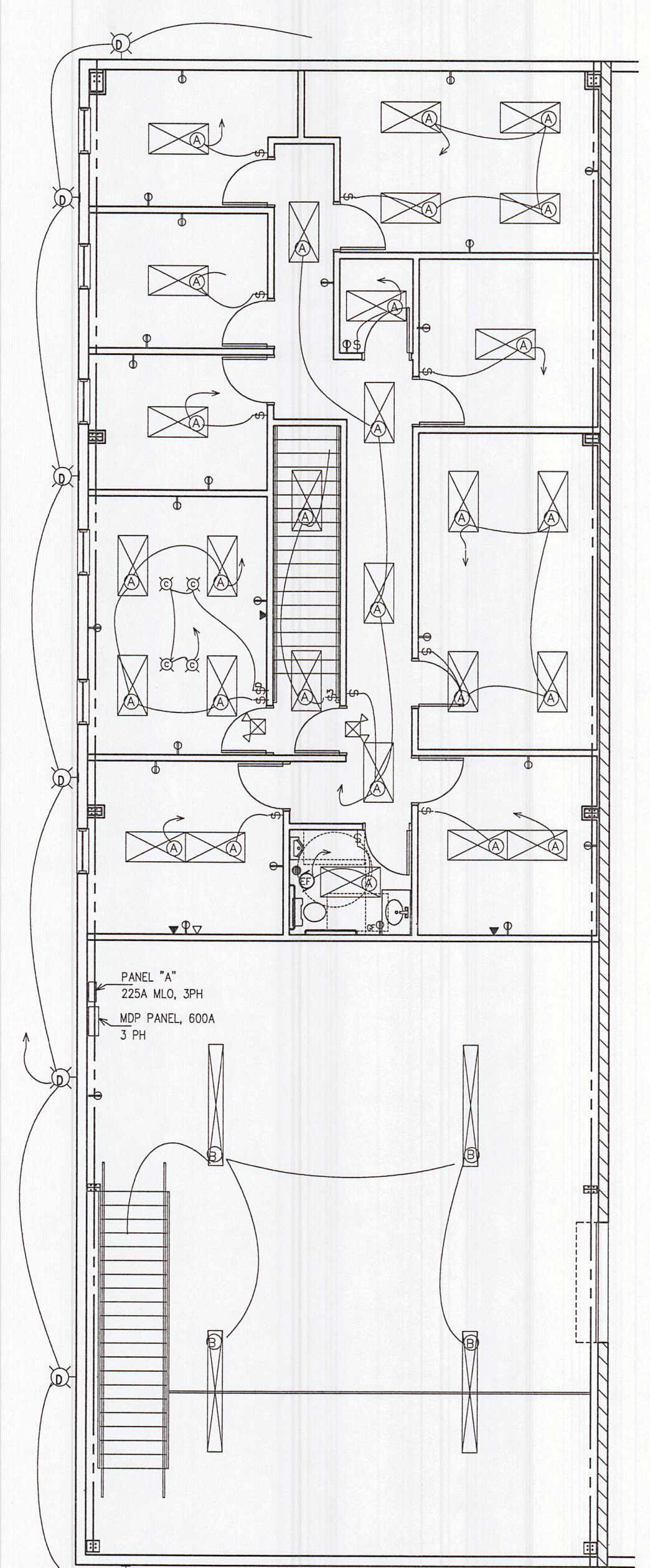
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STATE OF OHIO
Milton Studer
REGISTERED ARCHITECT
8308

Milton Studer lic. # 8308
expires 12/31/15



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



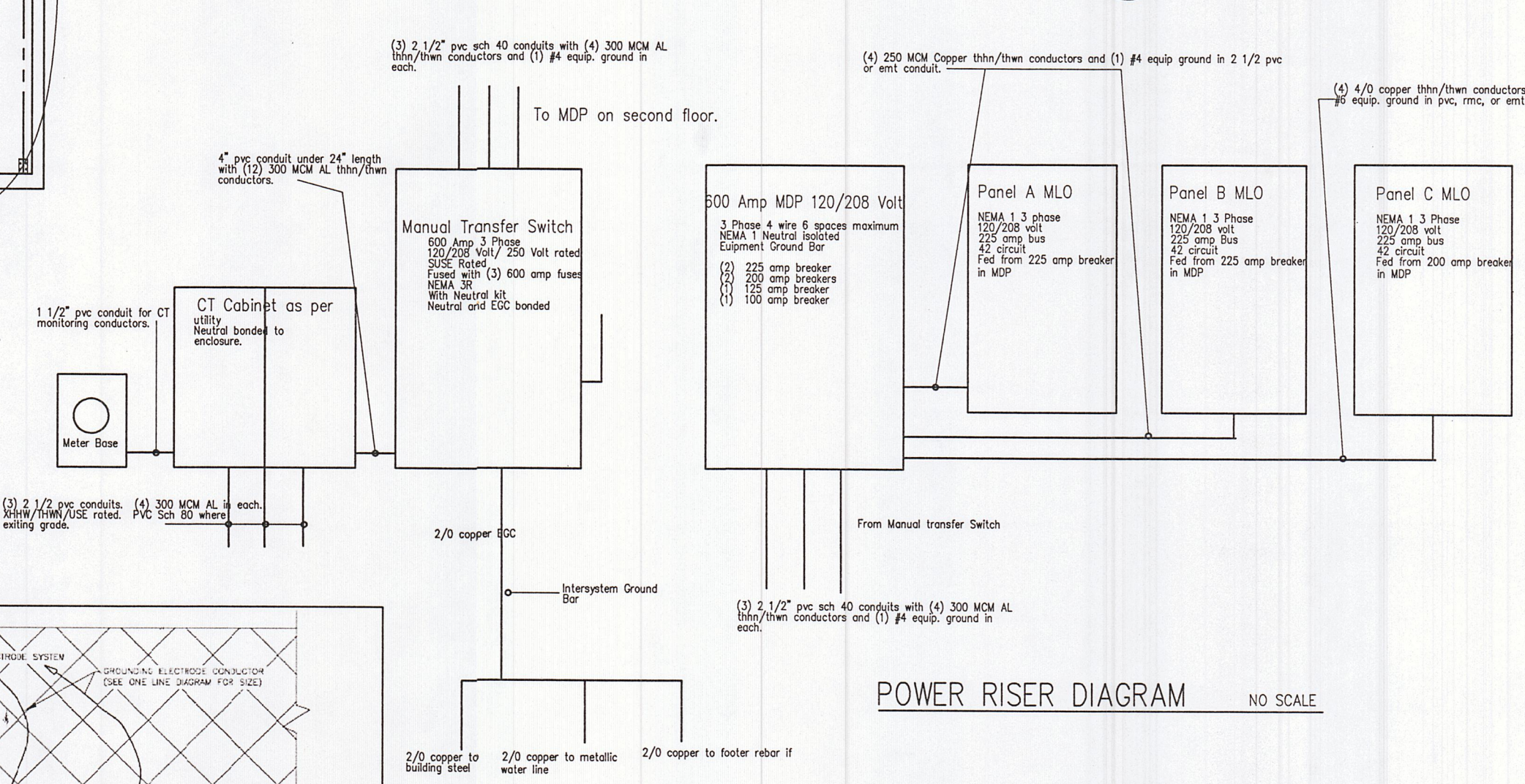
SECOND FLOOR ELECTRICAL PLAN
SCALE - 1/8" = 1'-0"

ELECTRICAL SCHEDULE	
SYMBOL	DESCRIPTION
	CREE ZR22, 2'x4' 35W LED RECESS TROFFER
	20-004-296E-120/277 8' STRIP LIGHT w/ (4) LED REPLACEMENT TB #12LED047-22W-WY-4 22 WATT LAMPS
	CREE JE-FB1122NU HIGH BAY, 220W LED, 120V-277V
	CREE JE-WP10080Z SURFACE MOUNT WALL PACK w/ - LED - 87 WATTS TOTAL - MOUNT @ 18' AFF
	SAFESITE #F030AM2P - 4' LED LINEAR FIXTURE, LOW PROFILE, CLASS 1, DIV. 2 / CLASS II, 66 WATTS, TOP CONDUIT, 100-277V
	CANARM INDUSTRIAL CEILING FAN 292 RPM, 46K CFM, 60" D., 0.84 AMPS
	ECONOLIGHT # 02-CLP2RW-RC EXIT / EMERGENCY LIGHT COMBINATION LED LIGHTPIPE w/ BATTERY BACKUP, WIRE AHEAD OF SWITCH w/ E-MIL2MW DOUBLE REMOTE EXTERIOR HEAD (2 WATTS TOTAL)
	ECONOLIGHT # 02-CLP2RW-RC EXIT / EMERGENCY LIGHT COMBINATION LED LIGHTPIPE w/ BATTERY BACKUP, WIRE AHEAD OF SWITCH
	ECONOLIGHT #02-EAW-LED WALL MOUNT, 2 HEAD LED EMERGENCY LIGHT w/ BATTERY BACK-UP 1'2" AFF
	MILITONE OTXEN150 CEILING RECESS MOUNTED 150 CFM EXHAUST FAN 6" DUCT THROUGH SIDE WALL
	TELEPHONE
	DATA
	DOOR OPERATOR - 1 HP, 120V w/ PUSH BUTTON & REMOTE CONTROL 3/4" EMT w/ (2) #10 THHN COPPER & (1) #10 THHN COPPER GROUND
	(3) PUSH BUTTON OPERATOR, CUTLER-HAMMER NEMA1025 SERIES
	HUBBELL #1221, 20A, SP SWITCH OR EQUAL
	HUBBELL #1223, 20A, 3-WAY SWITCH OR EQUAL
	PASS AND SEYMOUR #1591, 20A, 120V, 3 WIRE, DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE, 42" AFF (WP INDICATES WATER-PROOF COVER)
	JUNCTION BOX, STANDARD 4" SQUARE OR OCTAGON BOX w/ COVER, LOCATE & CONNECT AS DIRECTED
	220 RECEPT

Panel "A"						
Description	# VA	A	B	C	VA	Description
Wall Pack Lights	1 566 207V	*			207V	2 Spare
Wall Pack Lights	3 566 207V	*			207V	4 Drop Lights
Office Lights	5 1330 207V	*			207V	1330
Pole Lights in back	7 1650 207V	*			207V	8 Spare
Pole Lights in back	9 620 207V	*			207V	1440
Office Lights	11 1330 207V	*			207V	1800
Office Lights	12 1330 207V	*			207V	1800
Office Lights	15 1334 207V	*			207V	1640
Spare	17 207V	*			207V	1640
Spare	19 207V	*			400Z	3840
Spare	21 207V	*			400Z	3840
Spare	23 207V	*			400Z	3840
Spare	25 207V	*			400Z	3840
Kitchen	27 1440 207V	*			207V	1200
Conference Room	29 1200 207V	*			207V	1200
Shop 1	31 1200 207V	*			207V	1200
Shop 2	33 1200 207V	*			207V	1200
Shop 3	35 1200 207V	*			207V	1200
Driver Training Rooms	37 1330 207V	*			207V	1440
Locker Room Receptacle	39 1200 207V	*			207V	1200
Bedroom Receptacle	41 1200 207V	*			207V	1200
Total VA		18465	18270	18720		
		531A	133A	156A		

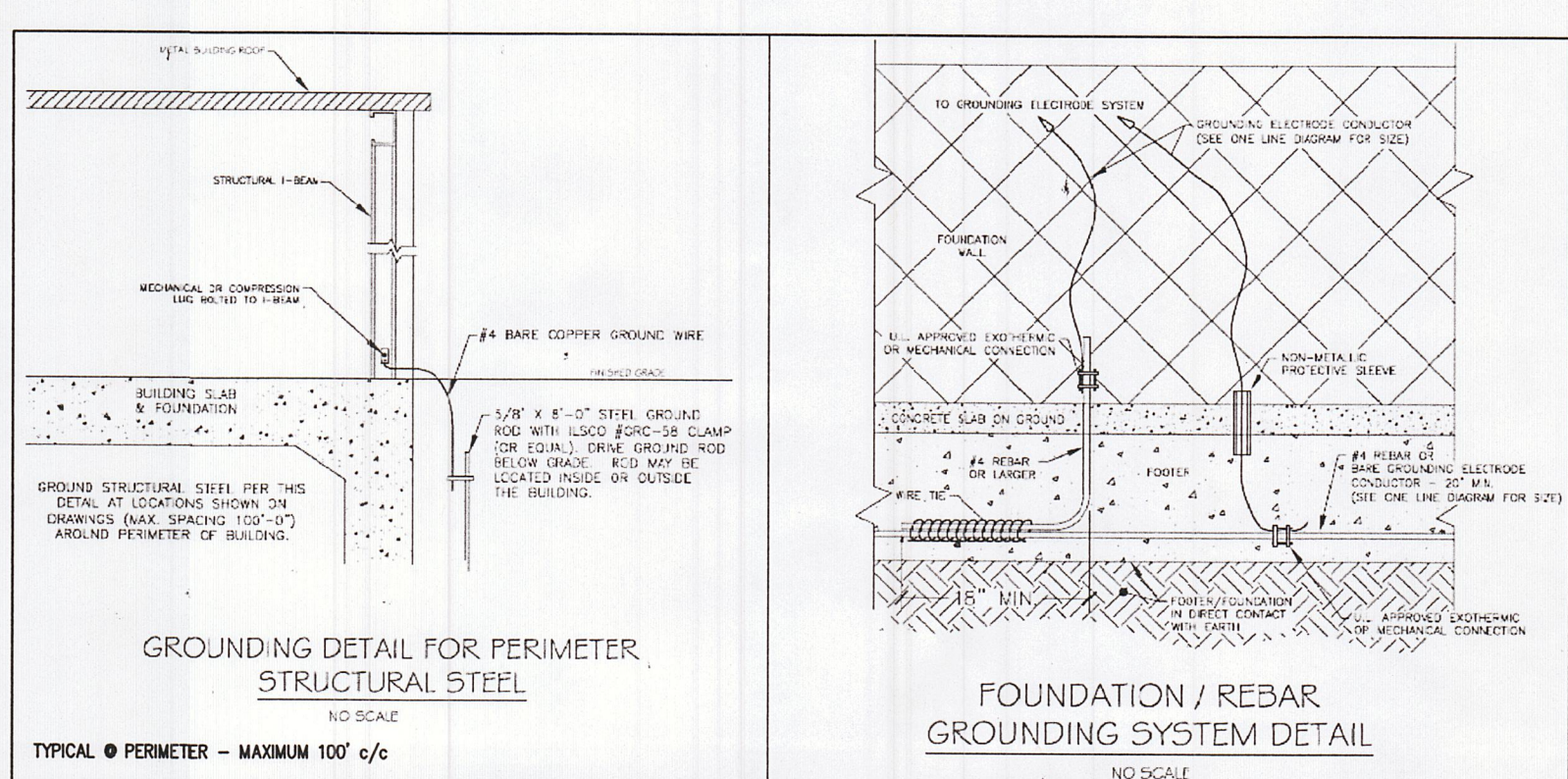
Panel "B"						
Description	# VA	A	B	C	VA	Description
Air compressor	1 1820 407V	*			207V	1440
Air compressor	3 1820 407V	*			207V	1440
Air compressor	5 1820 407V	*			207V	1440
Pressure washer	7 2880 307V	*			207V	8 Spare
Pressure washer	9 2880 307V	*			207V	1364
Spare	11 1200 207V	*			207V	1364
Resistor Heater	13 1200 207V	*			207V	1200
Spare	15 1200 207V	*			207V	1440
Truck heater	17 1440 207V	*			207V	1440
Truck heater	19 1440 207V	*			207V	1440
Truck heater	21 1440 207V	*			207V	1440
Truck heater	23 1440 207V	*			207V	1440
Truck heater	25 1440 207V	*			207V	1440
Truck heater	27 1440 207V	*			207V	1440
Truck heater	29 1440 207V	*			207V	1440
Pole Lights	31 620 207V	*			207V	32 Spare
Pole Lights	33 620 207V	*			207V	34 Spare
Spare	37 207V	*			207V	38 Spare
Spare	39 207V	*			207V	40 Spare
Spare	41 207V	*			207V	42 Spare
Total VA		16920	17304	15240		
		141A	144A	127A		

Panel "C"						
Description	# VA	A	B	C	VA	Description
Spare	1 207V	*			207V	3 Spare
Spare	3 207V	*			207V	3 Spare
Spare	5 207V	*			207V	6 Spare
Spare	7 207V	*			207V	3 Spare
Fans	9 1200 207V	*			207V	30 Spare
Welder Outlets	11 1200 207V	*			207V	12 Spare
Welder Outlets	13 4800 502V	*			207V	18 Spare
Welder Outlets	15 4800 502V	*			207V	18 Spare
Welder Outlets	17 4800 502V	*			207V	18 Spare
Welder Outlets	19 4800 502V	*			207V	18 Spare
Shop Lights	21 1320 207V	*			207V	1440
Shop Lights	23 1320 207V	*			207V	1440
Spare	25 207V	*			207V	26 Shop Area outlets
Spare	27 207V	*			207V	26 Shop Area outlets
Spare	29 207V	*			207V	26 Shop Area outlets
Spare	31 207V	*			207V	26 Shop Area outlets
Thermo Crier	33 1680 207V	*			207V	1200
Thermo Crier	35 1680 207V	*			207V	1200
Spare	37 207V	*			207V	26 Shop Area outlets
Spare	39 207V	*			207V	26 Shop Area outlets
Truck Heater	41 1440 207V	*			207V	1200
Total VA		14880	14280	15480		
		120A	109A	129A		



POWER RISER DIAGRAM NO SCALE

- ### ELECTRICAL SPECIFICATIONS
- THE ELECTRICAL DRAWINGS WILL CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR WORK COMPLETE AND PERFECT IN EVERY RESPECT, WILL BE INCLUDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
 - ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT NATIONAL ELECTRIC CODE, AND ALL APPLICABLE STATE AND LOCAL CODES.
 - ALL WIRING SHALL BE IN CONDUIT AS FOLLOWS:
ALTERNATE - SCHEDULE 80 PVC WHERE ALLOWED BY NEC
EMT: ALL EXPOSED CONDUITS ABOVE GRADE AND ALL CONDUITS CONCEALED IN WALLS OR CEILINGS
PVC SCHEDULE 40: BELOW GRADE, UNDER CONCRETE SLAB IN TRENCH ONLY
LIQUIDTITE FLEX: FLEXIBLE CONNECTIONS TO VIBRATING EQUIPMENT EXTERIOR, IN MET OR DAMP ENVIRONMENTS
MC CABLE: MAY BE USED AS PERMITTED BY NEC
 - WORKMANSHIP SHALL BE IN ACCORDANCE WITH NECA "STANDARD OF INSTALLATION" ALL MATERIAL AND WORKMANSHIP WITH THE EXCEPTION OF EXPENDABLE ITEMS SUCH AS LAMPS, SHALL BE GUARANTEED FOR ONE YEAR.
 - ALL WIRE SHALL BE A MINIMUM OF 12 AWG UNLESS OTHERWISE NOTED, RATED AT 600 VOLTS, ALL CONDUCTORS SHALL BE COPPER ONLY WITH TYPE THIN INSULATION. SERVICE ENTRANCE CONDUCTORS TO BE ALUMINUM.
 - PANELBOARDS SHALL BE TYPE NMB WITH PLUG OR BOLT-IN SWITCH RATED BREAKERS AS INDICATED ON THE PANEL SCHEDULES. TYPED DIRECTORIES SHALL BE FURNISHED AND INSTALLED IN ALL PANELS UPON COMPLETION OF THE JOB.
 - WIRING DEVICES: 20 AMP SPECIFICATION GRADE (INCLUDING GROUND FAULT RECEPTACLES)
 - DISCONNECT SWITCHES: NEMA 1 HEAVY DUTY, FUSIBLE OR NON-FUSIBLE AS INDICATED, ON ROOF OR OUTDOORS, NEMA 3 HEAVY DUTY (WATERPROOF)
 - LIGHTING FIXTURES SHALL BE FURNISHED AND INSTALLED BY E.C. AND SHALL BE LITHONIA, KEENE, METALUX OR APPROVED EQUAL.
 - PANELS, SWITCHES, TRANSFORMERS, ETC. SHALL BE G.E., SQUARE D, SIEMENS-ITE OR CUTLER-HAMMER
 - GENERAL NOTES:
A. E.C. SHALL CAREFULLY REVIEW DRAWINGS AND EXISTING INSTALLATION DETAILS PRIOR TO BIDDING. ALL NEW EQUIPMENT FURNISHED SHALL BE COMPATIBLE WITH EXISTING SYSTEMS AND SHALL BE INSTALLED AND WIRED TO OPERATE IN AN IDENTICAL FASHION.
B. PLACEMENT OF DEVICES (LOCATION, MOUNTING HEIGHTS) SHALL BE IDENTICAL TO THOSE IN EXISTING SPACES.
C. E.C. SHALL VISIT SITE TO DETERMINE EXACT EXISTING CONDITIONS PRIOR TO BIDDING. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER. DURING BIDDING AN ADDENDUM WILL BE ISSUED TO CORRECT ANY PROBLEMS SO THAT ALL BIDDERS MAY HAVE THE SAME INFORMATION. WITH THE SUBMISSION OF BID, E.C. CERTIFIES HE HAS INSPECTED EXISTING CONDITIONS AND HAS INCLUDED ALL LABOR, PREMIUM AND OTHERWISE, AND ALL MATERIALS / EQUIPMENT REQUIRED TO COMPLETE THE INTENT OF THE DRAWINGS.
D. ALL MISCELLANEOUS SYSTEMS SHOWN ON THE DRAWINGS ARE INCLUDED IN THE ELECTRICAL CONTRACT AND SHALL BE FURNISHED, INSTALLED AND/OR EXTENDED TO MATCH THE EXISTING INSTALLATIONS.
E. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARDS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS AND MISC. ELECTRICAL DEVICES INSTALLED BY THE ELECTRICAL CONTRACTOR USE ENGRAVED LAMACOR LABEL, 1" WIDE x 2" LONG MIN. BLACK w/ WHITE LETTERS, MIN 3/4" HIGH
 - ISOLATED GROUNDS FOR COMPUTER EQUIPMENT TO BE CONNECTED TO THE NEUTRAL OF THE SERVICE DISCONNECT



GROUNDING DETAIL FOR PERIMETER STRUCTURAL STEEL
FOUNDATION / REBAR GROUNDING SYSTEM DETAIL

New Shop / Office for:
ERGO Trucking
11337 State Route 800
Magnolia, Ohio 44643

Sluder Architects LLC
8725 N. Stolon Ln.
Minerva, Ohio 44657 (330) 895-7777
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JOB # M15020 September 11, 2015

Milton Studer
REGISTERED ARCHITECT
8308

Milton Studer / # 8308
expires 12/31/15