

# HVAC & PLUMBING SYMBOL SCHEDULE

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	DOMESTIC COLD WATER LINE (CW)	SA	SUPPLY AIR
---	EXISTING DOMESTIC COLD WATER LINE (CW)	OA	OUTSIDE AIR
---	DOMESTIC HOT WATER LINE (HW)	RA	RETURN AIR
---	EXISTING DOMESTIC HOT WATER LINE (HW)	EA	EXHAUST AIR
---	HOT WATER RECIRC LINE (HWC)	Ⓢ	ELECTRIC OR DDC THERMOSTAT
---	EXISTING HOT WATER RECIRC LINE (HWC)	---#---	ELECTRIC WIRING (WITH 2 WIRES) - LOW VOLTAGE
---	ABOVE FLOOR WASTE LINE (W)	120V ---#---	120V POWER WIRING
---	EXISTING ABOVE FLOOR WASTE LINE (W)	M.C.	MECHANICAL CONTRACTOR
---	BELOW WASTE LINE (W)	P.C.	PLUMBING CONTRACTOR
---	EXISTING BELOW WASTE LINE (W)	E.C.	ELECTRICAL CONTRACTOR
---	PLUMBING VENT LINE (V)	G.C.	GENERAL CONTRACTOR
---	EXISTING PLUMBING VENT LINE (V)	UH	GAS UNIT HEATER
G	NATURAL GAS LINE (G)	111	ROOM CALLOUT
VTR	VENT THRU ROOF	△	REVISION NUMBER
FD	FLOOR DRAIN	●	CONNECT NEW TO EXISTING. VERIFY EXACT LOCATION.
CO ●	CLEANOUT (FLOOR)	(#)	REFER TO PLAN NOTES
CO ●●	2-WAY CLEANOUT (FLOOR)	(E)	EXISTING EQUIPMENT OR MATERIAL DESIGNATION
WCO -I	WALL CLEANOUT		
CO -II	END OF LINE CLEANOUT		
P-#	PLUMBING FIXTURE CALLOUT		
WHA#	WATER HAMMER ARRESTOR - PDI SIZE		
f	FLOW LINE ELEVATION		
HB	HOSE BIBB		
DHWP	DOMESTIC HOT WATER PUMP		
CI	CAST IRON		
VCP	VITRIFIED CLAY PIPE		
PVC	POLYVINYL CHLORIDE PIPE		
WH	WALL HYDRANT		
WH-#	WATER HEATER CALLOUT		
→	CAP		
○	PIPE RISE		
○	PIPE DROP		
∩	UNION OR FLANGE CONNECTION		
→	DIRECTION OF FLOW		
X	ANCHOR		
≡	CONCENTRIC REDUCER OR INCREASER		
≡	ECCENTRIC REDUCER		
∩	TOP CONNECTION, 45° OR 90°		
∩	BOTTOM CONNECTION, 45° OR 90°		
∩	SIDE CONNECTION		
∩	CAPPED OUTLET		
BOP	BOTTOM OF PIPE ELEVATION ABOVE FLOOR		
TOP	TOP OF PIPE ELEVATION ABOVE FLOOR		
∩	GAS COCK		
∩	VALVE IN DROP		
∩	VALVE IN RISER		
∩	BALL VALVE		
∩	BUTTERFLY VALVE		
∩	STRAINER		
∩	PLUG VALVE		
∩	CALIBRATED BALANCE VALVE		
∩ 24x12	(UP) DUCT SECTION, POSITIVE PRESSURE (FIRST SIZE IS TOP DIMENSION)		
∩ 24x12	(DOWN) DUCT SECTION, POSITIVE PRESSURE (FIRST SIZE IS TOP DIMENSION)		
∩ 24x12	(UP) DUCT SECTION, NEGATIVE PRESSURE (FIRST SIZE IS TOP DIMENSION)		
∩	SUPPLY DUCT DROP		
∩	SUPPLY DUCT RISER		
∩	RETURN DUCT DROP		
∩	RETURN DUCT RISER		
	FLEXIBLE DUCT		
∩	TURNING VANES		
∩	SIDE WALL SUPPLY REGISTER		
∩ 24x12	(DOWN) DUCT SECTION, NEGATIVE PRESSURE (FIRST SIZE IS TOP DIMENSION)		
18x12	DUCT SIZE, FIRST FIGURE IS SIDE SHOWN (CLEAR INSIDE DIMENSIONS)		
-R	DUCT CHANGE OF ELEVATION RISE(R) DROP(D)		
∩	FLEXIBLE CONNECTION		
∩	OPPOSED BLADE BALANCING DAMPER W/ MANUAL LOCKING QUADRANT (RECT DUCT)		
∩	BUTTERFLY BALANCING DAMPER W/ MANUAL LOCKING QUADRANT (ROUND DUCT)		
∩	OPPOSED BLADE BALANCING DAMPER W/ MOTORIZED LOCKING QUADRANT (RECT DUCT)		
∩	BUTTERFLY BALANCING DAMPER W/ MOTORIZED LOCKING QUADRANT (ROUND DUCT)		
BOD	BOTTOM OF DUCT ELEVATION ABOVE FLOOR		
TOD	TOP OF DUCT ELEVATION ABOVE FLOOR		
BOS	BOTTOM OF STEEL		
EF	EXHAUST FAN		
FCU	FAN COIL UNIT		
RTU	ROOFTOP UNIT		
SF	SUPPLY AIR FAN		

## GENERAL DEMOLITION NOTES

- VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE ARCHITECT IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
- REMOVAL OF EXISTING FIXTURES AND EQUIPMENT WILL REQUIRE ISOLATING THE PIPING RISERS OR MAINS VIA SHUT-OFF VALVES. INSTALL NEW ISOLATION VALVES WHERE REQUIRED FOR COMPLETION OF WORK.
- REMOVAL OF EXISTING PLUMBING FIXTURES AND EQUIPMENT, ETC. WILL REQUIRE CAPPING AND SEALING EXISTING MAINS OR BRANCHES AS NECESSARY AND REQUIRED TO ALLOW THE REMAINING SYSTEMS TO FULLY OPERATE WITHOUT DEGRADATION.
- CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK, AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
- ALL DRAINED PIPING RISERS AND MAINS SHALL BE REFILLED WITH PROPER FLUID AND PROPERLY VENTED BY THIS CONTRACTOR, ONCE NEW WORK HAS BEEN INSTALLED.
- COORDINATE WITH GENERAL CONTRACTOR THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALLS, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
- EXISTING PIPING AND EQUIPMENT, ETC., NOT TO BE UTILIZED IN THE COMPLETED BUILDING SHALL BE DISCONTINUED OR REMOVED AS REQUIRED. ALL ENDS OF DISCONTINUED PIPING SHALL BE CAPPED IN THE NEAREST WALL, CEILING OR FLOOR SO THAT THEY ARE COMPLETELY CONCEALED. OPENINGS LEFT IN WALLS, CEILINGS, ETC., WHERE EQUIPMENT AND PIPE, ETC., ARE REMOVED AND NOT REPLACED, SHALL BE PATCHED NEATLY WITH SIMILAR MATERIAL TO ADJACENT CONSTRUCTION. REFER TO DRAWINGS DELINEATING NEW WORK FOR ADDITIONAL INFORMATION REGARDING SYSTEMS OR PORTIONS OF SYSTEMS WHERE USE IS TO BE DISCONTINUED.
- EXISTING PIPING, FIXTURES AND EQUIPMENT THAT ARE NOT TO BE REUSED SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE OWNER IF THEY WISH TO RETAIN OWNERSHIP OF SAME. IF NOT, EQUIPMENT SHALL BECOME THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AS SOON AS PRACTICAL AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
- ALL CUTTING AND CHANNELING OF EXISTING BUILDING SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
- WHERE EXISTING PIPING AND EQUIPMENT, ETC., THAT ARE TO BE UTILIZED IN THE COMPLETED PROGRAM CONFLICT WITH NEW CONSTRUCTION AND THE REQUIRED DEMOLITION, THEY SHALL BE RELOCATED AND RECONNECTED TO MAINTAIN THE DESIRED SERVICE.
- PORTIONS OF EXISTING SYSTEMS MAY BE SHOWN FOR CLARITY EVEN THOUGH IT MAY NOT BE NECESSARY TO MODIFY OR REVISE THEM. ALL EXISTING SYSTEMS ARE SHOWN BASED ON ORIGINAL OR REMODEL BUILDING DRAWINGS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS.
- ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER AND OCCUPANTS OF THIS BUILDING SO AS TO PROVIDE THE LEAST AMOUNT OF DISRUPTION OF BUILDING ACTIVITIES AS POSSIBLE. MAINTAIN CONDITIONED SPACE FOR ALL OWNER OCCUPIED AREAS DURING CONSTRUCTION.
- ALL ACCESSIBLE ABANDONED PIPING AND DUCTWORK SHALL BE REMOVED AND PROPERLY DISPOSED OF.

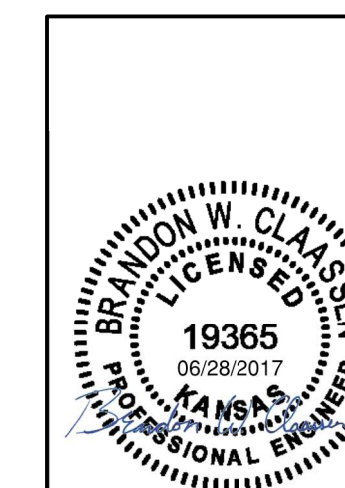
## GENERAL NOTES


- VERIFY JOB SITE CONDITIONS AND DIMENSIONS BEFORE BEGINNING WORK. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
- NO PIPING, DUCTWORK, ETC. SHALL PENETRATE STRUCTURAL MEMBERS.
- PROVIDE MISCELLANEOUS CUTTING, PATCHING AND REPAIRING OF FINISHES, ROOF, WALLS, ETC., AS REQUIRED TO ACCOMMODATE THE NEW WORK.
- G.C. IS TO PATCH ANY OPENINGS IN CORRIDORS REQUIRED TO BE CONSTRUCTED TO LIMIT THE TRANSFER OF SMOKE AND IN SMOKE BARRIERS AS REQUIRED TO MEET CODE REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXACT LOCATION, CONFIGURATION AND ROUTING OF EXISTING SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING THE PROJECT TO PREVENT DAMAGE DURING DEMOLITION AND PHASING.
- REMOVE ALL EXISTING EQUIPMENT, DUCTWORK AND PIPING THAT IS NOT REQUIRED FOR A WORKING INSTALLATION.
- COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
- UNLESS OTHERWISE INDICATED, INSTALL ALL SPACE THERMOSTATS AND OTHER OCCUPANT ADJUSTABLE CONTROL DEVICES SAME HEIGHT AS ADJACENT LIGHT SWITCHES, BUT IN NO CASE HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR PER ADA REQUIREMENTS. COORDINATE EXACT HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
- ALL CUTTING AND PATCHING SHALL BE CLOSELY COORDINATED WITH THE G.C.
- COORDINATE ROUTING OF PLUMBING, AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE. REWORK OF INSTALLED WORK TO RESOLVE CONFLICTS ARISING FROM LACK OF COORDINATION SHALL NOT JUSTIFY AN INCREASE IN THE CONTRACT AMOUNT.
- ALL DIFFUSERS ARE 4-WAY BLOW UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- FLEXIBLE DUCTWORK IS ALLOWED ON RUNOUTS TO SUPPLY DIFFUSERS ONLY. UTILIZE ONLY ABOVE LAY-IN ACCESSIBLE CEILINGS. DO NOT INSTALL FLEX DUCT ABOVE HARD CEILINGS OR WHERE EXPOSED. A MAXIMUM LENGTH OF 6'-0" MAY BE USED AT EACH CONNECTION.
- SEAL TRANSVERSE AND LONGITUDINAL JOINTS OF ALL DUCTWORK USING HARDCAST DT TAPE AND FTA-20 ADHESIVE OR HARDCAST AFG-1402 "FOIL GRIP" PER MANUFACTURERS INSTRUCTIONS. SEAL TO SMACNA SEAL CLASS A.
- INSTALL BALANCE DAMPER WITH STANDOFF AND LOCKING QUADRANT IN AN ACCESSIBLE LOCATION AT EACH RUNOUT TO SUPPLY DIFFUSERS, EXHAUST GRILLES, AND RETURN GRILLES WHERE AIRFLOW IS INDICATED, OR AS INDICATED OTHERWISE.
- ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRE STOPPED BY THE TRADE MAKING THE PENETRATION. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
- DO NOT ROUTE PIPING OR DUCTWORK OVER ELECTRICAL PANELS OR EQUIPMENT. PIPING OR DUCTWORK SHALL NOT BE ROUTED THROUGH ELECTRICAL ROOMS, TELECOM ROOMS OR ELEVATOR EQUIPMENT ROOMS UNLESS SPECIFICALLY SERVING THAT ROOM. COORDINATE WITH E.C. PROVIDE WATERTIGHT DRIP PAN WITH DRAIN TO NEAREST APPROVED RECEPTOR WHERE REQUIRED.
- COORDINATE SIZE AND LOCATION OF ACCESS DOORS IN CONSTRUCTION REQUIRED FOR ACCESS TO MECHANICAL EQUIPMENT WITH G.C.
- COORDINATE SIZE AND LOCATION OF MECHANICAL EQUIPMENT PADS WITH G.C.
- ALL WORK IS TO CONFORM WITH APPLICABLE CODES AND STANDARDS.
- DUCT SIZES SHOWN ARE ACTUAL INSIDE CLEAR DIMENSIONS. INCREASE SHEET METAL DIMENSIONS AS REQUIRED TO ACCOMMODATE DUCT LINER WHERE LINER IS SPECIFIED.
- ALL EQUIPMENT SUPPORT STANDS SHALL BE PRIMED AND PAINTED WITH EPOXY ENAMEL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.
- PAINT INSIDE OF DUCTWORK BLACK ANYWHERE VISIBLE THROUGH FACE OF GRILLE OR DIFFUSER.
- ALL CONTROL DAMPERS AND ACTUATORS/MOTORS OPERATORS SHALL BE FURNISHED AND INSTALLED BY THE MC.
- COORDINATE ACCESS TO EQUIPMENT AND VALVES INSTALLED ABOVE "HARD" CEILINGS AND IN MASONRY CHASES WITH GENERAL CONTRACTOR. PROVIDE LOCKING ACCESS DOORS FOR INSTALLATION BY CONTRACTOR AS REQUIRED TO SERVICE CONCEALED DAMPERS, VALVES AND EQUIPMENT. CEILING ACCESS DOORS FOR FIRE DAMPERS, SMOKE DAMPERS AND FIRE SMOKE DAMPERS FURNISHED AND INSTALLED BY CONTRACTOR.
- CONTRACTOR TO INSTALL TEMPORARY FILTERS OVER ALL RETURN AND EXHAUST GRILLES IN WORK AREA DURING CONSTRUCTION.
- THESE DRAWINGS ARE ACCOMPANIED BY SPECIFICATIONS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.
- EQUIPMENT THAT REQUIRES MAINTENANCE SHALL BE LOCATED A MINIMUM OF 10'-0" FROM THE BUILDING ROOF EDGE WHERE REQUIRED BY CODE.

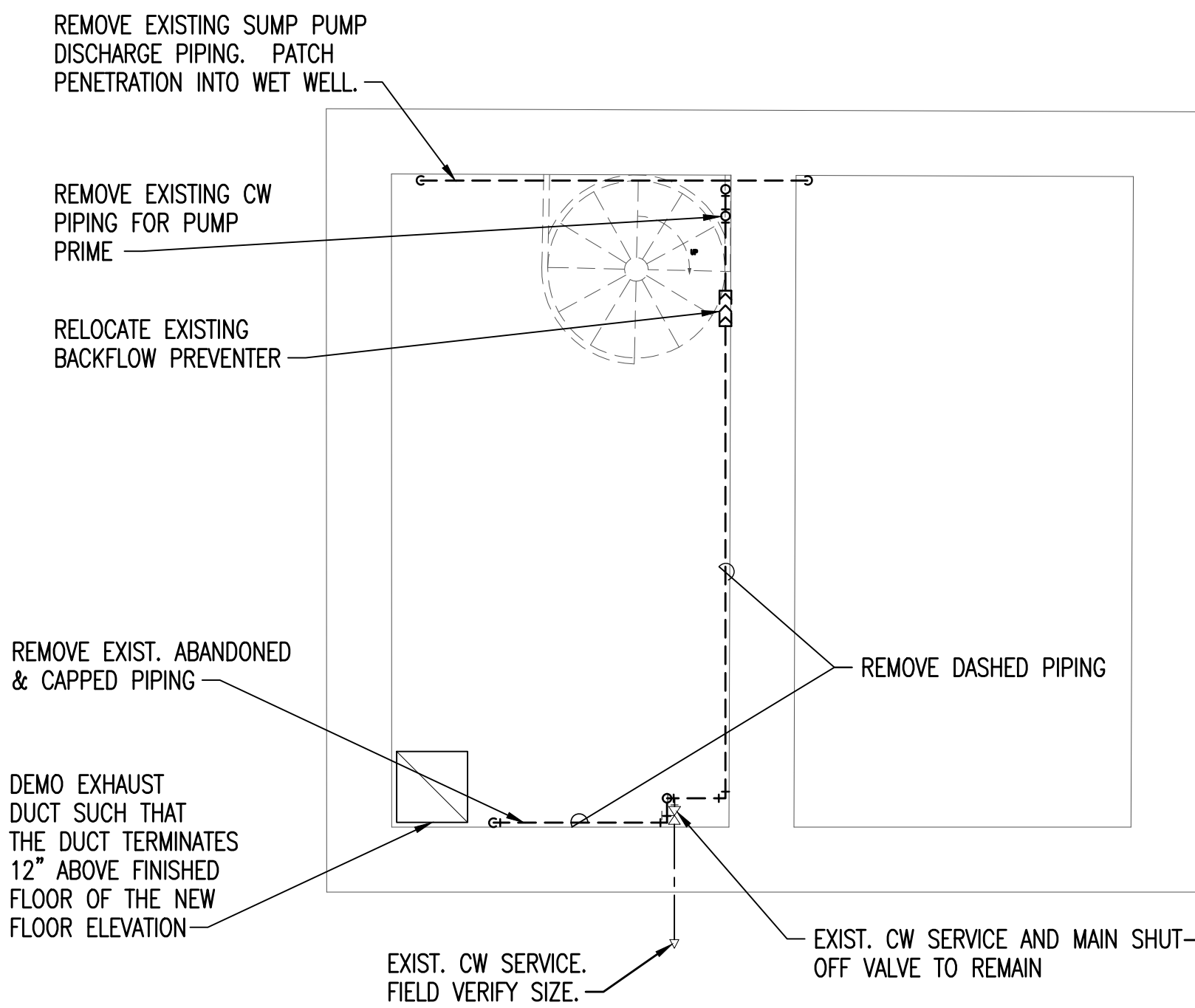
## SHEET INDEX

- M0.1 - MECHANICAL COVER SHEET
- M1.1 - MECHANICAL DEMOLITION FLOOR PLAN
- M2.1 - PLUMBING FLOOR PLAN
- M2.2 - MECHANICAL FLOOR PLAN
- M3.1 - MECHANICAL DETAILS AND SCHEDULES

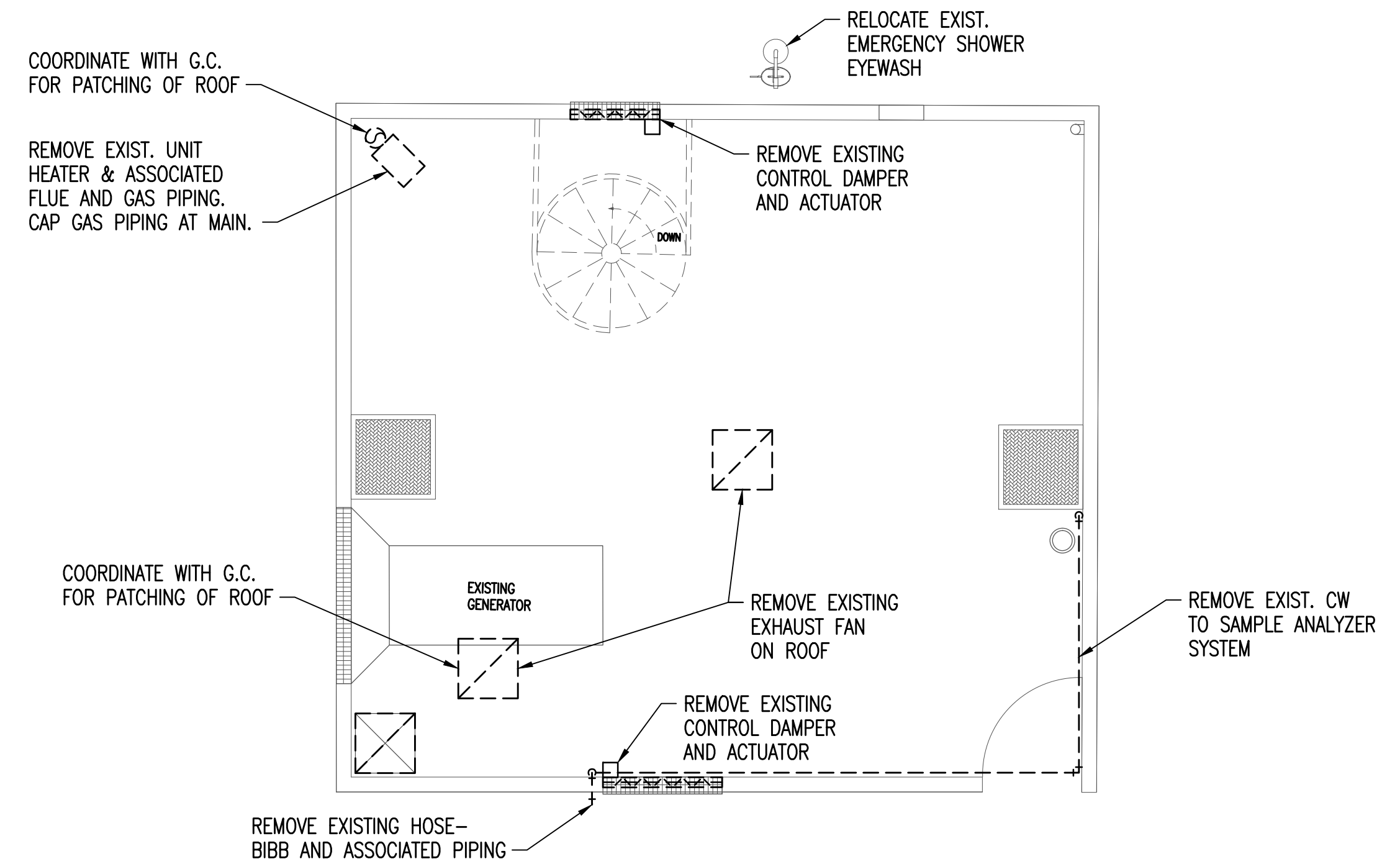
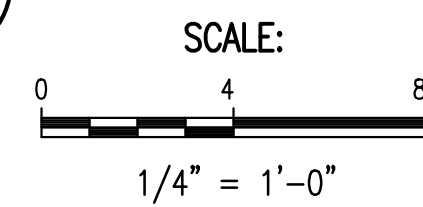
Solved: 06-15-2017 4:57:09 PM by BWC  
 Plot: Scale: 1:1 06-28-2017 8:44:13 AM by BRANDON GLASSSEN  
 U:\Wichita-Civil\2016\160316\001\Mech\Drawings\160316-001-M0.1 MECHANICAL COVER SHEET



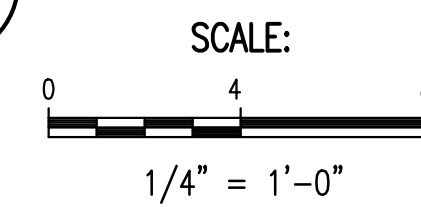
No.	Revision	By	Date
<b>LIFT STATION REHABILITATION</b> 31ST STREET SOUTH AND GLENN AVENUE <b>MECHANICAL COVER SHEET</b> GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-85136			
 <b>PEC</b> PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	BWC	Job No.	35-160316-1-0042
Drawn by	BWC	Date	JUNE 2017
			Sht. M0.1 5



**A MECHANICAL BASEMENT DEMOLITION PLAN**

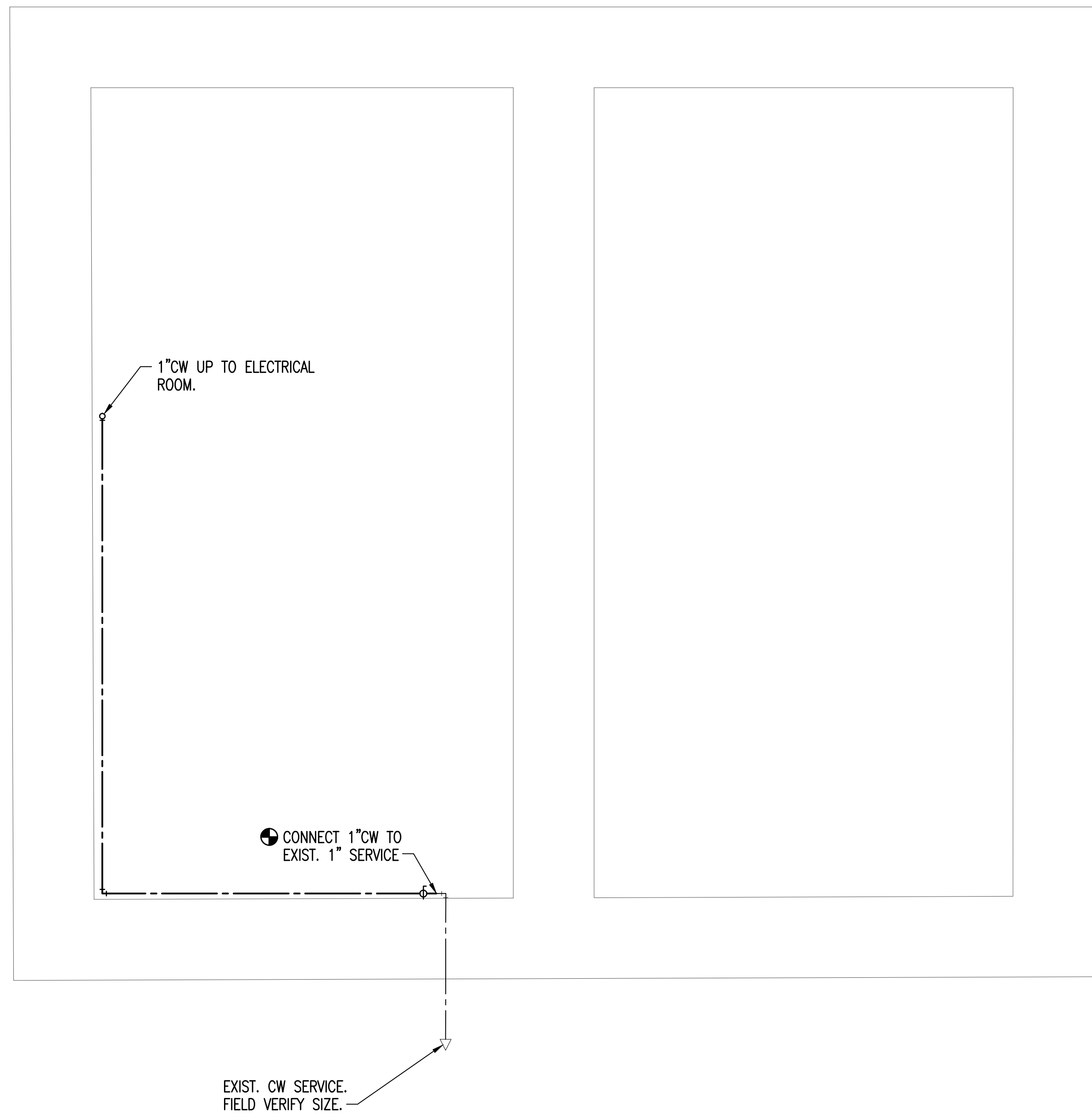


**B MECHANICAL DEMOLITION PLAN**



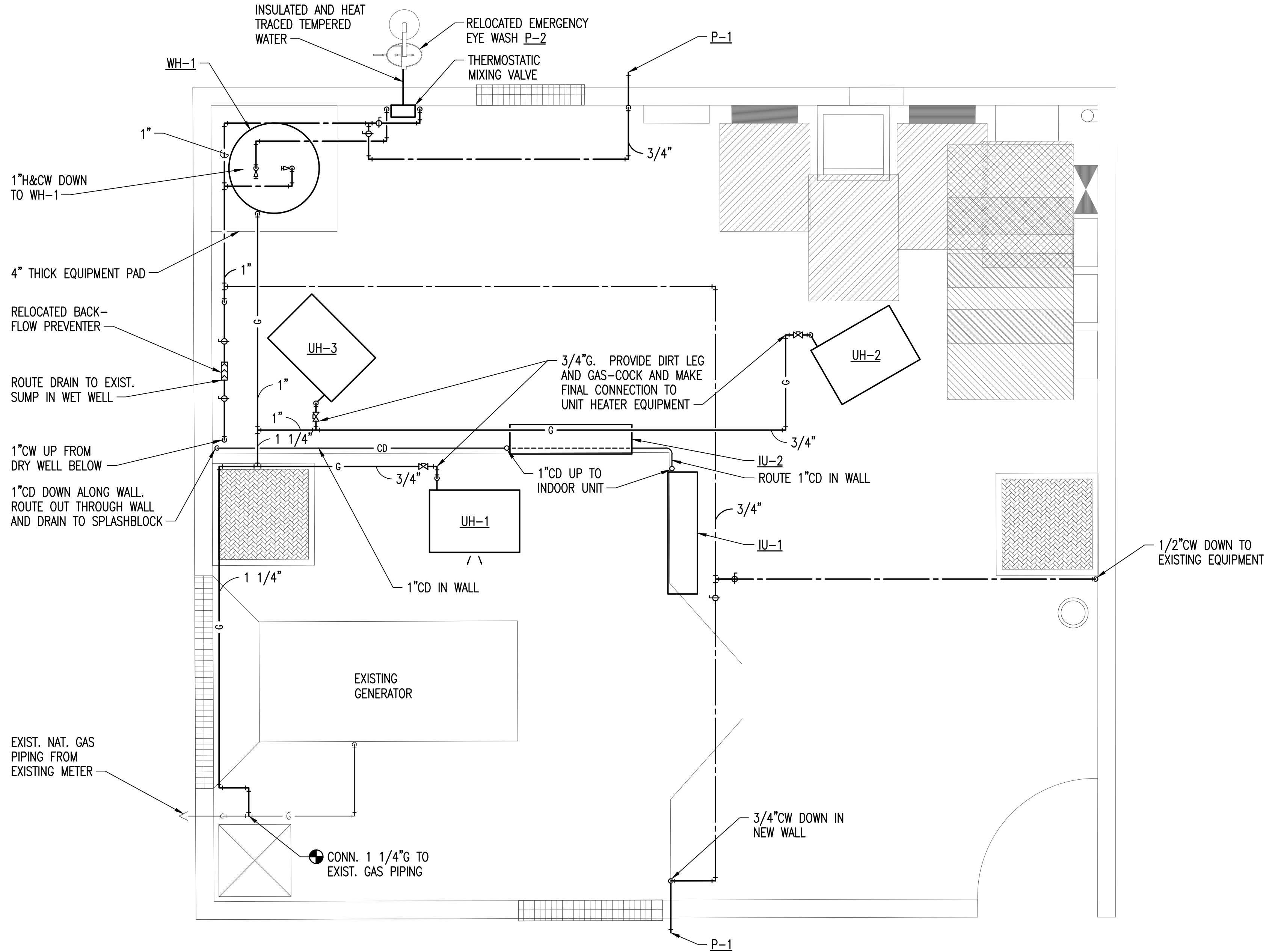
Saved: 06-27-2017 5:15:39 PM by BWC  
 Plot Scale: 1:1 06-28-2017 8:44:14 AM by BRANDON CLAASSEN  
 U:\Wichita-Civil\2016\160316\001\Mech\Drawings\160316-001-M1.1 MECHANICAL DEMOLITION PLAN

No.	Revision	By	Date
<b>LIFT STATION REHABILITATION</b> <b>31ST STREET SOUTH AND GLENN AVENUE</b> <b>MECHANICAL DEMOLITION FLOOR PLAN</b> GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-85136			
Designed by	BWC	Job No.	35-160316-1-0042
Drawn by	BWC	Date	JUNE 2017
			Sht. M1.1 5



**A LOWER LEVEL PLUMBING FLOOR PLAN**

SCALE:  
 0" 2" 4"  
 1/2" = 1'-0"



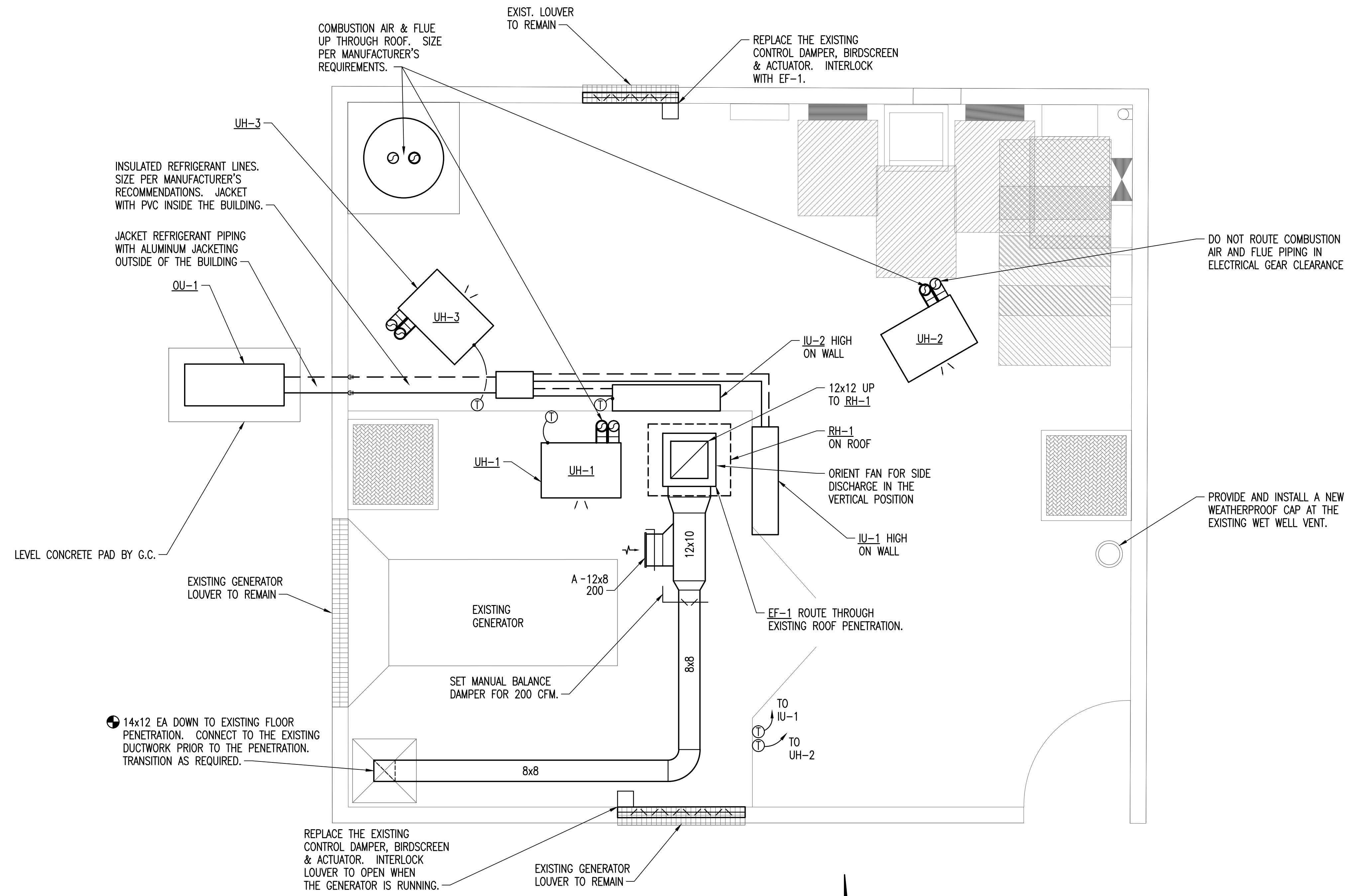
**B PLUMBING FLOOR PLAN**

SCALE:  
 0" 2" 4"  
 1/2" = 1'-0"

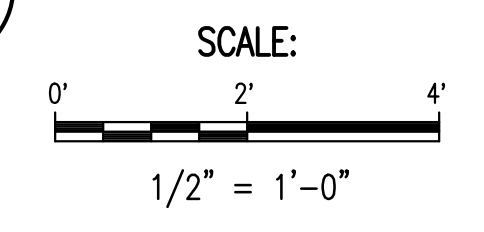
Saved: 06-28-2017 8:29:37 AM by BWC  
 Plot Scale: 1:1 06-28-2017 8:44:17 AM by BRANDON CLAASSEN  
 U:\Wichita-Civil\2016\160316\001\Mech\Drawings\160316-001-M2.1 PLUMBING FLOOR PLAN

No.	Revision	By	Date
<b>LIFT STATION REHABILITATION</b> 31ST STREET SOUTH AND GLENN AVENUE <b>PLUMBING FLOOR PLAN</b> GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-85136			
Designed by	BWC	Job No.	35-160316-1-0042
Drawn by	BWC	Date	JUNE 2017
			Sht. M2.1 5

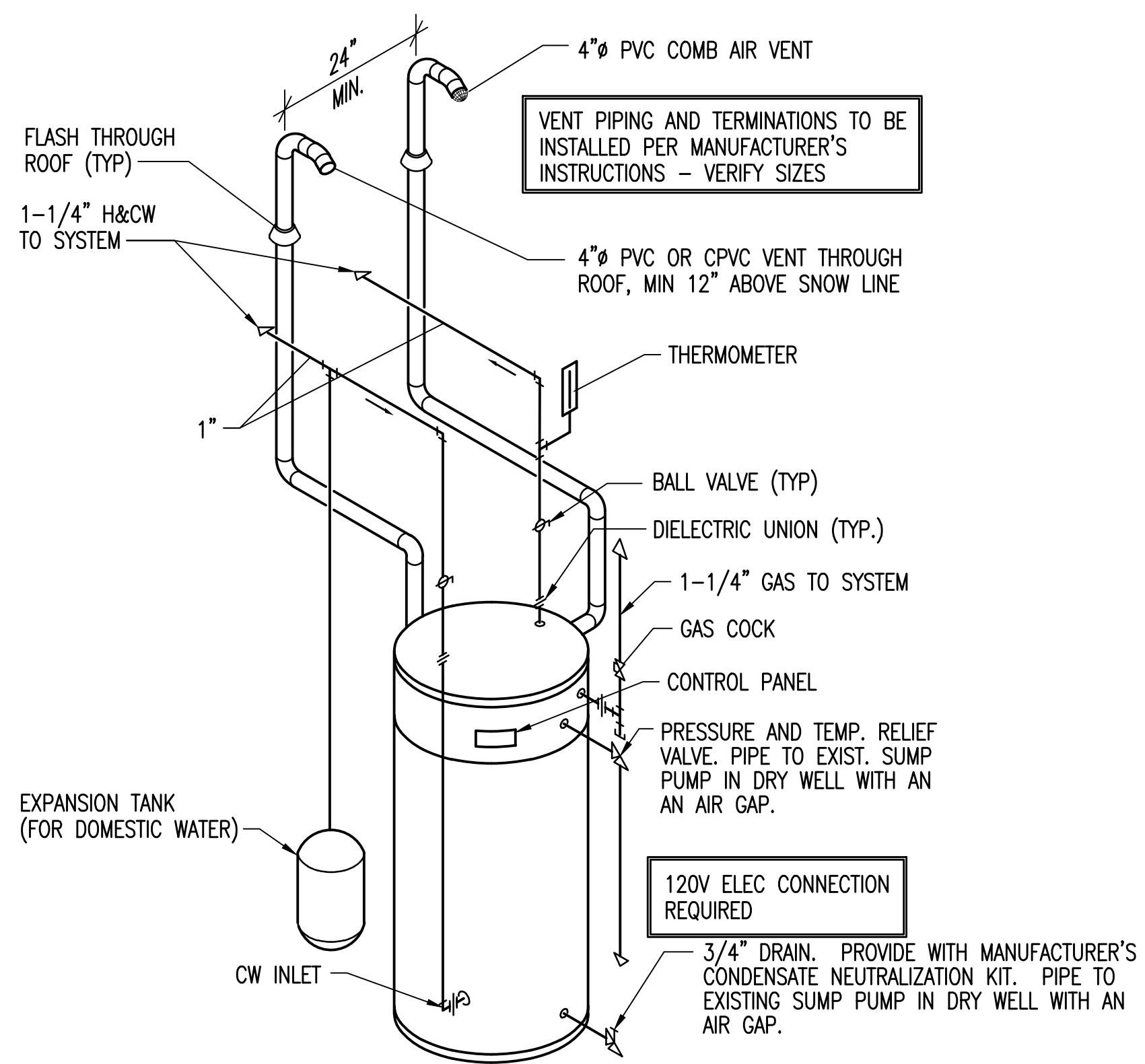
Saved: 06-28-2017 8:43:35 AM by BWC  
 Plot Scale: 1:1 06-28-2017 8:44:18 AM by BRANDON CLAASSEN  
 U:\Wichita-Civil\2016\160316\001\Mech\Drawings\160316-001-M2.2 HVAC FLOOR PLAN



### A HVAC FLOOR PLAN



No.	Revision	By	Date
<b>LIFT STATION REHABILITATION</b> <b>31ST STREET SOUTH AND GLENN AVENUE</b> <b>HVAC FLOOR PLAN</b> GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-85136			
Designed by	BWC	Job No.	35-160316-1-0042
Drawn by	BWC	Date	JUNE 2017
			Sht. M2.2 5



**WATER HEATER  
GAS HIGH EFFICIENCY**

SCALE: NONE

1

WATER HEATER SCHEDULE															
MARK	LOC. AT ROOM	TYPE	MIN. CAPACITY		GAS			ELECTRIC		EXP. TANK	REMARKS	RECIRC PUMP REF	ELECT REF		
			GAL STOR	GPH RECOVERY AT 100' RISE	INPUT MBH	VENT DIA	VENT MOTOR H.P.	ELECT	TOTAL KW					NO. ELEMENTS	VOLT/PHASE
WH-1	125	TANK	60	138	120.0	4"	--	120/1Ø	--	--	120/1Ø	②	①	--	L:30

① BASED ON A.O. SMITH BTH-120 HIGH EFFICIENCY (UP TO 96% EFFICIENT) DIRECT VENT COMMERCIAL GAS WATER HEATER. VERIFY COMBUSTION AIR AND FLUE PIPING SIZE WITH MANUFACTURER. PROVIDE WITH MANUFACTURER'S CONCENTRIC VENT KIT AND CONDENSATE NEUTRALIZATION KIT.  
 ② BASED ON AMTRLO ST-5.

PLUMBING FIXTURE SCHEDULE										
"p" NO.	FIXTURE	WATER				WASTE		VENT	REMARKS	
		COLD		HOT		TEMPERED	RUNOUT			CONN.
		RUNOUT	CONN.	RUNOUT	CONN.					
P-1	FREEZE PROOF WALL HYDRANT	3/4"	3/4"	3/4"	3/4"	--	--	--	--	--
P-2	COMBI SHOWER & EYE/FACE WASH	1"	1"	1"	1"	1-1/4"	1-1/4"	--	--	--

P-1: WALL HYDRANT: WOODFORD B65 BOX TYPE ANTI-SIPHON PROTECTED FREEZELESS WALL HYDRANT.  
 P-2: EMERGENCY COMBINATION SHOWER & EYE/FACE WASH: RELOCATE THE EXISTING EMERGENCY SHOWER AND EYE/FACE WASH COMBINATION UNIT AS SHOWN. 1 1/4"IPS SUPPLY. PROVIDE HAWS MODEL 9201E THERMOSTATIC MIXING VALVE CAPABLE OF UP TO 31 GPM. JACKET, INSULATE, AND HEAT TRACE ALL EXTERIOR PIPING.

ROOF HOOD SCHEDULE									
MARK	SERVES	INTAKE OR RELIEF	HOOD SIZE (IN)			CAPACITY		MAXIMUM VELOCITY (FPM)	REMARKS
			THROAT SIZE	HOOD SIZE	HEIGHT	CFM	MAX P.D. IN H2O		
RH-1	EF-1	RELIEF	12	12	14	400	0.01	133	①

① BASED ON COOK 12X12GR GRAVITY RELIEF HOOD WITH INSECT SCREEN AND FACTORY ROOF CURB.

EXHAUST FAN SCHEDULE																	
MARK	LOC AT BLDG.	TYPE	MIN. CAP		FAN RPM	SONES	DRIVE	MOTOR (BY M.C.)				WT LBS	REMARKS	CONTROLS	ELECT REF		
			CFM	SP				HP (W)	RPM	SPEED	ELECT.					STARTER	
EF-1	INLINE	GEN	400	0.5	1,435	6.9	DIR	1/4	1,725	VAR	115/1	--	110	①	SIH,BD,DS,EC	④	L:25

① BASED ON COOK SQUARE INLINE DIRECT DRIVE CENTRIFUGAL EXHAUST VENTILATOR MODEL 120SQN17DEC WITH TOP DISCHARGE.  
 ④ FAN SHALL RUN CONTINUOUSLY.

ACCESSORIES KEY	
SIH	SPRING ISOLATION HANGER
FC	FACTORY ROOF CURB
BD	GRAVITY BACKDRAFT DAMPER
BS	BIRD SCREEN
DS	DISCONNECT SWITCH
FSC	FAN SPEED CONTROL
EC	EC MOTOR - ADJ ON MOTOR

GRILLE & REGISTER SCHEDULE														
MARK	TYPE	MANUFACTURER BASED ON	MODEL	MATERIAL		FINISH					ACCESSORIES & REMARKS	O.B.D.		
				ALUM	STEEL	WHITE	BLACK	BRONZE	CLEAR	ANODIZ.			OTHER	
A	EXHAUST GRILLE	TITUS	350FL	X		X							SURFACE MOUNT	

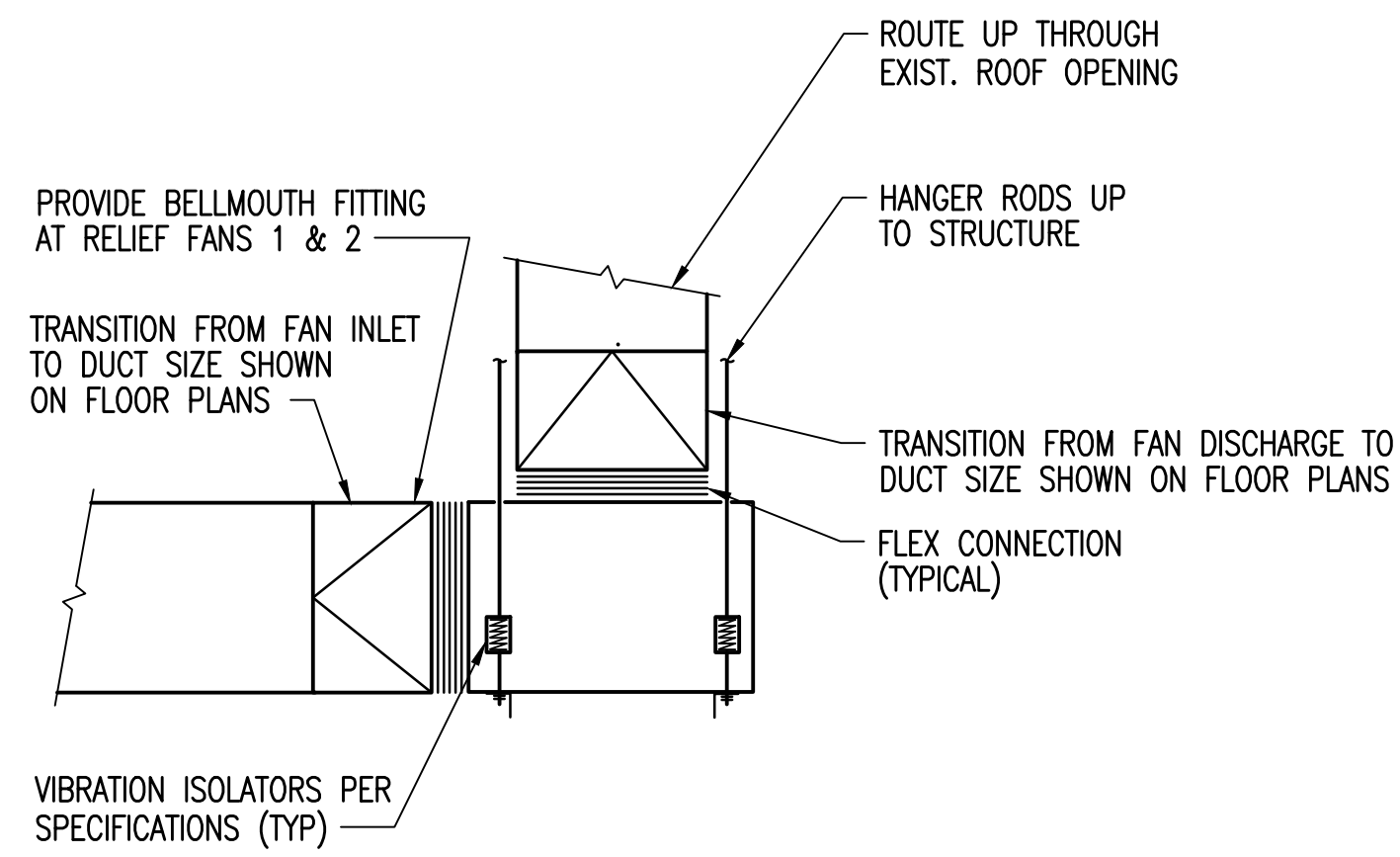
GRILLE CALLOUT IN GRILLE AND REGISTER SCHEDULE: A-12x12 - GRILLE SIZE  
 CUBIC FEET OF AIR PER MINUTE: 600 (FD) - FIRE DAMPER  
 GRILLE CALLOUT SYMBOL

SPLIT SYSTEM SCHEDULE													
INDOOR UNIT				OUTDOOR UNIT				ELECT.	INDOOR UNIT LOCATION	OUTDOOR UNIT LOCATION	REMARKS	ELECT. REF.	
MARK	CFM	MCA	CAPACITY MBH	MARK	MBH	OA TEMP	MIN. SEER						
IU-1	720	--	24.0	OU-1	48.0	95°F	--	27.3	208/1	ELECT	GRADE	①	L:18
IU-2	720	--	24.0										

① BASED ON LG MULTI F MAX OUTDOOR HEAT PUMP SYSTEM WITH ONE ONE LMU480HV OUTDOOR UNIT AND TWO LMN248HVT INDOOR WALL HUNG UNITS. HEAT CAP = 27.0 MBH AT 47/43 DB/WB OUTDOOR AMBIENT FOR EACH INDOOR UNIT.  
 NOTES:  
 1. PROVIDE WITH LOW-AMBIENT WIND BAFFLE, LOUVERED HAIL GUARD EQUAL TO TURBO EAGLE, INVERTER COMPRESSOR, AND INTERNAL CONDENSATE LIFT.  
 2. COOLING CAPACITIES BASED ON 80/67 DB/WB ENTERING COIL AND 95/75 DB/WB OUTDOOR AMBIENT.

UNIT HEATER SCHEDULE - GAS													
MARK	LOC AT ROOM	CFM	GAS MBH		FLUE SIZE	COMB. AIR SIZE	MOTOR (BY M.C.)			REMARKS	ELEC REF		
			INPUT	OUTPUT			HP	SPEED	RPM			ELEC	
UH-1	GENERATOR	370	30	24.9	4"Ø	4"Ø	1/20	1	1,650	120/1	①	L:7	
UH-2	ELECTRICAL	370	30	24.9	4"Ø	4"Ø	1/20	1	1,650	120/1	①	L:27	
UH-3	ELECTRICAL	370	30	24.9	4"Ø	4"Ø	1/20	1	1,650	120/1	①	L:29	

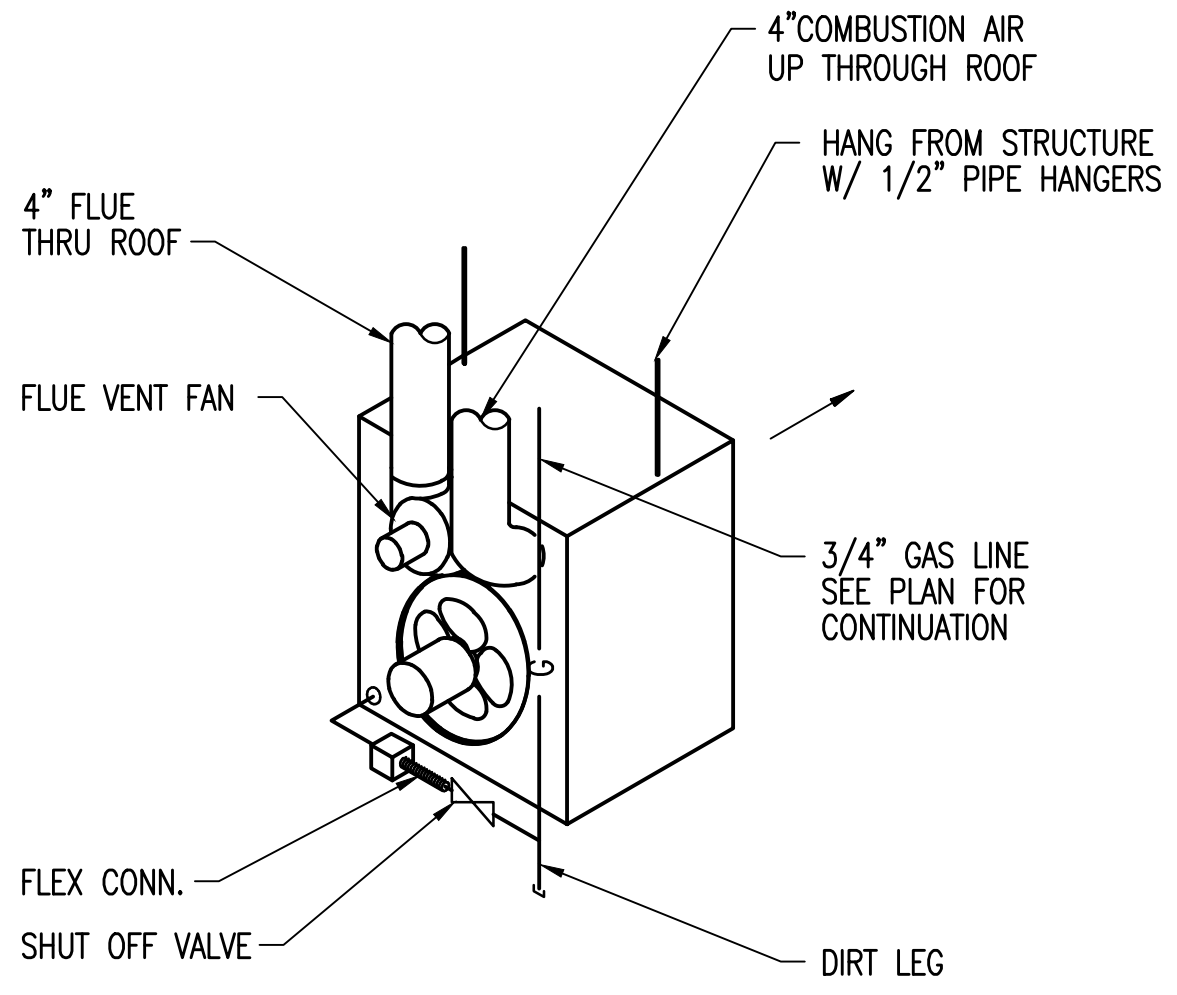
① BASED ON STERLING GAS FIRED UNIT HEATER MODEL GG LOW PROFILE SIZE 30 WITH DIRECT SPARK IGNITION, TUBULAR HEAT EXCHANGER, AND MANUFACTURER'S SINGLE STAGE THERMOSTAT.



**EXHAUST FAN DETAIL - INLINE**

SCALE: NONE

2



**UNIT HEATER DETAIL - GAS FIRED**

SCALE: NONE

3

Sowed: 06-28-2017 8:29:26 AM by BWC  
 Plot Scale: 1:1 06-28-2017 8:44:20 AM by BRANDON GLASSSEN  
 U:\Wichita-Civil\2016\160316\001\Mech\Drawings\160316-001-M3.1 MECHANICAL DETAILS AND SCHEDULES

No.	Revision	By	Date
LIFT STATION REHABILITATION 31ST STREET SOUTH AND GLENN AVENUE <b>MECHANICAL DETAILS &amp; SCHEDULES</b> GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-85136			
		PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2891 www.pec1.com	
Designed by	BWC	Job No.	35-160316-1-0042
Drawn by	BWC	Date	JUNE 2017
		Sht.	M.3.1 5