PUBLIC PROTECTION CABINET
Department of Housing, Buildings and Construction
Division of Plumbing
500 Mero St., 1st Floor
Frankfort, KY 40601-1987
Phone:(502) 573-0397, (502) 573-1058
www.dhbc.ky.gov

Andy Beshear
Governor

Mona Womack
Commissioner

Kerry B Harvey
Secretary

Max Fuller
Deputy Commissioner

July 23, 2020

Bryan Atkins
500 S 17th St
Paducah, KY 42003-2819

RE: Case No: TBD / Plan#:015741 / LP
Jackson Purchase Energy Headquarters
6525 US Highway 60 W
Paducah, KY/McCracken
Per Code (no changes)
Number of Openings: 73

Dear Bryan Atkins:

This is to advise you that plans covering the above captioned project are approved for the plumbing system only by the Division of Plumbing as of the date of this letter. The approval type is as listed above.

Inspections must be requested before any part of this plumbing is covered under the floor or concealed in the walls. A final inspection and air test must be requested after all plumbing fixtures have been set. If a private sewage disposal system or water system is used they also must be inspected.

Two sets of approved plans have been sent to the project Plumbing Inspector. One set of the approved plumbing plans shall be on the construction site for the plumbing inspectors review and comments.

This approval is valid only if construction is begun within one year from this date. If you have any questions concerning this project, please contact the Division of Plumbing at (502) 573-0397.

Sincerely,

David Moore

Mike McPherson
mike.mcpherson@ky.gov

CC: Lynn Bundy

PLAN APPLICATION FORM

PUBLIC PROTECTION CABINET
DEPARTMENT OF HOUSING, BUILDINGS AND CONSTRUCTION
DIVISION OF BUILDING CODE ENFORCEMENT & DIVISION OF PLUMBING
101 SEA HERO ROAD, SUITE 100
FRANKFORT, KENTUCKY 40601-5405

BUILDING CODES: 502/ 573-0373 PLUMBING: 502/ 573-0397

NOTE: Complete all applicable spaces **Today's Date:** 6/1/2020 REV.2/2012

NAME OF PERSON SUBMITTING PLANS	BRYAN ATKINS, PE Phone (270) 444-9274 Ext	***IS THE BCE PLAN REVIEW FEE INCLUDED WITH PLANS?***	☐ Yes ☐ No
MAILING ADDRESS: 500 SOUTH 17TH STREET (NUMBER / STREET, HWY, ROAD or P. O. BOX)	PADUCAH (CITY) KY (STATE) 42002- (ZIP CODE)		
FAX: 270 443-1904	**EMAIL: batkins@marcumengineering.net**	**SEND APPROVAL LETTER VIA: FAX☐ EMAIL☒ POSTAL☐**	
BUSINESS & PROJECT NAME: (Or tenant name if multi-tenant building)	JACKSON PURCHASE ENERGY HEADQUARTERS	***PLEASE NOTE IF PROJECT IS INSIDE OR OUTSIDE LIMITS OF CITY NOTED BELOW***	
PROJECT LOCATION: 6525 US HIGHWAY 60 (NUMBER/STREET, HWY OR ROAD (Please do not indicate P.O. Box or Postal Routes))	PADUCAH (CITY) KY (STATE) 42001- (ZIP CODE)		
IF PROJECT IS EXISTING, PLEASE NOTE PREVIOUS NAME:	**Paducah Regional Sportsplex**		
PROJECT LOCATED WITHIN CITY LIMITS? ☐ Yes ☒ No	COUNTY MCCRACKEN		
OWNER (INDIVIDUAL & COMPANY)	GREG GRISSOM - JACKSON PURCHASE ENERGY	PHONE (270) 442-7321 Ext	
MAILING ADDRESS: 2900 IRVIN COBB DRIVE (NUMBER / STREET, HWY, ROAD or P. O. BOX)	PADUCAH (CITY) KY (STATE) 42003- (ZIP CODE)		
FAX:	**EMAIL:greg.grissom@jpenergy.com**		
ARCHITECT (NAME & FIRM)	MICHAEL DEANE - M+H ARCHITECTS	PHONE (314) 878-3500 Ext	
AS THE ARCHITECT LISTED ABOVE, I AM RESPONSIBLE FOR CONSTRUCTION CONTRACT ADMINISTRATION		☒ Yes ☐ No	
MAILING ADDRESS: 2150 SCHUETZ ROAD, SUITE 200 (NUMBER / STREET, HWY, ROAD or P. O. BOX)	ST. LOUIS (CITY) MO (STATE) 63146- (ZIP CODE)		
FAX:	**EMAIL: deane@mha.us.com**		

NOTE: DESIGN CERTIFICATION REQUIRED. All buildings or structures requiring professional design (Architect or Engineer) by Section 122 of the 2007 KBC shall include a statement from the design professional in responsible charge indicating the Seismic Design Category for this specific site and the applicability of seismic bracing requirements for architectural, mechanical and electrical components and a statement to that effect shall be included with the initial construction documents submitted to the building code official having jurisdiction. This does not apply for Plumbing submission only.

ENGINEER (NAME & FIRM)	BRYAN ATKINS, PE - MARCUM ENGINEERING	PHONE (270) 444-9274 Ext	
MAILING ADDRESS: 500 SOUTH 17TH STREET (NUMBER / STREET, HWY, ROAD or P. O. BOX)	PADUCAH (CITY) KY (STATE) 42002- (ZIP CODE)		
FAX:	**EMAIL:batkins@marcumengineering.net**		
PROJECT CONTRACTOR	TBD	PHONE ( ) - Ext	
MAILING ADDRESS: (NUMBER / STREET, HWY, ROAD or P. O. BOX)	(CITY) (STATE) (ZIP CODE)		
FAX:	**EMAIL:**		

BUILDING INFORMATION

NUMBER OF BUILDINGS IN THIS SUBMITTAL:	2	**USE OF BUILDING(S) other (please specify)**	**ie...restaurant, office, classroom, storage or**			OFFICE	
BUILDING(S) IN THIS PROJECT IS / ARE:	☒ NEW FREESTANDING BUILDING	☐ NEW ADDITION TO EXISTING STRUCTURE	☐ RENOVATION ONLY	☒ RENOVATION & ADDITION			
TOTAL AREA IN NEW BLDG. OR ADDITION:	9,118 **FT²**	**NUMBER OF LEVELS (INCLUDING BASEMENT):**	1	**BASEMENT**	☐ Yes	☒ No	
TOTAL AREA IN EXISTING BLDG.:	83,979 **FT²**	**DATE CONSTRUCTION TO BEGIN:**	7/20/2020	**ESTIMATED COMPLETION DATE:**		5/30/2021	

TYPE OF PLAN SUBMITTALS

BUILDING PLAN SUBMITTALS (Check the type of evaluations requested at this time)

BUILDING PLAN REVIEW (BCE)

- Full Building Review ☐
- Expedited Site & Foundation Review ☐

SUBMIT ONLY ONE SET FOR BCE

PLUMBING PLAN REVIEW

- Plumbing Review ***ONLY*** ☒
- Water Supply Review ☐
- Waste Water Review ☐
- Other (please specify) ☐

SUBMIT 3 SETS OF PLANS FOR PLB

SHOP DRAWING PLAN SUBMITTALS (Check the type of evaluations requested at this time)

- Suppression System (Sprinkler, CO^2, Etc.) ☐
- Alarm Systems ☐
- Boiler System ☐
- Bleacher Seating ☐
- Range Hood System ☐
- Fuel Tank ☐
- Elevator ☐
- Swimming Pool ☐
- Prefabricated Truss ☐

SUBMIT ONLY ONE SET OF PLANS FOR THE ABOVE

THE INFORMATION IN THIS SECTION IS FOR THE DIVISION OF PLUMBING (TO BE COMPLETED BY PERSON SUBMITTING PLANS)

DESIGN CAPACITY OF BUILDING: NO. OF MALES 50 NO. OF FEMALES 50

SEWAGE DISPOSAL: TYPE: ☒ Municipal ☐ Private

WATER SUPPLY: ☒ PUBLIC ☐ DRILLED WELL ☐ CISTERN ☐ HAULED WATER ☐ ROOF WATER ☐ SPRING ☐ STREAM

IF PRIVATE, INDICATE THE TYPE AND THE DESIGN: **BY WHOM:**

ARE RESTROOMS ACCESSIBLE TO PUBLIC? ☒ Yes ☐ No

ARE RESTROOMS ACCESSIBLE TO DISABLED? ☒ Yes ☐ No

NAME TITLE REGISTRATION NUMBER

THIS SECTION TO BE COMPLETED BY THE LOCAL HEALTH DEPARTMENT OFFICIAL (Must be completed prior to sending Plumbing Plans to Frankfort)

REVIEWED BY: [signature]

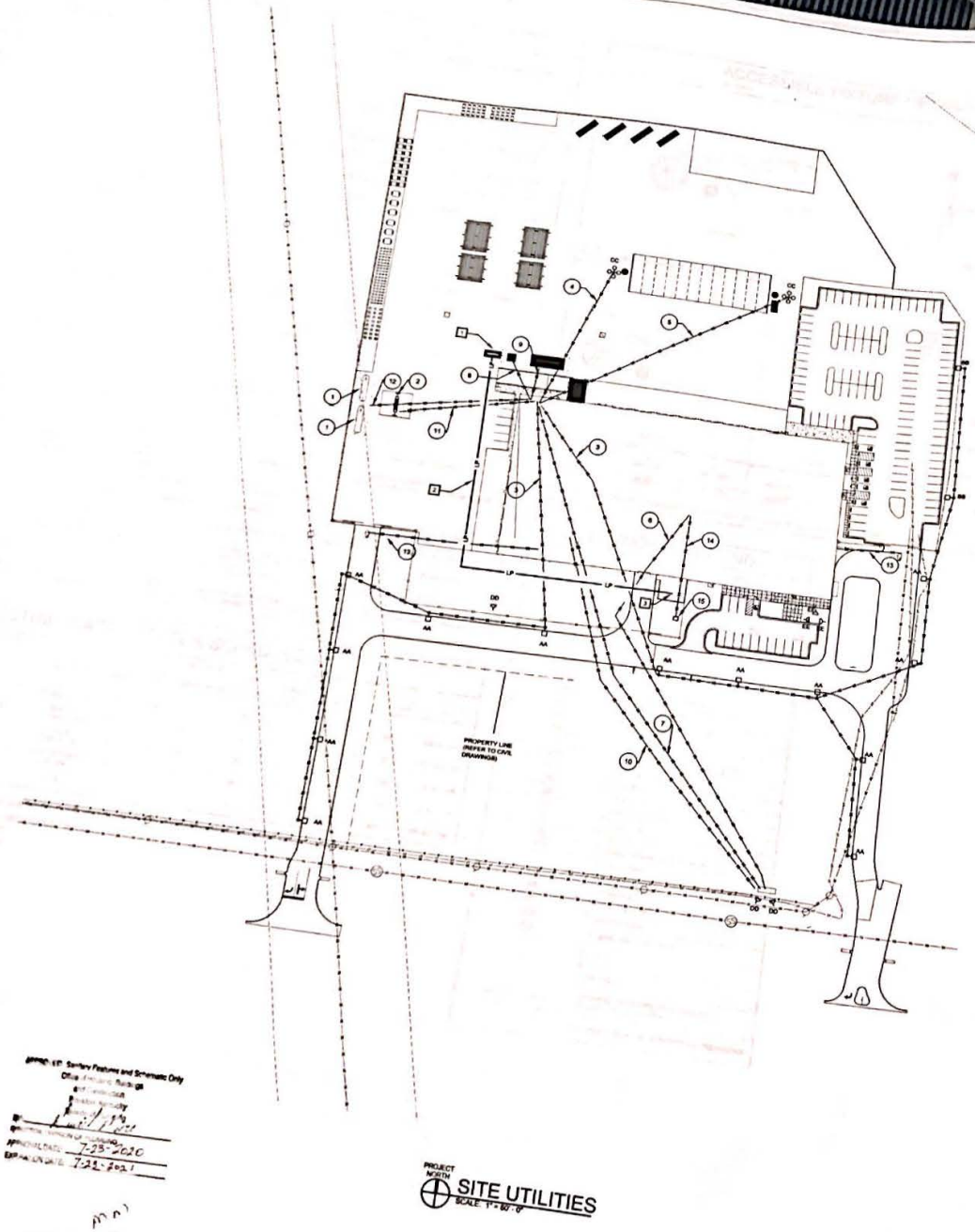
NAME

ENV. Manager

TITLE

APPROVED BY (COUNTY OR DISTRICT HEALTH DEPARTMENT) DATE

THIS AREA FOR OFFICE USE ONLY



PROJECT NORTH

SITE UTILITIES
SCALE: 1" = 60'-0"

ELECTRICAL CONSTRUCTION TAG NOTES

(APPLIES TO THIS DRAWING ONLY)

#	
1	CONTRACTOR SHALL COORDINATE ALL CONNECTIONS AT FUEL TANKS WITH FUEL TANK EQUIPMENT SUPPLIER. REFER TO DETAIL ON DRAWING U-4.1 FOR ALL CONDUIT REQUIREMENTS AT FUEL TANKS.
2	CONTRACTOR SHALL COORDINATE ALL CONNECTIONS AT FUEL DISPENSERS WITH FUEL TANK EQUIPMENT SUPPLIER. REFER TO DETAIL ON DRAWING U-4.1 FOR ALL CONDUIT REQUIREMENTS AT DISPENSER ISLAND.
3	CONTRACTOR SHALL ROUTE (1) 1 1/4" CONDUIT WITH PULL STRING UNDERGROUND FROM PANEL LOCATED IN MECHANICAL ROOM TO FUTURE LIGHT POLE 8 TO BE INSTALLED BY OWNER. REFER TO DRAWING E1.4 FOR LOCATION OF PANEL. CONTRACTOR SHALL TURN UP CONDUITS 18 INCHES ABOVE GRADE AND CAP FOR FUTURE USE AT EACH POLE AS INDICATED ON DRAWINGS.
4	CONTRACTOR SHALL ROUTE (1) 1/2" CONDUIT WITH (3) #12 THWN CONDUCTORS UNDERGROUND FROM 480/277 VOLT PANEL LOCATED IN MECHANICAL ROOM TO HIGH MAST LIGHT POLE TO BE INSTALLED. REFER TO DRAWING E1.4 FOR LOCATION OF PANEL.
5	CONTRACTOR SHALL ROUTE (1) 3/4" CONDUIT WITH (1) #6 THWN CONDUCTORS UNDERGROUND FROM 480/277 VOLT PANEL LOCATED IN MECHANICAL ROOM TO HIGH MAST LIGHT POLE TO BE INSTALLED. REFER TO DRAWING E-1.4 FOR LOCATION OF PANEL.
6	CONTRACTOR SHALL ROUTE (1) 1" CONDUIT WITH PULLSTRING UNDERGROUND FROM RACK LOCATED IN SERVER ROOM 106 TO SIGN TO BE INSTALLED ON SITE. CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING AT SIGN WITH ASSOCIATED CONTRACTOR.
7	CONTRACTOR SHALL ROUTE ONE (1) 2 1/2" CONDUIT WITH PULLSTRING UNDERGROUND FROM 208 VOLT PANEL LOCATED IN MECHANICAL ROOM TO ROADWAY SIGN. CONDUIT SHALL BE CAPPED AND STAKED BELOW GRADE AT SIGN LOCATION FOR FUTURE REQUIREMENTS. REFER TO DRAWING E-1.4 FOR LOCATION OF PANEL IN MECHANICAL ROOM.
8	CONTRACTOR SHALL ROUTE 3 SETS OF 4"C WITH 4#600KCMIL CU UNDERGROUND FROM TRANSFORMER LOCATION TO TRANSFER SWITCH LOCATED IN MECHANICAL ROOM. REFER TO DRAWING E-1.4 FOR LOCATION OF TRANSFER SWITCH IN MECHANICAL ROOM. CONTRACTOR SHALL COORDINATE INSTALLATION LOCATION OF TRANSFORMER PAD WITH UTILITY.
9	CONTRACTOR SHALL ROUTE 3 SETS OF 4"C WITH 4#600KCMIL #3/0 GND UNDERGROUND FROM TRANSFER SWITCH LOCATED IN MECHANICAL ROOM TO PAD MOUNTED GENERATOR LOCATION. REFER TO DRAWING E1.4 FOR LOCATION OF TRANSFER SWITCH IN MECHANICAL ROOM. CONTRACTOR SHALL COORDINATE INSTALLATION LOCATION OF GENERATOR WITH OWNER.
10	CONTRACTOR SHALL ROUTE ONE (1) 3/4" CONDUIT CONTAINING (2) #6 AND (1) #10 THWN CONDUCTORS UNDERGROUND FROM PANEL TO LIGHTING TO BE INSTALLED FOR SIGN.
11	CONTRACTOR SHALL ROUTE (1) 2" CONDUIT WITH PULLSTRING UNDERGROUND FROM PANEL LOCATED IN MECHANICAL ROOM TO FUEL DISPENSING LOCATION FOR FUTURE USE BY FUEL DISPENSING CONTRACTOR. ALL CONDUIT SHALL BE RIGID METAL CONDUIT. CONTRACTOR SHALL FURNISH AND INSTALL SEAL OFFS ON EACH END OF CONDUIT WITHIN THREE (3) FEET ABOVE GRADE AND PROVIDE INTERIOR SEALING MATERIAL FOR FUTURE USE.
12	CONTRACTOR SHALL ROUTE (1) 2" CONDUIT WITH PULLSTRING UNDERGROUND FROM PANEL LOCATED IN MECHANICAL ROOM TO FUEL TANK LOCATION FOR FUTURE USE BY FUEL DISPENSING CONTRACTOR. ALL CONDUIT SHALL BE RIGID METAL CONDUIT. CONTRACTOR SHALL FURNISH AND INSTALL SEAL OFFS ON EACH END OF CONDUIT WITHIN THREE (3) FEET ABOVE GRADE AND PROVIDE INTERIOR SEALING MATERIAL FOR FUTURE USE.
13	CONTRACTOR SHALL INSTALL TWO (1) 1" CONDUITS WITH PULLSTRING FROM ABOVE ACCESSIBLE CEILING TO PEDESTAL FOR GATE CONTROLS. CONTRACTOR SHALL FURNISH AND INSTALL SINGLE POST PEDESTAL WITH DEVICES AT 42" AND 72" PEDESTAL SHALL BE EQUAL TO PEDESTAL CEO #72-9C-DSP WITH LANDO-KY-20X14-E-BLK AND CSP-ABP-1212
14	CONTRACTOR SHALL FURNISH AND INSTALL FOUR (4) 2 1/2" CONDUITS WITH PULLSTRING UNDERGROUND FROM SERVER 182 TO HANDHOLE. REFER TO ELECTRICAL DRAWINGS FOR CONTINUATION.
15	APPROXIMATE LOCATION OF UTILITY COMPANY FURNISHED AND INSTALLED HANDHOLE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL LOCATION AND TERMINATE CONDUITS IN HANDHOLE PER UTILITY COMPANY REQUIREMENTS.

MECHANICAL CONSTRUCTION TAG NOTES

(APPLIES TO THIS DRAWING ONLY)

#	
1	CONTRACTOR SHALL CONNECT LP GAS PIPING TO RELOCATED LP GAS TANK. CONTRACTOR SHALL FURNISH AND INSTALL PRESSURE REGULATOR TO REDUCE GAS PRESSURE FROM TANK PRESSURE TO 5.0 PSIG. TRANSITION TO HDPE PIPING BELOW GRADE AND ROUTE TO GENERATOR.
2	ROUTE 2" HDPE PIPING BELOW GRADE FROM LP GAS TANK TO GENERATOR. COORDINATE ROUTING WITH ALL TRADES. REFER TO SPECIFICATIONS FOR REQUIREMENTS ON PIPING DEPTH AND IDENTIFICATION.
3	LP GAS PIPING TO RISE IN ENCLOSURE FOR GENERATOR. COORDINATE EXACT LOCATION WITH ALL TRADES. SLEEVE PIPING THRU CONCRETE SLAB. INSTALL PIPING TO NOT PROHIBIT SERVICE ACCESS AND CLEARANCE. INSTALL PLUG VALVE, SEDIMENT DRIP LEG, PRESSURE REGULATOR TO REDUCE PRESSURE FROM 5 0PSIG TO 7-11"WC. UNION AND TRANSITION TO UNIT CONNECTION SIZE.

SITE UTILITY NOTES

1. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE PRIOR TO BIDDING IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS. ANY DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE BID DATE.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE KENTUCKY BUILDING CODE, KENTUCKY STATE PLUMBING CODE, NATIONAL ELECTRIC CODE AND OTHER LOCAL, STATE AND NATIONAL BUILDING CODES THAT APPLY.
3. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL APPLICABLE PERMITS AND UTILITY COMPANY FEES.
4. NEW CONNECTIONS TO UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
5. THESE PLANS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE AND GENERAL LOCATION OF THE WORK. CONTRACTOR SHALL INSTALL WORK THROUGH COORDINATION WITH OTHER TRADES AND TO SUIT FIELD CONDITIONS.
6. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS AND LOCATIONS OF ALL TIE-IN POINTS BEFORE INSTALLING ANY UNDERGROUND PIPING OR CONDUITS.
7. VERIFY ALL DIMENSIONS BEFORE FABRICATION.
8. USE EXTREME CAUTION WHEN EXCAVATING. UNDERGROUND UTILITIES ILLUSTRATED ARE APPROXIMATE AND ARE SHOWN TO ALERT CONTRACTOR TO THEIR PRESENCE. CONTRACTOR MUST LOCATE/VERIFY UTILITIES BY HAND TOOL EXCAVATION.
9. CONTRACTOR SHALL PATCH AND REPAIR ALL WALKS, DRIVES, GRASS, ETC. DAMAGED IN THE COURSE OF CONSTRUCTION. THESE REPAIRS SHALL MATCH EXISTING ALIKE ITEMS IN THE AREA.
10. ALL CONSTRUCTION SHALL COMPLY WITH OSHA AND OTHER APPROPRIATE SAFETY STANDARDS.
11. FURNISH AND INSTALL COMPLETE AND FUNCTIONAL SYSTEMS REGARDLESS OF WHETHER OR NOT ALL ELEMENTS ARE SPECIFICALLY CALLED OUT.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION AND BACKFILL REQUIRED FOR THE INSTALLATION OF THE WORK. PROVIDE STREET PLATES, BARRICADES, WARNING LIGHTS, SHORING, BRACING, DE-WATERING EQUIPMENT, ETC. AS REQUIRED. CONDUCT EXCAVATION SO THAT WALLS, FOOTINGS AND ADJOINING PROPERTY ARE NOT DISTURBED OR INJURED. PROPERLY DISPOSE OF SPOILS OFF-SITE.
13. THE CONTRACTOR SHALL COORDINATE THE ELEVATIONS OF THE DIFFERENT UNDERGROUND PIPING AND CONDUIT SYSTEMS TO INSURE THAT THE ELEVATIONS OF PIPE AND/OR CONDUITS WILL NOT CONFLICT.
14. THE CONTRACTOR SHALL FURNISH AND INSTALL SYSTEM MARKER TAPE ABOVE EACH UNDERGROUND UTILITY SYSTEM.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THE
BASED UPON INFORMATION
AND FIELD

MH-H ARCHITECTS

ARCHITECT:
Mitchell and Hogsback Architects, Inc.
D.B.A. Mitch Architects
2150 Schuetz Road, Suite 200
St. Louis, Missouri, 63146
314.878.3566
www.mha-us.com
Corporate License No.: 0009614
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Mitchell and Hogsback Architects, Inc.

CONSULTANTS:
Civil, Structural & MEP:
Baron Farmer Workman
Engineering & Testing, Inc.
500 S 17th Street
Paducah, KY 42003
270-443-1999
www.bfwengineers.com
Corporate License No.: 0009

MAR ENGINEE

ENTER PROJECT DESCRIPTION HERE:
JACKSON PURCHASE ENERGY

DESCRIPTI
DD SI
BID/I

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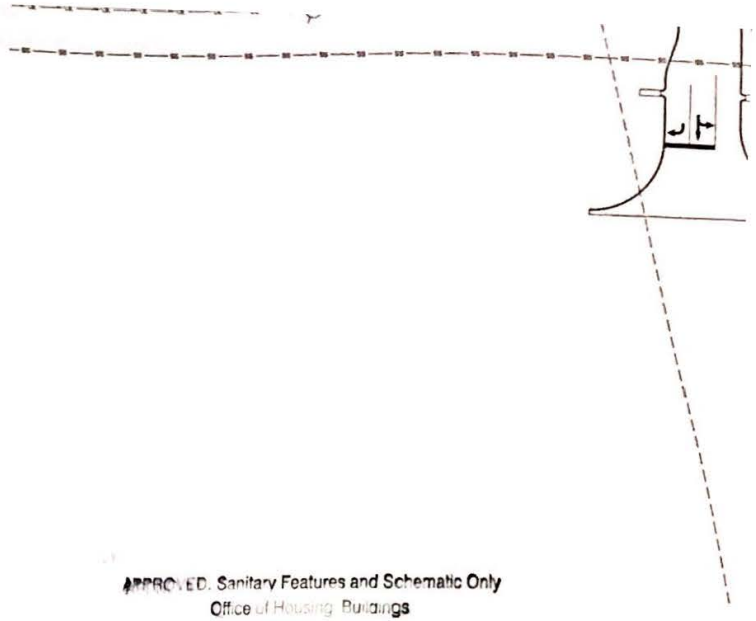


APPROVED. Sanitary Features and Schematic Only
Office of Housing, Buildings
and Construction
Frankfort, Kentucky
Division of Plumbing
BY: _____
DIRECTOR, DIVISION OF PLUMBING
APPROVAL DATE: 7-23-2020
EXPIRATION DATE: 7-23-2021

ALL PLUMBING MUST
CONFORM TO THE KY
STATE PLUMBING CODE

PER CODE

LP015741

MM
73
CP

SPECIALTY ITEMS

MARK	DESCRIPTION	REMARKS
BFP-1	BACKFLOW PREVENTER	WATTS SERIES LF007 MODEL LF007-QT-FDA LEAD FREE 3" DOUBLE CHECK VALVE ASSEMBLY BACKFLOW PREVENTER WITH QUARTER TURN BALL VALVES AND STRAINER ASSEMBLY
BFP-2	BACKFLOW PREVENTER	WATTS SERIES 009 009QT 1" REDUCED PRESSURE ZONE ASSEMBLY WITH BRONZE STRAINER
BFP-3	BACKFLOW PREVENTER	WATTS SERIES 009 009QT 1-1/2" REDUCED PRESSURE ZONE ASSEMBLY WITH BRONZE STRAINER
CAF-1	COMPRESSED AIR FILTER	INGERSOLL RAND MODEL FA1903, 1" CONNECTION, 110 SCFM @ 100 PSI, GRADE H FILTER CAPABLE OF PARTICLE REMOVAL TO 0.01 MICRON INCLUDING WATER AND OIL AEROSOLS. PROVIDE GRADE G FILTER PRIOR TO GRADE H FILTER CAPABLE OF PARTICLE REMOVAL DOWN TO 1.0 MICRON. PROVIDE FILTERS WITH VISUAL INDICATOR FOR CAPACITY & LIFE
CB-1	CATCH BASIN	ZURN Z891-12 STAINLESS STEEL CATCH BASIN, CONSTRUCTED OF 304 STAINLESS STEEL, 4" NO-HUB BOTTOM OUTLET, DUCTILE IRON SLOTTED GRATE SUITABLE FOR CLASS E LOADING, BOTTOM DOME STRAINER, PROVIDE OPENINGS ON SIDE FOR CONNECTION OF TRENCH DRAIN SYSTEM(S). REFER TO DRAWINGS FOR QUANTITIES
CO-1	CLEANOUT	ZURN MODEL # ZN1400 LEVEL TROL ADJUSTABLE FLOOR CLEAN OUT, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE TAPERED THREAD PLUG AND ROUND SCORIATED SECURE NICKEL BRONZE TOP WITH VANDAL-PROOF SCREWS
CCO-1	COMBINATION CLEANOUT/ TEST TEE	ZURN MODEL # Z1446 ADJUSTABLE CLEANOUT WITH SPIGOT CONNECTION FOR CAULKING INTO A HUB, DURA-COATED CAST IRON BODY WITH GAS AND WATER TIGHT BRONZE TAPERED PLUG WITH POLISHED BRONZE TOP
CP-1	CIRCULATING PUMP	BELL AND GOSSETT MODEL # NBF 35 IN-LINE WET ROTOR CIRCULATION PUMP FOR OPEN (POTABLE) WATER SYSTEM WITH LEAD FREE BRONZE BODY. 23 GPM @ 15 FT HD. 270 WATTS, 3300 RPM, 115 VOLT, SINGLE PHASE.
ET-1A ET-1B ET-1C	EXPANSION TANK	AMTROL MODEL ST-6 THERMAL EXPANSION TANK
ET-2	EXPANSION TANK	AMTROL MODEL ST-5 THERMAL EXPANSION TANK
FD-1	FLOOR DRAIN	ZURN MODEL # ZN415-6" TYPE "B" FLOOR DRAIN (ROUND TOP) FLOOR DRAIN WITH 6" DIAMETER NICKEL BRONZE, VANDAL PROOF STRAINER.
FD-2	FLOOR DRAIN	ZURN MODEL # ZN1920 16"x16" FLOOR DRAIN WITH 4" OUTLET, SQUARE NICKEL BRONZE FRAME AND FULL SLOTTED GRATE, CLAMP COLLAR, 1/2" TRAP PRIMER CONNECTION. ALUMINUM ANTI-SPLASH INTERIOR BOTTOM DOME STRAINER.
FWH-1	FREEZE-PROOF WALL HYDRANT	WOODFORD MODEL 70 AUTOMATIC DRAINING WALL HYDRANT WITH LOOSE TEE KEY OPERATION, CHROME FINISH, BRASS VALVE BODY. INSTALL VERTICAL WITH TEE KEY OPERATOR ABOVE HOSE CONNECTION. COORDINATE PLACEMENT WITH METAL BUILDING PANEL RIBS.
FWH-2	FREEZE-PROOF WALL HYDRANT	WOODFORD MODEL 67 AUTOMATIC DRAINING WALL HYDRANT WITH LOOSE TEE KEY OPERATION AND CHROME FINISH
HB-1	HOSE BIBB	WOODFORD MODEL # 24 WALL FAUCET WITH METAL WHEEL HANDLE AND BRASS FINISH. INSTALL HOSE BIBB 18" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
HB-2	HOSE BIBB	CAMLOCK DIRECT ALUMINUM 2 INCH MALE CAMLOCK X 2 INCH MALE NPT, GLOBAL TYPE "P" MALE CAMLOCK (CAM & GROOVE) COUPLER TO 2 INCH MALE NPT THREADS. SUPPLY WITH A 2 INCH QUARTER TURN SHUT-OFF BALL VALVE
GR-1	OPEN RECEPTACLE	4" OPEN RECEPTACLE WITH HUB EXTENDED 1" ABOVE FINISHED FLOOR
OWS-1	OIL / WATER SEPARATOR	ROCKFORD TANKTAPP SYSTEMS MODEL OS-1675, WELDED A36 STEEL OIL WATER SEPARATOR, 500 GPM INTERMITTENT FLOW, 735 GALLON STATIC CAPACITY, 8" FLANGED INLET AND OUTLET, TWO (2) 4" THREADED VENT CONNECTIONS, 3" OIL DRAW OFF CONNECTION, VISIBLE DOUBLE WALL OUTSIDE TRAP SEAL, REMOVABLE FLTER SCREEN, NON-REMOVABLE SEPARATION PLATES, HEAVY DUTY LEAK PROOF GASKET, OPEX SHOP COATING INTERIOR AND BITUMINOUS COATING EXTERIOR, HEAVY DUTY TRAFFIC, 3/4-20 REINFORCED COVER. FURNISH WITH ROCKFORD MODEL ST 71-030-4, 3000 GALLON STORAGE TANK FOR OIL DRAIN-OFF TANK SHALL BE DUAL WALL WITH 30-YEAR WARRANTY. PROVID INTERCONNECTING PIPING BETWEEN SEPARATOR AND TANK. PROVIDE TANK WITH OIL PUMPER CONNECTION.
ST-1	SAND TRAP	ZURN MODEL # Z1187-30 60 GALLON ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL SAND INTERCEPTOR WITH 4" NO-HUB INLET AND UTLET REMOVABLE HEAVY-DUTY GRATE, VANDAL PROOF SCREWS AND A MAXIMUM FLOW OF 20 GPM
TD-1	TRENCH DRAIN	ZURN MODEL Z886-HDG 6" WIDE TRENCH DRAIN SYSTEM WITH HEAVY DUTY GALVANIZED FRAME, MODULAR CHANNEL SECTIONS WITH HDPE, POSITIVE MECHANICAL CONNECTIONS BETWEEN SECTIONS, SELF CLEANING BOTTOM, REBAR CLIPS, 4" NO-HUB END OUTLET, VANDAL PROOF LOCKDOWN FOR GALVANIZED DUCTILE SLOTTED GRATE SUITABLE FOR CLASS E LOADING
TP-1	TRAP PRIMER	PRECISION PLUMBING PRODUCTS MODEL # PR 500 PRIME-RITE TRAP PRIMER WITH DU-4 (DISTRIBUTION UNIT).
TMV-1	THERMOSTATIC MIXING VALVE	POWERS MODEL # LFSM1400 HYDROGUARD XP MILD WATER TEMPERING VALVE, LEAD FREE BRASS BODY, WITH VANDAL RESISTANT LOCKING MECHANISM, ROUGHT BRONZE FINISH
VB-1	VACUUM BREAKER	WATTS 501BQ 1" 25M 1/2" SPILL RESISTANT ATMOSPHERIC VACUUM BREAKER WITH STAINLESS STEEL SPRING LOADED VENT, SPILL RESISTANT DIAPHRAGM, AND ONE PIECE MODULAR CHECK AND FLOAT ASSEMBLY
WB-1	WASHER BOX	GUY GRAY MODEL # WMFSM 2200W RECESSED WASHING MACHINE OUTLET BOX WITH 120V AND 220V ELECTRICAL OUTLETS. FURNISHED WITH 1/2" MIP/SWEAT VALVES AND A 2" THREADED DRAIN FITTING. COORDINATE LOCATION WITH ELECTRICAL CONTRACTOR
WCO-1	WALL CLEAN OUT	ZURN MODEL #Z1446 CLEAN OUT TEE, DURA-COATED CAST IRON BODY, GAS AND WATERTIGHT BRONZE TAPERED THREAD PLUG AND ROUND SMOOTH STAINLESS STEEL ACCESS COVER WITH VANDAL PROOF SCREWS
YCO-1	YARD CLEAN OUT	ZURN MODEL Z1468 ADJUSTABLE CLEANOUT WITH SPIGOT CONNECTION FOR CAULKING INTO HUB, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE PLUG WITH POLISHED BRONZE TOP. SHALL BE 1-UTTH HEAVY DUTY WHERE EXPOSED TO VEHICLE TRAFFIC

ELECTRIC WATER HEATER SCHEDULE

MARK	MFG.	MODEL	TYPE	DIMENSIONS WIDTH / DIAMETER (IN.)	DIMENSIONS HEIGHT (IN.)	SERVICE OR LOCATION	TEMP SETTING (DEG. F)	TEMP RISE (DEG. F)	RECOVERY (GPH)	RECOVERY (GPM)	STORAGE CAPACITY (GALLONS)	ELECTRICAL NUMBER OF ELEMENT	ELECTRICAL KW PER ELEMENT	TOTAL KW	VOLTAGE / PHASE (V/PH)	REMARKS AND ACCESSORIES
WH-1A	LOCHINVAR	KNJ030KD	TANK	23	49.75	VEHICLE STORAGE 188	110	100	19	–	30	2	4.5	9	208 / 1	SEE BELOW
WH-1B	LOCHINVAR	KNJ030KD	TANK	23	49.75	VEHICLE STORAGE 188	110	100	19	–	30	2	4.5	9	208 / 1	SEE BELOW
WH-1C	LOCHINVAR	KNJ030KD	TANK	23	49.75	VEHICLE STORAGE 188	110	100	19	–	30	2	4.5	9	208 / 1	SEE BELOW
WH-2	LOCHINVAR	KNJ030KD	TANK	23	35.75	PAINTS / SECURE TOOL 180	110	100	19	–	30	2	4.5	9	208 / 1	SEE BELOW
WH-3	EEMAX	SP4J09	TANKLESS	6.22	9.87	7LT 185	110	91	–	–	–	–	–	4.1	15	208 / 1	SEE BELOW

REMARKS AND ACCESSORIES

A OTHER EQUAL MANUFACTURERS ARE EEMAX, STIEBEL ELTRON, AND SEUSCO

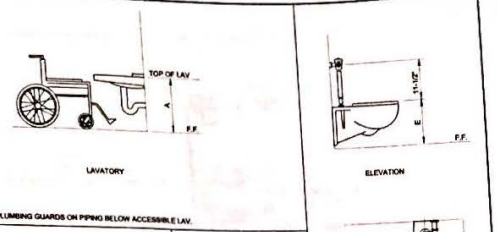
B OTHER EQUAL MANUFACTURERS ARE BRADFORD WHITE, A.O. SMITH, LOCHINVAR,AND STATE.

C SEISMICALLY RESTRAIN WATER HEATER TO ACCEPTABLE SUBSTRATE

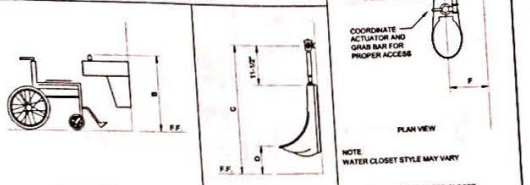
D NOT SIMULTANEOUS OPERATION OF ELECTRICAL HEATING ELEMENTS.

ACCESSIBLE FIXTURE DETAILS

NO SCALE



NOTE:
INSTALL PLUMBING GUARDS ON PIPING BELOW ACCESSIBLE LAV.



AGE GROUP (YEARS OLD)	A (INCHES)	B (INCHES)	C (INCHES)	D (INCHES)	E (INCHES)		F (INCHES)	
					MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
13 AND UP	34 MIN	36 MAX	44 MIN	17 MAX	17	19	16	18

NOTE
INSTALL PLUMBING FIXTURES IN ACCORDANCE WITH ADOPTED EDITION OF ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

PLUMBING LEGEND

SYMBOL	DESCRIPTION
SS	SANITARY SEWER PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RECIRCULATING PIPING
	VENT PIPING
CA	COMPRESSED AIR PIPING
AC	AIR COMPRESSOR
BFP	BACKFLOW PREVENTER
CO	CLEANOUT
CCO	COMBINATION CLEANOUT
CP	CIRCULATION PUMP
ET	THERMAL EXPANSION TANK
FD	FLOOR DRAIN
FS	FLOOR SINK
FWH	FREEZE PROOF WALL HYDRANT
GT	GREASE TRAP
HB	HOSE BIBB
IMB	ICE MAKER BOX
OR	OPEN RECEPTACLE
ST	SAND TRAP
TD	TRENCH DRAIN
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
VTR	VENT THRU ROOF
WB	WASHER BOX
WH	WATER HEATER
YCO	YARD CLEANOUT
A	COMPRESSED AIR DROP
	BALL VALVE
	GAS VALVE
	REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTER
	DOUBLE CHECK VALVE BACKFLOW PREVENTER

PLUMBING NOTES

1 ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE BUILDING CODE, STATE PLUMBING CODE, STATE BOILER CODE, INTERNATIONAL MECHANICAL CODE, AND OTHER LOCAL/STATE/ NATIONAL CODES OR STANDARDS THAT APPLY

2 ACCESSIBLE PLUMBING FIXTURES SHALL BE INSTALLED PER THE STATE BUILDING CODE IN ACCORDANCE WITH THE LATEST EDITION OF ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

3 ALL WETTED PLUMBING ITEMS SHALL COMPLY WITH NSF 372 DRINKING WATER SYSTEMS COMPONENTS - LEAD CONTENT. ALL SUPPLIERS MUST ASSURE COMPLIANCE REGARDLESS OF PRODUCTS SPECIFIED WITHIN THE CONSTRUCTION DOCUMENTS

4 THE CONTRACTOR SHALL ACQUIRE PLUMBING PERMIT(S), COORDINATE ALL INSPECTIONS, AND PAY ALL ASSOCIATED FEES (INCLUDING TAP FEES)

5 EACH CONTRACTOR MUST VISIT THE SITE PRIOR TO BIDDING IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS. ANY DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER NINE (9) DAYS PRIOR TO THE BID DATE

6 THESE PLANS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE AND GENERAL LOCATION OF PLUMBING, PIPING, AND/OR EQUIPMENT. COORDINATE INSTALLATION OF WORK WITH OTHER DRAWINGS AND TRADES. PRECISELY LOCATE ALL PLUMBING FIXTURE LAYOUTS AND HEIGHTS PER ARCHITECTURAL DRAWINGS IN LIEU OF PLUMBING DRAWINGS.

7 COORDINATE NEW CONNECTIONS AND OBTAIN NECESSARY UTILITY COMPANY APPROVALS

8 BE AWARE THAT SEVERAL UTILITIES ARE LOCATED IN THE GROUND BELOW THE PROJECT CONSTRUCTION LIMITS. EXERCISE CAUTION WHEN EXCAVATING. UTILIZE HAND TOOLS TO LOCATE EXISTING UTILITIES PRIOR TO MACHINE EXCAVATION

9 VERIFY ALL INVERT ELEVATIONS AND DIMENSIONS BEFORE FABRICATION AND/OR INSTALLATION. DISCOVER ALL POINT OF CONNECTIONS AND ESTABLISH ELEVATIONS AND PITCH PRIOR TO BEGINNING ANY INSTALLATION

10 OUTDOOR CLEANOUTS SHALL TERMINATE FLUSH WITH GRADE AND BE EMBEDDED IN CONCRETE FINISHED 12"W x 12"L x 8"TK

11 COORDINATE SANITARY SEWER PIPING WITH STRUCTURAL MEMBERS AS REQUIRED. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR RESTRICTIONS

12 ILLUSTRATED HORIZONTAL SANITARY SEWER DRAIN LINES SHALL BE UNDERSTOOD TO BE INSTALLED BENEATH FLOOR. HORIZONTAL VENT PIPING AND WATER PIPING SHALL BE INSTALLED ABOVE CEILINGS, UNLESS NOTED OTHERWISE

13 COORDINATE PLUMBING ROUTING IN CEILING SPACES TO AVOID CONFLICTS WITH FIRE PROTECTION, HVAC, SPECIAL SYSTEMS, LIGHTING, NEC CLEARANCES, ETC. DO NOT INSTALL PIPING DIRECTLY OVER ELECTRICAL PANELS OR SWITCHGEAR

14 CONCEAL ALL PLUMBING PIPING, ETC. IN CEILING AND/OR WALL SPACES (UNLESS NOTED OTHERWISE). PROVIDE ALL NECESSARY ACCESS DOORS IN ACCESSIBLE CEILINGS OR WALLS TO ALLOW ACCESS FOR VALVES, TRAP PRIMERS, ETC

15 SLEEVE ALL PLUMBING, PIPING, VENTS, ETC. THROUGH NEW ROOF, FLOOR, AND/OR WALLS. PIPE SLEEVES SHALL BE SCHEDULE 10 AND GALVANIZED STEEL. SLEEVES ARE NOT REQUIRED FOR CORE DRILLED HOLES.

16 FLASH AND SEAL ALL ROOF, FLOOR, AND WALL PENETRATIONS

17 FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. FIRE STOPPING METHOD AND MATERIALS SHALL BE UL LISTED. FIRE COLLARS WILL BE REQUIRED IF PIPING IS COMBUSTIBLE. CHANGING PIPE MATERIAL TO METAL AT PENETRATION IS ACCEPTABLE

18 PATCH ALL WALLS, FLOORS, CEILINGS, PAVEMENTS, GRADES, ETC. THAT ARE ALTERED BECAUSE OF WORK REQUIRED

19 PLACE MILDEW RESISTANT SILICONE SEALANT AROUND ALL PLUMBING FIXTURES THAT CONTACT CASEWORK, WALLS, FLOORS, OR ANY OTHER HARD SURFACES. COLOR SHALL MATCH ADJACENT SURFACE OR SHALL BE CLEAR.

20 COVER ALL OPENINGS ON WATER CONVEYANCE ITEMS (PIPING, COMPONENTS, AND/OR EQUIPMENT), WHETHER STORED OR INSTALLED, TO PREVENT ACCUMULATION OF CONSTRUCTION DEBRIS

21 INSTALL ARRESTORS AT ALL FIXTURE SUPPLIES. ARRESTORS SHALL BE FABRICATED DURING ROUGH-IN WITH TEE, LINE SIZE PIPE (MINIMUM 8" LONG), AND PIPE CAP

22 INSTALL MANUFACTURED HAMMER ARRESTORS ON ALL PIPES SUPPLYING QUICK ACTING VALVES

23 SECURE PLUMBING ROUGH-IN TO BUILDING STRUCTURE TO PROHIBIT MOVEMENT OF FLUSH VALVE ACTUATORS, HOSE BIBBS, WALL HYDRANTS, FIXTURE SUPPLY STOP VALVES, ETC.

24 INSTALL HOSE BIBBS 18" ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE. INSTALL FREEZE PROOF WALL HYDRANTS 18" ABOVE FINISHED GRADE, UNLESS NOTED OTHERWISE.

25 INSTALL DIELECTRIC CONNECTIONS AT ALL DISSIMILAR MATERIAL PIPING JOINTS AND AT SLAB FOR UNDERGROUND PIPE ENTRANCES

26 INSTALL A PRESSURE RELIEF VALVE ON EACH WATER HEATING UNIT AND/OR TANK. ROUTE DISCHARGE LINE PER PLUMBING CODE TO AN ACCEPTABLE DRAIN OR OUTDOORS AS LAST OPTION

27 INSTALL A DRAIN LINE FOR ALL EQUIPMENT (WATER HEATERS, TANKS, ETC.) REQUIRING A DRAIN. THE DRAIN SIZE (AT A MINIMUM) SHALL BE EQUAL TO THE UNIT'S CONNECTION SIZE BUT IN NO CASE SHALL BE LESS THAN 3/4" DIAMETER.

28 INSTALL SUPPLY CHECK VALVES ON COLD AND HOT WATER CONNECTIONS TO THE FOLLOWING FIXTURE TYPES: MOP SINKS, SERVICE SINKS, AND ANY OTHER FIXTURE WHERE CROSSOVER IS POSSIBLE. THESE MAY BE OMITTED IF INTEGRAL CHECK VALVES ARE FURNISHED WITH THE FIXTURE/FAUCET(S)

29 DOMESTIC WATER ISOLATION VALVES SHALL BE ONE PIECE BRONZE BALL TYPE. PLASTIC BODY VALVES ARE NOT ACCEPTABLE.

30 FOR THIS PROJECT, MINIMUM PIPING MATERIALS SHALL BE AS LISTED BELOW. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS
- WATER OUTDOOR: REFER TO CIVIL DRAWINGS
- WATER INDOOR: TYPE L RIGID COPPER PIPE WITH SOLDERED FITTINGS
- WATER INDOOR, UNDER SLAB: PEX TUBING OR ANNEALED COPPER TUBING (NO JOINTS UNDER SLAB)
- SEWER OUTDOOR: REFER TO CIVIL DRAWINGS
- SEWER INDOOR: SCH 40 PVC PIPE WITH DWV FITTINGS OR COPPER DWV PIPING

31 INSULATE COLD WATER PIPING AND HOT WATER (INCLUDING RECIRCULATION) PIPING PER WRITTEN SPECIFICATIONS

32 SEISMICALLY SUPPORT ALL EQUIPMENT, PIPE, PLUMBING, ETC. PER THE STATE BUILDING CODE AND SEISMIC DESIGN CATEGORY D.

33 INSTALL SUPPORT CONNECTIONS PER ROOF FRAMING MANUFACTURER'S REQUIREMENTS WHEN SUSPENDING SYSTEMS FROM PRE-ENGINEERED METAL BUILDINGS

34 PLACE REINFORCED CONCRETE PADS FOR ALL FLOOR AND/OR GRADE MOUNTED EQUIPMENT. CONCRETE SHALL HAVE A DEVELOPED STRENGTH OF 4,000 PSI AT 28 DAYS. CHAMFER ALL EXPOSED EDGES AT 1".
- INDOOR PAD INSTALLATIONS
- A. PAD SHALL BE 4" THICK (MINIMUM) BUT SUITABLE HEIGHT FOR SYSTEM OPERATION AND PROPER DRAINAGE
- B. STEEL REINFORCEMENT SHALL BE 6" WWF, DOWELED TO FLOOR TO PREVENT LATERAL MOVEMENT.
- C. AT A MINIMUM, PAD DIMENSIONS SHALL GENERALLY EXTEND 4" PAST THE OUTER MOST EDGE OF THE UNIT.

35 ALL PLUMBING SUPPLIES TO FIXED-IN-PLACE EQUIPMENT SHALL BE CHROME PLATED TUBING WHERE EXPOSED OR COPPER TUBING WHERE CONCEALED. USED OF FLEXIBLE HOSE CONNECTIONS FOR FIXED EQUIPMENT AND FIXTURES IS NOT ACCEPTABLE.

"NO LEAD" WARNING

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Corporate License No.: 000614

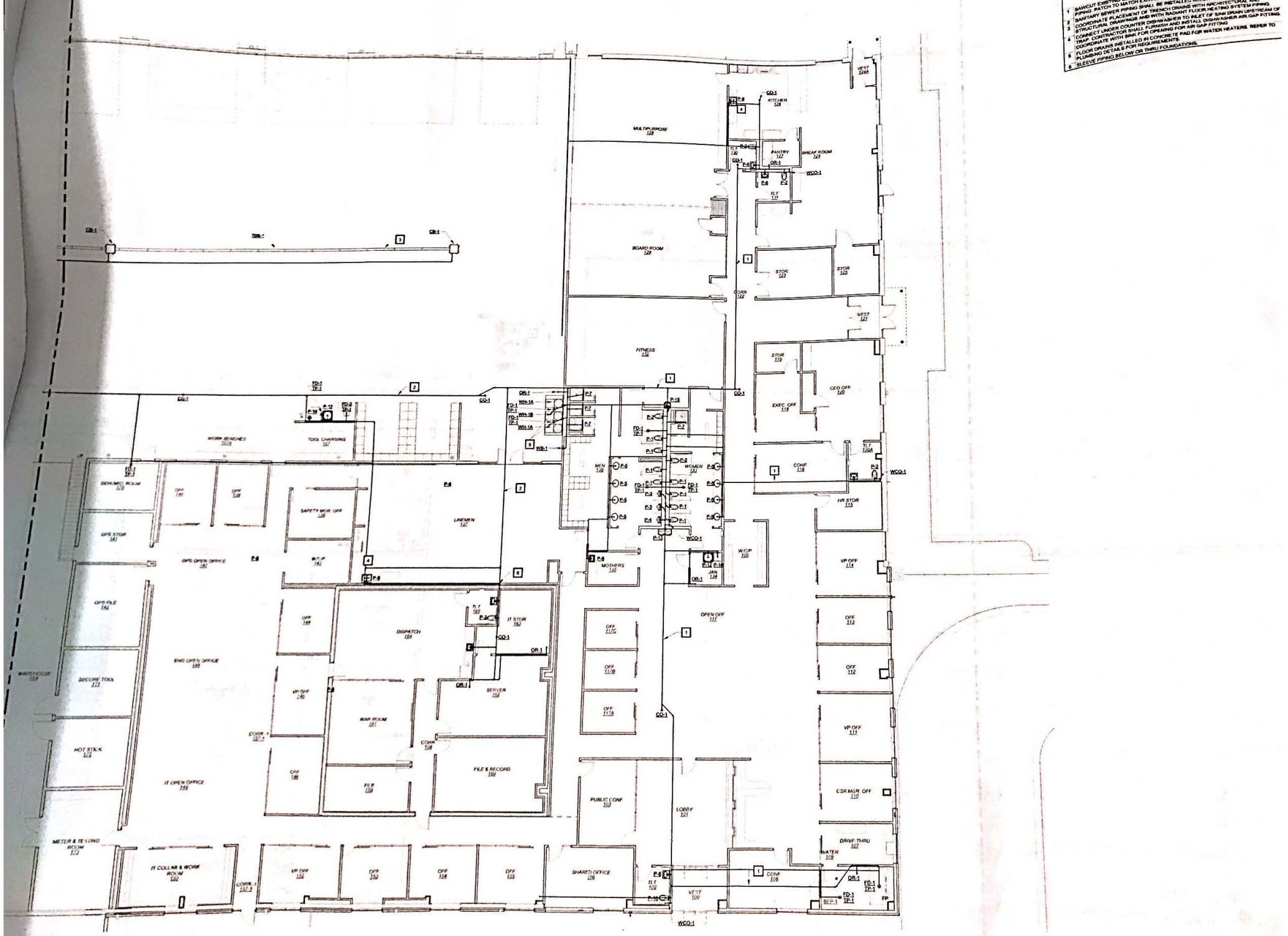
MARCU ENGINEERING

ENTER PROJECT DESCRIPTION HERE:
JACKSON PURCHASE ENERGY
[illegible] W Paducah, KY 42001

DESCRIPTION:
DD SET
BID/PERMIT SE

Issue Date
Job Number
Drawn By
Checked By
Drawing Title
PLUMBING LE
SHEET

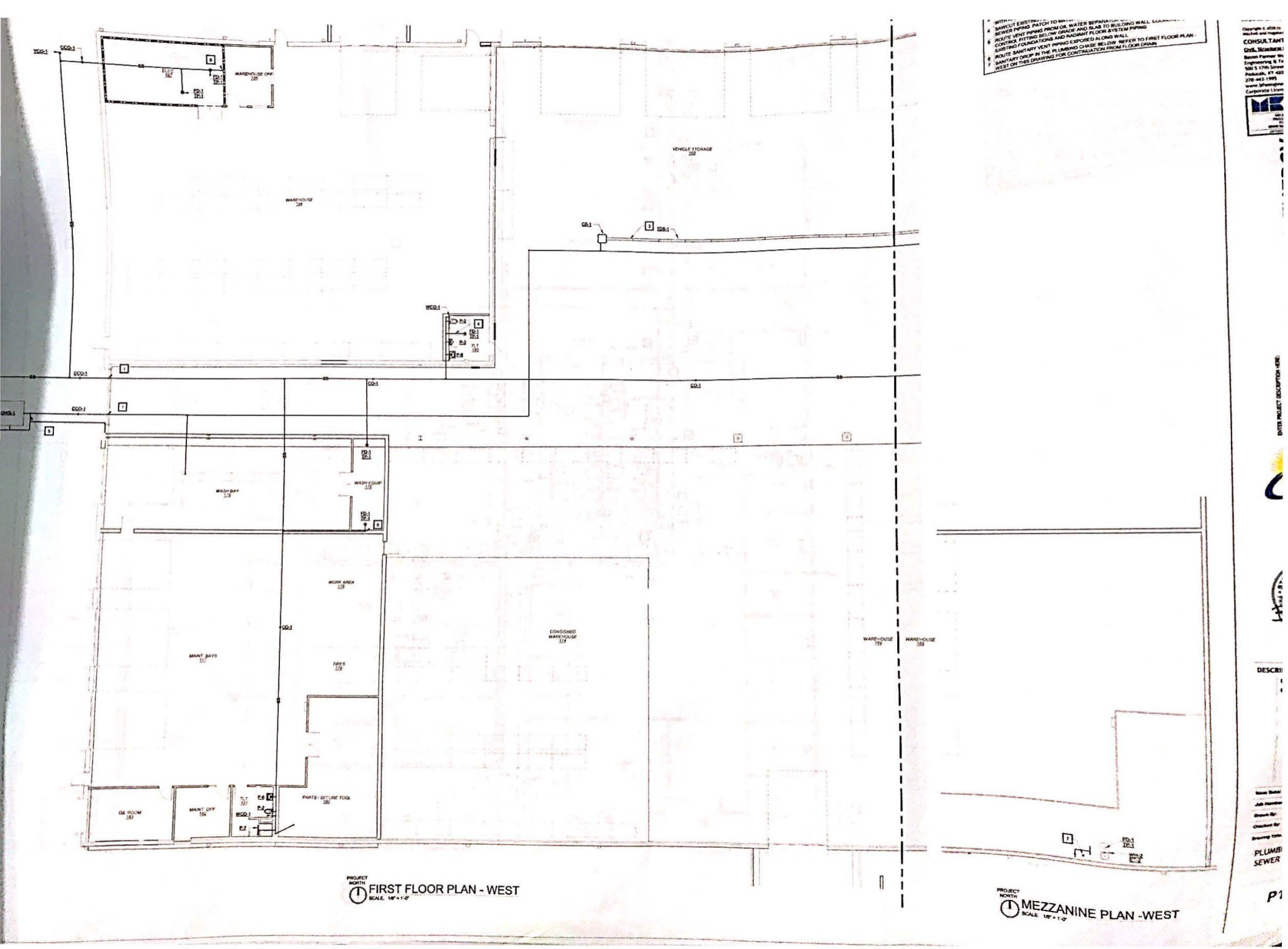
PD.1



PROJECT NORTH

FIRST FLOOR PLAN - EAST

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



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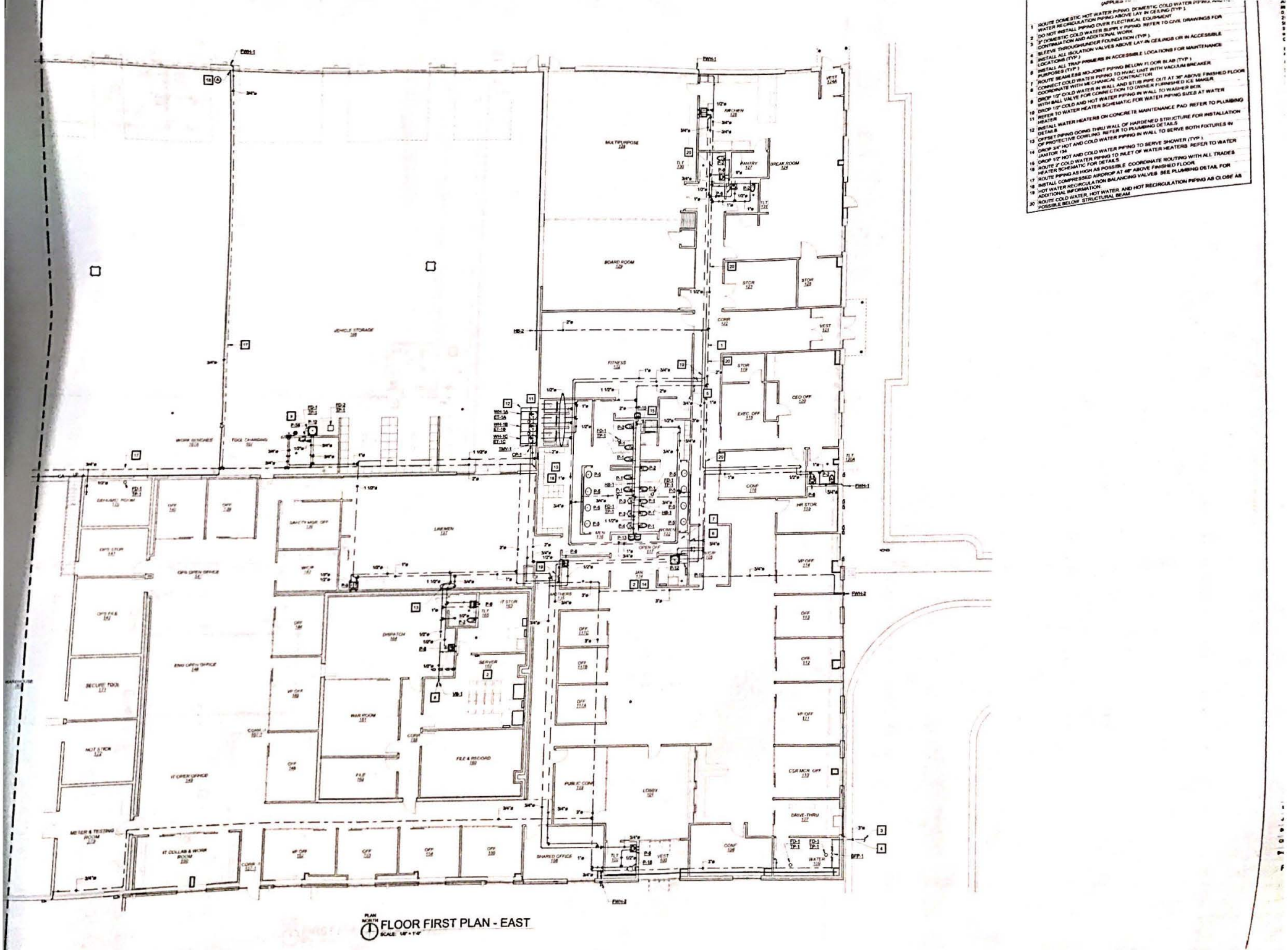


PLAN NORTH
FLOOR FIRST PLAN - EAST
SCALE: 1/8" = 1'-0"

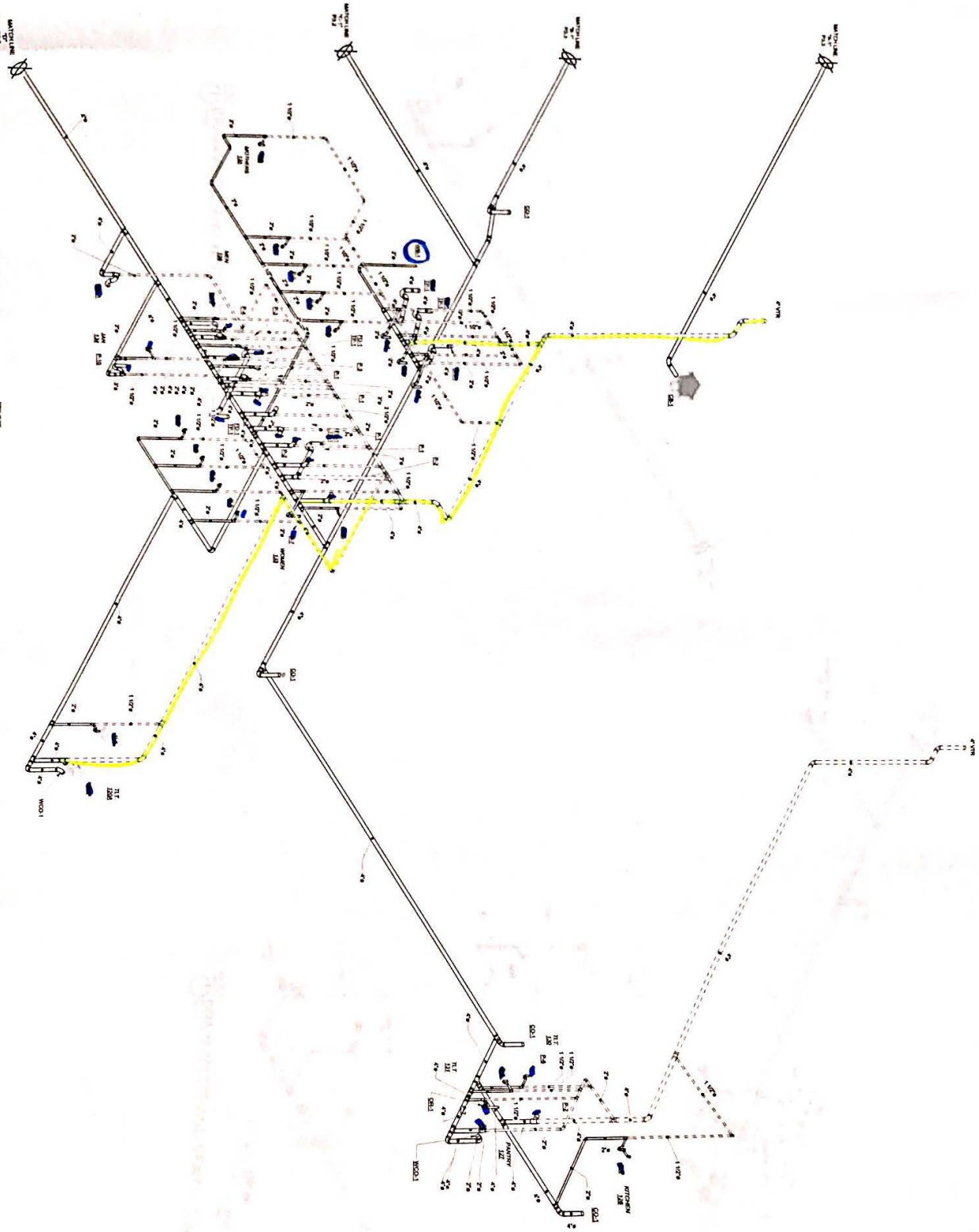
ENTER PROJECT DESCRIPTION HERE.

JACKSON PURCHASE ENERGY

6525 US Highway 60 W, Paducah, KY 42001

MARCUM ENGINEERING, LLC

P1.4



1 DRAIN WASTE AND VENT DIAGRAM

ENTER PROJECT DESCRIPTION HERE:

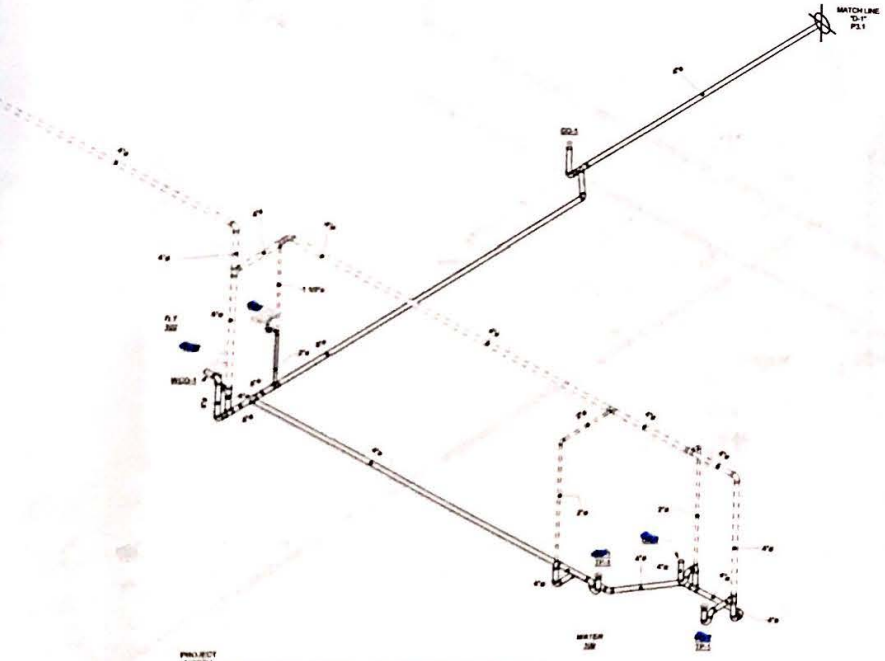
JACKSON PURCHASE ENERGY

6525 US Highway 60 W, Paducah, KY 42001

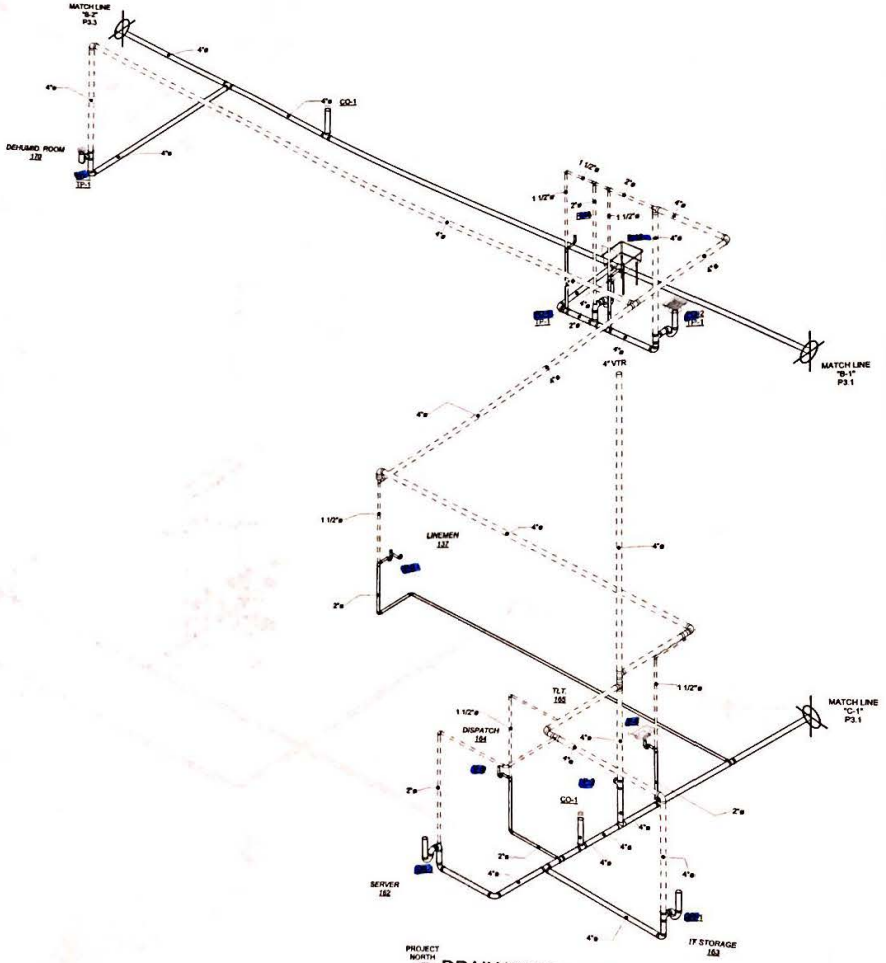
DESCRIPTION:
90 SET
RE/PERMIT SET

DRAIN WASTE VENT DIAGRAM - EAST

P3.1



DRAIN WASTE AND VENT DIAGRAM



DRAIN WASTE AND VENT DIAGRAM

ARCHITECT:
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MARCUM ENGINEERING, LLC
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PADUCAH, KENTUCKY

JPEC

COMMONWEALTH OF KENTUCKY
Bryan C. Atkins
No. 29078
LICENSED PROFESSIONAL ENGINEER

2020-05-27

DESCRIPTION:

DD SET	4/9/2020
BID/PERMIT SET	5/11/2020

Issue Date:
Job Number:
Drawn By:
Checked By:
Drawing Title:

DRAIN WASTE VENT DIAGRAM - EAST

P3.2

1 DRAIN WASTE AND VENT DIAGRAM

ENTER PROJECT DESCRIPTION HERE.

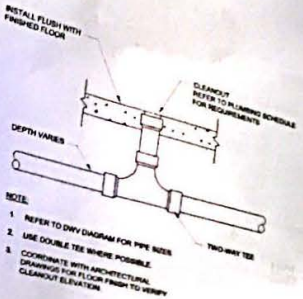
JACKSON PURCHASE ENERGY

6525 US Highway 60 W, Paducah, KY 42001

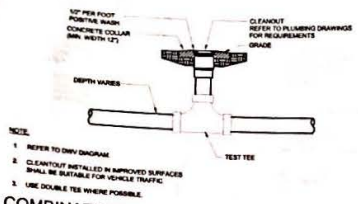
DESCRIPTION:

DRAIN WASTE VENT DIAGRAM - WEST

P3.3



CLEANOUT DETAIL
NO SCALE



COMBINATION TEST TEE AND CLEANOUT DETAIL
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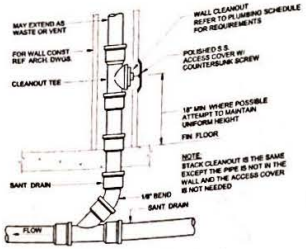

WALL CLEANOUT DETAIL
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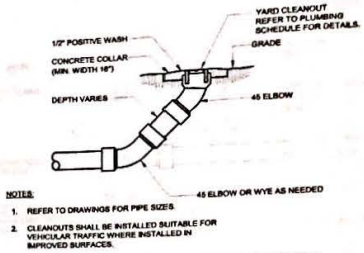
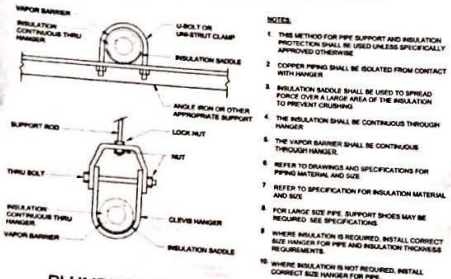


YARD CLEANOUT DETAIL
NO SCALE

PIPE TAKE OFF DETAIL
NO SCALE



PLUMBING PIPE SUPPORT DETAIL
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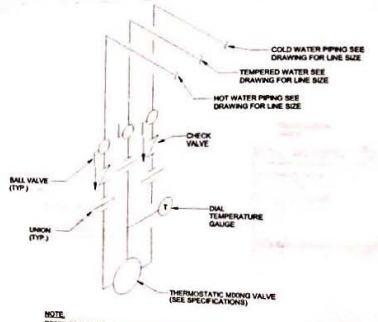

THERMOSTATIC MIXING VALVE PIPING DETAIL
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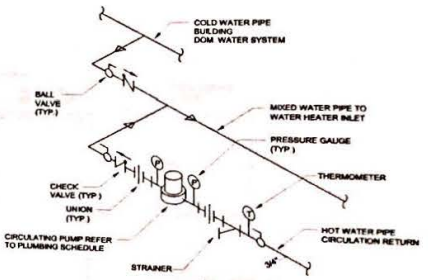

CIRCULATING PUMP PIPING DETAIL
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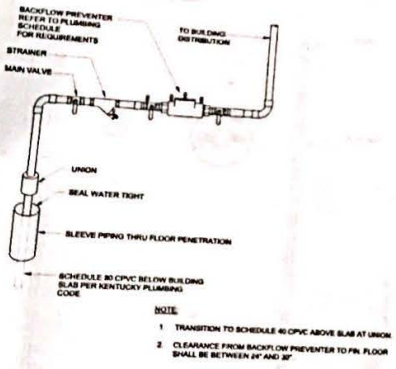
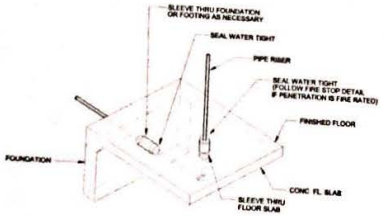


DOMESTIC WATER SERVICE DETAIL (PLASTIC)
NO SCALE



PIPE PENETRATION DETAIL
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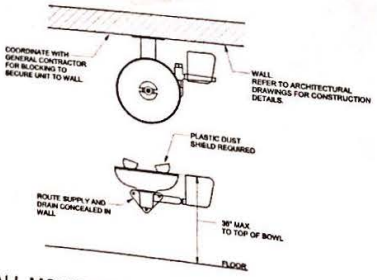
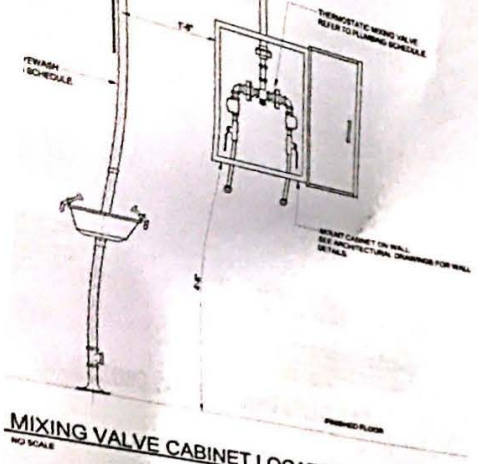
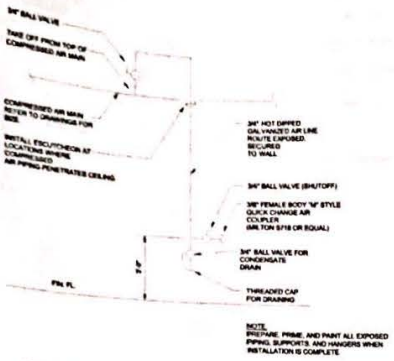


WALL MOUNTED EYE / FACE WASH DETAIL
NO SCALE



MIXING VALVE CABINET LOCATION DETAIL
NO SCALE



COMPRESSED AIR DROP DETAIL
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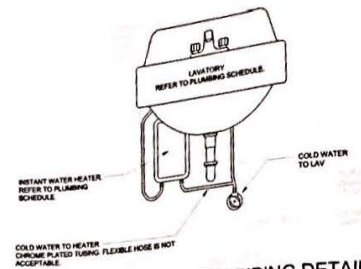
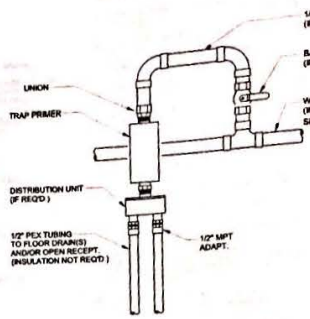
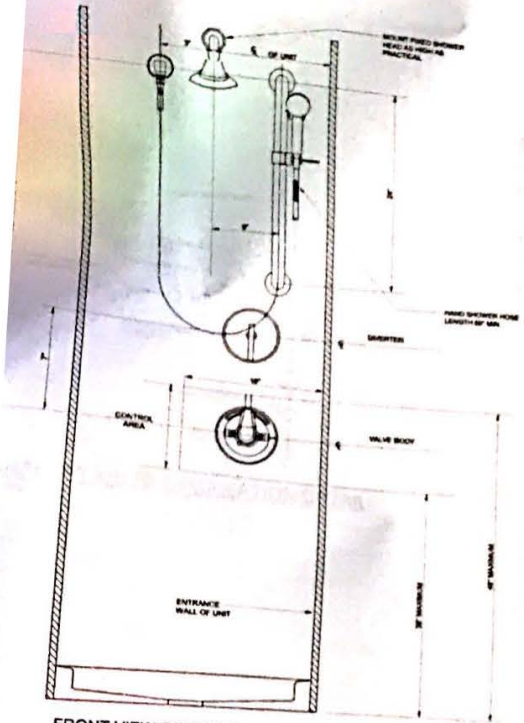


INSTANT WATER HEATER PIPING DETAIL
NO SCALE



TRAP PRIMER DETAIL
NO SCALE

TRAP PRIMER NOTES:
1. TAKE OFF FROM TOP OF PIPE TO LIMIT SOLID PARTICLES ENTERING TRAP PRIMER
2. TAKE OFF SHALL BE MIN. 12" ABOVE FLOOD LEVEL RIM OF FLOOR DRAIN
3. ALWAYS INSTALL IN ACCESSIBLE AREA
4. PRIORITY OF TRAP PRIMER LOCATION (IN ORDER)
   A. MECHANICAL ROOMS
   B. JANITOR CLOSETS/ROOMS
   C. ABOVE ACCESSIBLE CEILINGS WHEN HEATED
   D. IN ACCESSIBLE PLUMBING CHASES
5. TRAP PRIMER SHALL BE ACCESSIBLE FOR MAINTENANCE. IF THE ABOVE LOCATIONS ARE NOT PRACTICAL, LOCATE PRIMER IN AN INTERIOR WALL AND FURNISH AND INSTALL A PAINTABLE STEEL, KEY LOCKED ACCESS DOOR WITH FRAME.



FRONT VIEW OF SHOWER STALL

TAIL FOR A 36" x 36" SHOWER UNIT.

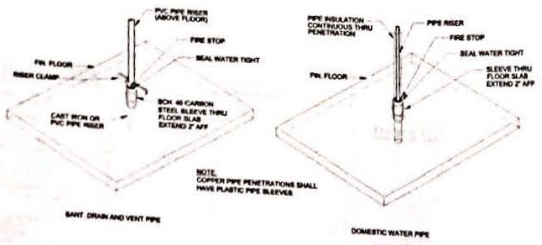
AND HELD SHOWER AND CONTROL AREA SHALL BE LOCATED ON OPPOSITE WALL OF FOLD-UP SEAT.

ER PROJECTS HAVING MULTIPLE SHOWERS, INSTALL ALL SHOWER TRIM PER THIS DETAIL FOR CONSISTENCY IN OUGH-IN HEIGHTS/LOCATIONS.

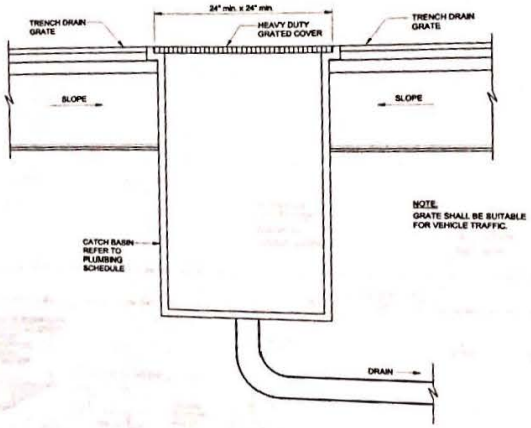
URE COORDINATION OF GRAB BAR AND CONTROL VALVE ROUGH-IN HEIGHTS TO MITIGATE INTERFERENCES.

DEVICES, CONTROLS, GRAB BARS, ETC SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST VERSION OF A117.0

ADA SHOWER ROUGH-IN DETAIL
NO SCALE

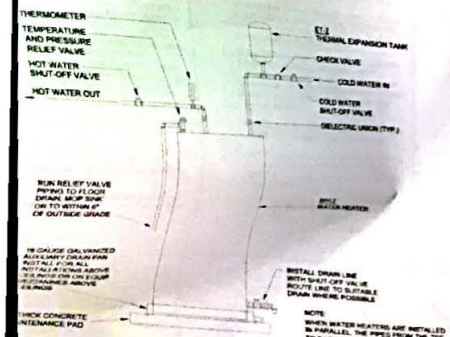


PIPE THRU FLOOR DETAIL
NO SCALE



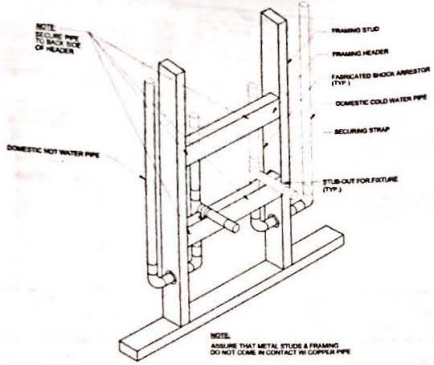
CATCH BASIN DETAIL
NO SCALE

BACKFLOW PREVENTER FOR HVAC CONNECTION
NO SCALE



ELECTRIC WATER HEATER DETAIL

NO SCALE



FIXTURE SUPPLY DETAIL

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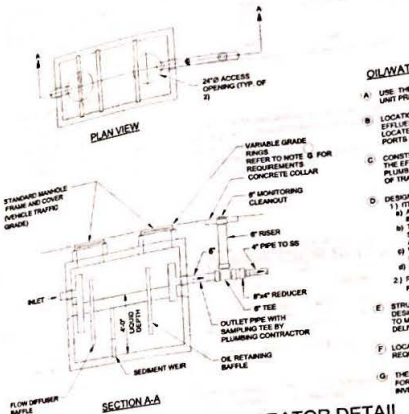


1000 GALLON OIL/WATER SEPARATOR DETAIL

NO SCALE

OIL/WATER SEPARATOR SPECIFICATIONS

A. USE: THE OIL/WATER SEPARATOR IS TO BE USED AS A FLOATING LIQUID AND WATER SEPARATION UNIT PRIOR TO ALLOWING WASTEWATER CONTAINING OILS TO FLOW INTO THE SANITARY SEWER.

B. LOCATION: THE TRAP SHOULD BE LOCATED NEAR THE PERIMETER OF THE STRUCTURE. THE EFFLUENT LINE IS TO BE CONNECTED TO THE PUBLIC SEWER. IN ADDITION, THE TANK MUST BE LOCATED IN A POSITION ACCESSIBLE TO OIL RECOVERY TRUCKS. BOTH CLEANOUT AND OUTLET PORTS MUST BE FITTED WITH A STANDARD TRAFFIC MANHOLE, FRAME AND COVER.

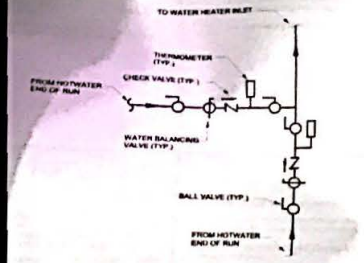
C. CONSTRUCTION: PVC PIPING MAY BE USED FOR THE INFLUENT TO THE OIL/WATER SEPARATOR. THE EFFLUENT PIPE SHALL BE PVC OR OTHER MATERIALS MEETING THE LOCAL AND STATE PLUMBING CODE. THE JOINTS SHALL BE OF WATERTIGHT CONSTRUCTION. JOINTS TO THE OUTSIDE OF TRAP MAY BE FLEXIBLE MATERIAL.

D. DESIGN AND SIZING
1.) ITEMS TO CONSIDER IN THE DESIGN OF AN OIL/WATER SEPARATOR ARE:
a) ACCESSIBILITY OF THE UNIT TO ASSURE CONVENIENCE.
b) EASE OF CLEANING AND REMOVAL OF ACCUMULATED OIL.
c) THE DISTANCE BETWEEN INLET PIPE AND OUTLET PIPE SHALL BE MAXIMIZED IN CLEANING AND REMOVAL OF OIL AND WASTEWATER OCCURS.
d) THE DISTANCE SEPARATION OF OIL AND WASTEWATER OCCURS.
SO THAT ADEQUATE SEPARATION IS MINIMIZED
AND SHORT-CIRCUITING IS MINIMIZED
e) VENTING IS NOT NECESSARY FOR UNITS THAT HAVE PIPING OF SUFFICIENT
f) VENTING IS NOT NECESSARY FOR UNITS THAT HAVE PIPING OF SUFFICIENT SIZE SUCH THAT SIPHONAGE OF THE OUTLET PIPE IS UNLIKELY
g) SIPHONAGE OF DISCHARGE PIPE
h) MONITORING CLEANOUT REQUIRED ON DISCHARGE PIPE
2.) REQUIREMENT: THE PLAN SHOWN HEREON REPRESENTS ONE CONCEPT ONLY OF A TRAP OF REQUIRED CAPACITY OF LIQUID WHEN IN OPERATION

E. STRUCTURAL DESIGN: IT IS THE RESPONSIBILITY OF THE SUPPLIER TO PROVIDE STRUCTURAL DESIGN (CONCRETE THICKNESS AND COMPOSITION WITH APPROPRIATE REINFORCING STEEL) TO MEET THE ANTICIPATED LIVE AND DEAD LOADS. DESIGN SUITABLE FOR TRACTOR/TRAILER DELIVERY TRAFFIC

F. LOCAL REQUIREMENTS: IT IS THE RESPONSIBILITY OF THE SUPPLIER TO SATISFY LOCAL REQUIREMENTS AS THESE OVERRIDE ALL OTHER REQUIREMENTS.

G. THE CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL MANHOLE RINGS AS REQUIRED FOR INVERT ELEVATIONS AND INSTALLING MANHOLE COVER FLUSH WITH FINISHED GRADE.

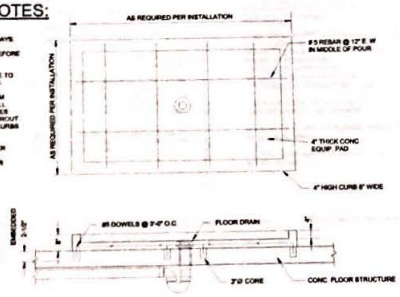


RANCHLINE RECIRCULATION DETAIL

SCALE

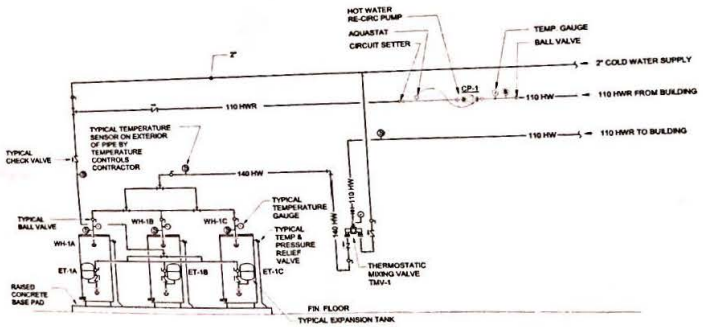
STRUCTURAL NOTES:

1. CONCRETE SHALL OBTAIN A 4,000 PSI COMPRESSIVE STRENGTH AFTER 28 DAYS.
2. FIELD VERIFY ALL MEASUREMENTS BEFORE FABRICATION.
3. 4" THICK (MIN.) CONCRETE PAD. SLOPE TO DRAIN AT 1/8" PER FOOT FROM CURBS.
4. CAST IN # 5 DOWELS AT 5'-0" O.C. FROM EDGE, MAX. 4 'S" DIAMETER CORE DRILL GROUT # 5 DOWELS INTO CORED HOLES WITH NON-SHRINK HIGH-STRENGTH GROUT SPACE DOWELS AT 2'-0" O.C. ALONG CURBS ON FOUR (4) SIDES.
5. COAT THE PAD AND CURB WITH WATER REPELLANT COATING. (REFER ARCHITECTURAL SPECIFICATIONS FOR COATING REQUIREMENTS)



FLOOR DRAIN/PAD FOR WATER HEATERS DETAIL

NO SCALE



DOMESTIC WATER HEATER PIPING SCHEMATIC - AREA 'B'

NO SCALE

ARCHITECT:
CONSULTANTS:
Civil, Structural & MEP:
MARCUM ENGINEERING, LLC

ENTER PROJECT DESCRIPTION HERE:
JACKSON PURCHASE ENERGY
6525 US Highway 60 W, Paducah, KY 42001
PADUCAH - KENTUCKY

JPEC

STATE OF KENTUCKY
Bryan C. Atkins
No. 29078
LICENSED PROFESSIONAL ENGINEER
2020-05-27

DESCRIPTION:
DD SET
BIDPERMIT SET

Issue Date:
Job Number:
Drawn By:
Checked By:
Drawing Title:
PLUMBING DETAILS

P4.3