

DIVISION 15A - PLUMBING

1.1 DESCRIPTION OF THE WORK

- A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
 1. Plumbing fixtures, water heaters, and any other equipment necessary.
 2. Cold and hot water piping and insulation.
 3. DWV piping.
 4. Connection of all equipment; drain, vent, water.
- B. All work under this contract shall be installed in compliance with the latest edition of the following codes and standards insofar as they apply.
 1. The National Electrical Code.
 2. 2018 N.C. Building Code: Plumbing, and all applicable category codes.
 3. American Society of Sanitary Engineering Standard 1010.
 4. All local codes and ordinances.
- C. These codes are minimum standards. If codes require a more stringent method of construction than the specifications require, the codes shall govern.
- D. The Plumbing Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.
- E. Obtain all permits, licenses, inspections, etc., required for the work, and pay for the same.

1.2 INTENT

- A. The intent of these specifications and accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Plumbing Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

- A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.
- B. Locations shown are approximate. The Plumbing Contractor shall refer to the architectural drawings for placement of equipment, fixtures, etc. Where locations are not clear, the Contractor shall obtain the exact locations from the Architect.
- C. Coordinate all exterior piping connections w/Architect, site contractor/plans. Verify manhole elevations and provide backwater valves as required if flood level rims are below next upstream manhole cover elevation. Fixtures with flood level rims above upstream manhole shall not discharge thru bow valve. Notify engineer of backwater valve requirement, any issue prior to bid.

1.4 SHOP DRAWINGS

- A. Shop drawings shall be submitted for plumbing fixtures and for pipe. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 - PRODUCTS

2.1 FIXTURES

- A. Each fixture shall be properly supported from the building structure as required to the end effect that all fixtures and accessories will be held rigidly in place. Water pipes supplying the fixtures must also be held rigidly in place.
- B. Provide loose key angle stops and chrome plated supply pipe water supplies to fixtures.
- C. All exposed piping traps and accessories for fixtures shall be chrome plated. Provide chrome plated escutcheon plates where pipes enter walls.
- D. Provide shutoff valves for all sinks, water heaters, toilets, washing machines, refrigerator ice-maker, exterior hose bibbs and all other plumbing fixtures.
- E. Provide trap primers for all floor drains in areas not served by hose bibbs.

2.2 PIPING

- A. Drain waste: All waste piping shall be Schedule 40 PVC-DWV with the following exceptions: Use cast iron piping in all return air plenums and penetrations of rated walls/floors/ceilings. Review Arch. and Mech. drawings. Use ABS or cast iron piping for drainage of fluid temperature greater than 140 deg. F for a minimum distance of 10'-0".
- B. Hot and cold water piping above grade: Type "L" copper w/solder joints (ASTM-B88), hard drawn with wrought copper fittings (ANSI B16.22) PEX piping with copper fittings may be used with owner/tenant approval, and as allowed per code.
- C. Cold water piping below grade: Type "K" copper (ASTM-B8A) soft drawn.
- D. Hangers: Use pipe hangers where required on 8-foot centers with saddles to avoid crushing insulation.
- E. Solder: 95/5. Lead free.
- F. Unions: Provide unions where indicated on drawings, in long runs of piping (except drainage) and at equipment to provide convenient disassembly. Provide dielectric unions when connecting copper tubing to equipment and piping made of ferrous materials.

2.3 CLEANOUTS

- A. Hex plugs in rough areas: Recessed plugs with cover plates in exposed locations.

2.4 SHOCK ARRESTERS

- A. Provide shock arresters as required by codes, manufacturer's recommendations and accepted industry standards for quality construction. Provide for all quick closing valves.

PART 3 - EXECUTION

3.1 CONNECTIONS

- A. This contract includes complete connection of cold water, hot water, drainage, and vent piping as required. All fittings, valves, accessories, cutoffs, drains, etc., required to complete such connections shall be included.
- B. The connection to water closets shall be made watertight with gasket and wax ring. Floor flanges shall be caulked into position. Plastic caps shall be provided on the tie down bolts, and shall be secured in place by screwing down on threaded brass washers.

- C. Where water pipes connect to exposed chrome plated trim, use proper chrome plated escutcheons.

3.2 SERVICE ACCESS

- A. All valves and accessories shall be insulated so that they can be properly serviced. In no case shall the Plumbing Contractor install equipment or other components in situations that do not meet code requirements or manufacturer's requirements. Provide access doors as required to access valves, etc.

3.3 ROUTING OF PIPING

- A. Coordinate routing of piping with others, line up work true to or at right angle to adjacent surfaces and in a workmanlike manner. Support all interior piping from building structure by means of hanger or inserts to maintain pitch of lines, to prevent vibration, and to secure piping place.

- B. Space pipe hangers 8'-0" on center for one inch and smaller pipe, 4'-0" on center for 1-1/4 inch and larger pipe. Provide expansion loops as required.

- C. Pipe hangers for insulated lines shall have suitable saddles to protect insulation.

3.4 INSULATION

- A. All H/W and C/W piping shall be insulated with a min. of 1" inch elastomeric insulation (R=5.5 min.) in unconditioned areas. See NCSCB-Plumbing Sect. 305 for all protection requirements. All H/W piping of circulating systems shall be insulated with 1" insulation per Sect. C404.4 of the NCSCB 2018 Energy Conservation Code.
- B. Provide pre-fabricated insulation kits for all sink and lavatory exposed drain and supply piping.

3.5 INSPECTIONS AND TESTS

- A. Before being concealed, all water, soil and vent piping shall be tested to determine if they are water- and air-tight.
- B. Prior to placing into service, entire system shall be tested for leaks in strict accordance with state and local codes.

3.6 STERILIZATION OF PIPING

- A. Sterilize the new water piping thoroughly with a solution containing not less than 50 parts per million of available chlorine, using liquid chlorine, or sodium hypochlorite solution, introduced into the system in an approved manner. The sterilizing solution shall remain in the system in an approved manner. The sterilizing solution shall remain in the system for a period of 24 hours. After sterilization, flush the solution from the system with clean water until the residual chlorine content is not greater than 0.2 parts per million, unless otherwise directed.

3.7 SERVICE PRESSURE

- A. Provide approved water-pressure reducing valve (PRV) if service pressure exceeds 80 psi to reduce pressure to 80 psi static or less and as required per NCSCB-Plumbing Sect. 604.8.

3.8 DRAINDOWN

- A. Contractor to provide for complete plumbing system drain down.

3.9 CLEAN UP

- A. During construction, keep the site clear of debris and upon completion, and before final inspection, clean up the premises to remove all evidence of his work. In addition, upon completion of construction, clean, wash, and/or polish all fixtures, equipment and exposed material and leave them bright and clean.

3.10 GUARANTEES

- A. Guarantee all materials and labor included in the plumbing work for a period of one year from date of final acceptance by the Owner.
- B. Any defects in the system which become evident during the guarantee period shall be corrected without cost to the Owner. This shall include the replacing of defective materials where required, and the repair of damage caused by leaking pipes, etc., and damage to building surfaces caused in making repairs.

System No. W-L-1001

March 28, 2003

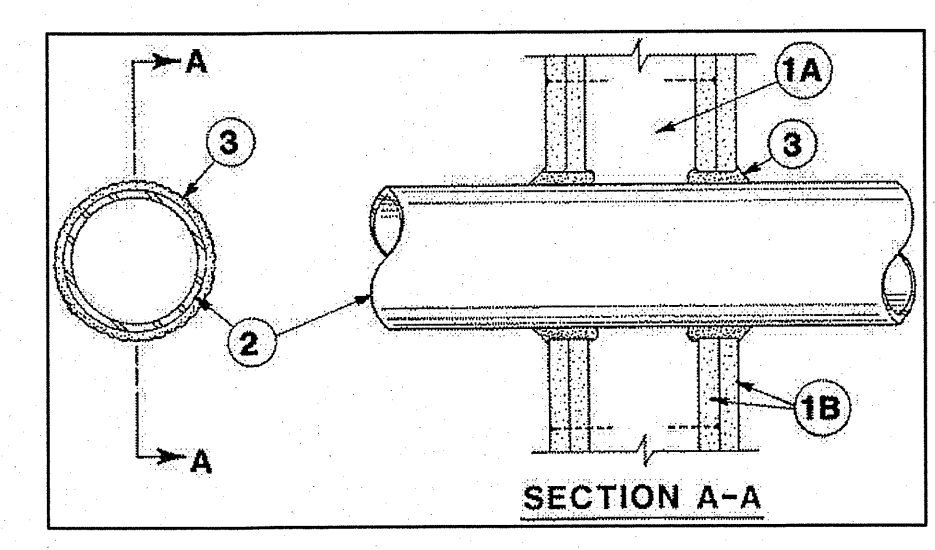
(Formerly System No. 147)

F Ratings -- 1, 2, 3 and 4 Hr (See Items 2 and 3)

T Ratings -- 0, 1, 2, 3, and 4 Hr (See Item 3)

L Rating At Ambient - less than 1 CFM/sq ft

L Rating At 400 F - less than 1 CFM/sq ft



1. Wall Assembly -- The 1,2,3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs -- Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.

- B. Gypsum Board* -- Nom 1/2 or 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in.

- 2. Through-Penetrant-- One metallic pipe, conduit or tubing installed either concentrically or eccentrically with the firestop system. The annular space between pipe, conduit, or tubing and periphery of opening shall be min of 0 in. (point contact) to max 2 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. Steel Pipe -- Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

- B. Iron Pipe -- Nom 24 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

- C. Conduit -- Nom 6 in. diam (or smaller) steel conduit or nom 4 in diam (or smaller) steel electrical metallic tubing.

- D. Copper Tubing -- Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

- E. Copper Pipe -- Nom 6 in. diam (or smaller) Regular (or heavier) copper tubing.

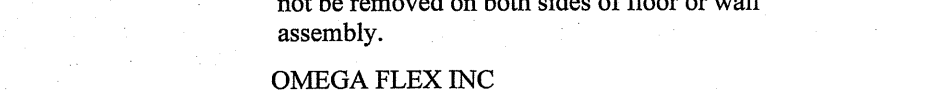
- F. through Penetrating Product* -- Flexible Metal Piping The following types of steel flexible metal gas piping may be used:

- 1. Nom 2 in diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

- 2. Nom 1 in diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

- 3. Nom 1 in diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

- 3. Fill, Void or Cavity Material* -- Caulk -- Min 5/8, 1-1/4, 1-7/8 and 2-1/2 in. thickness for caulk for 1,2,3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. dia bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:



Max Pipe or Conduit Diam in	F RATING Hr	T RATING Hr
1	1 or 2	0+, 1 or 2
1	3 or 4	3 or 4
4	1 or 2	0
6	3 or 4	0
12	1 or 2	0

*When copper pipe is used, T Rating is 0 h.

3M COMPANY-- CP 25WB+

*Bearing the UL Classification Mark

OR APPROVED EQUAL. SUBMIT ALL ITEMS FOR APPROVAL BY TENANT AND ARCHITECT PRIOR TO ORDERING.

ALL OTHER PLUMBING FIXTURES SHOWN ARE PROVIDED BY THE TENANT AND INSTALLED BY THE PLUMBING CONTRACTOR. SEE PLANS FOR NUMBER AND LOCATION. COORDINATE ALL REQUIREMENTS WITH EQUIPMENT SUPPLIER.

SYMBOL LEGEND - PLUMBING

SYMBOL	DESCRIPTION (U.O.N.)
---	WASTE PIPING (W)
----	VENT PIPING (V)
----	COLD WATER PIPING (CW)
----	HOT WATER PIPING (HW)
----	HIGH TEMPERATURE HW PIPING (HTHW) 120 DEG. F
----	MEDIUM TEMPERATURE HW PIPING (MTHW) 110 DEG. F
----	LOW TEMPERATURE HW PIPING (LTHW) 85 DEG. F
○ COFF	CLEANOUT FINISH FLOOR
⊥ WCO/HCO	WALL/HORIZONTAL CLEANOUT
□ COFG	CLEANOUT FINISH GRADE
⊥	DIELECTRIC UNION
⊥	SHUT-OFF VALVE
⊥	VENT THRU ROOF (VTR)
⊥	FREEZE PROOF, HOSE BIBB (FPHB/HB)
A.F.F.	ABOVE FINISHED FLOOR
U.O.N.	UNLESS OTHERWISE NOTED
----	1 HOUR FIRE BARRIER
----	2 HOUR FIRE BARRIER

LOAD SUMMARY - PLUMBING

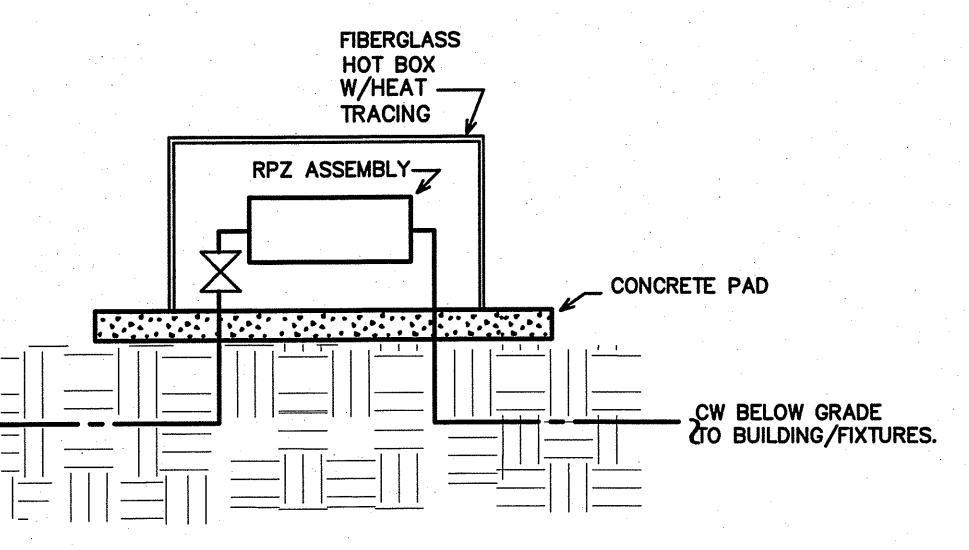
WASTE DEMAND (FU)	WATER DEMAND (FU)	WATER DEMAND (GPM)
35.0	39.5	26.1

FIXTURE SCHEDULE - PLUMBING *

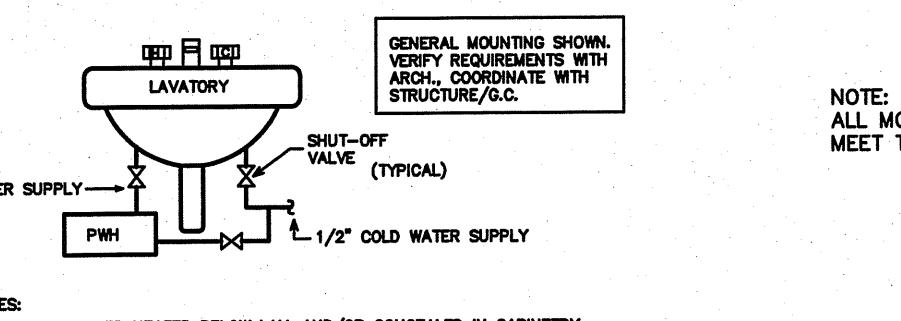
- EW* EYEWASH
BRADLEY BARRIER-FREE WALL MOUNT EYEWASH S19-220AB. COORDINATE EXACT MODEL/MOUNTING LOCATION WITH OWNER. PROVIDE BRADLEY NAVIGATOR EMERGENCY S19-2000 EP8X MIXING VALVE. INSTALL IN ACCESSIBLE LOCATION. SET OUTFLOW TO SPECIFIED LTHW TEMPERATURE (85 DEG. F).
- EWC* HIGH/LOW ELECTRIC WATER COOLER
HALSEY TAYLOR DUAL LEVEL ELECTRIC WATER COOLER. MODEL # HAC8FSBL-Q ADA COMPLIANT. PIPE TO SINGLE DRAIN AND SUPPLY LINE.
- EWH* ELECTRIC WATER HEATER
A.O. SMITH MODEL DEL-30, 30 GALLON, 4,500 WATT, 18 GPH RECOVERY AT 100 DEGREE TEMPERATURE RISE. 3/4" INLET AND OUTLET, 208 V, 1 PH. PROVIDE DRAIN PAN, EXPANSION TANK AND PRESSURE RELIEF VALVE.
- HB* WALL HOSE BIBB
WOODFORD MODEL #24 ANTI-SIPHON HOSE BIBB W/TEE KEY. COORDINATE MOUNTING W/TENANT. PROVIDE STEM LOCK SL-24 IF REQUIRED.
- FPHB* FREEZE PROOF HOSE BIBB
WOODFORD MODEL #19, FREEZE PROOF HOSE BIBB WITH BACKFLOW PREVENTER. COORDINATE MOUNTING W/TENANT. PROVIDE TEE KEY OR LOCK SL-17 IF REQUIRED. VERIFY MOUNTING LOCATION, COORDINATE STEM LENGTH PER WALL THICKNESS.
- IWH* INSTANTANEOUS (POINT OF USE) ELECTRIC WATER HEATER
EBAK TANKLESS WATER HEATER #EX3512T-ML, 120 V, 3,500 W, 29.2 A, 49 DEGREE TEMPERATURE RISE AT 0.5 GPM. PROVIDE FLEX CONNECTOR BRASS DELTA MODEL ML MODEL IS FACTORY PRESET TO 110 DEG. F MAX. INSTALL UNIT BELOW SINK/LAV.
- LAV* LAVATORY (WALL MOUNT)
KOHLER HUDSON LAVATORY, K-2881, VITREOUS CHINA, 4" CENTERS. ADA COMPLIANT. PROVIDE DELTA MODEL 523F-HIGHSET FAUCET, 0.5 GPM MAX WITH GRID STRAINER. PROVIDE P-TRAP AND SHUT-OFF VALVES.
- RPZ* REDUCED PRESSURE BACKFLOW PREVENTER WITH FIBERGLASS ENCLOSURE
WATTS MODEL #LF009M3QT 1" REDUCED PRESSURE BACKFLOW PREVENTER, "LEAD FREE" CONSTRUCTION. PROVIDE WATTSBOX WB-1 INSULATED ENCLOSURE WITH SOW HEATER ON CONCRETE PAD. INSTALL PAD PER UNIT REQUIREMENTS, COORDINATE PAD, HEATER CIRCUITING W/G.C.
- SI* COUNTER SINK
ELKAY LR2521 SINGLE BASIN STAINLESS STEEL SINK (MODEL LRAD2521 IF ADA COMPLIANCE REQUIRED), 18 GA., SELF-RIMMING, FURNISHED WITH THREE FAUCET HOLES AND CENTER DRAIN. PROVIDE ELKAY COMMERCIAL FAUCET MODEL LK1010A02L2 WITH TWO LEVER HANDLES, CHROME PLATED BRASS P-TRAP AND SHUT-OFF VALVES. COORDINATE EXACT UNIT WITH OWNER AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETY PRIOR TO ORDERING.
- US* UTILITY SINK
FLORESTONE MODEL FM-1, FLOOR MOUNTED SINK TO COME WITH A HEAVY DUTY MOLDED LEGS, WITH 1 1/2" DRAIN OPENING, 20 GALLON CAPACITY. PROVIDE FAUCET, P-TRAP, AND SHUT-OFF VALVES.
- VB* ICE MAKER VALVE BOX
OATEY VALVE BOX WITH 3/8" BRONZE SHUT-OFF VALVE. FLUSH TO WALL.
- WC* WATER CLOSET (FLUSH TANK)
KOHLER HIGHLINE WATER CLOSET, K-3979, ADA COMPLIANT 1.6 GPF. PROVIDE WITH K-4731 ADA SEAT, K-7637 SUPPLY AND STOP, WAX SEAL, CROSET BOLT KIT. PROVIDE MODEL WITH FLUSH CONTROL ON SIDE OPPOSITE GRAB BAR. USE KOHLER MELLWORTH #K-3978 WHERE ADA COMPLIANCE MODEL NOT REQUIRED.
- YH* FREEZE PROOF YARD HYDRANT
WOODFORD MODEL #Y34, FREEZELESS YARD HYDRANT WITH 3/4" INLET. VERIFY BURY DEPTH REQUIREMENT, COORDINATE LOCATION WITH OWNER/SITE. VERIFY FROST LINE DEPTH FOR DRAIN HOLE DEPTH/INSTALL REQUIREMENT.

GENERAL NOTES - PLUMBING

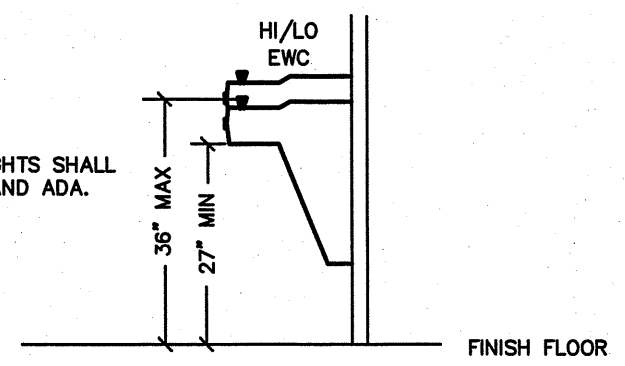
- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
- 2. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN. THE PLUMBING CONTRACTOR (PC) SHALL COORDINATE ALL OF HIS WORK WITH THE GENERAL CONTRACTOR (GC).
- 3. THE PLUMBING PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION AND ALL DISCREPANCIES OR INTERFERENCES BROUGHT TO THE ENGINEERS ATTENTION.
- 4. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. THE PC SHALL PROVIDE ALL MISC. ITEMS NEEDED FOR A COMPLETE SYSTEM REGARDLESS IF NOTED ON THE DRAWINGS OR NOT. FOR DIMENSIONS REFER TO ARCHITECTURAL PLANS.
- 5. THE GC SHALL PROVIDE ALL WALL, FLOOR AND ROOF OPENINGS OF THE SIZE AND LOCATION REQUIRED BY THE PC AND SHALL BE RESPONSIBLE FOR PAINTING AND FLOOR FINISHES. THE PC SHALL PROPERLY SEAL ALL PENETRATIONS AND PROVIDE ESCUTCHEON PLATES AT ALL FINISHED LOCATIONS.
- 6. ALL NEW WATER PIPING SHALL BE INSTALLED TIGHT TO STRUCTURE, ADEQUATELY SUPPORTED AND PROTECTED AND PROPERLY PITCHED TO ALLOW TOTAL DRAINAGE.
- 7. ALL WATER PIPING SHALL BE HYDROSTATICALLY TESTED FOR 2 - HOURS AT 150 PSIG BEFORE COVERING AND ALL LEAKS CORRECTED. THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE.
- 8. PROVIDE MIN. 18" SHOCK ABSORBERS WITH STOPS ON ALL HOT AND COLD WATER FIXTURE RUNS AS REQUIRED BY CODE.
- 9. VENT LINES SHALL SLOPE UP TO ALL STACKS AND TERMINATE A MIN. OF 12" ABOVE ROOF LINE.
- 10. PROVIDE CUT SHEETS ON ALL PLUMBING FIXTURES FOR ARCHITECT AND OWNER APPROVAL PRIOR TO ORDERING ANY FIXTURES.
- 11. PROVIDE/VERIFY HIGH TEMPERATURE HOT WATER (HTHW) AT 140 DEGREES F (MAX). PROVIDE/VERIFY MEDIUM TEMPERATURE HOT WATER (MTHW) AT 110 DEGREES F (MAX). PROVIDE/VERIFY LOW TEMPERATURE HOT WATER (LTHW) AT 85 DEGREES F (MAX). VERIFY MTHW FROM ALL LAVATORY FAUCETS. PROVIDE THERMOSTATIC MIXING VALVES (TMV) AS REQUIRED. VERIFY LTHW FROM EYEWASH (TMV INCLUDED W/UNIT). PROVIDE ASSE 1070 THERMOSTATIC MIXING VALVE (TMV) WHERE REQUIRED, ASSE 1017 TMV WHERE REQUIRED, AND PER CODE WHETHER OR NOT SHOWN ON PLANS.
- 12. PROVIDE CLEANOUTS AS REQUIRED BY CODE. NOT MORE THAN 100 FEET FOR 4" DRAIN.
- 13. PROPERLY SEAL ALL PIPING PENETRATIONS PER APPLICABLE PENETRATION SYSTEM DETAIL (THIS SHEET) THROUGH FIRE BARRIER WALLS/FLOORS/CEILINGS. PROVIDE CAST IRON PIPING FOR ALL DWV PIPING THROUGH FIRE BARRIERS.



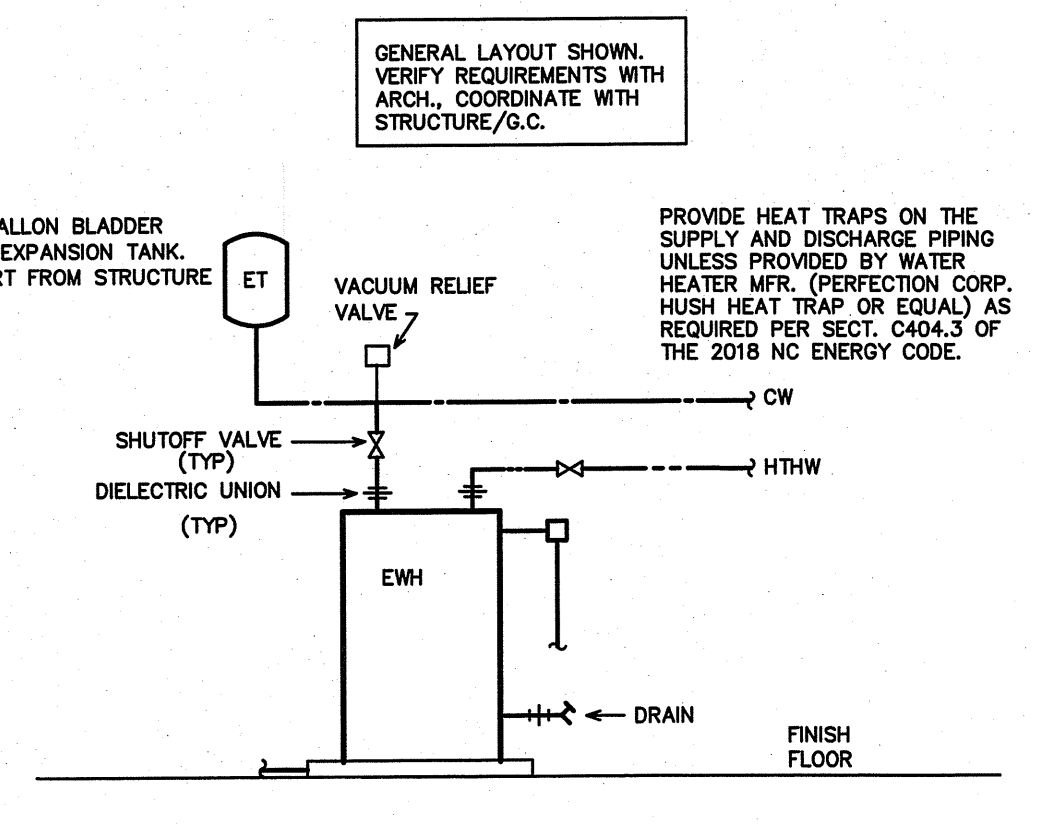
1 RPZ/HOT BOX DETAIL
SCALE: NOT TO SCALE



2 PWH DETAIL
SCALE: NOT TO SCALE



3 EWC DETAIL
SCALE: NOT TO SCALE



4 EWH DETAIL
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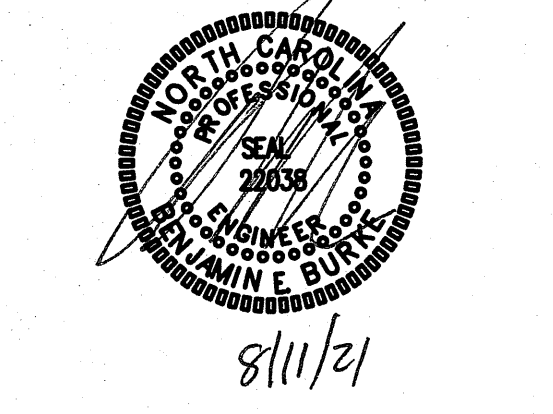


5 PENETRATION DETAIL
SCALE: NOT TO SCALE

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PROJECT TITLE
POWERMASTER ELECTRIC

311 JARCO DRIVE
FUQUAY-VARINA, NORTH CAROLINA

PROJECT NO.
2019

DRAWING TITLE
PLUMBING SPECIFICATIONS

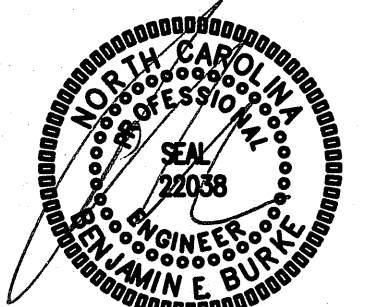
P1

PLOT DATE **8/6/2021**

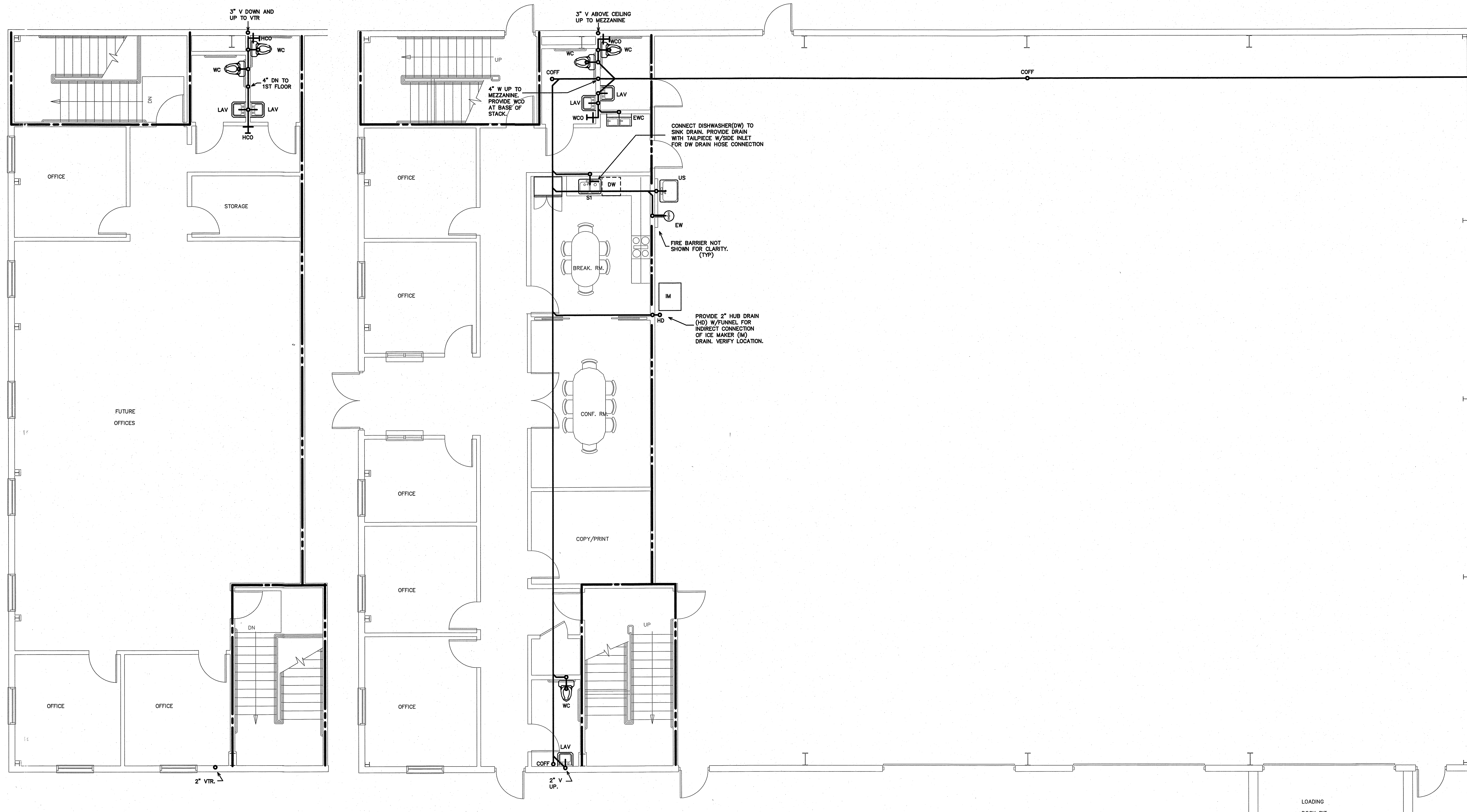
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ENGINEER

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8/11/21



EXTEND TO SEPTIC
FIELD. COORDINATE
WITH SITE

2 MEZZANINE DRAIN PLAN
SCALE: 3/16" = 1'-0"

1 1ST FLOOR DRAIN PLAN
SCALE: 3/16" = 1'-0"

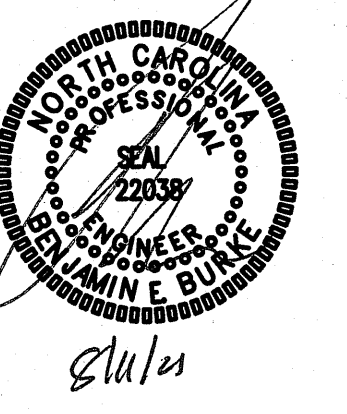
PROJECT TITLE
**POWERMASTER
ELECTRIC**
311 JARCO DRIVE
FUQUAY-VARINA, NORTH CAROLINA

PROJECT NO.
2019
DRAWING TITLE
DWV PLAN

P2

PLOT DATE 8/6/2021

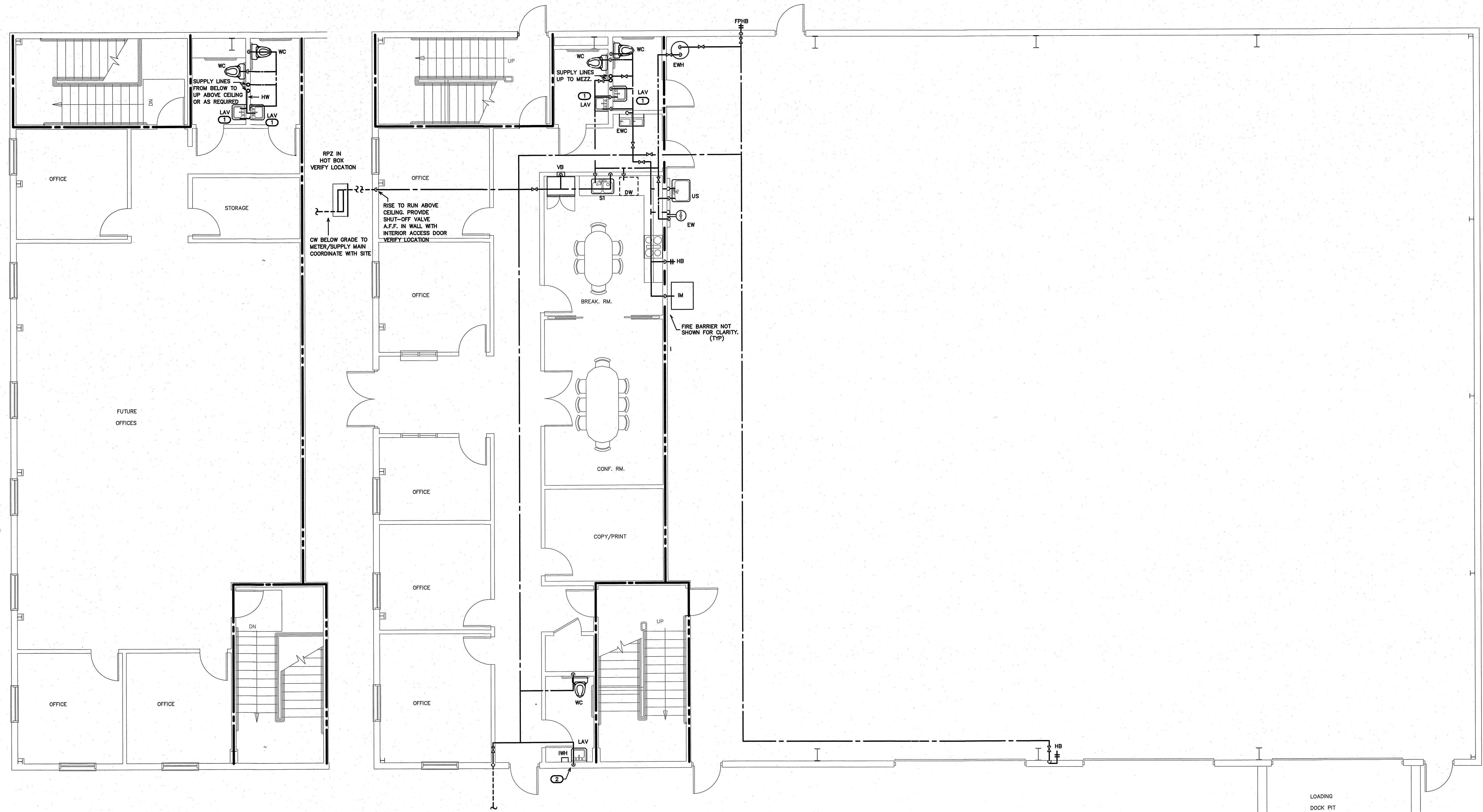
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KEY NOTE FOR SHEET P3

- 1 PROVIDE TMV AT LAVATORY FOR CW AND 110 DEG. F (MAX) LTHW TO FAUCET. LOCATE TMV (NOT SHOWN) IN PROPER MAINTENANCE ACCESSIBLE AREA BELOW FIXTURE, OR AS REQUIRED.
- 2 DROP CW TO LAV. EXTEND TO IWH. PROVIDE LTHW (NOT SHOWN) TO LAV FROM IWH. VERIFY IWH LOCATION.

NOTE:
VERIFY QUANTITY AND MOUNTING LOCATION OF HB, FPHB WITH OWNER. ARCH. VERIFY ROUTING OF ALL SUPPLY LINES (TYP)



2 MEZZANINE SUPPLY PLAN
SCALE: 3/16" = 1'-0"

VERIFY YH LOCATION. COORDINATE WITH ARCH. DRAWING AG.2.

1 1ST FLOOR SUPPLY PLAN
SCALE: 3/16" = 1'-0"

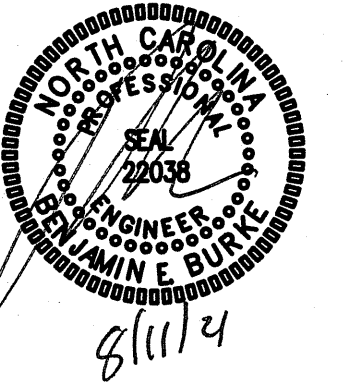
PROJECT TITLE
POWERMASTER ELECTRIC
311 JARCO DRIVE
FUQUAY-VARINA, NORTH CAROLINA

PROJECT NO.
2019
DRAWING TITLE
WATER PLAN

P3

PLOT DATE 8/6/2021

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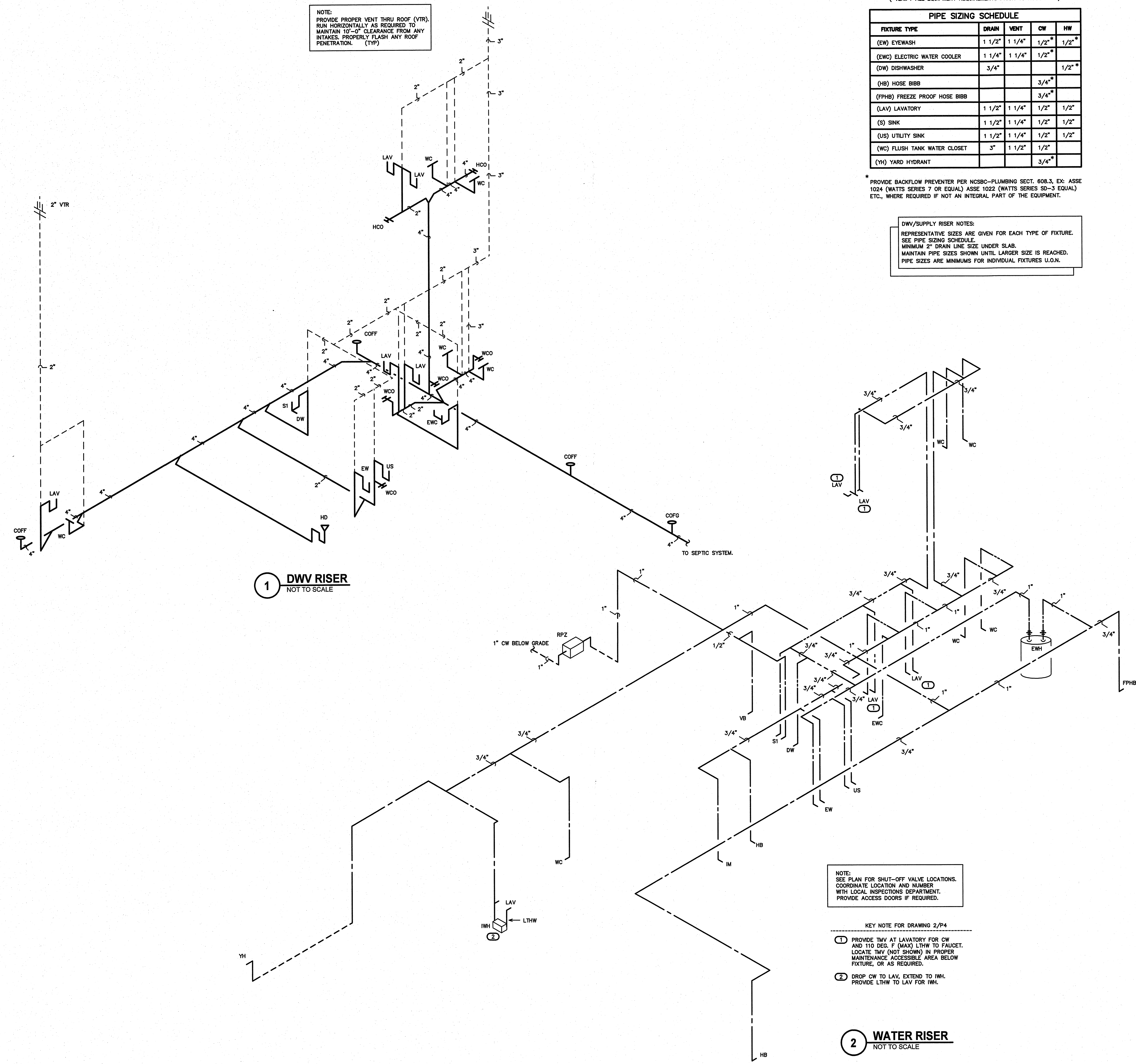
(VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO ROUGH-IN)

PIPE SIZING SCHEDULE				
FIXTURE TYPE	DRAIN	VENT	CW	HW
(EW) EYEWASH	1 1/2"	1 1/4"	1/2"	1/2"
(EWC) ELECTRIC WATER COOLER	1 1/4"	1 1/4"	1/2"	1/2"
(DW) DISHWASHER	3/4"			1/2"
(HB) HOSE BIBB			3/4"	
(FPHB) FREEZE PROOF HOSE BIBB			3/4"	
(LAV) LAVATORY	1 1/2"	1 1/4"	1/2"	1/2"
(S) SINK	1 1/2"	1 1/4"	1/2"	1/2"
(US) UTILITY SINK	1 1/2"	1 1/4"	1/2"	1/2"
(WC) FLUSH TANK WATER CLOSET	3"	1 1/2"	1/2"	
(YH) YARD HYDRANT			3/4"	

* PROVIDE BACKFLOW PREVENTER PER NCSBO-PLUMBING SECT. 608.3, EX. ASSE 1024 (WATTS SERIES 7 OR EQUAL) ASSE 1022 (WATTS SERIES SD-3 EQUAL) ETC., WHERE REQUIRED IF NOT AN INTEGRAL PART OF THE EQUIPMENT.

DWV/SUPPLY RISER NOTES:
REPRESENTATIVE SIZES ARE GIVEN FOR EACH TYPE OF FIXTURE. SEE PIPE SIZING SCHEDULE.
MINIMUM 2" DRAIN LINE SIZE UNDER SLAB.
MAINTAIN PIPE SIZES SHOWN UNTIL LARGER SIZE IS REACHED.
PIPE SIZES ARE MINIMUMS FOR INDIVIDUAL FIXTURES U.O.N.

NOTE:
PROVIDE PROPER VENT THRU ROOF (VTR).
RUN HORIZONTALLY AS REQUIRED TO
MAINTAIN 10"-0" CLEARANCE FROM ANY
INTAKES. PROPERLY FLASH ANY ROOF
PENETRATION. (TYP)



1 DWV RISER
NOT TO SCALE

NOTE:
SEE PLAN FOR SHUT-OFF VALVE LOCATIONS.
COORDINATE LOCATION AND NUMBER
WITH LOCAL INSPECTIONS DEPARTMENT.
PROVIDE ACCESS DOORS IF REQUIRED.

- KEY NOTE FOR DRAWING 2/P4
- 1 PROVIDE TMV AT LAVATORY FOR CW AND 110 DEG. F (MAX) LTHW TO FAUCET. LOCATE TMV (NOT SHOWN) IN PROPER MAINTENANCE ACCESSIBLE AREA BELOW FIXTURE, OR AS REQUIRED.
 - 2 DROP CW TO LAV. EXTEND TO IWH. PROVIDE LTHW TO LAV FOR IWH.

2 WATER RISER
NOT TO SCALE

PROJECT TITLE
**POWERMASTER
ELECTRIC**
311 JARCO DRIVE
FUQUAY-VARINA, NORTH CAROLINA

PROJECT NO.
2019

DRAWING TITLE
RISERS

P4

PLOT DATE 8/6/2021

This original sheet is 24" x 36"; other dimensions indicate it has been altered.
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