

1. SCOPE OF WORK: THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS DESCRIBE SCOPE OF WORK REQUIRED FOR PLUMBING SYSTEMS. LABOR AND MATERIAL SHALL BE PROVIDED AS REQUIRED FOR A COMPLETE, WORKMANLIKE INSTALLATION OF ALL SYSTEMS SHOWN ON DIAGRAMMATIC DRAWINGS AND/OR AS SPECIFIED HEREIN.
2. CONTRACTOR: THE WORD "CONTRACTOR", "PLUMBING CONTRACTOR", AND "P.C." AS USED HEREIN SHALL MEAN THE PLUMBING INSTALLER UNLESS OTHERWISE QUALIFIED.
3. DRAWINGS: DRAWINGS ARE DIAGRAMMATIC AND MAY NOT COMPLETELY DESCRIBE EVERY DETAIL OF THE INSTALLATION. HOWEVER, CONTRACTOR IS RESPONSIBLE FOR FURNISHING COMPLETE SYSTEMS INCLUDING ALL REQUIRED EQUIPMENT AND ACCESSORIES TO OBTAIN FULLY FUNCTIONING PLUMBING SYSTEMS.
4. CODE COMPLIANCE: COMPLY WITH THE LATEST EDITIONS OF THE FOLLOWING STANDARDS AND CODES, INsofar AS THEY APPLY:

2018 NORTH CAROLINA STATE BUILDING CODE.
2018 NORTH CAROLINA PLUMBING CODE.
2018 NORTH CAROLINA FUEL GAS CODE.
LOCAL JURISDICTION REQUIREMENTS.
5. PERMITS AND INSPECTIONS: OBTAIN ALL PERMITS, LICENSES, INSPECTIONS, ETC., REQUIRED FOR THE WORK AND PAY FOR SAME. FURNISH A FINAL CERTIFICATE OF INSPECTION AND APPROVAL FROM THE AUTHORITY HAVING JURISDICTION PRIOR TO ACCEPTANCE OF THE WORK.
6. SUPERVISION: PROVIDE SKILLED SUPERINTENDENTS TO SUPERVISE THE WORK FROM THE BEGINNING TO COMPLETION AND FINAL INSPECTION.
7. PROGRESS OF WORK: PERFORM WORK IN ACCORDANCE WITH SCHEDULE AND REQUIREMENTS OF THE GENERAL CONTRACTOR. UNDER NO CIRCUMSTANCES SHALL THIS CONTRACTOR DELAY THE OVERALL PROJECT SCHEDULE.
8. COORDINATION: COORDINATE PLUMBING WORK WITH THE WORK OF OTHER TRADES. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE UNLESS SPECIFICALLY DIMENSIONED. ARRANGE PLUMBING SO AS NOT TO INTERFERE WITH THE WORK OF OTHER TRADES. VERIFY ACTUAL BUILDING STRUCTURE PRIOR TO PIPING FABRICATION AND ADJUST LAYOUT AS REQUIRED. INCLUDE ALL OFFSETS IN PIPING, FITTINGS, ETC. AS REQUIRED TO PROPERLY INSTALL EQUIPMENT.
9. EQUIPMENT LOCATIONS: DETERMINE EXACT EQUIPMENT AND MATERIALS LOCATIONS TO PROVIDE BEST ARRANGEMENT AND TO FACILITATE PROPER MAINTENANCE AND SERVICING OF EQUIPMENT.
10. LISTING AND LABELING: ALL EQUIPMENT SHALL BE LABELED OR LISTED BY UL OR OTHER APPROVED TESTING AGENCY WHERE REQUIRED.
11. STORAGE SPACE: CONSULT WITH THE GENERAL CONTRACTOR REGARDING JOB SITE STORAGE FOR PLUMBING MATERIALS TO BE INSTALLED UNDER THIS PROJECT. STORAGE SPACE MUST BE SECURED AND CONTRACTOR'S REPRESENTATIVE MUST BE ON JOB BEFORE ANY MATERIAL MAY BE RECEIVED.
12. CLEANUP: REMOVE ALL DEBRIS GENERATED IN THE ACCOMPLISHMENT OF WORK UNDER THIS PROJECT. CLEAN, REPLACE OR REPAIR ALL SURFACES SOILED OR DAMAGED DURING THE COURSE OF THE WORK. REMOVE DEBRIS DAILY SO TO MAINTAIN SAFE WORKING CONDITIONS.
13. RECORD DRAWINGS: MAINTAIN ONE SET OF "RED-LINED" RECORD DRAWINGS ON SITE AT ALL TIMES AND PROVIDE DRAWINGS TO ENGINEER PRIOR TO FINAL INSPECTION.

	EXISTING
AAV	AIR ADMITTANCE VALVE
A.F.F.	ABOVE FINISHED FLOOR
A.R.C.I.	ACID RESISTANT CAST IRON
ADA	AMERICANS WITH DISABILITIES ACT
BRZ	BRONZE
BV	BALL VALVE
BT	BATHTUB
C.I.	CAST IRON
CO	CLEANOUT
CONC.	CONCRETE
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DIA.	DIAMETER
E.C.I.	ENAMELED CAST IRON
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
EWI	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
GA.	GAUGE
GAL.	GALLON
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
GPF	GALLONS PER FLUSH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GWH	GAS-FIRED WATER HEATER
HB	HOSE BIBB
INCL.	INCLUDED
KS	KITCHEN SINK
LAV	LAVATORY
LP	LIQUID PROPANE
MS	MOP SERVICE BASIN
NAT.	NATURAL GAS
NKL.	NICKEL
NON SIMULT.	NON SIMULTANEOUS
O.F.L.C.	OPEN FRONT LESS COVER
OB	OUTLET BOX
OC	ON CENTER
ORDL	OVERFLOW ROOF DRAIN LEADER
PC	PLUMBING CONTRACTOR
PRESS. BAL.	PRESSURE BALANCED
RCVY.	RECOVERY
RDL	ROOF DRAIN LEADER
SA	WATER HAMMER ARRESTOR
SH	SHOWER
SK	SINK
SLD.	SLIDE
SS	STAINLESS STEEL
TDH	TOTAL DYNAMIC HEAD
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VC	VITREOUS CHINA
VR	VANDAL RESISTANT
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT
NOTE: ALL ABBREVIATIONS MAY NOT BE USED IN PROJECT.	

	COMPRESSED AIR PIPING
	CONDENSATE PIPING
	DOMESTIC 140°F WATER PIPING
	DOMESTIC 140°F RETURN WATER PIPING
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER CIRCULATION PIPING
	DOMESTIC HOT WATER PIPING
	FILTERED WATER PIPING
	FIRE SPRINKLER PIPING
	FORCE MAIN PIPING
	NATURAL GAS PIPING
	LP GAS PIPING
	GREASE WASTE PIPING
	MEDICAL COMPRESSED AIR PIPING
	NITROUS OXIDE PIPING
	O2 (OXYGEN) PIPING
	OVERFLOW ROOF DRAIN PIPING
	ROOF DRAIN PIPING
	STORM DRAIN PIPING
	SANITARY VENT PIPING
	SANITARY WASTE PIPING
	TEPID WATER PIPING
	TRAP PRIMER PIPING
	VACUUM PIPING
	NON-POTABLE WATER
	BACKFLOW PREVENTION DEVICE
	BALL VALVE
	CHECK VALVE
	CIRCUIT SETTER (BALANCING VALVE)
	CIRCULATION PUMP
	CONTROL VALVE
	EXTENT OF DEMOLITION
	FLOOR CLEANOUT
	FLOOR DRAIN
	FLOOR SINK
	GAS-REGULATOR VALVE
	GATE VALVE
	GATE VALVE IN RISER
	GRADE CLEANOUT
	HOSE BIBB
	PIPE CAP
	PIPE ELBOW
	PIPE ELBOW DOWN
	PIPE ELBOW UP
	PIPE TEE
	PIPE TEE DOWN
	PIPE TEE UP
	SUMP PUMP
	DEMOLITION KEYED NOTE TAG
	HATCHING INDICATES ITEMS TO BE DEMOLISHED
	NEW WORK KEYED NOTE
	POINT OF CONNECTION - NEW TO EXISTING
	PRESSURE REDUCING VALVE
	SOLENOID VALVE
	THERMOSTATIC MIXING VALVE
	WALL CLEANOUT
	WALL HYDRANT
	WASHING MACHINE BOX
	WATER HAMMER ARRESTOR

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PLUMBING FIXTURE SCHEDULE

DRAWING CODE	FIXTURE		DESCRIPTION	MANUFACTURER	MODEL	ALTERNATE APPROVED MANUFACTURERS	NOTES	PIPE SIZE			
								DCW	DHW	WASTE	VENT
WC1	FLUSH VALVE WATER CLOSET, WALL HUNG, 1.6GPF, ADA	BOWL	ELONGATED, SIPHON JET, V.C., 2-1/8" TRAPWAY; TOP SPUD; AFWALL, MOUNT 17-19"A.F.F.	AMERICAN STANDARD	3352.101	ZURN, CRANE	5	1"	-	4"	2"
		FLUSH VALVE	11.5" HIGH, 1.6GPF, HARDWIRED, SENSOR-ACTIVATED WITH TRUE MECHANICAL OVERRIDE	SLOAN	111-ESS-1.6-TMO-HW	ZURN, AMERICAN STANDARD					
		SEAT	OFLC w/ SELF-SUSTAINING S.S. CHECK HINGE; HEIGHT 17-19" AFF	CHURCH	295SSCT	BEMIS, OLSONITE					
		CARRIER	HORIZONTAL FLOOR MOUNT	ZURN	Z1201-N	J.R. SMITH, WADE					
WC2	FLUSH VALVE WATER CLOSET, WALL HUNG, 1.6GPF	BOWL	ELONGATED, SIPHON JET, V.C., 2-1/8" TRAPWAY; TOP SPUD; AFWALL, MOUNT 17-19"A.F.F.	AMERICAN STANDARD	3352.101	ZURN, CRANE		1"	-	4"	2"
		FLUSH VALVE	11.5" HIGH, 1.6GPF, HARDWIRED, SENSOR-ACTIVATED WITH TRUE MECHANICAL OVERRIDE	SLOAN	111-ESS-1.6-TMO-HW	ZURN, AMERICAN STANDARD					
		SEAT	OFLC w/ SELF-SUSTAINING S.S. CHECK HINGE; HEIGHT 17-19" AFF	CHURCH	295SSCT	BEMIS, OLSONITE					
		CARRIER	HORIZONTAL FLOOR MOUNT	ZURN	Z1201-N	J.R. SMITH, WADE					
WC3	FLUSH VALVE WATER CLOSET, WALL HUNG, 1.6GPF, ADA	BOWL	ELONGATED, SIPHON JET, V.C., 2-1/8" TRAPWAY; TOP SPUD; AFWALL, MOUNT 17-19"A.F.F.	AMERICAN STANDARD	3352.101	ZURN, CRANE	5	1"	-	4"	2"
		FLUSH VALVE	11.5" HIGH, 1.6GPF, HARDWIRED, SENSOR-ACTIVATED WITH TRUE MECHANICAL OVERRIDE	SLOAN	111-ESS-1.6-TMO-HW	ZURN, AMERICAN STANDARD					
		SEAT	OFLC w/ SELF-SUSTAINING S.S. CHECK HINGE; HEIGHT 17-19" AFF	CHURCH	295SSCT	BEMIS, OLSONITE					
		CARRIER	VERTICAL FLOOR MOUNT	ZURN	Z1201-N	J.R. SMITH, WADE					
UR1	HANDS FREE URINAL WALL HUNG, 0.5GPF, ADA	BOWL	VITREOUS CHINA, WASHOUT, ELONGATED RIM MTD. 17 A.F.F. MAX., 3/4"TOP SPUD	AMERICAN STANDARD	6590.001	ZURN, KOHLER	1	3/4"	-	2"	2"
		FLUSH VALVE	11.5" HIGH, EXPOSED, BATTERY OPERATED, SINGLE FLUSH, POLISHED CHROME	SLOAN	186 ESS-0.5-DFB-HW	ZURN, TEC					
UR2	HANDS FREE URINAL WALL HUNG, 0.5GPF	CARRIER	FLOOR MOUNT, PLATE TYPE SYSTEM WITH BEARING PLATE	ZURN	Z1222	J.R. SMITH, WADE	1	3/4"	-	2"	2"
		FLUSH VALVE	VITREOUS CHINA, WASHOUT, ELONGATED RIM MTD. 21 A.F.F. MAX., 3/4"TOP SPUD	AMERICAN STANDARD	6590.001	ZURN, KOHLER					
LAV1	LAVATORY WALL HUNG, ADA	FLUSH VALVE	11.5" HIGH, EXPOSED, BATTERY OPERATED, SINGLE FLUSH, POLISHED CHROME	SLOAN	186 ESS-0.5-DFB-HW	ZURN, TEC	1,2,6	1/2"	1/2"	2"	2"
		CARRIER	FLOOR MOUNT, PLATE TYPE SYSTEM WITH BEARING PLATE	ZURN	Z1222	J.R. SMITH, WADE					
		BOWL	20"x18"VITREOUS CHINA, SINGLE HOLE DRILL W/OVERFLOW, RIM 34" AFF MAX.	ZURN	Z5341	AMERICAN STANDARD, SLOAN					
		FAUCET	SINGLE HOLE, HANDS FREE SENSOR OPERATED, HARD WIRED, CAST BRASS, WITH ASSE 1070 MIXING VALVE, 1.0 GPM AERATOR	ZURN	6913-XL-TMV-1	DELTA, SLOAN					
LAV2	COUNTERTOP LAVATORY, HANDS-FREE, ADA	DRAIN	CAST BRASS, CHROME PLATED, OPEN GRID STRAINER P.O. PLUG WITH BRASS TAILPIECE	MCGUIRE	155A	DEARBORN, DELTA	2,4,6	1/2"	1/2"	2"	2"
		MIXING VALVE	LEAD FREE THERMOSTATIC MIXING VALVE - SETPOINT = 105°F INSTALL ON HOT WATER SUPPLY, ASSE 1070	INCLUDED	-	-					
		BOWL	20"x17" VITREOUS CHINA, 34"A.F.F., MAX.	AMERICAN STANDARD	0476.028	ZURN, CRANE					
		FAUCET	SINGLE HOLE, HANDS FREE SENSOR OPERATED, HARD WIRED, CAST BRASS, WITH ASSE 1070 MIXING VALVE, 1.0 GPM AERATOR	ZURN	6913-XL-TMV-1	DELTA, SLOAN					
SK1	1-COMPARTMENT COUNTERTOP SINK, ADA	DRAIN	CAST BRASS, CHROME PLATED, OPEN GRID STRAINER P.O. PLUG WITH BRASS TAILPIECE	MCGUIRE	155A	DEARBORN, DELTA	2,3,4,6	1/2"	1/2"	2"	2"
		MIXING VALVE	LEAD FREE THERMOSTATIC MIXING VALVE - SETPOINT = 105°F INSTALL ON HOT WATER SUPPLY, ASSE 1070	INCLUDED	-	-					
		BOWL	23"x18"x5", 18 GA S.S., UNDERMOUNT, 34"A.F.F. MAX.	ELKAY	ELUHAD211550	JUST, ACORN					
		FAUCET	180° SWING SPOUT, SINGLE LEVER HANDLE, 3 HOLE, 1.5GPM, SOLID BRASS CONSTRUCTION, CHROME FINISH	MOEN	8701	DELTA, ZURN					
SH1	JOB-BUILT SHOWER, ADA	DRAIN	STAINLESS STEEL BASKET STRAINER, BRASS TAILPIECE	MCGUIRE	151A	ZURN, MOEN	1/2"	1/2"	2"	2"	2"
		DRAIN	WROUGHT BRASS CHROME PLATED STRAINER, BRASS TAILPIECE	MCGUIRE	152N	ZURN, MOEN					
		ENCLOSURE	JOB-BUILT BY G.C. W/ GRAB BARS per ADA	-	-	-					
		VALVE	PRESS. BALANCED MIXING VALVE, LEVER HANDLE, DIVERTER, HEAD W/ ARM, FLANGE, WALL/HAND SHOWER, FLEXIBLE METAL HOSE, IN-LINE VAC...	MOEN	8342EP15	DELTA, SYMMONS					
SH2	JOB-BUILT SHOWER	DRAIN	4-3/8" DIA. NICKEL BRONZE STRAINER, PVC	SIoux CHIEF	821	SMITH, ZURN	1/2"	1/2"	2"	2"	2"
		ENCLOSURE	JOB-BUILT BY G.C.	-	-	-					
		VALVE	PRESS. BALANCED MIXING VALVE, LEVER HANDLE, HEAD W/ ARM, FLANGE, 1.5GPM	MOEN	8375EP15	DELTA, SYMMONS					
		DRAIN	4-3/8" DIA. NICKEL BRONZE STRAINER, PVC	SIoux CHIEF	821	SMITH, ZURN					
SH3	JOB-BUILT GANG SHOWER	ENCLOSURE	JOB-BUILT BY G.C.	-	-	-	1/2"	1/2"	2"	2"	2"
		VALVE	PRESS. BALANCED MIXING VALVE, LEVER HANDLE, HEAD W/ ARM, FLANGE, 1.5GPM	MOEN	8375EP15	DELTA, SYMMONS					
		ENCLOSURE	JOB-BUILT BY G.C.	-	-	-					
		VALVE	PRESS. BALANCED MIXING VALVE, LEVER HANDLE, HEAD W/ ARM, FLANGE, 1.5GPM	SIoux CHIEF	821	SMITH, ZURN					
MS1	MOP SINK	BASIN	24"x24"x10" MOLDED STONE w/ STAINLESS STEEL DRAIN	MOEN	8124	DELTA, ZURN	1/2"	1/2"	3"	2"	2"
		FAUCET	BRASS CONSTRUCTION, ROUGH CHROME FINISH, INTEGRAL VACUUM BREAKER, INTEGRAL CHECK STOPS, 3/4"THREADED SPOUT, SERVICE STOPS, WALL MOUNT, VANDAL RESISTANT, LEVER HANDLES	MOEN	8198	-					
		ACCESSORIES	STAINLESS STEEL, THREE STATION MOP/BROOM HOLDER	MOEN	8199	DELTA, ZURN					
		ACCESSORIES	STAINLESS STEEL, HOSE BRACKET WITH 30" HEAVY DUTY RUBBER HOSE, GHT THREADED CONNECTION	MOEN	8199	DELTA, ZURN					
DS1	COMBINATION EYE/FACE WASH DRENCH SHOWER	FIXT	GALVANIZED STEEL PIPE WITH SAFETY YELLOW COATING, STAY OPEN BALL VALVE, SHOWER MIN. 20GPM@30PSI; EYE/FACE WASH MIN. 3.0GPM@30PSI; PLASTIC SHOWER HEAD, STAINLESS BOWL W/ DUST COVER, BARRIER FREE	GUARDIAN	GBF1909	BRADLEY, HAWS		1"	1"	-	-
EWC1	WALL HUNG WATER COOLER, ADA	FIXT	SPLIT LEVEL, STAINLESS STEEL FINISH, BOTTLE FILLING STATION, 8 GPH @ 50/80/90, 120V/1PH WITH FILTER	ELKAY	LMABFTL8WSSK	HALSEY TAYLOR, OASIS	1,7	1/2"	-	2"	2"
FD1	FLOOR DRAIN	FIXT	FINISHLINE ADJUSTABLE, SCH. 40 HUB CONNECTION, ABS/PVC BASE ADAPTER, ROUND NICKEL BRONZE STRAINER	SIoux CHIEF	832	ZURN, SMITH		-	-	MATCH	-
FD2	FLOOR DRAIN	FIXT	LARGE CAPACITY, ENAMEL-COATED CAST IRON, NICKEL-BRONZE STRAINER	SIoux CHIEF	860	ZURN, SMITH		-	-	MATCH	-
TD1	TRENCH DRAIN	FIXT	4-3/4" WIDE REVEAL, MODULAR SECTION, POLYPROPYLENE TRENCH DRAIN SYSTEM, PERFORATED STAINLESS STEEL GRATE	ZURN	Z884	WATTS,		-	-	MATCH	-
HB1	INTERIOR HOSE BIBB	FIXT	CHROME FINISH, ANTI-SIPHON VACUUM BREAKER, WHEEL HANDLE, 3/4" HOSE THREAD, FLUSH MOUNTED WALL BOX ENCLOSURE	WOODFORD	B24	ZURN, WATTS		3/4"	-	-	-
WH1	WALL HYDRANT	FIXT	CHROME PLATED BRASS, ANTI-SIPHON, VACUUM BREAKER, REMOVABLE TEE HANDLE, 3/4" HOSE THREAD	WOODFORD	65	ZURN, WATTS		3/4"	-	-	-
RD1	ROOF DRAIN	FIXT	15" DIAMETER ROOF DRAIN, ENAMEL COATED CAST IRON BODY, GRAVEL GUARD AND DOME STRAINER, DECK CLAMP	SIoux CHIEF	868-1504	ZURN, SMITH		-	-	MATCH	
NOTES		1. PROVIDE MATCHING WALL HANGER, COORDINATE WITH G.C. FOR WALL REINFORCING. 2. PROVIDE BRASS 1-1/2" TAILPIECE, CAST BRASS SLIP JOINT P-TRAP WITH CLEANOUT; PROVIDE ADA OFFSET ARRANGEMENT WHERE REQUIRED. 3. COORDINATE WITH MILLWORK. 4. COORDINATE ADA MILLWORK ENCLOSURE FOR WATER AND DRAIN PIPING UNDER SINK. 5. TRIP LEVER OR FLUSH HANDLE TO BE LOCATED ON WIDE SIDE OF STALL OR TOILET ROOM. 6. PROVIDE 1/2" IPS X 3/8" OD ANGLE BRASS STOP(S) WITH RIGID COPPER RISERS. ALL EXPOSED PIPING SHALL BE CHROME PLATED. 7. PROVIDE 1/2"IPS x 3/8" O.D. BRASS STOP CONCEALED BEHIND CABINET.									

PLUMBING SUMMARY WORKSHEET

FIXTURE	OCCUPANCY	TYPE OF CONTROL	QUANTITY	DOMESTIC WATER SYSTEM (W.S.F.U.)						WASTE & VENT SYSTEM (D.F.U.)	
				INDIVIDUAL FIXTURE UNITS			TOTAL FIXTURE UNITS			EACH	TOTAL
				COLD	HOT	TOTAL	COLD	HOT	TOTAL		
BATHROOM GROUP	PRIVATE	FLUSH TANK	1	2.7	1.5	3.6	2.7	1.5	3.6	5.0	5.0
LAVATORY (EXISTING)	PRIVATE	FAUCET	6	0.5	0.5	0.7	3.0	3.0	4.2	0.0	0.0
LAVATORY (EXISTING)	PUBLIC	FAUCET	23	1.5	1.5	2.0	34.5	34.5	46.0	0.0	0.0
SHOWER HEAD (EXISTING)	PUBLIC	MIXING VALVE	27	3.00	3.00	4.00	81.0	81.0	108.0	0.0	0.0
SHOWER HEAD (EXISTING)	PRIVATE	MIXING VALVE	4	1.00	1.00	1.40	4.0	4.0	5.6	0.0	0.0
SINK (EXISTING)	PRIVATE	FAUCET	2	0.5	0.5	0.7	1.0	1.0	1.4	0.0	0.0
URINAL (EXISTING)	PUBLIC	3/4"FLUSH VALVE	6	5.00	0.00	5.00	30.0	0.0	30.0	0.0	0.0
WATER CLOSET (EXISTING)	PRIVATE	FLUSH VALVE	6	6.00	0.00	6.00	36.0	0.0	36.0	0.0	0.0
WATER CLOSET (EXISTING)	PUBLIC	FLUSH VALVE	25	10.00	0.00	10.00	250.0	0.0	250.0	0.0	0.0
DRINKING FOUNTAIN	OFFICES, ETC.	3/8" VALVE	3	0.25	0.0	0.25	0.8	0.0	0.8	0.5	1.5
SINK	PRIVATE	FAUCET	1	1.0	1.0	1.4	1.0	1.0	1.4	2.0	2.0
LAVATORY	PRIVATE	FAUCET	1	0.5	0.5	0.7	0.5	0.5	0.7	1.0	1.0
LAVATORY	PUBLIC	FAUCET	13	1.5	1.5	2.0	19.5	19.5	26.0	1.0	13.0
SERVICE SINK	OFFICES, ETC.	FAUCET	1	2.25	2.25	3.00	2.3	2.3	3.0	2.0	2.0
SHOWER HEAD	PUBLIC	MIXING VALVE	9	3.00	3.00	4.00	27.0	27.0	36.0	2.0	18.0
URINAL	PUBLIC	3/4"FLUSH VALVE	4	5.00	0.00	5.00	20.0	0.0	20.0	2.0	8.0
WATER CLOSET	PUBLIC	FLUSH VALVE	20	10.00	0.00	10.00	200.0	0.0	200.0	4.0	80.0
TOTALS							710.5	173.8	769.1		125.5

BASED ON AN ESTIMATED DEMAND OF 769W.S.F.U.(177 GPM), PROVIDE A 3" INCOMING WATER LINE.
BASED ON A WASTE COUNT OF 126 D.F.U., PROVIDE A 4" OUTGOING WASTE LINE.

PIPING ACCESSORY SCHEDULE

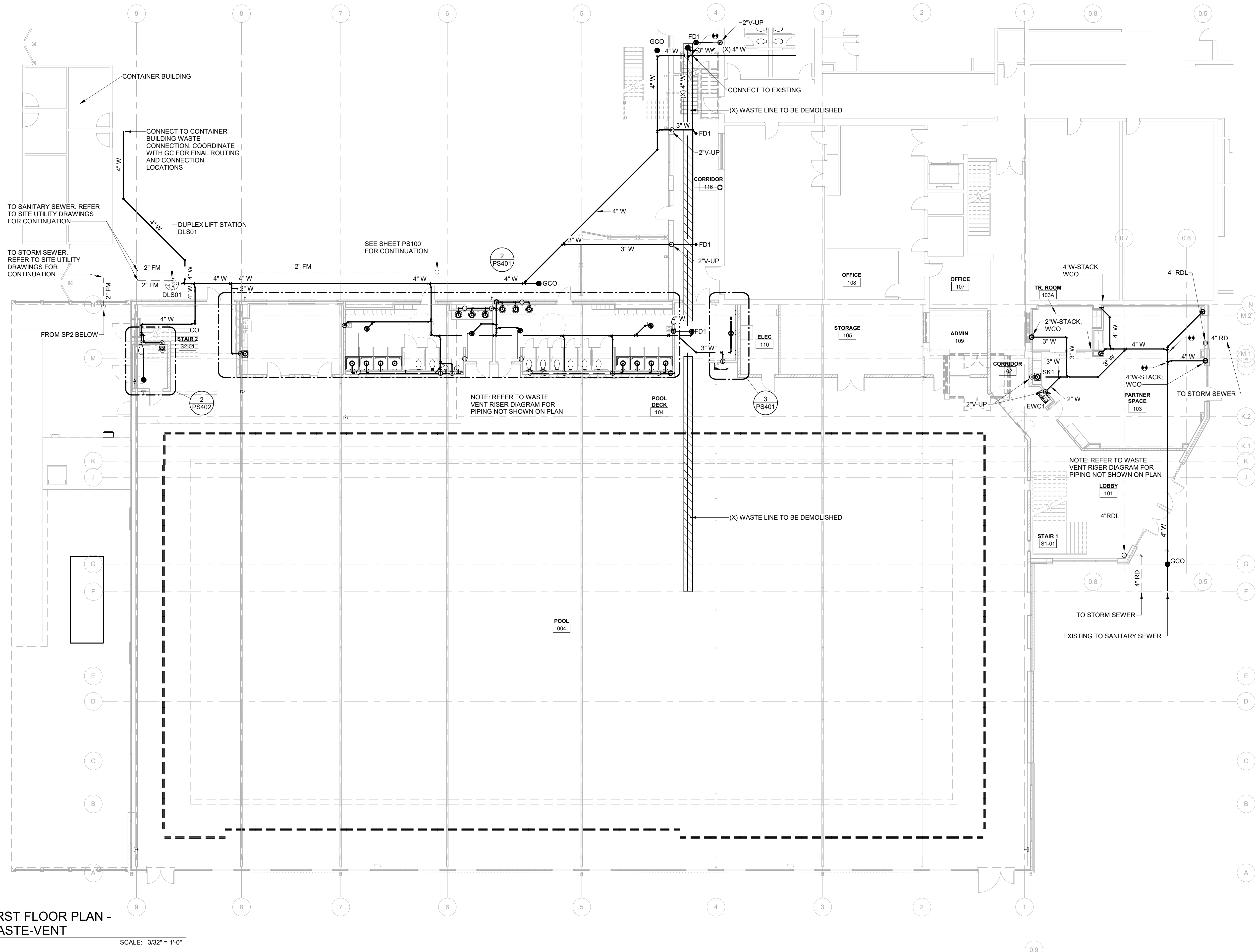
DRAWING CODE	ACCESSORY	DESCRIPTION	MANUFACTURER	MODEL	ALTERNATE APPROVED MANUFACTURERS
FCO	FLOOR CLEANOUT	4"SCH. 40 HUB, PVC BASE ADAPTER, ROUND NICKEL-BRONZE COVER, VANDAL RESISTANT SCREWS	SIoux CHIEF	834-4PNRV	ZURN, SMITH
GCO	GRADE CLEANOUT	4"SCH. 40 HUB, PVC BASE ADAPTER, ROUND NICKEL-BRONZE COVER, VANDAL RESISTANT SCREWS	SIoux CHIEF	851-44NV	ZURN, SMITH
WCO	WALL CLEANOUT	ROUND S/S ACCESS COVER & SCREW, RECESS BRONZE THRD. PLUG	SIoux CHIEF	870	ZURN, SMITH
OB1	ICE MAKER BOX	ABS HOUSING, 1/4 TURN BALL VALVE, CHROME PLATED BRASS, SHOCK ARRESTORS	SIoux CHIEF	696	OATEY, IPS
RPZ	BACKFLOW PREVENTER	REDUCED PRESS. ZONE TYPE, LEAD FREE	WATTS	LF009	FEBCO, WILKINS
TMV1	THERMOSTATIC MIXING VALVE	THERMOSTATIC MIXING VALVE, 50 GALLON CAPACITY, SURFACE MOUNTED, STAINLESS STEEL CABINET, COLD WATER BYPASS, HOT WATER SHUTOFF, ASSE 1071	GUARDIAN	G6042	WATTS, BRADLEY

PUMP SCHEDULE

DRAWING CODE	DESCRIPTION	MANUFACTURER	MODEL	FLOW GPM@FT. HD	MOTOR HP	POWER (V/PH/Hz)	PIPE CONNECTION (INCHES)	NOTES
CP1	DOMESTIC HOT WATER CIRCULATION, IN-LINE WET ROTOR, STAINLESS STEEL VOLUTE, 3-SPEED, BUILT IN THERMAL PROTECTION.	B&G	ECOCIRC 20-18	5@10	70 WATTS	115/1/60	3/4"	1,2
DLS01	DUPLEX LIFT STATION	STANCOR	SC-50	50@25	1/2	208/1/60	2"	3,4,5,6
SP1	SUMP PUMP	STANCOR	WSE50/208/1	30@25	1/2	208/1/60	2"	4,5,6
SP2	PACKAGED SUMP PUMP	LIBERTY	SPAC30-457	22@25	1	115/1/60	2"	7
NOTES: 1. PROVIDE AQUASTAT AND DIGITAL TIMER FOR CONTROLS. 2. ALTERNATE APPROVED MANUFACTURERS- GRUNDFOs, TACO 3. CONTRACTOR TO PROVIDE 36"DIAMETER x 48" DEEP FIBERGLASS DUPLEX EJECTOR BASIN. 4. NEMA 4X DUPLEX CONTROLLER, UL LISTED, 208/1, FOR UP TO 1 HP MAX., INCLUDES H-O-A SELECTOR SWITCH, RUN LIGHT, HIGH WATER ALARM, AND DRY CONTACT ALARM RELAY. 5. FLOAT SWITCH, TETHERED, (4) N/O WIDE ANGLE SIGNAL MASTER, 50 FT. CABLE, UL LISTED (OFF/LEAD/LAG/HIGH). 6. EFFLUENT IMPELLER PUMP, WITH SS UPPER HOUSING, NEMA 4X CONTROLLER INCLUDING HWA AND DRY CONTACT ALARM RELAY, AND (3) N/O WIDE ANGLE FLOAT SWITCHES (OFF/ON/HIGH) 7. PROVIDE WITH STANDARD HIGH WATER ALARM.								

GAS-FIRED STORAGE TANK WATER HEATER SCHEDULE

DRAWING G CODE	DESCRIPTION	MANUFACTURER - MODEL	ALTERNATE APPROVED...	PIPE SIZE			RECOVERY... @ 100°F RISE	FUEL SOURCE	GAS INPUT	ELECTRICAL					NOTES
				DCW	DHW	GAS				BTHU	VOLTAGE	PHASE	Hz	AMPS	
GW/H1	100 GALLON CONDENSING, MODULATING BURNER	A.O. SMITH - BTH-199A	BRADFORD-WHITE, STATE	1-1/2"	1-1/2"	3/4"	235	NATURAL	199,900	120	1	60	5	1-5	
GW/H2	100 GALLON CONDENSING, MODULATING BURNER	A.O. SMITH - BTH-199A	BRADFORD-WHITE, STATE	1-1/2"	1-1/2"	3/4"	236	NATURAL	199,900	120	1	60	5	1-6	
NOTES:	1. MINIMUM GAS INLET FLOW PRESSURE 3.5 K.C. MAXIMUM STATIC PRESSURE 14.0"W.C.														
	2. PROVIDE CONDENSATE NEUTRALIZATION KIT.														
	3. PROVIDE 5-1/2" THICK CONCRETE HOUSEKEEPING PAD.														
	4. VENT WATER WASTER IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTALLATION MANUAL.														
	5. TEMPERATURE SETPOINT 140°F														
	6. POTABLE WATER THERMAL EXPANSION TANK, DIAPHRAGM-TYPE, 10.3 GALLON TANK VOLUME, 150PSIG MAXIMUM WORKING PRESSURE, 200°F MAXIMUM OPERATING TEMPERATURE. FIELD ADJUST TANK PRE-CHARGE TO EQUAL BUILDING STATIC DOMESTIC WATER PRESSURE PRIOR TO INSTALLATION.														



FIRE WALL LEGEND

1 HOUR-RATED BARRIER

BECKER
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MYKINS)

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DAVID M. HAN

SEAL
23551

19-Aug-26

PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28403

ISSUED
FOR PERMITS

ISSUED: 08/19/2026

SHEET TITLE

PLUMBING FIRST
FLOOR PLAN -
WASTE-VENT

ISSUE BLOCK

Mark	Date	Description
PROJECT NO:	2025265.00	
DATE:	08/19/2026	
SCALE:	As indicated	
DRAWN BY:	JBS	PROJ MGR: DMH

PS101

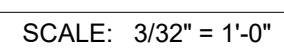
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FIRST FLOOR PLAN -
WASTE-VENT

SCALE: 3/32" = 1'-0"



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PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28401

ISSUED
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ISSUED: 08/19/2011

SHEET TITLE

PLUMBING EXISTING
FIRST FLOOR PLAN -
DOMESTIC WATER

ISSUE BLOCK

[illegible]

Mark	Date	Description
PROJECT NO:		2025265.1
DATE:		08/19/2010
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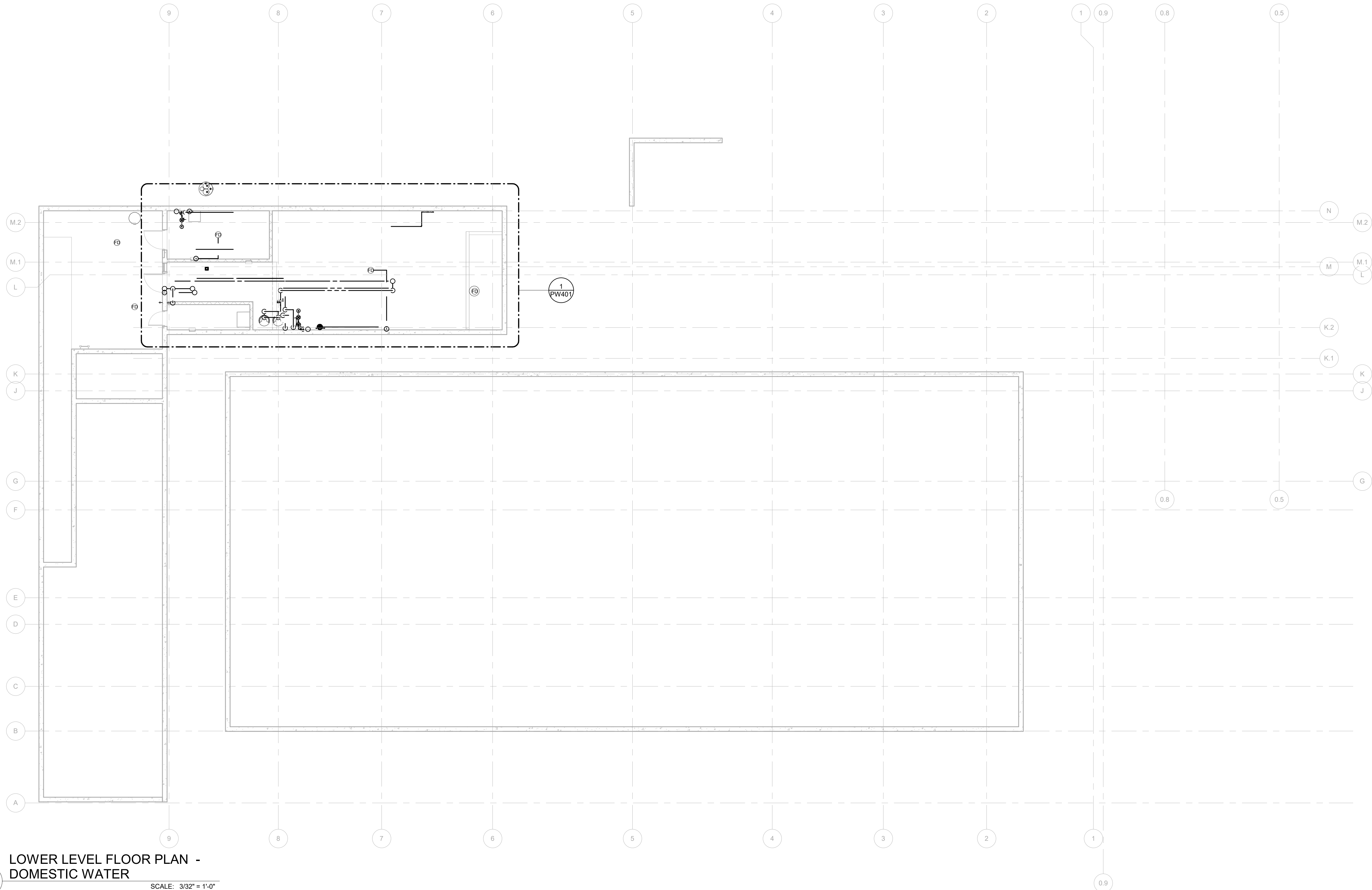
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EXISTING FIRST FLOOR PLAN -
DOMESTIC WATER

SCALE: 3/32" = 1'-0"

1



FIRE WALL LEGEND

1 HOUR-RATED BARRIER

BECKER
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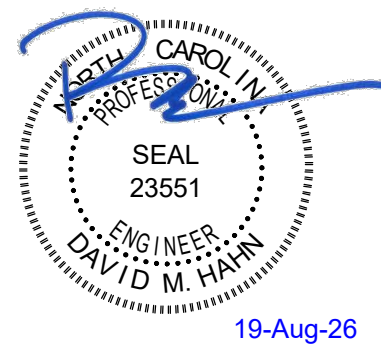
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PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28403

ISSUED
FOR PERMITS

ISSUED: 08/19/2026

SHEET TITLE

PLUMBING LOWER
LEVEL FLOOR PLAN -
DOMESTIC WATER

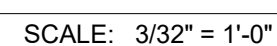
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	PROJECT TITLE
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**NIR FAMILY
YMCA - 50M
POOL**

2710 MARKET STREET,
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ISSUED: 08/19/2023

SHEET TITLE

EXISTING FIRST
FLOOR PLAN -
NATURAL GAS PIPING

ISSUE BLOCK

[illegible]

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EXISTING FIRST FLOOR PLAN -
NATURAL GAS PIPING

SCALE: 3/32" = 1'-0"



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PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28401

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ISSUED: 08/19/20

SHEET TITLE:

PLUMBING LOWER
LEVEL FLOOR PLAN -
NATURAL GAS PIPING

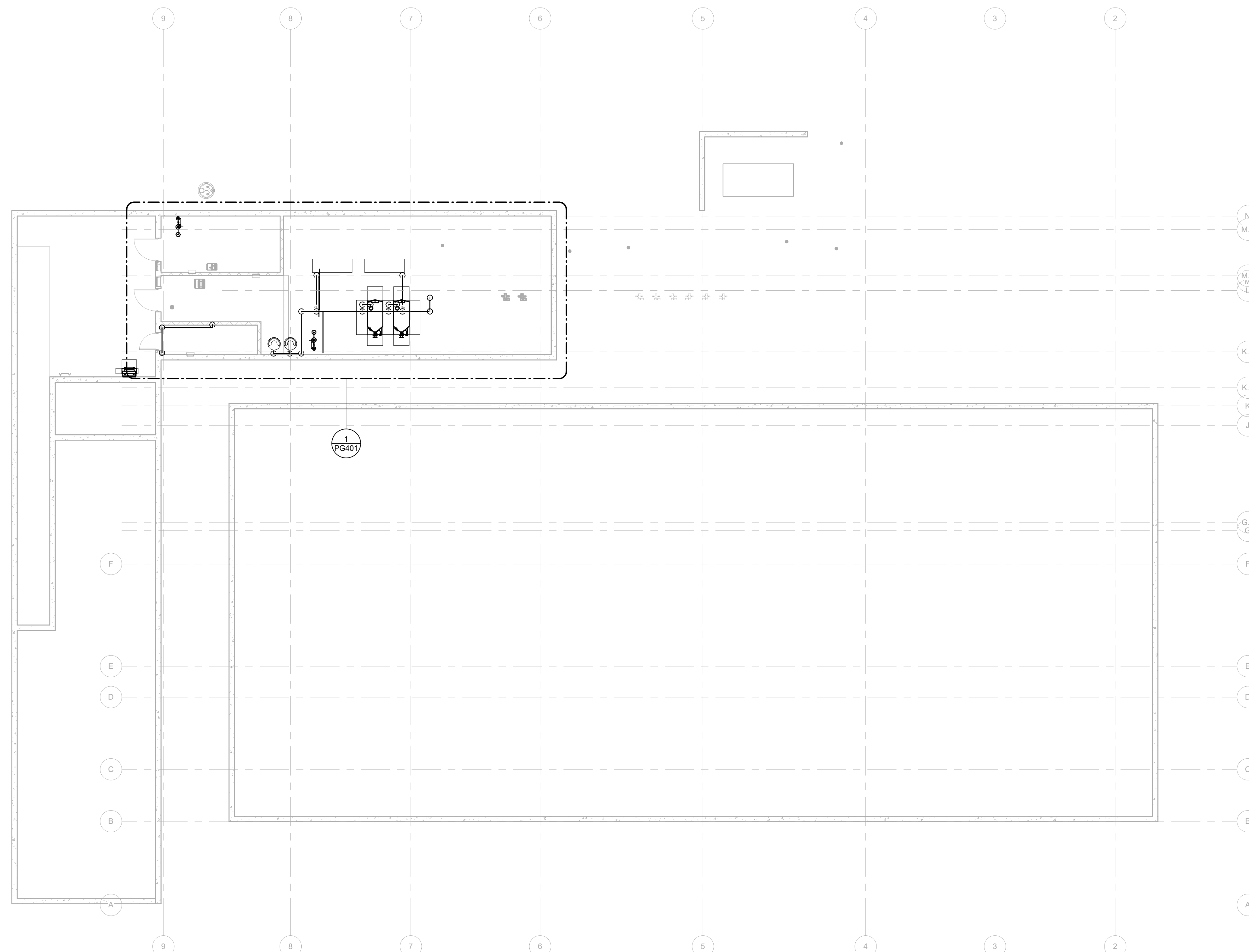
ISSUE BLOCK

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DATE:		08/19/2026
SCALE:		3/32" = 1'-0"
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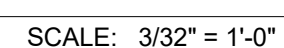
BASEMENT LEVEL FLOOR PLAN - GAS PIPING

SCALE: 3/32" = 1'-0"

1



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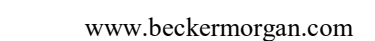


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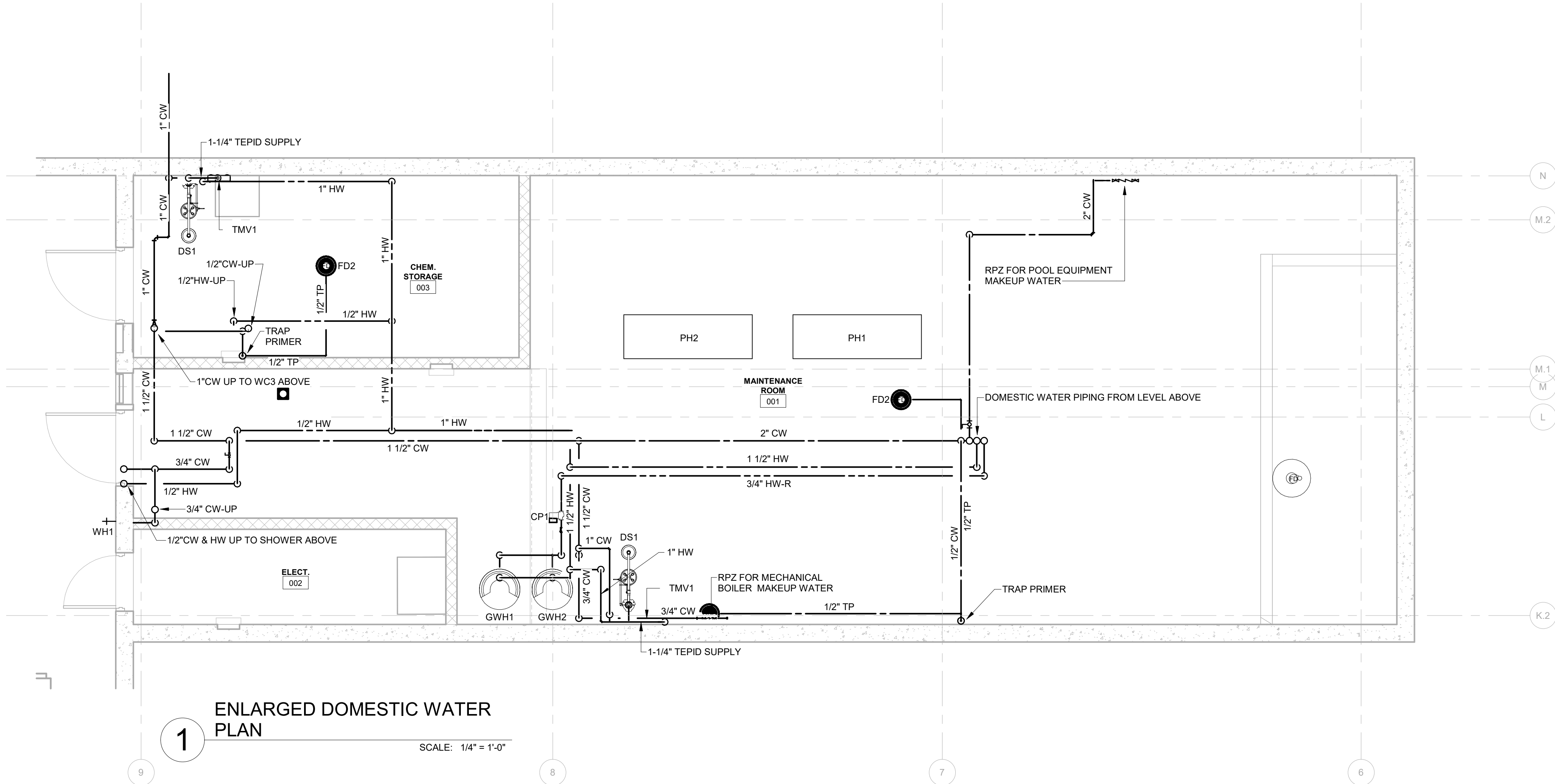


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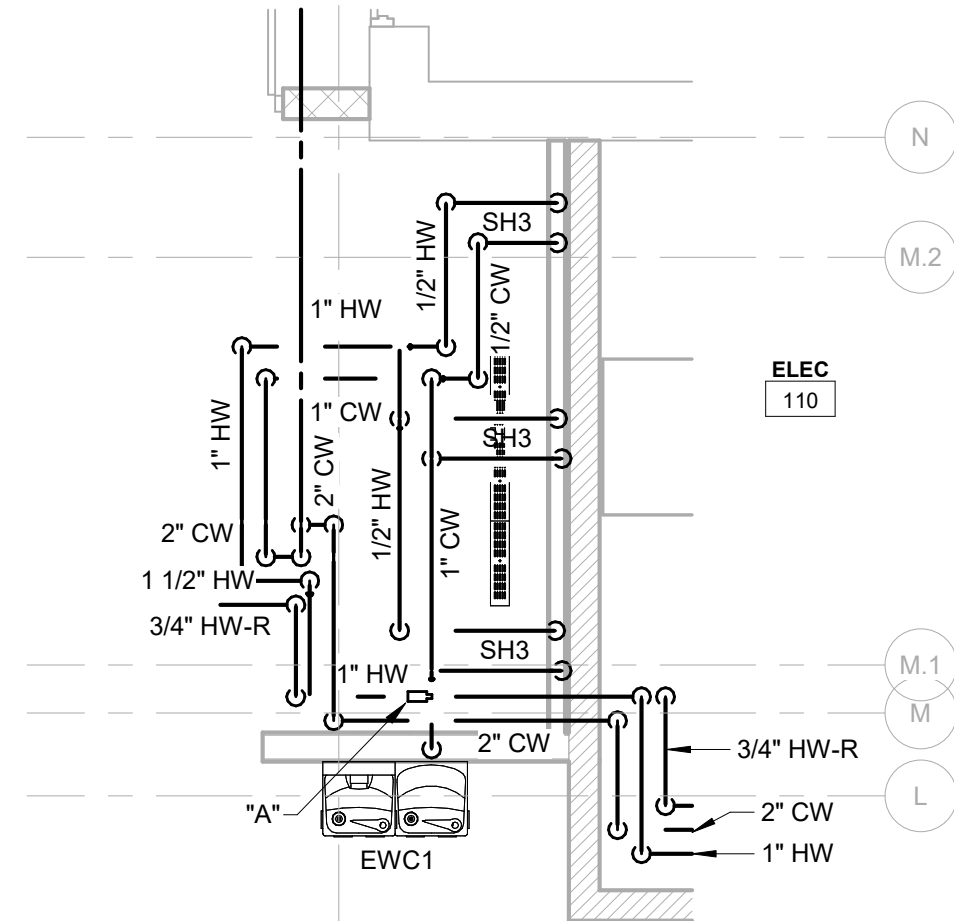
1 ENLARGED WASTE-VENT PLAN

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



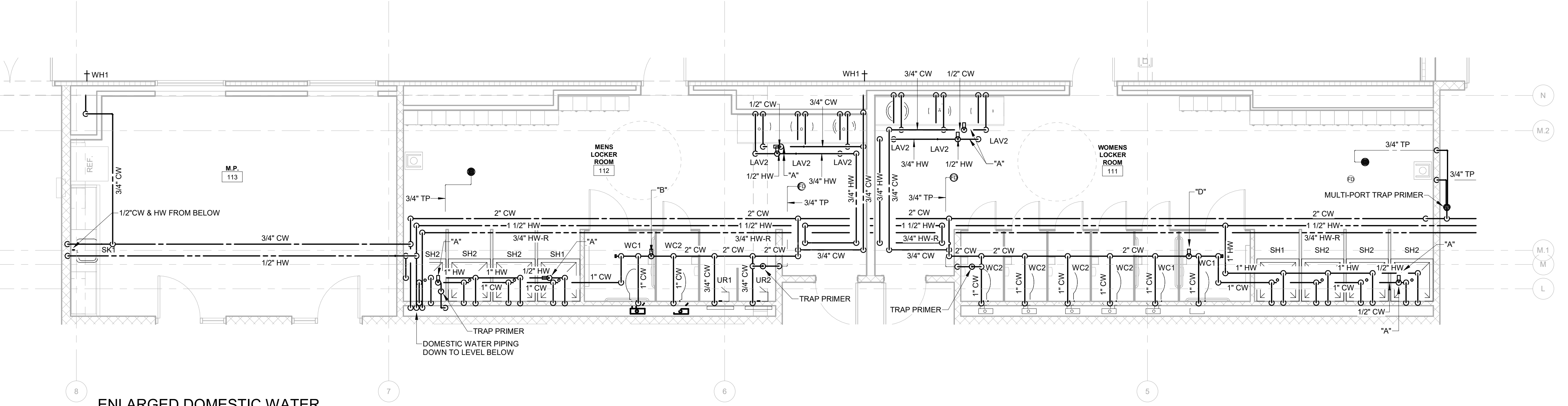
1
ENLARGED DOMESTIC WATER
PLAN

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



3
ENLARGED SHOWER -
DOMESTIC WATER PLAN

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



2
ENLARGED DOMESTIC WATER
PLAN

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

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SEAL
23551
ENGINEER
DAVID M. HAIN

19-Aug-26

PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28403

ISSUED
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ISSUED: 08/19/2026

SHEET TITLE

PLUMBING
ENLARGED
DOMESTIC WATER
PLANS

ISSUE BLOCK

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IMEG (FORMERLY LYNCH

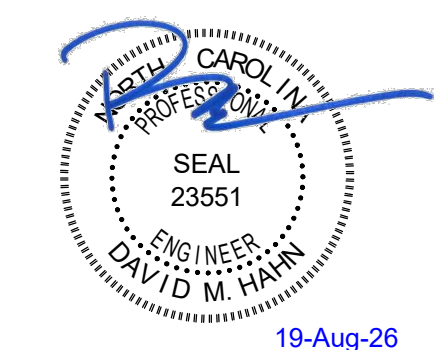
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PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
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ISSUED
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ISSUED: 08/19/2026

SHEET TITLE

PLUMBING ENLARGED DOMESTIC WATER PLAN

ISSUE BLOCK

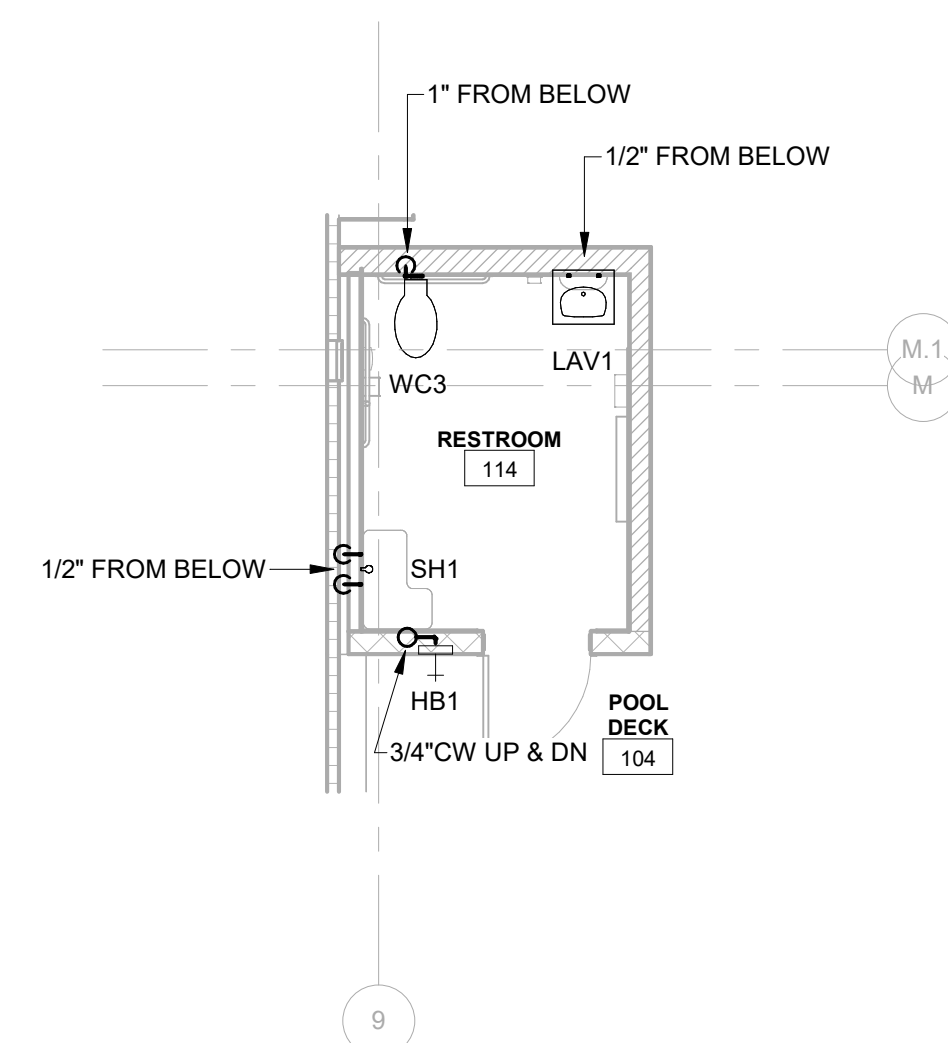
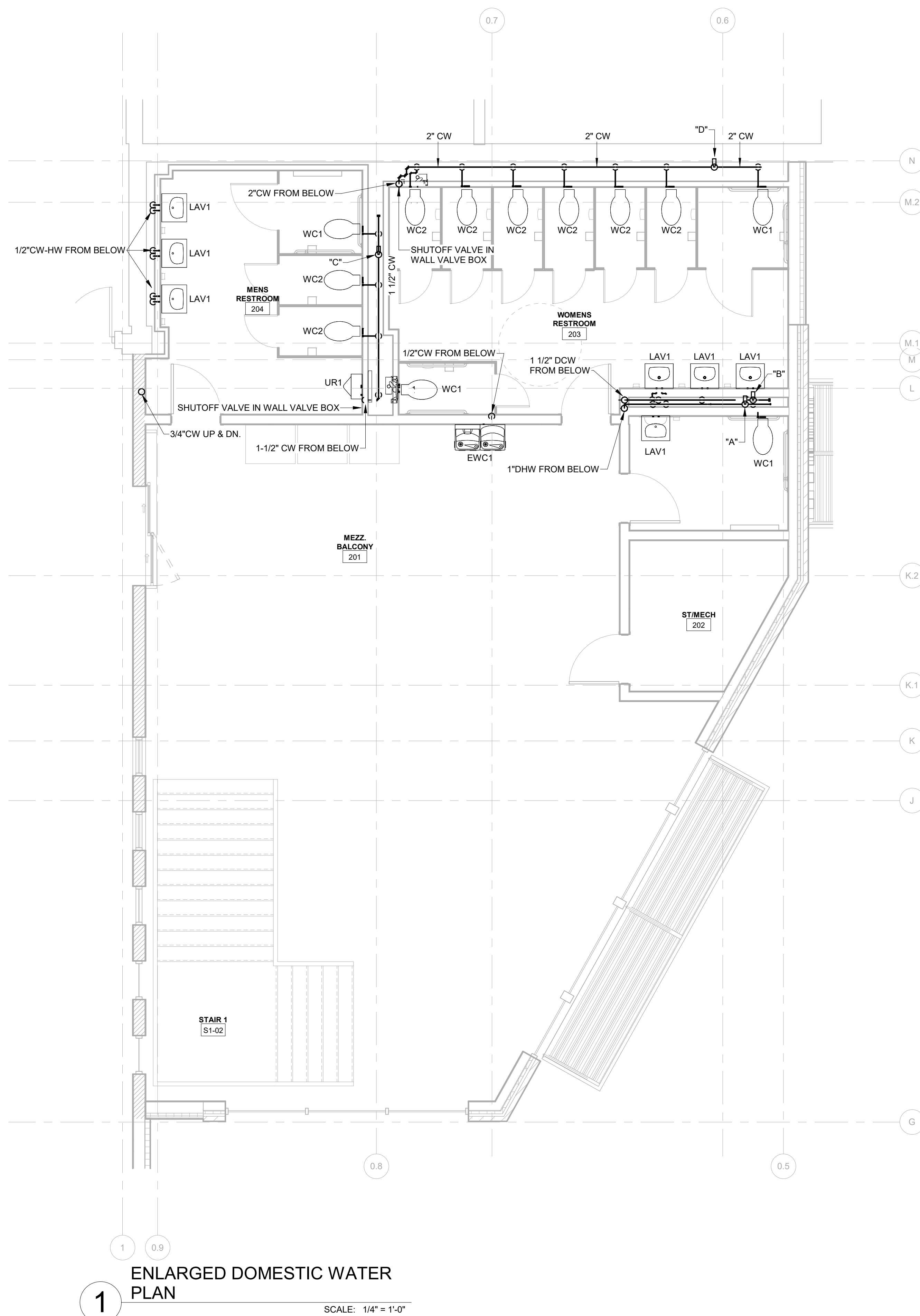
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FIRST FLOOR PLAN - SINGLE
TOILET DOMESTIC WATER

SCALE: 3/16" = 1'-0"



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PROJECT TITLE

NIR FAMILY
YMCA - 50M
POOL

2710 MARKET STREET,
WILMINGTON, NC 28403

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ISSUED: 08/19/202

SHEET TITLE:

PLUMBING ENLARGED GAS PIPING PLAN

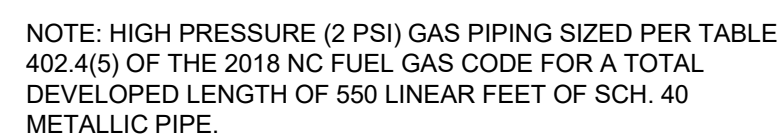
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LOW PRESSURE (LESS THAN 2 PSI) GAS PIPING SIZED PER
TABLE 402.4(2) OF THE 2018 NC FUEL GAS CODE FOR A TOTAL
DEVELOPED LENGTH OF 20 LINEAR FEET OF SCH. 40
METALLIC PIPE.

2 NATURAL GAS PIPING RISER DIAGRAM



M.2

M.1

$$L$$

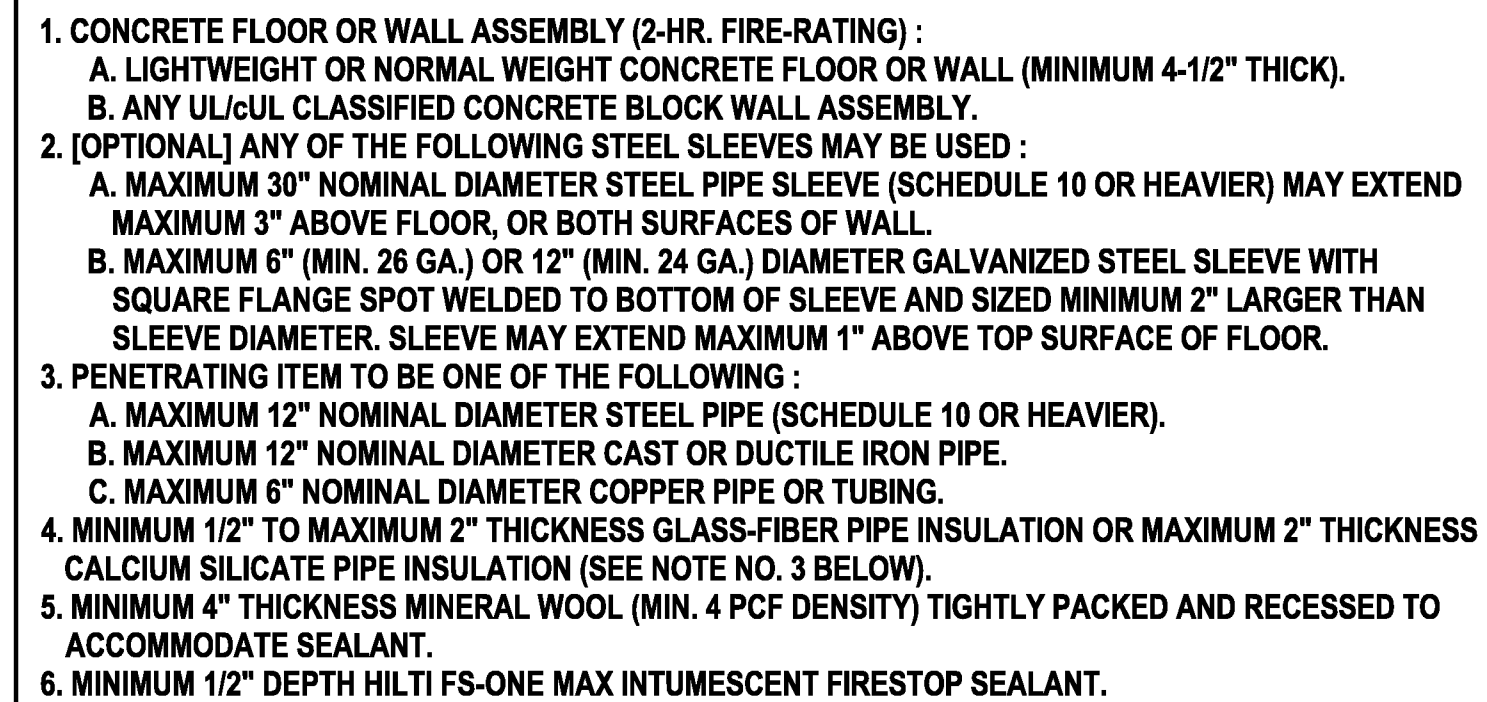
K.2

1 BASEMENT LEVEL FLOOR PLAN
- ENLARGED GAS PIPING

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

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

F-RATING = 2-HR.	L-RATING AT AMBIENT = 4 CFM / SQ FT
T-RATING = 0-HR. OR 1-HR. (SEE NOTE NO. 5 BELOW)	L-RATING AT 400° F = LESS THAN 1 CFM / SQ FT



NOTES :

1. MAXIMUM DIAMETER OF OPENING = 29".
2. ANNULAR SPACE = MINIMUM 1/2", MAXIMUM 12".
3. WHEN CALCIUM SILICATE PIPE INSULATION IS USED, SECURE INSULATION TO PIPE WITH STAINLESS STEEL BANDS OR MINIMUM 8 AWG STAINLESS STEEL WIRE AT MAX. 12" O.C.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.
5. WHEN PIPE INSULATION THICKNESS IS LESS THAN 2", T-RATING IS 0-HR.

F-RATING = 1-HR. OR 2-HR. (SEE NOTES BELOW)
T-RATING = 0-HR. OR 1/2-HR. (SEE NOTES BELOW)



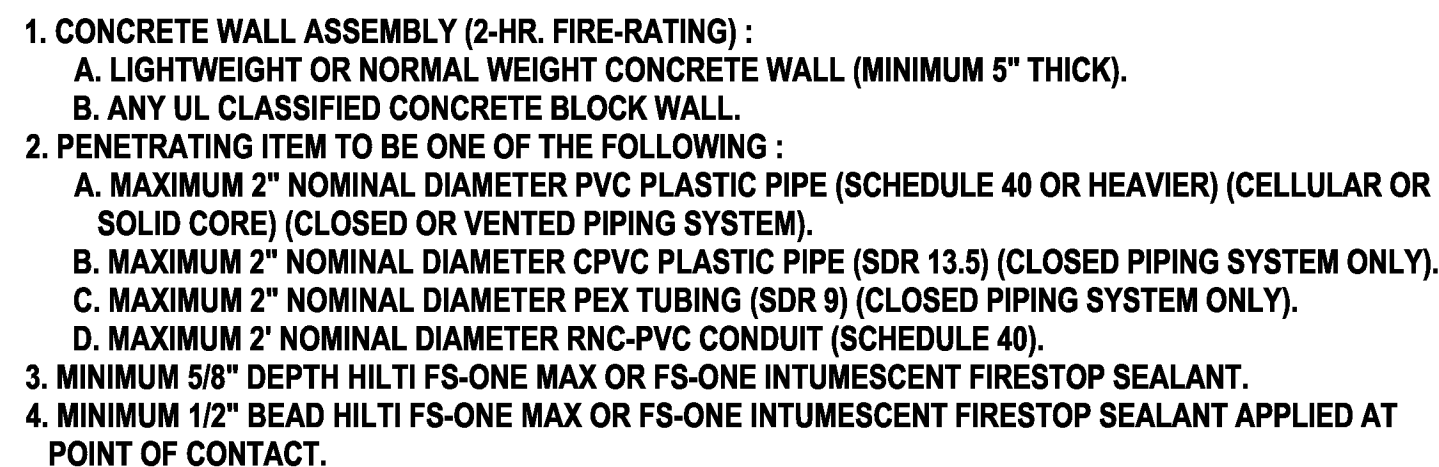
F-RATING = 1-HR. OR 2-HR. (SEE NOTES BELOW)
T-RATING = 0-HR. OR 1/2-HR. (SEE NOTES BELOW)
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT
L-RATING AT 400° F = LESS THAN 1 CFM / SQ FT

1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 3-3/4" THICK, FOR 1-HR. FIRE- RATING).
 - B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MIN. 5" THICK, FOR 2-HR. FIRE-RATING).
 - C. ANY UL/CUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 30" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 30" DIAMETER STAINLESS STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - C. MAXIMUM 30" NOMINAL DIAMETER CAST IRON PIPE.
 - D. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE (REGULAR OR HEAVIER).
 - E. MAXIMUM 6" DIAMETER COPPER TUBING (TYPE L OR HEAVIER).
 - F. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - G. MAXIMUM 4" NOMINAL DIAMETER STEEL EMT.
 - H. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM EMT.
 - I. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM CONDUIT.
 - J. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM PIPE (SCH. 5 OR HEAVIER).
3. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
4. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES:

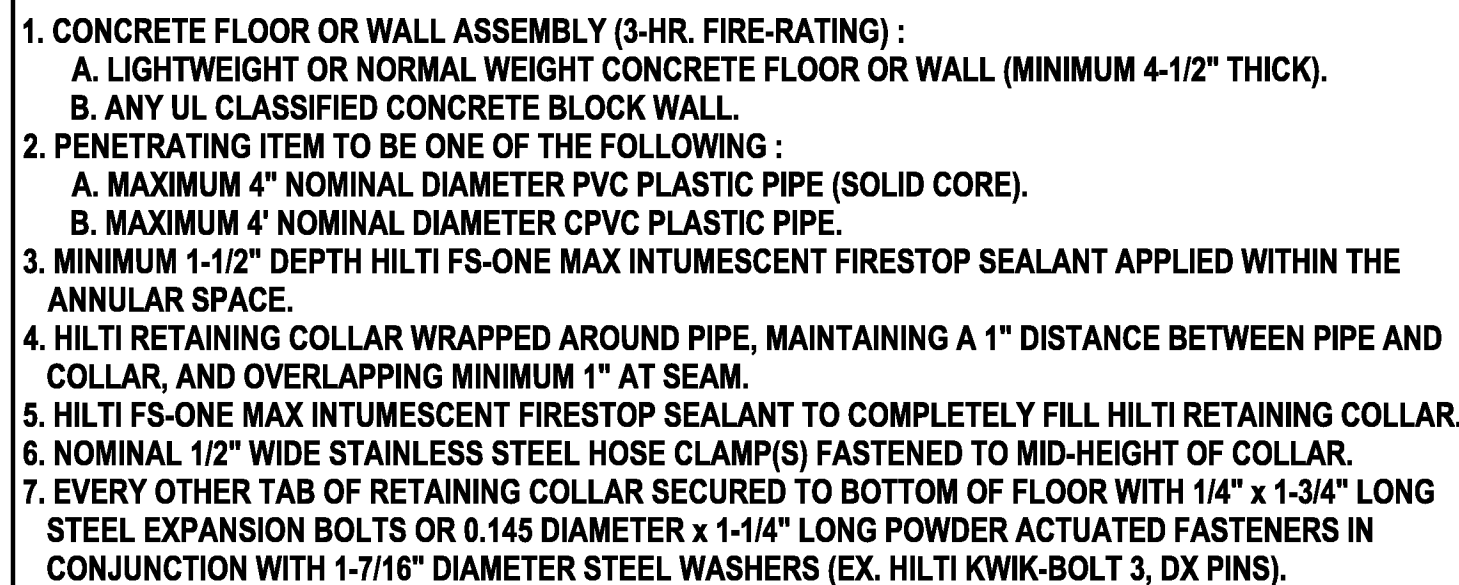
1. MINIMUM DIAMETER OF OPENING = 32-1/4".
2. ANNULAR SPACE (PENETRATIONS 2A THROUGH 2G) = MINIMUM 0", MAXIMUM 2-1/4".
3. ANNULAR SPACE (PENETRATIONS 2H THROUGH 2J) = MINIMUM 0", MAXIMUM 1-1/2".
4. PENETRATIONS 2A THROUGH 2G MAY BE INSTALLED WITH CONTINUOUS POINT OF CONTACT.
5. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, CONCRETE WALL ASSEMBLY SHALL BE MINIMUM 6" THICK FOR A 1-HR. OR 2-HR. F-RATING.
6. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, THE T-RATING IS 1/2-HR.
7. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, THE CAN/ULC-S115 TESTING STANDARD IS NOT APPLICABLE.

F-RATING = 2-HR.
T-RATING = 2-HR.



NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 5/8".

F-RATING = 3-HR.
T-RATING = 2-1/2-HR.

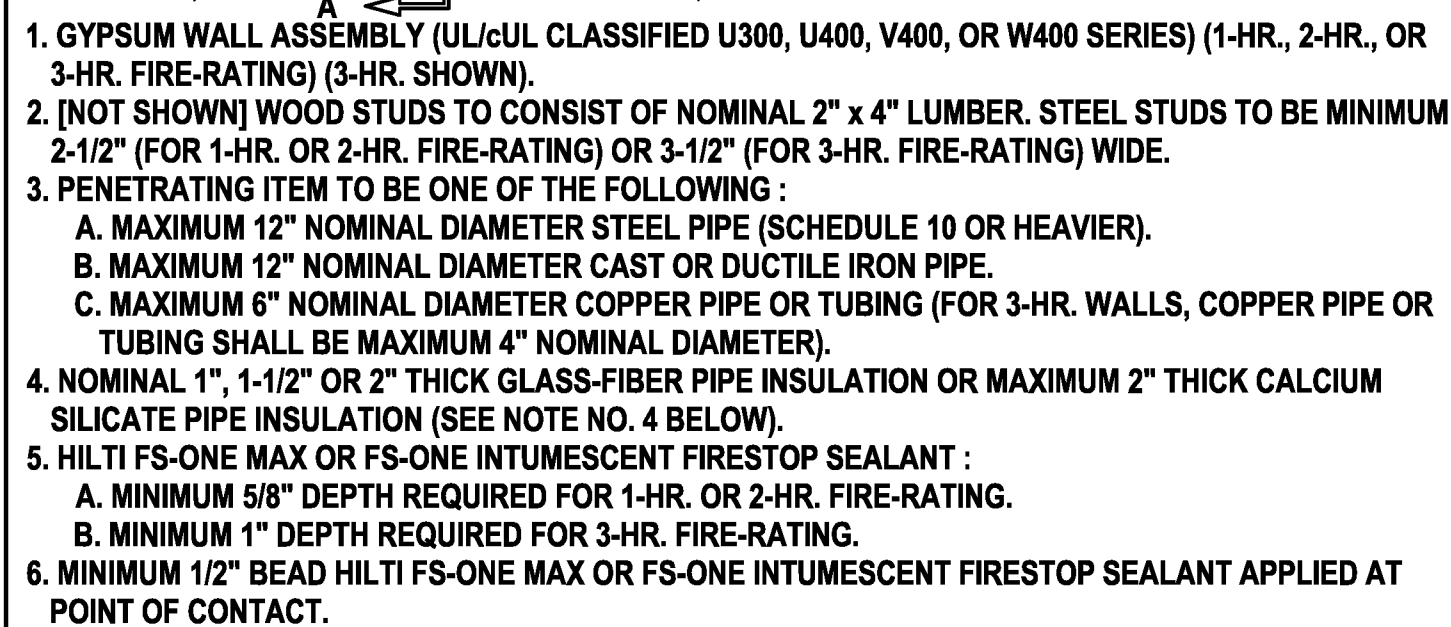


NOTES : 1. MAXIMUM DIAMETER OF OPENING = 5".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/2".
3. CLOSED OR VENTED PIPING SYSTEM (PVC = SCHEDULE 40; CPVC = SDR 17).
4. HILTI RETAINING COLLAR AND FS-ONE MAX ARE REQUIRED ON BOTH SIDES OF A WALL ASSEMBLY.

SCALE:	
100	1000

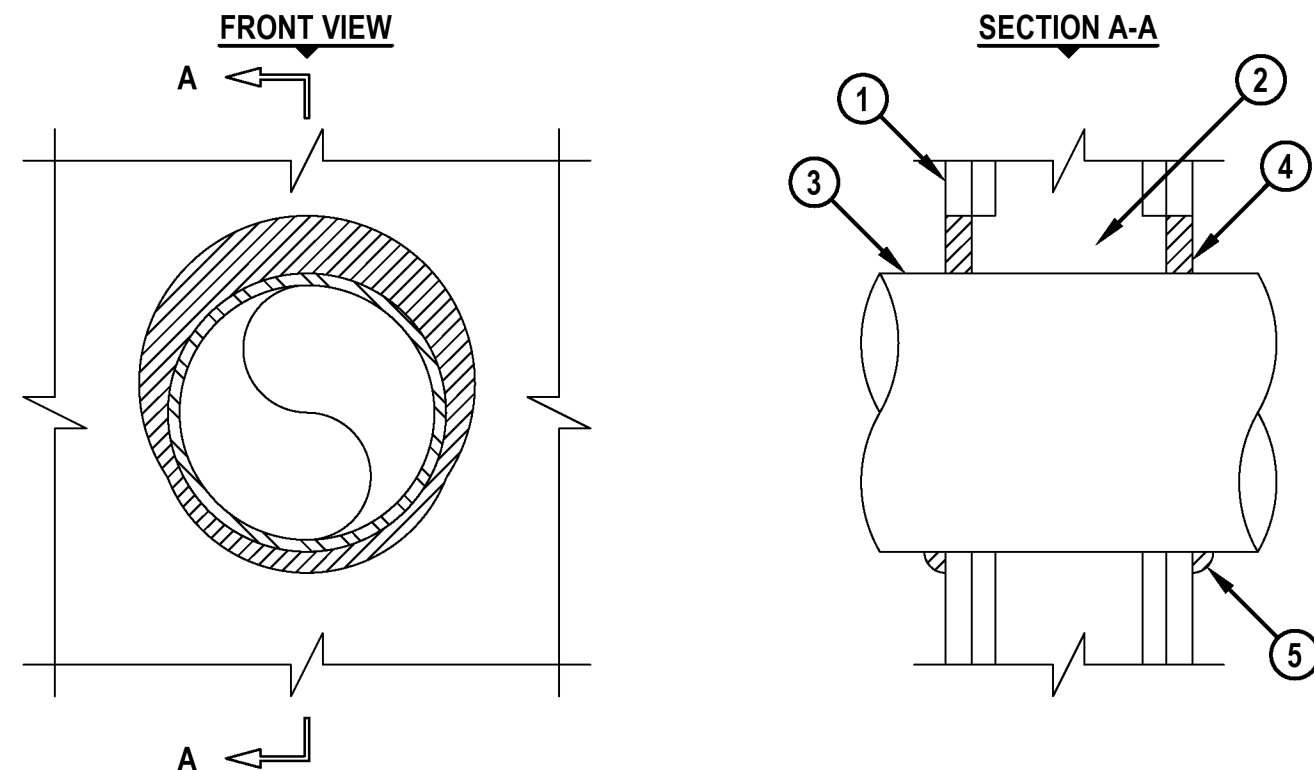
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F-RATING = 1-HR., 2-HR., OR 3-HR.
T-RATING = 0-HR., 1/2-HR., 1-HR., OR 1-1/4-HR. (SEE UL FIRE RESISTANCE DIRECTORY)
L-RATING AT AMBIENT = 4 CFM / SQ FT
L-RATING AT 400° F = LESS THAN 1 CFM / SQ FT

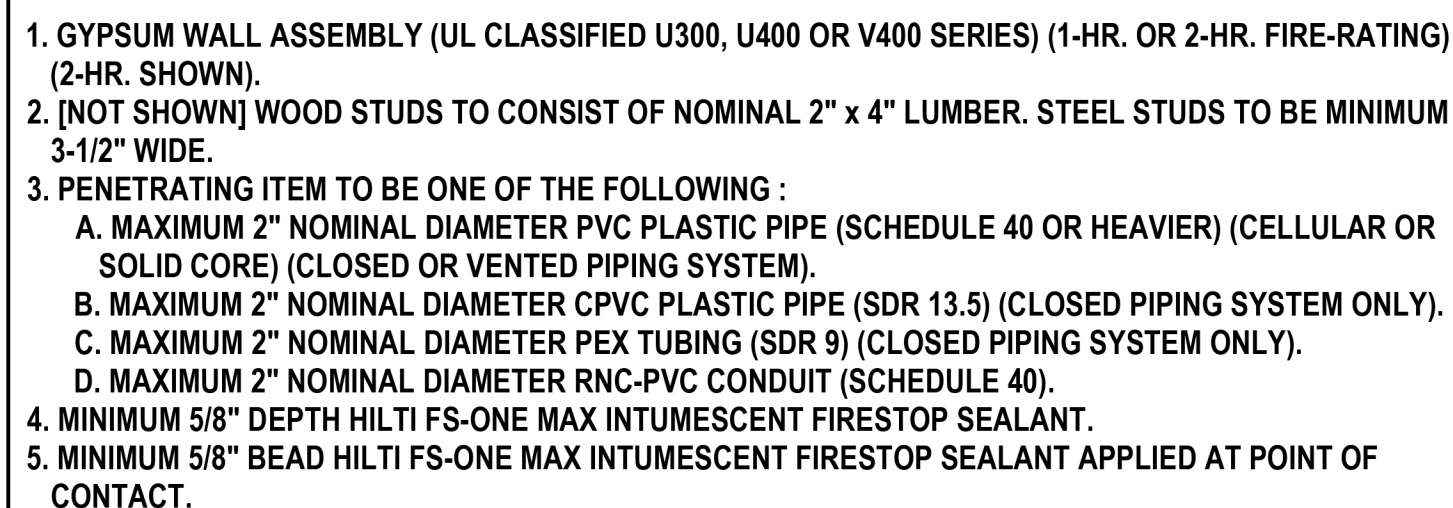


NOTES : 1. MAXIMUM DIAMETER OF OPENING = 18-5/8".
2. ANNUAL SPACE (FOR 1-HR. OR 2-HR. FIRE-RATING) = MINIMUM 0", MAXIMUM 1-7/8".
3. ANNUAL SPACE (FOR 3-HR. FIRE-RATING) = MINIMUM 0", MAXIMUM 1-1/4".
4. WHEN CALCIUM SILICATE PIPE INSULATION IS USED, SECURE INSULATION TO PIPE WITH STAINLESS STEEL BANDS OR MINIMUM 18 AWG STAINLESS STEEL WIRE AT MAXIMUM 12" O.C.

F-RATING = 1-HR. OR 2-HR. (SEE NOTES BELOW)
T-RATING = 0-HR. OR 1/2-HR. (SEE NOTES BELOW)
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT



F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR.
AT AMBIENT = LESS THAN 1 CFM /SQ FT
RATING AT 400°F = 4 CFM / SQ FT



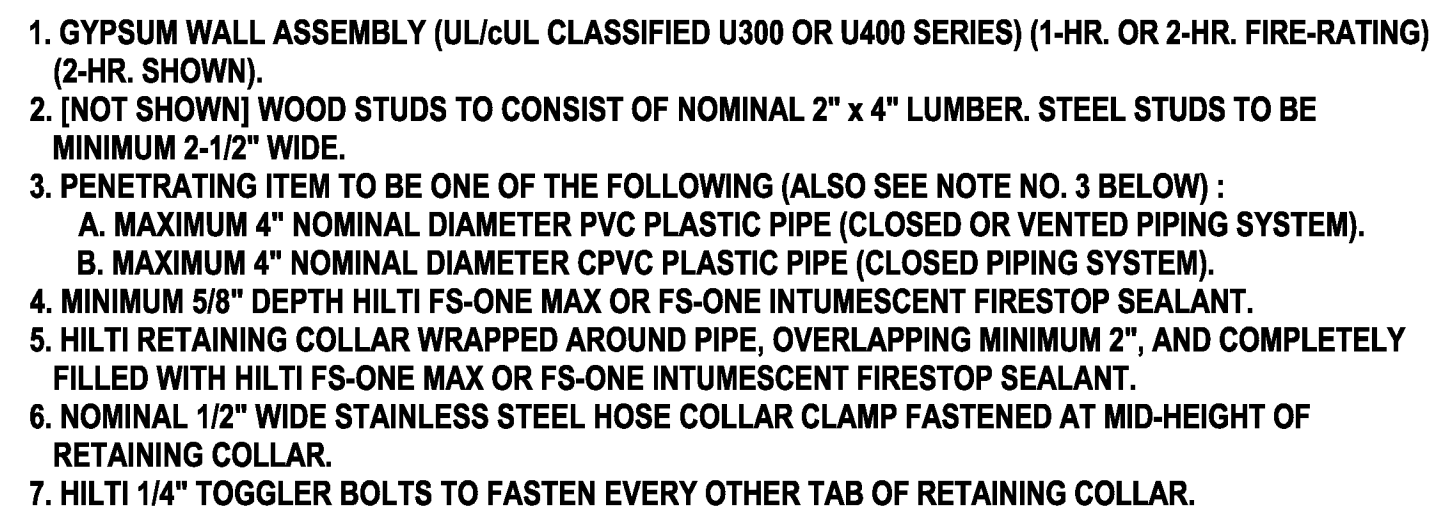
NOTES : 1. DIAMETER OF OPENING SHALL BE 1" LARGER THAN NOMINAL PIPE DIAMETER.
2. ANNULAR SPACE = MINIMUM 0". MAXIMUM 1/2".

F-RATING = 1-HR. OR 2-HR. (SEE NOTES BELOW)
T-RATING = 0-HR. OR 1/2-HR. (SEE NOTES BELOW)
L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 OR U400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE (SEE NOTE BELOW).
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
 - A. MAXIMUM 30" DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 30" DIAMETER STAINLESS STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - C. MAXIMUM 30" DIAMETER CAST IRON PIPE.
 - D. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE (REGULAR OR HEAVIER).
 - E. MAXIMUM 6" DIAMETER COPPER TUBING (TYPE L OR HEAVIER).
 - F. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - G. MAXIMUM 4" NOMINAL DIAMETER STEEL EMT.
 - H. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM EMT.
 - I. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM CONDUIT.
 - J. MAXIMUM 2" NOMINAL DIAMETER ALUMINUM PIPE (SCHEDULE 5 OR HEAVIER).
4. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES : 1. MAXIMUM DIAMETER OF OPENING :
A. 32-1/4" FOR STEEL STUD WALLS.
B. 14-1/2" FOR WOOD STUD WALLS.
2. ANNULAR SPACE (PENETRATIONS 2A THROUGH 2G) = MINIMUM 0", MAXIMUM 2-1/4".
3. ANNULAR SPACE (PENETRATIONS 2H THROUGH 2J) = MINIMUM 0", MAXIMUM 1-1/2".
4. PENETRATIONS 2A THROUGH 2G MAY BE INSTALLED WITH CONTINUOUS POINT OF CONTACT.
5. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, STEEL STUDS TO BE MINIMUM 3-5/8" WIDE.
6. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, T-RATING IS 1/2-HR.
7. WHEN PENETRATIONS 2H THROUGH 2J ARE INSTALLED, THE CAN/ULC-S115 TESTING STANDARD IS NOT APPLICABLE.

F-RATING = 1 AND 2-HR.
T-RATING = 0-HR.



NOTES : 1. MAXIMUM DIAMETER OF OPENING = 5".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1/2".
3. PVC = SCHEDULE 40; CELLULAR OR SOLID CORE; CPVC = SDR 13.5.



PROJECT TITLE

2710 MARKET STREET,
WILMINGTON, NC 28401

ISSUED
FOR PERMITS

ISSUED: 08/19/2026

SHEET TITLE

PLUMBING DETAILS

[illegible]

Work	Date	Description
PROJECT NO:		2025265 00

DATE: 08/19/2026

SCALE

DRAWN BY: JBS	PROJ MGR: DMH
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P-503

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