## MIXING VALVE SCHEDULE

TAG	LOCATION	SERVICE	MIN FLOW (GPM)	DESIGN FLOW (GPM)	DESIGN FLOW DELTA-P PSI	HOT WATER TEMP.	COLD WATER TEMP	MIXED WATER TEMP	BASIS OF DESIGN
TMV-1	BELOW LAVATORY FAUCET	SEE PLANS	0.5	5	5	140°F	50°F	110°F	CHICAGO FAUCET 131-ABNF
NOTES: 1. COLD WATER TEMPERATURE WILL VARY. 4. MIXING VALVE SHALL BE ASSE 1070 COMPLIANT.   2. LEAD FREE. 3. MIXING VALVE SHALL BE ASSE 1017 COMPLIANT.									

### EXPANSION TANK SCHEDULE

TAG	TYPE	CAPACITY (GAL)	MIN TEMP (DEG. F)	MAX TEMP (DEG. F)	MIN. PRES (PSIG)	MAX PRES (PSIG)	DIA (IN)	HEIGHT (IN)	BASIS OF DESIGN MFG. AND MODEL	REMARKS
ET-1	VERT ASME DIAPHRAGM	2.1	50	120	20	125	10 "	10"	THERM-X-TROL ST-5-C	DOMESTIC HOT WATER

# PIPE INSULATION THICKNESS

	-								
FLUID OPERATING	INSULATION (	''							
TEMPERATURE RANGE AND USAGE (°F)	CONDUCTIVITY BTU*IN/(H*FT <sup>2</sup> *°F)	MEAN RATING TEMPERATURE (°F)	<1	1 TO 1-1/2	1-1/2 TO <4	4 TO <8	≥8	REMARKS	
105 - 140 DOMESTIC HOT WATER	0.21-0.28	100	1	1	1.5	1.5	1.5		
40-60 DOMESTIC COLD WATER	0.21-0.27	75	0.5	0.5	1	1	1		

. FOR OUTDOOR PIPING PROVIDE DOUBLE THE INSULATION THICKNESS LISTED AND WEATHER PROOF JACKET (ALUMAGUARD). 2. FOR PIPING SMALLER THAN 1-1/2" AND LOCATED IN PARTITIONS WITHIN CONDITIONED SPACES, REDUCTION OF THESE THICKNESS BY 1 INCH SHALL BE PERMITTED. REVIEW ENERGY CONSERVATION CODE. 3. FOR PIPING IN MECHANICAL ROOMS, PROVIDE ALUMINUM INSULATION JACKET FOR ALL PIPING FROM FLOOR LEVEL TO 10' ABOVE THE FLOOR. 4. FOR CHILLED WATER AND CHILLED GLYCOL SYSTEMS PROVIDE CONTINUOUS INSULATION AT VALVES. 4a. FOR CHILLED WATER AND CHILLED GLYCOL SYSTEMS, PROVIDE REUSABLE VALVE WRAPS COVERS (NOSWEAT REUSABLE VALVE WRAPS.)

5. FOR HOT WATER AND GLYCOL SYSTEMS, PROVIDE REUSABLE VALVE WRAPS COVERS. (NOSWEAT REUSABLE VALVE WRAPS.)

BALANCE VALVE SCHEDULE								
BRANCH (GPM)	BALANCING VALVE SIZE (INCHES)	REMARKS						
0 TO 2.5	1/2	1						
2.6 TO 4.5	3/4	1						
1. PROVIDE BALANCING VALVE OF SIZE LISTED FOR FLOW RATE RANGES LISTED REGARDLESS								

OF PIPE LINE SIZE.

					CONNECTION SIZE			
TAG	FIXTURE TYPE	BASIS OF DESIGN MANUFACTURER	MODEL NO.	MAXIMUM FIXTURE FLOW RATES	CW	HW	W	V
WC-1	WATER CLOSET (ADA HEIGHT), WALL MOUNTED	тото	GHE20313	1.28 GALLONS PER FLUSH	1/2"	-	3"	2"
LAV-1	WALL-HUNG (ADA HEIGHT) LAVATORY	KOHLER	K02005	0.5 GPM @ 60 PSI	1/2"	1/2"	1 1/2"	1 1/2"
KSK-1	SINGLE BOWL SINK	ELKAY	LR2522	2.2 GPM @ 60 PSI	1/2"	1/2"	1 1/2"	1 1/2"
KSK-2	SINGLE BOWL SINK	ELKAY	LR2522	2.2 GPM @ 60 PSI	1/2"	1/2"	1 1/2"	1 1/2"
KSK-3	SINGLE BOWL SINK	ELKAY	LR2522	2.2 GPM @ 60 PSI	1/2"	1/2"	1 1/2"	1 1/2"
FD-1	FLOOR DRAIN	JR SMITH	2005	N/A	-	-	3"	1 /12"
DPCO-1	DECK PLATE CLEANOUT	JR SMITH	4031	N/A	-	-	VARIES	-
EWC-1	ADA WATER COOLER WITH BOTTLE FILER	ELKAY	LZSTL8WSSP	N/A	1/2"	-	2"	-
MSB-1	MOP SINK	FIAT	TSB-100	2.2 GPM @ 60 PSI	3/4"	3/4"	3"	2"
RD-1	ROOF DRAIN AND OVERFLOW DRAIN	JR SMITH	1800	N/A	-	-	SEE PLAN	-
DS-1	OVERFLOW DRAIN SPOUT	JR SMITH	1775	N/A	-	-	SEE PLAN	-
GCO-1	GRADE CLEANOUT	JR SMITH	4250	N/A			4"	

1. PROVIDE FAUCET, CW/HW, STOPS AND WASTE TRIM. MEET ANSI/ADA REQUIREMENTS AT ADA FIXTURES. 2. ERGO HEIGHT ADA ELONGATED TOILET WITH FLUSHMATE PRESSURE VESSEL WITH EXTRA LARGE DUAL FED SIPHON JETS FOR HIGH POWER BOWL CLEANING, PROVIDE TOILET SEAT (GOO99216).

3. LAVATORY'S SHALL HAVE A MANUAL FAUCET SETS, 4" CC.

4. LAVATORY SHALL HAVE AN ADJUSTABLE THERMOSTATIC SETTING FOR 120°F WATER IN - 105°F WATER OUT ON THE FAUCET DISCHARGE. 5. WITH GRIDDED DRAIN OFFSET TAIL PIECE, PIPING SAFETY COVERS.

TYPE OF FITTING	CHANGE IN DIRECTION								
PATTERN	HORIZONTAL TO VERTICAL	VERTICAL TO HORIZONTAL	HORIZONTAL TO HORIZONTAL						
SIXTEENTH BEND	Х	Х	Х						
EIGHTH BEND	Х	Х	Х						
SIXTH BEND	Х	Х	Х						
QUARTER BEND	Х	X(a)	X(a)						
SHORT SWEEP	Х	X(a,b)	Xa,b)						
LONG SWEEP	Х	Х	Х						
SANITARY TEE	Х	-	-						
WYE	Х	Х	Х						
COMBINATION WYE AND EIGHTH BEND	Х	Х	X						

#### IN-LINE CIRCULATOR PUMP SCHEDULE ELECTRICAL BASIS OF DESIGN REMARKS RPM PHASE HP 1 1/6 3250 TACO 0013-MSSFT-IFC 1, 2, 3, 4, 5, 6 PUMP RUNS CONTINUOUSLY DURING OCCUPIED HOURS. PROVIDE WITH ISOLATION VALVES. PROVIDE PIPING FLANGES AS BRONZE OR STAINLESS STEEL

	-								
TAG	SERVING	TYPE	CAPACITY (GPM)	HEAD (FT)	VOLTS				
RP-1	WH-1 CARTRIDGE		3	30	120				
2. F									

ELECTRIC WATER HEATER SCHEDULE									
TAG	LOCATION	CAPACITY (WATTS)	SIZE (GAL)	OPERATING TEMP. (DEG. F)	RECOVERY (GPH AT 100 DEG. F)	ELEC <sup>T</sup> VOLTS	RICAL PHASE	BASIS OF DESIGN MANUFACTURER & MODEL	REMARKS
WH-3	1ST FLOOR 1-08 UTILITY RM	1440	6	140	N/A	120	1	EEMAX MINI TANK EMT4	2, 3, 4
1. PROVIDE WATER HEATER WITH DIELECTRIC HEAT TRAPS NIPPLES ON THE HOT AND COLD WATER CONNECTIONS. 3. MIXING VALVE SHALL MEET ASSE 1070, NO ADDITIONAL MIXING VALVE REQUIRED.   2. INSTALL PER MANUFACTURER INSTALLATION INSTRUCTIONS. 3. MIXING VALVE SHALL MEET ASSE 1070, NO ADDITIONAL MIXING VALVE REQUIRED.									

# REMARKS

1, 2, 3, 4

#### WATER HAMMER ARRESTOR SCHEDULE MODEL NUMBER HYDROTROL 5005 5010 5020 5030 5040 FIXTURE UNIT RATING 1-11 12-32 33-60 61-113 114-154 TAG WHA-A WHA-B WHA-C WHA-D WHA-E OR APPROVED EQUAL

#### GENERAL NOTES:

- 1. PITCH ALL WATER LINES TO DRAIN, PROVIDE SHUTOFF VALVES ON ALL DOMESTIC COLD A WATER SUPPLY PIPING TO INDIVIDUAL FIXTURES.
- 2. PIPING SHALL RUN CONCEALED IN ALL AREAS WITH THE EXCEPTION OF MECHANICAL ROOT WHERE NO CEILING EXISTS.
- 3. ALL DOMESTIC WATER PIPING PRESSURE TESTS SHALL BE CONDUCTED PRIOR TO INSTALL OF PIPING INSULATION.
- 4. INSTALL DIELECTRIC CONNECTORS BETWEEN DISSIMILAR MATERIALS.
- 5. INSTALL HORIZONTAL RUNS OF DOMESTIC COLD AND HOT WATER PIPE AS HIGH AS POSSIB PROVIDE DRAW-OFFS AT ALL LOW POINTS WITH 3/4" HOSE VALVE AND CAP CONNECTION.
- 6. REFER TO EQUIPMENT SCHEDULES, DETAILS AND RISER DIAGRAMS FOR SIZES NOT SHOW FLOOR PLANS.
- 7. PROVIDE CLEANOUTS AT THE BASE OF ALL SANITARY AND STORM RISERS.
- 8. PROVIDE DOMESTIC CW, HW ISOLATION VALVES TO ALL BATHROOM GROUP FIXTURES .
- 9. PROVIDE CUTTING & PATCHING OF EXISTING STRUCTURAL REINFORCED FLOOR SLAB AT ( LEVEL. UNDER-SLAB PIPING SHALL BE SET AT A SLOPE AND PITCH OF 1/8" PER FT. MINIMU SUPPORTED TO PROVIDE FOR PATCHING WORK.
- 10. CLEAN AND VELOCITY FLUSH EXISTING BELOW SLAB SANITARY PIPING ON GROUND FLOOR SCHEDULED TO REMAIN IN SERVICE. PROVIDE ADEQUATE FLOWS TO FLUSH PIPING AT 1/2 CAPACITY MINIMUM.
- 11. VERTICALLY SUPPORT ALL RISERS AND STACKS AT EACH FLOOR AND SECURE TO WALLS F SPECIFIED SPACING.
- 12. ALL OPERATING VALVES, BALANCING VALVES AND WATER HAMMER ARRESTORS SHALL BE PLACED WHERE ACCESSIBLE AND MAINTAINABLE WITHIN CEILINGS AND CHASES.
- 13. CONFIRM WALL AND FLOOR CONDITIONS WITH FINISHES AND ACCOMMODATE PLUMBING PLACEMENTS WITH TRIM.
- 14. LAVATORIES AND KITCHEN SINKS SHALL BE PROVIDED WITH A MIXING VALVE TO DELIVER HOT WATER.

#### REMARKS 2, WALL MOUNTED W/ CARRIER, TOTO TET6LA, 1.28 GPF TURBINE/CAPACITOR HYDROELECTRIC POWERED FLUSH VALVE, 1.5" TOP SPUD, ELONGATED BOWL, ASME A112.19 15" RIM HEIGHT, HEAVY DUTY OPEN FRONT SEAT, (2) 1, 3, 4, 5, PROVIDE MANUAL ADA FAUCET, LEVER HANDLE (KOHKER K-15243-4RA), 0.5 GPM, ADA TRIM-INSULATED, ADA/ANSI-A117.1. (1) (3) (4) PROVIDE 3 HOLE DELTA 400-DST FAUCET WITH SPRAY, SUPPLIES, P-TRAP, BASKET STRAINER PROVIDE 3 HOLE DELTA 400-DST FAUCET WITH SPRAY, SUPPLIES, P-TRAP, BASKET STRAINER REPLACE EXISTING DROP-IN SINK, PROVIDE 3 HOLE DELTA 400-DST FAUCET WITH SPRAY, SUPPLIES, P-TRAP, BASKET STRAINER DURA-COATED CAST IRON BODY, POLISHED NICKEL BRONZE STRAINER 6" DIA., HEEL PROOF & ADJUSTABLE, LIGHT DUTY, W/TRAP SEAL PRIME DEVICE STABILIZER RING ROUND, POLISHED BRONZE NON-SLIP COVER, DIAMOND PATTERN. DUAL FOUNTAIN UNIT W/BOTTLE FILLER, ADA, STAINLESS STEEL W/ AIR COOLED CHILLER, NSF/ANSI STD 53 & 42, 7.5 GPH @ 50°F, STANDARD HEIGHT X ADA. PROVIDE ACCESSORY APRON CANE MODEL 98324C, STAINLESS STEEL CONSTRUCTION TO MAINTAIN THE MANDATORY ADA 27" FLOOR TO UNDERSIDE REQUIREMENT. PROVIDE FIAT 830-AA FAUCET WITH VACUUM BREAKER, PAIL HOOK AND 3/4" HOSE THREADED SPOUT STANDARD AND EMERGENCY ROOF DRAIN, LARGE LOW PROFILE POLYETHYLENE DOME, CAST IRON BODIES, COMBINED FLASHING CLAMP AND GRAVEL STOP AND UNDERDECK CLAMP, 3 1/2" HIGH INTERNAL WATER DAM STANDPIPE FLAP COVER AT ABOVE GRADE OUTLETS, SIZE PER DRAWINGS, HINGED PERFORATED COVER, STAINLESS STEEL FINISH. FLOOR CLEANOUT FOR UNFINISHED AREA, ROUND FLANGED HOUSING WITH HEAVY DUTY CAST IRON COVER

	LEGEND & ABBREVIATIONS		
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			ARCHITECTS, LLP
S PER	SAN	- BELOW SLAB SANITARY PIPING	
	SAN	ABOVE SLAB SANITARY PIPING	57 West High Street Ballston Spa
BE	V	SANITARY VENT PIPING	New York 12020
G FIXTURE	ST	- STORM PIPING	D. 519-995-1955
	$\mathbf{\bullet}$	REMOVAL POINT	P: 518•885•1255 F: 518•885•1266
R 110°F		CONNECTION POINT	www.brmarchitects.com
	X	KEYED NOTE	
	$\langle \overline{X} \rangle$	KEYED NOTE	Additions &
	A.F.F.	ABOVE FINISH FLOOR	Renovations
	AFG	ABOVE FINISHED GRADE	
	CO CONT.	CLEAN OUT CONTINUATION	
	CW	COLD WATER DOMESTIC COLD WATER	for the
	DCW DET	DETAIL	Marlboro
	DF DN	DRINKING FOUNTAIN DOWN	
	DWG	DRAWING	Free Library
	DPCO DS	FLOOR CLEANOUT DOWN SPOUT	
	E.C.	ELECTRICAL CONTRACTOR	
	EEW EWH	EMERGENCY EYEWASH STATION ELECTRIC WATER HEATER	
	EWC	ELECTRIC WATER COOLER	
	EX FD	EXISTING FLOOR DRAIN	
	FFHB	FROST FREE HOSE BIBB	1251 Rte 9W Marlboro, NY 12542
	G HB	GAS HOSE BIB	Manbolo, N 1 12342
	HW	HOT WATER	
	HWR INV. EL.	HOT WATER RECIRCULATING INVERT ELEVATION	
	LAV	LAVATORY	
	RD RP	ROOF DRAIN CIRCULATION PUMP	
	RTU	ROOFTOP UNIT	PROJECT
	RL SAN	ROOF LEADER SANITARY	
	ST	STORM	
	THRU TPRV	THROUGH TEMPERATURE AND PRESSURE RELIEF VALVE	

RELIEF VALVE VENT THRU ROOF

WATER CLOSET

WATER HEATER

WALL CLEAN OUT

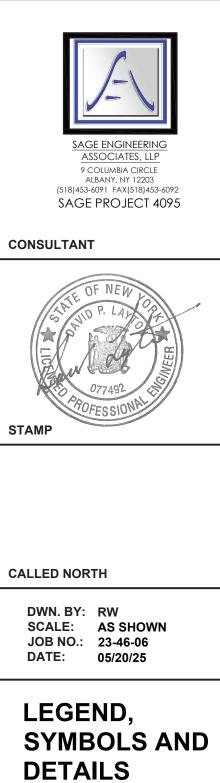
WATER HAMMER ARRESTOR

VTR WC

WH

WCO

WHA

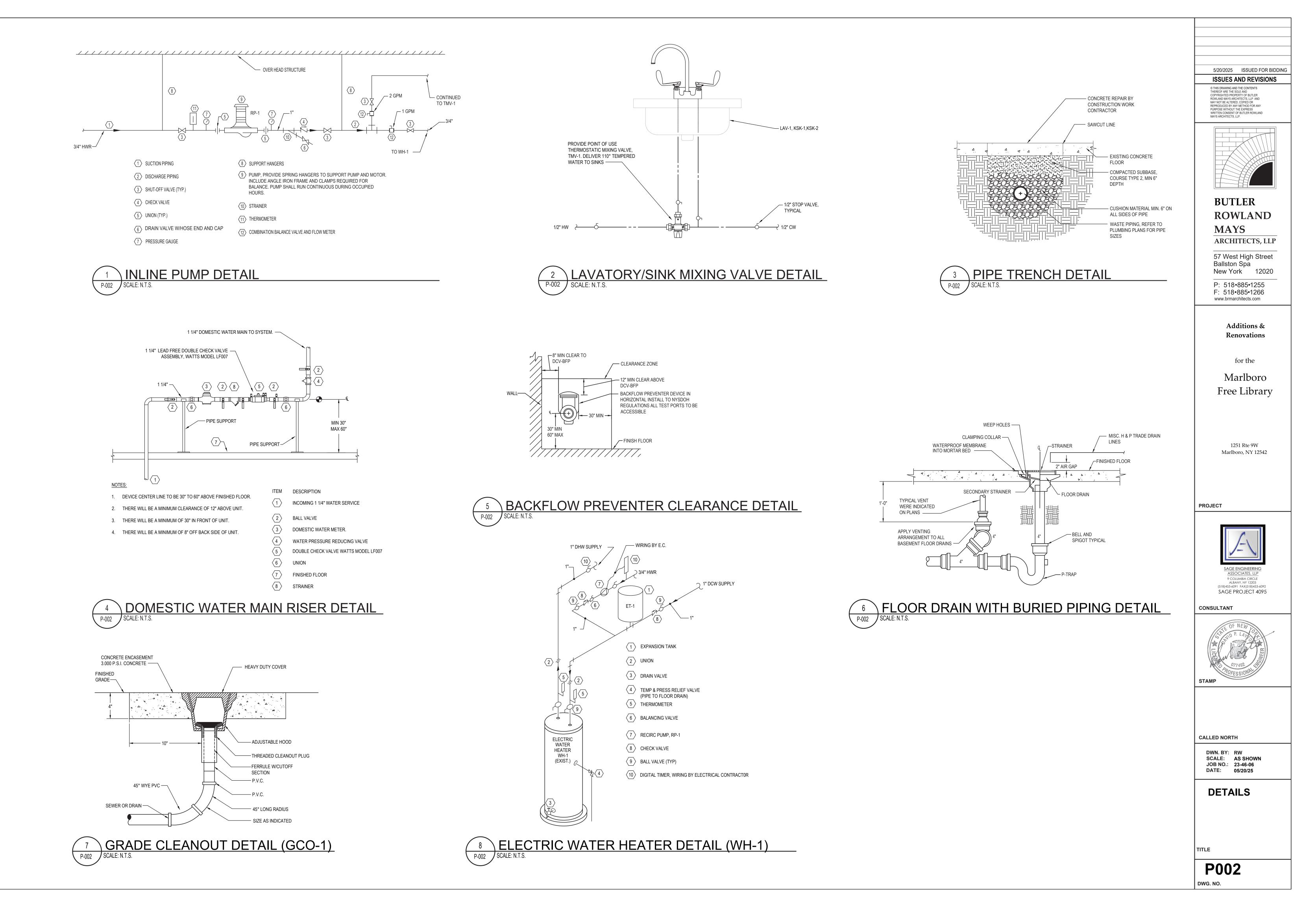


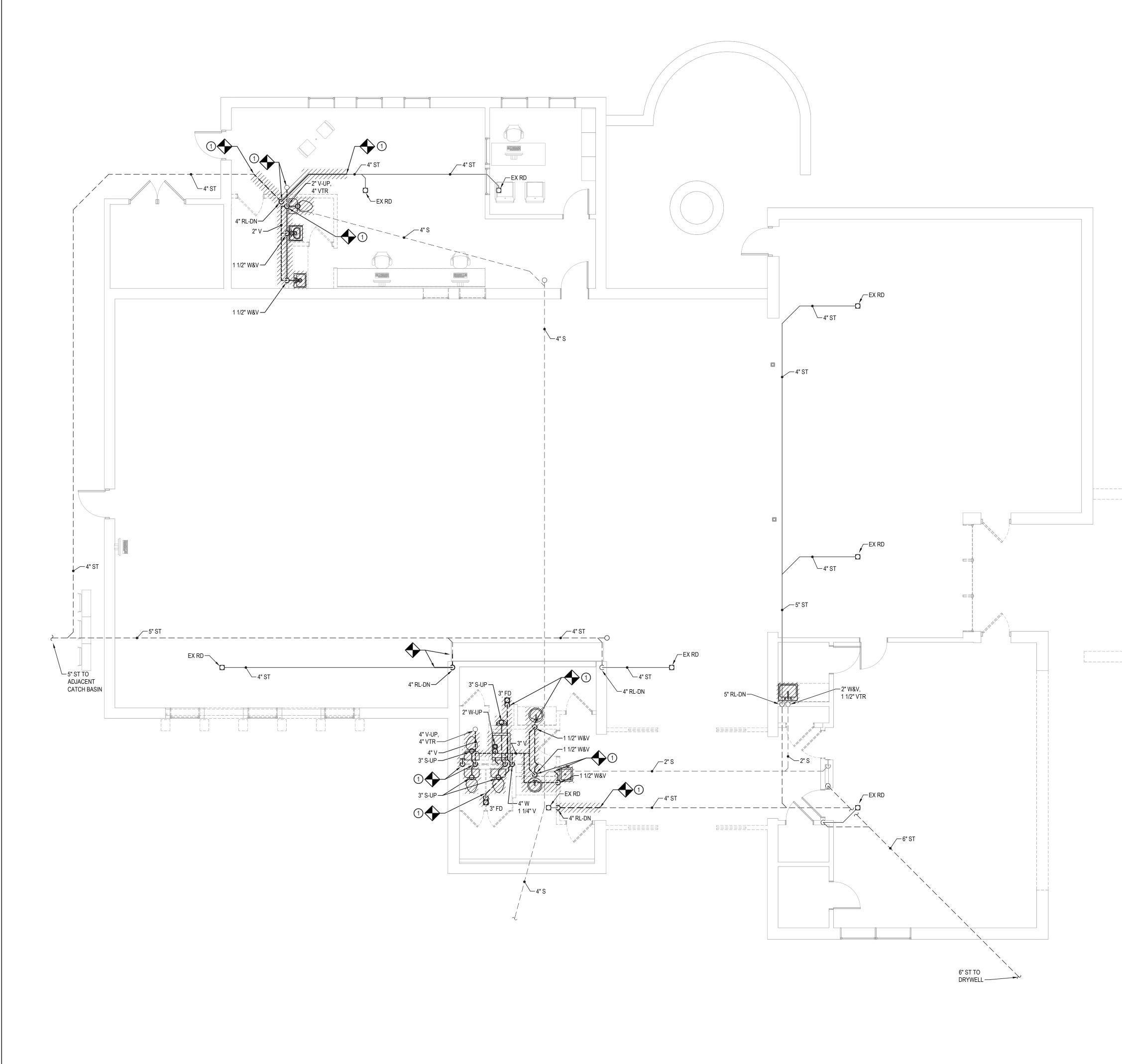
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TITLE

**P001** 

DWG. NO.





#### GENERAL NOTES:

1. SLAB REMOVAL AND SLAB REPAIR BY GC CONTRACT. REFER TO PIPE TRENCH DETAIL ON P-002

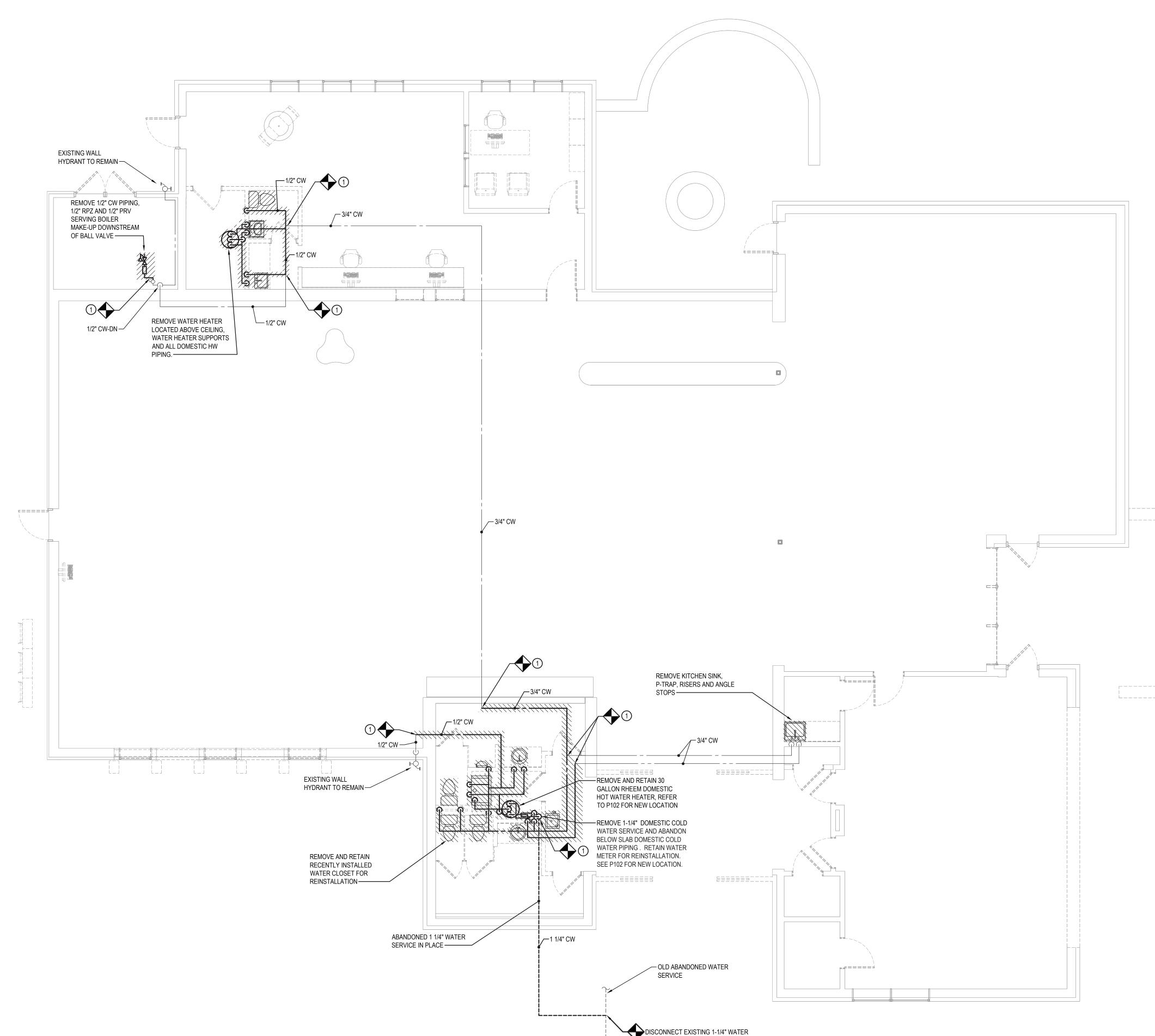
#### KEYED NOTES:

1 REMOVE WASTE, VENT AND STORM PIPING AS SHOWN, REFER TO P101 FOR PIPING INSTALLATION.

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PR101

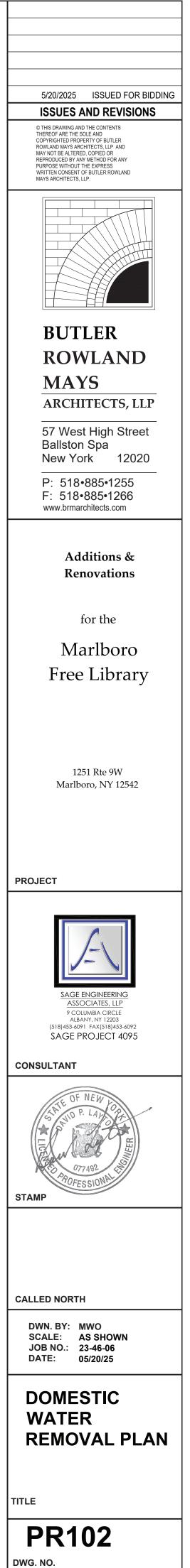
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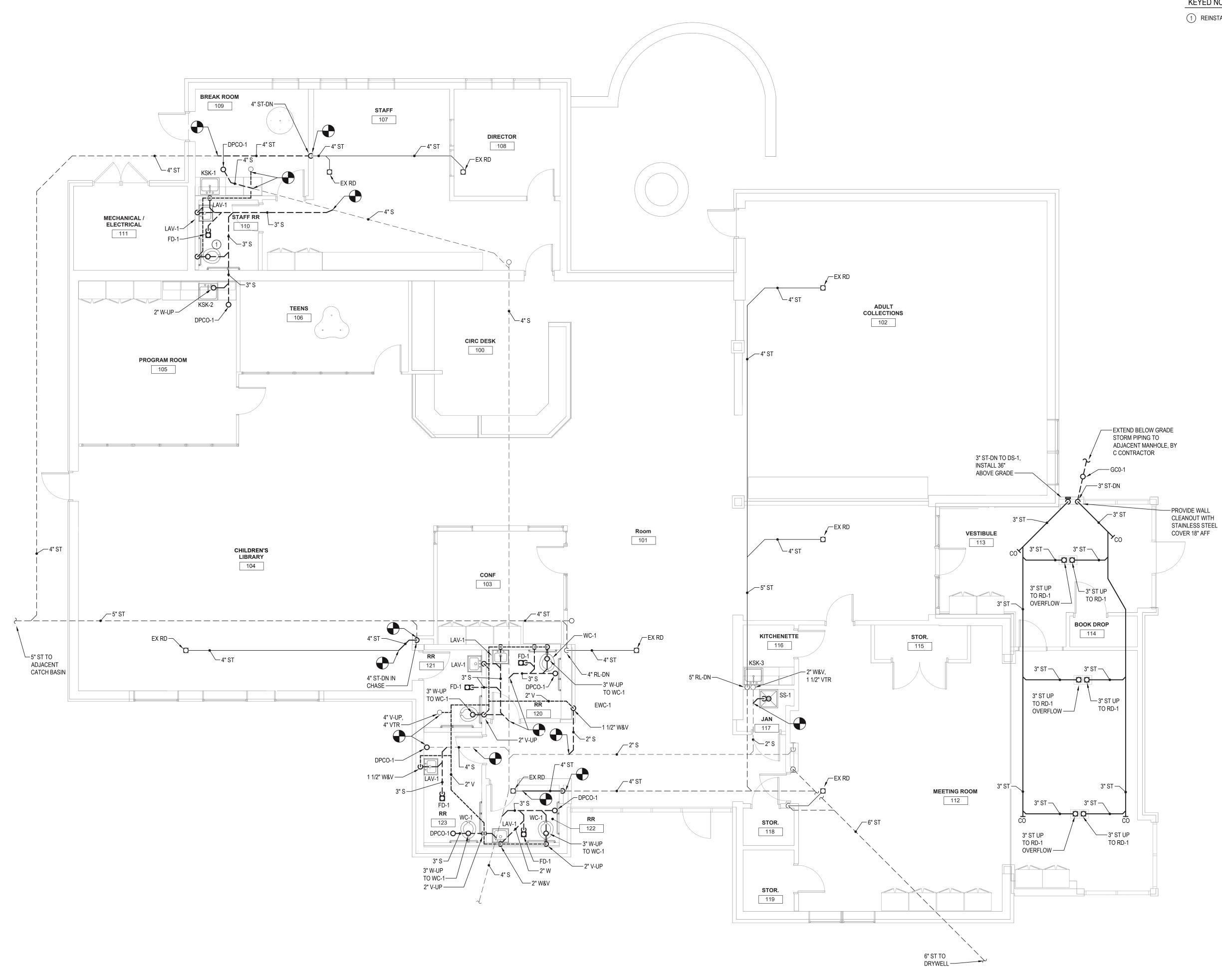


DISCONNECT EXISTING 1-1/4" WATER SERVICE AND ABANDON 1 1/4" PIPING IN PLACE. REFER TO P102 FOR WATER SERVICE PIPING AND METER LOCATION

#### KEYED NOTES:

(1) REMOVE PLUMBING FIXTURES AND DOMESTIC WATER PIPING AS SHOWN, REFER TO P102 FOR PIPING INSTALLATION.



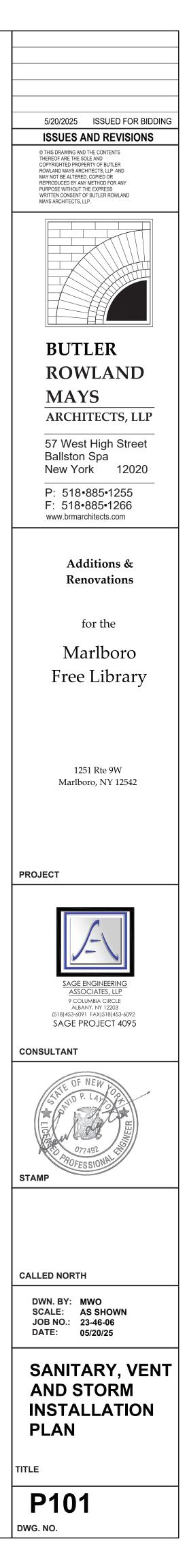


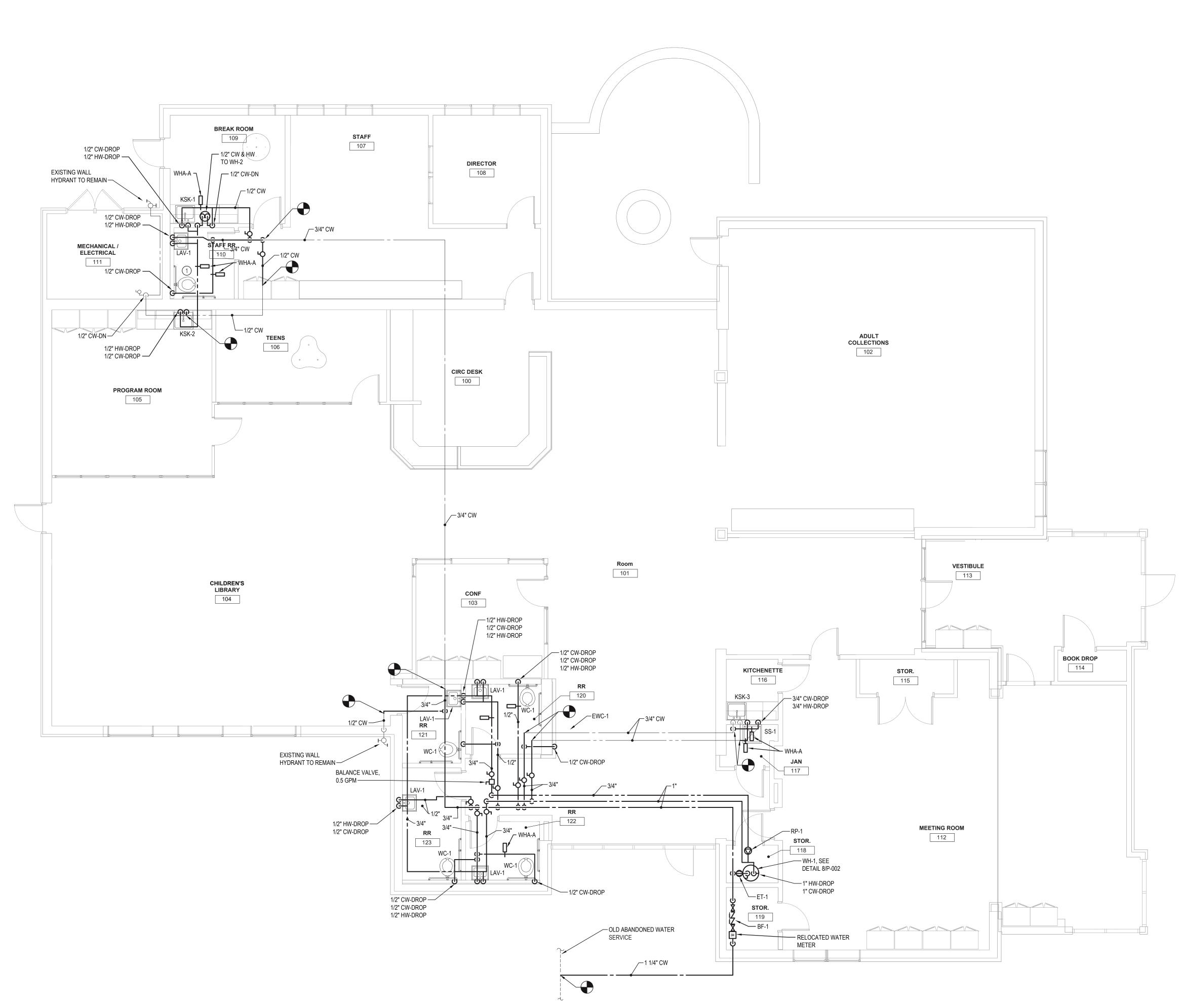
#### GENERAL NOTES:

1. COORDINATE STORM PIPING INSTALLATION IN ADDITION WITH HVAC DUCTWORK.

#### KEYED NOTES:

1 REINSTALL SALVAGED TANK WATER CLOSET.





#### GENERAL NOTES:

1. COORDINATE DOMESTIC WATER PIPING INSTALLATION WITH HVAC DUCTWORK.

#### KEYED NOTES:

(1) REINSTALL SALVAGED TANK WATER CLOSET.

