Moving Forward

Bullitt County Public Schools

1040 Highway 44 East
Shepherdsville, Kentucky 40165

502-869-8000
Fax 502-543-3608
www.bullittschools.org

Memo

To: Jesse Bacon, Superintendent

From: Bret Highley

Date: April 26, 2019

Re: Change Order #30
Maryville Elementary Addition/Renovation

Attached for the Board's review and approval is Change Order #30 for Maryville Elementary School addition/renovation project. This Change Order request is to add a water softener to the domestic water system. The original school did not have a softening system and due to budgetary concerns during the design phase a water softener was not included in the construction package.

After school started and the systems have been in use, hard water issues have been discovered and are causing serious problems with the hot water heaters, ice machines, and faucets. The BCPS plumbers spend a significant amount of time working on plumbing issues being created by the lack of having a water softener, and it is causing damage to the above mentioned equipment.

The cost of this Change Order to add the water softener is $30,116.39. Parco's current contract amount is $6,975,217.39, and adding the cost of this Change Order will bring their amount to $7,005,333.91.

If you have any questions, please feel free to contact me at 502-921-3659.

Attachments:
- Design Documents
- KDE Change Order

AIA® Document G701™ – 2017

Change Order

PROJECT: *(Name and address)*
Maryville Elem School Addition / Renov.
4504 Highway 44 East
Shepherdsville, Kentucky 40229

CONTRACT INFORMATION:
Contract For: General Construction
Date: August 17, 2015

CHANGE ORDER INFORMATION:
Change Order Number: 030
Date:

OWNER: *(Name and address)*
Bullitt County Board of Education
1044 Highway 44 East
Shepherdsville, KY

ARCHITECT: *(Name and address)*
Sherman Carter Barnhart Architects PLLC
2405 Harrodsburg Road
Lexington, KY 40504

CONTRACTOR: *(Name and address)*
Parco Construction Company
2521 Ridgemar Court
Louisville, KY 40269-0339

THE CONTRACT IS CHANGED AS FOLLOWS:
(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)

Water softener for the domestic water system, refer to attached backup and pricing information for details.

The original Contract Sum was	$	6,610,528.00
The net change by previously authorized Change Orders	$	364,689.52
The Contract Sum prior to this Change Order was	$	6,975,217.52
The Contract Sum will be increased by this Change Order in the amount of	$	30,116.39
The new Contract Sum including this Change Order will be	$	7,005,333.91

The Contract Time will be increased by Zero (0) days.
The new date of Substantial Completion will be

NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

ARCHITECT *(Firm name)*	CONTRACTOR *(Firm name)*	OWNER *(Firm name)*
Sherman Carter Barnhart Architects PLLC	Parco Construction Company	Bullitt County Board of Education
SIGNATURE	SIGNATURE	SIGNATURE
Mitch Hunter, Constr. Admin.		
PRINTED NAME AND TITLE	PRINTED NAME AND TITLE	PRINTED NAME AND TITLE
April 25, 2019		
DATE	DATE	DATE

FACPAC Contract Change Order Supplemental Information Form (Ref# 51198)

Form Status: Saved

Project: Maryville Elementary School - Addition/Renovations
BG Number: 15-106 (Imported Project) District: Bullitt County (071)
Status: Active Phase: No Data

Contract: PARCO CONST. GROUP, LLC, 00
Type: General Contractor Proposed

Change Order Number	30
Time Extension Required	No
Date Of Change Order	4/25/2019
Change Order Amount To Date	Increase

Construction Contingency

Calculations below are project wide. Remaining negative Construction Contingency may require the submission of a revised BG1.

Current Approved Amount	$491,857.85
Net Approved COs	$250,114.32
Remaining After Approved COs	$241,743.53
Net All COs	$361,385.21
Remaining After All COs	$130,472.64

This Requested Change Order Amount +/- $30,116.39
Change In A/E Fee This Change Order +/- $1,882.27
Change In CM Fee This Change Order +/- $0.00
Remaining Construction Contingency Balance $125,175.88
Contract Change Requested By Local Board of Education
Contract Change Reason Code Expansion of Scope

Change Order Description And Justification

Water softener for the domestic water system, refer to attached backup and pricing information for details.

Cost Benefit To Owner

Price is fair and reasonable.

Contract unit prices have been utilized to support the cost associated with this No

change order.

Detailed Cost Breakdown

Contract unit prices have not been utilized, provide a detailed cost breakdown which separates labor, material, profit and overhead.

Detail Item	Amount	Percent of Total
Labor	$1,284.90	4.27 %
Materials	$27,275.00	90.57 %
Profit and Overhead	$1,556.49	5.17 %
Bond Insurance		0.00 %
Cost Breakdown Total:	$30,116.39	

Cost for this Change Order supported by an alternate bid or competitive price quote: No

Explain Why

Change Order Supplimental Information Form Signature Page (Online Form Ref# 51198)

Architect	April 24, 2019 Date
Construction Manager	Date
Finance Officer	4-26-19 Date
Local Board of Education Designee	4/26/19 Date

Parco Constructors Group, LLC

General Contractor
2521 Ridgemar Court
P.O. Box 99339
Louisville, Kentucky 40299
(502) 266-7877
Fax (502) 266-9114

April 24, 2019

Mr. Mitch Hunter
Sherman-Carter-Barnhart, PSC
2405 Harrodsburg Road
Lexington, KY 40504
Phone: (859) 224-1351

e-mail: mhunter@scbarchitects.com

Re: Maryville Elementary School
BG #15-106
SCB PR # 15
Water Softener for Domestic Water System
Parco RFP # 1535-40

Dear Mitch:

Pursuant to your request for pricing to Furnish & Install (1) Watts Duplex Water Softener per the submittal Q-713 dated 4/5/2019. The cost for the referenced work is in the amount of **$30,116.39.** Please see the attached backup & pricing breakdown below.

Breakdown:

Contractor		
Parco Constructors-	Labor	$1,083.00
	Materials	101.90
	Equipment	100.00
Total Direct Cost		$1,284.90
Walker Mechanical-	Labor	$7,590.00
	Materials	6,341.00
	Equipment	10,681.00
	Start-Up & Training	1,835.00
	Insulation	828.00
Total Direct Cost		$27,275.00
Parco- Concrete Pad		$ 1,284.90
Walker- Water Softener System		27,275.00
Parco 15% Markup on Self-Performed Work		192.74
Parco 5 % Markup on Subcontracted Work		1,363.75
Total Change Amount		**$30,116.39**

I hope the above proposal meets with your approval. If you have any questions or need any additional information please give me a call.

Respectfully,

Tony Snellen
President/Project Manager

PARCO CONSTRUCTORS GROUP, LLC

Parco Job #	EXTRA WORK ESTIMATE	E.W. #
1901		1535-01

OWNER:	Bullitt County Public Schools	DATE:	
BLDG. NO.	Maryville Elementary School	P.O. NO.	Project No. BG # 15-106

DESCRIPTION OF WORK:

Construct New Concrete Housekeeping Pad for the Proposed Water Softener System.

Approximate Pad Size: 3' wide x 10' long x 4" high +/-

NAME OF EMPLOYEE	TRADE OR CRAFT	REGULAR HOURS	Rate	O.T. HOURS	Rate	TOTAL
Form & Pour Concrete Pad						$ -
Unknown @ this Time	Carpenter	8	$ 51.73		$ -	$ 413.84
Unknown @ this Time	Laborer	8	$ 38.52		$ -	$ 308.16
			$ -		$ -	$ -
Wreck Forms & Rub Edges of Pad						
Unknown @ this Time	Carpenter	4	$ 51.73		$ -	$ 206.92
Unknown @ this Time	Laborer	4	$ 38.52		$ -	$ 154.08
					$ -	$ -
						$ -
						$ -
						$ 1,083.00
Subcontractors						
						$ -
						$ -

MATERIALS

QUANTITY	DESCRIPTION	RATE	TOTAL	QUAN.	DESCRIPTION	RATE	TOTAL
16	4" Edge Form	$ 0.55	$ 8.80			$ -	$ -
20	3/4" Chamfer	$ 0.17	$ 3.40			$ -	$ -
8	# 4 Rebar Dowels x 5"	$ 0.45	$ 3.60	0		$ -	$ -
18	Bags 80-lb Concrete Mix	$ 4.50	$ 81.00	0		$ -	$ -
30	6 x 6 - w1.4/w1.4 WWF	$ 0.17	$ 5.10	0		$ -	$ -
		$ -	$ -	0		$ -	$ -

EQUIPMENT

HRS. USED	TYPE OF EQUIPMENT	RATE	TOTAL	HRS. USED	TYPE OF EQUIPMENT	RATE	TOTAL
2	Pickup Truck	$ 10.00	$ 20.00			$ -	$ -
2	Small Portable Concrete Mixer	$ 25.00	$ 50.00			$ -	$ -
2	Wheel Barrell	$ 15.00	$ 30.00			$ -	$ -
		$ -	$ -			$ -	$ -
		$ -	$ -			$ -	$ -

CONTRACTORS APPROVAL	OWNER REPRESENTATIVE
Tony Snellen	

OFFICE

LABOR	$ 1,083.00
MATERIALS	$ 101.90
EQUIPMENT	$ 100.00
SUBCONTRACTED	$ -
SUBTOTAL	$ 1,284.90
OVERHEAD/PROFIT	$ 192.74
TOTAL COST	$ 1,477.64

OWNERS COPY

WALKER Mechanical Contractors, Inc.
1400 W. Jefferson Street
Louisville, KY 40203
502.636.0002
502.636.0004 (Fax)

April 23, 2019

Parco Constructors Group, LLC
2521 Ridgemar Court
Louisville, KY 40269

Attn: Mr. Tony Snellen

Re: Maryville Elementary School – Water Softener Quote

Dear Mr. Snellen,

In accordance with your request, we offer the following quote for furnishing and installing (1) Watts Duplex Water Softener per the submittal Q-713 dated 4-5-19. Our quote includes piping the unit per the detail on drawing P1.1 dated 6-15-15 as prepared by CMTA.

Labor	$ 7,590.00
Materials	$ 6,341.00
Equipment	$10,681.00
Start-up & Training	$ 1,835.00
Insulation	$ 828.00
Total Quote Amount →	**$27,275.00**

Note: We exclude the concrete equipment pad, electrical power wiring, water meter shown on detail, overtime, anything not listed in this quote.

We will need to shutdown the main water supply to the building for a minimum of 8 hours for tie-ins to the existing domestic water service. The equipment has a 4 week lead time after receipt of a purchase order and approved submittals.

We appreciate your consideration of the above. If you have any questions or require additional information, please contact us at your convenience.

Regards,
Walker Mechanical Contractors, Inc.

Robert A. Smith, CIPE
Project Manager

AIA® Document G709™ – 2001

Work Changes Proposal Request

PROJECT *(Name and address):*
Maryville Elem School Addition / Renov.
4504 Highway 44
EastShepherdsville, Kentucky 40229

OWNER *(Name and address):*
Bullitt County Board of Education
1044 Highway 44
EastShepherdsville, KY

FROM ARCHITECT *(Name and address):*
Sherman Carter Barnhart Architects PLLC
2405 Harrodsburg RoadLexington, KY 40504

TO CONTRACTOR *(Name and address):*
Parco Construction Company
2521 Ridgemar CourtLouisville, KY 40269-0339

PROPOSAL REQUEST NUMBER: 015

DATE OF ISSUANCE: April 15, 2019

CONTRACT FOR: General Construction

CONTRACT DATE: August 17, 2015

ARCHITECT'S PROJECT NUMBER: 1470

OWNER: ☒
ARCHITECT: ☒
CONSULTANT: ☒
CONTRACTOR: ☒
FIELD: ☐
File 1470X, CA Copy: ☒

Please submit an itemized proposal for changes in the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. Within ten (10) days, the Contractor must submit this proposal or notify the Architect, in writing, of the date on which proposal submission is anticipated.

THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.

DESCRIPTION *(Insert a written description of the Work)*:

Provided itemized pricing for all labor and material to provide and install the owner requested a modified water softner package.

ATTACHMENTS *(List attached documents that support description)*:

PR 15. 1

REQUESTED BY THE ARCHITECT:

(Signature)

Mitch Hunter, Construction Admin.
(Printed name and title)

PR 15.1

DISNEY MCLANE
& ASSOCIATES

SUBMITTAL

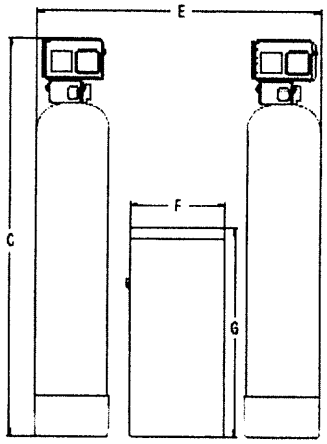
Date: 4.05.2019

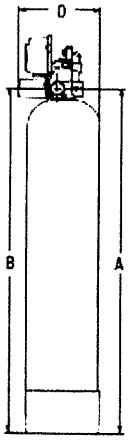
JOB NAME LOCAL MIDDLE SCHOOL- LOUISVILLE-KY **Q-713**

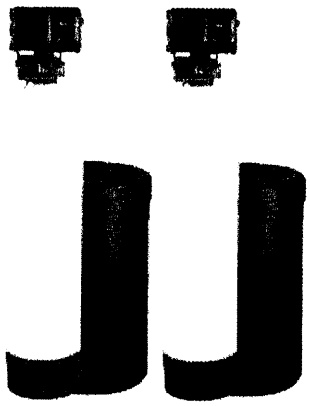
PROPOSED EQUIPMENT

WATTS DUPLEX PROGRESSIVE FLOW REGENERATION 7 CU FT

SOFTENER: M4052NT-NH as duplex progressive flow operation system 14







MODEL NO.	DIMENSIONS														WEIGHTS	
	A		B		C		D		E		F		G			
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg
As duplex	701/2	1791	701/2	1791	8015/16	2055	211/8	536	75	1905	24	610	50	1270	1200	545

Specifications

MODEL NO.	MINERAL TANK			BRINE TANK		SOFTENING CAPACITY		LBS. SALT PER REGENERATION		FLOW RATE & PRESSURE		
	TANK SIZE	RESIN ft³	GRAVEL	TANK SIZE	SALT FILL	MAX	MIN	MAX	MIN	SERV GPM	DROP PSI	BACK GPM
Each tank	21" x 62"	7	100 lbs.	24" x 50"	600	210 K	140 K	105	42	60/77	15/25	12

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FLOW RATE IN DUPLEX PARALLEL SYSTEM 14 - 114 GPM PEAK

SOFTENER CONTINUED:

MODEL NO.	DESCRIPTION	SPACE REQUIRED D X W X H	WEIGHT LBS	KGS
Each tank	7 Cubic Foot 2" Simplex Softener with Flow Meter	24" x 52" x 89"	600	273

NOTICE

Capacities are based on resin manufacturer's data and are dependent upon influent water TDS, temperature, bed depth, and flow rates. Feed water must be free of oil and color. Pipe size, tank size, and space requirements are in inches. Capacities and flow rates expressed above are per tank. Flow rates listed at 15 psi drops are for intermittent peak flow rates and are not to be used as continuous flows.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

TANKS: 21x62 Pentair / Structural fibers polyglass

Structural Composite Pressure Vessels offer reinforced fiberglass construction for outstanding performance and durability. Available in.

Product Features

- For commercial and industrial water treatment and storage
- 100% composite fiberglass construction
- Outstanding performance and durability in harsh chemical environments:
- Absolutely will not – and cannot – rust
- Requires little or no maintenance
- Factory-backed five-year warranty

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Material of Construction

- Polyethylene inner shell

Operating Parameters

- Maximum operating pressure: 150 psi
- Maximum operating temperature:

120°F (threaded)

Tanks continued

150°F (flanged)

Pentair Design Parameters

- Safety factor: 4:1
- Minimum burst at 600 psi
- Tested to 250,000 cycles without leakage

NSF Design Parameters

Tanks continued

- Safety factor: 4:1
- Minimum burst at 600 psi
- Tested to 100,000 cycles without leakage

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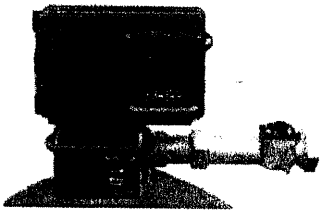
CONTROL VALVES :

FLECK 2900s
2-INCH CONTROL VALVE

MADE IN THE USA



FEATURES/BENEFITS

- Lead-free brass valve body for superior strength and durability
- Continuous service flow rate of 106 GPM with a backwash of 36 GPM
- Backwash capability accommodates softener tanks up to 36" and filter up to 24" in diameter
- Fully adjustable 3- or 5-cycle control for efficient and reliable water treatment system
- Designed for single or multiple tank systems
- Environmental protective cover for water resistance, corrosion resistance, and UV stability
- Time-tested, hydraulically-balanced piston for service and regeneration
- Rugged-built electromechanical timer designed with heavy duty 3/8" wide plastic gears

TESTED and CERTIFIED by the WQA to NSF/ANSI Standard 61 Section 8 Material Safety Only

TESTED and CERTIFIED by the WQA to NSF/ANSI Standard 372 for Lead Free Compliance

UL recognized to 979

Restriction of Hazardous Substance Compliant

VALVES CONTINUED:

Demand flow / Progressive Flow system 14 / 3214

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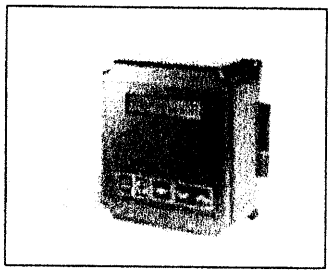
NXT- Network controller uses on-board communication capabilities to link multiple valves (via off-the-shelf CAT3, CAT5, or better cables) for system types 4,5,6,7,9,and 14

VALVE SPECIFICATIONS

Valve Material	Lead-free brass**
Inlet/Outlet	2" NPTF/BSPF
Cycles	5



The 3214NXT Demand Flow Network Controller is available to configure with all commercial Fleck™ 2750, 2850, 2900, 3150, and 3900 Control Valves. This demand flow system can be programmed to bring multiple units to the service position and back to standby based on system demand flow. The 3214NXT Demand Flow Network Controller uses on-board communication capabilities to link multiple valves via standard CAT3, CAT5, or better communication cables

System Types	
System Type 14	2 - 4 Valves (meter on each valve)

Regenerant Flow

Downflow, Upflow Brine Draw First, Upflow Refill First

Regeneration Type

Meter Immediate

Generic Meter Guidelines

Open collector output

Board will sink up to 1-mA @ 5 V DC

Support for meter outputs in the range of 1-255 gallons (25.5 m³) for every 1-255 pulses. Example, 35 gallons/100 pulses (= 3.5 gallons/10 pulses. = 0.35 gallons/1 pulse).

Electrical Rating

24 VAC Pentair® Transformers:
115 VAC +/- 20% input, 24 VAC output
230 VAC +/- 20% input, 24 VAC output

Humidity

95% RH, Non-Condensing

Features

- Network two to four valves
- Simple, on-site network programming
- Easy installation with plug-in wiring harnesses
- Shift key allows digit selecting in programming
- 2x16 character LCD backlit display (letter or digit codes not needed)
- Valve, piston, and cam type default storage
- User and master programming modes
- Diagnostic mode
  - Current flow rate
  - Peak flow rate (can be reset)
  - Totalizer (can be reset)
  - Hours between last two regenerations
  - Hours since last regeneration
  - Volume remaining (adjustable)
  - Valve addresses

Options

- CAT 3 networking cable kit
- Remote lock
- Programmable for Fleck™ and generic meters
- Programmable auxiliary relay output.
  - Dry contact relay (fused at 3 amps)
  - Program entire regeneration or during any part of regeneration
  - Chemical pump output (volume and time)

Three programming levels

- User mode
- Master programming
- Diagnostic mode

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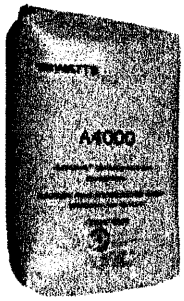
MEDIA: **WATTS BRAND A4000 SOFTENER RESIN**

Watts brand A4000 Resin

Watts brand A4000 resin is a high purity, premium grade, prewashed, strong acid gel-type cation exchange resin specially designed for water softening applications. A4000 is a bead type, cross-linked, polystyrene divinylbenzene resin that offers excellent bead integrity and very low extractables.



Resin Properties

Type	8% crosslink polystyrene
Form	Gel type, light amber bead
Ionic form	Na+ (as shipped)
Functional group	Sulphonic acid
Bead size	16 x 50 mesh
Effective size	0.45 ± 0.07 mm
Bulk density	51 lbs/ft3
Bead count	min. 90%
Water retention	46-49%
Total capacity	≥2.0 meq/l
Volume change	Na+ → H+ <5%
Stability, temp	<300°F
Stability, pH	0 - 14

A4000 is tested and certified by WQA against NSF/ANSI Standard 61

Design Conditions

Bed depth	>30 in
Flow rate	2-5 gpm/ft3
Freeboard	50% of bed depth
Backwash expansion	50% of bed depth
NaCl concentration for regeneration	5-25%
NaCl flow rate for regeneration	0.25-0.5 gpm/ft3
Turbidity	<5.0 NTU
Free chlorine	<1 ppm

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PROJECT SCHEDULE

LEAD TIME: 10 – 15 days lead time

F.O.B.

San Antonio Texas

TERMS: Above products are subject the standard terms of the manufacturer and will be supplied upon request. All taxes are extra. Partial or expedited shipments, at customer request, may result in additional freight charges. Any material over & above that what is listed is in addition to and therefore not provided for by this quotation. Please ensure that all quoted product meets your projects specifications. Our company will only be responsible for products shown on this quotation and not responsible for any product applied beyond the operating conditions and specifications. All shipments are FOB point of shipment unless otherwise indicated. all quotes are good for 30 days of entered date on quote unless otherwise stated.

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Ion Exchange Resin

- The ion exchange resin shall be a high purity, premium grade, strongly acidic gel-type cation exchange resin specially designed for drinking water treatment and WQA certified to NSF/ANSI Standard 61. The ion exchange resin shall be composed of polystyrene with 8% divinylbenzene crosslinking that offers excellent bead integrity, high resistance to bead fracture or osmotic shock, and very low extractables. The resin shall have a light amber color and shall be specially pretreated to remove taste, odor and color throw. Resin bead size shall be 16X40 mesh. The resin shall meet the requirements of FDA regulation CFR section 21,

Gravel Under-bedding

The gravel under-bedding shall be a flint media. This media shall be washed to rid it of fines to prevent clogging of the lower distributor system. Enough gravel must be furnished to completely cover the lower distributor in the mineral tank(s).

Internal Distributor System

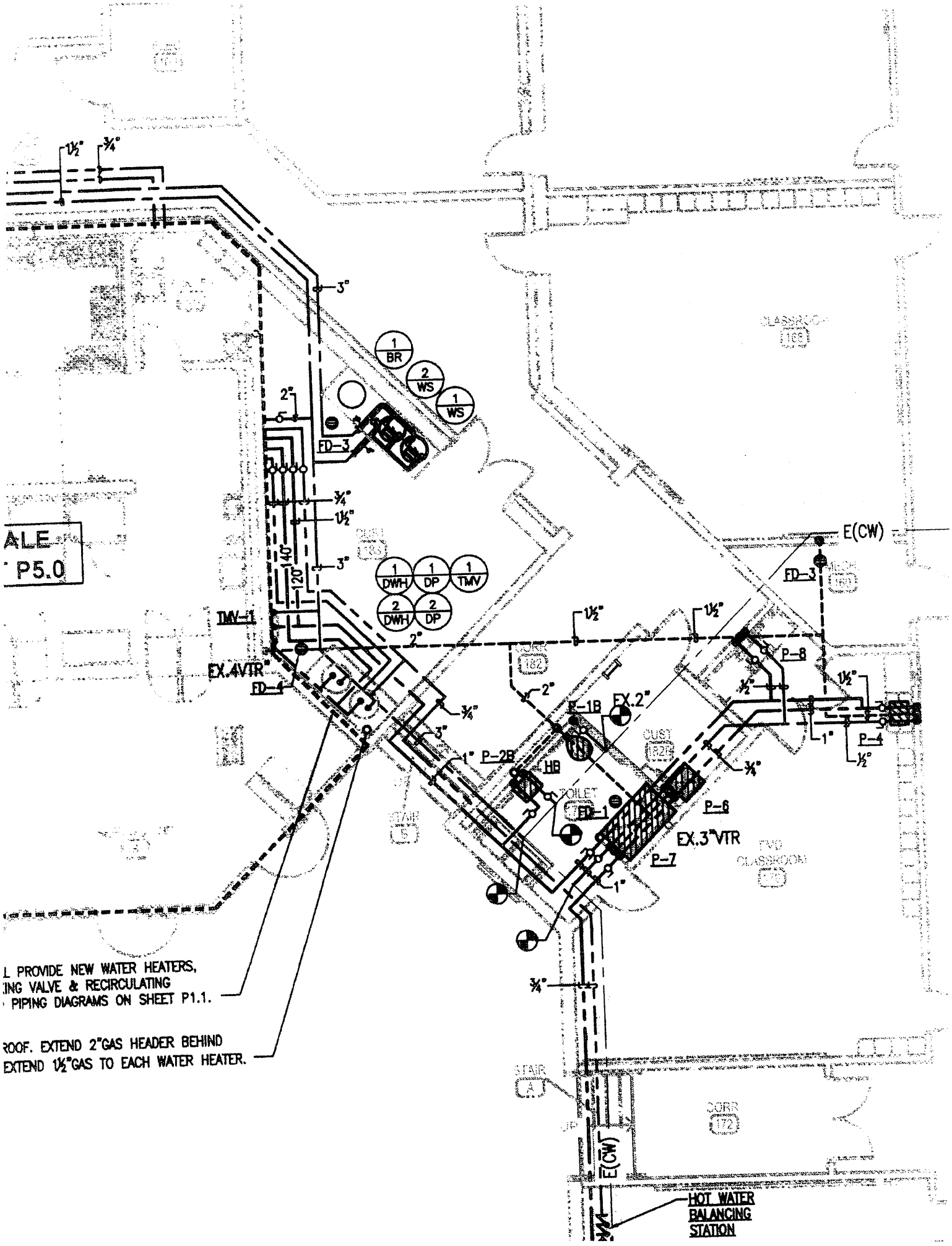
The internal distributor system shall come already installed in the water softener mineral tank(s). The screens/laterals of the internal distribution system shall be a slotted screen type diffuser. The slot cross section shall be a V shape to promote a self-cleaning characteristic of the slot while in the back wash flow mode. Slot size shall be .008" and not allow the resin to pass through and become present in the systems effluent water. Each screen will have an internal perforated pipe core to evenly distribute water flow across the entire lateral to prevent resin bed channeling. The lower distributor shall be a hub and lateral design for mineral tanks over 24" in diameter and single point design for mineral tanks 24" in diameter and below. The internal distribution system shall be made of abrasion resistant 20% glass filled polypropylene and have a maximum temperature limitation of 160 deg. F (71 deg. C). The distributor tube connecting the internal distribution system to the system control valve shall be made of polyvinyl chloride.

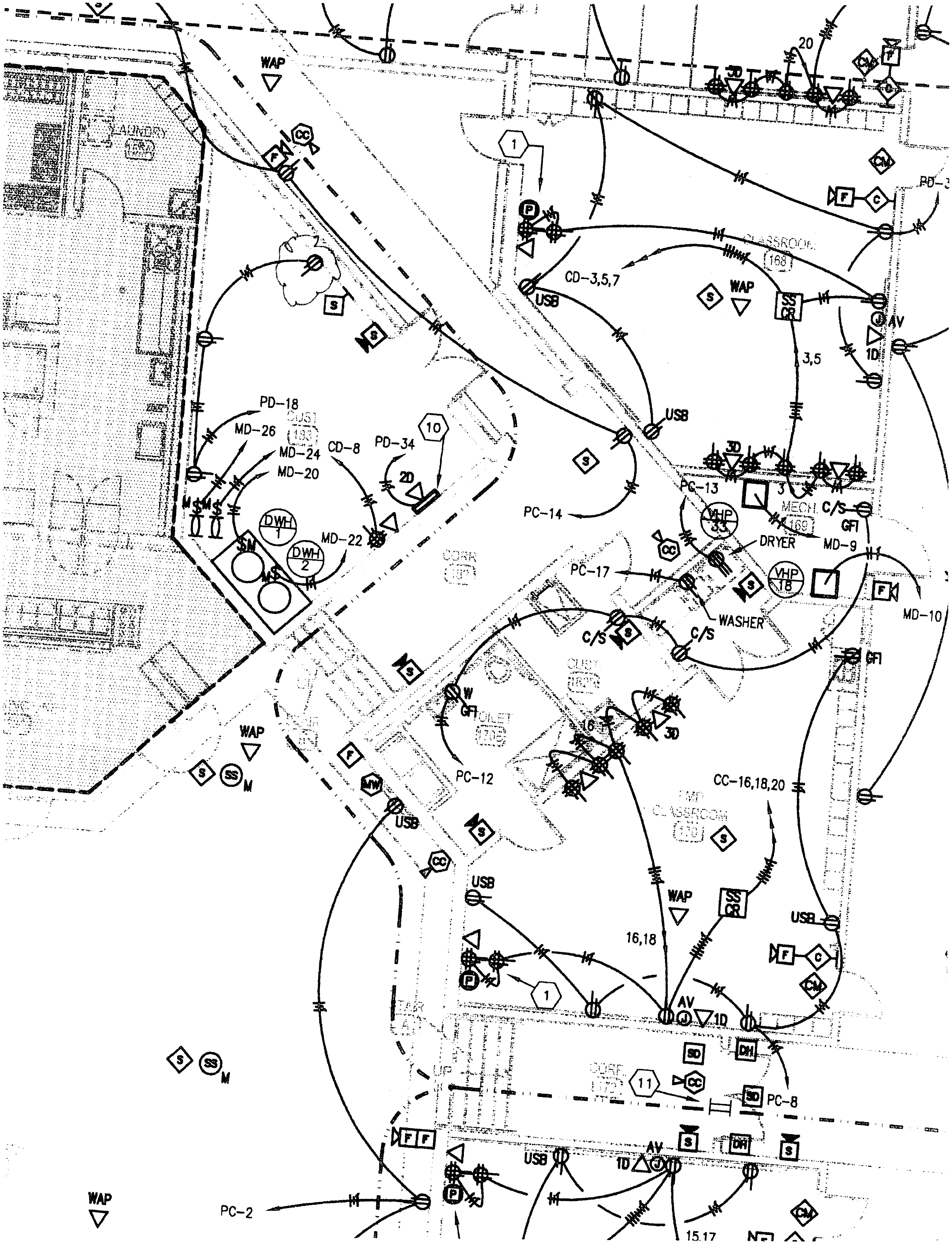
Brine Tank

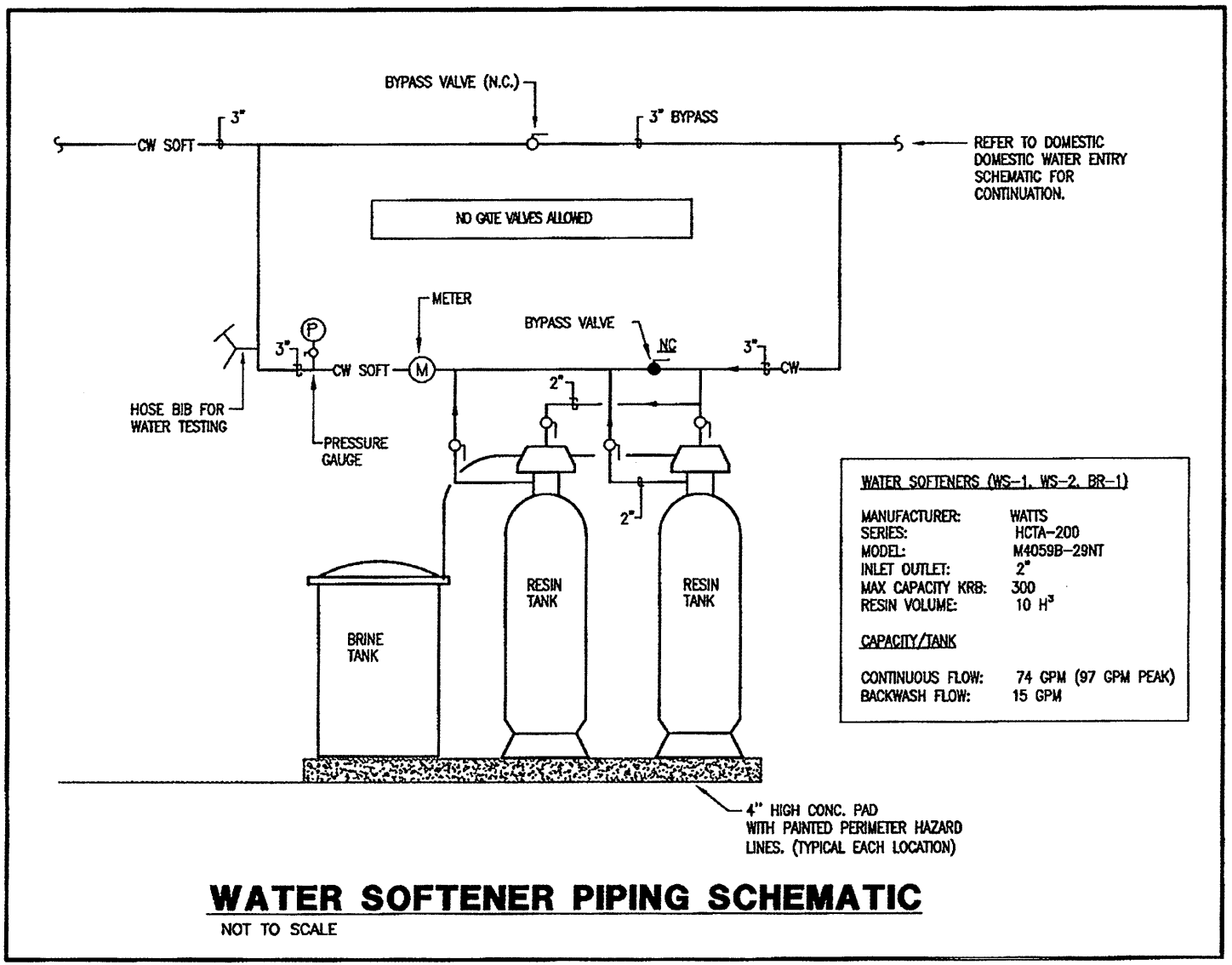
Provide a brine tank made of high density polyethylene for making a brine solution for the water softener to use during a regeneration cycle and for salt storage. The brine tank shall be furnished with an over flow connection, lid, aircheck, and brine well. The brine tank shall be sized to hold enough salt for 12 regenerations at 6 lbs of salt per cubic foot of resin.

Warranty

Provide a 1 year parts and labor warranty for the system to protect against manufacturers defects. The system shall not be subjected to water temperatures above 110 deg. F (43 deg. C) or below 34 deg. F. (1 deg. C) nor shall it be subjected to pressure exceeding 125 psi. During operation the feed water pressure must not fall below 25 psi so a proper regeneration can be performed. The resin shall not be subjected to iron levels greater than 1 ppm or free chlorine


1½"
¾"
3"
2"
¾"
1½"
3"
140
120
1
BR
2
WS
1
WS
FD-3
1
DWH
1
DP
1
TMV
2
DWH
2
DP
TMV-1
EX.4"VTR
FD-4
2"
1½"
1½"
E(CW)
FD-3
P-8
1½"
½"
1"
P-4
½"
¾"
2"
P-1B
EX.2"
HB
P-2B
1"
3"
¾"
TOILET
FD-1
P-6
EX.3"VTR
P-7
1"
¾"
E(CW)
HOT WATER
BALANCING
STATION
CLASSROOM
169
CORR
182
CUST
182A
STAIR
5
CORR
172
ALE
P5.0
L PROVIDE NEW WATER HEATERS,
ING VALVE & RECIRCULATING
PIPING DIAGRAMS ON SHEET P1.1.
ROOF. EXTEND 2"GAS HEADER BEHIND
EXTEND 1½"GAS TO EACH WATER HEATER.


WAP
CC
F
LAUNDRY
S
PD-18
MD-26
CUST
MD-24
CD-8
PD-34
10
MD-20
2D
DWH 1
DWH 2
MD-22
SM
CORR
1
P
CD-3,5,7
USB
CLASSROOM
168
SS CR
AV
1D
3,5
3D
PC-13
PC-14
VHP 33
MECH.
169
C/S
GFI
DRYER
MD-9
PC-17
VHP 18
MD-10
WASHER
W
TOILET
170B
PC-12
16
CC-16,18,20
EMD CLASSROOM
170
MW
16,18
CM
SD
DH
CORR
11
PC-8
UP
PC-2
15,17
20



WATER SOFTENERS (WS-1, WS-2, BR-1)

MANUFACTURER:	WATTS
SERIES:	HCTA-200
MODEL:	M4059B-29NT
INLET OUTLET:	2"
MAX CAPACITY KRB:	300
RESIN VOLUME:	10 H^3

CAPACITY/TANK

CONTINUOUS FLOW:	74 GPM (97 GPM PEAK)
BACKWASH FLOW:	15 GPM

WATER SOFTENER PIPING SCHEMATIC

NOT TO SCALE

TRAI
SHAI
1'-0"
FINIS
EVEI
PRIN

NOTE:
PROVIDE A TRA
LOCATED IN MI
ROOMS. ALL O
BE PROVIDED

INSULAT
FROM TF
PROVIDE

FLOOR DI
NOT TO SCALE