Item #	Description	Notes	Material	Size
		Well & purification subsytem		
1	Well & casing			
2	Submersible well pump & motor			
3	Pump screen			
4	Wiring to power pump			
5	Tubing to pump house			
6,7,8,9	*reserved*			
10	Shut off valve	Normally open; used in conjunction with 11 to divert water to outside instead of the filtration system.	bronze	1"
11	Shut off valve	Normally closed. See above. When 10 is closed and 11 open the well can be "run" bypassing the filtration system. Often used to remove sand & debris from the well.	bronze	2"
12	Waste line to pumphouse exterior	Unsed when "running" well to divert well wateer to outside of pump house	PVC	2"
13	Buffer tank for well water	Maintains even flow & pressure in filtration plant.	metal/epoxy	40 Gal
14	Shut off valve	Normally open. Shuts off flow to relief valve	bronze	1"
15	air release valve	Opens when too much air collects in the plumbing	bronze	?
16	Water meter	Measures amount of water flowing into filtration plant	bronze	2"
17	Bypass valve	Normally closed. When open & 20 closed allows well water to flow into backwash channel	bronze	2"
18	manual relief valve	Normally closed. When open allows air to escape from thes section of the system. Used when recharching system after a drain.	PVC	1/2"
19	Pressure switch	Not sure how this is wired in. Used to control water pressure in this section of system		1/2"
20	Pressure guage	Monitors water pressure in this section of system		1/2"
21	Shut off valve	Normally Open. Shuts off flow to ozone injector	PVC	2"
22	Shut off valve	Normally Closed. When open & 21 closed bypasses ozone injector.	PVC	2"
23	Shut off valve	Nomrmally closed. When open, bypasses filtration system. This would require 21,22 & 24 to be closed.	PVC	2"
24	Shut off valve	Normally open. Allows filtered water into resevoir & distribution subsytem.	PVC	2"
25	Shut off valve	Normally open. Allows preassure monitoring and draining of ozone injected loop & tank	PVC	2"
26	Preassure guage	Monitors pressure of ozone injected loop & tank		1/2"
27	drain valve	Nomrmally closed. When open,drains water from this section of the system	PVC	1/2"
28	shut off valve	Normally open. When closed, prevents ozone injected water from entering mixing tank	PVC	2"
29	Osone injection fitting	Injecs O3 gas into the water stream		
30	Ozone Generation			
31	Ozone generator controller			
32	Ozone generator electircal interface			
33	Wall mounted tube associated with ozone generator			
34	*reserved*			
35	Mixing tank	Allows ozone time to interact with well water killing bacteria.	fiberglass	30"x72"
36	air release valve	Opens when too much air collects in this part of the system. Tubing type drain lines directs residual water drainage to backwash waste water channel.	bronze	?
37	shut off valve	Normally open. Allows ozone mixed water to enter rest of system	PVC	2"
38	check valve	Prevents backflow of backwash water during backwash cycle	PVC	2"
39	Solenoid valve	Normally closed. Electrically controlled. Opens during backwash cycle to allow backwash water to the berm tanks (40 & 43). Operates in conjunction with 60	PVC	2"
40	Berm tank #1	Berm tank. Contains material for filtering iron & other contaminants from the water.	fiberglass	30"x72"

Item #	Description	Notes	Material	Size
41	3 way solenoid valve	3 Port valve for controlling filter tank operation. Ports: 1 Ozone injected or backwash water. 2. filtered water. 3. backwash water. During normal operation water from port 1 is filtered and output on port 2. During backwash cycle, water from port 1 rinses the filer media & is ouput on port 3.		
42	timer for controlling 41	Timer appears to be integral to valve		
43	Berm tank #2	Similar to 40. Appears to operate in parrallel		
44	3 way solenoid valve	Similar to 41. Appears to operate in parrallel		
45	timer for controlling 44	Similar to 42. Appears to operate in parrallel		
46,47,48,49	*reserved*			
50	Shut off valve	Normally open. When closed, shuts off water supply to port 1 of berm tank #1 so it can be isolated from the system for servicing, etc.	PVC	2"
51	Shut off valve	Normally open. When closed, shuts off water supply to port 1 of berm tank #1 so it can be isolated from the system for servicing, etc.	PVC	2"
52	shut off valve	Normally open. Allows preasure guage (53) & drain/bleed valve (54) to function	PVC	1/2"
53	Preassure guage	Monitors pressure of supply water to berm tanks		1/2"
54	shut off valve	Normally closed. Allows water & air to be bled from berm tank input lines.	PVC	1/2"
55	shut off valve	normally open. When closed, stops output of filtered water from berm tank #2. Allows tank to be isolated for servicing, etc.	PVC	2"
56	shut off valve	Normally open. Allows preasure guage (57) & drain/bleed valve (58) to function	PVC	1/2"
57	Preassure guage	Monitors pressure of filtered water from berm tanks		1/2"
58	shut off valve	Normally closed. Allows water & air to be bled from berm tank output lines.	PVC	1/2"
59	shut off valve	normally open. When closed, stops output of filtered water from berm tank #1. Allows tank to be isolated for servicing, etc.	PVC	2"
60	Solenoid valve	Normally open. Electrically controlled. Closes during backwash cycle to prevent backwash water from berm tanks (40 & 43) from entering distribution subsyteem & resevoir. Operates in conjunction with 39	PVC	2"
61	Bypass valve	Normally closed. Allows filtered water to be drained from tanks through backwash piping to exterior of pump house. Not sure if this is used much.	PVC	2"
62	Bypass valve	Normally open. When closed, prevents backwash water from draining to pump house exterior. Should be closed if 61 is open. Not sure that this is really needed.	PVC	2"
63	drain valve	Normally closed. Drains water from solenoid valve & nearby piping. Not sure this is needed.	PVC	1/2"
64,65,66	*reserved*			
67,68,69	*reserved*			
70	Shut off valve	normally open. Controls supply of backwash water to filtration tanks	bronze	2"
71	Bypass valve	Normally closed. When open allows filtered water into the backwash piping	bronze	2"
72	Check valve	prevents backflow of water in the piping to the resevoir	PVC	2"
73	Shut off valve	Normally closed. Allows fitered water to be introduced directly into the 8" distribution main	bronze	2"
74	Shut off valve	Normally open. When closed, filtered water is prevented from being pumped to the resevoir.	PVC	2"
75,76,77	*reserved*			
78,79	*reserved*			

Item #	Description	Notes	Material	Size
		Distribution & pressure boost Subsytem.		
80	Booster pump #1	draws water from 8" resevoir main and increases pressure when delivering it to 6" distribution main		
81	Booster pump #1 motor	Motor is independent of pump		
82	shut off valve	Normally open. Controls flow into booster pump. When closed (along with 85) allows pump to be maintained & removed without interrupting operation.	bronze	2"
83	Pressure guage.	Monitors input water pressure to booster pump	bronze	1/2"
84	Pressure guage.	Monitors ouput water pressure from booster pump	bronze	1/2"
85	shut off valve	Normally open. Controls flow from booster pump.	bronze	2"
86	Check valve	prevents backflow of boosted pressure water back into pump & resevoir main.	bronze	2"
87	drain valve	normally closed. Used to release air from booster pump channel.	bronze	1/2"
88,89	*reserved*			
90	Booster pump #2	draws water from 8" resevoir main and increases pressure when delivering it to 6" distribution main. Operates in parrallel with booster pump #1. Also used backwash cycle to provide boosted water pressure for backwash channel.		
91	Booster pump #2 motor	Motor is independent of pump		
92	shut off valve	Normally open. Controls flow into booster pump. When closed (along with 95) allows pump to be maintained & removed without interrupting operation.	bronze	2"
93	Pressure guage.	Monitors input water pressure to booster pump	bronze	1/2"
94	Pressure guage.	Monitors ouput water pressure from booster pump	bronze	1/2"
95	shut off valve	Normally open. Controls flow from booster pump.	bronze	2"
96	Check valve	prevents backflow of boosted pressure water back into pump & resevoir main.	bronze	2"
97	drain valve	normally closed. Used to release air from booster pump channel.	bronze	1/2"
98	check valve	Prevents backflow from backwash channel of boosted pressure water back into pump & resevoir main.	bronze	2"
99	*reserved*			
100-119	*6" preassure boosted group*	*see additional drawings & table*		
101	gate valve	Normally closed. When opem (with 121) connects 6" main with 8" main bypassing booster pumps. Allows gravity feed of water from resevoir.	steel	6"
120-139	*8" resevoir feed group*	*see additional drawings & table*		
121	gate valve	Normally closed. When opem (with 121) connects 6" main with 8" main bypassing booster pumps. Allows gravity feed of water from resevoir.	steel	6"
140	Pressure switch	Activates booster pump in backwash channel	bronze	1/2"
141	Pressure guage	Monitors pressure in backwash channel	bronze	1/2"
142	shut off valve	Normally open. Enables relief valve (143) for boosted pressure chanel	bronze	1/2"
143	air release valve	Opens when too much air collects in this part of the system.		
144	shut off valve		bronze	1"
145	air release valve	Opens when too much air collects in this part of the system.		
146	PVC line from resevoir main	Appears to be used for water sampling	PVC	1/2"
147	drain valve	used to take water sample	bronze	1/2"
148,149	*reserved*			

Item #	Description	Notes	Material	Size
150	Pressure tank	Buffer tank for backwash channel		
151	shut off valve	normally open. Connect boosted presssure tankds to 6" distribution group	bronze	2"
152	Pressure switch	controls booster pump	bronze	1/2"
153	Pressure switch	controlls booser pump	bronze	1/2"
154	Pressure guage	monitors pressure in 2" piping sections	bronze	1/2"
155	drain valve	Normally closed. Allows air/water to be bled from this section of pipe	bronze	1/2"
156	shut off valve	Connects boosted pressure tank #2 to system	bronze	2"
157	shut off valve	Connects boosted pressure tank #1 to system	bronze	2"
158	drain valve	Normally closed. Allows air/water to be bled from this section of pipe	bronze	1/2"
159	*reserved*			
160	storage tank	Boosted pressure storage tank #1		
161	storage tank	Boosted pressure storage tank #2. Both tanks operater in parrallel		
162	Air volume control	Controls the amount of air in the above 2 tanks		
163	Pressure gauge	monitors pressure in storage tanks		
164	gate valve	Normally open. Isolates tank 1 from tank 2	bronze	1"
165	gate valve	Normally open. Isolates tank 2 from tank 1	bronze	1"
166	Connecting line	Connects the air pockets in tanks 1 & 2 together. Enables use of single air volume control	galvanized steel	1"
167	Pressure release valve	Opens when water or air preassure exceeds the valve setting	bronze	1"
168	drain valve	Drains water in booster tanks.		