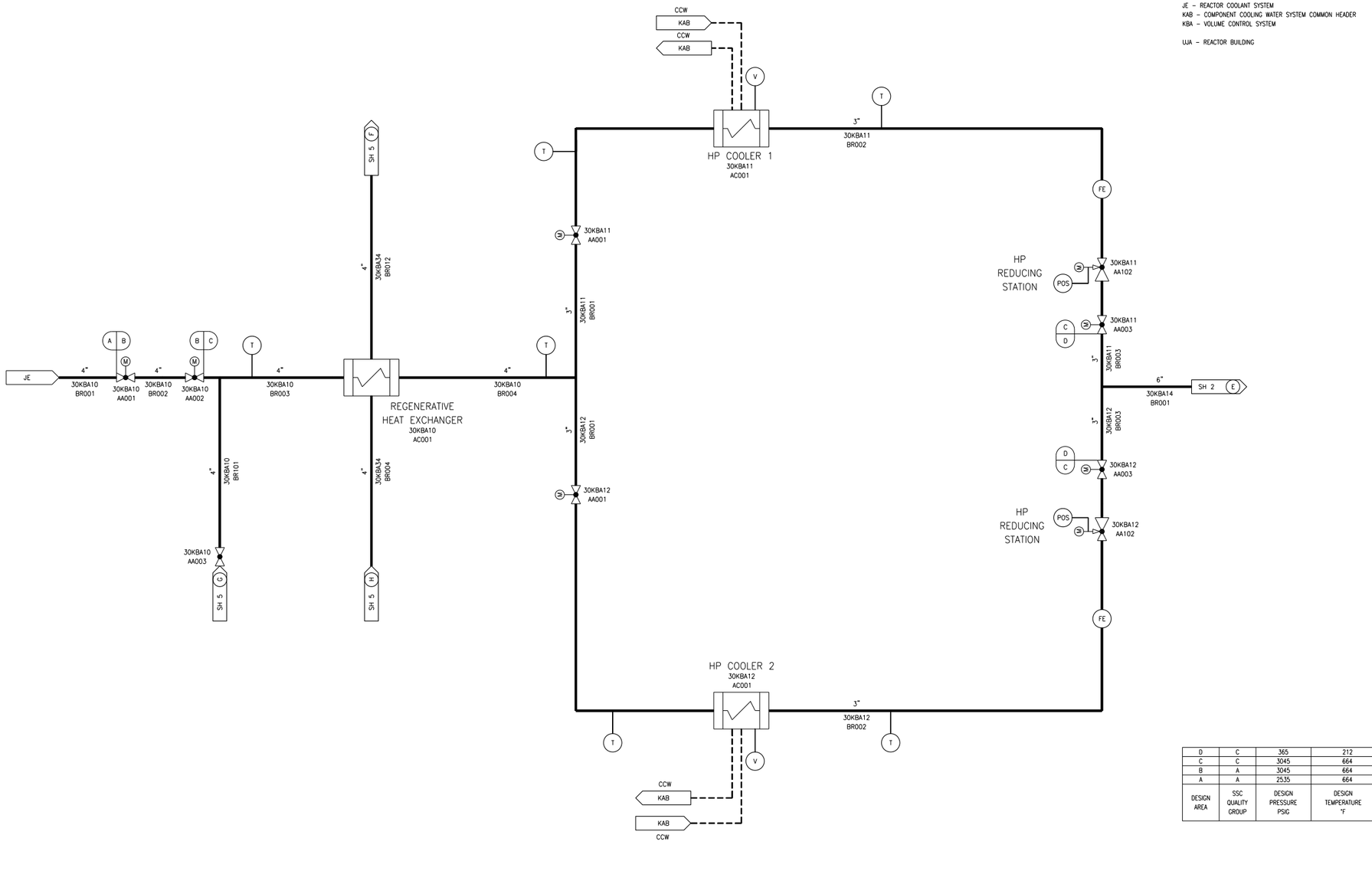
Figure 9.3.4-1—Chemical and Volume Control System
Sheet 1 of 9



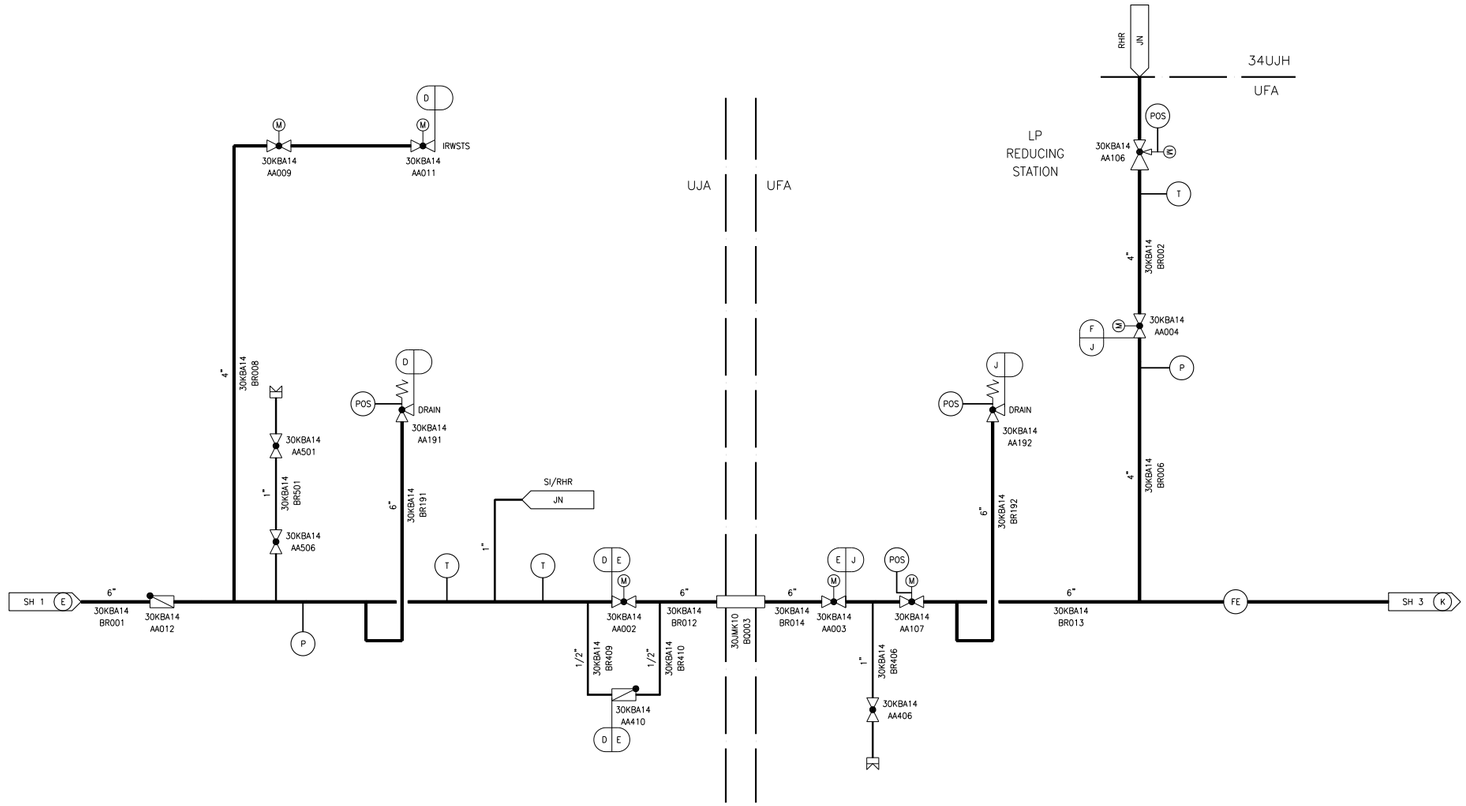
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS
D	C	365	212	I
C	C	3045	664	I
B	A	3045	664	I
A	A	2535	664	I

KBA01T2

Figure 9.3.4-1—Chemical and Volume Control System
Sheet 2 of 9

JN – SAFETY INJECTION AND RESIDUAL HEAT REMOVAL SYSTEM
KBA – VOLUME CONTROL SYSTEM

UFA – FUEL BUILDING
UJA – REACTOR BUILDING
34UJH – SAFEGUARD BUILDING MECHANICAL, DIVISION 4



J	D	365	212	NSC
F	C	1160	360	I
E	B	365	340	I
D	C	365	212	I
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBA02T2

Figure 9.3.4-1—Chemical and Volume Control System
Sheet 3 of 9

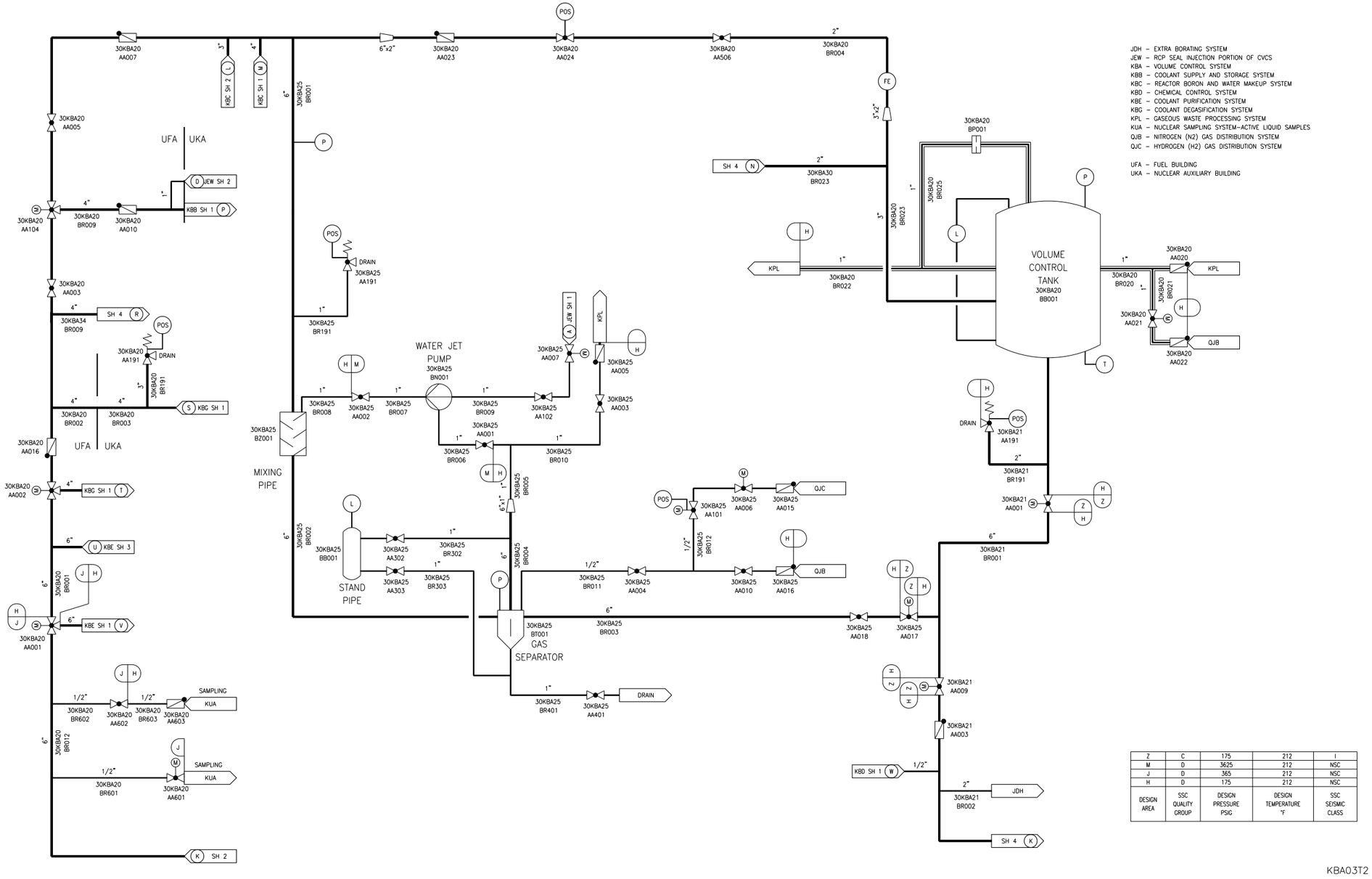


Figure 9.3.4-1—Chemical and Volume Control System
Sheet 4 of 9

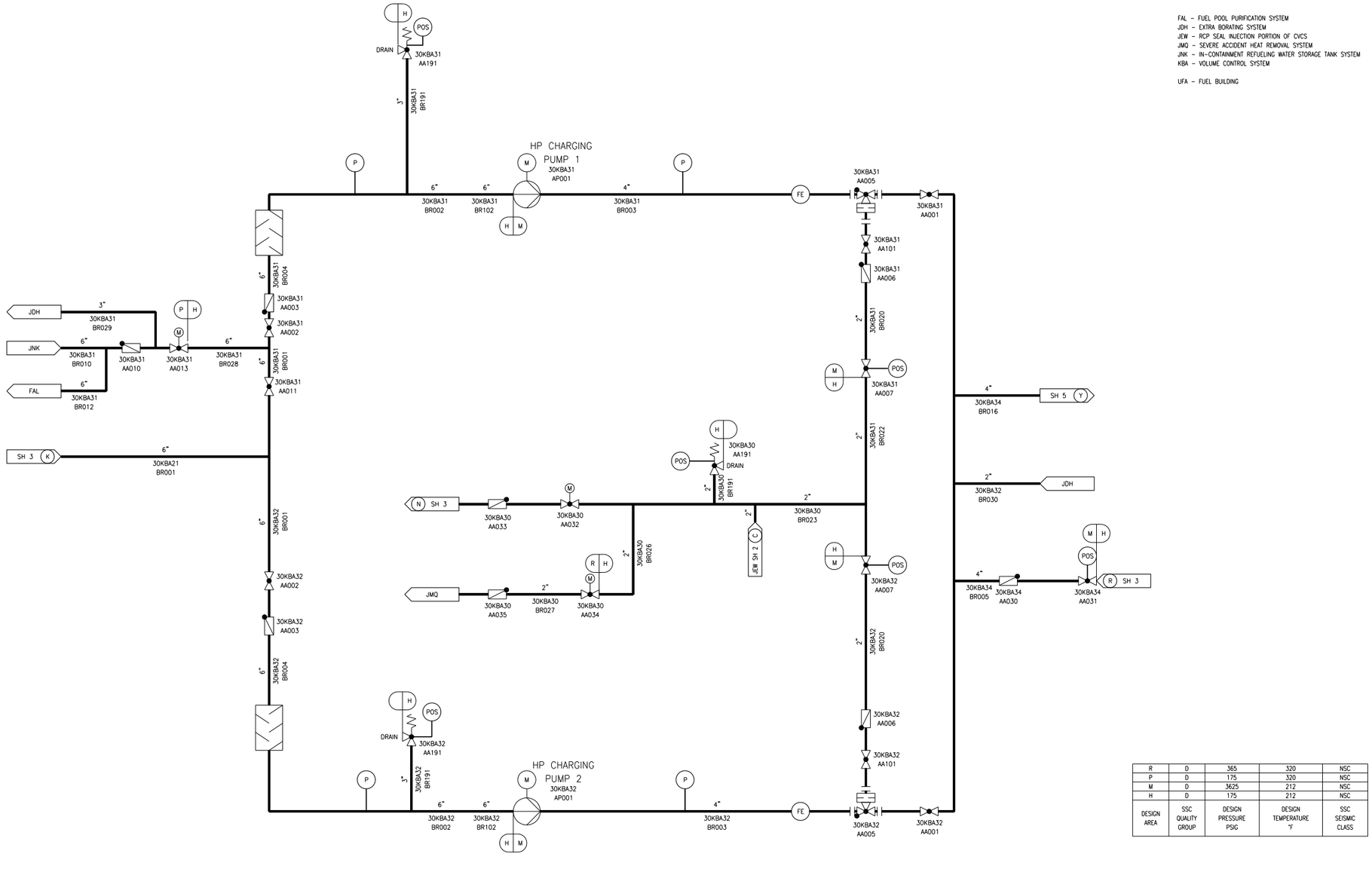


Figure 9.3.4-1—Chemical and Volume Control System
Sheet 5 of 9

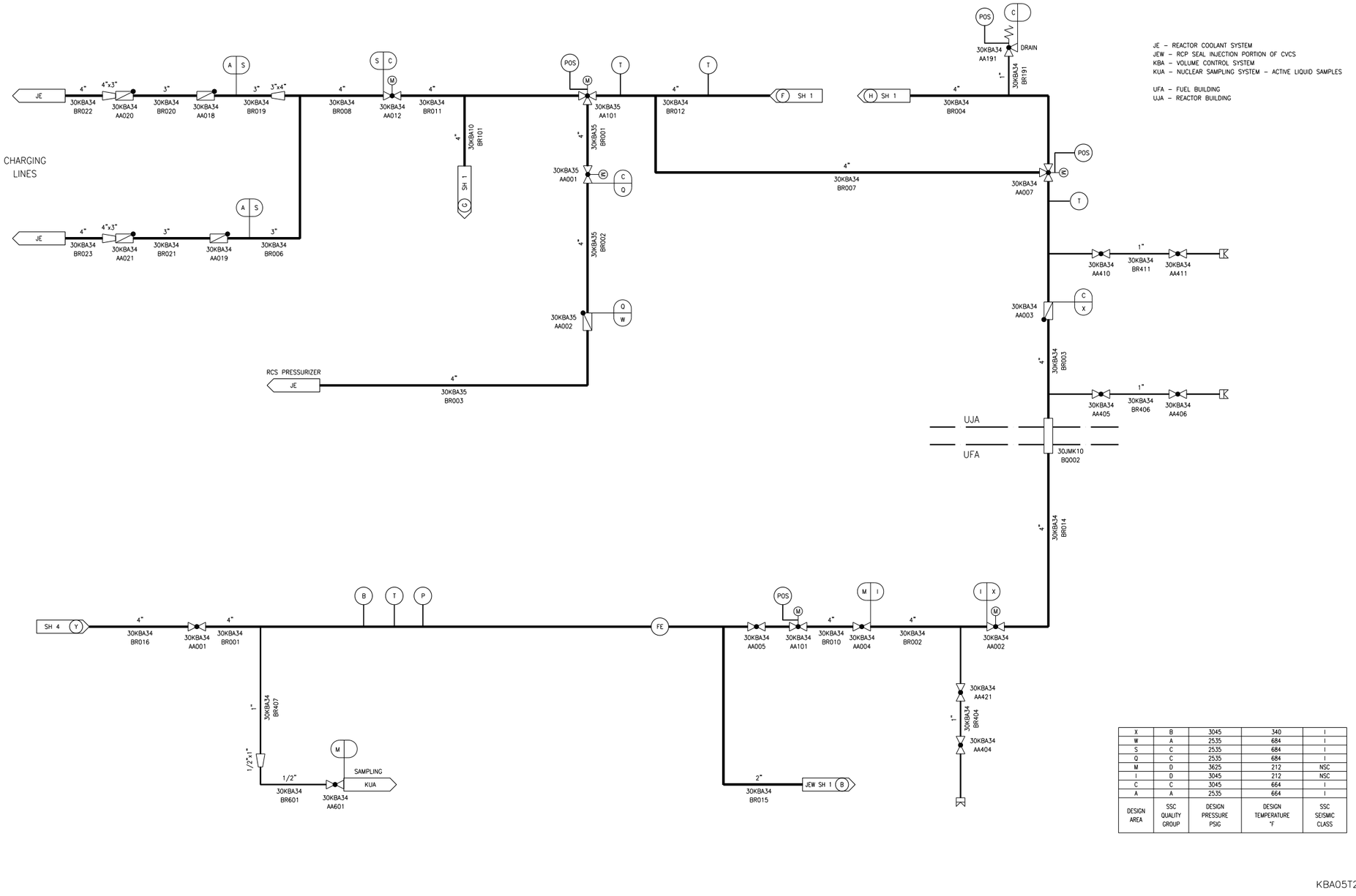
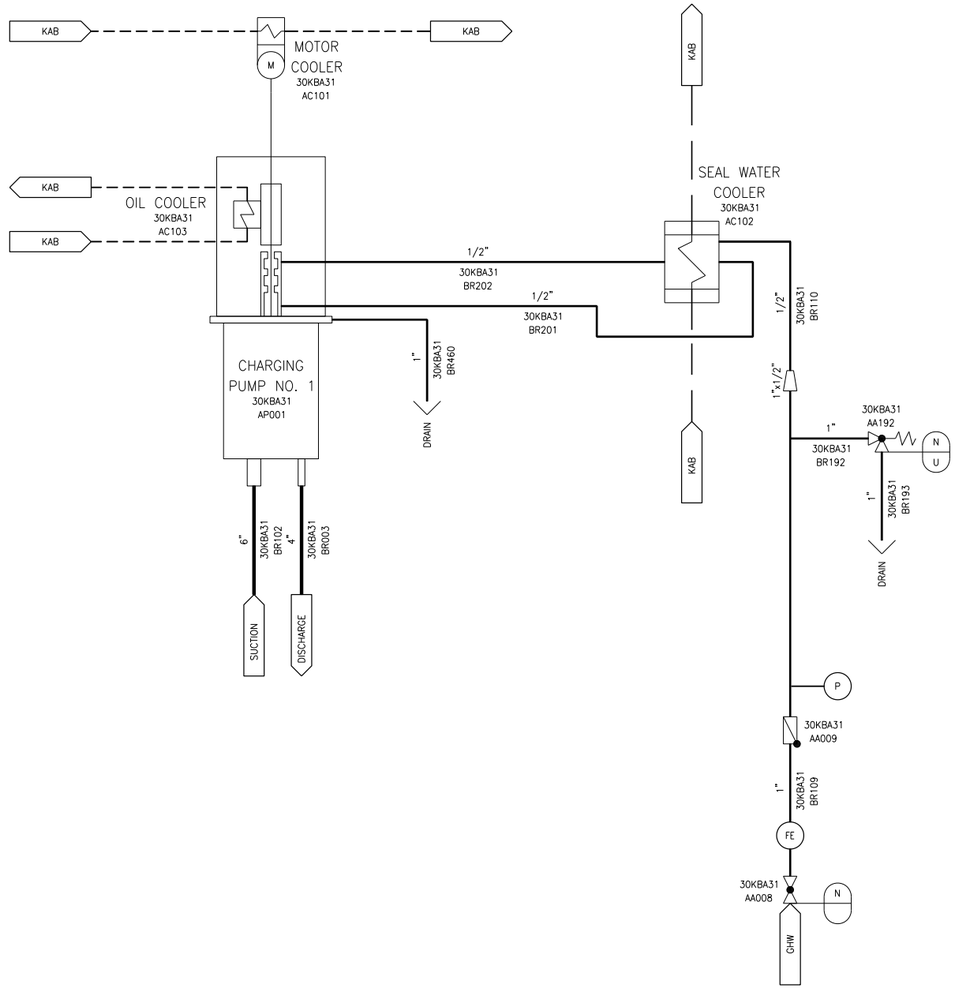


Figure 9.3.4-1—Chemical and Volume Control System
Sheet 6 of 9

GHW – SEAL WATER SUPPLY SYSTEM
KAB – COMPONENT COOLING WATER SYSTEM COMMON HEADER
KBA – VOLUME CONTROL SYSTEM

UFA – FUEL BUILDING

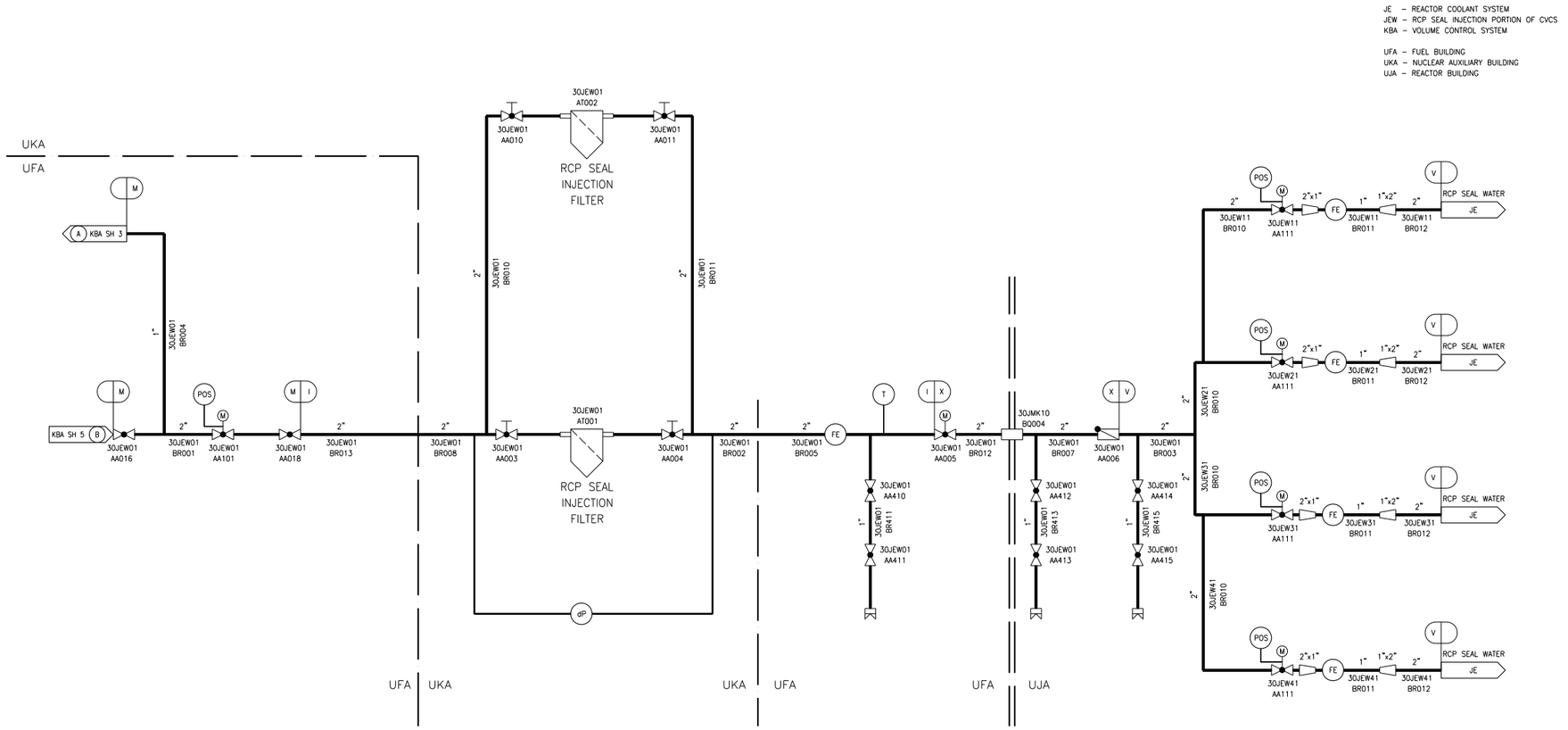


NOTE:
TRAIN 1 SHOWN, REPRESENTATIVE OF TRAIN 2 WITH EXCEPTIONS NOTED.

U	E	0	212	NSC
N	D	235	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

REV 001
KBA06T2

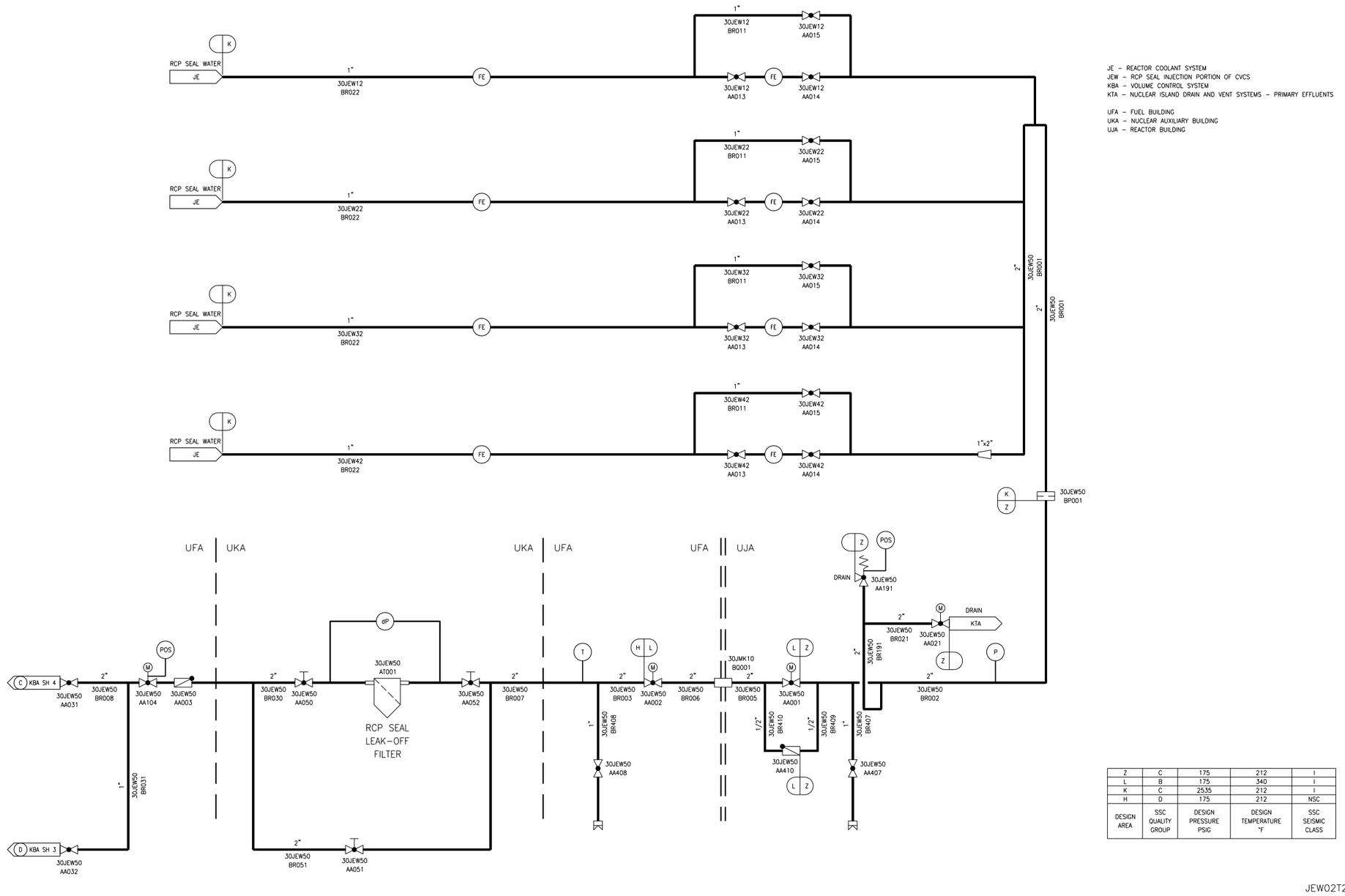
Figure 9.3.4-1—Chemical and Volume Control System
Sheet 7 of 9



X	B	3045	340	I
V	C	3045	212	I
M	D	3625	212	NSC
I	D	3045	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

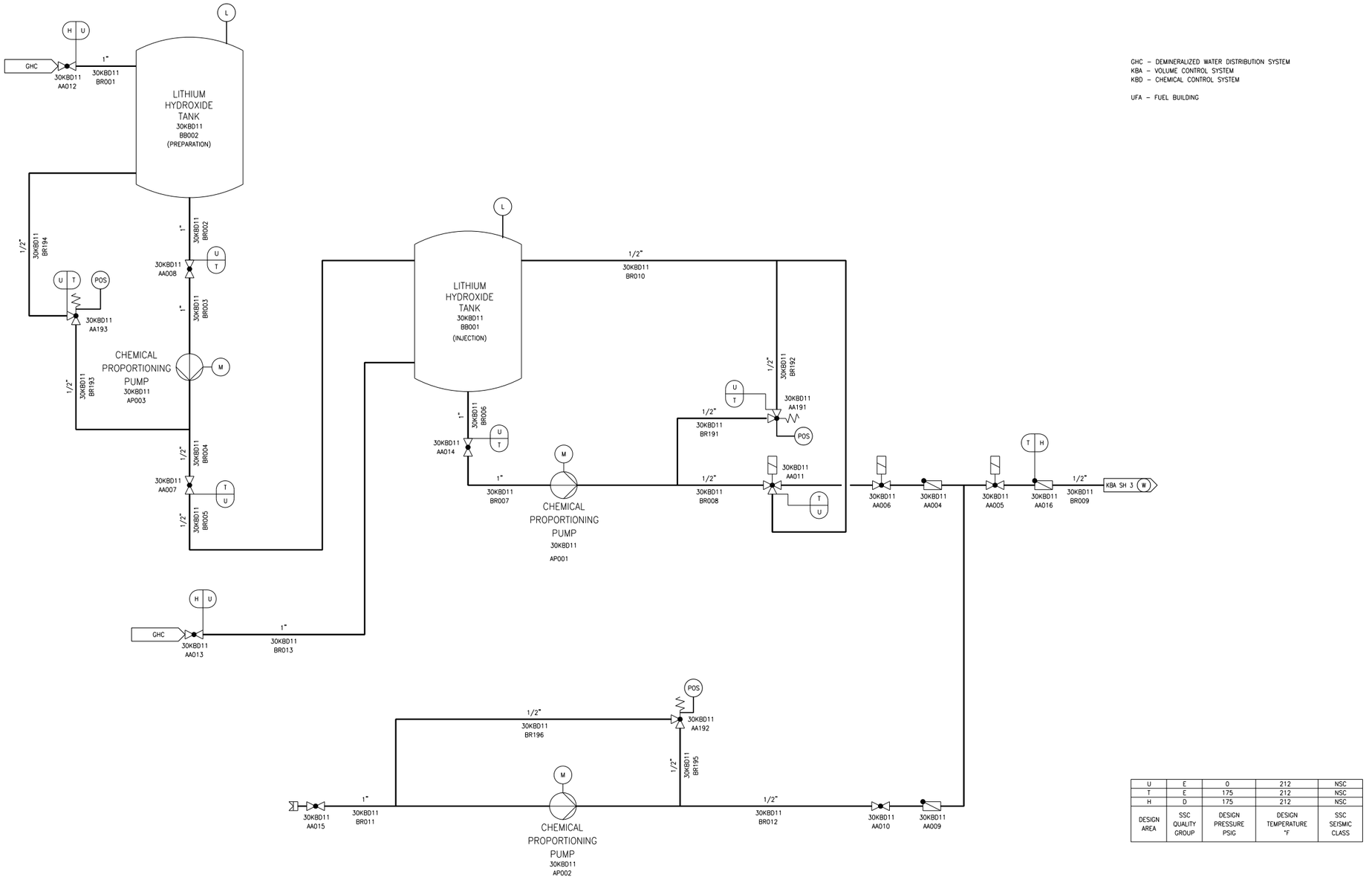
JEW01T2

Figure 9.3.4-1—Chemical and Volume Control System
Sheet 8 of 9



Z	C	175	212	I
L	B	175	340	I
K	C	2535	212	I
H	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

Figure 9.3.4-1—Chemical and Volume Control System
Sheet 9 of 9



GHC – DEMINERALIZED WATER DISTRIBUTION SYSTEM
KBA – VOLUME CONTROL SYSTEM
KBD – CHEMICAL CONTROL SYSTEM

UFA – FUEL BUILDING

U	E	0	212	NSC
T	E	175	212	NSC
H	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBD01T2

Figure 9.3.4-2—Coolant Purification System
Sheet 1 of 5

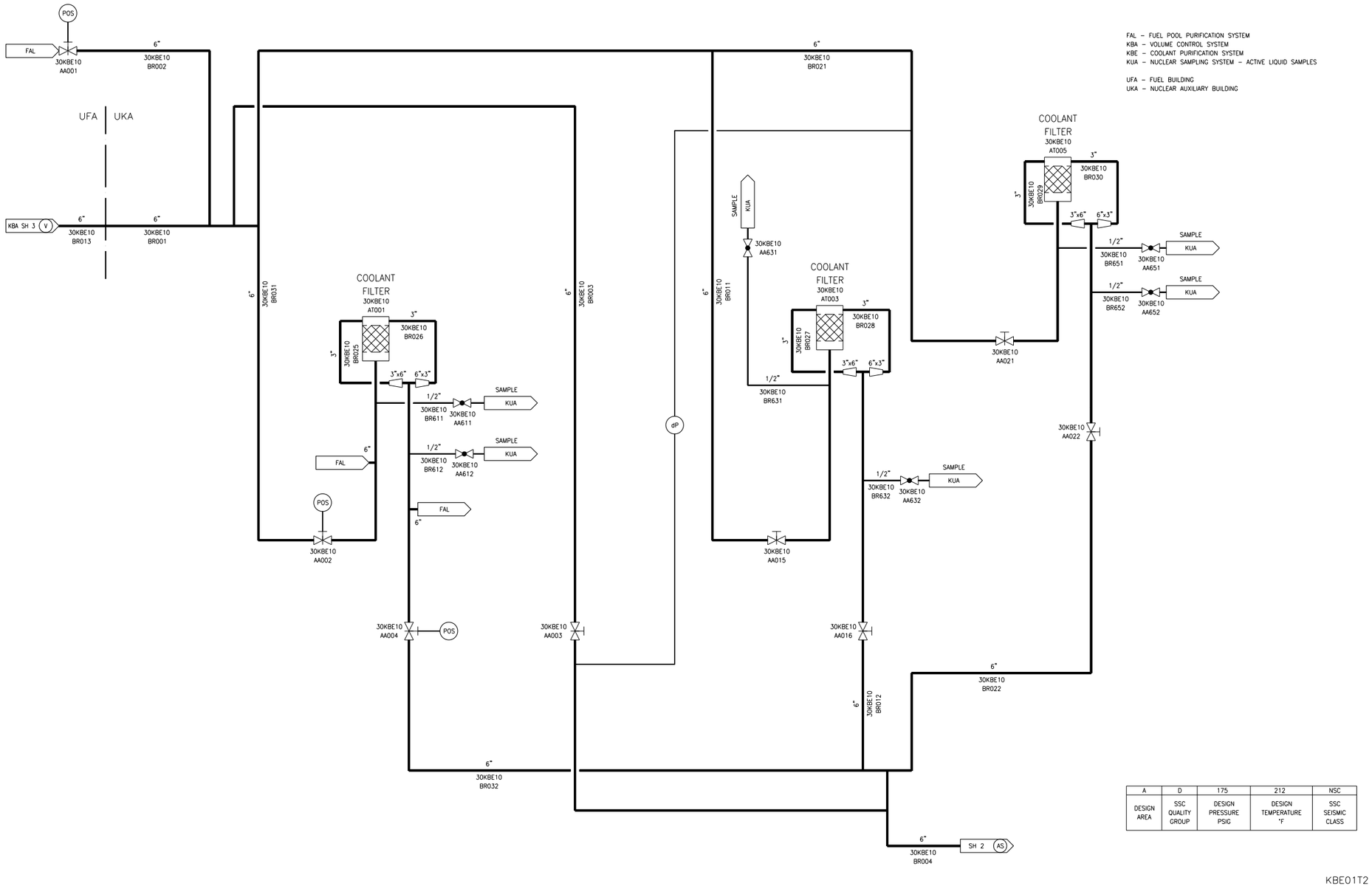
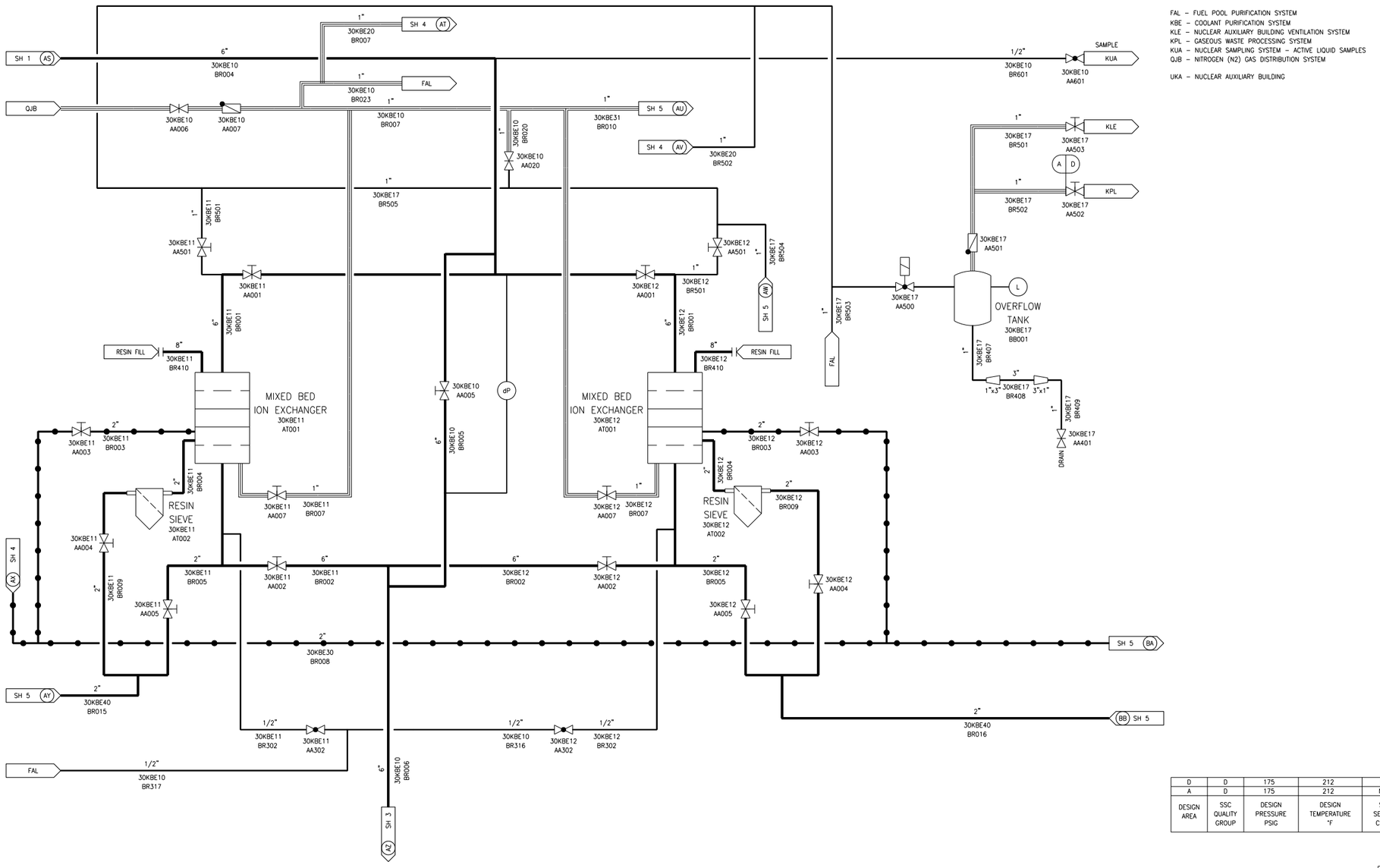


Figure 9.3.4-2—Coolant Purification System
Sheet 2 of 5



FAL – FUEL POOL PURIFICATION SYSTEM
KBE – COOLANT PURIFICATION SYSTEM
KLE – NUCLEAR AUXILIARY BUILDING VENTILATION SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM
KUA – NUCLEAR SAMPLING SYSTEM – ACTIVE LIQUID SAMPLES
QJB – NITROGEN (N2) GAS DISTRIBUTION SYSTEM

UKA – NUCLEAR AUXILIARY BUILDING

D	D	175	212	RS
A	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

REV 001
KBE02T2

Figure 9.3.4-2—Coolant Purification System
Sheet 3 of 5

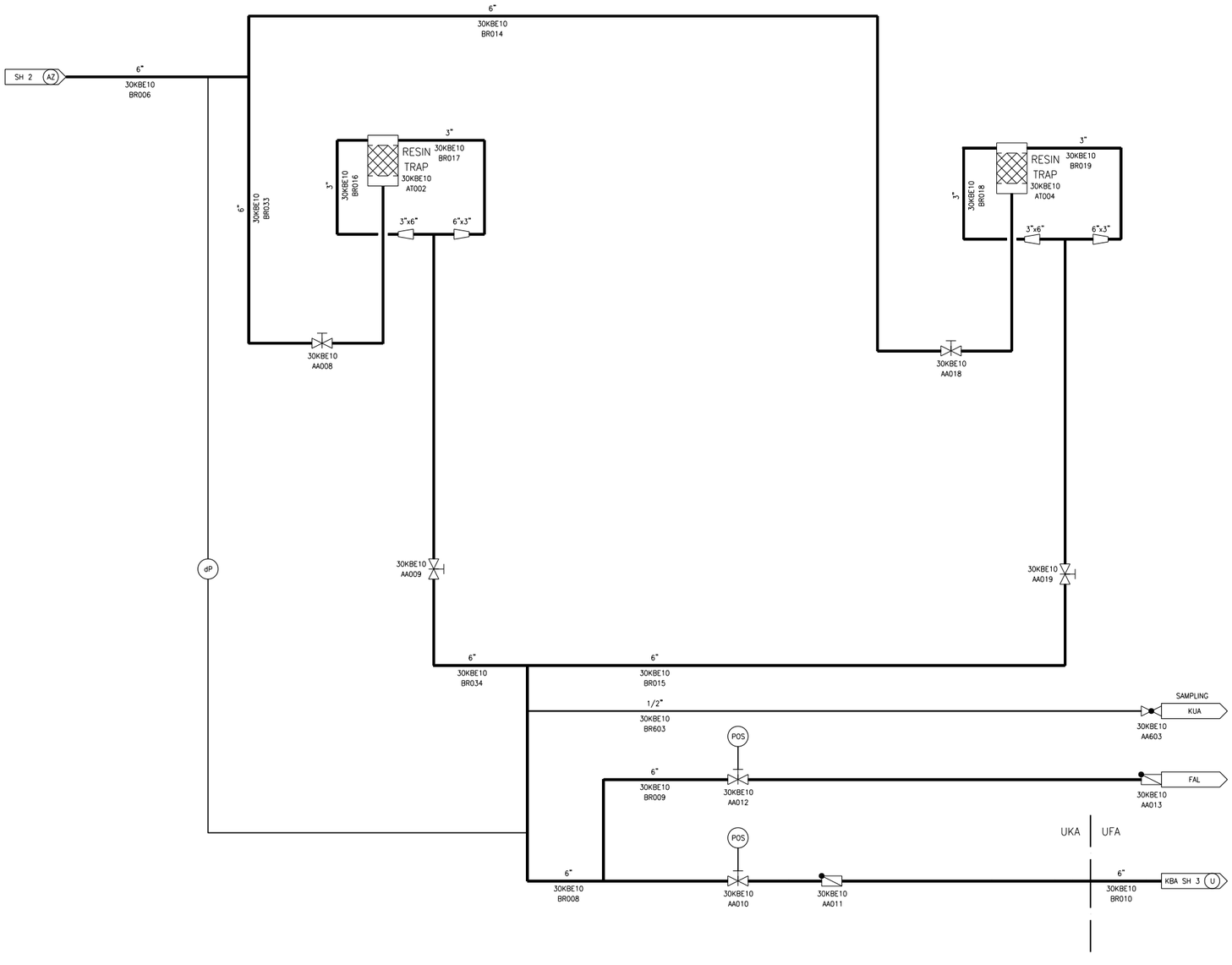


Figure 9.3.4-2—Coolant Purification System
Sheet 4 of 5

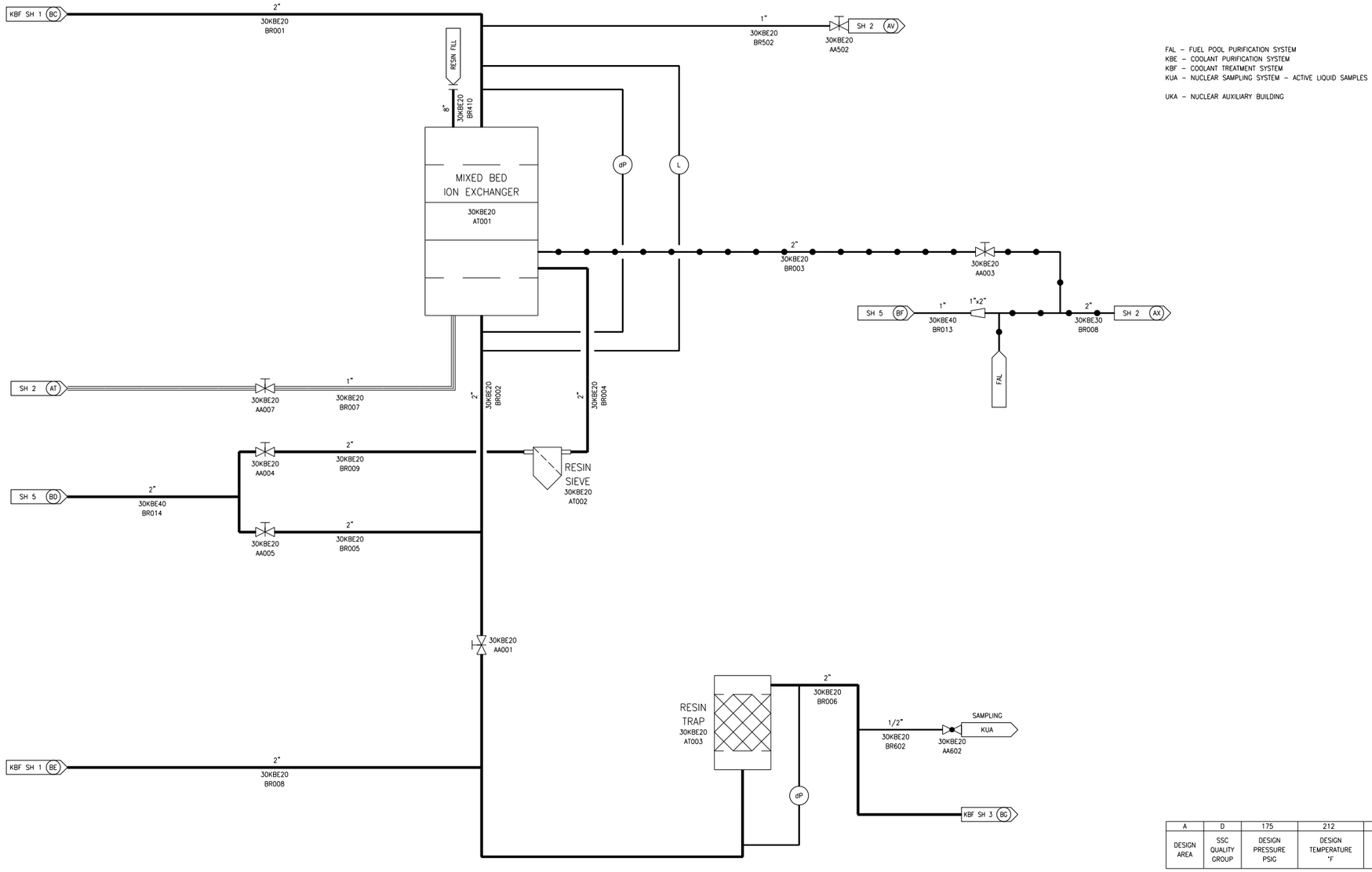


Figure 9.3.4-2—Coolant Purification System
Sheet 5 of 5

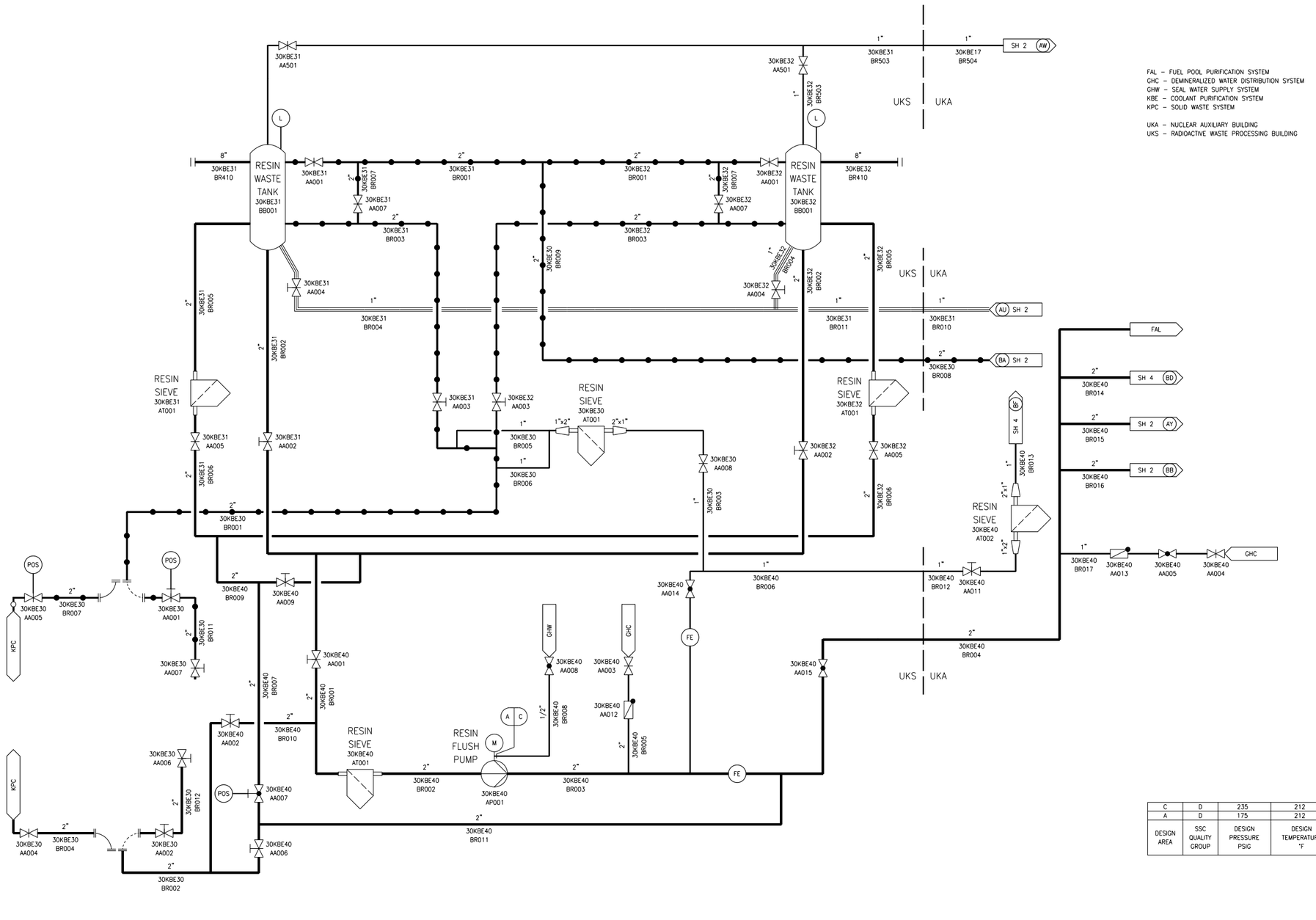
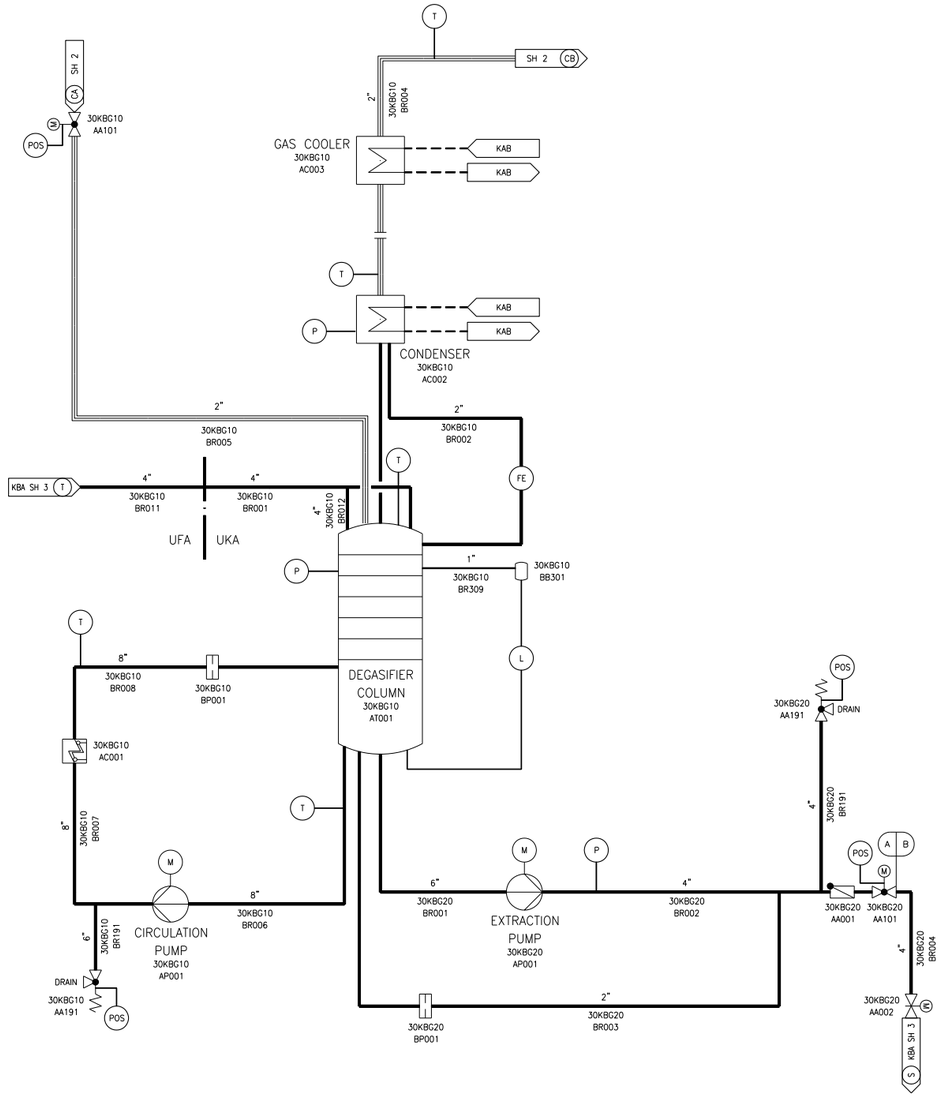


Figure 9.3.4-3—Coolant Degasification System
Sheet 1 of 2



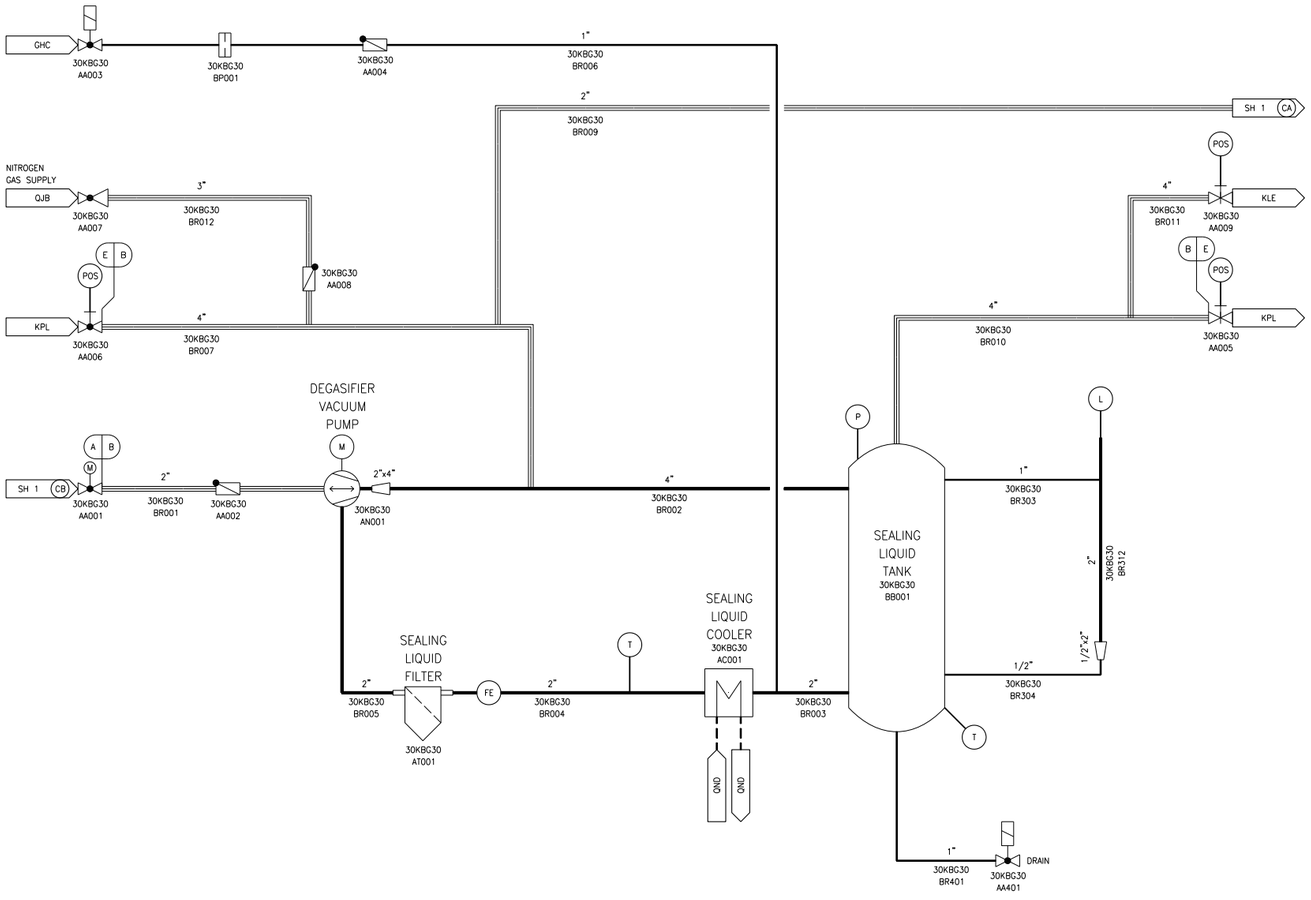
KAB – COMPONENT COOLING WATER SYSTEM COMMON HEADER
KBA – VOLUME CONTROL SYSTEM
KBG – COOLANT DEGASIFICATION SYSTEM

UFA – FUEL BUILDING
UKA – NUCLEAR AUXILIARY BUILDING

B	D	175	212	NSC
A	D	175	395	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBG01T2

Figure 9.3.4-3—Coolant Degasification System
Sheet 2 of 2



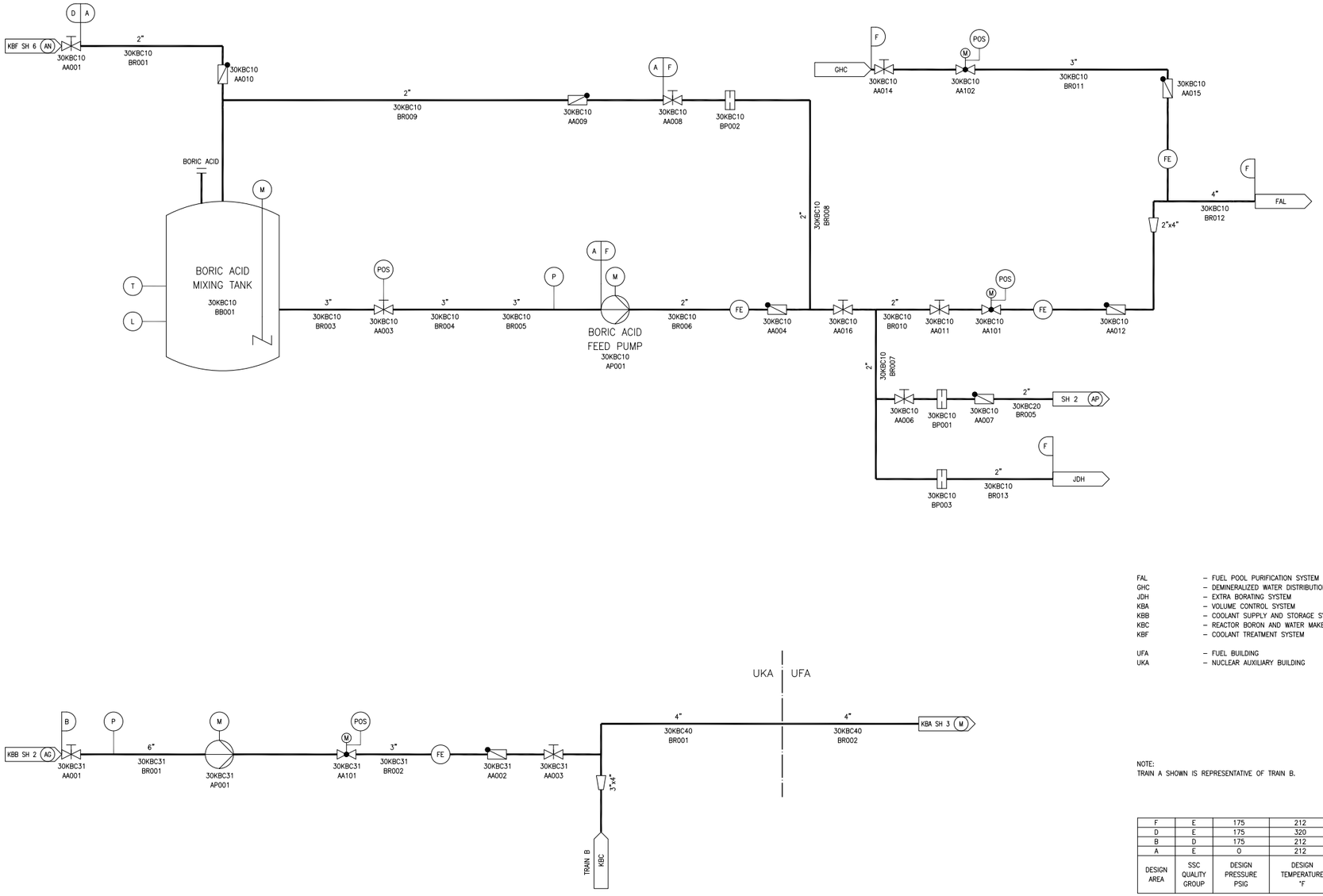
GHC – DEMINERALIZED WATER DISTRIBUTION SYSTEM
KBG – COOLANT DEGASIFICATION SYSTEM
KLE – NUCLEAR AUXILIARY BUILDING VENTILATION SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM
QJB – NITROGEN (N2) GAS DISTRIBUTION SYSTEM
QND – OPERATIONAL CHILLED WATER SYSTEM

UKA – NUCLEAR AUXILIARY BUILDING

DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS
E	D	175	212	RS
B	D	175	212	NSC
A	D	175	395	NSC

KBG02T2

Figure 9.3.4-4—Reactor Boron and Water Makeup System
Sheet 1 of 2



FAL – FUEL POOL PURIFICATION SYSTEM
GHC – DEMINERALIZED WATER DISTRIBUTION SYSTEM
JDH – EXTRA BORATING SYSTEM
KBA – VOLUME CONTROL SYSTEM
KBB – COOLANT SUPPLY AND STORAGE SYSTEM
KBC – REACTOR BORON AND WATER MAKEUP SYSTEM
KBF – COOLANT TREATMENT SYSTEM

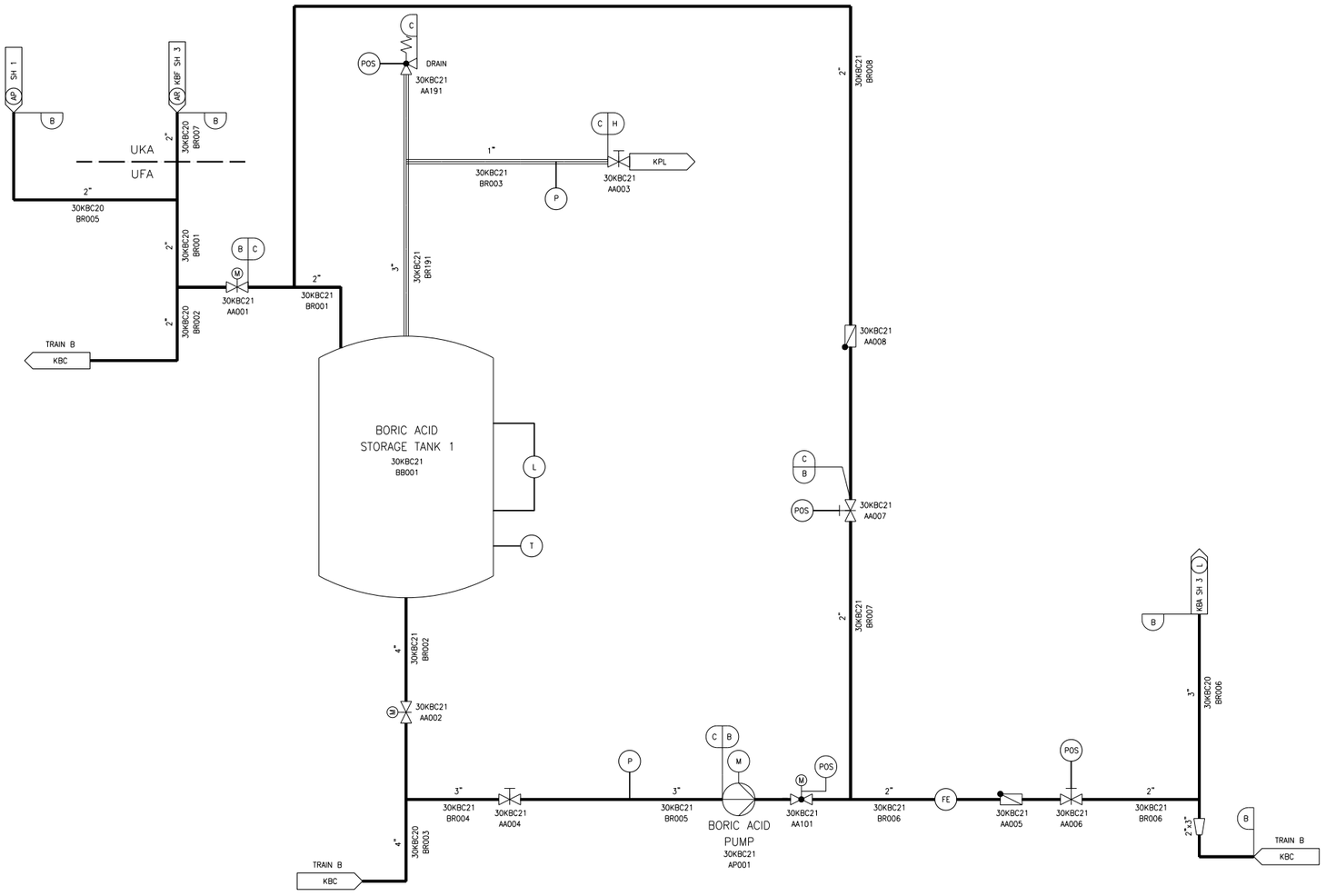
UFA – FUEL BUILDING
UKA – NUCLEAR AUXILIARY BUILDING

NOTE:
TRAIN A SHOWN IS REPRESENTATIVE OF TRAIN B.

F	E	175	212	NSC
D	E	175	320	NSC
B	D	175	212	NSC
A	E	0	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

REV 002
KBC01T2

Figure 9.3.4-4—Reactor Boron and Water Makeup System
Sheet 2 of 2



KBA – VOLUME CONTROL SYSTEM
KBC – REACTOR BORON AND WATER MAKEUP SYSTEM
KBF – COOLANT TREATMENT SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM

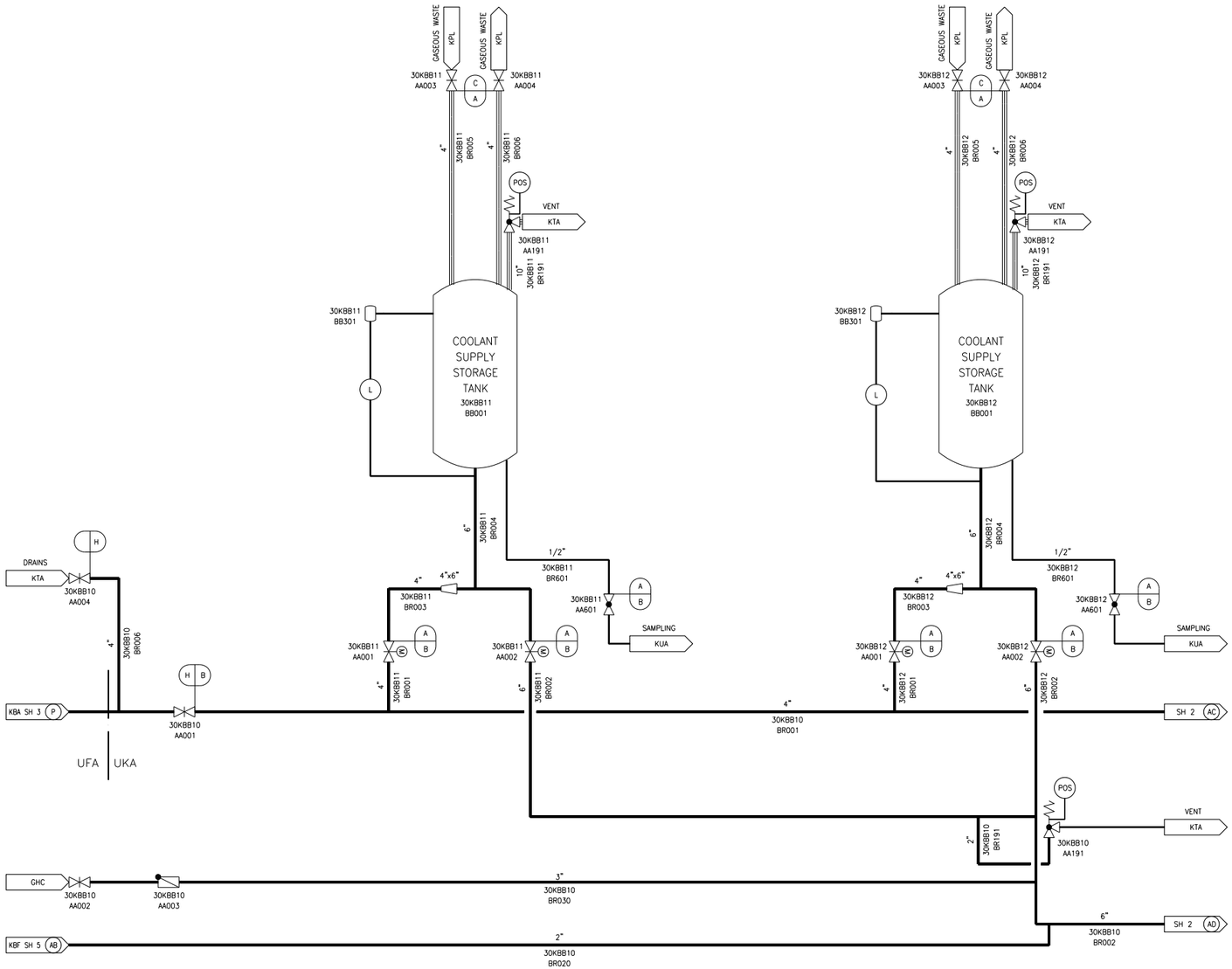
UFA – FUEL BUILDING
UKA – NUCLEAR AUXILIARY BUILDING

NOTE:
TRAIN A SHOWN IS REPRESENTATIVE OF TRAIN B.

H	D	175	212	RS
C	D	45	212	NSC
B	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBC02T2

Figure 9.3.4-5—Coolant Supply and Storage System
Sheet 1 of 3



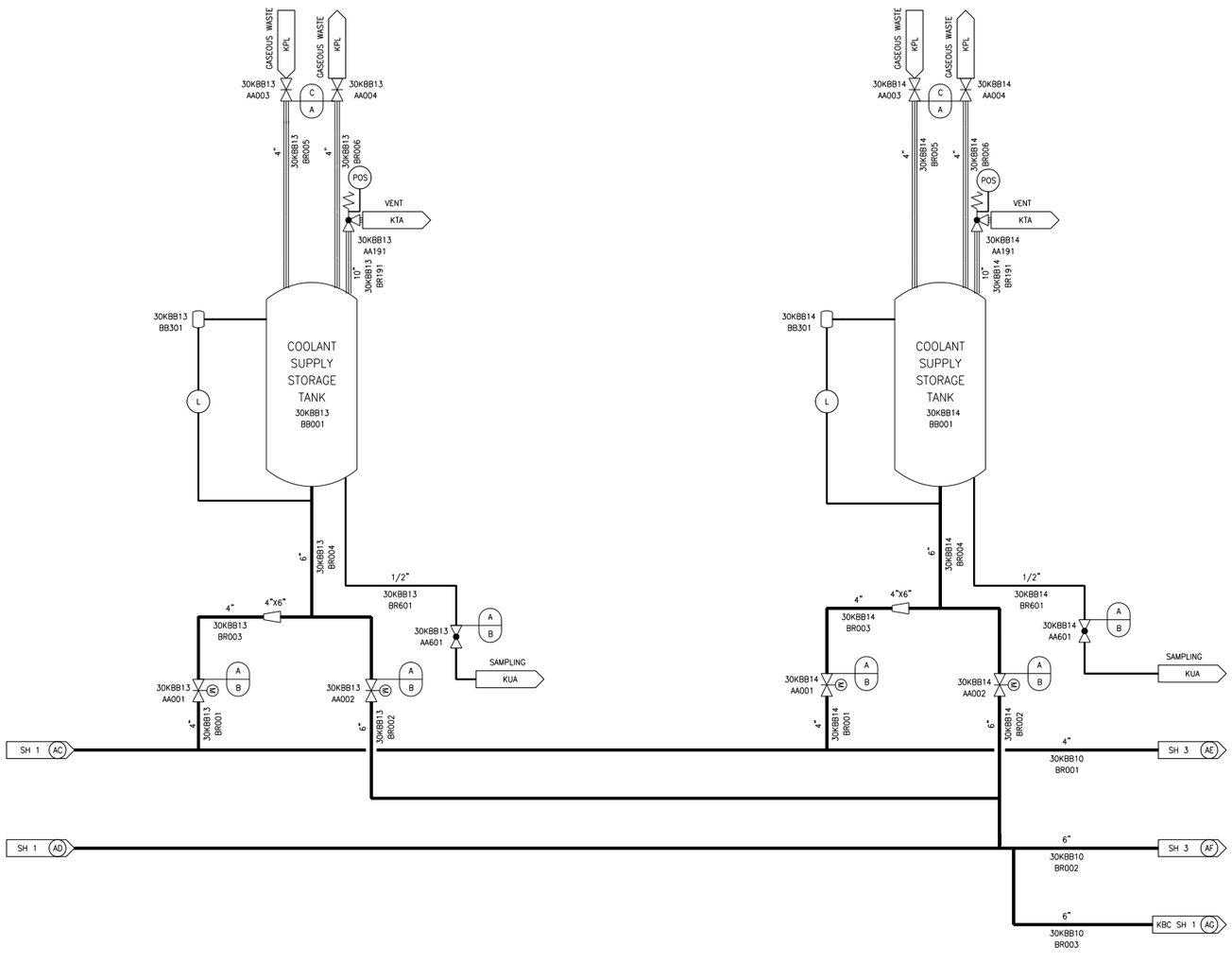
GHC – DEMINERALIZED WATER DISTRIBUTION SYSTEM
KBA – VOLUME CONTROL SYSTEM
KBB – COOLANT SUPPLY AND STORAGE SYSTEM
KBF – COOLANT TREATMENT SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM
KTA – NUCLEAR ISLAND DRAIN AND VENT SYSTEMS – PRIMARY EFFLUENTS
KUA – NUCLEAR SAMPLING SYSTEM – ACTIVE LIQUID SAMPLES

UFA – FUEL BUILDING
UKA – NUCLEAR AUXILIARY BUILDING

H	D	175	212	NSC
C	D	175	212	RS
B	D	175	212	NSC
A	D	45	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBB01T2

Figure 9.3.4-5—Coolant Supply and Storage System
Sheet 2 of 3



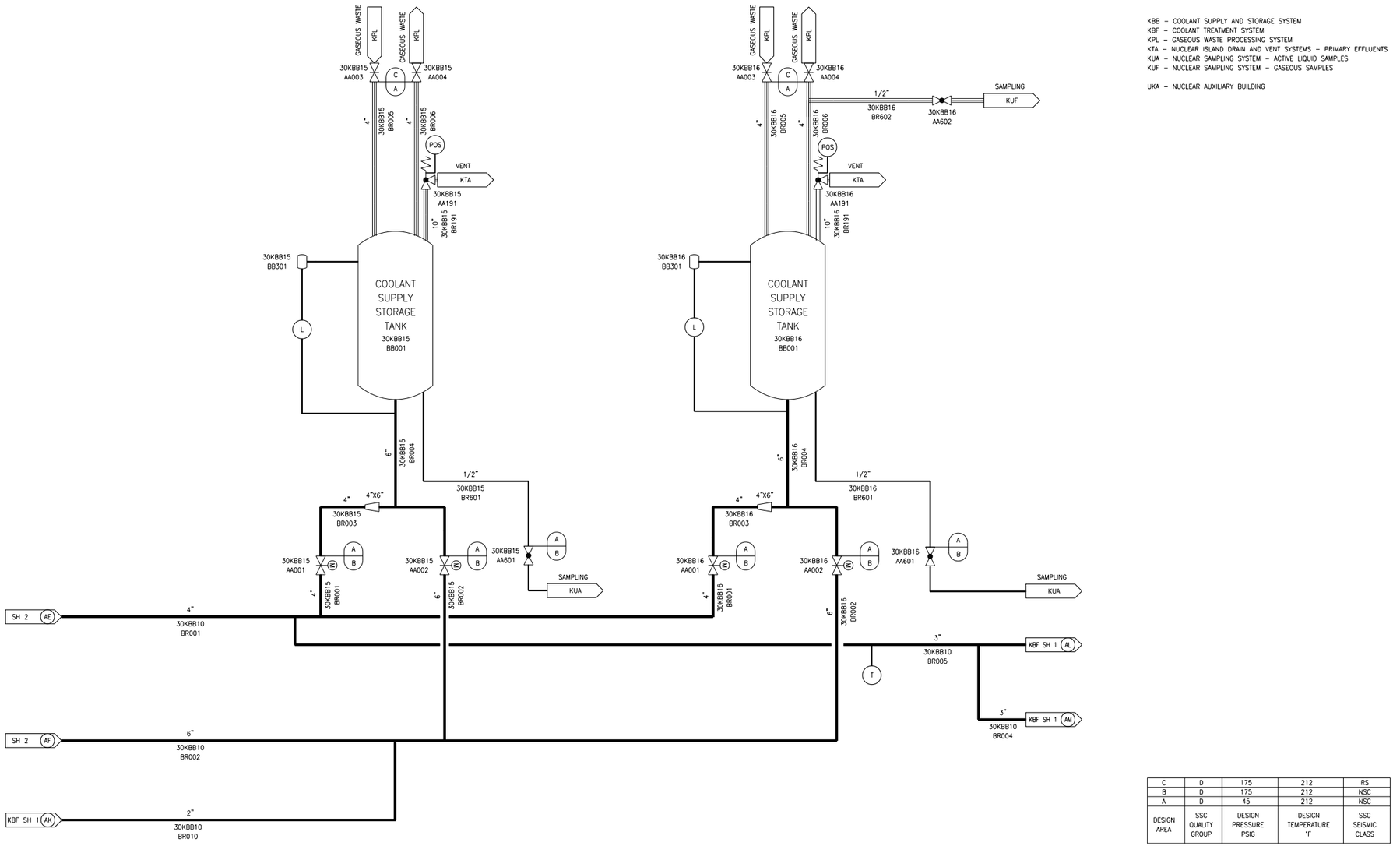
KBB – COOLANT SUPPLY AND STORAGE SYSTEM
KBC – REACTOR BORON AND WATER MAKEUP SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM
KTA – NUCLEAR ISLAND DRAIN & VENT SYSTEMS – PRIMARY EFFLUENTS
KUA – NUCLEAR SAMPLING SYSTEM – ACTIVE LIQUID SAMPLES

UKA – NUCLEAR AUXILIARY BUILDING

C	D	175	212	RS
B	D	175	212	NSC
A	D	45	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBB02T2

Figure 9.3.4-5—Coolant Supply and Storage System
Sheet 3 of 3



KBB – COOLANT SUPPLY AND STORAGE SYSTEM
KBF – COOLANT TREATMENT SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM
KTA – NUCLEAR ISLAND DRAIN AND VENT SYSTEMS – PRIMARY EFFLUENTS
KUA – NUCLEAR SAMPLING SYSTEM – ACTIVE LIQUID SAMPLES
KUF – NUCLEAR SAMPLING SYSTEM – GASEOUS SAMPLES

UKA – NUCLEAR AUXILIARY BUILDING

C	D	175	212	RS
B	D	175	212	NSC
A	D	45	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBB03T2

Figure 9.3.4-6—Coolant Treatment System
Sheet 1 of 6

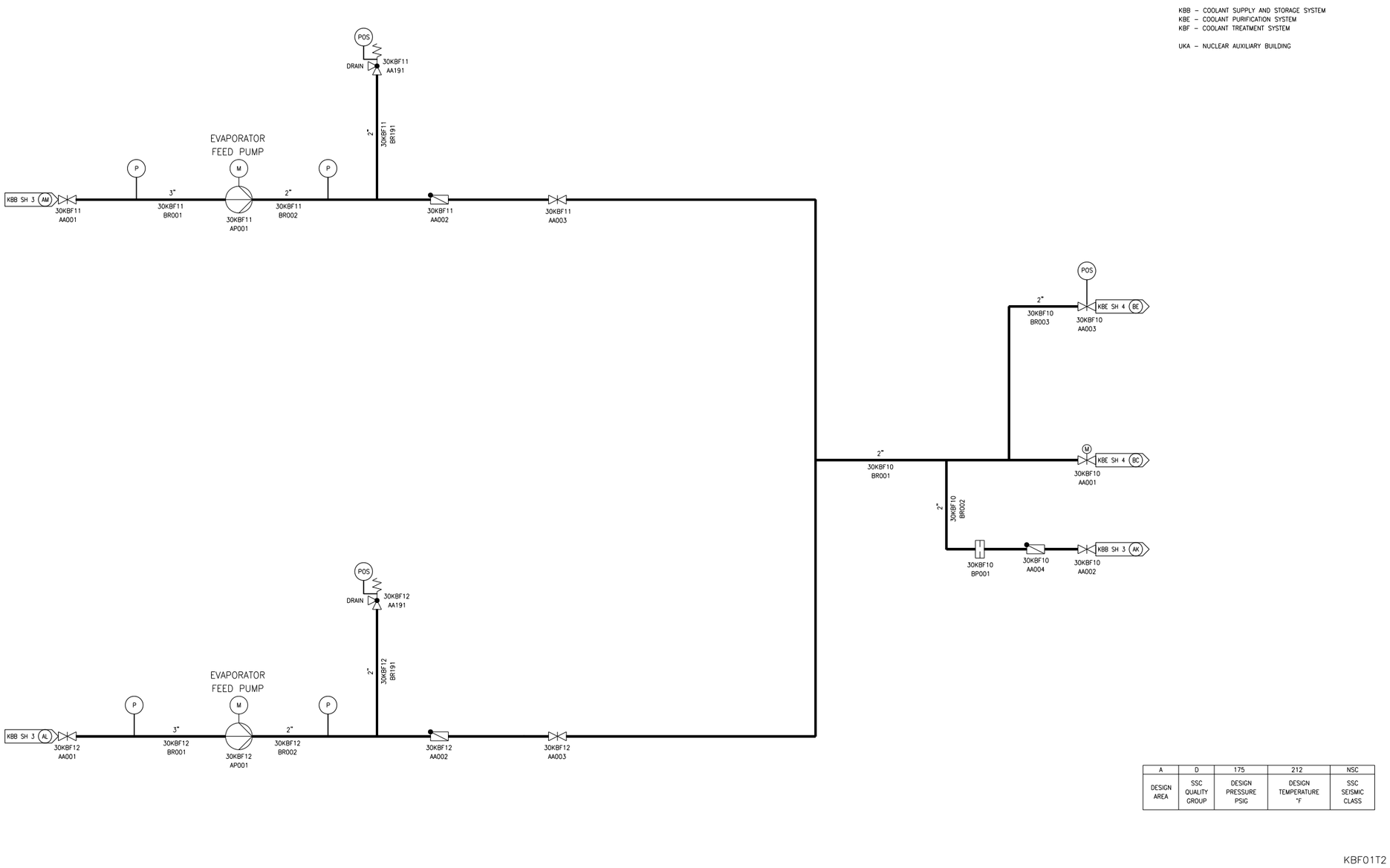


Figure 9.3.4-6—Coolant Treatment System
Sheet 2 of 6

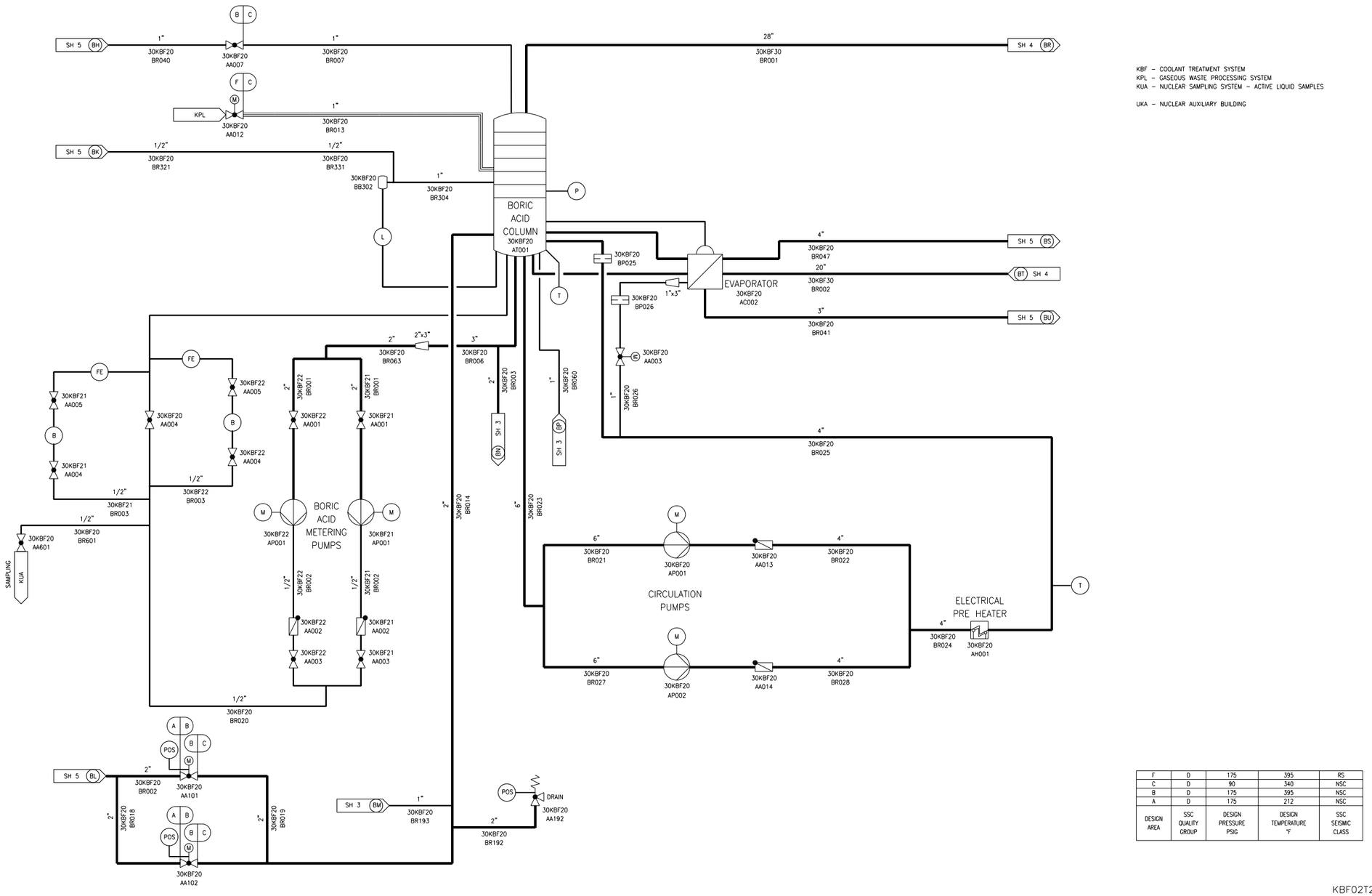


Figure 9.3.4-6—Coolant Treatment System
Sheet 3 of 6

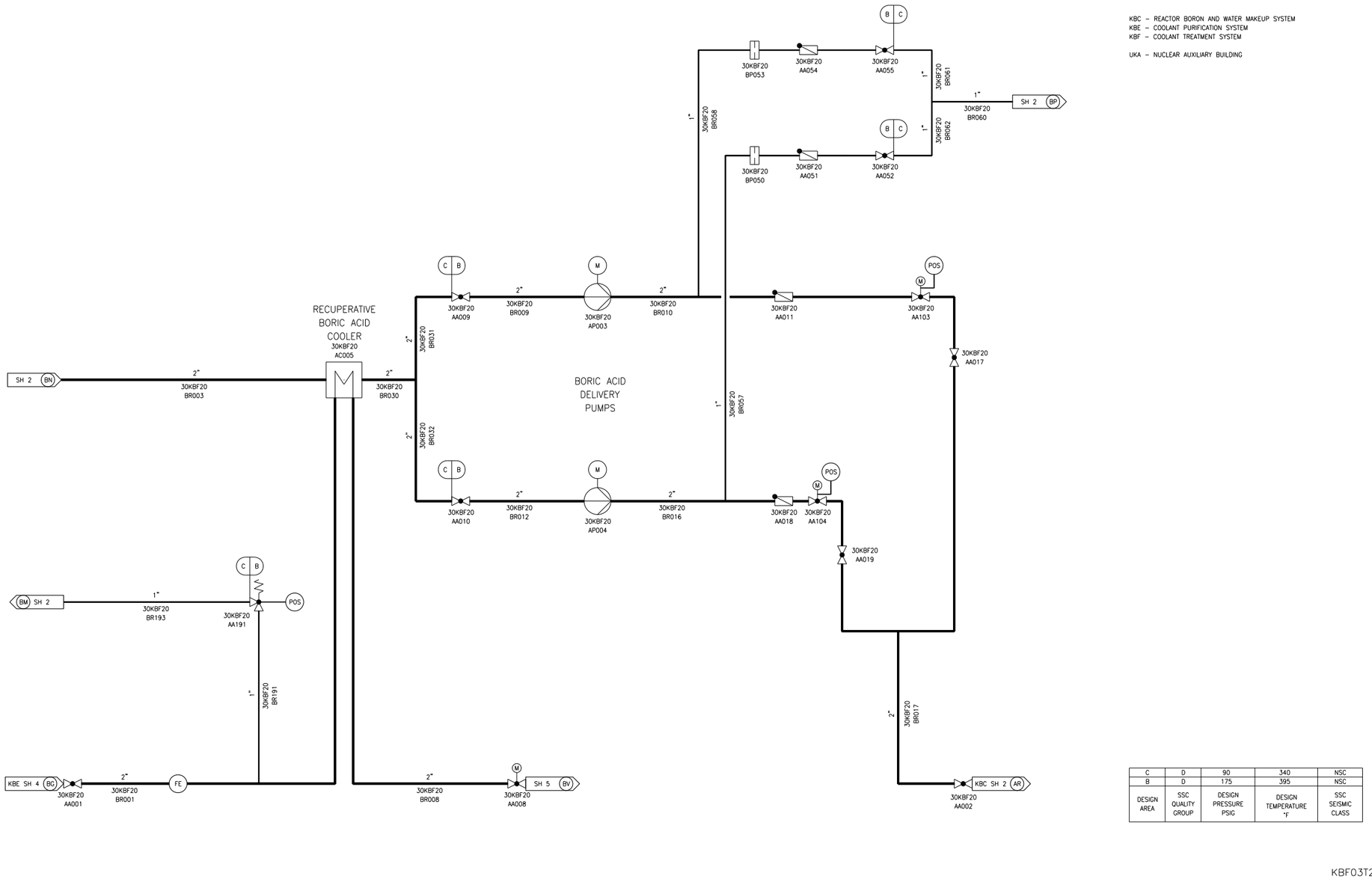
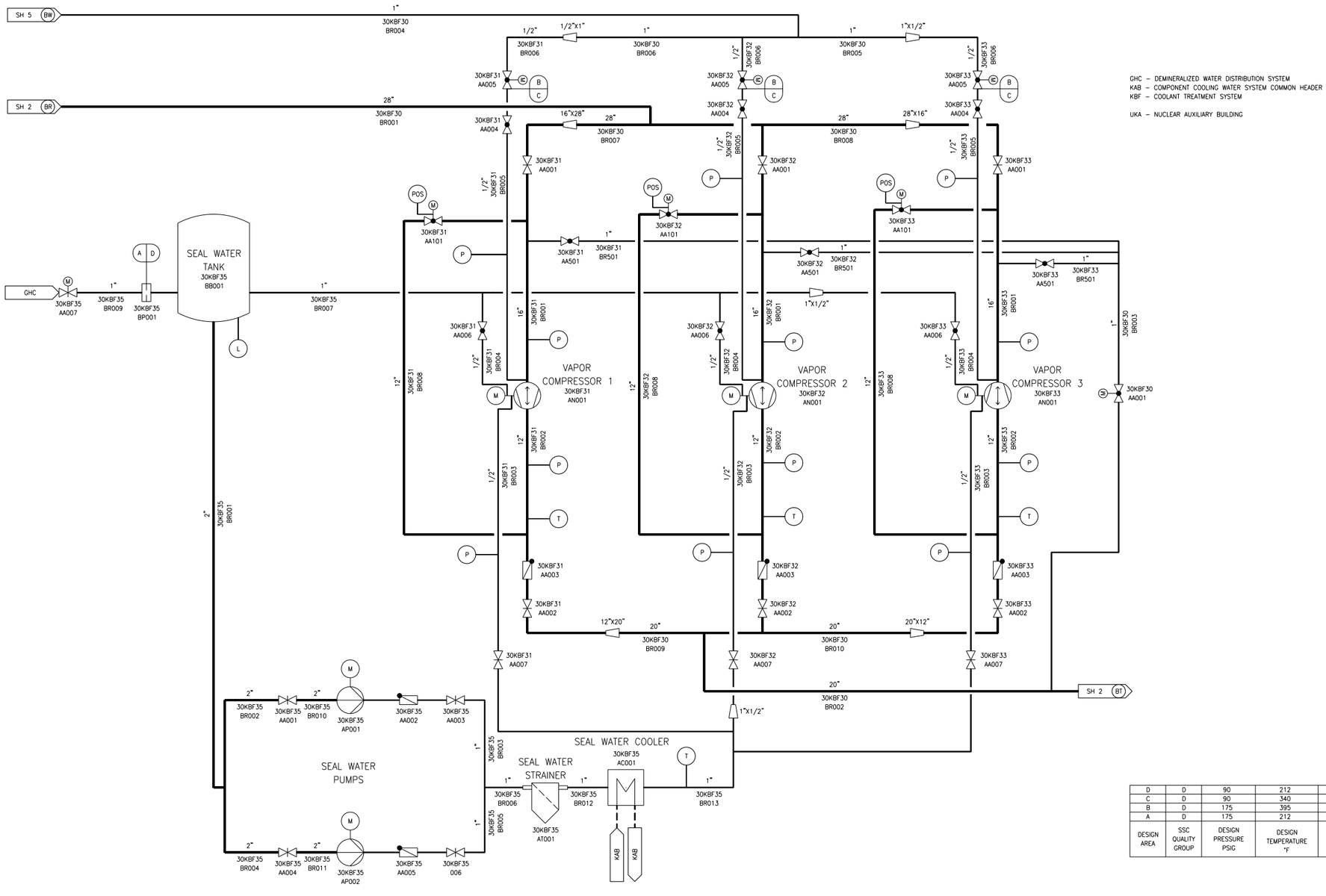


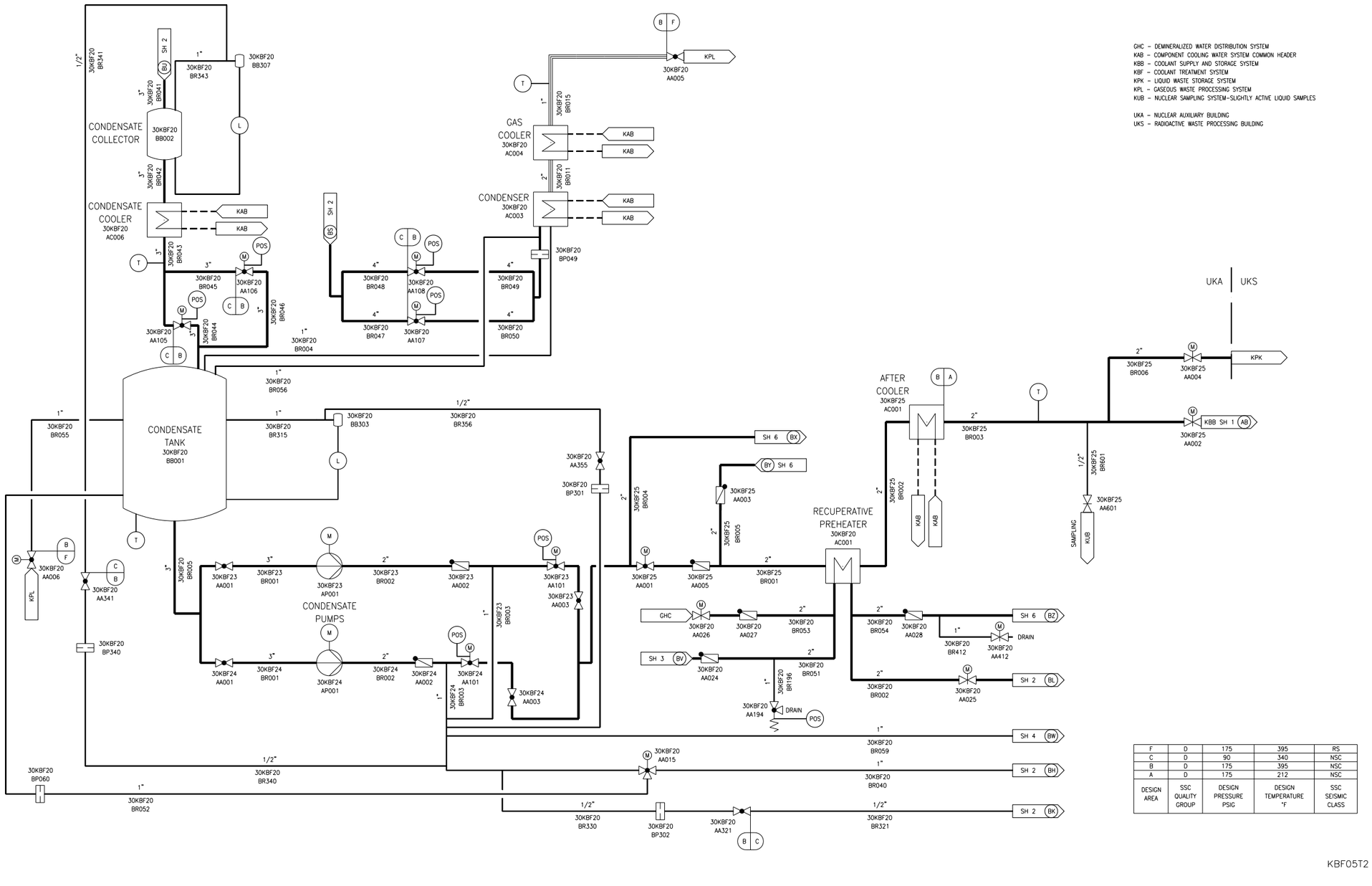
Figure 9.3.4-6—Coolant Treatment System
Sheet 4 of 6



D	D	90	212	NSC
C	D	90	340	NSC
B	D	175	395	NSC
A	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

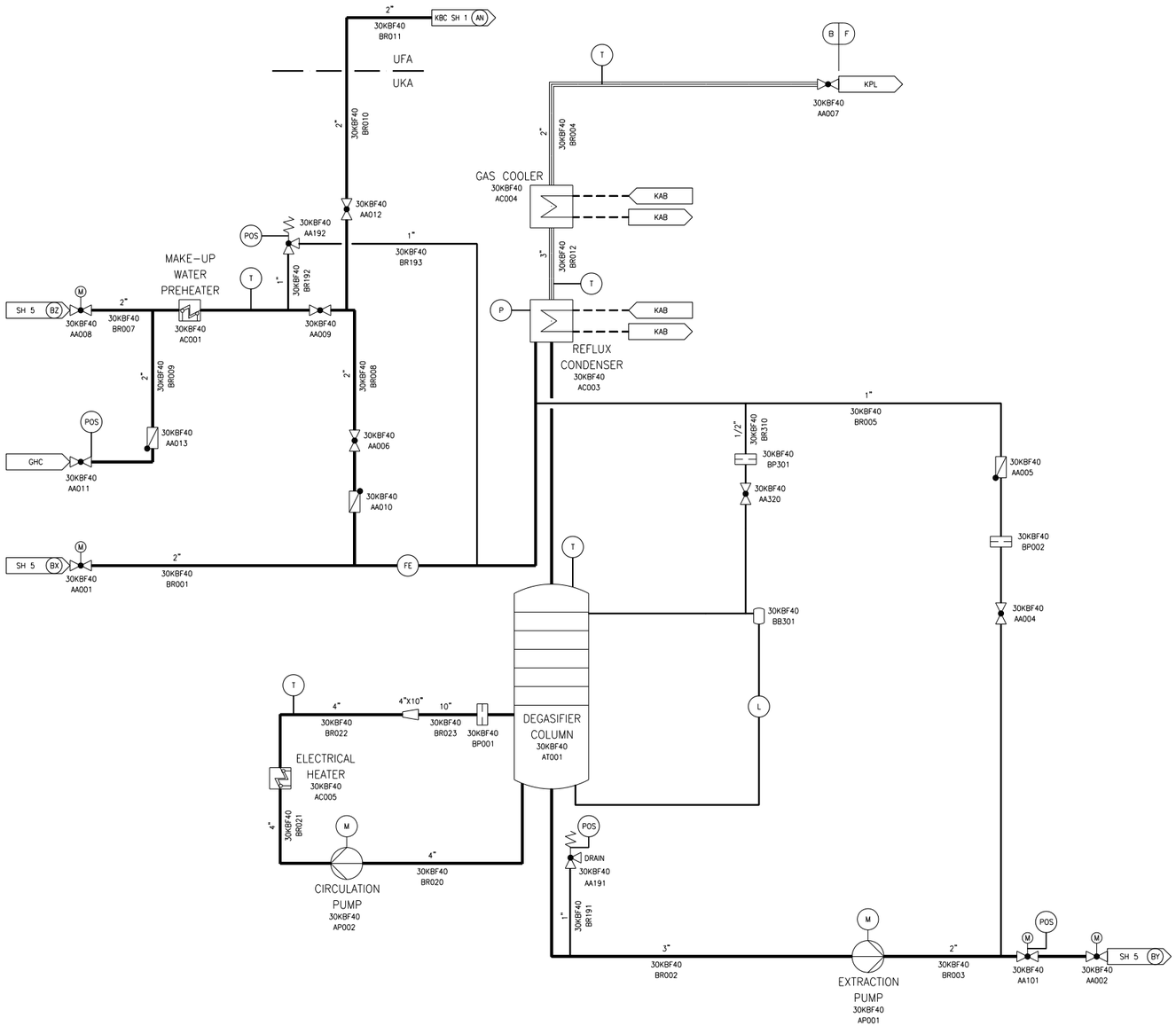
KBF04T2

Figure 9.3.4-6—Coolant Treatment System
Sheet 5 of 6



F	D	175	395	RS
C	D	90	340	NSC
B	D	175	395	NSC
A	D	175	212	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

Figure 9.3.4-6—Coolant Treatment System
Sheet 6 of 6



GHC – DEMINERALIZED WATER DISTRIBUTION SYSTEM
KAB – COMPONENT COOLING WATER SYSTEM COMMON HEADER
KBC – REACTOR BORON AND WATER MAKEUP SYSTEM
KBF – COOLANT TREATMENT SYSTEM
KPL – GASEOUS WASTE PROCESSING SYSTEM

UFA – FUEL BUILDING
UKA – NUCLEAR AUXILIARY BUILDING

F	D	175	395	RS
B	D	175	395	NSC
DESIGN AREA	SSC QUALITY GROUP	DESIGN PRESSURE PSIG	DESIGN TEMPERATURE °F	SSC SEISMIC CLASS

KBF06T2