

LG&E/KU - E.W. BROWN STATION PHASE II: AIR QUALITY CONTROL STUDY PROCESS FLOW DIAGRAMS

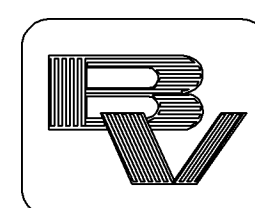


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<u>UNIT 1</u>	
<u>B&V DRAWING NUMBER</u>	<u>TITLE</u>
168908-B1ASB-M2022	FLY ASH HANDLING
168908-B1CCE-M2145	INDUCED DRAFT
168908-B1CAB-M2182	AQCS COMPRESSED AIR
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<u>UNIT 2</u>	
<u>B&V DRAWING NUMBER</u>	<u>TITLE</u>
168908-B2ASB-M2022	FLY ASH HANDLING
168908-B2CCE-M2145	INDUCED DRAFT
168908-B2CAB-M2182	AQCS COMPRESSED AIR
168908-B2SGB-M2582	COMBUSTION AIR
168908-B2SGC-M2583	AIR PREHEAT

<u>UNIT 3</u>	
<u>B&V DRAWING NUMBER</u>	<u>TITLE</u>
168908-B3ASB-M2022	FLY ASH HANDLING
168908-B3CCE-M2145	INDUCED DRAFT
168908-B3CAB-M2182	AQCS COMPRESSED AIR
168908-B3CCH-M2148A	POWDER ACTIVATED CARBON INJECTION

RILEY POWER INC. DRAWINGS SELECTIVE CATALYTIC REDUCTION SYSTEM

<u>DRAWING NUMBER</u>	<u>TITLE</u>
502651-094900002	LEGEND
502651-094900037	AMMONIA INJECTION SYSTEM A
502651-094900038	AMMONIA INJECTION SYSTEM B
502651-094900039	DILUTION AIR SUPPLY SYSTEM
502651-094900050	SELECTIVE CATALYTIC REDUCTION SYSTEM REACTOR A
502651-094900051	SELECTIVE CATALYTIC REDUCTION SYSTEM REACTOR B
502651-094900065	SONIC HORN SYSTEM

RILEY POWER INC. DRAWINGS SELECTIVE CATALYTIC REDUCTION SYSTEM

<u>DRAWING NUMBER</u>	<u>TITLE</u>
502651-094900002	LEGEND
502651-094900037	AMMONIA INJECTION SYSTEM A
502651-094900038	AMMONIA INJECTION SYSTEM B
502651-094900039	DILUTION AIR SUPPLY SYSTEM
502651-094900050	SELECTIVE CATALYTIC REDUCTION SYSTEM REACTOR A
502651-094900051	SELECTIVE CATALYTIC REDUCTION SYSTEM REACTOR B
502651-094900065	SONIC HORN SYSTEM

PROJECT NO. 168908

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LG&E/KU - E.W. BROWN STATION PHASE II: AIR QUALITY CONTROL STUDY	
PROCESS FLOW DIAGRAM TABLE OF CONTENTS	

PROJECT	DRAWING NUMBER	REV
168908-BCUUU-M2000	168908-BCUUU-M2000	B
CODE	AREA	

PROCESS FLOW DIAGRAM LEGEND

PIPING ACCESSORIES		VALVES		OPERATORS		PIPING DETAILS		EQUIPMENT		GENERAL NOTES	
FUNCTION CODE	DESCRIPTION										
EXJ	EXPANSION JOINT		GATE VALVE		SOLENOID OPERATED		BLIND FLANGE		AGITATOR		
ORF	PRESSURE BREAKDOWN ORIFICE		GLOBE VALVE (T PATTERN)		MOTOR OPERATED		FLANGE		BLOWER, MECHANICAL EXHAUSTER		
GG	GAGE GLASS		GLOBE VALVE (Y PATTERN)		HYDRAULIC OPERATED		OPEN DRAIN FUNNEL		ROOF DRAIN OR FLOOR DRAIN		
FE	PRIMARY FLOW ELEMENT (ORIFICE)		PLUG VALVE		PISTON OPERATED		CLOSURE, SCREWED CAP		CLOSURE, WELDED CAP		
FE	ANNUBAR		BALL VALVE		PISTON OPERATED WITH POSITIONER		LINE SIZE CHANGE		SCREENED VENT		
FE	PRIMARY FLOW ELEMENT (NOZZLE)		NEEDLE VALVE		CONTROL VALVE WITH HANDJACK		UNION		EQUIPMENT CONNECTION		
SFI	SIGHT FLOW INDICATOR		DIAPHRAGM VALVE		SELF CONTAINED CONTROL		BELL-UP		HOSE CONNECTION		
M	MECHANICAL DISPLACEMENT OR MAGNETIC FLOW METER		IN-LINE SAFETY VALVE		DIAPHRAGM OR CYLINDER OPERATED SPRING OPENING		QUICK DISCONNECT		SPECTACLE FLANGE		
FI	RATE OF FLOW INDICATOR		DOUBLE DIAPHRAGM ANGLE		DIAPHRAGM OR CYLINDER OPERATED SPRING CLOSING		PLUGGED PORT/TAP		FLOATING TANK SUCTION		
^	DIFFUSER ORIFICE		DELUGE		SPRING OPEN/CLOSE OPERATOR		TIE IN POINT				
TRP	TRAP		EXCESS FLOW VALVE		DIRECT FLOAT OPERATED						
STR	STRAINER, Y-TYPE		SAFETY OR RELIEF VALVE		POST INDICATOR						
STR	STRAINER, T-TYPE		ANGLE VALVE								
FLT	FILTER		THREE-WAY VALVE								
FHOS	FLEXIBLE HOSE		STOP CHECK VALVE								
STR	STRAINER, CONE OR PLATE TYPE		AIR OPERATED CHECK VALVE								
STR	STRAINER, BASKET TYPE		BUTTERFLY VALVE								
STR	STRAINER, DUPLEX BASKET TYPE		CHECK VALVE, LIFT								
AV	AUTOMATIC AIR RELEASE VALVE		CHECK VALVE, TILTING DISK								
	WASTE CONE		WAFER CHECK VALVE								
	AIR LUBRICATOR		CHECK VALVE, SWING								
	SONIC HORN		PINCH VALVE								
	CORIOLIS		ALARM CHECK VALVE								
			SLIDE GATE VALVE								
			THREE-WAY SOLENOID VALVE								
			ROTARY FEEDER								
						PIPING					
						PIPING EXISTING					
								AGITATOR BLOWER, MECHANICAL EXHAUSTER CENTRIFUGAL FAN CENTRIFUGAL PUMPS DAMPER EDUCTOR FEEDER HOPPER SUMP PUMP TANK, RECEIVER			

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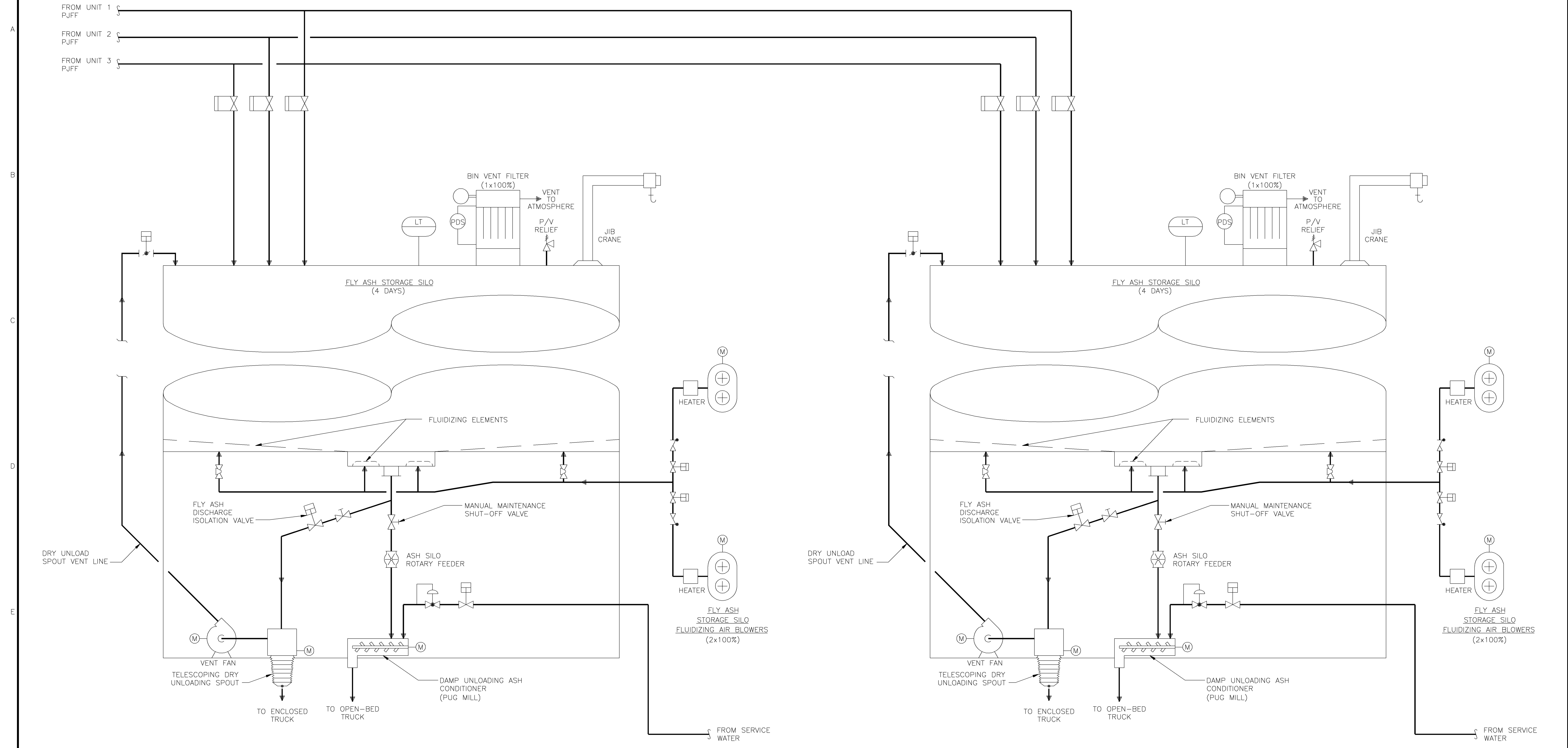
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LG&E/KU - E.W. BROWN STATION
 PHASE II: AIR QUALITY CONTROL STUDY

PROJECT: 168908-BCUUU-M2001

PROCESS FLOW DIAGRAM LEGEND

REV	B
CODE	
AREA	



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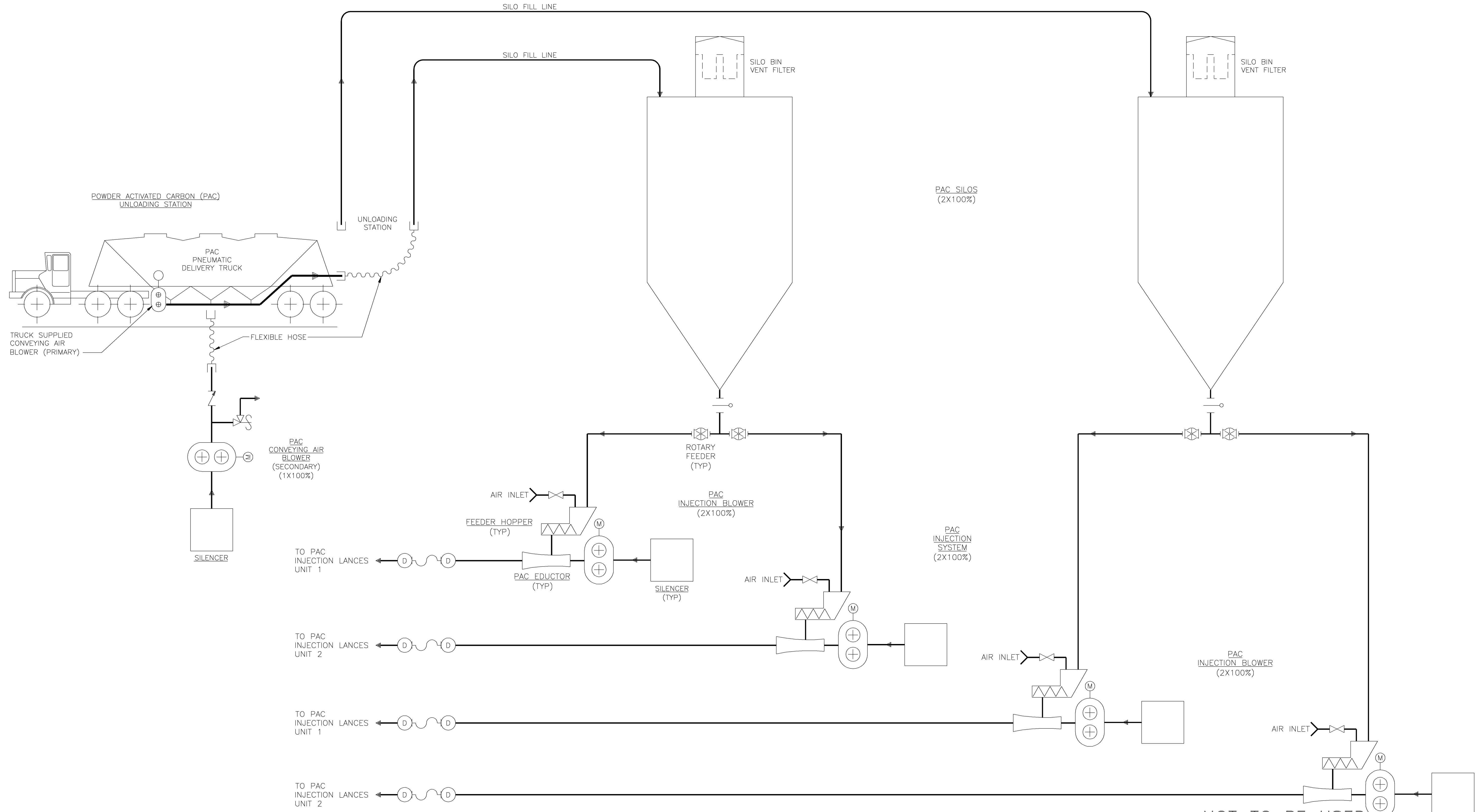
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LG&E/KU - E.W. BROWN STATION
PHASE II: AIR QUALITY CONTROL STUDY

PROCESS FLOW DIAGRAM
 FLY ASH HANDLING

PROJECT	DRAWING NUMBER	REV
168908-BCASB-M2022		B
CODE		
AREA		

A
B
C
D
E
F



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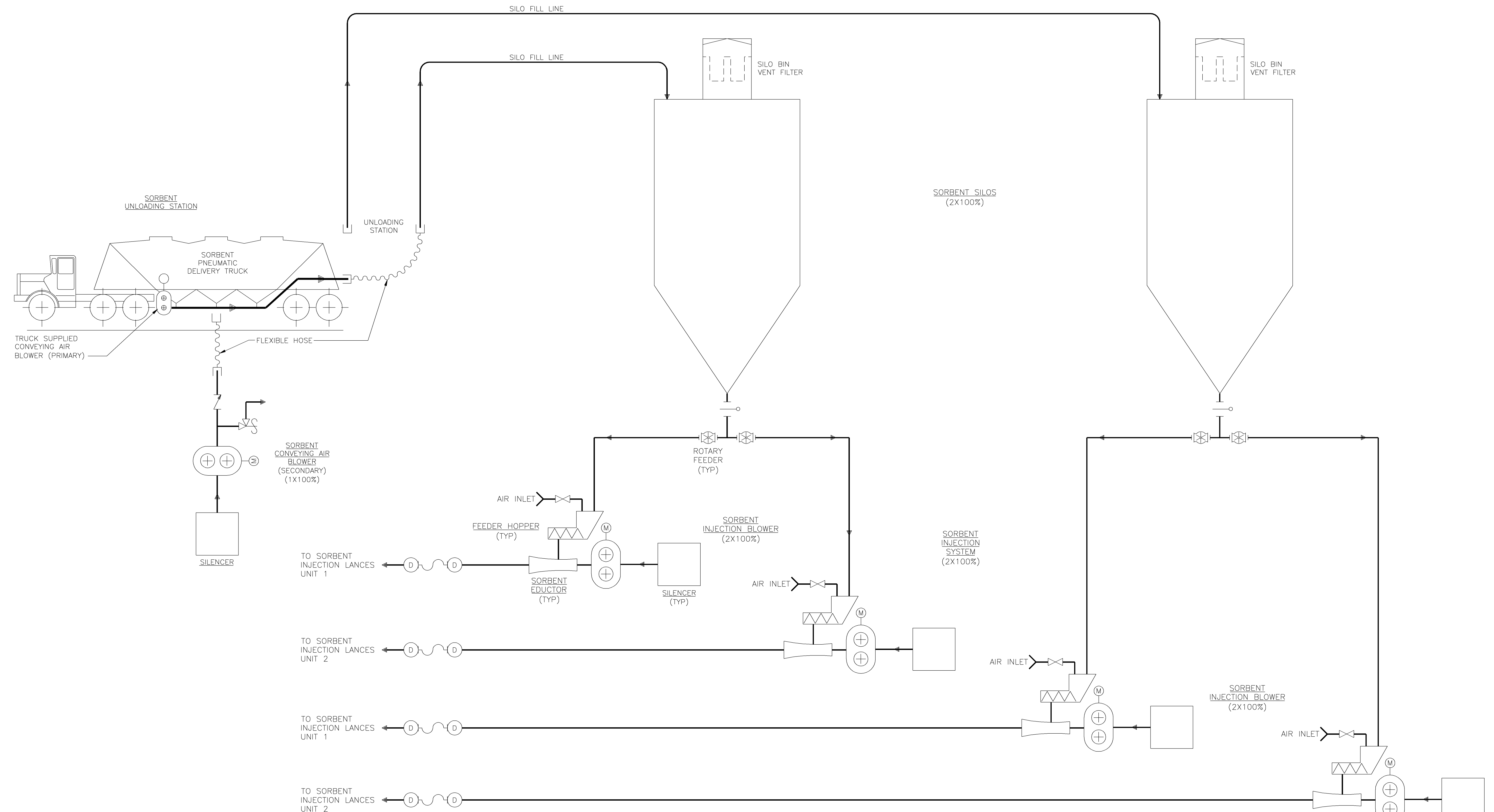
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LG&E/KU – E.W. BROWN STATION
 PHASE II: AIR QUALITY CONTROL STUDY

UNIT 1 & UNIT 2 PROCESS FLOW DIAGRAM
 POWDER ACTIVATED CARBON INJECTION

PROJECT	DRAWING NUMBER	REV
168908-BCCCH-M2148A		B
CODE	AREA	

A
B
C
D
E
F



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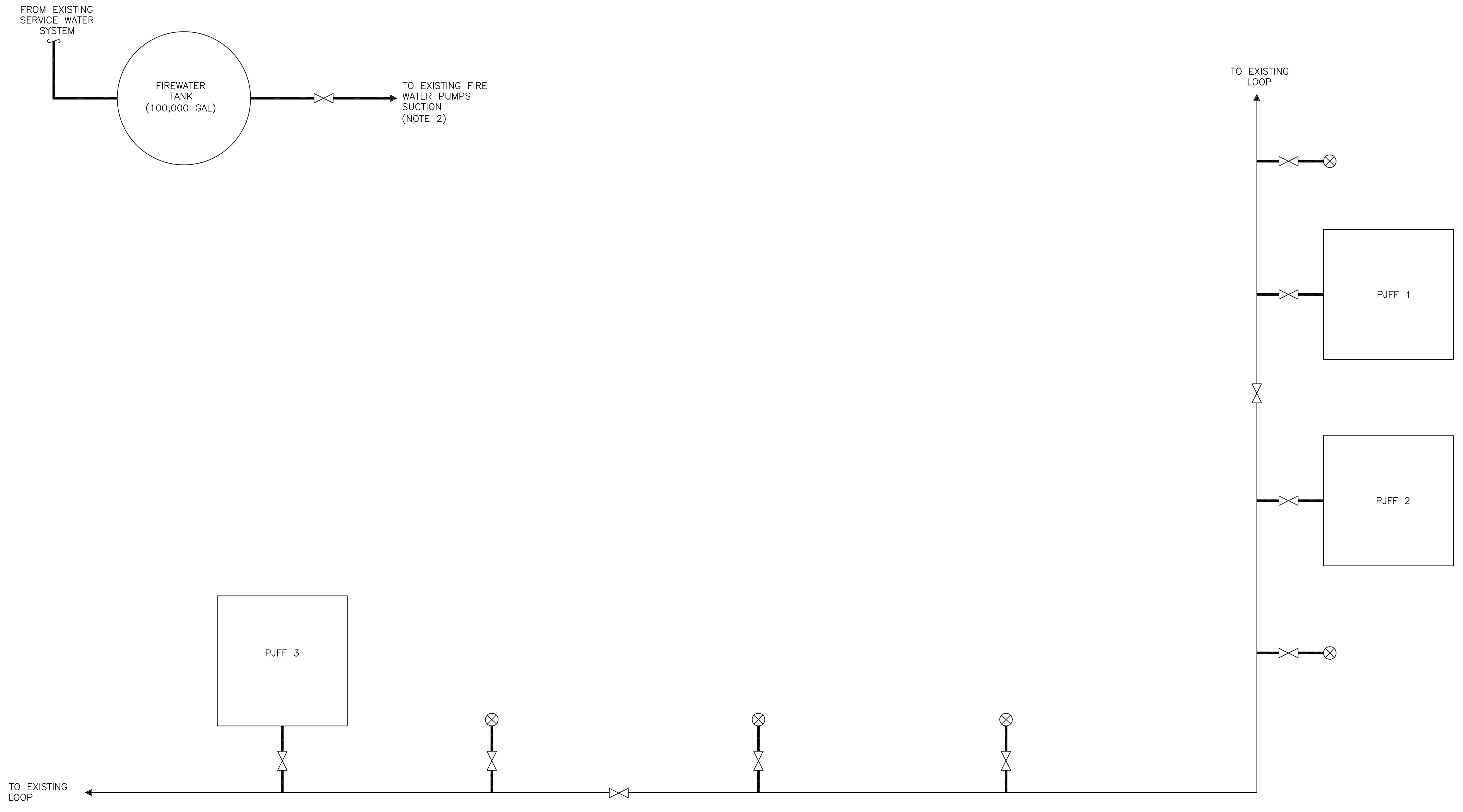
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 PHASE II: AIR QUALITY CONTROL STUDY

UNIT 1 & UNIT 2 PROCESS FLOW DIAGRAM
 SORBENT INJECTION

PROJECT	DRAWING NUMBER	REV
168908-BCCCH-M2148B		B
CODE	AREA	

- NOTES:**
1. ADDITIONAL PIPE AND HYDRANTS MAY NEED TO BE ADDED DURING DETAILED DESIGN.
 2. ADDITIONAL PIPING INCLUDED FROM FIRE PUMP DISCHARGE HEADER TO MAIN FIRE LOOP.



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	LG&E/KU - E.W. BROWN STATION PHASE II: AIR QUALITY CONTROL STUDY	PROJECT 168908-BCSTG-M2547	DRAWING NUMBER B
	PROCESS FLOW DIAGRAM SITE FIRE PROTECTION	CODE AREA	REV B