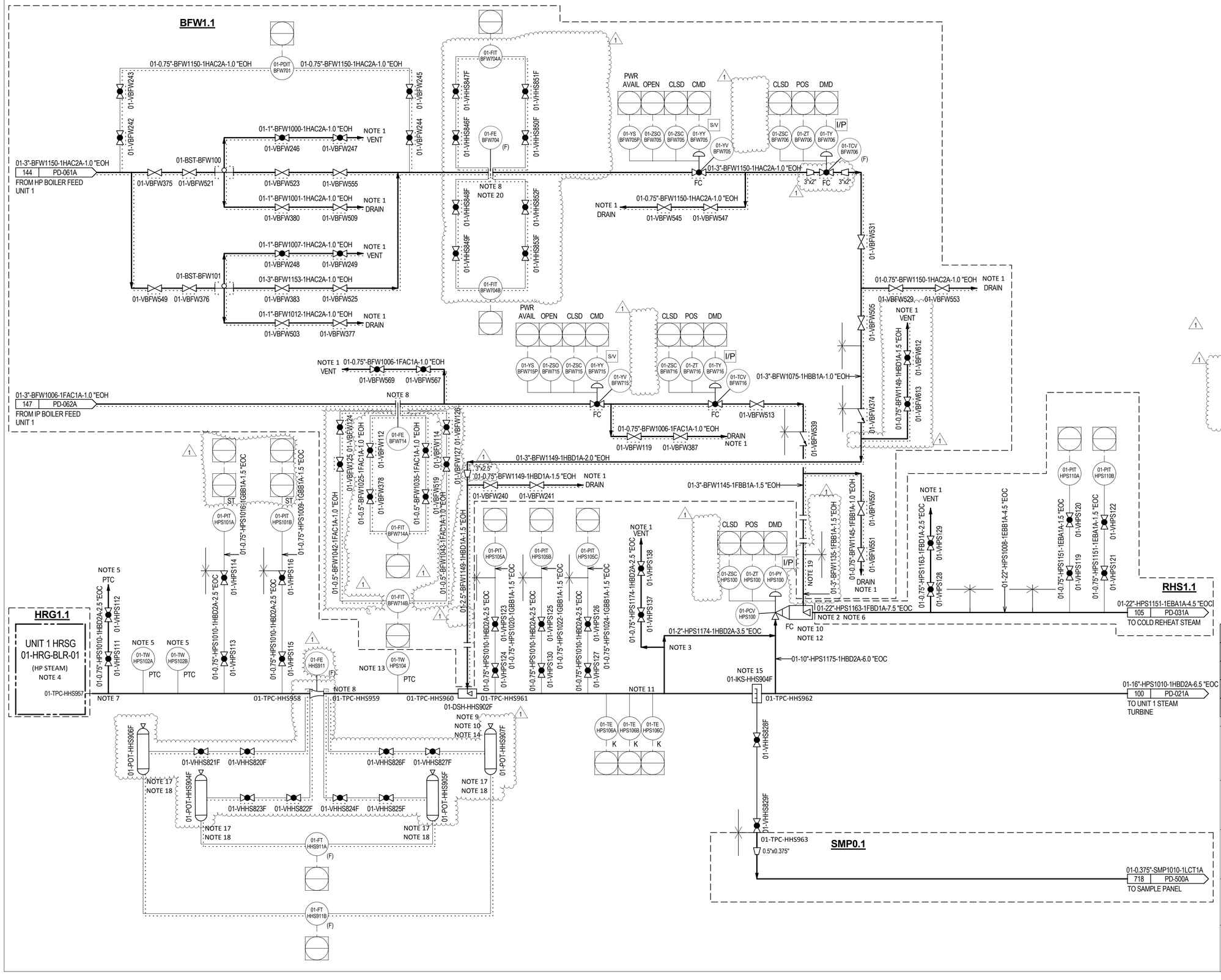

NOTES:

1. THREADED HALF COUPLING TO BE INSTALLED DURING PIPE SHIPPING FOR THREAD PROTECTION. COUPLING MAY BE REMOVED AFTER PIPING INSTALLATION.
2. MINIMUM 15 PIPE DIAMETERS STRAIGHT P91 ALLOY DOWNSTREAM OF BYPASS VALVE.
3. ROUTE AS CLOSE TO BYPASS VALVE INLET AS POSSIBLE.
4. SEE KIEWIT DWG: 94.03.32.100-PD-0008-001
   SEE VENDOR DWG: 2080_00005-2
5. CONTRACTOR TO PROVIDE 3/4" NPT CONNECTION WITH CAP ON PRESSURE TAP. WEEP HOLE REQUIRED. LOCATE CONNECTIONS AS CLOSE TO HRSG INTERFACE AS POSSIBLE.
6. SLOPE BYPASS VALVE DISCHARGE MINIMUM 1/8" PER FOOT TO COLD REHEAT HEADER.
7. SLOPE STEAM PIPES MINIMUM 1/8" PER FOOT IN THE DIRECTION OF FLOW (MINIMUM 1/4" PER FOOT IF SLOPED AGAINST FLOW) UNLESS NOTED OTHERWISE ON ISOMETRIC. MINIMUM SLOPE SHALL BE MET IN HOT AND COLD POSITIONS. SLOPE DRAINS 1/8" PER FOOT WITHOUT POCKETS.
8. PROVIDE 10 DIAMETERS STRAIGHT RUN UPSTREAM AND 5 DIAMETER DOWNSTREAM OF FLOW ELEMENT.
9. A MINIMUM OF 50 PIPE DIAMETERS ARE REQUIRED BETWEEN THE TERMINAL ATTEMPERATORS AND THE STEAM TURBINE INLET.
10. WATER SUPPLY TO BE ROUTED UNDER THE ATTEMPERATOR TO RETAIN A WATER POCKET IN THE SUPPLY LINE.
11. THREE THERMOCOUPLES SHALL BE PLACED ON TOP CENTER OF PIPE, 47 FT (MIN) DOWNSTREAM OF THE TERMINAL ATTEMPERATOR. USING THE BOTTOM OF THE PIPE AS A 0 DEGREE REFERENCE, THE THERMOCOUPLES SHALL BE LOCATED TOP DEAD CENTER, 3' APART.
12. PROVIDE 3 FEET STRAIGHT RUN UPSTREAM AND 13 FEET DOWNSTREAM OF BYPASS VALVE.
13. LOCATE TW JUST DOWNSTREAM OF THE MINIMUM STRAIGHT LENGTH REQUIRMENT FOR 01-FE-HHS911.
14. PROVIDE 6 FEET STRAIGHT RUN UPSTREAM AND 17 FEET DOWNSTREAM OF DSH.
15. LOCATE 01-IKS-HHS904F A MINIMUM OF 35 PIPE DIAMETERS STRAIGHT RUN DOWNSTREAM OF 01-DSH-HHS902F AND PROVIDE A MINIMUM OF 4 PIPE DIAMETERS STRAIGHT RUN DOWNSTREAM OF 01-IKS-HHS904F.
16. ALL SMALL BORE P91/P22 TRANSITIONS TO BE BUTTWELD ONLY.
17. INSTALL 1" THICK REMOVABLE INSULATION BLANKET ON SEAL POT.
18. SEAL POT PIPING AND SEAL POT INSULATION THICKNESS NOT SUFFICIENT FOR PERSONEL PROTECTION. INSULATION SHALL BE YELLOW AND HAVE HIGH-TEMPERATURE WARNING LABEL. TUBING FROM FE TO SEAL POT & SEAL POT SHALL BE HEAT TRACED.
19. SCH160 X SCH80 TRANSITION PIECE.
20. VENDOR TAG: 01-FE-HHS913
    SEE KIEWIT DWG: 94.03.32.100.IN-0015-001
    SEE VENDOR DWG: 2080_71E71_2

LEGEND	START-UP CODE
	HPS1.1- BALANCE
	BFW1.1- (1)
	HRG1.1- (1)
	RHS1.1- (1)
	SMP0.1- (1)

REV	DESIGN BY	CHECKED BY	DATE
1	CONFORMED TO CONSTRUCTION RECORDS		
	K. GALLAGHER	T. SHINO	01-17-22
0	ISSUED FOR CONSTRUCTION		
	E. BURKEMPER	D. WHEAT	01-03-20

JACKSON GENERATION, LLC.
JACKSON GENERATION

Kiewit
ILLINOIS DESIGN FIRM REGISTRATION NUMBER 184004213-0006

Kevin.Gallagher
Digitally signed by Kevin.Gallagher
DN: CN=Kevin.Gallagher, OU=Employees, OU=Users, OU=Kiewit, DC=KIEWITPLAZA, DC=com
Date: 2022.01.21 08:52:09-06'00'

LICENSED PROFESSIONAL ENGINEER
KEVIN GALLAGHER
062.073087
OF ILLINOIS
EXPIRES: 11/30/23

PIPING AND INSTRUMENTATION DIAGRAM
HPS - HIGH PRESSURE STEAM

ENGINEER/DESIGN ORIGINATOR	E. BURKEMPER
LEAD ENG	P. NOVOGORATZ
ENG MGR	T. SHINO
PROJ MGR	F. BUSCH

DRAWING NUMBER
20023894-PD-020A