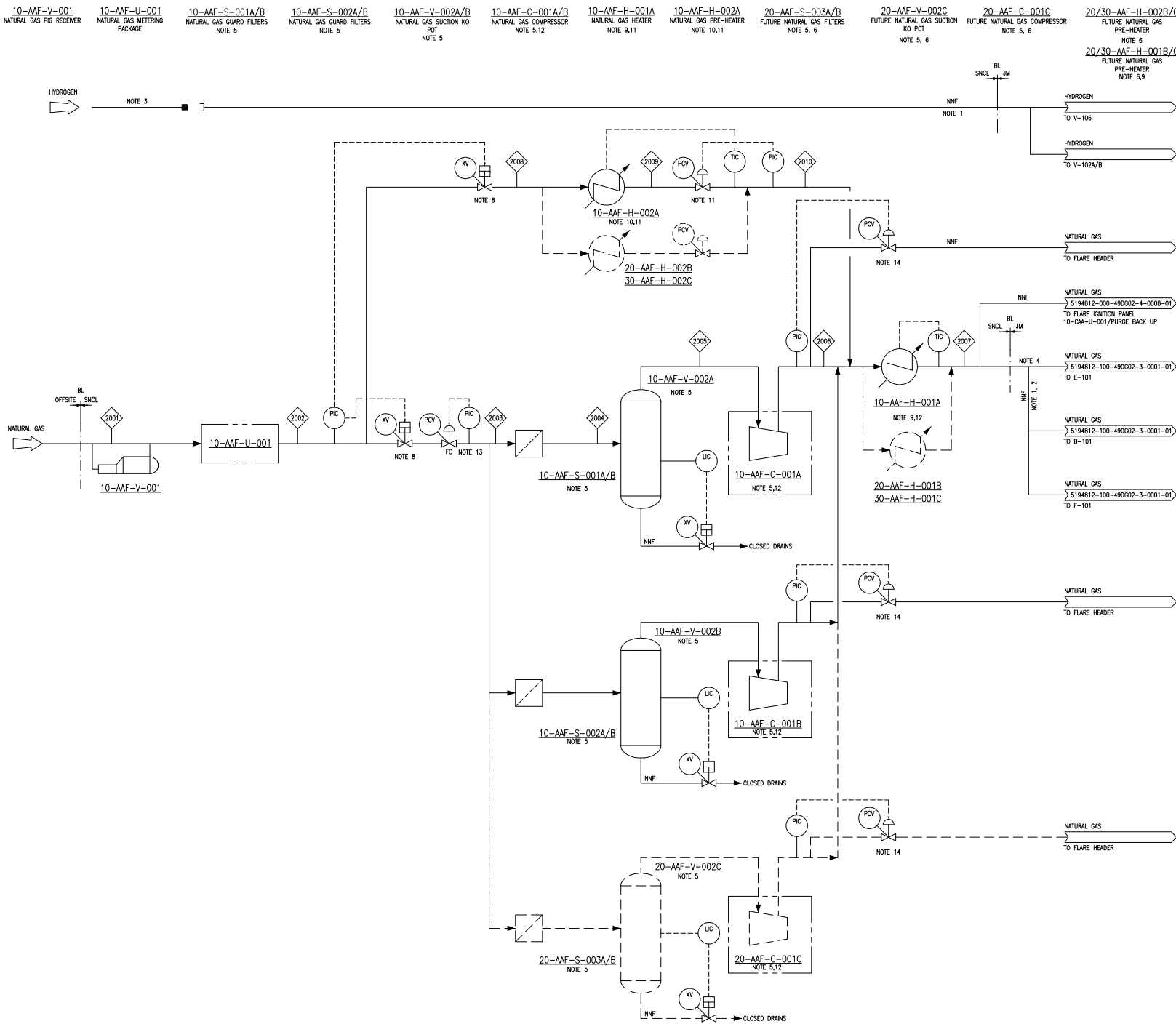


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- NOTES**
1. CONDITIONS FOR ABNORMAL OPERATIONS (START-UP, SHUTDOWN AND EMERGENCY CONDITIONS) ONLY.
  2. GAS USED FOR FURNACE FIRING.
  3. START-UP HYDROGEN TO BE IMPORTED BY TANKER.
  4. NATURAL GAS PROCESS FEED.
  5. TWO COMPRESSORS AND ASSOCIATED EQUIPMENT WILL BE PROVIDED AS PART OF PHASE 1 AND WILL OPERATE AS DUTY AND STANDBY. EACH COMPRESSOR WILL BE SIZED TO PROVIDE 150% OF THE PHASE 1 FLOWRATE (OR 50% OF THE PHASE 3 FLOWRATE), DURING PHASE 2, A THIRD, IDENTICAL COMPRESSOR WILL BE ADDED TO TOTAL THREE COMPRESSORS (2 OPERATING, 1 STANDBY).
  6. THE UFD'S SHOW BOTH PHASE 1 EQUIPMENT IN SOLID LINES AND FUTURE PHASE EQUIPMENT IN DASHED LINES. CONNECTIONS TO FUTURE HYDROGEN GENERATION TRAINS WILL BE ADDED DURING THE DESIGN AND ENGINEERING OF THOSE TRAINS.
  7. DELETED.
  8. ON HIGH NATURAL GAS SUPPLY PRESSURE FROM NTS, XV ON LINE TO COMPRESSOR SUCTION TO CLOSE AND XV ON LINE TO PRESSURE LET DOWN TO OPEN. ON LOW PRESSURE, THE OPPOSITE SHALL APPLY.
  9. POTENTIAL FOR HEAT INTEGRATION AND OPTIMISATION WITH LCH PLANT TO BE CONFIRMED IN DETAILED ENGINEERING.
  10. ELECTRIC PRE-HEATER PROVIDED TO MAINTAIN MINIMUM TEMPERATURE OF 5°C DOWNSTREAM OF PRESSURE LET DOWN VALVE.
  11. NATURAL GAS HEATER, PRE-HEATER AND PRESSURE LET DOWN VALVES SIZED FOR PHASE 1 FLOW RATE. ADDITIONAL EQUIPMENT AND VALVES TO BE PROVIDED IN SUBSEQUENT PHASES.
  12. NATURAL GAS COMPRESSOR 10-AAF-C-001A/B/C TO BE ELECTRIC MOTOR DRIVEN SINGLE STAGE RECIPROCATING TYPE.
  13. PCV PROVIDED TO MAINTAIN PRESSURE DIFFERENCE ACROSS THE COMPRESSOR, WHEN NETWORK SUPPLY PRESSURE RISES ABOVE MAXIMUM COMPRESSOR SUCTION. PCV PROVIDED TO REGULATE COMPRESSOR DISCHARGE PRESSURE DURING UPSET, START-UP AND SHUTDOWN.

- LEGEND**
- PHASE 1 SCOPE
  - - - PHASE 2/3 SCOPE
  - VENDOR PACKAGE LIMIT

- HOLDS**
1. DELETED.
  2. DELETED.
  3. DELETED.
  4. DELETED.

REV.	DATE	REVISION DESCRIPTION	PREP'D	CHK'D	APP.
05	31/08/2020	RE-ISSUED FOR DESIGN	YK	ROB	MW
04	10/06/2020	RE-ISSUED FOR DESIGN	JB	RO	MW
03	10/03/2020	ISSUED FOR DESIGN	JB	RO	MW
02	02/03/2020	ISSUED FOR CONSORTIUM REVIEW	JB	RO	MW
01	19/01/2020	ISSUED FOR IDC	JB	RO	MW

SCALE	NTS	ORIGINAL DRAWING SIZE	A0
PROJECT LOW CARBON HYDROGEN (LCH) FEED			
TITLE UTILITY FLOW DIAGRAM NATURAL GAS AND HYDROGEN IMPORT			
PROJECT NO.	DRAWING NUMBER	REV	
5194812	5194812-000-49DG02-4-0005-01	05	