ervia

European Commission

ERVIA CCS PRE-FEED STUDY

Utility Flow Diagrams - Dublin

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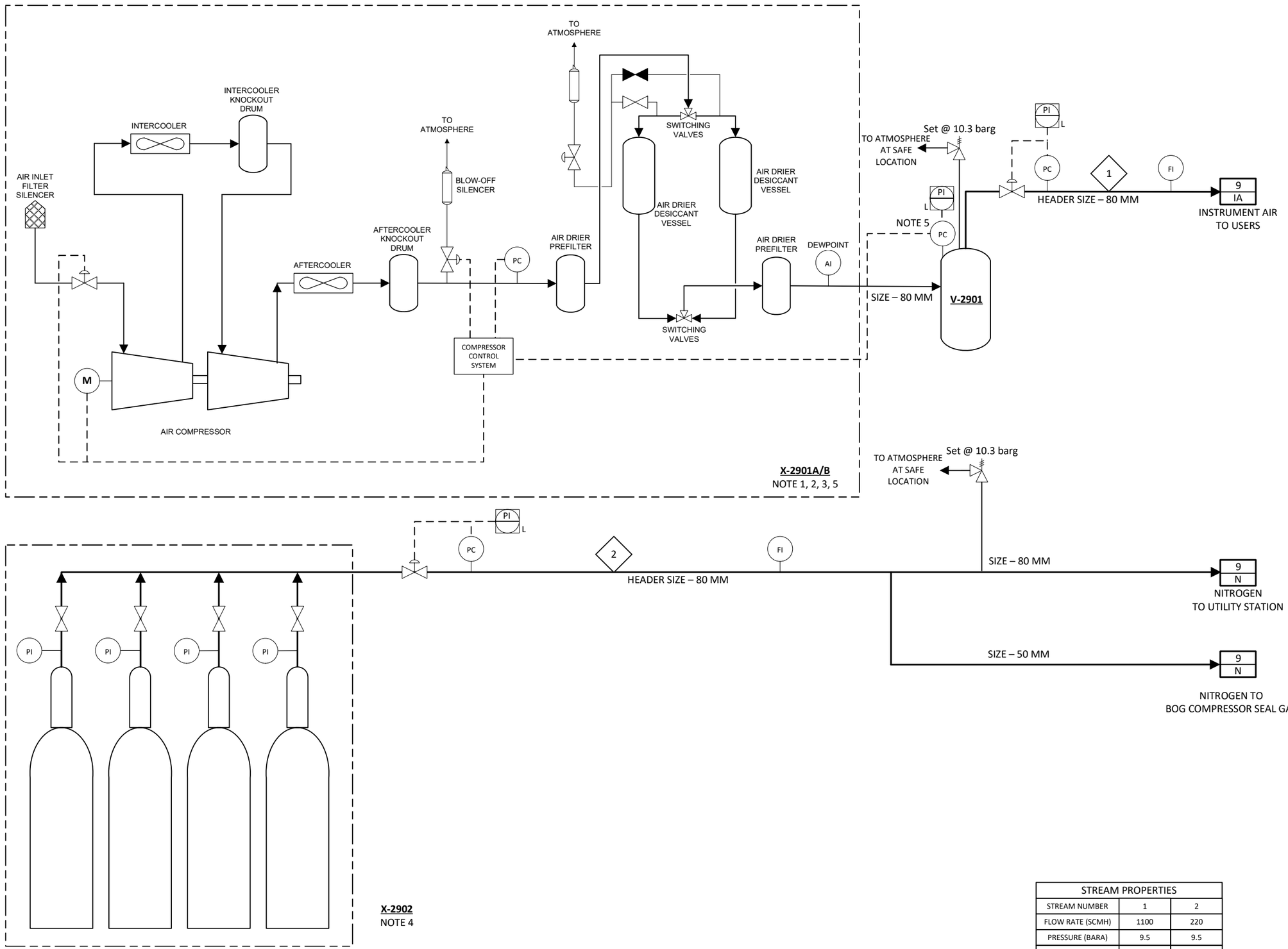
X-2901A/B
AIR COMPRESSOR AND DRIER PACKAGE
NOTE 1, 2, 3

V-2901
INSTRUMENT AIR
RECEIVER

X-2902
NITROGEN CYLINDER RACK



STREAM PROPERTIES		
STREAM NUMBER	1	2
FLOW RATE (SCMH)	1100	220
PRESSURE (BARA)	9.5	9.5
TEMPERATURE (°C)	AMB	AMB

GENERAL NOTES:

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NOTES:

1. TYPICAL SCHEMATIC IS SHOWN. ACTUAL CONFIGURATION TO BE DETERMINED BY VENDOR.

2. PACKAGE IS VENDOR SUPPLIED. VENDOR SUPPLIED SHUTDOWN AND DETAILED INSTRUMENTATION IS NOT SHOWN.

3. COMPRESSOR AND DRIER PACKAGE CONFIGURATION IS 2 X 100%.

4. NUMBER OF CYLINDERS TO BE DETERMINED BY VENDOR.

5. STAND-BY AIR COMPRESSOR AND DRIER PACKAGE TO AUTO-START ON LOW HEADER PRESSURE.

LEGENDS

TEMPERATURE, C
PRESSURE, bara
FLOW, kg/hr
STREAM NUMBER

Rev	Date	Drn / Chk	Amendment / Issue	App
P02	11/02/22	GM / RK	RE-ISSUED FOR PRE-FEED	MJC
P01	07/01/22	GM / RK	ISSUED FOR PRE-FEED	MJC

Client: ervia

RPS / BECHTEL ENERGY INC.

Project: CCS PRE-FEED STUDY

Title: UTILITY FLOW DIAGRAM - DUBLIN
INSTRUMENT AIR & NITROGEN

Model File Identifier:

File Identifier: MDE1234-BEC-03-DX-DR-M-UFD0001

Created on: 11/02/2022 | Sheets: 1 OF 1

Scale: N.T.S | Status: S3 | Rev: P02

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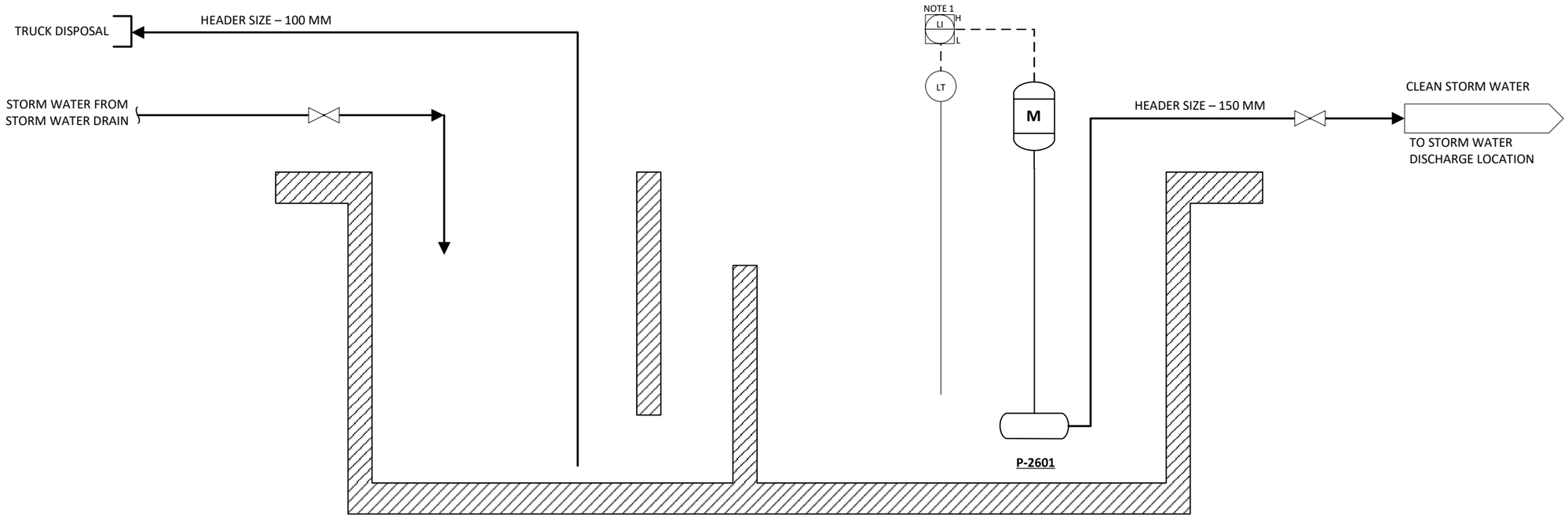
Q-2601
STORM WATER
RETENTION SUMP

P-2601
STORM WATER RETENTION
SUMP PUMP



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NOTES:

1. HIGH LIQUID LEVEL STARTS THE PUMP AND LOW LIQUID LEVEL STOPS THE PUMP.

LEGENDS

TEMPERATURE, ˚C
PRESSURE, bara
FLOW, kg/hr
STREAM NUMBER

Rev	Date	Drn / Chk	Amendment / Issue	App
P03	09/03/22	GM / RK	RE-ISSUED FOR PRE-FEED	MJC
P02	11/02/22	GM / RK	RE-ISSUED FOR PRE-FEED	MJC
P01	07/01/22	GM / RK	ISSUED FOR PRE-FEED	MJC

Client: ervia

BECHTEL ENERGY INC.

Project: CCS PRE-FEED STUDY

Title: UTILITY FLOW DIAGRAM - DUBLIN
STORM WATER DRAIN

Model File Identifier:

File Identifier: MDE1234-BEC-03-DX-DR-M-UFD0002

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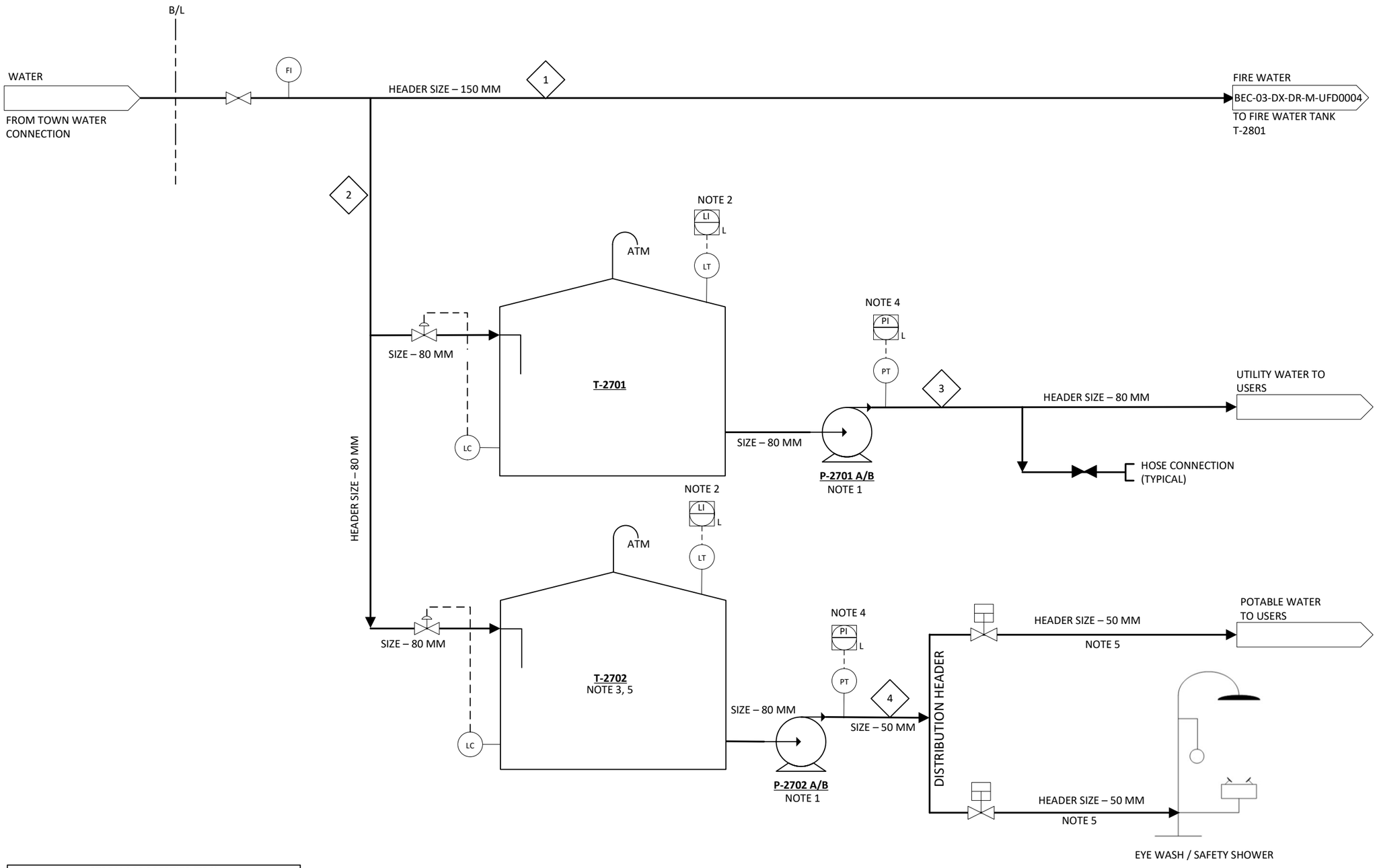
T-2701
UTILITY WATER TANK

P-2701 A/B
UTILITY WATER TANK PUMP

T-2702
POTABLE WATER TANK

P-2702 A/B
POTABLE WATER TANK PUMP



STREAM PROPERTIES (TBC)				
STREAM NUMBER	1	2	3	4
FLOW RATE, M3/HR	60	15	9	6
PRESSURE, BARA	3	3	3.5	3.5
TEMPERATURE	AMB	AMB	AMB	AMB

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NOTES:

1. 2 X 100% CONFIGURATION.
2. LOW LIQUID LEVEL STOPS PUMP.
3. OPERATOR TO RUN SHOWERS AND TAKE PERIODIC WATER SAMPLE TO ENSURE POTABLE WATER QUALITY.
4. LOW PRESSURE STARTS STAND-BY PUMP.
5. THE SYSTEM TO BE DESIGNED WITH ADEQUATE PROVISION TO ENSURE THE WATER TEMPERATURE REMAINS WITHIN THE TEPID RANGE OF 16 °C TO 36 °C AND THE WATER IS OF POTABLE QUALITY.

LEGENDS

TEMPERATURE, ˚C
PRESSURE, bara
FLOW, kg/hr
STREAM NUMBER

Rev	Date	Drn / Chk	Amendment / Issue	App
P02	11/02/22	GM / RK	RE-ISSUED FOR PRE-FEED	MJC
P01	07/01/22	GM / RK	ISSUED FOR PRE-FEED	MJC

Client: ervia

RPS / BECHTEL ENERGY INC.

Project: CCS PRE-FEED STUDY

Title: UTILITY FLOW DIAGRAM - DUBLIN
POTABLE & UTILITY WATER

Model File Identifier:

File Identifier: MDE1234-BEC-03-DX-DR-M-UFD0003

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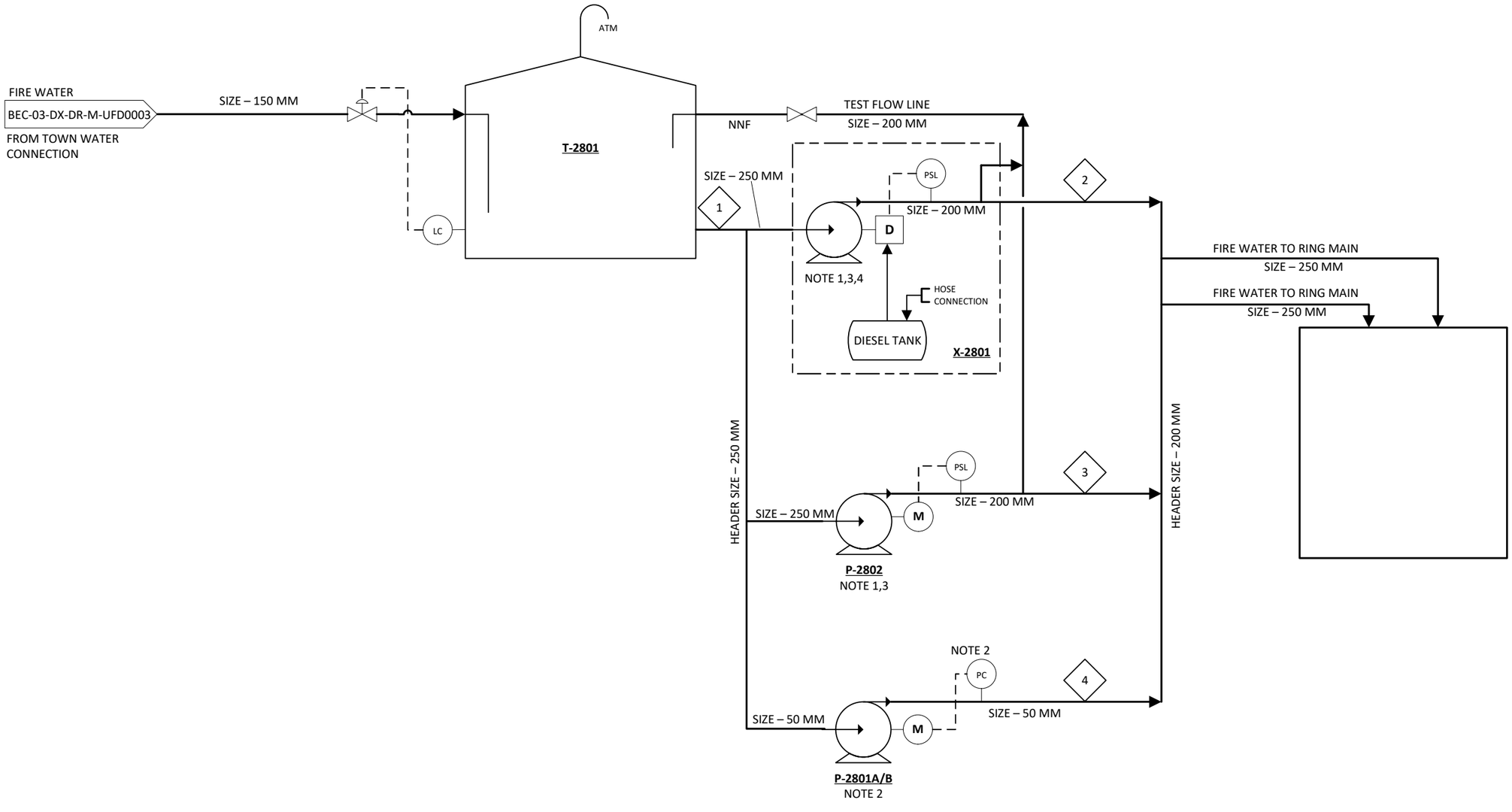
T-2801 FIRE WATER TANK

X-2801 DIESEL DRIVEN FIRE WATER PUMP PACKAGE

P-2801A/B JOCKEY FIRE WATER PUMP

P-2802 ELECTRIC DRIVEN FIRE WATER PUMP



STREAM PROPERTIES				
STREAM NUMBER	1	2	3	4
FLOW RATE (m3/h)	240	240	240	2.4
PRESSURE (BARA)	1.1	11	11	11
TEMPERATURE	AMB	AMB	AMB	AMB

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NOTES:

1. FOR FIRE WATER SYSTEMS THE APPROPRIATE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) REGULATIONS AND ANY SITE SPECIFIC REQUIREMENTS OF THE LOCAL AUTHORITY FIRE DEPARTMENT SHALL APPLY.

2. TWO (2) FIREWATER JOCKEY PUMPS TO MAINTAIN THE REQUIRED PRESSURE IN THE FIRE WATER RING. ONE PUMP WILL BE KEPT ON AUTO MODE, WHICH WILL BE START/STOP BASED ON FIREWATER HEADER PRESSURE. THE OTHER PUMP WILL BE ON STAND-BY MODE.

3. 2 x 100% FIRE WATER PUMPS (1 ELECTRIC MOTOR DRIVEN AND 1 DIESEL ENGINE DRIVEN). IN CASE JOCKEY PUMP FAILS TO MAINTAIN REQUIRED PRESSURE IN FIRE WATER RING MAIN, ELECTRIC DRIVEN FIRE WATER PUMP TO START. IN CASE ELECTRIC DRIVEN FIRE WATER PUMP FAILS TO START OR REQUIRED PRESSURE DOES NOT BUILT-UP, DIESEL DRIVEN FIRE WATER PUMP TO START.

4. DIESEL ENGINE DRIVEN PUMPS SHALL BE A COMPLETE PACKAGE WITH DIESEL TANK.

LEGENDS

TEMPERATURE, ˚C

PRESSURE, bara

FLOW, kg/hr

STREAM NUMBER

Rev	Date	Drn / Chk	Amendment / Issue	App
P01	07/01/22	GM / RK	ISSUED FOR PRE-FEED	MJC

Client: ervia

RPS / BECHTEL ENERGY INC.

Project: CCS PRE-FEED STUDY

Title: UTILITY FLOW DIAGRAM - DUBLIN FIRE WATER PUMPS & TANKS

Model File Identifier:

File Identifier: MDE1234-BEC-03-DX-DR-M-UFD0004

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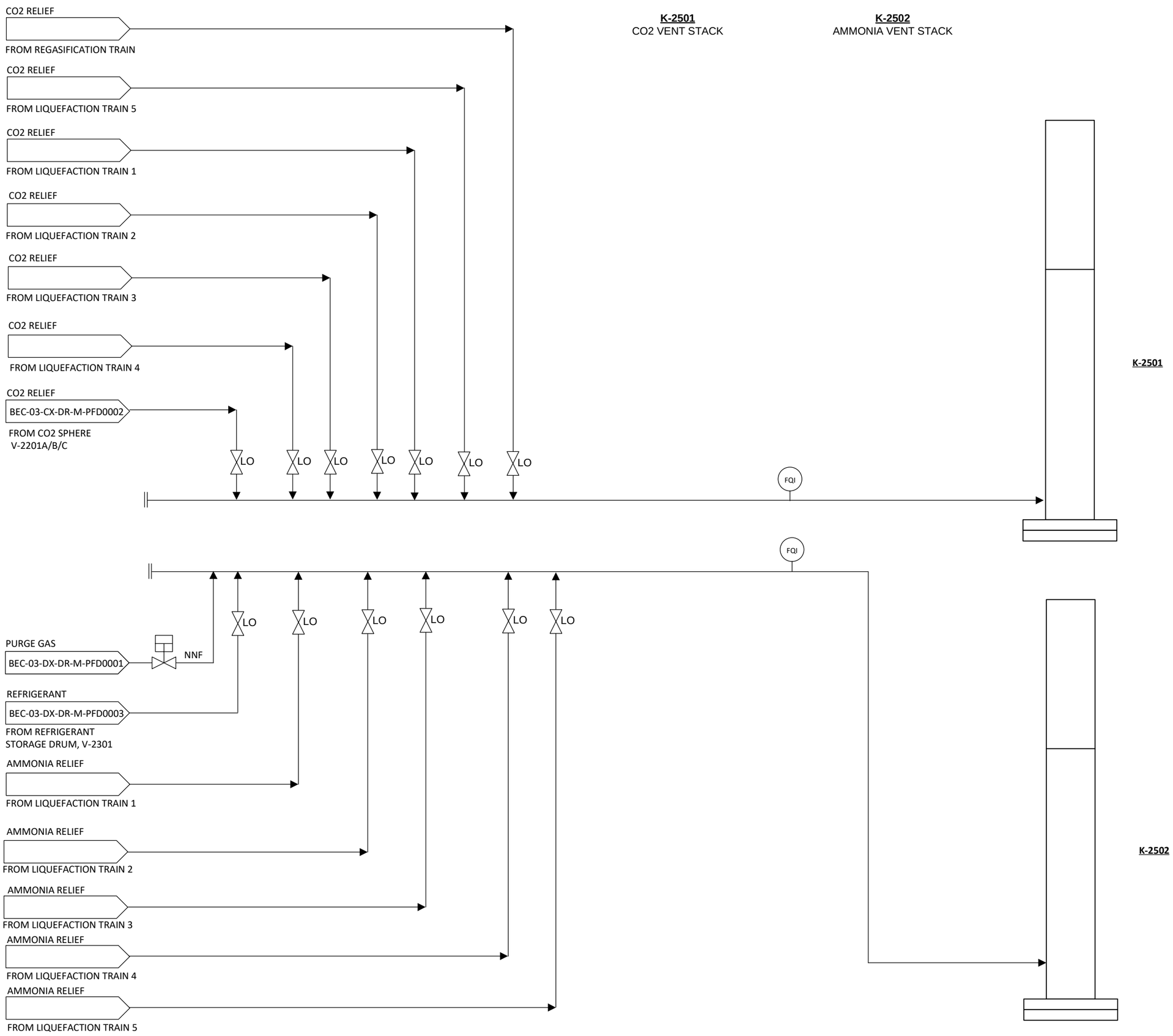

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NOTES:

LEGENDS

TEMPERATURE, ˚C
PRESSURE, bara
FLOW, kg/hr
STREAM NUMBER

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P01	07/01/22	GM / RK	ISSUED FOR PRE-FEED	MJC

Client: ervia

BECHTEL ENERGY INC.

Project: CCS PRE-FEED STUDY

Title: UTILITY FLOW DIAGRAM - DUBLIN VENT STACK & HEADER

Model File Identifier:

File Identifier: MDE1234-BEC-03-DX-DR-M-UFD0005

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