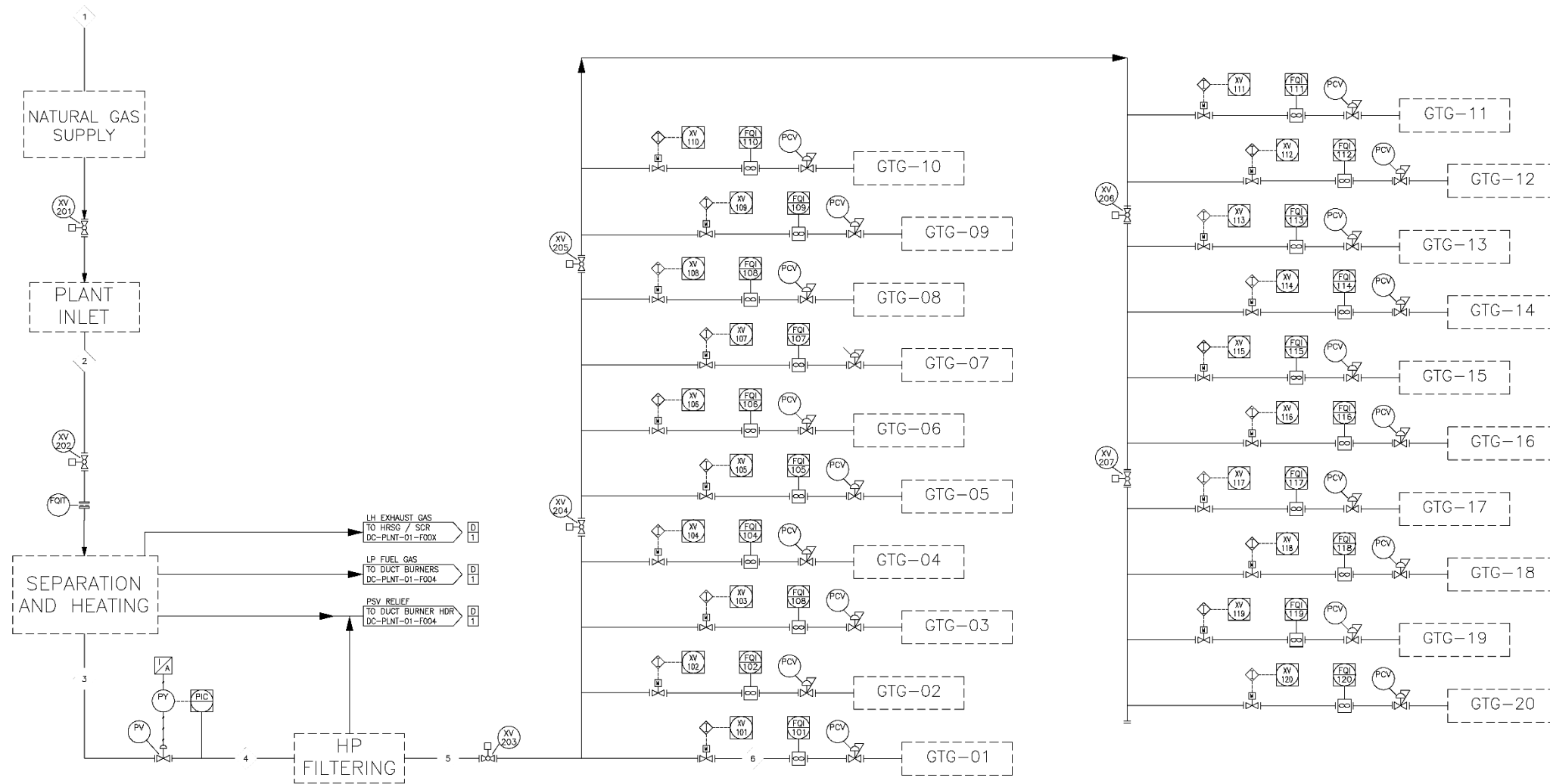


GSC-01
GAS SCRUBBER
TYPE: COALESCING
RATED CAPACITY:
MFR:
YEAR: 2026

GTG-01 to 20
GAS TURBINE GENERATORS
TYPE: AERODERIVATIVE
RATED CAPACITY: 50 MW
MFR: INTERNATIONAL
YEAR: 2026



Notes: 1. Fuel gas volumetric flow rates shown are ACTUAL m³/h at line conditions (not normalized).
2. Pressure shown is [kPa(g)] and temperature assumed is [°C]

STREAM #	1	2	3	4	5	6
STREAM NAME	PIPELINE SUPPLY GAS	INLET GAS	STRIPPED GAS	HEADER GAS	FILTERED FUEL GAS	GTG FUEL GAS (TYP)
DESCRIPTION						
FLOW - m ³ /HR	5,583	7,081	7,081	7,776	13,576	710
TEMPERATURE °C	18	18	18	45	40	40
PRESSURE kPa	5,200	4,100	4,100	4,080	2,300	2,200
ENTHALPY MJ/m ³	40.8	40.8	40.8	40.8	40.8	40.8

REFERENCE DRAWING NO	REFERENCE DRAWING TITLE	NO	DATE	REVISION	DRAFTER	DRAFTING CHECKER	DESIGNER	PROJECT MANAGER	COMPANY
DC-PLNT-01-F002	COOLING WATER PROCESS FLOW DIAGRAM	A	30-01-2026	ISSUED FOR EAPA REVIEW	MHP	SSB	AHA/EVW	DBT	BISE CONCEPTS
DC-PLNT-01-F003	HRSG WATER CYCLE PROCESS FLOW DIAGRAM	B	12-02-2026	RELOCATION OF INLET SEPARATOR	PAC		DBT	DBT	SAW
DC-PLNT-01-F004	GTG COMBUSTION PROCESS FLOW DIAGRAM	C	16-02-2026	ADDITION OF LINE HEATER DUCT TO STACK, MASS BALANCE ADJUSTMENTS	PAC		DBT	DBT	SAW
		D	31-03-2026	ADDITION OF SEGMENTED ISOLATION VALVES AS PER ERP	PAC		DBT	DBT	SAW

ISSUED FOR REVIEW

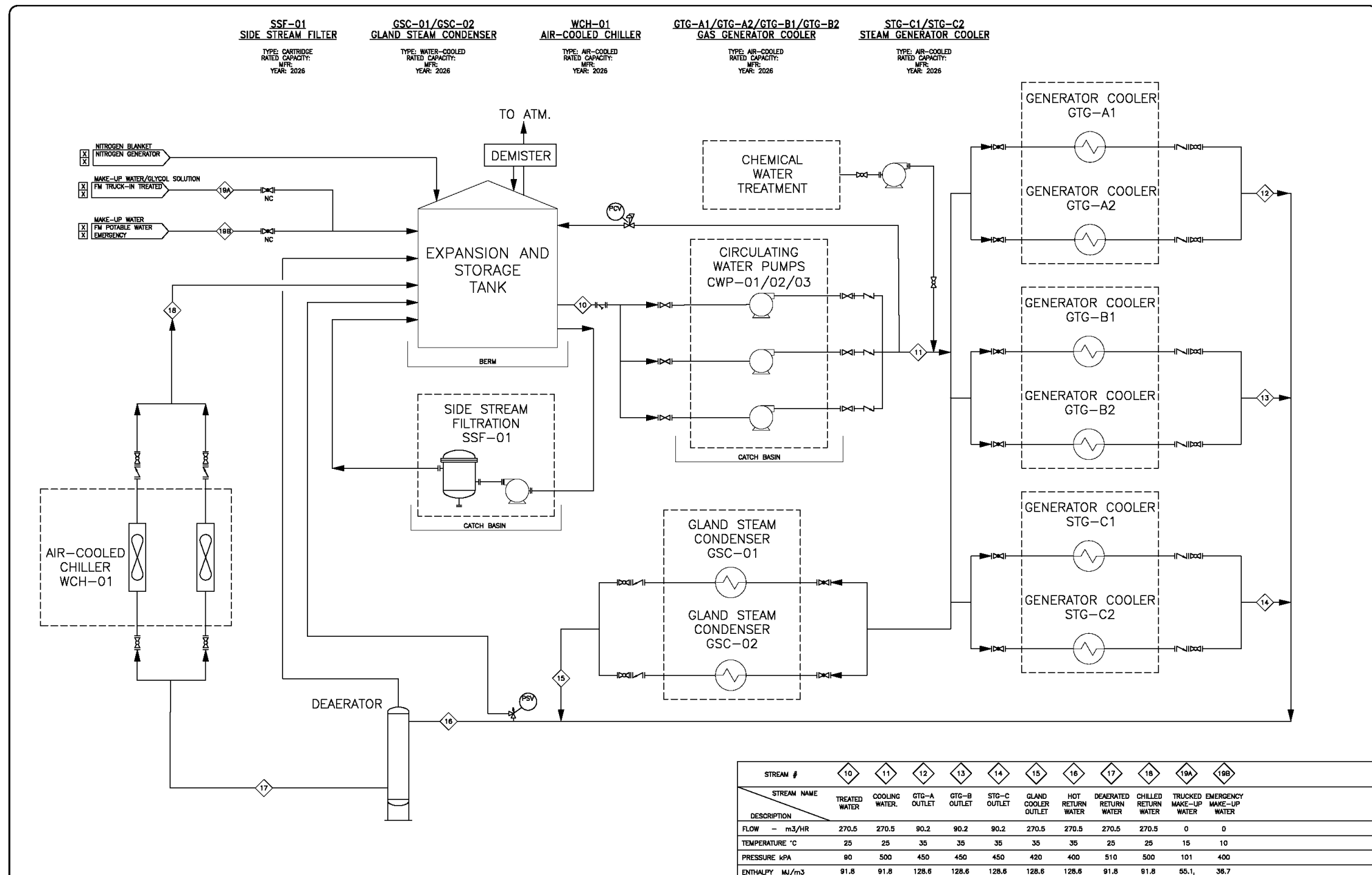
BASE **synapse**

LSD 04-33-01-WSM

SYNAPSE DATA CENTER - OLDS, AB
FUEL GAS
PROCESS FLOW DIAGRAM

SCALE: NTS DRAWING NO: DC-PLNT-01-F001 REV: D

PROFESSIONAL ENGINEER PERMIT



STREAM #	10	11	12	13	14	15	16	17	18	19A	19B
STREAM NAME	TREATED WATER	COOLING WATER	GTG-A OUTLET	GTG-B OUTLET	STG-C OUTLET	GLAND COOLER OUTLET	HOT RETURN WATER	DEAERATED RETURN WATER	CHILLED RETURN WATER	TRUCKED MAKE-UP WATER	EMERGENCY MAKE-UP WATER
DESCRIPTION											
FLOW - m ³ /HR	270.5	270.5	90.2	90.2	90.2	270.5	270.5	270.5	270.5	0	0
TEMPERATURE °C	25	25	35	35	35	35	35	25	25	15	10
PRESSURE kPa	90	500	450	450	450	420	400	510	500	101	400
ENTHALPHY MJ/m ³	91.8	91.8	128.6	128.6	128.6	128.6	128.6	91.8	91.8	55.1	36.7

REFERENCE DRAWING NO	REFERENCE DRAWING TITLE	NO	DATE	REVISION	DRAFTER	DRAWING CHECKER	DESIGNER	PROJECT MANAGER	COMPANY
DC-PLNT-01-F001	FUEL GAS PROCESS FLOW DIAGRAM	A	30-01-2026	ISSUED FOR EPA REVIEW	MHP	SSB	AHA/E/VW	DBT	BASE CONCEPTS
DC-PLNT-01-F003	HRSG WATER CYCLE PROCESS FLOW DIAGRAM	B	14-02-2026	UPDATED MASS BALANCE	PAC			DBT	SAW
DC-PLNT-01-F004	GTG COMBUSTION PROCESS FLOW DIAGRAM								

ISSUED FOR REVIEW

BASE **synapse**

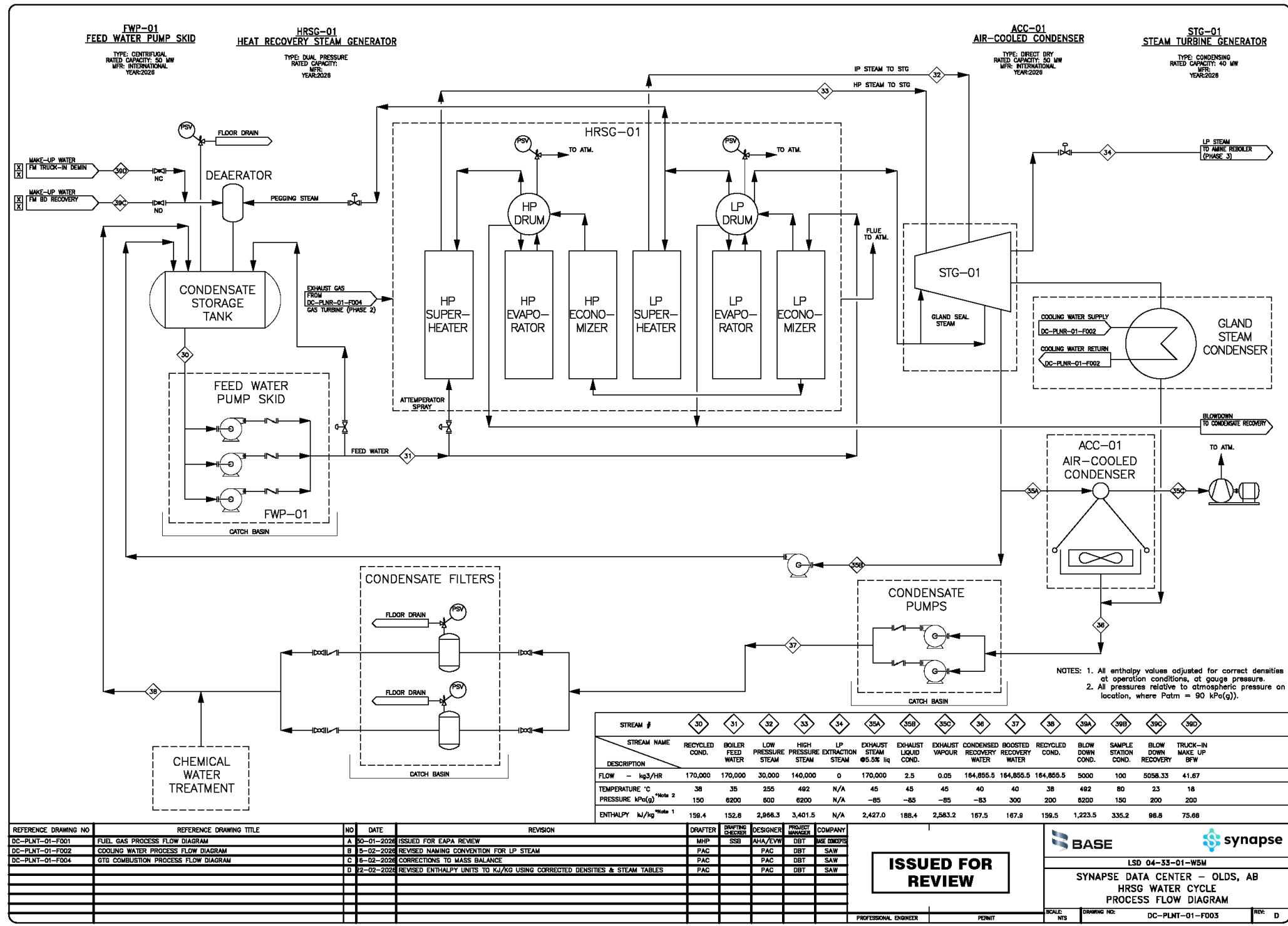
LSD 04-33-01-W5M

SYNAPSE DATA CENTER - OLDS, AB

COOLING WATER

PROCESS FLOW DIAGRAM

SCALE: NTS DRAWING NO: DC-PLNT-01-F002 REV: B



NOTES: 1. All enthalpy values adjusted for correct densities at operation conditions, at gauge pressure.
 2. All pressures relative to atmospheric pressure on location, where Patm = 90 kPa(g).

STREAM #	30	31	32	33	34	35A	35B	35C	36	37	38	39A	39B	39C	39D
DESCRIPTION	RECYCLED COND.	BOILER FEED WATER	LOW PRESSURE STEAM	HIGH PRESSURE STEAM	LP EXTRACTION STEAM	EXHAUST STEAM @5.5% lq	EXHAUST LIQUID COND.	EXHAUST VAPOUR	CONDENSED RECOVERY WATER	BOOSTED RECOVERY WATER	RECYCLED COND.	BLOW DOWN COND.	SAMPLE STATION COND.	BLOW DOWN RECOVERY	TRUCK-IN MAKE UP BFW
FLOW - kg3/HR	170,000	170,000	30,000	140,000	0	170,000	2.5	0.05	164,855.5	164,855.5	164,855.5	5000	100	5058.33	41.67
TEMPERATURE °C	38	35	255	492	N/A	45	45	45	40	40	38	492	80	23	18
PRESSURE kPa(g) ^{Note 2}	150	6200	800	6200	N/A	-85	-85	-85	-83	300	200	8200	150	200	200
ENTHALPY kJ/kg ^{Note 1}	159.4	152.6	2,966.3	3,401.5	N/A	2,427.0	188.4	2,583.2	167.5	167.9	159.5	1,223.5	335.2	96.8	75.66

REFERENCE DRAWING NO	REFERENCE DRAWING TITLE	NO	DATE	REVISION
DC-PLNT-01-F001	FUEL GAS PROCESS FLOW DIAGRAM	A	30-01-2024	ISSUED FOR EPA REVIEW
DC-PLNT-01-F002	COOLING WATER PROCESS FLOW DIAGRAM	B	30-02-2024	REVISED NAMING CONVENTION FOR LP STEAM
DC-PLNT-01-F004	GTG COMBUSTION PROCESS FLOW DIAGRAM	C	30-02-2024	CORRECTIONS TO MASS BALANCE
		D	22-02-2024	REVISED ENTHALPY UNITS TO KJ/KG USING CORRECTED DENSITIES & STEAM TABLES

ISSUED FOR REVIEW

BASE | synapse

LSD 04-33-01-W5M

SYNAPSE DATA CENTER - OLDS, AB
 HRSG WATER CYCLE
 PROCESS FLOW DIAGRAM

SCALE: NTS | DRAWING NO: DC-PLNT-01-F003 | REV: D

