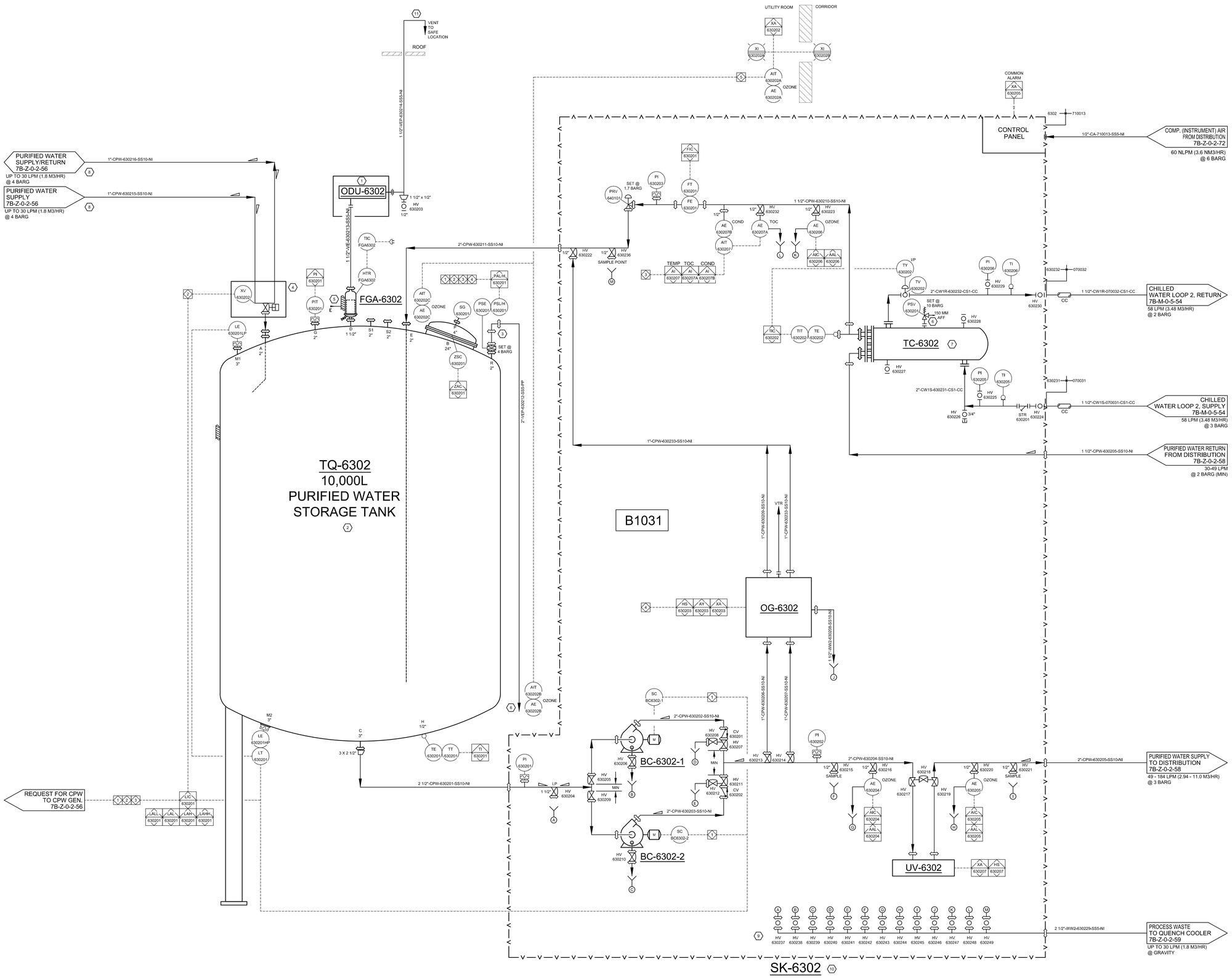

GENERAL NOTES:

1. ALL COMPONENT & EQUIPMENT NUMBERS ARE PRECEDED BY "7B" TO REPRESENT THE BULK DRUG SUBSTANCE (BDS) BUILDING.
2. ALL AUTOMATIC VALVES FAIL CLOSED (F.C.) UNLESS NOTED FAIL OPEN (F.O.).
3. ALL PLC/COMPUTER CONNECTIONS ARE WITHIN THE PCS UNLESS OTHERWISE NOTED.
4. LAST LINE NUMBER: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.
5. LINE NUMBER NOT USED: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.
6. LAST AUTO VALVE NUMBER: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.
7. AUTO VALVE NUMBERS NOT USED: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.
8. LAST MANUAL VALVE NUMBER: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.
9. MANUAL VALVE NUMBERS NOT USED: REFER TO P&ID 7B-Z-0-2-58 FOR DETAILS.

SHEET NOTES

1. TANK VENT TO BE EQUIPPED WITH A CATALYTIC OZONE VENT DECOMPOSER & VENTED TO SAFE LOCATION OUTSIDE OF BUILDING, AWAY FROM DOORS, WINDOWS, OR HVAC INTAKES.
2. ALL TANK MOUNTED INSTRUMENTS TO BE CLOSE-COUPLED.
3. SPOOL PIECE FOR EASY RUPTURE DISC REPLACEMENT
4. CPW GENERATION SKID VENDOR TO PROVIDE CPW STORAGE TANK SUPPLY VALVE.
5. PROVIDE ELECTRIC HEAT TRACE ON VENT FILTER.
6. ROUTE LINE 150 MM ABOVE FINISHED FLOOR.
7. HEAT EXCHANGER SIZED TO COOL 49 LPM FROM 29°C TO 22°C.
8. THE PURIFIED WATER GENERATION SYSTEM DESIGN IS BASED ON A BWT UNIT WHICH HAS TWO PURIFIED WATER SUPPLY MODES:

   "ACTIVE" DUTY CONVERTS BOTH THE SUPPLY AND RETURN LINES INTO SUPPLY LINES DURING FILLING. LINES COMBINE TO SUPPLY 30 LPM.

   "STAND-BY" DUTY SLOWS THE FLOW AND THE SUPPLY AND RETURN ACT AS A NORMAL LOOP.
9. VENDOR TO COMBINE FUNNEL DRAIN POINTS AS MUCH AS REASONABLE.
10. LOCATE VALVES AND REGULATORS AT OPERATOR LEVEL FOR ERGONOMIC ACCESS (TYPICALLY 1220 MM TO 1525 MM ABOVE FINISHED FLOOR).
11. VENTS TO THE BUILDING EXTERIOR SHALL BE INSTALLED WITH A BIRD SCREEN.

INTERLOCKS

- ON BURST DISC INDICATION PAL/H-630201 OR LOW LOW LEVEL LALL-630201, PUMP IS STOPPED (IF RUNNING) AND AUTOMATED START IS DISABLED.
- ON BURST DISC INDICATION PAL/H-630201 OR HIGH HIGH LEVEL LAHH-630201, CLOSE VALVE XV-630202.
- ENABLE COMMON ALARM OUTPUT ON BURST DISK, TANK LOW LOW LEVEL, HIGH CONDUCTIVITY, HIGH TOC.
- ON BURST DISC INDICATION PAL/H-630201, DISABLE OZONE GENERATOR.
- OZONE DETECTION IN UTILITY ROOM TURN ON ALARM AND LIGHT, AND DISABLE OZONE GENERATOR.

ips
Integrated Project Services
Engineering Design/Build Compliance Consulting
721 Arbor Way
Suite 100
BLUE BELL, PA 19422
PHONE: (610) 828-4090
FAX: (610) 828-3656
www.ipsdb.com
IPS Professional Engineers and Architects, LLC.

REVISION	DATE	DESCRIPTION	BY
A	01JUL2020	50% BD ISSUE	DLS
B	28AUG2020	90% BD ISSUE	JJR
C	27NOV2020	DESIGN ISSUE	JJR
D	12FEB2021	30% DD ISSUE	RLD
E	05AUG2021	90% DD ISSUE	RLD
G	02SEP2021	CONSTRUCTION ISSUE	RLD

TESSLER engenharia
R. Dr. Cesário Mota Júnior, 424 - Vila Buarque, São Paulo - SP, 01223-020

REVISION HISTORY

1. REV. 0 - NONE.

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CLIENT
Takeda
Hemobrás
Empresa brasileira de hemoderivados e biotecnologia

BURITI EPCMV

DRAWING TITLE
P&I DIAGRAM DRUG SUBSTANCE PURIFIED WATER STORAGE TANK, TQ-6302

ENGINEER	ARCHITECT	DESIGNER	IPS PROJECT #
JJR	BJE	RBN	ITD19439.01
DRAWN BY	REVIEWED BY	SCALE	CADD FILE NAME
LG	GJC	NONE	7B-Z-0-2-57

XREF FILE(S)

DRAWING NUMBER
7B-Z-0-2-57

SEAL
THIS IS NOT A SEALED DOCUMENT
DATE:

TQ-6302
CPW STORAGE TANK
TYPE: VERTICAL
CAPACITY: 10,000 L
SIZE: 2134mm ID X 2845mm T.T.
MOC: 316L SS
DP/DT: 4 BARG & F.V. / 175°C

FGA-6302
VENT FILTER
TYPE: IN-LINE, HYDROPHOBIC
FLOW: 130 SLPM @ 0.01 BARD
SIZE:1 RND. X 10" CARTRIDGE
MOC: 316L SS HSG., PTFE ELEM.
RATING: 0.2 µM

ODU-6302
OZONE DESTRUCT UNIT
TYPE: THERMAL
CAPACITY: 1.5 WT % O3, MAX.
SIZE: 3 NM3/H
MOC: STAINLESS STEEL
MODEL: OZONIA ODT-003
ELEC: 220V / 60HZ / 1PH, 0.75 kW

BC-6302-1
CPW DISTRIBUTION PUMP
TYPE: SANITARY CENTRIFUGAL
CAPACITY: 50 - 200 LPM @ 4 BARG
MANUF./MODEL: TBD
MOC: 316L SS
ELEC: 380V / 60HZ / 3PH, 3 KW

BC-6302-2
CPW DISTRIBUTION PUMP
TYPE: SANITARY CENTRIFUGAL
CAPACITY: 50 - 200 LPM @ 4 BARG
MANUF./MODEL: TBD
MOC: 316L SS
ELEC: 380V / 60HZ / 3PH, 3 KW

OG-6302
OZONE GENERATOR
TYPE: ELECTROLYTIC
CAPACITY: 3 gO3/HR
MODEL: OZONOIA MEMBREL MkIV/1
ELEC: 220V / 60HZ / 1PH, 5.5A

UV-6302
ULTRA VIOLET OZONE DESTRUCT UNIT
TYPE: 254nm ULTRAVIOLET STERILIZER
CAPACITY: REDUCE 1 PPM O3 TO <0.01 PPM @ 20°C, 378 LPM MAX.
SIZE: 4" TC, 68" L X 17"D
MOC: 316L SS
MODEL: AQUAFINE OPTIVENN 04CDL
ELEC: 220V / 60HZ / 1PH, 5.6 A

TC-6302
CPW COOLER
TYPE: HYGENIC SHELL AND TUBE
CAPACITY: 23.9 KW (COOL, 49 LPM @ 7°C ΔT)
SIZE: TBD
MOC: TUBE, 316L SS/ SHELL, 304L SS
DP/DT: 10 BARG / FV, 175°C
AREA: TBD SQ. M

ISSUED FOR CONSTRUCTION

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