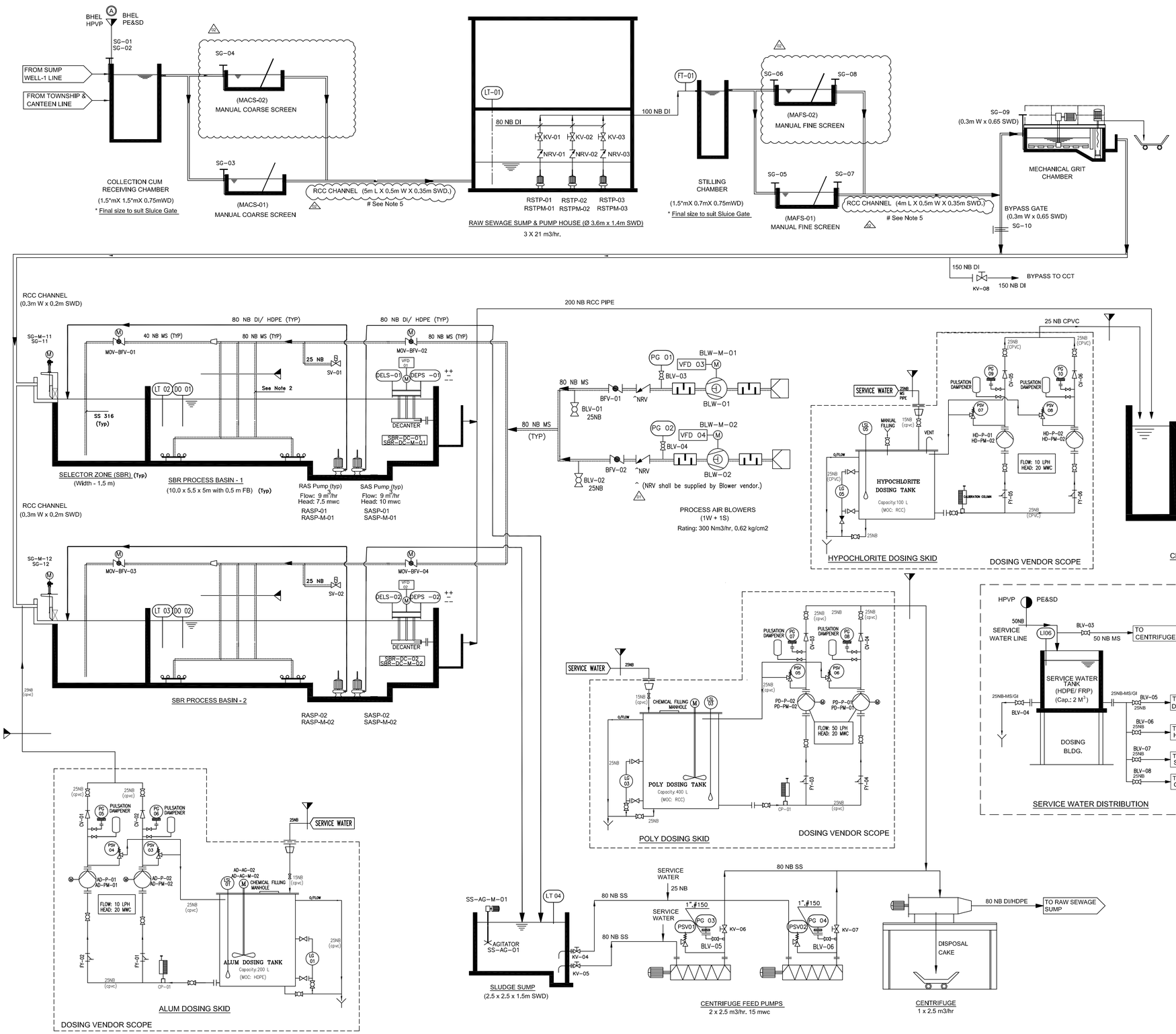
FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

DRG. NO. PY-DP-1-M150-1040-01 SH. 01 OF 01



EQUIPMENT LIST:					
Sl.NO	DESCRIPTION	Qty.	Working + Standby	Capacity	Remarks
1	SBR BASIN AIR DIFFUSERS	LOT	-N.A-	-N.A-	
2	SBR BASIN AIR GRID LATERALS	LOT	LOT	-N.A-	
3	DECANTER	02	02	-N.A-	
4	SELECTOR AIR PIPES	LOT	LOT	-N.A-	
5	SBR AIR BLOWERS	02	1W + 1S	Flow: 300 Nm^3/hr, 0.62 kg/cm2	
6	RETURN ACTIVATED SLUDGE PUMPS	03	2W + 1SS	Flow: 9 m^3/hr, Head: 7.5 mwc	
7	SURPLUS ACTIVATED SLUDGE PUMPS	03	2W + 1SS	Flow: 9 m^3/hr, Head: 10 mwc	
8	COARSE SCREEN -MANUAL	02	1W + 1S	-N.A-	
9	RAW SEWAGE SUMP TRANSFER PUMPS	03	2W + 1S	Flow: 21 m^3/hr, Head: 13 mwc	
10	FINE SCREEN - MANUAL	02	1W + 1S	-N.A-	
11	CENTRIFUGE FEED PUMPS	02	1W + 1S	Flow: 2.5 m^3/hr, Head: 15 mwc	
12	CENTRIFUGE	01	1W	Flow: 2.5 m^3/hr	
13	SLUDGE SUMP AGITATOR	01	1W	-N.A-	
14	HYPOCHLORITE DOSING SYSTEM	1 set	-N.A-	Flow: 10 lph, Head: 20 mwc	
15	DWPE DOSING SYSTEM	1 set	-N.A-	Flow: 60 lph, Head: 20 mwc	
16	ALUM DOSING SYSTEM	1 set	-N.A-	Flow: 10 lph, Head: 20 mwc	
17	GRIT MECHANISM	1 set	-N.A-		

CIVIL PROCESS UNITS:				
Sl.NO	DESCRIPTION	Qty.	MOC	Remarks
1	COLLECTION CUM RECEIVING CHAMBER	01	RCC	
2	RAW SEWAGE SUMP	01	RCC	
3	STILLING CHAMBER	01	RCC	
4	GRIT CHAMBER	01	RCC	
5	SBR BASINS	02	RCC	
6	SLUDGE SUMP	01	RCC	
7	CHLORINE CONTACT TANK	01	RCC	
8	OVERHEAD TANK	01	HDPE	

LINE LEGEND
- AIR LINE
- INSTRUMENT SIGNAL
- DRAIN LINE
- RCC CHANNEL

LEGEND
- NON-RETURN VALVE
- BUTTERFLY VALVE
- MOTORISED KNIFE GATE VALVE
- MOTORISED BUTTERFLY VALVE
- CHANNEL MOUNTED MOTORISED GATE
- KNIFE GATE VALVE
- BALL VALVE
- NEEDLE VALVE
- VFD VARIABLE FREQUENCY DRIVE
- FM FLOW METER
- M MOTOR
- AIR BLOWER
- SILENCER
- FILTER
- MFM MAGNETIC FLOW METER

INSTRUMENT LIST		
MK.NO.	DESCRIPTION	REMARK
PG 01, 02	PRESSURE GAUGES	BOURDON TYPE
PG 03, 04	PRESSURE GAUGES	DIAPHRAGM TYPE
DO 01, 02	DISSOLVED OXYGEN METER	IMMERSION TYPE
LT 02, 03	LEVEL TRANSMITTER	HYDROSTATIC TYPE
VFD 03, 04	VARIABLE FREQUENCY DRIVE	FOR BLOWERS
VFD 01, 02	VARIABLE FREQUENCY DRIVE	FOR DECANTERS
DELS 01, 02	DECANTER LEVEL SENSOR	CAPACITIVE SWITCH
DEPS 01, 02	DECANTER POSITION SENSOR	MAGNETIC LIMIT SWITCH
LT 01, 04, 05	LEVEL TRANSMITTER	ULTRASONIC TYPE
LS 01 - 05	LEVEL SWITCH	CAPACITANCE TYPE
FT 01	FLOW METER	ULTRASONIC TYPE

NOTES:

1) ALL AUTOMATIC VALVES, GATES, DRIVES & INSTRUMENTS SHALL BE INTERLOCKED WITH PLC.
2) DIFFUSERS LAYOUT & LATERAL PIPES GRID SHALL BE AS PER DIFFUSERS GENERAL ARRANGEMENT DRAWING ONLY.
3) INSTRUMENT ISOLATION SHALL BE OF 1/2" UNLESS OTHERWISE SPECIFIED.
4) INSTRUMENT COUNTER FLANGES WILL BE IN THE PIPING SCOPE.
5) CHANNEL LENGTH SHALL BE CONFIRMED AFTER RECEIPT OF SCREEN VENDOR DATA.

CUSTOMER: BHARAT HEAVY ELECTRICALS LIMITED HPVP VIZAG

EPC CONTRATOR: BHARAT HEAVY ELECTRICALS LIMITED PE&SD HYDERABAD

PROJECT: 1.0 MLD STP AT HPVP VIZAG

	NAME	SIGN.	DATE	NO.OF VAR.
DRN.	CH.P	-sd-	14.11.19	N.A
CHD.	AKS	-sd-	14.11.19	
APPD.	M.S.S.N	-sd-	14.11.19	

DEPT. / CODE. | UNITOL DIMS. GR. -S/W/F- | SCALE 1:100 | WEIGHT (KG) N.A | REF. TO ASSY. DRG. N.A | ITEM NO. N.A | NO.OF ITEMS N.A

TITLE: P&ID OF 1.0 MLD STP

CARD CODE N.A | DRAWING NO. PY-DP-1-M150-1040-01 | REV. 02 | SHT. No 01 | NO. OF SHT. 01

REV.	DATE	ALTERED	CHD/APPD
02	25.02.20	System optimised Mechanical Screens removed.	CHD/APPD
01	20.12.19	Mechanical Screens and Grit mechanism added. Layout comments incorporated. SBR basin size optimised.	AKS CHD/APPD MSSN

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GENERAL DIMENSIONAL LIMITS,FITS & TOLERANCES AS PER HY0230261

SIGN. AND DATE | REF. DRG. NO. | INVENTORY NO