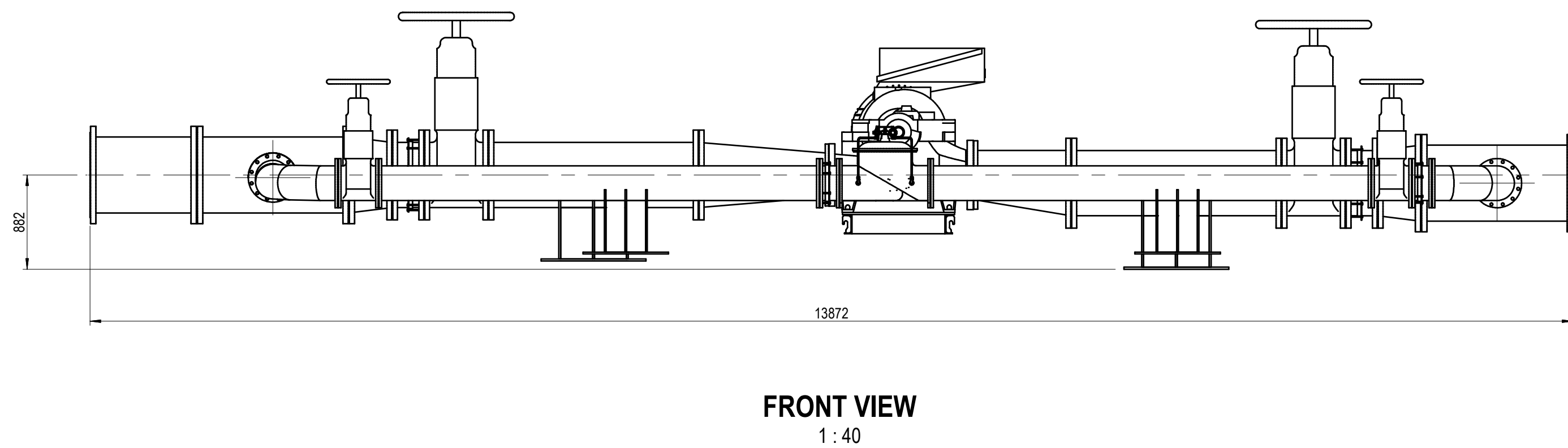
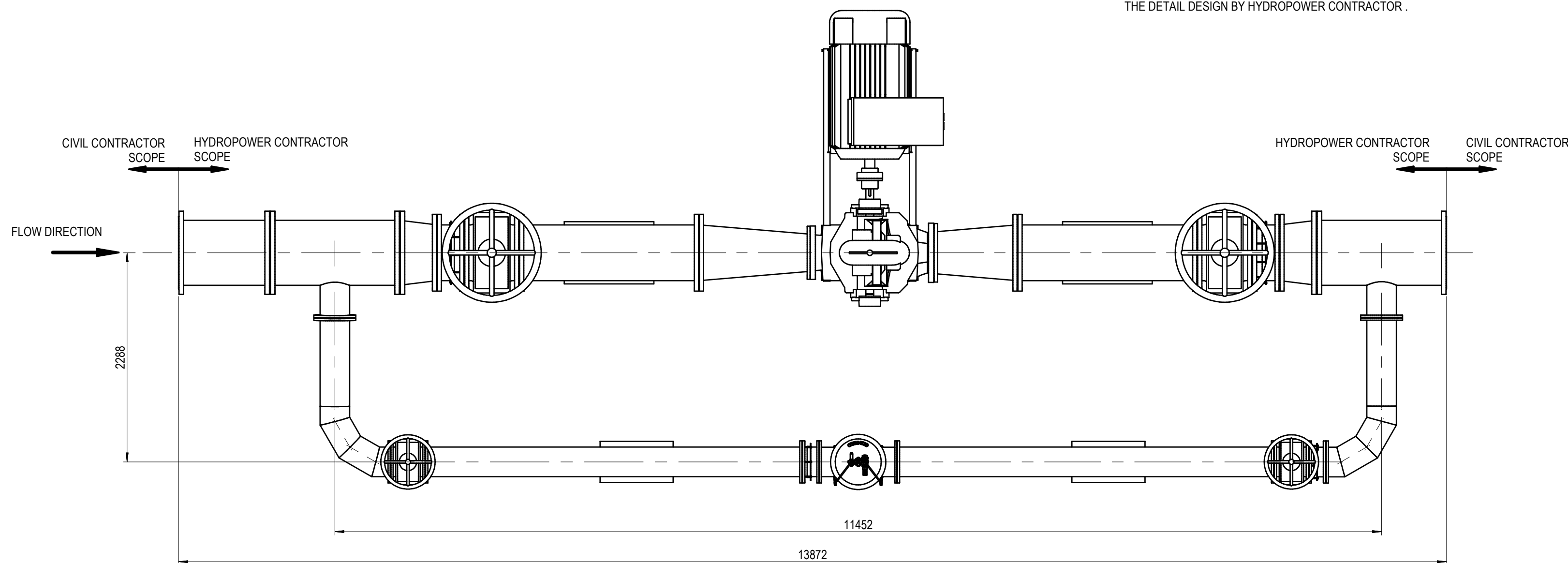
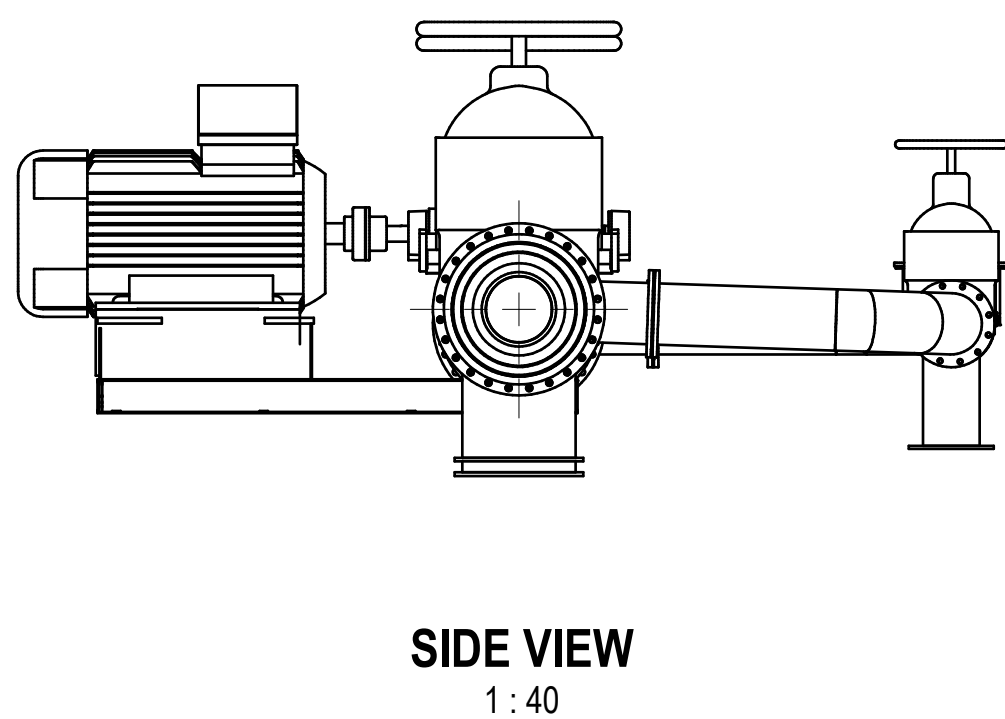
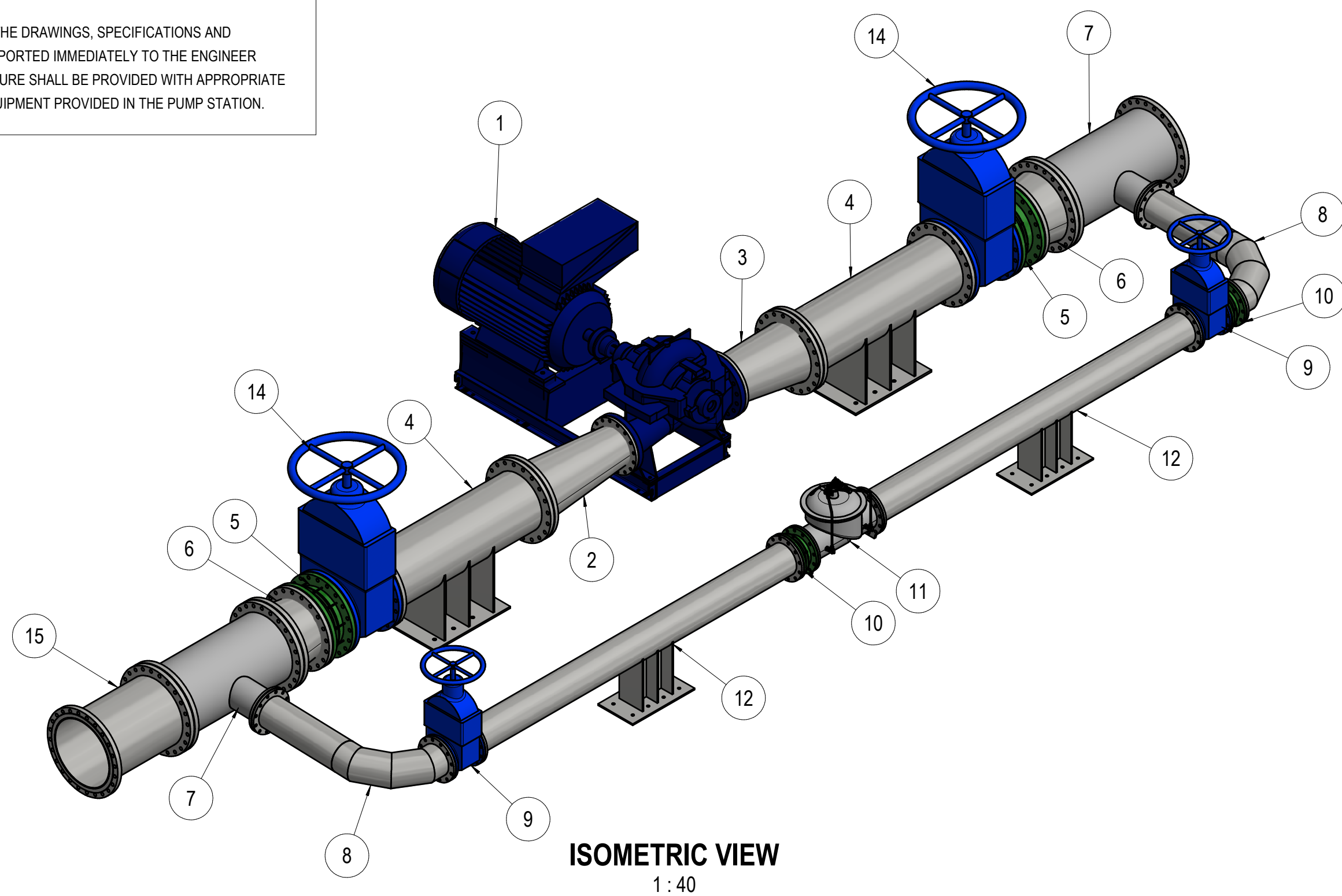





1. ALL PIPEWORK IS INDICATIVE AND SHALL NOT BE MANUFACTURED FROM THIS DRAWING. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE PIPEWORK, VALVES AND SPECIALS. THE CONTRACTOR SHALL SUBMIT HIS DESIGN CALCULATIONS AND SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL BEFORE MANUFACTURING OR FABRICATION COMMENCES. THE DESIGN MUST BE IN ACCORDANCE WITH THE MECHANICAL SPECIFICATION.
2. THE LEVELS AND DIMENSIONS ARE BASED ON THE TOPOGRAPHIC SURVEY AND AVAILABLE INFORMATION AT THE DESIGN STAGE. THE CONTRACTOR SHALL ENSURE THAT ALL EXISTING SERVICES ARE SURVEYED. IF ANY DISCREPANCIES ARISE OR DESIGN CHANGES ARE REQUIRED; IT MUST IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. THE CONTRACTOR SHALL MAKE PROVISION FOR FITTINGS TO C&I CONNECTIONS, LOCAL DRAIN POINTS AND QUICK-COUPLING CONNECTION POINTS TO FLUSH THE LINE WITH COMPRESSED AIR.
4. ALL FLANGES AND FITTINGS BELOW GROUND SHALL BE COVERED WITH A VISCO-ELASTIC COATING (STOPAQ OR SIMILAR APPROVED) AND WRAPPED WITH PVC TAPE.
5. THE RESTRAINED FLANGE ADAPTORS, DISMANTLING JOINTS AND FLANGES ON THE SUCTION AND DISCHARGE PIPEWORK SHALL MATCH THE PRESSURE CLASS IN THE SYSTEM.
6. ANY DISCREPANCIES BETWEEN THE DRAWINGS, SPECIFICATIONS AND BILL OF QUANTITIES MUST BE REPORTED IMMEDIATELY TO THE ENGINEER
7. SPOOL PIECES WITHIN A STRUCTURE SHALL BE PROVIDED WITH APPROPRIATE LIFTING LUGS TO FIT LIFTING EQUIPMENT PROVIDED IN THE PUMP STATION.

PARTS LIST		
ITEM	QTY	DESCRIPTION
1	1	AXIALLY SPLIT VOLUTE PUMP AS TURBINE
2	1	CONCENTRIC REDUCER; DN 600 - DN 400 x 6 mm SANS 719 GRADE C; FLANGED SANS 1123 TABLE 1600/3 (RF)
3	1	ECCENTRIC REDUCER; DN 600 - DN 400 x 6 mm SANS 719 GRADE C; FLANGED SANS 1123 TABLE 1600/3 (RF)
4	2	SPOOL PIECE DN 600 x 6 mm SANS 719 GRADE C; FLANGED BOTH ENDS SANS 1123 TABLE 1600/3 (RF) WITH ANCHOR SUPPORT
5	2	DISMANTLING JOINT DN 600 PN 16; FLANGED SANS 1123 1600/3 (RF)
6	2	CONCENTRIC REDUCER; DN 700 - DN 600 x 6 mm SANS 719 GRADE C; FLANGED SANS 1123 TABLE 1600/3 (RF)
7	2	UNEQUAL TEE DN 700 - 300 x 6 mm SANS 719 GRADE C; FLANGED SANS 1123 TABLE 1600/3 (RF)
8	2	SPOOL PIECE DN 300 x 6 mm SANS 719 GRADE C; ONE END FITTED WITH MEDIUM RADIUS BEND (2 D); 90 DEGREE DN 300 x 6 mm
9	2	GATE VALVE DN 300 PN 16; SANS 664 NON RISING SPINDLE - SHORT PATTERN; FLANGED SANS 1123 TABLE 1600/1 (RF)
10	2	DISMANTLING JOINT DN 600 PN 16; FLANGED SANS 1123 1600/3 (RF)
11	1	PRESSURE REDUCING VALVE DN 300 PN 16, ; FLANGED SANS 1123 1600/3 (RF)
12	2	SPOOL PIECE DN 300 x 6 mm SANS 719 GRADE C; FLANGED BOTH ENDS SANS 1123 TABLE 1600/3 (RF) WITH ANCHOR SUPPORT
14	2	GATE VALVE DN 600 PN 16; SANS 664 NON RISING SPINDLE - SHORT PATTERN; FLANGED SANS 1123 TABLE 1600/1 (RF)
15	1	SPOOL PIECE DN 700 x 6 mm SANS 719 GRADE C; FLANGED BOTH ENDS SANS 1123 TABLE 1600/3 (RF)

NOTES:

1. ALL ITEMS WITHIN THE INDICATED SCOPE BREAK SHALL FORM PART OF THE SUPPLY BY THE HYDROPOWER CONTRACTOR.
2. ALL ITEMS ARE SHOWN INDICATIVELY AND ARE SUBJECT TO THE DETAIL DESIGN BY HYDROPOWER CONTRACTOR .



CONSULTING ENGINEERS		DESIGNED	L. LEDWABA	18.10.21	 <b>Johannesburg Water</b>	17 HARRISON STREET MARSHALLTOWN 2107  TEL: (011) 688-1400 FAX: (011) 688-1529	 <b>Joburg</b>	HALFWAY HOUSE WATER UPGRADE	APPROVAL BY JW DEPOT		SCALE	AMENDMENTS			DRAWING No.		
 <b>ZUTARI</b> IMPACT. ENGINEERED.	DRAWN	L. LEDWABA	18.10.21	CHECKED							AS SHOWN	REV:	DESCRIPTION		DATE:		111242 - 0000-DRG-WW-0519 - T0 PROJECT No. DRAWING No. REV.  A1 SHEET 1 OF 1 ORIGINAL PAGE SIZE FILE No.
	CHECKED	K. van VEENHUYZEN	18.10.21	APPROVED BY:								T0	FOR TENDER		18.10.21		
	APPROVED BY:	A. KALINAKI	18.10.21						SIGNATURE	DATE							
32A JELlicoe AVENUE OXFORD CORNER ROSEBANK SOUTH AFRICA  TEL: +27 11 214 4500			SIGNATURE	DATE													
CLIENT		ECSA REG. No.															
		CHECKED BY:															
			SIGNATURE	DATE													
17 HARRISON STREET MARSHALLTOWN 2107		ECSA REG. No.															