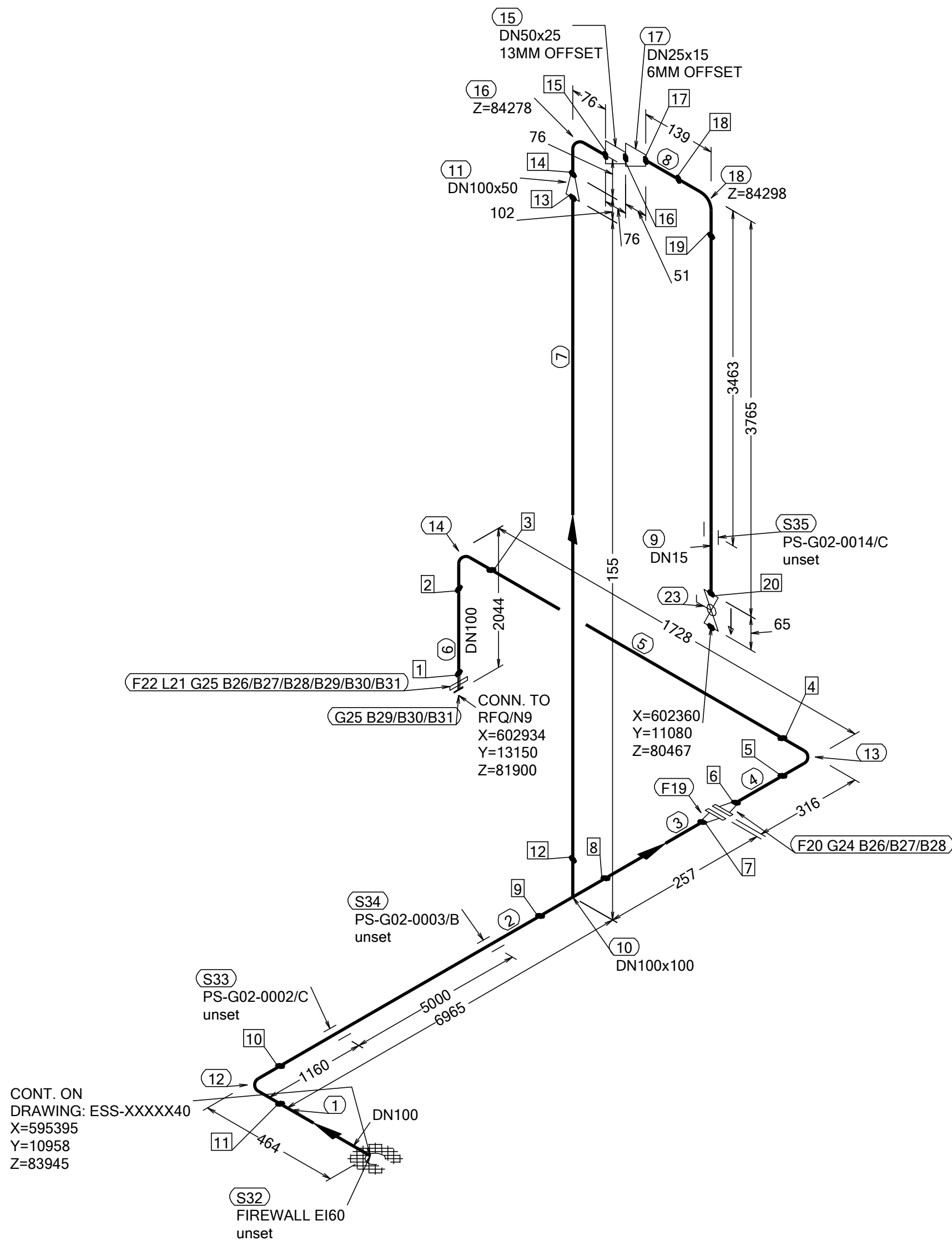



N (Y)



WELD	WPS	FABRICATION MATERIALS					
1		PT	COMPONENT DESCRIPTION	DN	MATERIAL	QTY	REMARKS
2		NO				(mm)	
3							
4							
5							
6							
7							
8		1	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	312	
9		2	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	6708	
10		3	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	100	
11		4	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	112	
12		5	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	1424	
13		6	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	1840	
14		7	PIPE, SS-EN 10217-7, TC1, 114.3x2.0	100	EN 1.4404	50	
15		8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	111	
16		9	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	3737	
17							
18			FITTINGS				
19							
20		10	TEE EQUAL, SS-EN 10253-4, TYPE A, 114.3x2.0 / 114.3x2.0	100 x 100	EN 1.4404	1	
		11	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 114.3x2.0 / 60.3x2.0	100 x 50	EN 1.4404	1	
		12	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 114.3x2.0	100	EN 1.4404	1	
		13	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 114.3x2.0	100	EN 1.4404	1	
		14	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 114.3x2.0	100	EN 1.4404	1	
		15	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 60.3x2.0 / 33.7x2.0	50 x 25	EN 1.4404	1	
		16	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 60.3x2.0	50	EN 1.4404	1	
		17	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 33.7x2.0 / 21.3x2.0	25 x 15	EN 1.4404	1	
		18	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
			FLANGES				
		19	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	100		1	
		20	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	100		1	
		21	WELDING RING WITH COLLAR, SS-EN 1092-1 TYPE 35, PN16	100		1	
		22	LOOSE FLANGE, SS-EN 1092-1, TYP 02, PN16	100		1	
			VALVES / IN-LINE ITEMS				
		23	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
GASKETS					
24	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	100	EXPANDED GRAPHITE	1	
25	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	100	EXPANDED GRAPHITE	1	
BOLTS					
26	HEXAGONAL NUT, M6M, ISO 4032	16	EN 1515-4, A4	16	
27	WASHER, BRB, ISO 7089	16	EN 1515-4, A4, HV≥250	32	
28	70 mm HEXAGONAL BOLT, M6S, ISO 4017	16	EN 1515-4, A4-70	16	
29	HEXAGONAL NUT, M6M, ISO 4032	16	EN 1515-4, A4	8	
30	WASHER, BRB, ISO 7089	16	EN 1515-4, A4, HV≥250	16	
31	80 mm HEXAGONAL BOLT, M6S, ISO 4017	16	EN 1515-4, A4-70	8	
SUPPORTS					
32	PENETRATION ATTA	100		1	
33	ESS Atta	100		1	
34	ESS Atta	100		1	
35	ESS Atta	15		1	

WPS See Weldlist TBN	Design Temperature 50degC	Tightening Torque For Flange Joints TBN	P&ID Drawing Number ESS-0060416	General Layout Drawing Number TBN	Calculation Report ESS-0058702	Inspection Plan TBN	Area Code G02
Quality Level For Weldign Acc To TBN	Design Pressure 10bar (g)	Bend Radius N/A	Bending Procedure N/A	Coupling Installation Procedure TBN	Pressure Test Program TBN	Alternate System Tag	Date (First Issue) 170522
Weld Joint Efficiency Factor (Longitudinal) 1,0	Test Pressure 14.3bar (g)	Insulation Specification N/A				Title/Name EUROPEAN SPALLATION SOURCE ERIC WATER COOLING SYSTEM CWM DIW SUPPLY FOR FEB ESS.ACC.E02.E03.WP0005	
Elevation (z) Acc To BCS	Quality Class MQC4-C	Insulation Thickness N/A				Scale -	
	Media CWM	Allowance For Corrosion 0				Format A2	
	Pipe Specification MQC4-W-PN16	Surface Treatment N/A				Sheet 1 of 1	
			Document Number ESS-XXXXX14			Revision A1	

Rev	Description	Date	Drawn	Designed	Reviewed	Verified	Quality	Approved
A1	ISSUED FOR CDR	170522	FRPE	FRPE	AKCO	ANLU		