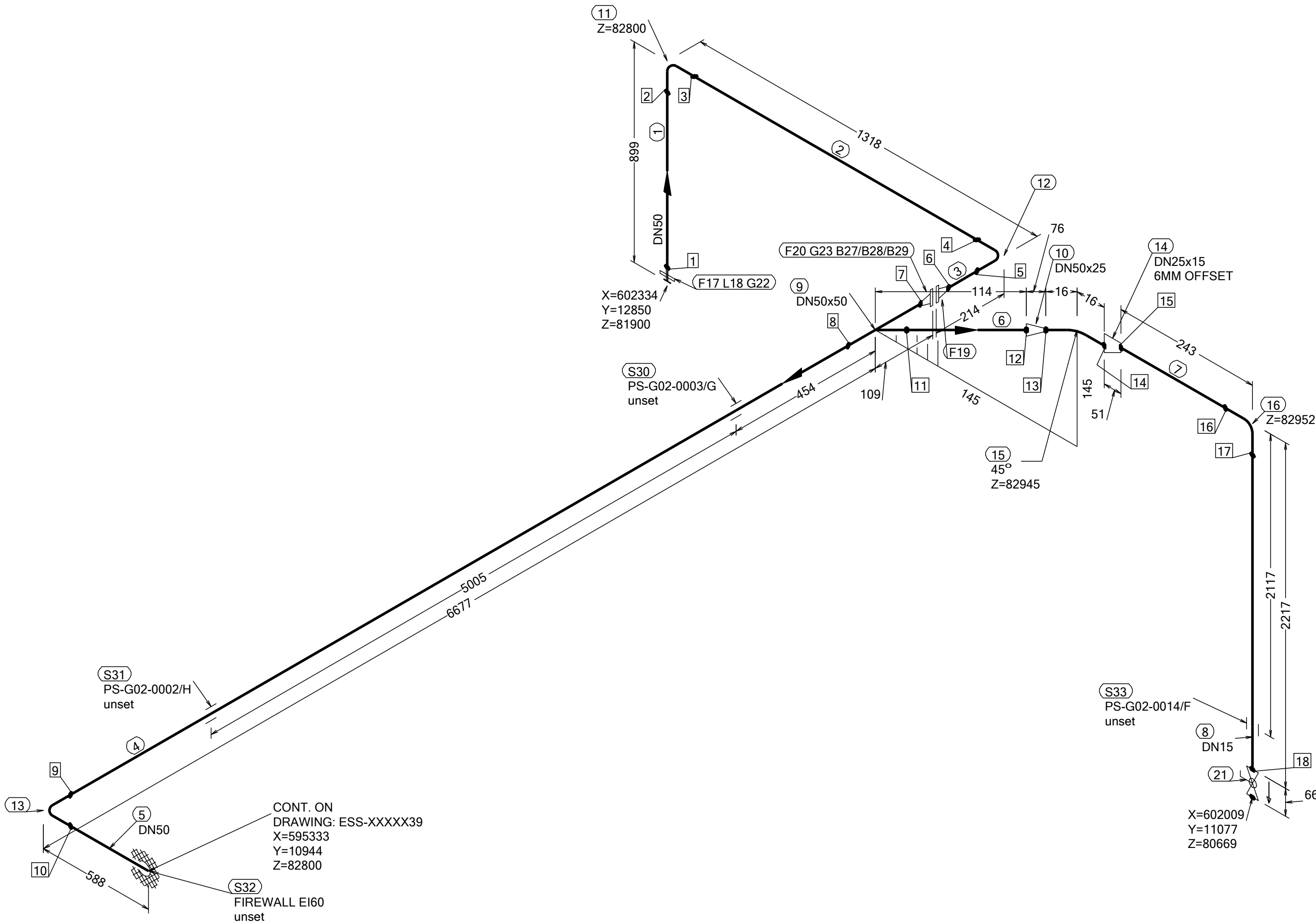



N (Y)



WELD	WPS	FABRICATION MATERIALS					
		PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
1		1	PIPE				
2			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	778	
3			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	1166	
4			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	93	
5			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	6537	
6			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	512	
7			PIPE, SS-EN 10217-7, TC1, 60.3x2.0	50	EN 1.4404	50	
8			PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	215	
9		8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	2189	
10			FITTINGS				
11			TEE EQUAL, SS-EN 10253-4, TYPE A, 60.3x2.0 / 60.3x2.0	50 x 50	EN 1.4404	1	
12			REDUCER CONC, SS-EN 10253-4, TABLE A.5, 60.3x2.0 / 33.7x2.0	50 x 25	EN 1.4404	1	
13			ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 60.3x2.0	50	EN 1.4404	1	
14			ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 60.3x2.0	50	EN 1.4404	1	
15			ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 60.3x2.0	50	EN 1.4404	1	
16			REDUCER ECC, SS-EN 10253-4, TABLE A.5, 33.7x2.0 / 21.3x2.0	25 x 15	EN 1.4404	1	
17		15	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 33.7x2.0	25	EN 1.4404	1	
18			ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
19		FLANGES					
20		17	LOOSE FLANGE, SS-EN 1092-1, TYP 02, PN16	50		1	
21			WELDING RING WITH COLLAR, SS-EN 1092-1 TYPE 35, PN16	50		1	
22			FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	50		1	
23			FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	50		1	
24		VALVES / IN-LINE ITEMS					
25		21	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
GASKETS					
22	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	50	EXPANDED GRAPHITE	1	
23	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	50	EXPANDED GRAPHITE	1	
BOLTS					
27	HEXAGONAL NUT, M6M, ISO 4032	16	EN 1515-4, A4	4	
28	WASHER, BRB, ISO 7089	16	A4, HV≥250	8	
29	65 mm HEXAGONAL BOLT, M6S, ISO 4017	16	EN 1515-4, A4-70	4	
SUPPORTS					
30	ESS Atta	50		1	
31	ESS Atta	50		1	
32	PENETRATION ATTA	50		1	
33	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	<div><div>Title/Name EUROPEAN SPALLATION SOURCE ERIC WATER COOLING SYSTEM CWM DIW SUPPLY FOR FEB ESS.ACC.E02.E03.WP0004 Document Number ESS-XXXXX13</div></div>				Scale -
Elevation (z) Acc To BCS	Quality Class MQC4-C	Insulation Thickness N/A					Format A2
	Media CWM	Allowance For Corrosion 0					Sheet 1 of 1
	Pipe Specification MQC4-W-PN16	Surface Treatment N/A					Revision A1

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