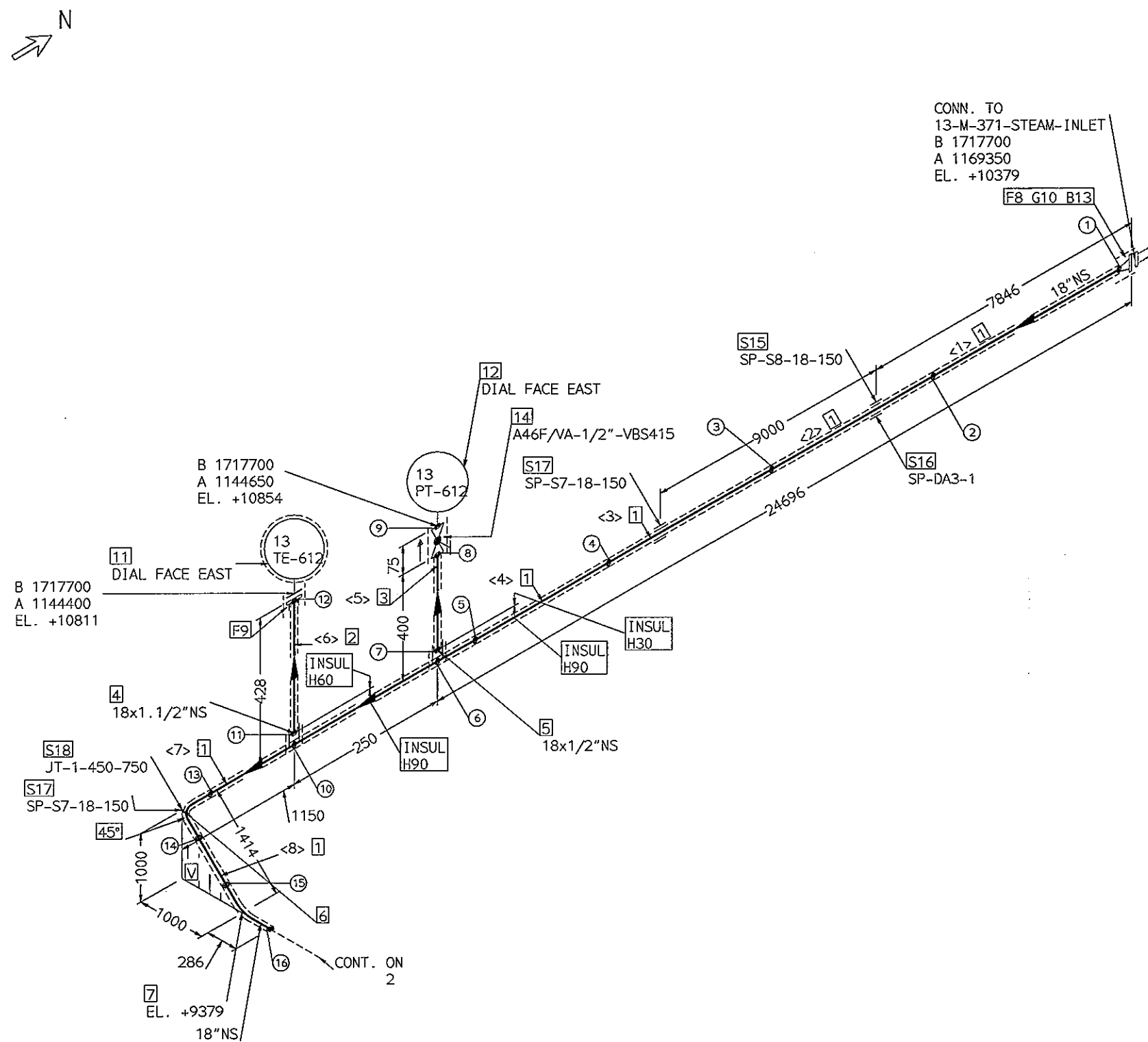


FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A672 GR.B65 CL.22 SCH60 EFW BE ASME B36.10M	18	A46F/P-18"-60	25.7M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1.1/2	A46F/P-1.1/2"-80	0.2M
3	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1/2	A46F/P-1/2"-80	0.2M
FITTINGS				
4	HALF COUPLING CL3000 SW A105 ASME B16.11	18 x 1.1/2	A46F/CHS-18"x1.1/2"	1
5	HALF COUPLING CL3000 SW A105 ASME B16.11	18 x 1/2	A46F/CHS-18"x1/2"	1
6	90 DEG. ELBOW LR A234 GR.WPB SCH60 WELD BW ASME B16.9	18	A46F/EB-18"x90	1
7	45 DEG. ELBOW LR A234 GR.WPB SCH60 WELD BW ASME B16.9	18	A46F/EB-18"x45	1
FLANGES				
8	FLANGE CL600 RF WN A105 SCH60 BORE ASME B16.5	18	A46F/WFR-18"	1
9	FLANGE CL600 RF SW A105 SCH80 BORE ASME B16.5	1.1/2	A46F/FR-1.1/2"	1
GASKETS				
10	GASKET CL600 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	18	A46F/GR-18"-G214ACM	1
INSTRUMENTS				
11	INSTRUMENT CL600 RF 13 TE-612	1.1/2		1
12	INSTRUMENT SW 13 PT-612	1/2		1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
BOLTS				
13	320 MM LONG STUD BOLT . M42 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-18"-320	20
COMPONENTS				
14	GLOBE VALVE CL800 SW A105 BODY #5 TRIM LOOSE DISC OS&Y BB API602 BY MFR (VBS415)	1/2	A46F/VA-1/2"-VBS415	1
SUPPORTS				
15	SPECIAL SUPPORT (SP-S8-18-150)	18	SUP/S8-18"	1
16	SPECIAL SUPPORT (SP-DA3-1)	18	SUP/DA3-1-18"	1
17	SPECIAL SUPPORT (SP-S7-18-150)	18	SUP/S7-18"	2
18	PIPE SUPPORT (JT-1-450-750)	18	SUP/JT-1-18"	1

CUT PIPE LENGTH							
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS
<1>	6000	18		<2>	6000	18	
<3>	6000	18		<4>	6000	18	
<5>	150	1/2		<6>	154	1.1/2	
<7>	1219	18		<8>	443	18	



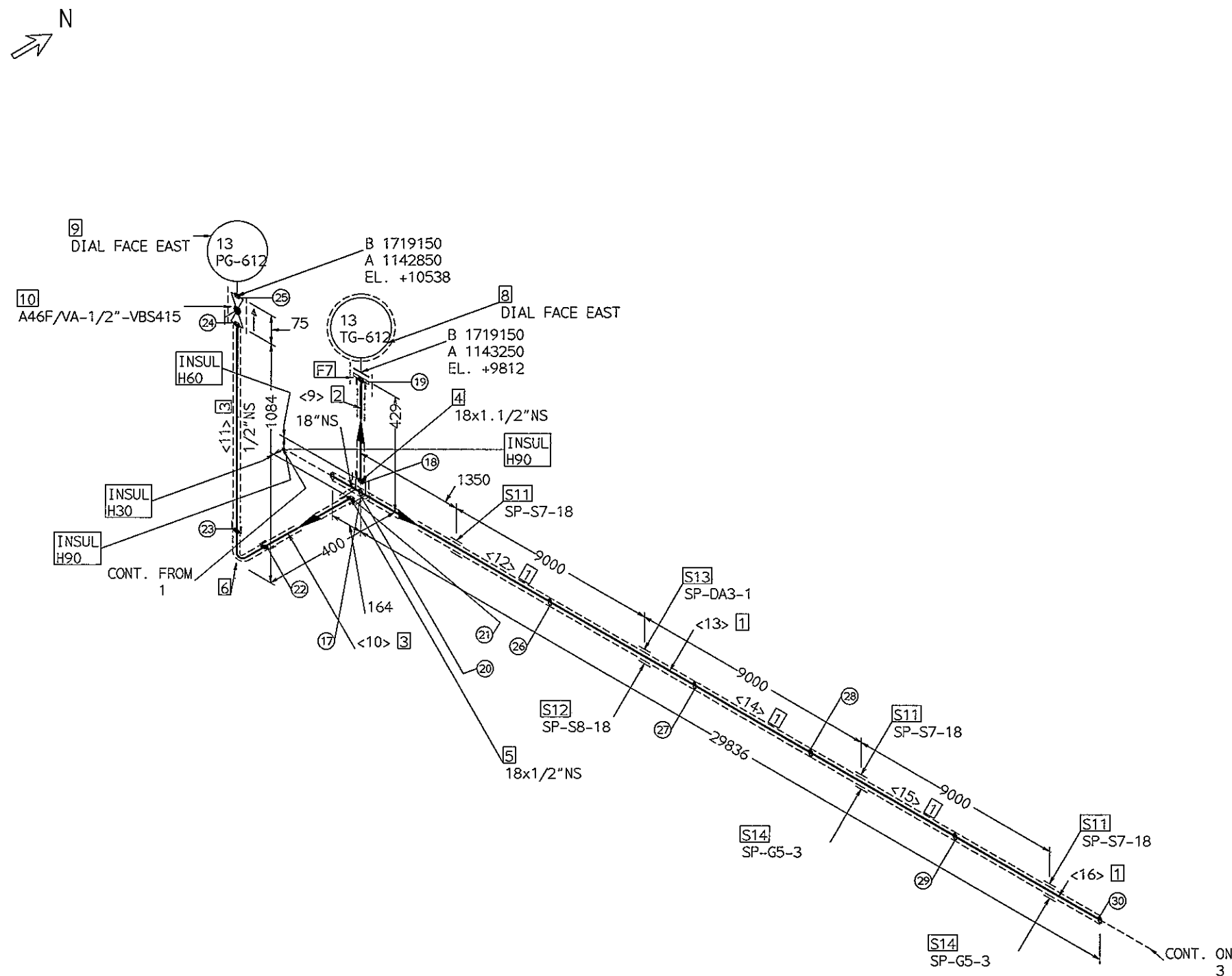
REVISED FOR CONSTRUCTION

October 20, 2011

△						OPR. PRESS.: 3.78 MPa(G)	OPR. TEMP.: 260 °C	CLASS: A46F	DWN.	Y.M.LU	06/01/2011	REVIEWED	 富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置				
△						DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION : H90	DESN.	D.H.LEE	06/01/2011						
1	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT : NO	TRACING : ---	CHK.	Y.C.CHOU	06/01/2011						
0	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING : PER SPEC.	STEAM DUT: NO	RT : 10	APPR.	A.F.WU	06/01/2011						
A	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION			DWG NO.: 316B,316C,317C			CONTRACT: C192502		LINE NO.:		SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	        			DIA. NO.: 1208-038			FILE NO.: 13-HS38002-4		13-18"-HS-38002-A46F-H		1 OF 8	1

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A672 GR.B65 CL.22 SCH60 EPW BE ASME B36.10M	18	A46F/P-18"-60	30.0M
2	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1.1/2	A46F/P-1.1/2"-80	0.2M
3	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	1/2	A46F/P-1/2"-80	1.3M
FITTINGS				
4	HALF COUPLING CL3000 SW A105 ASME B16.11	18 x 1.1/2	A46F/CHS-18"x1.1/2"	1
5	HALF COUPLING CL3000 SW A105 ASME B16.11	18 x 1/2	A46F/CHS-18"x1/2"	1
6	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	1/2	A46F/ES-1/2"x90	1
FLANGES				
7	FLANGE CL600 RF SW A105 SCH80 BORE ASME B16.5	1.1/2	A46F/FR-1.1/2"	1
INSTRUMENTS				
8	INSTRUMENT CL600 RF 13 TG-612	1.1/2		1
9	INSTRUMENT SW 13 PG-612	1/2		1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
COMPONENTS				
10	GLOBE VALVE CL800 SW A105 BODY #5 TRIM LOOSE DISC OS&Y BB AP1602 BY MFR (VBS415)	1/2	A46F/VA-1/2"-VBS415	1
SUPPORTS				
11	SPECIAL SUPPORT (SP-S7-18)	18	SUP/S7-18"	3
12	SPECIAL SUPPORT (SP-S8-18)	18	SUP/S8-18"	1
13	SPECIAL SUPPORT (SP-DA3-1)	18	SUP/DA3-1-18"	1
14	SPECIAL SUPPORT (SP-G5-3)	18	SUP/G5-3-18"	2

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<9>	155	1.1/2		<10>	134	1/2
<11>	1068	1/2		<12>	6000	18
<13>	6000	18		<14>	6000	18
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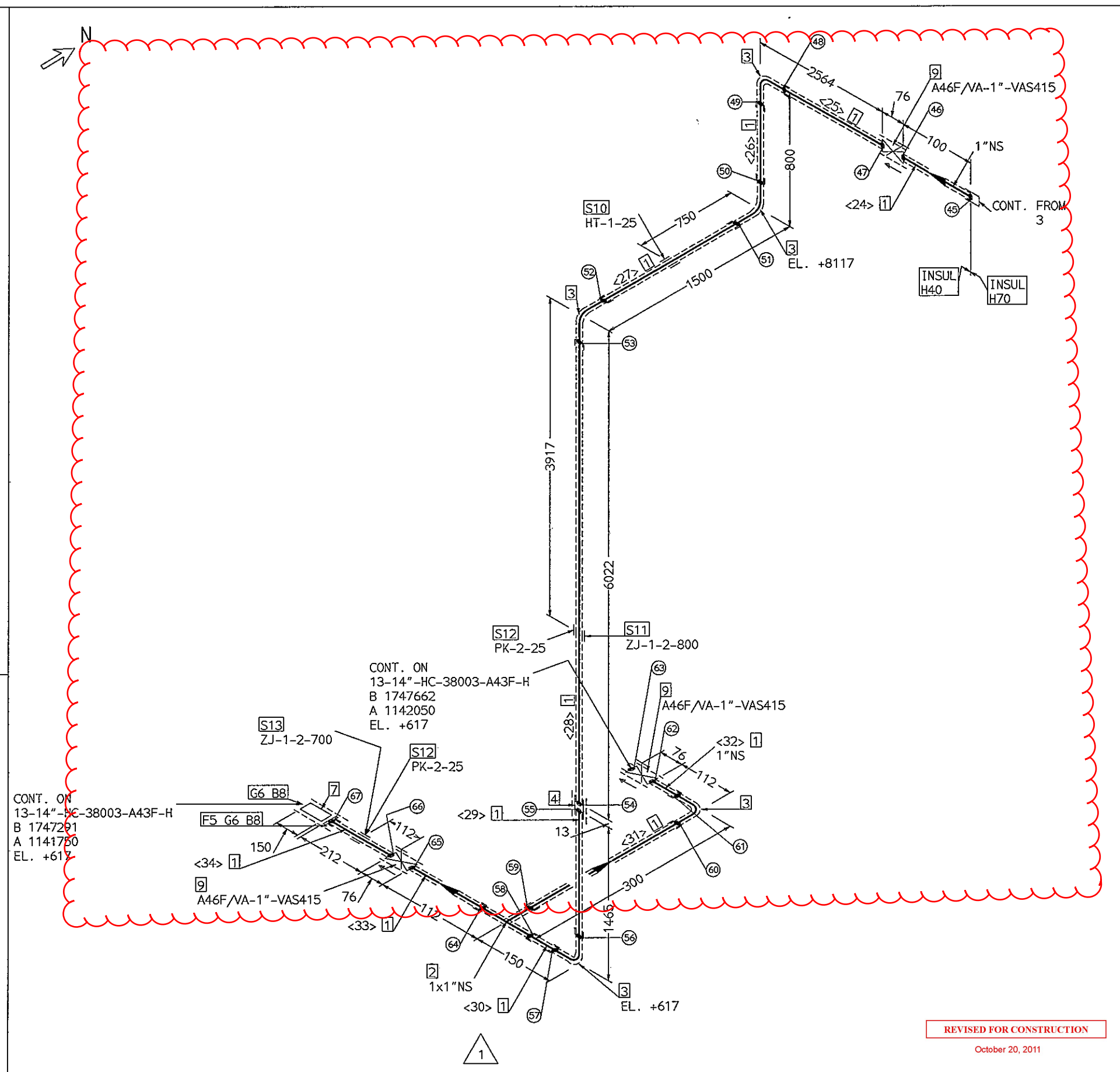


REVISED FOR CONSTRUCTION
October 20, 2011

△						DPR. PRESS.: 3.78 MPa(G)	DPR. TEMP.: 260 °C	CLASS: A46F	DWN. Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置							
△2	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION : H90	DESN. D.H.LEE	06/01/2011									
△1	08/31/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRD TEST: WATER 7.17 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/01/2011									
△0	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	06/01/2011									
△A	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU														
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	WELDED 	FIELD WELDED 	SOCKET 	THREAD 	COUPLING 	FIELD CONN. 	SUPPORT 	STEAM TRACE 	INSULATION 	DWG NO.: 3168,316C,317C	CONTRACT: C192502	LINE NO.:	SHT.	ISSU
															DIA. NO.: 1208-038	FILE NO.: 13-HS38002-2	13-18"-HS-38002-A46F-H	2 OF 8	2

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.8 SCH80 SMLS PE ASME B36.10M	1	A46F/P-1"-80	13.1M
FITTINGS				
2	TEE CL3000 SW A105 ASME B16.11	1 x 1	A46F/TS-1"	1
3	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	1	A46F/ES-1"X90	5
4	FULL COUPLING CL3000 SW A105 ASME B16.11	1	A46F/CFS-1"	1
FLANGES				
5	FLANGE CL600 RF SW A105 SCH80 BORE ASME B16.5	1	A46F/FR-1"	1
GASKETS				
6	GASKET CL600 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	1	A46F/GR-1"-G214ACM	2
INSTRUMENTS				
7	TRAP CL600 RF	1	A46F/TRAP-1"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
BOLTS				
8	100 MM LONG STUD BOLT . M16 A193 GR.87 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-1"-100	8
COMPONENTS				
9	GATE VALVE CL800 SW A105 BODY #5 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS415)	1	A46F/VA-1"-VAS415	3
SUPPORTS				
10	PIPE SUPPORT (HT-1-25)	1	SUP/HT-1-1"	1
11	PIPE SUPPORT (ZJ-1-2-800)	1	SUP/ZJ-1-2-1"	1
12	PIPE SUPPORT (PK-2-25)	1	SUP/PK-2-1"	2
13	PIPE SUPPORT (ZJ-1-2-700)	1	SUP/ZJ-1-2-1"	1

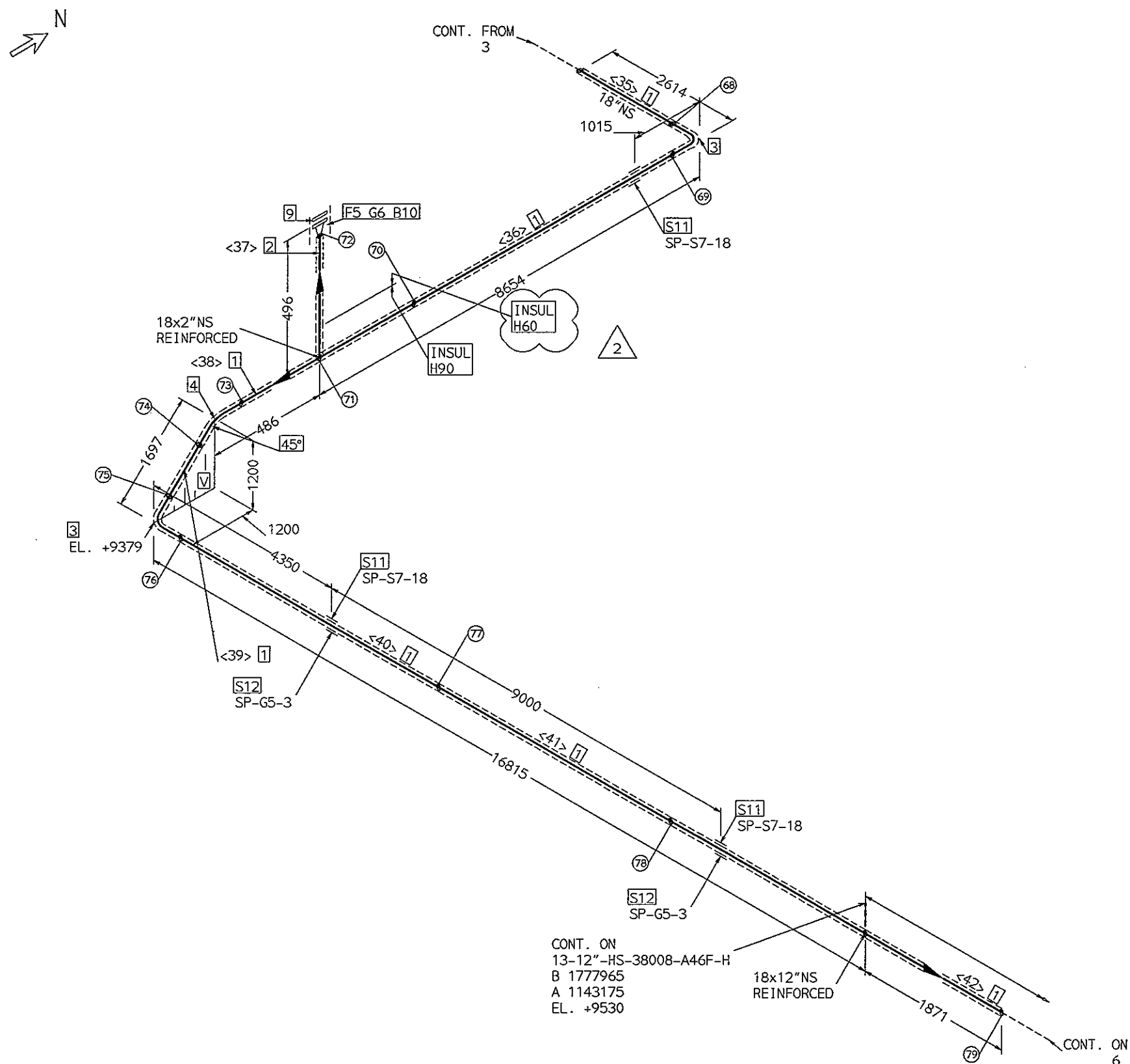
CUT PIPE LENGTH						
PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH (INS)	N.S. (INS)
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<28>	6000	1		<29>	1443	1
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<32>	90	1		<33>	90	1
<34>	198	1				



						OPR. PRESS.: 3.78 MPa(G)	OPR. TEMP.: 260 °C	CLASS: A46F	DWN.	Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置		
						DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION: H90	DESN.	D.H.LEE	06/01/2011				
	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT: NO	TRACING: ---	CHK.	Y.C.CHOU	06/01/2011				
	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING: PER SPEC.	STEAM OUT: NO	RT: 10	APPR.	A.F.WU	06/01/2011				
	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU				DWG NO.: 316B,316C,317C		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE	
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.				DIA. NO.: 1208-038		FILE NO.: 13-HS38002-4	13-18"-HS-38002-A46F-H		4 OF 8	1

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A672 GR.B65 CL.22 SCH60 EPW BE ASME B36.10M	18	A46F/P-18"-60	28.9M
2	PIPE A106 GR.B SCH80 SMLS BE ASME B36.10M	2	A46F/P-2"-80	0.2M
FITTINGS				
3	90 DEG. ELBOW LR A234 GR.WPB SCH60 WELD BW ASME B16.9	18	A46F/EB-18"x90	2
4	45 DEG. ELBOW LR A234 GR.WPB SCH60 WELD BW ASME B16.9	18	A46F/EB-18"x45	1
FLANGES				
5	FLANGE CL600 RF WN A105 SCH80 BORE ASME B16.5	2	A46F/WFR-2"	1
GASKETS				
6	GASKET CL600 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	2	A46F/GR-2"-G214ACM	1
MISCELLANEOUS COMPONENTS				
7	REINFORCING PAD A672 GR.B65 CL.22 SCH60 EPW BE ASME B36.10M	12	A46F/PAD-18"x12"	1
8	REINFORCING PAD A672 GR.B65 CL.22 SCH60 EPW BE ASME B36.10M	2	A46F/PAD-18"x2"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FLANGES				
9	BLIND FLANGE CL600 RF A105 ASME B16.5	2	A46F/FBR-2"	1
BOLTS				
10	110 MM LONG STUD BOLT . M16 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-2"-110	8
SUPPORTS				
11	SPECIAL SUPPORT (SP-S7-18)	18	SUP/S7-18"	3
12	SPECIAL SUPPORT (SP-G5-3)	18	SUP/G5-3-18"	2

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH (INS)	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH (INS)	N.S. (INS)
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<39>	725	18		<40>	6000	18
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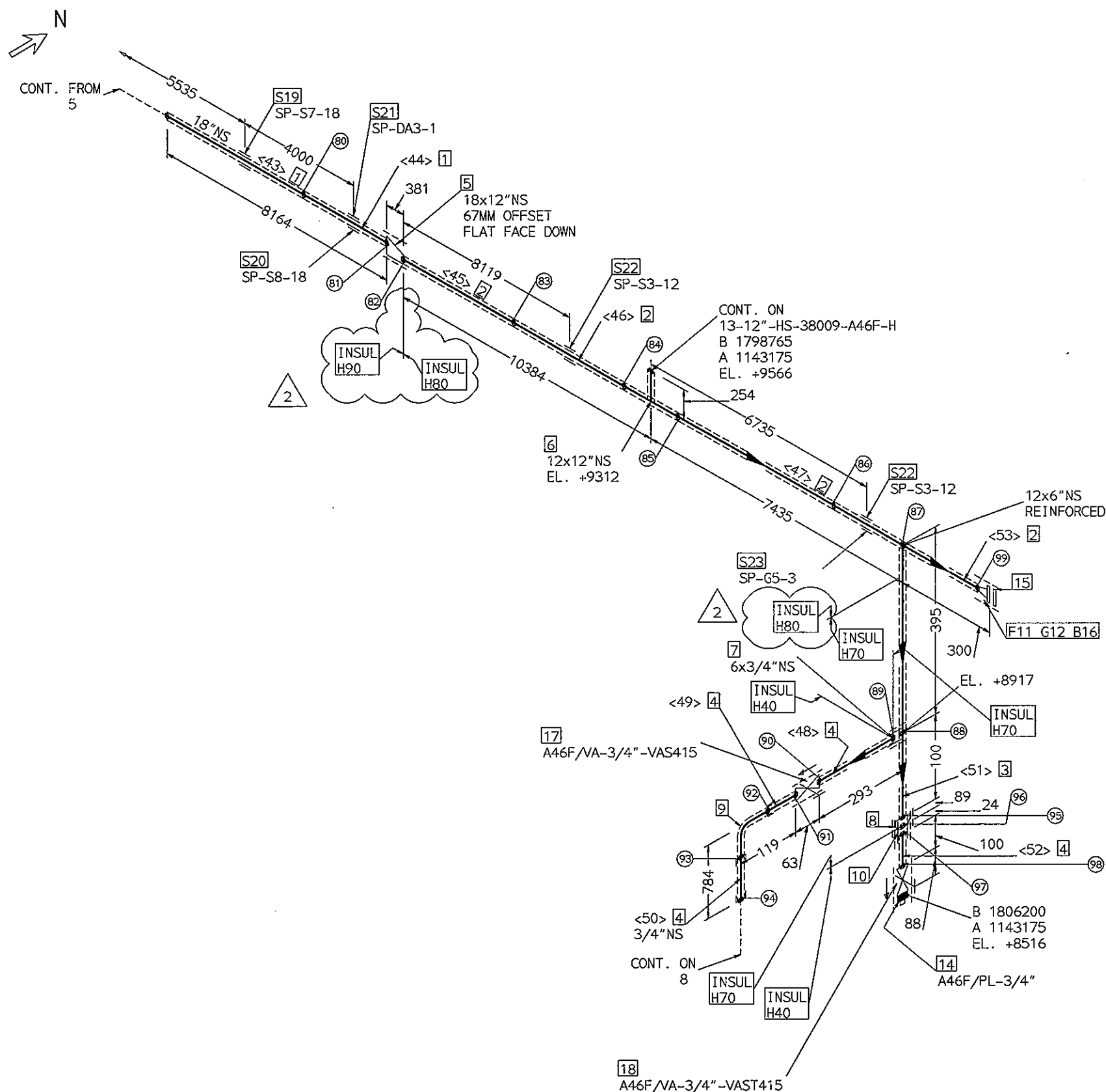


REVISED FOR CONSTRUCTION

October 20, 2011

△						OPR. PRESS.: 3.78 MPa(G)	OPR. TEMP.: 260 °C	CLASS: A46F	DWN. Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置		
△2	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION : H90	DESN. D.H.LEE	06/01/2011				
△1	08/31/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT : NO	TRACING : ---	CHK. Y.C.CHOU	06/01/2011				
△0	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR. A.F.WU	06/01/2011				
△A	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU									
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION 			DWG NO.: 316B,316C,317C		CONTRACT: C192502	LINE NO.:	SHT.	ISSUE
									DIA. NO.: 1208-038		FILE NO.: 13-HS38002-5	13-18"-HS-38002-A46F-H	5 OF 8	2

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A672 GR.B65 CL.22 SCH60 EFW BE ASME B36.10M	18	A46F/P-18"-60	8.2M
2	PIPE A106 GR.B SCH80 SMLS BE ASME B36.10M	12	A46F/P-12"-80	17.5M
3	PIPE A106 GR.B SCH80 SMLS BE ASME B36.10M	6	A46F/P-6"-80	0.4M
4	PIPE A106 GR.B SCH80 SMLS PE ASME B36.10M	3/4	A46F/P-3/4"-80	1.2M
FITTINGS				
5	REDUCER ECC A234 GR.WPB SCH60/SCH80 WELD BW ASME B16.9	18 x 12	A46F/RE-18"x12"	1
6	TEE A234 GR.WPB SCH80 SMLS BW ASME B16.9	12 x 12	A46F/TB-12"	1
7	HALF COUPLING CL3000 SW A105 ASME B16.11	6 x 3/4	A46F/CHS-6"x3/4"	1
8	CAP A234 GR.WPB SCH80 SMLS BW ASME B16.9	6	A46F/CB-6"	1
9	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	3/4	A46F/ES-3/4"x90	1
10	HALF COUPLING CL3000 SW A105 ASME B16.11	3/4	A46F/CHS-3/4"	1
FLANGES				
11	FLANGE CL600 RF WN A105 SCH80 BORE ASME B16.5	12	A46F/WFR-12"	1
GASKETS				
12	GASKET CL600 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	12	A46F/GR-12"-G214ACM	1
MISCELLANEOUS COMPONENTS				
13	REINFORCING PAD A106 GR.B SCH80 SMLS BE ASME B36.10M	6	A46F/PAD-12"x6"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
FITTINGS				
14	PLUG A105 HEXAGONAL TYPE SCRD(M-NPT) ASME B16.11	3/4	A46F/PL-3/4"	1
FLANGES				
15	BLIND FLANGE CL600 RF A105 ASME B16.5	12	A46F/FBR-12"	1
BOLTS				
16	230 MM LONG STUD BOLT . M33 A193 GR.B7 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-12"-230	20
COMPONENTS				
17	GATE VALVE CL800 SW A105 BODY #5 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS415)	3/4	A46F/VA-3/4"-VAS415	1
18	GATE VALVE CL800 SW/SCRD(NPT) A105 BODY #5 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAST415)	3/4	A46F/VA-3/4"-VAST415	1
SUPPORTS				
19	SPECIAL SUPPORT (SP-S7-18)	18	SUP/S7-18"	1
20	SPECIAL SUPPORT (SP-S8-18)	18	SUP/S8-18"	1
21	SPECIAL SUPPORT (SP-DA3-1)	18	SUP/DA3-1-18"	1
22	SPECIAL SUPPORT (SP-S3-12)	12	SUP/S3-12"	2
23	SPECIAL SUPPORT (SP-G5-3)	12	SUP/G5-3-12"	1
***** * CONT. ON 7 * *****				



REVISED FOR CONSTRUCTION

October 20, 2011

△						OPR. PRESS.: 3.78 MPa(G)	OPR. TEMP.: 260 °C	CLASS: A46F	DWN.	Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置		
2	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION: H90	DES.N.	D.H.LEE	06/01/2011				
1	08/31/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT: NO	TRACING: ---	CHK.	Y.C.CHOU	06/01/2011				
0	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINING: PER SPEC.	STEAM OUT: NO	RT: 10	APPR.	A.F.WU	06/01/2011				
A	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU										
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION			DWG NO.: 316B,316C,317C		CONTRACT: C192502	LINE NO.:		SHT.	ISSUE
									DIA. NO.: 1208-038		FILE NO.: 13-HS38002-6	13-18"-HS-38002-A46F-H		6 OF 8	2

* CONT. FROM 6 *

CUT PIPE LENGTH

PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS
<43>	6000	18		<44>	2164	18	
<45>	6000	12		<46>	4130	12	
<47>	6000	12		<48>	187	3/4	
<49>	100	3/4		<50>	765	3/4	
<51>	367	6		<52>	100	3/4	
<53>	1319	12					

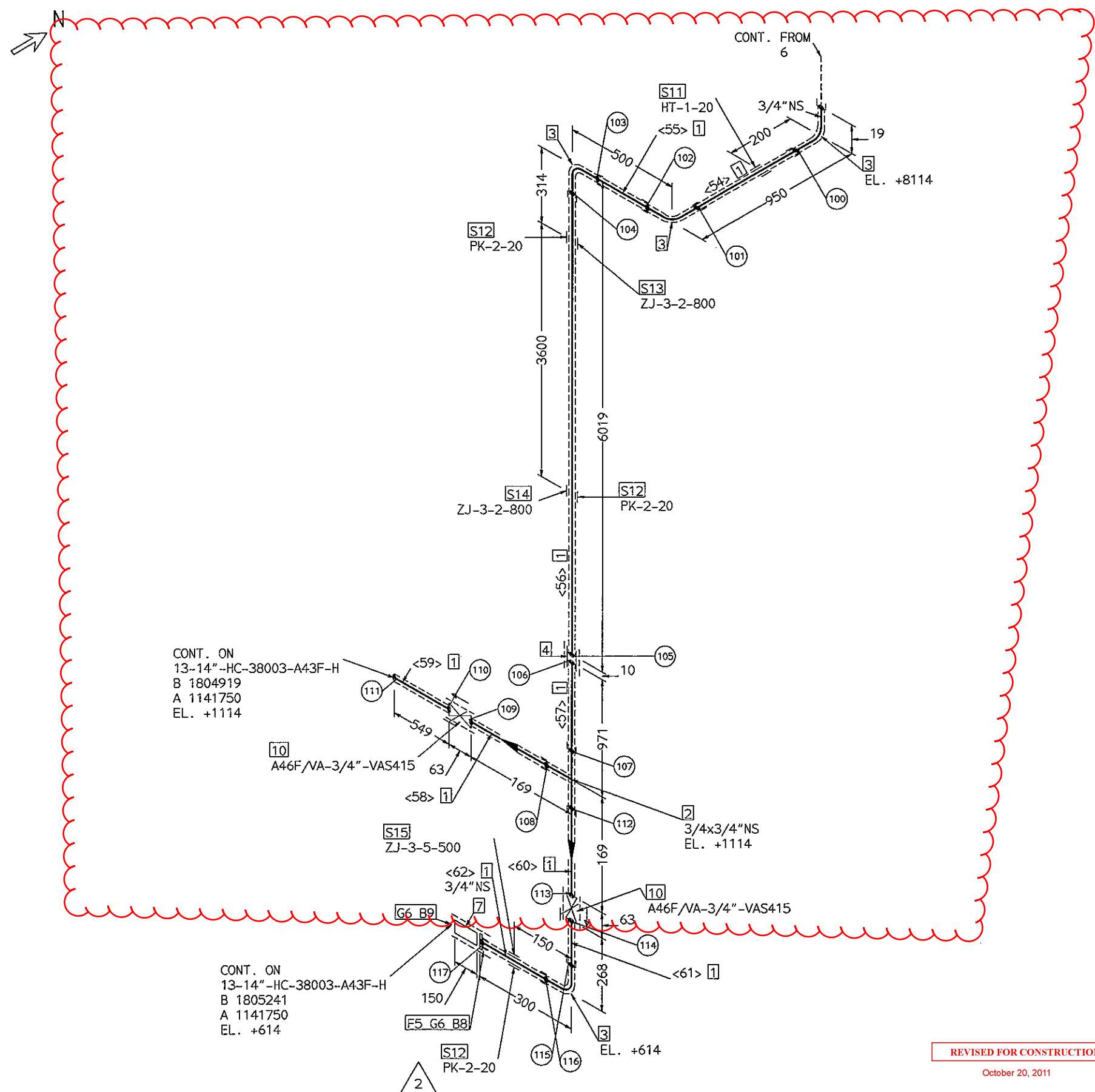
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REVISED FOR CONSTRUCTION
October 20, 2011

						OPR. PRESS.: 3.78 MPa(G)	OPR. TEMP.: 260 °C	CLASS: A46F	DWN.	Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD.		
						DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION : H90	DESN.	D.H.LEE	06/01/2011				
	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT : NO	TRACING : ---	CHK.	Y.C.CHOU	06/01/2011			腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU 装置	
	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10 %	APPR.	A.F.WU	06/01/2011				
	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU				DWG NO.: 316B,316C,317C		CONTRACT: C192502	LINE NO.:		SHT.	ISSUE
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.				DIA. NO.: 1208-038		FILE NO.: 13-HS38002-7	13-18"-HS-38002-A46F-H		7 OF 8	1

FABRICATION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
PIPE				
1	PIPE A106 GR.8 SCH80 SMLS PE ASME B36.10M	3/4	A46F/P-3/4"-80	9.7M
FITTINGS				
2	TEE CL3000 SW A105 ASME B16.11	3/4 x 3/4	A46F/TS-3/4"	1
3	90 DEG. ELBOW CL3000 SW A105 ASME B16.11	3/4	A46F/ES-3/4"X90	4
4	FULL COUPLING CL3000 SW A105 ASME B16.11	3/4	A46F/CFS-3/4"	1
FLANGES				
5	FLANGE CL600 RF SW A105 SCH80 BORE ASME B16.5	3/4	A46F/FR-3/4"	1
GASKETS				
6	GASKET CL600 RF 4.5mm 316SS SPIRAL WOUND FILLER FLEXIBLE GRAPHITE INNER RING 316SS OUTER RING LOW CS (G214ACM) ASME B16.20	3/4	A46F/GR-3/4"-G214ACM	2
INSTRUMENTS				
7	TRAP CL600 RF	3/4	A46F/TRAP-3/4"	1
ERECTION MATERIALS				
PT NO	DESCRIPTION & MATERIAL	N.S. (INS)	ITEM CODE	QTY
BOLTS				
8	100 MM LONG STUD BOLT . M16 A193 GR.87 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-3/4"-100	4
9	90 MM LONG STUD BOLT . M16 A193 GR.87 W/HEX HEAD HEAVY NUT A194 GR.2H		A46F/BSF-3/4"-90	4
COMPONENTS				
10	GATE VALVE CL800 SW A105 BODY #5 TRIM SOLID WEDGE OS&Y BB API602 BY MFR (VAS415)	3/4	A46F/VA-3/4"-VAS415	2
SUPPORTS				
11	PIPE SUPPORT (HT-1-20)	3/4	SUP/HT-1-3/4"	1
12	PIPE SUPPORT (PK-2-20)	3/4	SUP/PK-2-3/4"	3
13	PIPE SUPPORT (ZJ-3-2-800)	3/4	SUP/ZJ-3-2-3/4"	1
14	PIPE SUPPORT (ZJ-3-2-800)	3/4	SUP/ZJ-3-2-3/4"	1
15	PIPE SUPPORT (ZJ-3-5-500)	3/4	SUP/ZJ-3-5-3/4"	1

CUT PIPE LENGTH						
PIECE NO	CUT LENGTH	N.S. (INS)	REMARKS	PIECE NO	CUT LENGTH	N.S. (INS)
<54>	912	3/4		<55>	462	3/4
<56>	6000	3/4		<57>	952	3/4
<58>	150	3/4		<59>	549	3/4
<60>	150	3/4		<61>	249	3/4
<62>	267	3/4				



REVISED FOR CONSTRUCTION
October 20, 2011

△						DPR. PRESS.: 3.78 MPa(G)	DPR. TEMP.: 260 °C	CLASS: A46F	DWN.	Y.M.LU	06/01/2011	REVIEWED	富台工程股份有限公司 FU-TAI ENGINEERING CO., LTD. 腾龙芳烃(漳州)80万吨/年对二甲苯工程 CSU/VDU装置	
2	10/20/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	DES. PRESS.: 4.78/FV MPa(G)	DES. TEMP.: 400 °C	INSULATION : H90	DES.	D.H.LEE	06/01/2011			
1	08/31/2011	REV. FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	HYDRO TEST: WATER 7.17 MPa(G)	PWHT : NO	TRACING : ---	CHK.	Y.C.CHOU	06/01/2011			
0	07/08/2011	FOR CONSTRUCTION	Y.M.LU	Y.C.CHOU	A.F.WU	PAINTING : PER SPEC.	STEAM OUT: NO	RT : 10	APPR.	A.F.WU	06/01/2011			
A	06/01/2011	FOR APPROVAL	Y.M.LU	Y.C.CHOU	A.F.WU	WELDED FIELD WELDED SOCKET THREAD COUPLING FIELD CONN. SUPPORT STEAM TRACE INSULATION			DWG NO.: 3168,316C,317C		CONTRACT: C192502			LINE NO. :
REV. NO.	DATE	REVISION DESCRIPTION	BY	CHK.	APPR.				DIA. NO.: 1208-038		FILE NO.: 13-HS38002-8	13-18"-HS-38002-A46F-H	8 OF 8	2