

Proyecto: LIM-050 PIPERACKS AND
Fecha: vie 28/12/12

Tarea		Hito resumido		Tarea inactiva		Resumen manual	
Tarea crítica		Progreso resumido		Hito inactivo		Sólo el comienzo	
Hito		División		Resumen inactivo		Sólo fin	
Resumen		Tareas externas		Tarea manual		Progreso	
Tarea resumida		Resumen del proyecto		Sólo duración		Tarea crítica	
Tarea crítica resumida		Agrupar por sintTarea		Informe de resumen manual			

PLANO	MODELO	NIVEL	TUBERIA	DIM	USO	CLASE	CODE FLUIDO	PIPE COLOR	LETTERING COLOR	CODIGO	CANT (mm)	CODIGO	FLANGE	CANT.	CODIGO	FITTING	CANT.	SUPPORTS 1	CANT	SUPPORTS 2	CANT	REFERENCE	BOLTS	CANT	GASKET	CANT
P-708	M-02-01-1	TOS EL 4526.450	54"-PRW-800-001-L1B	54	PRW	L1B	AGUA DE PROCESO	VERDE	BLANCO	PP02173	11998	PF03730	SLIP-ON	2	0	0	0	G-100	1	S-100	1	DW-P-794	PH00528	44	PG01372	1
P-708	M-02-01-1	TOS EL 4526.450	30"-RW-800-023-L1B	30	RW	L1B	AGUA CRUDA	VERDE	BLANCO	PP01602	11998	PF02949	SLIP-ON	2	0	0	0	G-100	1	S-100	1	DW-P-794	PH00408	28	PG01100	1
P-708	M-02-01-1	TOS EL 4526.450	4"-FO-400-009-L3	4	FO	L3	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01816	11998	PF01315	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00484	8	PG01214	1
P-708	M-02-01-1	TOS EL 4526.450	6"-FRW-800-012-P7	6	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01709	11998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-708	M-02-01-1	TOS EL 4528.450	12"-FPW-800-026-L9	12	FPW	L9	RED CONTRA INCENDIO	ROJO	BLANCO	PP01640	11998	PC00158	COUPLING	1	0	0	0	G-1	1	G-1	1	ST-P-026	PH00422	12	PG01091	1
P-708	M-02-01-1	TOS EL 4528.450	10"-GSW-800-101-L1B	10	GSW	L1B	AGUA DE SELLO	VERDE	BLANCO	PP01588	11998	PF00021	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00332	8	PG01090	1
P-708	M-02-01-1	TOS EL 4528.450	8"-PA-265-012-L8B	8	PA	L8B	AIRE DE PLANTA	AZUL	BLANCO	PP01587	11998	PF00062	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00440	8	PG01089	1
P-708	M-02-01-1	TOS EL 4528.450	6"-IA-265-001-L2W	6	IA	L2W	AIRE DE INSTRUMENTACION	AZUL	BLANCO	PP01170	11998	PF00061	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00329	4	PG01212	1
P-708	M-02-01-2	TOS EL 4530.450	2"-PAX-260-005-L4	2	PAX	L4	POTASIO XANTATO AMILICO	NO	NEGRO	PP01814	11998	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-708	M-02-01-2	TOS EL 4530.450	3"-FO-400-054-L4	3	FO	L4	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01815	11998	PF00065	WELDING NECK	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-MB-260-009-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-MB-260-007-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-MB-260-005-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-MB-260-003-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	2"-RAF-260-024-L4	2	RAF	L4	Aerofloat 238	NO	NEGRO	PP01814	11998	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-015-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-013-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-011-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-009-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-007-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-005-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-003-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	2"-RAF-260-024-L4	2	RAF	L4	Aerofloat 238	NO	NEGRO	PP01814	11998	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-015-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-013-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-011-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-009-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-007-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-005-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-003-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	2"-RAF-260-024-L4	2	RAF	L4	Aerofloat 238	NO	NEGRO	PP01814	11998	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-015-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-013-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-011-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-009-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-007-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-005-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-003-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	2"-RAF-260-024-L4	2	RAF	L4	Aerofloat 238	NO	NEGRO	PP01814	11998	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-015-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-013-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-011-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-009-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-007-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-708	M-02-01-2	TOS EL 4530.450	3/4"-RAF-260-005-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811																

P-712	M-02-05-1	TOS EL 4528.450	8"-PA-265-012-L8B	8	PA	L8B	AIRE DE PLANTA	AZUL	BLANCO	PP01587	11998	PF00062	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00332	8	PG01090	1
P-712	M-02-05-1	TOS EL 4528.450	6"-IA-265-001-L2W	6	IA	L2W	AIRE DE INSTRUMENTACION	AZUL	BLANCO	PP01170	11998	PF00061	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00440	8	PG01089	1
P-712	M-02-05-1	TOS EL 4528.450	3"-PAX-260-018-L4	3	PAX	L4	POTASIO XANTATO AMILICO	NO	NEGRO	PP01815	7128	PF01313	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-712	M-02-05-2	TOS EL 4530.450	8"-FRW-800-208-P7	8	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01710	11998	PF03917	BACKING	2	PQ00397	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00124	8	PG01134	1
P-712	M-02-05-2	TOS EL 4530.450	3"-FO-400-054-L4	3	FO	L4	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01815	11998	PF00065	WELDING NECK	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-013-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-011-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-009-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-007-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-005-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-MB-260-003-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	2"-RAF-260-024-L4	2	RAF	L4	Aerofloat 238	NO	NEGRO	PP01814	9758	PF01299	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00329	4	PG01212	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-015-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-013-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-011-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-009-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-007-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-712	M-02-05-2	TOS EL 4530.450	3/4"-RAF-260-005-L4	3/4	RAF	L4	Aerofloat 238	NO	NEGRO	PP01811	8208	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-1	TOS EL 4526.450	54"-PRW-800-001-L1B	54	PRW	L1B	AGUA DE PROCESO	VERDE	BLANCO	PP02173	11998	PF03730	SLIP-ON	2	0	0	0	S-100	1	S-100	1	DW-P-794	PH00528	44	PG01372	1
P-713	M-02-06-1	TOS EL 4526.450	30"-RW-800-023-L1B	30	RW	L1B	AGUA CRUDA	VERDE	BLANCO	PP01602	11998	PF02949	SLIP-ON	2	0	0	0	S-100	1	S-100	1	DW-P-794	PH00408	28	PG01100	1
P-713	M-02-06-1	TOS EL 4526.450	4"-FO-400-009-L3	4	FO	L3	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01816	11998	PF01315	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00484	8	PG01214	1
P-713	M-02-06-1	TOS EL 4528.450	6"-FRW-800-012-P7	6	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01709	11998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-713	M-02-06-1	TOS EL 4528.450	12"-FPW-800-026-L9	12	FPW	L9	RED CONTRA INCENDIO	ROJO	BLANCO	PP01640	11998	PC00158	COUPLING	1	0	0	0	G-1	1	G-1	1	ST-P-026	PH00422	12	PG01091	1
P-713	M-02-06-1	TOS EL 4528.450	10"-GSW-800-101-L1B	10	GSW	L1B	AGUA DE SELLO	VERDE	BLANCO	PP01588	11998	PF00021	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00422	12	PG01091	1
P-713	M-02-06-1	TOS EL 4528.450	6"-ML-260-014-P7	6	ML	P7	LECHADA DE CAL	NO	NEGRO	PP01709	11998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-713	M-02-06-1	TOS EL 4528.450	6"-ML-260-014-P7	6	ML	P7	LECHADA DE CAL	NO	NEGRO	PP01709	5588	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-713	M-02-06-1	TOS EL 4528.450	8"-PA-265-012-L8B	8	PA	L8B	AIRE DE PLANTA	AZUL	BLANCO	PP01587	11998	PF00062	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00332	8	PG01090	1
P-713	M-02-06-1	TOS EL 4528.450	6"-IA-265-001-L2W	6	IA	L2W	AIRE DE INSTRUMENTACION	AZUL	BLANCO	PP01170	11998	PF00061	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00440	8	PG01089	1
P-713	M-02-06-1	TOS EL 4528.450	3"-PAX-260-018-L4	3	PAX	L4	POTASIO XANTATO AMILICO	NO	NEGRO	PP01815	11998	PF01313	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-713	M-02-06-2	TOS EL 4530.450	8"-FRW-800-208-P7	8	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01710	11998	PF03917	BACKING	2	PQ00397	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00124	8	PG01134	1
P-713	M-02-06-2	TOS EL 4530.450	3"-FO-400-054-L4	3	FO	L4	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01815	11998	PF00065	WELDING NECK	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-013-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-011-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-009-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-007-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-005-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3/4"-MB-260-003-L4	3/4	MB	L4	ESPUMANTE	NO	NEGRO	PP01811	11998	PF03272	SOCKET WELD	2	0	0	0	G-1	2	G-1	1	ST-P-026	PH00328	4	PG01209	1
P-713	M-02-06-2	TOS EL 4530.450	3"-FL-260-024-P7	3	FL	P7	FLOCULANTE	NO	NEGRO	PP01707	11998	PF03914	BACKING	2	PQ00292	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00457	4	PG01131	1
P-713	M-02-06-2	TOS EL 4530.450	3"-AL-260-013-S1	3	AL	S1	ALUM	NO	NEGRO	PP01765	11998	PF03201	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00457	4	PG01131	1
P-714	M-02-07-1	TOS EL 4526.450	54"-PRW-800-001-L1B	54	PRW	L1B	AGUA DE PROCESO	VERDE	BLANCO	PP02173	11998	PF03730	SLIP-ON	2	0	0	0	G-100	1	S-100	1	DW-P-794	PH00528	44	PG01372	1
P-714	M-02-07-1	TOS EL 4526.450	30"-RW-800-023-L1B	30	RW	L1B	AGUA CRUDA	VERDE	BLANCO	PP01602	9796	PF02949	SLIP-ON	2	0	0	0	G-100	1	S-100	1	DW-P-794	PH00408	28	PG01100	1
P-714	M-02-07-1	TOS EL 4526.450	4"-FO-400-009-L3	4	FO	L3	ACEITE COMBUSTIBLE	GRIS	NEGRO	PP01816	11998	PF01315	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00484	8	PG01214	1
P-714	M-02-07-1	TOS EL 4528.450	6"-FRW-800-012-P7	6	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01709	9998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-714	M-02-07-1	TOS EL 4528.450	12"-FPW-800-026-L9	12	FPW	L9	RED CONTRA INCENDIO	ROJO	BLANCO	PP01640	9998	PC00158	COUPLING	1	0	0	0	G-1	1	G-1	1	ST-P-026	PH00422	12	PG01091	1
P-714	M-02-07-1	TOS EL 4528.450	10"-GSW-800-101-L1B	10	GSW	L1B	AGUA DE SELLO	VERDE	BLANCO	PP01588	9998	PF00021	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00422	12	PG01091	1
P-714	M-02-07-1	TOS EL 4528.450	6"-ML-260-014-P7	6	ML	P7	LECHADA DE CAL	NO	NEGRO	PP01709	9998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-714	M-02-07-1	TOS EL 4528.450	6"-ML-260-014-P7	6	ML	P7	LECHADA DE CAL	NO	NEGRO	PP01709	9998	PF03916	BACKING	2	PQ00294	STUB END	2	G-1	1	G-1	1	ST-P-026	PH00123	8	PG01133	1
P-714	M-02-07-1	TOS EL 4528.450	8"-PA-265-012-L8B	8	PA	L8B	AIRE DE PLANTA	AZUL	BLANCO	PP01587	9998	PF00062	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00332	8	PG01090	1
P-714	M-02-07-1	TOS EL 4528.450	6"-IA-265-001-L2W	6	IA	L2W	AIRE DE INSTRUMENTACION	AZUL	BLANCO	PP01170	9998	PF00061	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00440	8	PG01089	1
P-714	M-02-07-1	TOS EL 4528.450	3"-PAX-260-018-L4	3	PAX	L4	POTASIO XANTATO AMILICO	NO	NEGRO	PP01815	9998	PF01313	SLIP-ON	2	0	0	0	G-1	1	G-1	1	ST-P-026	PH00401	4	PG01213	1
P-714	M-02-07-2	TOS EL 4530.450	8"-FRW-800-208-P7	8	FRW	P7	AGUA FRESCA	VERDE	BLANCO	PP01710	10198	PF03917	BACKING	2	PQ00397	STUB END										

Item N°	Descripción de Partida	P.U.	Unidad	Cantidad	Total US\$	ACUMULADO ANTERIOR		PRESENTE PERIODO		ACUMULADO ACTUAL		SALDO A VALORIZAR
						Cantidad	Total US\$	Cantidad	Total US\$	Cantidad	Total US\$	
1	Mobilization	LS			84,397,36							
1.1	CONSTRUCCIONES TEMPORALES											
1.1.1	OFICINAS PARA CONTRATISTA IMECON	3,00	mes	4,133,75	1,377,92							
1.1.2	OFICINAS PARA SUPERVISION DE OBRAS	3,00	mes	4,133,75	1,377,92							
1.1.3	ALMACEN CERRADO, TIPO CONTENEDOR (1 unidad)	3,00	mes	4,133,75	1,377,92							
1.1.4	PERSONAL PARA SELECCION Y ALMACENAMIENTO DE CONTENEDORES	3,00	mes	1,934,38	551,17							
1.1.5	DESCARGA DE CONTENEDORES	3,00	mes	35,803,15	11,934,38							
1.2	INSTALACIONES PROVISIONALES											
1.2.1	AGUA PARA CONSUMO HUMANO	3,00	mes	7,440,76	2,480,25							
1.2.2	SERVICIOS HIGIENICOS TRANSPORTABLES (3 unidades)	3,00	mes	4,133,75	1,377,92							
1.2.3	INSTALACION PARA ACCESO A INTERNET Y TELEFONO PARA TODAS LAS OFICINAS	3,00	mes	620,06	206,69							
1.3	TRABAJOS PRELIMINARES											
1.3.1	TRANSPORTE DE PERSONAL	3,00	mes	9,094,26	3,031,42							
1.3.2	SEGURIDAD, SERIALIZACION, DEPOSITOS, ETC	3,00	mes	10,334,39	3,444,80							
1.3.3	LIMPIEZA PERMANENTE DE OBRA	3,00	mes	4,132,10	1,377,37							
2	Site Resident Engineer	MO	mes	31,127,21	10,375,74							
3	Site HSE Engineer	MO	mes	19,846,08	6,615,36							
4	Site Personnel	MO	mes	82,898,06	27,632,69							
5	(See dwg. 400-GA-P-704 module index)											
6	Pipe Modules # 8-15	L.S.	16,00	333,080,41	20,817,53							
	Fabricate Pipe Supports According to Pipe Support Standards and Pipe Rack Module Drawings (ST-021 @ 41)	L.S.	1,00	88,422,85	88,422,85							
TOTAL					639,771,97	639,771,97						
TOTAL VALOR VENTA					639,771,97	639,771,97						
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										
RESIDENTE		US\$										
COORDINADOR DE CONSTRUCCION		US\$										
GERENTE DE PROYECTO		US\$										
CONTRATISTA		US\$										
SUPERVISOR		US\$										
SUPERVISION		US\$										
TOTAL		US\$										
SUBTOTAL		US\$										
(-) DESC. ADEL		US\$										
IGV 18%		US\$										
TOTAL A FACTURAR		US\$										
(-) RETENCION		US\$										
MONTOS A PAGAR		US\$										

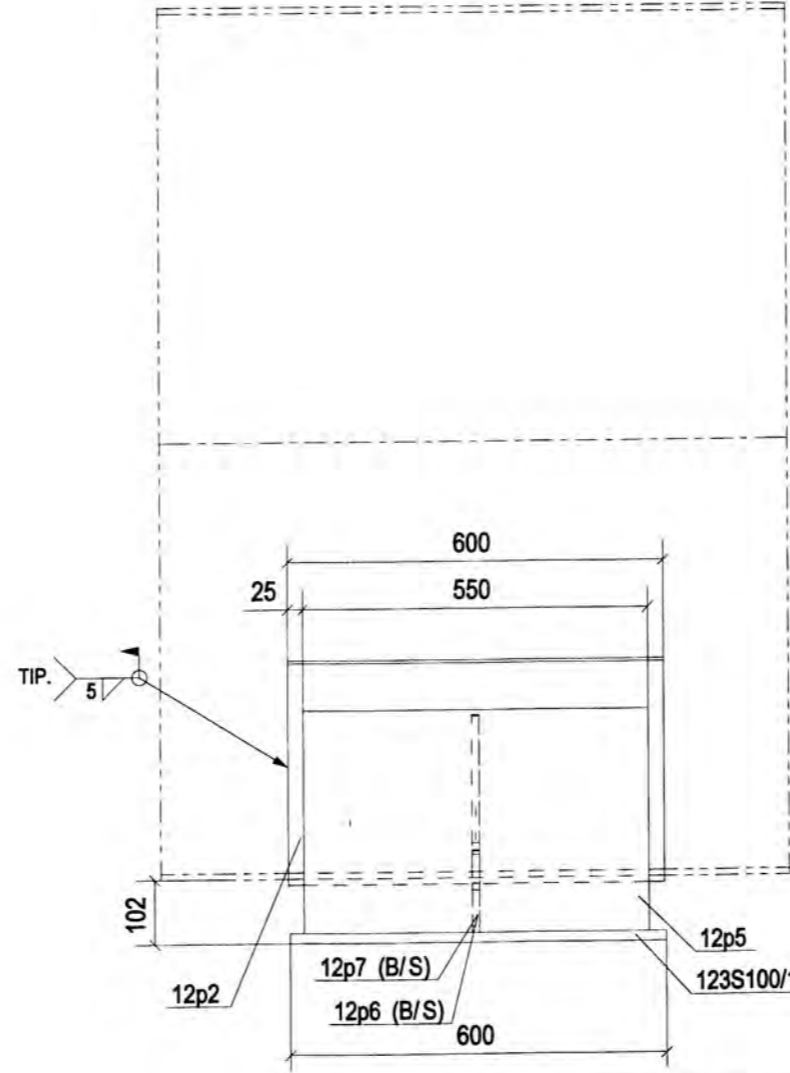
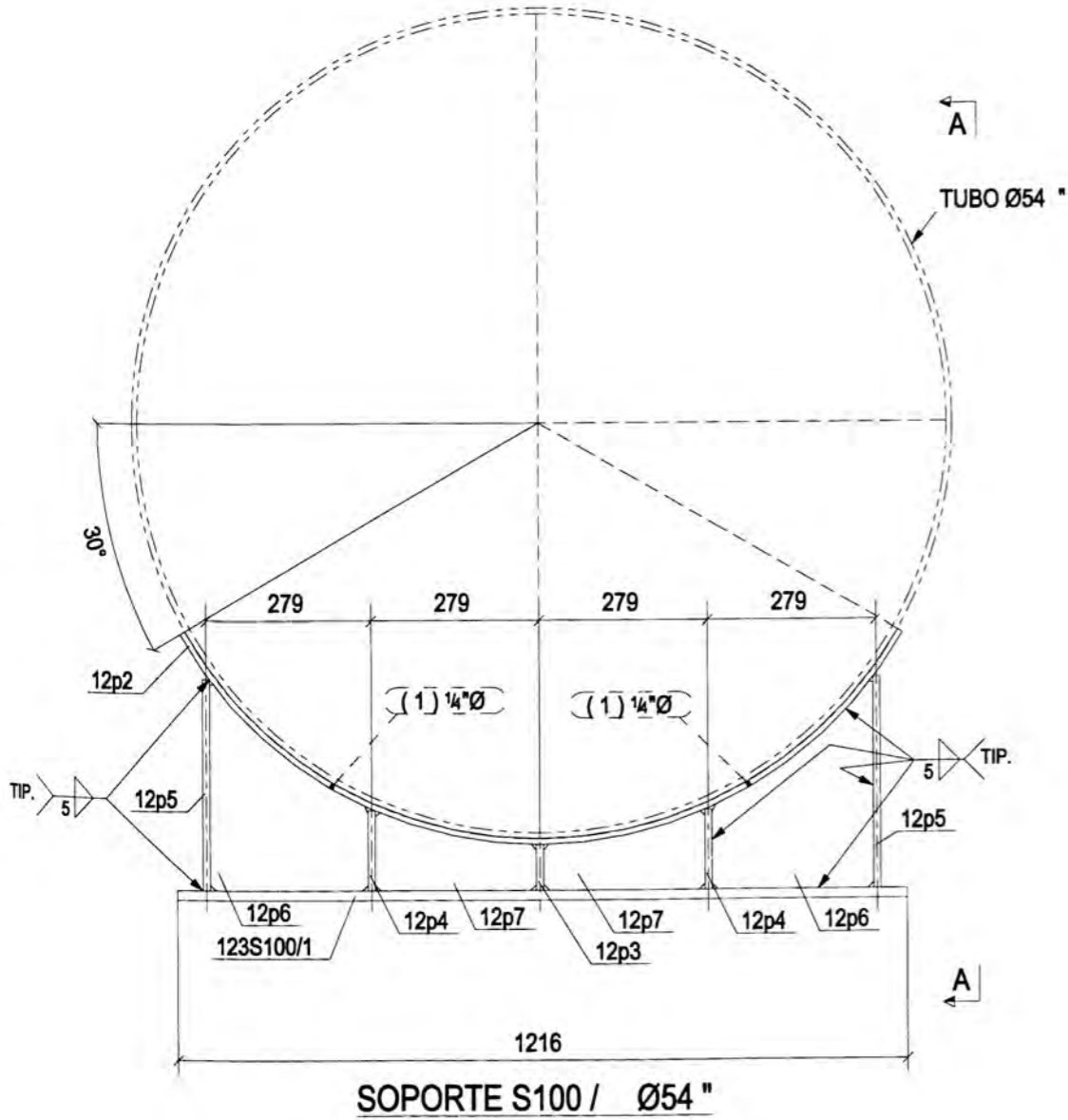
LOCALIZACION	
123S100/1	2/<A-B

LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE 123S100/1				226.4	
123S100/1	1	1	PL16X600	1216	A36		91.6	91.6
12p2	1	1	PL10X600	1446	A36		65	64.6
12p3	1	1	PL12X76	550	A36		4	4.0
12p4	2	2	PL12X133	550	A36		7	13.8
12p5	2	2	PL12X350	550	A36		18	36.3
12p6	2	2	PL12X267	343	A36		6	11.3
12p7	2	2	PL12X130	267	A36		2	4.8
TIPO EST.:								226.4

FABRICAR 16 UND.



ESTANDAR DE PROYECTO, S.I.C.

MATERIAL	A36
SOLD. AWS	1/4" o 6mm
ELECTRODOS	70XX
AGUJEROS	21mm
PERNOS	A325N

MODELADO:

PLANO DE MONTAJE :

PLANO DE DISEÑO REF.:

400-DW-P-794_Rev_1



INSTALACIONES MECANICAS ELECTRICAS Y CIVILES
AV. MAQUINARIAS 2977 LIMA - PERU

PROYECTO : PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY

ESTRUCTURA : PIPE SUPORTS

CLIENTE : MINERA CHINALCO PERU S.A. / JACOBS

O.C.:

SECUENCIA
FASE
PINTURA
TIPO & NO.

O.T.:
OT-120

SEC.:
1

PLANO:
NO. 123S100/1

REV:
NO. 0

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
4				
3				
2				
1	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.

RECUBRIMIENTO

Sistema 0 Sin recubrimiento

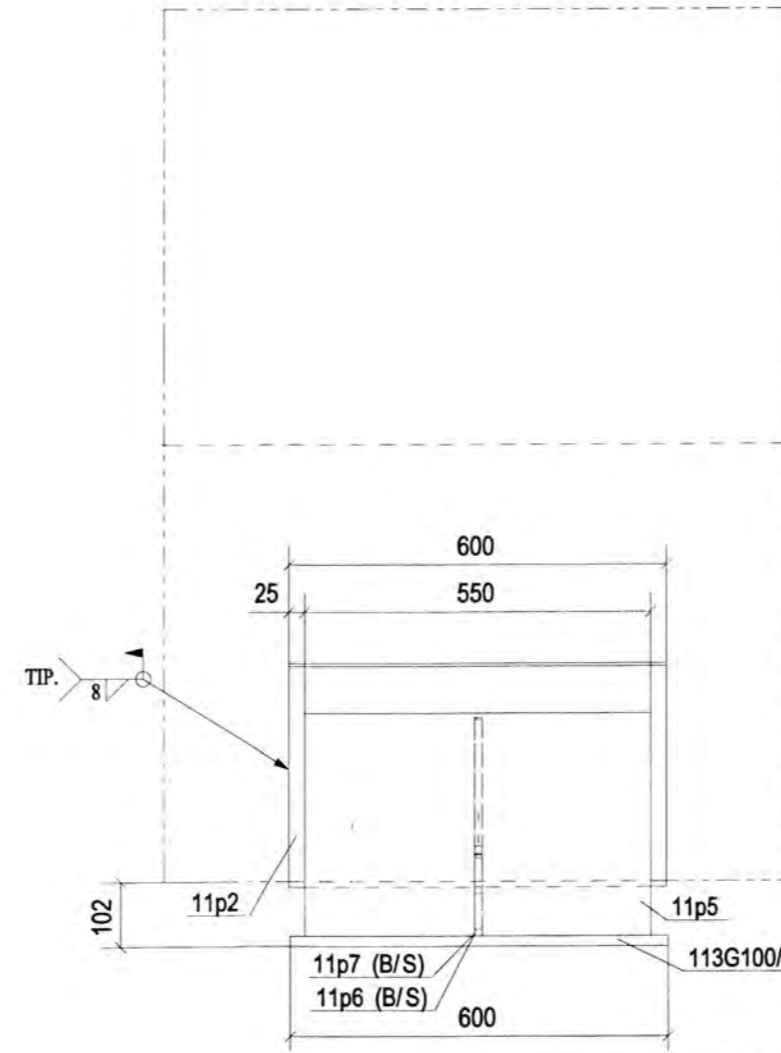
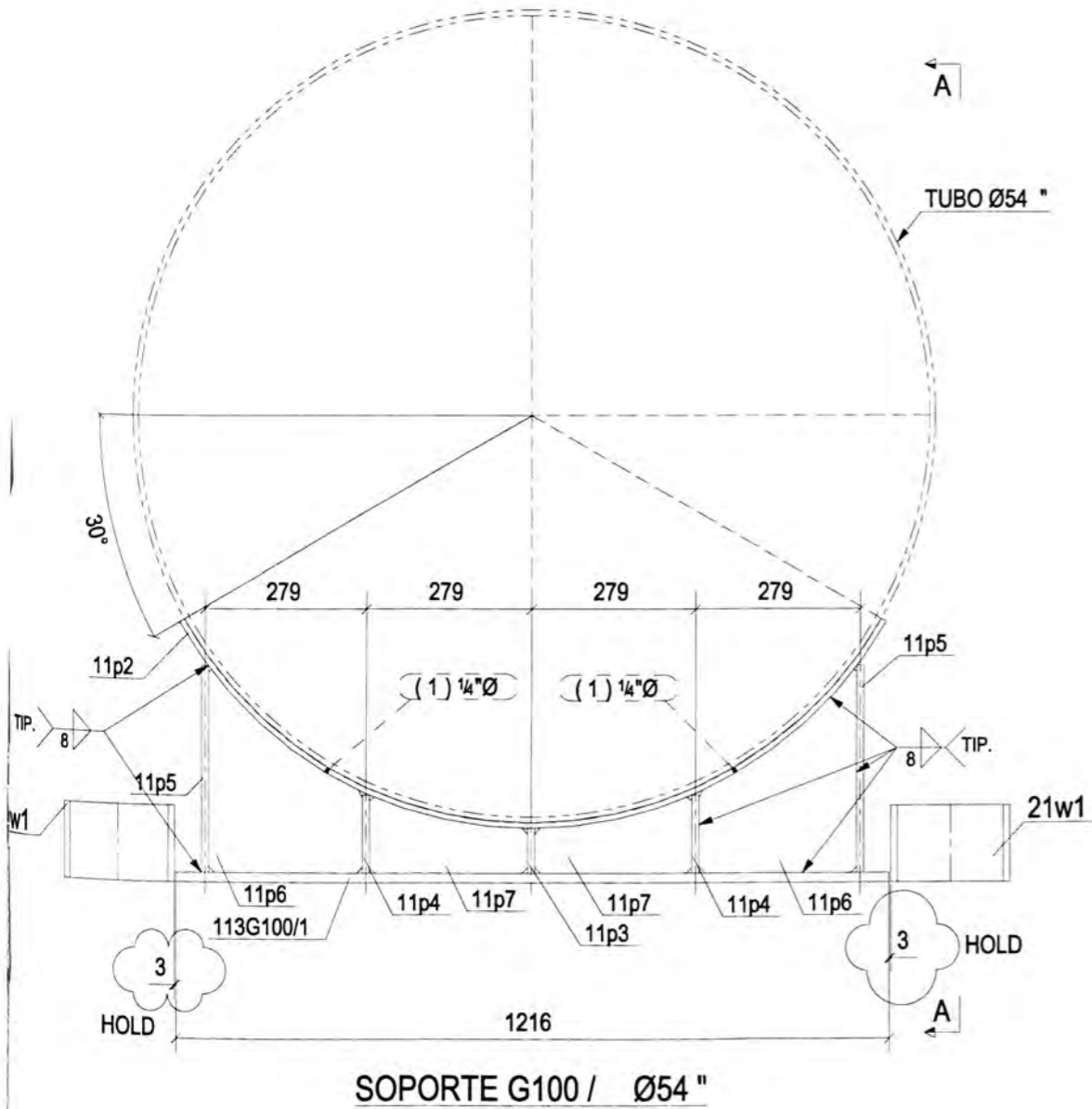
LOCALIZACION
113G100/1 1/<A-B

LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE 113G100/1				238.4	
113G100/1	1	1	PL16X600	1216	A36		91.6	91.6
11p2	1	1	PL10X600	1446	A36		65	64.6
11p3	1	1	PL12X76	550	A36		4	4.0
11p4	2	2	PL12X133	550	A36		7	13.8
11p5	2	2	PL12X350	550	A36		18	36.3
11p6	2	2	PL12X267	343	A36		6	11.3
11p7	2	2	PL12X130	267	A36		2	4.8
21w1	2	2	W8X31	130	A36		6	12.0
TIPO EST.:								238.4

FABRICAR 6 UND.



SECCION A - A

ESTANDAR DE PROYECTO, S.I.C.

MATERIAL	A36
SOLD. AWS	1/4" o 6mm
ELECTRODOS	70XX
AGUJEROS	21mm
PERNOS	A325N

MODELADO:

PLANO DE MONTAJE :

PLANO DE DISEÑO REF.:

400-DW-P-794_Rev_1



PROYECTO : PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY

ESTRUCTURA : PIPE SUPORTS

CLIENTE : MINERA CHINALCO PERU S.A. / JACOBS

O.C.:

O.T.: OT-120

SEC.: 1

PLANO: NO. 113G100/1

REV: NO. 0

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
4				
3				
2				
1	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.

RECUBRIMIENTO

Sistema 0 Sin recubrimiento

LOCALIZACION
133DA100/13>/<A-B

LISTA DE MATERIALES

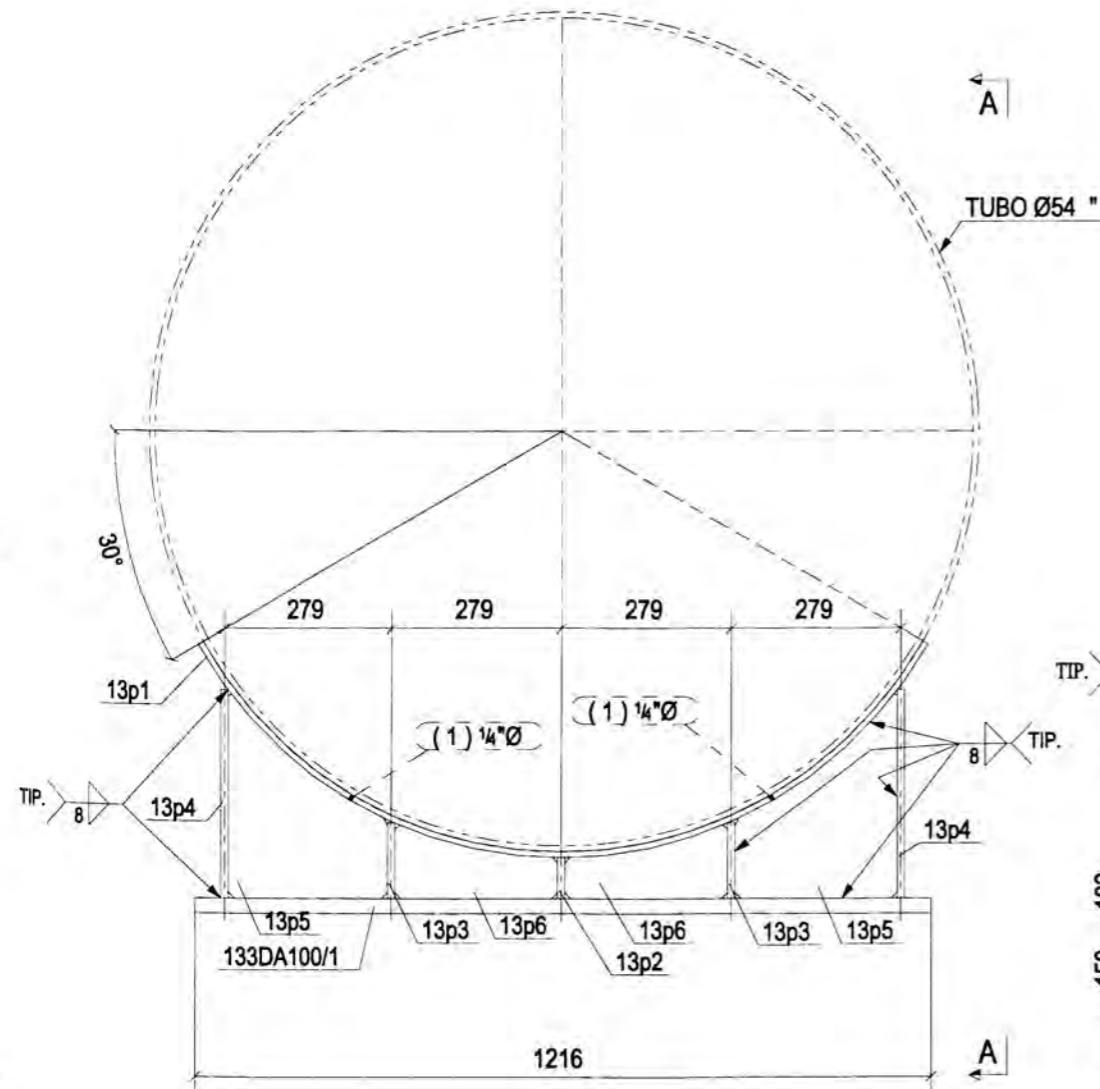
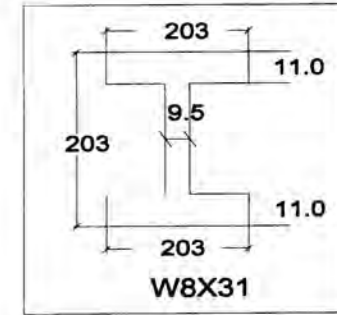
Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE 133DA100/1				464.6	
133DA100/1	1	1	PL25X1000	1216	A36		238.6	238.6
13p1	1	1	PL10X1000	1446	A36		108	107.7
13p2	1	1	PL12X67	950	A36		6	6.0
13p3	2	2	PL12X124	950	A36		11	22.2
13p4	2	2	PL12X341	950	A36		31	61.1
13p5	2	2	PL12X267	334	A36		5	10.9
13p6	2	2	PL12X121	267	A36		2	4.3
13w1	2	2	W8X31	150	A36		7	13.9

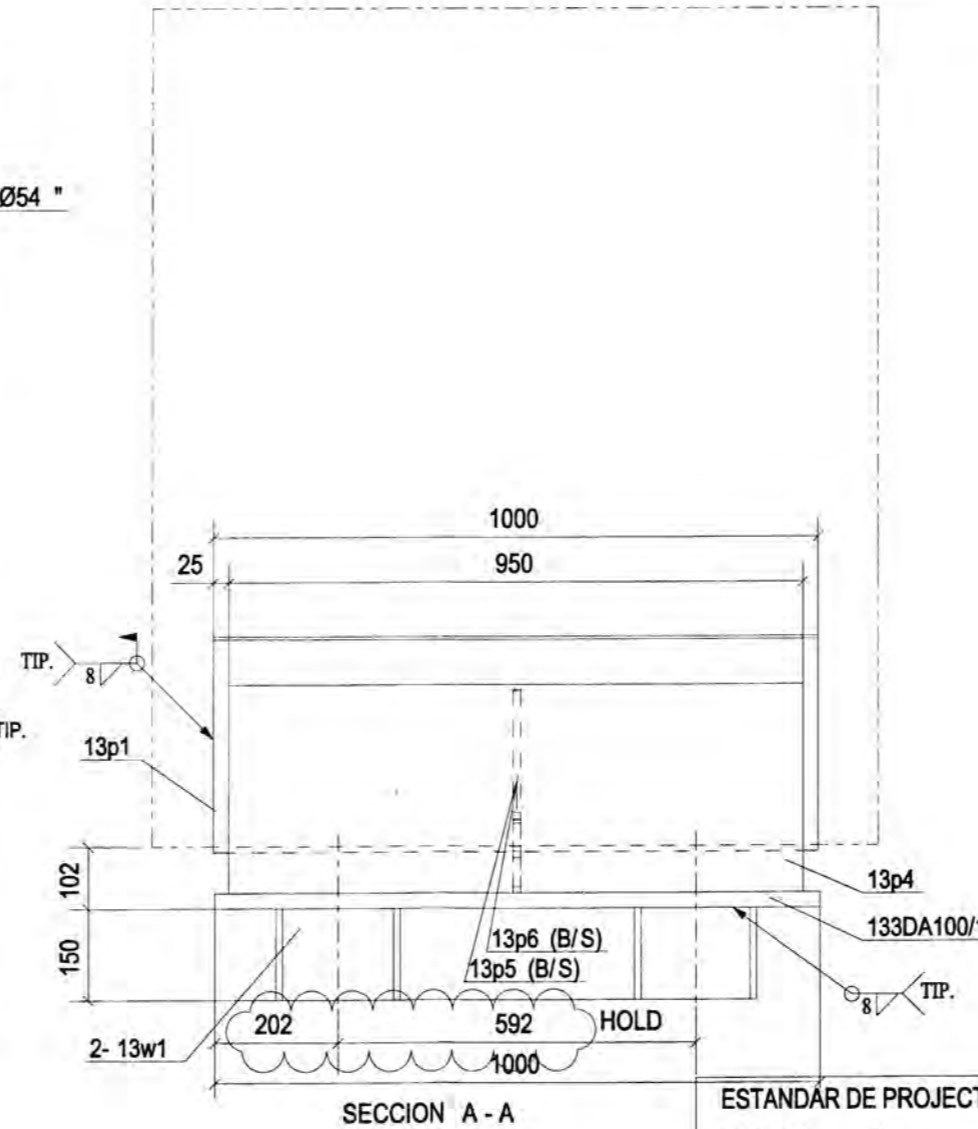
TIPO EST.:

464.6

FABRICAR 2 UND.



SOPORTE DA100 / Ø54 "



SECCION A - A

ESTANDAR DE PROYECTO, S.I.C.

MATERIAL A36

SOLD. AWS 1/4" o 6mm

ELECTRODOS 70XX

AGUJEROS 21mm

PERNOS A325N

MODELADO:

PLANO DE MONTAJE :

PLANO DE DISEÑO REF.:

400-DW-P-794_Rev_1



INSTALACIONES MECANICAS ELECTRICAS Y CIVILES
AV. MAQUINARIAS 2977 LIMA - PERU

PROYECTO : PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY

ESTRUCTURA : PIPE SUPORTS

CLIENTE : MINERA CHINALCO PERU S.A. / JACOBS

O.C.:

SECUENCIA
FASE
PINTURA
TIPO & NO.

O.T.: OT-120

SEC.: 1

PLANO:
NO. 133DA100/1

REV:
NO. 0

RECUBRIMIENTO	
Sistema 0	Sin recubrimiento

4					
3					
2					
1	△	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.
REV.		DESCRIPCION	FECHA	DIBUJO	REVISO

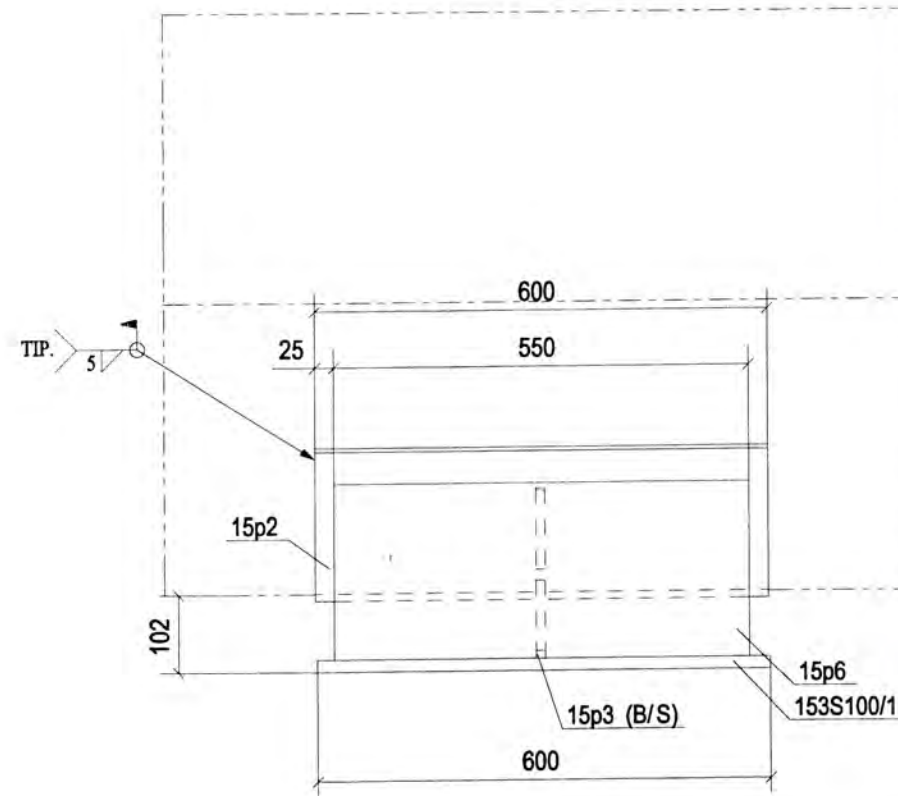
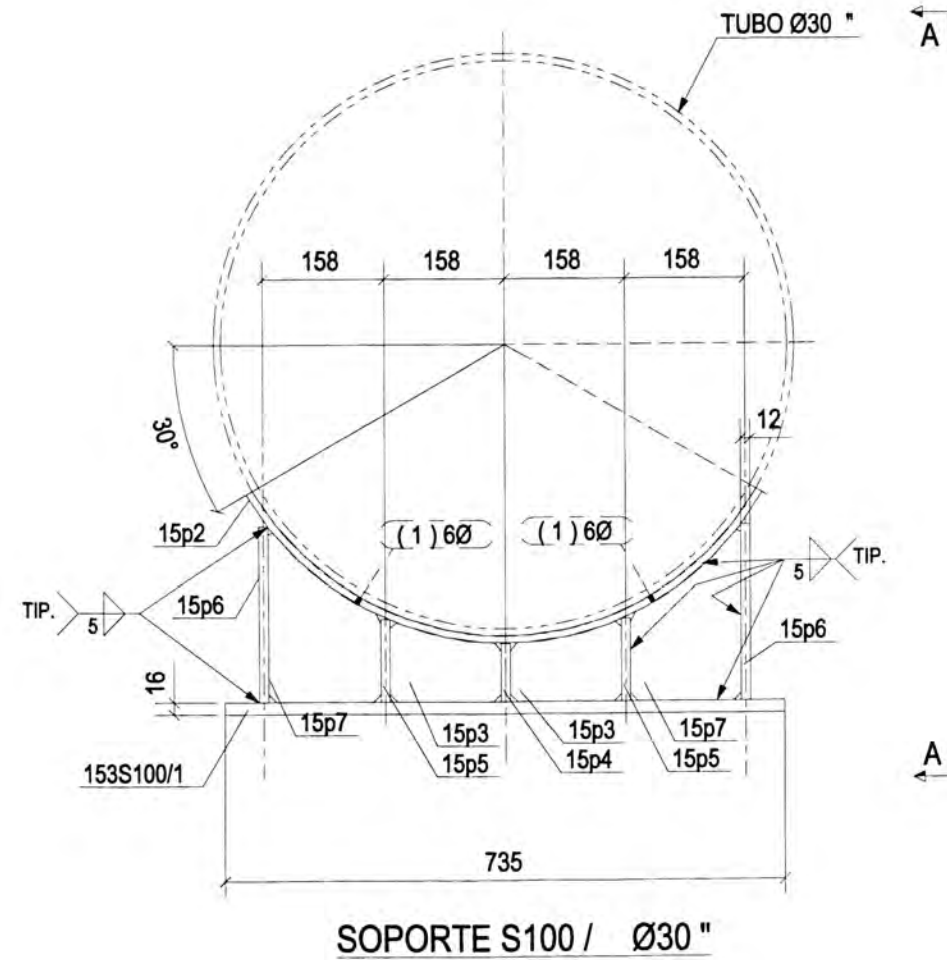
LOCALIZACION	
153S100/1	2/A-B

LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE 153S100/1				137.2	
153S100/1	1	1	PL16X600	735	A36		55.4	55.4
15p2	1	1	PL10X600	808	A36		36	36.0
15p3	2	2	PL12X104	146	A36		1	2.4
15p4	1	1	PL12X76	550	A36		4	4.0
15p5	2	2	PL12X108	550	A36		6	11.2
15p6	2	2	PL12X230	550	A36		12	23.8
15p7	2	2	PL12X146	222	A36		2	4.4
TIPO EST.:								137.2

FABRICAR 16 UND.



SECCION A - A

ESTANDAR DE PROYECTO, S.I.C.

MATERIAL	A36
SOLD. AWS	1/4" o 6mm
ELECTRODOS	70XX
AGUJEROS	21mm
PERNOS	A325N

MODELADO:

PLANO DE MONTAJE :

PLANO DE DISEÑO REF.:

400-DW-P-794_Rev_1



INSTALACIONES MECANICAS ELECTRICAS Y CIVILES
AV. MAQUINARIAS 2977 LIMA - PERU

PROYECTO : PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY

ESTRUCTURA : PIPE SUPORTS

CLIENTE : MINERA CHINALCO PERU S.A. / JACOBS

O.C.:

O.T.: OT-120

SEC.: 1

PLANO: NO. 153S100/1

REV: NO. 0

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
4				
3				
2				
1	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.

RECUBRIMIENTO
Sistema 0 Sin recubrimiento

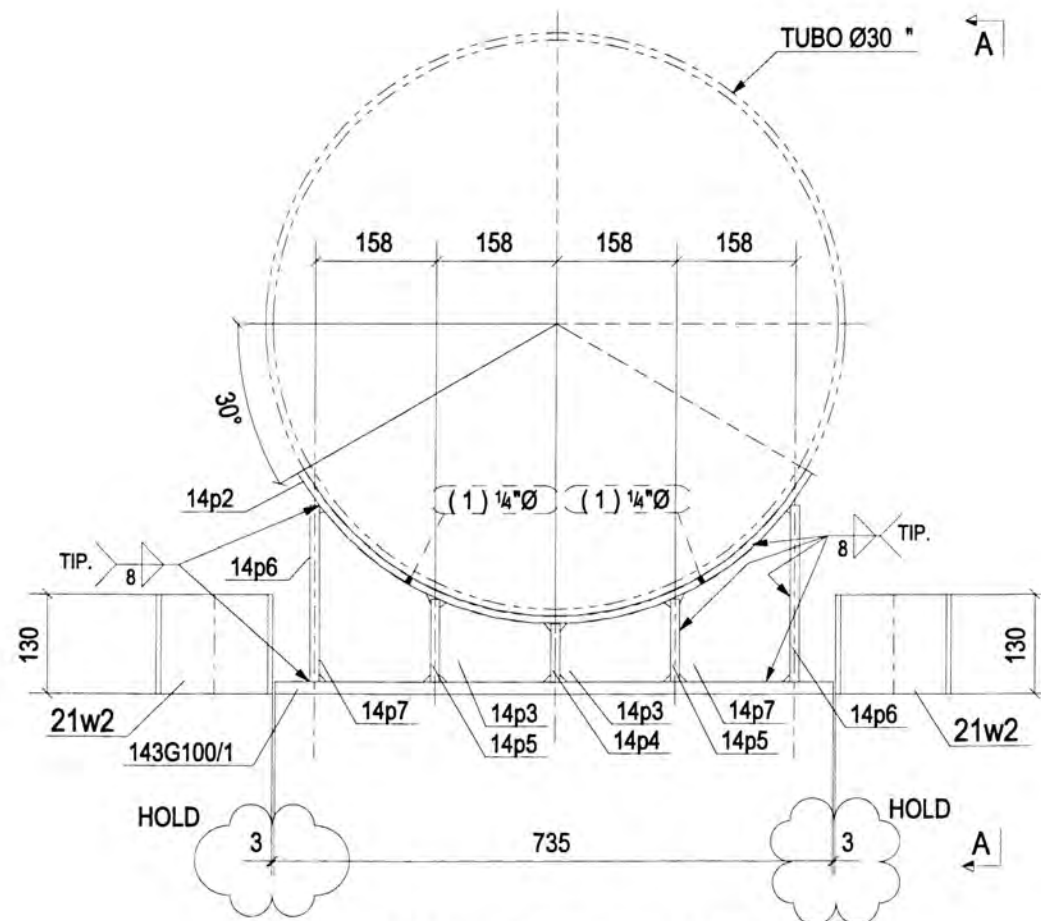
LOCALIZACION	
143G100/1	1/A-B

LISTA DE MATERIALES

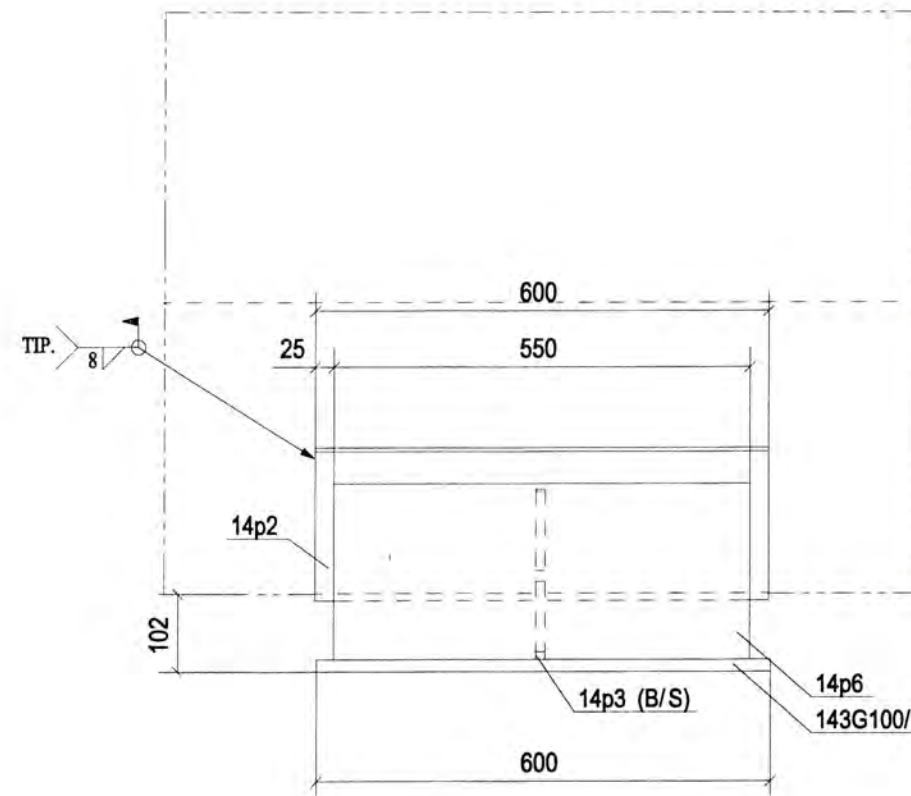
Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE 143G100/1				143.0	
143G100/1	1	1	PL16X600	735	A36		55.4	55.4
14p2	1	1	PL10X600	808	A36		36	36.0
14p3	2	2	PL12X104	146	A36		1	2.4
14p4	1	1	PL12X76	550	A36		4	4.0
14p5	2	2	PL12X108	550	A36		6	11.2
14p6	2	2	PL12X230	550	A36		12	23.8
14p7	2	2	PL12X146	222	A36		2	4.4
21w2	2	2	W6X15	130	A36		3	5.8
TIPO EST.:								143.0

FABRICAR 6 UND.



SOPORTE G100 / Ø30 "



SECCION A - A

ESTANDAR DE PROYECTO, S.I.C.		 INSTALACIONES MECANICAS ELECTRICAS Y CIVILES AV. MAQUINARIAS 2977 LIMA - PERU	
MATERIAL	A36		
SOLD. AWS	1/4" o 6mm	PROYECTO :	PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY
ELECTRODOS	70XX	ESTRUCTURA :	PIPE SUPORTS
AGUJEROS	21mm	CLIENTE :	MINERA CHINALCO PERU S.A. / JACOBS
PERNOS	A325N	O.C.:	-
MODELADO:		O.T.:	OT-120
PLANO DE MONTAJE :		SEC.:	1
PLANO DE DISEÑO REF.:	400-DW-P-794_Rev_1	PLANO NO.:	143G100/1
		REV. NO.:	0

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
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3				
2				
1	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.

RECUBRIMIENTO	
Sistema 0	Sin recubrimiento

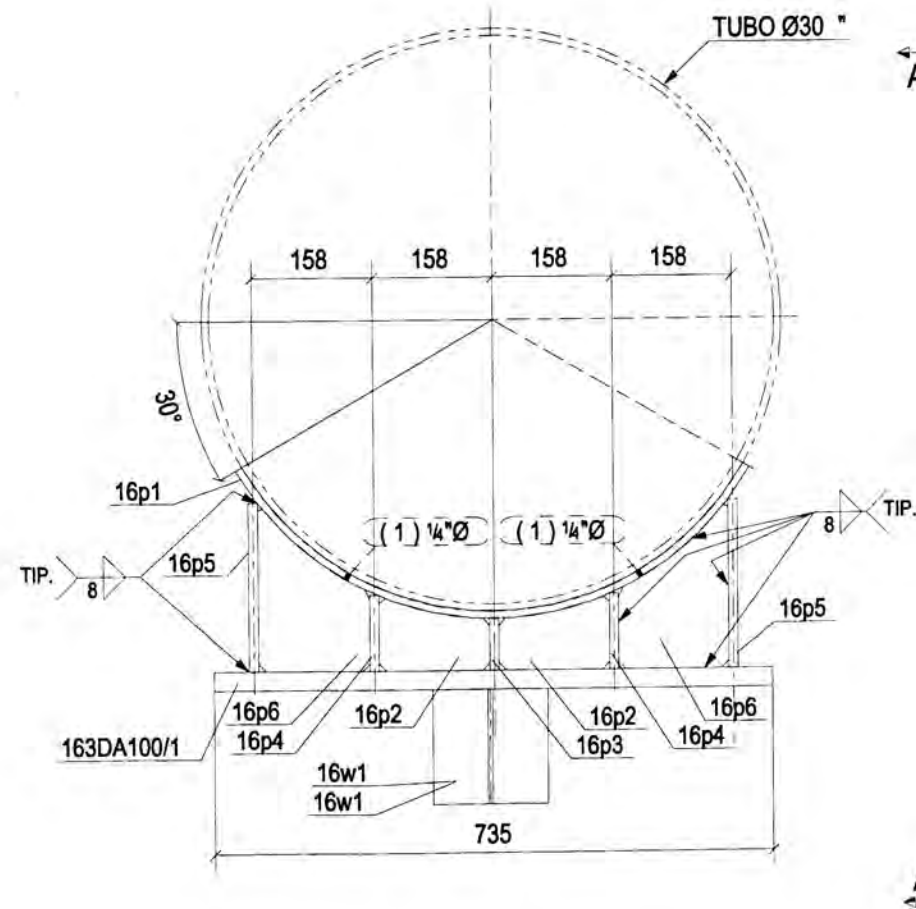
LOCALIZACION
163DA100/1 3>/A-B

LISTA DE MATERIALES

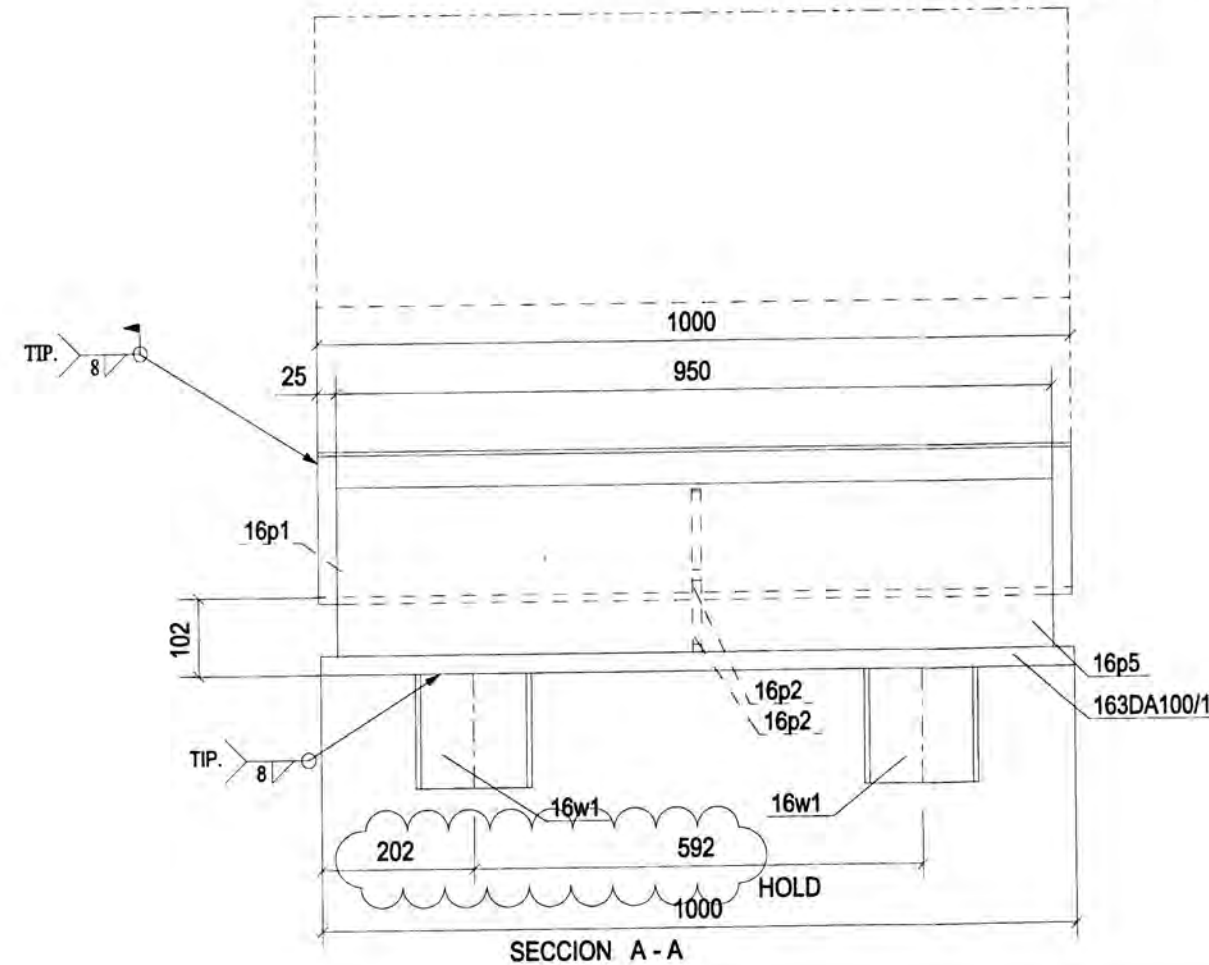
Dimensiones en mm. / Pesos en Kg

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		1	SOPORTE 163DA100/1				280.6	
163DA100/1	1	1	PL25X735	1000	A36		144.2	144.2
16p1	1	1	PL10X808	1000	A36		60	60.1
16p2	2	2	PL12X95	146	A36		1	2.1
16p3	1	1	PL12X67	950	A36		6	6.0
16p4	2	2	PL12X99	950	A36		9	17.8
16p5	2	2	PL12X221	950	A36		20	39.5
16p6	2	2	PL12X146	213	A36		2	4.2
16w1	2	2	W6X15	150	A36		3	6.7
TIPO EST.:								280.6

FABRICAR 2 UND.



SOPORTE DA100 / Ø30 "



SECCION A - A

ESTANDAR DE PROYECTO, S.I.C.

MATERIAL A36
SOLD. AWS 1/4" o 6mm
ELECTRODOS 70XX
AGUJEROS 21mm
PERNOS A325N

MODELADO:

PLANO DE MONTAJE :

PLANO DE DISEÑO REF.:

400-DW-P-794_Rev_1



INSTALACIONES MECANICAS ELECTRICAS Y CIVILES
AV. MAQUINARIAS 2977 LIMA - PERU

PROYECTO : PO L-130 PIPE RACK AND CABLE TRAYS PRE-ASSEMBLY

ESTRUCTURA : PIPE SUPORTS

CLIENTE : MINERA CHINALCO PERU S.A. / JACOBS

O.C.:

O.T.:
OT-120

SEC.:

1

SECUENCIA
FASE
PINTURA
TIPO & NO.

PLANO:
NO.

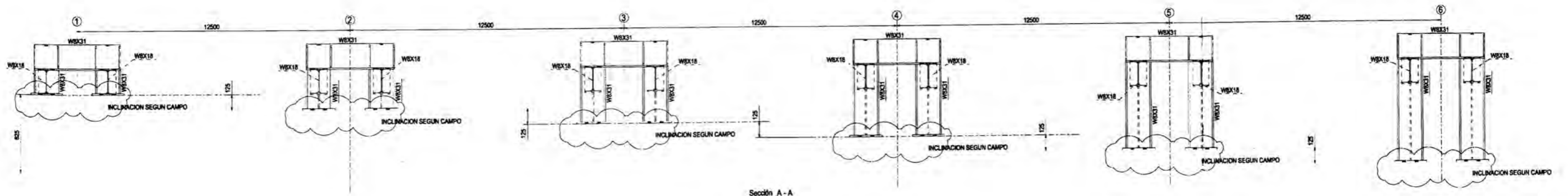
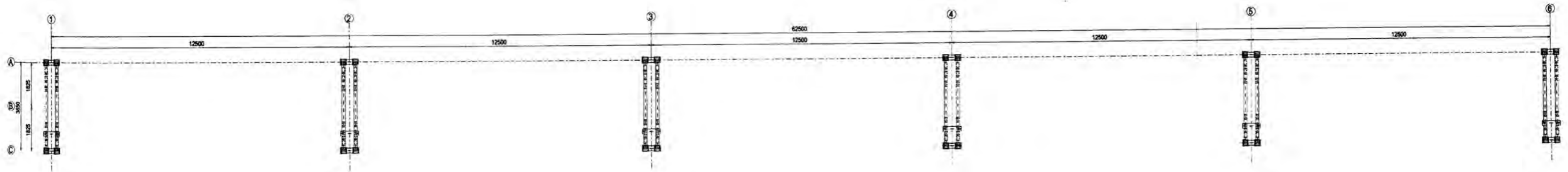
163DA100/1

REV:
NO. 0

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
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3				
2				
1	EMITIDO PARA REVISION	04/10/2011	TLG	J.C.H.

RECUBRIMIENTO

Sistema 0 Sin recubrimiento



Sección A - A
1:15

4					
3					
2					
1	△	EMITIDO PARA REVISION	14/09/2011	TLG	J.C.H.
	REV.	DESCRIPCION	FECHA	DIBUJO	REVISO

ESTANDAR DE PROYECTO
U.N.O.
MATERIAL A36
SOLD. AWS 1/2 H mm
ELECTRODOS E70X
AGUJEROS 1/2" x 21mm
PERNOS A325
MODELADO
PLANO DE DISEÑO REF:



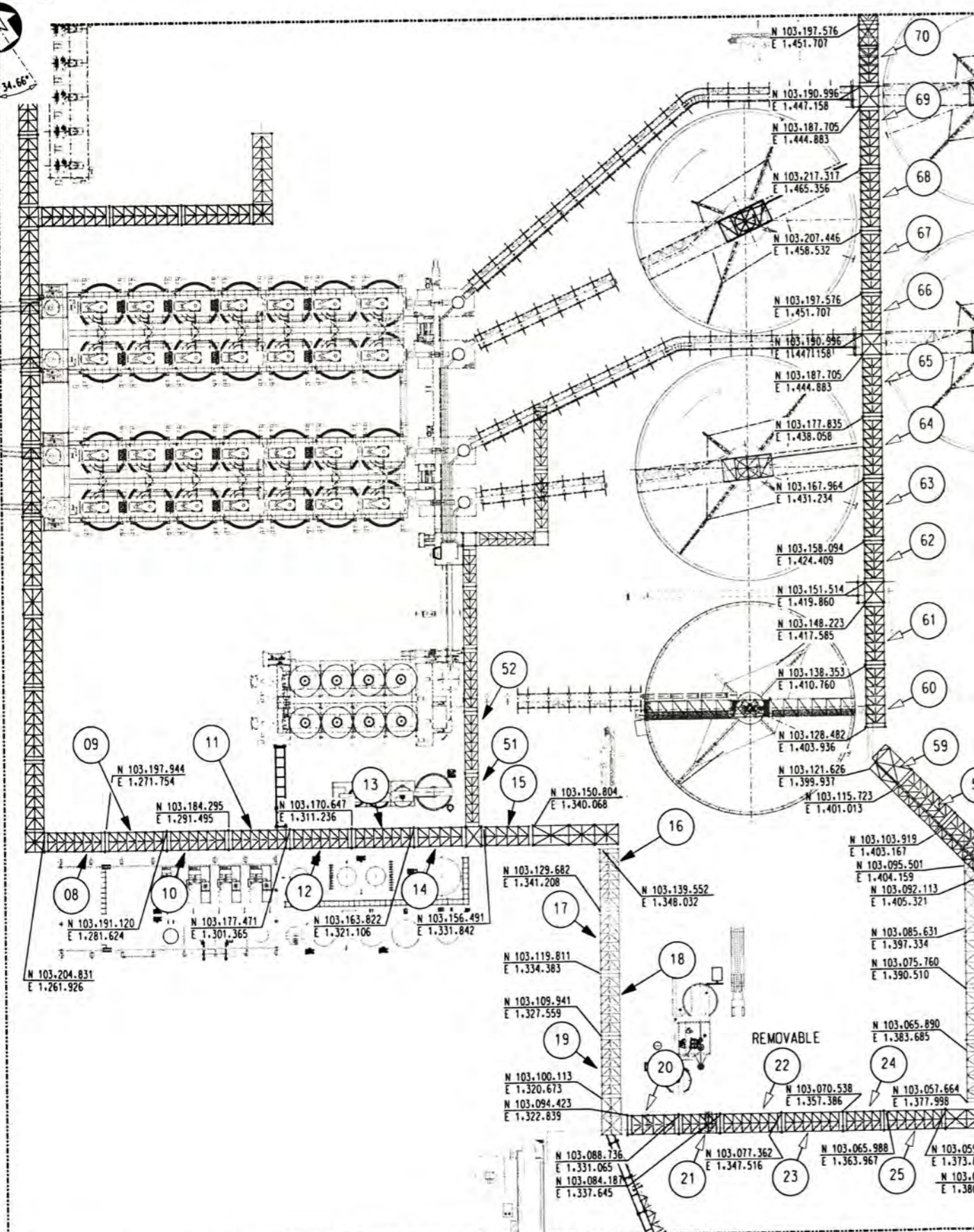
PROYECTO : PIPE RACK
ESTRUCTURA : ARRELO GENERAL
CLIENTE : MINERA CHINALCO PERU S.A.

O.C.:
O.T.: OT120
SEC.:
PLANO No. 120.11-01-DG-001
REV. No. A

DRAWING LIMITS



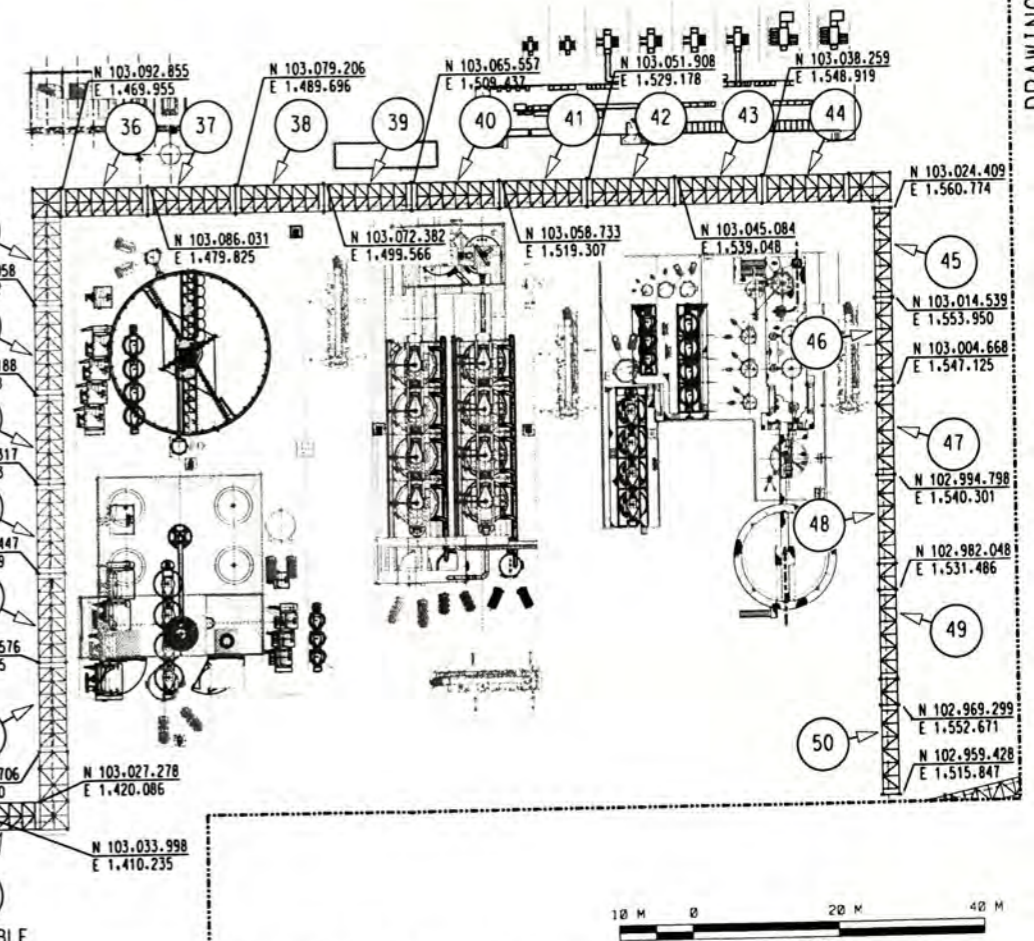
DRAWING LIMITS



MODULE LEGEND

ITEM #	MODULE #	BENT #	DRAWING #	ITEM #	MODULE #	BENT #	DRAWING #	ITEM #	MODULE #	BENT #	DRAWING #
08	M-02-01-1&2	T-04 & B-02-01	400-DW-P-708	30	M-05-01-1&2	B-05-01 & B-05-02	400-DW-P-730	52	HOLD	HOLD	400-DW-P-752
09	M-02-02-1&2	B-02-01 & B-02-02	400-DW-P-709	31	M-05-02-1&2	B-05-02 & B-05-03	400-DW-P-731	53	M-10-04-1	B-10-04 & B-10-03	400-DW-P-753
10	M-02-03-1&2	B-02-02 & B-02-03	400-DW-P-710	32	M-05-03-1&2	B-05-03 & B-05-04	400-DW-P-732	54	M-10-03-1	B-10-03 & B-10-02	400-DW-P-754
11	M-02-04-1&2	B-02-03 & B-02-04	400-DW-P-711	33	M-05-04-1&2	B-05-04 & B-05-05	400-DW-P-733	55	M-10-02-1	B-10-02 & B-10-01	400-DW-P-755
12	M-02-05-1&2	B-02-04 & B-02-05	400-DW-P-712	34	M-05-05-1&2	B-05-05 & B-05-06	400-DW-P-734	56	M-10-01-1	B-10-01 & T-20	400-DW-P-756
13	M-02-06-1&2	B-02-05 & B-02-06	400-DW-P-713	35	M-05-06-1&2	B-05-06 & T-10	400-DW-P-735	57	M-09-01-1	T-19 & B-09-01	400-DW-P-757
14	M-02-07-1&2	B-02-06 & T-05	400-DW-P-714	36	M-06-01-1&2	T-10 & B-06-01	400-DW-P-736	58	M-09-02-1	B-09-01 & B-09-02	400-DW-P-758
15	M-02-08-1&2	T-05 & T-06	400-DW-P-715	37	M-06-02-1&2	B-06-01 & B-06-02	400-DW-P-737	59	M-09-03-1	B-09-02 & T-18	400-DW-P-759
16	M-03-01-1&2	T-07 & B-03-01	400-DW-P-716	38	M-06-03-1&2	B-06-02 & B-06-03	400-DW-P-738	60	M-09-04-1&2	B-09-03 & B-09-04	400-DW-P-760
17	M-03-02-1&2	B-03-01 & B-03-02	400-DW-P-717	39	M-06-04-1&2	B-06-03 & B-06-04	400-DW-P-739	61	M-09-05-1&2	B-09-04 & T-17	400-DW-P-761
18	M-03-03-1&2	B-03-02 & B-03-03	400-DW-P-718	40	M-06-05-1&2	B-06-04 & B-06-05	400-DW-P-740	62	M-09-06-1&2	T-17 & B-09-05	400-DW-P-762
19	M-03-04-1&2	B-03-03 & B-03-04	400-DW-P-719	41	M-06-06-1&2	B-06-05 & B-06-06	400-DW-P-741	63	M-09-07-1&2	B-09-05 & B-09-06	400-DW-P-763
20	M-04-01-1&2	B-04-01 & B-04-02	400-DW-P-720	42	M-06-07-1&2	B-06-06 & B-06-07	400-DW-P-742	64	M-09-08-1&2	B-09-06 & B-09-07	400-DW-P-764
21	M-04-02-1&2	B-04-02 & B-04-03	400-DW-P-721	43	M-06-08-1&2	B-06-07 & B-06-08	400-DW-P-743	65	M-09-09-1&2	B-09-07 & T-16	400-DW-P-765
22	M-04-03-1&2	B-04-03 & B-04-04	400-DW-P-722	44	M-06-09-1&2	B-06-08 & T-11	400-DW-P-744	66	M-09-10-1&2	T-16 & B-09-08	400-DW-P-766
23	M-04-04-1&2	B-04-04 & B-04-05	400-DW-P-723	45	M-07-06-1	B-07-04 & B-07-05	400-DW-P-745	67	M-09-11-1&2	B-09-08 & B-09-09	400-DW-P-767
24	M-04-05-1&2	B-04-05 & B-04-06	400-DW-P-724	46	M-07-05-1	B-07-03 & B-07-04	400-DW-P-746	68	M-09-12-1&2	B-09-09 & B-09-10	400-DW-P-768
25	M-04-06-1&2	B-04-06 & T-08	400-DW-P-725	47	M-07-04-1	B-07-02 & B-07-03	400-DW-P-747	69	M-09-13-1&2	B-09-10 & T-15	400-DW-P-769
26	M-04-07-1&2	T-08 & B-04-07	400-DW-P-726	48	M-07-03-1	T-12 & B-07-02	400-DW-P-748	70	M-09-14-1&2	T-15 & B-09-11	400-DW-P-770
27	M-04-08-1&2	B-04-07 & B-04-08	400-DW-P-727	49	M-07-02-1	T-12 & T-13	400-DW-P-749				
28	M-04-09-1&2	B-04-08 & B-04-09	400-DW-P-728	50	M-07-01-1	B-07-01 & T-13	400-DW-P-750				
29	M-04-10-1&2	B-04-09 & T-09	400-DW-P-729	51	HOLD	HOLD	400-DW-P-751				

DRAWING LIMITS



DRAWING LIMITS

THIS DRAWING NOT VALID UNLESS THE LATEST REVISION INITIALS ARE HANDWRITTEN

REV. NO.	DATE	DESCRIPTION	BY	CHECK	APPROVED
001	01/18/10	ISSUED FOR INTERNAL REVIEW	MAC	APP	
002	06/11/10	ISSUED FOR CLIENT APPROVAL	MEL	APP	
003	07/08/10	ISSUED FOR CONSTRUCTION	JEC	MEL	APP

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
01	ISSUED FOR INTERNAL REVIEW	MAC	APP		01/18/10
02	ISSUED FOR CLIENT APPROVAL	MEL	APP		06/11/10
03	ISSUED FOR CONSTRUCTION	JEC	MEL	APP	07/08/10

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
01	ISSUED FOR INTERNAL REVIEW	MAC	APP		01/18/10
02	ISSUED FOR CLIENT APPROVAL	MEL	APP		06/11/10
03	ISSUED FOR CONSTRUCTION	JEC	MEL	APP	07/08/10

NOTICE

THIS IS A PRELIMINARY DRAWING AND SUBJECT TO CHANGE WITHOUT NOTICE. THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED HEREIN. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONTRACTS AND AGREEMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SERVICES AND SUPPLIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY MATERIALS AND EQUIPMENT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TRANSPORTATION AND LOGISTICS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY COMMUNICATIONS AND NETWORKING. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SECURITY AND PROTECTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TRAINING AND EDUCATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SUPPORT AND MAINTENANCE. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY REPAIRS AND REPLACEMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY UPGRADES AND IMPROVEMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY MONITORING AND EVALUATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY REPORTING AND DOCUMENTATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY ARCHIVING AND PRESERVATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BACKUP AND RECOVERY. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SECURITY AND PROTECTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TRAINING AND EDUCATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SUPPORT AND MAINTENANCE. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY REPAIRS AND REPLACEMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY UPGRADES AND IMPROVEMENTS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY MONITORING AND EVALUATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY REPORTING AND DOCUMENTATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY ARCHIVING AND PRESERVATION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BACKUP AND RECOVERY.

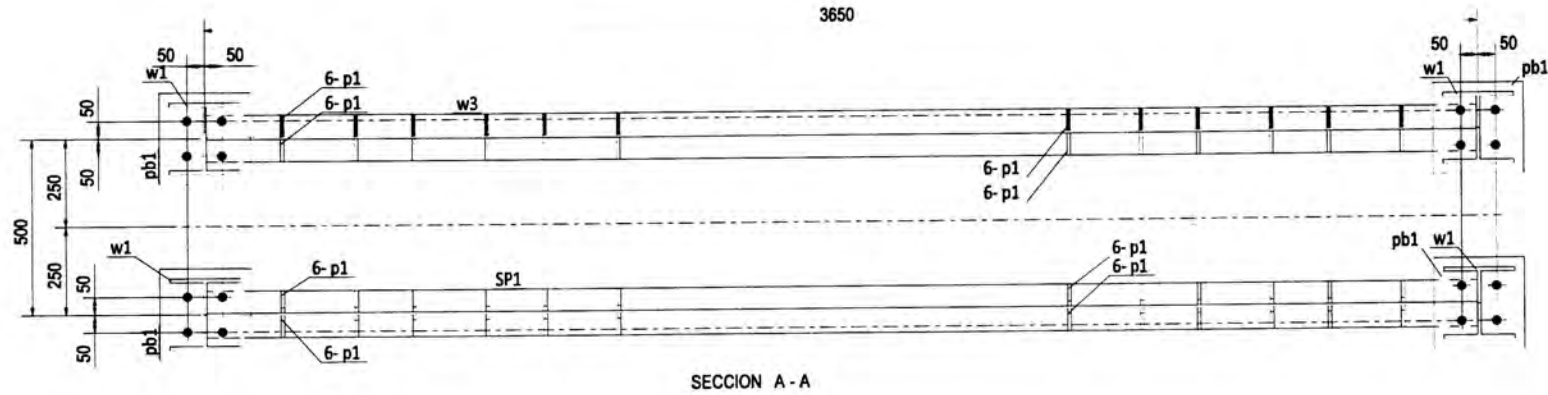
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MCP APPROVED: RRR	DATE: 07/08/10

DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL

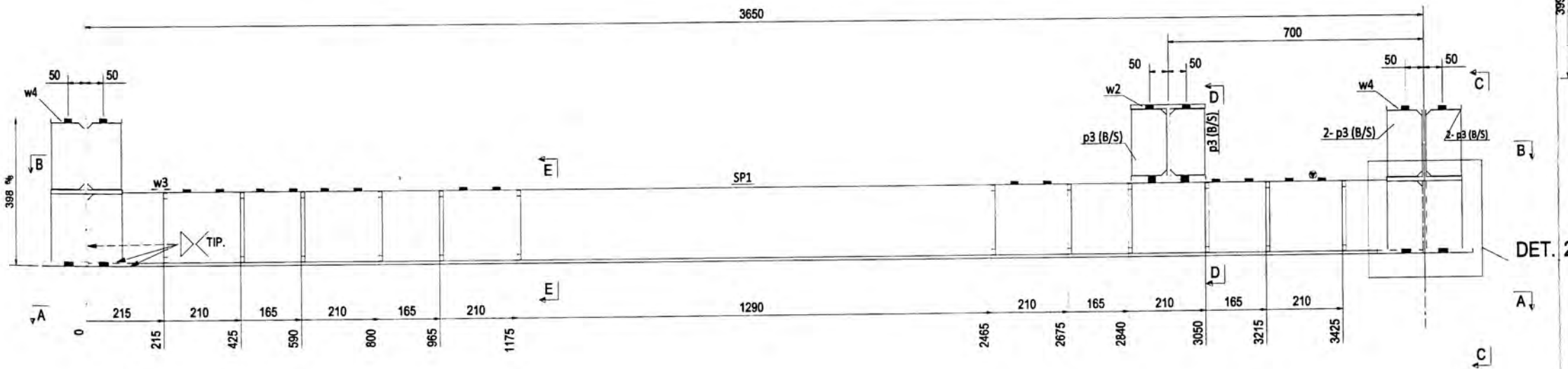
QUALITY CONTROL	SIGN	AkerSolutions
DISCIPLINE MANAGER NAME	SIGN & STAMP	
DOCUMENT CONTROL		
PROJECT: TOROMOCHO PROJECT		
AREA: 400-GENERAL ON-SITE FACILITIES	CAD NO: 560-400-CA-P-704.DGN	REVISION: 0
TITLE: PLANT PIPEBRIDGE SYSTEM OVERALL PIPEBRIDGE MODULE INDEX		
DWC NO: 400-CA-P-704		

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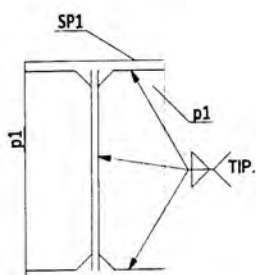
LOCALIZACION
SP1 1/C-A



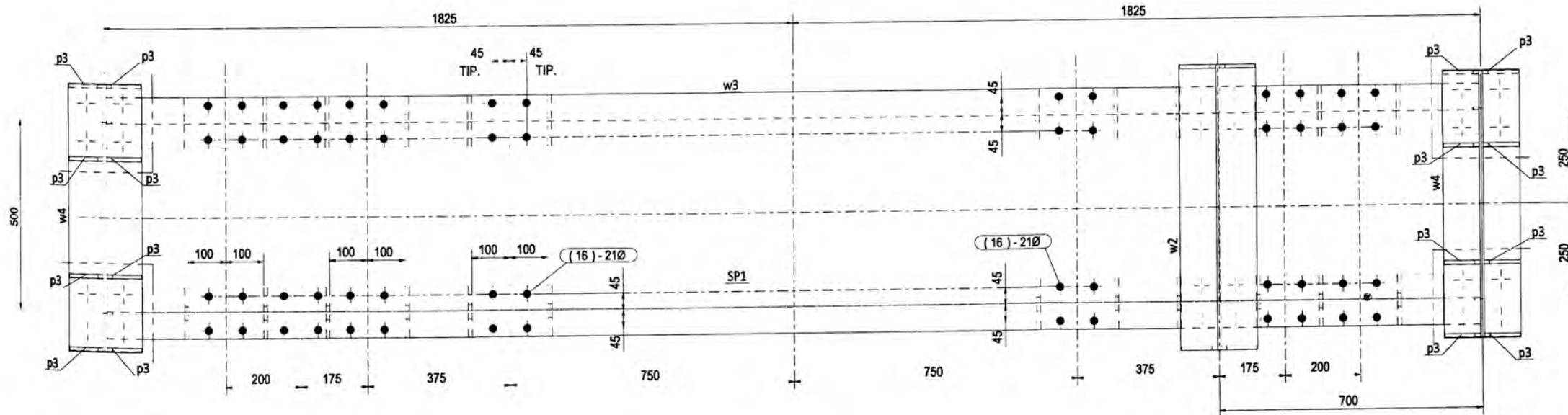
SECCION A - A



SECCION B - B



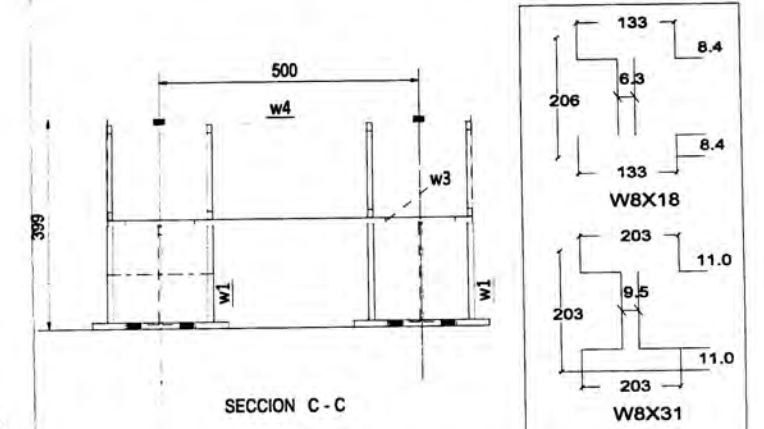
SECCION E - E
24 - LUG.TIP.



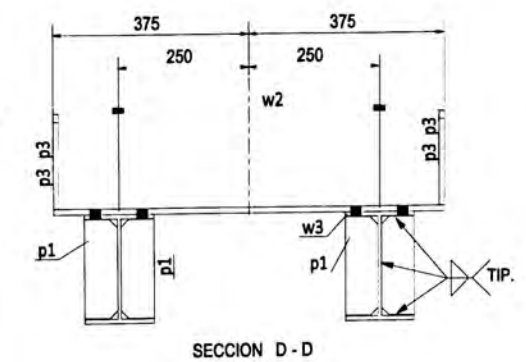
SECCION C - C

LISTA DE MATERIALES
Dimensiones en mm. / Pesos en Kg

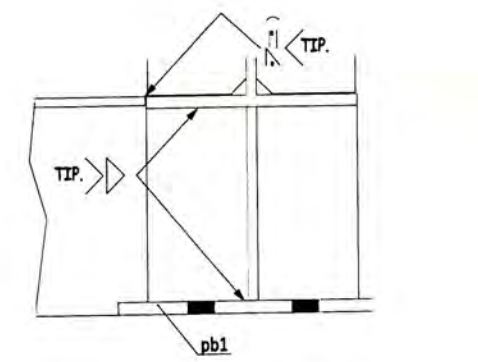
MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL
SP1	1	1	SOPORTE SP1	3640	A36		423.4	97.0
p1	48	48	PL10X64	188	A36		1	44.1
p3	20	20	PL10X95	179	A36		1	26.4
pb1	4	4	PL12X260	260	A36		6	25.5
w1	4	4	W8X31	184	A36		8	34.0
w2	1	1	W8X31	750	A36		35	34.7
w3	1	1	W8X18	3640	A36		97	97.0
w4	2	2	W8X31	700	A36		32	64.7
TIPO EST.:							423.4	97.0



SECCION D - D



SECCION E - E



DETALLE~ 2

ESTANDAR DE PROYECTO, S.I.C.
MATERIAL A36
SOLD. AWS 1/4" 66 mm
ELECTRODOS E7XX
AGUJEROS 13/16" Ø 21mm
PERNOS A325
MODELADO:
PLANO DE MONTAJE:
PLANO DE DISEÑO REF.:



PROYECTO : PIPE RACK
ESTRUCTURA : SOPORTE
CLIENTE : MINERA CHINALCO PERU S.A
O.C.:
O.T.: OT120 SEC.: 1 PLANO NO.: SP1 REV. NO.: A

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
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3				
2				
1	A	25/07/2011	B.G	A.G.S.

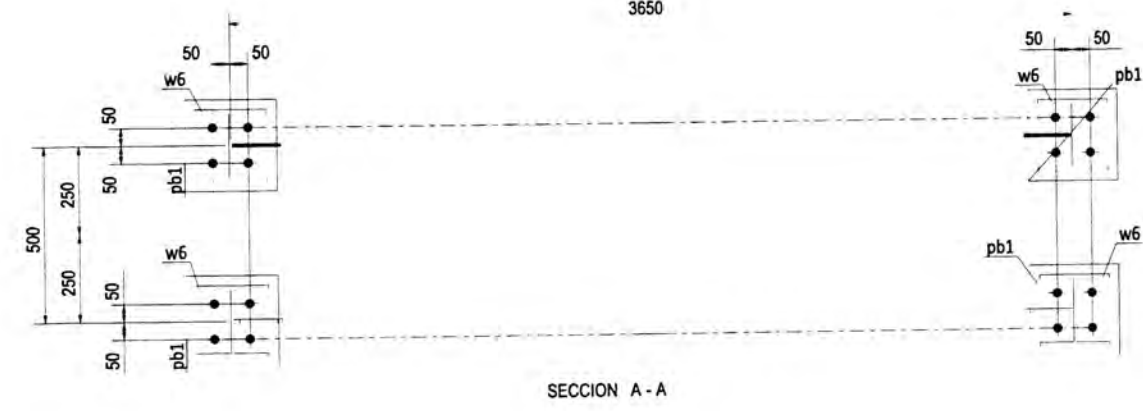
RECUBRIMIENTO
Sistema 0 Sin recubrimiento

LOCALIZACION
SP3 3/C-A

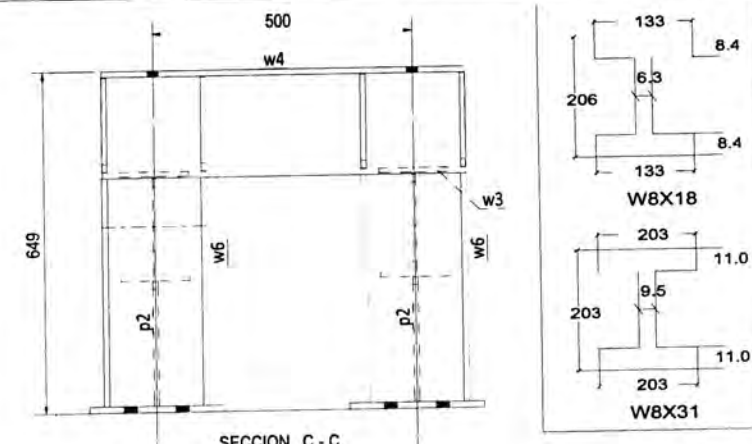
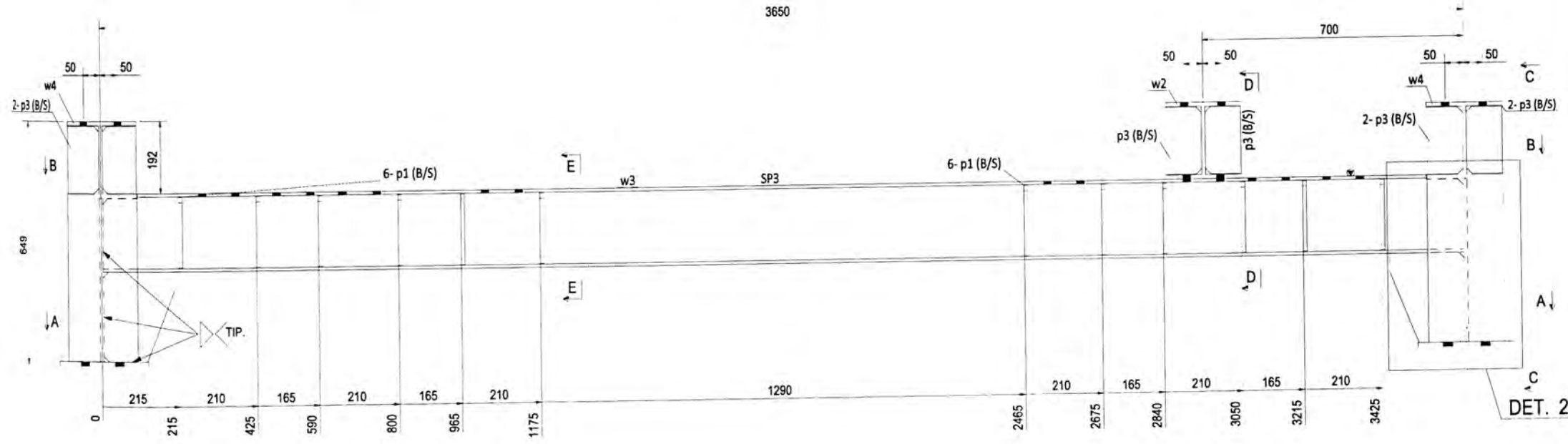
LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

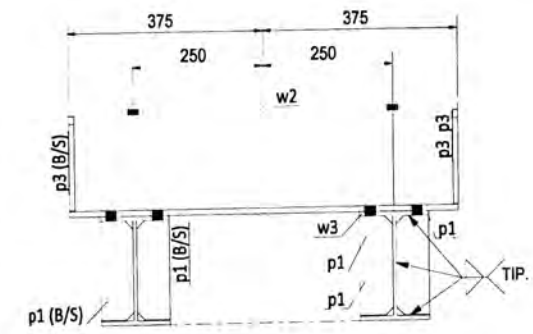
MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
SP3	1	1	SOPORTE SP3	3640	A36		482.1	97.0
p1	48	48	PL10X64	188	A36		1	44.1
p2	4	4	PL10X198	238	A36		3	12.5
p3	20	20	PL10X95	179	A36		1	26.4
pb1	4	4	PL12X260	260	A36		6	25.5
w2	1	1	W8X31	750	A36		35	34.7
w3	1	1	W8X18	3640	A36		97	97.0
w4	2	2	W8X31	700	A36		32	64.7
w6	4	4	W8X31	434	A36		20	80.2
TIPO EST.:								482.1



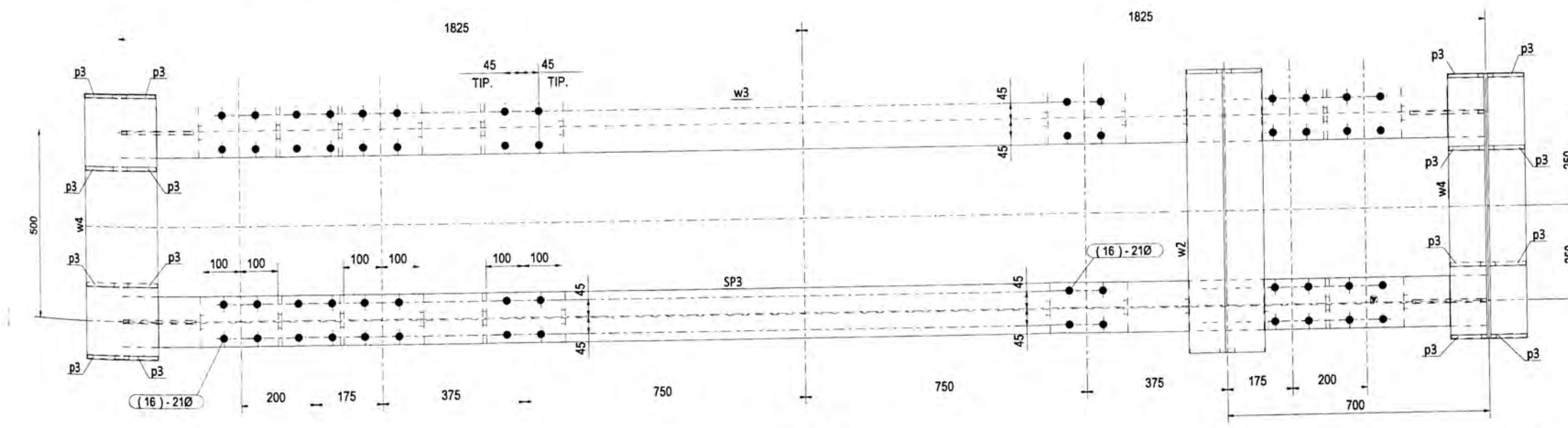
SECCION A - A



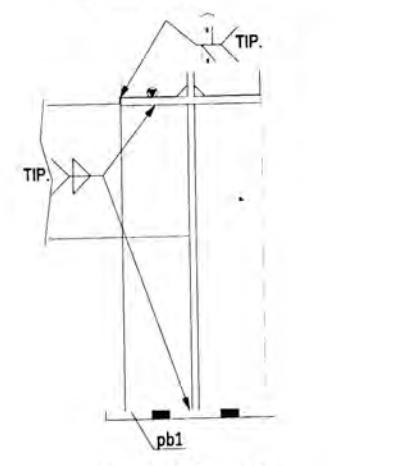
SECCION C - C



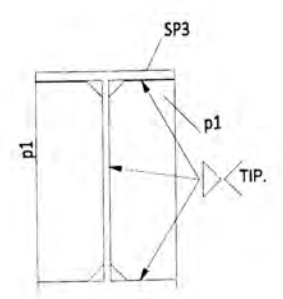
SECCION D - D



SECCION B - B



DETALLE~ 2



SECCION E - E
24 - LUG.TIP.

ESTANDAR DE PROYECTO, S.I.C.
MATERIAL A-36
SOLD. AWS 1/4" ó 6 mm
ELECTRODOS E7XX
AGUJEROS 13/16" ó 21mm
PERNOS A325



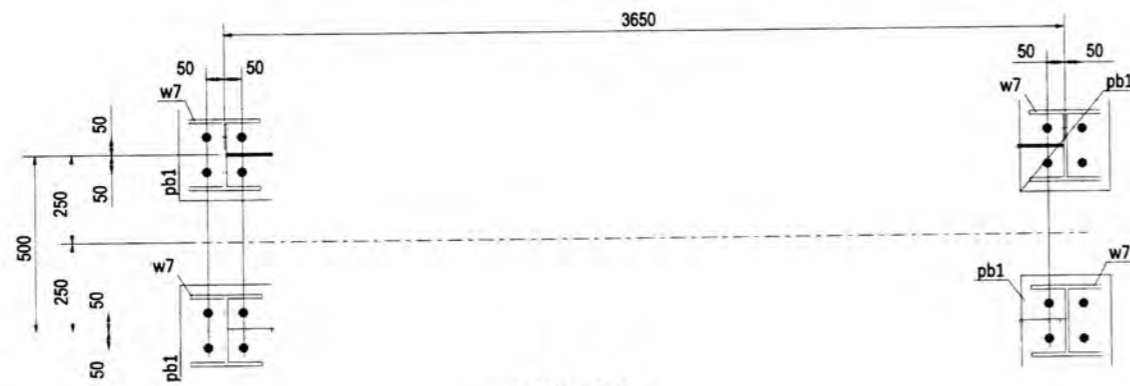
PROYECTO : PIPE RACK
ESTRUCTURA : SOPORTE
CLIENTE : MINERA CHINALCO PERU S.A

O.C.:
O.T.: OT120
SEC.: 1
PLANO NO.: SP3
REV. NO.: A

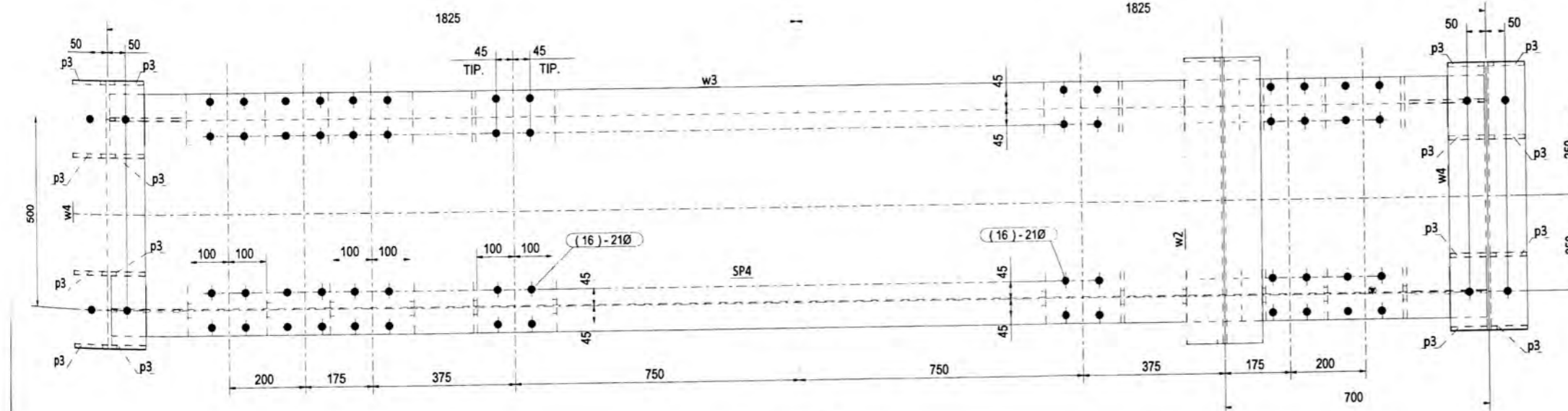
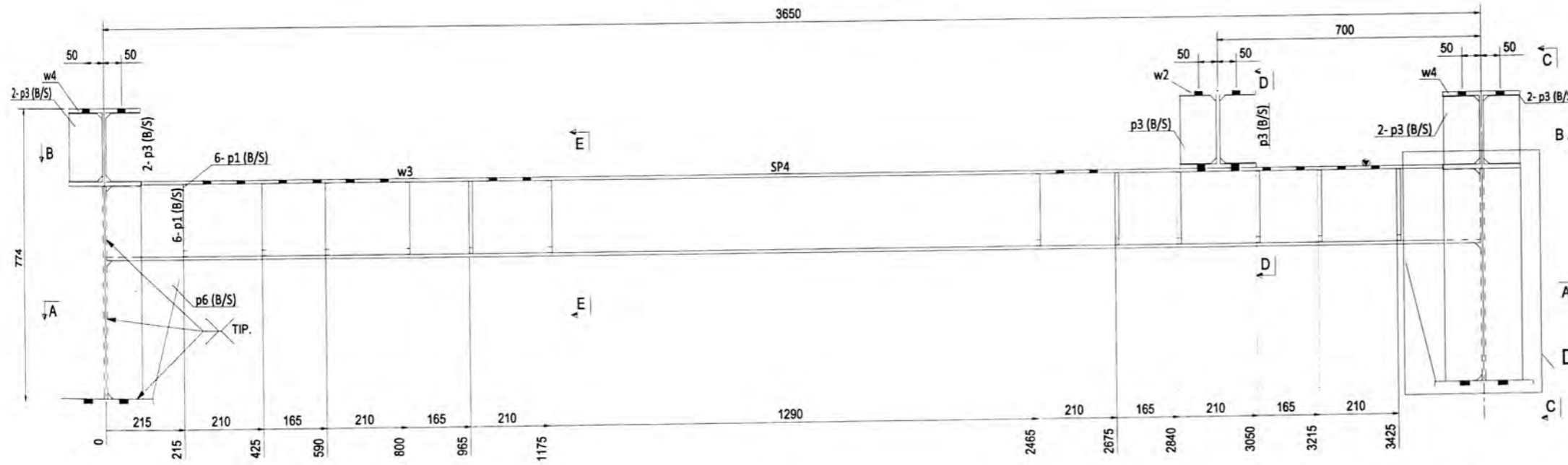
REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
1	EMITIDO PARA REVISION	19/09/2011	KAR	J.C.H.

RECUBRIMIENTO
Sistema 0 Sin recubrimiento

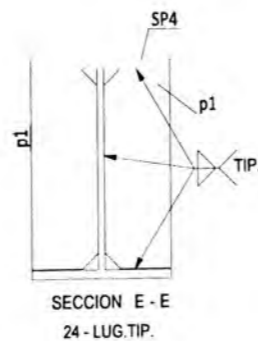
LOCALIZACION
SP4 4/C-A



SECCION A - A



SECCION B - B

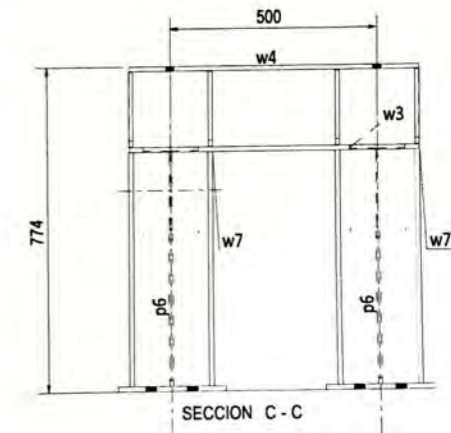


SECCION E - E
24 - LUG. TIP.

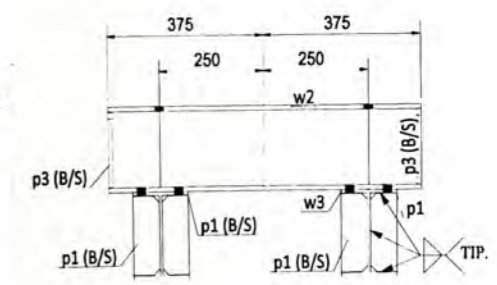
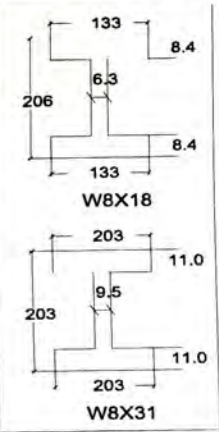
LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

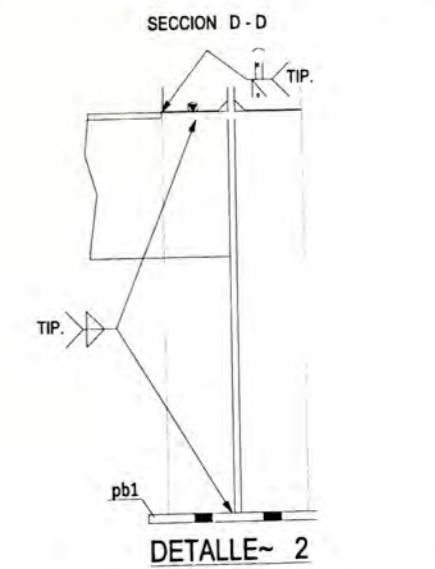
MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL.
		1	SOPORTE SP4				509.6	
SP4	1	1	W8X18	3640	A36		97.0	97.0
p1	48	48	PL10X64	188	A36		1	44.1
p3	20	20	PL10X95	179	A36		1	26.4
p6	4	4	PL9X198	363	A36		4	16.9
pb1	4	4	PL12X260	260	A36		6	25.5
w2	1	1	W8X31	750	A36		35	34.7
w3	1	1	W8X18	3640	A36		97	97.0
w4	2	2	W8X31	700	A36		32	64.7
w7	4	4	W8X31	559	A36		26	103.3
TIPO EST.:								509.6



SECCION C - C



DET. 2



DETALLE~ 2

RECUBRIMIENTO
Sistema 0 Sin recubrimiento

ESTANDAR DE PROYECTO, S.I.C.
MATERIAL A-36
SOLD. AWS 1/4" 66mm
ELECTRODOS E7XX
AGUJEROS 13/16" 621mm
PERNOS A325

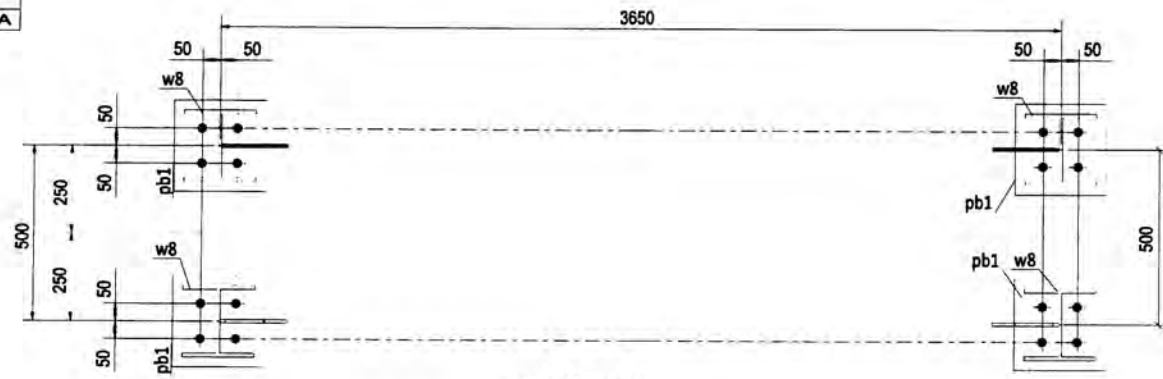


PROYECTO : PIPE RACK
ESTRUCTURA : SOPORTE
CLIENTE : MINERA CHINALCO PERU S.A

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
4				
3				
2				
1	A EMITIDO PARA REVISION	19/09/2011	KAR	J.C.H.

O.C.:
O.T.: OT120
SEC.: 1
PLANO NO.: SP4
REV. NO.: A

LOCALIZACION
SP5 5/C-A

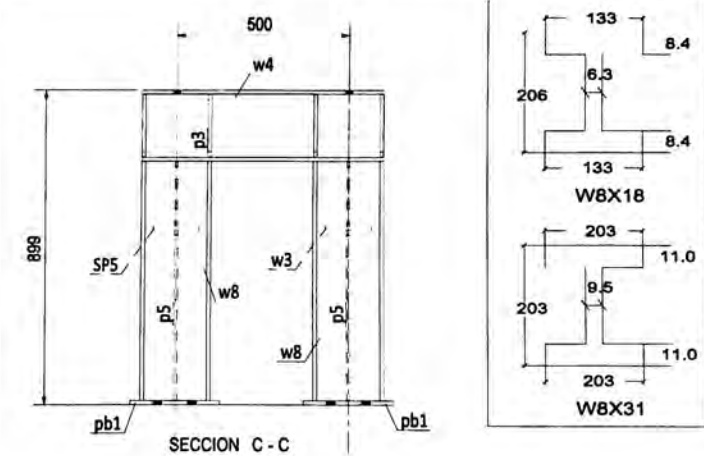
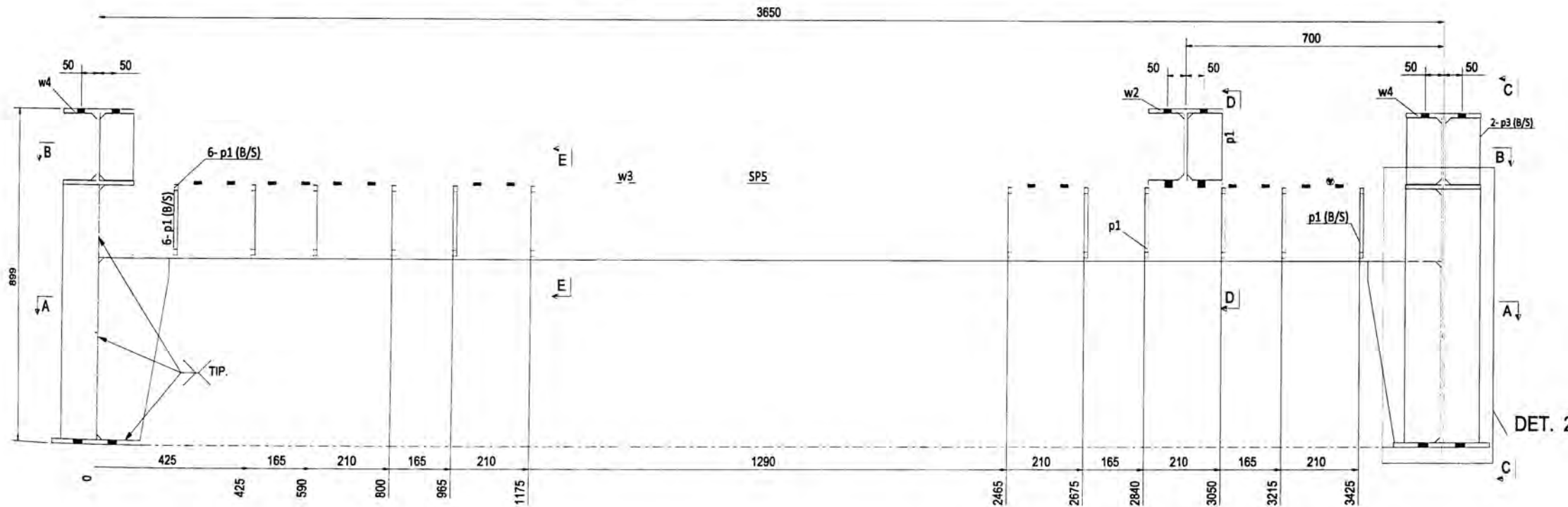


SECCION A - A

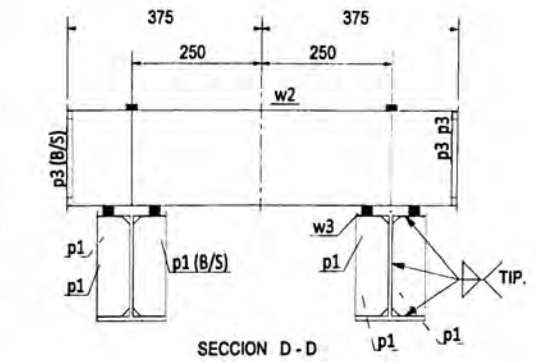
LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

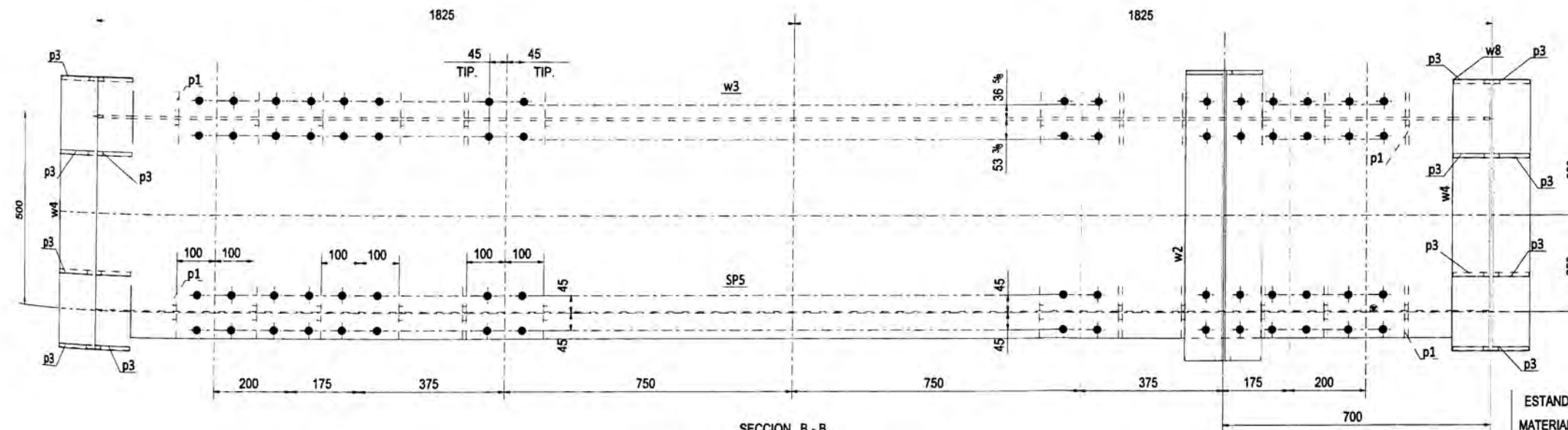
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SP5	1	1	SOPORTE SP5	3640	A36		538.4	97.0
p1	48	48	PL10X64	188	A36		1	44.1
p3	20	20	PL10X95	179	A36		1	26.4
p5	4	4	PL9X198	488	A36		6	22.6
pb1	4	4	PL12X260	260	A36		6	25.5
w2	1	1	W8X31	750	A36		35	34.7
w3	1	1	W8X18	3640	A36		97	97.0
w4	2	2	W8X31	700	A36		32	64.7
w8	4	4	W8X31	684	A36		32	126.4
TIPO EST.:								538.4



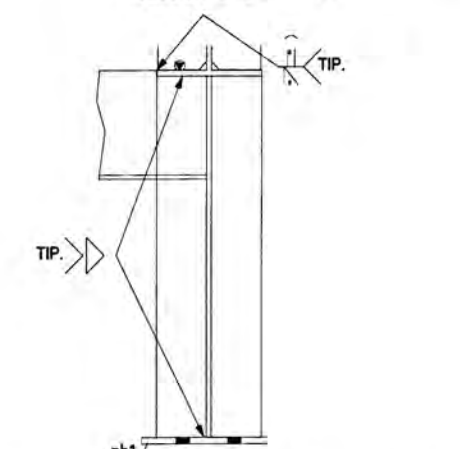
SECCION C - C



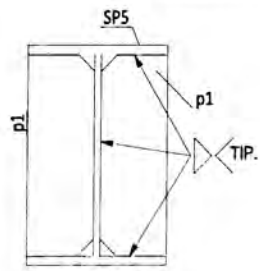
SECCION D - D



SECCION B - B



DETALLE-2



SECCION E - E
24 - LUG. TIP.

ESTANDAR DE PROYECTO, S.I.C.

MATERIAL	A36
SOLD. AWS	1/4" 66mm
ELECTRODOS	E7XX
AGUJEROS	13/16" 6 21mm
PERNOS	A325
MODELADO:	
PLANO DE MONTAJE:	
PLANO DE DISEÑO REF.:	

IMECON
INSTALACIONES MECANICAS ELECTRICAS Y CIVILES
AV. MAQUINARIAS 2977 LIMA - PERU

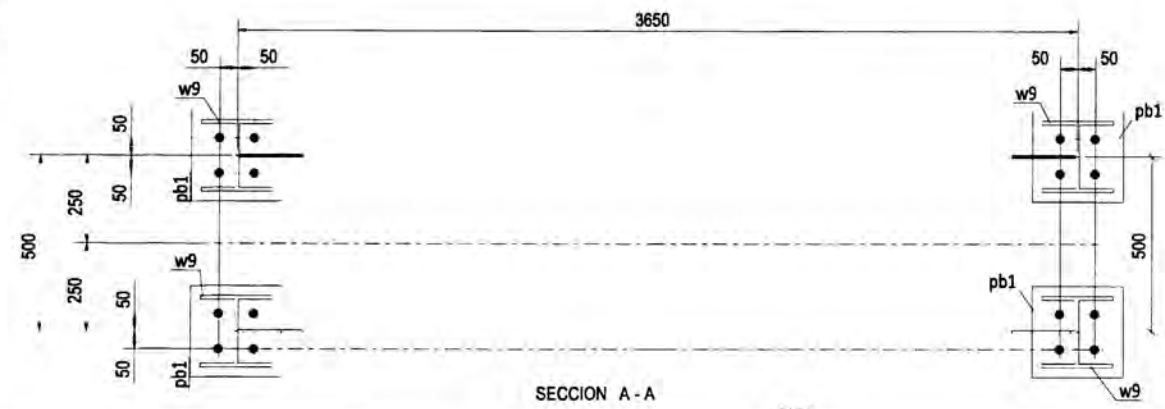
PROYECTO : PIPE RACK
ESTRUCTURA : SOPORTE
CLIENTE : MINERA CHINALCO PERU S.A

O.C.:
O.T.: OT120
SEC.: 1
PLANO NO.: SP5
REV. NO.: A

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
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3				
2				
1	A EMITIDO PARA REVISION	19/09/2011	KAR	J.C.H.

RECUBRIMIENTO
Sin recubrimiento

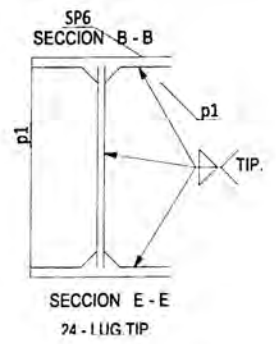
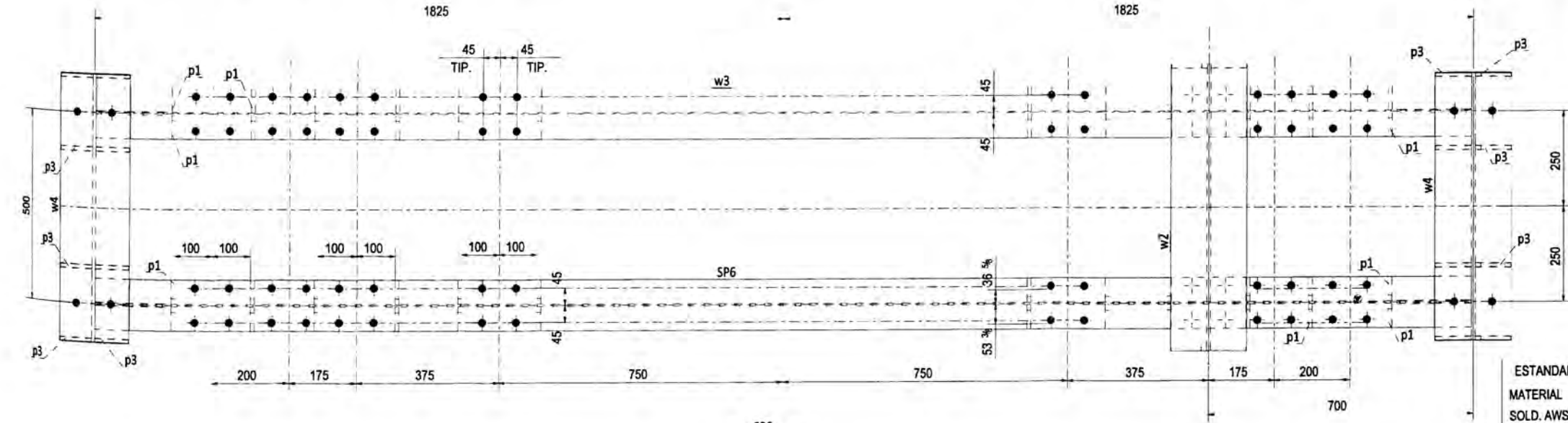
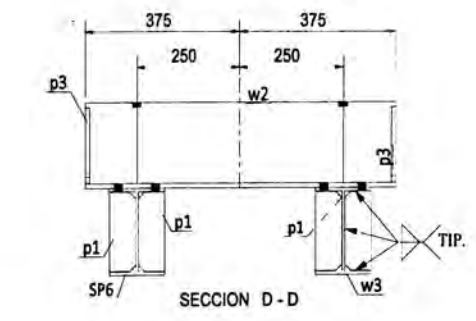
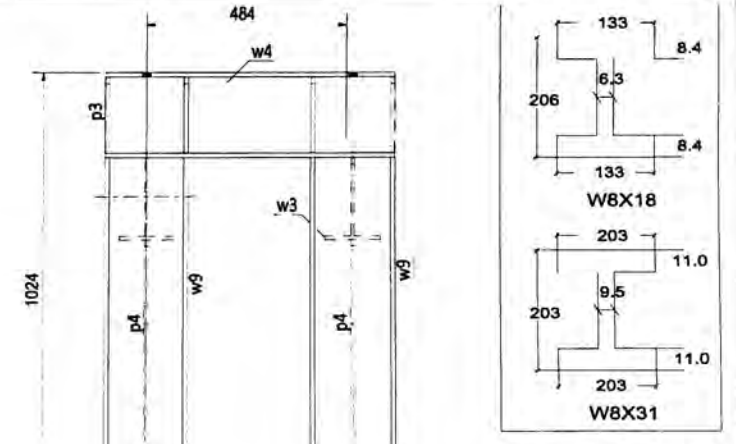
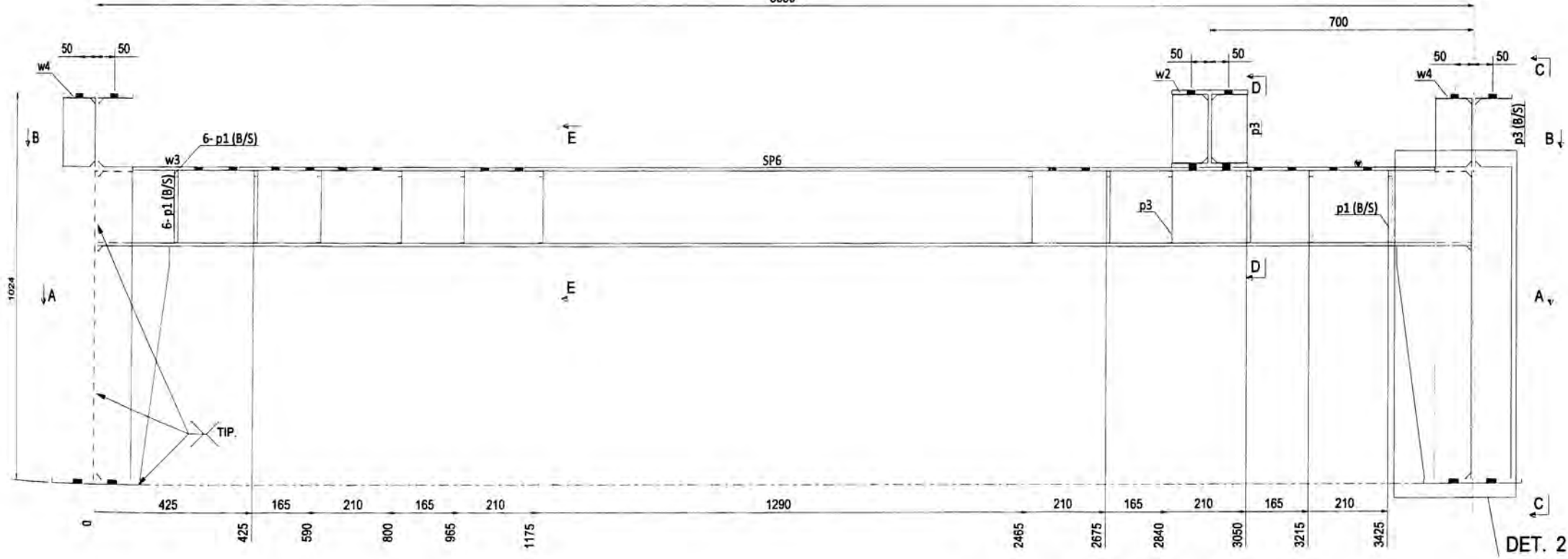
LOCALIZACION
SP6 6/C-A



LISTA DE MATERIALES

Dimensiones en mm. / Pesos en Kg

MARCA	C.U.	C.T.	DESCRIPCION	LONG.	MATERIAL	NOTAS	P. UNIT.	P. TOTAL
			SOPORTE SP6					
SP6	1	1	W8X18	3640	A36		567.2	97.0
p1	48	48	PL10X64	188	A36		1	44.1
p3	20	20	PL10X95	179	A36		1	26.4
p4	4	4	PL9X198	613	A36		7	28.2
pb1	4	4	PL12X260	260	A36		6	25.5
w2	1	1	W8X31	750	A36		35	34.7
w3	1	1	W8X18	3640	A36		97	97.0
w4	2	2	W8X31	700	A36		32	64.7
w9	4	4	W8X31	809	A36		37	149.5
TIPO EST.:								567.2



DET. 2

DETALLE- 2

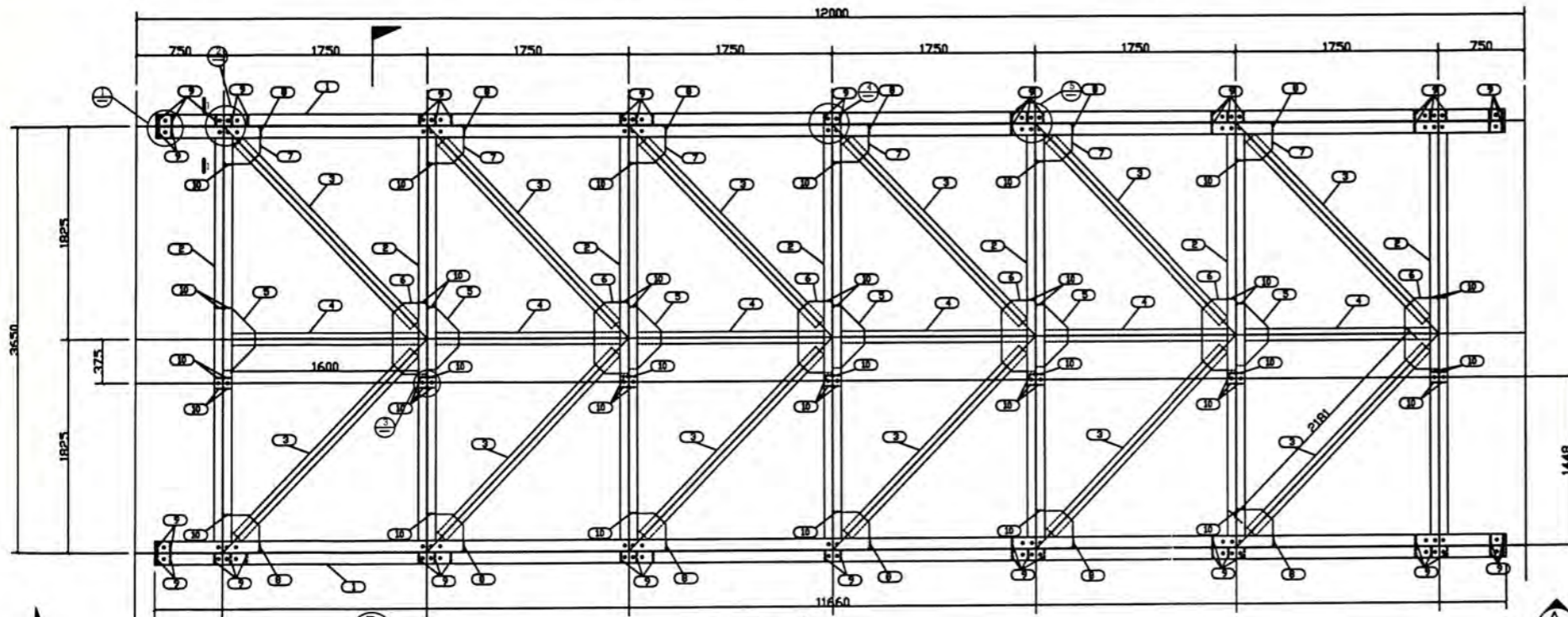
ESTANDAR DE PROYECTO, S.I.C.
MATERIAL A36
SOLD. AWS 1/4" 66mm
ELECTRODOS E7XX
AGUJEROS 13/16" 621mm
PERNOS A325
MODELADO:
PLANO DE MONTAJE:
PLANO DE DISEÑO REF.:



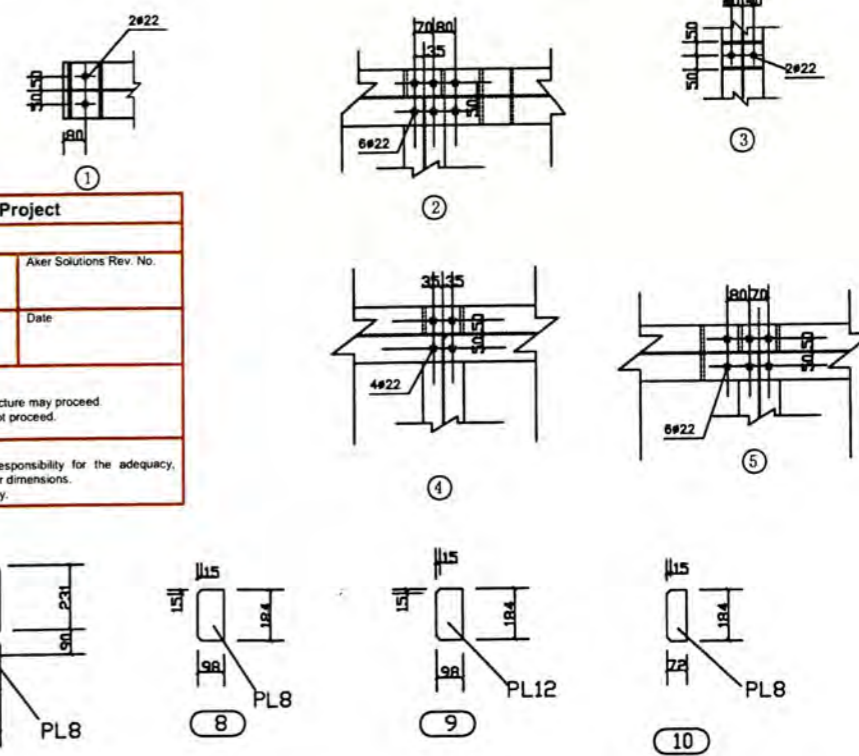
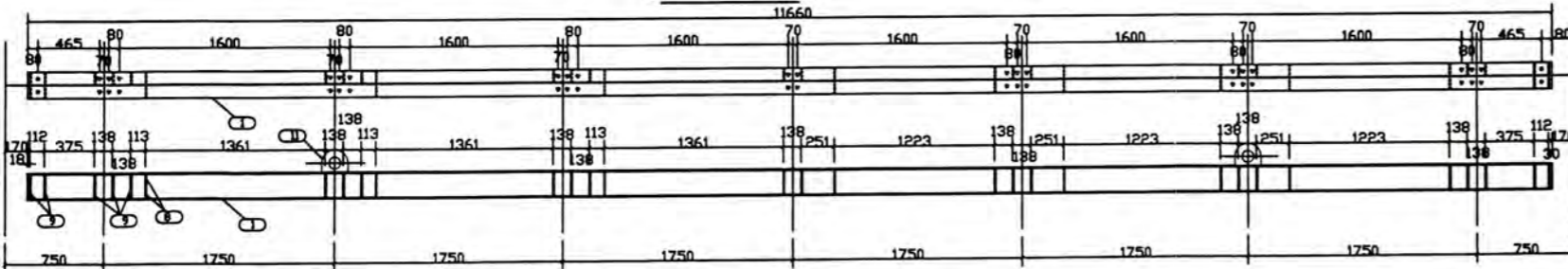
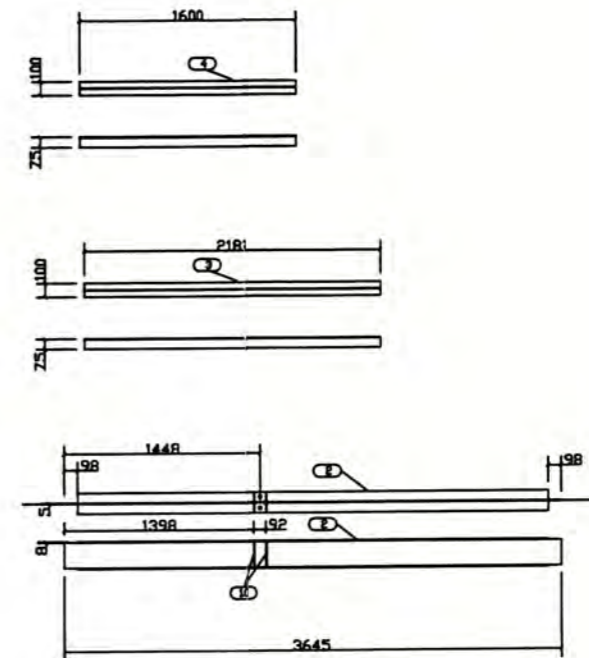
PROYECTO : PIPE RACK
ESTRUCTURA : SOPORTE
CLIENTE : MINERA CHINALCO PERU S.A
O.C.:
O.T.: OT120 SEC.: 1 PLANO NO.: SP6 REV. NO.: A

REV.	DESCRIPCION	FECHA	DIBUJO	REVISO
1	EMITIDO PARA REVISION	19/09/2011	KAR	J.C.H.
2				
3				
4				

RECUBRIMIENTO
Sistema 0 Sin recubrimiento



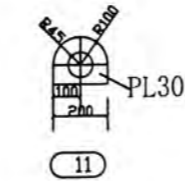
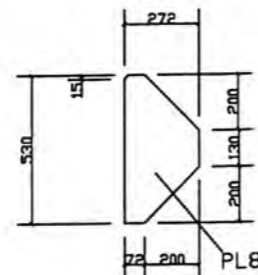
B1-01



AkerSolutions				Toromocho Project			
Purchase Order No.		Document Type		Sequential No.		Aker Solutions Rev. No.	
Status Code		Reviewer		Date			
Status Codes: 1. Reviewed and accepted as final certified. Manufacture may proceed. 2. Reviewed and accepted as noted. Submit certified drawings. Manufacture may proceed. 3. Reviewed and returned. Revise and resubmit. Manufacture should not proceed. 4. Review not required. For information only. Reviewed for general dimensions only. Review of these documents does not relieve the vendor of full responsibility for the adequacy, correctness, accuracy and/or completeness of calculations, details and/or dimensions. Aker Solutions does not accept liability for their completeness or accuracy.							

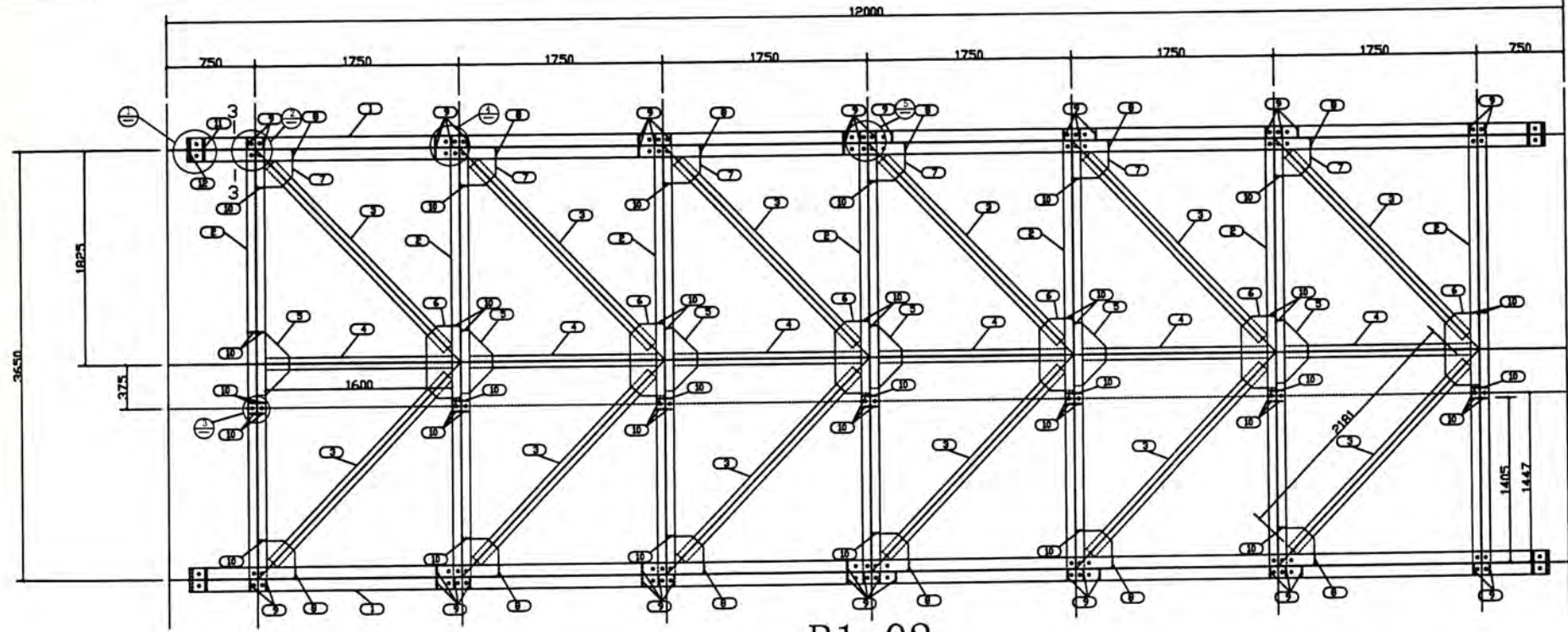
MATERIAL LIST

MEMBER NO.	B1-01	QTY	38	UNIT WT	2180.79	TOTAL WT	82870.02
PART NO.	SPECS	L	W DR	WT/m	QTY	WEIGHT kg	TESTURE
1	WH200*200*5*8	11660	32.34	2	754.17	Q345B	
2	WH200*150*5*8	3645	26.06	7	664.92	Q345B	
3	WT74*100*6*9	2181	10.3	12	269.57	Q345B	
4	WT74*100*6*9	1600	10.3	6	98.88	Q345B	
5	8	272	530	6	54.32	Q345B	
6	8	294	610	6	67.58	Q345B	
7	8	312	321	12	75.47	Q345B	
8	8	98	184	12	13.59	Q345B	
9	12	98	184	62	105.32	Q345B	
10	8	72	184	54	44.93	Q345B	
10	30	200	170	4	32.04	Q345B	
TOTAL					2180.79		

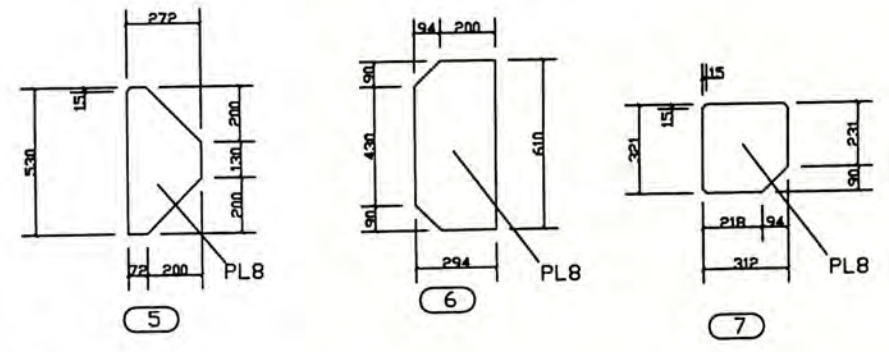
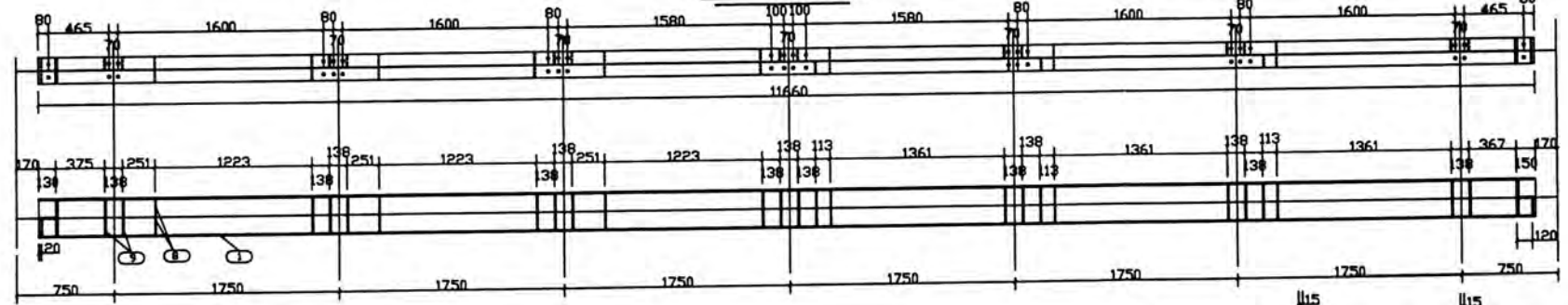
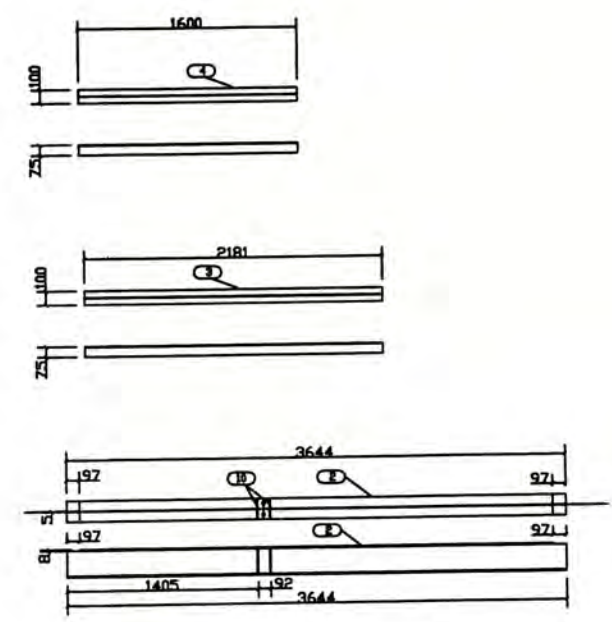


Note: Welds which undefined are 6mm. Full Welding.

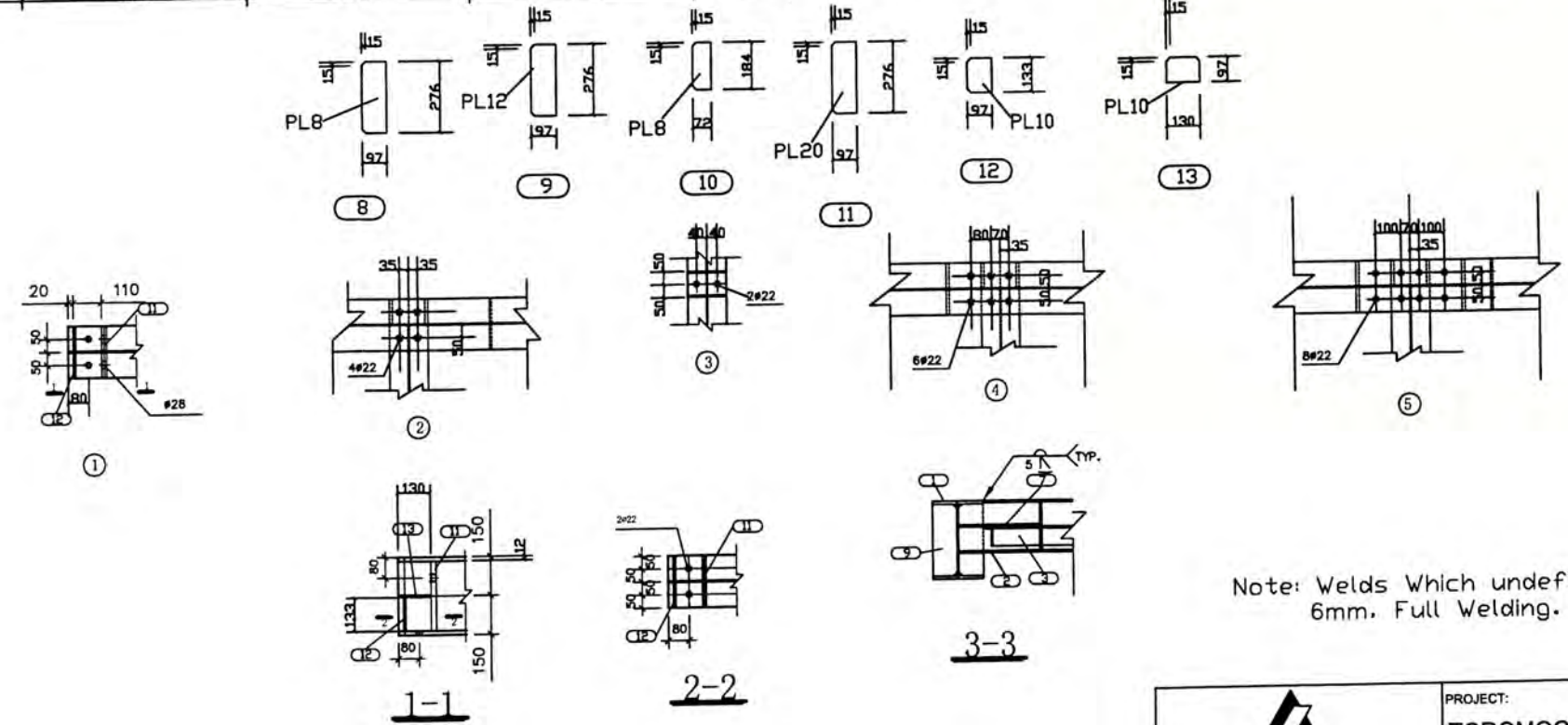
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Supply of Pipebridges Structure Steel		AREA: 400-INFRASTRUCTURE	
DESIGNED BY:		TITLE: PIPEBRIDGES TYPE B1 MODULE PLANS & SECTIONS	
CHECKED BY:		Drawing No.:	
APPROVED BY:		400-DW-S-E103-01	
REFERENCE DRAWING: 400-DW-S-103	Aker Doc.Type B040	CONTRACT No. R05323-S-003	Revision 1
1:1 A3	CGW	SIGN	DATE



B1-02

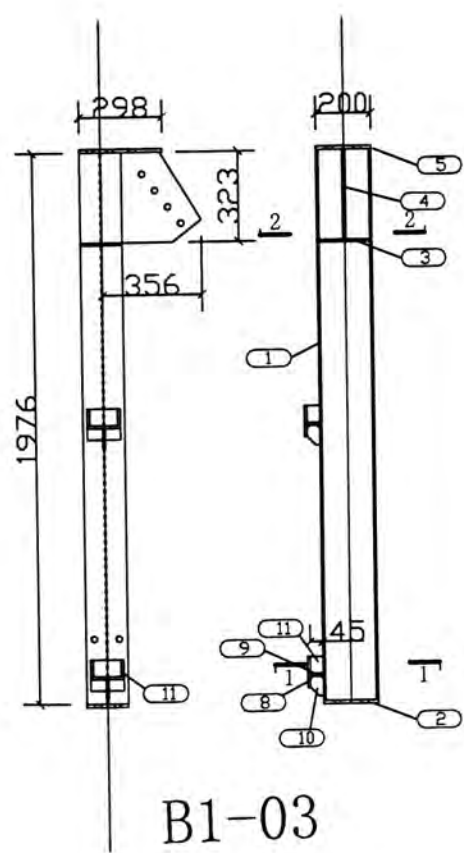


MATERIAL LIST							
MEMBER NO.	B1-02	QTY	38	UNIT WT	2644.94	TOTAL WT	100507.72
PART NO.	SPECS	L	W DR	WT/m	QTY	WEIGHT	TESTURE
1	WH300*200*6*12	11660		50.67	2	1181.62	Q345B
2	WH200*150*5*8	3644		26.06	7	664.78	Q345B
3	WT74*100*6*9	2181		10.3	12	269.57	Q345B
4	WT74*100*6*9	1600		10.3	6	98.88	Q345B
5	8	272		530	6	54.32	Q345B
6	8	294		610	6	67.58	Q345B
7	8	312		321	12	75.47	Q345B
8	8	97		276	12	20.39	Q345B
9	12	97		276	46	117.20	Q345B
10	8	72		184	54	44.93	Q345B
11	20	97		276	8	33.63	Q345B
12	10	97		133	8	8.10	Q345B
13	10	130		97	8	7.92	Q345B
TOTAL						2644.94	

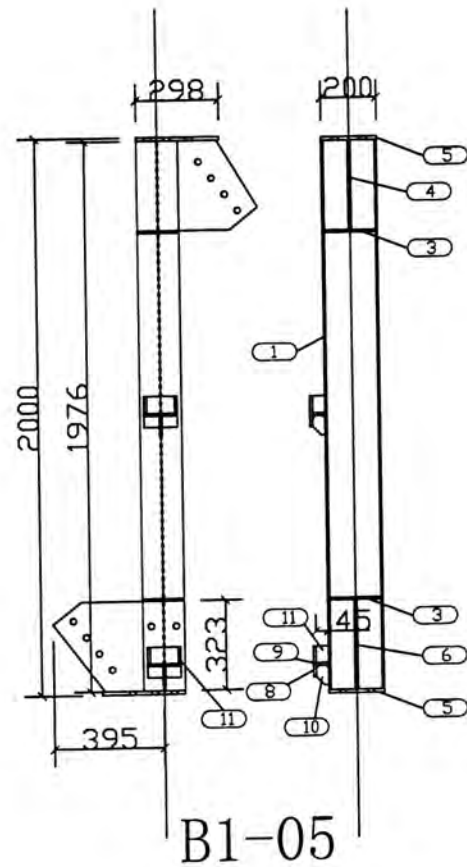


Note: Welds which undefined are 6mm. Full Welding.

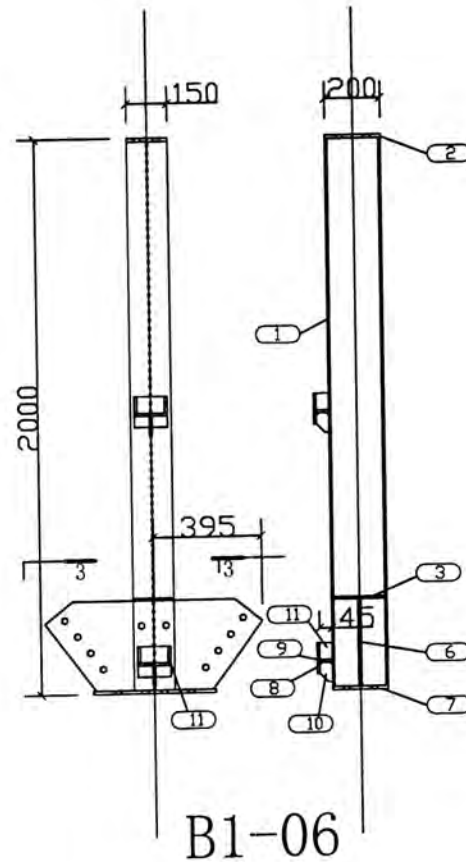
		PROJECT: TOROMOCHO PROJECT	
		AREA: 400-INFRASTRUCTURE	
Supply of Pipebridges Structure Steel		CGW	TITLE: PIPEBRIDGES TYPE B1 MODULE PLANS A SECTIONS
DESIGNED BY:	CHECKED BY:	APPROVED BY:	Drawing No.: 400-DW-S-E103-02
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REFERENCE DRAWING: 400-DW-S-103	Awar Doc.Type	B040	
REV	DESCRIPTION	DATE	SIGN



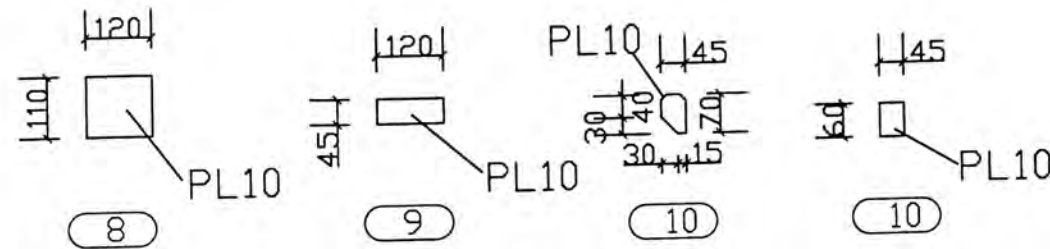
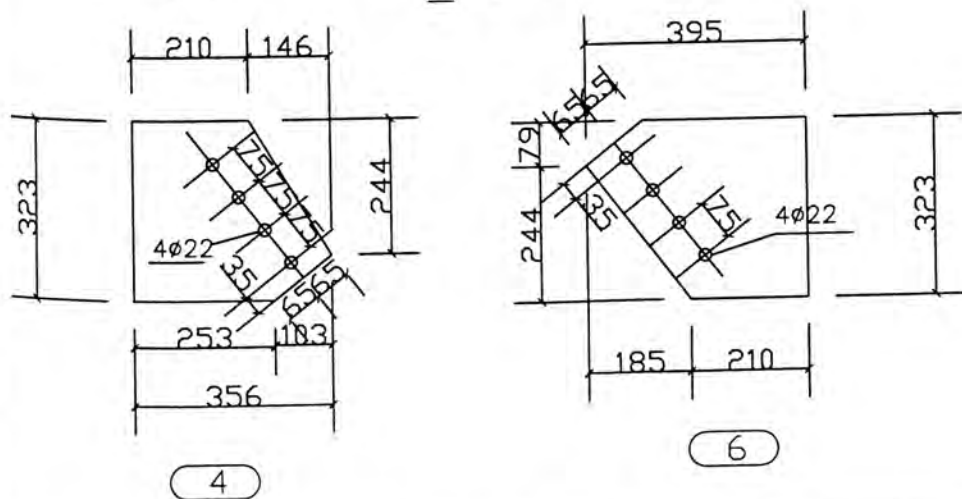
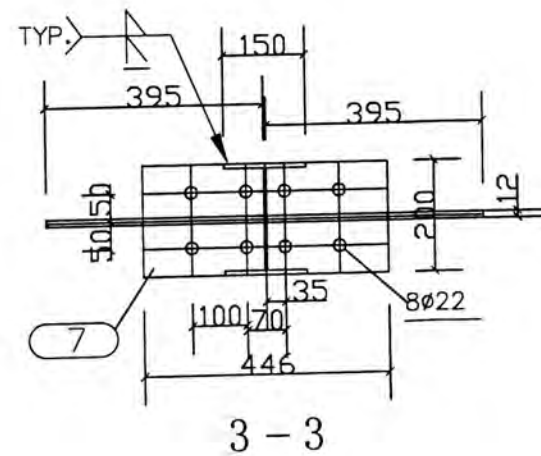
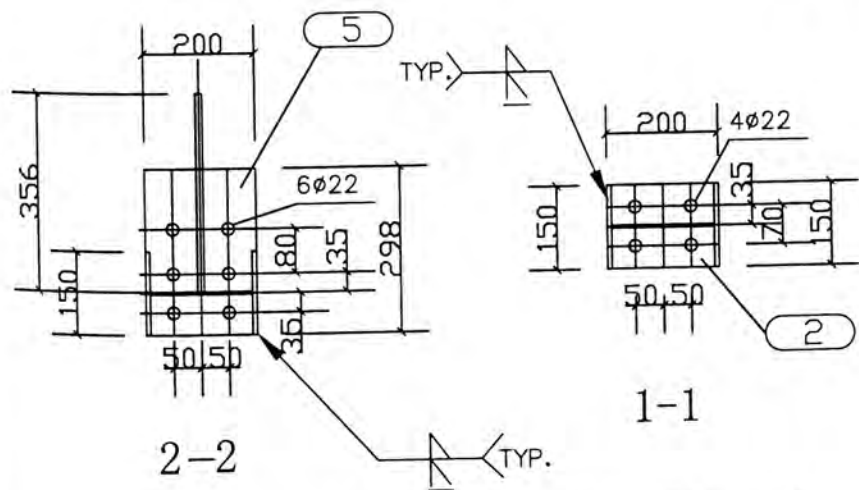
B1-03



B1-05



B1-06



Note: Welds Which undefined are 6mm, Full Welding.

MATERIAL LIST							
MEMBER NO.	B1-03	QTY	152	UNITWT	76.68	TOTAL WT	
11655.36	SPECS		L	V DR WT/m	QTY	WEIGHT	TESTURE
1	WH200*150*5*8	1976	26.06	1	51.49	Q345B	
2	12	200	150	1	2.83	Q345B	
3	8	72	184	2	1.66	Q345B	
4	12	356	323	1	10.83	Q345B	
5	12	200	298	1	5.61	Q345B	
8	10	120	110	2	2.07	Q345B	
9	10	120	45	2	0.85	Q345B	
10	10	45	70	2	0.49	Q345B	
11	10	45	60	4	0.85	Q345B	
TOTAL					76.68		

MATERIAL LIST							
MEMBER NO.	B1-05	QTY	304	UNITWT	93.15	TOTAL WT	
28317.60	SPECS		L	V DR WT/m	QTY	WEIGHT	TESTURE
1	WH200*150*5*8	1976	26.06	1	51.49	Q345B	
3	8	72	184	4	3.33	Q345B	
4	12	356	323	1	10.83	Q345B	
5	12	200	298	2	11.22	Q345B	
6	12	395	323	1	12.02	Q345B	
8	10	120	110	2	2.07	Q345B	
9	10	120	45	2	0.85	Q345B	
10	10	45	70	2	0.49	Q345B	
11	10	45	60	4	0.85	Q345B	
TOTAL					93.15		

MATERIAL LIST							
MEMBER NO.	B1-06	QTY	76	UNITWT	92.68	TOTAL WT	
7043.68	SPECS		L	V DR WT/m	QTY	WEIGHT	TESTURE
1	WH200*150*5*8	1976	26.06	1	51.49	Q345B	
2	12	200	150	1	2.83	Q345B	
3	8	72	184	2	1.66	Q345B	
6	12	395	323	2	24.04	Q345B	
7	12	446	200	2	8.40	Q345B	
8	10	120	110	2	2.07	Q345B	
9	10	120	45	2	0.85	Q345B	
10	10	45	70	2	0.49	Q345B	
11	10	45	60	4	0.85	Q345B	
TOTAL					92.68		

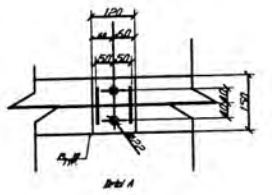
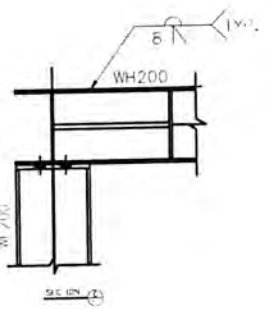
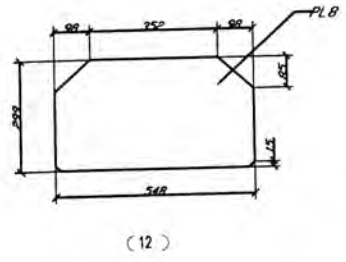
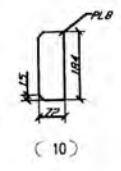
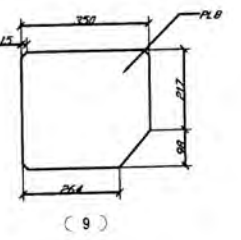
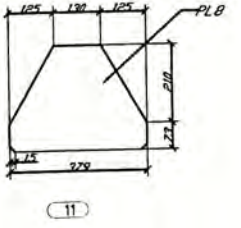
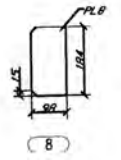
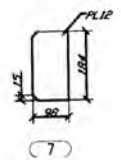
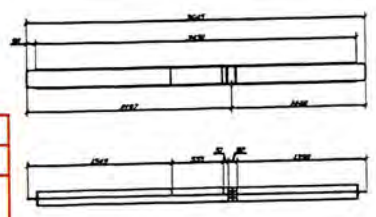
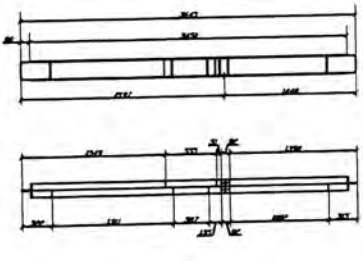
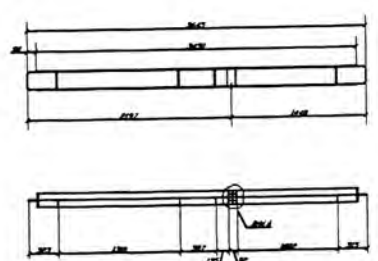
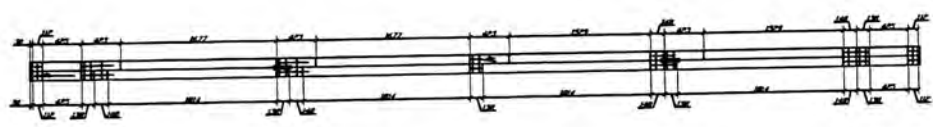
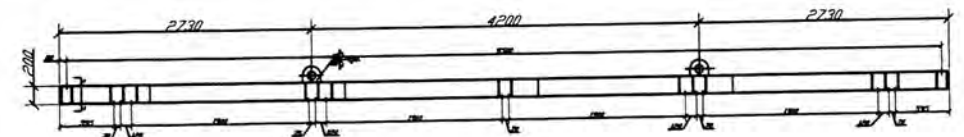
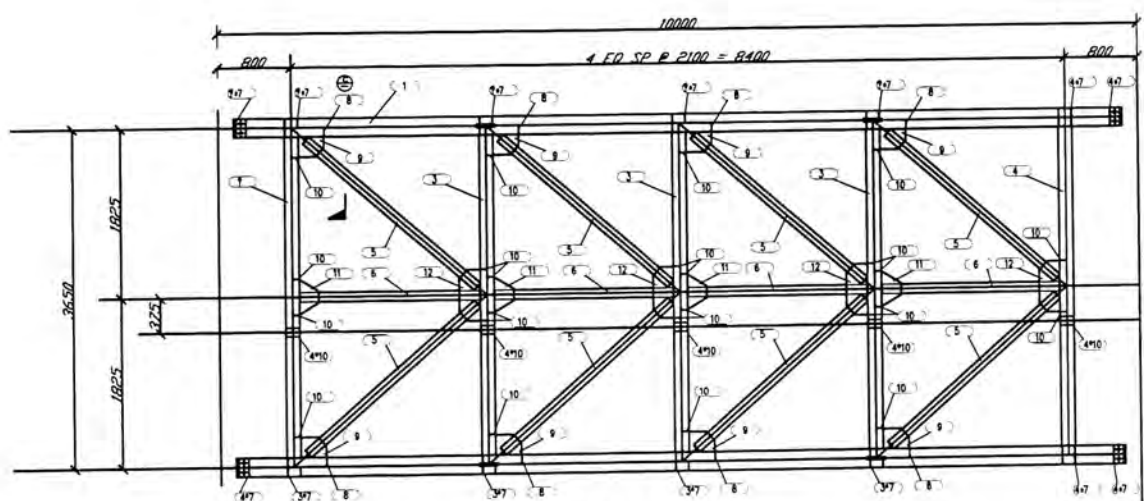
PROJECT: TOROMOCHO PROJECT
 AREA: 400-INFRASTRUCTURE
 TITLE: PIPEBRIDGES TYPE B1 MODULE PLANS & SECTIONS
 Drawing No.: 400-S-DW-E103-04

CHINALCO
 长铝建
 Supply of Pipebridges Structure Steel CGW

CONTRACT No. R05323-S-003
 Revision
 REFERENCE DRAWING: 400-DW-S-103
 Alter Doc.Type B040

DESIGNED BY:	SIGN	DATE
CHECKED BY:		
APPROVED BY:		

REV	DESCRIPTION	DATE	SIGN



Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 5 is Total Quantity.
2. All of Welds undefined are 6mm, Full-Length Welding.

MATERIAL LIST

PART NO.	SPECS	L/A	W OR W/M	WT	QTY	TOTAL WT	MATERIAL
1	WH200*200*5*8	9.660	32.30	312.02	2	624.04	Q345B
2	WH200*150*5*8	3.645	26.10	95.13	2	190.27	Q345B
3	WH200*150*5*8	3.645	26.10	95.13	6	570.81	Q345B
4	WH200*150*5*8	3.645	26.10	95.13	2	190.27	Q345B
5	TM74*100*6*9	2.429	10.30	25.02	16	400.30	Q345B
6	TM74*100*6*9	1.930	10.30	19.88	8	159.03	Q345B
7	184*98*12	0.018	94.20	1.70	52	88.17	Q345B
8	184*98*8	0.018	62.80	1.13	8	9.06	Q345B
9	350*315*8	0.110	62.80	6.92	16	110.78	Q345B
10	72*184*8	0.013	62.80	0.83	84	69.89	Q345B
11	379*283*8	0.081	62.80	5.09	8	40.69	Q345B
12	548*299*8	0.164	62.80	10.29	8	82.32	Q345B

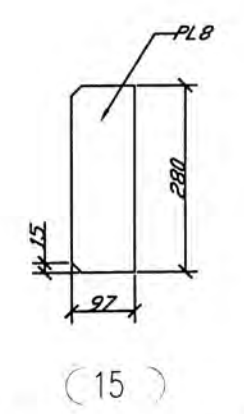
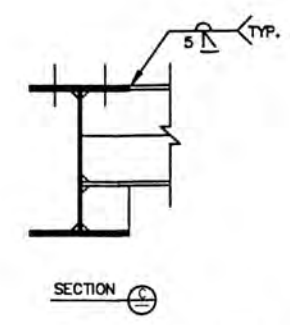
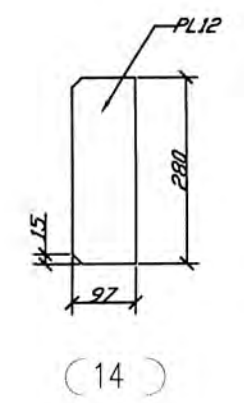
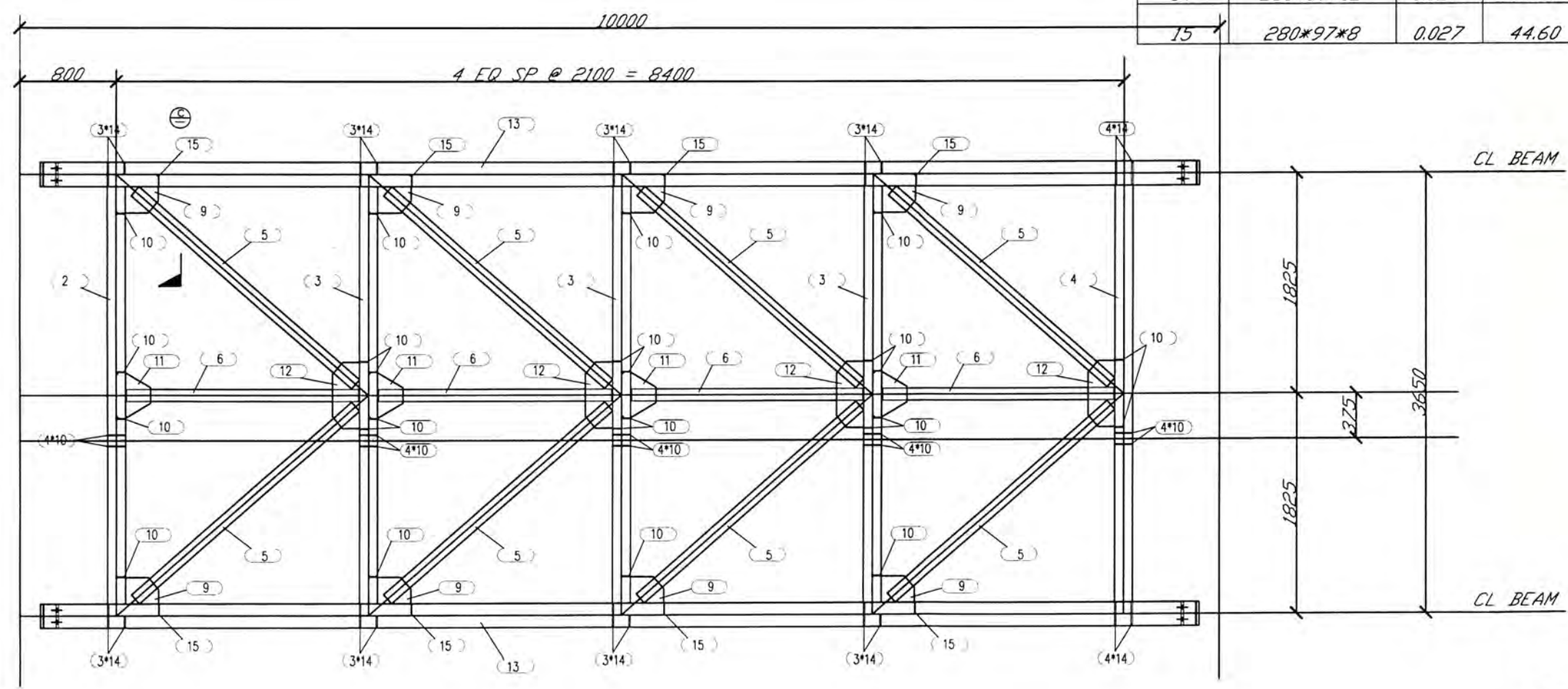
Toromocho Project			
Order No.	Equipment Tag	Sequential No.	Aker Solutions Rev. No.
Reviewer	Date		

Notes:
1. If these documents are accepted as final certified, Manufacture may proceed.
2. If these documents are accepted as noted, Manufacture may proceed.
3. If these documents are not returned, Revise and resubmit. Manufacture should not proceed.
4. If these documents are not returned, For information only.
5. For general dimensions only.
6. If these documents does not relieve the vendor of full responsibility for the adequacy, accuracy and/or completeness of calculations, details and/or dimensions.
7. Aker Solutions does not accept liability for their completeness or accuracy.

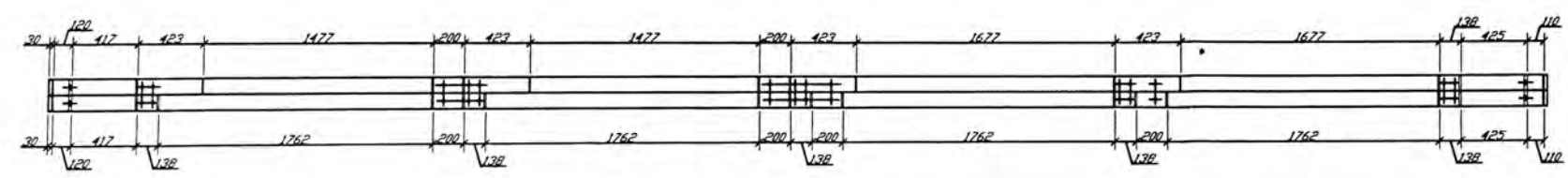
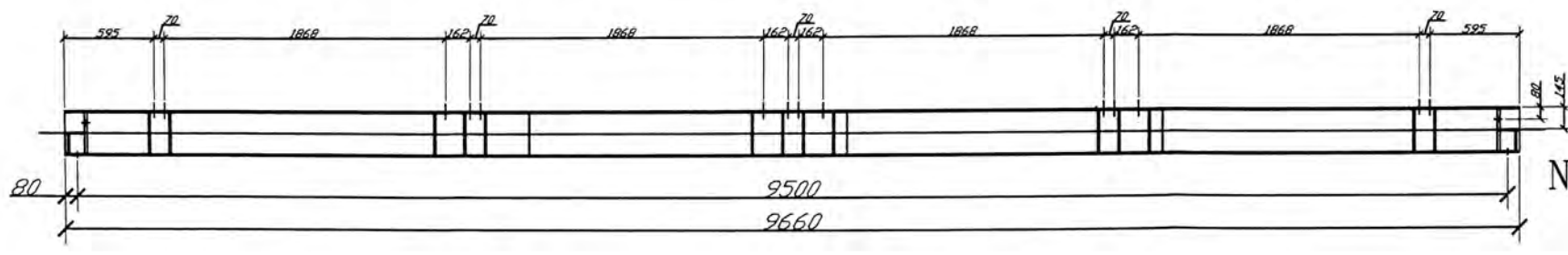
DESIGNED BY:		SIGN		DATE	
CHECKED BY:		SIGN		DATE	
APPROVED BY:		SIGN		DATE	
REV.	DESCRIPTION	DATE	SIGN		

CHINALCO 长铝建		PROJECT: TOROMOCHO PROJECT	
Supply of Pipebridges Structure Steel		AREA: 400-INFRASTRUCTURE	
Scale: 1:1	Sheet Size: A3	CONTRACT No: R05323-S-003	Revision: B040
REFERENCE DRAWING: 400-DW-S-104		Drawing No: 400-DW-S-E104-01	


MATERIAL LIST							
PART NO.	SPECS	L/A	W DR W/M	WT	QTY	TOTAL WT	MATERIAL
13	WH300*200*6*10	9.660	44.60	430.84	2	861.67	Q345B
14	280*97*12	0.027	94.20	2.56	42	107.46	Q345B
15	280*97*8	0.027	44.60	1.21	8	9.69	Q345B



B2-2

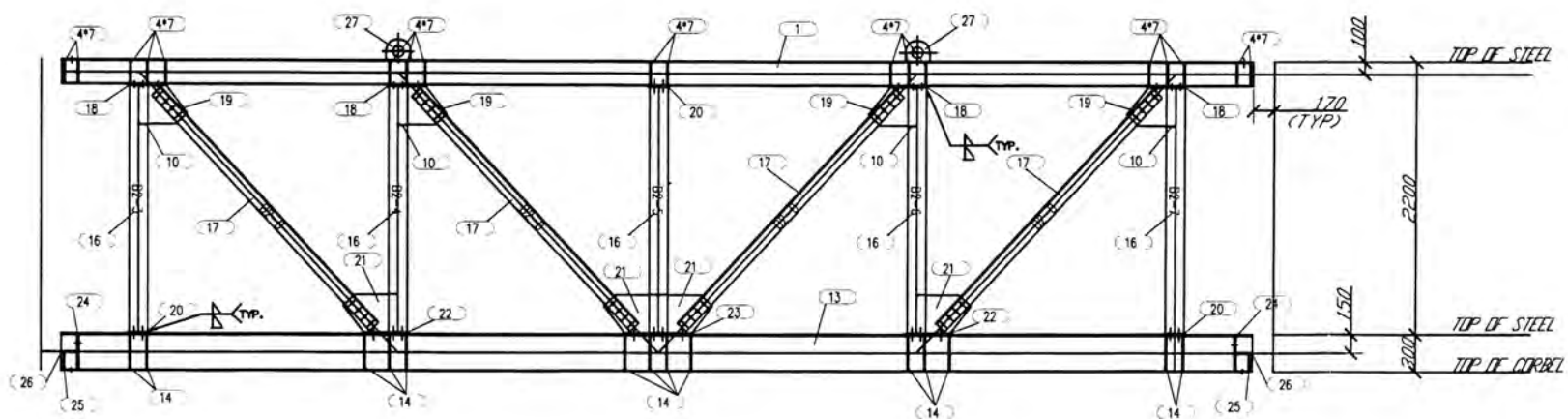


Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 5 is Total Quantity.
 2. All of Welds undefined are 6mm, Full-Length Welding.

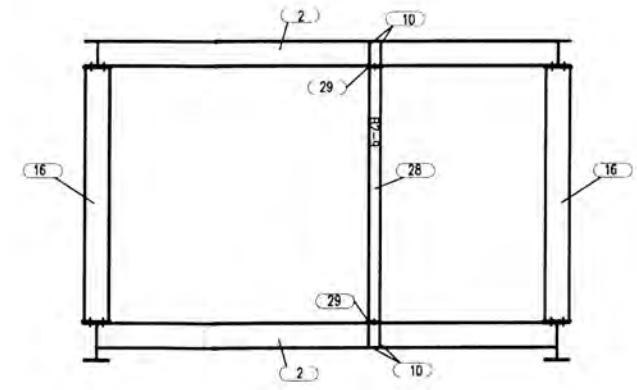
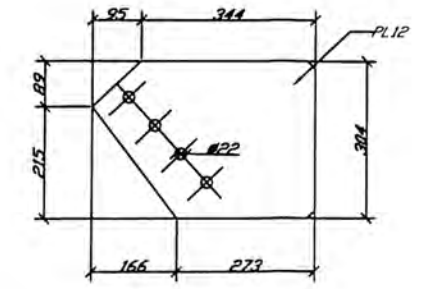
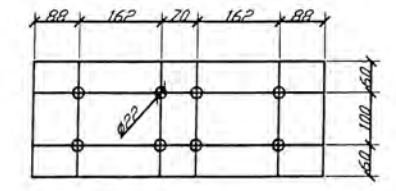
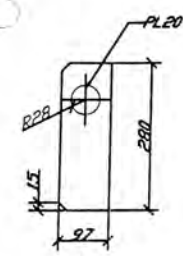
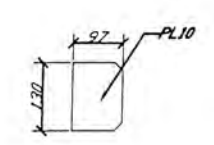
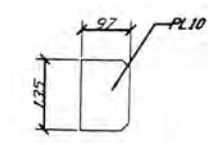
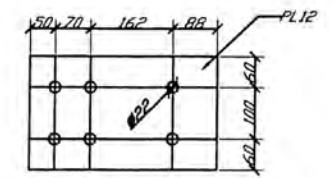
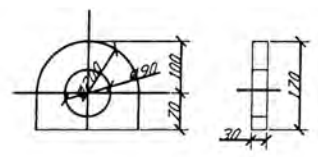
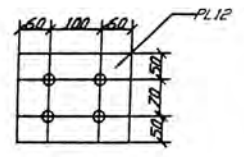
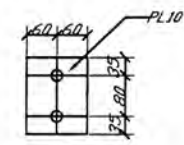
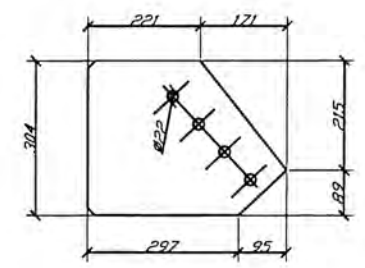
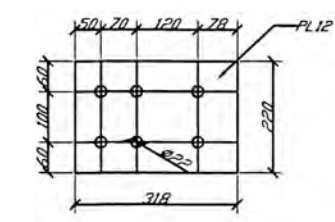
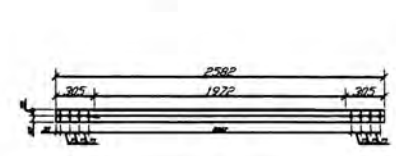
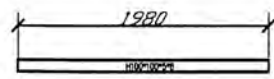
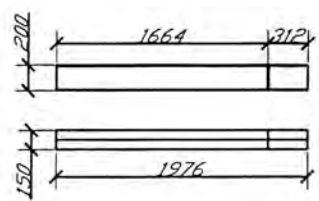
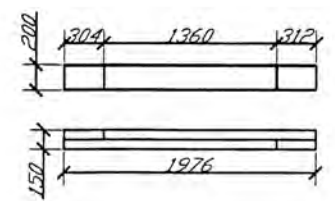
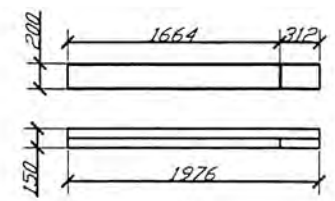
 CHINALCO 长铝建	PROJECT:	TOROMOCHO PROJECT
	AREA:	400-INFRASTRUCTURE
	TITLE:	PIPEBRIDGES TYPE B2 MODULE PLANS & SECTIONS
	Drawing No.:	400-DW-S-E104-02
DESIGNED BY:	CGW	Scale Sheet Size CONTRACT No. Revision
CHECKED BY:		1:1 A3 R05323-S-003
APPROVED BY:		REFERENCE DRAWING: 400-DW-S-104

REV.	DESCRIPTION	DATE	SIGN


(13)



MATERIAL LIST							
PART NO.	SPECS	L/A	W DR W/M	WT	QTY	TOTAL WT	MATERIA L
16	WH200*150*5*8	1.976	26.10	51.57	10	515.74	Q345B
17	TN124*124*5*8	2.582	12.60	32.53	8	260.27	Q345B
18	318*220*12	0.070	94.20	6.59	8	52.72	Q345B
19	304*392*12	0.119	94.20	11.23	8	89.81	Q345B
20	220*170*12	0.037	94.20	3.52	3	10.57	Q345B
21	304*439*12	0.133	94.20	12.57	8	100.57	Q345B
22	220*370*12	0.081	94.20	7.67	4	30.67	Q345B
23	220*570*12	0.125	94.20	11.81	2	23.63	Q345B
24	97*280*20	0.027	157.00	4.26	4	17.06	Q345B
25	135*97*10	0.013	78.50	1.03	8	8.22	Q345B
26	130*97*10	0.013	78.50	0.99	8	7.92	Q345B
27	200*170*30	0.034	235.50	8.01	4	32.03	Q345B
28	HW100*100*6*8	1.980	16.90	33.46	5	167.31	Q345B
29	150*120*10	0.018	78.50	1.41	10	14.13	Q345B

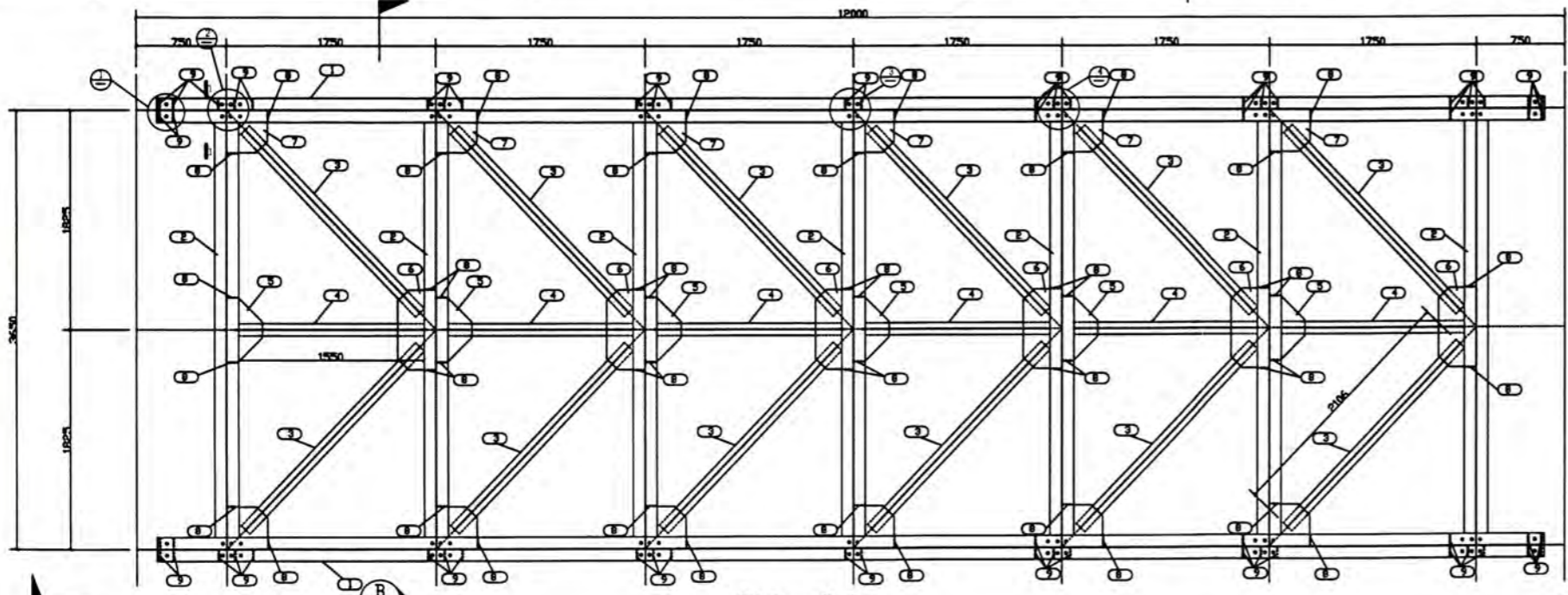


Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 5 is Total Quantity.
 2. All of Welds undefined are 6mm, Full-Length Welding.

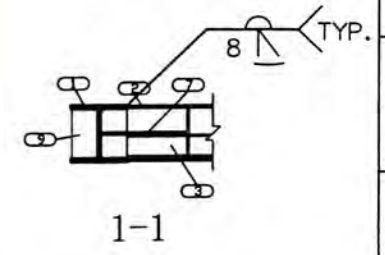
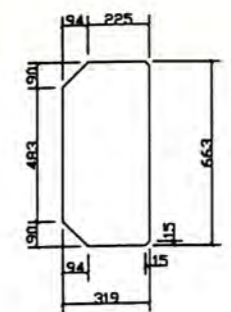
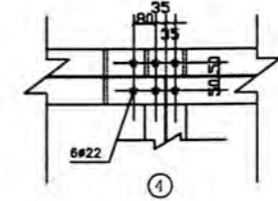
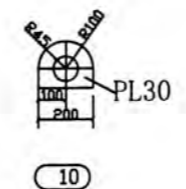
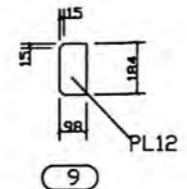
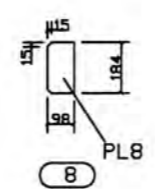
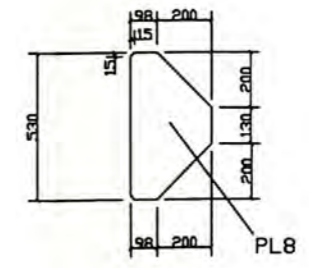
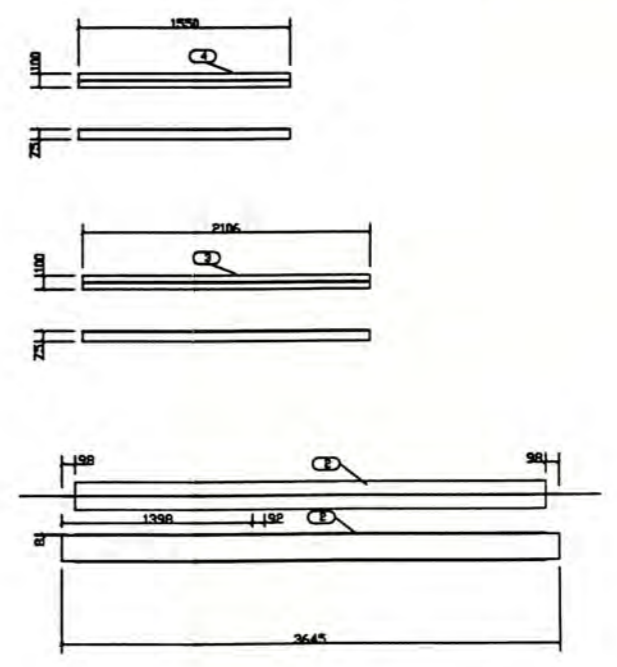
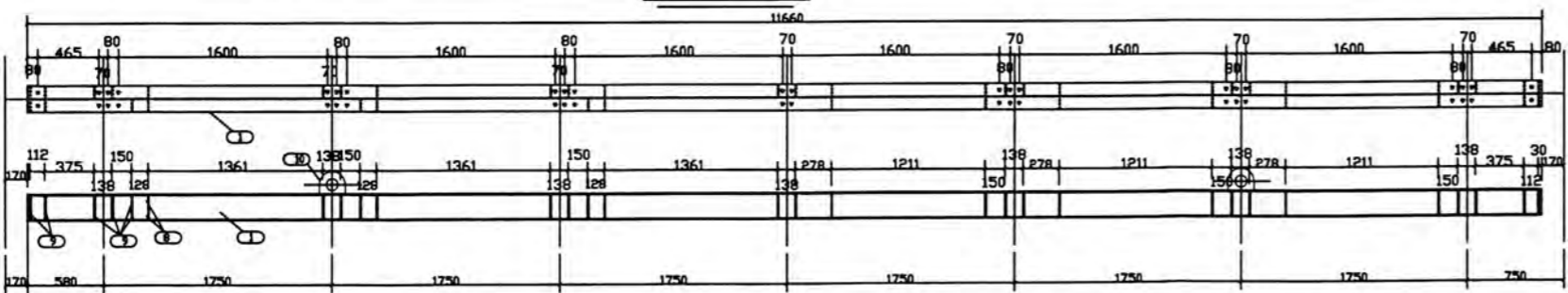

 Supply of Pipebridges Structure Steel
 Scale 1:1 Sheet Size A3 CONTRACT No. R05323-S-003
 REFERENCE DRAWING: 400-DW-S-104

PROJECT:	TOROMOCHO PROJECT
AREA:	400-INFRASTRUCTURE
TITLE:	PIPEBRIDGES TYPE B2 MODULE PLANS & SECTIONS
Drawing No.:	400-DW-S-E104-03

DESIGNED BY:	SIGN	DATE	
CHECKED BY:			
APPROVED BY:			
REV.	DESCRIPTION	DATE	SIGN



F1-01



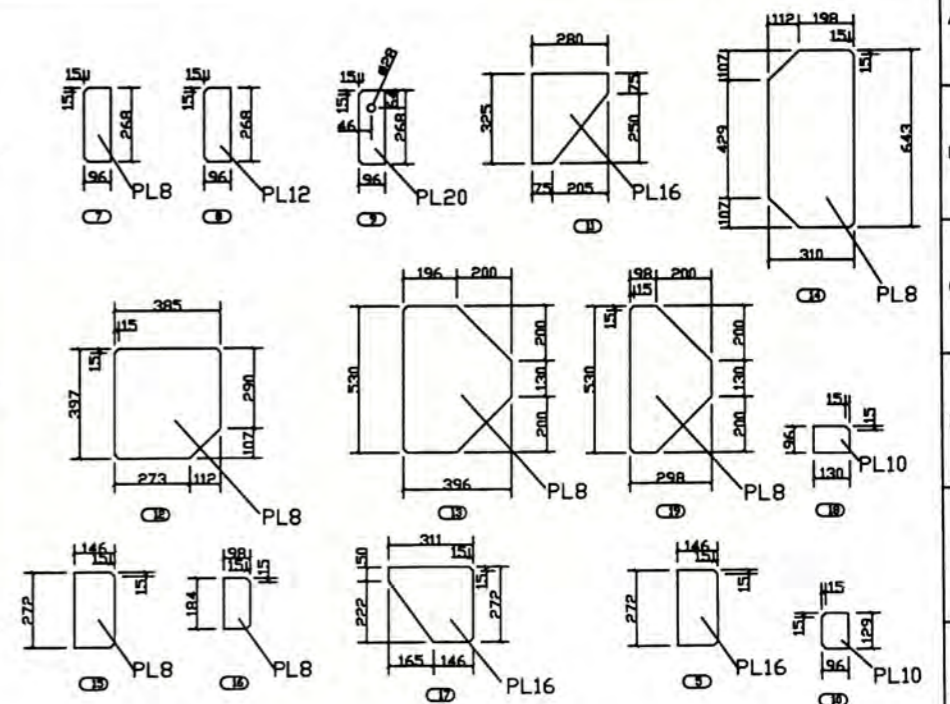
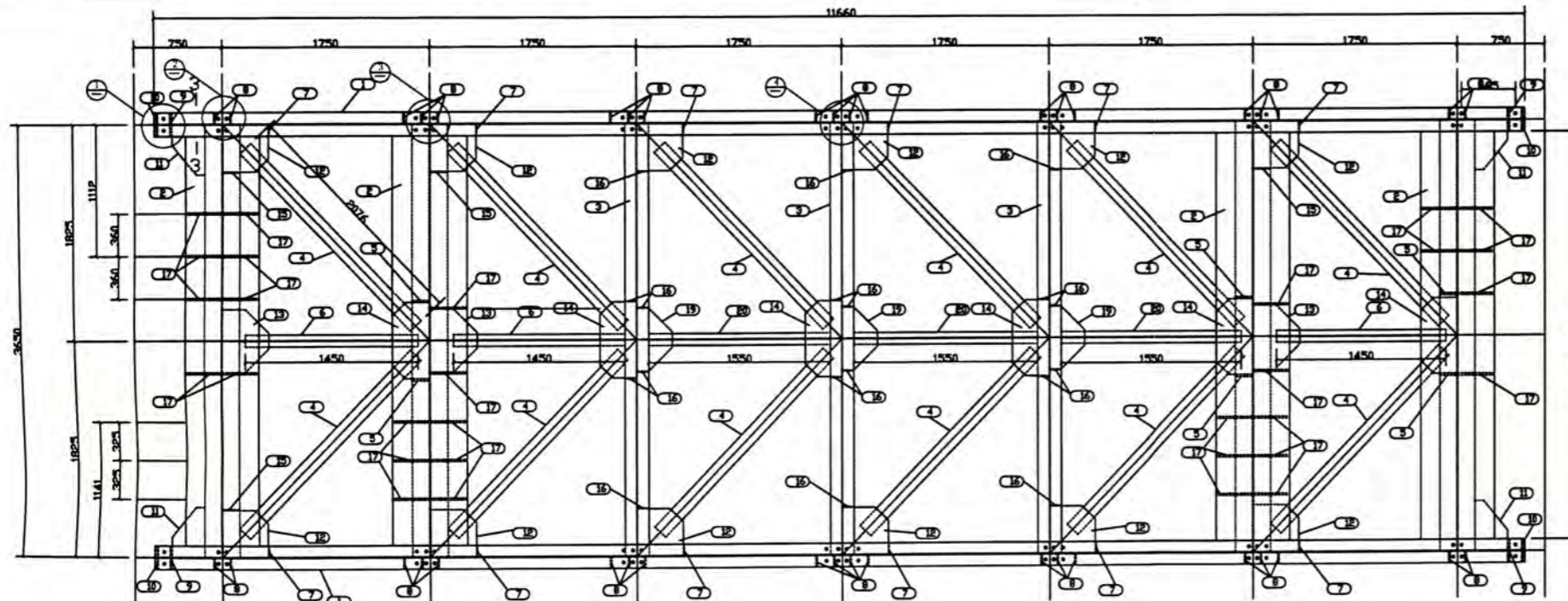
MATERIAL LIST							
MEMBER NO.	F1-01	QTY	16	UNIT WT	2350.56	TOTAL WT	37608.96
PART NO.	SPECS	L	W DR	WT/m	QTY	WEIGHT kg	TESTURE
1	WH200*200*5*8	11660	32.34	2	754.17	Q345B	
2	WH200*200*5*8	3645	32.34	7	825.16	Q345B	
3	WT74*100*6*9	2106	10.3	12	260.30	Q345B	
4	WT74*100*6*9	1550	10.3	6	95.79	Q345B	
5	8	272	530	6	54.32	Q345B	
6	8	319	663	6	79.69	Q345B	
7	8	339	350	12	89.41	Q345B	
8	8	98	184	48	54.36	Q345B	
9	12	98	184	62	105.32	Q345B	
10	30	200	170	4	32.04	Q345B	
TOTAL					2350.56		

Toromocho Project			
Equipment Tag:			
Purchase Order No.	Document Type	Sequential No.	Aker Solutions Rev. No.
Status Code	Reviewer	Date	
Status Codes:			
1. Reviewed and accepted as final certified. Manufacture may proceed			
2. Reviewed and accepted as noted. Submit certified drawings. Manufacture may proceed			
3. Reviewed and returned. Revise and resubmit. Manufacture should not proceed			
4. Review not required. For information only			
Review for general dimensions only			
Review of these documents does not relieve the vendor of full responsibility for the adequacy, correctness, accuracy and/or completeness of calculations, details and/or dimensions.			
Aker Solutions does not accept liability for their completeness or accuracy.			

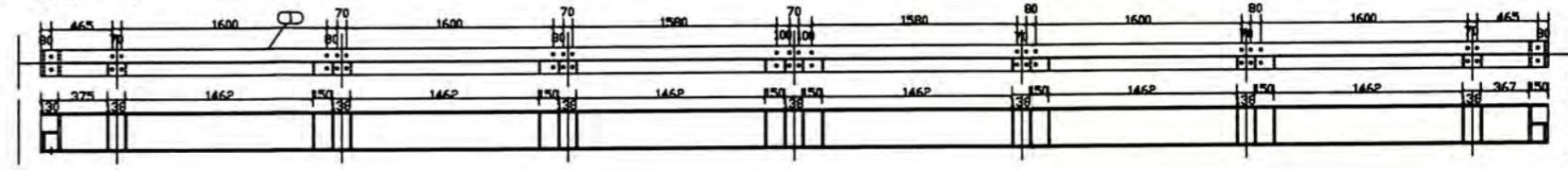
Note: Welds which undefined are 6mm. Full Welding.

DESIGNED BY:	SIGN	DATE	
CHECKED BY:			
APPROVED BY:			
REV	DESCRIPTION	DATE	SIGN

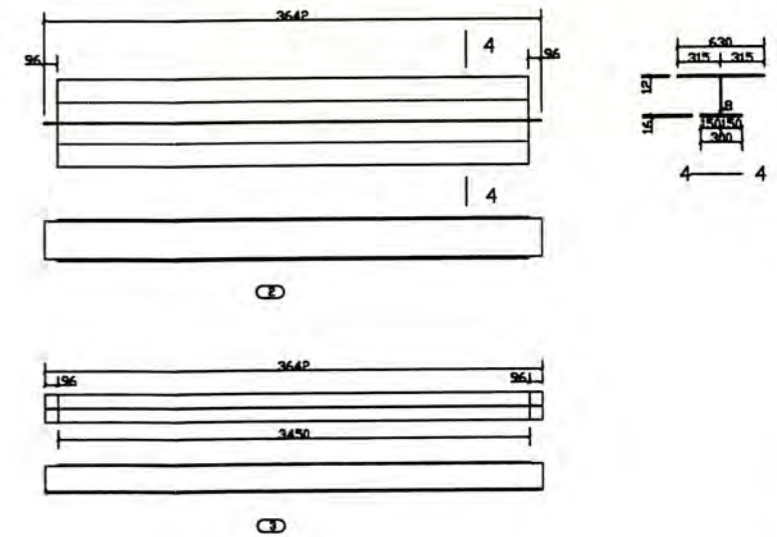
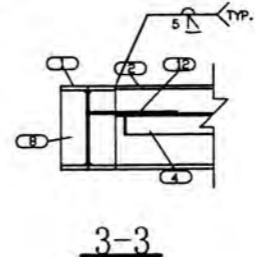
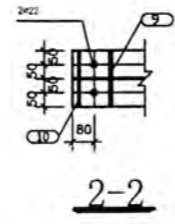
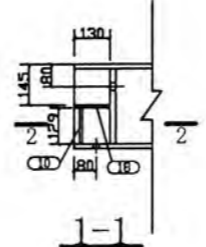
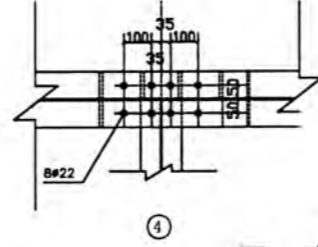
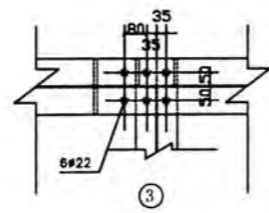
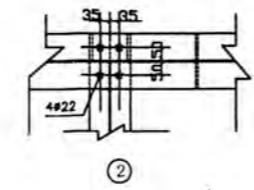
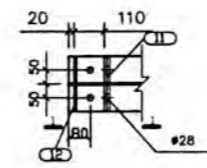
<p>CHINALCO 长铝建</p>	PROJECT:	TOROMOCHO PROJECT	
	AREA:	400-INFRASTRUCTURE	
	TITLE:	PIPEBRIDGES TYPE F1 MODULE PLANS A SECTIONS	
	Drawing No.:	400-DW-S-E110-01	
Supply of Pipebridges Structure Steel	CGW		
Scale	Sheet Size	CONTRACT No.	Revision
1:1	A3	R05323-S-003	
REFERENCE DRAWING:	Aker Doc.Type	B040	
400-DW-S-110			



F1-02
M-04-03-1



MATERIAL LIST							
MEMBER NO.	F1-02	QTY	12	UNIT WT	4815.52	TOTAL WT	57785.24
PART NO.	SPECS	L	W OR WT/m	QTY	WEIGHT kg	TESTURE	
1	WH300*200*8*16	11660	67.07	2	1564.07	Q345B	
2	WHE300	3642	114.10	4	1662.21	Q345B	
3	WH200*200*5*8	3642	32.34	3	353.35	Q345B	
4	WT124*124*5*8	2076	12.6	12	313.89	Q345B	
5	16	146	272	6	29.93	Q345B	
6	WT74*100*6*9	1450	10.3	3	32.28	Q345B	
7	8	96	268	10	16.16	Q345B	
8	12	96	268	40	80.79	Q345B	
9	20	96	268	8	32.31	Q345B	
10	10	130	96	8	7.84	Q345B	
11	16	280	325	4	45.72	Q345B	
12	8	385	397	12	115.18	Q345B	
13	8	396	530	3	39.54	Q345B	
14	8	310	643	6	75.12	Q345B	
15	8	146	272	4	9.98	Q345B	
16	8	98	184	18	20.38	Q345B	
17	16	311	272	30	318.74	Q345B	
18	10	130	96	8	7.84	Q345B	
19	8	298	530	3	29.76	Q345B	
20	WT74*100*6*9	1550	10.3	3	47.90	Q345B	
TOTAL					4815.52		



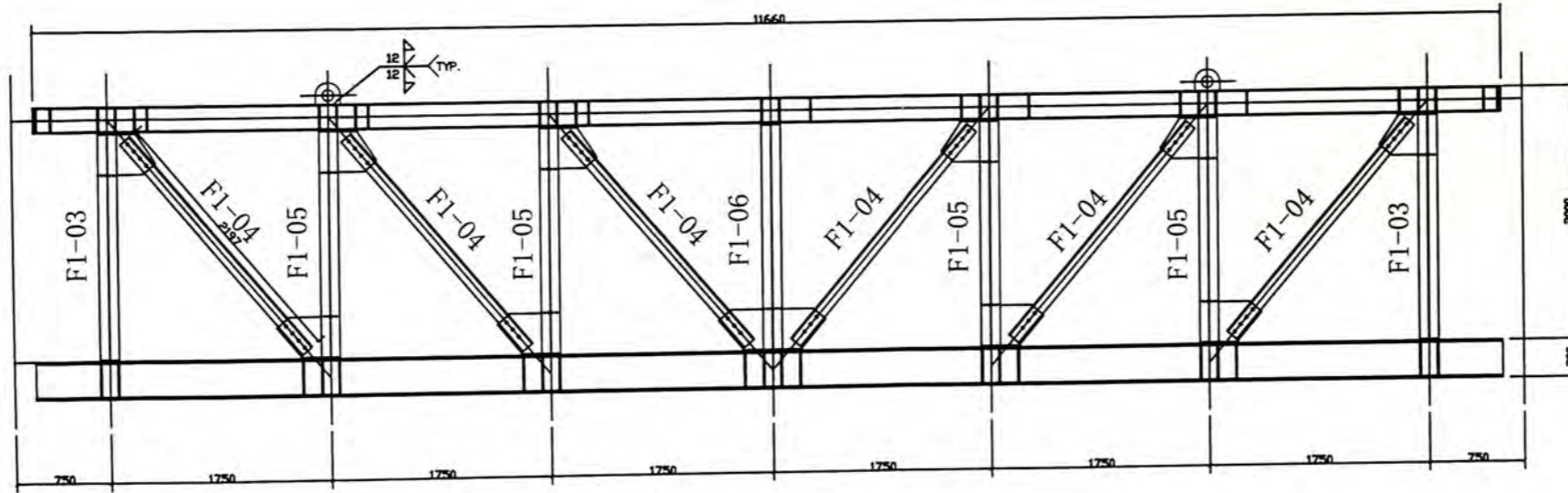
Note: Welds which undefined are 6mm. Full Welding.

	PROJECT:	TOROMOCHO PROJECT
	AREA:	400-INFRASTRUCTURE
	TITLE:	PIPEBRIDGES TYPE F1 MODULE PLANS & SECTIONS
	Drawing No.:	400-DW-S-E110-02

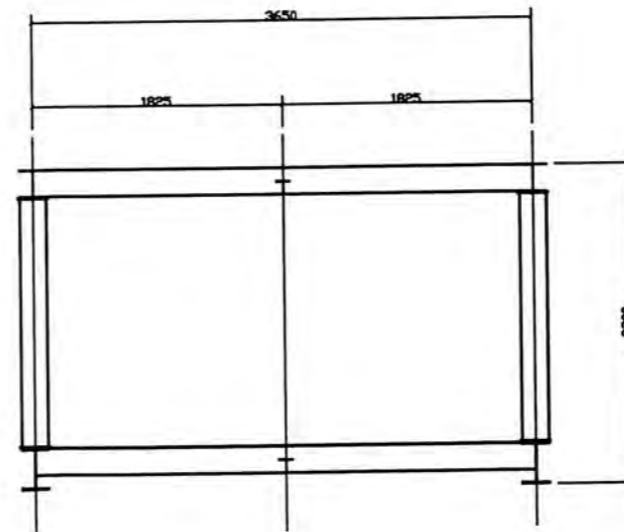
REV	DESCRIPTION	DATE	SIGN

DESIGNED BY:	SIGN	DATE
CHECKED BY:		
APPROVED BY:		

Supply of Pipebridges Structure Steel	CGW
Scale 1:1	Revision
Sheet Size A3	
CONTRACT No. R05323-S-003	
REFERENCE DRAWING: 400-DW-S-110	Doc Type B040




SECTION A



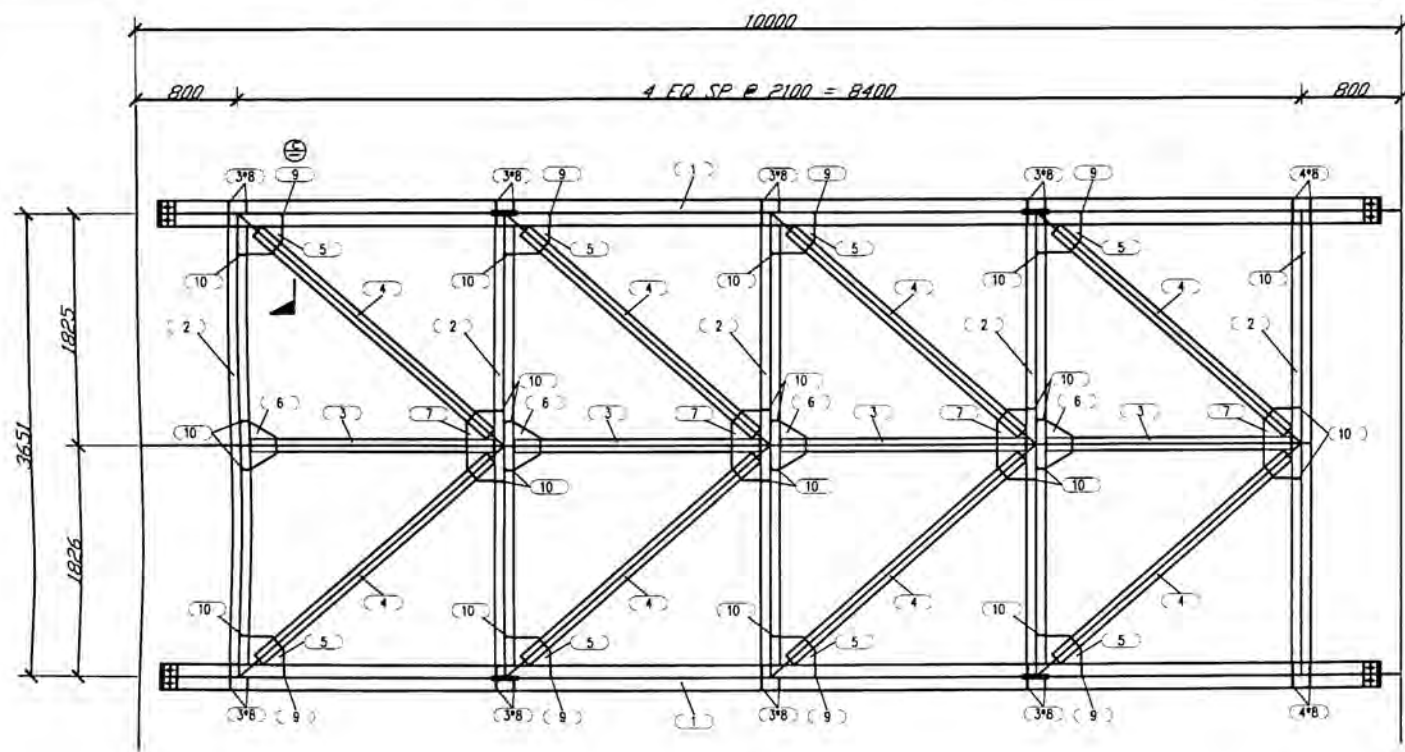
SECTION B

REV	DESCRIPTION	DATE	SIGN


 CHINALCO
 长铝建

Supply of Pipebridges Structure Steel	CGW
Scale 1:1	Sheet Size A3
CONTRACT No. R05323-S-003	Revision
REFERENCE DRAWING: 400-DW-S-110	Rev. Doc. Type B040

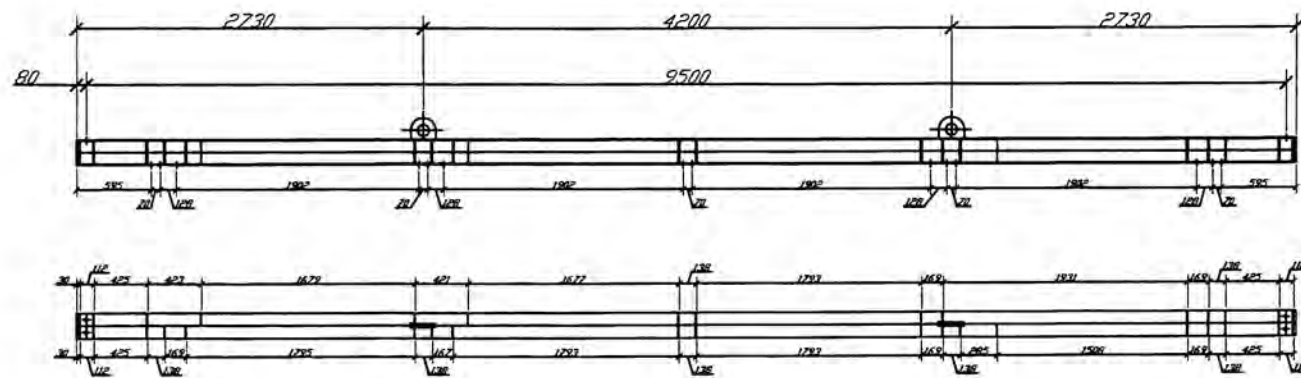
PROJECT:	TOROMOCHO PROJECT
AREA:	400-INFRASTRUCTURE
TITLE:	PIPEBRIDGES TYPE F1 MODULE PLANS & SECTIONS
Drawing No.:	400-DW-S-E110-03



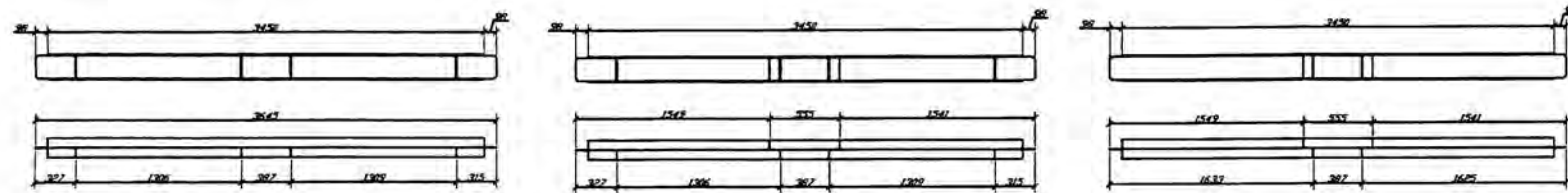
F2-1

MATERIAL LIST							
PART NO.	SPECS	L/A	W OR W/M	WT	QTY	TOTAL WT	MATERIA L
1	WH200*200*5*8	9.660	32.30	312.02	2	624.04	Q345B
2	WH200*150*5*8	3.645	26.10	95.13	10	951.35	Q345B
3	WT75*100*5*6	1.930	7.42	14.32	8	114.56	Q345B
4	WT75*100*5*6	2.429	7.42	18.02	16	288.37	Q345B
5	350*315*8	0.110	62.80	6.92	16	110.78	Q345B
6	283*379*8	0.107	62.80	6.74	8	53.89	Q345B
7	548*299*8	0.164	62.80	10.29	8	82.32	Q345B
8	98*184*12	0.018	94.20	1.70	56	95.12	Q345B
9	184*98*8	0.018	62.80	1.13	8	9.06	Q345B
10	72*184*8	0.013	62.80	0.83	64	53.25	Q345B

Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 3 is Total Quantity.
 2. All of Welds undefined are 6mm, Full-Length Welding.



(1)

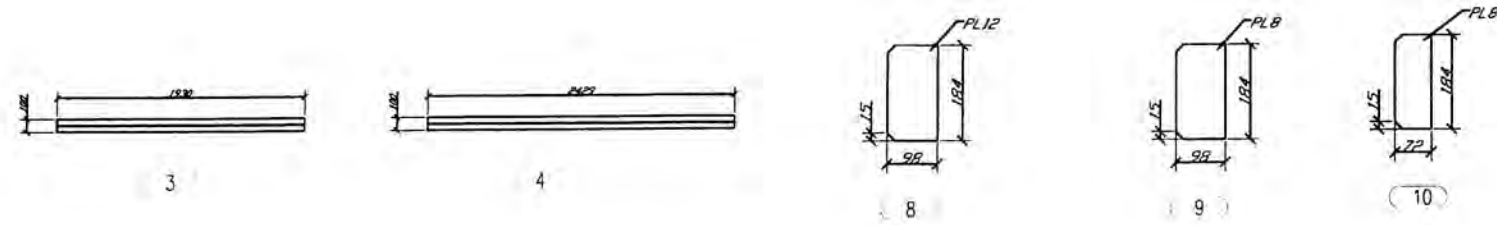


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2

2

7



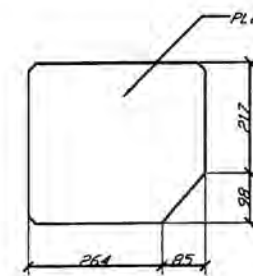
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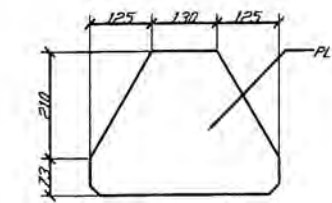
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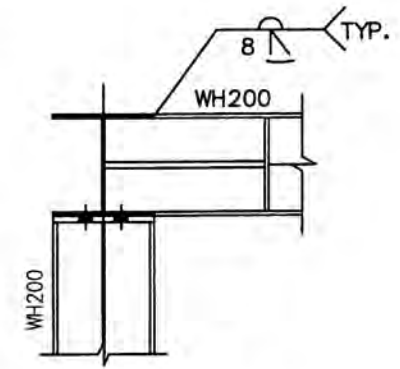
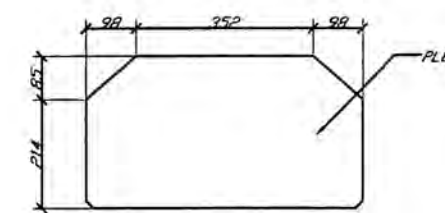
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5



6



SECTION C

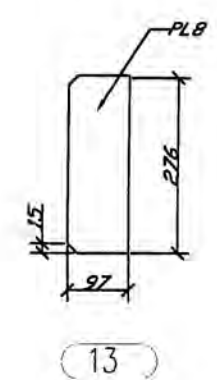
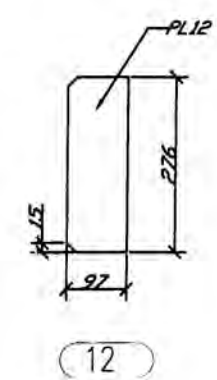
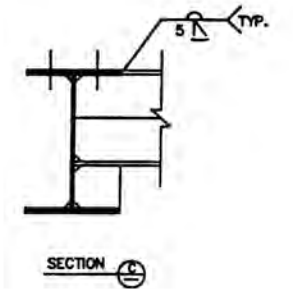
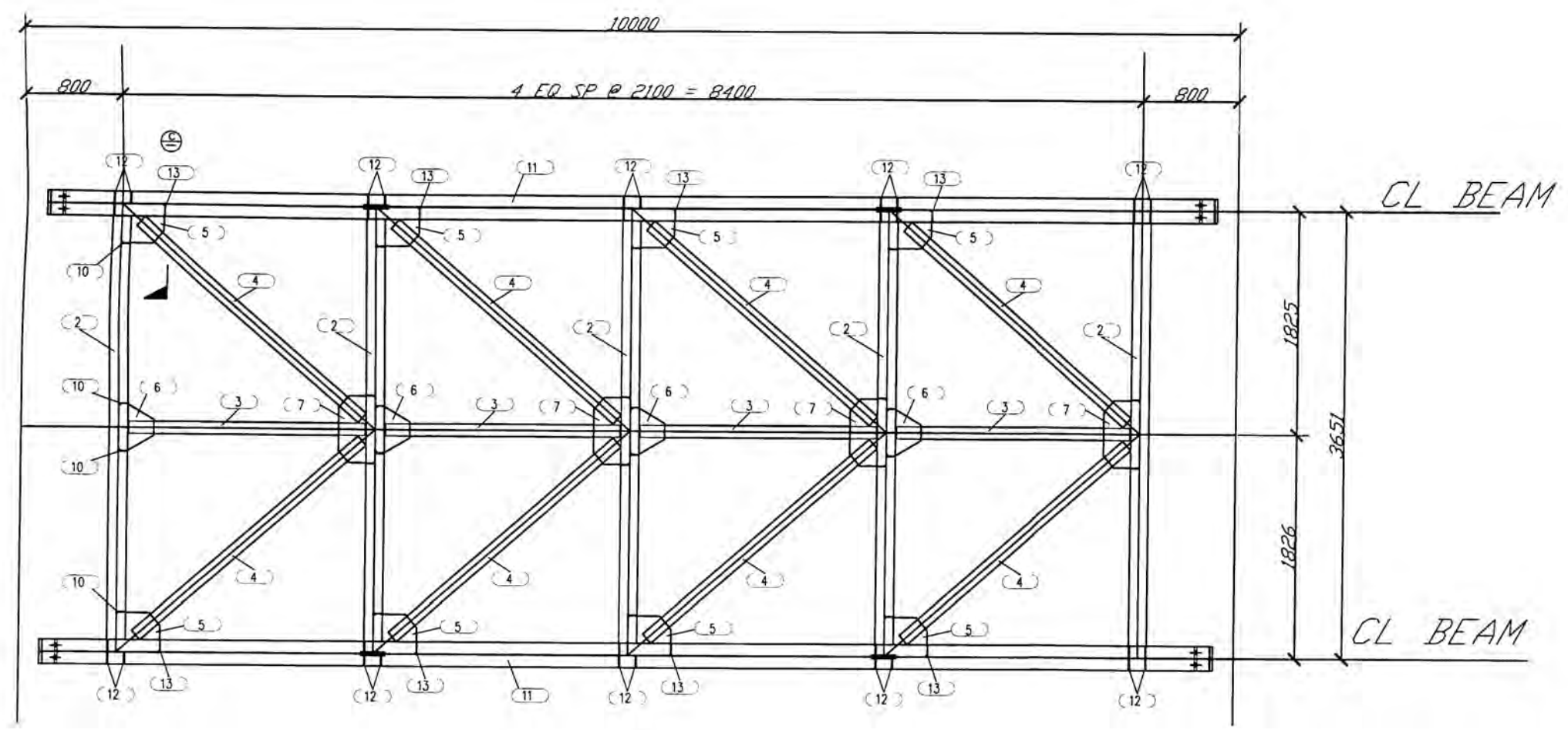
Toromocho Project			
Purchase Order No.	Equipment Tag	Sequential No.	Aker Solutions Rev. No.
Status Code	Reviewer	Date	
Status Codes: 1. Reviewed and accepted as final certified. Manufacture may proceed. 2. Reviewed and accepted as noted. Submit certified drawings. Manufacture may proceed. 3. Reviewed and returned. Revise and resubmit. Manufacture should not proceed. 4. Review not required. For information only. Reviewed for general dimensions only. Review of these documents does not relieve the vendor of full responsibility for the adequacy of the design. Aker Solutions does not accept liability for their completeness or accuracy.			
DESIGNED BY:	DATE		
CHECKED BY:			
APPROVED BY:			
REV.	DESCRIPTION	DATE	SIGN

CHINALCO
长铝建

PROJECT: TOROMOCHO PROJECT
 AREA: 400-INFRASTRUCTURE
 TITLE: PIPEBRIDGES TYPE F2 MODULE PLANS & SECTIONS
 Drawing No.: 400-DW-S-E111-01

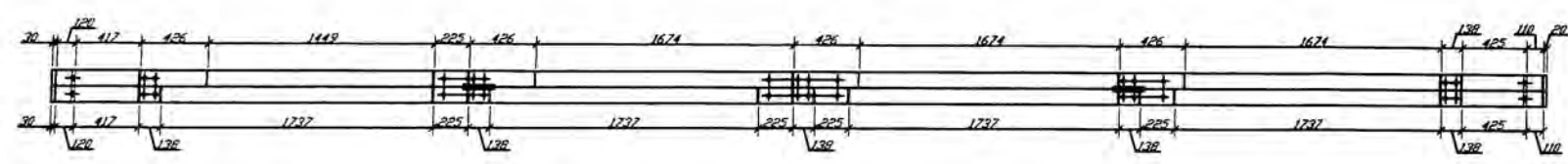
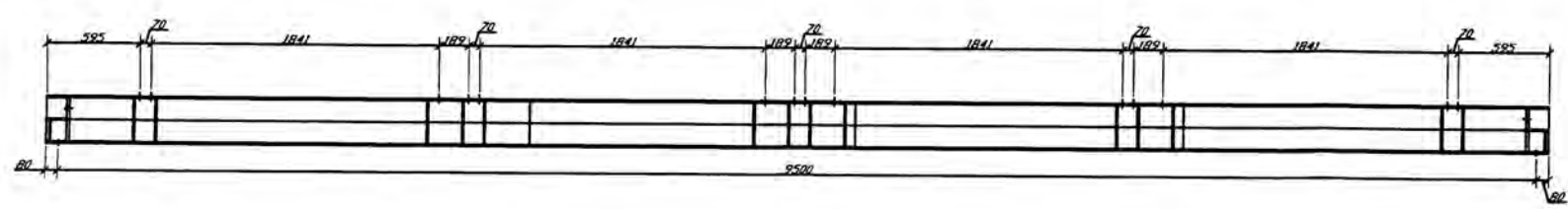
Supply of Pipebridges Structure Steel CGW
 Scale: 1:1
 Sheet Size: A3
 CONTRACT No.: R05323-S-003
 Revision: 1
 Aker Doc.Type: B040

MATERIAL LIST							
PART NO.	SPECS	L/A	W DR W/M	WT	QTY	TOTAL WT	MATERIAL
11	WH300*200*6*16	9.660	50.70	489.76	2	979.52	Q345B
12	276*97*12	0.027	94.20	2.52	46	116.01	Q345B
13	276*97*8	0.027	44.60	1.19	8	9.55	Q345B




F2-2

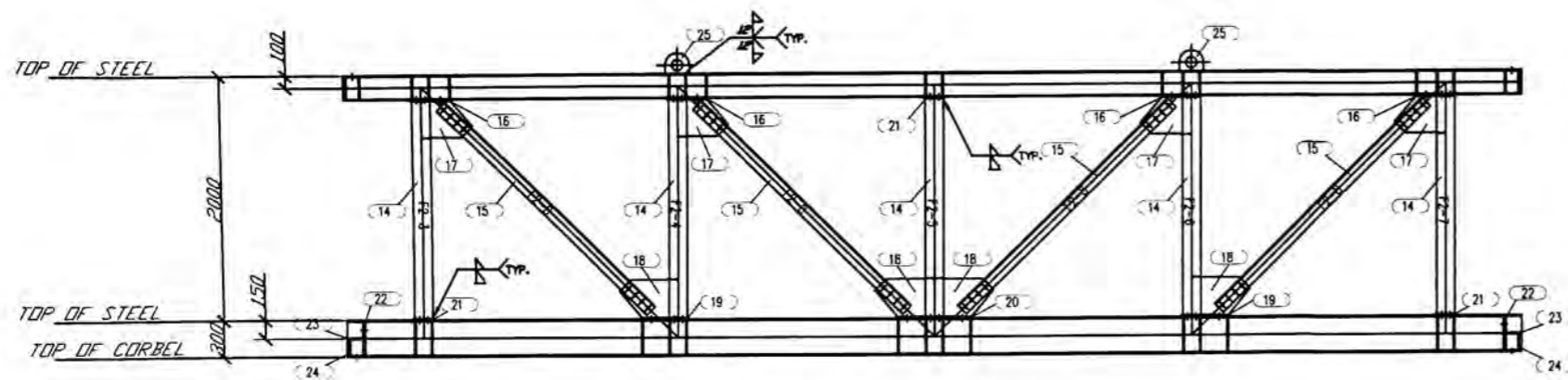
Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 3 is Total Quantity.
 2. All of Welds undefined are 6mm, Full-Length Welding.



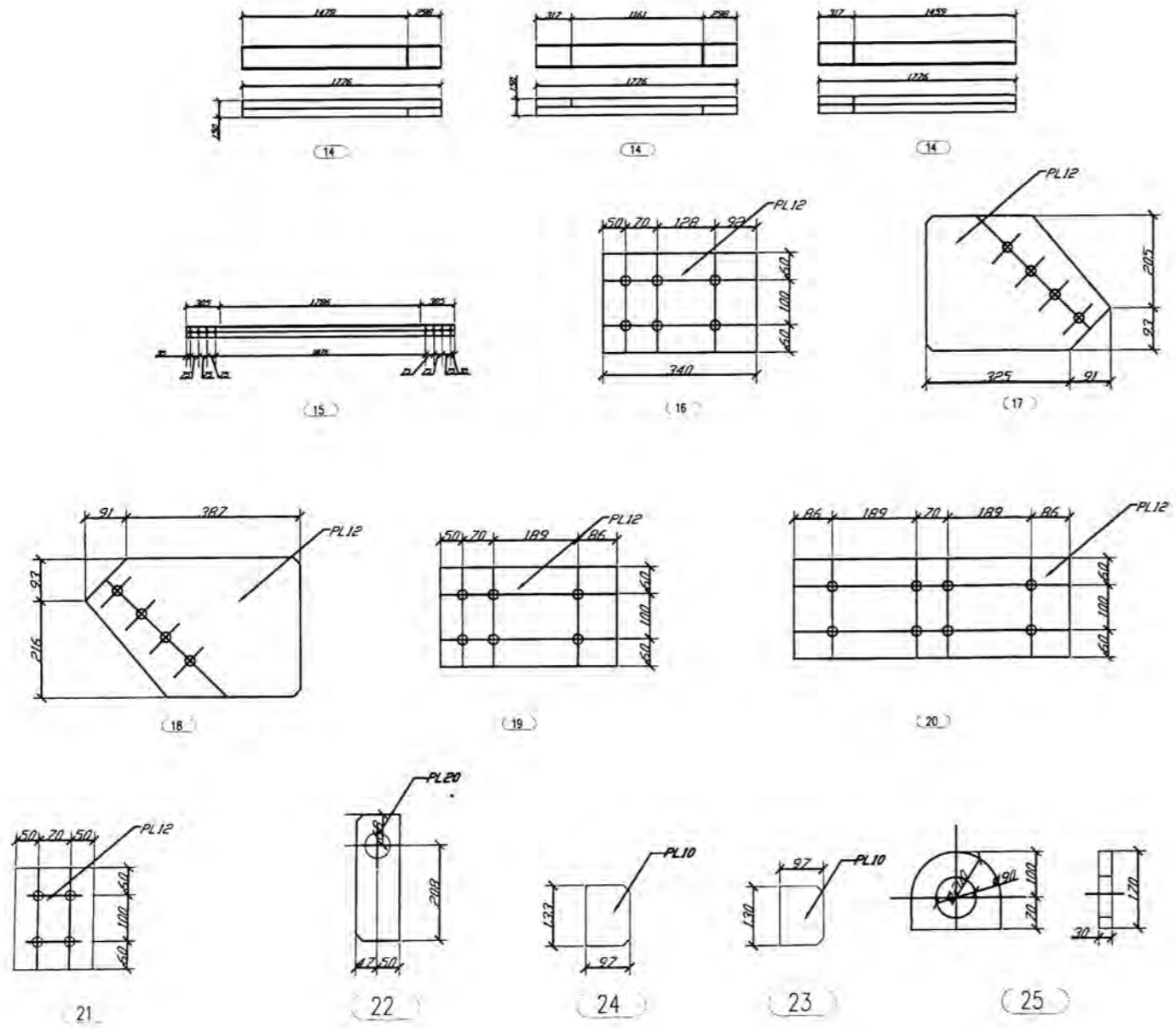
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DESIGNED BY:	SIGN	DATE	
CHECKED BY:			
APPROVED BY:			
REV.	DESCRIPTION	DATE	SIGN

 CHINALCO 长铝建	PROJECT:	TOROMOCHO PROJECT
	AREA:	400-INFRASTRUCTURE
	TITLE:	PIPEBRIDGES TYPE F2 MODULE PLANS & SECTIONS
	Drawing No.:	400-DW-S-E111-02
Supply of Pipebridges Structure Steel	CGW	
Scale 1:1	Sheet Size A3	CONTRACT No. R06323-S-003
REFERENCE DRAWING: 400-DW-S-111	Akur Doc.Type	B040

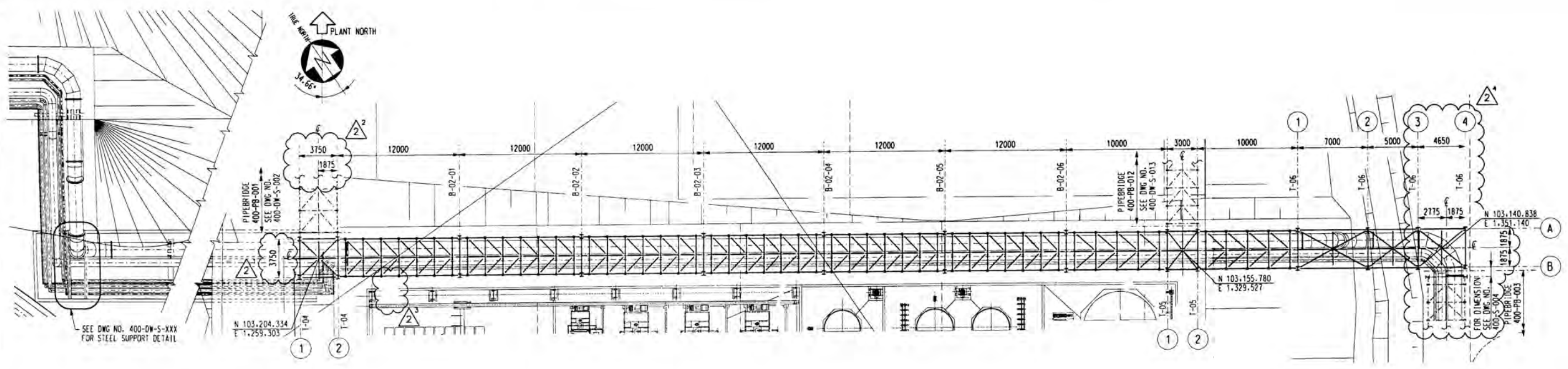


MATERIAL LIST							
PART NO.	SPECS	L/A	W DR W/M	WT	QTY	TOTAL WT	MATERIA L
14	WH200*150*5*8	1.776	26.10	46.35	10	463.54	Q345B
15	WT100*125*5*8	2.396	11.50	27.55	8	220.43	Q345B
16	340*220*12	0.075	94.20	7.05	8	56.37	Q345B
17	416*298*12	0.124	94.20	11.68	8	93.42	Q345B
18	478*309*12	0.148	94.20	13.91	8	111.31	Q345B
19	395*220*12	0.087	94.20	8.19	4	32.74	Q345B
20	220*620*12	0.136	94.20	12.85	2	25.70	Q345B
21	220*170*12	0.037	94.20	3.52	6	21.14	Q345B
22	97*276*20	0.027	157.00	4.20	8	33.63	Q345B
23	130*97*10	0.013	78.50	0.99	8	7.92	Q345B
24	133*97*10	0.013	78.50	1.03	8	8.22	Q345B
25	200*170*30	0.034	235.50	8.01	4	32.03	Q345B

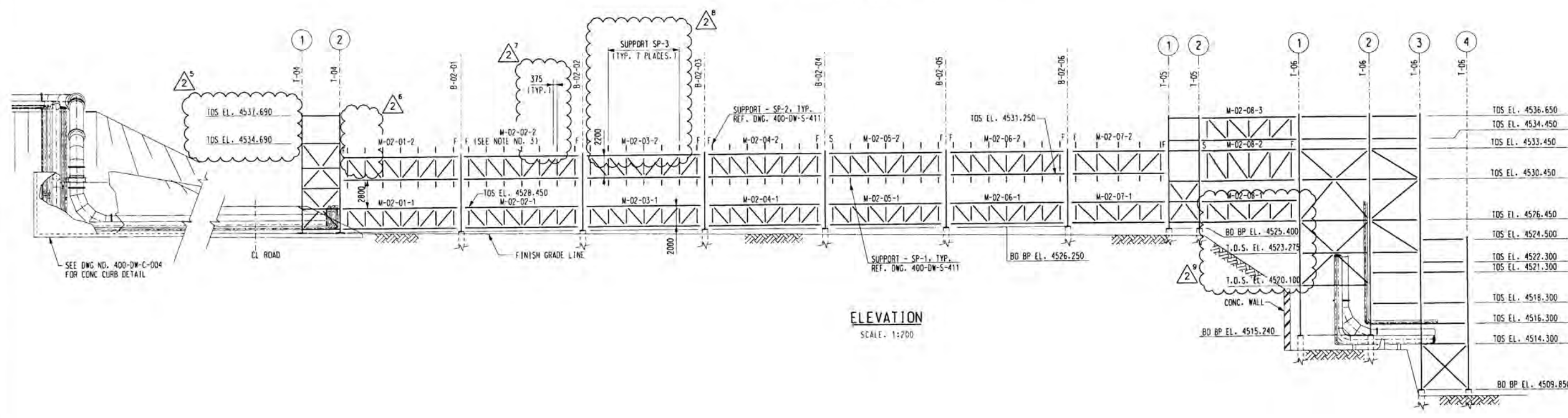


Notes: 1. Quantity of Material List is Unit Quantity, Quantity of Material List Multiplied 3 is Total Quantity.
 2. All of Welds undefined are 6mm, Full-Length Welding.

		PROJECT: TOROMOCHO PROJECT	
		AREA: 400-INFRASTRUCTURE	
DESIGNED BY: _____ CHECKED BY: _____ APPROVED BY: _____		TITLE: PIPEBRIDGES TYPE F2 MODULE PLANS & SECTIONS	
		Drawing No.: 400-DW-S-E111-03	
Scale: 1:1 Sheet Size: A3 CONTRACT No.: R05323-S-003 REFERENCE DRAWING: 400-DW-S-111		Revision: _____ CGW B040	



PLAN FOR PIPEBRIDGE 400-PB-002
SCALE: 1:200



ELEVATION
SCALE: 1:200

- NOTES:
1. DIMENSIONS ARE IN MILLIMETERS, ELEVATIONS AND COORDINATES ARE IN METERS.
 2. SEE GENERAL NOTES ON DWG 400-DW-S-001.
 3. CONNECTION TYPE OF MODULE TO BENT OR TOWER:
F - FIXED CONNECTION
S - SLIDING CONNECTION

DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL.

QUALITY CONTROL	SIGN	AkerSolutions
DISCIPLINE MANAGER NAME DOCUMENT CONTROL	SIGN & STAMP	
PROJECT: TOROMOCHO PROJECT		
AREA: 400 - INFRASTRUCTURE	CAD NO.: 560-400-DW-S-003.DGN	REVISION: 2
TITLE: PIPEBRIDGE 400-PB-002 PLAN & ELEVATION		DWG. NO.: 400-DW-S-003

THIS DRAWING NOT VALID UNLESS THE LATEST REVISION INITIALS ARE HANDWRITTEN

REF. NO.	DESCRIPTION
1	ISSUED FOR INFORMATION TO ELECTRICAL & PIPING
2	ISSUED FOR REVIEW
3	ISSUED FOR CONSTRUCTION
4	REVISED AS NOTIFIED
5	REVISED AS NOTIFIED

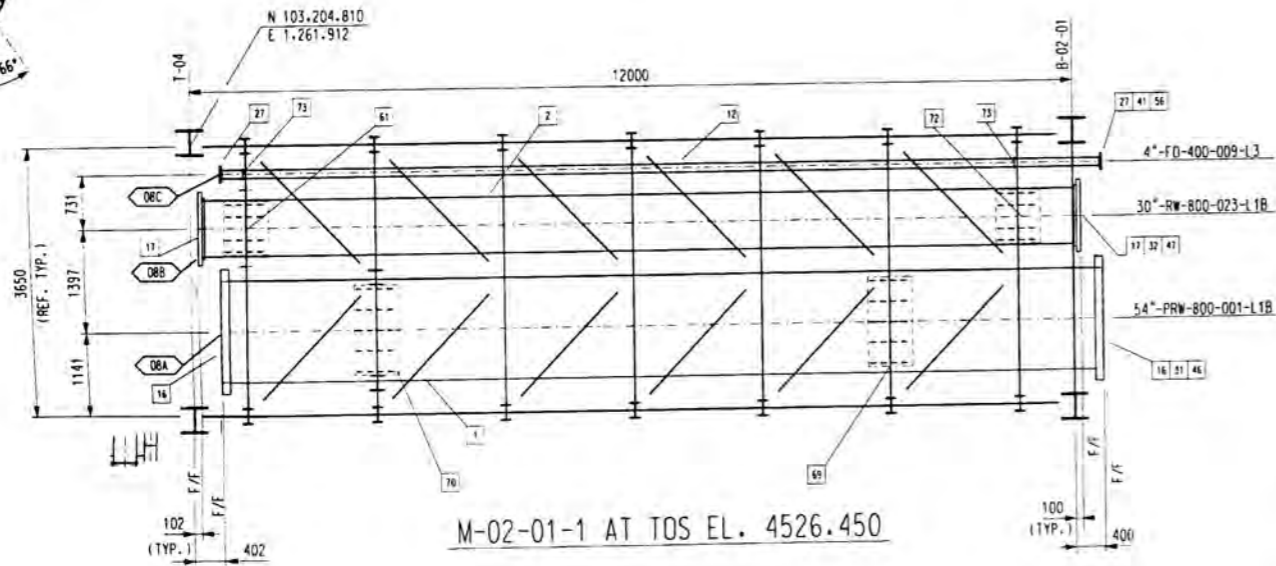
NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
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2	ISSUED FOR REVIEW	DRB	AM	LD	11/25/10
3	ISSUED FOR CONSTRUCTION	DRB	AM	LD	12/08/10
4	REVISED AS NOTIFIED	DRB	AM	LD	02/28/11
5	REVISED AS NOTIFIED	LMP	MS	LD	04/27/11

NOTICE

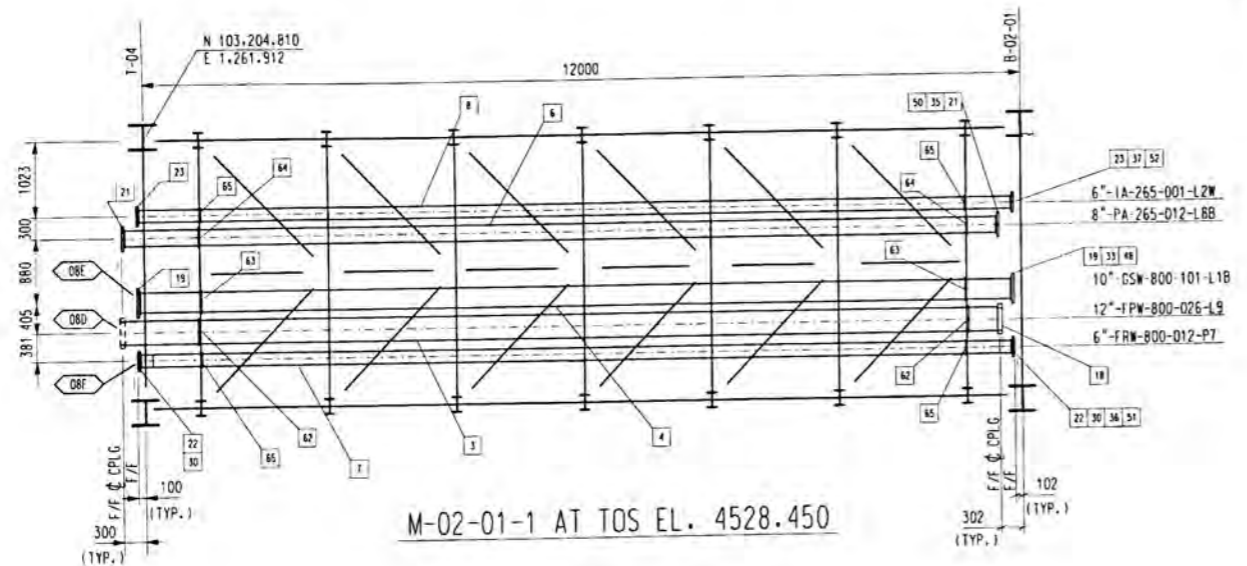
THIS IS A COMPUTER GENERATED DRAWING. ALL CHANGES MUST BE MADE TO THE PROJECT BY THE ORIGINAL DESIGNER. THE USER OF THIS DRAWING IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE USER OF THIS DRAWING IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

SCALE	SHEET SIZE
AS NOTED	A1
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CHECKED BY: AM	DATE: 12/08/10
APPROVED BY: LGM	DATE: 12/08/10
AUTHORIZED BY: ATH	DATE: 12/08/10
MEP APPROVED:	DATE:

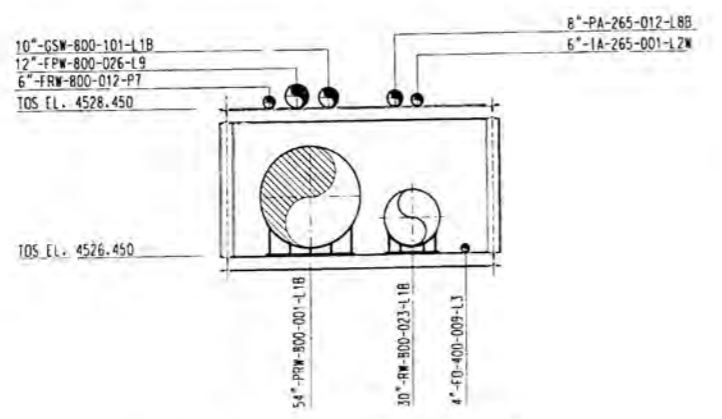




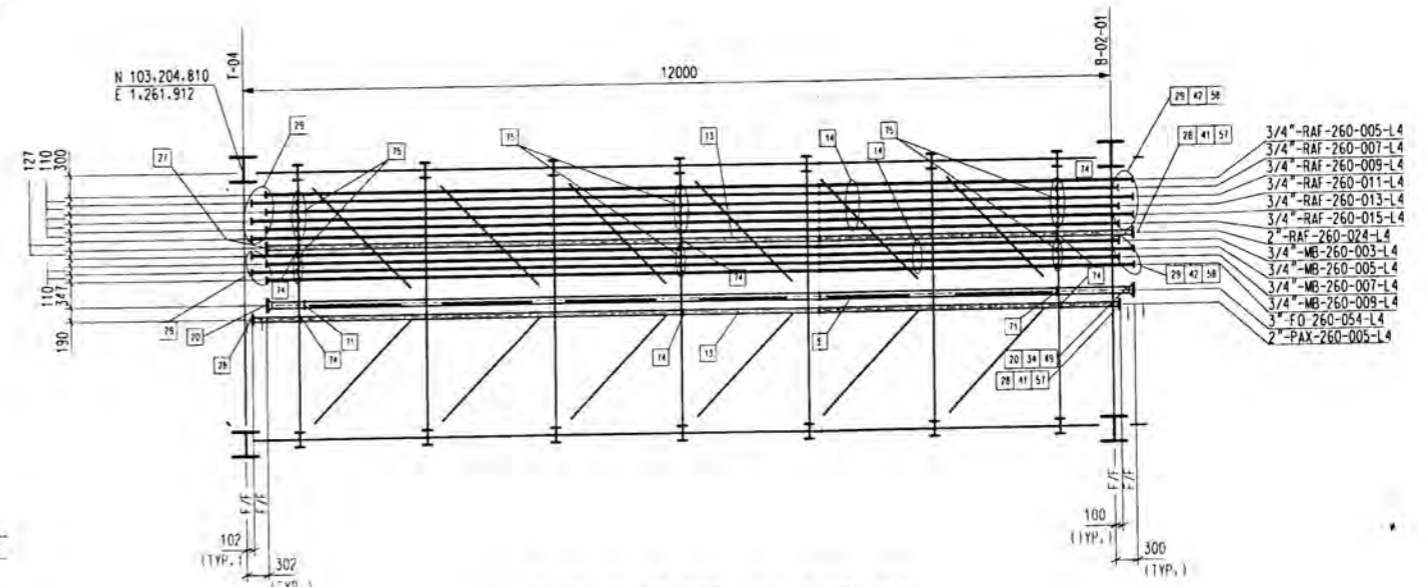
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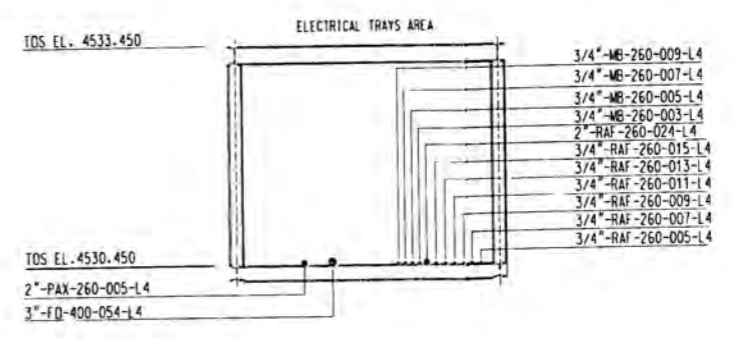
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M-02-01-1 LOOKING WEST



M-02-01-2 AT TOS EL. 4530.450



M-02-01-2 LOOKING WEST

- NOTES:
1. DIMENSIONS ARE IN MILLIMETERS, COORDINATES AND ELEVATIONS IN METERS.
 2. FABRICATOR SHALL ATTACH META. TAG TO ALL TIF-IN POINTS DESIGNATED BY SYMBOL AS AN EXAMPLE.

THIS DRAWING NOT VALID UNLESS THE LATEST REVISION IS CALLED AND HANDWRITTEN.

REV. NO.	DESCRIPTION	DATE
1	ISSUE FOR FABRICATION	04/12/10
2	ISSUE FOR FABRICATION	06/03/10
3	ISSUE FOR FABRICATION	07/05/10
4	ISSUE FOR FABRICATION	04/04/11
5	ISSUE FOR FABRICATION	06/21/11

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
1	ISSUE FOR FABRICATION	MJM	APP		04/12/10
2	ISSUE FOR FABRICATION	MJM	APP		06/03/10
3	ISSUE FOR FABRICATION	MJM	APP		07/05/10
4	ISSUE FOR FABRICATION	MJM	APP		04/04/11
5	ISSUE FOR FABRICATION	MJM	APP		06/21/11

NOTICE

THIS IS A PRELIMINARY DRAWING. ALL DIMENSIONS AND COORDINATES ARE SUBJECT TO CHANGE WITHOUT NOTICE. THE FABRICATOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND COORDINATES BEFORE FABRICATION. THE FABRICATOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE FABRICATOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

SCALE: 1:50

SHEET SIZE: A1

DRAWN BY: MMJ

CHECKED BY: APP

APPROVED BY: JBS

AUTHORIZED BY: HW / RC

DATE: 04/12/10

DATE: 05/26/10

DATE: 07/05/10

DATE: 07/05/10

QUALITY CONTROL

DISCIPLINE MANAGER NAME

DOCUMENT CONTROL

NAME

SIGN

SIGN & STAMP

AkerSolutions

PROJECT: TOROMOCHO PROJECT

AREA: 400-GENERAL DN-SITE FACILITIES

CAD NO.: C-560

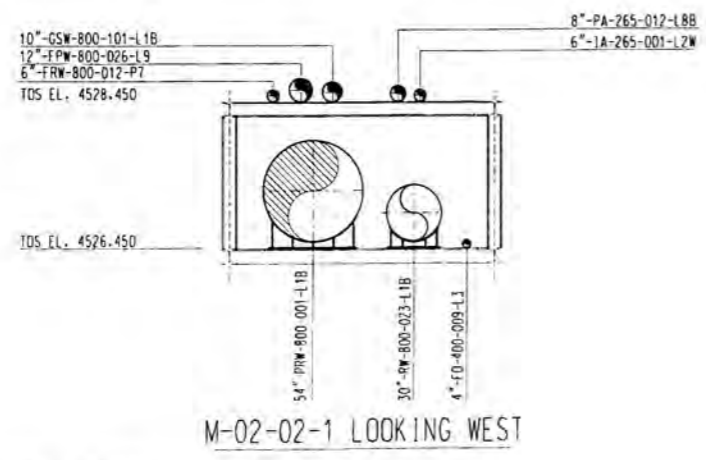
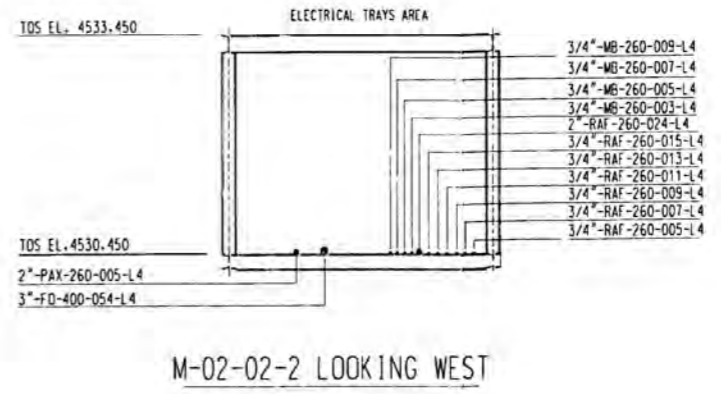
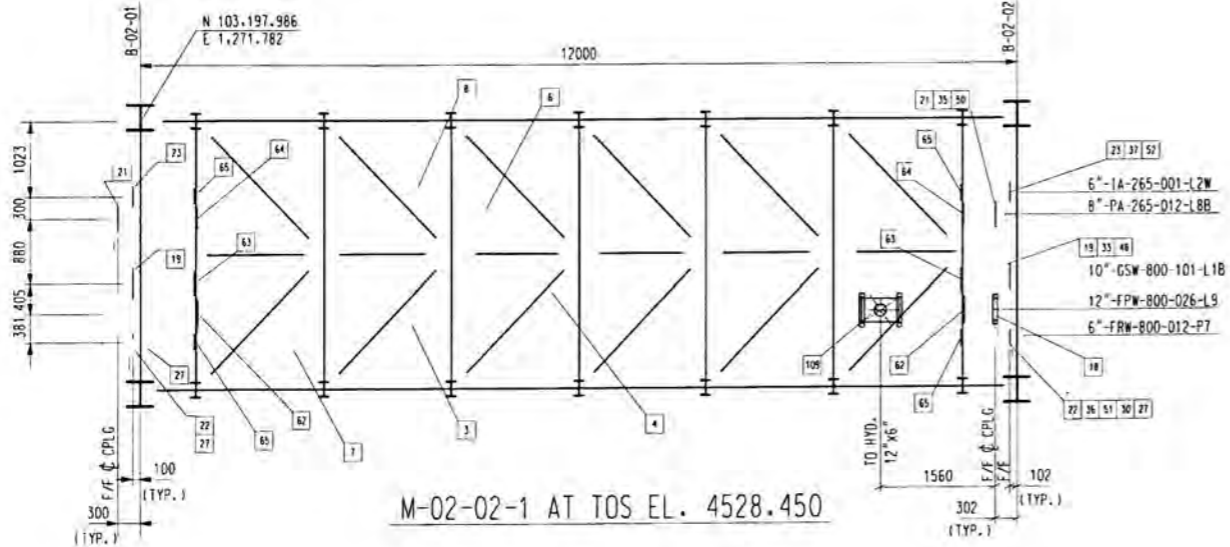
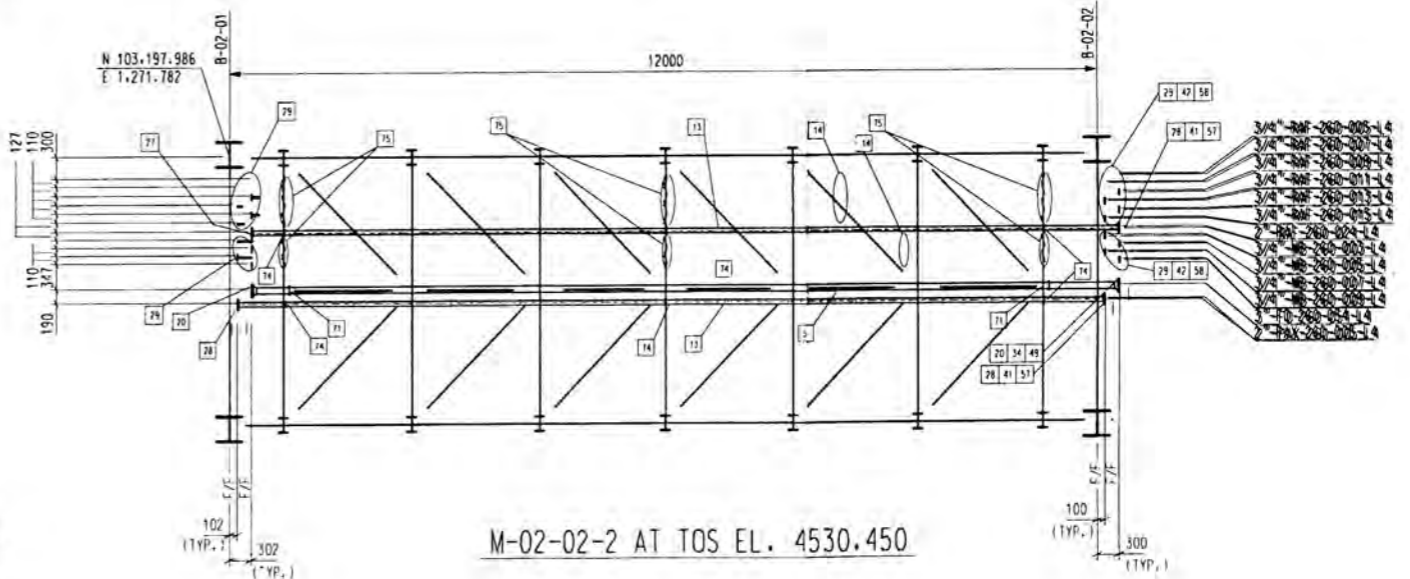
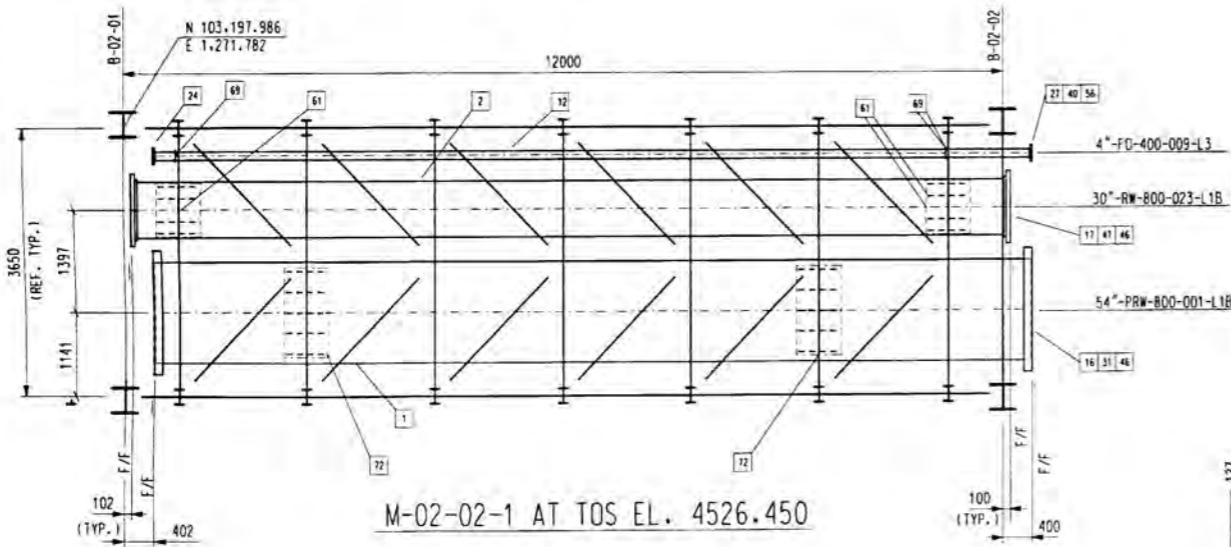
TITLE: PIPEBRIDGE PB-002
MODULE M-02-01-1 & 2
FABRICATION DETAILS & SECTIONS

560-400-DW-P-708.DGN

REVISION: 2

DWG. NO.: 400-DW-P-708

CHINALCO
MINERA CHINALCO PERU S.A.



NOTES:
1. DIMENSIONS ARE IN MILLIMETERS; COORDINATES AND ELEVATIONS IN METERS.

THIS DRAWING NOT VALID UNLESS THE LATEST REVISION IS TAKEN AND HANDLED

REF. NO.	DESCRIPTION
400-02-P-704	PLAN & SECTION FOR GENERAL FABRICATION MODULE TRAY
400-02-P-705	SECTION FOR GENERAL FABRICATION MODULE TRAY
400-02-P-706	SECTION FOR GENERAL FABRICATION MODULE TRAY
400-02-P-707	SECTION FOR GENERAL FABRICATION MODULE TRAY
400-02-P-708	SECTION FOR GENERAL FABRICATION MODULE TRAY
400-02-P-709	SECTION FOR GENERAL FABRICATION MODULE TRAY

NO.	DATE	DESCRIPTION	BY	CHECK	APPROVED
1	04/12/10	ISSUE FOR INTERNAL REVIEW	MVD	APP	
2	05/27/10	ISSUE FOR GENERAL FABRICATION	MVD	APP	
3	07/09/10	GENERAL REVISION	JBS	APP	
4	07/09/10	GENERAL REVISION	JBS	APP	
5	08/23/10	ISSUE FOR GENERAL FABRICATION	MVD	APP	

NO.	DATE	DESCRIPTION	BY	CHECK	APPROVED
1	04/12/10	ISSUE FOR INTERNAL REVIEW	MVD	APP	
2	05/27/10	ISSUE FOR GENERAL FABRICATION	MVD	APP	
3	07/09/10	GENERAL REVISION	JBS	APP	
4	07/09/10	GENERAL REVISION	JBS	APP	
5	08/23/10	ISSUE FOR GENERAL FABRICATION	MVD	APP	

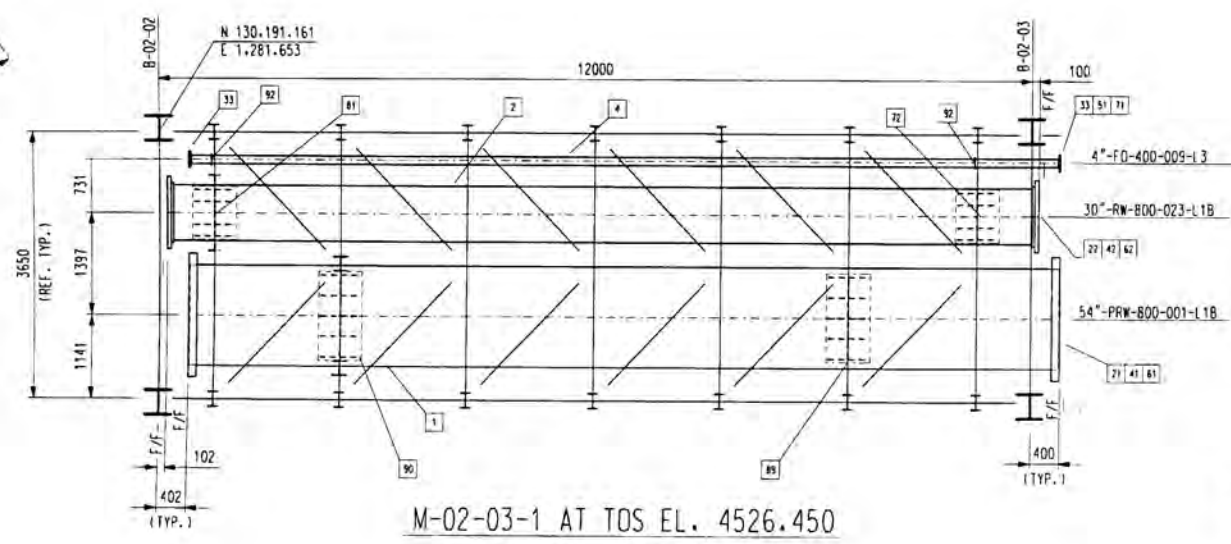
NOTICE
THIS IS A COMPUTER GENERATED DRAWING. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. THIS DRAWING IS THE PROPERTY OF AKER SOLUTIONS. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF AKER SOLUTIONS.

SCALE: 1:50	SHEET SIZE: A1
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CHECKED BY: APP	DATE: 05/26/10
APPROVED BY: JBS	DATE: 07/09/10
AUTHORIZED BY: HW / RC	DATE: 07/09/10
MCP APPROVED:	DATE:

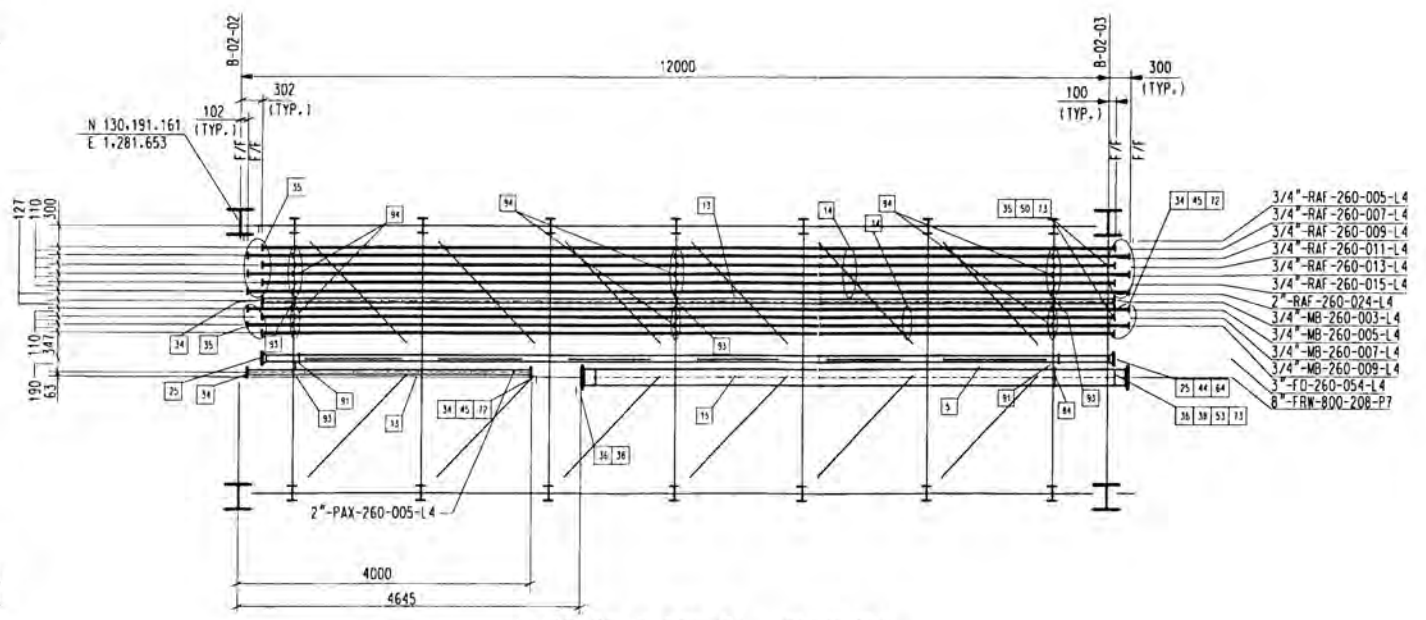
DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL

QUALITY CONTROL	SIGN	AkerSolutions
DISCIPLINE MANAGER NAME	SIGN & STAMP	
DOCUMENT CONTROL		
NAME		
PROJECT: TOROMOCHO PROJECT		
AREA: 400-GENERAL ON-SITE FACILITIES	C-560	REVISION
TITLE: PIPEBRIDGE PB-002 MODULE M-02-02-1 & 2 FABRICATION DETAILS & SECTIONS		2
CAD NO. 560-400-DW-P-709.DGN	DWG. NO. 400-DW-P-709	

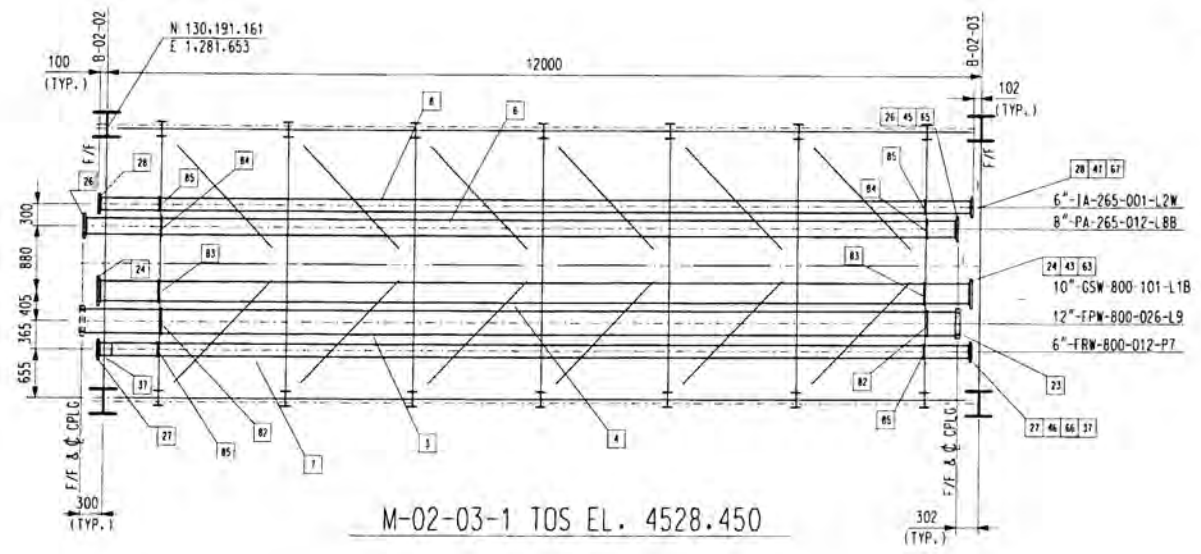
MINERA CHINALCO PERU S.A.



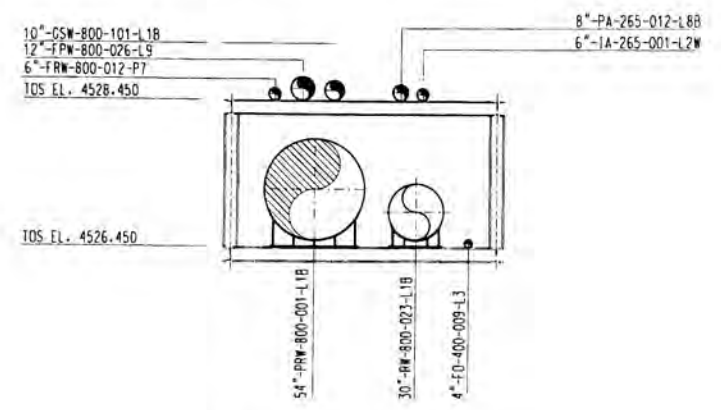
M-02-03-1 AT TOS EL. 4526.450



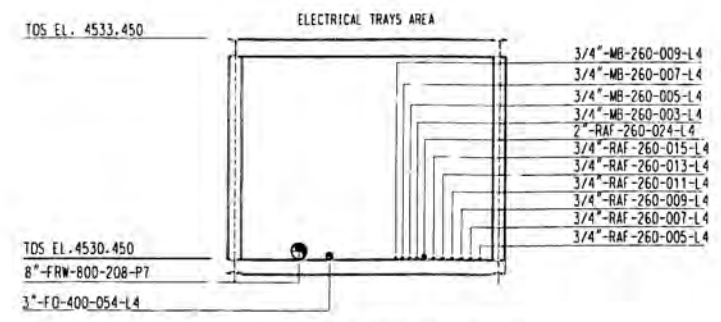
M-02-03-2 TOS EL. 4530.450



M-02-03-1 TOS EL. 4528.450



M-02-03-1 LOOKING WEST



M-02-03-2 LOOKING WEST

NOTES:
1. DIMENSIONS ARE IN MILLIMETERS, COORDINATES AND ELEVATIONS IN METERS.

THIS DRAWING NOT VALID UNLESS THE LATEST REVISIONS IN THIS ARE HANDWRITTEN

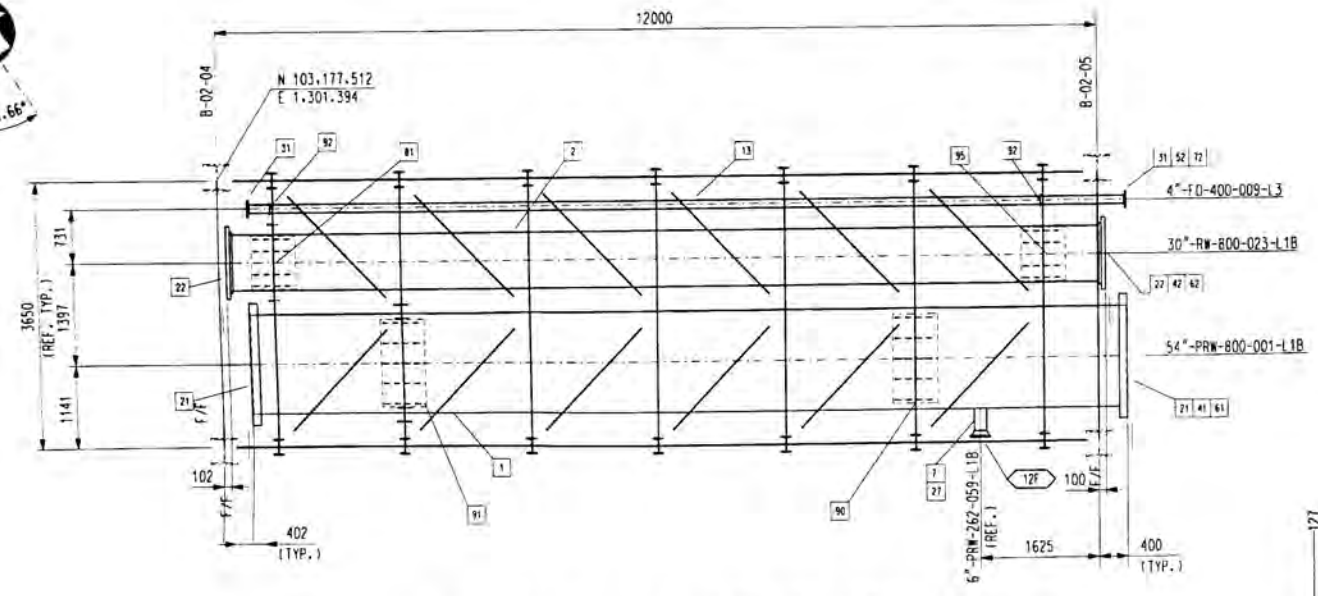
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400-DW-P-710	GENERAL ON-SITE FACILITIES	2	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	3	ISSUE FOR REVIEW	MAC	APP		07/22/10						
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400-DW-P-710	GENERAL ON-SITE FACILITIES	5	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	6	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	7	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	8	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	9	ISSUE FOR REVIEW	MAC	APP		07/22/10						
400-DW-P-710	GENERAL ON-SITE FACILITIES	10	ISSUE FOR REVIEW	MAC	APP		07/22/10						

NOTICE
THIS IS A PRELIMINARY DRAWING. ALL DIMENSIONS AND ELEVATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. THE USER SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

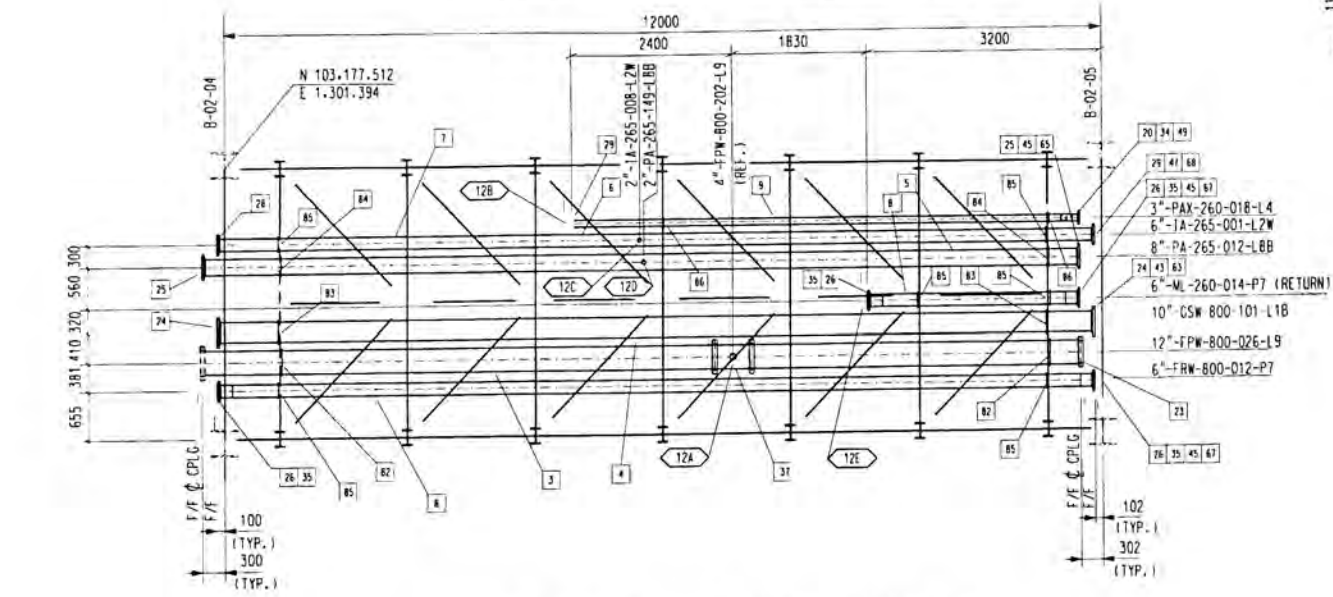
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CHECKED BY: APP
APPROVED BY: JRS
AUTHORIZED BY: HW / RC
MCP APPROVED: DATE:



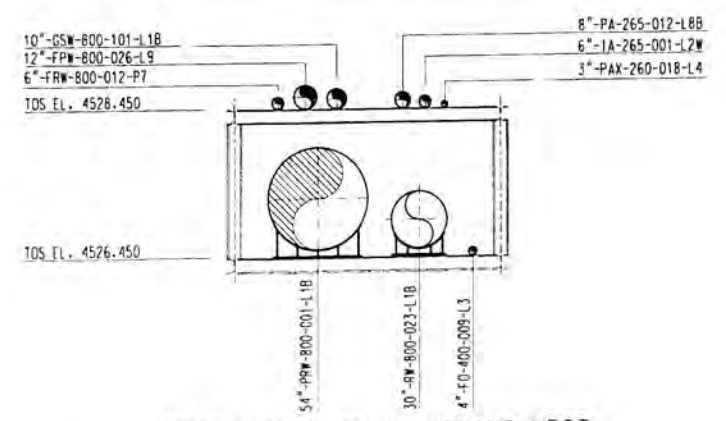
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DISCIPLINE MANAGER NAME		SIGN & STAMP		
DOCUMENT CONTROL		SIGN & STAMP		
PROJECT: TOROMOCHO PROJECT				
AREA: 400-GENERAL ON-SITE FACILITIES	CAD NO.: C-560	REVISION: 2		
TITLE: PIPEBRIDGE PB-002 MODULE M-02-03-1 & 2 FABRICATION DETAILS & SECTIONS		DRAWING NO.: 400-DW-P-710		



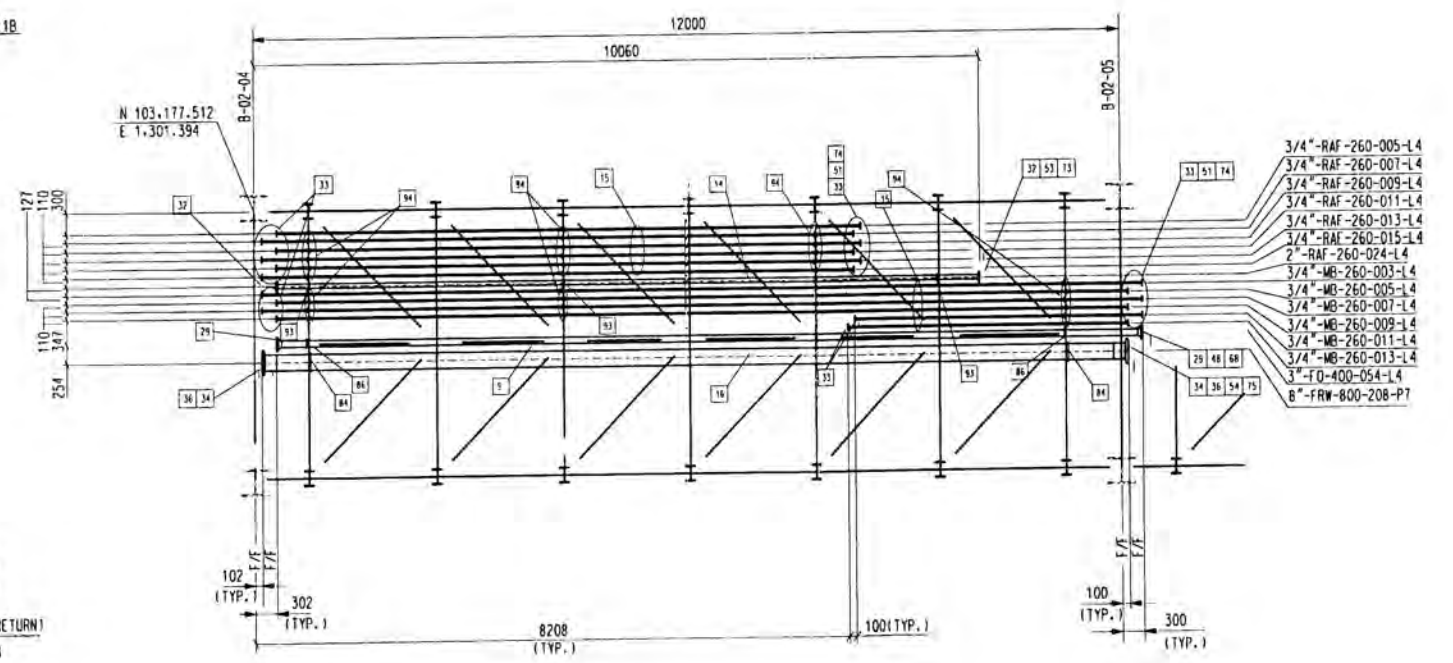
MODULE M-02-05-1 AT TOS EL. 4526.450



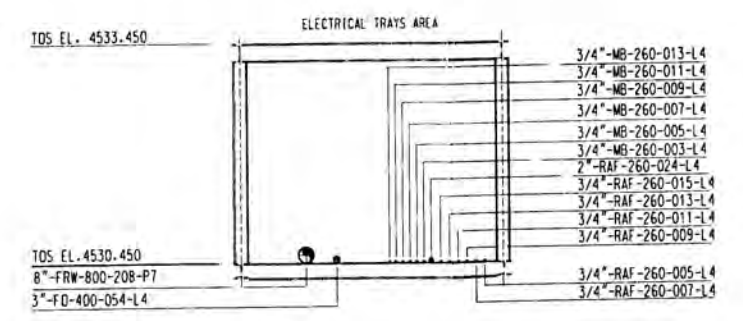
MODULE M-02-05-1 AT TOS EL. 4528.450



MODULE M-02-05-1 LOOKING WEST



MODULE M-02-05-2 AT TOS EL. 4530.450



MODULE M-02-05-2 LOOKING WEST

NOTES:
 1. DIMENSIONS ARE IN MILLIMETERS, COORDINATES AND ELEVATIONS IN METERS.
 2. FABRICATOR SHALL ATTACH METAL TAG TO ALL TIE-IN POINTS DESIGNATED BY SYMBOL 20A AS AN EXAMPLE.

REFERENCES

NO.	DESCRIPTION
1	...
2	...
3	...
4	...
5	...

REVISIONS

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
1	...	JMC	20/08/10
2	20/09/10
3	20/10/10
4	20/11/10
5	20/12/10

REVISIONS

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
1
2
3
4
5

NOTICE

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SCALE: 1:50

SHEET SIZE: A1

DRAWN BY: JMC DATE: 04/26/10

CHECKED BY: APP DATE: 04/26/10

APPROVED BY: JRS DATE: 07/16/10

AUTHORIZED BY: HW / RC DATE: 07/16/10

MCP APPROVED: DATE:

DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL

QUALITY CONTROL: _____ SIGN: _____

DISCIPLINE MANAGER NAME: _____ SIGN & STAMP: _____

DOCUMENT CONTROL: _____

NAME: _____

PROJECT: TOROMOCHO PROJECT

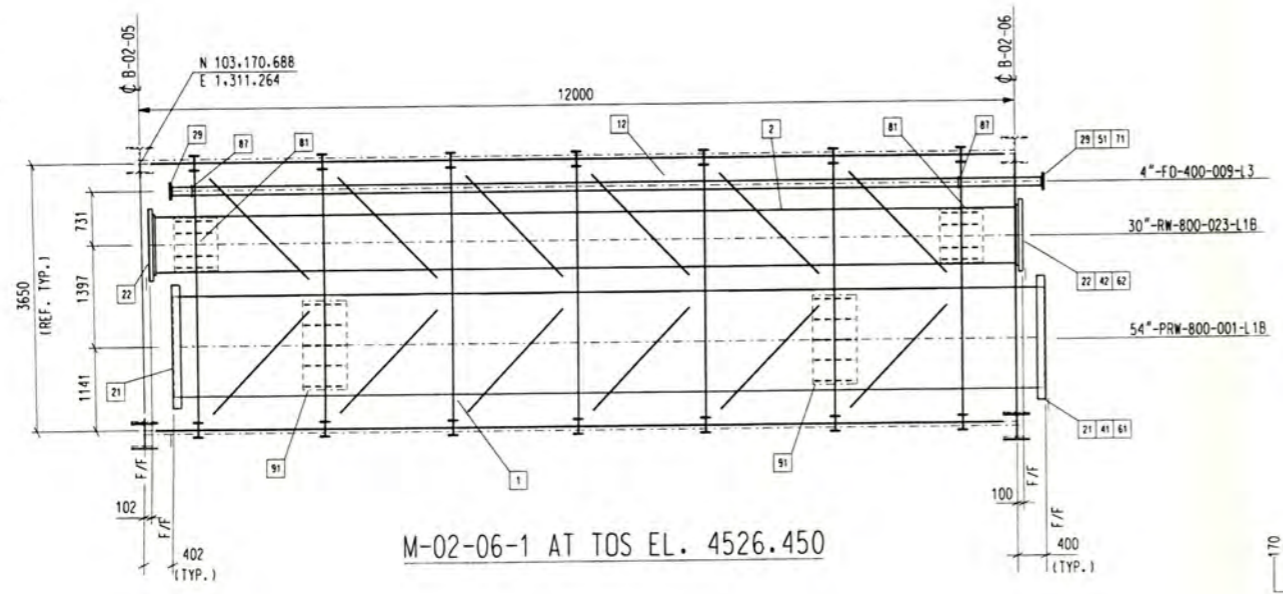
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TITLE: PIPEBRIDGE PB-002 MODULE M-02-05-1 & 2 FABRICATION DETAILS & SECTIONS DWG. NO: 400-DW-P-712

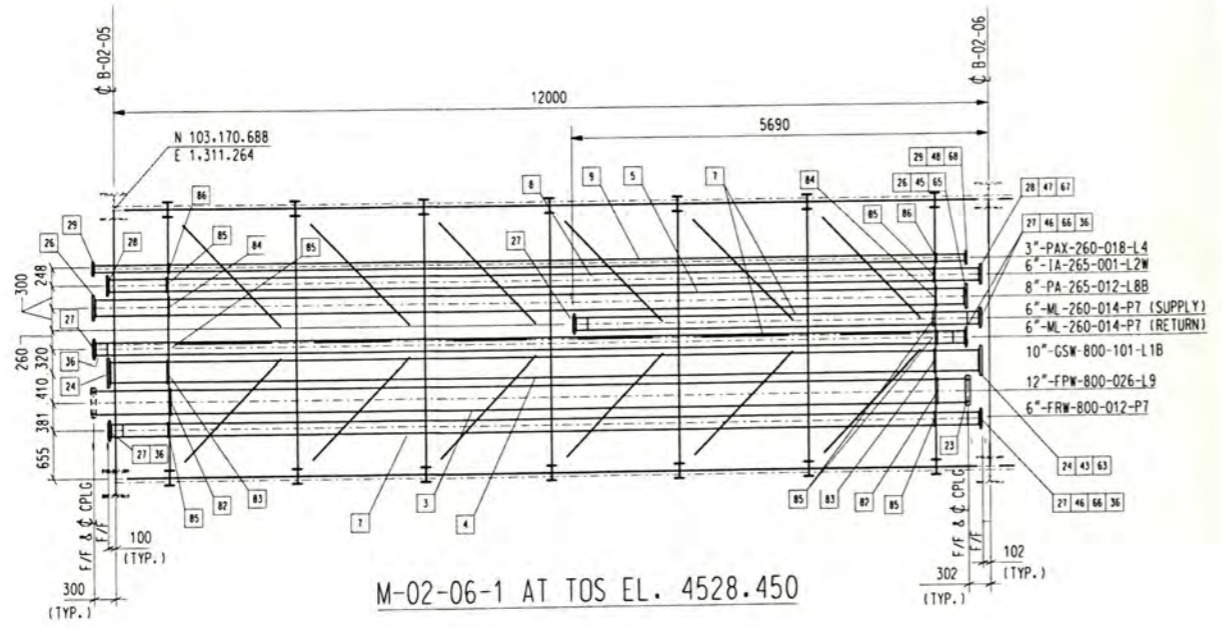
REVISION: 2

AKER SOLUTIONS

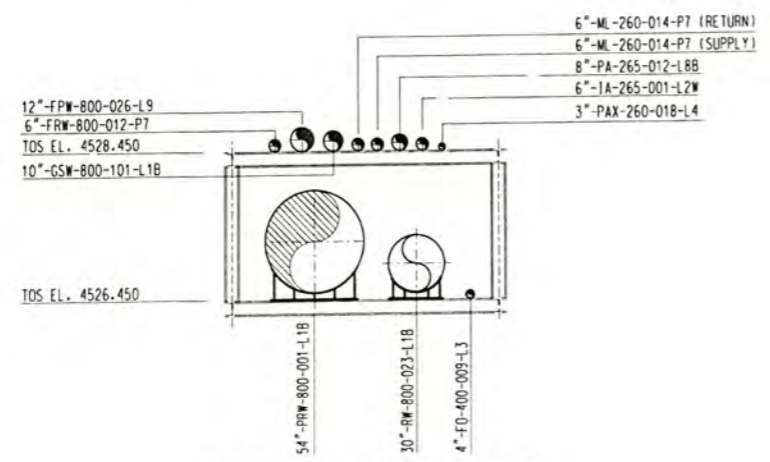
CHINALCO MINERA CHINALCO PERU S.A.



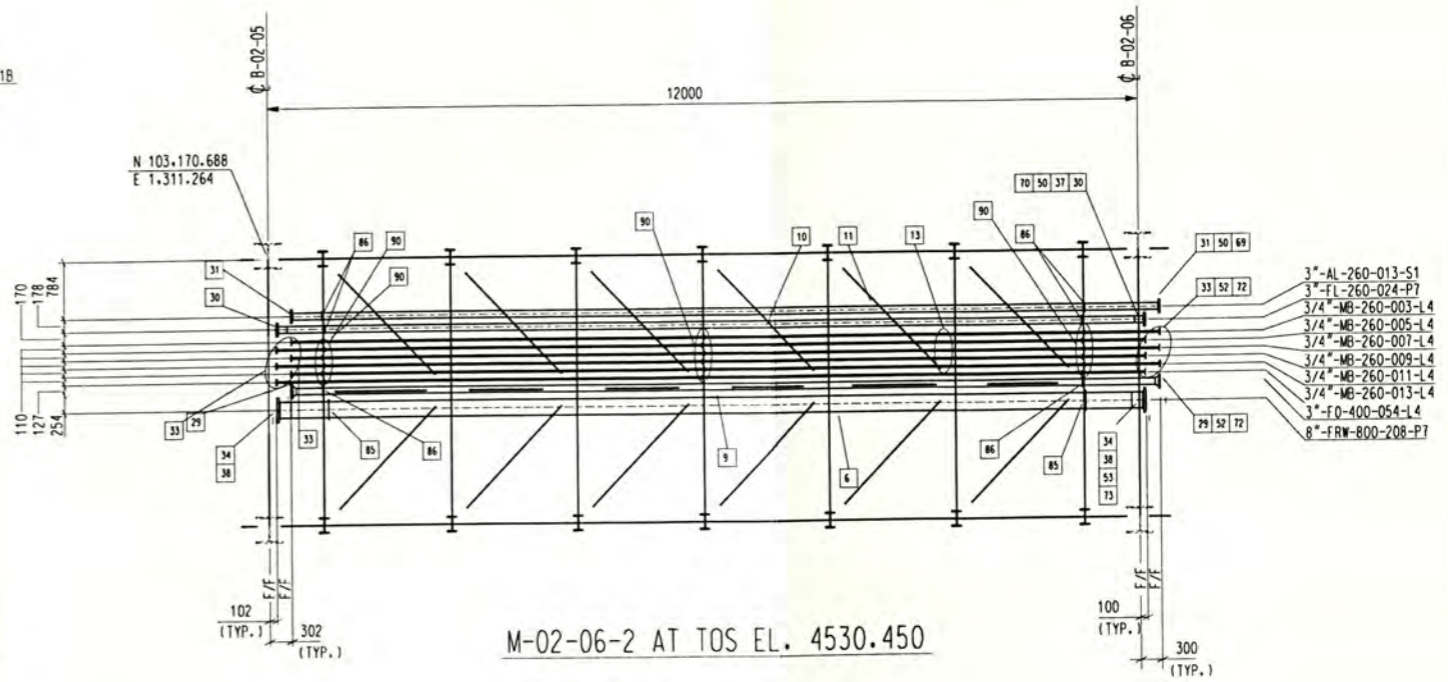
M-02-06-1 AT TOS EL. 4526.450



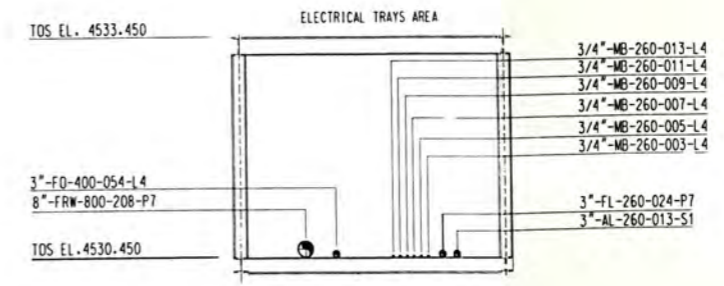
M-02-06-1 AT TOS EL. 4528.450



M-02-06-1 LOOKING WEST



M-02-06-2 AT TOS EL. 4530.450



M-02-06-2 LOOKING WEST

NOTES:
1. DIMENSIONS ARE IN MILLIMETERS, COORDINATES AND ELEVATIONS IN METERS.

REFERENCES

DOC. NO.	TITLE
400-CA-P-104	PLANT PIPEBRIDGE SYSTEM-GENERAL PIPEBRIDGE MODULE INDEX
400-DW-P-703	DETAILED DISON & SECTIONS
400-DW-P-003	PIPEBRIDGE 400-PP-002 PLAN & ELEVATION
400-DW-P-712	MODULE M-02-06-1 & 2
400-DW-P-714	MODULE M-02-06-1 & 2

REVISIONS

NO.	DESCRIPTION	BY	CHECK	APPROVED	DATE
1	ISSUED FOR CLIENT APPROVAL	MRL	APP		06/10/10
2	ISSUED FOR CONSTRUCTION	JEC	MRL	APP	07/16/10
3	GENERAL REVISION	JEC	MRL	APP	04/05/11
4	ISSUED FOR FABRICATION	RWR	APP	RC	08/23/11

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SCALE: 1:50

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DRAWN BY: MMD
CHECKED BY: APP
APPROVED BY: JBS
AUTHORIZED BY: HW / RC
MCP APPROVED: DATE:

DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL

QUALITY CONTROL: SIGN

DISCIPLINE MANAGER NAME: SIGN & STAMP

DOCUMENT CONTROL: NAME

PROJECT: TOROMOCHO PROJECT

AREA: 400-GENERAL ON-SITE FACILITIES

TITLE: PIPEBRIDGE PB-002
MODULE M-02-06-1 & 2
FABRICATION DETAILS & SECTIONS

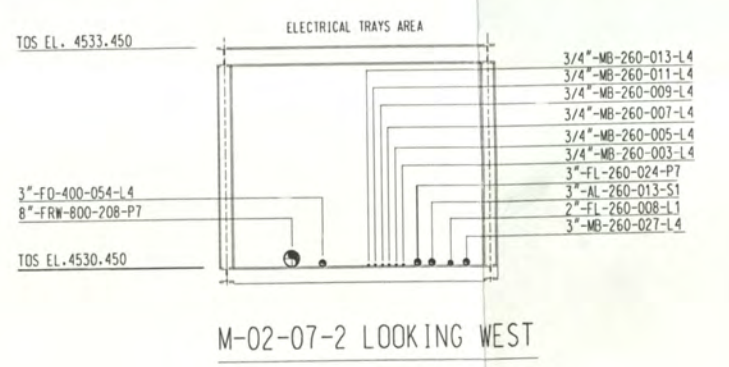
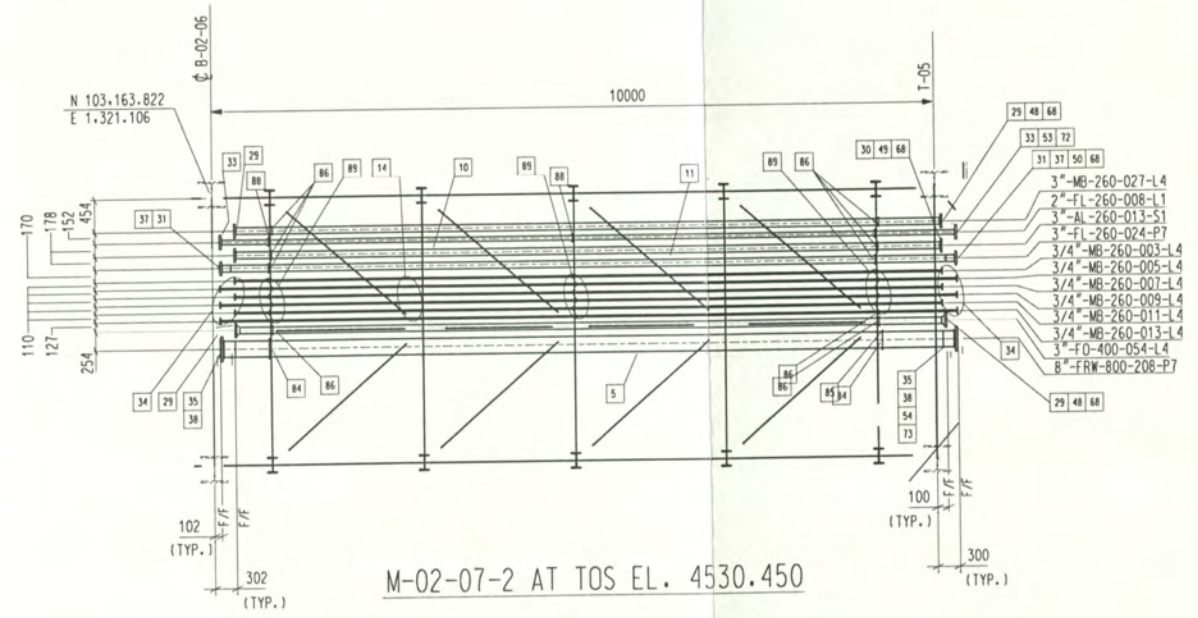
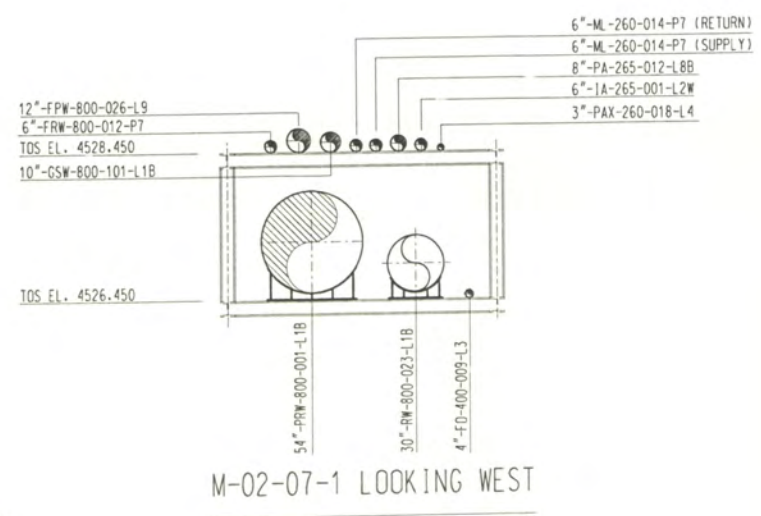
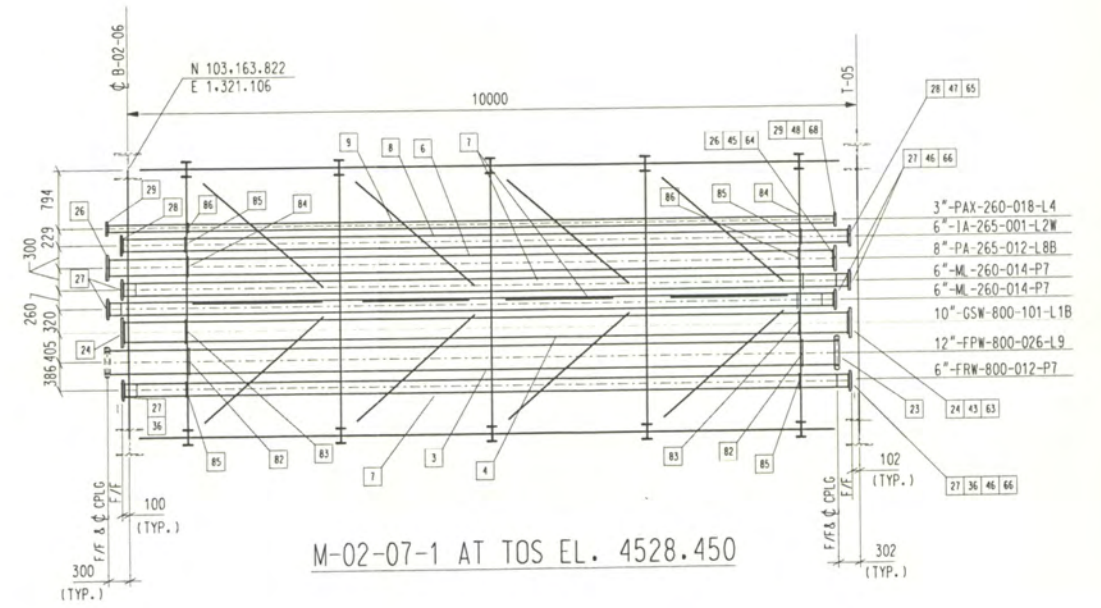
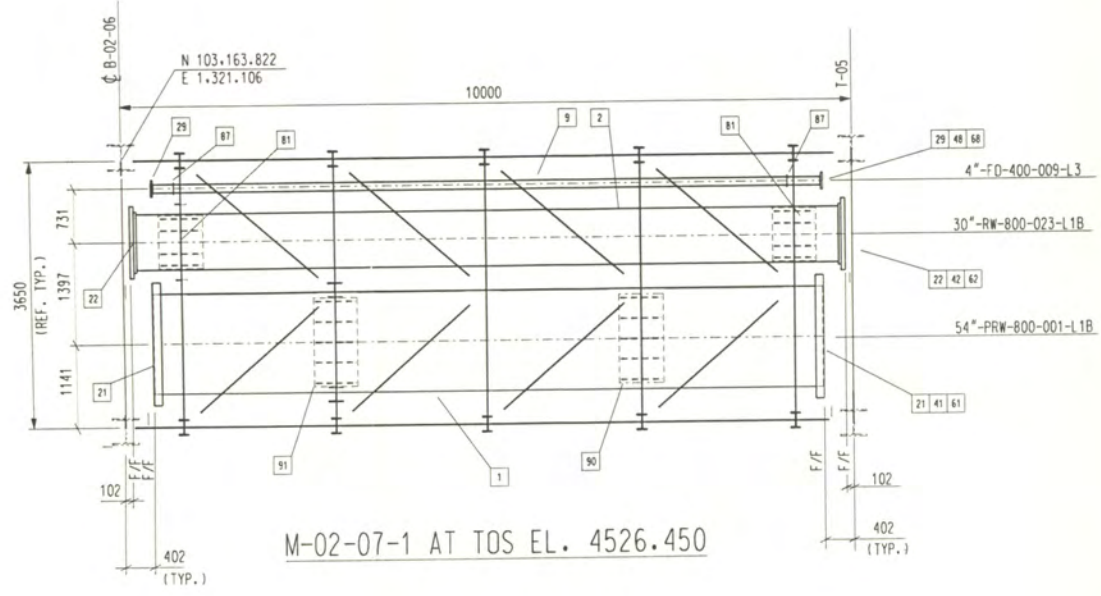
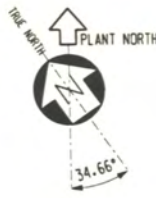
CAD NO.: C-560
560-400-DW-P-713.DGN

REVISION: 2

DWG. NO.: 400-DW-P-713

MINERA CHINALCO PERU S.A.

User: USER NAME & DATE: 01/16/10



NOTES:
1. DIMENSIONS ARE IN MILLIMETERS, COORDINATES AND ELEVATIONS IN METERS.

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DWG. NO.	TITLE
400-GA-P-704	PLANT PIPEBRIDGE SYSTEM-OVERALL PIPEBRIDGE MODULE INDEX
400-DW-P-703	DETAIL DESIGN & SECTIONS
400-DW-S-003	PIPEBRIDGE 400-PB-003 PLAN & ELEVATION
400-DW-P-713	MODULE M-02-07-1 & 2

REVISIONS					REVISIONS						
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2	ISSUED FOR CONSTRUCTION	ROW	MRJ	APP	07/16/10						
3	GENERAL REVISION	JEC	MRJ	APP	04/05/11						
4	ISSUED FOR FABRICATION	RWB	APP	RC	08/23/11						

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SCALE: 1:50
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DRAWN BY: MRJ
CHECKED BY: APP
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MCP APPROVED:

DATE: 05/13/10
DATE: 06/07/10
DATE: 07/16/10
DATE: 07/16/10
DATE:

DRAWING NOT VALID WITHOUT SIGN AND STAMP OF DOCUMENT CONTROL

QUALITY CONTROL	SIGN	
DISCIPLINE MANAGER NAME	SIGN & STAMP	
DOCUMENT CONTROL		
PROJECT: TOROMOCHO PROJECT		
AREA: 400-GENERAL ON-SITE FACILITIES	CAD NO.: C-560	REVISION: 2
TITLE: PIPEBRIDGE PB-002 MODULE M-02-07-1 & 2 FABRICATION DETAILS & SECTIONS		DWG. NO.: 400-DW-P-714

Logo: CHINALCO MINERA CHINALCO PERU S.A.

Footer: User: \$USERNAME\$ \$DATE\$ \$TIME\$ \$FILE\$

