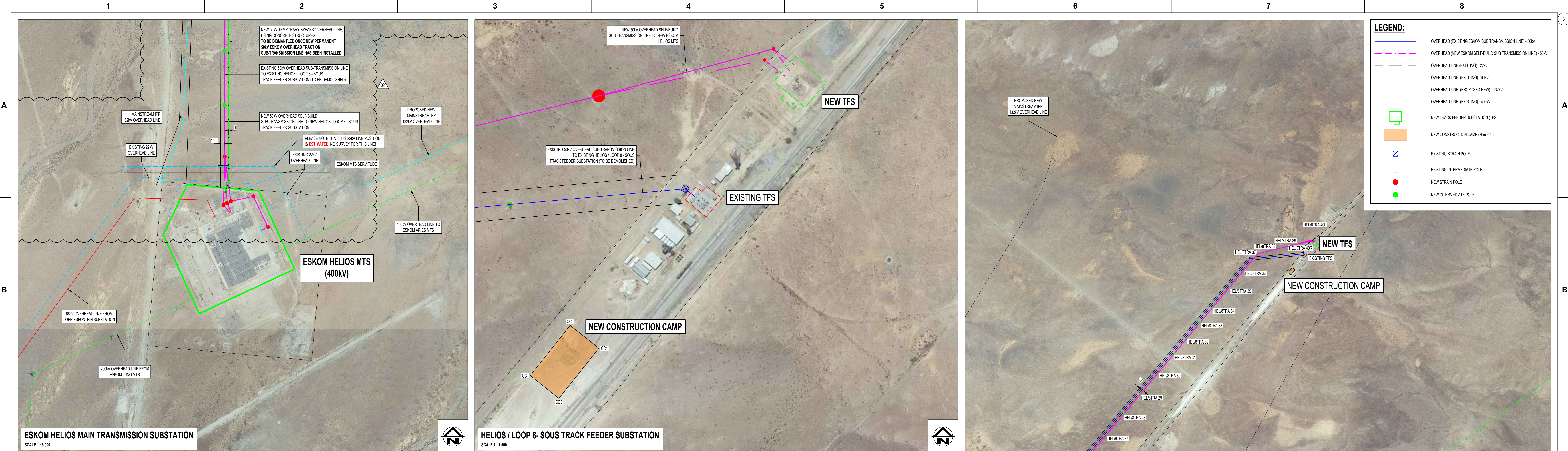
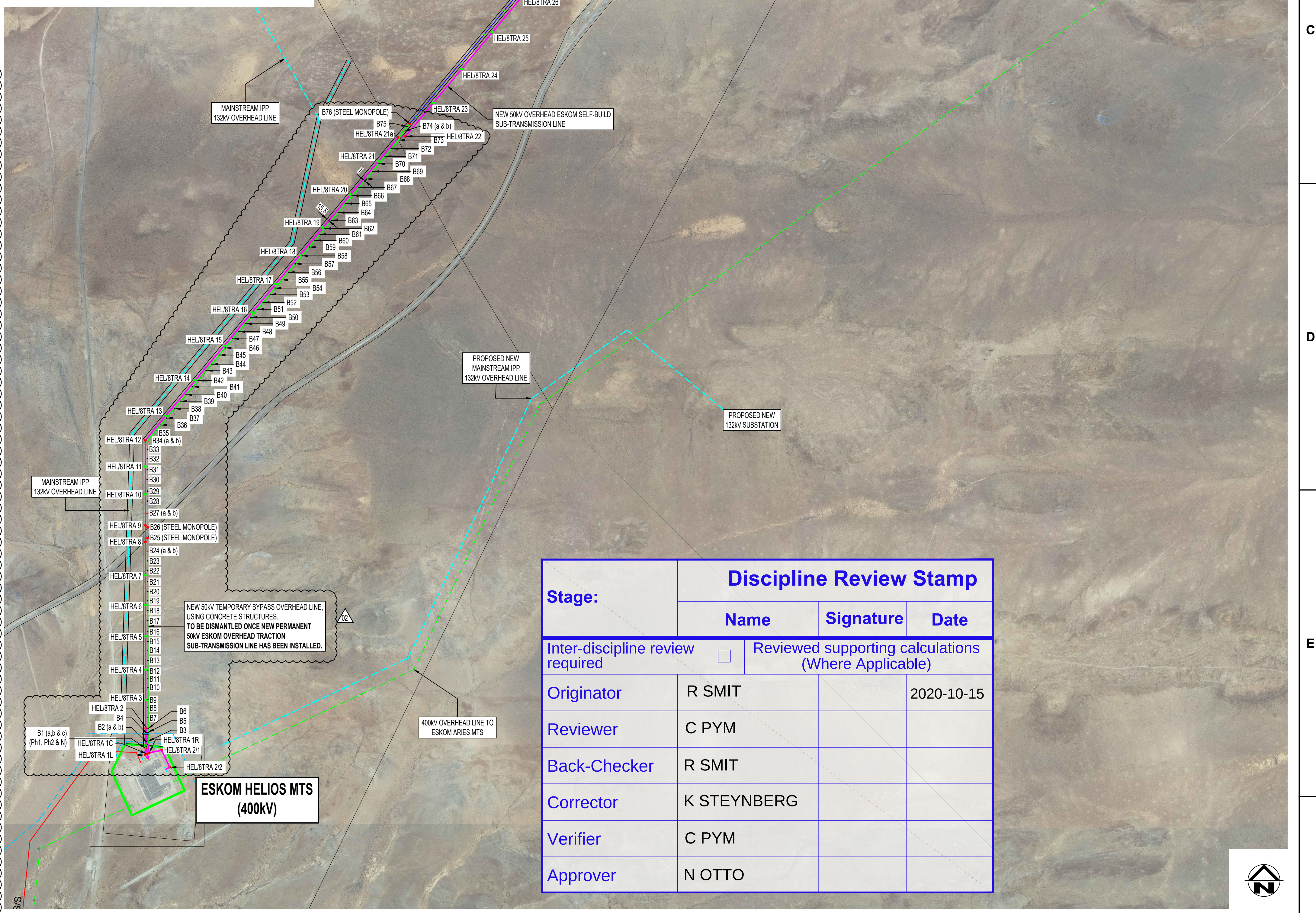
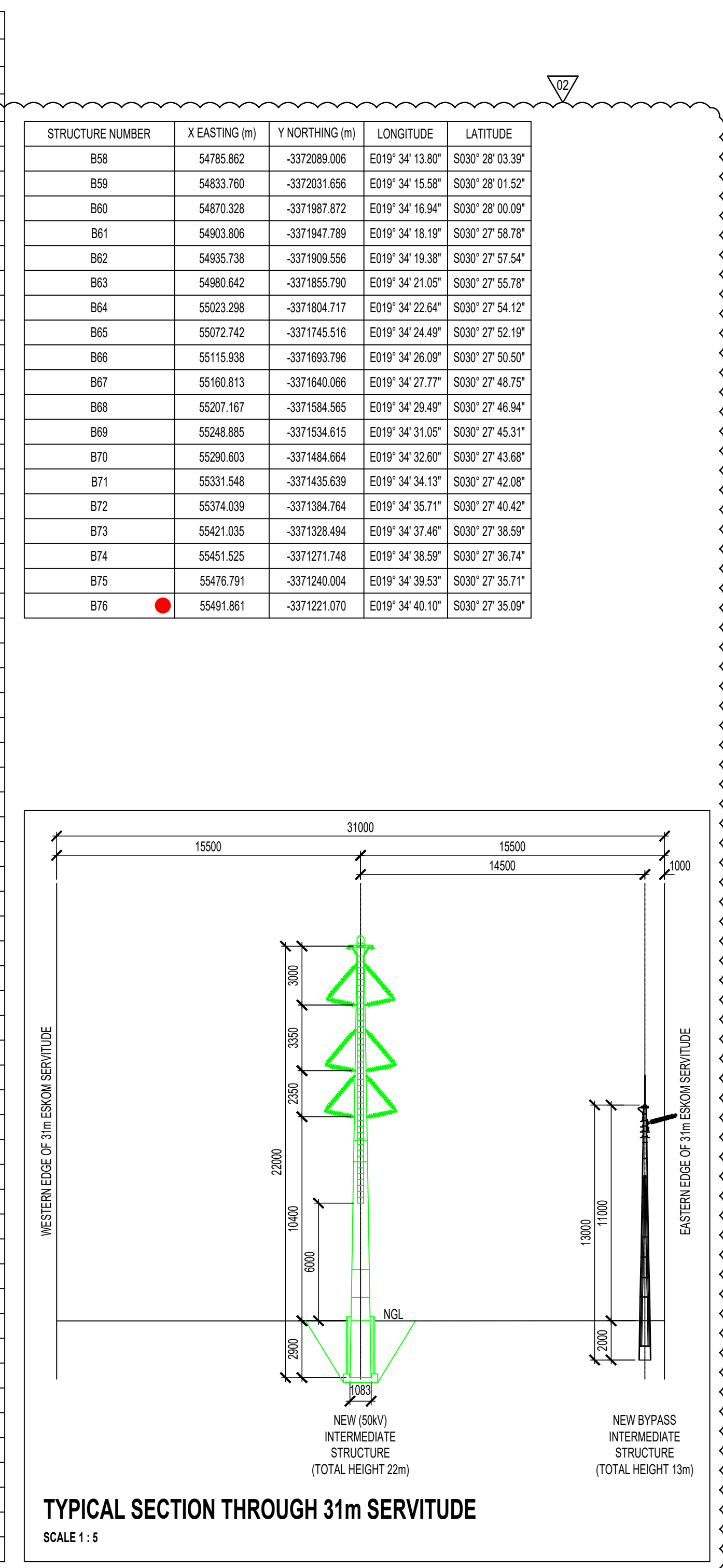




STRUCTURE NUMBER		X EASTING (m)	Y NORTHING (m)	STRUCTURE DESCRIPTION	BOO DESCRIPTION	LONGITUDE	LATITUDE
ESKOM HELIOS MAIN TRANSMISSION SUBSTATION							
MTS Gantry 2 10m CAH		53890.940	-3375461.920	helios gantry2 4.pol	B7 OTHERS (ESKOM T4)	E01° 33' 40.88"	S00° 29' 53.06"
HELISTRA 21		53862.442	-3375337.263	helios mts term 5 d.pol	TNET Type D 16.4m CAH flanged pole 12F	E01° 33' 39.79"	S00° 29' 40.02"
HELISTRA 22		53914.800	-3375448.270	helios mts term 5 d.pol	TNET Type D 16.4m CAH flanged pole 12F	E01° 33' 41.77"	S00° 29' 42.61"
HELISTRA 1L		53752.501	-3375384.390	helios gantry 2 10m CAH	B7 OTHERS (ESKOM T4)	E01° 33' 35.24"	S00° 29' 50.01"
HELISTRA 1R		53753.783	-3375386.701	helios mts term 7 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.72"	S00° 29' 50.05"
HELISTRA 2		53780.397	-3375355.519	helios mts term 5 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 36.71"	S00° 29' 49.62"
HELISTRA 3		53768.318	-3375192.793	helios mts pre term 14.pol	TNET Type D 12m CAH flanged pole 12F	E01° 33' 35.67"	S00° 29' 44.34"
HELISTRA 4		53757.955	-3375004.336	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 33' 35.61"	S00° 29' 38.24"
HELISTRA 4		53757.574	-3374807.440	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 3.1m	E01° 33' 35.76"	S00° 29' 31.83"
HELISTRA 5		53757.153	-3374589.403	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 3.1m	E01° 33' 35.76"	S00° 29' 31.83"
HELISTRA 6		53756.758	-3374584.681	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 2.9m	E01° 33' 35.67"	S00° 29' 16.10"
HELISTRA 7		53756.379	-3374188.290	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 35.67"	S00° 29' 11.72"
HELISTRA 8		53755.952	-3373967.354	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 12F	E01° 33' 35.54"	S00° 29' 04.55"
HELISTRA 9		53755.746	-3373860.494	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 12F	E01° 33' 35.54"	S00° 29' 01.08"
HELISTRA 10		53755.352	-3373656.005	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.48"	S00° 29' 54.45"
HELISTRA 11		53754.999	-3373473.359	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 33' 35.41"	S00° 29' 48.51"
HELISTRA 12		53754.666	-3373301.070	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.37"	S00° 29' 42.91"
HELISTRA 13		53889.129	-3373140.073	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 34.38"	S00° 29' 37.68"
HELISTRA 14		54083.780	-3372807.035	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 3.5m	E01° 33' 34.38"	S00° 29' 30.07"
HELISTRA 15		54272.335	-3372681.248	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 34.68"	S00° 29' 22.70"
HELISTRA 16		54455.450	-3372481.999	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 01.48"	S00° 29' 15.55"
HELISTRA 17		54611.075	-3372275.684	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 07.28"	S00° 29' 08.48"
HELISTRA 18		54771.306	-3372083.814	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 13.25"	S00° 29' 03.22"
HELISTRA 19		54821.913	-3371903.488	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 18.86"	S00° 29' 57.34"
HELISTRA 20		55102.872	-3371687.090	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 25.07"	S00° 29' 50.28"
HELISTRA 21		55287.056	-3371466.291	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 32.47"	S00° 29' 43.09"
HELISTRA 21a		55417.171	-3371310.500	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 34' 37.31"	S00° 29' 38.00"
HELISTRA 22		55464.554	-3371304.011	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 34' 39.09"	S00° 29' 37.79"
HELIOS / LOOP 8 - SOUS TRACK FEEDER SUBSTATION							
HELISTRA 23		55945.700	-3371092.252	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 45.91"	S00° 29' 30.02"
HELISTRA 24		55832.879	-3370862.952	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 52.81"	S00° 29' 23.40"
HELISTRA 25		56036.779	-3370616.789	treila 15m 4.pol	TNET Type C 15m CAH flanged pole 12F	E01° 35' 00.40"	S00° 29' 15.44"
HELISTRA 26		56235.621	-3370380.680	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 07.81"	S00° 29' 07.68"
HELISTRA 27		56411.723	-3370169.803	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 14.37"	S00° 29' 00.80"
HELISTRA 28		56588.827	-3369945.752	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 21.34"	S00° 29' 53.49"
HELISTRA 29		56779.921	-3369728.898	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 28.98"	S00° 29' 46.42"
HELISTRA 30		56979.396	-3369490.033	treila 15m 4.pol	TNET Type C 15m CAH flanged pole 12F	E01° 35' 35.51"	S00° 29' 38.63"
HELISTRA 31		57147.449	-3369288.793	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 41.77"	S00° 29' 32.07"
HELISTRA 32		57289.747	-3369118.396	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 35' 47.07"	S00° 29' 26.51"
HELISTRA 33		57428.482	-3368952.265	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 35' 52.24"	S00° 29' 21.09"
HELISTRA 34		57571.057	-3368781.538	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 57.54"	S00° 29' 15.52"
HELISTRA 35		57751.387	-3368565.619	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 36' 04.26"	S00° 29' 08.48"
HELISTRA 36		57913.994	-3368370.878	treila 14m 4.pol	TNET Type C 14m CAH flanged pole 12F	E01° 36' 10.31"	S00° 29' 02.13"
HELISTRA 37		58058.104	-3368198.311	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 36' 15.68"	S00° 29' 56.50"
HELISTRA 38		58243.303	-3368153.232	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 36' 22.61"	S00° 29' 55.00"
HELISTRA 39		58466.189	-3368008.879	helios ts pre term 14.pol	TNET Type E 15m CAH flanged pole 12F	E01° 36' 30.89"	S00° 29' 53.20"
HELISTRA 40C 2-POLE		58652.125	-3368053.720	helios ts term 7 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 36' 37.91"	S00° 29' 51.70"
TFS Gantry		58874.203	-3368071.235	helios ts dummy 1 pol	BY CONTRACTOR AS PER SPECIFICATION	E01° 36' 38.74"	S00° 29' 52.26"

STRUCTURE NUMBER		X EASTING (m)	Y NORTHING (m)	STRUCTURE DESCRIPTION	BOO DESCRIPTION	LONGITUDE	LATITUDE
ESKOM HELIOS MAIN TRANSMISSION SUBSTATION							
HELISTRA 1L		53752.501	-3375384.390	helios gantry 2 10m CAH	B7 OTHERS (ESKOM T4)	E01° 33' 35.24"	S00° 29' 50.01"
HELISTRA 1R		53753.783	-3375386.701	helios mts term 7 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.72"	S00° 29' 50.05"
HELISTRA 2		53780.397	-3375355.519	helios mts term 5 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 36.71"	S00° 29' 49.62"
HELISTRA 3		53768.318	-3375192.793	helios mts pre term 14.pol	TNET Type D 12m CAH flanged pole 12F	E01° 33' 35.67"	S00° 29' 44.34"
HELISTRA 4		53757.955	-3375004.336	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 33' 35.61"	S00° 29' 38.24"
HELISTRA 4		53757.574	-3374807.440	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 3.1m	E01° 33' 35.76"	S00° 29' 31.83"
HELISTRA 5		53757.153	-3374589.403	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 3.1m	E01° 33' 35.76"	S00° 29' 31.83"
HELISTRA 6		53756.758	-3374584.681	treila 14m 4.pol	TNET Type A 14m CAH flanged pole 2.9m	E01° 33' 35.67"	S00° 29' 16.10"
HELISTRA 7		53756.379	-3374188.290	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 35.67"	S00° 29' 11.72"
HELISTRA 8		53755.952	-3373967.354	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 12F	E01° 33' 35.54"	S00° 29' 04.55"
HELISTRA 9		53755.746	-3373860.494	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 12F	E01° 33' 35.54"	S00° 29' 01.08"
HELISTRA 10		53755.352	-3373656.005	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.48"	S00° 29' 54.45"
HELISTRA 11		53754.999	-3373473.359	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 33' 35.41"	S00° 29' 48.51"
HELISTRA 12		53754.666	-3373301.070	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 33' 35.37"	S00° 29' 42.91"
HELISTRA 13		53889.129	-3373140.073	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 34.38"	S00° 29' 37.68"
HELISTRA 14		54083.780	-3372807.035	treila 15m 4.pol	TNET Type D 15m CAH flanged pole 3.5m	E01° 33' 34.38"	S00° 29' 30.07"
HELISTRA 15		54272.335	-3372681.248	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 33' 34.68"	S00° 29' 22.70"
HELISTRA 16		54455.450	-3372481.999	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 01.48"	S00° 29' 15.55"
HELISTRA 17		54611.075	-3372275.684	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 07.28"	S00° 29' 08.48"
HELISTRA 18		54771.306	-3372083.814	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 13.25"	S00° 29' 03.22"
HELISTRA 19		54821.913	-3371903.488	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 18.86"	S00° 29' 57.34"
HELISTRA 20		55102.872	-3371687.090	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 25.07"	S00° 29' 50.28"
HELISTRA 21		55287.056	-3371466.291	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 32.47"	S00° 29' 43.09"
HELISTRA 21a		55417.171	-3371310.500	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 34' 37.31"	S00° 29' 38.00"
HELISTRA 22		55464.554	-3371304.011	treila 14m 4.pol	TNET Type D 14m CAH flanged pole 12F	E01° 34' 39.09"	S00° 29' 37.79"
HELIOS / LOOP 8 - SOUS TRACK FEEDER SUBSTATION							
HELISTRA 23		55945.700	-3371092.252	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 45.91"	S00° 29' 30.02"
HELISTRA 24		55832.879	-3370862.952	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 34' 52.81"	S00° 29' 23.40"
HELISTRA 25		56036.779	-3370616.789	treila 15m 4.pol	TNET Type C 15m CAH flanged pole 12F	E01° 35' 00.40"	S00° 29' 15.44"
HELISTRA 26		56235.621	-3370380.680	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 07.81"	S00° 29' 07.68"
HELISTRA 27		56411.723	-3370169.803	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 14.37"	S00° 29' 00.80"
HELISTRA 28		56588.827	-3369945.752	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 21.34"	S00° 29' 53.49"
HELISTRA 29		56779.921	-3369728.898	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 28.98"	S00° 29' 46.42"
HELISTRA 30		56979.396	-3369490.033	treila 15m 4.pol	TNET Type C 15m CAH flanged pole 12F	E01° 35' 35.51"	S00° 29' 38.63"
HELISTRA 31		57147.449	-3369288.793	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 41.77"	S00° 29' 32.07"
HELISTRA 32		57289.747	-3369118.396	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 35' 47.07"	S00° 29' 26.51"
HELISTRA 33		57428.482	-3368952.265	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 35' 52.24"	S00° 29' 21.09"
HELISTRA 34		57571.057	-3368781.538	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 35' 57.54"	S00° 29' 15.52"
HELISTRA 35		57751.387	-3368565.619	treila 15m 4.pol	TNET Type A 15m CAH flanged pole 3.5m	E01° 36' 04.26"	S00° 29' 08.48"
HELISTRA 36		57913.994	-3368370.878	treila 14m 4.pol	TNET Type C 14m CAH flanged pole 12F	E01° 36' 10.31"	S00° 29' 02.13"
HELISTRA 37		58058.104	-3368198.311	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 36' 15.68"	S00° 29' 56.50"
HELISTRA 38		58243.303	-3368153.232	treila 12m 4.pol	TNET Type A 12m CAH flanged pole 2.9m	E01° 36' 22.61"	S00° 29' 55.00"
HELISTRA 39		58466.189	-3368008.879	helios ts pre term 14.pol	TNET Type E 15m CAH flanged pole 12F	E01° 36' 30.89"	S00° 29' 53.20"
HELISTRA 40C 2-POLE		58652.125	-3368053.720	helios ts term 7 d.pol	TNET Type D 14m CAH flanged pole 12F	E01° 36' 37.91"	S00° 29' 51.70"
TFS Gantry		58874.203	-3368071.235	helios ts dummy 1 pol	BY CONTRACTOR AS PER SPECIFICATION	E01° 36' 38.74"	S00° 29' 52.26"



DRAWING NO.	REFERENCE
CC1	58391.336
CC2	58434.99
CC3	58422.804
CC4	58466.259

NOTES
1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEG SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.

CONSTRUCTION CAMP	
CC1	58391.336
CC2	58434.99
CC3	58422.804
CC4	58466.259

TRACTION FEEDER SUBSTATION - REFER TO CIVIL ENGINEER'S DETAIL DRAWINGS FOR EXACT POSITION	
CC1	58391.336
CC2	58434.99
CC3	58422.804
CC4	58466.259

DISCIPLINE REVIEW STAMP
