

3D EMF Calculation Notes:
1) Calculations based on the EPRI Red Book methods (3rd Edition, 2005 - 7.4 Calculation of Magnetic Fields and Appendices 7.1 Calculation of Field Ellipse Parameters and 7.6 Electric Field Calculations for 3D Geometry).
2) All wire positions are modeled at the specified weather case and wind direction. Height above ground determined by the modeled ground TIN.
3) Only the effects of wires are being analyzed. The effects of structures are not included unless enabled as noted below.
4) Ground return is being ignored for magnetic field calculations.

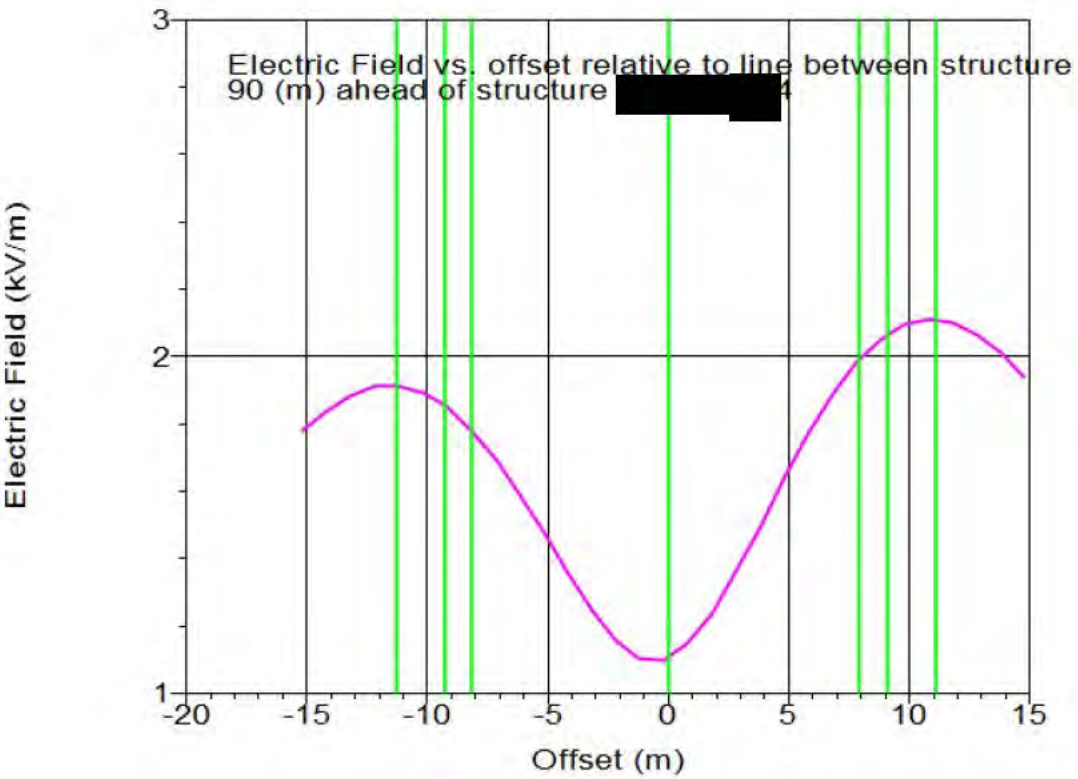
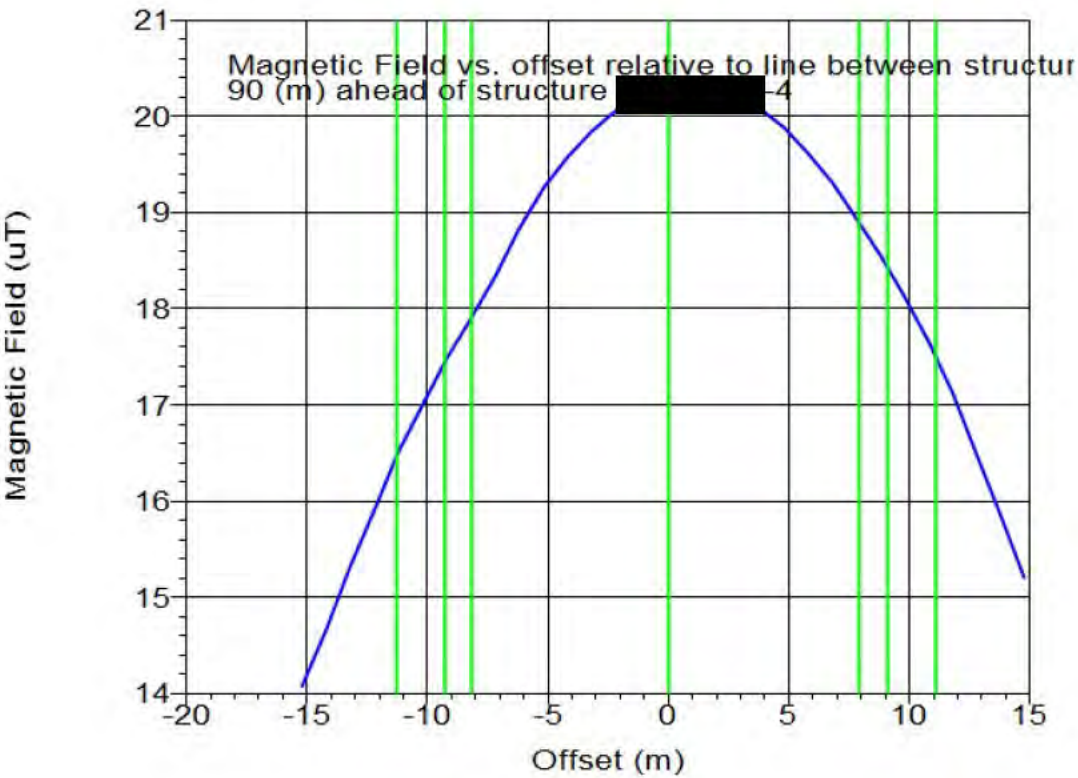
Meter height above ground: 1.00 (m)
Maximum wire distance: 150.00 (m)
Maximum cable segment size: 3.00 (m)
Cross section offset +/-: 15.20 (m)
Result interval: 1.00 (m)
Electric field limit: 9.00 (kV/m)
Magnetic field limit: 360.00 (uT)
Space potential limit: 0.00 (kV)
Contour Map Spacing: 3 (m)
Analyzing spans between these structures: █/█-4 - █/█-11, █-6T - █-9T

One or more sections have wind from both directions which is not supported. A wind direction of left is being used for those sections.

Section Data for 3D EMF Results:

Section Number	Section Note	Voltage Ph-Ph (kV)	Current (Amps)	-----Cable-----		Conductors Per Phase	Bundle Diameter (cm)	Cable Radius (cm)	Weather Case	Condition	Wind Dir.	WC Temperature (deg C)	Effective Radius (cm)
				Filename	Description								
1		0.0	0.0	AACSR OPGW	OPGW Data Sheet	1	0.000	1.190	10°C	Creep FE	Left	10.000	1.190
2		0.0	0.0	AACSR OPGW	OPGW Data Sheet	1	0.000	1.190	10°C	Creep FE	Left	10.000	1.190
3		0.0	0.0	AACSR OPGW	OPGW Data Sheet	1	0.000	1.190	10°C	Creep FE	Left	10.000	1.190
5		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
6		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
7		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
9		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
10		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
11		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
13		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
14		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
15		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
17		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
18		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
19		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
21		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
22		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
23		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
25		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
26		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651
27		400.0	3400.0	Lamifil_700mm_aaac_araucaria_HC_RTS	HC - 700mm ² AAAC - Araucaria - RTS	2	50.000	1.863	90°C	Creep FE	Left	90.000	9.651

Wire low point cross section results between structures █/█-4 and █/█-5

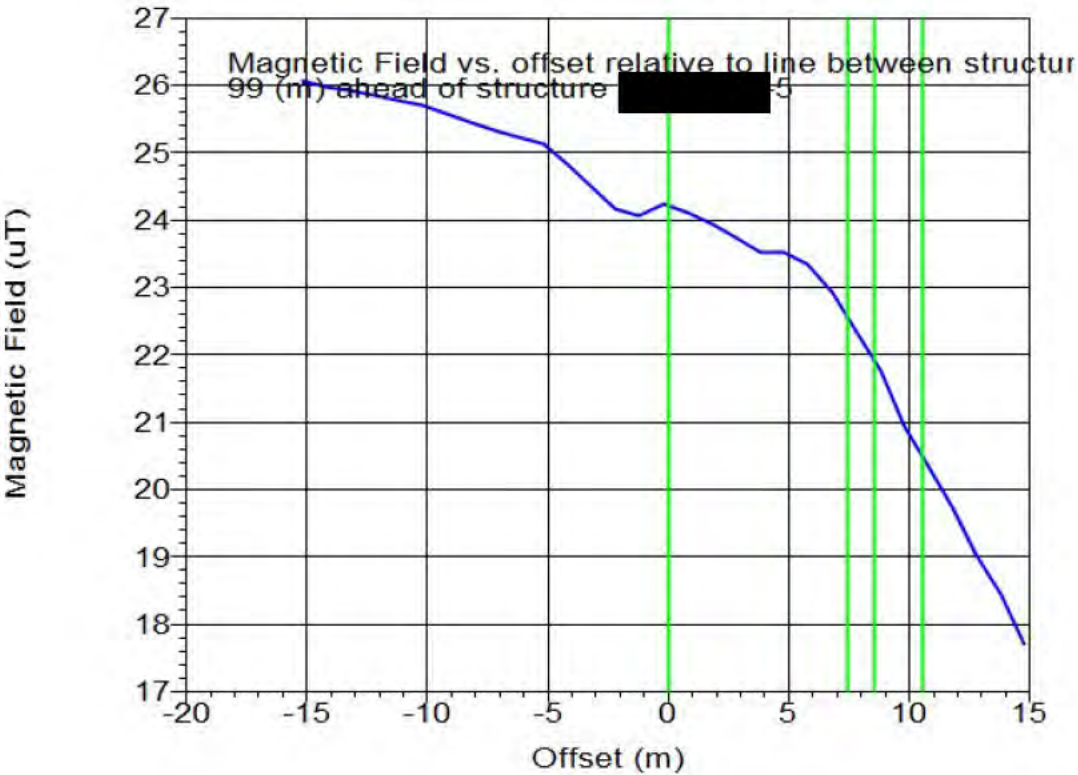


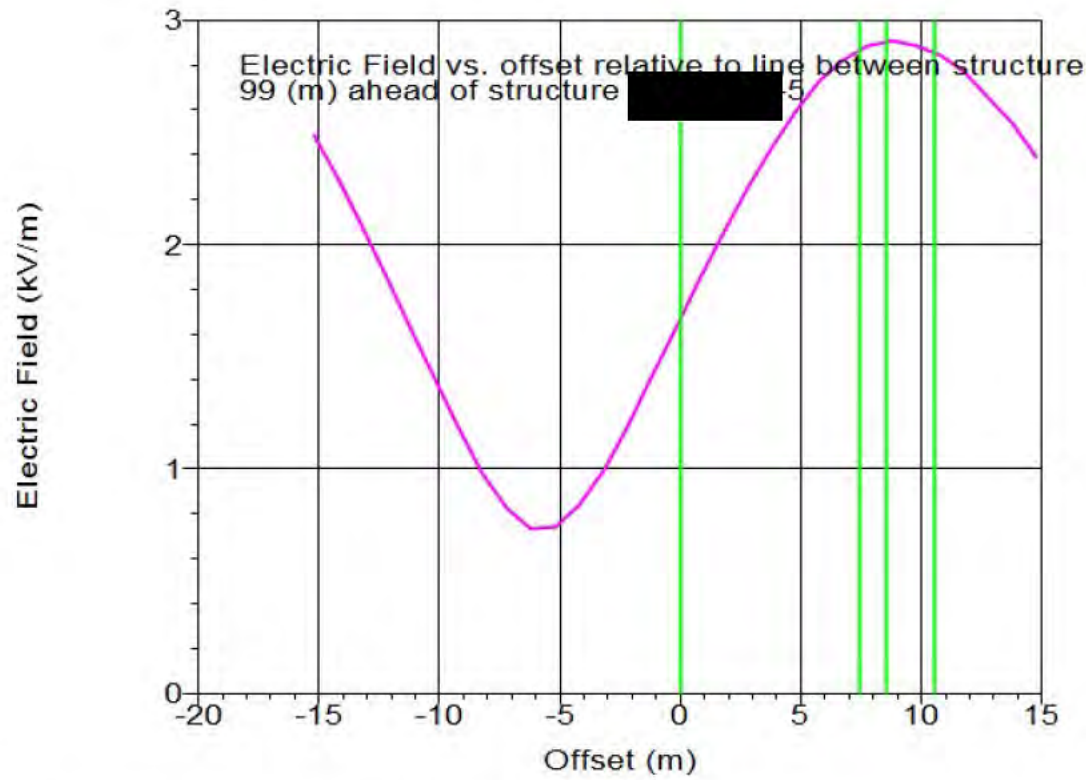
3D EMF Point Results Span from -4 to -5:

Measurement			B						H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization		Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %		(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
249386.0	843889.5	39.1	12.212	6.966	29.7	14.059	30.8		11.188	1.740	0.375	12.2	1.780	2.1	1.548	-0.476	-17.1	1.620
249385.3	843890.2	39.2	12.775	7.235	29.5	14.681	30.0		11.683	1.808	0.338	10.6	1.840	2.2	1.658	-0.459	-15.5	1.720
249384.5	843890.9	39.2	13.343	7.513	29.4	15.313	29.2		12.186	1.861	0.295	9.0	1.884	2.3	1.780	-0.438	-13.8	1.833
249383.8	843891.6	39.2	13.896	7.792	29.3	15.931	28.4		12.678	1.894	0.244	7.3	1.910	2.5	1.887	-0.407	-12.2	1.930
249383.1	843892.3	39.2	14.407	8.063	29.2	16.509	27.6		13.138	1.905	0.187	5.6	1.914	2.7	1.949	-0.364	-10.6	1.982
249382.4	843893.0	39.2	14.856	8.318	29.2	17.026	26.8		13.549	1.890	0.125	3.8	1.894	3.0	1.948	-0.309	-9.0	1.972
249381.7	843893.7	39.2	15.242	8.558	29.3	17.481	26.1		13.911	1.849	0.071	2.2	1.851	3.3	1.895	-0.248	-7.5	1.911
249380.9	843894.4	39.2	15.583	8.793	29.4	17.893	25.4		14.239	1.782	0.083	2.7	1.784	3.8	1.821	-0.184	-5.8	1.830
249380.2	843895.1	39.2	15.941	9.051	29.6	18.332	24.8		14.588	1.689	0.160	5.4	1.697	4.8	1.795	-0.111	-3.5	1.798

249379.5	843895.8	39.3	16.346	9.351	29.8	18.831	24.2	14.985	1.573	0.257	9.3	1.594	6.5	1.831	-0.015	-0.5	1.831
249378.8	843896.4	39.4	16.677	9.633	30.0	19.260	23.7	15.326	1.434	0.362	14.2	1.479	8.8	1.801	0.098	3.1	1.804
249378.1	843897.1	39.4	16.902	9.881	30.3	19.578	23.2	15.580	1.275	0.474	20.4	1.360	11.7	1.690	0.215	7.2	1.704
249377.4	843897.8	39.4	17.073	10.118	30.7	19.846	22.9	15.793	1.098	0.592	28.3	1.248	15.4	1.550	0.343	12.5	1.588
249376.6	843898.5	39.4	17.193	10.343	31.0	20.064	22.6	15.966	0.911	0.715	38.1	1.158	19.6	1.385	0.482	19.2	1.466
249375.9	843899.2	39.5	17.242	10.541	31.4	20.209	22.5	16.082	0.715	0.841	49.6	1.104	23.0	1.190	0.621	27.6	1.342
249375.2	843899.9	39.5	17.240	10.721	31.9	20.302	22.4	16.156	0.521	0.968	61.7	1.100	24.1	0.982	0.766	38.0	1.245
249374.5	843900.6	39.5	17.190	10.878	32.3	20.343	22.5	16.188	0.343	1.094	72.6	1.147	22.3	0.763	0.914	50.1	1.191
249373.8	843901.3	39.5	17.088	11.008	32.8	20.326	22.6	16.175	0.231	1.217	79.3	1.239	18.9	0.540	1.061	63.0	1.190
249373.1	843902.0	39.5	16.908	11.086	33.3	20.218	22.9	16.089	0.270	1.333	78.6	1.360	14.9	0.318	1.180	74.9	1.222
249372.3	843902.7	39.5	16.701	11.144	33.7	20.078	23.2	15.978	0.412	1.439	74.0	1.497	11.8	0.104	1.306	85.5	1.310
249371.6	843903.4	39.5	16.450	11.164	34.2	19.881	23.7	15.821	0.573	1.533	69.5	1.637	9.3	-0.102	1.422	-85.9	1.425
249370.9	843904.1	39.5	16.155	11.143	34.6	19.626	24.2	15.618	0.729	1.612	65.7	1.769	7.5	-0.294	1.523	-79.1	1.551
249370.2	843904.8	39.5	15.819	11.079	35.0	19.313	24.8	15.369	0.872	1.671	62.5	1.885	6.1	-0.470	1.608	-73.7	1.675
249369.5	843905.5	39.5	15.442	10.971	35.4	18.943	25.5	15.074	0.997	1.711	59.8	1.980	5.2	-0.629	1.673	-69.4	1.787
249368.7	843906.2	39.6	15.054	10.837	35.7	18.549	26.2	14.761	1.103	1.729	57.5	2.051	4.5	-0.786	1.746	-65.8	1.915
249368.0	843906.9	39.6	14.648	10.672	36.1	18.123	27.0	14.422	1.189	1.726	55.4	2.095	4.1	-0.939	1.818	-62.7	2.046
249367.3	843907.6	39.6	14.209	10.464	36.4	17.647	27.9	14.043	1.253	1.700	53.6	2.112	3.9	-1.074	1.865	-60.1	2.153
249366.6	843908.3	39.7	13.739	10.211	36.6	17.118	28.7	13.622	1.297	1.655	51.9	2.102	3.7	-1.185	1.880	-57.8	2.223
249365.9	843909.0	39.7	13.205	9.883	36.8	16.494	29.6	13.126	1.320	1.590	50.3	2.067	3.6	-1.226	1.813	-55.9	2.189
249365.2	843909.7	39.7	12.662	9.528	37.0	15.846	30.6	12.610	1.326	1.511	48.7	2.010	3.5	-1.247	1.728	-54.2	2.131
249364.4	843910.4	39.7	12.128	9.163	37.1	15.200	31.5	12.096	1.316	1.419	47.2	1.935	3.5	-1.266	1.649	-52.5	2.079

Wire low point cross section results between structures -5 and -6

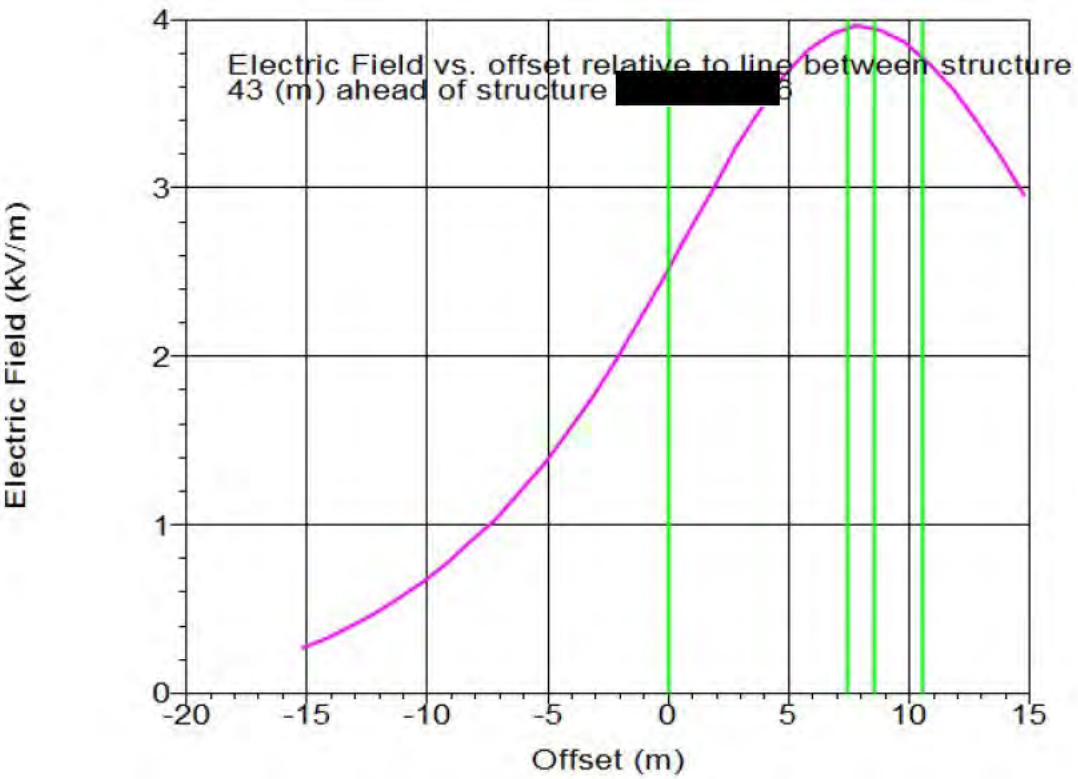
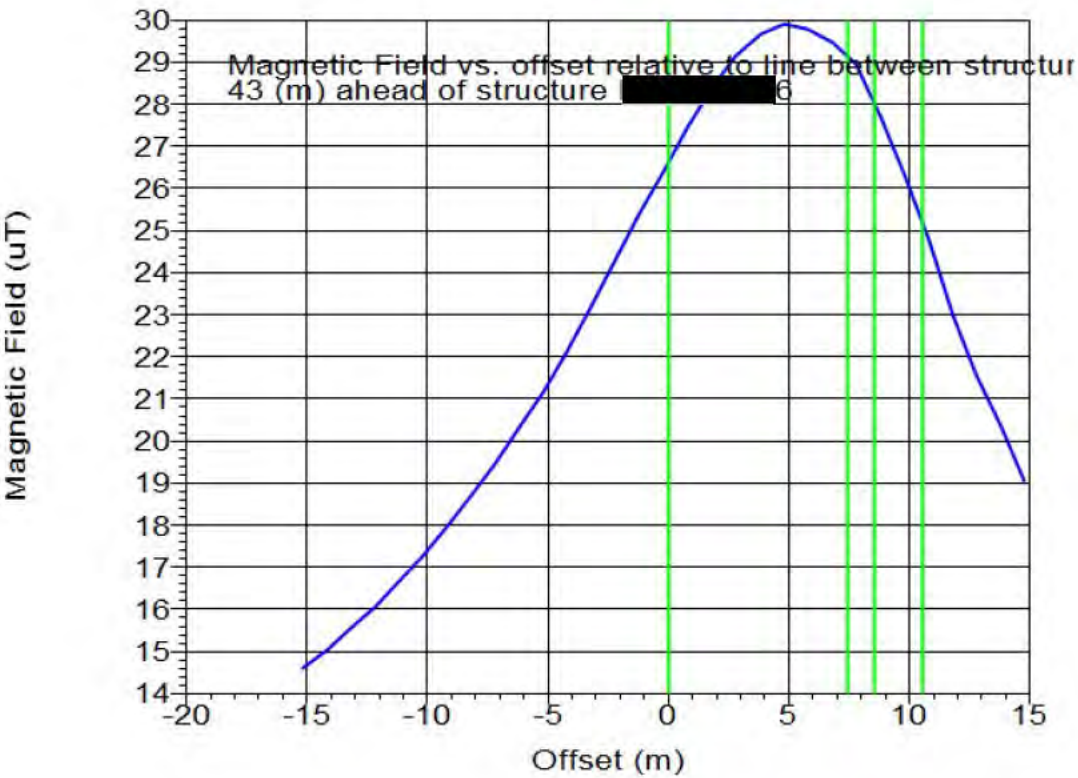




3D EMF Point Results Span from -5 to -6:

Measurement			B					H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
249056.8	843549.9	86.7	23.635	10.986	24.9	26.063	8.5	20.740	2.467	0.347	8.0	2.491	3.4	2.101	0.433	11.7	2.145
249056.1	843550.6	86.6	23.472	11.128	25.4	25.976	7.9	20.671	2.275	0.284	7.1	2.293	3.9	1.622	0.575	19.5	1.720
249055.4	843551.3	86.5	23.330	11.293	25.8	25.919	7.5	20.626	2.067	0.220	6.1	2.079	4.8	1.226	0.707	30.0	1.415
249054.6	843552.0	86.4	23.161	11.458	26.3	25.841	7.1	20.563	1.847	0.162	5.0	1.854	6.1	0.853	0.837	44.4	1.195
249053.9	843552.7	86.3	23.007	11.640	26.8	25.784	6.8	20.518	1.620	0.134	4.7	1.625	8.0	0.531	0.965	61.2	1.102
249053.2	843553.4	86.3	22.828	11.821	27.4	25.707	6.5	20.457	1.388	0.163	6.7	1.398	10.8	0.219	1.094	78.7	1.116
249052.5	843554.1	86.1	22.597	11.982	27.9	25.577	6.4	20.354	1.155	0.236	11.5	1.179	14.8	-0.101	1.219	-85.2	1.224
249051.8	843554.8	86.0	22.368	12.146	28.5	25.453	6.4	20.255	0.924	0.333	19.8	0.982	20.6	-0.389	1.338	-73.8	1.394
249051.0	843555.5	85.9	22.144	12.313	29.1	25.337	6.5	20.162	0.697	0.443	32.4	0.826	28.0	-0.645	1.450	-66.0	1.587
249050.3	843556.2	85.8	21.925	12.481	29.7	25.228	6.6	20.076	0.478	0.563	49.7	0.739	32.8	-0.870	1.552	-60.7	1.779
249049.6	843556.8	85.7	21.711	12.648	30.2	25.126	6.9	19.995	0.276	0.692	68.2	0.745	28.1	-1.064	1.643	-57.1	1.957
249048.9	843557.5	85.5	21.338	12.709	30.8	24.836	7.3	19.764	0.135	0.826	80.7	0.837	16.2	-1.229	1.644	-53.2	2.053
249048.2	843558.2	85.2	20.920	12.725	31.3	24.486	7.8	19.486	0.233	0.966	76.4	0.994	7.4	-1.316	1.576	-50.1	2.054
249047.5	843558.9	85.0	20.536	12.744	31.8	24.168	8.4	19.233	0.423	1.111	69.1	1.189	3.0	-1.333	1.476	-47.9	1.989
249046.7	843559.6	84.9	20.326	12.867	32.3	24.056	9.0	19.143	0.619	1.260	63.8	1.404	1.4	-1.348	1.459	-47.3	1.986
249046.0	843560.3	85.0	20.362	13.162	32.9	24.246	9.5	19.294	0.811	1.410	60.1	1.627	1.3	-1.464	1.636	-48.2	2.196
249045.3	843561.0	84.9	20.136	13.259	33.4	24.110	10.2	19.186	0.993	1.557	57.5	1.846	0.8	-1.469	1.614	-47.7	2.182
249044.6	843561.7	84.8	19.885	13.325	33.8	23.937	11.0	19.048	1.165	1.697	55.5	2.058	0.5	-1.453	1.570	-47.2	2.139
249043.9	843562.4	84.8	19.624	13.369	34.3	23.745	11.8	18.895	1.325	1.827	54.1	2.257	0.5	-1.430	1.524	-46.8	2.090
249043.1	843563.1	84.7	19.340	13.381	34.7	23.518	12.7	18.715	1.470	1.944	52.9	2.437	0.5	-1.402	1.473	-46.4	2.034
249042.4	843563.8	84.8	19.243	13.538	35.1	23.528	13.6	18.723	1.602	2.045	51.9	2.598	0.8	-1.571	1.672	-46.8	2.294
249041.7	843564.5	84.8	18.996	13.557	35.5	23.338	14.6	18.572	1.714	2.123	51.1	2.728	0.9	-1.649	1.744	-46.6	2.400
249041.0	843565.2	84.7	18.584	13.418	35.8	22.922	15.7	18.241	1.804	2.172	50.3	2.824	1.0	-1.599	1.654	-46.0	2.300
249040.3	843565.9	84.6	18.067	13.165	36.1	22.355	16.8	17.789	1.872	2.192	49.5	2.883	1.0	-1.464	1.463	-45.0	2.070
249039.6	843566.6	84.6	17.527	12.873	36.3	21.747	17.9	17.306	1.917	2.183	48.7	2.905	1.0	-1.331	1.280	-43.9	1.847
249038.8	843567.3	84.4	16.855	12.437	36.4	20.947	19.1	16.669	1.938	2.143	47.9	2.889	0.9	-1.058	0.945	-41.8	1.419
249038.1	843568.0	84.4	16.322	12.112	36.6	20.325	20.3	16.174	1.939	2.078	47.0	2.842	1.0	-0.995	0.846	-40.4	1.306
249037.4	843568.7	84.4	15.805	11.785	36.7	19.715	21.4	15.689	1.919	1.989	46.0	2.764	1.2	-0.990	0.808	-39.2	1.278
249036.7	843569.4	84.4	15.249	11.404	36.8	19.042	22.6	15.153	1.881	1.879	45.0	2.659	1.3	-0.961	0.742	-37.7	1.214
249036.0	843570.1	84.5	14.755	11.068	36.9	18.445	23.7	14.678	1.828	1.754	43.8	2.533	1.5	-1.051	0.787	-36.8	1.313
249035.2	843570.8	84.5	14.150	10.610	36.9	17.686	24.8	14.074	1.760	1.616	42.6	2.389	1.6	-0.987	0.682	-34.7	1.200

Wire low point cross section results between structures -6 and -7

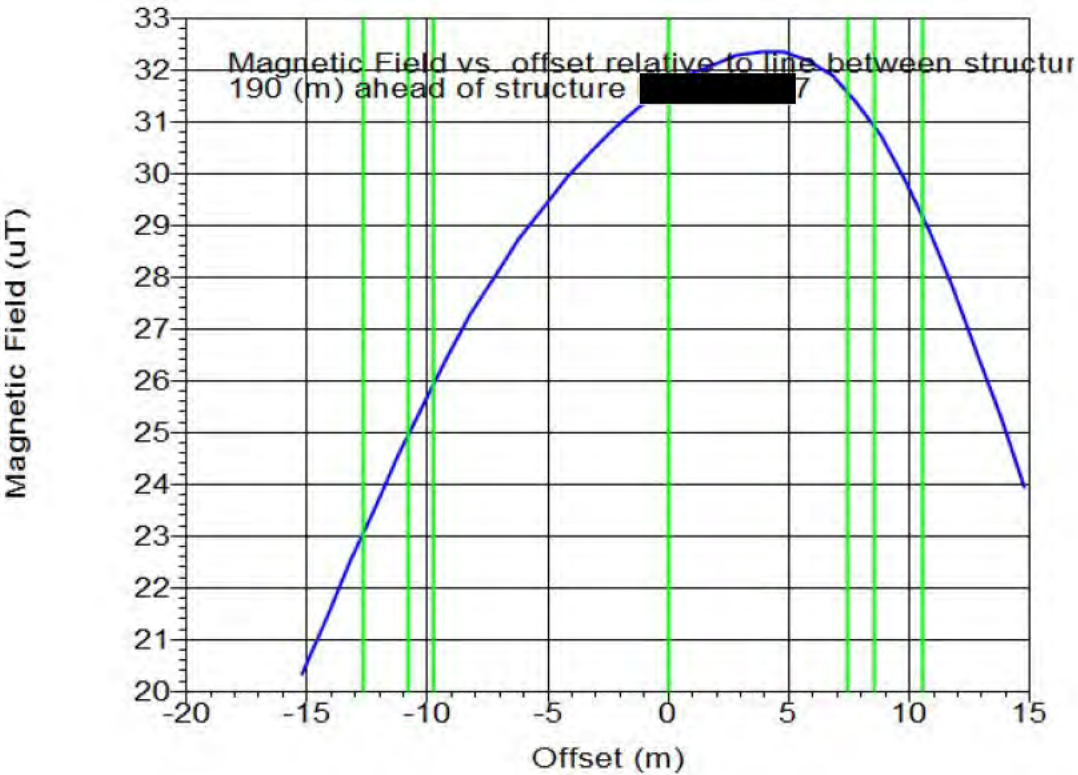


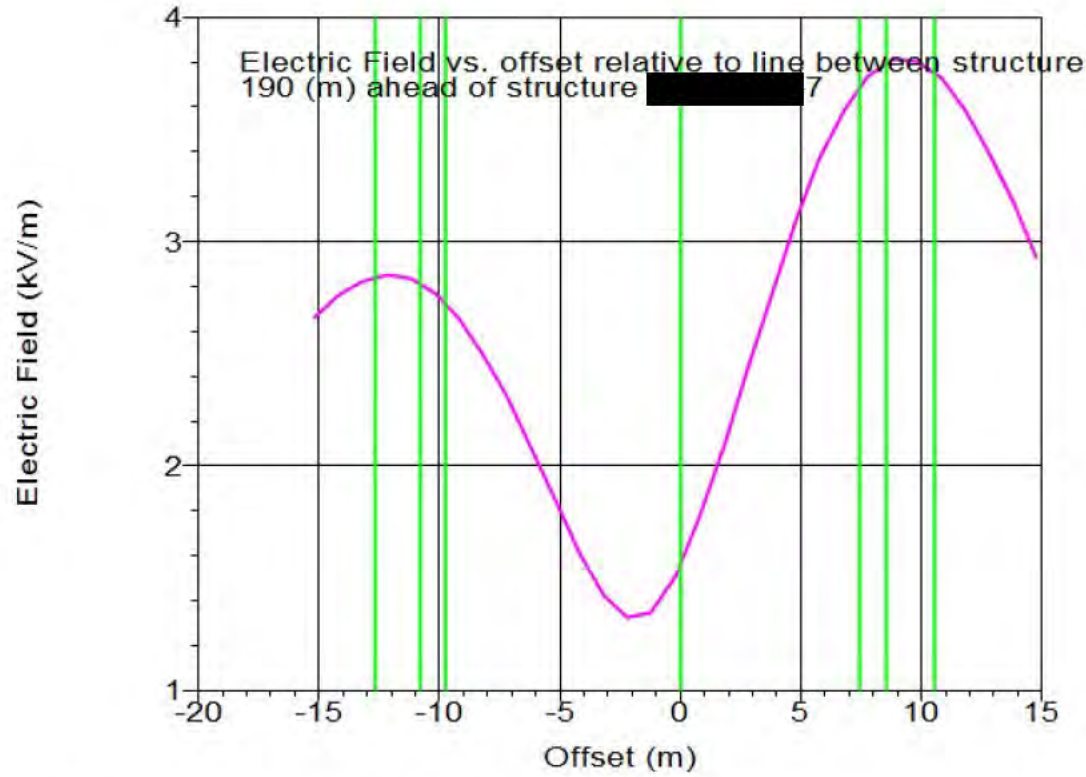
3D EMF Point Results Span from [redacted] -6 to [redacted] -7:

Measurement			B						H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization		Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %		(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
248819.2	843304.8	119.0	12.299	7.870	32.6	14.601	4.0		11.619	0.152	0.220	55.4	0.268	27.6	-0.467	0.037	-4.5	0.468
248818.5	843305.5	118.9	12.625	8.140	32.8	15.022	3.6		11.954	0.193	0.267	54.2	0.329	23.0	-0.586	0.094	-9.1	0.594
248817.8	843306.2	118.9	13.021	8.471	33.0	15.534	3.4		12.361	0.241	0.319	53.0	0.399	19.8	-0.738	0.191	-14.5	0.762
248817.1	843306.9	118.8	13.420	8.810	33.3	16.054	3.0		12.775	0.293	0.377	52.1	0.478	17.2	-0.899	0.283	-17.5	0.942
248816.4	843307.6	118.8	13.874	9.200	33.5	16.647	2.8		13.247	0.353	0.442	51.4	0.565	15.0	-1.092	0.411	-20.6	1.167
248815.7	843308.3	118.7	14.352	9.618	33.8	17.277	2.4		13.749	0.418	0.515	50.9	0.664	13.2	-1.305	0.551	-22.9	1.416
248814.9	843309.0	118.7	14.855	10.068	34.1	17.945	2.1		14.280	0.491	0.598	50.6	0.774	11.5	-1.536	0.706	-24.7	1.690
248814.2	843309.7	118.7	15.399	10.564	34.4	18.674	1.8		14.860	0.573	0.690	50.3	0.897	10.1	-1.797	0.893	-26.4	2.007
248813.5	843310.4	118.6	15.978	11.103	34.8	19.457	1.4		15.483	0.663	0.794	50.2	1.034	8.9	-2.086	1.108	-28.0	2.362

248812.8	843311.1	118.6	16.587	11.685	35.2	20.290	1.0	16.146	0.762	0.911	50.1	1.188	7.7	-2.401	1.352	-29.4	2.755
248812.1	843311.8	118.6	17.227	12.311	35.6	21.174	0.6	16.849	0.871	1.041	50.1	1.357	6.7	-2.743	1.626	-30.7	3.189
248811.4	843312.5	118.6	17.911	12.997	36.0	22.129	0.3	17.610	0.991	1.185	50.1	1.545	5.9	-3.126	1.951	-32.0	3.685
248810.6	843313.2	118.6	18.693	13.791	36.4	23.230	0.5	18.486	1.122	1.345	50.2	1.751	5.1	-3.600	2.390	-33.6	4.321
248809.9	843313.9	118.6	19.449	14.590	36.9	24.314	1.1	19.348	1.262	1.520	50.3	1.975	4.4	-4.063	2.817	-34.7	4.944
248809.2	843314.6	118.6	20.171	15.384	37.3	25.368	1.8	20.187	1.409	1.707	50.5	2.214	3.9	-4.507	3.225	-35.6	5.542
248808.5	843315.3	118.6	20.870	16.183	37.8	26.409	2.5	21.016	1.563	1.906	50.7	2.465	3.4	-4.947	3.631	-36.3	6.137
248807.8	843316.0	118.5	21.543	16.982	38.2	27.431	3.4	21.829	1.721	2.112	50.8	2.725	3.0	-5.384	4.038	-36.9	6.730
248807.0	843316.7	118.5	22.177	17.767	38.7	28.416	4.3	22.613	1.881	2.321	51.0	2.987	2.8	-5.813	4.439	-37.4	7.314
248806.3	843317.4	118.4	22.631	18.394	39.1	29.163	5.4	23.208	2.033	2.521	51.1	3.239	2.6	-6.109	4.673	-37.4	7.691
248805.6	843318.1	118.3	22.914	18.862	39.5	29.678	6.6	23.617	2.174	2.703	51.2	3.469	2.6	-6.284	4.755	-37.1	7.881
248804.9	843318.7	118.1	22.999	19.134	39.8	29.918	7.9	23.808	2.298	2.856	51.2	3.666	2.5	-6.319	4.655	-36.4	7.849
248804.2	843319.4	117.9	22.832	19.142	40.0	29.795	9.3	23.710	2.398	2.970	51.1	3.817	2.5	-6.156	4.304	-35.0	7.512
248803.5	843320.1	117.7	22.523	18.995	40.1	29.464	10.7	23.447	2.473	3.040	50.9	3.919	2.5	-5.907	3.845	-33.1	7.049
248802.7	843320.8	117.6	22.096	18.714	40.3	28.956	12.2	23.043	2.520	3.062	50.6	3.966	2.4	-5.598	3.316	-30.6	6.507
248802.0	843321.5	117.2	21.153	17.863	40.2	27.686	13.7	22.032	2.527	3.022	50.1	3.939	2.2	-4.756	2.156	-24.4	5.222
248801.3	843322.2	116.8	20.148	16.932	40.0	26.317	15.1	20.943	2.508	2.939	49.5	3.863	1.7	-3.861	0.974	-14.2	3.982
248800.6	843322.9	116.4	19.008	15.843	39.8	24.745	16.5	19.691	2.462	2.817	48.8	3.742	1.1	-2.802	-0.342	7.0	2.822
248799.9	843323.6	115.9	17.756	14.626	39.5	23.004	17.8	18.306	2.396	2.667	48.1	3.586	0.4	-1.570	-1.773	48.5	2.368
248799.1	843324.3	115.5	16.719	13.633	39.2	21.573	19.1	17.167	2.312	2.492	47.1	3.399	1.2	-0.654	-2.761	76.7	2.837
248798.4	843325.0	115.2	15.826	12.789	38.9	20.348	20.2	16.192	2.210	2.294	46.1	3.185	2.3	0.006	-3.389	-89.9	3.389
248797.7	843325.7	114.8	14.873	11.879	38.6	19.035	21.3	15.147	2.095	2.088	44.9	2.958	3.7	0.749	-4.023	-79.5	4.092

Wire low point cross section results between structures -7 and -8

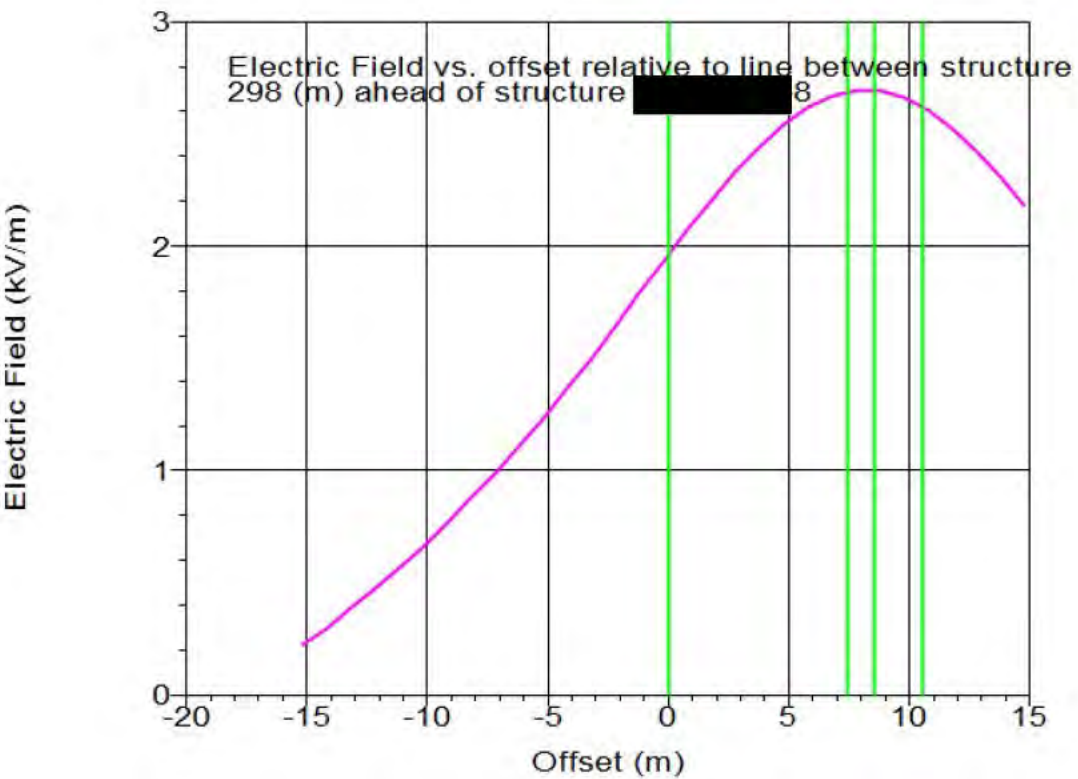
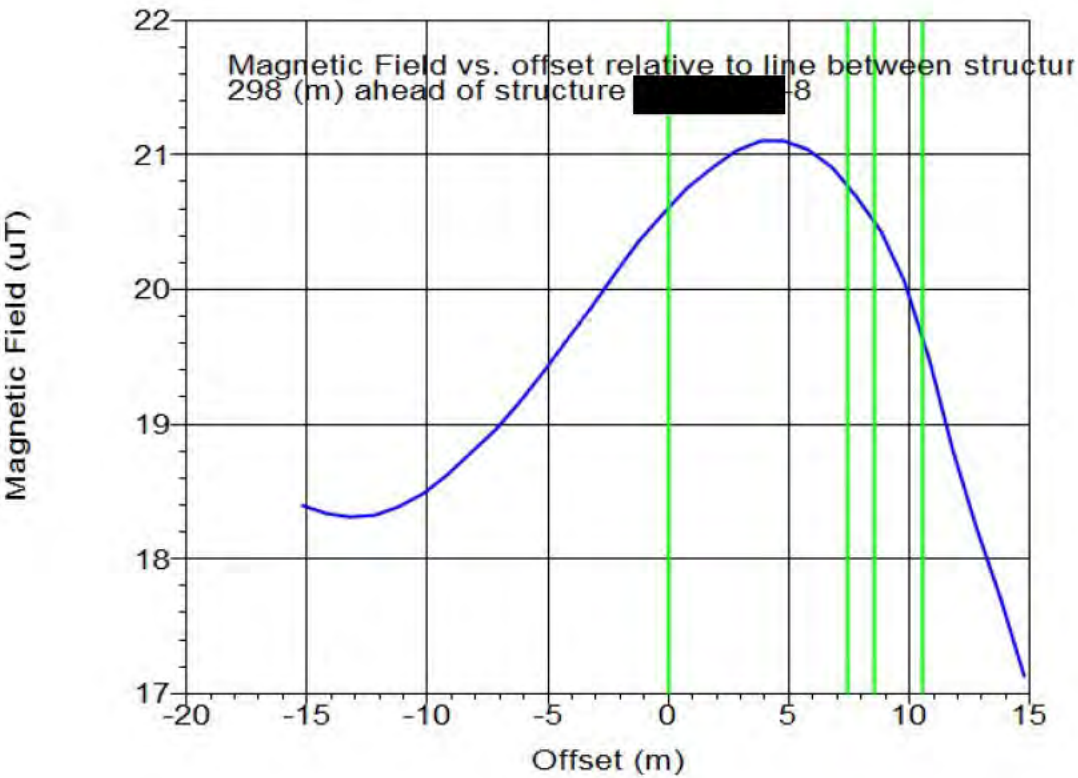




3D EMF Point Results Span from -7 to -8:

Measurement			B					H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
248509.5	842985.3	126.5	17.896	9.634	28.3	20.324	26.2	16.174	2.591	0.599	13.0	2.659	1.1	1.448	-0.781	-28.3	1.645
248508.8	842986.0	126.5	18.899	10.072	28.1	21.415	25.1	17.042	2.703	0.554	11.6	2.759	1.1	1.750	-0.817	-25.0	1.932
248508.1	842986.7	126.6	19.885	10.518	27.9	22.496	24.0	17.901	2.781	0.499	10.2	2.826	1.1	2.049	-0.844	-22.4	2.216
248507.4	842987.4	126.7	20.840	10.972	27.8	23.552	22.9	18.742	2.820	0.432	8.7	2.852	1.2	2.333	-0.858	-20.2	2.486
248506.7	842988.1	126.8	21.748	11.433	27.7	24.570	21.8	19.552	2.813	0.355	7.2	2.835	1.3	2.591	-0.858	-18.3	2.729
248505.9	842988.8	126.8	22.592	11.900	27.8	25.535	20.7	20.320	2.758	0.266	5.5	2.771	1.5	2.807	-0.843	-16.7	2.931
248505.2	842989.5	126.9	23.362	12.373	27.9	26.437	19.7	21.038	2.654	0.168	3.6	2.660	1.9	2.973	-0.810	-15.2	3.081
248504.5	842990.2	127.0	24.052	12.854	28.1	27.271	18.8	21.701	2.502	0.078	1.8	2.503	2.5	3.083	-0.759	-13.8	3.175
248503.8	842990.9	127.0	24.657	13.342	28.4	28.035	17.9	22.310	2.306	0.118	2.9	2.309	3.6	3.131	-0.688	-12.4	3.206
248503.1	842991.6	127.1	25.177	13.838	28.8	28.729	17.1	22.862	2.069	0.252	6.9	2.084	5.4	3.116	-0.593	-10.8	3.172
248502.3	842992.3	127.2	25.615	14.344	29.2	29.358	16.4	23.362	1.799	0.411	12.9	1.845	8.5	3.038	-0.473	-8.8	3.074
248501.6	842993.0	127.2	25.976	14.858	29.8	29.925	15.9	23.814	1.503	0.589	21.4	1.614	13.4	2.897	-0.324	-6.4	2.915
248500.9	842993.7	127.3	26.267	15.380	30.4	30.438	15.4	24.222	1.189	0.784	33.4	1.424	20.8	2.698	-0.145	-3.1	2.701
248500.2	842994.4	127.4	26.493	15.909	31.0	30.903	15.1	24.592	0.870	0.996	48.9	1.323	28.6	2.444	0.068	1.6	2.445
248499.5	842995.0	127.4	26.631	16.423	31.7	31.288	15.0	24.898	0.571	1.223	65.0	1.350	30.7	2.135	0.304	8.1	2.157
248498.8	842995.7	127.5	26.700	16.923	32.4	31.611	15.0	25.155	0.377	1.463	75.5	1.511	25.7	1.789	0.564	17.5	1.876
248498.0	842996.4	127.5	26.713	17.409	33.1	31.885	15.2	25.373	0.463	1.711	74.9	1.772	19.0	1.415	0.853	31.1	1.652
248497.3	842997.1	127.6	26.666	17.870	33.8	32.100	15.5	25.545	0.728	1.961	69.6	2.092	13.7	1.019	1.167	48.9	1.549
248496.6	842997.8	127.7	26.579	18.308	34.6	32.274	16.0	25.683	1.032	2.207	64.9	2.437	10.1	0.599	1.518	68.5	1.632
248495.9	842998.5	127.7	26.417	18.690	35.3	32.360	16.7	25.751	1.332	2.438	61.4	2.778	7.7	0.165	1.884	85.0	1.892
248495.2	842999.2	127.8	26.171	18.997	36.0	32.339	17.5	25.735	1.610	2.644	58.7	3.096	6.0	-0.272	2.254	-83.1	2.271
248494.4	842999.9	127.8	25.830	19.209	36.6	32.190	18.4	25.616	1.857	2.813	56.6	3.371	4.9	-0.703	2.613	-74.9	2.706
248493.7	843000.6	127.9	25.379	19.301	37.3	31.884	19.5	25.373	2.066	2.934	54.8	3.588	4.2	-1.112	2.938	-69.3	3.142
248493.0	843001.3	128.0	24.793	19.237	37.8	31.380	20.7	24.972	2.230	2.998	53.4	3.737	3.8	-1.472	3.192	-65.2	3.516
248492.3	843002.0	128.0	24.108	19.040	38.3	30.720	22.0	24.446	2.346	3.001	52.0	3.810	3.6	-1.799	3.397	-62.1	3.844
248491.6	843002.7	128.1	23.322	18.701	38.7	29.894	23.4	23.789	2.414	2.943	50.6	3.806	3.6	-2.079	3.534	-59.5	4.100
248490.9	843003.4	128.1	22.426	18.202	39.1	28.883	24.8	22.984	2.434	2.826	49.3	3.730	3.7	-2.286	3.571	-57.4	4.240
248490.1	843004.1	128.2	21.489	17.612	39.3	27.784	26.3	22.110	2.412	2.660	47.8	3.591	4.0	-2.470	3.570	-55.3	4.341
248489.4	843004.8	128.2	20.496	16.912	39.5	26.572	27.8	21.146	2.354	2.457	46.2	3.402	4.4	-2.596	3.494	-53.4	4.353
248488.7	843005.5	128.3	19.462	16.120	39.6	25.272	29.3	20.110	2.265	2.226	44.5	3.176	4.9	-2.661	3.347	-51.5	4.276
248488.0	843006.2	128.3	18.419	15.273	39.7	23.928	30.8	19.041	2.154	1.983	42.6	2.928	5.5	-2.682	3.153	-49.6	4.139

Wire low point cross section results between structures -8 and -9

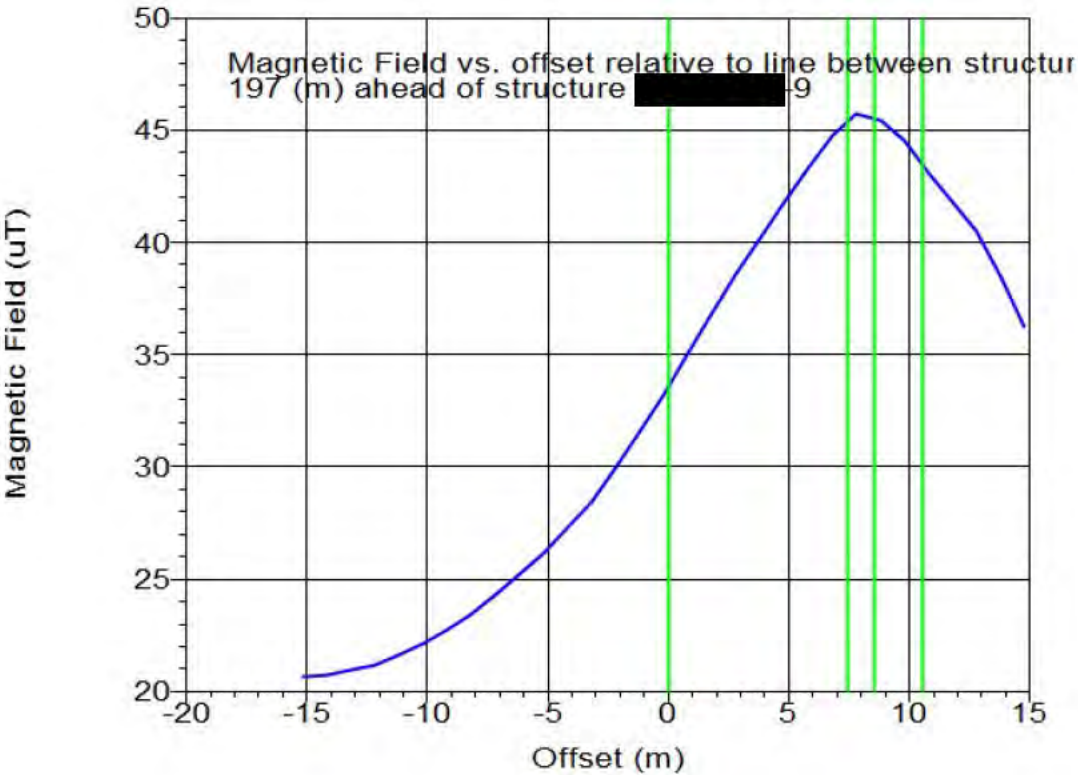


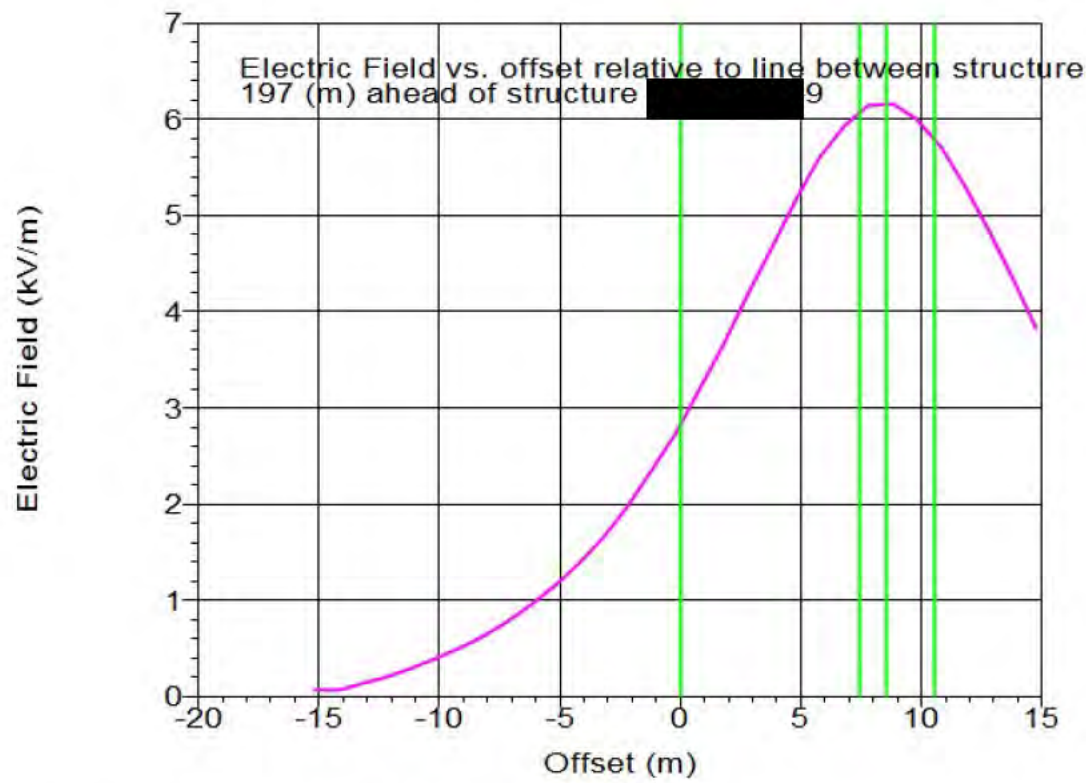
3D EMF Point Results Span from [REDACTED]-8 to [REDACTED]-9:

Measurement			B						H	EF					Space Potential			
X (m)	Y (m)	Z (m)	Real (uT)	Imaginary (uT)	Angle (deg)	Magnitude (uT)	Polarization Axial Ratio %		Magnitude (A/m)	Real (kV/m)	Imaginary (kV/m)	Angle (deg)	Magnitude (kV/m)	Polarization Axial Ratio %	Real (kV)	Imaginary (kV)	Angle (deg)	Magnitude (kV)
248094.0	842556.7	125.2	15.900	9.264	30.2	18.402	4.3		14.644	0.073	0.208	70.7	0.220	15.8	-0.212	0.151	-35.5	0.260
248093.3	842557.4	125.2	15.782	9.330	30.6	18.333	3.8		14.589	0.136	0.265	62.9	0.298	8.9	-0.254	0.184	-36.0	0.314
248092.6	842558.0	125.1	15.705	9.414	30.9	18.310	3.4		14.571	0.203	0.325	58.0	0.383	5.8	-0.299	0.220	-36.3	0.371
248091.9	842558.7	125.0	15.664	9.518	31.3	18.329	2.9		14.586	0.271	0.387	55.0	0.473	4.1	-0.347	0.258	-36.6	0.432
248091.2	842559.4	125.0	15.657	9.639	31.6	18.386	2.4		14.631	0.340	0.453	53.1	0.566	3.2	-0.397	0.297	-36.8	0.496
248090.4	842560.1	124.9	15.687	9.783	31.9	18.488	1.9		14.712	0.410	0.522	51.9	0.664	2.5	-0.455	0.345	-37.2	0.571
248089.7	842560.8	124.9	15.746	9.944	32.3	18.623	1.4		14.820	0.483	0.596	51.0	0.767	2.1	-0.516	0.396	-37.5	0.651
248089.0	842561.5	124.8	15.822	10.116	32.6	18.779	0.8		14.944	0.558	0.674	50.4	0.875	1.7	-0.575	0.444	-37.7	0.727
248088.3	842562.2	124.7	15.917	10.302	32.9	18.960	0.3		15.088	0.637	0.757	49.9	0.989	1.5	-0.635	0.493	-37.8	0.804

248087.6	842562.9	124.7	16.028	10.498	33.2	19.160	0.3	15.247	0.718	0.845	49.6	1.109	1.2	-0.694	0.542	-38.0	0.881
248086.9	842563.6	124.6	16.161	10.714	33.5	19.390	0.9	15.430	0.804	0.938	49.4	1.235	1.0	-0.765	0.605	-38.3	0.976
248086.1	842564.3	124.6	16.304	10.938	33.9	19.633	1.6	15.623	0.893	1.036	49.2	1.368	0.9	-0.839	0.672	-38.7	1.075
248085.4	842565.0	124.5	16.448	11.164	34.2	19.880	2.3	15.820	0.985	1.138	49.1	1.505	0.8	-0.911	0.738	-39.0	1.172
248084.7	842565.7	124.5	16.589	11.390	34.5	20.123	3.0	16.013	1.079	1.243	49.0	1.646	0.7	-0.980	0.802	-39.3	1.267
248084.0	842566.4	124.4	16.720	11.608	34.8	20.354	3.7	16.197	1.175	1.350	49.0	1.790	0.6	-1.045	0.862	-39.5	1.355
248083.3	842567.1	124.4	16.834	11.814	35.1	20.566	4.5	16.366	1.272	1.457	48.9	1.934	0.6	-1.104	0.915	-39.7	1.434
248082.5	842567.8	124.4	16.930	12.006	35.3	20.755	5.4	16.516	1.367	1.561	48.8	2.075	0.6	-1.160	0.966	-39.8	1.510
248081.8	842568.5	124.3	16.998	12.175	35.6	20.908	6.3	16.638	1.458	1.661	48.7	2.210	0.6	-1.210	1.009	-39.8	1.575
248081.1	842569.2	124.3	17.042	12.323	35.9	21.031	7.2	16.736	1.546	1.753	48.6	2.337	0.6	-1.264	1.056	-39.9	1.647
248080.4	842569.9	124.3	17.046	12.434	36.1	21.099	8.1	16.790	1.625	1.833	48.4	2.450	0.6	-1.307	1.090	-39.8	1.702
248079.7	842570.6	124.2	17.005	12.502	36.3	21.106	9.1	16.795	1.696	1.898	48.2	2.545	0.6	-1.338	1.108	-39.6	1.737
248079.0	842571.3	124.2	16.913	12.522	36.5	21.043	10.2	16.746	1.755	1.946	48.0	2.620	0.7	-1.356	1.108	-39.3	1.751
248078.2	842572.0	124.2	16.768	12.489	36.7	20.908	11.2	16.638	1.800	1.973	47.6	2.671	0.7	-1.359	1.090	-38.7	1.742
248077.5	842572.7	124.2	16.567	12.400	36.8	20.694	12.3	16.468	1.831	1.979	47.2	2.696	0.8	-1.345	1.051	-38.0	1.707
248076.8	842573.4	124.2	16.339	12.279	36.9	20.439	13.4	16.264	1.847	1.962	46.7	2.694	0.9	-1.355	1.034	-37.4	1.704
248076.1	842574.1	124.1	16.023	12.070	37.0	20.061	14.5	15.964	1.846	1.921	46.1	2.664	0.9	-1.298	0.945	-36.1	1.605
248075.4	842574.8	124.0	15.559	11.709	37.0	19.472	15.7	15.496	1.827	1.857	45.5	2.605	0.9	-1.067	0.678	-32.4	1.264
248074.6	842575.4	123.9	15.041	11.292	36.9	18.808	16.7	14.967	1.794	1.773	44.7	2.522	0.7	-0.799	0.384	-25.7	0.887
248073.9	842576.1	123.8	14.591	10.933	36.8	18.232	17.8	14.509	1.748	1.675	43.8	2.421	0.7	-0.683	0.251	-20.2	0.728
248073.2	842576.8	123.8	14.170	10.599	36.8	17.695	18.9	14.081	1.692	1.566	42.8	2.305	0.7	-0.659	0.210	-17.6	0.692
248072.5	842577.5	123.8	13.725	10.236	36.7	17.122	19.9	13.625	1.625	1.447	41.7	2.175	0.8	-0.632	0.166	-14.7	0.653

Wire low point cross section results between structures -9 and -10

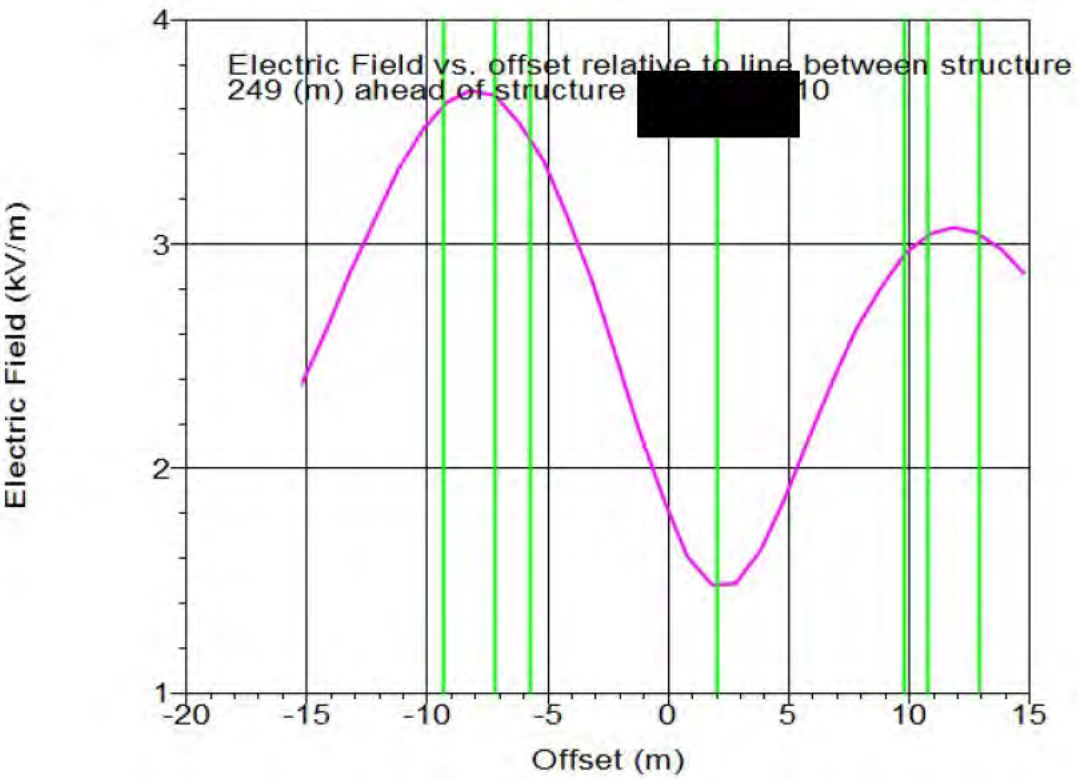
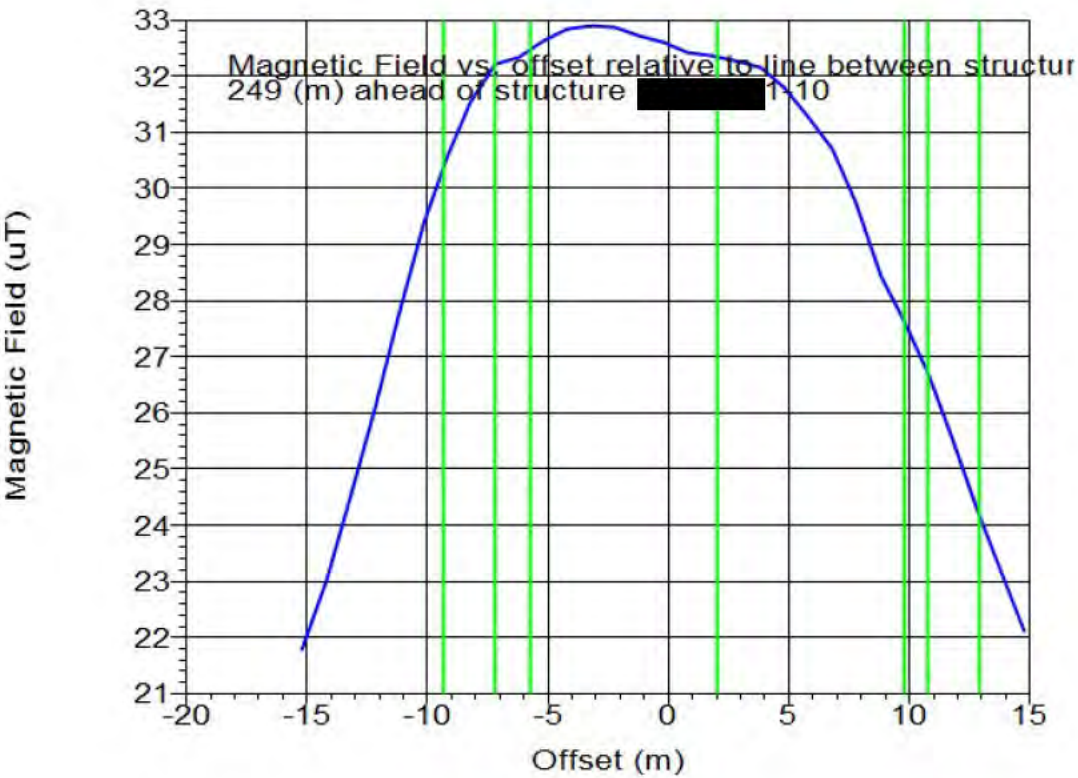




3D EMF Point Results Span from -9 to -10:

Measurement			B					H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
247787.4	842240.3	137.3	17.537	10.870	31.8	20.633	7.5	16.419	0.050	0.036	35.8	0.062	71.2	-0.078	0.130	-58.9	0.152
247786.6	842241.0	137.3	17.550	11.035	32.2	20.731	7.0	16.497	0.023	0.070	72.0	0.073	20.8	-0.102	0.161	-57.7	0.190
247785.9	842241.7	137.3	17.644	11.248	32.5	20.925	6.5	16.651	0.064	0.116	61.3	0.133	1.3	-0.120	0.190	-57.7	0.225
247785.2	842242.4	137.2	17.817	11.511	32.9	21.212	6.0	16.880	0.119	0.169	54.9	0.207	2.7	-0.134	0.217	-58.3	0.255
247784.5	842243.1	137.3	18.084	11.846	33.2	21.619	5.6	17.204	0.181	0.229	51.7	0.292	2.9	-0.152	0.253	-58.9	0.295
247783.8	842243.8	137.3	18.453	12.262	33.6	22.156	5.2	17.631	0.251	0.298	49.8	0.390	2.7	-0.185	0.308	-58.9	0.359
247783.1	842244.5	137.3	18.844	12.690	34.0	22.719	4.7	18.079	0.331	0.375	48.6	0.500	2.6	-0.188	0.329	-60.2	0.379
247782.3	842245.2	137.3	19.335	13.209	34.3	23.417	4.3	18.634	0.422	0.466	47.9	0.629	2.4	-0.208	0.371	-60.8	0.425
247781.6	842245.9	137.4	19.949	13.843	34.8	24.281	3.9	19.322	0.527	0.573	47.4	0.778	2.2	-0.268	0.459	-59.8	0.532
247780.9	842246.5	137.3	20.584	14.508	35.2	25.183	3.5	20.040	0.648	0.698	47.1	0.952	2.0	-0.294	0.514	-60.2	0.592
247780.2	842247.2	137.3	21.286	15.251	35.6	26.186	3.0	20.838	0.787	0.845	47.0	1.155	1.9	-0.323	0.573	-60.6	0.658
247779.5	842247.9	137.3	22.052	16.073	36.1	27.288	2.5	21.715	0.947	1.018	47.1	1.391	1.7	-0.354	0.638	-61.0	0.730
247778.7	842248.6	137.3	22.889	16.986	36.6	28.503	1.9	22.682	1.129	1.221	47.2	1.663	1.6	-0.399	0.722	-61.1	0.825
247778.0	842249.3	137.4	23.884	18.078	37.1	29.954	1.4	23.837	1.336	1.459	47.5	1.978	1.5	-0.550	0.926	-59.3	1.077
247777.3	842250.0	137.5	24.945	19.272	37.7	31.522	0.7	25.084	1.568	1.733	47.9	2.337	1.5	-0.733	1.172	-58.0	1.382
247776.6	842250.7	137.5	26.070	20.572	38.3	33.210	0.2	26.427	1.824	2.046	48.3	2.741	1.5	-0.960	1.475	-56.9	1.760
247775.9	842251.4	137.6	27.247	21.972	38.9	35.003	0.9	27.854	2.104	2.396	48.7	3.189	1.5	-1.235	1.843	-56.2	2.219
247775.2	842252.1	137.7	28.451	23.452	39.5	36.870	1.8	29.341	2.404	2.778	49.1	3.674	1.4	-1.558	2.277	-55.6	2.759
247774.4	842252.8	137.7	29.518	24.841	40.1	38.579	2.9	30.701	2.714	3.180	49.5	4.181	1.4	-1.796	2.620	-55.6	3.177
247773.7	842253.5	137.7	30.535	26.224	40.7	40.250	4.1	32.030	3.025	3.586	49.9	4.691	1.3	-2.073	3.011	-55.5	3.655
247773.0	842254.2	137.7	31.461	27.555	41.2	41.821	5.5	33.280	3.322	3.970	50.1	5.176	1.2	-2.391	3.447	-55.3	4.196
247772.3	842254.9	137.8	32.278	28.809	41.7	43.265	7.0	34.429	3.588	4.303	50.2	5.602	1.2	-2.783	3.958	-54.9	4.838
247771.6	842255.6	137.9	33.117	30.134	42.3	44.775	8.5	35.630	3.809	4.559	50.1	5.941	1.4	-3.414	4.730	-54.2	5.834
247770.9	842256.3	138.0	33.577	31.060	42.8	45.740	10.2	36.399	3.960	4.697	49.9	6.144	1.6	-3.933	5.323	-53.5	6.619
247770.1	842257.0	138.0	33.188	30.993	43.0	45.410	12.1	36.136	4.016	4.672	49.3	6.161	1.9	-3.908	5.218	-53.2	6.519
247769.4	842257.7	138.0	32.446	30.489	43.2	44.523	14.0	35.430	3.985	4.502	48.5	6.012	2.3	-3.798	4.970	-52.6	6.255
247768.7	842258.4	137.9	31.331	29.505	43.3	43.037	16.0	34.248	3.871	4.202	47.3	5.713	2.7	-3.545	4.527	-51.9	5.750
247768.0	842259.1	138.0	30.383	28.701	43.4	41.796	17.9	33.260	3.700	3.821	45.9	5.318	3.5	-3.667	4.450	-50.5	5.766
247767.3	842259.8	138.2	29.416	27.845	43.4	40.505	19.9	32.233	3.480	3.384	44.2	4.854	4.7	-3.929	4.452	-48.6	5.937
247766.5	842260.5	138.2	27.974	26.345	43.3	38.427	21.8	30.579	3.219	2.904	42.1	4.336	5.7	-3.767	4.002	-46.7	5.496
247765.8	842261.2	138.3	26.449	24.699	43.0	36.188	23.7	28.797	2.942	2.427	39.5	3.814	6.8	-3.543	3.496	-44.6	4.977

Wire low point cross section results between structures -10 and -11

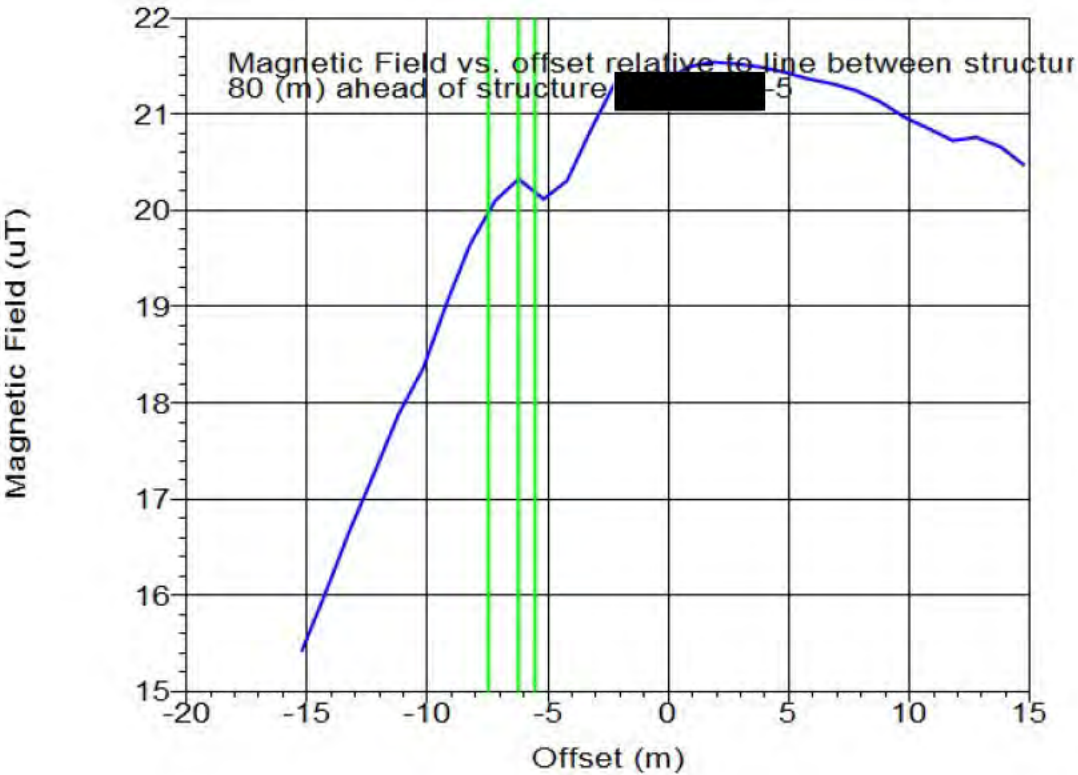


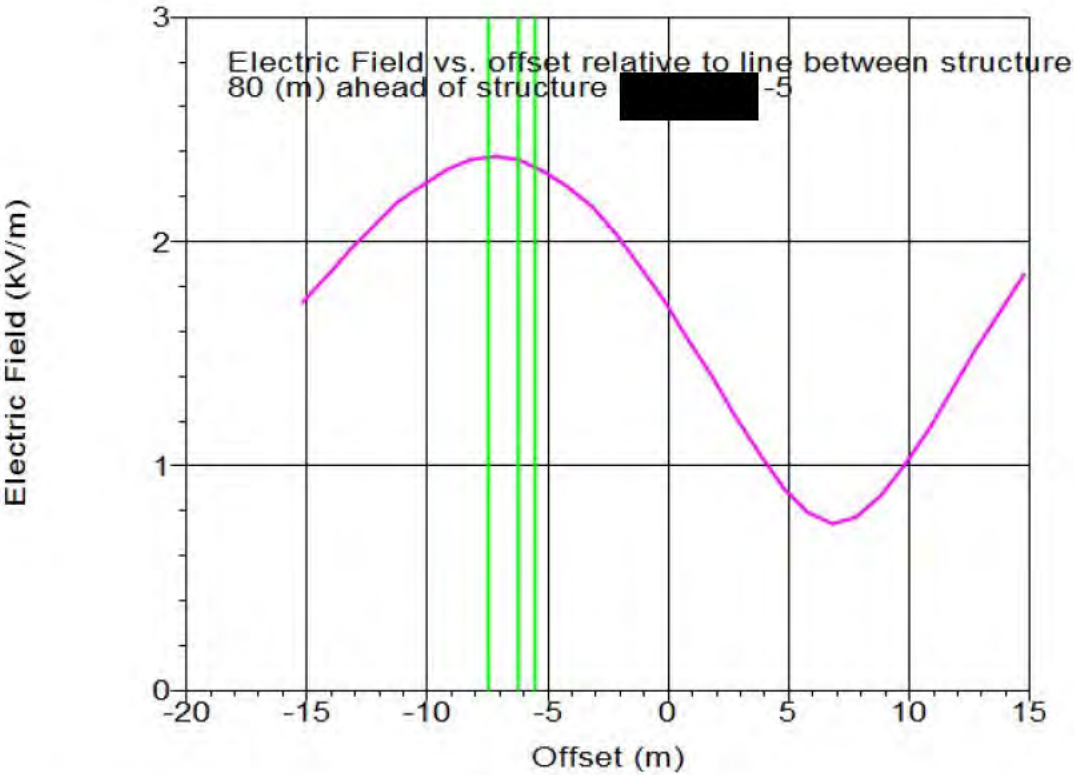
3D EMF Point Results Span from [REDACTED] -10 to [REDACTED] -11:

Measurement			B					H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
247459.9	841899.8	131.0	19.229	10.182	27.9	21.759	36.0	17.315	2.206	0.888	21.9	2.378	6.8	3.039	-0.394	-7.4	3.065
247459.2	841900.5	130.9	20.448	10.600	27.4	23.032	34.6	18.328	2.473	0.878	19.5	2.624	6.0	3.069	-0.236	-4.4	3.078
247458.5	841901.1	130.9	21.814	11.077	26.9	24.465	33.2	19.469	2.742	0.856	17.3	2.873	5.5	3.221	-0.122	-2.2	3.223
247457.8	841901.8	130.9	23.353	11.625	26.5	26.087	31.7	20.759	3.003	0.824	15.3	3.115	5.3	3.541	-0.047	-0.8	3.541
247457.0	841902.5	131.0	24.894	12.184	26.1	27.716	30.2	22.056	3.241	0.780	13.5	3.333	5.3	3.839	0.052	0.8	3.840
247456.3	841903.2	131.0	26.443	12.765	25.8	29.363	28.7	23.366	3.441	0.724	11.9	3.516	5.3	4.138	0.170	2.4	4.142
247455.6	841903.9	131.0	27.537	13.223	25.7	30.547	27.3	24.309	3.576	0.652	10.3	3.635	5.2	3.971	0.389	5.6	3.990
247454.9	841904.6	130.9	28.408	13.653	25.7	31.518	25.9	25.081	3.642	0.569	8.9	3.686	5.2	3.628	0.632	9.9	3.683
247454.1	841905.3	130.8	29.003	14.042	25.8	32.223	24.6	25.643	3.629	0.476	7.5	3.660	5.4	3.089	0.894	16.1	3.216

247453.4	841906.0	130.6	29.000	14.277	26.2	32.323	23.6	25.722	3.527	0.369	6.0	3.546	5.5	2.081	1.189	29.7	2.397
247452.7	841906.7	130.4	29.169	14.621	26.6	32.629	22.6	25.965	3.357	0.278	4.7	3.369	6.2	1.378	1.437	46.2	1.991
247452.0	841907.4	130.3	29.218	14.971	27.1	32.830	21.7	26.125	3.119	0.234	4.3	3.128	7.4	0.699	1.675	67.3	1.815
247451.3	841908.0	130.2	29.122	15.308	27.7	32.901	21.0	26.181	2.821	0.283	5.7	2.835	9.1	0.030	1.902	89.1	1.902
247450.5	841908.7	130.1	28.904	15.632	28.4	32.861	20.4	26.150	2.476	0.408	9.3	2.510	11.4	-0.606	2.116	-74.0	2.201
247449.8	841909.4	130.0	28.585	15.940	29.1	32.729	20.0	26.045	2.097	0.572	15.2	2.174	14.6	-1.191	2.311	-62.7	2.600
247449.1	841910.1	129.9	28.254	16.262	29.9	32.600	19.8	25.942	1.699	0.759	24.1	1.861	19.0	-1.673	2.499	-56.2	3.007
247448.4	841910.8	129.8	27.880	16.577	30.7	32.436	19.6	25.812	1.294	0.962	36.6	1.612	23.7	-2.087	2.675	-52.0	3.393
247447.6	841911.5	129.8	27.579	16.941	31.6	32.367	19.6	25.757	0.898	1.176	52.6	1.479	26.7	-2.410	2.881	-50.1	3.756
247446.9	841912.2	129.8	27.247	17.291	32.4	32.271	19.7	25.680	0.531	1.395	69.1	1.492	23.8	-2.705	3.093	-48.8	4.109
247446.2	841912.9	129.8	26.906	17.635	33.2	32.171	19.9	25.601	0.287	1.614	79.9	1.639	17.8	-2.979	3.321	-48.1	4.462
247445.5	841913.6	129.7	26.339	17.814	34.1	31.797	20.4	25.303	0.392	1.823	77.9	1.864	11.3	-3.226	3.438	-46.8	4.714
247444.7	841914.3	129.6	25.670	17.887	34.9	31.288	21.0	24.898	0.671	2.017	71.6	2.125	6.9	-3.409	3.481	-45.6	4.872
247444.0	841915.0	129.6	24.943	17.872	35.6	30.685	21.8	24.418	0.954	2.188	66.4	2.387	4.2	-3.525	3.468	-44.5	4.945
247443.3	841915.6	129.4	23.964	17.601	36.3	29.733	22.7	23.661	1.207	2.324	62.6	2.619	2.3	-3.490	3.225	-42.7	4.751
247442.6	841916.3	129.2	22.753	17.065	36.9	28.441	23.8	22.633	1.423	2.420	59.6	2.807	0.9	-3.250	2.718	-39.9	4.237
247441.8	841917.0	129.1	21.937	16.794	37.4	27.627	24.8	21.985	1.604	2.482	57.1	2.955	0.7	-3.176	2.566	-38.9	4.083
247441.1	841917.7	129.1	21.032	16.388	37.9	26.663	25.8	21.218	1.743	2.498	55.1	3.046	0.5	-3.035	2.331	-37.5	3.827
247440.4	841918.4	129.0	20.021	15.823	38.3	25.519	27.0	20.307	1.838	2.467	53.3	3.077	0.4	-2.795	1.976	-35.3	3.423
247439.7	841919.1	128.8	18.996	15.186	38.6	24.320	28.1	19.353	1.894	2.393	51.6	3.052	0.3	-2.523	1.603	-32.4	2.990
247439.0	841919.8	128.8	18.026	14.544	38.9	23.161	29.2	18.431	1.914	2.283	50.0	2.979	0.4	-2.291	1.301	-29.6	2.634
247438.2	841920.5	128.8	17.147	13.942	39.1	22.100	30.4	17.587	1.902	2.143	48.4	2.866	0.5	-2.154	1.122	-27.5	2.428

Wire low point cross section results between structures -5 and -6T

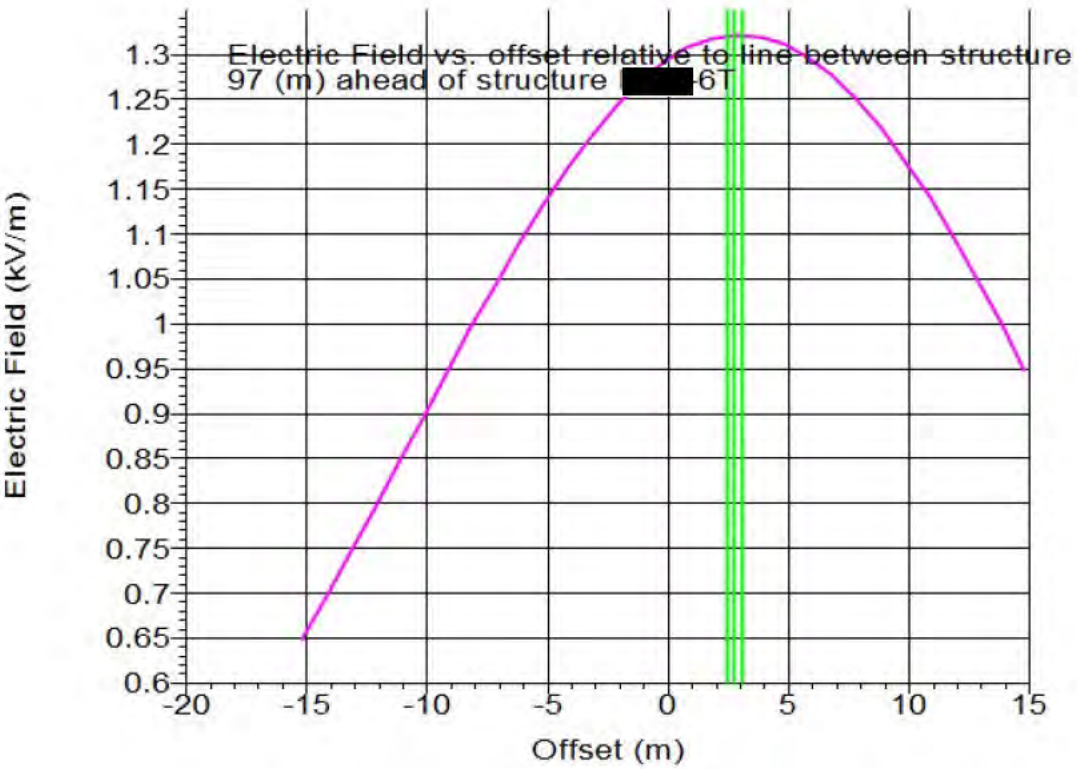
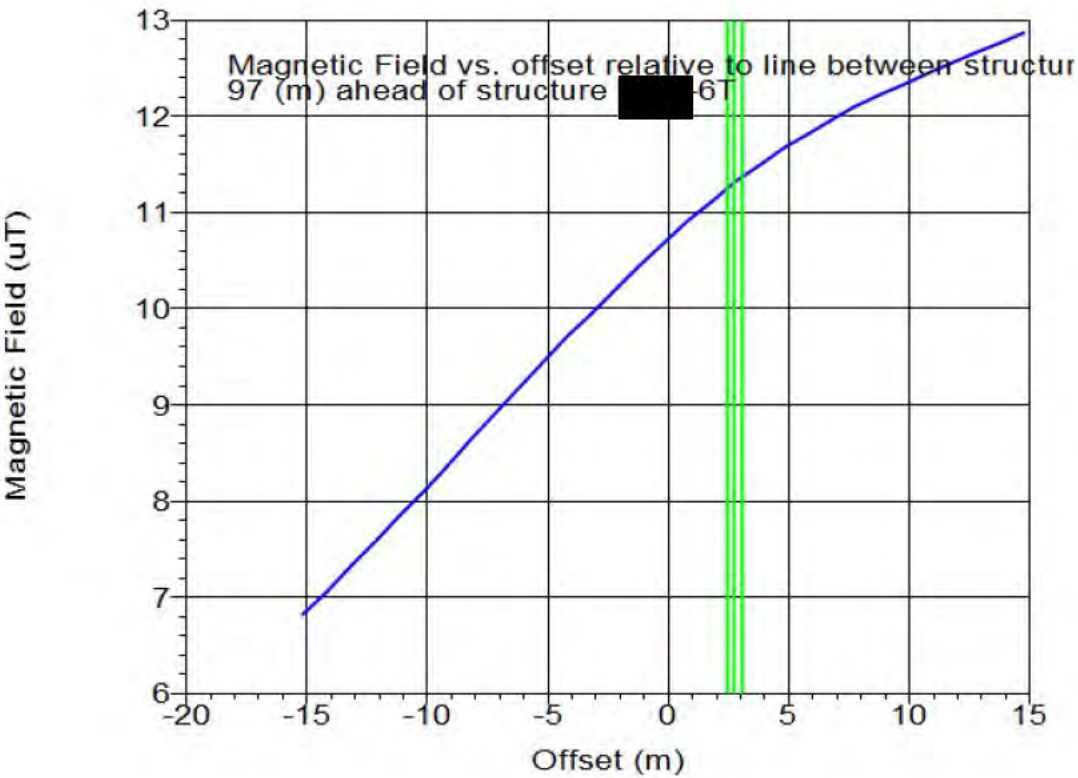




3D EMF Point Results Span from [redacted] -5 to [redacted] -6T:

-----Measurement-----			-----B-----					H	-----EF-----					-----Space Potential-----			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
249080.8	843558.1	85.6	13.810	6.827	26.3	15.406	21.6	12.260	1.633	0.547	18.5	1.722	5.3	3.600	-0.487	-7.7	3.633
249080.0	843558.7	85.5	14.422	7.049	26.0	16.052	20.9	12.774	1.762	0.553	17.4	1.847	4.8	3.613	-0.401	-6.3	3.635
249079.2	843559.3	85.4	15.018	7.267	25.8	16.684	20.1	13.277	1.887	0.554	16.4	1.966	4.4	3.587	-0.307	-4.9	3.600
249078.3	843559.9	85.3	15.591	7.480	25.6	17.292	19.4	13.761	2.003	0.551	15.4	2.077	4.0	3.517	-0.204	-3.3	3.523
249077.5	843560.5	85.2	16.137	7.690	25.5	17.876	18.6	14.225	2.107	0.543	14.4	2.175	3.7	3.410	-0.097	-1.6	3.411
249076.7	843561.1	85.0	16.587	7.873	25.4	18.361	17.8	14.611	2.193	0.528	13.5	2.256	3.4	3.173	0.036	0.6	3.174
249075.9	843561.6	85.0	17.225	8.137	25.3	19.050	17.0	15.159	2.266	0.510	12.7	2.323	3.3	3.226	0.094	1.7	3.227
249075.1	843562.2	85.0	17.775	8.379	25.2	19.651	16.2	15.638	2.315	0.486	11.9	2.365	3.3	3.178	0.176	3.2	3.183
249074.3	843562.8	84.9	18.182	8.583	25.3	20.106	15.4	16.000	2.336	0.456	11.1	2.380	3.2	2.965	0.289	5.6	2.979
249073.5	843563.4	84.8	18.366	8.719	25.4	20.330	14.7	16.178	2.326	0.419	10.2	2.364	3.1	2.499	0.444	10.1	2.538
249072.7	843564.0	84.4	18.139	8.713	25.7	20.123	14.1	16.013	2.282	0.373	9.3	2.312	2.8	1.550	0.668	23.3	1.688
249071.8	843564.6	84.2	18.270	8.854	25.9	20.303	13.5	16.156	2.219	0.325	8.3	2.243	2.8	1.155	0.784	34.2	1.396
249071.0	843565.1	84.3	18.749	9.148	26.0	20.861	12.8	16.601	2.136	0.276	7.4	2.154	3.4	1.259	0.829	33.4	1.507
249070.2	843565.7	84.4	19.140	9.427	26.2	21.335	12.1	16.978	2.028	0.225	6.3	2.040	4.2	1.277	0.898	35.1	1.561
249069.4	843566.3	84.3	19.143	9.564	26.5	21.399	11.7	17.029	1.892	0.167	5.1	1.899	4.7	0.894	1.011	48.5	1.350
249068.6	843566.9	84.1	19.010	9.655	26.9	21.322	11.3	16.967	1.735	0.113	3.7	1.739	5.2	0.436	1.120	68.7	1.202
249067.8	843567.5	84.1	19.096	9.851	27.3	21.487	10.9	17.099	1.568	0.103	3.8	1.571	6.5	0.254	1.210	78.1	1.237
249067.0	843568.1	84.0	19.082	10.013	27.7	21.550	10.6	17.149	1.388	0.148	6.1	1.395	8.2	0.017	1.301	89.3	1.301
249066.2	843568.6	83.9	18.989	10.147	28.1	21.531	10.5	17.133	1.197	0.223	10.6	1.218	10.1	-0.242	1.382	-80.1	1.403
249065.3	843569.2	83.8	18.875	10.276	28.6	21.492	10.4	17.102	1.001	0.313	17.4	1.049	12.5	-0.470	1.452	-72.1	1.526
249064.5	843569.8	83.7	18.744	10.399	29.0	21.435	10.3	17.058	0.801	0.412	27.2	0.901	15.3	-0.667	1.510	-66.2	1.651
249063.7	843570.4	83.6	18.599	10.517	29.5	21.366	10.4	17.003	0.600	0.517	40.8	0.792	17.3	-0.830	1.556	-61.9	1.763
249062.9	843571.0	83.6	18.470	10.644	30.0	21.317	10.5	16.964	0.401	0.629	57.5	0.746	16.8	-0.953	1.598	-59.2	1.861
249062.1	843571.6	83.5	18.326	10.762	30.4	21.252	10.7	16.912	0.209	0.745	74.3	0.774	13.0	-1.053	1.628	-57.1	1.939
249061.3	843572.1	83.4	18.133	10.847	30.9	21.129	11.0	16.814	0.068	0.864	85.5	0.866	7.8	-1.128	1.624	-55.2	1.978
249060.5	843572.7	83.3	17.906	10.905	31.3	20.966	11.4	16.684	0.200	0.984	78.5	1.005	3.9	-1.168	1.588	-53.7	1.971
249059.7	843573.3	83.2	17.723	10.984	31.8	20.850	11.8	16.592	0.380	1.106	71.0	1.169	2.0	-1.187	1.570	-52.9	1.968
249058.8	843573.9	83.2	17.534	11.053	32.2	20.727	12.3	16.494	0.555	1.225	65.6	1.345	1.0	-1.189	1.546	-52.4	1.951
249058.0	843574.5	83.2	17.481	11.212	32.7	20.767	12.8	16.526	0.723	1.342	61.7	1.524	0.8	-1.251	1.648	-52.8	2.069
249057.2	843575.1	83.2	17.305	11.279	33.1	20.656	13.4	16.438	0.880	1.452	58.8	1.698	0.6	-1.271	1.661	-52.6	2.091
249056.4	843575.6	83.1	17.064	11.288	33.5	20.459	14.1	16.281	1.026	1.552	56.5	1.860	0.4	-1.256	1.624	-52.3	2.053

Wire low point cross section results between structures [redacted] -6T and [redacted] -7

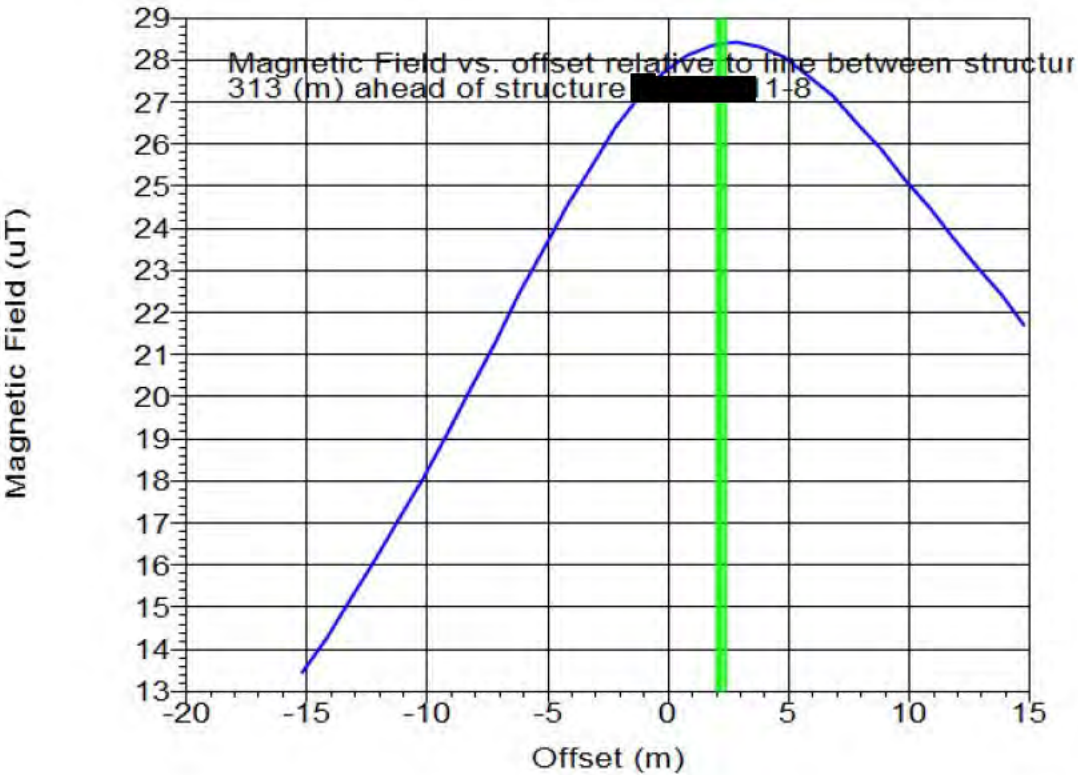


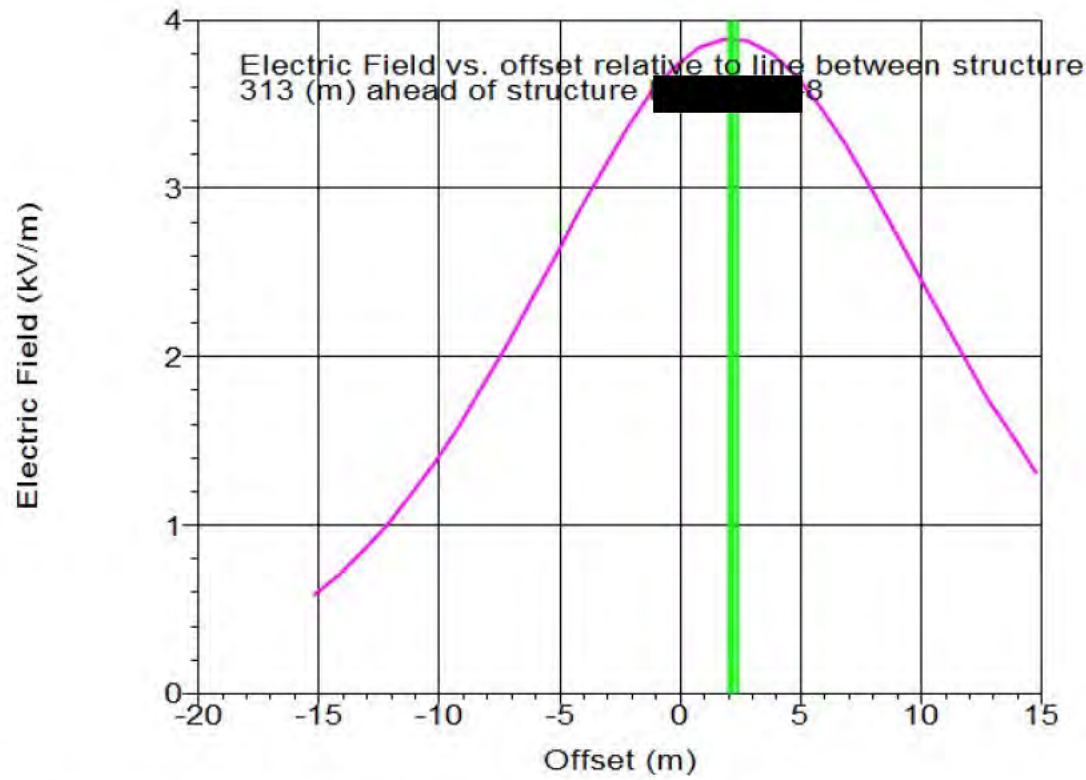
3D EMF Point Results Span from -6T to -7:

Measurement			B						H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization		Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %		(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
248769.8	843195.5	119.0	6.137	2.962	25.8	6.815	5.5		5.423	0.634	0.136	12.1	0.648	0.5	0.276	-0.284	-45.8	0.396
248769.3	843196.3	119.0	6.365	3.056	25.6	7.061	5.4		5.619	0.680	0.148	12.3	0.696	0.5	0.290	-0.286	-44.6	0.408
248768.8	843197.2	119.0	6.600	3.152	25.5	7.314	5.4		5.820	0.727	0.161	12.5	0.745	0.5	0.311	-0.290	-43.0	0.425
248768.3	843198.1	119.0	6.839	3.250	25.4	7.572	5.3		6.026	0.775	0.173	12.6	0.795	0.5	0.335	-0.293	-41.2	0.445
248767.8	843198.9	119.0	7.082	3.349	25.3	7.834	5.2		6.234	0.824	0.186	12.7	0.845	0.5	0.360	-0.297	-39.5	0.467
248767.3	843199.8	119.0	7.328	3.449	25.2	8.100	5.0		6.445	0.873	0.198	12.8	0.895	0.4	0.386	-0.301	-37.9	0.490
248766.8	843200.7	119.0	7.576	3.551	25.1	8.367	4.9		6.658	0.922	0.210	12.8	0.946	0.4	0.414	-0.304	-36.3	0.514
248766.3	843201.5	119.1	7.826	3.654	25.0	8.637	4.8		6.873	0.970	0.221	12.9	0.995	0.4	0.446	-0.309	-34.7	0.543
248765.8	843202.4	119.1	8.079	3.758	24.9	8.910	4.6		7.090	1.017	0.232	12.9	1.043	0.4	0.483	-0.314	-33.0	0.577

248765.3	843203.2	119.1	8.329	3.862	24.9	9.181	4.4	7.306	1.062	0.243	12.9	1.089	0.4	0.521	-0.320	-31.5	0.611
248764.8	843204.1	119.1	8.573	3.965	24.8	9.445	4.3	7.516	1.104	0.253	12.9	1.133	0.4	0.547	-0.322	-30.5	0.634
248764.3	843205.0	119.1	8.811	4.067	24.8	9.704	4.1	7.722	1.143	0.262	12.9	1.173	0.4	0.569	-0.323	-29.6	0.655
248763.7	843205.8	119.1	9.044	4.169	24.7	9.958	3.9	7.925	1.179	0.270	12.9	1.210	0.4	0.590	-0.324	-28.8	0.673
248763.2	843206.7	119.1	9.270	4.270	24.7	10.206	3.7	8.122	1.211	0.277	12.9	1.242	0.4	0.610	-0.324	-28.0	0.691
248762.7	843207.6	119.1	9.489	4.371	24.7	10.447	3.5	8.313	1.237	0.283	12.9	1.269	0.4	0.627	-0.324	-27.3	0.706
248762.2	843208.4	119.1	9.698	4.471	24.7	10.679	3.3	8.498	1.259	0.289	12.9	1.291	0.4	0.642	-0.323	-26.7	0.719
248761.7	843209.3	119.1	9.899	4.570	24.8	10.903	3.1	8.676	1.275	0.293	12.9	1.308	0.4	0.655	-0.322	-26.2	0.730
248761.2	843210.2	119.1	10.093	4.670	24.8	11.121	3.0	8.850	1.285	0.295	12.9	1.318	0.4	0.677	-0.323	-25.5	0.750
248760.7	843211.0	119.1	10.271	4.766	24.9	11.323	2.8	9.010	1.289	0.297	13.0	1.322	0.4	0.683	-0.319	-25.1	0.754
248760.2	843211.9	119.1	10.425	4.857	25.0	11.501	2.7	9.152	1.286	0.297	13.0	1.320	0.4	0.659	-0.309	-25.1	0.728
248759.7	843212.8	119.1	10.567	4.946	25.1	11.667	2.6	9.284	1.278	0.296	13.0	1.312	0.4	0.632	-0.298	-25.3	0.699
248759.2	843213.6	119.1	10.696	5.034	25.2	11.822	2.5	9.408	1.263	0.293	13.1	1.297	0.4	0.602	-0.286	-25.4	0.667
248758.7	843214.5	119.1	10.815	5.121	25.3	11.966	2.4	9.522	1.243	0.289	13.1	1.276	0.5	0.570	-0.273	-25.6	0.632
248758.2	843215.3	119.1	10.922	5.208	25.5	12.100	2.3	9.629	1.218	0.283	13.1	1.250	0.5	0.536	-0.259	-25.8	0.595
248757.7	843216.2	119.0	11.019	5.294	25.7	12.225	2.3	9.728	1.187	0.276	13.1	1.219	0.6	0.501	-0.244	-26.0	0.557
248757.2	843217.1	119.0	11.108	5.380	25.8	12.342	2.3	9.821	1.152	0.268	13.1	1.183	0.6	0.464	-0.228	-26.2	0.517
248756.7	843217.9	119.0	11.188	5.466	26.0	12.452	2.3	9.909	1.113	0.258	13.0	1.142	0.8	0.427	-0.211	-26.3	0.476
248756.2	843218.8	119.0	11.262	5.552	26.2	12.557	2.2	9.992	1.070	0.246	13.0	1.098	0.9	0.389	-0.193	-26.4	0.434
248755.7	843219.7	119.0	11.335	5.642	26.5	12.661	2.2	10.076	1.025	0.233	12.8	1.051	1.0	0.357	-0.176	-26.2	0.398
248755.2	843220.5	119.0	11.404	5.733	26.7	12.764	2.2	10.157	0.977	0.219	12.6	1.001	1.2	0.325	-0.157	-25.8	0.360
248754.7	843221.4	119.0	11.472	5.827	26.9	12.867	2.2	10.239	0.926	0.203	12.4	0.948	1.5	0.292	-0.136	-25.1	0.322

Wire low point cross section results between structures -8 and -9T

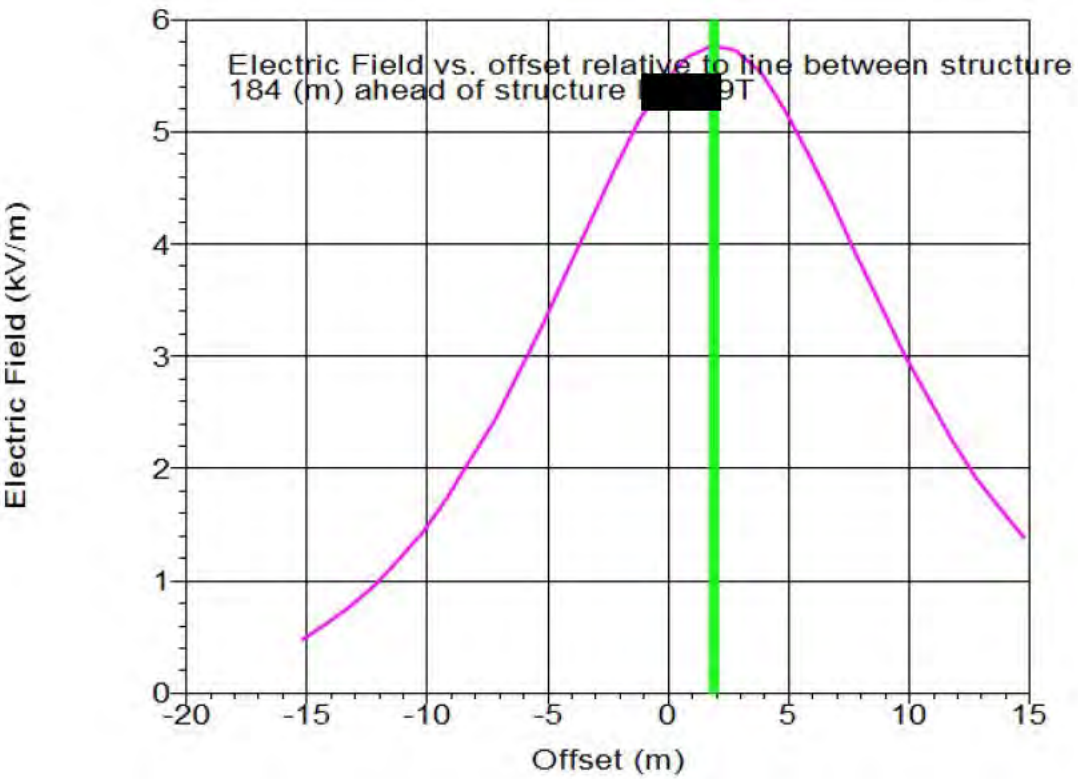
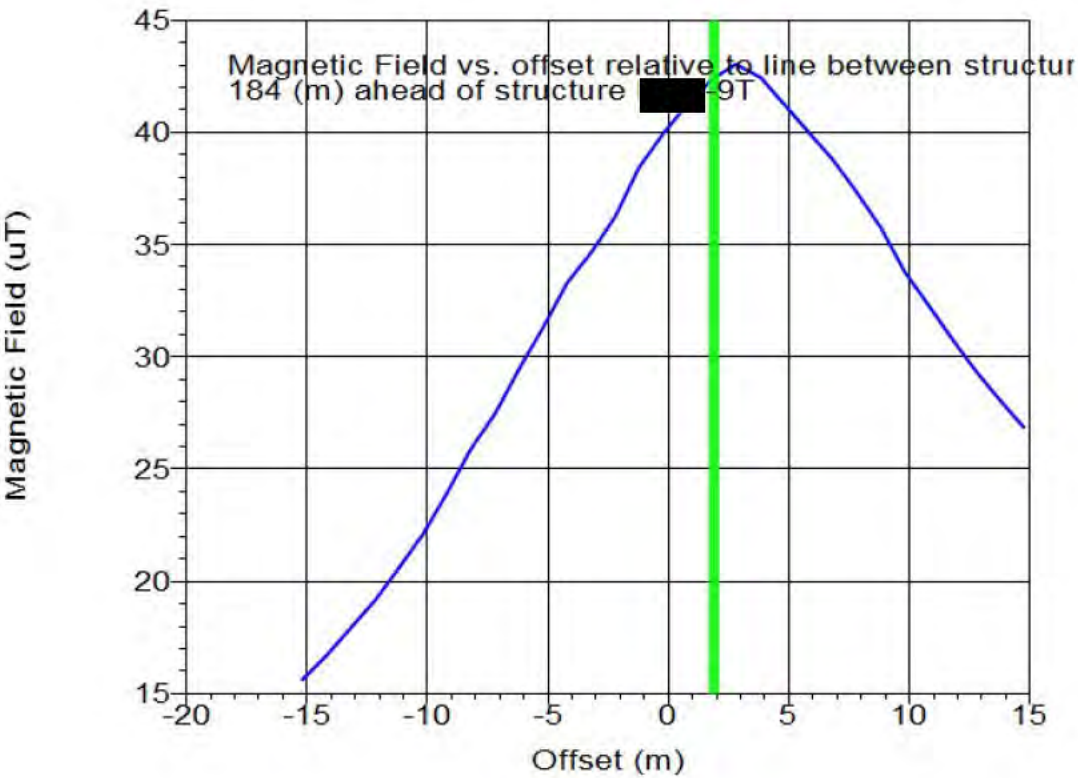




3D EMF Point Results Span from -8 to -9T:

Measurement			B					H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization	Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %	(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
248117.0	842519.6	127.2	12.161	5.694	25.1	13.428	11.8	10.686	0.543	0.208	21.0	0.581	2.0	1.368	-0.756	-28.9	1.563
248116.2	842520.2	127.1	12.962	5.962	24.7	14.267	11.7	11.353	0.661	0.247	20.5	0.705	2.2	1.534	-0.804	-27.7	1.732
248115.4	842520.8	127.1	13.819	6.238	24.3	15.162	11.6	12.066	0.796	0.288	19.9	0.846	2.4	1.721	-0.854	-26.4	1.921
248114.6	842521.4	127.1	14.740	6.524	23.9	16.119	11.4	12.827	0.948	0.330	19.2	1.004	2.5	1.934	-0.907	-25.1	2.136
248113.8	842522.0	127.1	15.668	6.795	23.4	17.078	11.2	13.590	1.119	0.374	18.5	1.180	2.5	2.117	-0.941	-24.0	2.317
248113.0	842522.6	127.0	16.640	7.067	23.0	18.079	10.8	14.387	1.310	0.419	17.7	1.375	2.5	2.305	-0.969	-22.8	2.501
248112.2	842523.2	126.9	17.652	7.339	22.6	19.117	10.4	15.213	1.520	0.463	16.9	1.589	2.4	2.496	-0.991	-21.7	2.686
248111.4	842523.8	126.9	18.696	7.608	22.1	20.185	9.9	16.063	1.749	0.507	16.2	1.821	2.3	2.685	-1.006	-20.5	2.867
248110.6	842524.4	126.8	19.776	7.878	21.7	21.287	9.3	16.940	1.995	0.550	15.4	2.069	2.2	2.884	-1.019	-19.5	3.058
248109.8	842525.0	126.8	20.891	8.148	21.3	22.424	8.7	17.844	2.255	0.590	14.7	2.331	2.0	3.105	-1.032	-18.4	3.272
248109.0	842525.6	126.7	21.951	8.394	20.9	23.501	8.0	18.702	2.522	0.627	14.0	2.598	1.8	3.254	-1.024	-17.5	3.411
248108.2	842526.2	126.6	22.973	8.627	20.6	24.539	7.2	19.528	2.789	0.661	13.3	2.866	1.6	3.371	-1.006	-16.6	3.518
248107.3	842526.8	126.6	23.931	8.844	20.3	25.512	6.3	20.302	3.047	0.690	12.8	3.124	1.4	3.446	-0.981	-15.9	3.582
248106.5	842527.4	126.5	24.795	9.041	20.0	26.392	5.4	21.002	3.285	0.715	12.3	3.362	1.2	3.469	-0.948	-15.3	3.596
248105.7	842527.9	126.4	25.505	9.210	19.9	27.117	4.4	21.579	3.491	0.735	11.9	3.567	1.0	3.395	-0.900	-14.8	3.512
248104.9	842528.5	126.3	26.079	9.359	19.7	27.707	3.5	22.049	3.654	0.751	11.6	3.730	0.8	3.275	-0.850	-14.6	3.383
248104.1	842529.1	126.3	26.482	9.484	19.7	28.129	2.5	22.384	3.763	0.763	11.5	3.840	0.6	3.093	-0.796	-14.4	3.194
248103.3	842529.7	126.2	26.703	9.583	19.7	28.370	1.7	22.576	3.813	0.769	11.4	3.890	0.5	2.855	-0.738	-14.5	2.949
248102.5	842530.3	126.1	26.737	9.656	19.9	28.427	1.1	22.622	3.799	0.772	11.5	3.877	0.4	2.571	-0.678	-14.8	2.659
248101.7	842530.9	126.1	26.608	9.709	20.0	28.324	1.2	22.540	3.724	0.769	11.7	3.802	0.4	2.276	-0.620	-15.2	2.359
248100.9	842531.5	126.0	26.315	9.737	20.3	28.059	1.9	22.329	3.591	0.761	12.0	3.671	0.4	1.965	-0.561	-15.9	2.044
248100.1	842532.1	125.9	25.880	9.742	20.6	27.653	2.7	22.005	3.410	0.749	12.4	3.491	0.4	1.653	-0.503	-16.9	1.728
248099.3	842532.7	125.9	25.338	9.728	21.0	27.141	3.5	21.598	3.191	0.730	12.9	3.274	0.4	1.365	-0.448	-18.2	1.437
248098.5	842533.3	125.8	24.711	9.698	21.4	26.546	4.2	21.124	2.947	0.706	13.5	3.030	0.3	1.106	-0.397	-19.7	1.175
248097.7	842533.9	125.7	24.016	9.650	21.9	25.883	4.8	20.597	2.687	0.677	14.1	2.771	0.3	0.872	-0.346	-21.7	0.939
248096.9	842534.5	125.7	23.281	9.589	22.4	25.179	5.4	20.037	2.422	0.643	14.9	2.506	0.2	0.670	-0.299	-24.1	0.734
248096.1	842535.1	125.6	22.554	9.526	22.9	24.484	5.9	19.483	2.160	0.604	15.6	2.243	0.1	0.534	-0.264	-26.3	0.596
248095.3	842535.6	125.6	21.830	9.458	23.4	23.791	6.4	18.932	1.908	0.561	16.4	1.989	0.1	0.434	-0.236	-28.5	0.494
248094.5	842536.2	125.6	21.113	9.383	24.0	23.104	6.7	18.385	1.670	0.514	17.1	1.748	0.2	0.353	-0.209	-30.7	0.410
248093.7	842536.8	125.5	20.407	9.301	24.5	22.427	7.0	17.847	1.449	0.465	17.8	1.522	0.3	0.281	-0.182	-33.0	0.335
248092.8	842537.4	125.4	19.658	9.184	25.0	21.698	7.1	17.267	1.245	0.414	18.4	1.312	0.5	0.145	-0.131	-42.1	0.196

Wire low point cross section results between structures 9T and -10



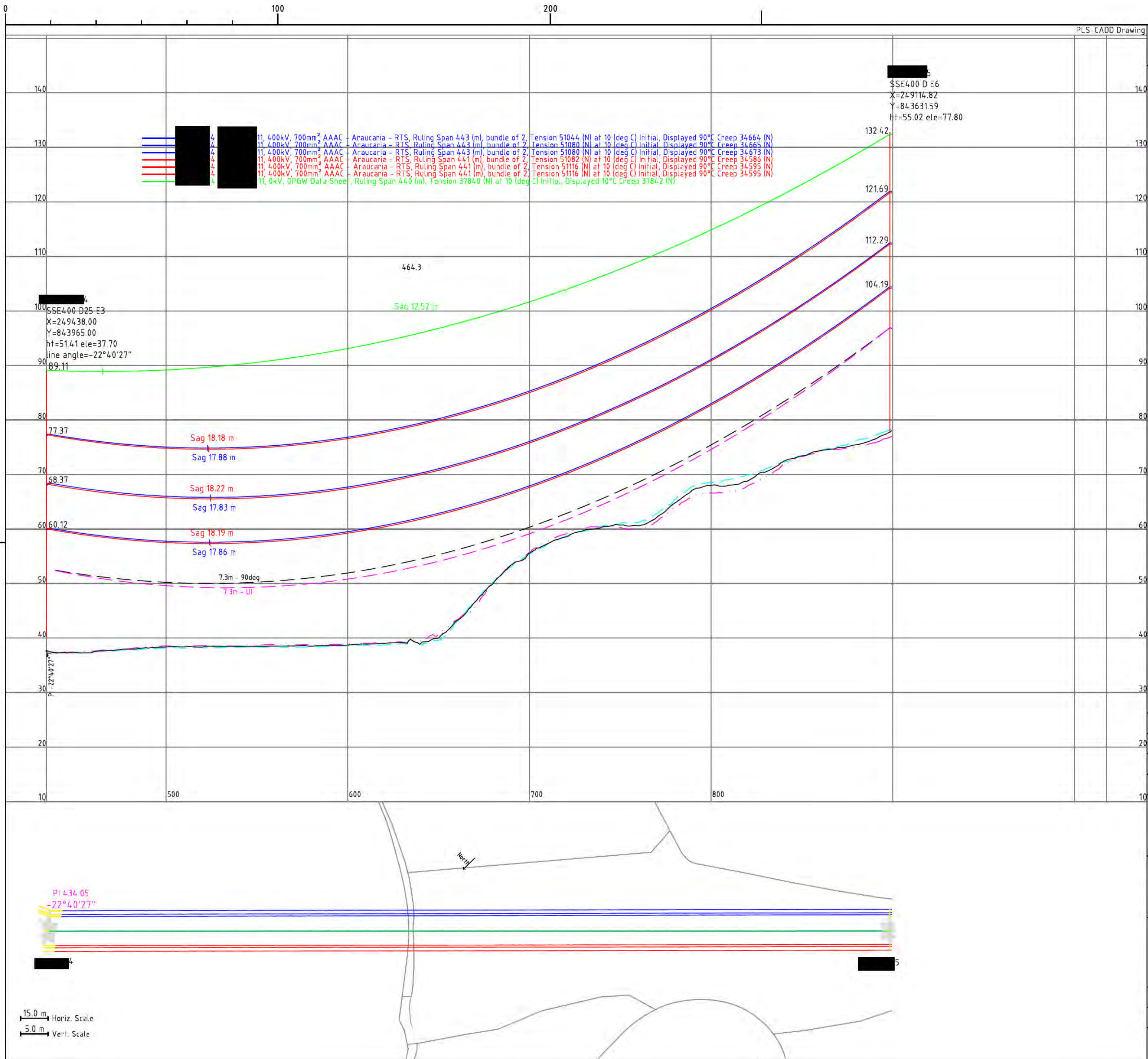
3D EMF Point Results Span from 9T to -10:

Measurement			B						H	EF					Space Potential			
X	Y	Z	Real	Imaginary	Angle	Magnitude	Polarization		Magnitude	Real	Imaginary	Angle	Magnitude	Polarization	Real	Imaginary	Angle	Magnitude
(m)	(m)	(m)	(uT)	(uT)	(deg)	(uT)	Axial Ratio %		(A/m)	(kV/m)	(kV/m)	(deg)	(kV/m)	Axial Ratio %	(kV)	(kV)	(deg)	(kV)
247816.9	842210.7	137.7	14.110	6.634	25.2	15.592	13.7		12.408	0.410	0.243	30.6	0.477	4.9	0.415	-0.270	-33.1	0.495
247816.3	842211.5	137.7	15.170	6.988	24.7	16.702	13.7		13.291	0.541	0.294	28.6	0.616	4.3	0.556	-0.323	-30.1	0.643
247815.7	842212.3	137.7	16.294	7.340	24.3	17.871	13.6		14.221	0.695	0.350	26.7	0.778	3.8	0.698	-0.367	-27.7	0.789
247815.2	842213.1	137.7	17.526	7.711	23.7	19.148	13.5		15.237	0.877	0.409	25.0	0.968	3.5	0.869	-0.416	-25.6	0.964
247814.6	842214.0	137.6	18.876	8.099	23.2	20.540	13.2		16.345	1.091	0.471	23.3	1.188	3.3	1.075	-0.470	-23.6	1.173
247814.0	842214.8	137.7	20.407	8.524	22.7	22.116	12.9		17.599	1.341	0.535	21.7	1.444	3.2	1.375	-0.551	-21.8	1.481
247813.4	842215.6	137.7	22.135	8.984	22.1	23.889	12.6		19.010	1.631	0.601	20.2	1.738	3.3	1.792	-0.658	-20.2	1.909
247812.8	842216.4	137.8	24.024	9.457	21.5	25.818	12.1		20.545	1.964	0.666	18.7	2.074	3.4	2.299	-0.774	-18.6	2.426
247812.3	842217.2	137.7	25.711	9.820	20.9	27.522	11.4		21.901	2.334	0.728	17.3	2.445	3.0	2.541	-0.782	-17.1	2.658

247811.7	842218.0	137.7	27.609	10.220	20.3	29.440	10.6	23.428	2.747	0.788	16.0	2.857	2.8	2.930	-0.824	-15.7	3.044
247811.1	842218.8	137.7	29.543	10.603	19.7	31.388	9.7	24.978	3.194	0.842	14.8	3.303	2.6	3.311	-0.851	-14.4	3.419
247810.5	842219.7	137.6	31.409	10.948	19.2	33.262	8.7	26.469	3.664	0.889	13.6	3.770	2.2	3.608	-0.849	-13.2	3.706
247810.0	842220.5	137.5	32.836	11.178	18.8	34.686	7.5	27.602	4.131	0.929	12.7	4.234	1.8	3.465	-0.745	-12.1	3.544
247809.4	842221.3	137.4	34.427	11.458	18.4	36.283	6.3	28.873	4.585	0.962	11.8	4.685	1.5	3.582	-0.712	-11.2	3.652
247808.8	842222.1	137.5	36.571	11.872	18.0	38.450	5.1	30.597	5.009	0.989	11.2	5.105	1.5	4.447	-0.836	-10.6	4.525
247808.2	842222.9	137.5	38.086	12.166	17.7	39.982	3.7	31.817	5.344	1.008	10.7	5.439	1.3	4.860	-0.871	-10.2	4.938
247807.6	842223.7	137.6	39.311	12.433	17.6	41.230	2.4	32.810	5.571	1.023	10.4	5.664	1.3	5.248	-0.915	-9.9	5.327
247807.1	842224.6	137.7	40.405	12.713	17.5	42.358	1.3	33.708	5.674	1.034	10.3	5.767	1.3	5.821	-1.011	-9.9	5.908
247806.5	842225.4	137.7	41.025	12.947	17.5	43.019	1.4	34.234	5.633	1.041	10.5	5.729	1.5	6.247	-1.104	-10.0	6.344
247805.9	842226.2	137.7	40.384	12.979	17.8	42.418	2.6	33.755	5.428	1.042	10.9	5.527	1.6	5.759	-1.050	-10.3	5.853
247805.3	842227.0	137.6	39.154	12.923	18.3	41.232	3.9	32.811	5.104	1.038	11.5	5.208	1.7	4.988	-0.953	-10.8	5.079
247804.7	842227.8	137.6	37.929	12.892	18.8	40.060	5.1	31.878	4.705	1.026	12.3	4.816	1.9	4.489	-0.916	-11.5	4.582
247804.2	842228.6	137.6	36.612	12.856	19.3	38.804	6.4	30.879	4.259	1.007	13.3	4.376	2.2	4.112	-0.907	-12.4	4.211
247803.6	842229.4	137.6	35.111	12.780	20.0	37.365	7.5	29.734	3.791	0.978	14.5	3.915	2.5	3.700	-0.890	-13.5	3.806
247803.0	842230.3	137.6	33.449	12.652	20.7	35.762	8.5	28.459	3.326	0.941	15.8	3.456	2.7	3.219	-0.846	-14.7	3.328
247802.4	842231.1	137.5	31.475	12.404	21.5	33.831	9.3	26.922	2.879	0.894	17.3	3.015	2.5	2.458	-0.699	-15.9	2.555
247801.9	842231.9	137.5	29.831	12.224	22.3	32.238	10.0	25.654	2.472	0.842	18.8	2.611	2.6	2.050	-0.636	-17.2	2.147
247801.3	842232.7	137.5	28.280	12.039	23.1	30.736	10.6	24.459	2.105	0.784	20.4	2.246	2.7	1.718	-0.580	-18.7	1.814
247800.7	842233.5	137.5	26.840	11.858	23.8	29.343	11.1	23.350	1.780	0.723	22.1	1.922	2.8	1.455	-0.535	-20.2	1.551
247800.1	842234.3	137.5	25.466	11.661	24.6	28.009	11.4	22.289	1.497	0.661	23.8	1.636	2.7	1.200	-0.477	-21.7	1.291
247799.5	842235.2	137.5	24.250	11.493	25.4	26.836	11.7	21.355	1.253	0.598	25.5	1.388	2.8	1.034	-0.445	-23.3	1.126

LT459-FNLN-EMF-OHL	Fanellan 400kV Substation EMF Compliance Report
Revision: 1.0	Classification: Public (Redacted confidential information)

Appendix C PROFILE DRAWING OF THE PROPOSED DESIGN



PLS-CADD Drawing

A2CAD

LEGEND

BH1 CIRCUIT

BGI CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

SIDE SLOPE AT 8.55m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

AACSR OPGW EARTHWIRE PROPERTIES

OVERALL DIAMETER: 23.8mm

COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

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GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

1. CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSEN TG-NET-OHL-519.

2. ALL MEASUREMENTS IN METRES.

3. FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.

4. ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.

5. THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.

6. PROFILES ARE BASED ON PLS CADD MODEL: "PLS CADD MODEL: FNLN4-LT459-MES-OHLTA-ZZ-M-E0-7601 Rev P03".

7. VEGETATION CLEARANCE INFRINGEMENTS SHALL BE IDENTIFIED/CONFIRMED BY ARBORICULTURE SURVEY AND RECTIFIED BY TREE CLEARANCE.

REFERENCES:

1. PLS CADD MODEL: FNLN4-LT459-MES-OHLTA-ZZ-M-E0-7601 Rev P03

2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

3. ENA TS 43-8, ISSUE 5, SSEN TG-NET-OHL-519

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	

CLIENT

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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 4 - 5

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-E0-4001-P02

ORIGINATOR DRAWING NUMBER

2637010.01/4001

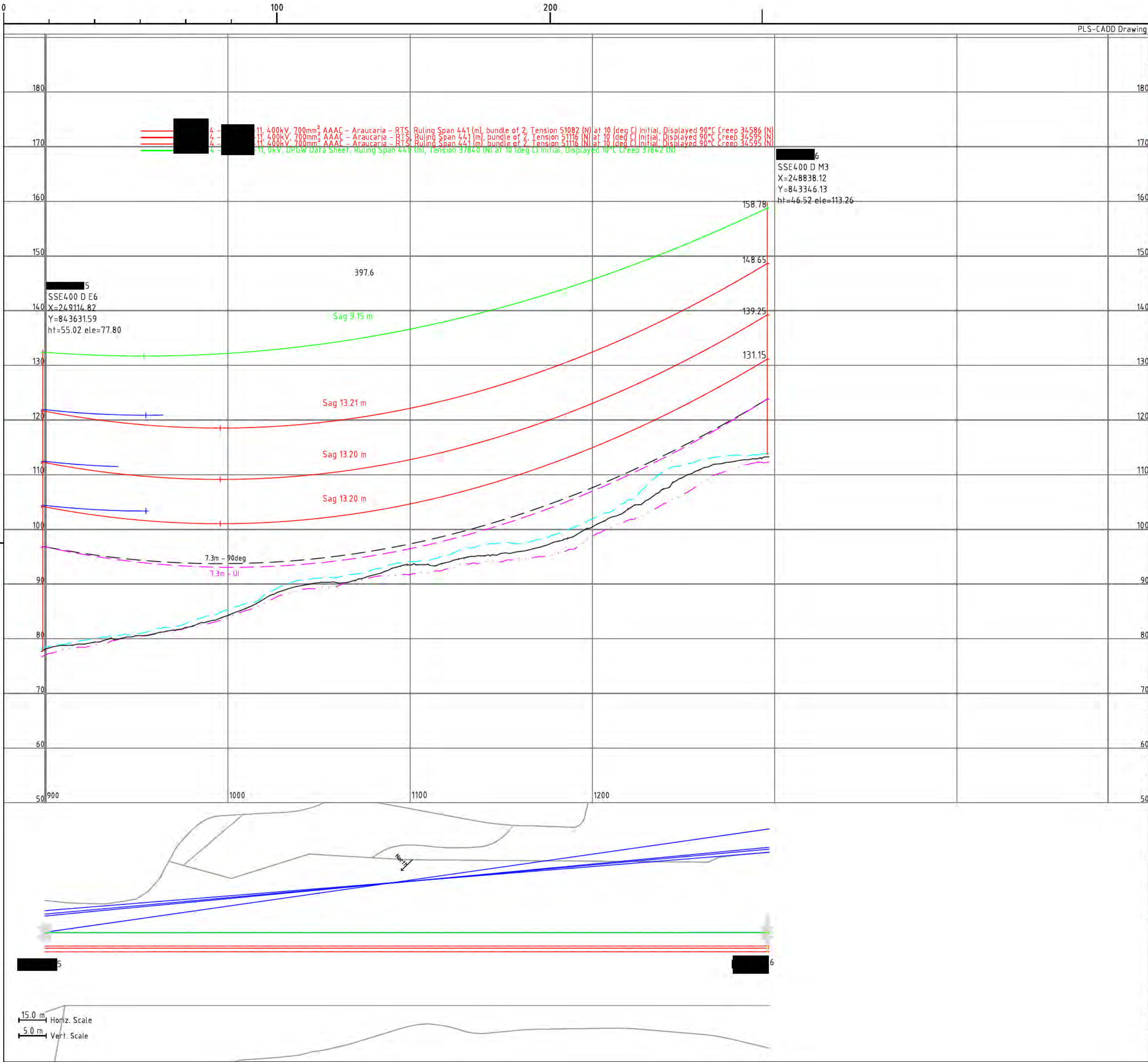
SHEET No.

1

No. OF SHEETS

11

SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2 CAD

LEGEND

- BN1 CIRCUIT
- BGI CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
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- SIDE SLOPE AT 8.55m RIGHT
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- TRACKS
- BUILDINGS AND HOUSES
- CROSSING POWER LINES
- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

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TOTAL MASS: 2348kg/km
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EDT: 20% of RTS @ 5°C
MET: 25% of RTS @ -20°C

AACSR OPGW EARTHWIRE PROPERTIES
OVERALL DIAMETER: 23.8mm
COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C
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NOMINAL BREAKING LOAD: 278.5kN
TOTAL MASS: 1782kg/km
DISPLAY TEMPERATURE: 10°C

ACSR OPGW EARTHWIRE SAGGING BASIS
SAGGED TO MATCH CONDUCTOR AT 5°C

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 - MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023
 - ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519

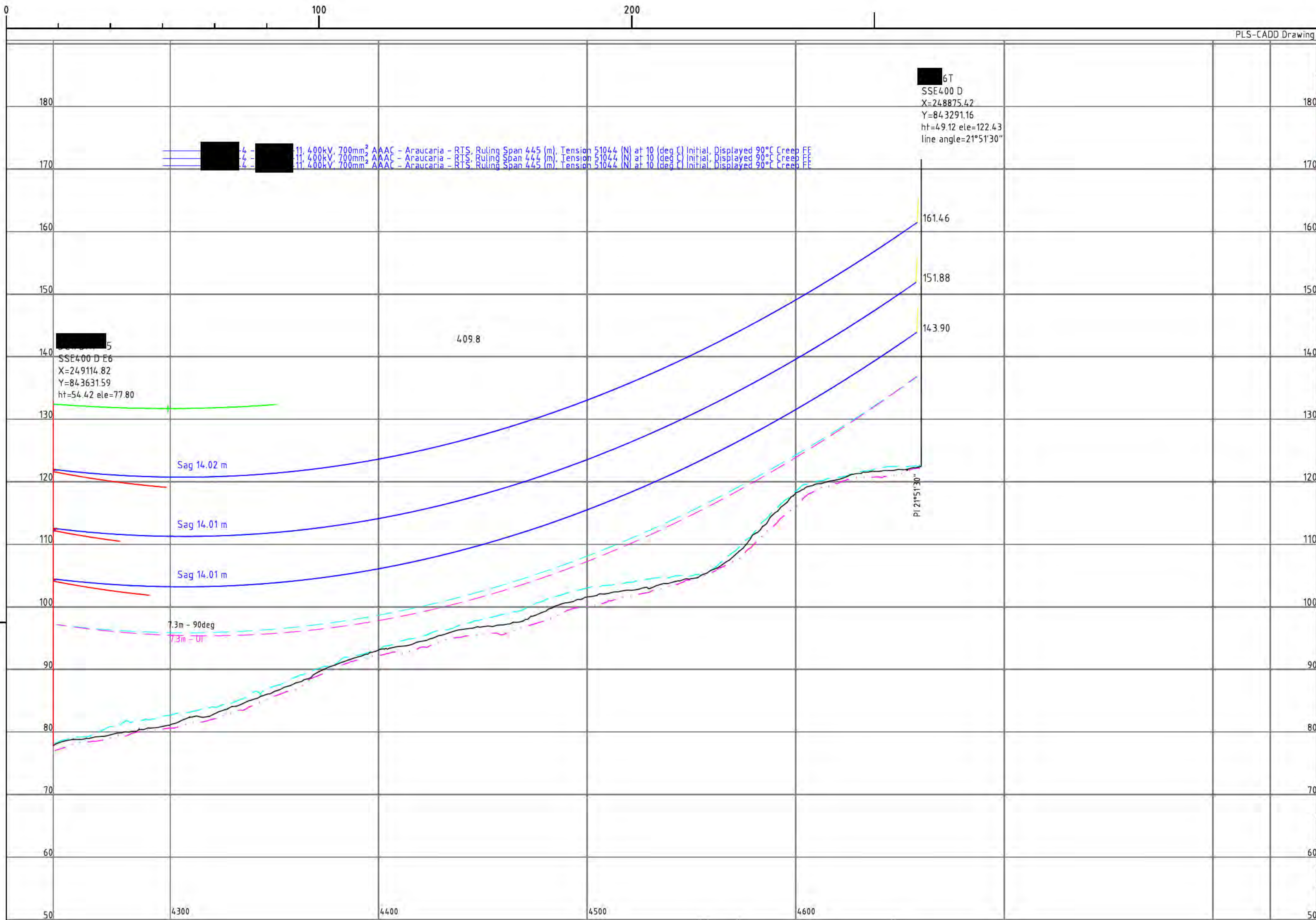
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DATE	18/04/2024			REMARKS
ISSUE	P02	CHECKED	AA	CIRCUIT COLOURS CHANGED
DRAWN	PWH	APPROVED	DA	
SSE SCHEME No.		LT459		



TITLE
BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 5 - 6

SITE			BEAULY 400kV TIE IN			ISSUE	
SSE DRAWING NUMBER			LT459-MES-OHLTA-ZZ-D-E0-4001-P02			P02	
ORIGINATOR DRAWING NUMBER			SHEET		No. OF		11
2637010.01/4001			No. 2		SHEETS		
SCALE:- 1:15 HORIZ. 1:5 VERT.							



PLS-CADD Drawing

A2CAD

LEGEND

BN1 CIRCUIT

BG1 CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

SIDE SLOPE AT 8.55m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

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NOMINAL BREAKING LOAD: 230kN

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DISPLAY TEMPERATURE: 90°C

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CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

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2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

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DATE	18/04/2024			REMARKS
ISSUE	P02	CHECKED	AA	CIRCUIT COLOURS CHANGED
DRAWN	PWH	APPROVED	DA	
SSE SCHEME No.	LT459			

CLIENT

Scottish & Southern Electricity Networks

MORRISON Energy Services

A part of MGroup Services

www.morrisones.com

TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 5 - 6T

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-E0-4001-P02

ORIGINATOR DRAWING NUMBER

2637010.01/4001

SHEET No.

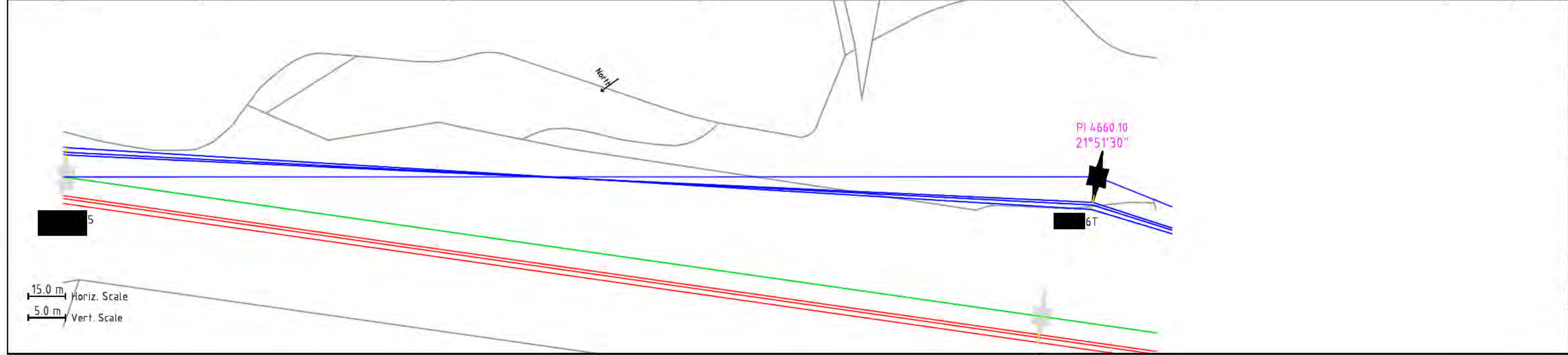
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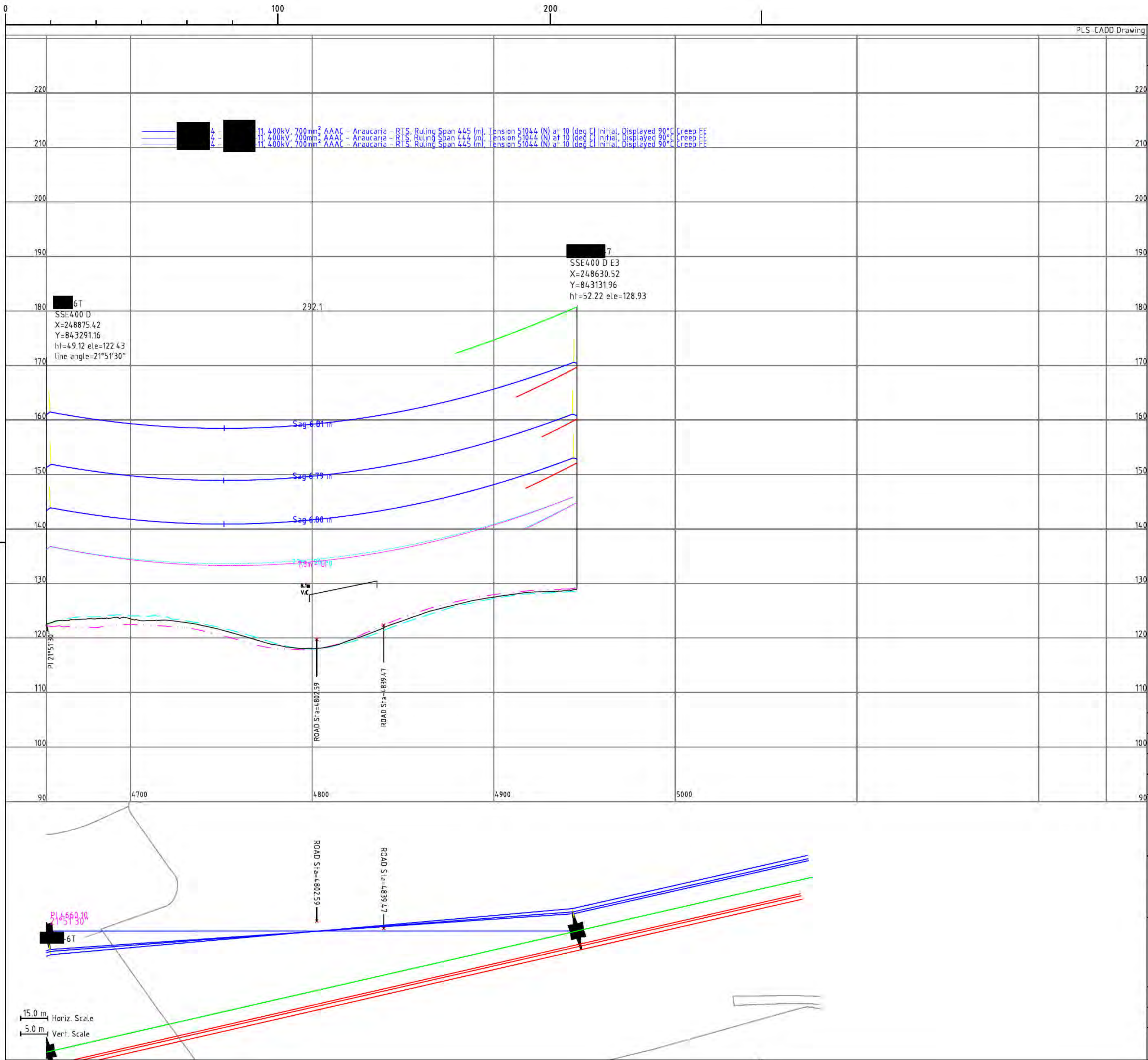
No. OF SHEETS

11

SCALE:-

1:15 HORIZ. 1:5 VERT.





A2				CAD	
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LEGEND

- BN1 CIRCUIT
- BG1 CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
- SIDE SLOPE AT 8.55m LEFT
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- RIVERS, PONDS AND STREAMS
- ROADS
- TRACKS
- BUILDINGS AND HOUSES
- CROSSING POWER LINES
- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

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CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

AACSR OPGW EARTHWIRE PROPERTIES

OVERALL DIAMETER: 23.8mm

COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

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EDT: 20% of RTS @ 5°C

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STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
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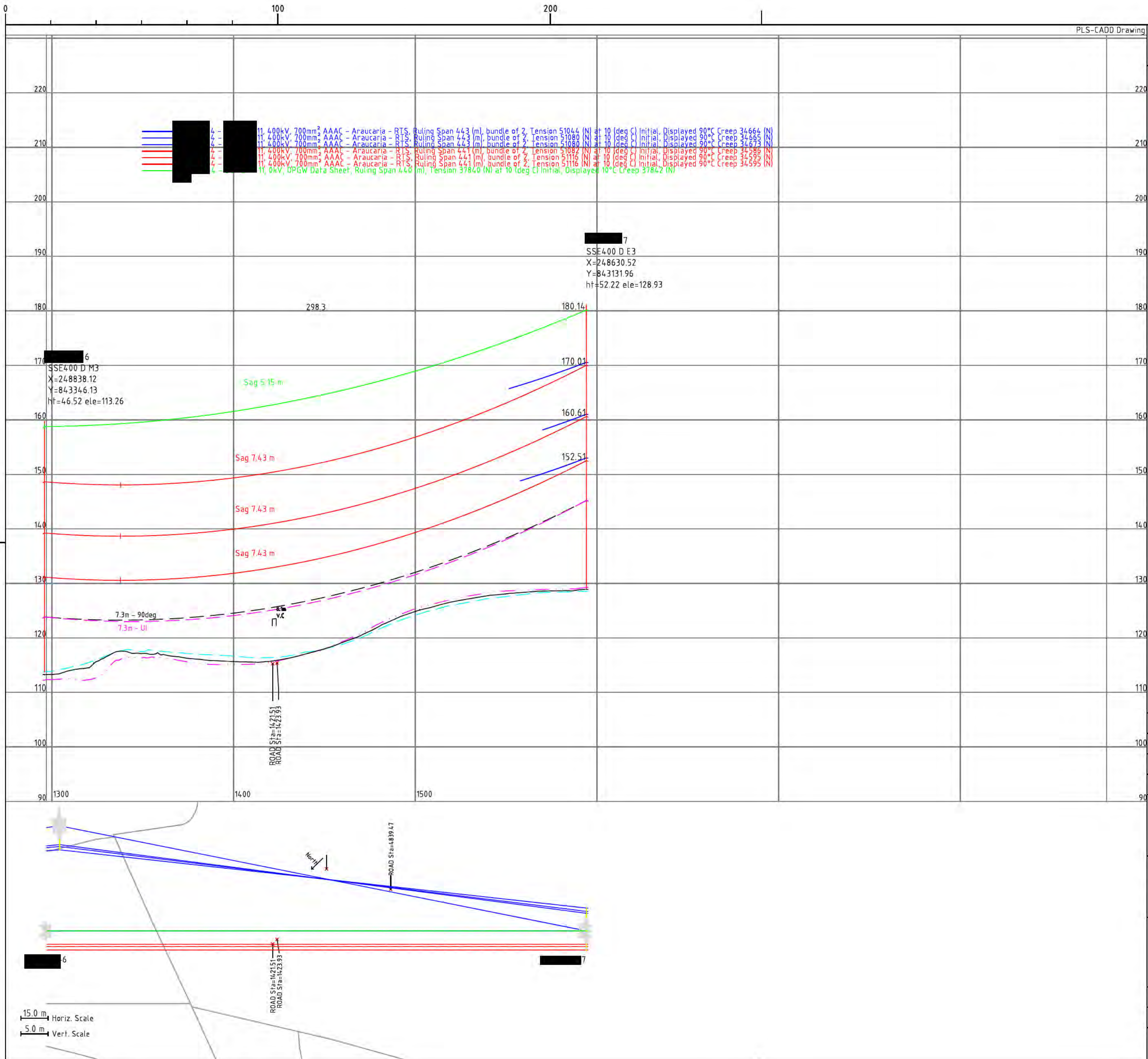
DATE	18/04/2024			REMARKS	
ISSUE	P02	CHECKED	AA	CIRCUIT COLOURS CHANGED	
DRAWN	PWH	APPROVED	DA		
SSE SCHEME No.	LT459				

CLIENT

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TITLE			
BEAULY 400kV TIE IN PLAN & PROFILE TEMPORARY ARRANGEMENT TOWERS 6T - 7			
SITE			ISSUE
BEAULY 400kV TIE IN			P02
SSE DRAWING NUMBER LT459-MES-OHLTA-ZZ-D-E0-4001-P02			
ORIGINATOR DRAWING NUMBER		SHEET No.	No. OF SHEETS
2637010.01/4001		4	11
SCALE:- 1:15 HORIZ. 1:5 VERT.			



A2CAD

LEGEND

BN1 CIRCUIT

BG1 CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

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ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

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DATE18/04/2024REMARKS

ISSUEP02CHECKEDAAAPROVEDDA

DRAWNPWH

SSE SCHEME No.LT459

CIRCUIT COLOURS CHANGED

CLIENT

Scottish & Southern

Electricity Networks

MORRISON

Energy Services

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TITLE

BEAULY 400kV TIE IN

PLAN & PROFILE TEMPORARY ARRANGEMENT

TOWERS 6 - 7

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-E0-4001-P02

ORIGINATOR DRAWING NUMBER

2637010.01/4001

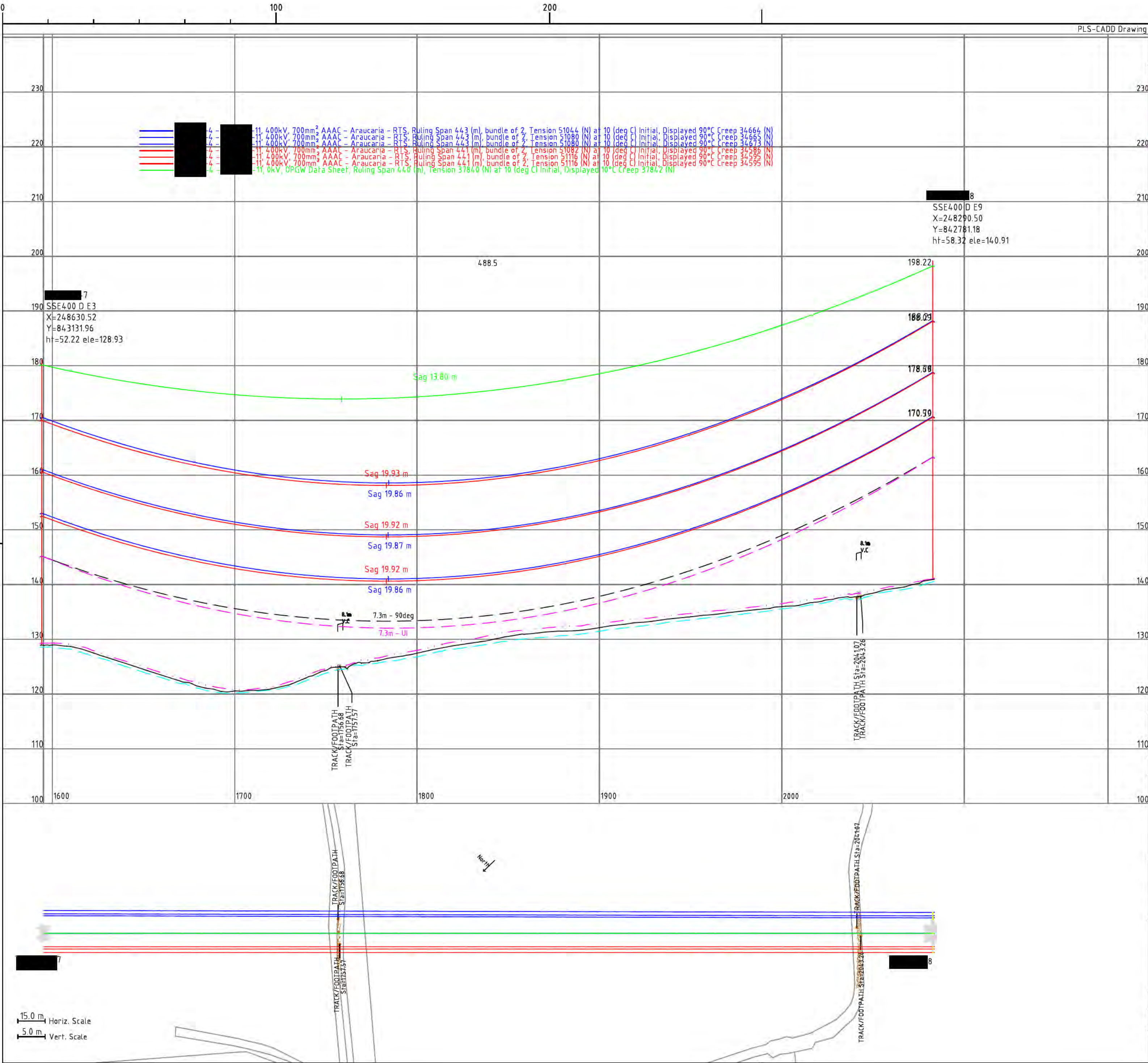
SHEET

No. 5

No. OF

SHEETS 11

SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

B01 CIRCUIT

B01 CIRCUIT

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CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

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SIDE SLOPE AT 8.55m RIGHT

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COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

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NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

1. CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSEN TG-NET-OHL-519.

2. ALL MEASUREMENTS IN METRES.

3. FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.

4. ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.

5. THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.

6. PROFILES ARE BASED ON PLS CADD MODEL: "PLS CADD MODEL: FNLN4-LT459-MES-OHLTA-ZZ-M-E0-7601 Rev P03".

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2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

3. ENA TS 43-8, ISSUE 5, SSEN TG-NET-OHL-519

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REMARKS

ISSUE

P02

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CIRCUIT COLOURS CHANGED

DRAWN

PWH

APPROVED

DA

SSE SCHEME No.

LT459

CLIENT

Scottish & Southern

Electricity Networks

MORRISON

Energy Services

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www.morrisones.com

TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 7 - 8

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-E0-4001-P02

ORIGINATOR DRAWING NUMBER

2637010.01/4001

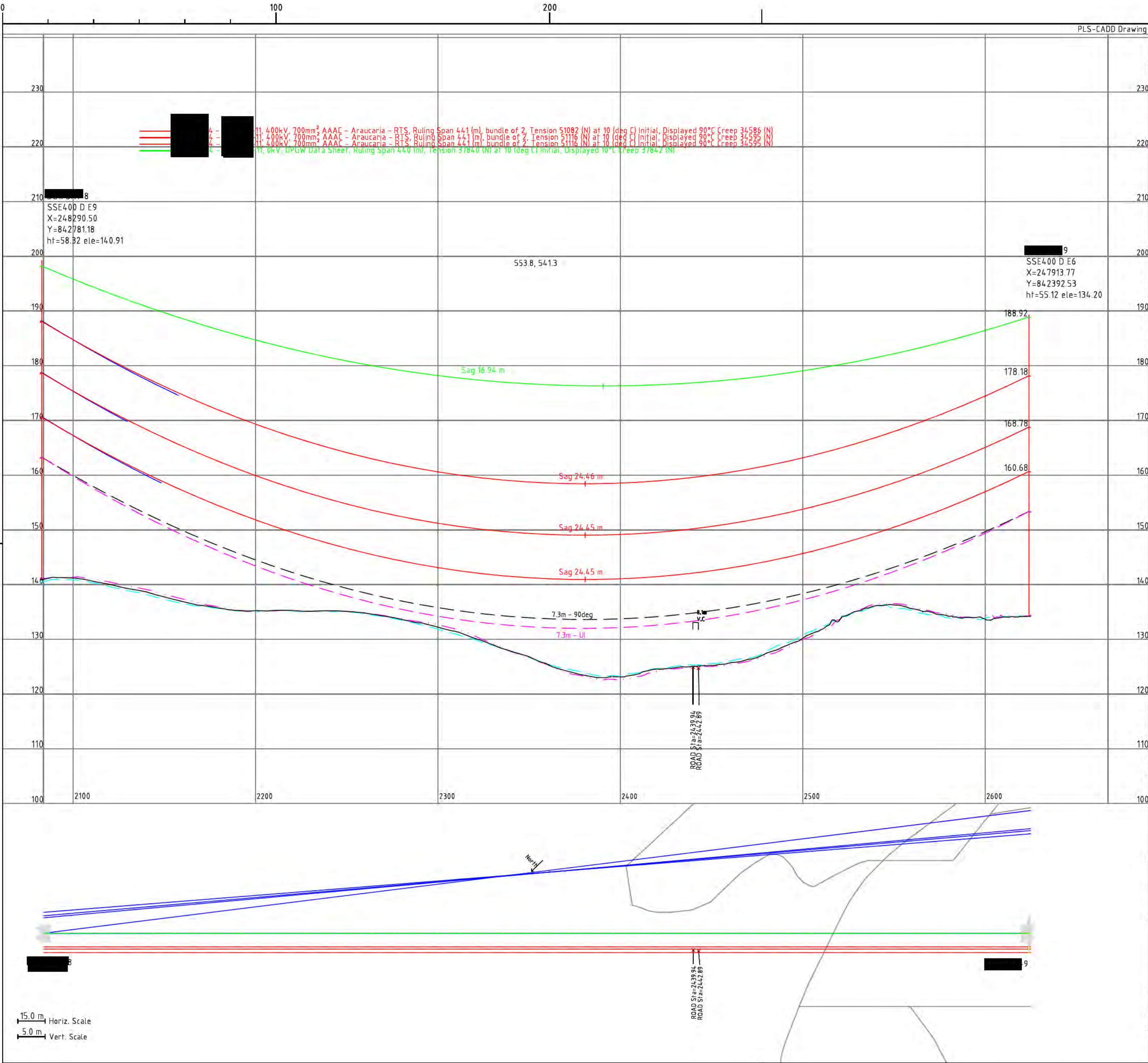
SHEET No.

6

No. OF SHEETS

11

SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

BH1 CIRCUIT

BG1 CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

SIDE SLOPE AT 8.55m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

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Energy Services

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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 8 - 9

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-E0-4001-P02

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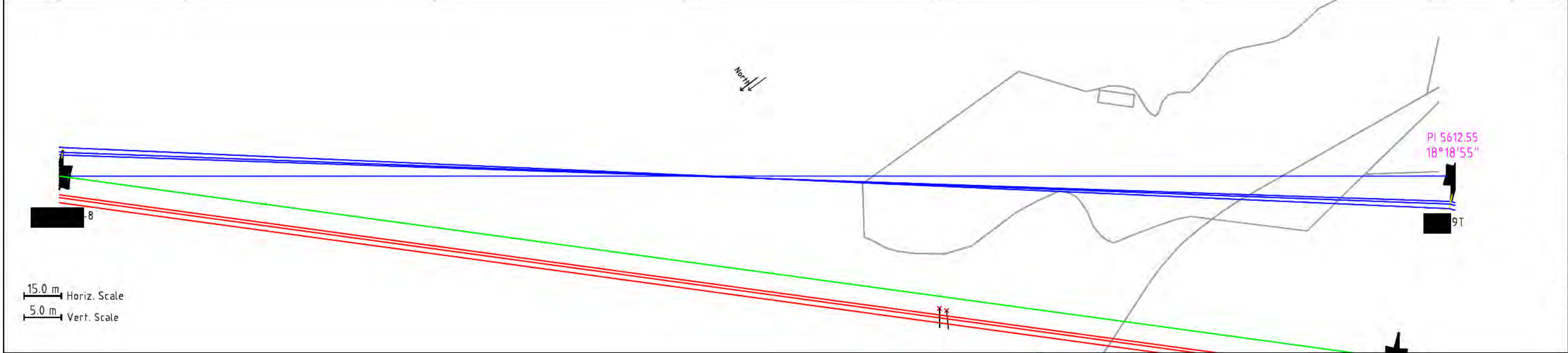
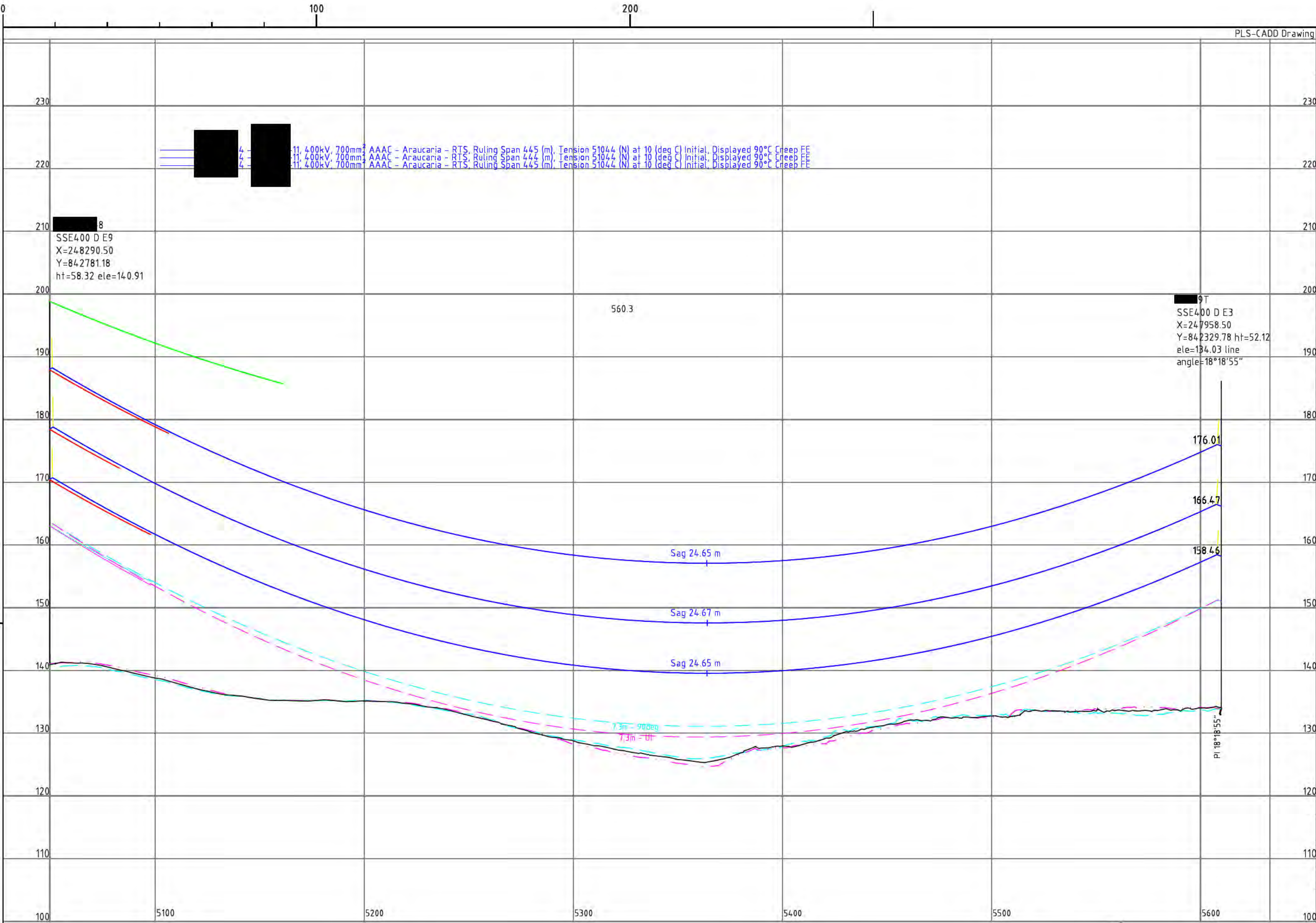
SHEET No.

7

No. OF SHEETS

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SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

BN1 CIRCUIT

BG1 CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

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RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE TEMPORARY ARRANGEMENT
TOWERS 8 - 9T

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-EO-4001-P02

ORIGINATOR DRAWING NUMBER

2637010.01/4001

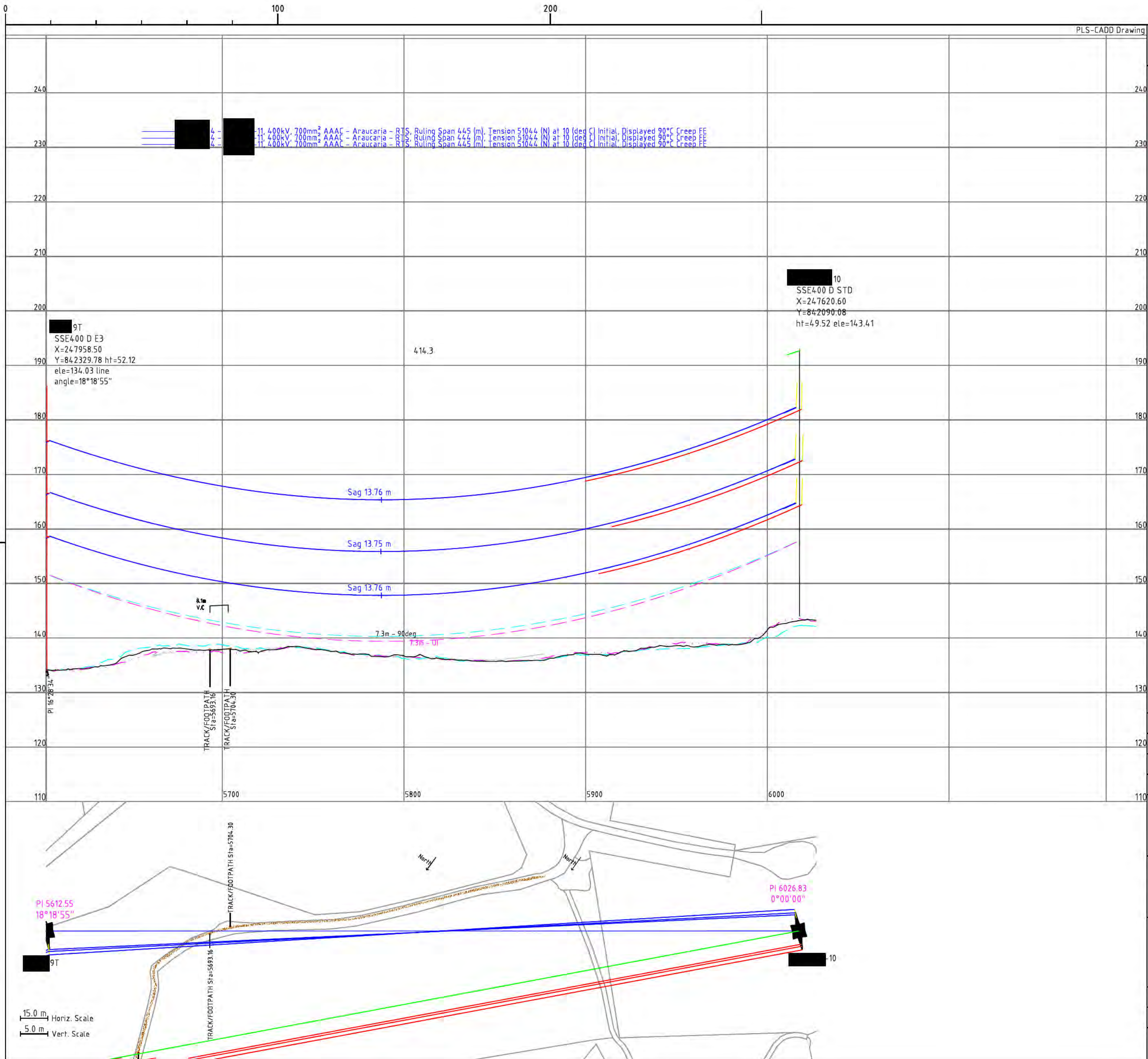
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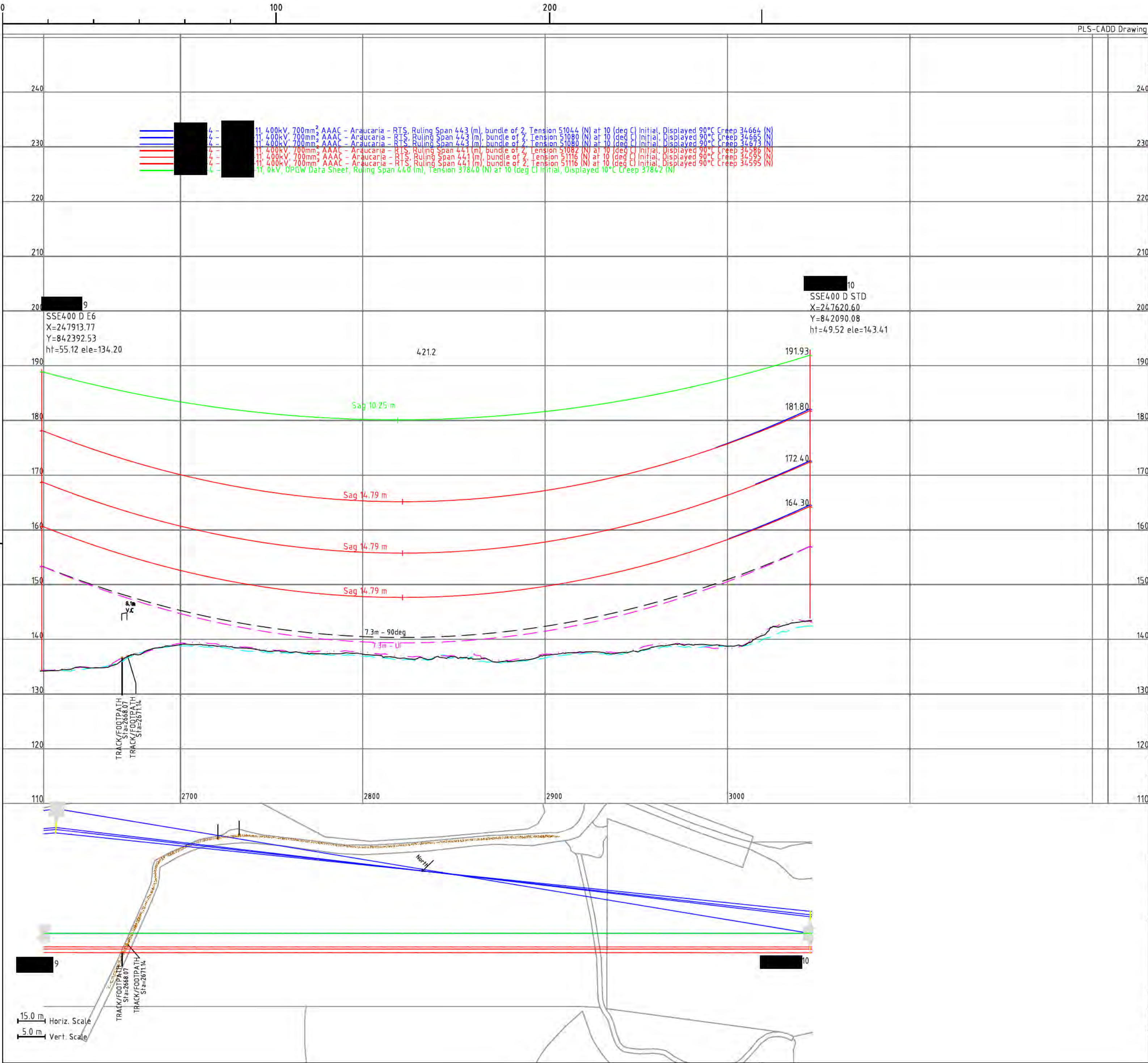
No. OF SHEETS

11

SCALE:- 1:15 HORIZ. 1:5 VERT.



A2				CAD																									
LEGEND																													
BN1 CIRCUIT BG1 CIRCUIT EARTHWIRE AACSR OPGW CLEARANCE LINE 7.3m, 90°C CLEARANCE LINE 7.3m, ULTIMATE ICE GROUNDLINE SIDE SLOPE AT 8.55m LEFT SIDE SLOPE AT 8.55m RIGHT RIVERS, PONDS AND STREAMS ROADS TRACKS BUILDINGS AND HOUSES CROSSING POWER LINES TREES/VEGETATION LAMP POSTS/SIGNAGE																													
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SITE				ISSUE																									
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SSE DRAWING NUMBER				No. OF SHEETS																									
LT459-MES-OHLTA-ZZ-D-E0-4001-P02				9 11																									
ORIGINATOR DRAWING NUMBER				SCALE:- 1:15 HORIZ. 1:5 VERT.																									
2637010.01/4001																													



PLS-CADD Drawing

A2CAD

LEGEND

BN1 CIRCUIT

BG1 CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 8.55m LEFT

SIDE SLOPE AT 8.55m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

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TITLE

BEAULY 400kV TIE IN

PLAN & PROFILE TEMPORARY ARRANGEMENT

TOWERS 9 - 10

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHLTA-ZZ-D-EO-4001-P02

ORIGINATOR DRAWING NUMBER

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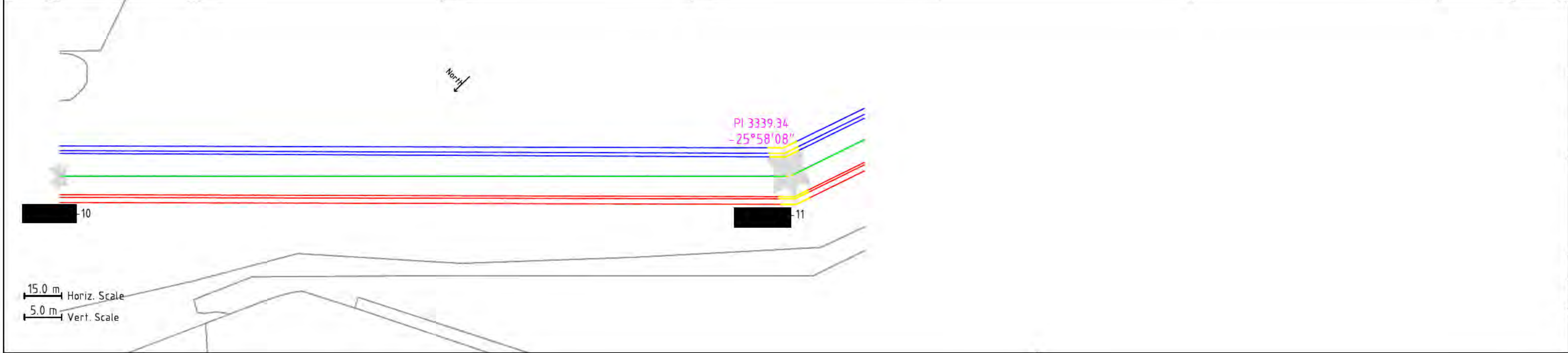
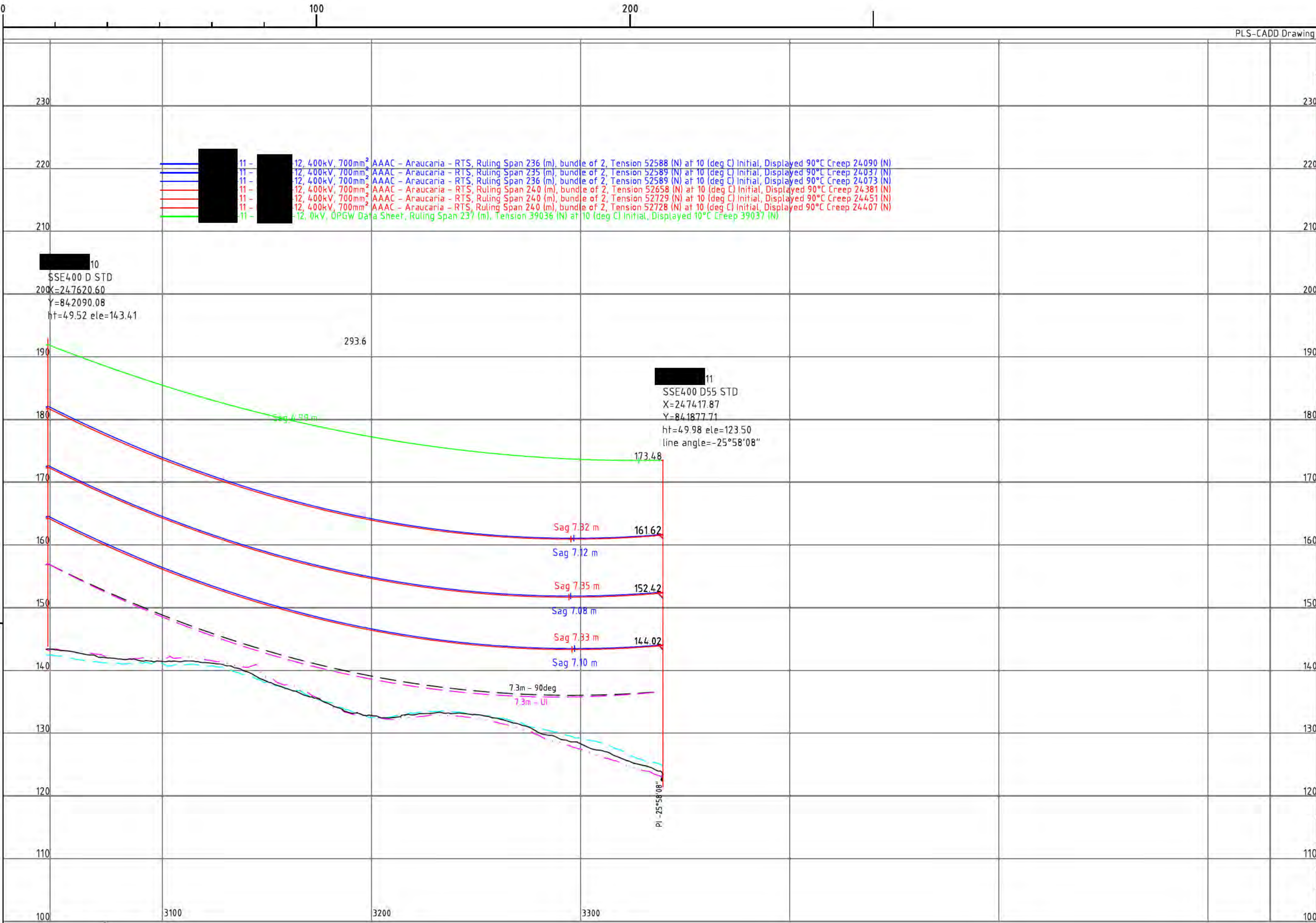
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No. OF SHEETS

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SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

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BG1 CIRCUIT

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CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

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BEAULY 400kV TIE IN

PLAN & PROFILE TEMPORARY ARRANGEMENT

TOWERS 10 - 11

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BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

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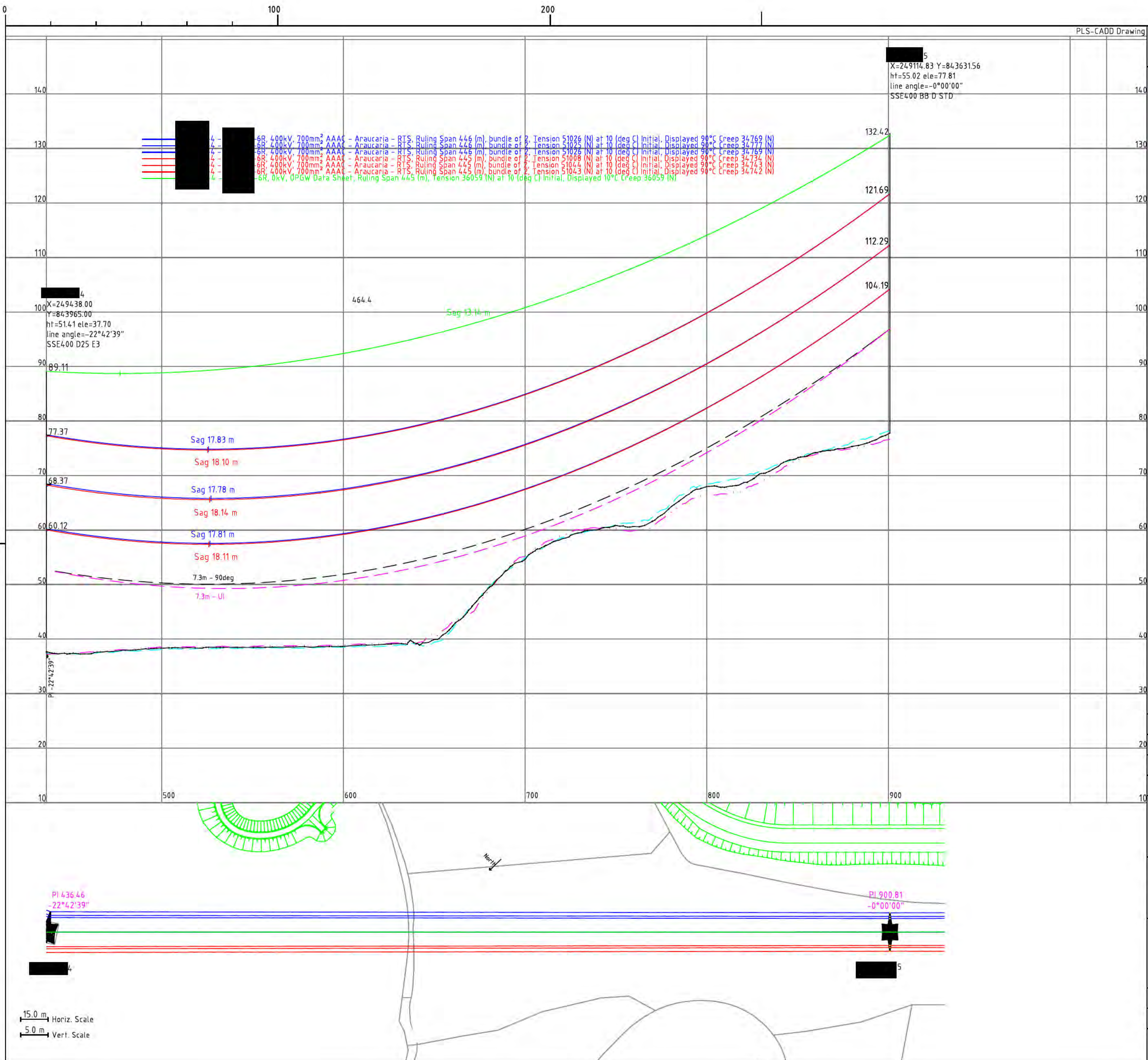
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LEGEND

- BG1 CIRCUIT
- BNI CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
- SIDE SLOPE AT 10m LEFT
- SIDE SLOPE AT 10m RIGHT
- RIVERS, PONDS AND STREAMS
- ROADS
- TRACKS
- BUILDINGS AND HOUSES
- CROSSING POWER LINES
- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES
OVERALL DIAMETER: 37.26mm
COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C
CROSS SECTIONAL AREA: 821.15mm²
NOMINAL BREAKING LOAD: 230kN
TOTAL MASS: 2348kg/km
DISPLAY TEMPERATURE: 90°C

AACSR OPGW EARTHWIRE PROPERTIES
OVERALL DIAMETER: 23.8mm
COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C
CROSS SECTIONAL AREA: 317.77mm²
NOMINAL BREAKING LOAD: 278.5kN
TOTAL MASS: 1782kg/km
DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS
EDT: 20% of RTS @ 5°C
MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS
SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION ENA TS 43-8
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

- CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSN TG-NET-OHL-519.
- ALL MEASUREMENTS IN METRES.
- FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.
- ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.
- THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.
- PROFILES ARE BASED ON PLS CADD MODEL: "FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03".
- VEGETATION CLEARANCE INFRINGEMENTS SHALL BE IDENTIFIED/CONFIRMED BY ARBORICULTURE SURVEY AND RECTIFIED BY TREE CLEARANCE.

REFERENCES:

- PLS CADD MODEL: FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03
- MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023
- ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519
- XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	
CLIENT	Scottish & Southern Electricity Networks	

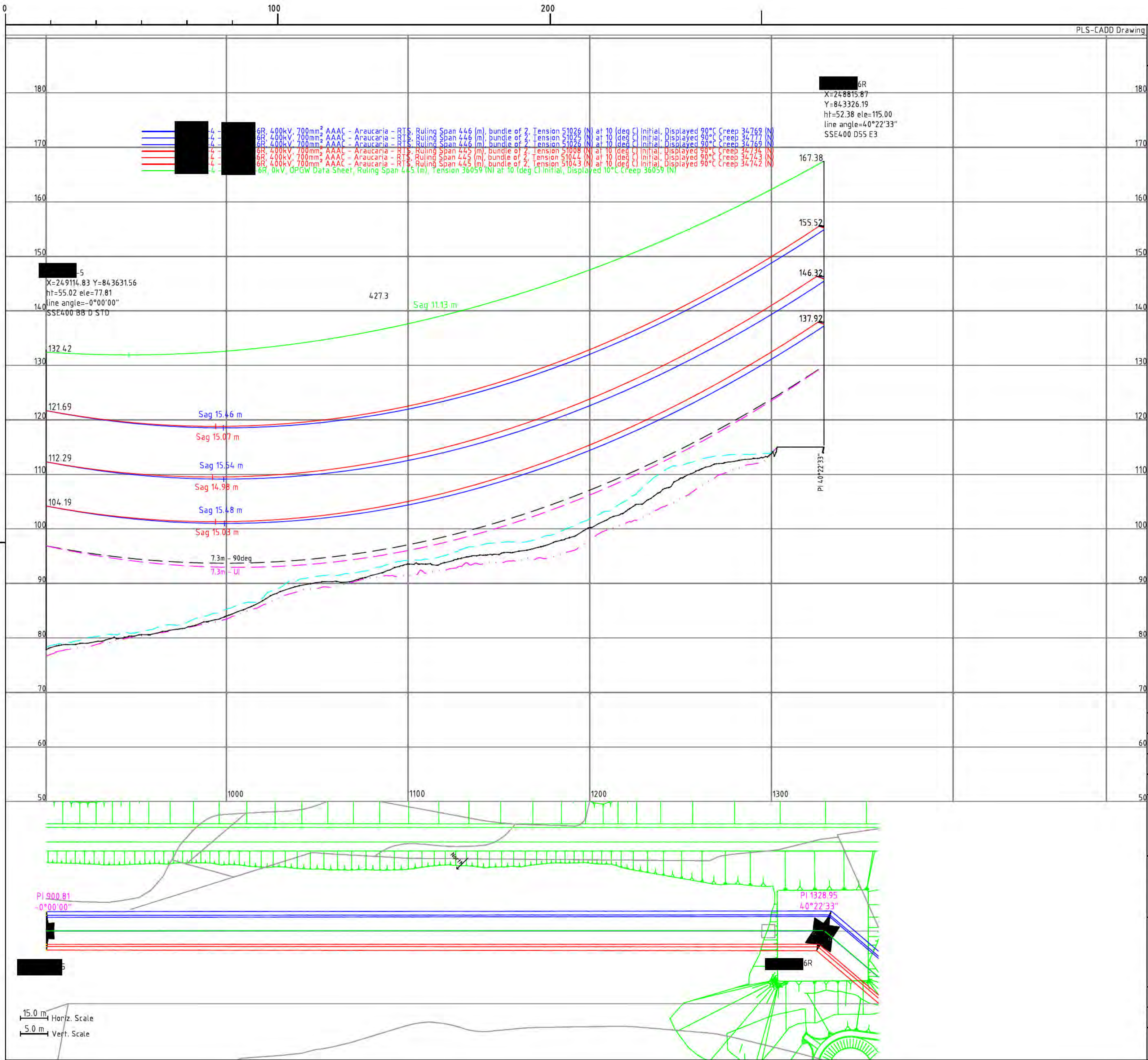
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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE FINAL ARRANGEMENT
TOWERS 4 & 5

SITE	BEAULY 400kV TIE IN	ISSUE	P02
SSE DRAWING NUMBER	LT459-MES-OHL-ZZ-D-EQ-4000		
ORIGINATOR DRAWING NUMBER	2637010.01/4000	SHEET No. 1	No. OF SHEETS 8
		SCALE:- 1:15 HORIZ. 1:5 VERT.	



LEGEND

- BG1 CIRCUIT
- BNI CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
- SIDE SLOPE AT 10m LEFT
- SIDE SLOPE AT 10m RIGHT
- RIVERS, PONDS AND STREAMS
- ROADS
- TRACKS
- BUILDINGS AND HOUSES
- CROSSING POWER LINES
- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

AACSR ARAUCARIA CONDUCTOR PROPERTIES
OVERALL DIAMETER: 37.26mm
COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C
CROSS SECTIONAL AREA: 821.15mm²
NOMINAL BREAKING LOAD: 230kN
TOTAL MASS: 2348kg/km
DISPLAY TEMPERATURE: 90°C

ARAUCARIA CONDUCTOR SAGGING BASIS
EDT: 20% of RTS @ 5°C
MET: 25% of RTS @ -20°C

AACSR OPGW EARTHWIRE PROPERTIES
OVERALL DIAMETER: 23.8mm
COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C
CROSS SECTIONAL AREA: 317.77mm²
NOMINAL BREAKING LOAD: 278.5kN
TOTAL MASS: 1782kg/km
DISPLAY TEMPERATURE: 10°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

- CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSN TG-NET-OHL-519.
- ALL MEASUREMENTS IN METRES.
- FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.
- ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.
- THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.
- PROFILES ARE BASED ON PLS CADD MODEL: "FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03".
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REFERENCES:

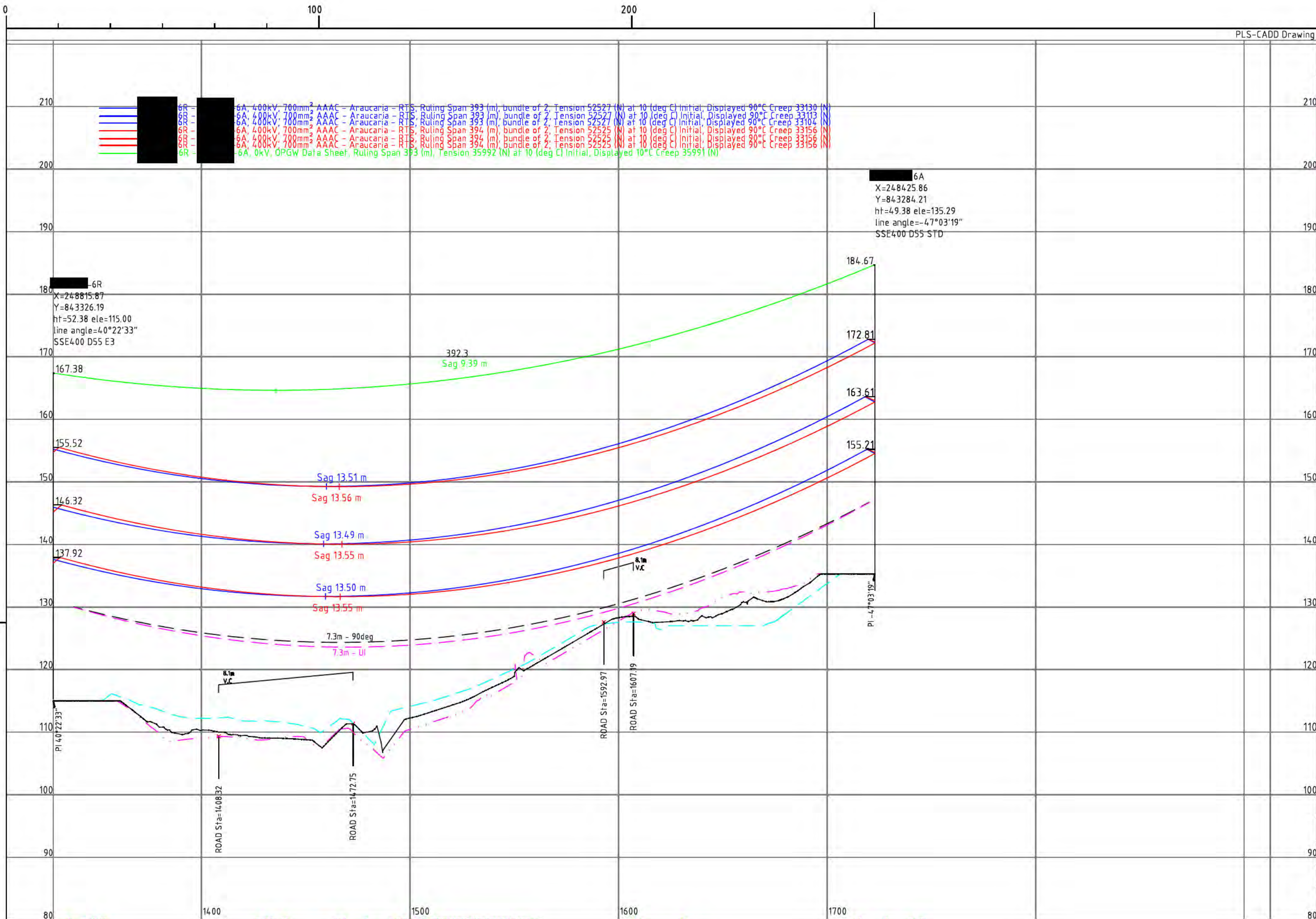
- PLS CADD MODEL: FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03
- MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023
- ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519
- XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	
CLIENT	Scottish & Southern Electricity Networks	

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TITLE		BEAULY 400kV TIE IN PLAN & PROFILE FINAL ARRANGEMENT TOWERS 4 & 6R	
SITE	BEAULY 400kV TIE IN		ISSUE
SSE DRAWING NUMBER	LT459-MES-OHL-ZZ-D-EQ-4000		P02
ORIGINATOR DRAWING NUMBER	2637010.01/4000		SHEET No. 2 No. OF SHEETS 8
		SCALE:- 1:15 HORIZ. 1:5 VERT.	



PLS-CADD Drawing

A2CAD

LEGEND

BG1 CIRCUIT

BNI CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 10m LEFT

SIDE SLOPE AT 10m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

AACSR OPGW EARTHWIRE PROPERTIES

OVERALL DIAMETER: 23.8mm

COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION ENA TS 43-8
GROUND	7.3m	TABLE 1, ITEM 1
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TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

1. CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSN TG-NET-OHL-519.

2. ALL MEASUREMENTS IN METRES.

3. FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.

4. ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.

5. THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.

6. PROFILES ARE BASED ON PLS CADD MODEL: "FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03".

7. VEGETATION CLEARANCE INFRINGEMENTS SHALL BE IDENTIFIED/CONFIRMED BY ARBORICULTURE SURVEY AND RECTIFIED BY TREE CLEARANCE.

REFERENCES:

1. PLS CADD MODEL: FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03

2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

3. ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519

4. XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
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SSE SCHEME No.	LT459	

CLIENT

Scottish & Southern

Electricity Networks

MORRISON

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TITLE

BEAULY 400kV TIE IN

PLAN & PROFILE FINAL ARRANGEMENT

TOWERS 6R & 6A

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHL-ZZ-D-EQ-4000

ORIGINATOR DRAWING NUMBER

2637010.01/4000

SHEET No.

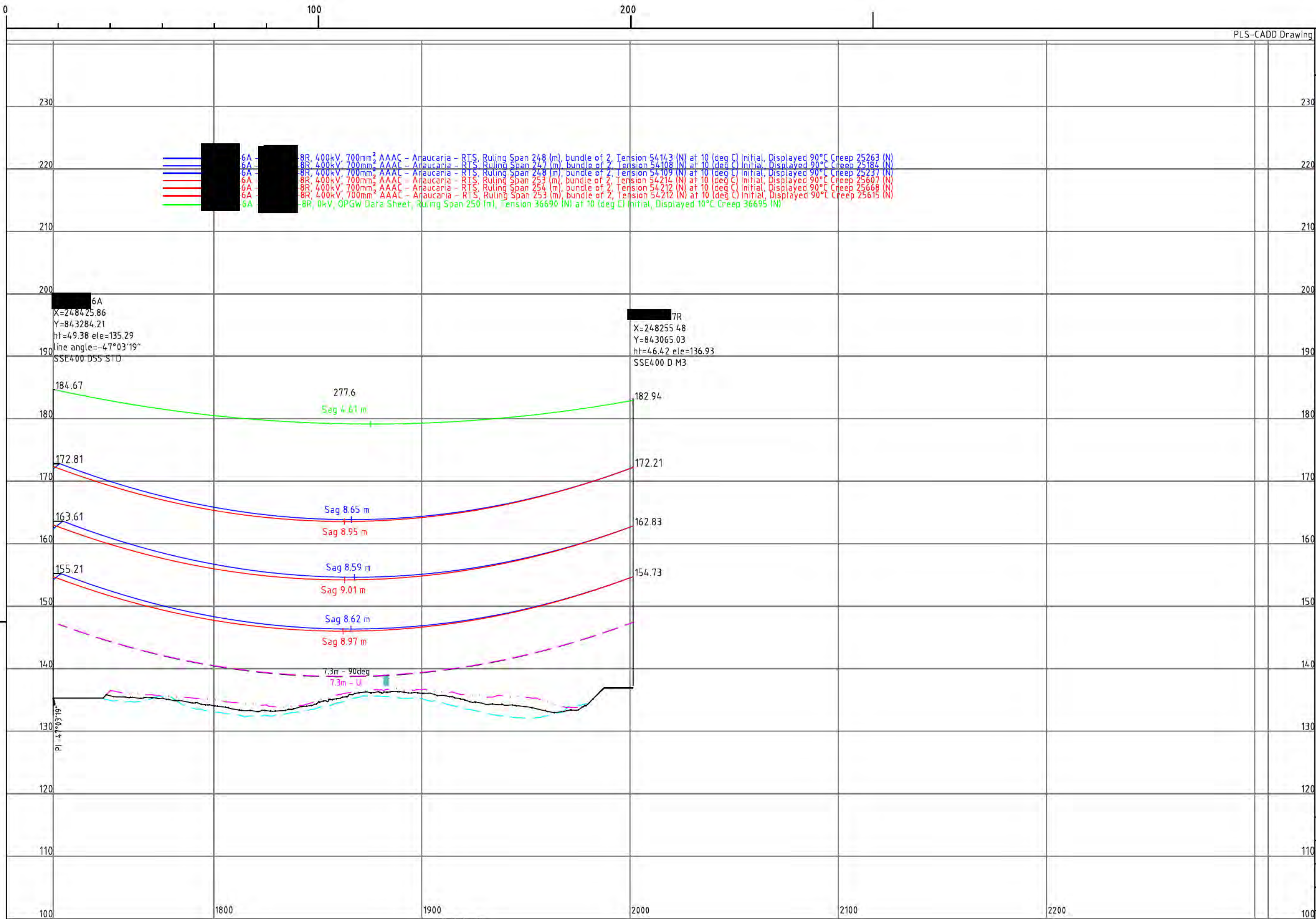
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No. OF SHEETS

8

SCALE:-

1:15 HORIZ. 1:5 VERT.



A2 CAD

LEGEND

- BG1 CIRCUIT
- BNI CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
- SIDE SLOPE AT 10m LEFT
- SIDE SLOPE AT 10m RIGHT
- RIVERS, PONDS AND STREAMS
- ROADS
- TRACKS
- BUILDINGS AND HOUSES
- CROSSING POWER LINES
- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES
OVERALL DIAMETER: 37.26mm
COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C
CROSS SECTIONAL AREA: 821.15mm²
NOMINAL BREAKING LOAD: 230kN
TOTAL MASS: 2348kg/km
DISPLAY TEMPERATURE: 90°C

AACSR OPGW EARTHWIRE PROPERTIES
OVERALL DIAMETER: 23.8mm
COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C
CROSS SECTIONAL AREA: 317.77mm²
NOMINAL BREAKING LOAD: 278.5kN
TOTAL MASS: 1782kg/km
DISPLAY TEMPERATURE: 10°C

ARAUCARIA CONDUCTOR SAGGING BASIS
EDT: 20% of RTS @ 5°C
MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS
SAGGED TO MATCH CONDUCTOR AT 5°C

OBJECT	MINIMUM CLEARANCE	SPECIFICATION
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (iii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

- CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSN TG-NET-OHL-519.
- ALL MEASUREMENTS IN METRES.
- FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.
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- MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023
- ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519
- XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	

CLIENT

Scottish & Southern
Electricity Networks

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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE FINAL ARRANGEMENT
TOWERS 6A & 7R

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHL-ZZ-D-EQ-4000

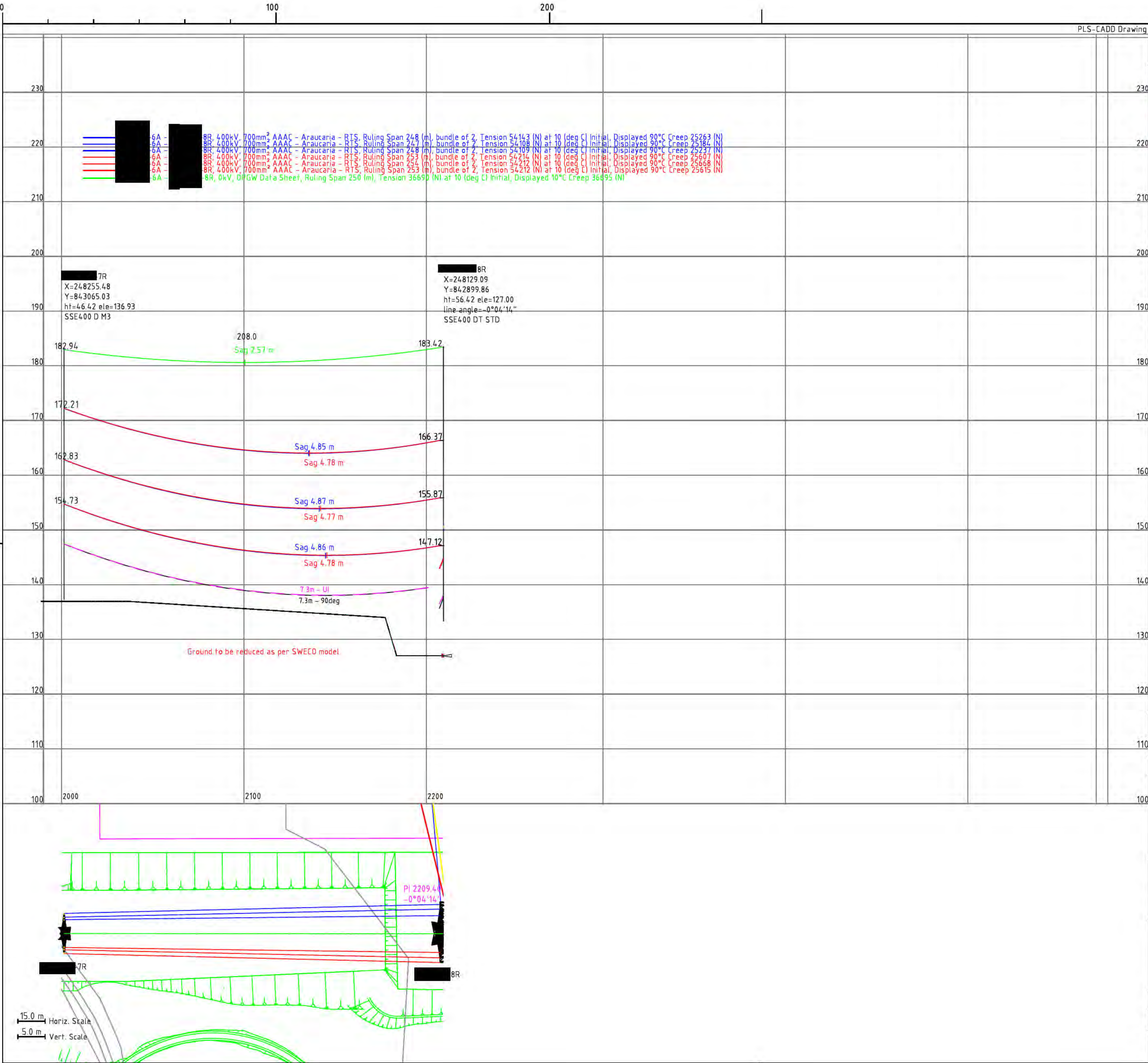
ORIGINATOR DRAWING NUMBER

2637010.01/4000

SHEET No. 4

No. OF SHEETS 8

SCALE: 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

BG1 CIRCUIT

BNI CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 10m LEFT

SIDE SLOPE AT 10m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

AACSR OPGW EARTHWIRE PROPERTIES

OVERALL DIAMETER: 23.8mm

COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION ENA TS 43-8.
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
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STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

1. CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSN TG-NET-OHL-519.

2. ALL MEASUREMENTS IN METRES.

3. FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.

4. ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.

5. THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.

6. PROFILES ARE BASED ON PLS CADD MODEL: "FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03".

7. VEGETATION CLEARANCE INFRINGEMENTS SHALL BE IDENTIFIED/CONFIRMED BY ARBORICULTURE SURVEY AND RECTIFIED BY TREE CLEARANCE.

REFERENCES:

1. PLS CADD MODEL: FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03

2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

3. ENA TS 43-8, ISSUE 5, SSN TG-NET-OHL-519

4. XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE

18/04/2024

REMARKS

ISSUE

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CIRCUIT COLOURS CHANGED

SSE SCHEME No.

LT459

CLIENT

Scottish & Southern

Electricity Networks

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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE FINAL ARRANGEMENT
TOWERS 7R & 8R

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHL-ZZ-D-EQ-4000

ORIGINATOR DRAWING NUMBER

2637010.01/4000

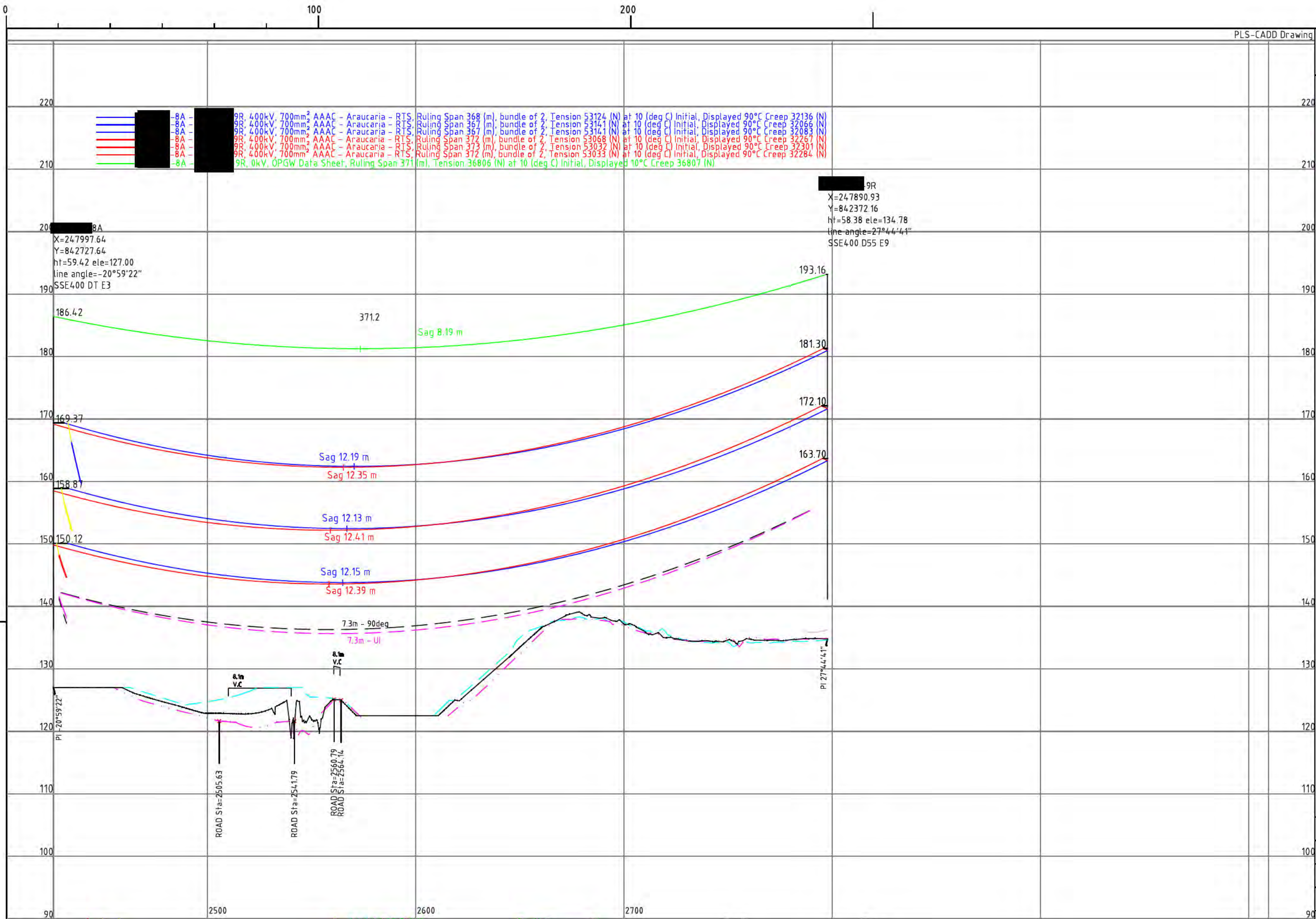
SHEET No.

5

No. OF SHEETS

8

SCALE:- 1:15 HORIZ. 1:5 VERT.



LEGEND

- BG1 CIRCUIT
- BNI CIRCUIT
- EARTHWIRE AACSR OPGW
- CLEARANCE LINE 7.3m, 90°C
- CLEARANCE LINE 7.3m, ULTIMATE ICE
- GROUNDLINE
- SIDE SLOPE AT 10m LEFT
- SIDE SLOPE AT 10m RIGHT
- RIVERS, PONDS AND STREAMS
- ROADS
- TRACKS
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- TREES/VEGETATION
- LAMP POSTS/SIGNAGE

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TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION ENA TS 43-8
GROUND	7.3m	TABLE 1, ITEM 1
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POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

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- MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023
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- XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	

CLIENT



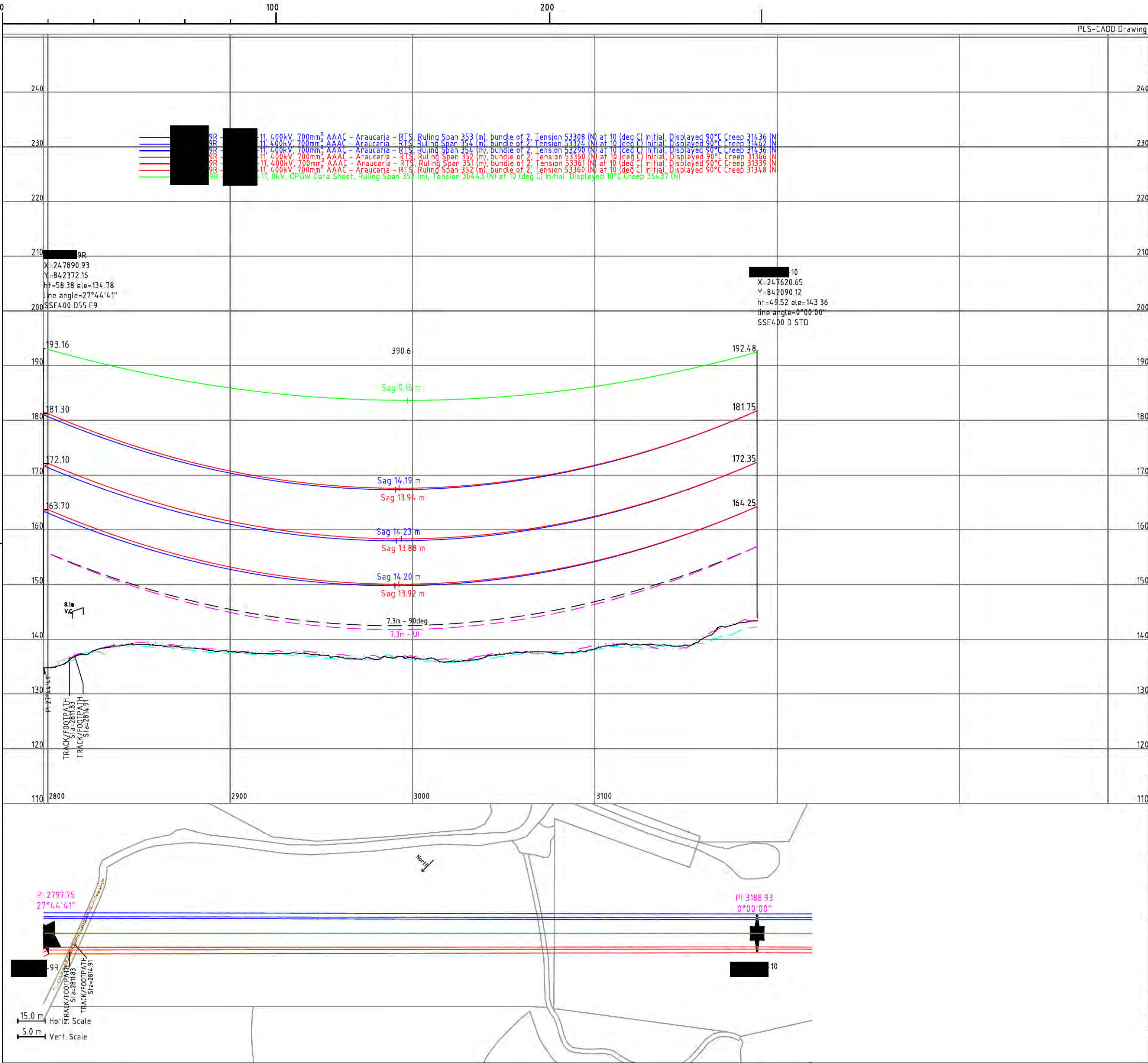
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TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE FINAL ARRANGEMENT
TOWERS 8A - 9R

SITE	BEAULY 400kV TIE IN	ISSUE	P02
SSE DRAWING NUMBER	LT459-MES-OHL-ZZ-D-EQ-4000		
ORIGINATOR DRAWING NUMBER	2637010.01/4000	SHEET No. 6	No. OF SHEETS 8
		SCALE:- 1:15 HORIZ. 1:5 VERT.	



PLS-CADD Drawing

A2CAD

LEGEND

BG1 CIRCUIT

BNI CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 10m LEFT

SIDE SLOPE AT 10m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

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MET: 25% of RTS @ -20°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

OBJECT	MINIMUM CLEARANCE	SPECIFICATION
GROUND	7.3m	TABLE 1, ITEM 1
ROADS	8.1m	TABLE 1, ITEM 2
BUILDINGS	5.3m	TABLE 2, ITEM 1
TREES	5.3m	TABLE 2, ITEM 3 (ii)
STREET LIGHTING	4.0m	TABLE 2, ITEM 6 (i)
POWERLINE CROSSING	4.4m	TABLE 5, ITEM 1

GENERAL NOTES:

1. CLEARANCES TO ENA TS 43-8 ISSUE 5 & SSEN TG-NET-OHL-519.

2. ALL MEASUREMENTS IN METRES.

3. FOR DEVIATIONS: A NEGATIVE VALUE INDICATES A LEFT DEVIATION, A POSITIVE VALUE INDICATES A RIGHT DEVIATION.

4. ALL LEVELS GIVEN ARE RELATIVE TO SEA LEVEL.

5. THIS DRAWING IS INTENDED TO BE VIEWED IN COLOUR.

6. PROFILES ARE BASED ON PLS CADD MODEL: "FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03".

7. VEGETATION CLEARANCE INFRINGEMENTS SHALL BE IDENTIFIED/CONFIRMED BY ARBORICULTURE SURVEY AND RECTIFIED BY TREE CLEARANCE.

REFERENCES:

1. PLS CADD MODEL: FNLN4-LT459-MES-OHL-ZZ-M-EQ-7600 Rev P03

2. MAPPING DATA SUPPLIED BY SSE, DECEMBER 2023

3. ENA TS 43-8, ISSUE 5, SSEN TG-NET-OHL-519

4. XREF-LT459-SWE-XX-XX-M-0001 WORKING, SWECCO, APRIL 2024

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DATE	18/04/2024	REMARKS
ISSUE	P02	CHECKED AA
DRAWN	PWH	APPROVED DA
SSE SCHEME No.	LT459	

CLIENT

Scottish & Southern

Electricity Networks

MORRISON

Energy Services

A part of MGroup Services

www.morrisones.com

TITLE

BEAULY 400kV TIE IN
PLAN & PROFILE FINAL ARRANGEMENT
TOWERS 9R - 10

SITE

BEAULY 400kV TIE IN

ISSUE

P02

SSE DRAWING NUMBER

LT459-MES-OHL-ZZ-D-EQ-4000

ORIGINATOR DRAWING NUMBER

2637010.01/4000

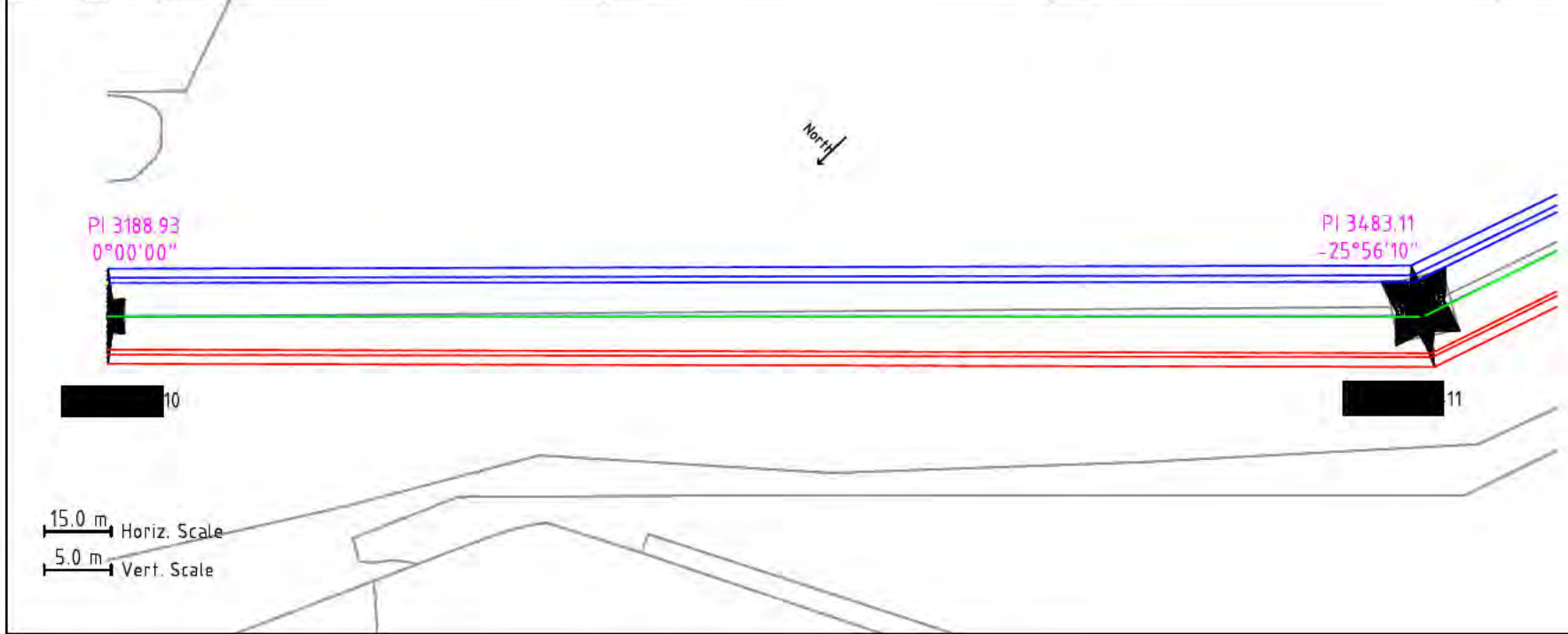
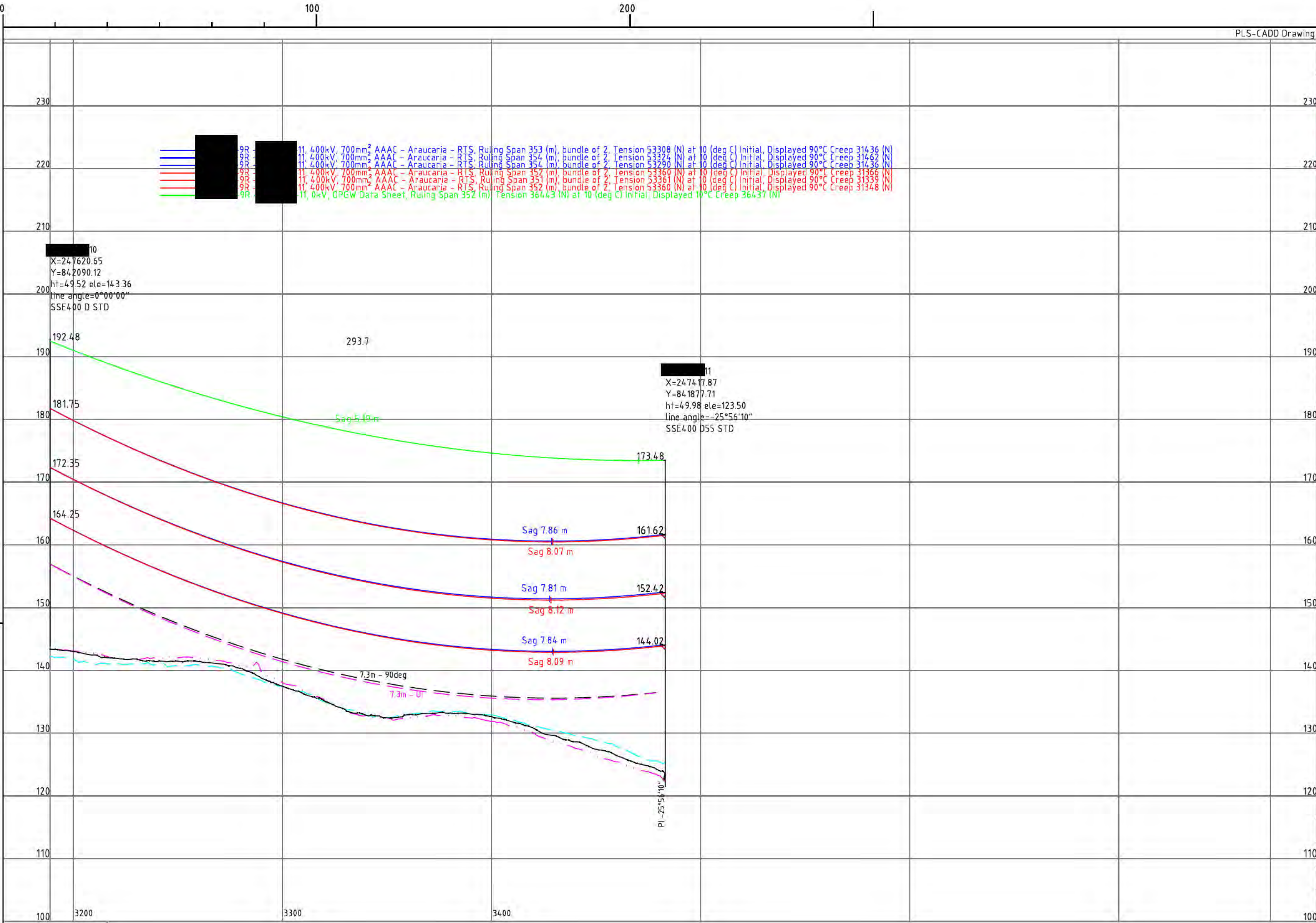
SHEET No.

7

No. OF SHEETS

8

SCALE:- 1:15 HORIZ. 1:5 VERT.



PLS-CADD Drawing

A2CAD

LEGEND

BG1 CIRCUIT

BNI CIRCUIT

EARTHWIRE AACSR OPGW

CLEARANCE LINE 7.3m, 90°C

CLEARANCE LINE 7.3m, ULTIMATE ICE

GROUNDLINE

SIDE SLOPE AT 10m LEFT

SIDE SLOPE AT 10m RIGHT

RIVERS, PONDS AND STREAMS

ROADS

TRACKS

BUILDINGS AND HOUSES

CROSSING POWER LINES

TREES/VEGETATION

LAMP POSTS/SIGNAGE

AAAC ARAUCARIA CONDUCTOR PROPERTIES

OVERALL DIAMETER: 37.26mm

COEFFICIENT OF LINEAR EXPANSION: 2.30 E-05/1°C

CROSS SECTIONAL AREA: 821.15mm²

NOMINAL BREAKING LOAD: 230kN

TOTAL MASS: 2348kg/km

DISPLAY TEMPERATURE: 90°C

ARAUCARIA CONDUCTOR SAGGING BASIS

EDT: 20% of RTS @ 5°C

MET: 25% of RTS @ -20°C

AACSR OPGW EARTHWIRE PROPERTIES

OVERALL DIAMETER: 23.8mm

COEFFICIENT OF LINEAR EXPANSION: 1.46E-05 / 1°C

CROSS SECTIONAL AREA: 317.77mm²

NOMINAL BREAKING LOAD: 278.5kN

TOTAL MASS: 1782kg/km

DISPLAY TEMPERATURE: 10°C

ACSR OPGW EARTHWIRE SAGGING BASIS

SAGGED TO MATCH CONDUCTOR AT 5°C

TABLE OF CLEARANCES (400kV)

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