

NOTES:

- 1ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED
- 2STRAIN STRUCTURES ARE HIGHLIGHTED USING A LIGHT GREY BACKGROUND
- 3LUNGA POWER STATION TO HENDERSON SOLAR FARM LINE LENGTH 5435 TO 4949 : 5.8km
- 4EARTHWIRES: NONE
- 5DESIGN OF THE PROPOSED ADSS LINE IS BASED ON THE FOLLOWING ASSUMPTIONS:

A TERRAIN AND GROUND INFORMATION ASSUMED FROM THE GIVEN PLS-CADD MODEL WAS SOURCED FROM HTTP://PCRAFI.SPC.INT ON 28TH AUGUST 2020

B EXISTING CONDUCTORS ARE STRUNG AT THE FOLLOWING %UTS

BANANA CONDUCTOR :10%

APPLE CONDUCTOR :10%

LV ABC CONDUCTOR TENSION ASSUMED FROM PROVIDED UGL REPORT (2.3%)

C LATTICE TOWER CROSS ARM WIDTHS ARE ASSUMED TO BE 7M (MEASURED OFF TOWER PHOTO EXTRACTED FROM GIS DATA)
- 6MAXIMUM OPERATING TEMPERATURE 70° C
- 7PLS-CADD MODEL NAME: SP_ADSS_PACKAGE 1.xyz
- PLS-CADD LINE NAME: [8] ADJUSTED AS PER SP COMMENTS 1/10/2020

8ADSS CABLE TOWER 2 TO STRUCTURE 4924

ADSS 48FG652D

MASS:1.95 kg/m

DIAMETER:15.5 mm

ULTIMATE TENSION:28 kN

BASIC AVERAGE DESIGN TENSIONS:DESIGN TENSIONS ARE SPECIFIC TO EACH SPAN

ALL OTHER SPANS

SM@RTSPAN F(60)_AD150 FAL4/KE

MASS:0.80 kg/m

DIAMETER:10.5 mm

ULTIMATE TENSION:10.9 kN

BASIC AVERAGE DESIGN TENSIONS:DESIGN TENSIONS ARE SPECIFIC TO EACH SPAN

9CONDUCTOR TOWER 2 TO TOWER 1

OLEX APPLE

MASS:1.71 kg/m

DIAMETER:9.0 mm

ULTIMATE TENSION:14.9 kN

BASIC AVERAGE DESIGN TENSIONS:DESIGN TENSIONS ARE SPECIFIC TO EACH SPAN

ALL OTHER SPANS

OLEX BANANA

MASS:2.68 kg/m

DIAMETER:11.3 mm

ULTIMATE TENSION:22.7 kN

BASIC AVERAGE DESIGN TENSIONS:DESIGN TENSIONS ARE SPECIFIC TO EACH SPAN

10FOR NEW STRUCTURES REFER TO THE FOLLOWING DRAWINGS FOR 11kV AND LV ASSEMBLY CONFIGURATIONS

FOR 11kV ASSMEBLY CONFIGURATIONS

SP-E125-101811kV PIN SINGLE CONSTRUCTION STRUCTURE TYPE 11B

SP-E126-101811kV PIN DOUBLE CONSTRUCTION STRUCTURE TYPE 12B

SP-E128-101811kV PIN THROUGH STRAIN CONSTRUCTION STRUCTURE TYPE 14B

FOR LV ASSEMBLY CONFIGURATIONS

SP-E103-1018LV ABC INTERMEDIATE SUSPENSION WOOD TYPE 1B

SP-E108-1018LV ABC ANGLE SUSPENSION WOOD TYPE 2B

SP-E113-1018LV ABC END TERMINATION TYPE 3B

SP-E117-1018LV ABC THROUGH TERMINATION TYPE 4B

DRAWING LIST

SK-01	ADSS SUSPENSION CLAMP ASSEMBLY
SK-02	ADSS SHORT SPAN TENSION ASSEMBLY
SK-03	ADSS COIL STORAGE
SK-04	ADSS SPLICE BOX ARRANGEMENT
SK-05	ADSS LONG SPAN TENSION ASSEMBLY
SK-06	EASTERN HONIARA ADSS DESIGN CONSTRUCTION SCHEDULE
SK-07	ADSS ROUTE PLAN AND PROFILE
SK-08	ADSS UGOH TRANSITION POLE 5435
SK-09	ADSS HENDERSON SF UNDERGROUNDING ROUTE
SK-10	ADSS GEOGRAPHICAL PLAN LINE ROUTE
SK-11	ADSS TELECOMMUNICATIONS PIT DETAILS
SK-12	ADSS MATERIAL SCHEDULE
SK-13	ADSS STRINGING CHART
SK-14	ADSS UGOH TRANSITION POLE 4943
SK-15	ADSS LUNGA UNDERGROUNDING ROUTE
SK-16	ADSS LUNGA UNDERGROUNDING CROSS SECTIONS
SK-17	STAY POLE ASSEMBLY

A5	Revised for Client Review	KC	JD	KC	KC	IK	12/20	CONTRACT	 SolomonPower energizing our nation	DESIGNED	Kelly Chang	SP ADSS 11kV LINE - EAST HONIARA ADSS CONSTRUCTION SCHEDULE		DRAWING NO. SK-06	
A4	For Client Review	KC	JD	KC	KC	IK	07/20			CHECKED	James Donald			PROJECT NO.	
A3	For Client Review	KC	JD	KC	KC	IK	06/20			DRAWN	Kelly Chang				
A2	For Client Review	KC	JD	KC	KC	IK	05/20			CHECKED	James Donald	LUNGA POWER STATION - HENDERSON SOLAR FARM		SHEET 1 OF 2	REV A5
A1	For Client Review	KC	JD	KC	KC	IK	05/20			APPROVED	Iqbal Kalsi				
AMDT	AMENDMENT DETAIL	DESIGN	CHK'D	DRAWN	CHK'D	APP' DATE	PLOT DATE:			A3	SCALE : NTS				

Pole ID	Station	Span Length Ahead	Line Deviation (deg)	Pole Type	Pole Height Above Ground	Pole Embedment Depth	Pole Type	Notes	SC/DC	11kV Conductor Type	400V Conductor Type	ADSS Type	11kV Conductor Install Tension at 15°C (%UTS)	400V Conductor Install Tension at 15°C (%UTS)	ADSS Install Tension at 15°C (%UTS)	Ahead Span Minimum Ground Clearance (m)	ADSS Attachment Below Lowest Crossarm (m)	ADSS Attachment Type	ADSS Pole Connection Type	ADSS Reference Drawing	ADSS Splice Box	ADSS Coil Location	Spiral Vibration Damper	Weak Link Required	Additional Stay Wire Required	Stay Wire Attachment From Top of Pole	Stay Wire Orientation (0° Along Alignment in Ahead Direction)	Comments
4945	0.0	21.19	0.0	16B	9.20	Existing	INGAL	Existing structure - 11kV Termination	Single	BANANA	-	-	-	-	-	-	-	-	-	-								
4943	64.1	0.00	0.0	-	9.30	Existing	Ocylte Pole	Existing Structure - ADSS UGOH Transition	Single	BANANA	-	SM@RTSPAN	10	-	10	6	1.5	Tension	Banded	SK- 02, SK- 03, SK- 14	YES	YES					See SK- 15 for Lungga Undergrounding from 4943	
4944	21.2	42.90	- 80.0	11B	9.60	Existing	Ocylte Pole	Existing Structure	Single	BANANA	-	SM@RTSPAN	10	-	10	6	1.5	Tension	Banded	SK- 02								
4950	197.4	45.10	- 75.1	14B	9.60	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Banded	SK- 02								
4949	242.5	54.69	- 7.0	14B	11.00	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	SM@RTSPAN	10	-	10	6	3	Tension	Banded	SK- 02								
4948	297.2	106.35	74.6	14B	11.00	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	SM@RTSPAN	10	-	10	6	3	Tension	Banded	SK- 02			YES					
15	403.5	66.70	- 32.5	14B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02					2	1, 1.2	30, 120	Stay wires for structural support
14	470.2	59.70	- 9.1	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01				YES				
13	529.1	81.01	57.3	14B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02					2	1, 1.2	330, 240	Stay wires for structural support
12	610.9	76.98	- 12.6	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES		2	1, 1.2	30, 120	Stay wires for structural support
11	687.9	86.10	- 9.3	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES		2	1, 1.2	30, 120	Stay wires for structural support
10	774.0	88.47	7.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES					
9	862.5	89.69	13.1	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01, SK- 17		YES		1 + Stay Pole	1, 1.2	270	Stay pole for structural support	
8	952.2	78.19	- 39.3	14B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02, SK- 03		YES	YES		2	1, 1.2	30, 120	Stay wires for structural support
7	1030.4	74.71	- 8.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES					
Pole 6A	1105.1	81.09	0.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES	YES				11m pole to rectify ground clearance
6	1186.2	85.77	- 8.7	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01			YES					
5	1271.9	64.92	- 49.1	14B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02					2	1, 1.2	30, 120	Stay wires for structural support
Pole 4A	1336.8	65.82	0.0	11B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01								12.5m pole to rectify ground clearance
4	1402.7	62.50	45.3	14B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02					2	1, 1.2	330, 240	Stay wires for structural support
Pole 3A	1465.2	46.09	0.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Suspension	Bolted	SK- 01								11m pole to rectify ground clearance
3	1511.2	79.65	- 35.1	14B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02			YES		2	1, 1.2	30, 120	Stay wires for structural support
2A	1590.9	87.52	0.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2.5	Suspension	Bolted	SK- 01			YES					
2	1678.4	67.39	48.5	14B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	10	6	2	Tension	Bolted	SK- 02					2	1, 1.2	330, 240	Stay wires for structural support
Pole 1A	1745.8	58.01	0.0	11B	9.20	1.80	Wood Pole	SP - New 11m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	-	6	2	Suspension	Bolted	SK- 01				YES				11m pole to rectify ground clearance
1	1803.8	52.30	- 29.2	14B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Single	BANANA	-	SM@RTSPAN	10	-	-	5.92	2	Tension	Bolted	SK- 02					2	1, 1.2	30, 120	Stay wires for structural support
4926	1856.1	102.72	86.5	14B	10.00	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	SM@RTSPAN	10	-	-	5.74	2.5	Tension	Banded	SK- 02			YES					
4925	1958.8	98.98	- 0.8	11B	8.60	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	SM@RTSPAN	10	-	-	6	2.5	Suspension	Banded	SK- 01			YES					
4924	2057.8	272.29	- 74.7	14B	9.60	Existing	Ocylte Pole	Existing structure	Single	BANANA	-	4BFG652D	10	-	-	6	2	Tension	Banded	SK- 02, SK- 03, SK- 04	YES	YES						
Tower 1	2330.1	767.96	- 54.8	Lattice Tower	28.00	Existing	Lattice Tower	Lattice Tower - River Crossing	Single	APPLE	-	4BFG652D	10	-	-	6	2	Tension	-	SK- 05								
Tower 2	3097.8	112.48	0.0	Lattice Tower	28.00	Existing	Lattice Tower	Lattice Tower - River Crossing	Single	BANANA	-	4BFG652D	10	-	-	6	2	Tension	-	SK- 05								
A1	3206.7	49.54	- 53.6	14B 4B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	-	6	2	Tension	Bolted	SK- 02, SK- 03, SK- 04	YES	YES						
A2	3256.3	49.66	- 3.4	11B 4B+3BTO	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	-	6	2	Suspension	Bolted	SK- 01				YES				
A3	3305.9	49.53	14.0	14B 2B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Tension	Bolted	SK- 02								
A4	3355.5	44.65	10.5	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A5	3400.1	48.71	- 4.9	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A6	3448.8	49.40	9.6	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A7	3498.2	49.65	- 9.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A8	3547.9	49.77	0.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A9	3597.6	49.77	0.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	-	6	2	Suspension	Bolted	SK- 01								
A10	3647.4	48.89	11.8	14B 2B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Tension	Bolted	SK- 02								
A11	3696.3	45.70	0.0	12B 4B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	5.78	2	Suspension	Bolted	SK- 01								
A12	3742.0	49.99	32.4	12B 4B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A13	3792.0	49.95	0.8	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A14	3841.9	50.05	0.3	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A15	3892.0	49.93	- 0.1	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 02, SK- 03		YES						
A16	3941.9	49.94	0.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A17	3991.8	49.82	2.5	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A18	4041.7	50.05	9.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A19	4091.7	49.42	11.4	14B 2B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Tension	Bolted	SK- 02								
A20	4141.1	50.09	7.6	11B 4B+3BTO	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A21	4191.2	49.98	0.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01				YES				
A22	4241.2	49.95	- 2.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A23	4291.2	50.05	- 4.6	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A24	4341.2	50.01	- 2.0	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension	Bolted	SK- 01								
A25	4391.2	50.03	2.3	11B 1B	10.50	2.00	Wood Pole	SP - New 12.5m Wood Pole - Refer to Note 10	Double	BANANA	ABC	SM@RTSPAN	10	2.3	10	6	2	Suspension										