



Orientation		
	Size	A3
Scale	1 : 100	
XLBrng	113.00 deg.	
Date	7/06/2012	/Mg
Ln/XL	0.00 deg.	
Ln/AL	0.00 deg.	

Notes	
1)	New pole replacement conforms to the required design standards
2)	
3)	
4)	

Action	
1)	
2)	
3)	
4)	

Load Diagrams		Load	Strength
Bending Moment	General	-----	-----
----- (kNm)	Seismic	-----	-----
130			
Shear Force	General	-----	-----
----- (kN)	Seismic	-----	-----
350			
Soil Pressure	90	-----	-----
Shear			
----- (kPa)	Bearing	-----	-----
180			

#	Target	Qty	Reference	Status	Description	Parameters	Inventory
1	P1	1	Line Pole	Erect New	Concrete(PS): Rctr(Dish) 11m Conc Pole	L 11(m) : GLD 240 x 430(mm) : #OD 418(mm)	
2	P2	1	Line Pole	Erect New	Concrete(PS): Rctr(Dish) 11m Conc Pole	L 11(m) : GLD 240 x 430(mm) : #OD 418(mm)	
3	M1	2	Cross Arm	Erect New	Wood(HHD): Rctr(Sold)	L 1.8(m) : MSX 75 x 100(mm) : Shaved/Natural	
4	M2	2	Cross Arm	Erect New	Wood(HHD): Rctr(Sold)	L 1.5(m) : MSX 75 x 75(mm) : Shaved/Natural	
5	M3	2	Cross Arm	Erect New	Wood(HHD): Rctr(Sold)	L 1.8(m) : MSX 75 x 100(mm) : Shaved/Natural	
6	M4	1	Cross Arm	Erect New	Wood(HHD): Rctr(Sold)	L 1.8(m) : MSX 75 x 75(mm) : Shaved/Natural	
7	M5	1	SLight Arm	Erect New	Steel(GMS): Round(Hw) Streetlight-Arm	L 1.2(m) : GLD 30 x 30(mm)	
8	F1	1	Pole Collar	Erect New	Concrete(R): Round(Hw) Single Dnurt	L 0.225(m) : MSX 500 x 500(mm) : #OD 418(mm)	
9	F2	1	Pole Butt	Erect New	Concrete(PS): Rctr(Sold) Stresscrete 914 Breast Block	L 0.914(m) : MSX 343 x 95(mm) : #OD 418(mm)	
10	A1	1	Cabinet	Erect New	Cubicle: # (Control/Metering)	Ref: Streetlight()	
11	N1	3	Insulator (Apps)	Erect New	Porcelain: Post (Standard)	Line Voltage / Unit: 11 kV	
12	N2	3	Insulator (Apps)	Erect New	Porcelain: Post (Standard)	Line Voltage / Unit: 11 kV	
13	N3	2	Insulator (Apps)	Erect New	Porcelain: Pin (Standard)	Line Voltage / Unit: 0.23 kV	
14	N4	4	Insulator (Apps)	Erect New	Porcelain: Pin (Standard)	Line Voltage / Unit: 0.23 kV	
15	N5	4	Insulator (Apps)	Erect New	Porcelain: Pin (Standard)	Line Voltage / Unit: 0.23 kV	
16	N6	4	Insulator (Apps)	Erect New	Porcelain: Shackle (Standard)	Line Voltage / Unit: 0.4 kV	
17	N7	2	Insulator (Apps)	Erect New	Porcelain: Pin (Standard)	Line Voltage / Unit: 0.23 kV	
18	N8	1	Insulator (Apps)	Erect New	Porcelain: Shackle (Standard)	Line Voltage / Unit: 0.4 kV	
19	N9	2	Insulator (Apps)	Erect New	Porcelain: Shackle (Standard)	Line Voltage / Unit: 0.4 kV	
20	C1	3	Conductor	As-Built (42 Yrs)	AAC-Cricket(7/5.36) Bare 1kV 3Ph	Hr(%CBS) 3.8 (0 Jnts) : L(m) 36 : B(deg) 4 : S(deg) 0	
21	C2	4	Conductor	As-Built (42 Yrs)	AAC-Weke(7/4.72) PVC/NBare 0.4W 3Ph+N	Hr(%CBS) 4.5 (0 Jnts) : L(m) 36 : B(deg) 4 : S(deg) 0	
22	C3	2	Conductor	As-Built (42 Yrs)	AAC-Kutu(7/3.00) PVC 0.28V 1Ph+P	Hr(%CBS) 5 (0 Jnts) : L(m) 36 : B(deg) 4 : S(deg) 0	
23	C4	3	Conductor	As-Built (42 Yrs)	AAC-Cricket(7/5.36) Bare 1kV 3Ph	Hr(%CBS) 4 (0 Jnts) : L(m) 36 : B(deg) 222 : S(deg) 0	
24	C5	4	Conductor	As-Built (42 Yrs)	AAC-Weke(7/4.72) PVC/NBare 0.4W 3Ph+N	Hr(%CBS) 4.7 (0 Jnts) : L(m) 36 : B(deg) 222 : S(deg) 0	
25	C6	2	Conductor	As-Built (42 Yrs)	AAC-Kutu(7/3.00) PVC 0.28V 1Ph+P	Hr(%CBS) 5.3 (0 Jnts) : L(m) 36 : B(deg) 222 : S(deg) 0	
26	C7	4	Conductor	As-Built (42 Yrs)	AAC-Kutu(7/3.00) PVC/NBare 0kV 3Ph+N	Hr(%CBS) 1.8 (0 Jnts) : L(m) 7 : B(deg) 133 : S(deg) 0	
27	C8	1	Conductor	As-Built (42 Yrs)	HDCC-7/17(7/1.38) PVC 0.23kV Pilot	Hr(%CBS) 2 (0 Jnts) : L(m) 7 : B(deg) 133 : S(deg) 0	
28	C9	2	Conductor	As-Built (42 Yrs)	HDCC-7/16(7/1.70) PVC 0.23kV Ph+N	Hr(%CBS) 3 (0 Jnts) : L(m) 17 : B(deg) 260 : S(deg) 0	
29	C10	1	Cable	As-Built (42 Yrs)	NScreen(Cu):16mm(7/1.70) 3Cr PVC 0.4kV2Ph	Hr(%CBS) 2 (0 Jnts) : L(m) 13 : B(deg) 102 : S(deg) 0	

Tests	#	Target	Pty	Instruction	Comments	Requirements
1	Pole P1,2	High	Erect New Heavier Pole(s)		Replace with double 11m Conc Poles	
2	Site F1, F2	High	Fit New Concrete Collar		Fit Base & Breast Blocks	

Reserved		Exposure			
Ref Site/Node		Prx	Wind (Pa)	1,200.000	
Distance (m)	0.00	Prx	Snow (Pa)	0.000	
Bearing (deg)	0.00	Prx	Ice mm	LC Mx	0.00 1.00
Terrain	Bush/Urban	T-Amb (deg C)		15.00	
Topography	Flat/Undulating	T-High   T-Low		50.00   0.00	
Class	Slope	B1   0.00	Soil Class	Hard	
Site Access		Good Land Vehicle Access (No Special Restrictions)			

Performance		Load (SLS)		S.I (SLS)	
Classification	I	General (kN)	XLine ↓	17.91	2.30
Nom. Hght (m)	9.20	ALine →		6.57	1.58
Seismic Ftr (z)	1.00	Seismic (kN)	XLine ↑	0.38	30.64
Ductility Rtr (u)	1.00	ALine →		0.83	10.35
VPeriod XL (s)	3.77	Foundation (kPa)	Lateral ↑	269.09	0.82
VPeriod AL (s)	3.87	Bearing ⊗		78.76	6.98
Axial Load (kN)	30.58	Calc Model Rf	IAMS/BS/EST(2005)SLS/SI/Calc/101X		

BEST (LSE-Excel) Administration					
	Inspected	ABC01	5/06/2012	<b>Structure Data Sheet</b> (SI Calculations & Design)	
	Modelled	ABC01	19/06/2012		
	Reviewed				
Power Company NZ		Site Address		Ntwk#	1212
New Zealand		65 Smith Street		Node#	1