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## APPENDIX A

### **TECHNICAL DATA SHEET**

(To be completed by tenderers and returned as part of their tender)

- 1.0 Name of Manufacturer.....
- 2.0 DISTRIBUTION BOARD
- 2.1 Type and manufacture.....
- 2.2 Minimum thickness of sheet steel.....
- 2.3 Degree of protection to SANS 60529.....
- 2.4 Form of segregation of circuits.....
- 2.5 To what standards have the following been tested?
- 2.5.1 Thermal rating.....
- 2.5.2 Short time rating.....
- 2.6 Test certificate number for:
- 2.6.1 Thermal rating.....
- 2.6.2 Short time rating.....
- 2.7 Dimensions:
- 2.7.1 Length.....
- 2.7.2 Width.....
- 2.7.3 Height.....
- 3.0 BUSBARS
- 3.1 Size.....
- 3.2 Enclosed current rating.....
- 3.3 One second fault rating.....
- 4.0 AIR CIRCUIT BREAKERS
- 4.1 Type and manufacture.....
- 4.2 Symmetrical Breaking Capacity ..... kA at ..... volts for..... seconds.
- 4.3 Asymmetrical Breaking Capacity ..... kA at ..... volts for..... Seconds.
- 4.5 Short time current for 1 second.....
- 4.6 Making capacity (Peak in kA).....
- 4.7 Continuous enclosed current rating.....
- 4.8 Range of overcurrent protection (Amps).....
- 4.9 Type of overcurrent protection.....
- 4.10 Under voltage release setting.....
- 4.10.1 Self-resetting value.....
- 4.11 Type Test Certificates to be included with Tender

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**APPENDIX A****TECHNICAL DATA SHEET (continues)**

(To be completed by tenderers and returned as part of their tender)

## 5.0 MOULDED CASE CIRCUIT BREAKERS

5.1 Manufacturer.....

## 6.0 CONTACTORS

6.1 Manufacturer.....

6.2 Duty rating.....

6.3 No. of electrical operations.....

## 7.0 INDICATING INSTRUMENTS

7.1 Type, size and manufacture of voltmeter.....

7.2 Type, size and manufacture of ammeter.....

7.3 Energy meter (KWh).....

Y	N
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## 8.0 CURRENT TRANSFORMERS

8.1 Metering - Type: ..... VA: ..... Class: .....

8.2 Protection - Type: ..... VA: ..... Class: .....

## 9.0 MECHANICAL CABLE GLANDS

Manufacturer.....

## 10.0 LIGHT SENSITIVE CONTROL UNIT

Manufacturer.....

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**APPENDIX B****SCHEDULE OF REQUIREMENTS**

(To be completed by the Client)

1.0 Name of the depot/substation.....

Y	N
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2.0 Energy meter (KWh) required.....

3.0 Circuit breaker requirements:

No. of breakers	Rating (A)

4.0 Distribution board load.....

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5.0 Current transformer ratio.....

6.0 Special requirement

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**APPENDIX B****SCHEDULE OF REQUIREMENTS**

(To be completed by the Client)

- 1.0 Name of the depot/substation..... Polokwane yard  
 2.0 Energy meter (KWh) required.....  
 3.0 Circuit breaker requirements:

<input type="checkbox"/> Y	<input checked="" type="checkbox"/> X
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No. of breakers	Rating (A)
Main CB (1 EA)	250 A
Load CB (5 EA)	100 A
Yard lights CB (5EA)	100 A
Yard lights load CB(4 EA)	80 A

- 4.0 Distribution board load..... N/A  
 5.0 Current transformer ratio..... N/A  
 6.0 Special requirement  
   6.1 Install one voltmeter and one Ammeter  
   6.2 Install two contactors ( spec: 220V coil, 80A)  
   6.3 Install one photocell/ light sensitive control unit  
   6.4 Install two override switch for the contactors with a 10A CB  
   6.5 Install one socket outlet  
   6.6 Install two each 100A and 80A spares  
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**APPENDIX B****SCHEDULE OF REQUIREMENTS**

(To be completed by the Client)

- 1.0 Name of the depot/substation Polokwane Station.....
- 2.0 Energy meter (KWh) required.....
- 3.0 Circuit breaker requirements:

<input type="checkbox"/> Y	<input checked="" type="checkbox"/> X
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No. of breakers	Rating (A)
Main CB (1 ea)	250 A
Load CB (1 ea)	150 A
Control Point CB (3ea)	60 A
Yard lights CB (4ea)	100 A

- 4.0 Distribution board load.N/A.....
- 5.0 Current transformer ratio.N/A.....
- 6.0 Special requirement
- 6.1 Install one voltmeter and one Ammeter.....
- 6.2 Install two contactors ( spec: 220V coil, 80A).....
- 6.3 Install one photocell/ light sensitive control unit.....
- 6.4 Install two override switch for the contactors with a 10A CB.....
- 6.5 Install four 80A CB for yard lights.....
- 6.6 Install one socket outlet.....
- 6.7 Install two each 100A and 80A spare.....
- .....

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**APPENDIX B****SCHEDULE OF REQUIREMENTS**

(To be completed by the Client)

- 1.0 Name of the depot/substation. Musina Loc.....
- 2.0 Energy meter (KWh) required.....
- 3.0 Circuit breaker requirements:

<input type="checkbox"/> Y	<input type="checkbox"/> N X
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No. of breakers	Rating (A)
Main CB (1 ea)	150 A
Load CB (2 ea)	100 A
Load CB (2 ea)	60 A

- 4.0 Distribution board load.....
- 5.0 Current transformer ratio.....
- 6.0 Special requirement
- 6.1 Install one voltmeter and one Ammeter
  - 6.2 Install two contactors ( spec: 220V coil, 80A)
  - 6.3 Install two photocell/ light sensitve control unit
  - 6.4 Install two override switch for the contactors with a 10A CB
  - 6.5 Install four 80A CB for yard lights
  - 6.6 Install one socket outlet
  - 6.7 Install two each 100A and 80A spare

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**APPENDIX B****SCHEDULE OF REQUIREMENTS**

(To be completed by the Client)

- 1.0 Name of the depot/substation..... **Musina station**
- 2.0 Energy meter (KWh) required.....
- |                          |                                     |
|--------------------------|-------------------------------------|
| Y                        | N                                   |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- 3.0 Circuit breaker requirements:
- | No. of breakers  | Rating (A) |
|------------------|------------|
| Main CB (1 ea)   | 500A       |
| A.Kiosk CB (1EA) | 250 A      |
| B.Kiosk CB (1EA) | 250 A      |
| C.Kiosk CB (1E)  | 250 A      |
- 4.0 Distribution board load.....
- 5.0 Current transformer ratio.....
- 6.0 Special requirement
- 6.1 Install one voltmeter and one Ammeter
  - 6.2 Install two contactors ( spec: 220V coil, 80A)
  - 6.3 Install two photocell/ light sensitive control unit
  - 6.4 Install two override switch for the contactors with a 10A.CB
  - 6.5 Install four 80A.CB for yard lights
  - 6.6 Install one socket outlet
  - 6.7 Install two each 100A and 80A spare
  - 6.8 Install one 100A welding circuit breaker
  - 6.9 Install one 30A for Rovos shed