TAD LABORATORY BOQ; ROOF MEASUREMENTS AS PER OVERHEAD ARIAL VIEW PICTURE AND PRICING SCHEDULE

- First Illustration with alphabet labels (page 9) covers all building (blocks) sections with alphabet labels in the scope of work

Block A

Downpipes	Gutters	Roof	Roof Spinal Column
• 24 Units • Length = 3 m	• 11 m x 2 • 10m x 2 • 23 x 1 • 12m x 1 • 30m x 1 • 13m x 1 • 10m x 2 • 5m x 1 • 7m x 1 • 1m x 1	• 11m x 10m • 30m x 13m • 10m x 5m • 7m x 5m	Not Applicable
Rand Value Totals = R			

Block B

Downpipes	Gutters	Roof	Roof Spinal Column
• 12 x 2 = 24 Units • Length = 4 m	• 16.5m x 2 • 89.5m x 2 • Galvanised industrial type	• 16.5m x 3.5m x 2 • 16.5m x 6.5m x 2 • 89.5m x 3.5 x 2 • 89.5m x 6.5m x 2	Length = 89.5m x 2m
Rand Value Totals = R			

Block C

Downpipes	Gutters	Roof	Roof Spinal Column
• 10 x 2 = 20 Units • Length = 4 m	• 15m x 1 • 45m x 2 • Galvanised industrial type	• 15m x 3.5m • 45m x 6.5m x 2	Length = 36m x 2m
Rand Value Totals = R			

Block D

Downpipes	Gutters	Roof	Roof Spinal Column
• 12 x 2= 24 Units • Length = 4 m	• 21.5m x 2 • 35 m x 2	• 21.5m x 6m x 2 • 21.5m x 6.5m x 2 • 35m x 6m x 2 • 35m x 6.5m x 2	26m x 2
Rand Value Totals = R			

Block E

Downpipes	Gutters	Roof	Roof Spinal Column
• 13 x 2 = 20 Units • Length = 4 m	• 16m x 1 • 51m x 2 • Galvanised industrial type	• 16m x 3.5m • 51m x 6.5m x 2	Length = 36m x 2m
Rand Value Totals = R			

Block F

Downpipes	Gutters	Roof	Roof Spinal Column
• 19 x 2= 38 Units • Length = 4 m	• 87.5m x 2	• 87.5m x 3.5m x 2 • 87.5m x 6.5m x 2	Length = 80m x 2m
Rand Value Totals = R			

Block E Roof Repairs

1. Remove damaged roof sheets = 5m x 3,5m …….cost implication =
2. Remove damaged wooden trusses = 5 x 3,5m ……cost implication =
3. Remove wooden supporting beams = 5m x 3,5m……..cost implications =
4. Rebuild wooden supporting beams = 5m x 3,5m……..cost implications =
5. Rebuild damaged wooden trusses = 5m x 3,5……cost implication =
6. Replace damaged roof sheets by 1 mm thickness = 5m x 3,5m……cost implication =

Rand Value Totals = R

Recommendations:

It is recommended that the following should be applied:

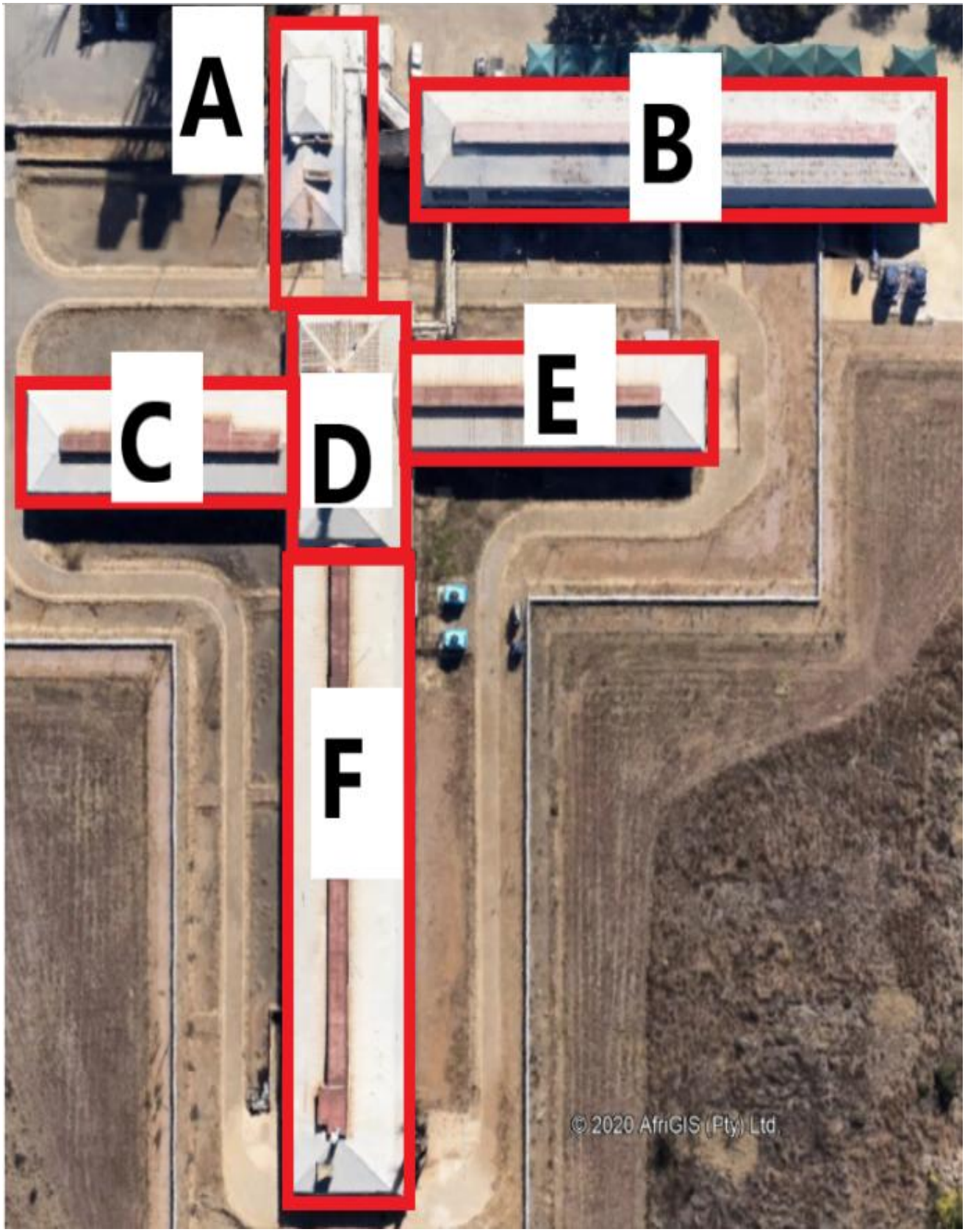
1. Remove rust
2. Apply anti-rust primer
3. Ensure that all bolts and washers are secured
4. Apply metal roof coat paint after primer
5. Apply final antique green waterproofing paint (Similar to new Admin Building)
6. All gutters should be replaced
7. All downpipes should be replaced
8. Gutter side heights to be similar to the existing/current size (galvanised industrial type).
9. Ensure all wooden planks and nets are secured.
10. All nets replaced and secured.
11. All wooden planks are oil treated prior installation.

FINAL RAND TOTALS OF THE LAB SCOPE:

- **Block A =**
- **Block B =**
- **Block C =**
- **Block D =**
- **Block E =**
- **Block F =**

Final Rand Value Totals = R

TAD Laboratory Overhead Aerial View



Block AREA with the Perimeter	LENGTH	BREATH/WIDTH
A = 46m	(11m + 10m) x 2	1m
B = 144m	70m x 2	1m
C = 76m	36m x 2	1m
D = 56	26m x 2	1m
E = 76m	36m x 2	1m
F = 164m	80m x 2	1m
Rand Value Totals = R		

Provision for damaged/replacement of wooden planks will be accommodated by the **CONTINGENCY**.

- All the nets are to be replaced with new nets to block flies or bees from entering the ventilation space

TAD Laboratory Overhead Aerial View Reference

Block AREA with the Perimeter	LENGTH	BREATH/WIDTH
A = 46m	(11m + 10m) x 2	2m
B = 144m	70m x 2	2m
C = 76m	36m x 2	2m
D = 56	26m x 2	2m
E = 76m	36m x 2	2m
F = 164m	80m x 2	2m
Rand Value Totals = R		

Provision for damaged/replacement of wooden planks will be accommodated by the **CONTINGENCY**

- Between Blocks A & B, the old concrete paving attachment must be removed and prepared for new installation.

SIZES	AREA
15m x 4m = 60m^2 …….Thickness = 300mm	Tissue Culture
7m x 5m = 35m^2…….Thickness = 300mm	Reception
35m x 4m = 140 m^2…….Thickness = 300mm	Overheard Passageway to Showers
11m x 4m = 44 m^2……Thickness = 300mm	Stairway
7m x 1m = 7 m^2……..Thickness = 300mm	Distil Plant
9m x 4m = 36 m^2…….Thickness = 300mm	Incinerator Room

1. Removal of all existing water protection in all areas (322m), cost implication =
2. Sealing of all concrete cracks (visible only after removal) per square metre =
3. Preparation and installation of new materials in all areas (322m) =

Rand Value Totals = R

- Parking areas - installation of galvanised industrial gutters and downpipes

DIRECTION	GUTTERS	DOWNPIPES	TRUSEE EXTENSIONS	ROOF SHEET SUPPORT BEAM
SOUTH PARKING	Length = 30m	6 x 3m length	9 x 1m length	Not Applicable
NORTH PARKING	Length = 30m	6 x 3m length	9 x 1m length	10cm x 60cm x 30m length (remove existing and replace with new oiled.

Rand Value Totals = R

- Back covered tractor parking removal and replacement of four (4) galvanised industrial gutters and four (4) downpipes

DIRECTION	GUTTERS	DOWNPIPES
SOUTHSIDE	1 x 20m	2 x 3m length
NORTHSIDE	1 x 20m	2 x 3m length
EASTSIDE	1 x 7m	Not Applicable
WESTSIDE	1 x 7m	Not Applicable

Rand Value Totals = R

- LT, generator and transformers, concrete paving, old attachment removal, preparation and installation of new rubber membrane

AREA	GUTTERS	DOWNPIPES	CONCRETE WATERPROOFING BY RUBBER MEMBRANE
GENERATOR ROOM	2 x 14m	4 x 6m length	Not applicable
LT & TRANSFORMERS	2 x 9m	6 x 4m length	13m x 9m = 117 m^2 Thickness = 800mm

Rand Value Totals = R

- Building A, remove and install new gutters and downpipes

DIRECTION	GUTTERS	DOWNPIPES
SOUTHSIDE	1 x 15m 1 x 8m	3 x 3m length 3 x 3m length
NORTHSIDE	1 x 22m	5 x 3m length
EASTSIDE	1 x 9m 1 x 5m	2 x 3m length 2 x 3m length
WESTSIDE	1 x 6m 2 x 9m 1 x 6m	2 x 3m length 4 x 3m length 2 x 3m length

Rand Value Totals = R

- New administration (admin) building, remove all as listed below and install new as listed below.

Perimeter	1 270m	**Cellotape application for painting**
Gutters	80m (patio) + 1 270m x galvanised industrial type with catchment lip	Dependant
Downpipes	30 x 4m length	Dependant
Facia boards	1 270m x 30cm	Dependant
Ceilings	1 270m x 1m	Dependant
Ceiling edges finishing's	1 270m x 2	Dependent
Door entrance ceiling painting	6m x 4m	Essential
Outside window frames painting	1m x 1,5m x 30 units	Essential
Door oil application	2m x 1m x 1 units	Essential
Doorframes painting and doors	2m x 1m x 14 units	Essential

Rand Value Totals = R

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- Stores building next to new admin building, remove all as listed below, install new as listed below and paint all except gutters.

Perimeter	70m	**Cellotape application for painting**
Gutters	70m x galvanised industrial type with catchment lip, do not paint	Dependant
Downpipes	14 x 4m length	Dependant
Facia boards	70m x 30cm	Dependant
Ceilings	70m x 1m	Dependant
Ceiling edges finishing's	70m x 2	Dependent
Door entrance ceiling painting	1m x 1m	Essential
Outside window frames painting	1m x 1,5m x 10 units	Essential
Door oil application	2m x 1m x 5 units	Essential
Doorframes painting	2 x 2m x 1m x 5 units	Essential

Rand Value Totals = R

Provision for damaged/replacement of wooden planks will be accommodated by the **CONTINGENCY**

- Employees' residences living quarters, white block.

Perimeter	160m	**Cellotape application for painting**
Roof	70m x 15m = 1 050 m^2	
Car park roof	30m x 5m = 150 m^2	
Replacement of existing support poles by metal poles dug into ground with concrete reinforcement	3m height x 14 poles	
Gutters	140m x galvanised industrial type	Dependant
Downpipes	28 x 3m length	Dependant
Facia boards	32m x 30cm	Dependant
Ceilings	70m x 15m = 1 050 m^2	Dependant
Ceilings edges finishing's	200 m	Dependent
Painting of ceilings and edges	Ceilings = 1 050m^2 Edges = 200m	
Door entrance ceiling painting	Not applicable	Essential
Outside window frames painting	1m x 1,5m x 30 units	Essential
Double door replacement, oil application with new lock and keys	1,8m x 2,4m x 1 units Number of keys = 18 units	Essential
Doorframes painting and doors	1.8m x 1m x 8 units	Essential
Replace outside access door next to showers	1.8 x 1m x 1 unit	
Door locks	7 units	
Windows replacement	40cm x 30cm x 20units	
Outside wall perimeter painting x two coats	680 m^2	
New zinc/metal sheet roof cover, car park installation with metal support structure treated and painted	18m x 5m = 90 m^2	
New firebreak interlock grey paving installation around the wall perimeter level with existing paving.	70m x 3m = 21 m^2 10 x 3 m = 30 m^2 10m x 3m = 30 m^2	

	70m x 5m = 350 m^2	
Ground concrete slab	(70m x 10m x 10m) lengths (50 cm x 5 cm) width & thickness	
N.B.: Paving compacting and underneath plastic roll must both prevent any shrub growth and capable for load stress of 3,5 ton minimum.		

Rand Value Totals = R

Provision for damaged/replacement of wooden planks will be accommodated by the **CONTINGENCY**

- Employees' residences living quarters, face brick block.

Perimeter	64m	**Cellotape application for painting**
Roof	20m x 12m = 240 m^2	
Car park roof	12m x 3m	
Replacement of existing support poles by metal poles dug-into ground with concrete reinforcement	Not applicable	
Gutters	2 x 20m	
Downpipes	4 x 3m length	Dependant
Facia boards	24m x 30cm	Dependant
Ceilings	Not applicable	Dependant
Ceilings edges finishing's	Not applicable	Dependent
Door entrance ceiling painting	Not applicable	Essential
Outside window frames painting	2m x 1m x 12 units	Essential
Double door replacement, oil application with new lock and keys	Not applicable	Essential
Doorframes painting and doors	1.8m x 1m x 8 units	Essential
Door locks	8 units	
Windows replacement	40cm x 30cm x 12units	
Outside wall perimeter painting x two coats	Not applicable	

New zinc/metal sheet roof cover car park installation with metal support structure treated and painted with own new interlock paving bricks.	18m x 10m = 180 m^2	
New firebreak interlock grey paving installation around the wall perimeter level with existing paving	20m x 3m = 21 m^2 10 x 3 m = 30 m^2 10m x 3m = 30 m^2 20m x 5m = 350 m^2	
Ground concrete slab	(70m x 10m x 10m) lengths (50 cm x 5 cm) width & thickness	
N.B.: Paving compacting and underneath plastic roll must both prevent any shrub growth and be capable for load stress of 3,5 ton minimum.		

Rand Value Totals = R

Provision for damaged/replacement of wooden planks will be accommodated by the **CONTINGENCY**