



<p>ELECTRICAL AND MINOR WORKS AT MEYERTON STATION</p>
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SCOPE, SPECIFICATIONS AND SCHEDULE OF QUANTITIES

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ANNEXURE A CIVIL WORKS: SCHEDULE OF QUANTITIES

PROVISIONAL SCHEDULE OF QUANTITIES

MINOR UPGRADES AT MEYERTON STATION

OCCUPATIONAL HEALTH AND SAFETY		<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	<u>Amount</u>
<p>The contractor shall comply with all the requirements set out in the Construction Regulations, issued under The Occupational Health & Safety Act no 85 of 1993.</p> <p>Safety file shall be provided by the contractor prior to commencement of work.</p> <p>The contractor shall carry out the works with as little noise and mess as possible. All rubble shall be taken away from site on a daily basis.</p> <p>Note: All designated items should comply with local content threshold.</p>					
<u>BILL NO. 1</u>		<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	<u>Amount</u>
<u>ALTERATIONS (PROVISIONAL)</u>					
<u>REMOVAL OF EXISTING WORK</u>					
Price shall include removal and disposal of rubble from site					
Taking down and removing					
1	Rhino board ceiling completely	m ²	30	R -	R -
2	Asbestos roof sheeting	m ²	20	R -	R -
Taking out and removing doors including steel frame					
3	Timber single door and steel frame 813 x 2032mm high	No.	2	R -	R -
Taking out and removing glass, etc					
4	Glass from steel window frames including cleaning out rebates and preparing for new glass	m ²	5	R -	R -
Taking out and removing steel manhole frames					

5	600 x 500mm steel manhole frames and preparation of surfaces (removed frames to be returned to the employer)	No.	10	R	-	R	-
	SERVICING, REPAIRING, RE-FIXING, CLEANING, ETC OF EXISTING WORK						
	Clean down existing roof sheeting, box gutter, flushing, etc, apply de-rusting compound to surfaces, prepare area for paint application and allow for re-fixing, replacing and waterproofing of necessary roof screws, fixing screws, etc						
6	Sheet steel box gutters in fair condition	m ²	40	R	-	R	-
	Carried to final summary					R	-
	<u>BILL NO 2</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
	<u>CARPENTRY AND JOINERY</u>						
	<u>DOORS</u>						
	44mm thick exterior grade flush solid core timber single door with 3mm thick commercial ply on both sides with consolidated edges fitted and complying with SABS 545 in pressed steel frame. All painted in accordance with architect's colour schedules						
1	813 x 2032 x 44mm single leaf solid core with commercial veneer for paint. pricing shall include painting as per manufactures specification	No.	5	R	-	R	-
	44mm thick interior grade flush solid core timber single door with 3mm thick commercial ply on both sides with consolidated edges fitted and complying with SABS 545 in pressed steel frame. All painted in accordance with architect's colour schedules						
2	813 x 2032 x 44mm single leaf solid core with commercial veneer for paint. pricing shall include painting as per manufactures specification	No.	10	R	-	R	-
	<u>Level G3 bullet resistant Anti-bandit door, complete with 100 x 50 x 3mm gauge mild steel rectangular frame and 25 x 25 x 3mm MS anlg e rebates, overall size 930 x 2100mm high in powder coating and or galvinised cladding with peep hole, supplied with a 6 pin tumbler key system, mortice dead lock with an additional heavy duty magnetic</u>						

	<u>lock and striker including key switch and surface mounted casing, 6 Amp power supply, push buttons and interlock system, heavy duty aluminium continuous hinge, aluminium slam bar with heavy duty door closer and D-style pull handles. Door to comply to SABS 1658-1996</u>					
3	Level G3 bullet resistant anti-bandit external door	No.	1	R	-	R -
	Carried to final summary					R -
	<u>BILL NO 3</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>
	<u>CEILING WORK</u>					
	<u>SUPPLEMENTARY PREAMBLES</u>					
	<u>Description</u>					
	Items described as “nailed” shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete					
	Items described as “plugged” shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as “bolted”, bolts priced elsewhere					
	6.4mm “Rhino” gypsum plaster board with H-Type pressed steel jointing strips					
1	Ceiling including 38 x 38mm sawn softwood brander at 450mm centres	m ²	20	R	-	R -
2	Extra over ceiling for 800 x 800mm trap door of 38 50mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No.	2	R	-	R -
	“Rhino” gypsum plasterboard cornice					
3	75mm coved cornices fixed to ceiling	m	35	R	-	R -
	Carried to final summary					R -
	<u>BILL NO 4</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>

	<u>IRONMONGERY</u>					
	<u>LOCKS</u>					
	<u>Supply and install</u>					
1	Ultra-security heavy duty locks	No.	10	R	-	R -
2	3 liver mortice lockset with handles	No.	10	R	-	R -
3	Indicator door lock chrome plated	No.	10	R	-	R -
	Carried to final summary					R -
	<u>BILL NO 5</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	<u>Amount</u>	
	<u>PLUMBING WORK</u>					
	<u>SANITARY FITTINGS</u>					
	<u>Supply and install</u>					
1	Anti-vandal High traffic suite complete (Front flush), suite to includes CC Cistern, including CC Pan and and heavy duty seat.	No.	8	R	-	R -
2	Close coupled suite colour White , comprising 90° outlet open rim pan with matching 9 litre front single flush cistern including lid and fitments and heavy duty seat.	No.	2	R	-	R -
3	Sanitary ware white vitreous china wall mounted urinal with top inlet (code 705426) or back inlet (code 7054Z1). Overall size 600x385x380mm. Supplied with 38mm c.p. domical grating, a spreader(with a 20mm tread) and two hanger brackets	No.	4	R	-	R -
4	Wall mounted white Vandal Resistant Wash Hand Basin, 330mm (w) x 310 (d) x 325mm (h). Installation as per manufacturer's specification.	No.	5	R	-	R -
5	Ceramic wash hand basin colour White, size 510 x 405mm with one tap hole including integrated overflow and chain stay hole bolted to wall with two x 10mm bolts and including Classic floor mounted pedestal and sealed with silicone sealant where basin meets wall.	No.	3	R	-	R -

6	50mm pipes with all connection and make good	m	20	R	-	R	-
	TAPS, VALVES, ETC						
	Supply and install						
7	Pillar tap for hot and cold water	No.	10	R	-	R	-
	15mm chrome plated deck mounted sink mixer with overarm swivel outlet and adjustable flanges, manufactured in accordance with SANS 226:2004 Type 1.						
8		No.	1	R	-	R	-
9	Exposed type urinal flush valve with ball-o-stop, wall flange, chrome plate finish and non-hold open feature	No.	4	R	-	R	-
10	Flexi connector	No.	20	R	-	R	-
11	15 Brass Gate Valve	No.	5	R	-	R	-
12	Mini Ball Valve	No.	20	R	-	R	-
13	22mm Brass Gate Valve including cast iron valve box	No.	2	R	-	R	-
	Extra over PVC pipes for fittings						
14	110mm pan connector completely	No.	13	R	-	R	-
	WATER SUPPLIERS						
	Class “O” copper pipe						
15	15mm pipes	m	30	R	-	R	-
16	15mm pipes chased into brick walls and make good	m	40	R	-	R	-
17	22mm pipes	m	10	R	-	R	-
18	22mm pipes chased into brick walls	m	30	R	-	R	-
	Extra over class “O” copper pipes for capillary fittings						
19	15mm fitting	No.	15	R	-	R	-
20	22mm fitting	No.	15	R	-	R	-
21	15mm Tee	No.	20	R	-	R	-
22	22mm Tee	No.	10	R	-	R	-

23	<p>PLATFORM MANHOLE COVERS AND FRAMES</p> <p>The concrete manhole covers to be installed completely frame and cover as per the applicable Standard</p> <p>Type 9B MD concrete lid and frame including to make good after completion</p>	No.	10	R	-	R	-
24	<p><u>CONCRETE COPING BLOCKS</u></p> <p>25MPa/20mm Concrete</p> <p>Reinforced 500w x 600l x 150mm thick concrete coping blocks</p>	No.	5	R	-	R	-
Carried to final summary						R	-
1	<p><u>BILL NO.6</u></p> <p><u>METAL WORK</u></p> <p>SECURITY GATES</p> <p>Supply and install Burglar door</p> <p>900 x 2100mm high Heavy duty single Burglar door and frame with 16mm steel round bar and 40 x 40 x 2.5mm square tubing as per attached drawing for single door</p>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
2	<p>Supply and install Burglar windows</p> <p>12 x 12mm horizontal and vertical bars to fit 200mm W x 2000mm H</p>	No.	10	R	-	R	-
3	<p>PRESSED STEEL DOOR FRAMES</p> <p>1.2mm double rebated frames suitable for one brick wall</p> <p>Frame for door 813 x 2032mm high</p>	No.	2	R	-	R	-
<p>FENCING AND GATES</p> <p><u>MILD STEEL PALISADE FENCE</u></p>							

4	Supply and erect 2.4m high welded mesh galvanized fence in concrete footings, complete with post, pales, ground beam, horizontal rails, fixing accessories and recess in rails to be epoxy cement Grouted.	m	100	R	-	R	-
5	2.4m high x 1.5m wide welded mesh galvanized fence gate in concrete footings, complete with post, pales, ground beam, horizontal rails, fixing accessories and recess in rails to be epoxy cement Grouted.	No.	1	R	-	R	-
Carried to final summary						R	-
<u>BILL NO.7</u>		<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
<u>GLAZING</u>							
<u>GLAZED TO STEEL WITH PUTTY</u>							
4mm clear float glass							
1	Panes exceeding 0.1 m ² and not exceeding 0.5m ²	m ²	5	R	-	R	-
4mm clear obscure glass							
2	Panes exceeding 0.1 m ² and not exceeding 0.5 m ²	m ²	5	R	-	R	-
Carried to final summary						R	-
<u>BILL NO.8</u>		<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
<u>PAINTWORK</u>							
For preambles see “Model Preambles for Trades” 2008 edition published by the Association of South African Quantity Surveyors							
SUPPLEMENTARY PREAMBLES							
Previously painted plastered surfaces							
Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler							

	and finished smooth						
	Previously painted metal surfaces						
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal						
	Previously painted wood surfaces						
	Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with a suitable filler and finished smooth						
	PAINTWORK, ETC TO NEW WORK						
	ON FLOATED PLASTER						
	One coat professional plaster primer and two coats acrylic paint						
1	On ceiling and cornices	m ²	20	R	-	R	-
	ON WOOD						
	One coat wood primer, one Universal Undercoat and two coats Prasa Oakley Brown enamel paint						
2	On doors	m ²	60	R	-	R	-
	ON METAL						
	One coat zinc chromate primer, one under coat and two coats professional white gloss enamel paint						
3	On buglers, gates, door frames, window frames, gutters and down pipes	m ²	50	R	-	R	-
	PAINTWORK ETC TO PREVIOUSLY PAINTED WORK						
	One coat professional plaster primer and two coats acrylic paint						

4	On ceiling and cornices	m ²	200	R	-	R	-
						R	-
	<u>BILL NO.9</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
	<u>TILING</u>						
	WALL TILING						
	Matt Full Bodied Porcelain tiles, size 600 x 300mm x 12mm fixed to internal wall plaster backing with TAL tile adhesive mixed with TAL bonding liquid in lieu of water with joints continuous in both directions and grouted with TAL tile grout, excess grout on the surface to be cleaned with water as work proceeds.						
1	On walls	m ²	10	R	-	R	-
						R	-
	<u>BILL NO.10</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>		<u>Amount</u>	
	<u>ROOF COVERING ETC</u>						
	PROFILED METAL SHEETING AND ACCESSORIES						
	<u>Roof sheeting to be Concealed Fix interlocking "KLIP-LOK 700", 0,58mm thick heavy industrial Z275 spelter galvanised steel sheeting with Chromadek, ColorPlus, Colourbond or Globalcoat finish to one side and Grey other side and accessories, fixed to steel purlins using SL 700 approved clips and fasteners. Cover width 700mm. High wind - 120km/h plus - loading to be considered with installation and fixing must be in accordance with manufacturer's recommendations and specifications.</u>						
1	Roof covering to flat roof on existing purlins	m ²	10	R	-	R	-
2	1.25mm thick polycarbonate clear IBR sheeting's on the existing purlins completely installed as per manufactures specification	m ²	10	R	-	R	-
						R	-

CIVIL WORKS FINAL SUMMARY**MINOR UPGRADES AT MEYERTON STATION**

	STATION NAME	PAGE	AMOUNT
1	Alterations	3	R -
2	Carpentry and Joinery	4 to 5	R -
3	Ceiling work	5	R -
4	Ironmongery	5 to 6	R -
5	Plumbing work	6 to 8	R -
6	Metal work	8 to 9	R -
7	Glazing	9	R -
8	Paint work	9 to 11	R -
9	Tiling	11	R -
10	Roof covering	11	R -
SUB TOTAL			R -
ADD VAT @ 15%			R -
TOTAL			R -

ANNEXURE B ELECTRICAL WORKS: SCHEDULE OF QUANTITIES

PROVISIONAL SCHEDULE OF QUANTITIES

Major Supply and Installation of Platform and Shelter Lighting at
Meyerton Station

	<u>Description</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	<u>Amount</u>
	OCCUPATIONAL HEALTH AND SAFETY				
	The contractor shall comply with all the requirements set out in the Construction Regulations, issued under The Occupational Health & Safety Act no 85 of 1993.				
	Safety file shall be provided by the contractor prior to commencement of work.				
	The contractor shall carry out the works with as little noise and mess as possible. All rubble shall be taken away from site on a daily basis.				
	Note: All designated items should comply with local content threshold.				
	<u>Schedule of Quantities</u>				
	Unless otherwise stated the description of each item shall be deemed to include manufacturing, conveying, and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting, waste, patterns, plant, temporary works, establishment charges, profit and other obligations arising out of the conditions of contract				
	<u>BILL NO. 1</u>				
	<u>ALTERATIONS (PROVISIONAL)</u>				
	<u>REMOVAL OF EXISTING WORK</u>				
	Taking out and removing electrical work				
1	4/5 foot fluorescent fittings	No.	40	R -	R -
2	Bulkhead fittings	No.	15	R -	R -

	Carried to final summary				R	-
	<u>BILL NO.2</u>	<u>Unit</u>	<u>QTY</u>	<u>Rate</u>	<u>Amount</u>	
	<u>ELECTRICAL WORK</u>					
	Fluorescent fittings waterproofed fixture white including 2x58w T8 LED Fluorescent tubes and polycarbonate base with clear polycarbonate cover IP65					
1	Waterproof polycarbonate LED 5ft 2 x58w T8 fluorescent fitting including 2 LED tubes	No.	20	R -	R	-
2	1500m (5 foot) 58w Open channel LED Fluorescent fittings double tubes for ticket office building	No.	25	R -	R	-
	Bulkhead fittings					
3	Vandal proof incandescent compact ceiling light fittings 75w power, 1210 lumens with Die cast aluminum housing and tough polycarbonate refractors	No.	20	R -	R	-
4	7w LED bulk head fittings completely with bulbs	No.	5	R -	R	-
	High mast pole street light fitting					
5	279W LED Luminaire (34460 lumen) with 3 an optical compartment with LED engine, glass protector, LED warm light with colour temperature of 3000 kelvin, gear compartment and a spigot top entry adjustable compartment. Both optical and gear compartments to be rated IP 66. 20kV/kA surge protection. The luminaire housing to be manufactured of marine grade cast aluminium (EN 1706 AC-44300). Including 1 opening tool	No.	3	R -	R	-
	Bridge fittings					
6	125W HPS-T SE /230V C/W LAMP with 4800 lumen and the laminair to bear SANS 475 (Complete with lamp, control gear and spigot compartment	No.	10	R -	R	-
7	125W HPS BALLAST AND LAMP	No.	10	R -	R	-

	<u>SWITCHES</u>						
8	Day light switches	No.	6	R	-	R	-
9	11 kw contactors	No.	4	R	-	R	-
10	White 1 lever 2 way switch	No.	15	R	-	R	-
11	White 2 lever 1 way switch	No.	5	R	-	R	-
	Electrical cables						
12	50mm ² 4 core cable on sleeves (priced elsewhere)	m	70	R	-	R	-
13	16mm ² 4 core cable on sleeves (priced elsewhere)	m	100	R	-	R	-
14	10mm ² 4 core cable on sleeves (priced elsewhere)	m	1000	R	-	R	-
15	4mm ² GP wires for stove and geyser	m	30	R	-	R	-
16	2.5mm ² GP wires (Red, white, blue, black and earth) for lights rewiring of shelters, footbridge, ablutions and access points in 3 phase system	m	150	R	-	R	-
17	2.5mm ² suffix cable or GP wire for plugs	m	200	R	-	R	-
18	1.5mm ² suffix cable or GP wire for lights	m	200	R	-	R	-
	Electrical casing						
19	20mm galvanized SABS conduit completely with all the couplings, galvanized saddle, spacer bar assembly and heavy duty U clamps	m	100	R	-	R	-
20	20mm PVC SABS conduit completely with all the couplings, saddle, spacer bar assembly and heavy duty U clamps	m	100	R	-	R	-
	Circuit breakers						
21	10 A 1P 6KA single circuit breaker	No.	20	R	-	R	-

22	10 A 3P 6KA circuit breaker	No.	5	R	-	R	-
23	12 A 3P Contactor	No.	2	R	-	R	-
24	20 A 1P 6KA single circuit breaker	No.	18	R	-	R	-
25	20 A 3P 6KA circuit breaker	No.	3	R	-	R	-
26	30 A 1P 6KA circuit breaker	No.	3	R	-	R	-
27	30 A 2P 6KA circuit breaker	No.	3	R	-	R	-
28	40 A 2P 6KA circuit breaker	No.	3	R	-	R	-
29	60 A 3P 6KA circuit breaker	No.	3	R	-	R	-
30	60 A 3P AC1 Contactor	No.	2	R	-	R	-
31	63 A 2P 6KA circuit breaker	No.	2	R	-	R	-
32	63 A 3P 6KA circuit breaker	No.	2	R	-	R	-
33	63 A 30Ma 3P + N Earth leakage	No.	2	R	-	R	-
34	250 A 3P Isolator	No.	1	R	-	R	-
35	40 A stove Isolator	No.	1	R	-	R	-
36	30A Air conditioner Isolator	No.	3	R	-	R	-
PLUGS							
37	4 x 4 Double plug	No.	10	R	-	R	-
38	4 x 4 single plug	No.	10	R	-	R	-
DB BOARDS							

39	Flush mounted min distribution board 2 x 15w completely	No.	2	R	-	R	-
40	Lockable fiber glass water proofed 12 way CBI DB Eaves box to be mounted on external walls for platform shelters, waiting areas, access point, ablutions, etc	No.	15	R	-	R	-
HVAC Systems							
41	Supply, install and commission new 24000 BTU split unit, inverter technology air conditioner completely with all accessories (drain pipe, amorflex, copper pipe, refrigerant, cable, communication wire, brackets, circuit breaker, isolator, etc)	No.	3	R	-	R	-
<u>ELECTRICAL COMPLIANCE</u>							
All work to comply to SANS 10142 Compliance certificate to be provided on completion Pricing to include all necessary complete connection							
42	Certificate of compliance and all other testing required including 12 month guarantee certificate	Item	1	R	-	R	-
Carried to final summary						R	-
<u>BILL NO. 3</u>							
<u>EARTHWORKS</u>							
<u>EXCAVATION, FILLING, ETC</u>							
1	Cutting of tar and apply hot mix asphalt re-surfacing after cable has been laid	m ²	500	R	-	R	-
Excavation in earth not exceeding 1m deep							
2	Trenches	m ³	350	R	-	R	-
15 Mpa/20 mm unreinforced concrete							
3	15 Mpa/20mm unreinforced concrete on top of underground cable	m ³	100	R	-	R	-
Earth filing obtain from the excavation and/or prescribed stock piles on site compacted to 90% Mod AASHTO density							

4	Backfilling to holes after concrete has been laid	m ³	500	R	-	R	-
	Carried to final summary					R	-

ELECTRICAL WORK FINAL SUMMARY

Major Supply and Installation of Platform and Shelter Lighting at Meyerton Station

	STATION NAME	PAGE	AMOUNT
1	Alterations	13 to 14	R -
2	Electrical work	14 to 17	R -
3	Earthworks	17 to 18	R -
SUB TOTAL			R -
ADD VAT @ 15%			R -
TOTAL			R -

ELECTRICAL AND MINOR WORKS AT MEYERTON FINAL SUMMARY

	DESCRIPTION	PAGE	AMOUNT
1	Annexure A Civil works BoQ Final summary	3 to 12	R -
2	Annexure B Electrical works BoQ Final summary	13 to 18	R -
SUB TOTAL			R -
ADD VAT @ 15%			R -
TOTAL			R -