



Item No	<u>SECTION 2</u>	Quantity	Rate	Amount
	<u>BILL NO. 14</u>			
	<u>GLAZING</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Float glass</u> The term "float glass" is used for monolithic annealed glass			
	<u>Laminated glass</u> Laminated glass to have polyvinyl butyral (PVB) interlayer(s)			
	<u>GLAZING TO STEEL WITH NEOPRENE GASKETS TO EXISTING FRAMES</u>			
	<u>6.4mm Clear laminated safety glass</u>			
1	Panes exceeding 0.1m2 and not exceeding 0.5m2	m ²	2	
	<u>GLAZING TO WOOD WITH PINNED ON BEADS (BEADS ELSEWHERE)</u>			
	<u>6.4mm Clear laminated safety glass</u>			
2	Panes exceeding 0.5m2 and not exceeding 2m2	m ²	2	
	<u>GLAZING TO EXISTING ALUMINIUM FRAMES</u>			
	<u>4mm Clear float glass</u>			
3	Panes exceeding 0.1m2 and not exceeding 0.5 m2	m ²	1	
4	Panes exceeding 0.5m2 and not exceeding 2m2	m ²	3	
	<u>4mm Frosted glass</u>			
	Carried to Collection			R
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gm R.J. [Signature]



TOPS. SHELVES. DOORS. MIRRORS. ETC

6mm Silvered float glass copper backed mirrors with bevelled and polished round edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork, tiles, concrete or timber

5 Mirror 600 x 900mm high with six screws No 1

SUNDRIES

Approved silicon sealant

6 Silicon sealant in internal and external window frame m 15

Certificate of Compliance

7 Contractor to supply glazing certificate Item

Carried to Collection

R

Section No. 2
Section 2: Building Works
Bill No. 14
Glazing

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gm R. J. J.



Dwarsberg Police Station (Contract 2)

Section No. 2

Bill No. 14

Glazing

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Glazing

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SM R-J D



Item No	Quantity	Rate	Amount
<u>SECTION 2</u>			
<u>BILL NO. 15</u>			
<u>PAINTWORK</u>			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>PREPARATORY WORK TO EXISTING WORK</u>			
<u>Previously painted plastered surfaces</u>			
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			
<u>Previously painted metal surfaces</u>			
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal			
<u>Previously painted wood surfaces</u>			
Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth			
<u>General</u>			
Where a specific trade name is specified, the primer and/or undercoats must be of the same product or other approved. All coats and paints must be applied in accordance with the manufactures instructions.			
<u>PAINTWORK ETC TO NEW WORK</u>			
<u>ON FIBRE-CEMENT</u>			
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SM R J J



	<u>One undercoat and two coats "Dura 50" or similar approved acrylic emulsion paint to match existing paint</u>		
1	On ceilings	m ²	18
2	Fascias and barge boards not exceeding 300mm girth, including priming metal joining strips	m	10
<u>PAINTWORK ETC TO PREVIOUSLY PAINTED WORK</u>			
<u>ON INTERNAL FLOATED PLASTER SURFACES</u>			
<u>Make good damaged or peeling paint, fill in cracks or chipped paint to match existing apply one coat "Dulux" or similar approved one universal undercoat and one coat eggshell enamel paint applied in accordance with manufacturers instructions</u>			
3	On internal walls	m ²	878
4	On ceilings	m ²	76
<u>One coat "Dura 50" or similar approved universal undercoat and two coats acrylic paint to match existing</u>			
5	On ceilings	m ²	6
<u>One coat "Dulux" or similar approved weatherguard applied in accordance with manufacturers instructions to match existing</u>			
6	On external walls	m ²	250
<u>ON METAL</u>			
<u>Prepare surface, sandown and clean with galvanise iron cleaner before applying "Dulux" or similar approved chromate primer and two coats universal enamel paint to match existing paint</u>			
7	On doors and frames	m ²	10

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Paintwork

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GM R.T.G.



Dwarsberg Police Station (Contract 2)

8	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m ²	100
9	On brackets, rails, etc not exceeding 300mm girth	m	20
10	On mesh screens and frames (both sides measured)	m ²	5
<u>ON WOOD</u>			
<u>Two coats "Dulux Silthane Silk" or similar approved paint</u>			
11	On doors	m ²	5
<u>Approved</u>			
<u>Slightly sand down and apply one sealer coat and two coats matt varnish</u>			
12	On doors	m ²	3
<u>Sand down slightly and apply one sealer coat and two coats polyurethane matt varnish</u>			
13	On shelves	m ²	20
14	On general surfaces of fittings	m ²	10
15	On slatted benches	m ²	10
<u>ON EXTERNAL FLOATED PLASTER SURFACES</u>			
<u>"Dulux" or similar approved</u>			
<u>Make good damaged, fill in cracks or chipped paint to match existing apply one coat primer and two coats weatherguard applied in accordance with manufacturers instructions</u>			
16	On external walls	m ²	250
17	Cills, etc not exceeding 300mm girth	m	2

ON FIBRE-CEMENT BOARD SURFACES

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Section 2: Building Works
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gm R J J



Dwarsberg Police Station (Contract 2)

Two coats "Dulux" or similar approved eggshell enamel paint to match existing

18 Fascias and barge boards not exceeding 300mm girth, including priming metal joining strips m 484

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Sm R. J. J.



Dwarsberg Police Station (Contract 2)

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Paintwork

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Item No		Quantity	Rate	Amount
	<p><u>SECTION 3</u></p> <p><u>BILL NO. 1</u></p> <p><u>ROAD WORKS, PARKING AND PAVING</u></p> <p>NOTE: All trenches shall be backfilled with material selected from trench excavations and compacted to a minimum density of 100% Mod AASHTO</p> <p>NOTE: All sleeves to be laid in bedding class B</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of the ground</u></p> <p>The Tenderer shall acquaint himself or personal examination of the nature of the ground. Descriptions of excavations shall be deemed to include all ground conditions classifiable as "earth" and where conditions of a more difficult character are indicated these are separately measured</p> <p><u>Carting away of excavated material</u></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling "Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>SITE CLEARANCE</u></p> <p><u>Site clearance</u></p>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs, bush, etc and trees not exceeding 200mm girth	m ²	117	
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SM R. J. S.



Dwarsberg Police Station (Contract 2)

2	Removing rubbish, debris, vegetation, hedges, shrubs, bush, etc over existing paving etc.	m ²	2,558
	<u>Remove existing work</u>		
3	Carefully remove existing concrete paver (re-installation measured elsewhere)	m ²	63
	<u>EXCAVATIONS ETC</u>		
	<u>Excavations in earth over sloping site</u>		
4	Excavations to reduce levels	M3	19
	<u>Extra over all excavations for carting away</u>		
5	Surplus material from excavations and/or stockpiles on site to a dumping site to be located by the contractor	M3	10
	<u>FILLING ETC</u>		
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site in layers not exceeding 200mm compacted to 95% Mod AASHTO density</u>		
6	Under floors, steps, pavings, etc	M3	13
	<u>Earth filling supplied by the contractor, compacted to 95% Mod AASHTO density</u>		
7	Backfilling to trenches, holes, etc	M3	3
	<u>Compaction of surfaces</u>		
8	Compaction of ground surface under bases etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m ²	162
	<u>SOIL POISONING</u>		
	<u>Approved weedkiller and ant poisoning mixed and applied in the proportion as per manufacturers specifications</u>		
9	To bottom of paving etc	m ²	162

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R. J. H.

5



Dwarsberg Police Station (Contract 2)

10	Over existing paving and into grooves etc. contractor to supply certificate for soil poisoning. with guarantee	m ²	2,558
	<u>PAVING</u>		
	<u>Take into possession 80mm rectangular concrete pavers on site and lay to basket weave pattern on 50mm (thickness after final compaction) clean river sand to 40mm fall across</u>		
11	80mm Paving in basket weave pattern, to match existing	m ²	63
12	200mm Edging on and including 200 x 150mm thick unreinforced concrete bedding including excavation, formwork, etc to match existing	m	50
	<u>Precast concrete pavers on site and laid to basket weave pattern on 50mm (thickness after final compaction) clean river sand to 40mm fall across</u>		
13	80mm Paving in basket weave pattern	m ²	95
14	200mm Edging on and including 200 x 150mm thick unreinforced concrete bedding including excavation, formwork, etc	m	10
	<u>Precast concrete finished smooth on exposed surfaces including bedding, jointing and pointing</u>		
	<u>User note</u>		
	Where SANS 927 in the following description is not applicable, refer to other suitable construction standards or provide full specifications		
15	150 x 300mm High kerbs (SANS 927 fig 3) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc	m	5
	<u>ROADWORK</u>		
	<u>White road marking paint to SABS 731 on concrete paving blocks</u>		
16	Line 100mm wide	m	278

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R.J. 29



Dwarsberg Police Station (Contract 2)

	<u>Yellow road marking paint to SABS 731 on concrete</u>			
17	Wheelchair characters and symbols - form paraplegic symbol size 1 x 1.5m high overall	m ²	3	
	<u>Traffic signs in accordance with SA road traffic signs</u>			
18	Standard regulatory road "Stop" sign type R1 fixed to and including 76mm diameter x 2mm thick galvanised mild steel post 2500mm long bedded in and including 400 x 400 x 400mm unreinforced concrete base, including necessary excavation, backfilling, paint finish etc.	No	3	
	<u>FENCING</u>			
	<u>"Classic" or similar approved 1800mm high palisade three point fishtail style fencing formed of two 40 x 8mm flat bar mild steel with 40 x 40 x 3mm angle section welded on and with ends built into brickwork, filled in with 40 x 40 x 3mm angle section mild steel bars at 100mm spacing</u>			
19	Palisade panel 2352mm long	No	2	
20	Palisade panel 2371mm long	No	2	
21	Palisade fence 2390mm long	No	10	
22	Palisade fence 2410mm long	No	1	
23	Take into possession 2352mm long palisade panel on-site and fix into brickwork	No	1	
24	Take into possession 2371mm long palisade panel on-site and fix into brickwork	No	1	
	<u>Gate</u>			
25	Single gate 1230 x 2400mm high formed of 100 x 50 x 3mm rectangular hollow section outer frame, middle rail and posts, 50 x 50 x 3mm rectangular hollow section wall posts fixed to brickworks cast into 400 x 400 x 400mm, filled in with 40 x 40 x 3mm angle section 3 spike vertical bars at 100mm spacing including 3 heavy duty bullet hinges, flat plate locking arm with stay	No	1	
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	<u>One coat self-etching primer and two coats high gloss enamel paint as per manufacturers specifications</u>		
26	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area)	m ²	413
	<u>FLAG POLE</u>		
	<u>Precast concrete pyramoidal cappings</u>		
27	Excavate in earth not exceeding 2m deep for flag pole bases	M3	4
28	Risk of collapse to sides of excavation not exceeding 1.5m deep	m ²	24
29	Unreinforced concrete 25MPa/19 in flag bases	M3	2
30	Smooth formwork to sides of flag pole bases	m ²	8
31	"Flagcraft" or similar approved galvanised steel white powder coated fixed pole in two parts, 6000 x 101 x 2mm bottom and 6000 x 76 x 2mm top, flag pole with hinged base and complete with all fittings including all ropes, pulleys, cleats and galvanised foundation cage	No	2
	<u>BOUNDARY WALL</u>		
	<u>Precast concrete pyramoidal cappings</u>		
32	475 x 475 x 114mm High concrete pier coping left smooth from the form on all exposed sides and bedded in cement mortar on top of brick piers	No	45
	<u>CARPORTS</u>		
	<u>Sand down, apply anti-rust where necessary and apply one coat zinc chromate primer, one coat universal undercoat and two coats heavy duty SABS approved enamel paint</u>		
33	On carports steel surfaces	m ²	155

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5m
R.J.S



Dwarsberg Police Station (Contract 2)

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SECTION 3

BILL NO. 2

PROVISIONAL SUMS

General

Work for which budgetary allowances are provided will be measured and valued in accordance with the relevant clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss of profit on the said allowances

Prime cost amounts and provisional sums are net. Prime cost amounts shall include for delivery to site of all articles concerned

Provisional sums are for material and equipment supplied and installed complete by firms of specialists

Provisional sums are for material and equipment supplied and installed complete by firms of specialists

Profit

Where stated, the contractor may allow for profit if required

User note

Use the following descriptions where the JBCC N/S Subcontract Agreement is applicable

The item "attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors the contractor's duties as described in clause 12.2 of the JBCC N/S Subcontract Agreement

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Builder's work

Builder's work in connection with specialist services is given elsewhere in these bills of quantities

TANK AND STAND

- 1 Provide the sum of R65,000.00 (Sixty Five Thousand Rand) for erecting steel support structure and installing the existing water tank on the new steel structure, complete with all pipes works and connections
- 2 Profit
- 3 Attendance

Item

65,000.00

%

%

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R. J. H.



Dwarsberg Police Station (Contract 2)

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Provisional Sums

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R. J. J.



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gm R.J.D.



Item No	SECTION 4	Quantity	Rate	Amount
	<u>BILL NO. 1</u>			
	<u>SITE WORKS</u>			
	<u>EXCAVATIONS, ETC.</u>			
	<u>Excavate in earth and set excavated material aside for re-use as filling for:</u>			
1	Excavations in 'earth' for cable/sleeve trenches (450x700mm) (Inclusive of removal and re-instatement of existing paving)	M3	29	
2	Extra over excavations in 'earth' for cable or sleeve trenches in 'soft rock' (Inclusive of removal and re-instatement of existing paving)	M3	1	
3	Extra over excavations in 'earth' for cable or sleeve trenches in 'hard rock' (Inclusive of removal and re-instatement of existing paving)	M3	1	
4	Imported river sand for bedding above/below electrical cables/sleeves	M3	5	
5	Selected and approved material from the excavations, in backfilling in trenches, to specified density	M3	24	
6	Surplus material from the excavations removed from site	M3	6	
	<u>SLEEVES</u>			
	<u>High-density polyethylene (HDPE) flexible sleeve piping laid in trench (trench and backfilling measured elsewhere) including joints</u>			
7	50mm Diameter	m	10	
8	110mm Diameter	m	60	
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 Section 4: Electrical Installation
 Bill No. 1
 Site Works

Sm R.J.F.



	<u>90 Degreee long radius bends for high-density polyethylene (HDPE) flexible sleeve piping</u>		
9	50mm Diameter	No	1
	<u>MANHOLES</u>		
	<u>Construction of manholes, complete with heavy duty steel lid</u>		
10	1000 x 1000 x 1000 manhole (underground junction box) for electrical cable	No	3
	<u>CABLES</u>		
	<u>600/1000V PVC/SWA/PVC copper cable laid in trenches (trenching and backfilling measured elsewhere)</u>		
11	2.5 mm ² 3-core	m	530
12	4 mm ² 4-core	m	385
13	6 mm ² 4-core	m	70
14	10 mm ² 4-core	m	160
15	16 mm ² 4-core	m	75
16	25 mm ² 4-core	m	100
17	50 mm ² 4-core	m	100
	<u>CABLE JOINING</u>		
	<u>Scotchcast resin cable joining kits for weatherproof joints of 600/1000V PVC/SWA/PVC copper cables laid in trenches for the following cable sizes:</u>		
18	4 mm ² 4-core	No	2
19	6 mm ² 4-core	No	1
20	10 mm ² 4-core	No	1
21	16 mm ² 4-core	No	1
22	50 mm ² 4-core	No	2
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R.T. [Signature]

m



CABLE TERMINATIONS

Termination for 600/1000V (PVC/PVC/SWA/PVC)
copper cables

23	2.5 mm ² 3-core	No	8
24	4 mm ² 4-core	No	98
25	6 mm ² 4-core	No	2
26	10 mm ² 4-core	No	4
27	16 mm ² 4-core	No	2
28	25 mm ² 4-core	No	4
29	50 mm ² 4-core	No	4

EARTHING

Bare copper earth conductor installed with cable (cable
measured elsewhere)

30	2.5 mm ²	m	325
31	4 mm ² Conductor	m	70
32	6 mm ² Conductor	m	160
33	10mm ² Conductor	m	70
34	16 mm ² Conductor	m	100
35	25 mm ² Conductor	m	100

EARTH CONDUCTOR TERMINATION

Termination for bare and PVC insulated copper
conductors including lugs and connections

36	2.5 mm ² Conductor	No	98
37	4 mm ² Conductor	No	2
38	6 mm ² Conductor	No	4

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Sm R-J D



Dwarsberg Police Station (Contract 2)

39	10 mm ² Conductor	No	2
40	16 mm ² Conductor	No	4
41	25 mm ² Conductor	No	4
<u>ELECTRICAL JUNCTION BOXES</u>			
<u>Surface-mount electrical junction box, IP67 complete with earth terminal, cable glands and inner seals</u>			
42	3-way electrical junction box for 4mm ² 4C PVC/SWA/PVC cable	No	38
<u>LIGHTING</u>			
<u>Lighting types and descriptions within this bill as well as accompanying lighting specifications supersedes the descriptions on drawing legends</u>			
<u>Type H1</u>			
43	37 Watt LED DECORATIVE POST STOP LUMINAIRE INCLUSIVE OF MOUNTING PEDESTALS (Specification: Annexure G)	No	37
44	22 Watt LED DECORATIVE POST TOP (SAPS BLUE VERSION) INCLUSIVE OF MOUNTING PEDESTAL (Specification: Annexure G)	No	1
<u>SUNDRIES</u>			
45	Cable warning tape placed 150mm above cables in excavations	m	280
<u>CHASING OF PLASTERED WALLS</u>			
46	Chasing and re-plastering of existing plastered walls for installation of conduit, inclusive of re-painting	m	100
<u>CHASING OF FACEBRICK WALLS</u>			
47	Removal and re-bricking of existing facebrick walls for installation of conduit	m	100

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Item No	SECTION 4	Quantity	Rate	Amount
	<u>BILL NO. 2</u>			
	<u>BACKUP POWER SUPPLY EQUIPMENT</u>			
	<u>UNINTERRUPTABLE POWER SUPPLY</u>			
	<u>Supply and installation of UPS (Uninterruptable Power Supply) as per detailed electrical technical specifications (Inclusive of 12 month warranty and support)</u>			
1	10 kVA three phase in, single phase out double conversion UPS	No	1	
	<u>GENERATOR</u>			
	<u>Supply and installation of Generator as per detailed electrical technical specifications</u>			
	<u>Generator installation sum will be inclusive of all costs associated with testing and commissioning. Installation sum will also include the cost of handing over the project to the client with a full diesel tank</u>			
2	68 kVA three phase diesel generator complete with weatherproof silent canopy, controller and GSM reporting modem. (Automatic change-over installed in DB Main)	No	1	
3	125A 3-Pole automatic change-over switch with rotary handle and panel indicators for change-over switch position by "Socomec" or similar approved	No	1	
	<u>12 Month warranty and support</u>			
4	The sum priced for performing work under warranty will be inclusive of all parts, equipment, consumables, lubricants, diesel for testing, travelling, accommodation and labour costs			
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SM R & J



Dwarsberg Police Station (Contract 2)

5 Two (2) six-monthly services of the generator within the 12 month warranty period. Services are inclusive of comprehensive cleaning (also utilising compressed air) of the unit, replacement of lubricants, replacement of oil, replacement of filters etc. Services will be inclusive of all requirements as per manufacturer. Services will be scheduled with the knowledge and permission of the station commander and will be performed with a station member (who received the basic generator operation training) present. First service will be performed six months after project final completion date and the second service will be performed 12 months after project final completion date. The rate priced for servicing will be inclusive of all parts, equipment, consumables, lubricants, diesel for testing, travelling, accommodation and labour costs

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Backup Power Supply Equipment

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Backup Power Supply Equipment

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R. J. J.



Item No		Quantity	Rate	Amount
	<u>SECTION 4</u>			
	<u>BILL NO. 3</u>			
	<u>LOW TENSION DISTRIBUTION</u>			
	<u>DISTRIBUTION BOARDS</u>			
	<u>Supply and installation of a pre-manufactured low voltage distribution board, complete with sheetmetal tray, frames, sub-frames, busbars, breakers, legend card, circuit breakers, fuses, relay, volt-meter, ammeter, transformer, earth, leakage unit, time, switch, etc.</u>			
	<u>DB-M (MAIN BUILDING)</u>			
1	Earthing and bonding of the electrical installation. Pre-manufactured and pre-wired as per detailed electrical specification wired as per drawing ELECTRICAL SCHEMATIC: DB-M-NPS AND DB-M-EPS	No	1	
	<u>DB-C (CELL BLOCK)</u>			
2	Top entry recessed distribution board Pre-manufactured and pre-wired as per detailed electrical specification Wired as per drawing ELECTRICAL SCHEMATIC: DB-C-NPS AND DB-C-EPS	No	1	
	<u>DB-W (WASHBAY BUILDING)</u>			
3	Supply bottom entry recessed distribution board Pre-manufactured and pre-wired as per detailed electrical specification Wired as per drawing ELECTRICAL SCHEMATIC: DB-W-NPS	No	1	
	<u>DB-UPS (SERVER ROOM)</u>			
4	Top entry recessed distribution board Pre-manufactured and pre-wired as per detailed electrical specification Wired as per drawing ELECTRICAL SCHEMATIC: DB-UPS	No	1	
	<u>CABLES</u>			
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600/1000V (PVC/PVC/SWA/PVC) copper cable installed on cable ladders/ trays/ sleeves (ladders, trays, and sleeves measured elsewhere)

5	4 mm ² 3-Core	m		Rate Only
6	6 mm ² 3-Core	m		Rate Only
7	10 mm ² 3-Core	m	100	
8	16 mm ² 3-Core	m	80	

CABLE TERMINATIONS

Termination for 600/1000V (PVC/PVC/SWA/PVC) copper cables

9	4 mm ² 3-Core	No		Rate Only
10	6mm ² 3-Core	No		Rate Only
11	10 mm ² 3-Core	No	4	
12	16 mm ² 3-Core	No	2	

TRACING AND TESTING EXISTING CABLING FOR RE-USE

13	Tracing, testing and temporary labelling of existing perimeter lighting cabling, main building cabling, washbay building cabling and cell block cabling			SUM
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CERTIFICATES OF COMPLIANCE: ELECTRICAL INSTALLATIONS

Test and commission, balancing, labelling and provision of CoC for the complete electrical installation

Individual COC's will be issued for NPS and EPS DB's though they are installed in unified cabinets

14	COC's: DB-M-NPS AND DB-M-EPS			SUM
15	COC's: DB-C-NPS AND DB-C-EPS			SUM
16	COC: DB-W-NPS			SUM

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17 | COC; DB-UPS

SUM

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Item No	<u>SECTION 4</u>	Quantity	Rate	Amount
	<u>BILL NO. 4</u>			
	<u>LIGHTNING</u>			
	<u>WIRING CHANNELS</u>			
	<u>Note</u>			
	The rates for wiring channels shall include for hangers, splices, jointing, drilling etc.			
	<u>Hot dipped galvanised steel channel complete with galvanised cover fixed/suspended from steel trusses or concrete slab with and including earthing and bonding of the electrical installation</u>			
1	P8300 Channel (0.8 mm thick) straight sections	m	200	
2	90-degree horizontal bends: P8300	No	15	
3	90-degree external/internal bends: P8300	No	6	
4	3-way tee: P8300	No	6	
5	End cap: P8300	No	6	
	<u>GALVANISED CONDUIT</u>			
	<u>Note</u>			
	<u>Conduit includes all bends, tee-pieces, joints, locknuts etc.</u>			
	<u>Surface mounted to brickwork, concrete, steel, wood, roof members, etc. not exceeding 3000mm above floor level</u>			
6	20mm Diameter	m	150	
	<u>RIGID PVC CONDUIT</u>			
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m



<u>Note</u>				
<u>Conduit includes all bends, tee-pieces, joints, locknuts etc.</u>				
<u>Chased and/or fixed in brickwork not exceeding 3000mm above floor level (making good of chase by others)</u>				
7	20mm Diameter	m	1,200	
<u>Light gauge PVC flexible conduit</u>				
8	20mm Diameter x 300mm long complete with connectors at both ends	No	5	
<u>CONDUIT BOXES AND FITTINGS</u>				
<u>Galvanised steel fixed onto conduit</u>				
9	Round conduit box for 20mm diameter conduit	No	20	
10	100 x 50 x 50mm Deep wall box	No	8	
11	100 x 100 x 50mm Deep wall box	No	15	
<u>PVC type fixed onto conduit</u>				
12	Round conduit box for 20mm diameter conduit	No	170	
<u>Cover plates for conduit boxes</u>				
13	White steel cover plate for 100 x 50 x 50mm deep wall box	No	2	
14	White steel cover plate for 100 x 100 x 50mm deep wall box	No	15	
15	White steel cover plate for 20mm round conduit box	No	2	
<u>CONDUCTORS</u>				
<u>PVC insulated stranded copper conductor drawn into wire ways</u>				
16	2,5mm ²	m	6,200	
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EARTHING

Bare Earth Conductor installed with conductors

17 2.5 mm² m 2,500

LIGHT SWITCHES AND SOCKET OUTLETS

Light switches installed in brickwork complete with white steel cover plate, chrome screws, and flush galvanized wall box

18 16A One-lever one-way switch No 7

19 16A Two-lever one-way switch No 2

20 6A One-lever two-way switch No 2

21 Type S1: 1000VA, 360 deg, recess/surface mounted vacancy/ occupancy sensor switch equal to "Schneider Electric" or similar approved SAE-UE-MS-CSAWE No 5

22 Type S2: 1000VA, 360 deg, recess mounted ultrasonic vacancy/ occupancy sensor switch with auxiliary contact equal to "Schneider Electric" or similar approved SAE-UE-MS-CU-WE No 3

Light switches complete with weatherproof box surface mounted to brickwork

23 16A, weatherproof rotary light switch No 4

24 600W Day-night sensor No 2

Socket outlets installed in galvanized trunking

25 5A Round three-pin unswitched socket outlet, Installed in P8300 trunking No 270

LUMINAIRES AND EQUIPMENT

Supply and install luminaires complete with lamps, connections, etc. mounted in position

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<u>Type C1</u>			
26	9 Watt LED ROUND RECESSED DOWN LIGHT LUMINAIRE WITH 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure A)	No	58
<u>Type C1/E</u>			
27	Same as Type C1, BUT WITH 60 MINUTE BATTERY BACKUP FOR EMERGENCY MODE (Specification: Annexure A)	No	20
<u>Type C2</u>			
28	16 Watt LED ROUND RECESSED DOWN LIGHT LUMINAIRE WITH 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure A)	No	50
<u>Type C2/E</u>			
29	SAME AS TYPE 2, BUT WITH 60 MINUTE BATTERY BACKUP FOR EMERGENCY MODE (Specification: Annexure A)	No	13
<u>Type C3</u>			
30	10.7 Watt LED ROUND RECESSED DIFFUSED DOWNLIGHT LUMINAIRE (CUTOFF DIAMETER 170MM), WHITE, 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure B)	No	3
<u>Type F1</u>			
31	30 Watt LED PANEL LUMINAIRE (600 x 600 mm) RECESSED, 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure C)	No	1
<u>Type F2</u>			
32	SAME AS TYPE F1 (Specification: Annexure C)	No	51
<u>Type F4</u>			
33	SAME AS TYPE F1 BUT INCLUSIVE OF OEM SURFACE MOUNT FRAME (Specification: Annexure C)	No	10

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<u>Type F5</u>			
34	SAME AS TYPE F1 BUT INCLUSIVE OF OEM SURFACE MOUNT FRAME (Specification: Annexure C)	No	4
<u>Type F6</u>			
35	48 Watt LED PANEL LUMINAIRE (1200 x 600 mm) RECESSED, 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure C)	No	8
<u>Type F6/E</u>			
36	SAME AS TYPE F6, BUT WITH 60 MINUTE BATTERY BACKUP FOR EMERGENCY MODE (Specification: Annexure C)	No	3
<u>Type F7</u>			
37	SAME AS TYPE F6 (Specification: Annexure C)	No	4
<u>Type F8</u>			
38	30 Watt (4ft) LED VAPOUR PROOF STANDARD LUMINAIRE, 4000 K CCT (Specification: Annexure D)	No	14
<u>Type F9</u>			
39	SAME AS TYPE F8 (Specification: Annexure D)	No	4
<u>Type F10</u>			
40	48 Watt LED PANEL LUMINAIRE (1200 x 600 mm) WITH OEM SURFACE MOUNT FRAME, 3M FLEXIBLE CABLE AND 5A PLUGTOP, 4000 K CCT (Specification: Annexure C)	No	4
<u>Type F11</u>			
41	56 Watt (2ft) LED VANDAL RESISTANT LUMINAIRE, OPAQUE DIFFUSER, MANUFACTURED WITHOUT SIDE ENTRY, BASE POWDER COATED GREY, WITH NIGHT LIGHT AT MAXIMUM 5% OF NOMINAL POWER 4 000 K CCT (Specification: Annexure E)	No	7

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<u>Type F12</u>			
42	56 Watt (2ft) LED VANDAL RESISTANT LUMINAIRE, OPAQUE DIFFUSER, MANUFACTURED WITHOUT SIDE ENTRY, BASE POWDER COATED GREY, 4 000 K CCT (Specification: Annexure E)	No	29
<u>Type F12/E</u>			
43	SAME AS TYPE F12, BUT WITH 60 MINUTE BATTERY BACKUP FOR EMERGENCY MODE	No	3
<u>Type F13</u>			
44	15 Watt (1ft) LED VANDAL RESISTANT LUMINAIRE, OPAQUE DIFFUSER, MANUFACTURED WITHOUT SIDE ENTRY, BASE POWDER COATED GREY, 4 000 K CCT (Specification: Annexure E)	No	15
<u>Type W1</u>			
45	16 Watt (1ft) LED BULKHEAD LUMINAIRE, PRISMATIC DIFFUSER, 4 000 K CCT (Specification: Annexure F)	No	51
<u>Type W2</u>			
46	15 Watt (1ft) LED VANDAL RESISTANT LUMINAIRE, PRISMATIC DIFFUSER, MANUFACTURED WITHOUT SIDE ENTRY, BASE POWDER COATED GREY, 4 000 K CCT (Specification: Annexure E)	No	11
<u>Type W3</u>			
47	15 Watt (1ft) LED VANDAL RESISTANT LUMINAIRE, PRISMATIC DIFFUSER, MANUFACTURED WITHOUT SIDE ENTRY, BASE POWDER COATED GREY, 4 000 K CCT (Specification: Annexure E)	No	2
<u>Type W4</u>			
48	8 Watt (1 ft) LED BULKHEAD LUMINAIRE, PRISMATIC DIFFUSER, 4 000 K CCT (Specification: Annexure F)	No	6
49	LEAD BEACON LIGHT, GREEN, FLASHING, SURFACE MOUNT, 230V AC, IP65, MOUNTED AT 100MM ABOVE STEEL DOOR. EQUAL TO "KLAXON" OR SIMILAR APPROVED	No	3

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SUNDRIES

Supply and install occupancy controller for lights and air conditioning units as per detailed electrical technical specification

50	Controller equal to "Deman Alux M6" or similar approved	No	23
51	Relay module for lights equal to "Deman Alux S1" or similar approved	No	23
52	Relay module for air conditioning equal to "Deman Alux S2" or similar approved	No	23
53	RJ11 connectors	No	46
54	Interface cabling	No	52

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	<u>SECTION 4</u>			
	<u>BILL NO. 5</u>			
	<u>POWER POINT</u>			
	<u>WIRING CHANNELS</u>			
	<u>Note</u>			
	<u>The rates for wiring channels shall include for hangers, splices, jointing, drilling etc.</u>			
	<u>Hot dipped galvanised steel channel complete with galvanised cover suspended from steel trusses or concrete slab with and including hangers, etc. exceeding 3000 mm above floor level</u>			
1	P9000 channel (1 mm thick) straight sections	m	190	
2	90-degree horizontal bends: P9000	No	12	
3	90-degree external/internal bends: P9000	No	4	
4	3-way tee: P9000	No	7	
5	End Cap: P9000	No	6	
	<u>CABLE TRAYS</u>			
	<u>Note</u>			
	<u>The rates for wiring channels shall include for hangers, splices, jointing, drilling etc.</u>			
	<u>Hot dipped galvanised steel cable tray suspended from steel trusses or concrete slab, including hangers, etc., not exceeding 3000 mm above floor level</u>			
6	228 mm medium duty cable tray	m	10	
7	90-degree horizontal bend: 228 mm medium duty cable tray	No		Rate Only
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