

To To all tenderers
From Nonhlanhla Mafoko
Date 14 February 2022
Subject Addendum 8
Pages 62

www.transnet.net

TENDER NO: TPT/2021/12/2/RFP

DESCRIPTION OF WORKS: FOR THE PROVISION OF OFFICES FOR TRANSNET PORT TERMINALS AT 202 ANTON LEMBEDE STREET, DURBAN FOR TRANSNET SOC LTD (REG NO. 1990/000900/30) OPERATING AS TRANSNET PORT TERMINALS (HEREINAFTER REFERRED AS "TPT").

1.Addendum on Tender for Mechanical Discipline- 202 Anton Lembede road TPT HQ

Bidder/s requested a bill format for addendum no 7. Please find attached amended Bill of quantities/BOQ. Please note the changes are on item 8.1.73 and 16.1.83. Bidders are to submit the attached BOQ with their offer.

Attached for your attention is a copy of Addendum 8 dated 14 February 2022

Endorsement should be made on the tender that Addendum 8 dated 14 February 2022 has been received and taken into account in submitting your tender.

*Please acknowledge receipt of this Addendum before the closing date of tender.

Regards

A handwritten signature in black ink, appearing to read 'N. Mafoko'.

**Nonhlanhla Mafoko
Sourcing Specialist**

TRANSNET SOC LTD

TENDER NO: TPT/2021/12/2/RFP

DESCRIPTION OF WORKS: FOR THE PROVISION OF OFFICES FOR TRANSNET PORT TERMINALS AT 202 ANTON LEMBEDE STREET, DURBAN FOR TRANSNET SOC LTD (REG NO. 1990/000900/30) OPERATING AS TRANSNET PORT TERMINALS (HEREINAFTER REFERRED AS "TPT").

ADDENDUM 8

Date: 14 February 2022

1.Addendum on Tender for Mechanical Discipline- 202 Anton Lembede road TPT HQ

Bidder/s requested a bill format for addendum no 7. Please find attached amended Bill of quantities/BOQ. Please note the changes are on item 8.1.73 and 16.1.83. Bidders are to submit the attached BOQ with their offer.

The following information is furnished in addition to, in amplification and substitution of, matters contained in the tender documents issued in respect of the above-mentioned work.

TRANSNET SOC LTD

TENDER NO: TPT/2021/12/2/RFP

DESCRIPTION OF WORKS: FOR THE PROVISION OF OFFICES FOR TRANSNET PORT TERMINALS AT 202 ANTON LEMBEDE STREET, DURBAN FOR TRANSNET SOC LTD (REG NO. 1990/000900/30) OPERATING AS TRANSNET PORT TERMINALS (HEREINAFTER REFERRED AS "TPT").

ADDENDUM 8

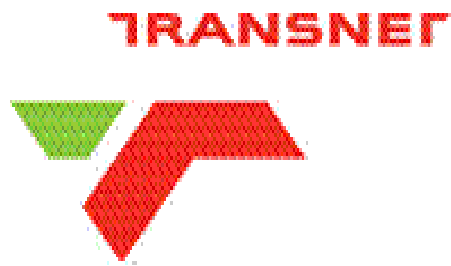
Date: 14 February 2022

This is to certify that we _____
have received Addendum 8 dated 14 February 2022

TENDERER

DATE: _____

WITNESSES:1. _____



**TPT HQ MOVE TO 202 ANTON
LEMBEDE STREET**

BILLS OF QUANTITIES

Prepared by:

TRANSNET PORT TERMINAL

JUNE 2021

Item	Payment Clause	Description	Unit	Qty	Rate	Amount
1	SANS 1200A PSA	SECTION 1: PRELIMINARIES AND GENERAL BILL NO.1 PREAMBLES enders are referred to the Measurement and Payment Clause (Clause 8) of the SANS 1200 A (General) document for full intent and meaning of each clause thereof, which are hereinafter referred to by the clause number				
1.1		<u>FIXED CHARGE ITEMS</u>				
1.1.1		Contractual requirements	Item	1		
		<u>Facilities for Contractor on site</u>				
1.1.2		Office and Storage Sheds	Item	1		
1.1.3		Workshops	Item	1		
1.1.4		Tools and Equipment	Item	1		
1.1.5		Access and Access Control	Item	1		
1.1.6		Removal of Site Establishment	Item	1		
1.1.7		Other Fixed Charge Obligation	Item	1		
		<u>TIME RELATED ITEMS</u>				
1.1.8		Contractual requirements	Item	1		
		<u>Operation and maintenance of facilities on sites for duration of construction except where stated</u>				
1.1.9		Facilities for Contractor				
1.1.10		Office and Storage Sheds	Item	1		
1.1.11		Workshops	Item	1		
1.1.12		Tools and Equipment	Item	1		
1.1.13		Access and Access Control	Item	1		
1.1.14		Supervision	Item	1		
1.1.15		Company and Head Office overheads	Item	1		
		<u>Other time related obligations</u>				
1.1.16		Environmental compliance	Item	1		
1.1.17		Health and Safety compliance	Item	1		
1.1.18		Quality compliance	Item	1		
1.1.19		Items in terms of the Industrial Relations policy, and Employment conditions for tender purposes	Item	1		
1.1.20		Contractor costs to comply with regulations of a National Pandemic such as COVID-19	Item	1		



Item	Payment Clause	Discription	Page	Amount
		<u>SECTION SUMMARY</u> Page Total brought forward	1	
		TOTAL CARRIED FORWARD TO FINAL SUMMARY		R -

Item	Payment Clause	Discription	Unit	Qty	Rate	Amount
2		CIVILS WORKS				
2.1		BILL NO. 2				
		Ground floor, 2nd, 3rd, 4th, 5th and 9th floor				
		Refer drawing No: 1-000-A-LA-0001-01 & 1-000-A-LA-0003-01 & 1-000-A-LA-0005-01				
		REMOVAL OF EXISTING WORKS				
		<u>Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:</u>				
2.1.1		600mmx600mm Tiles to floors	m ²	428		
		<u>Taking down and removing, floors, paneling, ceiling, partitions, etc.</u>				
2.1.2		Drywall partitioning 3,23m high including doors, ironmongery, glazed borrowed lights, etc.	m	8		
2.1.3		Gypsum plasterboard suspended ceilings including suspension grid, hangers, etc.	m ²	430		
		<u>Taking out and removing glass and mirrors</u>				
2.1.4		Glass from steel double door including cleaning out rebates and preparing for new glass	No	2		
2.1.5		Glass and Metal frame including cleaning out rebates and preparing for new glass	m ²	3		
		GROUND FLOOR ABLUTIONS				
		<u>Breaking down and removing brickwork etc.</u>				
2.1.6		Half brick wall	m ²	54		
		<u>Taking out and removing doors, windows, etc from brickwork to be demolished.</u>				
2.1.7		Timber single door and frame 850mm x 2050mm high	no.	4		
2.1.8		Vitreous china wash hand basin	no.	4		
2.1.9		Vitreous china WC pan with cistern	no.	2		
2.1.10		Vitreous china wall hung urinal with flush valve	no.	2		
		<u>Taking down and removing roofs, floors, paneling, ceiling, partitions, etc.</u>				
2.1.11		Gypsum plasterboard suspended ceilings including suspension grid, hangers, etc.	m ²	49		
2.2		2nd FLOOR				
		<u>Taking down and removing roofs, floors, paneling, ceiling, partitions, etc.</u>				
2.2.1		Drywall partitioning 3,23m high including doors, ironmongery, glazed borrowed lights, etc.	m	235		
2.2.2		Existing wallpaper 2800mm high	m ²	1450		
		<u>Taking out and removing glass and mirrors</u>				
2.2.3		Glass and Metal door including cleaning out rebates and preparing for new glass	No	1		
2.2.4		Glass and Metal frame including cleaning out rebates and preparing for new glass	m ²	5		
		<u>Taking up and removing vinyl floor coverings, carpeting, etc:</u>				
2.2.5		Rubber floor covering including preparation screed for new floor covering	m ²	12		
		<u>Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:</u>				
2.2.6		600mmx600mm Tiles to floors	m ²	23		
TOTAL CARRIED FORWARD TO FINAL SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
CIVILS WORKS						
2.3		3rd Floor Taking out and removing doors, windows, etc from brickwork to be demolished				
2.3.1		Drywall partitioning 3.23 m high including doors, ironmongery, glazed borrowed lights etc.	m	25		
		Taking out and removing doors, windows, etc from brickwork to be demolished				
2.3.2		Timber door 850mm x 2050mm high	No	1		
		Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:				
2.3.3		500mmx500mm Tiles to floors	m ²	63		
4th FLOOR						
		Taking down and removing roofs, floors, paneling, ceiling, partitions, etc.				
2.4.1		Drywall partitioning 3,23m high including doors, ironmongery, glazed borrowed lights, etc.	m	7		
5th FLOOR						
		Taking down and removing roofs, floors, paneling, ceiling, partitions, etc.				
2.5.1		Drywall partitioning 3,23m high including doors, ironmongery, glazed borrowed lights, etc.	m	24		
2.5.2		Gypsum plasterboard suspended ceilings including suspension grid, hangers, etc.	m ²	153		
		Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:				
2.5.3		500mmx500mm Tiles to floors	m ²	86		
		Taking out and removing sundry joinery work:				
2.5.4		Timber counter 1400x 900 mm high	No	1		
		Taking out and removing sundry metal work:				
2.5.5		power poles	No	2		
9th FLOOR						
		Taking out and removing sundry metal work:				
2.6.1		Steel gate 11000 mm long including cleaning out rebates	No	1		
		Taking out and removing doors, windows, etc from brickwork to be demolished				
2.6.2		Half brickwall	m ²	52		
		Taking out and removing sundry joinery work:				
2.6.3		Timber counter 1400x 900 mm high	No	1		
		Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes:				
2.6.4		500mmx500mm Tiles to floors	m ²	132		
BUILDING UP OPENINGS						
		Brickwork in NFP bricks in class II mortar in building up:				
3RD FLOOR						
2.7.1		Half brick walls	m ²	2		
PREPARATORY WORK TO EXISTING SURFACES						
All floors						
2.7.2		Making good defects in existing screeded floors as per architect spec.	m ²	715		
MAKING GOOD OF FINISHES ETC						
Sundries						
2.7.1		Cutting toothings and bonding new brickwork to existing.	m	6		
2.7.2		Faces of walls where half brick walls removed.	m	6		
2.7.3		Floors where half brick walls removed.	m	24		
TOTAL CARRIED FORWARD TO FINAL SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
2.8		<u>3RD FLOOR</u> <u>MAKING GOOD OF FINISHES ETC</u>				
2.8.1		Floors where 1 brick walls removed. <u>Making good internal cement plaster:</u>	m	1		
2.8.2		Walls where one brick walls was removed	m	1		
2.8.3		Walls where half brick walls was removed Sundries <u>Making good screed</u>	m	1		
2.8.4		Floors where partitions removed	m	273		
2.8.5		Floors where Counter top removed	m	3		
2.8.6		Floors where cupboard removed <u>OPENINGS THROUGH EXISTING WALLS ETC</u> Breaking out for and forming plain openings through brick walls including necessary precast concrete lintels and making good plaster on both sides and into reveals and with screed finish to thresholds (making good paintwork elsewhere): <u>3RD FLOOR</u>				
2.8.7		Opening for door with timber frame 850 x 2050mm high overall through half brick wall.	no.	2		
2.9		<u>4RD FLOOR</u>				
2.9.1		Opening for door with timber frame 850 x 2050mm high overall through half brick wall.	no.	1		
2.9.2		Opening for door with timber frame 850 x 2050mm high overall through half brick wall. <u>Carting Away</u>	no.	1		
2.9.3		Surplus material from demolished walls and partitions to an approved dumping site to be located by the contractor	m3	100		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
3		<u>CIVILS WORKS</u> <u>BILL NO.3</u> <u>Ground Floor Ablutions & 4th Floor kitchen</u> <u>Refer drawing No: 1-001-A-LA-0006-01</u> <u>SUPPLEMENTARY PREAMBLES</u> <u>BRICKWORK</u> <u>SUPERSTRUCTURE</u> <u>Brickwork of NFP bricks in class II mortar:</u> 3.1.1 230mm One brick wall m² 40 3.1.2 Half brick walls. m² 86 <u>Galvanised hoop iron cramps, ties, etc:</u> 3.1.3 30 x 1,6mm Wall tie 500mm long with one end shot pinned to concrete and other end built into brickwork. no. 283 <u>Prestressed fabricated concrete lintels including necessary temporary supports</u> 3.1.4 110 x 75mm Lintels in lengths not exceeding 3m m 4 <u>SKIRTINGS</u> <u>GROUND FLOOR Canteen</u> 3.1.5 100mm floor tile cut wide strips m 44 3.2 <u>CEILINGS ETC</u> <u>SUSPENDED CEILINGS</u> <u>Proprietary suspended ceilings:</u> <u>Electrical light fittings, diffusers, panels, etc generally are lay in units of the same dimensions as the suspension grid described and allowance must be made accordingly for their support inclusive of any flexibility in setting out that may be required</u> <u>Pre painted AMF Fine stratos micro ceiling tiles 600x600x15mm equal or similar approved with square edge laid on econogrid prepainted white exposed tee grid system including fire safety punch outs. Main tees suspended by means of 19x0.5mm GMS strap angers at 1200mm centres</u> 3.2.1 Ceilings suspended exceeding 2m and not exceeding 3m below concrete soffits.(boardrooms) m² 310 3.2.2 Ceilings suspended exceeding 1m and not exceeding 2m below concrete soffits.(canteen) m² 116 3.2.3 Ceilings suspended exceeding 1m and not exceeding 2m below concrete soffits.(ablution) m² 49 3.2.4 Ceiling suspended not exceeding 1m below concrete soffits (5th floor) m² 153 3.2.5 Ceiling suspended not exceeding 1m below concrete soffits (9th floor) m² 153 3.2.6 Extra over ceiling for opening for 250mm diameter downlighter. no 60 3.2.7 Extra over ceiling for opening for 600 x 600 mm light fitting no 60 3.2.8 Extra over ceiling for opening for ventilation/airconditioning diffuser. no 40 3.2.9 Horizontal bulk heads suspended exceeding 2m and not exceeding 3m below concrete soffits m² 310 3.2.10 Horizontal bulk heads suspended exceeding 1m and not exceeding 2m below concrete soffits m² 116 3.2.11 Horizontal bulk heads suspended not exceeding 1m below concrete soffits m² 49				
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		CIVILS WORKS				
		SUSPENDED CEILINGS				
3.2.12		Ceiling suspended exceeding 2m and not exceeding 3m below steel purlins	m ²	310		
3.2.13		Ceiling suspended exceeding 1m and not exceeding 2m below steel purlins	m ²	116		
3.2.14		Ceiling suspended not exceeding 1m below steel purlins at	m ²	49		
3.2.15		Suspended vertical bulk heads	m ²	280		
3.2.16		Sloping ceiling suspended exceeding 2m and not exceeding 3m below concrete soffits	m ²	310		
3.2.17		Sloping ceiling suspended exceeding 1m and not exceeding 2m below concrete soffits	m ²	130		
3.2.18		Sloping ceiling suspended not exceeding 1m below concrete soffits	m ²	49		
3.3		INSULATION				
3.3.1		100mm rockwool Acoustic and Thermal insulation or similar approved closely fitted and laid on top of steel purlins	m ²	426		
3.4		PARTITIONS ETC.				
		Equal or Similar Approved System Jumbo Dry wall Partition: <u>System Jumbo Drywall 51/30' partitioning shall comprise steel studding formed of 51mm top and bottom tracks with vertical studs at maximum 600mm centres, friction fitted or pop-riveted to the top and bottom tracks with similar additional vertical studs as necessary at abutments, ends, corners etc, and covered as described with 12mm thick jumbo plasterboards in single lengths to suit height, butt and flushed over with joints taped over and flushed with jointing compound prepared for painting.</u>				
		<u>Prices shall include for 75 mm powder coated aluminium skirting both sides, 3 Tier power skirting. Prices for forming openings shall include for additional framing and trimming boarding around openings.</u>				
		<u>System Jumbo drywall' or similar approved steel stud partitioning with 12,5mm Jumbo plaster boards on both sides:</u>				
		<u>2nd Floor, 4th floor and 9th floor</u>				
3.4.1		System Jumbo Drywall Partitioning 2,64m high or similar approved with bottom track plugged and top track fixed to suspended ceiling tees including aluminium shadowline bead at junction of partition and ceiling.	m	178		
		<u>2nd, 5th and 9th Floor</u>				
3.4.2		System Jumbo drywall Partitioning 2,05m high or similar approved with bottom track plugged and top track fixed to suspended ceiling tees including aluminium shadowline bead at junction of partition and ceiling.	m	3		
		<u>Ground floor</u>				
3.4.3		System Jumbo drywall Partitioning 2,1m high or similar approved with bottom track plugged and top track fixed to suspended ceiling tees including aluminium shadowline bead at junction of partition and ceiling.	m	13		
3.4.4		Extra over partition 2,64m high for vertical abutment.	no.	30		
3.4.5		Extra over partition 2,64m high for T-intersection.	no.	2		
3.4.6		Extra over partition 2,625m high for corner.	no.	3		
		INSULATION				
3.4.7		100mm Rockwool Acoustic and Thermal Insulation blanket or similar approved in drywall cavity	m ²	605		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
4		CIVILS WORKS GROUND FLOOR Equal or similar Approved system Jumbo Firewall 63/120/556 with overall thickness of 124mm, with 63x35mm Jumbo studs at 600mm centres friction fitted into head track and floor track and clad on both sides with a double layer of 15mm thick fire resistant jumbo plasterboard fixed at 220mm centres using 25mm Jumbo screws on the base layer and 42mm Jumbo screws on the face layer, all plasterboard joints must overlap, all exterior joints to be covered with jumbo tape and finished with 2 layers of Jumbo jointing plaster applied and lightly sanded down, leaving wall surface prepared for painting, all in accordance with suppliers recommendations, a 14kg/m3 density insulation to be installed in the cavity. System Jumbo steel stud partition with Fire resistant jumbo plasterboard.				
4.1.1		System jumbo firewall Partitions 2.9 m high with bottom track plugged and top track fixed to underside of slab	m	23		
4.1.2		System jumbo firewall Partitions 3.94m high with bottom track plugged and top track fixed to underside of slab	m	14		
4.1.3		System jumbo firewall Partitions 3.64m high with bottom track plugged and top track fixed to underside of beam	m	5		
4.1.4		System jumbo firewall Partition 5.42m high with bottom track plugged and top track fixed to underside of slab	m	20		
4.1.5		Equal or Similar approved bautech GF serene 50 Demountableand Relocable Acoustic Partitioning, with a 45 DB Acoustic Rating with bottom track plugged and top track fixed to suspended ceiling tees ALUGLASS bautech GF serene 50 Demountableand Relocable Acoustic Partitions 2.9 m high with bottom track plugged and top track fixed to suspended ceiling tees or similar approved	m	3.55		
4.1.6		Equal or similar approved bautech GF serene 50 Demountableand Relocable Acoustic Partitions 2.9 m high with bottom track plugged and top track fixed to suspended ceiling tees	m	5.62		
4.1.7		Equal or similar approved bautech GF serene 50 Demountableand Relocable Acoustic Partitions 2.9 m high with bottom track plugged and top track fixed to suspended ceiling tees	m	2.30		
4.1.8		Equal or similar approved bautech GF serene 50 Demountableand Relocable Acoustic Partitions 2.9 m high with bottom track plugged and top track fixed to suspended ceiling tees	m	2.30		
		DOORS				
4.1.9		Extra over drywall partition for 44mm solid Timber door 900 x 2125mm high finished with 1 coat dulux wood primer and 3 coats dulux pearl Glo water based finish or similar approved. Paint colour dark grey	no.	11		
4.1.10		Extra over Acoustic partition or similar approved for Varikust VK62 single 900mm x 2400mm high acoustic door in a glass with 900mm wide x 500mm fixed Glass panel above door, finished with intergrated GF serene system, all with a 45 DB Acoustic rating. A horizontal 1200mm high sandblasted decorative treatment must be added to all Glass	no.	7		
4.1.11		Extra over Equal or similar approved Nuklip heavy duty aluminium shopfront system or similar 900 x 2125 door, in a 6.38mm laminated safety glass, laminate to be sand blasted, finished with ANP 3055 Matt Charcoal powercoated aluminium		35		
4.1.12		Extra over equal or similar approved Nuklip heavy duty aluminium shopfront system or similar 750 x 2125 door, in a 6.38mm laminated safety glass, laminate to be sand blasted, finished with ANP 3055 Matt Charcoal powercoated aluminium		1		
4.1.13		Extra over Equal or approved Nuklip heavy duty aluminium shopfront system or similar 1700 x 2125 door, in a 6.38mm laminated safety glass, laminate to be sand blasted, finished with ANP 3055 Matt Charcoal powercoated aluminium		3		
4.1.14		Extra over equal or similar approved Nuklip heavy duty aluminium shopfront system or similar 900 x 1000 door, in a 6.38mm laminated safety glass, laminate to be sand blasted, finished with ANP 3055 Matt Charcoal powercoated aluminium		2		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription	Unit	Qty		
5		<u>CIVILS WORKS</u>				
		<u>BILL NO. 4</u>				
		<u>FLOOR COVERINGS</u>				
		<u>Mezzanizne, 2nd, 3rd, 4th & 5th floor</u>				
		<u>500 x 500mm Berber point 920 charcoal carpet tiles equal or similar approved</u>				
		On floors	m²	787		
		<u>Ground Floor toilets & Canteen& Boardrooms</u>				
		<u>600x600mm Full body first grade Porcelain tiles or similar approved finished with aluminium edge trim to all egdes,pie rating 5. every 5x5m have epoxy tile extension joint. Allow R500SQM excl. adhesive, grout and installation. To be confirmed by architect. Grout colour : Dove Grey</u>				
		On floors	m²	624		
		<u>600x300mm Full body first grade Porcelain tiles or similar approved finished with aluminium edge trim to all egdes,pie rating 5. every 5x5m have epoxy tile extension joint. Allow R450SQM excl. adhesive, grout and installation. To be confirmed by architect. Grout colour : Dove Grey</u>				
		on walls	m²	190		
5.1.1		<u>4th & 9th Floor</u>				
		<u>500 x 500mm Nottingham loose lay heavy commercial vinyl tiles with a group T (en 660) abrasion resistance or similar approved vinyl tiles laid to manufactures instruction</u>				
		On floors	m²	129		
		<u>Sanitary Fittings</u>				
		Midi weaver basin or similar approved with square chrome bottle trap, bolted to wall using 10mm bolts (code 8448Z000)	no.	6		
		perla surface mounted basin with square chrome bottle trap or similar approved	no.	1		
		orchid paraplegic wall hung pan with back inlet rim pan, inlet exposed flush valve and concealed cistern with remote actuator plate or similar approved	no.	1		
		refine wall hung pan, back inlet closed rim and thermostet soft close seat with geberit sigma concealed cistern and sigma 50 actuator plate or similar approved	no.	5		
		lavatera BI back inlet wall hung urinal with concealed (Back inlet) flushvalve, cobra FJ8.102 or similar approved	no.	3		
		Double quinline QLX621-120 double end bowl sink, all-in one value pack , code : FRA-810016 with spaza F/2 double bowl plumbing kit, 50/90mm outlet or similar approved	no.	2		
		5.2		<u>TRAPS ETC</u>		
		<u>Similar or Approved</u>				
		<u>Ground & 4th floor kitchen</u>				
5.2.1		Belina sink mixer with aerated swivel outlet and mounting kit or similar approved	no.	2		
5.2.2		KQ-951R basin mixer or similar approved	no.	6		
5.2.3		NM-851 Elbow action basin mixer or similar approved	no.	1		
5.2.4		8939Z000, 8940Z000 and 8941Z000 Grab rails or similar approved	no.	1		
5.2.5		Copper-free mirror, glazed in accordance with NBR N schedule 1 and SABS 0137, sizes 1500mm x 600mm fixed to a backing board to create a floating mirror effect or similar approved	no.	7		
5.2.6		Toilet roll holder : Tuff Roll lockable 3 holder or systems or similar approved	no.	6		
5.2.7		Hands free hand dryer HF 2400 HD product code 359961 by "franke" or similar	no.	3		
5.2.8		waste disposal bin strx 605 product code 359730 by Frankie or similar approved	no.	3		
5.2.9		paper towel dispenser strx 600 product code 359730 by Frankie or similar approved	no.	3		
5.2.10		Hands free hand dryer HF950 SD "Franke" or similar approved	no.	5		
5.2.11		Zip stainless steel 7.5 litre hydroboil pro with instant boiling water or similar approved, connected to 15mm cold water supply and 220 volt 15 AMP electrical power supply, plugged and screws to wall	no.	2		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
6		CIVILS WORKS Sanitary Plumbing BILL NO.5 Alterations to existing pipework, etc: Cut into existing 50mm uPVC waste pipe as necessary for and provide and insert new access bend including all necessary fittings, jointing, etc., and connect up new uPVC branch pipe. Cut into existing 160mm uPVC waste pipe as necessary for and provide and insert new access bend including all necessary fittings, jointing, etc., and connect up new uPVC branch pipe. uPVC pipes: 40mm Pipes. 50mm Pipes. 110mm Pipes. Extra over uPVC pipes for fittings: 40mm Bend. 50mm Bend. 110mm Pan connector. 50mm Access bend. 110mm Access bend. Testing waste pipe system WATER AND FIRE SUPPLIES Class 460/0 copper pipes: 15mm Pipes. 22mm Pipes. Extra over class 460/0 copper pipes for capillary fittings: 15mm Fittings. 22mm Fittings. FITTINGS The following fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc The references given in the descriptions are to the respective types of fittings detailed on the Architect's drawing no 1-001-A-LA-0002-01 accompanying the tender documents for tender purposes. Prices for fittings shall include for all necessary closed ends, required ironmongery as outlined and all doors shall be fitted with 25mm concealed sprung hinges. Kitchen Cupboards etc Ground Floor and 4th Floor kitchen cupboards etc with RIH 1098 RAIEL HINGE CLOVER 105 degree soft close or similar 2 per door, with RIH915 RAFAEL zion handle Doors, sides & mid shelf: 16mm Bisom melamine on MDF gloss with with impact edging, all round colour white or similar approved. Backing boards: white moisture resistant masonite backing boards in cupboards and drawer units. Carcase: 16mm moisture resistant melamine board with impact edging all round colour white. Base unit to sit on adjustable 100mm stainless steel plinth legs Drawer unit approximate size 2500 x 600 x 840mm high, all sides to be 16mm moisture resistance malamine board white with impact edging, ball bearing slide 35mm UTA F/EXT 500mm-RIH 545 RAIEL or similar approved (sinks elsewhere). With door, sides & mid shelf (Ground floor) Drawer unit approximate size 3700 x 600 x 840 mm high, all sides to be 16mm moisture resistance malamine board white with impact edging, ball bearing slide 35mm UTA F/EXT 500mm-RIH 545 Rael or similar approved With door, sides & mid shelf (Ground floor) Countertops Ceasar stone 5031 statuario Maximus 20mm Quarts or similar approved Counter top size 2500 x 600mm, to be 16 mm moisture resistant melanine board with impact edging all round colour white. Base unit to sit on adjustable 100 mm stainless steel plinth legs.(Ground floor)				
6.1.1		Cut into existing 50mm uPVC waste pipe as necessary for and provide and insert new access bend including all necessary fittings, jointing, etc., and connect up new uPVC branch pipe.	no.	3		
6.1.2		Cut into existing 160mm uPVC waste pipe as necessary for and provide and insert new access bend including all necessary fittings, jointing, etc., and connect up new uPVC branch pipe.	no.	3		
6.1.3		40mm Pipes.	m	10		
6.1.4		50mm Pipes.	m	20		
6.1.5		110mm Pipes.	m	20		
6.1.6		40mm Bend.	no.	10		
6.1.7		50mm Bend.	no.	10		
6.1.8		110mm Pan connector.	no.	6		
6.1.9		50mm Access bend.	no.	6		
6.1.10		110mm Access bend.	no.	6		
6.1.11		Testing waste pipe system	item	1		
6.1.12		15mm Pipes.	m	50		
6.1.13		22mm Pipes.	m	30		
6.1.14		15mm Fittings.	no	25		
6.1.15		22mm Fittings.	no	15		
6.1.16		Kitchen Cupboards etc Ground Floor and 4th Floor kitchen cupboards etc with RIH 1098 RAIEL HINGE CLOVER 105 degree soft close or similar 2 per door, with RIH915 RAFAEL zion handle Doors, sides & mid shelf: 16mm Bisom melamine on MDF gloss with with impact edging, all round colour white or similar approved. Backing boards: white moisture resistant masonite backing boards in cupboards and drawer units. Carcase: 16mm moisture resistant melamine board with impact edging all round colour white. Base unit to sit on adjustable 100mm stainless steel plinth legs Drawer unit approximate size 2500 x 600 x 840mm high, all sides to be 16mm moisture resistance malamine board white with impact edging, ball bearing slide 35mm UTA F/EXT 500mm-RIH 545 RAIEL or similar approved (sinks elsewhere). With door, sides & mid shelf (Ground floor)	no.	1		
6.1.17		Drawer unit approximate size 3700 x 600 x 840 mm high, all sides to be 16mm moisture resistance malamine board white with impact edging, ball bearing slide 35mm UTA F/EXT 500mm-RIH 545 Rael or similar approved With door, sides & mid shelf (Ground floor) Countertops Ceasar stone 5031 statuario Maximus 20mm Quarts or similar approved Counter top size 2500 x 600mm, to be 16 mm moisture resistant melanine board with impact edging all round colour white. Base unit to sit on adjustable 100 mm stainless steel plinth legs.(Ground floor)	no.	1		
6.1.18		Countertops Ceasar stone 5031 statuario Maximus 20mm Quarts or similar approved Counter top size 2500 x 600mm, to be 16 mm moisture resistant melanine board with impact edging all round colour white. Base unit to sit on adjustable 100 mm stainless steel plinth legs.(Ground floor)	no.	1		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription	Unit	Qty		
		<u>CIVIL WORKS</u>				
		<u>Countertops</u> <u>Stone 5031 statuario Maximus 20mm Quarts similar or approved</u>				
6.1.19		Counter top size 3700 x 600mm, to be 16 mm moisture resistant melanine board with impact edging all round colour white. Base unit to sit on adjustable 100 mm stainless steel plinth legs.(Ground floor)	no.	1		
6.1.20		Counter top size 3700 x 500mm, to be 16 mm moisture resistant melanine board with impact edging all round colour white. Base unit to sit on adjustable 100 mm stainless steel plinth legs.(Ground floor)	no.	1		
6.1.21		Counter top size 3955 x 600 mm Ceasar stone 5031 statuario maximus 20mm Quartz Countertop with eased edgeor similar approved, painted 6mm low iron toughened Glass splashback 5150mmx 500 (4Th Floor)	no.	1		
6.1.22		Countertop 2400 x 600 mm and 500mm front panel , joint between top and front panel to be 45 degreemiter edge. Front panel 2400x500mm. Provision to be made for gms under counter support bracket.(Ground Floor)	no.	1		
6.1.23		Countertop 3030 x 600 mm and 500mm front panel , joint between top and front panel to be 45 degreemiter edge. Front panel 3030x500mm. Provision to be made for gms under counter support bracket.(Ground Floor)	no.	1		
7		<u>Mezzanine</u> <u>STRUCTURAL STEEL WORK</u> <u>Supplementary preambles</u> <u>Description of bolts shall be deemed to include nuts and washers</u> <u>STEEL COLUMNS AND BEAMS</u> <u>Welded beams in single lenghts with flat section bearer and connection plates bolted to columns</u>				
7.1.1		457 x 152 x 67 I Beam	Tonnes	0.05		
7.1.2		IPE 100 I Beam	Tonnes	6		
7.1.3		300 x 100 x 9 PFC	Tonnes	1		
		<u>BOLTS, FASTENERS, ETC.</u> <u>Bolts to Beams</u>				
7.1.4		16mm diameter bolts to beams	Tonnes	0.01		
		<u>PAINTING</u> <u>All painting to be done to Transnet's specification. Colour to be approved by the Architect.</u> <u>On galvanised structural steel columns, beams, etc.</u>				
7.1.5		On galvanised structural steel columns, beams, etc.	Tonnes	7		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
7.2		<u>CIVIL WORKS</u> <u>Mezzanine</u> <u>CARPENTRY AND JOINERY</u> <u>Particle board</u> <u>Particle board shall comply with the following specifications</u> <u>Joinery</u> <u>Description of hardwood joinery shall be deemed to include</u> <u>pelleting of bolt holes</u> <u>Fixing</u> <u>items described as nailed shall be deemed to be fixed with</u> <u>hardened steel nails or shot pins to brickwork or concrete</u> <u>Laminate finish shall be glued under pressure, edge strips shall</u> <u>be built jointed at junctions with adjacent similar finish</u> <u>FLOORS ETC</u>				
7.2.1.		21mm Pine shutter ply timber on top of steel beams(2440x1220)	m	34		
7.2.2		<u>PLASTERING</u> <u>Internal cement plaster on walls</u> on walls	m ²	234		
7.2.3		on narrow widths	m ²	4		
7.2.4		<u>Paint</u> <u>All painting shall be done in accordance with specifications</u> <u>unless otherwise described</u> <u>Prepare, prime and paint new plastered surfaces with min 3</u> <u>finishing coats, with Plascon luxurious silk finish or similar</u> <u>approved. Painting to be in strict accordance with manufactures</u> <u>specification, Deep colour to Architects specifications</u> <u>Existing Dado Rail to remain and receive 2 coats of dulux Pearl</u> <u>Glo Paint or similar approved</u> on walls (Ablutions)	m ²	702		
7.2.5		<u>ON PLASTER BOARD</u> on partitions 1 Coat Dulux wood primer and 3 coats Dulux Pearl Glo water based Finish or similar approved. Paint colour Dark Grey; Drawing ref: 1-001-A-SC- 0005-01	m ²	2520		
7.2.6		On Doors	m ²	90		
7.2.7		All painting shall be done in accordance with specifications unless otherwise described Drawing reference: 1-001-A-SC-0005-01 On door frames	m ²	30		
7.3		<u>PAPERHANGING</u> Preparatory work to existing work. Surfaces shall be thoroughly washed down and allowed to dry completely before any paperhanging is commenced. Blistered or peeling paint shall be completely removed an cracks shall be opened, filled with a suitable filler and finished smooth. Bare plaster surfaces shall be painted with a single coat of inferior quality PVA emulsion paint. <u>PAPERHANGING TO NEW WORK</u> <u>Custom made full colour, floor to ceiling</u> Supply , Install, Design of Wallpaper.				
7.3.1		On previously painted walls and columns (9th floor) New 2800mm high wallpaper to all Corridors, passages,patern to be confirmed by architect. Allow R300/sqm excl. epoxy and installation.	m ²	66		
7.3.2		On previously painted walls and columns (2nd Floor)	m ²	1450		
8		<u>Ironmongery</u> <u>Supplementary Premeables</u> <u>D 27</u> <u>Hinges, Bolts ETC</u>				
8.1.1		100 x 75 SS GR13 Butt Hinge	No	3		
8.1.2		<u>Catches, Cabin Hooks, ETC</u> Union or similar approved Union AL8722AS Coat Hoak Rubber Tipped	No	1		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription				
		<u>CIVIL WORKS</u> <u>Ironmongery</u> <u>Supplementary Premeables</u> <u>Locks</u> <u>Equal or similar approved</u> <u>The Following locks are to be suitable for master key operation</u>				
8.1.3		Union 37651AS Paraplegic Facility Indicator Bolt AS or similar approved	No	1		
		<u>Handles</u> <u>Equal or similar approved</u>				
8.1.4		Union PHD-CF-300-22SS. SS BT Handle with Flange Fixing-300 Centres 22 Diameter	No	1		
		<u>Push Plates and Kicking Plates</u> <u>Equal or similar approved</u>				
8.1.5		700 x 800 mm Union SS5086-700W09 Kick Plate	No	1		
		<u>Door Closers</u>				
8.1.6		DC700DA AA CAM Motion Closer EN3-6 DA similar or approved	No	1		
		<u>Letters, Nameplates, ETC</u>				
8.1.7		SS5066-06SSE14 Paraplegic Sign similar or approved	No	1		
		<u>D28 /D29 / D36</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.8		8352-200BLK ALUMINIUM REFLEX HINGE 200mm black P/C	No	9		
		<u>Locks</u> <u>The Following locks are to be suitable for master key operation</u>				
8.1.9		QR35X85MM-SS ROLLER LATCH & DEADLOCK - STAINLESS STEEL	No	3		
8.1.10		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	3		
		<u>Handles</u> <u>Equal or similar approved</u>				
8.1.11		30x400mm Union 520286-400BBSS. SS KINGLET SQUARE PULL HANDLE BTB	No	3		
		<u>Push Plates and Kicking Plates</u> <u>Equal or similar approved</u>				
8.1.12		Union SS5306-05SS. SS E/PROFILE square Escutcheon(Pairs) or similar approved	No	3		
		<u>Door Closers</u>				
8.1.13		DC500DA AA CAM ACTION Closer EN 1-4 SIL	No	3		
		<u>Sliding Gear</u>				
8.1.14		87001SS FLOOR DOOR STOP SATIN SS	No	3		
		<u>D16 /D17</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.15		8352-200BLK ALUMINIUM REFLEX HINGE 200mm black P/C	No	6		
		<u>Locks</u> <u>Equal or similar approved</u> <u>The Following locks are to be suitable for master key operation</u>				
8.1.16		QR35X85MM-SS SPRING LATCH & DEADLOCK - STAINLESS STEEL	No	2		
8.1.17		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	2		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription		
		<u>CIVIL WORKS</u> <u>Ironmongery</u> <u>Supplementary Premeables</u> <u>Handles</u> equal or similar approved		
8.1.18		6274-06SS IMPALA LEVER HANDLE on ROSE	No	2
		<u>Sliding Gear</u> 87001SS FLOOR DOOR STOP SATIN SS	No	2
		<u>D30/D31/D32/D33/D34</u> <u>Hinges, Bolts ETC</u> 100X75 SS GR13 BUTT HINGE JH-BB-SS-STD.2BB	No	15
		<u>Catches, Cabin Hooks, ETC</u> equal or similar approved AL8722AS Coat Hoak Rubber Tipped	No	5
		<u>Locks</u> The Following locks are to be suitable for master key operation w/c 8mm DEADLOCK - Stainless steel	No	5
		<u>Handles</u> 22X200mm BTB 520286-200BBSS. SS KINGLET SQUARE PULL HANDLE	No	5
		<u>Push Plates and Kicking Plates</u> SS5306-05SS. SS BATHROOM square Escutcheon	No	5
		<u>D21/D22/D26</u> <u>Hinges, Bolts ETC</u> AL8208-180AS/MD Flush Bolt for Metal Doors	No	3
		<u>Locks</u> The Following locks are to be suitable for master key operation QR35x85mm-SS Roller Latch & Deadlock0 Stainless steel	No	3
		ALB208-180AS/MD Flush Bolt for Metal Doors <u>Handles</u> 30X400mm BTB Union 520286-400BBSS. SS KINGLET SQUARE PULL HANDLE or similar approved	No	3
		<u>Push Plates and Kicking Plates</u> <u>Equal or similar approved</u> SS5306-05SS. SS E/PROFILE SQUARE Escutcheon(Pairs)	No	3
		<u>Door closer</u> DC240DAHO CAM ACTION FS EN 2-4 DAHO	No	3
		<u>D18/D19/D20/D55/D56</u> <u>Hinges, Bolts ETC</u> 100X75 SS GR13 BUTT HINGE equal or similar approved JH-BB-SS-STD.2BB	No	15
		<u>Locks</u> The Following locks are to be suitable for master key operation L-2215-78SS/SL Mortice Sash Lock-Stainless steel	No	5
		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	5
TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription				
		<u>CIVIL WORKS</u> <u>Ironmongery</u> <u>Supplementary Premeables</u> <u>Handles</u>				
8.1.34		Equal or similar approved 6274-06SS IMPALA LEVER handle on Rose	No	5		
		<u>Sliding Gear</u>				
8.1.35		87001SS FLOOR DOOR STOP SATIN SS	No	5		
		<u>D39</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.36		100x75 similar or approved JH-BB-SS-STD, 2BB GR13 BUTT HINGE	No	3		
		<u>Locks</u>				
		The Following locks are to be suitable for master key operation				
8.1.37		QR35x85mm-SS Deadbolt lock 35MW- Stainless steel	No	1		
8.1.38		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	1		
		<u>Handles</u>				
8.1.39		FF65x50SS Flush Finger Pull 65x50mm	No	1		
		<u>Push Plates and Kicking Plates</u>				
8.1.40		PZ-05SS, Escutcheon on Rose Profile (Pairs)	No	1		
		<u>D37/D38</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.41		8352-200BLK Aluminium Reflex Hinge 200mm Black P/C	No	4		
		<u>Catches, Cabin Hooks, ETC</u>				
8.1.42		ARC1182SS Roller Catch	No	2		
		<u>Handles</u>				
8.1.43		Equal or approved FF65x50SS Flush Finger Pull 65x50mm	No	2		
		<u>D35</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.44		200mm Black P/C Union 8352-200BLK Aluminium Reflex Hinge or similar approved	No	3		
		<u>Locks</u>				
		The Following locks are to be suitable for master key operation				
8.1.45		QR35x85mm-SS Roller Latch & Deadlock 35MW- Stainless steel	No	1		
8.1.46		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	1		
		<u>Handles</u>				
8.1.47		30x400mm BTB, Union 520286-400BBSS, SS Kinglet Square Pull handle or similar approved	No	1		
		<u>Push Plates and Kicking Plates</u>				
		<u>Equal or approved</u>				
8.1.48		SS5306-05SS, SS E/Profile Square Escutcheon(Pairs)	No	1		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription				
		<u>CIVIL WORKS</u>				
		<u>Ironmongery</u>				
		<u>Supplementary Preambleables</u>				
		<u>Door Closers</u>				
8.1.49		Equal or similar approved DC 500 CAM Action Closer EN 1-4 SL	No	1		
		<u>Sliding Gear</u>				
8.1.50		87001SS Floor Door Stop Satin SS or similar approved	No	1		
		<u>D01-D15 / D40-D54</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.51		200mm Black P/C Union 8352-200BLK Aluminium Reflex Hinge or similar approved	No	90		
		<u>Locks</u>				
		<u>The Following locks are to be suitable for master key operation</u>				
8.1.52		QR35x85mm-SS Spring Latch and Deadbolt Lock- Stainless steel	No	30		
8.1.53		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	30		
		<u>Handles</u>				
8.1.54		6274-06SS Impala lever Handle on Rose	No	30		
		<u>Sliding Gear</u>				
8.1.55		87001SS Floor Door Stop Satin SS	No	30		
		<u>D23/D24/D25/P27/P28/P30/P31</u>				
		<u>Hinges, Bolts ETC</u>				
8.1.56		200mm Black P/C Union 8352-200BLK Aluminium Reflex Hinge	No	28		
		<u>Locks</u>				
		<u>The Following locks are to be suitable for master key operation</u>				
8.1.57		QR35x85mm-SS Roller Latch and DeadLock- Stainless steel	No	7		
8.1.58		2X18SCMKD DOUBLE CYLINDER PROFILE MKD SC	No	7		
		<u>Handles</u>				
8.1.59		520286-40BBSS, SS Kinglet Square Pull Handle 30x400mm BTB	No	7		
		<u>Push Plates and Kicking Plates</u>				
8.1.60		SS5306-05SS, SS E/Profile Square Escutcheon(Pairs)	No	7		
		<u>Door Closers</u>				
8.1.61		DC 500 CAM Action Closer EN 1-4 SL	No	7		
		<u>Sliding Gear</u>				
8.1.62		87001SS Floor Door Stop Satin SS	No	4		
		<u>Photoluminentscent Signs</u>				
		<u>Supplementary Preambleables</u>				
		<u>All signage as per Transnet Brand Guidelines</u>				
8.1.63		500 x 200 mm Sign with Male and Female sign (T-INT-19/20)	No	17		
8.1.64		220 x 200mm Sign with Male sign (T-INT-19)	No	3		
8.1.65		220 x 200mm Sign with Male sign (T-INT-20)	No	3		
8.1.66		220 x 200mm Sign with Wheelchair sign (T-INT-21)	No	3		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription			
		CIVIL WORKS			
		<u>Photoluminentscent Signs</u>			
		<u>Supplementary Preambles</u>			
8.1.62		500 x 200mm Sign (T-INT-20)	No	26	
8.1.63		1130mm Transnet Port Terminal Logo Sign (T-INT 21)	No	4	
8.1.64		150 x 60 mm Sign with Numbers (T-INT-16)	No	75	
8.1.65		200 x 200 mm Sign with Coffee pictogram sign (T-INT-19)	No	6	
8.1.66		400 x 100mm Sign with Arrows sign (T-INT-10)	No	12	
8.1.67		500 x 420 mm Sign with Transnet logo and arrows (T-INT-08)	No	9	
8.1.68		300 x 213 mm Sign (T-INT-15)	No	13	
8.1.69		600 x 425 mm Sign No Authorized Sign (T-INT-23)	No	6	
8.1.70		300 x 60 mm Sign (T-INT-17)	No	61	
8.1.71		1500 x 210 mm Sign (T-INT-2)	No	6	
8.1.72		1130mm Transnet Port Terminal Logo Sign (T-INT 28)	No	15	
8.1.73		Fire signage -Fire Extingusher down with arrow to SANS 1186	No	27	
8.2		<u>FURNITURE</u>			
		<u>Delivery of Flatpacks Furniture</u>			
		<u>All furniture from Storage is flat packed. Furniture to be transported to site, assembled and placed into position approximately 15 kms. All furniture from TPT HQ to be dismantled, wrapped and transported to site approximately 10 kms.</u>			
		<u>Furniture to be re-assembled and placed into position on site. All frames at TPT HQ to be wrapped and transported to site. Picture frames to be hung on walls as determined on site using 2 by M8 hilti HRD-CR Plastic Frame anchors per frame.</u>			
		<u>Load, Deliver Flatpacks furniture from TPT HQ Office and Storage to be delivered to 202 Antony Lembede street TPL Office.</u>			
		<u>STORAGE</u>			
8.2.1		TYPE 1 HOT DESK RIGHT HANDED	no.	75	
8.2.2		TYPE 2 HOT DESK LEFT HANDED	no.	75	
8.2.3		TYPE 5 GM DESK RIGHT HANDED	no.	3	
8.2.4		STANDARD WORKSTATION CHAIRS	no.	50	
8.2.5		GM MEETING TABLE CHAIRS	no.	16	
8.2.6		GM CHAIR	no.	4	
8.2.7		GM BOARDROOM CHAIRS	no.	6	
8.2.8		BOARDROOM CHAIRS	no.	56	
8.2.9		BOARDROOM CHAIRS	no.	22	
8.2.10		GM WALL UNIT	no.	4	
8.2.11		GM MEETING TABLE 4 SEATER	no.	4	
8.2.12		BOARDROOM TABLE 6 SEATER	no.	1	
8.2.13		BOARDROOM TABLE 8 SEATER	no.	4	
8.2.14		BOARDROOM TABLE 10 SEATER	no.	1	
8.2.15		BOARDROOM TABLE 14 SEATER	no.	1	
8.2.16		DESK SCREEN 1900 X 500	no.	97	
8.2.17		DESK SCREEN 1600 X 500	no.	131	
8.2.18		WORKSTATION WASTE BINS	no.	100	
		<u>TPT HQ</u>			
8.2.19		TYPE 3 PERMANENT DESK RIGHT HANDED		67	
8.2.20		TYPE 4 PERMANENT DESK LEFT HANDED		69	
8.2.21		TYPE 6 GM DESK LEFT HANDED		4	
8.2.22		CE DESK		1	
		TOTAL CARRIED FORWARD TO SECTION SUMMARY			

Item	Payment Clause	Discription				
		CIVIL WORKS				
8.2.23		CANTEEN TABLES		12		
8.2.24		COFFEE TABLES		4		
8.2.25		STANDARD WORKSTATION CHAIRS		286		
8.2.26		GM MEETING TABLE CHAIRS		12		
8.2.27		GM CHAIR		3		
8.2.28		CE SINGLE SEATER COUCH		6		
8.2.29		CE DOUBLE SEATER COUCH		1		
8.2.30		CE CHAIR		1		
8.2.31		CE BOARDROOM CHAIRS		8		
8.2.32		SINGLE SEATER ARM CHAIR		6		
8.2.33		DOUBLE SEATER COUCH		2		
8.2.34		CANTEEN CHAIRS		48		
8.2.35		BAR STOOL		5		
8.2.36		FILING CABINET / CREDENZA		108		
8.2.37		GM WALL UNIT		3		
8.2.38		CE FLOOR UNIT		2		
8.2.39		SIDE UNIT		1		
8.2.40		GM MEETING TABLE 4 SEATER		3		
8.2.41		CE MEETING TABLE		1		
8.2.42		BOARDROOM TABLE 22 SEATER		1		
8.2.43		CE BOARDROOM TABLE 8 SEATER		1		
8.2.44		DESK SCREEN 2400 X 500		80		
8.2.45		DESK SCREEN 1600 X 500		125		
8.2.46		WORKSTATION WASTE BINS		186		
8.2.47		OFFICE RECYCLING BIN		10		
8.2.48		CANVAS PICTURE FRAME SET		6		
8.2.49		CANVAS PICTURE FRAME		10		
8.2.50		PICTURE FRAME WITH GLASS FRONT		10		
8.2.51		PICTURE FRAME WITH GLASS FRONT		10		
8.2.52		PICTURE FRAME WITH GLASS FRONT		10		
8.2.53		PICTURE FRAME WITH GLASS FRONT		10		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Page	Amount
		CIVILS SECTION SUMMARY		
		SECTION SUMMARY		
		Page Total brought forward	4	
		Page Total brought forward	5	
		Page Total brought forward	6	
		Page Total brought forward	7	
		Page Total brought forward	8	
		Page Total brought forward	9	
		Page Total brought forward	10	
		Page Total brought forward	11	
		Page Total brought forward	12	
		Page Total brought forward	13	
		Page Total brought forward	14	
		Page Total brought forward	15	
		Page Total brought forward	16	
		Page Total brought forward	17	
		Page Total brought forward	18	
		TOTAL CARRIED FORWARD TO FINAL SUMMARY		-

Item	Payment Clause	Discription	Unit	Qty	Rate	Amount
9		<u>ELECTRICAL WORKS</u> <u>BILL NO.6</u> <u>GROUND FLOOR</u> <u>Note</u> <u>All the electrical works shall be carried out in accordance with TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments of SANS 10142-1 Code of Practice for the Wiring of Premises and any additional requirements thereto, described in this specification</u>				
9.1.1		Allowance for safe dismantling of the existing electrical infrastructure comprising of lighting, the associated wiring and wireways. <u>Cable Racking</u> <u>Note</u> <u>All installations shall be safely done in accordance with SANS 10142. Cable ladder shall be supported at every 1,5m intervals as details on drawing:001-E-LA-0001-01</u>	sum	1		
9.1.2		Supply and install Hot-dip Galvanised 200mm lite span straight cable ladder	ea	15		
9.1.3		Supply and install Hot-dip Galvanized 200mm lite span horizontal bend cable ladder	ea	4		
9.1.4		Supply and install Hot-dip Galvanised 200mm external bend cable ladder	ea	3		
9.1.5		Supply and install Hot-dip Galvanised flat splice set c/w fasteners	ea	15		
9.1.6		Supply and installation Hot-dip Galvanised 200mm Single Cantilever bracket.	ea			Rate only
9.1.7		Supply and installation of Hot-dip Galvanised 40x40mm channel (This shall be cut into 250mm lengths for the cable ladder supports)	ea	3		
9.1.8		Supply and installation of Hot-dip Galvanised 40x40mm channel hangers	ea	50		
9.1.9		plate, joint, support structure lugged and secured with galvanised bolts	ea	10		
9.1.10		200mm dia x 400mm deep concrete core drilling and make good (drilling procedure shall be provided onsite).	each	5		
		<u>Cabling</u> <u>Note</u> <u>Stainless Steel bandit straps. Cable tag numbers to be Stainless Steel.</u>				
9.1.11		Supply and installation of 185mm ² PVC insulated PVC Bedded SWA PVC sheathed 600/1000V x 4 Core cable as shown on drawing:001-E-LA-0001-01	m	50		
9.1.12		Supply and install 70mm ² PVC insulated earth conductor as shown on drawing:001-E-LA-0001-01	m	50		
9.1.13		Supply and installation of 16mm ² PVC insulated PVC Bedded SWA PVC sheathed 600/1000V x 4 Core cable as shown on drawing:001-E-LA-0001-01	m	20		
9.1.14		Supply and install 6mm ² PVC insulated earth conductor as shown on drawing:001-E-LA-0001-01	m	20		
9.1.15		Supply and installation of 4mm ² PVC insulated PVC Bedded SWA PVC sheathed 600/1000V x 4 Core cable as shown on drawing:001-E-LA-0001-01	m	20		
9.1.16		Supply and install 2,5mm ² PVC insulated earth conductor as shown on drawing:001-E-LA-0001-01	m	20		
		<u>Cable Terminations</u> <u>Note:</u> <u>Cable terminations shall include mechanical gland with relevant shroud or housing, lugs, hexagon crimped, core sleeve identification.</u>				
9.1.17						
9.1.18		Supply and Install a No.6 captive component terminal gland set	ea	2		
9.1.19		Supply and Install a No.3 compression gland set	ea	2		
9.1.20		Supply and Install a No.3 captive component terminal gland set	ea	2		
9.1.21		Supply and Install a No.2 compression gland set	ea	2		
9.1.22		Supply and Install a No.1 captive component terminal gland set	ea	2		
9.1.23		Supply and Install a No.0 compression gland set	ea	2		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
		ELECTRICAL WORKS				
		Distribution Board				
		<u>Note:</u> <u>Distribution board works and or installation shall be carried out in accordance with TPD-002-DBSPEC Technical specification for low voltage distribution boards, OEM regulations and SANS 10142-1</u>				
9.1.24		Supply and installation of a new surface mounted distribution board c/w with all components as per drawing no:001-E-LA-0008-01.	sum	1		
9.1.25		Supply and installation of a 320A,15kA, 4P Moulded Case Circuit Breaker c/w Magnetic Trip Unit. The CB shall be housed in a suitable metal junction box for termination 185mm ² PVC insulated PVC Bedded SWA PVC sheathed 600/1000V x 4 Core cable of a 185mm ² and be secured/installed at the existing DB -G-B panel shown in the drawing,	sum	1		
		Trunking				
		<u>Supply and install Pre-galvanized wiring channel/ OL2000 trunking with built-in splice tab and with PVC covers as shown on drawing:001-E-LA-0001-01. The trunking shall be suspended with 10mm threaded rods inside the ceiling void.</u>				
9.1.26		Straight length	m	400		
9.1.27		Distribution Outlet	ea	2		
9.1.28		PVC Cover	m	400		
9.1.29		10mm dia Zinc plated threaded Rod	m	200		
9.1.30		OL2000 trunking hanger	ea	50		
9.1.31		Miscellaneous trunking items: Rawl bolts, Anchor bolts, springs washers, fender washers, flat washers, coupling, channel hangers, nuts,screws, bolts and nuts	sum	1		
		Lighting				
		<u>Note:</u> <u>The light fittings shall be the pluggable type and must be supplied with about 2m length flexible cord and a plug-top. Unswitched socket outlets shall be installed in the ceiling void on the sides of the OL2000 trunking or concrete at reach to the light fittings.</u>				
9.1.32		Supply and installation of 5A unswitched socket outlet complete with PVC round box	ea	72		
9.1.33		Supply and install of one way single lever flush type light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to cabtree.	ea	9		
9.1.34		Supply and install of one way double lever flush type light switch.	ea	2		
9.1.35		4x2 mounting box and cover plate. Equal or similar approved to cabtree.	ea	7		
9.1.36		Supply and install ceiling mount 360° PIR Occupancy sensor. Equal or similar approved to Legrand	ea	9		
9.1.37		600x 600mm 25W LED recessed mount panel with white finish as detailed on drawing:001-E-LA-0002-01	ea	72		
9.1.38		600x 600mm 25W LED ceiling mount panel light fitted with 60minutes emergency gear as detailed on drawing:001-E-LA-0002-01	ea	12		
9.1.39		Supply and installation of equal or similar approved to recess mount Beka Rondo LED HE 11W	ea	42		
9.1.40		Supply and installation of equal or similar approved to recess mount Beka Rondo LED Eco 22W, 4000K	ea	25		
9.1.41		Supply and installation of equal or similar approved to recess mount Beka Rondo LED Eco 22W, 4000K c/w 60minutes emergency kit	ea	7		
		Wiring				
		<u>Note:</u> <u>Wiring shall be pulled into the ceiling void trunking, conduiting for power circuits and to the powerskirting for power circuits as shown on drawing. (2,5mm² housewire for lighting as well as the plugs circuits, and the 4mm² housewire for the power isolators)</u>				
9.1.42		2,5mm ² housewire (Red)	m	1500		
9.1.43		2,5mm ² housewire (White)	m	1500		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
		ELECTRICAL WORKS				
9.1.44		2,5mm ² housewire (Blue)	m	1500		
9.1.45		2,5mm ² housewire (Black)	m	1500		
9.1.46		2,5mm ² housewire - earthing (Green/Yellow)	m	1500		
9.1.47		4mm ² housewire (Red)	m	50		
9.1.48		4mm ² housewire (White)	m	50		
9.1.49		4mm ² housewire (Blue)	m	50		
9.1.50		4mm ² housewire (Black)	m	50		
9.1.51		4mm ² housewire - earthing (Green/Yellow)	m	50		
9.1.52		Supply and installation of wiring miscellaneous accessories including ferrules;lugs,screws,washer,PVC glands,silcon, glue, rubber gromets	Sum	1		
		Conduit <u>Conduiting shall be securely installed and saddled at 1,5m intervals in the ceiling void on the concrete soffit.</u>				
9.1.53		Supply and Installation of 20 mm PVC conduit	m	200		
9.1.54		Supply and Installation of 32 mm PVC conduit	m	300		
9.1.55		Conduit installation accessories including end caps,ids,saddles,couplings, adaptors, bends, round boxes, wall boxes, junction boxes, push-in glands, PVC glue	Sum	1		
		Power (Socket outlets and Isolators) <u>Note:</u> Supply and installation of power outlets and sockets in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments as shown on drawing:001-E-LA-0002-01 Allowance for sockets/isolators shall include mounting boxes and cover plates.				
9.1.56		45A,380V, IP66, 3Pole Surface mounted Rotary Isolator switch	ea	1		
9.1.57		32A Surface mount 380V Isolator switch	ea			Rate Only
9.1.58		20A, 220V Surface mounted single phase Isolator switch (in ceiling void)	ea	12		
9.1.59		20A,380V,3Pole, IP66 Rotary Isolator switch	ea	1		
9.1.60		20A,220V Recess mount Isolator switch	ea	4		
9.1.61		20A Recess mount 220V Cordgrip Isolator	ea	1		
9.1.62		16A Surface mounted 220V standard switched socket outlets	ea	7		
9.1.63		16A Standard flush mounted 220V single switched socket outlets	ea	5		
9.1.64		16A,220V flush mounted single switched socket outlets comprising of	ea	2		
9.1.65		16A Powerskirting mounted 220V single switched socket outlets	ea	60		
9.1.66		16A Shaved earth pin/dedicated 220V socket outlets mounted on powerstking (Red)	ea	112		
9.1.67		Supply and installation of equal or similar approved to Legrand 4 compartment flush mounted carpet floor boxes comprising of standard SSO + Dedicated shaved Earth pin SSO and 2 x Comms points c/w flush metal mounting box and clip-on lid.	ea	9		
9.1.68		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea			Rate only
		ICT <u>Note:</u> <u>Switching network equipment to be connected via fiber uplink, and all Power over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switcht to terminating LAN ethernet network points</u>				
		TOTAL CARRIED FORWARD TO SECTION B				

Item	Payment Clause	Description	Unit	Qty	Rate	Amount
		<u>ELECTRICAL WORKS</u>				
		<u>ICT</u>				
9.1.69		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	944		
9.1.70		Supply and installation of RJ45 connector	ea	100		
9.1.71		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	50		
9.1.72		Supply and installation of RJ11 CAT6 Telephone point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	50		
9.2		<u>Powerskirting</u> Supply and install 2 tier grey power skirting trunking c/w lids, ends, bends joints and spacers - all firmly secured to the relevant walls as shown on drawing:001-E-LA-0002-01.				
9.2.1		Straight Length	m	200		
9.2.2		Joints	ea	100		
9.2.3		Internal elbow	ea	28		
9.2.4		External elbow	ea	5		
9.2.5		Flat elbow	ea			Rate Only
9.2.6		Flat Junction	ea			Rate Only
9.2.7		End caps	ea	5		
		<u>Testing and Commissioning</u>				
		<u>Note:</u>				
9.2.8		Allowance for testing and commissioning of the entire electrical installation in accordance with SANS 10142-1	sum	1		
		<u>Ground/Mezzanine Floor</u>				
		<u>Lighting</u>				
9.2.9		Supply and installation of new 1200mm LED light fittings wired with 2,5mm ² PVC insulated house wire.	ea	5		
9.2.10		Supply and installation of new 1200mm 40W LED light fitting wired with 2,5mm ² PVC insulated house wire c/w emergency kit.	ea	1		
9.2.11		Supply and Install new 20A,6kA single Circuit breaker installed at the existing Ground Distribution Board.	ea	1		
		<u>Wiring</u>				
		<u>Note:</u>				
		Wiring shall be safely pulled through PVC conduit from the existing electrical distribution boards via ceiling space to the powerskirting for power circuits as shown on drawing:001-E-LA-0002-01.				
9.2.12		2,5mm ² housewire (Red)	m	30		
9.2.13		2,5mm ² housewire (Black)	m	30		
9.2.14		2,5mm ² housewire - earthing (Green/Yellow)	m	30		
9.2.15		Supply and install ceiling mount 360° PIR Occupancy sensor. Equal or similar approved to Legrand	ea	1		
9.2.16		Supply and install of one way single lever flush type light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to cabtree.	ea	1		
		<u>Conduiting</u>				
		<u>Note:</u>				
		Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
9.2.17		Supply and installation of 20mm PVC conduit	m	20		
9.2.18		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	Sum	1		
		<u>Second Floor</u>				
		<u>Works in the Distribution Boards</u>				
		<u>Note:</u>				
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty	Rate	Amount
		ELECTRICAL WORKS Second Floor Works in the Distribution Boards Note: The Contractor shall supply and install new additional power circuits in the existing distribution boards (DB - B, C & D) as indicated on drawing number: 001-E-LA-0008-01. This shall include finding the spare spaces, installation of new miniature circuit breakers matching the existing specification (Schneider Electric) labelling and updating of the distribution boards legends. The works shall be carried out in accordance with SANS 10142-1 and specification No. TPD: 001-EL&PSPEC; Technical specification for the supply and installation of electrical lighting and power in buildings other than dwelling houses Supply and Installation of 63A, 6kA Din mount single Double pole miniature earth leakage unit. Equal or similar approved to Schneider Electric. Each ELU/phase shall cater for at least 6 circuits.	ea	9		
9.2.20		Supply and Installation of 20A, 6kA Din mount equal or similar approved to Schneider Electric single pole miniature circuit breaker	ea	33		
		Conduiting Note: Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
9.2.21		Supply and installation of 20mm PVC conduit	m	90		
9.2.22		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	sum	1		
		Powerskirting Supply and install 3 tier PVC grey power skirting trunking c/w lids, ends,bends joints and spacers all firmly secured to the relevant walls as shown on drawing: 001-E-LA-0005-01(Similar specification to the existing powerskirting).The rates shall include all the mounting screws and accessories.				
9.2.23		Straight Length	m	180		
9.2.24		Joints	ea	60		
9.2.25		Internal elbow	ea	9		
9.2.26		External elbow	ea	2		
9.2.27		Flat elbow	ea			Rate Only
9.2.28		Flat elbow	ea			Rate Only
9.2.29		End caps	ea	10		
		Power Note: Supply and installation of standard and shaved earth pin /dedicated socket outlets on powerskirting in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments as shown on drawing:001-E-LA-0003-01. Allowance shall include circuits labelling.				
9.2.30		16A Power skirting mounted single switched socket outlets	ea	64		
9.2.31		16A Shaved earth pin/dedicated socket outlets mounted on powerskirting (Red)	ea	106		
9.2.32		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea	53		
		ICT NOTE: Switching network equipment/switch to be connected via fiber uplink, and all Power over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switch to terminating LAN ethernet network points				
9.2.33		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	1758		
9.2.34		Supply and installation of RJ45 connector	ea	138		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty	Rate	Amount
		ELECTRICAL WORKS				
		ICT				
9.2.35		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w holding bracket, cover and accessories.	ea	53		
9.2.36		Supply and installation of RJ11 CAT6 Telephone point into a data/comms	ea	53		
9.3		Wiring				
		Note: Wiring shall be safely pulled through PVC conduit from the existing electrical distribution boards via ceiling space to the powerskirting for power circuits as shown on drawing:001-E-LA-0003-01.				
9.3.1		2,5mm ² housewire (Red)	m	500		
9.3.2		2,5mm ² housewire (White)	m	500		
9.3.3		2,5mm ² housewire (Blue)	m	500		
9.3.4		2,5mm ² housewire (Black)	m	500		
9.3.5		2,5mm ² housewire - earthing (Green/Yellow)	m	500		
		Testing and Commissioning				
		Note: Allowance for testing and commissioning in accordance with SANS 10142-1.	sum	1		
		Third Floor				
		Existing Distribution Board				
		Note: Supply and installation of new additional power circuits in the existing distribution board (DB- D) as indicated on drawing number:001-E-LA-0008-01. This shall include finding the spare spaces, installation of new miniature circuit breakers matching the existing specification (Schneider Electric) labelling and updating of the existing distribution boards legends (legend shall be laminated and stuck inside the DB doors.				
9.3.7		Supply and Installation of 63A, 6kA Din mount single phase miniature earth leakage unit. Equal or similar approved to Schneider Electric.	ea	2		
9.3.8		Supply and Installation of 20A, 6kA Din mount equal or similar approved to Schneider Electric single pole miniature circuit breaker	ea	8		
		Conduiting				
		Note: Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
9.3.9		Supply and installation of 20mm PVC conduit	m	50		
9.3.10		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	Sum	1		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>ELECTRICAL WORKS</u>				
		<u>Powerskirting</u> Supply and install 3 tier PVC grey power skirting trunking c/w lids, ends, bends joints and spacers all firmly secured to the relevant walls as shown on drawing:001-E-LA-0004-01. (Similar specification to the existing powerskirting). The rates shall include all the mounting screws and accessories.				
9.3.11		Straight Length	m	90		
9.3.12		Joints	ea	12		
9.3.13		Internal elbow	ea	1		
9.3.14		External elbow	ea			Rate Only
9.3.15		Flat elbow	ea			Rate Only
9.3.16		Flat Junction	ea			Rate Only
9.3.17		End caps	ea	3		
		<u>Power</u> Note: Supply and installation of standard and shaved earth pin /dedicated socket outlets on powerskirting in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments as shown on drawing:001-E-LA-0004-01. Allowance shall include circuits labelling.				
9.3.18		16A Power skirting mounted single switched socket outlets	ea	18		
9.3.19		16A Shaved earth pin/dedicated socket outlets mounted on powerstking (Red)	ea	30		
9.3.20		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea	15		
		<u>ICT</u> NOTE: Switching network equipment/switch to be connected via fiber uplink, and all Power over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switch to terminating LAN ethernet network points				
9.3.21		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	483		
9.3.22		Supply and installation of RJ45 connector	ea	30		
9.3.23		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w holding bracket, cover and accessories.	ea	15		
9.3.24		Supply and installation of RJ11 CAT6 Telephone point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	15		
		<u>Wiring</u> Note: Wiring shall be safely pulled through PVC conduit from the existing electrical distribution board via ceiling space to the powerskirting for power circuits as shown on drawing:001-E-LA-0004-01.				
9.3.25		2,5mm ² housewire (Red)	m	400		
9.3.26		2,5mm ² housewire (White)	m	400		
9.3.27		2,5mm ² housewire (Blue)	m	400		
9.3.28		2,5mm ² housewire (Black)	m	400		
9.3.29		2,5mm ² housewire - earthing (Green/Yellow)	m	400		
		<u>Testing and Commissioning</u>				
9.3.30		Allowance for testing and commissioning in accordance with SANS 10142-1.	sum	1		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		ELECTRICAL WORKS				
		Fourth Floor				
		<u>Existing Distribution Board</u>				
		<u>Note:</u> Supply and installation of new additional power circuits in the existing distribution board (DB- D) as indicated on drawing number: 001-E-LA-0008-01. This shall include finding the spare spaces, installation of new miniature circuit breakers matching the existing specification (Schneider Electric) labelling and updating of the existing distribution boards legends (legend shall be laminated and stuck inside the DB doors.				
9.3.31		Supply and Installation of 63A, 6kA Din mount single phase miniature earth leakage unit. Equal or similar approved to Schneider Electric.	ea	3		
9.3.32		Supply and Installation of 20A, 6kA Din mount equal or similar approved to Schneider Electric single pole miniature circuit breaker.	ea	17		
		Conduiting				
		<u>Note:</u> Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
		Supply and installation of 20mm PVC conduit	m	200		
9.3.33		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	Sum	1		
		Powerskirting				
		Supply and install 3 tier PVC grey power skirting trunking c/w lids, ends,bends joints and spacers all firmly secured to the relevant walls as shown on drawing:001-E-LA-0005-01. (Similar specification to the existing powerskirting).The rates shall include all the mounting screws and accessories.				
9.3.34		Straight Length	m	100		
9.3.35		Joints	ea	50		
9.3.36		Internal elbow	ea	5		
9.3.37		External elbow	ea			Rate Only
9.3.38		Flat elbow	ea			Rate Only
9.3.39		Flat Junction	ea			Rate Only
9.3.40		End caps	ea	6		
		Power				
		<u>Note:</u> Supply and installation of standard and shaved earth pin /dedicated socket outlets on powerskirting and recessed onto the walls in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments as shown on drawing:001-E-LA-0005-0 Allowance shall include circuits labelling, wall boxes and cover plates.				
9.3.41		16A Powerskirting mounted single switched socket outlets	ea	25		
9.3.42		16A Shaved earth pin/dedicated socket outlets mounted on powerstking (Red)	ea	40		
9.3.43		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea			Rate Only
9.3.44		20A Recess mount 220V Cordgrip Isolator	ea	1		
9.3.45		16A Standard flush mounted 220V single switched socket outlets	ea	3		
9.3.46		20A, 220V Surface mounted single phase Isolator switch (in ceiling void)	ea	10		
		ICT				
		<u>NOTE:</u> Switching network equipment/switch to be connected via fiber uplink, and all Power over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switcht to terminating LAN ethernet network points				
9.3.47		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	554		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>ELECTRICAL WORKS</u>				
		<u>ICT</u>				
9.3.48		Supply and installation of RJ45 connector	ea	42		
9.3.49		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w holding bracket, cover and accessories.	ea	20		
9.3.50		Supply and installation of RJ11 CAT6 Telephone point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	20		
		<u>Wiring</u>				
		Note: <u>Wiring shall be safely pulled through PVC conduit from the existing electrical distribution board via ceiling space to the powerskirting for power circuits as shown on drawing:001-E-LA-0005-01.</u>				
9.3.51		2,5mm ² housewire (Red)	m	400		
9.3.52		2,5mm ² housewire (White)	m	400		
9.3.53		2,5mm ² housewire (Blue)	m	400		
9.3.54		2,5mm ² housewire (Black)	m	400		
9.3.55		2,5mm ² housewire - earthing (Green/Yellow)	m	400		
		<u>Lighting</u>				
		Note: <u>The light fittings shall be the ceiling mount type and must be supplied with about 2m length flexible cord and a plug-top, with capabilities of the cord being removed and directly wire the fitting.</u>				
9.3.56		Supply and installation of 5A unswitched socket outlet complete with PVC round box	ea	40		
9.3.57		Supply and install of one way single lever flush type light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to cabtree.	ea	14		
9.3.58		Supply and install of one way double lever flush type light switch.	ea	2		
9.3.59		Supply and install of dimmable flush type light switch light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to Legrand.	ea	2		
9.3.60		Provisional allowance of ten thousand rands (R10 000) for repositioning of the existing light fittings around the existing 600x600mm removable ceiling.	sum	1		
9.3.61		Supply and install 360° PIR Occupancy sensor. Equal or similar approved to Legrand.	ea	2		
9.3.62		Allowance for 600x 600mm 25W LED ceiling mount panel light as detailed on detailed on drawing:001-E-LA-0005-01	ea	23		
9.3.63		Allowance for 600x 600mm 25W LED ceiling mount panel light fitted with 60minutes emergency kit as detailed on detailed on drawing:001-E-LA-0005-01	ea	16		
9.3.64		Supply and installation of equal or similar approved to recess mount dimmable Beka Rondo LED HE 11W	ea	12		
		<u>Testing and Commissioning</u>				
9.3.65		Allowance for testing and commissioning accordance with SANS 10142-1.	sum	1		
		<u>Fifth Floor</u>				
		Existing Distribution Board works				
		Note: <u>Supply and installation of new additional power circuits in the existing distribution boards (DB C&D) as indicated on drawing number: 001-E-LA-0008-01. This shall include finding the spare spaces, installation of new miniature circuit breakers matching the existing specification (Schneider Electric) labelling and updating of the existing distribution boards legends (legend shall be laminated and stuck inside the DB doors.</u>				
9.3.66		Supply and Installation of 63A, 6kA Din mount single phase miniature earth leakage unit. Equal or similar approved to Schneider Electric.	ea	8		
9.3.67		Supply and Installation of 20A, 6kA Din mount equal or similar approved to Schneider Electric single pole miniature circuit breaker.	ea	63		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription	Unit	Qty		
9.4		<u>ELECTRICAL WORKS</u> <u>Conduiting</u> <u>Note:</u> Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
9.4.1		Supply and installation of 20mm PVC conduit	m	350		
9.4.2		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	ea	1		
		<u>Powerskirting</u> Supply and install 3 tier PVC grey power skirting trunking c/w lids, ends,bends joints and spacers all firmly secured to the relevant walls as shown on drawing:001-E-LA-0006-01 . (Similar specification to the existing powerskirting).The rates shall include all the mounting screws and accessories.				
9.4.3		Straight Length	m	130		
9.4.4		Joints	ea	39		
9.4.5		Internal elbow	ea	4		
9.4.6		External elbow	ea			Rate Only
9.4.7		Flat elbow	ea			Rate Only
9.4.8		Flat Junction	ea			Rate Only
9.4.9		End caps	ea	5		
		<u>Power</u> <u>Note:</u> Supply and installation of standard and shaved earth pin /dedicated socket outlets on powerskirting in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments. Allowance shall include circuits labelling				
9.4.10		16A Powerskirting mounted single switched socket outlets	ea	41		
9.4.11		16A Shaved earth pin/dedicated socket outlets mounted on powerstking (Red)	ea	82		
9.4.12		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea	38		
		<u>ICT</u> <u>NOTE:</u> Switching network equipment/switch to be connected via fiber uplink, and all Power Over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switcht to terminating LAN ethernet network points				
9.4.13		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	1033		
9.4.14		Supply and installation of RJ45 connector	ea	138		
9.4.15		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w holding bracket, cover and accessories.	ea	53		
9.4.16		Supply and installation of RJ11 CAT6 Telephone point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	53		
		<u>Wiring</u> <u>Note:</u> Wiring shall be safely pulled through PVC conduit from the existing electrical distribution board via ceiling space to the powerskirting for power circuits as shown on drawing				
9.4.17		2,5mm ² housewire (Red)	m	800		
9.4.18		2,5mm ² housewire (White)	m	800		
9.4.19		2,5mm ² housewire (Blue)	m	800		
9.4.20		2,5mm ² housewire (Black)	m	800		
9.4.21		2,5mm ² housewire - earthing (Green/Yellow)	m	800		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
		<u>ELECTRICAL WORKS</u>				
		<u>Lighting</u>				
		<u>Note:</u> The light fittings shall be the ceiling mount type and must be supplied with about 2m length flexible cord and a plug-top, with capabilities of the cord being removed and directly wire the fitting				
9.4.22		Supply and installation of 5A unswitched socket outlet complete with PVC round box	ea	35		Rate Only
9.4.23		Supply and install of one way single lever flush type light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to cabtree.	ea			
9.4.24		Supply and install of one way double lever flush type light switch.	ea	1		
9.4.25		Supply and install of dimmable flush type light switch light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to Legrand.	ea			
9.4.26		Supply and install 360° PIR Occupancy sensor. Equal or similar approved to Legrand.	ea	2		
9.4.27		600x 600mm 25W LED ceiling mount panel light as detailed on drawing:	ea	35		
9.4.28		600x 600mm 25W LED ceiling mount panel light fitted with 60minutes emergency kit as detailed on drawing:	ea	5		
		<u>Testing and Commissioning</u>				
9.4.29		Allowance for testing and commissioning accordance with SANS 10142-1.	sum	1		
		<u>9th Floor :Think Tank</u>				
		<u>Existing Distribution Board works</u>				
		<u>Note:</u> Supply and installation of new circuits in the existing 9th floor distribution board as indicated on drawing number:001-E-LA-0008-01. This shall include finding the spare spaces, installation of new miniature circuit breakers matching the existing specification (Schneider Electric) labelling and updating of the existing distribution boards legends (legend shall be laminated and stuck inside the DB doors.				
9.4.30		Supply and Installation of 63A, 6kA Din mount single phase miniature earth leakage unit. Equal or similar approved to Schneider Electric.	ea	3		
9.4.31		Supply and Installation of 20A, 6kA Din mount equal or similar approved to Schneider Electric single pole miniature circuit breaker.	ea	18		
		<u>Conduiting</u>				
		<u>Note:</u> Conduiting works shall include finding suitable routes for securing/installation of conduits in the existing ceiling voids. The new conduiting shall be ran from the existing distribution boards to the existing and or new powerskirting via the existing ceiling space.				
9.4.32		Supply and installation of 20mm PVC conduit	m	30		
9.4.33		Conduit installation accessories including end-caps,saddles,couplings, adaptors, bends, round boxes+lids,junction boxes, push-in glands,screws, PVC glue	ea	1		
		<u>Powerskirting</u>				
		<u>Supply and install 3 tier PVC grey power skirting trunking c/w lids, ends,bends joints and spacers all firmly secured to the relevant walls as shown on drawing:001-E-LA-0007-01. (Similar specification to the existing powerskirting).The rates shall include all the mounting screws and accessories.</u>				
9.4.34		Straight Length	m	60		
9.4.35		Joints	ea	30		
9.4.36		Internal elbow	ea	7		
9.4.37		External elbow	ea	1		
9.4.38		Flat elbow	ea			Rate Only
9.4.39		Flat Junction	ea			Rate Only
9.4.40		End caps	ea	5		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty	Rate	Amount
		<u>ELECTRICAL WORKS</u>				
		<u>Power</u>				
		<u>Note:</u> Supply and installation of standard and shaved earth pin /dedicated socket outlets on powerskirting in accordance with SANS 10142-1 and TPD-001-EL&PSPEC Technical specification for electrical installations to building other than dwelling houses and the latest edition and amendments as shown on drawing: 001-E-LA-0007-01. Allowance shall include circuits labelling				
9.4.41		16A Powerskirting mounted single switched socket outlets	ea	21		
9.4.42		16A Shaved earth pin/dedicated socket outlets mounted on powerstking (Red)	ea	15		
9.4.43		20A Recess mount 220V Cordgrip Isolator	ea	1		
		16A Surface mounted 220V standard switched socket outlets	ea			Rate Only
9.4.44		16A Standard flush mounted 220V single switched socket outlets	ea	1		
9.4.45		20A, 220V Surface mounted single phase Isolator switch (in ceiling void)	ea	2		
9.4.46		Supply and installation of 16A underdesk plug modules comprising of two standard and one dedicated switched socket outlets. The modules shall be provided with a 3m pluggable 1,5mm ² flexible cord +16A fixed on the cord plug top	ea			Rate Only
9.4.47		Supply and installation of equal or similar approved to Legrand 4 compartment flush mounted carpet floor boxes comprising of standard SSO + Dedicated shaved Earth pin SSO and 2 x Comms points c/w flush metal mounting box and clip-on lid.	ea	1		
		<u>ICT</u>				
		<u>NOTE:</u> <u>ICT</u> <u>Note:</u> Switching network equipment/switch to be connected via fiber uplink, and all Power Over Ethernet (POE) ready devices. CAT6/CAT6e physical cabling shall be from network switch to terminating LAN ethernet network points				
9.4.48		Supply and installation of Ethernet CAT6 twisted shielded cable.	m	239		
9.4.49		Supply and installation of RJ45 connector	ea	27		
9.4.50		Supply and installation of RJ45 CAT6 Shuttered Data point into a data/comms powerskirting compartment c/w holding bracket, cover and accessories.	ea	6		
9.4.51		Supply and installation of RJ11 CAT6 Telephone point into a data/comms powerskirting compartment c/w cradle holding bracket, cover and accessories.	ea	2		
9.4.52		<u>Wiring</u> <u>Note:</u> Wiring shall be safely pulled through PVC conduit from the existing electrical distribution board via ceiling space to the powerskirting for power circuits as shown on drawing:001-E-LA-0007-01.				
9.4.53		2,5mm ² housewire (Red)	m	200		
9.4.54		2,5mm ² housewire (White)	m	200		
9.4.55		2,5mm ² housewire (Blue)	m	200		
9.4.56		2,5mm ² housewire (Black)	m	200		
9.4.57		2,5mm ² housewire - earthing (Green/Yellow)	m	200		
		<u>Lighting</u>				
		<u>Note:</u> The light fittings shall be the ceiling mount type and must be supplied with about 2m length flexible cord and a plug-top, with capabilities of the cord being removed and directly wire the fitting				
9.4.58		Supply and installation of 5A unswitched socket outlet complete with PVC round box	ea	4		
9.4.59		Supply and install of one way single lever flush type light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to Legrand.	ea	2		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty	Rate	Amount
		<u>ELECTRICAL WORKS</u>				
		<u>Lighting</u>				
9.4.60		Supply and install of one way double lever flush type light switch.	ea			Rate Only
9.4.61		Supply and install of dimmable flush type light switch light switch c/w 4x2 mounting box and cover plate. Equal or similar approved to Legrand.	ea	3		
9.4.62		Supply and install 360° PIR Occupancy sensor. Equal or similar approved to Legrand.	ea	2		
9.4.63		600x 600mm 25W LED ceiling mount panel light as detailed on drawing:	ea	2		
9.4.64		600x 600mm 25W LED ceiling mount panel light fitted with 60minutues emergency kit as detailed on drawing:	ea	2		
9.4.65		Supply and installation of equal or similar approved to recess mount dimmable Beka Rondo LED HE 11W	ea	30		
9.4.66		Supply and installation of equal or similar approved to recess mount dimmable Beka Rondo LED HE 11W c/w emergency kit	ea	5		
9.4.67		<u>Testing and Commissioning</u>				
		Allowance for testing and commissioning accordance with SANS 10142-1.	sum	1		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Page	Amount
		ELECTRICAL WORKS SECTION SUMMARY		
		<u>SECTION SUMMARY</u>		
		Page Total brought forward	20	
		Page Total brought forward	21	
		Page Total brought forward	22	
		Page Total brought forward	23	
		Page Total brought forward	24	
		Page Total brought forward	25	
		Page Total brought forward	26	
		Page Total brought forward	27	
		Page Total brought forward	28	
		Page Total brought forward	29	
		Page Total brought forward	30	
		Page Total brought forward	31	
		Page Total brought forward	32	
		TOTAL CARRIED FORWARD TO FINAL SUMMARY		R

Item	Payment Clause	Description	Unit	Qty	Rate	Amount
10		<u>MECHANICAL WORKS</u> <u>BILL NO.7</u> <u>Mechanical Installation</u> <u>Fire Protection, Water Reticulation, Air conditioning and ventilation systems</u> Allow for all the preliminary and general items required to provide the health & safety, mechanical & electrical installation for this project.				
10.1.1		Site Establishment and clearance at termination of Contract.	sum	1.0		
10.1.2		<u>GUARANTEE AND MAINTENANCE</u> Guarantee and maintenance for the complete installation of mechanical installation including materials and workmanship for a period of TWELVE MONTHS after date of completion	sum	1.0		
10.1.3		<u>REMOVAL OF WASTE</u> Tenderer to allow for all costs associated with cleaning the site of all rubbish and waste caused by this contract	sum	1.0		
10.1.4		<u>COMMISSIONING AND TESTING</u> Allow for testing and commissioning the whole of the Mechanical Installation as laid down in the specification and for re-testing as may be required after the making good of all defective work to the satisfaction of the Consulting Engineer.	sum	1.0		
10.1.5		<u>CERTIFICATE FOR COMPLIANCE</u> Provision for the Certificate of Compliance to be issued on completion of the project.	sum	1.0		
10.1.6		<u>BUILDERS WORK DRAWINGS</u> Provision of Builders work layouts on AutoCAD to indicate exact positions of openings and power points.	sum	1.0		
10.1.7		<u>CONTRACTORS SHOP DRAWINGS</u> Contract shop drawings prepared in accordance with co-ordinated Architectural, Structural & Service layouts.	sum	1.0		
10.1.8		<u>PROGRAMMING OF WORKS</u> Programming of the works to run concurrently with the Builders programme.	sum	1.0		
10.1.9		<u>EQUIPMENT APPROVAL</u> Equipment Procurement Submissions for Engineers Approval.	sum	1.0		
10.1.10		<u>PRESSURE TEST CHILLED WATER PIPING</u> Pressure Testing & Inspection of all chilled water pipework to meet design specifications.	sum	1.0		
10.1.11		<u>SCAFFOLDING</u> Provision of Scaffolding for installation of equipment at high level.	sum	1.0		
10.1.12		<u>OPERATION & MAINTENANCE MANUALS</u> Provision of Operating and Maintenance Manuals as per the Technical Specification.	sum	1.0		
10.1.13		<u>BLUECHEM TREATMENT OF AC EQUIPMENT</u> Provision of BLUECHEM Treatment to all coils and fins of all VRF condenser coils and all chilled water AHU evaporator coils-equal to or similar approved	sum	1.0		
10.1.14		Project hand-over	sum	1.0		
10.1.15		Demolition and Removal of Old Air Handling Units, Filters, Grilles, Louvres, Pipe Insulation and associated materials	sum	1.0		
		<u>AIR HANDLING UNITS</u> Supply; deliver; assembly; connecting to existing chilled water piping, insulation of piping, install and commissioning; Complete with associated vibration mountings, fixing attachments, valves, flanges, etc. for all chilled water air handling units below. This also includes new chilled water piping, pipe fittings, pipe insulation, pipe support structure in the Air Handling Plant Room.				
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
		AIR HANDLING UNITS				
10.1.16		Air Handling Unit-2nd Floor-West - Sizing: Airflow:3165L/s;Cooling Coil Load Capacity: 70kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.17		Air Handling Unit-2nd Floor-Central - Sizing: Airflow:2080L/s;Cooling Coil Load Capacity: 52kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.18		Air Handling Unit-2nd Floor-East - Sizing: Airflow:2770L/s;Cooling Coil Load Capacity: 64kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.19		Air Handling Unit-3rd Floor-East - Sizing: Airflow:2460L/s;Cooling Coil Load Capacity: 55kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.20		Air Handling Unit-4th Floor-East - Sizing: Airflow:2610L/s;Cooling Coil Load Capacity: 72kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.21		Air Handling Unit-5th Floor-East - Sizing: Airflow:2460L/s;Cooling Coil Load Capacity: 61kW; with double skin, units to be demountable for plantroom assembly, with 316 stainless steel coil frames, drain pans to be 316 stainless steel, coils to be copper with aluminium fins, fans to be FCC or BCC, primary and secondary filters, magnahelic gauge to be fitted across secondary filters, all parts to be locally available in South Africa	each	1.0		
10.1.22		<u>New Air Handling Unit Pipework, wiring and associated components in each of the AHU plant rooms on the 2nd floor, 3rd floor, 4th floor, 5th floor.</u> New Air Handling Unit, new chilled water pipework, pipe fittings, pipe insulation, structural pipe supports in each of the Air Handling Plant rooms as part of the installation of the new Air Handling Units in these plant rooms.	sum	1.0		
10.1.23		Self-contained Air conditioner Rooftop Package Unit -Cooling Capacity: 62 kW; Airflow: 1200 L/s; On Coil DB Temperature-32oC; On Coil WB Temperature-26oC; Airflow: 1200 L/s; On Coil DB Temperature-14.5oC; On Coil WB Temperature-14oC; Refrigerant: R407c; External Static Pressure: 200 Pa which complies with following specification installed onto a concrete plinth - Insulated double skin evaporator section; backward curved centrifugal supply air fan; Constant speed motor and drive; Copper/aluminium DX cooling coil; Primary and secondary air filters; 1 x Magnahelic gauge; Stainless steel coil frame and drain pan; Epoxy treatment to components where possible; Separate Condensing unit section; Copper/aluminium condenser coils; Bluchem treatment on all coils; Electrical/control panel; Refrigerant piping; Weatherproof construction.	each	1.0		
		<u>Split Type VRF Air Conditioning Units</u> <u>Supply: deliver; installation; connecting to refrigerant pipework and duct work, insulation of refrigerant piping, install and commissioning; Complete with associated vibration mountings, fixing attachments, galvanised steel hanger rods, valves, flanges, etc. for all chilled water air handling units below</u>				
10.1.24		AC Split type VRF 67.2 kW Cooling Capacity Condenser unit -LG MultiV5 ARUM240LTE5 - equal or similar approved	each	1.0		
10.1.25		AC Split type DX Coil Ceiling Cassette Evaporator Unit for Ground Floor Room G1-Canteen-LG ARNU24GBGA4 - equal or similar approved	each	3.0		
10.1.26		AC Split type DX Coil Ceiling Casette Evaporator Unit for Ground Floor Room G2-Waiting Area-LG ARNU15GTQC4 - equal or similar approved	each	1.0		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
10.1.27		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G3-LG ARNU18GTQC4 - equal or similar approved	each	2.0		
10.1.28		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G4-LG ARNU15GTQC4 - equal or similar approved	each	2.0		
10.1.29		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G5-LG ARNU15GTQC4 - equal or similar approved	each	1.0		
10.1.30		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G6-LG ARNU15GTQC4 - equal or similar approved	each	1.0		
10.1.31		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G7-LG ARNU18GTQC4 - equal or similar approved	each	1.0		
10.1.32		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G8-LG ARNU15GTQC4 - equal or similar approved	each	1.0		
10.1.33		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Boardroom Ground Floor Room G9-LG ARNU15GTQC4 - equal or similar approved	each	2.0		
10.1.34		AC Split type DX Coil Ceiling Cassette Evaporator Unit-for Office on North side, Ground Floor Room G16-LG M10EJH NJ0-9000 BTU Indoor and Outdoor Unit M10EJH UJ0 including wall mounted control panel- equal or similar approved	each	1.0		
10.1.35		AC Split type DX Coil High Static Ducted Unit Evaporator Unit-for 9th Floor Think Tank Room-LG-ARNU18GBHA4-18 000 BTU Indoor Unit - equal or similar approved	each	1.0		
10.1.36		AC Split type DX Coil High Static Ducted Unit Evaporator Unit-for 9th Floor Think Tank Room-LG-ARNU24GBHA4 24 000 BTU Indoor Unit - equal or similar approved	each	1.0		
10.1.37		AC Split type DX Coil Ceiling Cassette Unit Evaporator Unit-for 9th Floor Board Room-LG-ARNUGTQC4-18 000 BTU Indoor Unit - equal or similar approved	each	1.0		
10.1.38		AC Split type DX Coil Condenser Outdoor Unit 9th Floor-LG ARUN080LSS0 - equal or similar approved	each	1.0		
10.1.39		Ø260mm x Ø150mm Round Main Duct Concentric Reducer Piece as shown in drawing	each	1.0		
10.1.40		Ø180mm x Ø100mm Round Main Duct Concentric Reducer Piece as shown in drawing	each	1.0		
10.1.41		Ø250mm x Ø150mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
10.1.42		Ø260mm Main Round Duct as shown in drawing	m	2.0		
10.1.43		Ø220mm Main Round Duct as shown in drawing	m	2.0		
10.1.44		Ø180mm Main Round Duct as shown in drawing	m	11.0		
10.1.45		Ø150mm Main Round Duct as shown in drawing	m	11.0		
10.1.46		Ø100mm Main Round Duct as shown in drawing	m	4.0		
10.1.47		Ø180mm Round Branch Duct 90o elbow in horizontal plane	each	1.0		
10.1.48		Ø150mm Round Branch Duct 90o elbow in horizontal plane	each	1.0		
10.1.49		Ø100mm Round Branch Duct 90o elbow in horizontal plane	each	1.0		
10.1.50		Ø250mm Round Insulated Branch Duct as shown in drawing	m	4.0		
10.1.51		Ø200mm Round Insulated Branch Duct as shown in drawing	m	10.0		
10.1.52		Ø150mm Round Insulated Branch Duct as shown in drawing	m	4.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
10.1.53		Ø250mm Round Insulated Branch Duct 90o elbow in horizontal plane	each	1.0		
10.1.54		Ø200mm Round Insulated Branch Duct 90o elbow in horizontal plane	each	3.0		
10.1.55		Ø150mm Round Insulated Branch Duct 90o elbow in horizontal plane	each	1.0		
10.1.56		Ø260mm Round to Square 300mm x 300mm Duct Transition Piece	each	1.0		
10.1.57		300mm x 300mm Filter duct box as indicated on drawing	each	1.0		
10.1.58		Washable Primary Air Filter- 295mm x 295mm x 50mm on Ninth Floor - Trox WP-PS-295 x 295 x 50 - equal or similar approved	each	1.0		
10.1.59		Aluminium Weather Louver for fresh air to outdoor processing unit as per drawing - Trox-AWG-585x495 - equal or similar approved	each	1.0		
10.1.60		Inline Ducted Fan for outdoor fresh air introduction on 9th floor - Donkin CDC 200/0.8 - equal or similar approved	each	1.0		
10.1.61		Fan Sound Attenuator on ninth floor as per drawing - Donkin Sonax Circular 200-315 - equal or similar approved	each	2.0		
10.1.62		Ceiling Extractor Fan on 9th floor in Kitchen as per drawing - Expelair CMF741 - equal or similar approved	each	1.0		
10.1.63		Ø250mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
10.1.64		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
10.1.65		Ø200mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	4.0		
10.1.66		Ø180mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
10.1.67		Ø150mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
10.1.68		Ø100mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
10.1.70		Square Constant Volume Plate Diffuser with Circular face plate with 175mm neck- Trox DCV/0/175/0/RAL9016 on Ninth Floor Think Tank-equal or similar approved	each	4.0		
10.1.71		Square Constant Volume Plate Diffuser with Circular face plate with 150mm neck- Trox DCV/0/150/0/RAL9016-equal or similar approved	each	52.0		
10.1.72		Square Constant Volume Plate Diffuser with Circular face plate with 175mm neck- Trox DCV/0/175/0/RAL9016-equal or similar approved	each	59.0		
10.1.73		Square Constant Volume Plate Diffuser with Circular face plate with 200mm neck- Trox DCV/0/200/0/RAL9016-equal or similar approved	each	29.0		
10.1.74		Square Constant Volume Plate Diffuser with Circular face plate with 250mm neck- Trox DCV/0/250/0/RAL9016-equal or similar approved	each	10.0		
10.1.75		Square Ceiling Diffuser with 137mm neck- Trox ADLQ-2E - 244X244- installed on the 9th floor in new Boardroom as shown on drawing -equal or similar approved	each	1.0		
10.1.76		Square Ceiling Diffuser with 137mm neck- Trox ADLQ-4 - 244X244- installed on the 9th floor in Waiting Area as shown on drawing -equal or similar approved	each	1.0		
10.1.77		Square 400x400 Return Air Grille - Trox AE-400x400- equal or similar approved	each	4.0		
10.1.78		Steel Extract Disc Valve- Trox-LVS/200/P0/RAL9010-equal or similar approved	each	6.0		
10.1.79		Steel Supply Disc Valve- Trox-LVS/150/P0/RAL9010-equal or similar approved	each	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
10.2		<u>MECHANICAL WORKS</u>				
10.2.1		Door Grilles Aluminium-Trox-AGS-T/350x350 - equal or similar approved - Door grilles to be installed on Ground floor as indicated on drawing.	each	3.0		
10.2.2		Door Grilles Aluminium-Trox-AGS-T/400x550 - equal or similar approved - Door grilles to be installed on Ground floor as indicated on drawing.	each	3.0		
10.2.3		Door Grilles Aluminium-Trox-AGS-T/400x400 - equal or similar approved - Door grilles to be installed on Mezzanine floor Filing Area as indicated on drawing.	each	1.0		
10.2.4		Door Grilles Aluminium-Trox-AGS-T/400x550 - equal or similar approved - Door grilles to be installed on 2nd floor as indicated on drawing.	each	11.0		
10.2.5		Door Grilles Aluminium-Trox-AGS-T/400x550 - equal or similar approved - Door grilles to be installed on 3rd floor as indicated on drawing.	each	7.0		
10.2.6		Door Grilles Aluminium-Trox-AGS-T/400x550 - equal or similar approved - Door grilles to be installed on 4th floor as indicated on drawing.	each	7.0		
10.2.7		Door Grilles Aluminium-Trox-AGS-T/400x550 - equal or similar approved - Door grilles to be installed on 5th floor as indicated on drawing.	each	5.0		
10.2.8		Door Grilles Aluminium-Trox-AGS-T/300x450 - equal or similar approved - Door grilles to be installed on 9th floor kitchen as indicated on drawing.	each	1.0		
10.2.9		EXPELAIR GX12 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Ground Floor in Bathroom area as indicated on drawing	each	1.0		
10.2.10		EXPELAIR GX9 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Ground Floor in G15-Filing area as indicated on drawing	each	1.0		
10.2.11		EXPELAIR GX9 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Mezzanine in M1-Filing area as indicated on drawing	each	1.0		
10.2.12		EXPELAIR GX12 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Second Floor in Existing Kitchen on Southern Passageway, Existing Male Ablution on Western passageway, HR Kitchen on Northern Passageway, Kitchen on Eastern Passage Way area as indicated on drawing	each	4.0		
10.2.13		EXPELAIR XID 150 (or equal approved) Ducted Extraction Fan with mounting kits including installation thereof on Second Floor in Existing Female Ablution on Eastern Passage way, Existing Female Ablution, Existing Male Ablution, Existing Paraplegic Ablution on Eastern Passage way area as indicated on drawing	each	4.0		
10.2.14		EXPELAIR CMF-271 (or equal approved) Ceiling Mounted Fan with mounting kits and Ø150mm flexible ductwork including installation thereof on Third Floor in Paraplegic Ablution on Eastern passageway of building area as indicated on drawing.	each	1.0		
10.2.15		EXPELAIR XID 150 (or equal approved) Ducted Extraction Fan with mounting kits including installation thereof on Third Floor in Existing Female Ablution and Male Ablution on Eastern Passage way, area as indicated on drawing	each	2.0		
10.2.16		EXPELAIR GX9 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Third Floor in Existing Kitchen on Eastern Passage Way area as indicated on drawing.	each	1.0		
10.2.17		EXPELAIR GX12 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Fourth Floor in Kitchen on Eastern Passage Way area as indicated on drawing.	each	1.0		
10.2.18		EXPELAIR GX9 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Fourth floor Kitchen on Northern Passageway in central area Passageway areas as indicated on drawing	each	1.0		
10.2.19		EXPELAIR CMF-271 (or equal approved) Ceiling Mounted Fan with mounting kits and Ø150mm flexible ductwork including installation thereof on Fourth Floor Eastern side of Northern Passage Way on of building area as indicated on drawing.	each	1.0		
10.2.20		EXPELAIR XID 150 (or equal approved) Ducted Extraction Fan with mounting kits including installation thereof on Fourth Floor in Existing Female Ablution, Male Ablution and Paraplegic Ablution on Eastern Passage way, area as indicated on drawing	each	3.0		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
10.1.21		EXPELAIR GX9 (or equal approved) Window Mounted Fan with mounting kits including installation thereof on Fifth Floor in Existing Kitchen on Eastern Passage Way area as indicated on drawing.	each	1.0		
10.2.22		EXPELAIR XID 150 (or equal approved) Ducted Extraction Fan with mounting kits including installation thereof on Fifth Floor in Existing Female Ablution, Male Ablution and Paraplegic Ablution on Eastern Passage way, area as indicated on drawing	each	3.0		
10.2.23		EXPELAIR CMF-271 (or equal approved) Ceiling Mounted Fan with mounting kits and Ø150mm flexible ductwork including installation thereof on Ninth Floor in kitchen of building area as indicated on drawing.	each	1.0		
10.2.24		Donkin CDC 200/0.8 inline duct mounted fan on Ninth floor outdoor air duct - equal or similar approved	each	1.0		
10.2.25		Donkin Sonax 200-315 Sound attenuator on either side of Donkin CDC 200/0.8 on Ninth floor - equal or similar approved	each	2.0		
		<u>Manufacture, Supply Install, Testing and Commissioning of all HVAC indoor controllers.</u>				
10.2.26		AC DX split type Air Conditioner Wired Remote Controller for G1-Canteen-LG PREMTB001 (white)-equal or similar approved	each	2.0		
10.2.27		AC DX split type Air Conditioner Wired Remote Controller for G2-Waiting Area-LG PREMTB001(white)-equal or similar approved	each	1.0		
10.2.28		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G3-LG PREMTB001 (white)-equal or similar approved	each	2.0		
10.2.29		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G4-LG PREMTB001(white)-equal or similar approved	each	2.0		
10.2.30		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G5-LG PREMTB001(white)-equal or similar approved	each	1.0		
10.2.31		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G6-LG PREMTB001(white)-equal or similar approved	each	1.0		
10.2.32		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G7-LG PREMTB001(white)-equal or similar approved	each	1.0		
10.2.33		AC DX split type Air Conditioner Wired Remote Controller for Boardroom G8-LG PREMTB001(white)-equal or similar approved	each	1.0		
10.2.34		AC split type Type Air Conditioner Wired Remote Controller for 9th Floor Think Tank room-Daikin-equal or similar approved	each	2.0		
10.2.35		AC split type Type Air Conditioner Wired Remote Controller for 9th Floor Boardroom daikin-equal or similar approved	each	1.0		
TOTAL CARRIED FORWARD TO SECTION SUMMARY						

Item	Payment Clause	Discription	Unit	Qty			
11		<u>MECHANICAL WORKS</u>					
		REFRIGERANT PIPING As per Specification: Supply, deliver, install, pressure test and commission as per specification the following refrigerant piping complete with external ARMAFLEX insulation including hangers, straps, supports, clamps and necessary accessories, as per tender specifications and drawings					
		11.1.1	Ø 6.35 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	27.0		
		11.1.2	Ø 12.7 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	27.0		
		11.1.3	Ø 6.35 mm Bends 900	each	35.0		
		11.1.4	Ø 12.7 mm Bends 900	each	35.0		
		11.1.5	Ø 9,52 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	40.0		
		11.1.6	Ø 19,05 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	12.0		
		11.1.7	Ø 9.52 mm Bends 900	each	39.0		
		11.1.8	Ø 19,05.7 mm Bends 900	each	21.0		
		11.1.9	Ø 15,88 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	33.0		
		11.1.10	Ø 22,2 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	10.0		
		11.1.11	Ø 15,88 mm Bends 900	each	28.0		
		11.1.12	Ø 22,2 mm Bends 900	each	12.0		
		11.1.13	Ø 28,58 mm Straight copper piping include for 3/4" thick ARMAFLEX insulation, and all associated accessories	m	18.0		
		11.1.14	Ø 28,58 mm Bends 900	each	8.0		
		11.1.15	Class 4 PVC Piping with 3/4" thick ARMAFLEX Insulation and mounting kit Manufacturer, Supply, Delivery, Installation, Pressure testing, including all	m	125.0		
			<u>Ground Floor (Canteen, Waiting Area and Boardrooms) Outdoor Air Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Outdoor Air Unit</u>				
		11.1.16	Ø500mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in vertical plane	each	2.0		
		11.1.17	Ø500mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.18	Ø390mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.19	Ø320mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.20	Ø260mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.21	Ø240mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.22	Ø210mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.23	Ø170mm Insulated and Externally cladded Round Main Outdoor Air Duct 90o elbow in horizontal plane	each	1.0		
		11.1.24	Ø500mm Insulated and Externally cladded Round Main Outdoor Air Duct	m	13.5		
		11.1.25	Ø460mm Insulated and Round Main Outdoor Air Duct	m	2.2		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY	26.50				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
11.1.26		Ø430mm Insulated and Round Main Outdoor Air Duct	m	6.7		
11.1.27		Ø390mm Insulated and Round Main Outdoor Air Duct	m	6.9		
11.1.28		Ø320mm Insulated and Round Main Outdoor Air Duct	m	11.4		
11.1.29		Ø240mm Insulated and Round Main Outdoor Air Duct	m	2.5		
11.1.30		Ø190mm Insulated and Round Main Outdoor Air Duct	m	3.3		
11.1.31		Ø500mm x Ø460mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.32		Ø460mm x Ø430mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.33		Ø430mm x Ø390mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.34		Ø390mm x Ø320mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.35		Ø320mm x Ø240mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.36		Ø260mm x Ø200mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.36		Ø240mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
11.1.37		Ø260mm Insulated Round Branch Outdoor Air Duct	m	6.7		
11.1.38		Ø240mm Insulated Round Branch Outdoor Air Duct	m	6.4		
11.1.39		Ø220mm Insulated Round Branch Outdoor Air Duct	m	4.0		
11.1.40		Ø210mm Insulated Round Branch Outdoor Air Duct	m	16.2		
11.1.41		Ø200mm Insulated Round Branch Outdoor Air Duct	m	13.0		
11.1.42		Ø190mm Insulated Round Branch Outdoor Air Duct	m	11.3		
11.1.43		Ø170mm Insulated Round Branch Outdoor Air Duct	m	5.6		
11.1.44		Ø210mm Insulated Round Flexible duct	m	6.0		
11.1.45		Ø200mm Insulated Round Flexible duct	m	6.0		
11.1.46		Ø190mm Insulated Round Flexible duct	m	8.0		
11.1.47		Ø180mm Insulated Round Flexible duct	m	2.0		
11.1.48		Ø170mm Insulated Round Flexible duct	m	4.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
11.1.49		Ø170mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
11.1.50		Ø180mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
11.1.51		Ø190mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	3.0		
11.1.52		Ø200mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
11.1.53		Ø210mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	3.0		
11.1.54		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
11.1.55		Ø240mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
11.1.56		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
12		<u>Ground Floor (Canteen, Waiting Area, Boardrooms and Male, Female and Paraplegic Ablution Facilities) Outdoor Air Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Outdoor Air Unit</u>				
12.1.1		Ø370mm Round Main Extraction Duct	m	5.8		
12.1.2		Ø270mm Round Main Extraction Duct	m	4.4		
12.1.3		Ø230mm Round Main Extraction Duct	m	1.3		
12.1.4		Ø180mm Round Main Extraction Duct	m	7.4		
12.1.5		Ø270mm Round Extraction Duct 90o elbow in horizontal plane	each	1.0		
12.1.6		Ø180mm Round Extraction Duct 90o elbow in horizontal plane	each	1.0		
12.1.7		Ø370mm x Ø270mm Round Uninsulated Duct Concentric Reducer Piece as shown in drawing	each	1.0		
12.1.8		Ø270mm x Ø230mm Round Uninsulated Duct Concentric Reducer Piece as shown in drawing	each	2.0		
12.1.9		Ø230mm x Ø180mm Round Uninsulated Duct Concentric Reducer Piece as shown in drawing	each	2.0		
12.1.10		Ø180mm Uninsulated Round Flexible duct	m	12.0		
12.1.11		Ø150mm Uninsulated Round Flexible duct	m	2.0		
12.1.12		550 L/s @ 85 Pa 355mm Axial duct mounted extraction fan with foot supports and flexible connectors to connect to sound attenuators- FlaktWoods JM Aerofoil 35JM/16/4/5/26 - 0,075 kW - equal or similar approved	each	1.0		
		<u>Second Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to West Plantroom's Air Handling Unit</u>				
12.1.13		Rectangular Main Duct 480mm x 960mm 90o elbow in vertical plane	each	1.0		
12.1.14		Rectangular Main Duct 480mm x 960mm 90o elbow in horizontal plane	each	4.0		
12.1.15		Rectangular Main Duct 480mm x 960mm	m	36.0		
12.1.16		Rectangular Main Duct Transition Piece - (480mm x 960mm) to (480mm x 870mm)	each	1.0		
12.1.17		Rectangular Main Duct 480mm x 870mm	m	4.2		

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
12.1.18		Rectangular Main Duct Transtion Piece - (480mm x 870mm) to (480mm x 820mm)	each	1.0		
12.1.19		Rectangular Main Duct 480mm x 820mm	m	4.0		
12.1.20		Rectangular Main Duct Transtion Piece - (480mm x 820mm) to (480mm x 750mm)	each	1.0		
12.1.21		Rectangular Main Duct 480mm x 750mm	m	5.4		
12.1.22		Rectangular Main Duct Transtion Piece - (480mm x 750mm) to (480mm x 720mm)	each	1.0		
12.1.23		Rectangular Main Duct 480mm x 720mm	m	3.3		
12.1.24		Rectangular Main Duct Transtion Piece - (480mm x 720mm) to (480mm x 680mm)	each	1.0		
12.1.25		Rectangular Main Duct 480mm x 680mm	m	4.9		
12.1.26		Rectangular Main Duct Transtion Piece - (480mm x 680mm) to (480mm x 610mm)	each	1.0		
12.1.27		Rectangular Main Duct 480mm x 610mm	m	5.4		
12.1.28		Rectangular Main Duct Transtion Piece - (480mm x 610mm) to (480mm x 550mm)	each	1.0		
12.1.29		Rectangular Main Duct 480mm x 550mm	m	3.3		
12.1.30		Rectangular Main Duct Transtion Piece - (480mm x 550mm) to (440mm x 480mm)	each	1.0		
12.1.31		Rectangular Main Duct 440mm x 480mm	m	4.2		
12.1.32		Rectangular Main Duct Transtion Piece - (440mm x 480mm) to (390mm x 480mm)	each	1.0		
12.1.33		Rectangular Main Duct 390mm x 480mm	m	5.9		
12.1.34		Rectangular Main Duct Transtion Piece - (390mm x 480mm) to (390mm x 400mm)	each	1.0		
12.1.35		Rectangular Main Duct 300mm x 400mm	m	3.1		
12.1.36		Rectangular Main Duct Transtion Piece - (300mm x 400mm) to (300mm x 320mm)	each	1.0		
12.1.37		Rectangular Main Duct 300mm x 320mm	m	3.2		
12.1.38		Rectangular Main Duct Transtion Piece - (300mm x 320mm) to (240mm x 320mm)	each	1.0		
12.1.39		Rectangular Main Duct 240mm x 320mm	m	3.3		
12.1.40		Rectangular Main Duct Transtion Piece - (240mm x 320mm) to (200mm x 220mm)	each	1.0		
12.1.41		Rectangular Main Duct 200mm x 220mm	m	4.0		
12.1.42		<u>Round Branch Duct take-offs from Rectangular Main Duct</u>				
		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	12.0		
12.1.43		Ø240mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
12.1.44		Ø230mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
12.1.45		Ø210mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
12.1.46		Round Branch Duct take-off Round Manual Balancing Dampers				
12.1.47		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	12.0		

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
12.1.48		Ø240mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
12.1.49		Ø230mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
12.1.50		Ø210mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
12.1.51		Ø260mm Round Insulated Branch Duct as shown in drawing (12 pieces of approx 2.8m)	m	28.0		
12.1.52		Ø240mm Round Insulated Branch Duct as shown in drawing	m	3.2		
12.1.53		Ø230mm Round Insulated Branch Duct as shown in drawing	m	1.9		
12.1.54		Ø220mm Round Insulated Branch Duct as shown in drawing	m	3.2		
12.1.56		Ø210mm Round Insulated Branch Duct as shown in drawing	m	3.2		
12.1.57		Ø200mm Round Insulated Branch Duct as shown in drawing	m	34.0		
12.1.58		Ø240mm Round Insulated Flexible duct	m	2.0		
12.1.59		Ø230mm Round Insulated Flexible duct	m	2.0		
12.1.61		Ø220mm Round Insulated Flexible duct	m	2.0		
12.1.62		Ø210mm Round Insulated Flexible duct	m	2.0		
12.1.63		Ø200mm Round Insulated Flexible duct	m	24.0		
12.1.64		Ø260mm x Ø200mm Round Insulated Branch Duct Reducer Piece as shown in drawing	each	12.0		
12.1.65		200mm x 220mm Rectangular Branch Duct take-off from Rectangular Main Duct	each	1.0		
12.1.66		200mm x 220mm Rectangular Branch Duct take-off Rectangular Manual Balancing Damper	each	1.0		
12.1.67		200mm x 220mm Insulated Rectangular Branch Duct transition to Ø230mm take-off from Rectangular Main Duct	each	1.0		
12.1.68		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other ossociated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
13		<u>Second Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Central Plantroom's Air Handling Unit</u>				
13.1.1		Main Branch Leg from Central Plant Room				
13.1.2		Rectangular Main Duct 480mm x 720mm	m	24.0		
13.1.3		Rectangular Main Duct 480mm x 720mm 90o elbow in vertical plane	each	1.0		
13.1.4		Rectangular Main Duct 480mm x 720mm 90o elbow in horizontal plane	each	1.0		
13.1.5		Rectangular Main Duct Splitter Piece - from (480mm x 720mm) to two sections which is (420mm x 480mm) and (420mm x 460mm)	each	1.0		

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
		<u>Western Main Duct Leg from Central AHU</u>				
13.1.6		Rectangular Manual Balancing Damper 420mm x 480mm	each	1.0		
13.1.7		Rectangular Main Duct 420mm x 480mm	m	7.2		
13.1.8		Rectangular Main Duct Transtion Piece - (420mm x 480mm) to (420mm x 440mm)	each	1.0		
13.1.9		Rectangular Main Duct 420mm x 440mm	m	5.2		
13.1.10		Rectangular Main Duct Transtion Piece - (420mm x 440mm) to (390mm x 400mm)	each	1.0		
13.1.11		Rectangular Main Duct 390mm x 400mm	m	7.1		
13.1.12		Rectangular Main Duct Transtion Piece - (390mm x 400mm) to (320mm x 360mm)	each	1.0		
13.1.13		Rectangular Main Duct 320mm x 360mm	m	7.0		
13.1.14		Rectangular Main Duct Transtion Piece - (320mm x 360mm) to (250mm x 300mm)	each	1.0		
13.1.15		Rectangular Main Duct 250mm x 300mm	m	4.7		
		<u>Western Main Duct Leg- Branch Ductwork from Central AHU</u>				
13.1.16		Ø280mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
13.1.17		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
13.1.18		Ø220mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
13.1.19		Ø280mm Round Insulated Branch Duct as shown in drawing	m	1.9		
13.1.20		Ø240mm Round Insulated Branch Duct as shown in drawing	m	5.3		
13.1.21		Ø220mm Round Insulated Branch Duct as shown in drawing	m	9.5		
13.1.22		Ø210mm Round Insulated Branch Duct as shown in drawing	m	3.3		
13.1.23		Ø200mm Round Insulated Branch Duct as shown in drawing	m	3.3		
13.1.24		Ø180mm Round Insulated Branch Duct as shown in drawing	m	22.0		
13.1.25		Ø280mm x Ø240mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
13.1.26		Ø220mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	3.0		
13.1.27		Ø280mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
13.1.28		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	3.0		
13.1.29		Ø180mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	4.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
13.1.30		250mm x 300mm Insulated Rectangular Branch Duct transition to Ø300mm take-off from Rectangular Main Duct as shown in drawing	each	1.0		
13.1.31		Ø230mm Round Flexible duct	m	4.0		
13.1.32		Ø220mm Round Flexible duct	m	2.0		
13.1.33		Ø210mm Round Flexible duct	m	8.0		
		<u>Eastern Main Duct Leg from Central AHU</u>				
13.1.34		Rectangular Manual Balancing Damper 420mm x 460mm	each	1.0		
13.1.35		Rectangular Main Duct 420mm x 460mm	m	3.6		
13.1.36		Rectangular Main Duct Transtion Piece - (420mm x 460mm) to (400mm x 420mm)	each	1.0		
13.1.37		Rectangular Main Duct 400mm x 420mm	m	2.7		
13.1.38		Rectangular Main Duct Transtion Piece - (400mm x 420mm) to (370mm x 380mm)	each	1.0		
13.1.39		Rectangular Main Duct 370mm x 380mm	m	7.3		
13.1.40		Rectangular Main Duct Transtion Piece - (370mm x 380mm) to (350mm x 350mm)	each	1.0		
13.1.41		Rectangular Main Duct 350mm x 350mm	m	4.2		
13.1.42		Rectangular Main Duct Transtion Piece - (350mm x 350mm) to (310mm x 310mm)	each	1.0		
13.1.43		Rectangular Main Duct 310mm x 310mm	m	2.8		
13.1.44		Rectangular Main Duct Transtion Piece - (310mm x 310mm) to (230mm x 310mm)	each	1.0		
13.1.45		Rectangular Main Duct 230mm x 310mm	m	3.8		
13.1.46		Rectangular Main Duct Transtion Piece - (230mm x 310mm) to (180mm x 230mm)	each	1.0		
13.1.47		Rectangular Main Duct 180mm x 230mm	m	3.7		
		<u>Western Main Duct Leg- Branch Ductwork-from Central AHU</u>				
13.1.48		Ø280mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
13.1.49		Ø220mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
13.1.50		Ø210mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
13.1.51		Ø200mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
13.1.52		Ø300mm Round Insulated Branch Duct as shown in drawing	m	1.3		
13.1.53		Ø280mm Round Insulated Branch Duct as shown in drawing	m	4.1		
13.1.54		Ø260mm Round Insulated Branch Duct as shown in drawing	m	8.2		
13.1.55		Ø230mm Round Insulated Branch Duct as shown in drawing	m	6.0		
13.1.56		Ø220mm Round Insulated Branch Duct as shown in drawing	m	4.3		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
13.1.57		Ø210mm Round Insulated Branch Duct as shown in drawing	m	7.0		
13.1.58		Ø190mm Round Insulated Branch Duct as shown in drawing	m	3.5		
13.1.59		Ø300mm x Ø230mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
13.1.60		Ø280mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
13.1.61		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
13.1.62		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
13.1.63		Ø230mm Round Flexible duct	m	4.0		
13.1.64		Ø220mm Round Flexible duct	m	2.0		
13.1.65		Ø210mm Round Flexible duct	m	8.0		
13.1.66		Ø190mm Round Flexible duct	m	4.0		
13.1.67		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other associated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
14		<u>Second Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Eastern Plantroom's Air Handling Unit</u>				
14.1.1		Rectangular Main Duct 480mm x 770mm 90o elbow in vertical plane	each	1.0		
14.1.2		Rectangular Main Duct 480mm x 770mm 90o elbow in horizontal plane	each	4.0		
14.1.3		Rectangular Manual Balancing Damper 480mm x 770mm	each	1.0		
14.1.4		Rectangular Main Duct 480mm x 770mm	m	41.5		
14.1.5		Rectangular Main Duct Transition Piece - (480mm x 770mm) to (480mm x 720mm)	each	1.0		
14.1.6		Rectangular Main Duct 480mm x 720mm	m	5.4		
14.1.7		Rectangular Main Duct Transition Piece - (480mm x 720mm) to (480mm x 680mm)	each	1.0		
14.1.8		Rectangular Main Duct 480mm x 680mm	m	7.2		
14.1.9		Rectangular Main Duct Transition Piece - (480mm x 680mm) to (480mm x 630mm)	each	1.0		
14.1.10		Rectangular Main Duct 480mm x 630mm	m	4.9		
14.1.11		Rectangular Main Duct Transition Piece - (480mm x 630mm) to (480mm x 570mm)	each	1.0		
14.1.12		Rectangular Main Duct 480mm x 570mm	m	2.6		
14.1.13		Rectangular Main Duct Transition Piece - (480mm x 570mm) to (480mm x 490mm)	each	1.0		
14.1.14		Rectangular Main Duct 480mm x 490mm	m	3.5		
14.1.15		Rectangular Main Duct Transition Piece - (480mm x 490mm) to (440mm x 480mm)	each	1.0		
14.1.16		Rectangular Main Duct 440mm x 480mm	m	7.4		
14.1.17		Rectangular Main Duct Transition Piece - (440mm x 480mm) to (390mm x 480mm)	each	1.0		
14.1.18		Rectangular Main Duct 390mm x 480mm	m	6.5		
14.1.19		Rectangular Main Duct Transition Piece - (390mm x 480mm) to (310mm x 480mm)	each	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
14.1.20		Rectangular Main Duct 310mm x 480mm	m	7.6		
14.1.21		Rectangular Main Duct Transtion Piece - (310mm x 480mm) to (310mm x 390mm)	each	1.0		
14.1.22		Rectangular Main Duct 310mm x 390mm	m	5.4		
14.1.23		Rectangular Main Duct Transtion Piece - (310mm x 390mm) to (300mm x 310mm)	each	1.0		
14.1.24		Rectangular Main Duct 300mm x 310mm	m	3.8		
14.1.25		Rectangular Main Duct Transtion Piece - (300mm x 310mm) to (230mm x 230mm)	each	1.0		
14.1.26		Rectangular Main Duct 230mm x 230mm	m	5.0		
		<u>Branch Duct of Main Ductwork from the Eastern AHU Plant room</u>				
14.1.27		Ø290mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
14.1.28		Ø270mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
14.1.29		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	6.0		
14.1.30		Ø250mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
14.1.31		Ø290mm Round Insulated Branch Duct as shown in drawing	m	2.9		
14.1.32		Ø270mm Round Insulated Branch Duct as shown in drawing	m	2.9		
14.1.33		Ø260mm Round Insulated Branch Duct as shown in drawing	m	17.4		
14.1.34		Ø230mm Round Insulated Branch Duct as shown in drawing	m	10.5		
14.1.35		Ø220mm Round Insulated Branch Duct as shown in drawing	m	16.6		
14.1.36		Ø200mm Round Insulated Branch Duct as shown in drawing	m	36.0		
14.1.37		Ø190mm Round Insulated Branch Duct as shown in drawing	m	33.0		
14.1.38		Ø250mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	4.0		
14.1.39		Ø270mm x Ø220mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
14.1.40		Ø290mm x Ø220mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
14.1.41		230mm x 300mm Insulated Rectangular Branch Duct transition to Ø250mm take-off from Rectangular Main Duct as shown in drawing	each	1.0		
14.1.42		Ø290mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
14.1.43		Ø270mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
14.1.44		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	6.0		
14.1.45		Ø250mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	4.0		
14.1.46		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
14.1.47		Ø200mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	6.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
14.1.48		Ø190mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	5.0		
14.1.49		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other ossociated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
		<u>Third Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Eastern Plantroom's Air Handling Unit</u>				
14.1.50		Rectangular Main Duct 480mm x 700mm 90o elbow in vertical plane	each	1.0		
14.1.51		Rectangular Main Duct 480mm x 700mm 90o elbow in horizontal plane	each	4.0		
14.1.52		Rectangular Manual Balancing Damper 480mm x 700mm	each	1.0		
14.1.53		Rectangular Main Duct 480mm x 700mm	m	40.0		
14.1.54		Rectangular Main Duct Transtion Piece - (480mm x 700mm) to (480mm x 680mm)	each	1.0		
14.1.55		Rectangular Main Duct 480mm x 680mm	m	7.4		
14.1.56		Rectangular Main Duct Transtion Piece - (480mm x 680mm) to (480mm x 650mm)	each	1.0		
14.1.57		Rectangular Main Duct 480mm x 650mm	m	3.6		
14.1.58		Rectangular Main Duct Transtion Piece - (480mm x 650mm) to (480mm x 610mm)	each	1.0		
14.1.59		Rectangular Main Duct 480mm x 610mm	m	4.9		
14.1.60		Rectangular Main Duct Transtion Piece - (480mm x 610mm) to (480mm x 570mm)	each	1.0		
14.1.61		Rectangular Main Duct 480mm x 570mm	m	3.6		
14.1.62		Rectangular Main Duct Transtion Piece - (480mm x 570mm) to (480mm x 550mm)	each	1.0		
14.1.63		Rectangular Main Duct 480mm x 550mm	m	3.8		
14.1.64		Rectangular Main Duct Transtion Piece - (480mm x 550mm) to (480mm x 490mm)	each	1.0		
14.1.65		Rectangular Main Duct 480mm x 490mm	m	7.3		
14.1.66		Rectangular Main Duct Transtion Piece - (480mm x 490mm) to (440mm x 460mm)	each	1.0		
14.1.67		Rectangular Main Duct 440mm x 460mm	m	8.0		
14.1.68		Rectangular Main Duct Transtion Piece - (440mm x 460mm) to (420mm x 440mm)	each	1.0		
14.1.69		Rectangular Main Duct 420mm x 440mm	m	5.1		
14.1.70		Rectangular Main Duct Transtion Piece - (420mm x 440mm) to (370mm x 440mm)	each	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
14.1.71		Rectangular Main Duct 370mm x 440mm	m	3.4		
14.1.72		Rectangular Main Duct Transtion Piece - (370mm x 440mm) to (340mm x 370mm)	each	1.0		
14.1.73		Rectangular Main Duct 340mm x 370mm	m	4.2		
14.1.74		Rectangular Main Duct Transtion Piece - (340mm x 370mm) to (300mm x 300mm)	each	1.0		
14.1.75		Rectangular Main Duct 300mm x 300mm	m	4.0		
14.1.76		Rectangular Main Duct Transtion Piece - (300mm x 300mm) to (240mm x 240mm)	each	1.0		
14.1.77		Rectangular Main Duct 240mm x 240mm	m	5.4		
14.1.78		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	6.0		
14.1.79		Ø240mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
14.1.1.80		Ø220mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
14.1.81		Ø210mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	4.0		
14.1.82		Ø260mm Round Insulated Branch Duct as shown in drawing	m	22.8		
14.1.83		Ø240mm Round Insulated Branch Duct as shown in drawing	m	2.9		
14.1.84		Ø210mm Round Insulated Branch Duct as shown in drawing	m	11.6		
14.1.85		Ø200mm Round Insulated Branch Duct as shown in drawing	m	47.0		
14.1.86		Ø160mm Round Insulated Branch Duct as shown in drawing	m	29.6		
14.1.87		Ø260mm x Ø200mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	7.0		
14.1.88		Ø240mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
14.1.89		Ø210mm x Ø160mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	4.0		
14.1.90		Ø220mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
14.1.91		240mm x 240mm Insulated Rectangular Branch Duct transition to Ø260mm take-off from Rectangular Main Duct as shown in drawing	each	1.0		
14.1.92		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	6.0		
14.1.93		Ø200mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	7.0		
14.1.94		240mm x 240mm Rectangular Branch Duct Manual Balancing Damper as shown in drawing	each	1.0		
14.1.95		Ø200mm Round Flexible duct	m	28.0		
14.1.96		Ø190mm Round Flexible duct	m	3.0		
14.1.97		Ø160mm Round Flexible duct	m	15.0		
14.1.98		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other ossociated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty			
15		<u>MECHANICAL WORKS</u>					
		<u>Fourth Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Eastern Plantroom's Air Handling Unit</u>					
		15.1.1	Rectangular Main Duct 480mm x 750mm 90o elbow in vertical plane	each	1.0		
		15.1.2	Rectangular Main Duct 480mm x 750mm 90o elbow in horizontal plane	each	4.0		
		15.1.3	Rectangular Manual Balancing Damper 480mm x 700mm	each	1.0		
		15.1.4	Rectangular Main Duct 480mm x 750mm	m	40.0		
		15.1.5	Rectangular Main Duct Transtion Piece - (480mm x 750mm) to (480mm x 680mm)	each	1.0		
		15.1.6	Rectangular Main Duct 480mm x 680mm	m	3.7		
		15.1.7	Rectangular Main Duct Transtion Piece - (480mm x 680mm) to (480mm x 650mm)	each	1.0		
		15.1.8	Rectangular Main Duct 480mm x 650mm	m	6.2		
		15.1.9	Rectangular Main Duct Transtion Piece - (480mm x 650mm) to (480mm x 570mm)	each	1.0		
		15.1.10	Rectangular Main Duct 480mm x 570mm	m	7.4		
		15.1.11	Rectangular Main Duct Transtion Piece - (480mm x 570mm) to (480mm x 530mm)	each	1.0		
		15.1.12	Rectangular Main Duct 480mm x 530mm	m	4.1		
		15.1.13	Rectangular Main Duct Transtion Piece - (480mm x 530mm) to (480mm x 490mm)	each	1.0		
		15.1.14	Rectangular Main Duct 480mm x 490mm	m	6.6		
		15.1.15	Rectangular Main Duct Transtion Piece - (480mm x 490mm) to (440mm x 490mm)	each	1.0		
		15.1.16	Rectangular Main Duct 440mm x 490mm	m	5.7		
		15.1.17	Rectangular Main Duct Transtion Piece - (440mm x 490mm) to (440mm x 440mm)	each	1.0		
		15.1.18	Rectangular Main Duct 440mm x 440mm	m	3.2		
		15.1.19	Rectangular Main Duct Transtion Piece - (440mm x 440mm) to (400mm x 440mm)	each	1.0		
		15.1.20	Rectangular Main Duct 400mm x 440mm	m	7.1		
		15.1.21	Rectangular Main Duct Transtion Piece - (400mm x 440mm) to (400mm x 400mm)	each	1.0		
		15.1.22	Rectangular Main Duct 400mm x 400mm	m	3.2		
		15.1.23	Rectangular Main Duct Transtion Piece - (400mm x 400mm) to (300mm x 400mm)	each	1.0		
		15.1.24	Rectangular Main Duct 300mm x 400mm	m	7.0		
		15.1.25	Rectangular Main Duct Transtion Piece - (300mm x 400mm) to (270mm x 300mm)	each	1.0		
		15.1.26	Rectangular Main Duct 270mm x 300mm	m	2.6		
		15.1.27	Rectangular Main Duct Transtion Piece - (270mm x 300mm) to (210mm x 210mm)	each	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY	1	of 50			

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
15.1.28		Ø280mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
15.1.29		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
15.1.30		Ø250mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
15.1.31		Ø240mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
15.1.32		Ø230mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	3.0		
15.1.33		Ø220mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
15.1.34		Ø210mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
15.1.35		Ø200mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
15.1.36		Ø280mm Round Insulated Branch Duct as shown in drawing	m	5.2		
15.1.37		Ø260mm Round Insulated Branch Duct as shown in drawing	m	3.2		
15.1.38		Ø250mm Round Insulated Branch Duct as shown in drawing	m	5.5		
15.1.39		Ø240mm Round Insulated Branch Duct as shown in drawing	m	2.6		
15.1.40		Ø230mm Round Insulated Branch Duct as shown in drawing	m	16.2		
15.1.41		Ø220mm Round Insulated Branch Duct as shown in drawing	m	6.3		
15.1.42		Ø210mm Round Insulated Branch Duct as shown in drawing	m	11.5		
15.1.43		Ø200mm Round Insulated Branch Duct as shown in drawing	m	2.6		
15.1.44		Ø180mm Round Insulated Branch Duct as shown in drawing	m	29.5		
15.1.45		Ø170mm Round Insulated Branch Duct as shown in drawing	m	33.0		
15.1.46		Ø150mm Round Insulated Branch Duct as shown in drawing	m	9.5		
15.1.47		Ø230mm take-off from Rectangular Main Duct as shown in drawing	each	1.0		
15.1.48		Ø280mm x Ø230mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	2.0		
15.1.49		Ø260mm x Ø210mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.50		Ø250mm x Ø210mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.51		Ø250mm x Ø170mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.52		Ø240mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.53		Ø230mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	2.0		
15.1.54		Ø220mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.55		Ø220mm x Ø170mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.56		Ø210mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
15.1.57		Ø200mm x Ø170mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
15.1.58		Ø280mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
15.1.59		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
15.1.60		Ø250mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
15.1.61		Ø230mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
15.1.62		Ø220mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
15.1.63		Ø210mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
15.1.64		Ø200mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
15.1.65		Ø180mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	7.0		
15.1.66		Ø170mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	6.0		
15.1.67		Ø160mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
15.1.68		Ø150mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	11.0		
15.1.69		210 x 210 Rectangular Manual Duct Damper	each	1.0		
15.1.70		Ø190mm Round Flexible duct	m	2.0		
15.1.71		Ø180mm Round Flexible duct	m	22.0		
15.1.72		Ø170mm Round Flexible duct	m	16.0		
15.1.73		Ø160mm Round Flexible duct	m	4.0		
15.1.74		Ø150mm Round Flexible duct	m	22.0		
15.1.75		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other associated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
16		<u>Fifth Floor Main Ductwork, Transition Pieces, Branch Ducts and Terminal Branches connected to Eastern Plantroom's Air Handling Unit</u>				
16.1.1		Rectangular Main Duct 480mm x 700mm 90o elbow in vertical plane	each	1.0		
16.1.2		Rectangular Main Duct 480mm x 700mm 90o elbow in horizontal plane	each	4.0		
16.1.3		Rectangular Manual Balancing Damper 480mm x 700mm	each	1.0		
16.1.4		Rectangular Main Duct 480mm x 700mm	m	36.8		
16.1.5		Rectangular Main Duct Transtion Piece - (480mm x 700mm) to (480mm x 650mm)	each	1.0		
16.1.6		Rectangular Main Duct 480mm x 650mm	m	7.1		
16.1.7		Rectangular Main Duct Transtion Piece - (480mm x 650mm) to (480mm x 610mm)	each	1.0		
TOTAL CARRIED FORWARD TO SECTION B						

Item	Payment Clause	Discription	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
16.1.8		Rectangular Main Duct 480mm x 610mm	m	3.1		
16.1.9		Rectangular Main Duct Transtion Piece - (480mm x 610mm) to (480mm x 570mm)	each	1.0		
16.1.10		Rectangular Main Duct 480mm x 570mm	m	3.2		
16.1.11		Rectangular Main Duct Transtion Piece - (480mm x 570mm) to (480mm x 530mm)	each	1.0		
16.1.12		Rectangular Main Duct 480mm x 530mm	m	7.2		
16.1.13		Rectangular Main Duct Transtion Piece - (480mm x 530mm) to (480mm x 490mm)	each	1.0		
16.1.14		Rectangular Main Duct 480mm x 490mm	m	3.6		
16.1.15		Rectangular Main Duct Transtion Piece - (480mm x 490mm) to (440mm x 490mm)	each	1.0		
16.1.16		Rectangular Main Duct 440mm x 490mm	m	3.8		
16.1.17		Rectangular Main Duct Transtion Piece - (440mm x 490mm) to (440mm x 460mm)	each	1.0		
16.1.18		Rectangular Main Duct 440mm x 460mm	m	7.4		
16.1.19		Rectangular Main Duct Transtion Piece - (440mm x 460mm) to (440mm x 440mm)	each	1.0		
16.1.20		Rectangular Main Duct 440mm x 440mm	m	3.9		
16.1.21		Rectangular Main Duct Transtion Piece - (440mm x 440mm) to (350mm x 440mm)	each	1.0		
16.1.22		Rectangular Main Duct 350mm x 440mm	m	5.2		
16.1.23		Rectangular Main Duct Transtion Piece - (350mm x 440mm) to (350mm x 360mm)	each	1.0		
16.1.24		Rectangular Main Duct 350mm x 360mm	m	4.9		
16.1.25		Rectangular Main Duct Transtion Piece - (350mm x 360mm) to (300mm x 320mm)	each	1.0		
16.1.26		Rectangular Main Duct 300mm x 320mm	m	5.3		
16.1.27		Rectangular Main Duct Transtion Piece - (300mm x 320mm) to (240mm x 240mm)	each	1.0		
16.1.28		Rectangular Main Duct 240mm x 240mm	m	5.3		
16.1.29		Ø260mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
16.1.30		Ø240mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
16.1.31		Ø230mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	2.0		
16.1.32		Ø240mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	8.0		
16.1.33		Ø210mm Round Branch Duct take-off Piece from Rectangular Main Duct	each	1.0		
16.1.34		Ø270mm Round Insulated Branch Duct as shown in drawing	m	1.7		
16.1.35		Ø260mm Round Insulated Branch Duct as shown in drawing	m	2.9		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
16.1.36		Ø240mm Round Insulated Branch Duct as shown in drawing	m	22.7		
16.1.37		Ø230mm Round Insulated Branch Duct as shown in drawing	m	6.0		
16.1.38		Ø210mm Round Insulated Branch Duct as shown in drawing	m	6.4		
16.1.39		Ø200mm Round Insulated Branch Duct as shown in drawing	m	6.1		
16.1.40		Ø190mm Round Insulated Branch Duct as shown in drawing	m	27.8		
16.1.41		Ø180mm Round Insulated Branch Duct as shown in drawing	m	52.0		
16.1.42		Ø160mm Round Insulated Branch Duct as shown in drawing	m	2.4		
16.1.43		Ø230mm take-off from Rectangular Main Duct as shown in drawing	each	1.0		
16.1.44		210mm x 210mm Insulated Rectangular Branch Duct take-off from Rectangular Main Duct as shown in drawing	m	1.0		
16.1.45		Ø270mm x Ø200mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
16.1.46		Ø260mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	1.0		
16.1.47		Ø240mm x Ø190mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	3.0		
16.1.48		Ø240mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	5.0		
16.1.49		Ø230mm x Ø180mm Round Insulated Branch Duct Concentric Reducer Piece as shown in drawing	each	2.0		
16.1.50		Ø270mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
16.1.51		Ø260mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
16.1.52		Ø240mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	8.0		
16.1.53		Ø230mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	2.0		
16.1.54		Ø210mm Round Branch Duct Round Manual Balancing Damper as shown in drawing	each	1.0		
16.1.55		Ø210mm Round Flexible duct	m	2.0		
16.1.56		Ø200mm Round Flexible duct	m	4.0		
16.1.57		Ø190mm Round Flexible duct	m	14.0		
16.1.58		Ø180mm Round Flexible duct	m	30.0		
16.1.59		Ø160mm Round Flexible duct	m	2.0		
16.1.60		Duct Supports, Duct threaded bar hangers, fasteners, gaskets, sealants and all other associated components required to successfully install all the mentioned ductwork in the area above	sum	1.0		
		TOTAL CARRIED FORWARD TO SECTION SUMMARY				

Item	Payment Clause	Description	Unit	Qty		
		<u>MECHANICAL WORKS</u>				
16.1.61		HVAC System Shop Drawings & As-built Drawings of final HVAC Systems	sum	1.0		
16.1.62		Handover Packs of all HVAC systems installed and constructed as described in Works Information Document	sum	1.0		
16.1.63		<u>Plumbing Works For Potable Water in Ground Floor, Female Ablution, Male Ablution, Paraplegic Ablution, Ground Floor Canteen kitchen</u>				
16.1.64		For the design, supply, delivery, installation testing and Commissioning of the Water reticulation system including connection pipework, supports, hangers, pipe fittings, valves as per the SANS 10252 code.manufacturer's specification and recommendations				
16.1.65		Pipe Lengths				
16.1.66		Pipe, DN 28: copper pipe	m	13.0		
16.1.67		Pipe, DN 22: copper pipe	m	18.0		
16.1.68		Pipe, DN 15: copper pipe	m	15.0		
		<u>Tee fittings</u>				
16.1.69		Equal Tee, DN 15 x DN 15: copper pipe compression fitting	no	6.0		
16.1.70		Equal Tee, DN 22 x DN 22: copper pipe compression fitting	no	9.0		
16.1.71		Reducing Tee, DN 28 x DN 22 x DN28: copper pipe compression fitting	no	2.0		
16.1.72		90 Degrees Fittings				
16.1.73		DN 28, 90 degree bends	no	5.0		
16.1.74		DN 22, 90 degree bends	no	8.0		
16.1.75		DN 15, 90 degree bends	no	5.0		
		<u>Isolating valves</u>				
16.1.76		Brass Gate valve, SABS, DN 28 - With compression fitting ends	no	1.0		
16.1.77		Stop brass stopcock, DN 22	no	11.0		
16.1.78		Plastic-coated aluminium die-cast lever valve, DN 15	no	7.0		
		<u>Reducers</u>				
16.1.79		Reducer, DN 28 x DN 22 brass compression fitting	no	1.0		
16.1.80		Reducer, DN 22 x DN 15 brass compression fitting	no	1.0		
		<u>Pipe Hangers, Fittings, Supports, Saddles</u>	sum	1.0		
16.1.81		Testing and Commissioning	sum	1.0		
16.1.82		Plumbing System Shop Drawings & As-built Drawings of final Plumbing System	sum	1.0		
16.1.83		4.5 kg Dry Chemical Powder Fire extinguisher installed mounted on wall with wooden backboard bracket to SANS 1910	no	27		
		TOTAL CARRIED FORWARD TO SECTION B				

Item	Payment Clause	Discription	Page	Amount
		<u>MECHANICAL WORKS SECTION SUMMARY</u>		
		<u>SECTION SUMMARY</u>		
		Page Total brought forward	34	
		Page Total brought forward	35	
		Page Total brought forward	36	
		Page Total brought forward	37	
		Page Total brought forward	38	
		Page Total brought forward	39	
		Page Total brought forward	40	
		Page Total brought forward	41	
		Page Total brought forward	42	
		Page Total brought forward	43	
		Page Total brought forward	44	
		Page Total brought forward	45	
		Page Total brought forward	46	
		Page Total brought forward	47	
		Page Total brought forward	48	
		Page Total brought forward	49	
		Page Total brought forward	50	
		Page Total brought forward	51	
		Page Total brought forward	52	
		Page Total brought forward	53	
		Page Total brought forward	54	
		Page Total brought forward	55	
		Page Total brought forward	56	
		TOTAL CARRIED FORWARD TO SECTION 57 of 59		

Page 38 of 59