

Fixed Schedule of Rates
Section 1 – General Preambles

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

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APPLICABLE TO FIXED SCHEDULE OF RATES

1. GENERAL

- 1.1. This Fixed Schedule of Rates have been prepared in accordance with the principles of the Standard Method of Measurement of Building Works (Second edition) issued by the Singapore Institute of Surveyors and Valuers. Where however the method of measurement expressed herein has departed from the principles of the said Standard Methods of Measurement, the method as expressed in the Fixed Schedule of Rates is to be followed and notwithstanding anything stated or implied in the said Method or Measurement, this Fixed Schedule of Rates shall be firm throughout the whole duration of the Contract and any extension thereof.
- 1.2. The term "as specified" means as specified in the Requirement Specifications, Preliminaries, Preambles and Conditions of Contract.
- 1.3. The Contractor is referred to the full description of the materials and workmanship in the Requirement Specifications. These descriptions are to be read in conjunction with the measured items hereafter, no cross-reference to the Requirement Specifications has been made and the rates had included for complying with the requirements of the Requirement Specifications.
- 1.4. The following preambles shall be read in conjunction with their respective trades in the Fixed Schedule of Rates. All rates contained in the Fixed Schedule of Rates shall be held to include allowances complying with the following preambles where applicable.
- 1.5. All rates set against each and every item in the Fixed Schedule of Rates are fixed rates, and no amendments whatsoever shall be made to such rates.
- 1.6. All rates include for all plant, conveyance and delivery, sea and land transport, unloading, storing, hoisting, all labour, setting, fitting and fixing in position irrespective of height, all cutting to required profiles and shapes and waste return of packing, supervision, materials, sample of materials, erection, maintenance and every incidental and contingent cost, profit and establishment charges whatsoever unless otherwise specifically indicated.

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- 1.7. All rates are to apply equally to the work whether in large or small quantities and irrespective of height, shape and any profile and difficult or easy situations and no claim shall arise as to the proportions of the work actually falling into these categories.
- 1.8. All thickness and sizes described in the Fixed Schedule of Rates are finished consolidated thickness and size whether specifically stated or not, unless otherwise stated.
- 1.9. Rates include for work to existing or new building/s.

2. EXCAVATION

- 2.1. The quantities of excavation and filling shall be measured on the assumption that the gradient of the existing surfaces between the nearest adjacent spot levels and/or between contours is constant. Rates shall be held to include for any additional excavation or filling required due to variations of the existing surfaces differing from a constant gradient between spot levels.
- 2.2. All excavation, filling and disposal shall be measured nett. The increase in bulk after excavation, or before consolidation, any necessary double handling and any extra excavation for planking and strutting and formwork shall be held to have been included in the rates.
- 2.3. Rates for excavation shall be held to include for excavating by hand or machine over piled site or in whatever type of soil except that which in the opinion of the Superintending Officer requires the use of compressed air plant, blasting or other special method of removal. The rates shall also be held to include for getting out, removing of old bakau piles, cutting and forming slopes, maintaining the sides of all excavation by planking and strutting, keeping the excavations clear of all fallen materials and rubbish, trimming, levelling, ramming and consolidating by mechanical means the bottoms of all excavation, cutting out soft spots, and keeping all excavation free from water by pumping or baling and providing any temporary drains if required. Pumping below the normal water level shall be measured separately.
- 2.4. The quantities of breaking up concrete, reinforced concrete and tarmacadam or hardstanding shall be measured nett, the rates shall include for making good all works disturbed to match with the existing.
- 2.5. Rates for disposal of excavated material shall be held to include the provision for transport, loading and unloading, and a shoot, dump or tip.

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- 2.6. Rates for hardcore shall be held to include for all labours in laying to falls or cambers, handpacking vertical edges or haunchings, forming splayed edges and the like, blinding with sand, quarry waste or similar fine materials and consolidation in layers not exceeding 300mm thick.
- 2.7. Bakau piles shall be of reasonably uniform diameter throughout the length. The diameter shall be measured at mid-length. Rates for bakau piling, shall be held to include all handling, pitching, heading, pointing, providing protective wrought iron ring and driving with an approved monkey and finally cutting off top of piles to the required levels where necessary including all necessary excavation, disposal of materials displaced consequent upon driving of piles and moving piling rig around site.
- 2.8. Rates for pressure impregnated keruing or kempas timber pile shall be held to include all handling, pitching, heading, pointing, providing protective helmet, driving pile down to an approved set with an approved monkey moving rig and finally cutting off top of pile to the required level where necessary, apply wood preservative to cut off surfaces of pile including all necessary wastage, excavation, disposal of materials displaced consequent upon the driving of the pile and moving piling rig around site.
- 2.9. Payment shall be based on penetration length of the pile.
- 2.10. Rates for turfing works shall be held to include a maintenance period of six months for watering, weeding, cutting, top dressing, rolling, settlement, re-seeding and the like.
- 2.11. No trees, shrubs, creepers and plants shall be removed without the written permission of the S.O.

3. CONCRETE WORK

- 3.1. Rates for each item of concrete shall be held to include for pour joints, vibration, tamping, forming or cutting all grooves, chases, mortices, holes, openings not exceeding 0.10m² and making good and any other sundry items of a like nature, laying on any type of sub-base and for laying to falls or cambers and preparing surfaces and forming keys to receive screeds or pavings where required, forming keys on substrate, wire-brushing and clearing away all laitance, wetting and applying cement slurry or applying primer, removing mill scale, dirt, oil and any other deleterious matter from existing reinforcing bars and forming joints.

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- 3.2. Rates for each item of concrete shall be held to include preparation of old concrete to receive new, forming keys in old concrete, wire brushing and removing laitance and dust, thoroughly wetting and washing old surfaces with a neat cement slurry or priming old surfaces with approved primer, cleaning and removing dust, mill scale, dirt, oil and any other deleterious materials from existing reinforcement.
- 3.3. Rates for making good cracks and the like with mortar shall be held to include V-shape diamond cutting or by other approved means, removing and wire brushing away loose concrete, dust, laitance, etc. wetting with cement slurry or priming with approved primer and filling with a suitable mix of mortar.
- 3.4. Rates for all cutting in plaster, render, concrete and the like shall be held to include, unless otherwise approved, providing diamond cutter and drawing lines.
- 3.5. Rates for surface water channels, stormwater drains, concrete curbs and the like shall be held to include for all angles, intersections, ends, outlets, extra materials for forming grooves or rebates, preparation to old drains to receive new, any other sundry items of a like nature.
- 3.6. Rates for ready-mix concrete shall be held to include for the provision of supplier's certificates, giving the actual weight of aggregates, cement and sand, and delivery to site including transportation.
- 3.7. Rates for mild steel or high tensile steel rod reinforcement shall be held to include for short length, thoroughly wire brushing and cleaning all bars from rust, dust, mill scale, dirt, oil and any other deleterious matter, rolling margins, cutting to the required lengths, bending and hooking as required and for securing with and including No. 16 gauge galvanised soft iron tying wires at all crossings and spacer bars.
- 3.8. Rates for fabric reinforcement shall be held to include for bending of the fabric as necessary, extra material at laps, tying with and including No. 16 gauge galvanised soft iron tying wire at joints and for all raking and circular cutting and notchings around obstructions.
- 3.9. Rates for formwork shall be held to include for all necessary boardings, supports, erecting, framing, cutting, perforations for pipes, angles, cleaning, wetting and treatment with mould oil, mould liquid and the like, splayed edges, notchings, allowance for overlaps and passings at angles, battens, strutting, bolting, wedging, easing, striking and removal and for all raking and circular cutting.

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- 3.10. Rates for wrot formwork shall be held to include for lining the formwork with any suitable material as directed by the Superintending Officer and for cleaning off any fins remaining on the surfaces of the concrete after removal of the formwork and for making good any honeycombing or irregularities and for leaving the concrete with a true and even face.
- 3.11. Rates for precast concrete shall be held to include for all necessary moulds, formwork, surface finishes, holes, rebates, notchings, sinkings, mortices, recesses for anchors, bolts and the like and for hoisting, bedding, jointing, grouting and pointing of joints in cement mortar (1:3), delivery, unloading, erecting, fixing including all necessary temporary erection gear and bracing. Hoisting using cranes shall be measured separately. Reinforcement in precast concrete shall be measured separately.

4. BRICKWORK AND BLOCKWORK

- 4.1. Rates for each item of brickwork and facings shall be held to include for all holdfasts and bonding ties at abutments to concrete structures, all rough and fair cuttings, oversailing and receding courses, rough relieving and discharging arches, wedging and pinning, raking out joints for and pointing flashings, bedding plates, bedding and pointing wood frames, parging and coring flues and labour eaves, filling, plumbing angles, forming square and rebated reveals, cut squints and birdsmouths, notches, forming, leaving or cutting chases, holes and mortices, cutting and pinning and making good and other sundry items of a like nature. Rates for half brick thick and below brickwalls and piers shall be held to include brick reinforcement.
- 4.2. Rates for each item of brickwork and facing shall apply equally to new brickwork to existing walls or structures and new brickwork in filling opening including hacking and preparing existing floor, wall and ceiling finishes to receive new brickwork, making good all work disturbed to match existing and extra labour and materials for toothing and bonding.
- 4.3. Rates for each item of brickwork and facings shall apply equally to brickwork in thickening existing walls, brickwork in tapered walls and walls with battering face, brickwork circular on plan and to brickwork in manholes (unless otherwise mentioned), including forming openings in walls for drain pipes and turning arches over same where required and all templates.

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- 4.4. Rates for each item of blockwork shall be held to include for all purpose-made or special-made blocks, all holdfast and bonding tiles at abutments to concrete structures, all rough and fair cuttings, over-sailing and receding courses, free ends, plumbing angles, forming square and rebated reveals, notches, cutting and pinning at top, cutting at ends and around openings, cutting and bending to intersections, angles and irregular angles, raking out joints for and pointing flashings, bedding and pointing wood frames, parging and coring flues, labour eaves filling, notches, forming, leaving or cutting chases, holes and mortices, cutting and pinning and making good and any other sundry items of a like nature.
- 4.5. Rates for each item of blockwork shall apply equally to new blockwork to existing or different types of walls or structures and new blockwork in filling opening including hacking and preparing existing floor, wall and ceiling finishes to receive new blockwork, making good all work disturbed to match existing and extra labour and materials for toothing and bonding.
- 4.6. Rates for glass blocks shall be held to include for reinforcement strip, mortar joints, bedding, raking and pointing joints, bitumen emulsion coating, fibreglass covering strips, mastic compound and any other sundry items of a like nature.

5. ROOFING

- 5.1. Rates for all types of roofing materials shall be held to include small quantities, laps, all necessary fixing, cutting and waste and all necessary sundry materials, equipment, tools, fuel, labour for hoisting and fixing, protection against weather, clearing blockage and maintaining all existing rainwater goods during the progress of the works, making good all existing works such as outlets, services, etc. affected and temporary diversion of existing services.
- 5.2. Rates for corrugated and similar roof sheeting shall be held to include for straight, skew and circular cuttings at eaves, verge, top edges, abutments, valleys and hips, cutting holes for pipes, nails, screws, clips, pellets, straps and the like, fair ends, stops and intersections. Rates for sheet membrane roofing material together with its associated underbeds and insulation and cement panels and the like shall be held to include for narrow widths, temporary rules, covering up, all labour and materials to form arises, fair edges, finishing to eaves and verges, skirtings, upstands, flashings, aprons, gutters, ridges, hips and valleys, etc. and all cuttings and working around pipes and the like angles, fillets, fair ends, short lengths, junction, chasing the structure for burning-in or tucking in edges of coverings and flashings and the like.

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- 5.3. Rates for profiled sheet roofing or cladding shall be deemed to include all cutting at square and raking abutments, top edges, bedding and pointing, eaves fillers, verges, cutting and fitting and making good around outlets, pipes and any other sundry items of a like nature.
- 5.4. All works including flat roof gutters, skirtings, upstands, edges, parapet walls, cladding, and the like, unless otherwise stated shall be measured the nett area covered.

6. CARPENTRY AND JOINERY

- 6.1. Rates for each items of carpentry work shall be held to include for all cutting, notching, boring, sinking, pelleting, fitting, trimming, mitring, halving, morticing, tenoning, dovetailing, scarfing and wedging and all ends, splayed edges, short lengths and temporary supports and any other sundry items of a like nature and all labour in forming, drilling for bolts and fixing in position complete with nails, screws or adhesives.
- 6.2. Rates for wallboard, hardboard, plywood and other sheet materials of a like nature where used for lining ceilings and walls, dados, jambs, fittings, fitments, and the like shall be held to include for narrow widths, small quantities, all cutting and making holes for pipes, nails, screws or adhesives.
- 6.3. Rates for each item of joinery work shall be held to include for all nailing, glueing, screwing, plugging, cutting, notching, holes, housing ends, mitring, ends, and shaped ends, angles, junctions, heading joints, short lengths, tongued angles, splayed or rounded edges, chamfers, rebates, grooves and any other sundry items of a like nature including stops and working cross-grain, fitting and handing.
- 6.4. Rates for Carpenter's and Joiner's work shall be held to include for all screws, nails, pins or brads, short lengths, cleats, sprockets and the like. Timber exceeding 5.00m in length shall be given separately and price in accordance to prevailing market price.
- 6.5. Rates for each item of ironmongery work shall be deemed to include all cutting, fitting, sinking, boring, morticing and the like complete with all matching screws.
- 6.6. Rates for each item of ironmongery work shall be held to include fixing to walls, floors, timbers, metal, glass or other materials. Bolts, explosive tool fastenings and other metal anchors, fastening and the like required for fixing shall be deemed to be included with each item.
- 6.7. Rates for each item of locks shall be deemed to include two numbers of key, handles and all necessary accessories.

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7. STRUCTURAL STEELWORK AND METALWORK

- 7.1. No allowance shall be made for rolling margin and the weight of welding materials in the measurement of structural steelwork and metalwork.
- 7.2. Rates for structural steelwork and metalwork shall be held to include shop and site fabricating, drilling, cutting (including holes and openings for other trades), notching, splicing, welding, machining ends and bearings, delivery, unloading, landing, hoisting, erecting, fitting and fixing in position, welding appliances, rust inhibitive primer (factory-coated), red lead primer assembling, bedding, filling in solid and pointing, lugs and the like.
- 7.3. Rates for structural steelwork and metalwork shall include all temporary bracing supports and the like required for erection, providing samples and tests required by the specification, the inspection of welds including the use of any special radiographic techniques.
- 7.4. Rates for structural steelwork and metalwork shall be held to include preparation of shop drawings, where necessary. Rates for metalwork shall be held to include protection such as wrapping finished work with paper, coating with grease or carrying out such other protective measures as may be required and removing and cleaning on completion.

8. WALL AND CEILING FINISHINGS/FLOOR FINISHINGS

- 8.1. Rates for each item of wall and ceiling finishes shall be deemed to include all temporary rules, temporary grounds, temporary screeds and the like, cramps, dowels, ties, special metal supporting brackets and the like, cutting holes, notching and the like, masking, labour to internal angles other than cover angles, making good around pipes, sanitary fixtures and the like, work in narrow widths and small quantities, joints between different types of works, joints between new and old work, forming keys on old and new works, preparation of old and new substrate, internal angles, fair edges, rounded or chamfered edges or angles, arises, quirks, grooves, V-joints, groin points, and other intersections of curved surfaces, rounded coves and external angles not exceeding 25mm radius, mitres, stops and the like on cornices, mouldings, architraves, coves, skirtings, gutters, strings and all making good and any other sundry items of a like nature.

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- 8.2. Rates for each item of wall and ceiling finishes shall be held to include protecting surfaces from the weather or building operations and providing all necessary samples.
- 8.3. Rates for each item of wall tiling shall be held to include for laying to approved patterns, narrow widths, small quantities, raking or circular cuttings, fitting around bars, pipes and the like, rounded edge tiles, coved internal angle tiles, rounded external angle tiles, all short lengths, cut and special made angles, junctions, ends and making good and any sundry item of a like nature, soaking tiles in water, forming keys on existing or new substrate and cement slurry where necessary.
- 8.4. Rates for cutting, cracks, chases and the like existing wall and ceiling finishings shall be held to include chiesel and diamond cutting, all necessary tools and appliances, temporary lines, clearing away debris and preparing substrate.
- 8.5. Rates for each item of floor finishes shall be held to include all temporary rules, temporary grounds, temporary screeds and the like, cutting holes, notching and the like, all normal bedding and pointing materials, providing all necessary samples, cleaning down and making good around pipes, sanitary fixtures and the like, work in narrow widths and small quantities in areas interrupted by seating, channels and the like, all internal angles, quirks, grooves, throats, drips, coves and rounded external angles not exceeding 25mm radius, angles, stops, intersections, fair ends, junctions, wreathed corners and the like on cornices, mouldings, enrichments, coves, skirtings, gutters, channels, strings, kerbs and similar or other sundry items of a like nature.
- 8.6. Rates for each item of skirtings, risers, moulded or rounded edges, channels and the like shall be deemed to include all short lengths, formed, cut and purpose made angles, junctions, ends and the like, making good and any other sundry items of a like nature.
- 8.7. Rates for each item of floor finishes and skirting shall be deemed to include protecting surfaces from the weather or building operations.
- 8.8. Rates for each item of floor tiling shall be held to include for laying to approved patterns, narrow widths, small quantities, raking or circular cuttings, fitting around bars, pipes and the like, rounded edge tiles, coved internal angle tiles, rounded external angle tiles, all short lengths cut and special made angles, junctions, ends and making good and any sundry items of a like nature and soaking tiles in water, forming keys in existing or new substrate and cement slurry where necessary.

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9. PLUMBING

- 9.1. Rates for each item of plumbing work shall be deemed to include all cutting and waste, short lengths, joints in the running lengths, joints to all branches, tees, sockets, sleeves, connectors, backnuts, nipples, long screws, forming holes, joints between different pipes, standard pipe fixings or supporting clips, saddles, fastening brackets, holderbats straps and the like and for fixing to tiled or cast in-situ surfaces or to new or existing surfaces including making good.
- 9.2. Rates for each item of plumbing work shall be deemed to include application for permit and giving notices, complying with all requirements of the relevant authorities, paying fees and the like in connection with the installations and preparing and submitting drawings for approval if required, and engaging licensed plumbers to carry out the works.
- 9.3. Rates for each item of plumbing work shall be held to include work outside the boundary of the property and work laid in the ground, embedded in concrete, cement screed and the like and laid exposed along walls, ceiling and the like.
- 9.4. All diameters of pipes given in the measurement shall be the internal diameter and approximate equivalent to imperial sizes.
- 9.5. Pipes shall be deemed to include all elbows, bends, tees, junctions, inspection openings, reducers, fire bends, toes, diminishing pieces, plugs, crosses, capped ends, splay out ends and similar pipe fittings.
- 9.6. All copper pipes embedded in masonry shall be jointed by silver brazed or other approved method of welding or jointing.

10. GLAZING

- 10.1. Rates for each item of glazing shall be held to include for small quantities, small panes, irregular shapes, all raking and circular cutting, waste and risks, forming openings in glass, replacing cracked, scratched or broken glass, fixing and bedding, cleaning and polishing and all necessary protection.
- 10.2. Rates for each item of glazing shall be held to include fixing to metal, timber, concrete and other surfaces with and including pins, non-corrosive screws and cups, sprigs, putty and the like.

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11. PAINTING AND DECORATING

- 11.1. Rates for each item of painting and decorating shall be deemed to include all preliminary preparatory work to the surface required before the application of any material, use of different types of paint, all multi-coloured work and cutting to line and rubbing down between coats, work to internal and external surfaces, scaffolding, staging, narrow widths and girths, the protection and/or masking of floors, fittings and the like, removing and refixing door and window furniture, signs and the like and removing splash and spray marks.
- 11.2. Unless otherwise stated, scaffolding and steel staging shall be measured separately when the height of painting exceeding 6.00m.
- 11.3. Rates for painting and decorating to walls, ceilings, beams, columns and the like shall be held to include for extra labour, enamel and aluminium paint and associated materials for painting to electrical wiring battens, roses, conduits, switches and the like running or fixing to the surfaces in which painting work are being carried out.
- 11.4. Rates for each item of painting and decorating shall be held to include for brushes, rollers, spraying appliances, spirits, turpentine and the like.
- 11.5. Rates for each item of painting and decorating shall be held to include application on different types of substrate such as plaster, timber, metal and the like, work to existing and new substrates and work on walls, columns, ceilings, beams, fascia, skirting and the like.
- 11.6. All work shall be measured the net area covered. No allowance shall be made in the measurement for mouldings, edges and the like.

12. DRAINAGE WORK

- 12.1. Rates for each item of drainage work shall be held to include work in the ground, concealed, exposed and suspended.
- 12.2. Rates for each item of excavation shall be held to include getting out, maintaining faces of drainpipe trenches, grading bottoms, ramming, planking and strutting, backfilling, disposal of surplus soil and keeping excavations free from all surface and subterranean water, extra excavation for concrete beds and working space, excavating straight and curved trenches, and excavation in all types of soil.
- 12.3. Rates for each item of concrete beds, benchings, surrounds and coverings to pipes shall be deemed to include work in differing pipes and pipe sizes and formwork.

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12.4. Rates for each item of pipework shall be deemed to include for all cutting and waste, short lengths, joints in the running lengths, joints to all branches, tees, sockets, sleeves, connectors, backnuts, nipples, long screws, forming holes, joints between different pipes, standard pipe fixings or supporting clips, saddles, fastening brackets, holderbats straps and the like and work laid to gradient or along slopes.

12.5. Rates for each item of drainage work shall be held to include application for permit and giving notices, complying with all requirements of the relevant authorities, paying fees and the like in connection with the installations and preparing and submitting drawings for approval if required, and engaging licensed contractor to carry out the work.

13. ROADLAYER

13.1. The preambles of "Excavator - Painter" contained in the tender documents shall apply equally to this section where applicable.

13.2. The rates for sub-bases, bases, bottomings, etc., irrespective of sizes and types shall be the consolidated finished thickness as directed by the Superintending Officer and include labour in laying and handpacking to required profile, falls, chambers and super-elevation etc. supply and fixing of temporary level pegs and remove when not required.

13.3. Sub-base material shall be natural sand, crushed rock and crushed concrete or any other granular material (maximum size 75mm) approved by S.O.

13.4. Coarse granite aggregate (crusher run) shall be either crushed stone or crushed gravel (maximum size 90mm).

13.5. Graded granite aggregate shall be planted-mixed graded crushed, clean and hard angular aggregate complying with SS31 (maximum size 50mm).

13.6. Granite Block shall consist of 200 - 300mm size block.

13.7. Hot-mix asphalt concrete mix-specification type B1 shall contain 4.5% to 6% of bitumen with maximum size of stone 35mm.

13.8. Hot-mix asphalt concrete mix-specification type W1 shall contain 5.5% to 6.5% of bitumen with maximum size of stone 10mm.

13.9. Hot-mix asphalt concrete mix-specification type W3 shall contain 5.5% to 6.5% of bitumen with maximum size of stone 20mm.

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GENERAL INFORMATION

NOTE: The following terms, expressions and abbreviations where they appear in the Fixed Schedule of Rates shall have the meaning or implications hereby respectively assigned to them and are applicable to all Trades.

I. Material And Labour

The provision of all materials and labour and the performance of all workmanship (together with the provision and use of tools, plant scaffolding and appliances) necessary for the proper execution of the work as described in the item and the provision and use of all coverings or casings, etc., necessary to protect the works from damage from falling materials or other cause.

II. Labour Only

As defined for materials and labour except for the provision of materials.

III. Fixing, Fixing Only, Laying Only, Setting Only

As defined for materials and labour except the provision of the article to be fixed laid or set, but including removal of the article from store, or as directed (except where a separate item for such removal is given) and the provision of materials necessary for the proper execution of the work, as described in the item, which are subsidiary to but are not supplied as part of the principal article such as nails, screws, glue, packing, jointing and bedding materials and the like unless otherwise specifically excluded.

IV. Add If In Repairs

All materials, labour, tools and plant required for taking out the old article (including plugs and holdfasts) removal of the old article to store or as directed (except where a separate item for such removal is given), making good all works disturbed at fixings and obtaining access by raising or removing covers to fittings, etc. and replacing on completion (except where a separate item for such work is given).

V. Fixing Only In Repairs

As defines for "Fixing only" and in addition as defined for "Add if in repairs".

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VI. Patch Or In Patches

A repair to existing work which a partial replacement, renewal or repair is affected and to which the patch is intimately connected.

The description is not applicable to small quantities in new work, nor to work in repairs which does not necessitate cutting out or otherwise removing (or in the case of painting and similar work preparing a portion of the existing work) and fitting, matching or bonding the patch to the existing work.

VII. Renew Or Replacement

As defined for materials and labour and in addition including taking out the old articles and attachment disconnecting fittings and removal of the old articles as directed (except where a separate item for such removal is given) and making good all works disturbed to match with the surroundings.

Rates for each and every items of works in the respective `trades' are deemed to include for labour and materials, supply and fix, supply and lay or supply, fabricated and installation (except where items described as fix only, refix only, labour only, lay only or setting only) and shall not mentioned or repeated in the description.

Fixed Schedule of Rates
Section 2 – Excavation

FIXED SCHEDULE OF RATES**SECTION 2 – EXCAVATION**

	UNIT	\$	¢
<u>EXCAVATION</u>			
1) Clearing level or sloping site of tall grass, shrubs, bushes, undergrowth, etc. and small trees not exceeding 600mm girth at a height of 1 metre above ground and grubbing up their roots and filling voids with earth obtained from Contractor's own sources.	m ²	4.00	
2) Excavating surface to average depth not exceeding 100mm, getting out, removing, depositing, spreading, levelling and mechanically ramming and consolidating on site or removing off site to a dump as directed by the S.O. or depositing at Contractor's own dumping ground.		2.00	
3) Ditto but average depth exceeding 100mm and not exceeding 300mm deep ditto.	m ²	13.00	
4) Ditto but average depth exceeding 300mm and not exceeding 1000mm deep ditto.	m ³	17.00	
5) Excavate to form trenches, curved trenches, pier holes, stanchion bases, etc. to receive beams, large concrete pipes, drains, foundations, pile caps, etc. commencing from formation level and not exceeding 2.00m deep and getting out not (Excavation for drain pipes excluded).	m ³	65.00	
6) Excavating pits, small holes, etc (i.e. holes not exceeding 0.10m ³) to receive bases of posts, etc. getting out, backfilling, removing surplus excavated materials off site and making good.	No	13.00	
7) Excavating trenches for surface water channels and drains not exceeding 525mm width to an average depth not exceeding 0.75m, getting out, backfilling, removing surplus excavated materials off site and making good (length measured over sump pits).	m	10.00	
8) Excavating trenches for small or large pipes, curbs, etc. not exceeding 0.45m deep, getting out, backfilling, removing surplus excavated material off site and making good.	m	6.00	
9) Ditto but exceeding 0.45m and not exceeding 0.95m deep and ditto.	m	13.00	

FIXED SCHEDULE OF RATES**SECTION 2 – EXCAVATION**

		UNIT	\$	¢
<u>FILLING AND REMOVING</u>				
10)	Backfilling and ramming best of excavated material around foundations , trench, column base, beam, pier hole etc.	m ³	17.00	
11)	Removing excavated materials within Sentosa from temporary heap, depositing, spreading, levelling and consolidating in 300mm layers by hand or mechanical means as directed.	m ³	13.00	
12)	Loading into lorry and carting away excavated materials within Sentosa (Rate include bulking) irrespective of distance.	m ³	14.00	
13)	Ditto but remove off Sentosa ditto.	m ³	20.00	
14)	Loading into lorry and cart away broken concrete, bricks, reinforcement, etc. off Sentosa (rate include bulking).	m ³	20.00	
15)	Ditto to a dump within Sentosa and depositing where directed.	m ³	17.00	
16)	Dry approved earth filling obtained from the Contractor's own sources, deposited, spread and consolidated by hand or mechanical means in layers of 300mm and as directed to make up levels or banks.	m ³	18.00	
17)	Ditto but obtained from within SDC's site ditto.	m ³	10.00	
18)	Taking out silt, loose muddy soil or other materials from existing running stormwater channels, drains exceeding 150mm deep, sump pits or cesspits and removing, depositing, spreading and levelling in positions as directed by the S.O. or removing off site.	m ³	69.00	
19)	Ditto from shallow drains not exceeding 150mm deep.	m	1.00	
<u>SAND</u>				
20)	Unwashed sand in bed, filling, etc. irrespective of thickness, deposited, spread, levelled and rammed with mechanical rammer, or rolled with hand roller.	m ³	130.00	
<u>GRANITE AGGREGATE</u>				
21)	12-20mm granite aggregate in beds, fillings, etc. irrespective of thickness, deposited, spread, levelled and rammed with mechanical rammer or rolled with hand roller including blinding with quarry waste.	m ³	60.00	

FIXED SCHEDULE OF RATES**SECTION 2 – EXCAVATION**

		UNIT	\$	¢
<u>GRANITE CHIPPINGS</u>				
22)	3mm to 6mm granite chippings in bed, filling, etc. deposited, spread, levelled and rammed with mechanical rammer or rolled with hand roller.	m ³	44.00	
<u>MARBLE CHIPPING</u>				
23)	25mm thick white marble chippings (6mm - 20mm in size) deposited, spread and levelled as directed. Add or deduct \$14.00 for each 10mm variation in thickness.	m ³	48.00	
<u>QUARRY WASTE</u>				
24)	Quarry waste in beds, fillings, etc. deposited, well spread, levelled and rammed.	m ³	61.00	
25)	Quarry dust ditto.	m ³	61.00	
<u>HARDCORE</u>				
26)	Hardcore as specified in beds, making up levels, etc. and deposited, spread, levelled mechanically consolidated (in layers of 300mm thick if exceeding 300mm thick) and top blinded with sand/granite dust.	m ³	51.00	
<u>BREAKING UP</u>				
27)	Breaking up reinforced concrete by approved mechanical means.	m ³	161.00	
28)	Breaking up mass concrete and ditto.	m ³	129.00	
29)	Breaking up hardcore bed, gravel bed, brickworks, brick paving and hollow blockwall and ditto.	m ³	85.00	
30)	30) Breaking up tarmacadam and ditto	m ³	61.00	
Note : Remove off site measured separately				
<u>BAKAU PILING</u>				
31)	Supplying and laying mattress piling consisting of bakau piles 75mm diameter (at mid-length) laid to approval, including tamping pile firmly into position, cutting off pile as necessary and tying, at junction with approved tying wire (measurement on total length of piles in position).	pcs	6.00	
32)	Supply Bintangor pole	pcs	4.50	

FIXED SCHEDULE OF RATES**SECTION 2 – EXCAVATION**

	UNIT	\$	¢
<u>LICENSED CABLE DETECTION WORKER (LCDW)</u>			
Licensed Cable Detection Worker to carry out the cable detection work prior to excavation earthworks. The rate shall include the following:			
A) fee for submission of Notice Form to the Cable Damage Prevention Unit of PowerGrid.			
B) fee of Cable Route Plans obtained from PowerGrid.			
C) Cable Detection Drawings prepared by LCDW.			
D) Cable Detection Report to the Client/Corporation.			
33) Area not exceeding 1000m2.	per job	20000.00	
34) Area exceeding 1000m2 but not exceeding 2000m2.	per job	2700.00	
35) Area exceeding 2000m2 but not exceeding 3000m2.	per job	3000.00	
36) Application of earthworks excavation licence Including fee for application. (Notice commence of excavation to relevant authorities).	per job	150.00	

Fixed Schedule of Rates
Section 3 – Concrete Work

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

			UNIT	\$	¢
<u>CONCRETE WORK</u>					
<u>NOTE:</u> The rates contained herein shall apply to concrete framed structure, steel framed structure and other concrete works					
<u>IN-SITU CONCRETE (Green concrete is referred to herein</u>					
Concrete for the various components of the structure are not separately classified and all quantities are measured in m ³ and the total rounded up to 1 decimal place. Hence, 0.01m ³ shall be rounded up and paid as 0.1m ³ .					
1)	Ditto C30 ditto.		m ³	267.00	
2)	Ditto C35 ditto.		m ³	274.00	
3)	Ditto C40 ditto.		m ³	280.00	
4)	Labour trowel top surface of concrete to a smooth finish including additional cement.		m ²	9.00	
<u>REPAIR TO CONCRETE</u>					
Cut out crack to form v-shape groove, clean and prepare surface and pressure grout the crack with approved grouting materials with sufficient adhesive, compressive and tensile strength including provision for mobilisation, grout pipe, fine wiremesh, pressure grouting pump, tools, all accessories scaffolding and hacking and making good plaster or tiled finishes if any. Apply two coats of water and weather resistance protective/decorative coating as carbonation barrier all in accordance to grouting specialist's recommendation.					
5)	Non-shrink cementitious grouting on concrete floor, columns, vertical side of beam and the like (minimum two (2) metres total length within the building and per call).		m	104.00	
6)	Ditto in brick structure (ditto).		m	65.00	
7)	Epoxy resin grouting on concrete floor column, vertical side of beam and the like (ditto).		m	91.00	
8)	Ditto in soffit of concrete slabs, canopy, beam and the like (ditto).		m	130.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	€
9) Thoroughly remove spalled or loose concrete in patches in soffit of concrete slab, canopy, beam and the like until good concrete is reached. Thoroughly brush and clean all surfaces of concrete by using compressed air or chemicals. Prime all concrete surfaces with a bonding agent and patch up with approved non-shrink cementitious grout with sufficient adhesive, compressive and tensile strength including provisions for mobilization, grout pipe, fine wire mesh, pressure grouting pump, tools, all accessories scaffolding and hacking and making good plaster or tiled finishes if any. Apply two coats of water and water resistance protective decorative coating as carbonation barrier all in accordance to grouting specialist's recommendation. Thickness of spalled or loose concrete not exceeding 30mm thick (minimum one (1) m ² within the building and per call).	m ²	400.00	
10) Ditto in vertical surfaces of columns, walls and the like, (ditto).	m ²	299.00	
Hack off spalled or loose concrete in patches until rusty reinforcement and good concrete is reached. Thoroughly brush rusty reinforcement to remove rust and scale, clean all surfaces of concrete and reinforcement by using wire brush and compressed air or chemicals. Prime all exposed reinforcement with approved rust and corrosion inhibitive primer. Apply a layer of approved bonding agent to concrete and reinforcement. Construct formwork and props if necessary and patch up with approved granite aggregate, grouting materials with sufficient adhesive, compressive and tensile strength including provision for mobilization, grout pipe, fine wire mesh, pressure grouting pump, tools, all accessories, scaffolding and hacking and making good plaster or tiled finishes if any all in accordance to grouting specialist's recommendation. Remove formwork including props if any (minimum half (½) m ² within the complex and per call).			
11) Non-shrink cementitious grouting to sides and soffit of concrete slab, canopy, beam and the like.	m ²	531.00	
12) Ditto on concrete slab and in vertical surfaces of column and the like.	m ²	479.70	
13) Epoxy resin grouting in soffit of concrete slabs, canopy, beam and the like.	m ²	1114.35	
14) Ditto on concrete slab and in vertical surfaces of column and the like.	m ²	750.00	

FIXED SCHEDULE OF RATES**SECTION 3 - CONCRETE WORK**

	UNIT	\$	¢
15) Supply labour/equipments/materials to inject polyurethane water cut-off on soffit of concrete slabs not exceeding 500mmx500mm. (PU Injection)	m2	480.00	
16) Ditto but to pipe area.	m ²	350.00	
17) Supply labour / equipments/materials to rectify leakage using 'Shutout' material area not exceeding 500mm x 500mm.	m ²	360.00	
NOTE: Concrete repair -measurement shall be based on nett existing surface area of spalled or loose concrete to be repaired. Before commencement of works, joint measurement must be conducted together with the Contractor to determine the areas to be hacked and payment shall be based on agreed areas. Rate shall be held to have been included all temporary works and making good to the areas where affected by hacking. Any additional areas to be repaired after hacking shall be approved by S.O. All rates given above are inclusive of replacement of reinforcement bars. (ALL RATES IN CONCRETE REPAIR INCLUSIVE OF WORKING UNDER TIDAL CONDITION) SURFACE WATER DRAIN ALL AS BEFORE DESCRIBED IN REPLACEMENT INCLUDING HACKING UP EXISTING, REMOVING DEBRIS, JOINTING UP TO EXISTING AND TEMPORARILY DIVERTING DRAINS AS NECESSARY AND MAKING GOOD (NOTE : As before described)			
18) Not exceeding 150mm wide internally and not exceeding 150mm deep to invert. <u>Add</u> \$2.50 per m for each additional stage of 25mm in depth.	m	44.00	
19) Exceeding 150mm and not exceeding 225mm wide internally and not exceeding 225mm deep to invert. <u>Add</u> \$3.20 per m for each additional stage of 25mm in depth.	m	62.00	
20) Exceeding 225mm and not exceeding 300mm wide internally and not exceeding 225mm deep to invert. <u>Add</u> \$3.70 per m for each additional stage of 25mm in depth.	m	70.00	
21) Extra over surface water channel (any width) for forming cascade not exceeding 300mm drop.	No	8.00	
22) Form 100mm wide scupper drain in existing concrete floor, made to correct line and falls and form rebate to receive grating if any, render invert and sides with 20mm cement and sand (1:3), including hacking existing concrete floor and paving, providing extra concrete of similar grade to floor below scupper drain, making good surrounds, formwork and clearing debris off site.	m	33.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
PRECAST CONCRETE C30 IN NEW OR EXISTING WORK WITH ALL EXPOSED FACES FINISHED FAIR, BEDDED, JOINTED AND POINTED IN CEMENT MORTAR (1:3) OR WITH EDGES BEDDED AND POINTED IN PUTTY OR MASTIC INCLUDING MAKING GOOD, REMOVING DEBRIS. ALL NECESSARY MOULDS, TRANSPORTING HANDLING AND FIXING (RATE EXCLUDE HOISTING USING CRANE			
23) In posts, bollards, blocks, lintels, copings, cills, steps, strings, railing, suspended slabs, etc. irrespective of size including all temporary support and hoisting up to 3m above ground level (Reinforcement measured separately).	m ³	706.00	
24) In 50mm thick slabs over drains, sumps, septic tanks, etc. complete with recesses, rebates, grooves, holes, hand-holds, mild steel flush lifting rings, etc. and reinforced with and including BRC No. A8 or other equal and approved fabric reinforcement and top surface rendered smooth to falls. <u>Add</u> or <u>Deduct</u> \$4.00 per m ² for every 15mm in thickness.	m ²	65.00	
25) Extra over for finishing any slab in green or cream colour cement minimum 15mm thick.	m ²	9.00	
26) In 50mm thick footpath, paving or apron slabs in suitable sizes (Reinforcement measured separately). <u>Add</u> or <u>Deduct</u> \$4.90 per m ² for every 15mm in thickness.	m ²	34.00	
27) Take out existing precast slab and remove off site.	m ²	5.00	
28) Take out existing precast slabs, lay aside and subsequently relay including jointing in cement mortar (1:3) and carting away debris. (New slabs measured separately).	m ²	9.00	
29) Hack out damaged pointing and repoint in cement mortar on existing precast slabs and pavements not exceeding 63mm thick irrespective of widths of gaps between slabs and pavements.	m	3.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
PRECAST CONCRETE C30 COMPOSITE ROAD SIDE OR BLOCK DRAIN AS SPECIFIED INCLUDING ALL NECESSARY MOULDS AND FINISHING ALL EXPOSED SURFACE SMOOTH			
30) 150mm wide composite precast concrete surface channel (Type C1-C5) laid to falls as directed and jointed in cement mortar (1:3) (Excavation, backfilling and disposal of excavated material measured separately).	m	36.00	
31) 810mm wide ditto (Type C7) ditto.	m ²	92.00	
32) 300mm wide (Type C8A) ditto.	m	123.00	
33) 305mm wide ditto (Type B1) ditto.	m	51.00	
34) 50mm thick precast concrete C30 revetment slabs reinforced with and including BRC No. A8 or other equal and approved fabric reinforcement, with joints grouted in cement mortar (1:3). (Area of slabs measured). (Excavation shall be measured separately).	m ²	38.00	
35) Take out precast concrete surface water channel (any width and type) not exceeding 1.00m deep internally, including sides slabs if any, remove debris off site; join up new channel to existing and temporarily divert drains as necessary and make good. (New channels shall be measured separately) <u>Add</u> \$0.50 per m for each additional stage of 75mm in depth.	m	5.00	
PRECAST CONCRETE C30 IN ROAD SIDE KERBS AND DIVIDERS INCLUDING ALL NECESSARY EXCAVATION, REMOVAL OF SURPLUS EXCAVATED MATERIAL, BACKFILLING, LAYING, BEDDING, JOINTING AND POINTING IN CEMENT MORTAR (1:3)			
36) 100 x 300mm size Type K2.	m	20.00	
37) 125 x 300mm size Type K7.	m	42.00	
38) Extra over for 125 x 300mm x 980mm long kerb with scupper month.	No	9.00	
39) Take out and stack on site for re-use precast concrete kerbs (any size) and remove debris off site.	No	2.00	
40) Select from stack, lay and joint divider/ kerb in cement and sand (1:3).	No	4.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
41) PRECAST CONCRETE AERATION SLAB - Supply and lay approved precast concrete aeration slabs 65mm thick of any pattern, fill all voids with top soil and turf including excavation, 50mm thick sand bed, trimming to formation and carting away	No	62.00	
42) Ditto but 100mm thick ditto.	No	73.00	
43) PAVING SLAB - Precast concrete (C20) paving slab 300 x 300 x 50mm thick jointed and pointed in cement and sand (1:3) including 50mm thick sand bed.	No	39.00	
44) Select from stock and lay paving/aeration precast concrete slab including filling all voids with top soil and turf, excavate to formation, trimming and carting away surplus excavated material off site.	No	7.00	
<u>FORMWORK</u>			
45) Wrote formwork to produce true and even concrete surface including timbering, propping and strutting where required not exceeding 3.5m high.	m ²	43.00	
46) Sawn formwork to concrete surface including ditto.	m ²	39.00	
47) Formwork (wrote/sawn) for circular work either on plan or elevation.	m ²	53.00	
48) Extra over formwork for strutting exceeding 3.5m high for each additional 1.5m high.	m ²	5.00	
MILD STEEL RODS IN FOUNDATIONS, BEAMS, SLABS, STAIRS, CANOPIES, ETC. INCLUDING ALL LABOUR FORMING STIRRUPS, LINKS, SPACER BLOCKS, ETC.			
49) 6mm to 13mm diameter.	kg	4.00	
50) 16mm to 25mm diameter.	kg	3.00	

FIXED SCHEDULE OF RATES**SECTION 3 - CONCRETE WORK**

	UNIT	\$	¢
DEFORMED HIGH TENSILE STEEL ROD IN FOUNDATIONS, BEAMS, SLABS, STAIRS, CANOPIES, ETC. INCLUDING ALL LABOUR FORMING STIRRUPS, LINKS, SPACER BLOCKS, ETC.			
51) 10mm to 32mm diameter.	kg	3.00	
52) 40mm diameter.	kg	3.00	
53) 50mm and above.	kg	3.00	
<u>FABRIC REINFORCEMENT (MEASURED NETT)</u>			
54) BRC No. A6 ditto.	m ²	8.00	
55) BRC No. A8 ditto.	m ²	13.00	
56) BRC No. A10 approved fabric reinforcement well lapped and tied at joints.	m ²	20.00	
57) BRC No. B6 ditto.	m ²	13.00	
58) BRC No. B8 ditto.	m ²	19.00	
59) BRC No. B10 ditto.	m ²	26.00	
60) Cutting through reinforcement concrete floors or wall (any thickness) to form opening not exceeding 0.20m ³ including making good, cutting reinforcement and removing debris off site.	No	36.00	
61) Ditto exceeding 0.20 ³ including ditto.	m ³	195.00	
<u>EXPANSION JOINTS</u>			
62) Remove existing bitumen or mastic filling in groove of expansion joint not exceeding 25mm wide, clean and prepare to receive new filling including removal of debris off site.	m	1.00	
63) PU sealant(25mm x 25mm)	m	30.00	
64) 20mm thick "Expansionthene" or other equal and approved polyethylene expansion joint filler 100mm high.	m	4.00	
65) <u>Add</u> or <u>deduct</u> for each 25mm variation in height.	m	1.00	
66) Cement mortar (1 : 3) filling (ditto).	m	1.00	
67) 12mm thick "Flexcell" or other equal and approved fibre board expansion joint filler 100mm high.	m	3.00	
68) 25mm thick "Flexcell" or other equal and approved fibre board expansion joint filler 100mm high.	m	4.20	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
<u>SUPPLY AND FIX PERENNATOR SEALANT TO JOINTS</u>			
69) V23-2 transparent silicone 6 x 6mm.	m	13.00	
70) Ditto but 15 x 25mm	m	39.00	
71) Ditto but 25 x 25mm	m	55.00	
<u>BONDING TIE</u>			
73) 6mm diameter x 500mm long mild steel bonding tie with one end cast into concrete and hooked around reinforcement and other end built into joints of brickwork including forming perforations in formwork.	No	1.00	
<u>PATCH UP OPENING</u>			
74) Patch up opening for pipe/conduit not exceeding 100mm diameter with waterproofed cement and sand mortar (1:3) in wall/floor not exceeding 225mm thick including use of waterproof cement additive and making good to match existing.	No	4.00	
<u>DAMP-PROOF MEMBRANE</u>			
75) One layer of 'Sisalthene 355' laminate, heavy duty or other equal and approved building paper paid under concrete slab and lapped 150mm at joints. (Measured Nett. No allowance made for laps).	m	6.00	
76) 2mm thick Sika Trocal 'Type T' membrane or equivalent with 2 layers of geotextile fleece.	m ²	64.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
<u>PROTECTION</u>			
77) 25mm thick, 16 km/m3 grade polystyrene board fixed to external surface of concrete.	m ²	10.00	
CUT OR DRILL HOLE IN EXISTING GRANITE BLOCK OR REINFORCED CONCRETE INCLUDING CUTTING THROUGH REINFORCEMENT LAYER, REMOVING DEBRIS AND MAKING GOOD SURROUNDING TO MATCH EXISTING. (NOTE : MAKING GOOD TILING TO BE PAID SEPARATELY).			
78) Depth of concrete or granite block up to 150mm and with diameter not exceeding 13mm.	No	5.00	
79) Ditto and not exceeding 50mm diameter.	No	130.00	
80) Hacking up, regrading and recementing inverts, sides and tops of in-situ concrete drains not exceeding 300mm internal widths (Length of drain measured).	m	14.00	
81) Ditto exceeding 300mm and not exceeding 450mm internal widths (ditto).	m	14.00	
82) Cutting in reinforced concrete to form groove not exceeding 100mm wide and not exceeding 100mm deep in concrete and rendering with cement mortar (1:3).	m	18.00	
83) Grout bolt with approved epoxy resin in concrete or Granite block (bolts and drilling measured separately).	cm ³	0.03	
84) ditto but with approved cementitious non-shrink grout ditto.	cm ³	0.02	
85) Remove existing filling in groove not exceeding 50mm wide and not exceeding 50mm deep clean and prepare to receive new work.	m	2.00	
86) Supply and fix calibrated "tell-tale" glass to existing cracks on plastered walls, etc.	No	117.00	
87) Supply labours and materials to lay `FORMWORK 28T' polysulphide rubber base joint sealant to existing or new concrete joints.	m	50.00	
88) Hack away existing deteriorated cement plaster to bare concrete, repair any honeycombed, apply 2 coats `VANDEX' or equivalent super and premix, replaster with `VANDEX' BB75 or equivalent and make good to match existing.	m ²	68.00	

FIXED SCHEDULE OF RATES

SECTION 3 - CONCRETE WORK

	UNIT	\$	¢
89) Hack existing concrete panel joint sealant clean and cement grout.	m	3.00	
90) Take from stack and relay existing precast concrete drains Type C7 or C7A, including concrete bedding to side of drain.	m	27.00	
91) Chase hairline crack on R.C. ceiling to 20mm wide, stop leakage with 'VANDEX' Vitofix or equivalent, apply 2 coats VANDEX or equivalent super and premix to groove, apply 4 days of curing treatment, seal with VANDEX ASM or equivalent waterproofing cement and make good.	m	123.00	
92) Labours and materials to seal up cracks in concrete floor with approved epoxy mortar.	m	10.00	
93) Repair and reseal bad mortar joint for pipes and floor traps with 'AMSEAL' or equivalent waterproofing treatment.	No	154.00	
94) 25mm x 15mm silicon sealer	m	8.00	
<u>SURFACE WATERPROOFING (BRUSH ON TYPE)</u>			
95) Quick-seal 102 or equivalent conceal system.	m ²	22.00	
96) Quick-seal 101 or equivalent expose system including reinforced mesh.	m ²	33.00	
97) Quick-seal 104 or equivalent flexible cementitious waterproofing membrane.	m ²	30.00	
98) SikaFlex top seal 107 or equivalent.	m ²	18.90	
DIAMOND CORING TO CONCRETE INCLUDING MOBILISATION, NECESSARY EQUIPMENT, FILLING WITH HIGH STRENGTH NON-SHRINK MOTAR TO CORE HOLE, TO AND FROM LABORATORY AND LABORATORY TESTING FEE			
99) 50 diameter not exceeding 300mm depth.	No	105.00	
100) 100 diameter x not exceeding 300mm depth.	No	176.00	
101) 150 diameter not exceeding 300mm depth.	No	209.00	

Fixed Schedule of Rates
Section 4 – Brickwork and Blockwork

FIXED SCHEDULE OF RATES**SECTION 4 - BRICKWORK & BLOCKWORK**

UNIT	\$	¢
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BRICKWORK & BLOCKWORK (All bricks to be Ecobricks certified)

- a. All 75mm and 102.5mm thick brickwall shall be reinforced with and including 'Exmet' or other equal and approved brick reinforcement brick reinforcement at every 4th course.
- b. All brickwork shall include brickwall piers, columns, circular work and filling to opening, etc. preparing cill, bonding to jambs and building against fittings.
- c. All brickwork shall be laid in cement (1:6) for non-loadbearing wall and (1:4) for non-loadbearing wall with 10mm joints including cutting, toothing, bonding, waste and preparing existing walls to receive new.
- d. Joints in fair-face or facework shall be flush, struck weathered or any other joints as directed by S.O.

BRICKWORK IN COMMON BRICKS

1) 65mm thick.	m ²	41.40
2) 102.5mm thick.	m ²	67.85
3) 215mm thick or reduced brickwork.	m ²	92.00

REPOINTING

4) Wash existing pointed brickwalls or blockwalls with caustic soda or other similar chemical cleaning liquid and remove dirt, grease, stains, fungus, etc.	m ²	2.00
5) Hack out damaged pointing in joints and . repoint in cement mortar or neat tinted cement as necessary to match existing (one side only).	m ²	9.20

FIXED SCHEDULE OF RATES**SECTION 4 - BRICKWORK & BLOCKWORK**

		UNIT	\$	¢
<u>GRANITE RUBBLE WALL</u>				
6)	Hammer dressed random rubble wall in selected granite blocks (200mm to 300mm) laid in cement mortar (1:3) including raking out joints and pointing in plain or white cement as work proceeds.	m ³	341.10	
7)	Render top of granite wall with cement mortar (1:3) average 50mm thick including layer of mesh reinforcement.	m ²	14.30	
8)	Extra over for setting granite blocks against slipped banks.	m ³	17.65	
9)	Hack out damaged pointing in joints and repoint in plain or white cement mortar one side only).	m ²	5.80	
<u>DAMP-PROOF COURSE</u>				
10)	3 ply bituminous felt horizontal damp proof course exceeding 300mm wide complying with ss374:1994 in new or existing work well lapped at joints and laid on and including a bed of cement mortar (1: 4).	m ²	18.00	
11)	3 ply bituminous felt horizontal damp proof course 112.5mm wide ditto.	m	5.00	
12)	Ditto but 225mm wide ditto.	m	7.00	
<u>HOLDFAST</u>				
13)	38mm x 3mm galvanised wrought iron or primed mild steel holdfast 225mm long, one end turned up and screwed to timber and other end split and built into brickwork.	No	2.00	
<u>DEMOLITIONS, ETC.</u>				
14)	Demolish existing granite rubble wall, clear off site or stack good blocks aside for re-use and cart debris off site.	m ³	96.00	
15)	Take from stack and rebuilt granite random rubble wall in cement mortar (1:3) with joints rake out and pointed in plain or white cement as the work proceeds.	m ³	74.75	

FIXED SCHEDULE OF RATES**SECTION 4 - BRICKWORK & BLOCKWORK**

	UNIT	\$	¢
<u>BRICK-ON-EDGE IN STEPS, SILLS, ETC.</u>			
16) One course brick-on-edge in facing brick laid in cement mortar (1:3) with 10mm joints in steps, sills, copings, footpaths, etc. (Plan area measured).	m ²	67.80	
17) Replace all broken and missing brick-on- edge in steps, sills, copings and the like with new one in cement mortar (1:3) to match existing.	m ²	64.40	
<u>CUTTING OPENINGS IN BRICKWORK OR BLOCKWORK</u>			
18) Cut small opening (i.e. not exceeding 0.5m ²) in existing or new brick or block walls not exceeding 150mm thick (total thickness) and remove debris off site. Add \$2.25 per no. for each additional stage of 25mm thick wall, floor, etc.	No	16.00	
19) Cut large opening (i.e. exceeding 0.5m ² and not exceeding 2m ²) in existing or new brick or block wall not exceeding 150mm thick (total thickness) and remove debris off site. Add \$2.70 per no. for each additional stage of 25mm thick wall, floor etc.	No	55.20	
<u>NOTE</u> : For opening larger than 2m² use Item E-4 (9).			
<u>WEEPS PIPES</u>			
20) Below 50mm diameter galvanised iron or unplasticised PVC pipe not exceeding 150mm long with one end splayed and built in wall Add or Deduct \$0.15 per no. for every 25mm in length.	No	3.00	
21) 50mm diameter to below 100mm diameter ditto Add or Deduct \$0.35 per no. for every 25mm in length.	No	5.00	

Fixed Schedule of Rates
Section 5 – Roofing

FIXED SCHEDULE OF RATES

SECTION 5 - ROOFING

UNIT

\$

¢

ROOFING**ROOFING SHEETS/TILES**<https://roofingoptions.com.au/fibreglass-roofing/>

- | | UNIT | \$ | ¢ |
|--|----------------|-------|---|
| 1) "Multideck Hi-Ten" sheet or other equal and approved 0.47mm thick KH Stramit profile patent colourbond with zincalume coating steel sheet roof decking, wall cladding, fascia, etc. fixed to timber or steel purlins or angle, rail, etc. (measured separately) including all necessary fixing clips, screws, etc. and stops to open rib ends of deck, labour in flange bending to form turn-ups at ridge or turn-down at eaves all cutting and waste, and all necessary materials, equipment and labour for hoisting and fixing in accordance with the manufacturer's printed instructions (Nett area measured). | m ² | 41.90 | |
| 2) "Trimdek Hi-Ten" sheet or equivalent 0.47mm thick Stramit rib' sheet (Ditto). | m ² | 58.30 | |
| 3) "Spandek Hi-Ten" or equivalent 0.47mm BS Lysaght profile patent (Ditto). | m ² | 48.30 | |
| 4) "V-crimp" BS Lysaght or equivalent 0.47mm profile patent zincalume or galvanised steel wall cladding, fascia (Ditto). | m ² | 45.00 | |
| 5) "Klip-lok Hi-Ten" sheet or equivalent 0.65mm thick BS Lysaght (Ditto). | m ² | 67.70 | |
| 6) Used "Marseilles" or equivalent pattern clay roofing tiles, laying and fixing to roof on existing timber battens and including wiring or nailing tiles to battens at every alternate course (Ditto). | m ² | 42.50 | |



FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
7) Ditto on and including new twice creosoted kapur battens (Ditto).	m ²	34.50	
8) "Redland 51" or equivalent interlocking concrete roofing tile (red, brown, grey) complying with SS 310 and SS CP 43 fixed to battens (measured separately) with galvanised nails at every other course. Add \$1.10 per m ² for special colour (green, yellow, white).	m ²	25.50	
9) Extra over for "Redland 51" or equivalent ridge tile.	m	20.20	
10) Ditto for right/left hand verge tile.	m	20.70	
11) Ditto for hip tile.	No	20.20	
12) Ditto for hip end or ridge start tile.	No	11.70	
13) Ditto for apex tile.	No	12.80	
14) 22 gauge corrugated aluminium roofing sheet with 125mm side laps and minimum 150mm end laps as specified (Ditto).	m ²	30.00	
15) 24 gauge (Ditto).	m ²	25.50	
16) Translucent corrugated fibreglass sheeting. weighing 1.82kg per sq metre fixed to purlins or rails (measurement separately), etc. with two corrugations side laps and with end laps minimum 150mm including all necessary drive nails and washers or hook all in accordance with manufacturer's instructions (Ditto).	m ²	65.50	
17) Ditto weighing 2.43kg per sq metre (Ditto).	m ²	95.00	
18) PVC transparent corrugated sheeting of the same profile to match corrugated metal or bituminous roofing sheets fixed to purlins or rails (measurement separately), etc. with two corrugations side laps and with minimum 150mm end laps including all necessary drive nails and washers or hook bolts and washers, all cutting and fixing all in accordance with manufacturer's instructions (Ditto).	m ²	25.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
19) TBF Renaissance or equivalent profile satin glazed clay roofing tile comply with SS70 fixed to battens (measured separately) with galvanised nails at approximately 400mm centres , all as specified and in accordance with the manufacturer's instruction (measured nett, no allowance made for laps, cutting and wastage).	m ²	64.40	
20) Extra over for ridge and hip tiles.	m	50.10	
21) Ditto right/left hand verge tile.	m	35.00	
22) Ditto hip end or ridge start tile.	m	56.30	
23) Ditto 3-way apex tile.	No	92.00	
24) TBF Romane or equivalent profile satin glazed clay roofing tile comply with SS70 fixed to battens (measured separately) with galvanised nails at approximately 400mm centres , all as specified and in accordance with the manufacturer's instruction (measured nett, no allowance made for laps.	m ²	62.80	
			
25) Extra over for ridge and hip tiles.	m	51.00	
26) Ditto right/left hand verge tile.	No	35.50	
27) Ditto hip end or ridge start tile.	m	34.80	
28) Ditto 3-way apex tile.	No	44.90	
29) Natural tone Marseille or equivalent profile clay roofing tile complying with SS70 fixed to battens (measurement separately), with galvanised nails approximately 350mm centre.	m ²	58.20	
30) Extra for ridge or hip tile.	m	52.60	
31) Extra for right/left hand verge tile.	m ²	47.80	
32) Extra for hip end or ridge start tile.	No	43.70	
33) Extra for apex tile.	No	80.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
34) Supply and fix approved Red cedar shingle roof tiles. including hip capping tile, ridge tile etc. secured onto 75mm x 38mm timber battens (measure separately) all in accordance to manufacturer's instruction.	m ²	85.00	
35) Fix only approved red cedar shingle roof tiles including hip capping tile, ridge tile etc and all necessary cutting, all in accordance to manufacturer's instruction.	m ²	32.00	
36) Strip off existing red cedar shingle roof tiles and remove off site.	m ²	5.50	
37) Strip off existing red cedar shingle ridge or hip tiles and replace with new tiles to match the existing.	m	12.00	
38) Supply and fix of 3mm thick polycarbonate sheet in accordance with the manufacturer's instruction. (All colours).	m ²	98.00	
39) Ditto but 4.5mm thick ditto.	m ²	129.60	
40) Ditto but 6mm thick ditto.	m ²	167.00	
41) Ditto but 9.5mm thick ditto.	m ²	275.00	
42) Aluminium strips for joints to polycarbonate roofing sheet including rubber inserts.	m	7.50	
43) "Kliplok", "Trimdek" or "Spandek" or equivalent standard ridges capping for pitch roof, notched and dressed down between ribs and fix with approved fasteners (Measured nett).	m	10.00	
44) Ditto for flat roof (Ditto).	m	13.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
45) Ditto but colourbond for pitch roof (Ditto).	m	12.00	
46) Ditto but colourbond for flat roof (Ditto).	m	15.60	
47) Used "Marseilles" or equivalent patterns or approved brand. clay ridge or hip tiles including bedding and pointing in cement mortar (1:3) (Ditto).	m	4.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

		UNIT	\$	¢
<u>STRIP EXISTING ROOF COVERING AND REMOVE OFF SITE</u>				
48)	"Kliplok" or "Spandex" or equivalent sheeting including	m ²	5.00	
49)	Corrugated metal, bituminous, PVC or decrabond sheeting including ridges and hips.	m ²	6.00	
50)	"Marseilles" or equivalent pattern clay, glass roofing tiles, or concrete interlocking tiles including ridge , hip tiles and battens.	m ²	7.00	
51)	"Kliplok" or "Spandex" or equivalent sheeting including ridges.	m ²	8.00	
52)	Corrugated metal, bituminous, PVC or decrabond sheeting including ridges and hips.	m ²	8.00	
53)	"Marseilles" or equivalent pattern clay, glass roofing tiles or concrete interlocking tiles, pantiles, including ridges and hips.	m ²	11.00	
54)	"Kliplok" or "Spandex" or equivalent sheeting including ridges fixed with new clips, screws, etc.	m ²	12.00	
55)	Ditto including new twice creosoted kapur battens.	m ²	22.00	
56)	Corrugated metal, bituminous, PVC or decrabond interlocking roofing tiles laid with adequate side and end laps fixed with new galvanised drive nails and washers or with new galvanised hook bolts and washers.	m ²	14.00	
57)	Ditto including bedding side and end laps with approved adhesive.	m ²	18.00	
58)	"Marseilles" or equivalent pattern clay tile, glass roofing tile, concrete standard interlocking tile or concrete pantile including new copper nails.	m ²	17.00	
59)	Ditto including new twice creosoted kapur battens.	m ²	22.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
<u>FELT ROOFING</u>			
60) Saturated bitumen one-ply felt in two layers, each layer weighing 35.5kg per 20m ² roll and sealed and bonded in hot bitumen laid on flat roofs (Nett area measured).	m ²	15.00	
61) Ditto but 150mm high in skirting, upstands, eaves, edges, gutter, etc.	m ²	5.00	
62) Extra labour and material to dressing to outlet fittings, etc.	m ²	17.00	
63) One coat of hot bituminous compound laid at 1.5kg per 10m ² .	m ²	3.00	
64) Strip felt roofing of any description and remove off site.	m ²	2.00	
65) PATENT PANEL ROOFING - Average 25mm thick waterproof cement and sand (1:3) topping laid in panels of 750 x 750mm to slope or flat roof all in accordance with specialist recommendation including steel trowelled and finished to falls.	m ²	19.00	
66) Average 38mm thick.	m ²	27.50	
67) Average 50mm thick.	m ²	36.50	
68) 25mm thick in skirtings, upstands, eaves, edges, gutters, etc. nc 150mm high.	m	8.50	
69) Approved bitumastic liquid solution fillings to expansion joints of panel roofing, crevices, cracks, etc. approximately 15mm wide x 22mm deep to panel roofing.	m	2.00	
70) Investigate and cure leak in tiled roof including providing new tiles not exceeding 0.50m ² in area to match existing for first spot of leak. Add \$11.00 per no. for each additional spot of leak.	No	34.00	
(NOTE : Individual block of building considered separately.)			
71) Seal existing nail or bolt heads with bituminous sealing compound.	No	1.00	
72) Seal existing side and end laps of roof with bituminous sealing compound irrespective of girth inclusive of cement mortar where necessary.	m ²	2.00	
73) Take out existing roof sheeting, seal side and end laps with sealing compound and relay including new drive nails and washers or hook bolts and washers (new roof sheeting measured separately).	m ²	10.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
74) Take down rainwater gutters including all finishings and fittings and cart away debris off site.	m	3.00	
75) Ditto rainwater pipe including fixings and fittings ditto.	m	2.00	
76) Take down rainwater head of any description.	No	4.00	
77) Ditto gutter support bracket or rainwater downpipe holderbats.	No	3.00	
78) Prepare new roof decking and apply 2 coats of Flinkote PF 4 or Shellkote Type 3 or equivalent. <u>Add</u> \$0.40 per m ² for application to wall cladding.	m ²	7.00	
79) Prepare and apply 2 coats of bitumen solution and 2 coats sandtex-matt or equivalent coating to new metal or concrete rood decking.	m ²	8.50	
80) Ditto to wall cladding.	m ²	9.50	
81) Prepare existing metal or concrete roof decking previously painted with sandtex-matt or equivalent coating, clean and apply 2 coats of sandtex-matt or equivalent coating.	m ²	8.00	
82) Ditto wall cladding ditto.	m ²	8.50	
83) Brush down and apply one coat of approved bituminous base aluminium solution formulated with high grade bitumen and finely divided aluminium on surfaces of roofing felt, asphalt, concrete, etc.	m ²	5.00	
84) Brush down and apply 3 coats of "Perflat" or other equal and approved rubberised flat paint on corrugated asbestos roof or cement rendering.	m ²	14.00	
85) 2mm thick L&M Santac or equivalent sheet.	m ²	51.00	
86) 2mm thick nuralite or equivalent sheet.	m ²	73.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
87) L& M Santac or equivalent sheet laid to skirting, riser, drop or vertical surface ne 300mm high. (Roof waterproofing membrane system on screed measured separately)	m	25.00	
<u>ROOFING SHEETS/TILES</u>			
88) Supply and fix approved equivalent “ American Shingle “including waterproofing system (underlay felt), hip capping tile, ridge tile etc. secured onto plywood surface (measure separately) all in accordance to manufacturer's instruction.	m ²	98.00	
89) Fix only approved equivalent “ American Shingle “including waterproofing system (underlay felt), hip capping tile, ridge tile etc and all necessary cutting, all in accordance to manufacturer's instruction.	m ²	26.00	
90) GUTTERS, RAINWATER DOWN PIPE AND FLASHING GALVANISED IRON SHEETING – 16 to 24 gauge bent to required shape flashing, gutters, rainwater down pipes, cappings, shoes, stopped ends, aprons, soakers and ridges etc. of any size including bolts and brackets.	m ²	50.00	
91) ALUMINIUM SHEETING – 18 to 24 gauge sheet aluminium in flashings, copings, valley gutters and the like including nailing, as specified above (Brackets measured separately).	m ²	52.00	
92) STAINLESS STEEL SHEETING – 18 - 22 gauge stainless steel sheet for fabricating valley gutters, box gutters, eaves gutter, flashing, etc. to any size and shape (Brackets measured separately).	m ²	110.00	
93) UPVC RAINWATER DOWN PIPE WITH CEMENT SOLVENT JOINTS AND JOINTING TO SUMPS AND DRAINS - Not exceeding 75mm diameter.	m ²	40.00	
94) 100mm diameter.	m ²	48.00	
95) 150mm diameter.	m ²	60.00	
96) 200mm diameter.	m ²	77.00	
97) RAINWATER SPOUT OUTLET WITH REMONABLE CAST IRON DOME GRATING AND LUTED FLANGE - 100mm to 150mm diameter cast iron outlet.	m ²	45.00	

FIXED SCHEDULE OF RATES**SECTION 5 - ROOFING**

	UNIT	\$	¢
98) 300MM WIDE STAINLESS STEEL WIRE MESH GRATING TO ROOF GUTTER - 10 X 10 X 0.8m diameter stainless steel mesh with 25 x 25 x 3mm stainless steel angle frame.	m ²	70.00	

Fixed
Fixed Schedule of Rates
Section 6 – Carpentry and Joinery

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

UNIT	\$	¢
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CARPENTRY AND JOINERY

CASCASS TIMBER FIXED IN CARPENTER’S WORKS

	Type of Timber	Rate per m ³	
		Swan	Wrot
1)	Chengal	3220	3737.5
2)	Kapur	1878.6	2281.7
3)	Balau	3105	3477.8
4)	Kempas	1380	1610
5)	Meranti	1495	1725

6)	Extra over above items if in prefabricated roof trusses for transporting, hoisting and fixing in position not exceeding 6m high and including bolts, screws, fixing plates, etc.	m ³	276.00
7)	Ditto exceeding 6m and not exceeding 9m high.	m ³	368.00
8)	Ditto exceeding 9m and not exceeding 12m high.	m ³	460.00
9)	<u>Add</u> to items 1-5 above if fixed in repairs to replace old and decayed timber, remove off site and including all strutting, steel straps, splicing, etc. and making good damaged or missing.	m ³	356.50
10)	<u>Add</u> to items 1 - 5 if tanalised or pressure impregnated timber is used.	m ³	138.00

SAWN WEATHER BOARDING IN NEW OR EXISTING WORK (IN PATCHES) WITH 32MM LAPS, WHERE DIRECTED, NAILED OR SCREWED TO BEARERS INCLUDING REBATES, HOLLOW JOINTED FEATHER EDGE SPLICING, ETC. (BEARERS MEASURED SEPARATELY

Kapur

11)	13mm thick.	m ²	18.40
12)	19mm thick.	m ²	37.90
13)	25mm thick.	m ²	48.30
14)	38mm thick.	m ²	69.00

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

			UNIT	\$	¢
<u>Chengal</u>					
15)	13mm thick.		m ²	44.70	
16)	19mm thick.		m ²	59.80	
17)	25mm thick.		m ²	80.50	
18)	38mm thick.		m ²	119.50	
19)	Take out existing weather boarding (any type and thickness) and remove off site.		m ²	4.00	
20)	Take out existing weather boarding (any type and thickness) and refix (bearer and new boarding measured separately).		m ²	9.05	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

				UNIT	\$	¢
WROT PLAIN SQUARE EDGE BOARDING TO FLOORS, WALLS, SHELVES, FITMENTS, PARTITIONS, CEILINGS, ETC. IN NEW OR EXISTING WORK (IN PATCHES) WELL CRAMPED UP, NAILED OR SCREWED TO BEARERS (BEARERS MEASURED SEPARATELY)						
<u>Kapur</u>						
21)	13mm.		m²		19.00	
22)	19mm.		m²		40.00	
23)	25mm.		m²		48.52	
24)	38mm.		m²		70.60	
<u>Chengal</u>						
25)	13mm.		m²		61.00	
26)	19mm.		m²		69.60	
27)	25mm.		m²		87.68	
28)	38mm.		m²		121.6	
<u>Balau</u>						
29)	13mm.		m²		38.00	
30)	19mm.		m²		51.50	
31)	25mm.		m²		66.30	
32)	38mm.		m²		97.50	
33)	50mm.		m²		176.75	
34)	Take out existing plain edge board (any thickness) and remove off site.		m²		4.00	
35)	Take out existing plain edge board (any thickness) in floor, wall, partition, table top, fitment, etc. relay and recramp (bearer and new boarding measured separately).		m²		9.05	
36)	Labour for planning surface.		m²		16.00	
WROT TONGUED AND GROOVED BOARDING TO FLOORS, WALLS, SHELVES, FITMENTS, PARTITIONS, CEILINGS, ETC. IN NEW OR EXISTING WORK (IN PATCHES) WELL CRAMPED UP, NAILED OR SCREWED TO BEARERS (BEARERS MEASURED SEPARATELY)						
<u>Kapur</u>						
37)	13mm.		m²		39.10	
38)	19mm.		m²		69.10	
39)	25mm.		m²		103.50	
40)	38mm.		m²		120.75	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

		UNIT	\$	¢
<u>Chengal</u>				
41)	13mm thick.	m ²	73.60	
42)	19mm thick.	m ²	66.70	
43)	25mm thick.	m ²	99.10	
44)	38mm thick.	m ²	118.45	
45)	50mm thick.	m ²	223.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

		UNIT	\$	¢
<u>Balau</u>				
46)	13mm.	m ²	41.40	
47)	19mm.	m ²	57.50	
48)	25mm.	m ²	73.60	
49)	38mm.	m ²	108.10	
50)	Take out existing tongued and grooved boarding (and thickness) and remove off site.	m ²	4.00	
<u>DOORS AND WINDOWS IN WROT KAPOR</u>				
51)	50mm solid timber door with 100mm wide tongued and grooved vertical battens V-jointed both sides and pelleted horizontally through thickness of door with and including 9mm diameter mild steel bar.	m ²	300.00	
52)	<u>Add</u> or <u>deduct</u> for each 6mm variation in thickness.	m ²	27.20	
53)	60mm framed, ledged, braced and battened door comprising 100 x 60mm style and top rail, 225 x 25mm middle and bottom rail, 100 x 35mm braces and 100 x 25mm tongued and grooved vertical battens V-jointed one side.	m ²	300.00	
54)	<u>Add</u> or <u>deduct</u> for each 6mm variation in thickness.	m ²	23.00	
55)	44mm louvred door or casement comprising 100 x 44mm style and top rail, 150 x 44mm middle rail, 200 x 44mm bottom rail and filled in with 12mm thick timber louvres set at angle of 60 spaced not more than 20mm apart.	m ²	85.70	
56)	<u>Add</u> or <u>deduct</u> for each 6mm variation in thickness.	m ²	2.00	
57)	50mm panelled door or casement comprising 100 x 50mm style, top and intermediate rails, 200 x 50mm bottom rail and filled in with 12mm thick interior quality plywood.	m ²	260.00	
58)	Extra over for using exterior quality plywood.	m ²	1.00	
59)	<u>Add</u> or <u>deduct</u> for each 6mm variation in thickness.	m ²	17.00	
60)	45mm thick solid core kapur flush door comprising hardwood lipping around 16mm wide vertical core strips glued and well cramped together and cover on both sides with 6mm thick plywood.	m ²	292.10	
61)	50mm thick ditto.	m ²	340.90	
62)	38mm thick kapur semi-solid flush door comprising hardwood lipping around stiles and rails cover on both sides with 6mm thick plywood.	m ²	207.50	
63)	45mm thick ditto.	m ²	220.90	
64)	38mm thick kapur hollow core flush door comprising skeleton framing and cover on both sides with 6mm thick plywood.	m ²	190.70	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

			UNIT		\$	¢
65)	38mm thick kapur panelled door in 3 panels comprising stiles and rails framed around 20mm thick solid timber panels.		m²		262.00	
66)	45mm thick ditto.		m²		300.60	
67)	Extra over for bottom panel louvred.		m²		48.80	
68)	Extra over for using waterproof plywood.		m²		38.00	
69)	Add or deduct for each 6mm variation in thickness for item 6 to 12.		m²		14.00	

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
70) Extra over door of any description for rebated meeting style (each door measured separately).	m	1.00	
71) Extra over for forming peephole irrespective of size including beads for glass (Glass measured separately).	No	28.50	
72) 36mm thick Nyatoh or equivalent solid door.	m²	218.50	
73) PVC folding door to any required sizes complete with ironmongeries.	m²	115.00	
74) Supply and install 38mm thick PVC flush door to any required sizes complete with ironmongeries (lockset and hinges etc.).	m²	160.00	
75) Supply and install of PVC door frame.	m	23.00	
<u>FIRE DOORS</u>			
½ hour fire rated timber door complying with SS332 complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame.			
76) 900mm x 2100mm x 45mm thick, single leaf, Polynorm or equivalent.	No	1,104.00	
77) 900mm x 2100mm x 45mm thick, single leaf, Singcol or equivalent.	No	1,070.00	
78) 900mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,441.00	
79) 1200mm x 2100mm x 45mm thick, double unequal leaf, Polynorm or equivalent.	No	1,565.00	
80) 1200mm x 2100mm x 45mm thick, double unequal leaf, Singcol or equivalent.	No	1,595.00	
81) 1200mm x 2100mm x 47mm thick, double unequal leaf, Polynorm or equivalent.	No	1,720.00	
1 hour fire rated timber door complying with SS332 complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame.			
82) 900mm x 2100mm x 45mm thick, single leaf, Polynorm or equivalent.	No	1,216.00	
83) 1200mm x 2100mm x 45mm thick, double unequal leaf, Polynorm or equivalent.	No	1,813.00	
84) 2400mm x 2100mm x 45mm thick, double unequal leaf, Polynorm or equivalent.	No	2,657.00	
85) 900mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,700.00	
86) 1200mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,870.00	
87) 2400mm x 2100mm x 47mm thick, double unequal leaf, Polynorm or equivalent.	No	3,628.00	
2 hour fire rated timber door complying with SS332 complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame			
88) 900mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,765.00	
89) 1200mm x 2100mm x 47mm thick, double unequal leaf, Polynorm or equivalent.	No	2,584.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

		UNIT	\$ ¢
Half rated steel door complying with SS332 complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame.			
90)	900mm x 2100mm x 47m thick, single leaf, Polynorm or equivalent.	No	1,257.00
91)	1200mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,574.00
92)	1200mm x 1200mm x 45mm thick, double leaf, Polynorm or equivalent.	No	2,118.00

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

		UNIT	\$	¢
	One hour fire rated steel door complying with SS332 complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame.			
93)	900mm x 2100mm x 45mm thick, single leaf, Singco or equivalent.	No	1,222.00	
94)	900mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,257.00	
95)	900mm x 2100mm x 47mm thick, single leaf, Hart or equivalent.	No	1,180.00	
96)	2100mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,574.00	
97)	2100mm x 2100mm x 45mm thick, single leaf, Singco or equivalent.	No	1,477.00	
98)	1200mm x 2100mm x 45mm thick, single leaf, Hart or equivalent.	No	1,911.00	
99)	2400mm x 2100mm x 47mm thick, double leaf, Polynorm or equivalent.	No	2,748.00	
	Two hour fire rated steel door complying with SS 332complete with fire proofed cylinder lockset, stainless steel ball bearing hinges, flush bolt, door closer and frame.			
100)	900mm x 2100mm x 45mm thick, single leaf, Singco or equivalent.	No	1,248.00	
101)	900mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,346.00	
102)	900mm x 2100mm x 47mm thick, single leaf, Hart or equivalent.	No	1,862.00	
103)	1200mm x 2100mm x 47mm thick, single leaf, Polynorm or equivalent.	No	1,684.00	
104)	1200mm x 2100mm x 45mm thick, single leaf, Singco or equivalent.	No	1,680.00	
105)	2400mm x 2100mm x 47mm thick, double leaf, Polynorm or equivalent.	No	2,838.00	
106)	1200mm x 2100mm x 45mm thick, single leaf, Hart or equivalent.	No	2,527.00	
	<u>DOOR IN REPAIRS</u>			
107)	Take down ledged and braced shutters or doors not exceeding 3.00m ² (Chengal, Kapur, Keruing, Meranti, etc.) replace not more than three ledges and/or braces by new and rehang including carting away old materials(Area of door measured).	m ²	46.00	
108)	Ditto exceeding 3.00m ³ (Ditto).	m ²	46.00	
109)	Replace small amounts (not exceeding 0.20m ²) or boarding (Chengal, Kapur, Keruing, Meranti, etc.) in ledged and braced shutters or doors not exceeding 3.00m ² including taking down, rehanging and carting away old materials (Ditto).	m ²	49.00	
110)	Ditto exceeding 3.00m ² (Ditto).	m ²	46.00	
111)	Take down framed, ledged and braced shutters not exceeding 3.00m ² (Chengal, kapur, Keruing, Meranti, etc.) replace not more than three ledges, frames and/or braces, glazing bars by new and rehang including carting away old materials (Ditto).	m ²	44.00	
112)	Ditto exceeding 3.00m ² (Ditto).	m ²	52.00	
113)	Replace small amounts (not exceeding 0.20m ²) of boarding (Chengal, Kapur, Keruing, Meranti, etc.) in framed, ledged and braced shutters or door not exceeding 3.00m ² including taking down, rehanging and removing old boards off site	m ²	51.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
114) Ditto exceeding 3.00m ² (Ditto).	m ²	61.00	
115) Take down casement window, shutter or door, etc. remove ironmongery and return to Store as directed and remove remainder off site, or cart away off site (Rate per leaf not exceeding 3.00m ²).	No	20.00	
116) Ditto (Rate for per m ² leaf exceeding 3.00m ²).	m ²	13.00	
117) Take down casement window, shutter or door, etc. not exceeding 3.00m ² , replace wedges, cramp up secure all joints, refix, rehang and adjust ironmongery (New ironmongery measured separately).	m ²	33.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
118) Ditto exceeding 3.00m ² (Ditto) (Area of door measured).	m ²	39.00	
119) Fix and hang only casement window, shutter or door, etc. not exceeding 3.00m ² (Excluding supply of new ironmongery and frame).	No	20.00	
120) Ditto exceeding 3.00m ² (Ditto) (Area of door measured).	m ²	26.00	
121) Take down casement window or doors not . exceeding 3.00m ² (Chengal, Kapur, Keruing, Meranti, etc.) take out some or all panels or louvres, prepare rails, stiles and muntins as necessary for glazing (including providing beads), replace wedges, cramp up, secure all joints, refix, rehang and adjust ironmongery (New ironmongery measured separately).	No	62.00	
122) Ditto exceeding 3.00m ² (Ditto) (Area of door measured).	m ²	59.00	
123) Take down existing timber door not exceeding 3.00m ² , trim to reduce height not exceeding 50mm, adjust door and rehang (New ironmongery measured separately).	No	48.00	
124) Ditto exceeding 3.00m ² (Ditto) (Area of door measured).	m ²	42.00	
125) Take out one only of either style, muntin or glazing bar in wrot panelled, glazed or louvred casements, shutters or doors (Chengal, Kapur, Keruing, Meranti, etc.), remove off site and replace the rail, etc. by new to match including taking down, splicing, framing up and rehang as necessary (New ironmongery measured separately).	No	56.00	
126) Replace ordinary/waterproof plywood (any thickness) panels or solid wrot timber panels in windows, shutters or doors including taking down, framing up and rehang as necessary, and removing old panels off site. (New ironmongery measured separately) (Area of door measured)	m ²	46.00	
127) Replace small area (not exceeding 3 louvres) of louvres in windows, shutters or doors including taking down, framing up and rehang as necessary and removing old panels off site (Ditto).	m ²	42.00	
128) Ease and adjust doors and windows (any type and size) including taking down and rehang as necessary.	No	29.00	
129) Labour for preparing existing door jamb to receive new work.	No	13.00	
<u>ALUMINIUM CASING, ETC. TO DOOR</u>			
130) Extra for encasing new door with 24 SWG or equivalent aluminium or galvanised iron sheeting including pinning with non-ferrous nails.	m ²	33.00	
131) Ditto but using 28 SWG or equivalent sheeting ditto.	m ²	35.00	
132) Extra for encasing existing door with 24 SWG or equivalent aluminium or galvanised iron sheeting including pinning with non-ferrous nails, preparation, taking down and rehang door.	m ²	35.00	
133) Ditto but using 28 SWG or equivalent sheeting ditto.	m ²	39.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
<u>STAINLESS STEEL PLATE TO DOOR</u>			
134) 1mm thick stainless steel plate fixed to new or existing door, partition, etc. with approved screws.	m ²	162.00	
135) 2mm thick ditto.	m ²	195.00	
136) 3mm thick ditto.	m ²	200.00	
FRAME, HEAD, MULLION, TRANSOM, STUDS, CILL FITMENTS, JOINERY, ETC. IN WROT TIMER WORKED TO THE REQUIRED SHAPE INCLUDING FORMING GROOVES, REBATES, THROATS, WEATHERED EDGES, ETC.			
<u>FRAME NOT EXCEEDING 2,000MM² CROSS-SECTIONAL AREA</u>			
137) Kapur.	m	11.00	
138) Chengal or Balau.	m	11.00	
FRAME EXCEED 2,000MM ² AND NOT EXCEEDING 4,000MM ² CROSS-SECTIONAL AREA			
139) Kapur.	m	16.00	
140) Chengal or Balau.	m	18.00	
FRAME EXCEEDING 4,000MM ² AND NOT EXCEEDING 6,000MM ² CROSS-SECTIONAL AREA			
141) Kapur.	m	20.00	
142) Chengal or Balau.	m	22.00	
143) Extra over above items if tanalised or pressured impregnated for item 4-9.	m	1.00	
FRAME EXCEEDING 6,000MM ² AND NOT EXCEEDING 8,000MM ² CROSS-SECTIONAL AREA			
144) Kapur.	m	27.00	
145) Chengal or Balau.	m	29.00	
FRAME EXCEEDING 8,000MM ² AND NOT EXCEEDING 10,000MM ² CROSS-SECTIONAL AREA			
146) Kapur.	m	35.00	
147) Chengal or Balau.	m	37.00	
FRAME EXCEED 10,000MM ² AND NOT EXCEEDING 12,000MM ² CROSS-SECTIONAL AREA			
148) Kapur.	m	26.00	
149) Chengal or Balau.	m	30.00	
150) Extra over above items if tanalised or pressured impregnated for item CJ-10 11-14 & 1-2.	m	1.00	
CUT OUT LENGTHS OF FRAMING TO EXISTING DOOR, WINDOW, PARTITION, STUDDING, STAIRCASE, JOINERY, FITMENT, ETC. REMOVE OFF SITE, AND WHERE NECESSARY PREPARE CUT SURFACE TO RECEIVE NEW			

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
151) Frame not exceeding 2,000mm ² cross-sectional area.	m	2.00	
152) Ditto exceeding 2,000mm ² and not exceeding 4,000mm ² cross-sectional area.	m	3.00	
153) Ditto 4,000mm ² cross-sectional area.	m	4.00	
154) Labour cutting existing framing to form grooves, rebates, throats, etc. not exceeding 1,500mm ² in sectional area.	m	4.00	
155) Take out existing frame for door, window, etc. provide temporary support, if necessary, remove off site and make good reveal.	No	36.00	
156) Ditto cramp up re-wedge joints and refix.	No	46.00	

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
BEADS, PICTURE RAILS, SKIRTING, ARCHITRAVES, FILLETS, ETC. IN WROT TIMBER			
157) Teak not exceeding 500mm ² in sectional area. <u>Add</u> \$6.00 per m for each additional 500mm ² in sectional area.	m	13.00	
158) Chengal not exceeding 500mm ² in sectional area. <u>Add</u> \$5.50 per m for each additional 500mm ² in sectional area.	m	10.00	
159) Kapur not exceeding 500mm ² in sectional area. <u>Add</u> \$1.80 per m for each additional 500mm ² of sectional area.	m	5.00	
160) Extra over to any above items if tanalised or pressure impregnated.	m	0.10	
161) Cut out lengths of existing beads, picture rails, skirtings, architraves, fillets, etc. (any size) remove off site and where necessary prepare cut surface to receive new.	m	2.00	
<u>TIMBER PARTITION, ETC.</u>			
162) Wrot Kapur partitions comprising wrot Kapur framing 50mm x 50mm cross section area fixed at 600mm centres both ways (Lining measured separately).	m ²	25.00	
163) Ditto wrot Kapur framing 50mm x 75mm cross section area (Ditto).	m ²	32.00	
164) Ditto wrot Kapur framing 75mm x 75mm cross section area (Ditto).	m ²	40.00	
165) Take out existing lattice work, remove off site and replace by sawn Kapur to match, including splicing new to existing and carting away old timber.	m ²	28.00	
166) Ditto all as last described but wrot.	m ²	32.00	
167) Take down existing gypsum, plasterboard, timber partitions and remove off site as directed.	m ²	6.00	
168) Ditto but rebuild in large sections using the same material and cart away remaining off site.	m ²	18.00	
169) Labour and materials for cutting opening in partition to receive air-condition frame, ducts, telephone tray, etc. (any size) and including additional bearers (new air- condition frame and telephone tray measured separately).	No	65.00	
<u>LININGS</u>			
170) 6mm thick top grade fire resistance calcium silicate board reinforced with selected fibres and fillers for internal use and including measured separately.	m ²	25.00	
171) 9mm thick (ditto).	m ²	42.00	
172) 12mm thick (ditto).	m ²	40.00	
173) 6mm thick top grade fire-resistance fibre- reinforced cement building board (ditto).	m ²	28.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
174) 9mm thick (ditto).	m²	37.00	
175) 12mm thick (ditto).	m²	44.00	
176) 6mm thick cement building board fixed to bearer (measured separately) including pointing.	m²	35.00	
177) 10mm thick (ditto).	m²	40.00	
178) 12mm thick (ditto).	m²	46.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
179) 10mm thick approved bare gypsum board pinned to bearers or fixed with brass screws to bearers (bearers measured separately).	m ²	19.00	
180) 12mm thick (ditto).	m ²	24.00	
181) 16mm thick (ditto).	m ²	30.00	
182) 3mm thick approved quality perforated hard- board pinned or fixed to bearers (ditto).	m ²	10.00	
183) 5mm thick clear perspex sheet.	m ²	85.00	
184) 12mm thick clear perspex sheet.	m ²	178.00	
185) 6mm thick non-waterproofed plywood fixed and glued with an approved adhesive compound as panelling or pinned or fixed to bearers with brass screws (bearers measured separately).	m ²	10.00	
186) 9mm thick (ditto).	m ²	13.00	
187) 12mm thick (ditto).	m ²	17.00	
188) 25mm thick (ditto).	m ²	30.00	
189) 6mm thick approved waterproof plywood fixed and glued with an approved adhesive compound as panelling or pinned or fixed to bearers with brass screws (bearers measured separately).	m ²	15.00	
190) 9mm thick (ditto).	m ²	17.00	
191) 12mm thick (ditto).	m ²	20.00	
192) 25mm thick (ditto).	m ²	40.00	
193) 12mm thick approved marine plywood fixed and glued with an approved adhesive compound as panelling or pinned or fixed to bearers with brass screws (bearers measured separately).	m ²	35.00	
194) 25mm thick (ditto).	m ²	50.00	
195) Supply and laminate decorate vinyl or veneer to gypsum oard, plywood, etc.	m ²	12.40	
196) 6mm thick `Suppertex wood grain' or equivalent lining pinned or fixed to bearers with brass screws and pointing (bearers measured separately).	m ²	48.20	
0.8MM THICK LAMINATED PLASTIC SHEET TO BS 3796 (FORMICA, PERSTOP, ETC.) FIXED TO TIMBER SURFACES WITH APPROVED ADHESIVE COMPOUND INCLUDING PREPARING SURFACE			
197) 1.0mm thick formica.	m ²	32.00	
198) 1.3mm thick ditto.	m ²	35.00	
199) 1.00mm thick print ditto.	m ²	27.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
200) 6mm hardboard lining to wall, ceiling or fitment nailed, glued or screwed to timber bearers (measured separately) with brass screws.	m²	12.00	
201) 13mm softboard lining to wall, ceiling or fitment nailed, glued or screwed to timber bearers (measured separately) with brass screws.	m²	12.00	
202) 12.5mm fibre board ditto.	m²	16.50	
203) 1mm thick decorative steel plate formica fixed to timber surfaces with ditto.	m²	104	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
204) Strip existing laminated plastic veneer lining remove off site and prepare surface to receive new.	m ²	4.00	
205) Take out existing lining (any type & thickness) from partition, counter tops, fitments, wall panels and the like, remove old boards off site and prepare surrounds to receive new.	m ²	3.00	
206) Ditto but set aside for reuse and prepare surrounds to receive new.	m ²	2.00	
207) Take from stack and refix old lining (not exceeding 15mm thick) including new fasteners.	m ²	5.00	
208) Take down and remove off site old or decayed timber of any description in any type of work or location.	m ³	145	
<u>FLY-PROOF NETTING</u>			
209) Supply and fix nylon fly-proof netting 14 mesh x 31 gauge to windows, doors, vents, fitments, etc.	m ²	6.00	
210) Take out and cart away ditto and prepare surrounds to receive new.	m ²	1.00	
<u>CHICKEN WIRE NETTING</u>			
211) Take out existing chicken wire netting in fence including any framing or posts (any type) with foundations remove off site and including making good work disturbed.	m ²	2.00	
212) Take out existing chicken wire netting, cart away from site or lay aside for re-use.	m ²	2.00	
213) Take from stack and fix only chicken wire netting.	m ²	3.00	
214) 24 gauge galvanised iron hex chicken wire netting 13mm each (Fillets measured separately).	m ²	7.00	
215) Extra over chicken wire netting for track welding to metal frames. (Area of mesh measured)	m ²	3.00	
216) <u>Expanded steel orname</u> mesh D1020 (16mm x 38mm x 1mm	m ²	7.00	
217) Ditto F2028 (22mm x 57mm x 2mm thick).	m ²	16.00	
218) Ditto G2030 (35mm x 76mm x 2mm thick).	m ²	13.00	
219) Ditto G3045 (35mm x 76mm x 3mm thick).	m ²	30.00	
220) <u>Expanded steel balustrade mesh</u> B3032. (25mm x 40mm x 3mm thick) Gothic pattern.	m ²	25.00	
221) <u>Square weldmesh</u> No. 228 (50mm x 50mm x 4.06mm thick) Camelot pattern.	m ²	12.00	
222) Ditto 2210 (50mm x 50mm x 3.25mm thick).	m ²	12.00	
223) 25mm x 25mm x 2mm PVC coated welded mesh.	m ²	19.00	
224) Finemesh No.5515(12.5mm x 12.5mm x 1.5mmthk)	m2	14.00	
225) Ditto No. 5518 (1.5mm x 12.5mm x 1.2mm thick).	m ²	7.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
226) Ditto No. 5115 (12.5mm x 25mm x 1.5mm thick).	m²	7.50	
227) Ditto No. 5118 (12.5mm x 25mm x 1.2mm thick).	m²	5.30	
228) Ditto No. 1115 (25mm x 25mm x 1.5mm thick).	m²	5.00	
229) Ditto No. 1118 (25mm x 25mm x 1.22mm thick).	m²	4.00	
230) Ditto No. 2215 (50mm x 50mm x 1.5mm thick).	m²	2.00	

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FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
231) <u>Finemesh</u> No. 2214 (50mm x 25mm x 2.0mm thick).	m²	6.00	
232) Ditto No. 2214 (50mm x 50mm x 2.0mm thick).	m²	4.50	
233) Ditto No. 2215 (50mm x 25mm x 3mm thick).	m²	11.00	
234) Roof mesh No. 3315 (75mm x 75mm x 1.5mm thick).	m²	9.00	
235) Extra over items above for tack welding to metal frames (Area of mesh measured).	m²	3.50	
236) No. 3315 (75mm x 75mm x 1.5mm thick) stainless steel mesh to roof gutter including over gutter sides and fixing rust-resistant nails (measured net).	m²	18.50	
237) 12.5mm x 12.5mm x 1.5mm thick stainless steel mesh.	m²	17.00	
<u>INSULATION</u>			
238) 50mm thick fibreglass insulation density 48kg/m3 to roof.	m²	13.50	
239) 50mm thick rock/mineral wool, density 50/m3 to roof.	m²	13.50	
240) 50mm thick rock/mineral wool, density 80kg/m3 to roof.	m²	17.30	
241) 50mm thick "Type 469" ditto - with aluminium foil of density 55kg/m³.	m²	17.40	
242) 50mm thick fibreglass insulation to wall, density 48kg/m².	m²	32.00	
243) 75mm thick ditto density 48kg/m².	m²	40.50	
244) One layer of "Sisalation 450" or other equivalent double sided, double reinforced fire resistant aluminium foil, lapped 150mm at joints, including extra labour dressing insulation sheet over roof purlins, bearers of ceilings, partition, etc. (Measured nett No allowance made for laps).	m²	5.00	
245) Ditto of 'Sisalation 430" or equivalent (Ditto).	m²	5.00	
246) Ditto of "Sisalation 921" or equivalent single sided (Ditto).	m²	5.00	
247) One layer of "Thermofoil 750" or other equivalent double-sided, fire resistant and reinforced aluminium foil, lapped 150mm at joints, including extra labour dressing over roof purlins, bearers of ceilings, partitions, etc. (Measured nett. No allowance made for laps).	m²	5.00	
<u>METAL FRAMED CEILINGS (EXPOSED GRID)</u>			
EXPOSED GRID TYPE SUSPENDED CEILING COMPRISING GALVANISED STEEL SUSPENSION TEES WITH ALUMINIUM DIAMETER STEEL ROD HANGERS, CLIPS AND RIVETTING FLANGED CAPPING ARRANGED IN GRID INCLUDING 6MM TO ENDS OF GRIDS ALONG THE BOUNDARIES			
248) 16mm thick Armstrong "Minaboard Tegular" or equivalent mineral fibre board.	m²	35.00	
249) 19m thick Armstrong 'Second Look Cottage" or equivalent acoustic mineral fibre board.	m²	38.00	
250) 6mm thick Welmate or equivalent calcium silicate board.	m²	38.00	
251) 9mm thick Welmate or equivalent calcium silicate board.	m²	45.00	
252) 12mm thick Welmate or equivalent calcium silicate board.	m²	47.00	

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

			UNIT	\$	¢
EXPOSED GRID TYPE SUSPENDED CEILING COMPRISING GALVANISED STEEL SUSPENSION TEES WITH ALUMINIUM FLANGED CAPPING ARRANGED IN GRID INCLUDING 6MM DIAMETER STEEL ROD HANGERS, CLIPS AND RIVETTING TO ENDS OF GRIDS ALONG THE BOUNDARIES					
253)	12mm thick Cape Masterboard or equivalent calcium silicate board.	m ²		40.00	
254)	9mm thick Cape Masterclad or equivalent calcium silicate board.	m ²		60.00	
255)	12mm thick Cape Masterclad or equivalent calcium silicate board.	m ²		100.00	
256)	12mm thick Cape Supalux or equivalent calcium silicate	m ²		65.00	
257)	10mm thick Walmate or equivalent cement building board.	m ²		30.00	
258)	12.7mm thick Fiberbond or equivalent gypsum board.	m ²		32.00	
259)	12.5mm thick vinyl faced fibreglass board.	m ²		25.00	
<u>METAL FRAMED CEILINGS (CONCEALED GRID)</u>					
RECESSED GRID TYPE SUSPENDED CEILING COMPRISING GALVANISED STEEL SUSPENSION TEES WITH ALUMINIUM FLANGED CAPPING ARRANGED IN GRID INCLUDING 6MM DIAMETER STEEL ROD HANGERS, CLIPS AND RIVETTING TO ENDS OF GRIDS ALONG THE BOUNDARIES					
260)	9mm thick gypsum board.	m ²		25.00	
261)	12mm thick gypsum board.	m ²		40.00	
262)	15.8mm thick gypsum board.	m ²		45.00	
263)	12.7mm thick fire rated gypsum board.	m ²		27.00	
264)	15mm thick vinyl faced fibreglass board.	m ²		28.00	
<u>METAL CEILINGS</u>					
LINEAR METAL SUSPENDED CEILING WITH CHROMATED AND STOVE ENAMELLED FINISHES INCLUDING GALVANISED STEEL RUNNERS, HANGERS, ADJUSTMENT CLIPS AND FIXING ACCESSORIES					
265)	0.80mm thick x 100mm wide Melcon "D100" or equivalent aluminium integrated ceiling.	m ²		81.50	
266)	0.45mm thick Dampa-100 or equivalent perforated aluminium integrated ceiling.	m ²		81.50	
267)	0.6mm thick x 100mm wide ‘Nordprofil’. Fermulu-F85H11 or equivalent perforated aluminium panel ceiling	m ²		73.80	
268)	0.6mm thick x 200mm wide ‘Nordprofil’. Fermulu-F85H11 or equivalent perforated aluminium panel ceiling	m ²		81.50	
269)	0.6mm thick x 300mm wide ‘Nordprofil’. Fermulu-F85H11 or equivalent perforated aluminium panel ceiling	m ²		98.00	
270)	Vinyl faced mineral fibre or fibreglass ceiling boards in replacement of defective or missing ones including removing old materials off site (excluding aluminium tees and hangers).	m ²		45.00	
271)	Replace defective or missing aluminium suspension tees including annealed wire and remove old materials off site.	m		7.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
<u>SUNDRIES</u>			
272) Take down ceiling board including timber or metal bearers, suspension system and cart away debris.	m ²	4.00	
273) Ditto ceiling board or lining (any type and thickness) excluding bearers, remove off site and where necessary prepare to receive new work.	m ²	1.30	
274) Take down false ceiling including timber or metal bearers and rebuilt, using the same materials and cart away debris off site (new materials measured separately).	m ²	15.00	
275) Take out suspended ceiling boards of exposed grid type and remove off site or stack aside for reuse.	m ²	1.00	
276) Take from stack and refix suspended ceiling boards.	m ²	2.00	
<u>AIR-CONDITION FRAME</u>			
277) Supply only room unit type air condition frame comprising of 100mm x 50mm wrotkapur including 3 coats of paint.	No	35.00	
278) Fit in only air-condition frame to opening in walls, etc. including pointing in cement and sand mortar (1:3) (making opening measured separately).	No	15.00	
<u>FIRE EXTINGUISHER BOX</u>			
279) 700mm x 250mm x 250mm high kapur fire extinguisher box complete with glazed casement door including small lock and keys, and hinges, fixed to brickwork or concrete work or timber work, etc. and 3 coats of paint.	No	230	
<u>HOSEREEL BOX</u>			
280) Hosereel cabinet constructed of wrot kapur frames rebated to receive and including 6mm thick clear glass panels and complete with glazed framed door, cabinet lock and keys, hinges and the whole painted with 3 coats of oil paint and mounted onto the wall including removing existing.	No	320	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
<u>STOP COCK-BOX</u>			
281) Stop cock-box constructed of wrot kapur timber frames rebated to receive and including 6mm thick glass panels and complete with glazed frames door, cabinet lock and keys, hinges and the whole painted with 3 coats of paint and mounted onto the wall.	No	78	
<u>TIMBER RAILING</u>			
282) Remove existing timber railing (any design and height), cart away and make good area disturbed.	m	1.30	
283) Ditto but replace any damaged portion (but not exceeding 2 balusters per m run or 0.50m run of handrail) cramp and secure all joints and refix (any design and height).	m	17.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

		UNIT	\$	¢																																																
<u>CHICKS</u>																																																				
284)	Supply and fix unpainted and unlined split Bertam or equivalent chicks properly and strongly constructed with ropes of No. 8 white glazed cord or nylon cord,25mm diameter galvanised pulleys, pulleys secured to galvanised screw hooks, size 18mm 100mm brass cleat fixed with brass screws. Additional brass cleat or cup hooks are to be provided and securely fixed at the bottom of the chicks on the outside to prevent the chicks been blown out. Rate includes for all cutting and plugging to brickwork, concrete, etc. required and for all making good of plaster, woodwork and decoration as necessary.	m²	27.00																																																	
285)	<u>Add</u> to item 3 for lining one side with first quality approved blue drill cloth or approved plastic cloth including properly bind the edges and allowing for all cutting and waste.	m²	8.00																																																	
<u>PLASTIC CHICKS</u>																																																				
286)	Plastic chicks of approved brand fixed complete with top and bottom members, brass cleats, pulleys, nylon cords, etc.	m²	40																																																	
287)	Take out as necessary, repair and refix the plastic chicks including replacing all the necessary accessories.	m²	17																																																	
<u>IRONMONGERY</u>																																																				
<u>HINGES</u>																																																				
288)	Take out existing hinges and remove off site.	No	2																																																	
	<table><tr><th rowspan="2">Butt Hinges (Supply and Fix)</th><th colspan="6">Rate Per Pair</th></tr><tr><th>50mm</th><th>65mm</th><th>75mm</th><th>90mm</th><th>100mm</th><th>150mm</th></tr><tr><td>289)</td><td>Medium pressed steel</td><td>5.00</td><td>6.00</td><td>7.00</td><td>7.00</td><td>8.00</td><td>9.00</td></tr><tr><td>290)</td><td>Heavy pressed steel</td><td>8.00</td><td>9.00</td><td>10.00</td><td>12.00</td><td>14.00</td><td>20.00</td></tr><tr><td>291)</td><td>Stainless steel</td><td>-</td><td>-</td><td>8.00</td><td>10.00</td><td>16.00</td><td>30.00</td></tr><tr><td>292)</td><td>Solid draw brass with steel pins</td><td>8.00</td><td>8.00</td><td>9.00</td><td>10.00</td><td>11.00</td><td>13.00</td></tr></table>	Butt Hinges (Supply and Fix)	Rate Per Pair						50mm	65mm	75mm	90mm	100mm	150mm	289)	Medium pressed steel	5.00	6.00	7.00	7.00	8.00	9.00	290)	Heavy pressed steel	8.00	9.00	10.00	12.00	14.00	20.00	291)	Stainless steel	-	-	8.00	10.00	16.00	30.00	292)	Solid draw brass with steel pins	8.00	8.00	9.00	10.00	11.00	13.00						
Butt Hinges (Supply and Fix)	Rate Per Pair																																																			
	50mm	65mm	75mm	90mm	100mm	150mm																																														
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291)	Stainless steel	-	-	8.00	10.00	16.00	30.00																																													
292)	Solid draw brass with steel pins	8.00	8.00	9.00	10.00	11.00	13.00																																													
293)	100mm brass hinges.	Pair	13																																																	
294)	100mm stainless steel ring hinges.	Pair	20																																																	
295)	125mm heavy duty stainless steel hinges.	Pair	26																																																	
<u>FLOOR SPRING (PER SET OF TWO)</u>																																																				
296)	Supply only DORMA or equivalent double action floor spring with shoe fixing and top centre (No. 8512-122AS).	Set	600.00																																																	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
297) Ditto (New Star 1630).	Set	121.00	
298) Ditto but single action (No. 8524-135AS or No. 8524-546AS).	Set	340.00	
299) Fix only floor spring including preparing floor to receive floor spring and making good work disturbed.	Set	51.00	
300) Take out existing floor spring and remove off site including making good work disturbed.	Set	40.00	

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
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FLOOR SPRING (PER SET OF TWO) (Cont'd)

301)	Take out existing floor spring repair and replace any defective components, including taking down and rehanging door leaf where necessary and making good work disturbed.	Set	145.00
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DOOR BOLT

302)	Supply and fix chrome plated indicating bolt	No	10.00
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	Bolts (Supply and Fix)	Rate Per Pair								
		75 mm	100 mm	150 mm	200 mm	250 mm	300 mm	375 mm	450 mm	600 mm
303)	Japanned barrel or tower bolts with polished shoot (straight or necked)	-	3.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00
304)	Brass barrel or tower bolts with brass shoot (ditto)	4.00	5.00	8.00	8.00	10.00	10.00	13.00	16.00	18.00
305)	Brass slide pattern flush bolt with brass shoot	4.00	7.00	9.00	13.00	-	-	-	-	-
306)	Aluminium slide pattern flush bolt	-	17.00	23.00	22.00	23.00	23.00	-	-	-
307)	Stainless steel slide pattern flush bolt	-	10.00	14.00	14.00	15.00	15.00	-	-	-
308)	Extra strong Japanned padlock bolt with eyelets and securely fastened on the inside with nuts and with 16mm diameter polished shoot (excluding padlock)	-	-	4.00	-	5.00	5.00	-	8.00	-

309)	Take out existing panic bolt, remove off site and make good work disturbed.	No	7.00
310)	Fix only panic bolt.	No	29.00
311)	Supply only `Union' or equivalent panic bolt for single leaf door, silver enamel (No. 80121 SE).	Set	120.00
312)	Ditto but for double leaves rebated doors (No. 80131 SE).	Set	189.00

DROP BOLT

313)	Supply and fix purpose-made mild steel drop bolt 19mm diameter x 406mm long complete with tubular guides welded on to gate to fit into and including 25mm dia x 152mm long socket set in and including concrete Grade 15 base 152mm x 152mm x 228mm deep including all necessary excavation and disposal of excavated materials off site.	No	21.00
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SHOOT BOLT

314)	Supply and fix purpose-made mild steel shoot bolt consisting of 19mm diameter mild steel bar 190mm long with tubular guides welded on to gate complete with 3mm thick mild steel slotted handle welded on to gate including drilling gate member as necessary.	No	23.00
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CASEMENT STAYS

	Casement Stays (Supply and Fix)	Rate Per No		
		200mm	250mm	300mm
315)	Art black malleable iron.	3.00	5.00	5.00
316)	Galvanised steel.	-	6.00	8.00
317)	Brass.	8.00	10.00	10.00

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
<u>LABOUR TO FIX LOCKS AND LATCHES</u>			
318) Single or double rebated cylinder mortice lockset complete with handle.	No	22.00	
319) Cupboard or drawer lock.	No	11.00	
320) Single or double cylinder latch.	No	15.00	
321) Emergency exit hardware for single door.	No	45.00	
322) Emergency exit hardware for double rebated door.	No	60.00	
323) Ditto but rebated type (Ditto).	No	39.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
324) Fix only mortice lock or latch complete with handle or knob, if any (Ditto).	No	20.00	
325) Ditto but rebated type (Ditto).	No	22.00	
326) Take out existing lock (any type and size) including furniture, cart away and make good work disturbed.	No	5.00	
327) Opening up lock, recondition and refix it.	No	29.00	
LOCK AND LATCHES			
<u>SUPPLY ONLY INCLUDING TWO KEYS)</u>			
<u>MORTICE LOCK</u>			
328) Two levers, mortice sash lock with enamelled black case and chromium plated forend, striking plate and lever handles.	No	40.00	
329) Single or double cylinder mortice sash lock with enamelled silver case and satin finish forend, striking plate and lever handles	No	72.00	
330) Ditto but rebated mortice sash with ditto	No	90.00	
331) Single or double cylinder mortice lockset with anodised aluminium lever handle furniture, concealed fixing	No	76.00	
332) Ditto but rebated mortice lockset with ditto	No	95.00	
333) Mortice lock complete with handles	No	43.00	
334) Showa CL-05-240 single cylinder.	No	83.00	
335) Yale 7801/520/32626 single cylinder.	No	86.00	
336) Union 643/46/45 rebated single cylinder.	No	96.00	
337) Yale 7801/520/32626 rebated single cylinder.	No	96.00	
338) Union 643/46/241 double cylinder.	No	86.00	
339) Showa CL5-05-240 single cylinder.	No	83.00	
340) Showa CL-26-240 rebated double cylinder.	No	90.00	
341) "Showa SS-G25-GQ-US32-70mm" cylinder mortice lockset with polished stainless steel knobset.	No	60.00	
342) "Showa CL-05-50" mortice lockset.	No	74.00	
343) "Showa CL-15-50" mortice latch.	No	59.00	
344) Yale 1 standard pattern cylinder rim.	No	56.00	
345) Abloy 1247 Jimmy Proof security locket without master key.	No	206.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$ ¢
<u>BATHROOM LOCK</u>		
346) Mortice bathroom lock with enamelled black case, chromium plated forend, striking plate and handles (Union No. 2294).	No	29.00
<u>LATCHES</u>		
347) Mortice plain latchset complete with handles (Union Raven Series 643-94-48AS).	No	30.00
348) Anodised aluminium tubular locksets for internal and external doors, inside turnbutton, outside cylinder and ditto. (Vibro No. 69021).	No	60.00
349) Standard pattern cylinder rim night latch, enamelled silver case and staple and brass knob (Union No. 1022).	No	45.00
350) Night latch with stop button, inside knob and outside cylinder (Vibro No. 69081).	No	30.00

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

			UNIT	\$	¢
<u>DRAWER AND CUPBOARD LOCKS</u>					
351)	Brass cupboard lock	No		30.00	
352)	Brass drawer lock (Union No. 4006).	No		20.00	
353)	Zinc drawer lock (Union No. 4137 or 4147).	No		26.00	
354)	`Globe' or `Diamond' brass cylinder drawer lock or cupboard lock.	No		6.00	
355)	Supply and fix vertical drawer lock.	No		21.00	
<u>DOOR CLOSERS</u>					
356)	Take out door closer, cart away and make good work disturbed.	No		8.00	
357)	Fix only Single or dual control door closer with or without holdopen arms or back check.	No		23.00	
358)	Ditto but concealed type.	No		24.00	
359)	Supply only `Ryobi 61' enamel door closer.	No		46.00	
360)	Supply only `Union 8850' door closer.	No		110.00	
361)	Supply only `Delta 72N' door closer with hold open arm.	No		43.00	
362)	Supply only Tiki 92/3 door closer with delay action.	No		110.00	
363)	Supply and fix door closer of Dorma TS73 for class 1 and 2 (silver or bronze colour).	No		130.00	
364)	Ditto for class 3 and 4 (ditto).	No		130.00	
<u>KNOBS AND HANDLES (SUPPLY AND FIX INCLUDING REMOVE OFF EXISTING</u>					
Handles (Supply and Fix including remove off existing)		Rate Per No			
		Nylon	Aluminium	Brass	Chromium Plated
365)	Bow handles without plate 100mm long or `U' shape door handles.	7.00	9.00	20.00	7.00
366)	Ditto 150mm long.	-	13.00	22.00	8.00
367)	Ditto 200mm long.	-	16.00	30.00	10.00
368)	Drawer pull 100mm long.	-	8.00	13.00	8.00
369)	Flush pull (fitment).	-	8.00	15.00	8.00
370)	Flush pull (entrance door).	-	21.00	-	-
371)	100mm angle handle to drawers	-	9.00	-	-
<u>DOOR STOP (SUPPLY AND FIX</u>					
372)	Rubber door stop not exceeding 40mm diameter and fixed to wood, concrete or brickwork.	No		4.00	
373)	Stainless steel door stop fixed to floor or wall with rubber buffer.	No		15.00	
374)	Brass floor spring stopper ditto.	No		34.00	
375)	Baked enamel magnetic catch fixed to wall.	No		13.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

UNIT \$ ¢						
Hasps and Staples (Supply and Fix)		Rate Per No - Overall Length				
		75mm	100mm	125mm	150mm	200mm
376)	Japanned steel wire loop, hinged to plate with staple or plate.	2.00	2.00	3.00	4.00	4.00
377)	Japanned flat bar 38 x 3mm with hinged joint.	3.00	3.00	3.00	6.00	--
378)	Brass ditto.	13.00	15.00	17.00	--	--

COAT HOOKS (SUPPLY AND FIX)

379)	150mm anodised aluminium coat hook with black inserts.	No	7.00
380)	Ditto but stainless hook.	No	9.00

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
<u>PADLOCK</u>			
381) Supply only 50mm approved brass padlock complete with 2 keys	No	25.00	
382) Ditto Key alike padlock	No	20.00	
<u>MISCELLANEOUS</u>			
383) Supply and fix 152mm natural anodised grip handle to door.	No	20.00	
384) Supply and fix roller shelter lock viro 8202/8203.	No	40.00	
385) Supply and install PL34 Glass lock set.	Set	200.00	
386) Water-proof tarpaulin roofing sheeting of approved pattern fixed on timber support including binding the edge and secured with brass rings at edges. (measured nett, price include for laps)	m ²	25.00	
387) 6mm diameter nylon cord for tarpaulin sheet.	m	1.00	
388) Green plastic tarpaulin sheeting for covering purpose.	m ²	5.00	
389) 3mm transparent flat `Perspex' plastic sheet lining fixed to fitments, partitions, table tops, etc.	m ²	50.00	
390) 6mm ditto.	m ²	80.00	
391) 9mm ditto.	m ²	85.00	
392) 12mm ditto.	m ²	135.00	
393) Supply only 13mm thick softboard size 2.40mm x 1.2mm.	No	23.00	
394) Take down, cut to the required shape & size and refix of timber to any description in any type of work or location.	m ³	350.00	
395) Supply and fix 12mm diameter manila rope including removing existing rope.	m	1.30	
396) Ditto but 16mm diameter ditto.	m	1.30	
397) Ditto but 20mm diameter ditto.	m	2.00	
398) Ditto but 25mm diameter ditto.	m	2.00	
399) Supply and fix 10mm diameter PP synthetic Classic II rope /3-strand Navy flex rope (manila rope look alike) including removing existing rope.	m	7.00	
400) Ditto but 16mm diameter ditto.	m	15.00	
401) Ditto but 26mm diameter ditto.	m	20.00	
402) Ditto but 32mm diameter ditto.	m	26.00	
403) Supply and fix 6mm diameter nylon ropes of PE grade.	m	1.00	
404) Supply only 6mm diameter nylon ropes (100%, 200m per coil).	Coil	54.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
405) Ditto 12mm diameter ditto.	Coil	300.00	
406) Ditto 18mm diameter ditto.	Coil	420.00	
407) Ditto 20mm diameter ditto.	Coil	550.00	
408) Ditto 24mm diameter ditto.	Coil	720.00	
409) Supply glass door lock set (lockwood 590/3SC).	No	91.00	
410) Supply and install Showa 535-35H-2H US32D-70 lock for fire or side door.	No	90.00	
411) Supply and install Baldish 2123-030 door push plate - 80mm x 375mm.	No	72.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR, MAINTENANCE AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF TWO (2) YEARS WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 6 - CARPENTRY & JOINERY

	UNIT	\$	¢
412) Supply and install aluminium hoarding, 75mm x 50mm post at 1.2m centre to centre including painting, excavation , concrete stump and removing off site or to SDC store after use.	m ²	55.00	
413) Supply only reflective tape (Yellow/red)	m ²	156.00	
<u>COMPOSITE TIMBER</u>			
414) Supply and fix Shera fire cement floor plank or equivalent composite timber	m ²	250.00	
415) Ditto Supply only	m ²	130.00	
416) Aluminium Composite panel	m ²	325.00	
417) Hoarding Sticker (New Item)	m ²	45.00	
418) Supply abloy lock (PL320/25)	No	130.00	
419) Supply abloy lock (PL320/20)	No	104.00	
420) Supply abloy lock (PL320/50)	No	160.00	

Fixed Schedule of Rates
Section 7 – Structural Steelwork and Metalwork

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

	UNIT	\$	¢
<u>STRUCTURAL STEELWORK, MILD STEEL AND ROLL STEEL, ETC.</u>			
1) Mild steel, roll steel or wrought iron of <u>SOLID</u> sections, any sizes, complying with BS 4360 Grade 43C (jambs, gratings, covers, ladders, brackets, straps, hangers, door frames, gates, angle guards to columns, strap hinge, balustrades, handrails, ornamental grilles, clothes line frames, tie rods, fasteners, clips and the like) including flats, angles, channels, plates, rods, stanchions, beams, girders, etc. and all labour and material fabricating, welding, drilling and painting one coat of red lead primer before delivery (bolts to be paid separately).	Kg	7.88	
2) Mild steel tubular or rectangular or square <u>HOLLOW</u> section of any section or size including cutting, welding and painting one coat of red lead primer in stanchions, beams, girders, roof trusses, rafters, cleats, brackets, etc. (ditto).	Kg	8.10	
<u>METALWORK</u>			
<u>Mild Steel Members</u>			
3) Hollow section, flat, rod, angle and channel complying with BS 4360 Grade 43C.	Kg	7.42	
4) Hot dip galvanising complying with SS117 to structural steel or metal work.	Kg	1.24	
5) Welding to joints, any thickness of steel or weld (Length of girth of joint measured).	m	5.09	
6) Spot welding i.e. ends of wire to frames.	No	3.39	
7) Grouting up gap not exceeding 300 mm wide x 50 mm thick between RSJ and brickwall with dry-pack-cement mortar (1:1) to the satisfaction of S.O and clean surrounds.	m	3.50	
8) Ditto exceeding 300 mm wide x 50 mm thick between ditto.	m	7.40	
<u>METAL WINDOWS</u>			
9) Take out metal windows, return to Store or cart away and make good work disturbed.	m ²	5.09	
10) Crittal's standard range or other equal and approved metal side hung window with neoprene weather strip to all edges including one coat anti-rust primer complete with satin chrome finish handles and fastener, non-ferrous striking plate, side hung hinges, and brass casement stay (Glass measured separately).	m ²	67.35	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

	UNIT	\$	¢
11) Ditto but top hung window with ditto complete with brass fastener, stay and pivoted hinges (Ditto).	m ²	69.38	
12) Take out, oil and refix metal window (any type and size) and put to smooth working condition.	No	22.60	
13) Removed damage or loose putty, clean edges of metal casements, prepare and reputty with new putty to secure perforated asbestos vents to metal casements including metal clip.	m	0.68	
14) Take out metal casement window including glazing as necessary, cut out damaged or corroded portions, provide new in replacement including welding, refixing and three coats paint.	No	28.25	
15) Take out existing lock in metal casement door or window and remove off site and make good.	No	7.91	
16) APPROVED GALVANISED STEEL ADJUSTABLE LOUVRED WINDOW FRAME FOR 150MM BLADES - Single or multiple light, single control frame for 3 louveres (Rate per set of two frames) Add \$0.90 per set for each additional louver (Ditto).	Set	9.04	
17) NATURAL ANODISED ALUMINIUM ADJUSTABLE LOUVRED WINDOW FRAME COMPLY WITH SS212 INCLUDING 6MM THICK CLIPS - Set of frame with single control.	m ²	44.01	
18) WEATHER STRIPS - 24 gauge approved metal weather strips (any type and width) fixed to window cill.	m	2.37	
19) ALUMINIUM LOUVRES - 18mm SWG (1.22mm) fixed extruded aluminium to and including 101mm x 51mm x 16 SWG aluminium louvered 100mm wide, bent as necessary with all edges beaded, soldered, fixed at 60 degree. "U" channel frames and mullions set.	m ²	230.75	
20) Mild steel sliding grilled door comprising of 25mm x 25mm x 2mm mild steel hollow section surround and 25mm x 6mm flat bars fixe+B54d vertically at not exceeding 500mm centre to centre and infill with 19mm x 6mm mild steel flat bars arranged.	m ²	115.26	
21) ALUMINIUM TOILET DOOR - 18 SWG or equivalent aluminium door in one or two leaves complete with hinges, bolts and all necessary fittings.	m ²	73.45	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

	UNIT	\$	¢
22) GRILLE WORK - Mild steel grilled door comprising of mild steel hollow section surround 25mm x 25mm x 2mm and 25mm x 6mm m.s. flat fixed vertically and infill with 19mm x 6mm mild steel flat bars arranged diagonally at 80mm centre to centre.	m ²	78.20	
23) Mild steel sliding grilled door comprising of 25mm x 25mm x 2mm mild steel hollow section surround and 25mm x 6mm flat bars fixed vertically at not exceeding 500mm centre to centre and infill with 19mm x 6mm mild steel flat bars arranged.	m ²	94.92	
24) Ditto in gate as before described but not exceeding 50mm x 50mm x 5mm thick hollow section or 50mm diameter pipe surround with infilling of mild steel flat bars not exceeding 25mm x 6mm thick, ditto and complete with pivoted hinges, stops, etc.	m ²	101.70	
25) Mild steel grilles comprising of 25mm x 6mm mild steel flat bars surround and fixed vertically not exceeding 450mm centre to centre and infilled with 10mm square bars arranged diagonally at 80mm centre to centre, the whole fillet welded.	m ²	67.80	
26) Gauge 18 aluminium ornamental grilles consisting of not exceeding 76mm x 44mm hollow section surround and 19mm x 3mm infilling fixed to approved ornamental shape or design including all necessary welding and fixing to woodwork, brickwork, etc.	m ²	83.62	
27) Supply and install bronze anodised aluminium grille comprising of 75mm x 20mm hollow section framing and 12mm x 10mm amplimesh `103' including U-channel edging and rivets.	m ²	158.20	
28) Ditto but `104' ditto.	m ²	169.50	
29) Supply and install bronze anodised aluminium sliding grille comprising of aluminium hollow section framing and 12mm x 10mm amplimesh `103' including window frame, approved lock, tracks, roller guides and all necessary accessories.	m ²	192.10	
30) Supply and install bronze anodised aluminium sliding door comprising of hollow section framing and 12mm x 10mm amplimesh `103' including door frame, approved cylinder lock, track, roller guides and all necessary accessories.	m ²	271.20	
31) Supply and install bronze anodised aluminium door comprising hollow section and amplimesh `103' including door frame and approved lock.	m ²	210.18	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
32)	50mm diameter tubular mild steel handrail or bottom rail/baluster comply with SS 17; (light duty) welded to baluster including running joint.	m	60.79	
33)	38mm diameter ditto.	m	50.06	
34)	Extra over for bend for items 1 & 2.	No	5.65	
35)	Extra over for ramp ditto.	No	2.83	
36)	Extra over for knee ditto.	No	2.83	
<u>MILD STEEL RAILING</u>				
37)	Type A mild steel railing consisting of tubular or square hollow section set in and including concrete foundation, painting with one coat of red lead primer, one undercoat and two finishing coats of enamel paint, excavation for concrete foundation and disposal of excavated material from the site .	m	48.59	
38)	Type D ditto.	m	82.72	
39)	Type E ditto.	m	92.89	
40)	Type F ditto.	m	226.57	
41)	Type G ditto.	m	29.04	
<u>ALUMINIUM ALLOY RAILING</u>				
42)	Type A aluminium alloy railing in powder coating finishing consisting of tubular or square hollow section set in and including concrete foundation, all necessary excavation and disposal of excavated material from site .	m	214.70	
43)	Type B ditto.	m	243.06	
<u>ALUMINIUM ALLOY RAILING (Cont'd)</u>				
44)	Type C ditto.	m	157.30	
45)	Type D ditto.	m	257.30	

FIXED SCHEDULE OF RATES

SECTION 7 - STRUCTURAL STEELWORK & METALWORK

		UNIT	\$	¢
<u>ALUMINIUM SLIDING OR SWING DOOR AND PARTITION</u>				
46)	Aluminium sliding door (approved thickness) natural satin matt finish framing, in one panel and with vinyl glazing gasket to receive glass, complete with door frame including waterproof cement fillet, vinyl weather strip all round, tracks, channels, nylon rollers, guides, concealed hook, cylinder lock operated by latch or by key and all other necessary accessories. (Glass measured separately).	m ²	107.35	
47)	Ditto but in two panels and with ditto.	m ²	110.74	
48)	Take down existing aluminium sliding door complete, cart away off site or stack aside for re-use and make good work disturbed.	m ²	27.12	
49)	Take out swing door if necessary, replace hydraulic oil in the mechanism box and rehang (Rate per leaf).	No	54.24	
50)	Adjust, ease, oil, and make good track, frame, etc. for aluminium sliding door (any thickness) and including replacing any missing or damaged rollers and guide, taking out door and re-hanging if necessary (Rate per leaf).	No	40.68	
51)	Ditto but for aluminium swing door and including replacing any missing or damage top centres (Ditto).	No	40.68	
52)	Anodised aluminium glazed swing door and frame 75 x 40mm thick door surrounds with weather strip all round and gasket to receive glass complete with necessary floor spring, lock and 200mm high push/pull plate (Glass measured separately).	m ²	222.84	
53)	Ditto but comprising 100 x 40mm thick door surrounds with ditto.	m ²	243.29	
54)	Anodised aluminium framed partition divided into one or multiple panels and fanlights and comprising 75 x 40mm studs placed at not more than 1200mm centres complete with weather strip all round, gasket to receive glass and 100mm high aluminium skirting (Ditto).	m ²	88.59	
55)	Ditto with aluminium fascia (Ditto).	m ²	114.02	
56)	Ditto as before described but comprising 100 x 40mm studs (Ditto).	m ²	89.27	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
57)	Aluminium framed partition with fixed glazed panel as before described each with 200mm high transom, including top fixed light, fanlight and one or multiple leaves of side- hung swing standard doors, each with 200mm high push/pull plates on both sides and with weather strip all round complete with necessary floor spring and lock (Ditto).	m ²	110.40	
<u>ALUMINIUM CASEMENT AND SASHES</u>				
<u>1.2MM THICK NATURAL ANODISED ALUMINIUM SECTION FRAMES IN SINGLE LIGHT, COMPLETE WITH IRONMONGERY, FIXING STRAPS, VINYL WEATHER STRIPS INCLUDING BUILDING-IN AND POINTING FRAME (GLASS MEASURED SEPARATELY)</u>				
58)	Side-hinged window and casement frames.	m ²	245.63	
59)	Top-hung window frame and sash.	m ²	252.67	
60)	Sliding window frame and sash.	m ²	242.39	
61)	Fixed window frame.	m ²	206.95	
62)	Extra over for item 5-8 but in bronze anodised ditto.	m ²	16.95	
<u>ALUMINIUM ROLLER SHUTTER</u>				
63)	To replace and remove faulty motor USA-400A or equivalent and any necessary adjustment, repair and lubricate all mechanisms to working conditions.	No	2486.00	
64)	-Ditto- for USA-700A or equivalent -ditto-	m ²	3390.00	
65)	Repair / servicing existing aluminium or other metal roller shutters (overall size not exceeding 4m x 4m) including replacing missing rollers, overhanging gears, tracks and oiling to working condition.	No	395.50	
66)	Ditto (overall size exceeding 4m x 4m) including ditto.	No	565.00	
<u>ALUMINIUM ROLLER SHUTTER</u>				
67)	Take down existing roller shutter complete, remove off site or set aside for reuse and make good work disturbed.	No	104.30	
68)	Fix only roller shutter in position as directed including providing minor accessories.	m ²	65.54	
69)	Supply and install roller shutter lock of approved brand including taking out of existing and remove off site.	No	42.94	
70)	Supply and fix approved manually operated roller shutter with 1.2mmthk natural anodised aluminium	m ²	400.00	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
<u>18G ANODISED ALUMINIUM SECTION CUT TO REQUIRED LENGTHS, FIXED TO BRICKWORK, CONCRETE WORK, ETC. INCLUDING BENDING, WELDING AND DRILLING HOLES, ETC.</u>				
71)	6mm x 6mm channel.	m	3.39	
72)	10mm x 10mm ditto.	m	3.39	
73)	13mm x 13mm ditto.	m	3.62	
74)	16mm x 16mm ditto.	m	4.18	
75)	19mm x 19mm ditto.	m	4.18	
76)	25mm x 25mm ditto.	m	4.97	
77)	25mm x 20mm bead.	m	3.96	
78)	82mm x 31mm x 75mm deep shoe.	No	4.52	
79)	101mm skirting including rubber insert.	m	6.85	
80)	63mm ditto.	m	5.88	
81)	UN 2 x 6mm strips including rubber insert.	m	4.46	
82)	UN 2 x 9mm deep ditto.	m	4.63	
83)	10mm x 10mm angle.	m	3.16	
84)	13mm x 13mm angle.	m	3.39	
85)	16mm x 16mm angle.	m	3.39	
86)	19mm x 19mm angle.	m	3.62	
87)	25mm x 25mm angle.	m	3.84	
88)	32mm x 32mm angle.	m	4.07	
89)	38mm x 38mm angle.	m	4.41	
90)	51mm x 51mm angle.	m	5.88	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
<u>GALVANISED STEEL GRATING AND COVERS TO SUMPS, SURFACE DRAIN, ETC.</u>				
91)	Galvanised steel grating in panels, each panel 600mm long and consisting of 32mm x 6mm thick flat bar as framing all round and infilling lengthwise at 25mm centres with 13mm diameter bars at 200mm centres as intermediate support including drilling holes for bars and welding the whole together and painting with one coat of red lead primer before delivery.	m ²	279.11	
92)	Galvanised steel angle framing to receive gratings consisting of 40mm x 40mm x 6mm thick angle with 75mm long x 25mm x 6mm fish-tailed flat bar as holding down lugs welded at 600mm centres and built into concrete surround including forming mortices, grouting around lugs in cement mortar (1:3), making good work disturbed and painting with one coat of red lead primer.	m	10.28	
<u>GALVANISED STEEL GRATING AND COVERS TO SUMPS, SURFACE DRAIN, ETC.</u>				
93)	Ditto but 50mm x 50mm x 6mm thick angle ditto.	m	13.67	
94)	Ditto but consisting of 75mm x 50mm x 10mm thick angles with 100mm long x 13mm diameter 'U'-shaped rod as holding down lugs welded at 600mm centres and cast on to edge of opening including making good work disturbed and painting with one coat of red lead primer.	m	16.50	
95)	150mm wide hot dip galvanised steel grating in panels, each panel 600mm long to 100mm wide scupper drain, consisting of 25mm x 6mm thick flat bar framing all round and infilling lengthwise at 25mm centres, the whole together and painting with one coat of red lead primer before delivery.	m	33.90	
96)	200mm wide ditto, to 150mm wide scupper drain consisting of ditto.	m	45.54	
97)	150mm wide hot dip galvanised steel grating in panels, (type A) with all joints and intersections wholes welded, drilling and including painting with one coat of inhibitive primer before delivery	m	33.63	
98)	200mm wide ditto.	m	43.39	
99)	Hot dip galvanised steel gratings in panels (Type B) ditto	m ²	551.28	
100)	Hot dip galvanised steel gratings in panels (Type C) ditto	m ²	635.34	
101)	Hot dip galvanised steel gratings in panels (Type D) ditto	m ²	518.05	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
102)	Heavy duty hot dip galvanised steel gratings in panels (Type E) ditto .	m ²	959.86	
103)	Light duty hot dip galvanised steel gratings in panels (Type F) ditto	m ²	484.82	
104)	Hot dip galvanised steel gratings in panels (Type G) ditto	m ²	639.25	
105)	Heavy duty hot dip galvanised steel gratings in panels (Type I) ditto	m ²	1002.86	
106)	Hot dip galvanised steel gratings in panels (Type J) ditto	m ²	670.53	
107)	Hot dip galvanised steel grating in panels, consisting of 64mm x 38mm x 4.6mm thick galvanised angle frame, with 35mm x 9mm galvanised mild steel flat all round, infill with 25 x 5mm galvanised mild steel flat all joints and intersection whole welded, drilled and including painting with one coat of inhibitive primer before delivery and built into concrete surround including 3mm thick galvanised cheque plate cover.	m ²	774.14	
108)	Hot dip galvanised steel grating in panels, consisting of 75mm x 75mm x 9.4mm thick galvanised angle frame with 65mm x 9mm fish-tailed; grating panels consist of 65mm x 9mm mild steel flat welded at 30mm centre and infilling with 12mm diameter mild steel bar at 85mm centres, all joints and intersection whole welded, drilled and including painting with one coat of inhibitive primer before delivery and built into concrete surround .	m ²	1222.21	
109)	Galvanised EMCO Expanded Metal WM 30080 (mesh 5mm thick, 7.5mm strand width, 25mm short way of mesh x 75mm long way of mesh opening) or equivalent fabricate in panels grating to required sizes complete with galvanised 38mm x 38mm x 5mm thick angle as framing.	m ²	183.76	
110)	Ditto but EMCO Expanded Metal WM 50080 (mesh 5mm thick, 8mm strand width, 42mm short way of mesh x 135mm long way of mesh opening) or equivalent ditto.	m ²	205.26	
111)	Ditto but EMCO Expanded Metal WM 50110 (mesh 5mm thick, 11mm strand width, 45mm short way of mesh x 135mm long way of mesh opening) or equivalent ditto.	m ²	242.41	
112)	Ditto but EMCO Expanded Metal WM 50075 (mesh 5mm thick, 7.5mm strand width, 25mm short way of mesh x 75mm long way of mesh opening) or equivalent ditto.	m ²	293.24	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
113)	Ditto but EMCO Expanded Metal WM 50105 (mesh 5mm thick, 10.5mm strand width, 30mm short way of mesh x 75mm long way of mesh opening) or equivalent ditto.	m ²	336.24	
<u>GRATING AND COVERS TO SUMPS, SURFACE DRAIN, ETC.</u>				
114)	200mm x 25mm (depth) x 12mm thick ultra violet resistant ABS. (Acrylonitrile Butadiene Styrene) gratings or approved equivalent (all colour).	m ²	49.72	
115)	250mm x 25mm (depth) x 12mm thick ditto.	m ²	50.85	
116)	300mm x 25mm (depth) x 12mm thick ditto.	m ²	51.98	
117)	Take out broken cast iron perforated cover (irrespective of size) and remove off site.	No	1.36	
118)	25mm thick perforated cast iron cover placed in position.	m ²	63.73	
119)	Supply and fix Jonite Stone or equivalent grating or equipment 210W x 500L x 25H to 250W x 500L x 25H light duty.	m	141.25	
120)	Ditto 210W x 500L x 35H to 250W x 500L x 35H ditto.	m	141.25	
121)	Ditto 292W x 500L x 25H to 332W x 500L x 25H ditto.	m	175.15	
122)	Ditto 292W x 500L x 35H to 332W x 500L x 35H ditto.	m	175.15	
123)	Ditto 210W x 500L x 35H to 250W x 500L x 35H heavy duty.	m	186.45	
124)	Ditto 292W x 500L x 35H to 332W x 500L x 35H ditto.	m	226.00	
125)	Ditto 292W x 500L x 45H to 332W x 500L x 45H ditto.	m	248.60	
126)	Ditto 355W x 500L x 45H to 395W x 500L x 35H extra heavy duty.	m	384.20	
<u>METAL POSTS</u>				
127)	75mm diameter mild steel tubular post not exceeding 2m high from ground level, one end minimum 600mm long cast in and including concrete Grade 30 in foundation not exceeding 750mm deep, the other end welded with steel plate complete with holes and including bolts and nuts (Rate includes excavation, formwork and cart away debris).	No	65.54	
128)	Ditto exceeding 2.00m but not exceeding 2.50m high from ground level, ditto.	No	73.45	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
129)	Ditto exceeding 2.50m but not exceeding 3.00m long from ground level, one end cast in and including concrete Grade 30 in foundation exceeding 1000mm deep, ditto.	No	102.83	
<u>HIGH STRENGTH FRICTION GRIP BOLTS WITH NUTS AND WASHERS INCLUDING DRILLING HOLES IF NECESSARY</u>				
130)	16mm diameter and not exceeding 75mm long.	No	2.49	
131)	20mm diameter ditto.	No	3.28	
132)	22mm diameter ditto.	No	4.07	
134)	24mm diameter ditto.	No	5.09	
135)	20mm diameter exceeding 75mm and not exceeding 150mm long.	No	4.29	
136)	22mm diameter ditto.	No	5.76	
137)	24mm diameter ditto.	No	6.67	
<u>"HILTI" OR OTHER EQUAL AND APPROVED FASTENING SYSTEMS TO CONCRETE, BRICK OR STEELWORK INCLUDING DRILLING HOLES IF NECESSARY</u>				
138)	HKD M6 flush anchor.	No	1.81	
139)	HKD M8 ditto.	No	1.92	
140)	HKD M10 ditto.	No	2.03	
141)	HKD M12 ditto.	No	2.26	
142)	HKD M16 ditto.	No	3.39	
143)	HKD M20 ditto.	No	4.97	
144)	HSA M6/65 stud anchor.	No	2.26	
145)	HSA M6/100 ditto.	No	2.37	
146)	HSA M8/75 ditto.	No	2.49	
147)	HSA M8/115 ditto.	No	2.83	
148)	HSA M10/90 ditto.	No	2.94	
149)	HSA M10/120 ditto.	No	3.16	
150)	HSA M12/110 ditto.	No	3.84	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
151)	HSA M12/180 ditto.	No	4.97	
152)	HSA M16/145 ditto.	No	5.65	
153)	HSA M16/220 ditto.	No	8.59	
154)	HSA M20/170 ditto.	No	10.06	
155)	HSA M20/270 ditto.	No	16.95	
156)	HSL M8/40 heavy-duty anchor.	No	9.61	
157)	HSL M10/20 ditto.	No	10.74	
158)	HSL M12/25 ditto.	No	14.13	
159)	HSL M16/50 ditto.	No	22.83	
160)	HSL M20/30 ditto.	No	33.34	
161)	HSL M20/60 ditto.	No	35.60	
162)	HSL M24/30 ditto.	No	39.55	
163)	HSL M24/60 ditto.	No	41.13	
164)	HVA adhesive anchor system comprising M8 anchor rod assembly (i.e. with nut and washer) and adhesive cartridge.	Set	7.35	
165)	Ditto M10 ditto.	Set	8.48	
166)	Ditto M12 ditto.	Set	9.61	
167)	Ditto M16 ditto.	Set	13.00	
168)	Ditto M20 ditto.	Set	19.78	
169)	Ditto M24 ditto.	Set	27.12	
<u>GKN BOLTS WITH NUTS AND WASHERS OF OTHER EQUAL AND APPROVED TYPE INCLUDING DRILLING HOLES IF NECESSARY</u>				
170)	16mm diameter and not exceeding 75mm long.	No	2.49	
171)	19mm ditto.	No	3.73	
172)	22mm ditto.	No	4.97	
173)	25mm ditto.	No	5.42	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
<u>HOT DIPPED GALVANISED BOLTS WITH NUTS AND WASHERS OR OTHER EQUAL AND APPROVED TYPE INCLUDING DRILLING HOLES IF NECESSARY</u>				
174)	6mm diameter and not exceeding 75mm long.	No	0.68	
175)	10mm diameter ditto.	No	0.90	
176)	13mm diameter ditto.	No	1.36	
177)	16mm diameter ditto.	No	2.26	
178)	19mm diameter ditto.	No	3.28	
179)	22mm diameter ditto.	No	4.29	
180)	25mm diameter ditto.	No	5.99	
181)	10mm diameter exceeding 75mm long but not exceeding 150mm long.	No	2.83	
182)	13mm diameter ditto.	No	3.39	
183)	16mm diameter ditto.	No	3.96	
184)	19mm diameter ditto.	No	5.31	
185)	22mm diameter ditto.	No	6.78	
186)	25mm diameter ditto.	No	9.72	
187)	13mm diameter exceeding 150mm but not exceeding 300mm long.	No	6.22	
188)	16mm diameter ditto.	No	7.35	
189)	19mm diameter ditto.	No	8.70	
190)	22mm diameter ditto.	No	10.17	
191)	25mm diameter ditto.	No	12.88	
192)	16mm diameter exceeding 300mm but not exceeding 450mm long.	No	10.51	
193)	19mm diameter ditto.	No	11.87	
194)	22mm diameter ditto.	No	13.56	
195)	25mm diameter ditto.	No	16.50	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
<u>VEHICULAR IMPACT GUARDRAIL</u>				
196)	Supply all plants, labour equipment and material and everything necessary for the installation and completion of approved hot-dip galvanised vehicular impact guardrail 311 x 82.5 x 3mm thick fixed to steel channel post (measured separately) including all necessary bends, bolts and nuts and washers .	m	60.12	
197)	Ditto but 700mm long end section ditto.	No	84.75	
198)	178 x 76 x 6mm thick hot dip galvanised channel post and channel spacer set in and including concrete foundation, all necessary excavation and disposal of excavated material .	Set	112.89	
<u>STAINLESS STEEL PLATE(304)</u>				
199)	0.4mm stainless steel sheeting cut to required size.	m ²	38.19	
200)	0.5mm ditto.	m ²	42.04	
201)	0.6mm ditto.	m ²	48.48	
202)	0.7mm ditto.	m ²	56.61	
203)	0.8mm ditto.	m ²	62.15	
204)	0.9mm ditto.	m ²	66.78	
205)	1mm ditto.	m ²	72.94	
206)	1.2mm ditto.	m ²	80.12	
207)	1.5mm ditto.	m ²	100.68	
208)	2mm ditto.	m ²	124.98	
209)	3mm ditto.	m ²	138.43	
<u>ALUMINIUM WORKS</u>				
210)	0.4mm aluminium sheeting cut to required size.	m ²	10.17	
211)	1mm ditto.	m ²	27.57	
212)	3mm ditto.	m ²	57.86	
213)	1.5mm aluminium chequered plate cut to required size and place in position.	m ²	65.54	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	€
214)	3mm ditto.	m ²	124.30	
215)	6mm ditto.	m ²	226.00	
216)	Natural aluminium anodizing.	m ²	16.95	
217)	Ditto in bronze or other colours.	m ²	23.17	

GALVANISED STEEL AND STEEL CHEQUERED PLATE

218)	3.0mm galvanised steel perforated sheet cut to required size and place in position.	m ²	109.61	
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STAINLESS STEEL BOLTS INCLUDING DRILL HOLE IF NECESSARY

219)	6mm diameter stainless steel bolt with nuts and washer including drilling holes not exceeding 100mm long.	No	2.49	
220)	10mm diameter ditto.	No	4.18	
221)	13mm diameter ditto.	No	8.48	
222)	16mm diameter ditto.	No	14.13	
223)	25mm diameter ditto.	No	17.52	

SUPPLY AND INSTALL STAINLESS STEEL GRADE 304 ANCHOR BOLTS WITH NUTS AND WASHERS,

	<u>BOLT DIAMETERS</u>	<u>LENGTH OF ANCHOR BOLT</u>	<u>EMBEDED LENGTH OF BOLT</u>	UNIT	\$
224)	8mm	110mm	80mm	No	15.00
225)	10mm	130mm	90mm	No	20.00
226)	12mm	160mm	110mm	No	24.00
227)	16mm	190mm	135mm	No	31.00
228)	20mm	210mm	170mm	No	48.00
229)	24mm	250mm	210mm	No	59.00

SUPPLY AND INSTALL MILD STEEL ANCHOR BOLTS WITH NUTS AND WASHERS, APPROVED GLASS

	<u>BOLT DIAMETERS</u>	<u>LENGTH OF ANCHOR BOLT</u>	<u>EMBEDED LENGTH OF BOLT</u>	UNIT	\$
230)	8mm	110mm	80mm	No	14.00
231)	10mm	130mm	90mm	No	18.00
232)	12mm	160mm	110mm	No	21.00
233)	16mm	190mm	135mm	No	26.00
234)	20mm	210mm	170mm	No	33.00
235)	24mm	250mm	210mm	No	37.00

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
<u>STAINLESS STEEL TUBULAR HANDRAIL</u>				
236)	Supply and install 63mm diameter 1.5mm thick polished finish stainless steel (AISI 304) in tubular post including ears attachment.	m	248.60	
237)	Ditto but 50mm diameter 1.5mm thick polished finish stainless steel (AISI 304) in tubular post or handrail including bents, junctions and ears attachment.	m	226.00	
238)	Ditto but 38mm diameter 1.5mm thick ditto.	m	135.60	
239)	Ditto but 25mm diameter 1.5mm thick ditto.	m	90.40	
240)	Fabricate and install stainless steel (AISI304) sleeves (any diameter).	No	61.47	
241)	Stainless steel flat bar 12mm x 6mm thickness in Handrail or alike with 180 grit finish.	m	18.08	
242)	Ditto but 12mm x 12mm thickness ditto.	m	23.73	
243)	Ditto but 16mm x 6mm thickness ditto.	m	20.34	
244)	Ditto but 19mm x 6mm thickness ditto.	m	19.78	
245)	Ditto but 19mm x 12mm thickness ditto.	m	28.25	
246)	Ditto but 20mm x 10mm thickness ditto.	m	22.60	
247)	Ditto but 30mm x 6mm thickness ditto.	m	23.73	
248)	Ditto but 40mm x 6mm thickness ditto.	m	31.64	
249)	Ditto but 40mm x 12mm thickness ditto.	m	47.46	
250)	Stainless steel round bar 6mm diameter in handrail or alike with 180 grit finish.	m	5.09	
251)	Ditto but 8mm diameter ditto.	m	6.22	
252)	Ditto but 10mm diameter ditto.	m	7.35	
253)	Ditto but 12mm diameter ditto.	m	10.17	
254)	Ditto but 16mm diameter ditto.	m	16.95	
255)	Ditto but 20mm diameter ditto.	m	25.43	
256)	Ditto but 25mm diameter ditto.	m	31.64	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
257)	304 STAINLESS STEEL CHEQUERED PLATES, 6mm thk. Cut to required size.	m ²	452.00	
258)	Ditto but 9mm thk.	m ²	565.00	
259)	304 STAINLESS STEEL "L" angle, 38mm x 38mm x 3mm thk.	m	20.34	
260)	304 Stainless Steel "L" angle, 50mm x 50mm x 3mm thk.	m	24.86	
261)	304 STAINLESS STEEL HOLLOW SECTION 25mm x 25mm x 3mm thk.	m	20.34	
262)	304 Stainless Steel Hollow Section 50mm x 50mm x 3mm thk.	m	33.90	
263)	304 Stainless Steel Hollow Section 100mm x 100mm x 3mm thk.	m	56.50	
264)	304 Stainless Steel Hollow Section 50mm x 100mm x 3mm thk.	m	74.58	
265)	316 STAINLESS STEEL CHEQUERED PLATE, 6mm thk.	m ²	621.50	
266)	Ditto but 9mm thk.	m ²	847.50	
267)	316 STAINLESS STEEL "L" ANGLE, 38mm x 38mm x 3mm thk.	m ²	28.25	
268)	316 Stainless Steel "L" angle, 50mm x 50mm x 3mm thk.	m ²	33.90	
269)	316 Stainless Steel HOLLOW SECTION 25mm x 25mm x 3mm thk.	m ²	39.55	
270)	316 Stainless Steel Hollow Section 50mm x 50mm x 3mm thk.	m ²	67.80	
271)	316 Stainless Steel Hollow Section 50mm x 100mm x 3mm thk.	m ²	113.00	
272)	316 Stainless Steel Hollow Section 100mm x 100mm x 3mm thk.	m ²	152.55	
<u>NATURAL ANODISED ALUMINIUM TUBULAR RAIL</u>				
273)	50mm diameter 1.5mm thick natural anodised aluminium (BS 1474) tubular rail.	m	53.48	
274)	38mm diameter 1.5mm thick natural anodised aluminium (BS 1474) tubular baluster/balustrade.	m	43.70	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

	UNIT	\$	¢
275) Aluminium rivets to linings (any type).	No	0.57	
276) Galvanised chain (4mm) diameter.	m	4.52	
277) Galvanised Chain (10mm) diameter.	m	10.17	
278) Galvanised Chain (13mm) diameter.	m	16.95	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
279)	Galvanised Chain (19mm) diameter.	m	24.86	
280)	Galvanised Chain (25mm) diameter.	m	32.54	
281)	4mm diameter stainless steel chain.	m	9.61	
282)	4mm to 10mm diameter galvanised steel shackle.	No	2.26	
283)	13mm to 25mm diameter galvanised steel shackle.	No	4.52	
284)	30mm to 38mm diameter galvanised steel shackle.	No	6.78	
285)	40mm to 44mm diameter galvanised steel shackle.	No	22.60	
286)	57mm to 63mm diameter galvanised steel shackle.	No	39.55	
287)	63mm to 75mm diameter galvanised steel shackle.	No	50.85	
288)	Refix old steelwork of any description to any height including collection from anywhere within SDC area, sorting, riveting, cleaning off dirt or rust and adjust or straighten to correct alignment and profile (new bolt and priming to be paid separately).	kg	1.24	
289)	Take down steel or ironwork of any description and height including unbolting, cutting or burning off connections and set aside for re-use or remove off site.	kg	0.45	
290)	Straight, raking or curved cutting or notching steelwork of any description and thickness.	m	4.52	
291)	6mm full penetration butt weld.	m	10.74	
292)	6mm fillet weld 90 one side.	m	9.27	
300)	Spot welding.	No	1.70	
301)	Galvanised steel stopcock or tap box 75mm diameter including 25mm brass padlock.	No	34.13	
302)	4mm diameter stainless steel chain.	m	9.61	
303)	Ditto but 6mm diameter ditto.	m	13.56	
304)	Ditto but 13mm diameter ditto.	m	28.25	
305)	4mm to 10mm diameter stainless steel shackle.	No	5.09	
306)	13mm to 25mm diameter ditto.	No	9.04	
307)	30mm to 40mm diameter ditto.	No	16.95	

FIXED SCHEDULE OF RATES

SECTION 7 - STRUCTURAL STEELWORK & METALWORK

		UNIT	\$	¢
<u>GALVANISED CHAIN LINK MESH FENCING IN NEW WORK OR FIXED ON TOP OF EXISTING FENCE INCLUDING LINKING TO EXISTING, COMPRISING A COMBINATION OF SOME OF THE FOLLOWING ITEMS</u>				
308)	50mm mesh x 10 SWG (total thickness) galvanised chain link mesh with strand of 8 SWG (total thickness) straining wire at 600mm centres both coated with polyvinyl chloride coating (Nett area measured) (NB : Wire thickness 13 SWG or 2.34mm).	m ²	7.35	
309)	50mm mesh x 8 SWG (total thickness) ditto. (NB : Wire thickness 11 SWG or 2.95mm).	m ²	9.04	
310)	Extra over all above items for infilling the mesh with one way interlocking aluminium slates to directions as directed by the S.O., including 2 coats of oil paint on one or both sides where necessary as directed.	m ²	16.95	
311)	Ditto double way.	m ²	21.58	
<u>SUNDRIES</u>				
312)	Remove existing fence (any type) complete with posts, struts, foundations, anti-climb arm, creepers, etc. as directed and remove off site including making good work disturbed (Length of fence measured but height measured from top of foundation to apex of post or anti-climb arm if applicable).	m ²	3.96	
313)	Take out existing chain link fence complete with posts, struts, concrete bases, etc. and lay aside for re-use including removing debris off site and making good work disturbed (Ditto).	m ²	3.39	
<u>GALVANISED STEEL PIPE TUBING (MEDIUM DUTY) IN FENCE POSTS AND UNCLIMBABLE ARMS, FRAMED AND WELDED TOGETHER OR FRAMED WITH TEES, BENDS, ELBOWS, ETC. INCLUDING ALL DRILLING (NETT LENGTH MEASURED) (CONCRETE FOUNDATION AND PAINTING MEASURED SEPARATELY)</u>				
314)	50mm diameter.	m	10.17	
315)	75mm diameter.	m	20.23	

FIXED SCHEDULE OF RATES

SECTION 7 - STRUCTURAL STEELWORK & METALWORK

		UNIT	\$	¢
<u>GATE</u>				
316)	Metal gate consisting of 50mm diameter galvanised steel tubular hollow section or 65mm x 38mm x 6mm thick mild steel angle framing with necessary matching intermediate rails and cross braces and BRC weldmesh 2210 or galvanised chain link 50mm mesh x gauge 10 infilling including hinges, stops, guide plates, drop bolts, padlock bolts, etc. and painted with 3 coats paint.	m ²	94.92	
317)	<u>Extra over</u> item above for forming opening for and including one leaf of wicket door measuring not exceeding 2.00m ² complete with door frames, hinges and padlock bolt (Size of wicket door opening measured).	m ²	9.61	
<u>GATE POSTS</u>				
318)	Mild steel angle posts not exceeding 75mm x 75mm x 6mm thick, one end splayed and cast in concrete base including 3 coats paint (foundation measured separately) (Length measured from top of concrete base).	m	10.74	
319)	Mild steel tubular gate post ('B' pipes) 75mm diameter, ditto.	m	18.36	
320)	Ditto 100mm diameter, ditto.	m	24.24	
<u>GALVANISED STEEL STUD PARTITION FRAMING</u>				
321)	76 X 40 X 1 mm thick galvanised steel 'C' channel framing fixed at 600mm centres bothways including forming door opening in partition (Lining measured separately).	m ²	54.24	
<u>SUNDRIES</u>				
322)	Supply and fix stainless steel eye hook 25mm diameter.	No	3.39	
323)	Supply and fix stainless steel queue link consisting of 2 hoops and 2.0m manila rope.	No	45.20	
324)	Supply and install 'SWAREFLEX' or equivalent cat eye (aluminum alloy).	No	21.47	
325)	Supply and install 4mm diameter stainless steel cable. (rope)	m	2.60	
326)	Ditto but 6mm diameter ditto.	m	3.73	
327)	Ditto but 10mm diameter ditto.	m	7.68	
328)	Ditto but 14mm diameter ditto.	m	13.00	

FIXED SCHEDULE OF RATES**SECTION 7 - STRUCTURAL STEELWORK & METALWORK**

		UNIT	\$	¢
329)	Supply and fix stainless steel cable cramp for 4mm to 6mm diameter stainless steel cable.	No	3.39	
330)	Ditto but 10-14mm diameter cable cramp ditto.	No	5.65	
331)	Supply and fix 200mm diameter swivel caster wheel including removing of existing and all necessary fitting.	No	56.50	
332)	To repair express track pier finger plate joint using epoxy and "FOSROC" Nitofill EPLV-FS or equivalent grout system.	Job	1130.00	
333)	Rental of steel plates – \$100 per piece per/mth.	No	99.44	
334)	Supply only stainless steel bicycle stand.	No	101.70	
335)	Supply only stainless steel bollard with round/bullet top and cup holder	No	192.10	
336)	Supply and install rectangular BRC Weldfence FPA-5155 or equivalent metal fencing	m ²	90.40	
337)	Supply and install 304 SS HS 25mm x 25mm x 3mm thk	m	20.34	
338)	Supply and install 304 SS HS 50mm x 50mm x 3mm thk	m	33.90	
339)	Supply and install 304 SS HS 50mm x 100mm x 3mm thk	m	74.58	

Fixed Schedule of Rates
Section 8 – Wall and Floor Finishings

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
<u>WALL FINISHINGS (Eco-cement is referred to herein)</u>			
<u>PLASTERER</u>			
1) Hack off any thickness in existing plaster, in whole or in patch including remove debris off site and prepare surface to receive new.	m ²	5.50	
2) Ditto but tiled finished ditto.	m ²	4.15	
3) Ditto but tiled finished including screed backing ditto.	m ²	6.60	
4) Ditto but to skirting of any size ditto.	m	1.60	
5) Cut out cracks to a width of at least 15mm, form undercut edges, remove debris off site and make good with cement mortar.	m	2.70	
6) Take out damaged pointing and repoint in Ordinary Portland cement, white or coloured cement to joints of existing tiling.	m ²	5.20	
7) 13mm thick cement and sand (1:4) plaster mixed with mortar plasticiser to concrete, brick surfaces including trowelling smooth.	m ²	28.40	
8) 20mm thick to ditto.	m ²	30.00	
9) 13mm thick cement and sand (1:3) plaster mixed with mortar plasticiser and Sika 'No 1' or equivalent waterproofing compound to concrete, brick surfaces including trowelling smooth.	m ²	19.00	
<u>CEMENT AND SAND (1:3) SCREED TO RECEIVE TILING</u>			
10) 13mm thick.	m ²	18.40	
11) 20mm thick. <u>Add</u> \$1.65 per m ² for each additional 5mm stage in thickness.	m ²	20.60	
<u>ROUGH CAST PLASTER CONSISTING OF CEMENT AND SAND (1:4) GAUGED WITH APPROVED PLASTICISER (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED)</u>			
12) 13mm thick.	m ²	37.00	
13) 20mm thick.	m ²	39.10	
14) Extra over above for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	0.90	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

		UNIT	\$	¢
<u>GLAZED WALL TILING (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
15)	108mm x 108mm x 6mm thick white glazed wall tiling complying with SS 301 angles, rounded edges, etc. laid and pointed neat with white or tinted cement.	m ²	50.40	
16)	150mm x 150mm x 6mm thick white ditto.	m ²	59.35	
17)	200mm x 200mm x 6mm thick Serie or equivalent Chrome white glazed wall tiling including ditto.	m ²	77.30	
18)	200mm x 200mm x 7.4mm thick Serie or equivalent Chrome special colour glazed wall tiling including ditto.	m ²	93.10	
19)	Extra over coloured glazed wall tiling for arranging to any approved pattern.	m ²	2.90	
20)	Extra over for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	1.75	
<u>MOSAIC TILES (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
21)	Pattern glazed mosaic tiles not exceeding 5mm thick laid and pointed neat in white or tinted cement.	m ²	42.55	
22)	Extra over mosaic tiles (any type) for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	1.73	
23)	Glass mosaic tiles not exceeding 5mm thick, laid and pointed neat in white or tinted cement.	m ²	87.40	
<u>CERAMIC TILES (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
24)	8mm thick medium duty vitrified ceramic tiles of approved pattern, design and colour and including rounded edge, etc., laid and pointed in white or tinted cement.	m ²	56.00	
25)	Extra over item 7 for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	1.70	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

		UNIT	\$	¢
<u>SUNDRIES</u>				
26)	Supply labour and mortar for laying of tiles (any type) to wall, etc. including pointed neat with white or Ordinary Portland cement (Supply of tiles and screed measured separately).	m ²	34.50	
27)	Supply labour and approved adhesive for laying of wall tiles (any type) (ditto).	m ²	37.00	
28)	3mm thick Skim coat of pure masonry cement slurry to existing wall, column and ceiling etc.	m ²	12.00	
29)	Supply labour and approved adhesive for fixing wall paper(any type) (ditto)	m ²	34.50	
30)	Supply labour for stripping od existing wall paper.	m ²	6.00	
<u>GLAZED CERAMIC TILES</u>				
<u>SUPPLY AND LAY CERAMIC WALL TILES including pointing with white cement</u>				
31)	7.5mm thick “Marca Corona” Or equivalent.	m ²	86.15	
32)	7.5mm thick “Appiani” Or equivalent.	m ²	89.45	
33)	7.5mm thick “ Serie Gamma” Or equivalent.	m ²	55.00	
34)	7.5mm thick “ Diamond TT533” Or equivalent.	m ²	55.00	
<u>FLOOR FINISHINGS</u>				
<u>PAVIOR</u>				
35)	Hack off any thickness in existing paving, in whole or in patch, remove debris off site and prepare surface to receive new .	m ²	10.70	
36)	Ditto tiled finishes ditto.	m ²	10.70	
37)	Ditto tiled finishes including screed bed ditto.	m ²	11.85	
38)	Cut out cracks in any type of paving to a width of at least 15mm, from undercut edges, remove debris off site and including making good with materials to match existing.	m ²	3.70	
39)	Take out damaged pointing and repoint in Ordinary Portland cement, white or coloured cement to joints of existing floor tiling.	m ²	4.85	

FIXED SCHEDULE OF RATES

SECTION 8 -WALL AND FLOOR FINISHINGS

		UNIT	\$	¢
<u>CAST IN-SITU TERRAZZO INCLUDING ANGLES, COVES, REBATES, ETC. AND COPPER OR ALUMINIUM OR BRASS DIVIDING STRIPS AT 1.00M INTERVALS (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED GRINDING AND POLISHING MEASURED SEPARATELY)</u>				
40)	30mm thick (average) ditto.	m ²	50.70	
41)	20mm thick to skirtings, risers, curbs and returns with coved and rounded angles.	m ²	53.70	
<u>CEMENT AND SAND (1:3) PAVING TROWELLED SMOOTH INCLUDING FORMING ANGLES, ROUNDED EDGES, ETC. (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED)</u>				
42)	Average 25mm thick ditto.	m ²	15.25	
43)	Average 50mm thick ditto. Add \$1.00 per m ² for each additional 5mm in thickness.	m ²	22.00	
44)	100mm high cement and sand (1:3) 20mm thick skirting with splayed or rounded top edge and coved bottom including trowelling smooth.	m ²	6.40	
45)	150mm high ditto.	m ²	8.40	
<u>WATERPROOFED CEMENT AND SAND (1:3) PAVING WITH SIKA 'NO 1' or equivalent WATERPROOFING COMPOUND INCLUDING TROWELLING SMOOTH</u>				
46)	Average 25mm thick ditto.	m ²	20.20	
47)	Average 50mm thick ditto. <u>Add</u> \$1.200 per m ² for each additional 5mm in thickness.	m ²	26.00	
<u>CEMENT AND SAND (1:3) SCREED LAID FLAT OR TO FALLS TO RECEIVE TILING (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED)</u>				
48)	Average 25mm thick.	m ²	14.00	
49)	Average 50mm thick.	m ²	19.00	
<u>PLAIN GRANOLITHIC PAVING CONSISTING OF CEMENT, SAND AND GRANITE CHIPPINGS (2:1:5) TOP TROWELLED SMOOTH AND INCLUDING ANGLES, COVES, ETC. (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED)</u>				
50)	25mm thick (average) topping laid flat or to falls <u>Add</u> or <u>Deduct</u> \$1.35 per m ² for every 5mm in thickness.	m ²	31.30	
51)	20mm thick to skirtings, plinths, risers, curbs and returns, etc. including coved and rounded angles.	m ²	12.80	

FIXED SCHEDULE OF RATES

SECTION 8 -WALL AND FLOOR FINISHINGS

		UNIT	\$	¢
<u>GRANOLITHIC AGGREGATE PAVING CONSISTING OF CEMENT, SAND AND GRANITE CHIPPINGS OF 5MM GAUGE (2:1:5) SET OUT IN PANELS WITH 15MM WIDE X 15MM DEEP RECESSED JOINTS LATERALLY AT APPROXIMATELY 1.20M CENTRES INCLUDING SCRUBBING TO PRODUCE EXPOSED AGGREGATE FINISHES</u>				
52)	25mm thick (average) topping laid flat or to fall.	m ²	47.15	
53)	32mm thick ditto.	m ²	48.70	
54)	40mm thick ditto. <u>Add</u> or <u>Deduct</u> \$1.80 per m ² for every 5mm in thickness.	m ²	49.10	
55)	Extra over items 2-4 for laying in patches, each patch not exceeding 1m ² at superficial area.	m ²	0.70	
<u>QUARRY TILES (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
56)	8mm thick approved plain colour quarry tiles laid and pointed in white or tinted cement.	m ²	48.30	
57)	Ditto to risers, skirtings, plinths, etc. including angles, rounded edges, etc.	m ²	63.15	
58)	8mm thick "Sixteen Eye" or equivalent pattern approved quarry tiles (any colour) laid and pointed in white cement including angles, rounded edges, etc.	m ²	86.65	
59)	Ditto to skirtings, risers, plinths, returns, etc. including angles, rounded edges, etc.	m ²	92.00	
60)	160mm x 235mm heavy duty non-slip nosing tiles.	m	17.25	
<u>MOSAIC TILES (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
61)	Vitreous unglazed mosaic tiles not exceeding 5mm thick with borders if directed laid and pointed neat in white or tinted cement.	m ²	56.50	
62)	Glazed mosaic tiles not exceeding 5mm thick with borders laid and pointed neat in white or tinted cement.	m ²	47.95	
63)	Ditto to skirtings, risers, plinths, returns, curbs, etc. including forming bottoms rows of tiles at 45° angle.	m ²	66.60	
64)	Glass mosaic tiles not exceeding 5mm thick (dark brown) to skirtings, plinths, risers, curbs and returns, etc. including forming bottom row of tiles at 45° angle.	m ²	138.85	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

		UNIT	\$	¢
<u>CERAMIC TILES (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>				
65)	8mm thick heavy duty ceramic tiles, ditto.	m ²	89.25	
66)	8mm thick homogeneous ceramic tile laid and pointed in white or tinted cement and including rounded edge.	m ²	80.40	
67)	8mm thick medium/heavy duty vitrified ceramic tiles, or 10mm thick homogeneous ceramic tile, laid and pointed in white or tinted cement to skirtings, plinths, risers, curbs and return, etc. including angles, rounded edges, etc.	m ²	66.15	
68)	Extra over for nosing tiles.	m	2.00	
<u>SUPPLY AND LAY HEAVY DUTY HOMOGENOUS CERAMIC TILE; INCLUDING POINTING WITH COLOURED CEMENT</u>				
69)	8 –10mm thick glazed ceramic tile.	m ²	74.75	
70)	8-10mm thick plain or fine speckled homogeneous tile.	m ²	66.70	
71)	8-10mm thick large speckled homogeneous tile.	m ²	61.50	
72)	8-10mm thick polished homogeneous tile.	m ²	99.60	
73)	Vitreous bull-nosed non-slip tiles 150 x 60 x 10mm thick.	m	15.20	
74)	Supply labour and mortar for laying of tiles to floor or horizontal surface, etc. including pointing in coloured cement.	m ²	34.50	
75)	Ditto but skirting 150mm high ditto.	m	8.55	
76)	Ditto but skirting 150mm - 300mm high ditto.	m	16.25	
77)	Supply labour and mortar for laying of natural stone panel on floor or horizontal surface including pointing in coloured cement.	m ²	81.95	
78)	Ditto on vertical including galvanised bracket and hangers ditto.	m ²	34.50	
<u>APPROVED VINYL ASBESTOS TILES OF APPROVED PATTERN AND COLOURS (ANY SIZE) FIXED WITH APPROVED ADHESIVE (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED AND POLISHING MEASURED SEPARATELY)</u>				
79)	Not exceeding 1.5mm thick.	m ²	14.00	
80)	Exceeding 1.5mm and not exceeding 2.0mm thick.	m ²	14.50	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
81) Exceeding 2.0mm and not exceeding 2.5mm thick.	m ²	19.10	
82) Exceeding 2.5mm and not exceeding 3.0mm thick.	m ²	22.70	
83) <u>Add</u> to items 2 to 5 for laying on and including 1 coat of Shellkote Type 3 or other equal and approved bituminous solution.	m ²	2.10	
84) 3mm thick x 100mm high black polyvinyl chloride extrusion skirting coved at bottom, fixed with an approved adhesive compound including corners, coves, junctions, angles, etc.	m ²	4.85	
85) Extra over items 2 to 5 for arranging tiles to patterns as directed.	m ²	1.60	
86) Ditto for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	0.50	
<u>APPROVED PLAIN VINYL ASBESTOS FLOOR COVERING FIXED WITH ADHESIVE (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED MEASURED SEPARATELY)</u>			
87) Not exceeding 2.0mm thick.	m ²	28.00	
88) Ditto but with heat welded joint.	m ²	29.45	
89) Exceeding 2.0mm and not exceeding 2.8mm thick.	m ²	38.55	
90) Ditto but with heat welded joint.	m ²	47.15	
91) Extra over items 5 to 8 for laying in patches, each patch not exceeding 1m ² in superficial.	m ²	0.40	
<u>SUPPLY AND LAY HOMOGENOUS VINYL TILE/SHEET WITH APPROVED ADHESIVE INCLUDING HOT WELDING SEAM</u>			
92) 2mm thick "Taralay Standard 43" or equivalent sheet .	m ²	49.85	
93) 3mm thick "Taralay Comfort 33" or equivalent sheet.	m ²	52.55	
94) 3.4mm thick "Taralay Comfort or equivalent sheet.	m ²	56.35	
95) 2mm thick "Tajima Humanity" or equivalent sheet.	m ²	45.55	
96) 2mm thick "Datwyler Toro 7000 " or equivalent sheet .	m ²	63.15	
97) 2mm thick "Datwyler super Select" or equivalent sheet.	m ²	32.55	
98) 2mm thick "Armstrong stonetex" or equivalent sheet.	m ²	41.20	
99) 2mm thick "Armstrong Possibilities " or equivalent sheet.	m ²	59.90	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
100) 2mm thick “UBX Corlon” or equivalent sheet .	m ²	41.90	
101) 2mm thick “petite Point” or equivalent sheet.	m ²	45.90	
102) 2mm thick “Ambiance 400” or equivalent tiles.	m ²	39.45	
103) 2mm thick “Elegance 500” or equivalent tiles .	No	46.10	
104) Supply and lay 3mm thick homogeneous, calendered and vulcanised rubber studded tiles (priapas).	No	92.00	
<u>WHITE MARBLE SLABS (MEASURED FLAT SUPERFICIAL UNLESS OTHERWISE SPECIFIED) (SCREED GRINDING AND POLISHING MEASURED SEPARATELY)</u>			
105) Taiwan marble slabs not exceeding 13mm thick, laid and pointed in white cement.	m ²	78.90	
106) Italian marble slabs ditto.	m ²	98.00	
107) Extra over items 13 and 14 for laying in patches, each patch not exceeding 1m ² in superficial area.	m ²	1.40	
<u>GRANITE AND MARBLE</u>			
108) Supply and lay 20mm thick Impala Black granite slab with flamed finish including pointing with colour cement.	m ²	337.00	
109) Ditto but skirting 150mm high ditto.	m	48.10	
110) Ditto but skirting 150mm - 300mm high ditto.	m	91.00	
111) Supply and lay 20mm thick polished Carara or equivalent white marble slab including pointing with white cement.	m ²	308.90	
112) Ditto but skirting 150mm high ditto.	m	43.00	
113) Ditto but skirting 150mm - 300mm high ditto.	m	82.00	
114) Supply labour for laying 20mmthick granite or marble slab including pointing in coloured cement.	m2	85.00	
115) Ditto on vertical including galvanised bracket and hangers ditto.	m ²	35.65	
116) Ditto but skirting ne 150mm high ditto.	m	8.05	
117) Ditto but skirting 150mm - 300m high ditto.	m	9.20	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
<u>CARPET</u>			
118) Plain 100% polypropylene needle punched carpet or other equal and approved low cost industrial carpet laid on and including adhesive to concrete or timber floor or to foam underlay.	m ²	14.00	
119) 100% acrylic carpet laid on and including ditto.	m ²	46.00	
120) Foam underlay laid on and including adhesive to concrete or timber floor.	m ²	14.40	
121) Remove away existing carpet and prepare surfaces to receive new.	m ²	2.90	
122) Taking out existing carpet/ tile and relay in new position including all necessary fixing material, cutting and trimming.	m ²	13.00	
123) Supply and lay with approved adhesive 100% polypropylene carpet grass.	m ²	51.00	
124) Supply and fix nosing to carpeted step.	m	2.30	
<u>SUPPLY AND LAY 80% WOOL, 20% NYLON BROADLOOM CARPET, WITH APPROVED ADHESIVE, INCLUDING FOAM RUBBER UNDERLAY AND ALL NECESSARY CARPET ACCESSORIES</u>			
125) Yarn or equivalent weight 40 oz/yd Axminster quality; type 'Brinton' or equivalent .	m ²	116.40	
126) Yarn or equivalent weight 40 oz/yd Axminster quality; type Axminster UK. or equivalent	m ²	101.30	
127) Yarn or equivalent weight 40 oz/yd Axminster quality; type 'Desso' or equivalent.	m ²	101.30	
128) Yarn or equivalent weight 36 oz/yd Axminster quality; type 'Brinton' or equivalent.	m ²	113.75	
129) Yarn or equivalent weight 36 oz/yd Axminster quality; type Axminster UK or equivalent.	m ²	92.00	
130) Yarn or equivalent weight 36 oz/yd Axminster quality; type 'Desso' or equivalent.	m ²	88.00	
131) Yarn or equivalent weight 40 oz/yd Tuffed Quality ; type ' Sunrise' or equivalent.	m ²	72.40	
132) Yarn or equivalent weight 40 oz/yd Tuffed Quality ; type ' Mannington' or equivalent.	m ²	74.00	
133) Yarn or equivalent weight 40 oz/yd Tuffed Quality ; type ' Bentley' or equivalent.	m ²	66.90	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
134) Yarn or equivalent weight 36 oz/yd Tuffed Quality ; type 'Sunrise' or equivalent.	m ²	69.70	
135) Yarn or equivalent weight 36 oz/yd Tuffed Quality ; type 'Mannington' or equivalent.	m ²	66.90	
136) Yarn or equivalent weight 40 oz/yd Tuffed Quality ; type ' Bentley' or equivalent.	m ²	61.65	
<u>SUPPLY AND LAY 100% NYLON CARPET TILE, SOLUTION OR YARN DYED, TUFFED CONSTRUCTION, WITH APPROVED ADHESIVE, INCLUDING FOAM RUBBER UNDERLAY AND ALL NECESSARY CARPET ACCESSORIES</u>			
137) Yarn or equivalent weight 24-26 oz/yd ; type ' Desso' or equivalent.	m ²	57.75	
138) Yarn or equivalent weight 24-26 oz/yd ; type ' Interface' or equivalent.	m ²	71.90	
139) Yarn or equivalent weight 24-26 oz/yd ; type ' Mannington' or equivalent.	m ²	67.30	
<u>LABOUR FOR CARPETING</u>			
140) Supply labour and compatible adhesive for laying carpet tile.	m ²	8.70	
141) Ditto but broadloom carpet.	m ²	9.80	
142) Ditto but broadloom carpet with felt or rubber underlay.	m ²	14.40	
<u>MAPLOCKS</u>			
143) 38mm wide aluminium maplocks, single-sided nailed to . concrete floor to receive edge of vinyl floor finishing.	m	5.20	
144) Ditto but double-sided, to receive edge of vinyl floor finishing and other side to receive other floor finishing.	m	6.40	
<u>WATERPROOFING SOLUTION</u>			
145) <u>Add</u> to items of paving, plaster, screed, etc. for mixing with "Aquabar No. 2" waterproofing solution (at a rate of 1 litre per 50kg of cement) or other equal and approved waterproofing solution, mixed in accordance with the manufacturer's instruction(Rate in a m ³ of paving, screeding or plastering).	m ³	17.25	
146) <u>Add</u> to items of paving, plaster, screed, etc. for mixing with AQUAPEL 3CC integral waterproofer (at a rate of 2 ¹ / ₄ litres per 50kg of cement) or other equal and approved waterproofing solution, mixed in accordance with the manufacturer's instruction. (Rate in a m ³ of paving, screeding or plastering).	m ³	110.90	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
<u>SHELLKOTE</u>			
147) Brush down and apply one coat of neat "Shellkote" or equivalent (at a rate of 5 litres per 10m ²) on surface of concrete floor, roof, wall, etc. and where necessary including preparing.	m ²	2.90	
148) Brush down and apply one coat of "Shellkote" or equivalent. Diluted with 50% of water ditto.	m ²	2.10	
<u>SUNDRIES</u>			
149) 38mm x 25mm aluminium non-slip nosing of approved type fixed to timber or concrete treads and the like.	m	8.05	
150) 3mm thick aluminium dividing strip, not exceeding 38mm wide, as expansion joint laid flush with floor paving or set in cement and sand between change of floor all cutting and waste. finish level with top finish flush with floor finish including.	m	12.80	
151) Ditto but of copper dividing strip, ditto.	m	28.65	
152) Ditto but of brass dividing strip, ditto.	m	10.25	
153) Remove existing dividing strip (any type) and make good work disturbed.	m	1.85	
154) Vitreous bull-nosed non-slip nosing tiles 150mm x 75mm x 6mm thick of approved type including bedding and pointing in cement (Screed measured separately).	m	9.00	
155) 240mm x 115mm x 12mm thick unglazed step tread and nosing tile including bedding and pointing in cement (Screed measured separately).	m ²	62.10	
156) Replacement of 240mm x 115mm x12mm thick unglazed step tread and nosing tile including cutting out of existing tiles, bedding and pointing in cement and make good to match existing (Rate per piece including cement and sand (1:3) screed).	No	5.75	
157) Remove existing nosing tiles (any type) or hack existing paving, make good work disturbed and prepare surface to receive new work.	m	2.30	
158) 25mm to 50mm wide x 1.7mm thick non-skid fixed vinyl profile strip fixed with adhesive to threshold, threads, etc.	m	5.20	
159) Skim coat of pure masonry cement slurry to levelling existing floor etc.	m ²	6.00	
160) Extra labour and materials over floor and wall finishes (any type and thickness) for working into recess, grooves, etc. not exceeding 75mm girth (For girth exceeding 300mm measured separately).	m	1.40	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
161) Ditto for working around sanitary fittings, ventilators, fixtures, etc. (Measured only in patch work).	m	4.90	
162) Hack existing concrete surface to form keys, wash and clean to receive finishing.	m ²	2.10	
163) Prepare existing floor surface by patching up small holes, minor cracks, etc. and wash down to receive floor coating.	m ²	2.80	
164) Form coloured cement lines, 50mm wide x 50mm thick, for basketball courts, etc. including any necessary formwork, trowelling to match existing level, hack existing concrete surface and removing debris off site.	m	5.65	
165) Ditto using mosaic or glazed floor tiles 50mm wide ditto.	m	6.20	
166) Prepare wash down with water and chlorox or other approved acid or detergent to remove all surface contaminants on existing mosaic or wall tiles.	m ²	2.90	
167) Supply and paste approved type wall paper.	m ²	15.40	
168) Supply and lay 'MARLEY or equivalent ' vinyl sheets.	m ²	42.55	
169) Apply 2 coats of wax polish and polish with hand or polishing machine to approval on PVC floor tiles or sheets (any type).	m ²	3.75	
170) 100mm x 200mm x 12.5mm Black slate tile of approved and colour to form borders to floor, laid in approved pattern, bedded, jointed and pointed in white or tinted cement (screed measured separately).	m ²	6.70	
171) 8-12mm thick slate approved manufacture, broken sizes, pattern and colour bedded and jointed in cement and sand (1:3) screed (measured separately) in crazy pattern and pointed in tinted cement.	m ²	58.00	
172) Prepare and apply one layer of protective polyurethane or similar approved coating to prepared surfaces of crazy slates in accordance with the Manufacturer's instructions.	m ²	5.75	
173) Ditto but in two layers.	m ²	7.50	
174) Supply and lay 300mm x 600mm x 50mm approved granite slab laid on cement and sand (1:3) (measured separately) with 10mm open joint all round grouted in cement and sand (1:3) mortar.	m ²	90.85	
175) Ditto 550mm x 1000mm x 75mm ditto do.	m ²	124.20	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
176) 50 - 75mm range kidney shaped cobbles, hand picked-pink, smooth worn and egg, embedded by hand, tight butted endwise with a wooden mallet to depth of 50% of their length with and including a 75mm deep 1:3 cement and sand mortar.	m ²	74.75	
177) 100mm x 100mm x 25-30mm approved granite tiles to wall & floor ditto.	m ²	81.40	
178) 100mm x 100mm x 40-50mm approved granite tiles to wall & floor ditto.	m ²	97.75	
179) 300mm x 300mm x 25-30mm approved polished granite . tiles bedded and jointed in cement and sand (1:3) screed (measured separately) and pointed in tinted cement.	m ²	138.95	
180) 300mm x 300mm x 25-30mm “Park Gold – flat chiselled” or equivalent granite tiles to wall & floor ditto.	m ²	115.00	
181) 300mm x 300mm x 50-55mm “Park Gold – flat chiselled” or equivalent granite tiles to wall & floor ditto.	m ²	195.50	
182) 60mm thick precast concrete interlocking paving block of any pattern and colour including filling joints with dry and sharp sand and 50mm thick bedding sand.	m ²	48.30	
183) Ditto but 80mm thick ditto.	m ²	51.00	
184) Ditto but 100mm thick ditto.	m ²	55.20	
185) 50mm thick clay paving stone of any pattern and colour including filling joints with dry and sharp sand and 50mm thick bedding sand.	m ²	57.50	
186) Ditto but 60mm thick.	m ²	63.30	
187) Ditto but 80mm thick.	m ²	69.00	
188) Supply 50mm thick Clay Paver only.	m ²	3.50	
189) Ditto but 60mm thick.	m ²	4.30	
190) 85mm thick precast “Boral” or equivalent Clay Paver interlocking paving block of any pattern and colour including filling joints with dry and sharp sand and 50mm thick bedding sand.	m ²	69.00	
191) Take out existing precast concrete/ clay paving stone interlocking paving stone and remove off site and make good or prepare to receive new.	m ²	4.60	
192) Supply labour to lay precast concrete interlocking/clay paving stone including 40mm thick consolidated sand bed laid to required level.	m ²	14.00	

FIXED SCHEDULE OF RATES

SECTION 8 -WALL AND FLOOR FINISHINGS

	UNIT	\$	¢
193) 32mm thick (average) pebble wash paving (any colour) consisting of cement, sand and 3-5mm grains river washed (any colour) of 5mm gauge (2:1:5) set out in panels with 15mm wide x 15mm deep recessed joints laterally at approximately 1.20M centres including scrubbing to produce exposed aggregate finishes.	m ²	46.00	
194) 40mm thick ditto. <u>Add</u> or <u>Deduct</u> \$2.00 per m ² for every 10mm in thickness.	m ²	48.50	
195) Extra over item 2-4 for laying in patches, each patch not exceeding 1m ² at superficial area.	m ²	1.85	
196) 40mm thick (average) pebble wash paving (any colour) consisting of cement, sand and 8-12mm grains river washed (any colour) of 5mm gauge (2:1:5) set out in panels with 15mm wide x 15mm deep recessed joints laterally at approximately 1.20M centres including scrubbing to produce exposed aggregate finishes.	m ²	57.50	
197) 100mm x 100mm x 50mm thick Sunset Pink granite cobbles fish-scale laid in approved pattern, bedded, jointed and pointed in white or tinted cement (screed measured separately).	m ²	105.00	
198) 300mm x 300mm x 20mm thick Sunset Pink or equivalent granite slate tile (flamed type) laid in approved pattern, bedded, jointed and pointed in white or tinted cement (screed measured separately).	m ²	150.00	
199) Ditto but 'Granite BSG-7' or equivalent slate tile (flamed type) ditto.	m ²	150.00	
200) 20mm thick 'Night Fire BSG 48' or equivalent slate tile (flamed type) ditto.	m ²	172.50	
<u>Supply labour and approved adhesive for laying of vinyl finishes including hot welding seam joints with matching welding cord</u>			
201) PVC tile.	m ²	10.40	
202) PVC sheet.	m ²	13.00	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
203) Supply and fix 2mm x 25mm high extruded aluminium. Dividing strip to receive edge of floor finish.	m	10.40	
204) Ditto but 3mm x 25mm high ditto.	m ²	11.00	
205) Ditto but 4mm x 25mm high ditto.	m	11.50	
206) Supply and fix 20mm x 5mm thick stainless steel dividing strip to receive edge of floor finish.	m	19.00	
207) Supply and fix black 150mm high PVC extrusion skirting with compatible adhesive.	m	10.25	

FIXED SCHEDULE OF RATES**SECTION 8 -WALL AND FLOOR FINISHINGS**

	UNIT	\$	¢
208) Approved 3mm epoxy resin for flooring.	m ²	14.00	
209) Ditto 5mm ditto.	m ²	21.00	
<u>ANTI-SLIP FLOOR TREATMENT CHEMICAL</u>			
210) Supply and apply anti-slip floor treatment chemical (Euroseal sealer or approved equivalent) to ceramic, granite tiles etc inclusive of washing with chemical cleaner and degreaser.	m ²	8.70	
211) Supply and apply anti-slip floor treatment chemical (Bodenlack or approved equivalent) to ceramic, granite tiles etc inclusive of washing with chemical cleaner and degreaser.	m ²	37.00	
<u>Adhesive for Tiles</u>			
212) Supply only GLOBALBOND 251 A+B (1 kg) or equivalent	Tin	200.00	
213) Supply and apply approved epoxy coating complete wi sealer, self levelling compound as specified	m ²	78.00	

Fixed Schedule of Rates
Section 9 – Plumbing and Sanitary

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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FITTINGS (SUPPLY AND LAY OR FIX)

CEMENT LINED CAST IRON PIPES AND FITTINGS TO BS 4622/1970 STAMPED CLASS ‘C’		Diameter (mm)		
		75	100	150
Rate Per Metre				
1)	Laid in trench or fixed to wall including red lead joints or tyton joints (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	54.99	60.45	91.00
Rate Per No Extra over pipe for fittings				
2)	Bend.	40.04	50.44	89.70
3)	Double flanged duckfoot bend	120.90	146.90	300.30
4)	Tee	60.19	78.00	108.16
5)	Flanged reducer	102.70	124.93	171.99
6)	Collar including double lead joint.	63.44	73.45	117.52
7)	Heavy duty bolted collar joint including rubber rings and bolts	58.89	85.54	123.89
8)	Gibault coupling (long type).	68.90	93.99	132.99
9)	Hydrant tee with 75mm flange tee	138.06	175.50	294.45
10)	75mm hydrant bend with flanged one end	--	--	78.52
11)	75m - 100mm tapered ditto	--	--	101.66
12)	Laid in trench or fixed to wall (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	61.10	68.90	100.10
Rate Per No Extra over pipe for fittings.				
13)	Blank flange.	35.10	49.40	58.50
14)	Double flanged bend	80.60	106.60	180.70
15)	Flanged sockets	65.00	74.10	114.40
16)	Flanges drilled to size	41.60	53.30	79.30
17)	Angled branch or the treble flanged	94.90	118.30	239.20
18)	Lengthening piece (450mm)	57.20	62.40	104.00

INTERNAL LINED DUCTILE IRON PIPES AND FITTINGS TO BS 4772 CLASS K9		Diameter (mm)				
		60	80	100	125	150
Rate Per Metre						
19)	Spigot and socket joint type laid in trench or fixed to wall (excavation measured separately).	91.00	109.14	128.83	156.00	140.00

INTERNAL LINED DUCTILE IRON PIPES AND FITTINGS TO BS 4772 CLASS K9		Diameter (mm)				
		60	80	100	125	150
Rate Per No Extra over pipe for fittings						
20)	Flange and socket connector	52.00	63.05	101.66	112.97	146.90
21)	Flange and spigot connector	41.34	36.40	57.20	75.27	102.96

INTERNAL LINED DUCTILE IRON PIPES AND FITTINGS TO BS 4772 CLASS K9		Diameter (mm)				
		60	80	100	125	150
Rate Per No Extra over pipe for fittings						
22)	Laid in trench or fixed to wall including red lead joints or tyton joints (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	66.04	66.56	106.60	154.70	165.60
23)	45° ditto	66.82	91.26	117.00	154.70	171.60
24)	22° 30' ditto	64.22	80.21	104.78	137.80	173.68
25)	11° 15' ditto	62.79	79.17	98.80	129.09	167.70
26)	90° double flanged bend.	54.60	62.40	101.40	123.50	180.70
27)	45° ditto.	51.22	58.50	102.18	127.40	172.90
28)	Double flanged duckfoot elbow	78.26	84.50	135.20	171.60	223.60
29)	Blank flange	24.96	36.14	58.50	71.63	96.85

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF ONE (1) YEARS
WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT \$ ¢

30)	Socket sleeve	69.29	92.30	113.10	148.20	183.30
31)	Socket tee with 45° branch	141.70	170.30	205.40	237.90	292.50
32)	Double flanged sleeve (250mm).	91.78	117.65	167.70	189.80	243.10
33)	Ditto (500mm).	110.50	137.80	184.60	221.00	260.00
34)	Plain end connecting sleeve	57.85	84.24	98.80	125.58	163.80
35)	Double flanged U-bend	188.50	234.00	309.40	338.00	390.00
36)	Four flanged cross	208.00	267.54	370.50	430.30	501.54
37)	Bend/elbow	-	101.92	118.43	-	186.75

Extra over pipe for three flanged tee.

38)	60mm x 60mmx 60mm.	No	100.36
39)	80mm x 60mm x 60mm.	No	106.34
40)	80mm x 80mm x 80mm.	No	161.72
41)	Laid in trench or fixed to wall including red lead joints or tyton joints (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	No	140.40
42)	100mm x 80mm x 80mm.	No	149.50
43)	100mm x 100mm x 100mm.	No	190.26
44)	125mm x 60mm x 60mm.	No	158.60
45)	125mm x 80mm x80mm.	No	175.50
46)	125mm x 100mm x100mm.	No	192.40
47)	125mm x 125mm x125mm.	No	201.50
48)	150mm x 60mm x 60mm.	No	197.60
49)	150mm x 80mm x80mm.	No	211.90
50)	150mm x 100mm x 100mm.	No	195.00
51)	150mm x 125mm x 125mm.	No	234.00
52)	150mm x 150mm x 150mm.	No	251.10

		Rate Per No			
	Extra Over Pipe for Fittings (Diameter -mm)	Double Socket Tees with Flanged Branch	All Socket Tees	Double Socket Reducers	Double Flanged Reducers
53)	60 x 60	128.70	137.80	--	--
54)	80 x 60	139.10	161.20	84.50	73.97
55)	Laid in trench or fixed to wall including red lead joints or tyton joints (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	141.70	169.00	--	--
56)	100 x 60	157.30	175.50	95.68	87.10
57)	100 x 80	161.20	189.80	184.73	101.40
58)	100 x 100	180.70	200.20	--	--
59)	125 x 60	209.30	214.50	107.25	70.59
60)	125 x 80	217.10	231.40	128.70	79.30
61)	150 x 100	--	--	261.04	--

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT \$ ¢

		Rate Per No			
	Extra Over Pipe for Fittings (Diameter -mm)	Double Socket Tees with Flanged Branch	All Socket Tees	Double Socket Reducers	Double flanged Reducers
62)	125 x 100	237.90	245.70	136.50	97.50
63)	125 x 125	248.30	250.90	--	--
64)	150 x 60	241.80	248.30	131.30	100.10
65)	150 x 80	260.26	256.10	150.80	114.40
66)	150 x 100	279.50	276.90	198.64	174.20
67)	150 x 125	292.50	295.10	213.20	179.40
68)	150 x 150	315.90	314.60	--	--

		Diameter (mm)		
Water Mains		75	100	150
Rate Per Metre				
69)	Disconnect, take up existing cast iron water mains with spigot and socket joints or with flanged joints and remove off site	9.36	10.92	12.48
70)	Ditto for asbestos cement pipes.	5.20	5.85	29.90
Rate Per No				
71)	Cut into pipe (any type, take out length not exceeding 2m, remove off site and prepare surface to receive new.	65.00	67.86	80.60

		Diameter (mm)		
Rate Per No		13	19	25
72)	Drill and tap cast iron water mains, including providing all necessary fittings, ferrules, etc. for branch connections.	78.00	98.80	117.00

		Diameter (mm)	
Rate Per No		100	150
73)	Cut into pipe and remake flanged joints including	91.00	105.30

		Diameter (mm)		
Rate Per No		80	100	150
74)	Ductile iron sluice valve stamped by	299	357.50	520.00
75)	Ductile iron non-return valve.	416	507.00	721.50

76)	Supply labour and materials for repairing burst water main not exceeding 150mm diameter including excavating, cutting off pipe and heavy duty Stanton or equivalent bolted collar with rubber replacing with new to match existing, including rings, return, fill in and ram, flushing off and making good (excluding resurfacing). (Rate per job). Deduct or Add \$52.00 per workman, if the workmen employed on site is less or more than 4 men for burst pipe of diameter 100mm and above.	No	650.00
77)	Supply labour and materials to replace damage sluice/ butterfly valve of nominal diameter and below including excavating, cutting off pipe and replacing with new to match existing, including heavy duty Stanton or equivalent bolted collar with rubber rings, return, fill in and ram, flushing off and making good (excluding resurfacing). (Rate per job). Deduct or Add \$40.00 per workmen, if the workmen employed on site is less or more than 4 men for burst pipe of diameter 100mm and above.	No	585.00
78)	Extra over for repairing burst water mains exceeding 150mm diameter.	No	130.00

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
MEDIUM GRADE COATED CAST IRON SOIL, WASTE, VENTILATING AND ANTI-SYPHONAGE PIPES COMPLYING WITH SS 33 INCLUDING SPIGOT AND SOCKET JOINT (SUPPLY & FIX OR LAY)					
79)	50mm diameter pipe fixed to walls or ceiling including holderbats.	m		41.15	
80)	Ditto but laid in trench or chased in floor (Trench excavation and chasing floor measured separately).	m		37.70	
81)	75mm diameter pipe fixed to walls or ceiling as before described.	m		43.36	
82)	Ditto but laid in trench or chased in floor (Trench excavation and chasing floor measured separately).	m		39.00	
83)	100mm diameter pipe fixed to walls or ceiling as before described.	m		58.50	
84)	Ditto but laid in trench or chased in floor (trench excavation and chasing floor measured separately).	m		53.30	
85)	Laid in trench or fixed to wall including red lead joints or tyton joints (rate includes holderbats for pipe fixed to wall) (excavation measured separately).	m		81.06	
86)	Ditto but laid in trench or chased in floor (trench excavation and chasing floor measured separately).	m		76.70	
87)	Extra over 50mm diameter pipes for bend with cleaning eye including extra joint.	No		15.60	
88)	Ditto but for bend without cleaning eye ditto.	No		13.00	
89)	Ditto for swanneck bend ditto.	No		20.80	
90)	Extra over 50mm diameter pipes for equal or unequal junction, etc. with cleaning eye including extra joint.	No		27.30	
91)	Ditto for 50 x 50mm tee with cleaning eye ditto.	No		27.30	
92)	Ditto but without cleaning eye ditto.	No		26.00	
93)	Extra over 75mm diameter pipe for bend/elbow with cleaning eye including extra joint.	No		26.91	
94)	Ditto but for bend without cleaning eye ditto.	No		23.40	
95)	Ditto for swanneck bend ditto.	No		28.60	
96)	Ditto for equal and unequal junction, etc. ditto.	No		28.60	
97)	Ditto for 75 x 75mm tee with cleaning eye ditto.	No		33.15	
98)	Ditto but without cleaning eye ditto.	No		27.30	
99)	Extra over 100mm diameter pipe for bend /elbow with cleaning eye including extra joint.	No		28.15	
100)	Ditto but for bend without cleaning eye ditto.	No		24.70	
101)	Ditto for 75 x 50mm reducer ditto.	No		53.30	
102)	Ditto for 75 x 50mm reducer ditto.	No		60.06	
103)	Extra over 100mm diameter pipe for swanneck, bend, shoe, 100 to 75mm diameter reducer, etc. with or without cleaning eye including extra joint.	No		32.50	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
104) Ditto for equal and unequal junction, etc. ditto.	No	35.10	
105) Ditto for 100 x 100mm tee with cleaning eye ditto.	No	41.80	
106) Ditto but without cleaning eye ditto.	No	37.70	
107) Extra over 150mm diameter pipe for bend/elbow with cleaning eye including extra joint.	No	59.80	
108) Ditto but for bend without cleaning eye ditto.	No	52.00	
109) Extra over 150mm diameter pipe for equal and unequal junction, etc. with or without cleaning eye including extra joint.	No	58.50	
110) Ditto for swanneck bend ditto.	No	54.60	
111) Ditto for 150 x 100mm reducer ditto.	No	97.89	
112) Ditto for 150 x 150mm tee with cleaning eye ditto.	No	76.12	
113) Ditto but without cleaning eye ditto.	No	75.40	
114) Take out existing holderbat and replace with new 50mm diameter cast iron holderbat.	No	10.79	
115) Ditto 75mm ditto.	No	12.87	
116) Ditto 100mm ditto.	No	15.60	
117) Ditto 150mm ditto.	No	20.80	
118) Recaulk lead joints of existing 50mm diameter cast pipe.	No	18.20	
119) Ditto 75mm ditto.	No	20.80	
120) Ditto 100mm ditto.	No	24.70	
121) Ditto 150mm ditto.	No	42.90	
122) Supply and fix in replacement cast iron cleaning eye of soil and waste pipes.	No	7.80	
123) Take out existing cast iron pipes (any size) fixed to wall, chased in floor or laid in trench including taking out holderbats and remove debris off site (trench measured separately).	m	3.90	
BALLOON GRATING (SUPPLY AND FIX)			
124) 100mm galvanised iron wire balloon grating fixed on top of pipe of any type and size including painting.	No	13.00	
125) 150mm ditto.	No	15.60	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
FLOOR TRAP (SUPPLY AND FIX)					
126)	150mm diameter cast iron floor trap `P, 'S' or 'Q' type with 75mm deep seal, 75mm diameter outgo and necessary side inlets, galvanised or UPVC hinged grating and frame including all connections, 150mm diameter raising piece, formwork, cutting through concrete floor, packing around trap with concrete Grade 15 and making good including jointed in caulked lead or set in suspended floor slab.	No		124.28	
127)	150mm diameter UPVC trap and hopper with 75mm or 100 outgo and 150mm x 150mm x 2mm thick stainless steel hinged grating including all connection, excavation, formwork, cutting through concrete floor (if in existing building) packing around trap with concrete Grade 15 and making good surrounds or set in suspended floor slab.	No		121.29	
FLOOR TRAP GRATING (SUPPLY AND FIX)					
128)	150mm square plastic floor trap grating.	No		7.80	
129)	75mm diameter ditto	No		5.85	
130)	150mm diameter ditto.	No		6.50	
100MM THICK CONCRETE GRADE 20 THRUST BLOCK UNDER DRAIN PIPES INCLUDING 75MM THICK LEAN CONCRETE GRADE 15 IN BED					
131)	275mm wide x 300mm long for 75mm diameter drain pipe including haunching carried up for full height of the pipe at appropriate intervals and sloped off tangentially.	No		13.00	
MEDIUM DUTY GALVANISED STEEL PIPE COMPLYING WITH BS 17 (GAS PIPEWORK) INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, SOCKETS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS AND FIXED TO WALL WITH AND INCLUDING HOLDERBATS (CHASING CONCRETE & TRENCH EXCAVATION MEASURED SEPARATELY)					
132)	15mm diameter pipe.	m		21.00	
133)	20mm ditto.	m		24.77	
134)	25mm ditto	m		32.83	
135)	32mm ditto	m		41.80	
136)	40mm ditto.	m		53.76	
137)	50mm ditto.	m		58.44	
138)	65mm ditto	m		56.68	
139)	80mm ditto	m		88.73	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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HEAVY DUTY GALVANISED STEEL PIPE COMPLYING WITH SS 17 (GAS PIPEWORK) INCLUDING FITTINGS 9 NOT EXCEEDING 50MM DIAMETER, SOCKETS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS AND FIXED TO WALL WITH AND INCLUDING HOLDERBATS (CHASING CONCRETE & TRENCH EXCAVATION MEASURED SEPARATELY)

140)	15mm diameter pipe.	m	23.86
141)	20mm ditto.	m	31.27
142)	25mm ditto.	m	35.43
143)	32mm ditto.	m	48.56
144)	40mm ditto.	m	56.68
145)	50mm ditto.	m	73.91
146)	65mm ditto.	m	81.90
147)	80mm ditto.	m	87.75
148)	65mm diameter bend.	No	29.06
149)	80mm diameter bend.	No	41.21
150)	65mm diameter elbow.	No	27.95
151)	80mm diameter elbow.	No	39.20
152)	100mm diameter elbow.	No	46.54
153)	65mm x 65mm x 65mm diameter tee.	No	34.97
154)	80mm x 80mm x 80mm diameter tee.	No	44.46
155)	65mm x 50mm diameter reducer.	No	25.74
156)	80mm x 65mm diameter reducer.	No	34.91

MEDIUM DUTY GALVANISED STEEL PIPE COMPLYING WITH SS 1387 (WATER SERVICE PIPEWORK) WITH APPROVAL INTERNAL LINING INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, SCREW JOINTS, SOCKETS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS AND FIXED TO WALL WITH AND INCLUDING HOLDERBATS (CHASING CONCRETE & TRENCH EXCAVATION MEASURED SEPARATELY)

157)	15mm diameter pipe.	m	26.07
158)	20mm ditto	m	30.03
159)	25mm ditto.	m	33.02
160)	32mm ditto.	m	35.10
161)	40mm ditto.	m	42.64
162)	50mm ditto.	m	46.25
163)	65mm ditto.	m	52.46
164)	80mm ditto.	m	59.02
165)	100mm ditto.	m	69.75

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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HEAVY DUTY GALVANISED STEEL PIPE COMPLYING WITH SS 1387 (WATER SERVICE PIPEWORK) WITH APPROVAL INTERNAL LINING INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, SCREW JOINTS, SOCKETS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS AND FIXED TO WALL WITH AND INCLUDING HOLDERBATS (CHASING CONCRETE & TRENCH EXCAVATION MEASURED SEPARATELY)

166)	50mm diameter pipe.	m	52.00
167)	65mm ditto.	m	76.70
168)	80mm ditto.	m	91.00
169)	100mm ditto.	m	111.80

EXTRA OVER FOR FITTING FOR WATER SERVICE PIPEWORK (FOR BOTH MEDIUM AND HEAVY DUTY)

170)	65mm diameter elbow/bend.	No	30.36
171)	80mm diameter elbow/bend.	No	45.11
172)	100mm diameter elbow/bend.	No	48.75
173)	65mm x 65m x 65mm diameter tee.	No	45.31
174)	80mm x 80mm x 80mm diameter tee.	No	59.80
175)	65mm x 50mm diameter reducer.	No	34.06
176)	80mm x 65mm diameter reducer.	No	45.50

GALVANISED STEEL PIPE FITTINGS (SUPPLY AND FIX IN REPLACEMENT INCLUDING MAKING GOOD WORK DISTURBED)

177)	Tees 13mm x 13mm x 13mm diameter.	No	8.97
178)	Tees 13mm x 20mm x 13mm diameter.	No	9.10
179)	Tee 25mm x 13mm x 25mm diameter.	No	9.23
180)	Tee 25mm x 20mm x 25mm diameter.	No	9.36
181)	Tee 25mm x 25mm x 25mm diameter.	No	9.62
182)	Tee 40mm x 25mm x 40mm diameter.	No	15.73
183)	Tee 40mm x 40mm x 40mm diameter.	No	22.23
184)	Tee 50mm x 40mm x 40mm diameter.	No	24.83
185)	Tee 50mm x 50mm x 50mm diameter.	No	28.86
186)	Tee 65 x 65 x 65mm diameter.	No	42.90
187)	Tee 80 x 80 x 80mm diameter.	No	52.00
188)	Holderbat for 13mm diameter pipe.	No	4.29
189)	Ditto for 20mm diameter ditto.	No	4.29
190)	Ditto for 25mm diameter ditto.	No	4.55
191)	Ditto for 40mm diameter ditto.	No	4.62
192)	Ditto for 50mm diameter ditto.	No	4.55

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
193) Ditto for 65mm diameter ditto.	No	4.55	
194) Ditto for 80mm diameter ditto.	No	5.20	
195) Ditto for 100mm diameter ditto.	No	10.14	
196) Ditto for 150mm diameter ditto.	No	10.14	
197) 13mm diameter elbow/bend.	No	6.50	
198) 20mm diameter ditto.	No	6.89	
199) 25mm diameter ditto.	No	8.45	
200) 30mm diameter ditto.	No	12.22	
201) 40mm diameter ditto.	No	14.95	
202) 50mm diameter ditto.	No	17.55	
203) 65mm diameter ditto.	No	23.66	
204) 80mm diameter ditto.	No	24.05	
205) 100mm diameter ditto.	No	33.80	
206) 13mm diameter union socket with male or female ends.	No	8.32	
207) 20mm diameter ditto.	No	8.71	
208) 25mm diameter union socket with male or female ends.	No	9.10	
209) 30mm diameter ditto.	No	10.01	
210) 40mm diameter ditto.	No	11.57	
211) 50mm diameter ditto.	No	12.74	
212) 80mm diameter ditto.	No	27.30	
213) 100mm diameter ditto.	No	39.00	
214) 13mm diameter nipple.	No	7.02	
215) 20mm diameter ditto.	No	7.36	
216) 25mm diameter ditto.	No	7.54	
217) 30mm diameter ditto.	No	7.54	
218) 40mm diameter ditto.	No	8.32	
219) 50mm diameter ditto.	No	8.97	
220) 80mm diameter ditto.	No	13.00	
221) 100mm diameter ditto.	No	20.80	
222) 20mm - 13mm diameter reducer.	No	8.58	
223) 30mm - 13mm diameter ditto.	No	9.49	
224) 40mm - 13mm diameter ditto.	No	10.40	
225) 50mm - 13mm diameter ditto.	No	11.05	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF ONE (1) YEARS
WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

		UNIT	\$	¢
226)	25mm - 20mm diameter ditto.	No	10.27	
227)	30mm - 25mm diameter ditto.	No	11.70	
228)	40mm - 30mm diameter ditto.	No	16.90	
229)	50mm - 40mm diameter ditto.	No	19.76	
230)	65mm - 50mm diameter ditto.	No	29.90	
<u>PVC-LINED GALVANISED IRON FITTINGS (SUPPLY AND FIX IN REPLACEMENT INCLUDING MAKING GOOD WORKDISTURBED)</u>				
231)	Fittings (sockets, elbows/bend, reducers, etc.) except tees connected to 13mm diameter pipe.	No	11.70	
232)	Ditto for 20mm diameter pipe.	No	11.96	
233)	Ditto for 25mm diameter pipe.	No	12.74	
234)	Ditto for 30mm diameter pipe.	No	17.16	
235)	Ditto for 40mm diameter pipe.	No	17.81	
236)	Ditto for 50mm diameter pipe.	No	21.26	
237)	Ditto for 65mm diameter pipe.	No	25.09	
238)	Ditto for 80mm diameter pipe.	No	37.31	
239)	Ditto for 100mm diameter pipe.	No	41.60	
240)	Tees connected to 13mm diameter pipe.	No	13.91	
241)	Ditto for 20mm diameter pipe.	No	13.52	
242)	Ditto for 25mm diameter pipe.	No	15.47	
243)	Ditto for 30mm diameter pipe.	No	19.24	
244)	Ditto for 40mm diameter pipe.	No	21.19	
245)	Ditto for 50mm diameter pipe.	No	37.96	
246)	Ditto for 65mm diameter pipe.	No	38.61	
247)	Ditto for 80mm diameter pipe.	No	36.08	
248)	Ditto for 100mm diameter pipe.	No	57.59	
249)	Labour only for cutting off existing piping thread ends and elbows for connection for pipes (Number of joints measured).	No	7.80	
250)	Take out existing galvanised steel pipes 13mm to 100mm diameter, fixed to wall, chased in floor or laid in trench including taking out holderbats (chasing floor and trench excavation measured separately).	m	2.60	
251)	Take out existing galvanised steel pipe 13mm to 100mm diameter, clean internally, and refix in any position including providing new holderbats and making good work disturbed.	m	9.10	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT\$¢

CUT INTO EXISTING PIPES		Diameter - Rate Per No				
		13mm	19mm	25mm	38mm	50mm
252)	Cut into existing water pipes and tee-off for new water supply line (various type i.e. galvanised pipe, copper pipe, PVC pipe or stainless steel pipe), prepare, and make connection for water meter. (fitting measured separately)	23.40	28.60	33.80	44.20	52.00

STAINLESS STEEL PIPES (SUPPLY & FIX OR LAY)

Stainless steel pipes to BS 4127 Type 304 including compression joints to NS 864 Part 2, fittings not exceeding 54mm diameter, fixed to walls with and including holderbats or laid in chased concrete or in trench (chasing concrete or trench excavation measured separately).

Diameter - Rate Per M									
6mm to 10mm		12mm	19mm	25mm	32mm	38mm	42mm	54mm	76mm
253)	18.20	26.00	30.49	34.52	42.64	47.78	52.78	84.76	105.30

EXTRA OVER FOR STAINLESS STEEL PIPE FITTING

For fittings exceeding 54mm diameter

254)	76mm diameter fittings (elbows/bend etc.).	No	174.72
255)	76mmx 65mm diameter reducers.	No	97.50
256)	Tees connected to 54mm diameter pipe.	No	137.02
257)	Ditto for 76mm x76mm x 76mm diameter tee.	No	213.20

STAINLESS STEEL PIPE FITTINGS (SUPPLY AND FIX IN REPLACEMENT INCLUDING MAKING GOOD WORK DISTURBED)

258)	Fittings (elbows/bend, union couplings, reducers, etc.) except tees and connected to 10mm - 15mm diameter pipe by compression joint.	No	9.10
259)	Ditto for 22mm diameter pipe.	No	13.52
260)	Ditto for 28mm diameter pipe.	No	16.90
261)	Ditto for 35mm diameter pipe.	No	26.00
262)	Ditto for 42mm diameter pipe.	No	42.90
263)	Ditto for 54mm diameter pipe.	No	115.70
264)	Ditto for 76mm diameter pipe.	No	170.04
265)	Tees connected to 10mm - 15mm diameter pipe by compression joint.	No	19.76
266)	Ditto to 22mm diameter pipe.	No	32.50
267)	Ditto to 28mm diameter pipe.	No	39.00
268)	Ditto to 35mm diameter pipe.	No	61.10
269)	Ditto to 42mm diameter pipe.	No	84.50
270)	Not in used.		
271)	Ditto to 54mm diameter pipe.	No	149.50
272)	Ditto to 76mm diameter pipe.	No	211.25

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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UPVC PIPES

273)	Take out existing UPVC pipe fixed to wall (fixed in any position) or chased in concrete or laid in trench including removing holderbats and carting away debris off site (Chasing floor and trench excavation measured separately).	m	2.60
273a)	UNPLASTICISED POLYVINYL CHLORIDE PIPE COMPLYING WITH SS141 WATER SUPPLY PIPE OR FOR GENERAL PURPOSE, INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, UPVC SOCKET, CONNECTIONS, LONG SCREWS, BACKNUTS, PLUG, ETC. AND FIXED TO WALL OR CEILING WITH AND INCLUDING HOLDERBATS OR LAID IN CHASED CONCRETE OR IN TRENCH (CHASING CONCRETE OR TRENCH EXCAVATION MEASURED SEPARATELY) (SUPPLY AND FIX OR LAY)		

Pipes fixed in any position	Diameter - Rate Per M									
	13mm	16mm	20mm	25mm	32mm	40mm	50mm	80mm	100 mm	155 mm
	8.71	9.49	9.75	16.90	19.70	24.25	24.64	37.96	60.00	73.19

OVER FOR UPVC PIPE FITTING (SS141)

274)	Fittings (sockets, elbows/bend, reducers, etc.) except tees connected to 80mm diameter pipe by solvent cement joints.	No	30.49
275)	Ditto for 100mm diameter pipe.	No	41.99
276)	Ditto for 155mm diameter pipe.	No	50.25
277)	80 x 80 x 80mm diameter tee.	No	35.04
278)	100 x 100 x 100mm diameter tee.	No	56.23
279)	155 x 155 x 155mm diameter tee.	No	77.87
280)	80 x 50 mm diameter reducer.	No	29.06
281)	100 x 80 mm diameter reducer.	No	34.58
282)	155 x 100 mm diameter reducer.	No	55.06

UNPLASTICISED POLYVINYL CHLORIDE PIPE COMPLYING WITH "SS 213" OR OTHER EQUAL AND APPROVED UPVC SOIL,WASTE, VENT, DRAIN AND ANTI-SYPHONAGE PIPES INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, UPVC SOCKET, CONNECTIONS, LONG SCREWS, BACKNUTS, PLUG, ETC. AND FIXED TO WALL OR CEILING WITH AND INCLUDING HOLDERBATS OR LAID IN CHASED-CONCRETE OR IN TRENCH (CHASING CONCRETE OR TRENCH EXCAVATION MEASURED SEPARATELY) (SUPPLY AND FIX OR LAY)

Pipes fixed in any position.	Diameter - Rate Per M							
	32mm	40mm	50mm	80mm	100mm	150mm	155mm	200 mm
a. Pipes fixed in any position.	17.03	21.52	23.40	27.69	32.24	---	49.92	110.00
b. For Siphonic pipe	---	---	85.00	---	90.00	96.00	---	---

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>EXTRA OVER FOR UPVC PIPE FITTING (SS213)</u>					
283)	Fittings (sockets, elbows/bend, reducers, etc.) except tees connected to 80mm diameter pipe by solvent cement joints.	No		17.23	
284)	Ditto for 100mm diameter pipe.	No		21.84	
285)	Ditto for 150mm diameter pipe.	No		49.40	
286)	80 x 80 x 80mm diameter tee.	No		32.37	
287)	100 x 100 x 100mm diameter tee.	No		32.50	
288)	155 x 155 x 155mm diameter tee.	No		32.50	
289)	100mm diameter vent cowl.	No		27.30	
290)	150mm diameter vent cowl.	No		37.70	
291)	80 x 50 mm diameter reducer.	No		15.86	
292)	100 x 75 mm diameter reducer.	No		23.47	
293)	150 x 100 mm diameter reducer.	No		26.46	
<u>UPVC PIPE FITTINGS SS141 (SUPPLY AND FIX IN REPLACEMENT INCLUDING MAKING GOOD WORK DISTURBED)</u>					
REDUCING TEE					
294)	20mm x 13mm x 20mm diameter.	No		6.24	
295)	25mm x 13mm x 25mm diameter.	No		6.76	
296)	25mm x 20mm x 25mm diameter.	No		6.89	
297)	30mm x 13mm x 30mm diameter.	No		6.89	
298)	30mm x 20mm x 30mm diameter.	No		6.89	
299)	30mm x 25mm x 30mm diameter.	No		6.89	
300)	40mm x 13mm x 40mm diameter.	No		8.97	
301)	40mm x 20mm x 40mm diameter.	No		9.10	
302)	40mm x 25mm x 40mm diameter.	No		9.10	
303)	40mm x 30mm x 40mm diameter.	No		9.10	
304)	50mm x 13mm x 50mm diameter.	No		11.05	
305)	50mm x 20mm x 50mm diameter.	No		11.05	
306)	50mm x 25mm x 50mm diameter.	No		11.05	
307)	50mm x 30mm x 50mm diameter.	No		11.05	
308)	50mm x 40mm x 50mm diameter.	No		11.05	
309)	80mm x 50mm x 80mm diameter.	No		35.36	
310)	100mm x 50mm x 100mm diameter.	No		46.67	
311)	100mm x 75mm x 100mm diameter.	No		53.04	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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REDUCING SOCKETS (SS 141)

312)	20mm x 13mm diameter.	No	4.55
313)	25mm x 13mm diameter.	No	4.94
314)	25mm x 20mm diameter.	No	4.94
315)	30mm x 25mm diameter.	No	5.46
316)	40mm x 30mm diameter.	No	11.70
317)	50mm x 40mm diameter.	No	18.98
318)	80mm x 50mm diameter.	No	26.39
319)	100mm x 50mm diameter.	No	25.87
320)	100mm x 80mm diameter.	No	31.33
321)	150mm x 100mm diameter.	No	48.23

UPVC PIPE FITTINGS SS141 (SUPPLY AND FIX IN REPLACEMENT INCLUDING MAKING GOOD WORK
DISTURBED)

	Type	Diameter - Rate Per No								
		13mm	20mm	25mm	30mm	40mm	50mm	80mm	100 mm	155 mm
322)	Bend	4.55	4.94	5.46	5.85	10.40	13.00	33.48	52.98	65.52
323)	Elbow	4.55	4.94	5.46	5.85	10.40	13.00	31.27	50.77	64.16
324)	Socket	4.16	4.75	4.94	5.20	9.56	11.05	30.03	47.39	60.13
325)	Tee	5.66	5.98	6.50	8.00	11.77	16.58	39.07	68.84	87.30

COPPER PIPES

COPPER PIPES WATER SERVICE PIPE COMPLYING WITH BS 2871 PART 1 TABLE X TO BS 864 PART 2 SOCKETS INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, COMPRESSION JOINTS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS, ETC. FIXED TO WALL WITH AND INCLUDING HOLDERBATS OR LAID IN CHASED CONCRETE OR IN TRENCH (CHASING CONCRETE OR TRENCH EXCAVATION MEASURED SEPARATELY) (SUPPLY AND FIX OR LAY)

	Diameter - Rate Per M								
		15mm	22mm	28mm	35mm	42mm	54mm	67mm	76mm
326)		31.92	38.16	47.00	63.64	75.79	93.86	121.55	145.34

COPPER PIPES WATER SERVICE PIPE COMPLYING WITH BS 2871 PART 1 TABLE Y TO BS 864 PART 2 SOCKETS INCLUDING FITTINGS NOT EXCEEDING 50MM DIAMETER, COMPRESSION JOINTS, CONNECTORS, LONG SCREWS, BACKNUTS, PLUGS, ETC. FIXED TO WALL WITH AND INCLUDING HOLDERBATS OR LAID IN CHASED CONCRETE OR IN TRENCH (CHASING CONCRETE OR TRENCH EXCAVATION MEASURED SEPARATELY) (SUPPLY AND FIX OR LAY)

	Diameter - Rate Per M								
		15mm	22mm	28mm	35mm	42mm	54mm	67mm	76mm
327)		42.51	50.90	62.79	78.78	99.19	130.07	156.78	195.33

328)	Extra over pipe for hot water pipe insulation as specified.	m²	68.38
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Diameter - Rate Per M								
13mm	22mm	28mm	35mm	42mm	54mm	67mm	76mm	
4.50	5.60	6.30	7.30	7.90	10.80	14.20	16.00	
5.85	7.28	8.19	9.49	10.27	14.04	18.46	20.80	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

		UNIT	\$	¢
329)	67mm diameter fitting (sockets, elbows/bend, reducers, etc.) except tees connected to 67mm diameter pipe by compression joints.	No	71.50	
330)	Ditto for 76mm diameter pipe.	No	92.89	
331)	Tees connected to 54mm diameter pipe.	No	108.55	
332)	67mm x 67mm x 67mm diameter tee.	No	12.35	
333)	76mm x 76mm x 76mm diameter tee.	No	144.69	
334)	67mm x 54mm diameter reducer.	No	78.00	
335)	76mm x 67mm diameter reducer.	No	96.14	
336)	67mm diameter coupling.	No	60.52	
337)	76mm diameter coupling.	No	62.79	

COPPER PIPE FITTINGS TABLE X & Y(WHEN REPAIRED INDEPENDENTLY) (SUPPLY AND FIX)

	Type	Diameter - Rate Per No					
		13mm	22mm	28mm	35mm	42mm	54mm
338)	Connectors/ Union Couplings	8.19	16.77	31.59	46.80	62.66	66.04
339)	Tees	16.25	23.27	37.70	53.82	79.17	104.52
340)	Elbows	11.57	12.35	16.51	32.37	62.40	100.10
341)	Reducers	11.70	16.38	31.46	38.87	54.47	69.03
342)	End cap	8.06	9.75	11.70	15.60	31.20	46.80

343)	Take out existing copper pipe holderbats (any diameter) and replace with new including making good work disturbed.	No	2.60	
344)	Take out existing copper pipe fixed to wall (any position) or chased in concrete or laid in trench including removing holderbats and carting away debris off site (Chasing floor and trench excavation measured separately).	m	1.95	

WATER TANKS

345)	Take out existing storage tank in any position above ground, remove off site including making good work disturbed and plugging pipes (excluding making good for ceiling). (For storage tank not exceeding 1,818 litres) Add \$25.00 per no. for each additional 1,818 litres in volume.	No	78.00	
346)	Ditto in any position on ground floor (ditto). Add \$25.00 per no. for each additional 1,818 litres in volume.	No	39.00	
347)	Supply and install approved prefabricated Fibreglass Reinforced Polyester (FRP) panel water tank, complete with weatherproof cover, manhole, inlet and outlet fittings, ball floats and valves, drain valves, overflow, air vent, stainless steel framings and bracings internally, and other accessories and installing in any position as directed, including fixing with gaskets, electro-galvanised steel bolts and nuts, etc. adjustments, connections to existing/new pipes and cleaning, all in accordance to manufacturer's instruction, and including internal stainless steel/PVC ladder, external ladder and internal reinforcing stainless steel members and making good works disturbed, all where required and directed by the S.O. (Surface area of panel measured. Applicable only for panels installed not above height of 2.00m from bottom of water tank itself) (Base steel supports measured separately).	m²	416.00	
348)	Ditto but for panels (wall panels and cover panels) installed at height above 2.00m from bottom of water tank itself. (Surface area panel measured) (Base steel supports measured separately)	m²	468.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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349) Aluminium ladder of approved design and size, for use in water tank. m 845.00

350)	Supply and fix high pressure brass ball valve to BS 1212 complete with copper arm and plastic ball float to BS 2456 (in new or replacement).	Diameter - Rate Per No		
		13mm	19mm	25mm
		50.70	72.80	118.30

	Types	Diameter - Rate Per No					
		13mm	19mm	25mm	32mm	38mm	50mm
351)	Supply and fix high pressure brass ball valve to BS 1212 complete with copper arm and copper ball float to BS 1968 (in new or replacement).	52.65	127.79	169.78	320.45	358.28	442.00

352) Drill holes in existing storage tank for pipe connections, including all necessary fittings, etc. (Rate for each hole). No 19.50

353) Sterilise water tanks and to engage PUB approved laboratory to take sample tests (bacteriological test and chemical analysis) to ensure that water from the water tank is fit for human consumption (Rate per compartment including test report). No 353.60

354) To engage PUB approved laboratory to collect water sample for testing inclusive of submission of test result (for two or more samples). No 104.00

355) Ditto (one sample only). No 136.50

356) Replace the water tank internal mild steel braces with stainless steel grade 304 angle section all in accordance with the manufacturer's instructions including brackets, cleats, plates, etc. m 84.50

357) Supply and install 100mm diameter brass gate valve. No 273.78

358) Supply and install 75mm diameter brass pressure ball valve complete with copper arm, copper ball float, stainless steel flange with 75mm diameter copper socket. No 1315.60

359) Supply and fix 100mm diameter high pressure brass ball valve complete with brass arm and brass ball float in water tank including taking out existing set. No 1755.00

COATING/LINING TO WATER TANK

360) Wash, clean, recondition and paint internal surface of existing water tank (including tank cover where directed) with one finishing coat of approved epoxy paint all in accordance to manufacturer's instructions. m² 15.34

361) Ditto but with two coats of epoxy paints. m² 25.74

362) Labour for repairing defective ball cock of water tank including renewing washer. No 18.20

363) Labour and material for welding ball float to level in water tank. No 32.50

364) Patching up holes in tank walls/bottoms/ covers by welding new pieces of plates including the cost for using, transporting and removing welding equipment. (Price for each hole). No 52.00

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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LINING OF WATER TANK

Supply labour and materials to coat existing pressed steel water tank with 2 coats of approved epoxy paint and lined with 2mm thick `SCHLEGEL', `NEPTUNE' or other equal and approved high density polyethylene sheet with the following specifications of work process :-

- a. Submission of PUB commencement notice.
- b. Remove tank covers as necessary, drain tank and hydroblast to remove scales loose rust at between 2000 to 3000 psi.
- c. Inspect tank for corrosion and repair all damages found.
- d. Apply one coat of PUB approved rust converter to tank walls and covers.
- e. Apply two coats of PUB approved epoxy to all tank surfaces and covers with minimum thickness of 285 microns.
- f. Lining of tank surfaces with approved 2mm thick HDPE sheets with double welded joints.
- g. Washing and sterilising of water tank
- h. Water sampling and testing by PUB approved laboratory.
- i. Submission of test result and PUB completion notice.
- j. To submit to SDC a written guarantee against defects for a period of 10 years upon completion of the works if instructed by the S.O. The guarantee shall be in the form of a deed and in a format approved by SDC.

365)	For areas less than 8m².	No	845.00
366)	For areas greater than 8m².	m²	97.50

NOTE:Payment shall be based on surface areas excluding tank covers. However, rate include coating to tank covers.

WATER TANKS (GLASS REINFORCED PLASTIC PRESSMOUNDED SECTIONAL WATER TANK)

367)	Supply and fix in position glass reinforced plastic press moulded sectional water tank	No	14,756.56
368)	Ditto but 4000mm x 2000mm x 2000mm high ditto.	No	30,408.17
369)	Ditto but 2000mm x1000mm x 1000 high ditto.	No	11,187.80
370)	Ditto but 4000mm x 2000mm x 2000mm high ditto.	No	24,209.38
371)	Ditto but 3000mm x 2000mm x 1000mm high ditto.	No	16,937.57
372)	Ditto but 1000mm x 3000mm x 1000mm high ditto.	No	9,404.20

But without ladder

373)	1000mm x 1000mm x 2000mm.	No	4,771.00
374)	1000mm x 3000mm x 2000mm.	No	6,913.40
375)	1000mm x 4000mm x 2000mm.	No	9,542.00
376)	1000mm x 5000mm x 1000mm.	No	11,450.10
377)	2000mm x 2000mm x 1000mm.	No	7,633.60
378)	2000mm x 3000mm x 1000mm.	No	11,315.20
379)	2000mm x 4000mm x 1000mm.	No	13,358.80
380)	2000mm x 5000mm x 1000mm.	No	16,177.20

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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WATER TANKS (PRESSED STAINLESS STEEL) *Can remove? Since most of our tanks are fibre glass)

381)	4800m x 2400mm x 2400mm high x 2.5mm thick pressed stainless (Grade 316) water tank, complete with stainless steel cover, access openings, stainless steel cheats, stays, bolts, nuts, washers, flanges, fittings, external aluminium ladder and internal stainless steel ladder.	No	39,228.80
382)	Ditto but 4800mm x 1200mm x 2400mm high x 2.5mm thick ditto.	No	15,912.00
383)	Ditto but 3600mm x 2400mm x 2400mm high x 2.5mm thick ditto.	No	30,160.00
384)	Ditto but 3600mm x 1200mm x 1200mm high x 2.5mm thick ditto.	No	13,323.70
385)	Ditto but 2400mm x 2400mm x 2400mm high x 2.5mm thick ditto.	No	22,620.00
386)	Ditto but 2400mm x 1200mm x 1200mm high x 2.5mm thick ditto.	No	9,425.00
387)	Ditto but 1200mm x 1200mm x 1200mm high x 2.5mm thick ditto.	No	6,462.30

APPROVED COATING MATERIALS FOR WATER STORAGE TANKS

The undermentioned coating materials are approved by the PUB.

S/No	Name of Product	Country of Make
a.	Pallidux Plastic Membrane	England
b.	Grey "EMER COAT SPECIAL"	Australia
c.	Skyblue "PHOENIX" coat	Japan
d.	Red/Black "NEUTRA-RUST"	England
e.	Light Blue "7437 Colturiet EHB Food	Holland
f.	White "Amercoat 395"	Singapore
g.	White "GLASSFLAKE"	England
h.	Grey, Cream, Green & Blue "NEOLINER ##10"	Japan
i.	White, Beige, Blue JMC Green 437, Blue Gery, Black, Brown "CORROCOAT A/S ELECTROSTATIC EPOXY POWER COATING EP 01366"	Thailand
j.	Red "CHESTERTON, RUST TRANSFORMER, LEAD FREE PRIMER AND MOISTURE-CURED URETHANE"	USA
k.	White "BYCO VERSA KOTE 3WB"	USA

Note :The undermentioned rates include all preparation for washing turning on and off of water supply, provision of standby plumbers, ladders and torchlights, other tools/ equipment and the removal of all debris, empty tins and other unwanted materials from the roofs all as specified.

The rates for painting of water tanks include preparation of surfaces as per manufacturer's recommendations and SO's instructions. No dilution of coating materials are allowed unless recommended by the manufacturer and the SO. The application of coating materials shall comply strictly to the manufacturer's recommendation and SO's instructions.

388)	Prepare, scrap, remove rust and incrustations and other sediments from internal sides and bottom of mild steel tanks, wash, flush and clean surfaces, bracings and mop up with cloth to dry to receive new painting (painting measured separately).	m²	8.97
389)	Ditto but to non-metal tank surfaces.	m²	5.07

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
390) Supply and line internal faces of water tank with 2mm thick "Schlegel HDPE" or equivalent high density polyethylene sheet all in accordance with the manufacturer's instructions to tank 1.20m height including removing water tank cover and refix after completion (5 years warranty).	m ²	87.10	
391) Ditto 2.40m height (ditto).	m ²	106.60	
392) Ditto 3.60m height (ditto).	m ²	143.00	
<u>RUST CONVERTOR</u>			
393) Prepare and paint internal surfaces of the mild steel water tanks including bracing with one coat of rust convertor (Water Base).	m ²	9.75	
<u>PRIMER</u>			
394) Ditto with Lead Free Primer (Solvent Base).	m ²	12.61	
395) Ditto with Synthetic Resin Primer.	m ²	4.55	
396) Ditto with Epoxy Base Primer.	m ²	7.41	
<u>FINISHING COAT</u>			
397) Ditto with two water base finishing coats.	m ²	17.29	
398) Ditto with two coats moistured cured urethane.	m ²	14.69	
399) Ditto one coat epoxy base.	m ²	11.70	
400) Ditto three coats synthetic rubber base.	m ²	8.97	
401) Prepare and paint external surfaces of the mild steel water tanks with one coat of rust convertor (Water Base).	m ²	9.36	
<u>PRIMER</u>			
402) Prepare and paint external surfaces of the mild steel water tanks with one coat of Lead Free Primer (Solvent Base).	m ²	12.22	
403) Ditto with Synthetic Resin Primer.	m ²	4.29	
404) Ditto with Epoxy Base Primer.	m ²	7.15	
<u>FINISHING COAT</u>			
405) Prepare and paint external surfaces of the mild steel water tanks with two coats of water base finishing coats.	m ²	16.90	
406) Ditto with two coats Moistured Cured Urethane.	m ²	14.30	
407) Ditto one coat Epoxy Base.	m ²	11.44	
408) Ditto three coats Synthetic Rubber Base.	m ²	9.23	
<u>WATER TANK COVER</u>			
409) Supply and fix water tank cover of 24 SWG galvanised iron, not exceeding 1.50m ² in area (measured on plan) of pyramoidal shape with beaded edges turned down and fixing on existing or new water tank (painting measured separately). Add \$122.10 per no. for each additional 1.50m ² in area (measured on plan).	No	149.50	
410) Take out existing water tank cover in any position and remove off site.	No	4.55	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
<u>CLEANING/FLUSING WATER</u>			
411) Labour and material cleaning with chlorine and flushing out existing water storage tank not exceeding 1,818 litres in capacity. Add \$30.00 per no. for each additional 1,818 litres in capacity.	No	78.00	
412) Add to above item if including applying one coat of cement washing to internal surfaces of tank.	No	26.00	
413) Wash and clean internal surface and structure of water tank to remove rust, scales, etc. by using power brush and other tools.	m²	7.80	
<u>DILUTION TANK</u>			
414) Supply only 737mm x 559mm x 559mm deep "Fibrite" or equivalent Fibreglass dilution tank (grey colour) complete with waste pipe.	No	676.00	
415) Fix only dilution tank including all necessary connections and adjustment (extra piping measured separately).	No	91.00	
<u>WATER THIMBLE</u>			
416) Supply and fix 15mm chrome plated water thimble of approved type.	No	32.50	
<u>COATING/LINING TO WATER TANK</u>			
417) Apply "Titan Blue" or equivalent skyblue epoxy coating (0.3 - 0.5mm thick) to internal surfaces and structure of water tank.	m²	74.75	
418) Supply and lined internal faces of tank walls and base with 2mm thick approved HDPE high density polyethylene sheet all in accordance with the manufacturer's instructions including dismantle all tank covers, clean, scrap/brush to remove loose rust and scale, apply one coat of PUB approved rust converter. (Height of tank : 1.20m or up to 2.40m) (Inclusive of 5 years warranty).	m²	123.50	
419) Ditto (Height of tank : 2.40m and above (ditto)).	m²	144.30	
420) Replace the water tank internal mild steel braces with stainless steel grade 316 angle section (50 x 50 x 6mm thick) complete with cleats, bolts and nuts all in accordance with the manufacturer's instructions.	m	123.50	
421) Apply "7437 Colturiet EHB Food" or equivalent epoxy coating (min. 0.3mm thick) to internal surfaces and structure of water tank.	m²	42.90	
422) Apply one coat of PUB approved rust converter/ transformer to the internal surfaces and structure of water tank.	m²	14.30	
<u>BASINS</u>			
<u>NOTE : Extra piping for the following sanitary fittings shall be measured separately</u>			
SUPPLY AND FIX GLAZED VITREOUS CHINA WALL HUNG BASINS COMPLETE WITH CHROMIUM PLATED CHAIN AND PLUG INCLUDING PLUGGING AND SCREWING THE BRACKETS TO WALL, MAKING GOOD WORK DISTURBED AND MAKING CONNECTIONS AND ADJUSTMENTS TO PIPING			
423) 508 x 406mm (white colour) - American Standard Laverne TF 911 or equivalent.	No	104.00	
424) Ditto but standard colour type.	No	113.10	
425) 572 x 432mm (white colour) - American Standard Trimline TF 941 or equivalent.	No	110.50	
426) Ditto but standard colour type.	No	117.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

		UNIT	\$	¢
427)	560 x 405mm (white colour) - Armitage Shanks or equivalent.	No	120.90	
428)	455 x 280mm (ditto).	No	128.70	
429)	Ditto but standard colour type.	No	141.70	
430)	400 x 300mm (white colour) - "Armitage Shank Portman" or equivalent.	No	133.90	
431)	Ditto but standard colour type.	No	141.70	
432)	500 x 400mm (white colour) - "Armitage Shank Portman" or equivalent wall hung shell type.	No	159.90	
433)	Ditto but standard colour type.	No	185.90	
434)	560 x 405mm (white colour) - Armitage Shanks Jade or equivalent over counter type.	No	238.55	
435)	Ditto but standard colour type.	No	260.00	
436)	560mm x 490mm (white colour) - Armitage Shanks Monte Carlo or equivalent.	No	189.80	
437)	Ditto but standard colour type.	No	215.80	
438)	590mm x 475mm (white colour) - Armitage 'Wentworth' or equivalent wall hung shell type.	No	253.89	
439)	Ditto but standard colour type.	No	260.00	
440)	510mm x 415mm (white colour) - Armitage 'royalex' or equivalent wall hung slab type.	No	214.63	
441)	Ditto but standard colour type.	No	234.00	
442)	560mm x 405mm (white) - Twyfords Classic 14003 or equivalent.	No	142.35	
443)	Ditto but standard colour type.	No	163.80	
444)	510mm x 410mm (White) - Potex Accord NB 2005 or equivalent.	No	110.50	
445)	Ditto but standard colour type	No	117.00	
446)	450mm x 310mm (White) - Potex Viva WB 202 or equivalent.	No	102.96	
447)	Ditto but standard colour type.	No	104.00	
448)	560mm x 410mm (White) - Potex Plaza WB 2003 or equivalent.	No	117.26	
449)	Ditto but standard colour type.	No	127.40	
450)	545mm x 420mm (White) - Potex Opal WB 2006 or equivalent vanity basin.	No	141.70	
451)	Ditto but standard colour type.	No	154.70	
452)	540mm x 490mm wide (white colour) - Inax L2394 or equivalent over-counter type.	No	113.10	
453)	Ditto but standard colour type.	No	260.00	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF ONE (1) YEARS
WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

		UNIT	\$	¢
454)	550mm x 460mm wide (white colour) - Inax L284 or equivalent wall hung shell type.	No	193.05	
455)	Ditto but standard colour type.	No	219.05	
456)	500mm x 400mm wide (white colour) - Inax L132 or equivalent wall hung with slab.	No	202.80	
457)	Ditto but standard colour type.	No	221.00	
458)	540mm x 490mm wide (white/standard colour) - Toto L521V3 or equivalent over-counter type.	No	227.24	
459)	560mm x 460mm wide (white/standard colour) - Toto L237 or equivalent wall hung shell type.	No	242.45	
460)	500mm x 400mm wide (white/standard colour) - Toto L230V3 or equivalent wall hung with slab.	No	252.07	
461)	Supply only "Diethelm" or equivalent 18/8 stainless steel . basin overall size 550mm x 450mm with weir overflow complete with painted steel brackets, 30mm diameter waste, chromium plated brass waste and chain.	No	241.80	
462)	Fix only new basin including plugging and screwing the brackets to wall, making good work disturbed and making connections and adjustments to piping (Basin and brackets supplied).	No	117.00	
463)	Take out and refix existing basin in existing/ new position including any necessary cutting and pinning ends of brackets, making good work disturbed and making all connections and adjustments to piping.	No	39.00	
464)	Adjust loose basin by pinning end of brackets, patching up with white cement etc.	No	22.10	
465)	Supply and fix cast iron brackets for basins.	Pair	14.30	
<u>PEDESTAL BASIN</u>				
SUPPLY AND FIX `ARMITAGE SHANKS' GLAZED VITREOUS CHINA PEDESTAL BASIN WITH WEIR OVERFLOW COMPLETE WITH WALL SUPPORT, 30MM DIAMETER CHROMIUM PLATED BRASS WASTE AND CHAIN WITH PLUG				
466)	510mm x 405mm (white colour).	No	176.80	
467)	Ditto but standard colour type.	No	195.00	
468)	585mm x 430mm (white colour).	No	247.00	
469)	Ditto but standard colour type.	No	266.50	
470)	Supply and install "vansen" or other equal and approved cultured marble vanity top wash basin of approved light mono colour, pattern and thickness, custom made 600mm wide with 100mm backsplash and 200mm front downturn complete with opening and integral basins at approximately 150mm apart and 32mm chromeplated bottle traps, waste outlets, chain and plug including all rounded corner, edge and openings (tap measured separately).	m	975.00	
471)	Not in used.			
472)	Not in used.			
473)	Not in used.			

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
474) Not in used.			
475) Supply and install "vansen" or other equal and approved cultured marble vanity top of approved light mono colour, pattern and thickness, custom made 600mm wide with 100mm backsplash and 200mm front downturn including all rounded corner, edge and openings.	m	715.00	
476) Supply and install "Bestone glamortone" or other equal and approved cultured marble vanity top wash basin of approved light mono colour, pattern and thickness, custom made 600mm wide with 100mm backsplash and 200mm front downturn complete with opening and integral basins at approximately 150mm apart and 32mm chrome plated bottle traps, waste outlets, chain and plug including all rounded corner, edge and openings (tap measured separately).	m	630.50	
477) Ditto but "Bestone gemsynite " or equivalent ditto.	m	734.50	
478) Ditto but "Bestone granitex " or equivalent ditto.	m	786.50	
479) Supply and install “ Bestone glamortone" " or other equal and approved cultured marble vanity top of approved light mono colour, pattern and thickness, custom made 600mm wide with 100mm backsplash and 200mm front downturn including all rounded corner, edge and openings.	m	494.00	
480) Ditto but "Bestone gemsynite " or equivalent ditto	m	572.00	
481) Ditto but "Bestone granitex" or equivalent ditto.	m	624.00	
<u>SUNDRIES</u>			
482) Take out existing basin or drinking fountain including brackets, if any, set aside for reuse and make good work disturbed.	No	13.00	
483) Take out existing basin or drinking fountain including brackets, if any, remove off site and make good work disturbed.	No	6.50	
484) Take out existing pedestal basin, remove off site and make good work disturbed.	No	9.10	
<u>SINKS</u>			
<u>NOTE: Extra piping to sanitary fittings shall be measured separately.</u>			
SUPPLY AND FIX WHITE VITREOUS CHINA SERVICES SINK COMPLETE HANGER, CHROMIUM PLATED WASTE FITTING, BOTTLE TRAP, PLUG AND CHAIN			
485) 600mm x 450mm x 200mm `Twyfords' or equivalent kitchen sink.	No	296.40	
486) 610mm x 455mm x 255mm ditto.	No	332.80	
487) 750mm x 450mm x 250mm ditto.	No	436.80	
488) 305mm x 305mm x 178mm `Armitage Shanks' or equivalent laboratory sinks.	No	235.30	
489) 355mm x 355mm x 230mm ditto.	No	176.80	
490) 750mm x 460mm x 165mm deep - Inax S-3 or equivalent.	No	540.80	
491) 600mm x 460mm x 150mm deep - Inax S-5 or equivalent	No	431.60	
492) 375mm x 360mm x 230mm deep - Armitage Shanks or equivalent.	No	209.30	
493) 565mm x 360mm x 225mm deep - Armitage Shanks or equivalent.	No	330.33	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
494) 760mm x 472m x 165mm deep - Toto SK6 or equivalent.	No	851.89	
495) 610mm x 472mm x 152mm deep - Toto SK7 or equivalent.	No	915.98	
496) Fix only sink complete including cutting and pinning in ends of brackets, making good work disturbed and making all connections and adjustments to piping (sink and brackets supplied).	No	117.00	
497) Take out existing sink including brackets, if any, set aside for reuse and make good.	No	7.80	
498) Take out and refix existing sink in existing/ new position including any necessary cutting and pining ends of brackets, making good and making all connections and adjustments to piping.	No	65.00	
499) Supply and fix cast iron brackets for sinks.	Pair	15.60	
500) Take out existing sink (any type) including brackets, remove off site and make good.	No	9.10	
501) Supply and fix in replacement 3mm x 75mm long brass grid screw to sink.	No	2.60	
<u>DRAINING BOARD</u>			
502) Take out wood or metal draining board and remove off site.	No	3.90	
503) Supply and fix "Hartington Brighton" draining board or equal and approved type.	No	44.20	
504) Supply and fix 25mm thick teak cross-tongued, stop fluted draining board not exceeding 0.40m² in area, with necessary skirting, fixed on and including pair of painted metal brackets.	No	188.50	
505) Supply and fix 25mm thick kapur cross-tongued, stop fluted draining board finished with 20 SWG aluminium lining not exceeding 0.40m² ditto.	No	74.10	
SUPPLY AND FIX 0.7MM THICK 22 SWG "DIETHELM" STAINLESS STEEL SINK AND DRAINER COMPLY WITH SS 40 INCLUDING 38MM DIAMETER WASTE FITTINGS, BOTTLE TRAP, PLUG AND CHAIN CHROMIUM PLATED CHAIN			
506) Single bowl, single drainer overall size 750mm x 450mm x 170mm deep.	No	182.00	
507) Ditto but 900mm x 500mm x 165mm deep.	No	229.58	
508) Ditto but 1,050mm x 450mm x 170mm deep.	No	266.50	
509) Ditto but 1,050mm x 525mm x 170mm deep.	No	273.00	
510) Ditto but 1,000mm x 500mm x 170mm deep.	No	273.00	
511) Single bowl, double drainer overall size 1,500mm x 500mm x 170mm deep.	No	312.00	
512) Double bowl, single drainer overall size 1,500mm x 500mm x 170mm deep.	No	351.00	
513) Double bowl, double drainer overall size 1,800mm x 500mm x 165mm deep.	No	584.74	
SUPPLY AND FIX "BRISTILE" OR EQUIVALENT STAINLESS STEEL SINKS (22 SWG) COMPLETE WITH 40MM WASTE FITTINGS CHROMIUM PLATED WASTE FITTINGS AND CHAIN WITH PLUG AND A SET OF PAINTED BRACKETS			
514) Single bowl, single drainer overall size 1,070mm x 450mm x 150mm deep.	No	312.00	
515) Ditto but 1,070mm x 530mm x 150mm deep.	No	319.80	

TERM CONTRACT FOR CIVIL AND STRUCTURAL MINOR REPAIR AND IMPROVEMENT WORKS AT SENTOSA FOR A PERIOD OF ONE (1) YEARS
WITH AN OPTION TO EXTEND FOR ANOTHER YEAR

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
516) Single bowl, double drainer overall size 1,200mm x 450mm x 150mm deep.	No	326.30	
517) Ditto but 1,200mm x 530mm x 150mm deep.	No	334.10	
518) Ditto but 1,300mm x 530mm x 150mm deep.	No	352.30	
519) Ditto but 1,350mm x 450mm x 150mm deep.	No	331.50	
520) Ditto but 1,500mm x 450mm x 150mm deep.	No	354.90	
521) Ditto but 1,500mm x 530mm x 150mm deep.	No	520.00	
522) Double bowl, double drainer overall size 1,500mm x 450mm x 150mm deep.	No	442.00	
523) Ditto but 1,524mm x 530mm x 150mm deep.	No	458.90	
524) Ditto but 1,800mm x 450mm x 150mm deep.	No	443.30	
525) Ditto but 1,829mm x 530mm x 150mm deep.	No	464.10	
526) Fix only sink complete including cutting and pinning in ends of brackets, making good and making all connections and adjustments to piping work.	No	117.00	
527) Ditto but double bowl.	No	91.00	
<u>WATER CLOSET</u>			
<u>NOTE: Extra piping for the following sanitary shall be measured separately.</u>			
<u>SQUATTING WATER CLOSET</u>			
528) Supply and fix “Armitage Shanks Claywood” or equivalent squatting pan complete with `S' or `P' trap including Rigel AFS-201C or equivalent concealed sensor flush valve and flush pipe.	No	1066.00	
529) Supply only `Potex' or equivalent	No	91.00	
530) Fix only squatting water closet (fitting supplied on site) including connections, adjustments and making good work disturbed.	No	171.99	
531) Take out existing squatting water closet, remove off site, prepare to receive new or stop up drain and make good work disturbed.	No	26.00	
532) Take out existing white vitreous china foot tread plates for squatting water closet, cart away off site and replace new including lining joints between tread and floor finish with white cement.	No	26.00	
533) Supply and fix white vitreous china foot tread plates for squatting water closet including ditto.	Pair	26.00	
<u>WATER CLOSET</u>			
534) Supply and fix `Inax 15' or equivalent white pedestal water closed coupled type complete with cistern, floor mounted with `S' or `P' trap and all necessary fitting.	No	562.25	
535) Ditto `Toto C430/S530' or equivalent white pedestal siphonic closed coupled type ditto.	No	772.85	
536) Ditto `Armitage Shanks Curzon' or equivalent white pedestal washdown closed coupled type ditto.	No	370.11	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
537) Ditto `Inax C13' or equivalent pedestal washdown flush valve type, floor mounted with `S' or `P' trap and all necessary fitting. (flush valve measured separately).	No	338.00	
538) Ditto `Toto C51' or equivalent pedestal washdown flush valve type, floor mounted with `S' or `P' trap and all necessary fitting. (flush valve measured separately).	No	472.81	
539) Ditto `Armitage Shanks magna' or equivalent pedestal washdown flush valve type, floor mounted with `S' or `P' trap and all necessary fitting. (flush valve measured separately).	No	123.63	
NOTE :Extra piping for the following sanitary shall be measured separately.			
540) Supply and fix `Armitage Shanks Silhouette' or equivalent white pedestal wash down flush valve type, floor mounted with `S' or `P' trap complete with seat & cover and Rigel AFS-101C or equivalent concealed sensor flush valve, flush pipe including all necessary fitting.	No	1261.00	
541) Ditto but standard colour type.	No	1287.00	
542) Supply and fix `Inax C11' or equivalent white pedestal wash down flush valve type, wall mounted with `S' or `P' trap and all necessary fitting (flush valve measured separately).	No	371.80	
543) Ditto 'Toto C453T2' white pedestal wash down flush valve type ditto.	No	915.20	
544) Ditto `Armitage Shanks melrose' or equivalent white pedestal wash down flush valve type ditto.	No	428.35	
545) Ditto `Inax C25' or equivalent white pedestal siphonic wash down flush valve type ditto.	No	720.85	
546) Ditto `Toto CU723/P' or equivalent white pedestal siphonic wash down flush valve type ditto.	No	814.84	
547) Ditto `Armitage Shanks Claywood' or equivalent white pedestal siphonic squatting washdown flush valve type ditto.	No	234.00	
548) Supply only `American Standard Delta' (TF 14/4049) or equivalent white glazed vitreous china syphonic type water closet with double trap complete with 9 litres cistern and fittings.	No	308.10	
549) Ditto but standard colour type.	No	347.10	
550) Supply only `Armitage Shanks Unisyla' or equivalent white glazed vitreous china syphonic type water closet suite with double trap complete with 9 litres cistern and valveless fittings.	No	374.40	
551) Ditto but standard colour type.	No	442.00	
552) Ditto `Armitage Shank Junia' or equivalent 305mm low height white glazed vitreous clay children's pedestal water closet with ditto.	No	141.70	
553) Supply only Potex TP 1100/1010 Lotus or equivalent white glazed vitreous China close-coupled single trap syphonic action pedestal pan complete with cistern and fittings, seat and cover.	No	260.00	
554) Ditto - but standard colour.	No	317.20	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
555) Supply only `Armitage Shanks Silhouette` or equivalent white pedestal wash down flush valve type, floor mounted with `S` or `P` trap complete with seat & cover (flush valve measured separately).	No	435.50	
NOTE: Extra piping for the following sanitary shall be measured separately.			
556) Supply only Potex TP 1007/1010 or equivalent Star white glazed vitreous China close-coupled double trap syphonic action pedestal pan complete with cistern and fittings, seat and cover.	No	286.00	
557) Ditto - but standard colour.	No	357.50	
558) Supply only Potex TP 1003/TP 1004 or equivalent Ascot white glazed vitreous China washdown pedestal water closet suite with `S` or `P` trap including flush pipe, seat and cover.	No	88.40	
559) Ditto - but standard colour.	No	97.50	
560) Fix only pedestal water closet. including connections, adjustments and making good work disturbed.	No	182.00	
561) Take out existing pedestal water closet. remove off site, prepare to receive new or stop up drain and making good work disturbed.	No	16.90	
562) Take out and refix pedestal water closet, including making good, work disturbed, connection and adjustments.	No	110.50	
563) Take out existing squatting pan, remove off site, alter soil pipe connections and prepare surface to receive pedestal type water closet including cast iron offset, bend, etc.	No	104.00	
564) Take out existing pedestal water closet pan, ditto and prepare surface to receive squatting pan.	No	117.00	
565) Labour and materials cleaning white glazed water closet pans or other white glazed sanitary fittings to a satisfactory finish free from stains.	No	6.50	
566) Supply and fix in replacement cleaning	No	4.55	
<u>WATER CLOSET SEAT AND COVER (In yellow price reviewed)</u>			
567) Take out existing lavatory seat and cart away off site.	No	4.55	
568) Supply only black bakelite hinged seat and cover to children's pedestal water closet inclusive of brackets, bolts and nuts.	No	50.70	
569) Ditto (black, white or standard colour) to adult's pedestal water closet (Ditto).	No	57.20	
570) Supply only black, white or standard colour plastic seat and cover to adult's pedestal water closet (`FLEX` or equivalent).	No	41.60	
571) Supply only white colour plastic seat and cover to ditto (`Kings` or equivalent).	No	41.60	
572) Ditto but of standard colour to ditto (`Kings` or equivalent).	No	43.55	
573) Ditto but "Shank armitage Moute Carlo" or equivalent cistern cover (champagne colour).	No	65.00	
574) Diito but "calypso" or equivalent water closet seat cover (white).	No	31.20	
575) Fix only water closet seat and cover or cistern cover.	No	6.50	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
SUPPLY ONLY 9 LITRES ARMITAGE SHANKS OR EQUIVALENT CISTERNS FOR WATER CLOSET OR URINAL INCLUDING A SET OF PAINTED BRACKETS AND ALL NECESSARY COVERS, FEEDING PIPES, VALVELESS SYPHON, OUTLET,OVERFLOW, BALL VALVE, FLOAT AND HANDLE					
576)	Plastic.	No		45.50	
577)	Washdown water closet - white glazed vitreous china.	No		149.50	
578)	Ditto - standard colour.	No		178.10	
579)	For syphonic water closet - white glazed vitreous china.	No		149.50	
580)	Supply only black colour `Shires-Lynx' or equivalent heavy duty flushing cistern for water closet or urinal including a set of painted brackets and all necessary cover, feeding pipes, valveless syphon, outlet, overflow, ball valve, float and handle.	No		110.50	
581)	Supply only 9 litres `Sky' or equivalent plastic cistern for water closet or urinal including ditto.	No		39.00	
582)	Fix only cistern on existing brackets including making connections and adjustments to piping and making good work disturbed.	No		26.00	
583)	Fix only cistern and brackets including any necessary cutting and pinning of brackets, making good work disturbed and making all connections and adjustments to piping.	No		29.90	
584)	Take out existing high or low level cistern, remove off site and make good work disturbed.	No		6.50	
585)	Supply and fix cast iron brackets for cisterns.	No		13.00	
586)	Labour and materials for overhauling flushing cistern (any type) with replacement of small defective parts (excluding ballcock) and painting internally and externally if necessary.	No		28.60	
587)	Take out existing syphon fittings including ball float, ball valve, handle, chain and internal fittings, etc. remove off site and replace with new to match including all necessary connections and adjustments.	No		39.00	
588)	Take out cistern syphon washer and replace with new to match.	No		3.90	
589)	Take out existing cistern ball float and replace with new plastic ball float including connections.	No		11.83	
<u>FLUSH ARM/HANDLE FOR CISTERN</u>					
590)	Approved chromium plated handle for low level cistern in replacement.	No		14.30	
591)	Approved cast aluminium flush arm for ditto.	No		10.79	
592)	Approved plastic handle for ditto.	No		11.44	
593)	Approved plastic flush arm for ditto.	No		11.44	
594)	Cast aluminium chain with handle for high level cistern.	No		12.87	
595)	Take out existing flush arm, remove off site and replace with new galvanised steel flush arm for w.c. cistern including all necessary connections and adjusting.	No		14.30	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>FLUSH PIPE (SUPPLY AND FIX)</u>					
596)	38mm diameter galvanised steel flush pipe for high level water closet cistern including all connections and two coats paint.	No		20.80	
597)	30mm diameter approved UPVC flush pipe for high level cistern including all connections.	No		11.44	
598)	38mm diameter galvanised steel flush pipe including rubber cone for low level cistern.	No		15.60	
599)	30mm diameter approved UPVC flush pipe including rubber cone for ditto.	No		11.44	
600)	Rubber cone for flush pipe to pedestal water closet connections.	No		8.45	
601)	Stainless steel flush pipe for urinal cistern including all connections.	No		45.50	
<u>FLUSH VALVES</u>					
602)	Supply and fix `Inax' UF-4/UF3' or equivalent flush valve complete with check valve, stop valve, vacuum breaker and stainless steel flush pipe concealed to wall for urinal.	No		214.50	
603)	Ditto `Inax CF 10MV (EX-12)' or equivalent exposed type for squatting pan water closet complete with check valve, stop valve, vacuum breaker and stainless steel flush pipe.	No		310.70	
604)	Ditto `Inax' CF 10MV (EX-12) or equivalent exposed type for pedestal water closet ditto.	No		296.40	
605)	Ditto `Inax CF 110MPV-XI' or equivalent push button concealed type for squatting pan water closet ditto.	No		378.30	
606)	Ditto `Inax CF 110MPV-XI' or equivalent push button concealed type for pedestal water closet ditto.	No		377.78	
607)	Ditto `Inax UF-3 (UX-3)' or equivalent exposed type for urinal ditto.	No		113.17	
608)	Ditto `Inax UF-3-X1' or equivalent push bottom concealed type for urinal ditto.	No		255.97	
609)	Ditto `Toto' TEA95V3' or equivalent concealed sensor flush valve complete with flush pipe and fittings.	No		1527.50	
610)	Ditto `Toto TV150NSV110' or equivalent exposed type for squatting-pan water closet complete with check valve, stop valve, vacuum breaker and stainless steel flush pipe.	No		421.85	
611)	Ditto `Toto TV150NLV98' or equivalent exposed type for pedestal water closet ditto.	No		508.56	
612)	Supply and fix `Toto TPV152ESSV47' or equivalent push button concealed type for squatting pan water closet complete with check valve, stop valve, vacuum breaker and stainless steel flush pipe.	No		529.50	
613)	vDitto `Toto TPV152ESV47' or equivalent push button concealed type for pedestal water closet ditto.	No		563.16	
614)	Ditto `Toto TP60SV12' or equivalent push bottom concealed type for urinal ditto.	No		329.50	
615)	Sannito-Begonia ST 4044 or equivalent white colour squatting pan water closet.	No		334.75	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
616) Sannito-Begonia ST 4044 or equivalent standard e colour squatting pan water closet.	No	172.25	
617) Sannito-Begonia ST 2088 or equivalent white colour squatting pan water closet.	No	481.20	
618) Sannito-Begonia ST 2088 or equivalent standard colour squatting pan water closet.	No	596.18	
619) Supply and fix 'Toto 76766 LV1' or equivalent water closet concealed flush valve complete with 'Toto 76522 D7V' or equivalent sensor eye with push button switch, flush pipe and fittings.	No	1352.00	
620) Ditto `Calfarme-Deoflush' SFU-1A (ABS-White) or equivalent exposed urinal sensor (piping measured separately) including transformer for flushing.	No	377.00	
621) Ditto `Calfarme-Deoflush' SFU-IS or equivalent (stainless steel) exposed urinal sensor ditto.	No	390.00	
622) Ditto `Rigel AFS-101C or equivalent concealed sensor WC flush valve including flush pipe and fittings.	No	748.80	
623) Ditto `Rigel AFS-201C or equivalent concealed sensor urinal flush valve including flush pipe and fittings.	No	517.40	
624) Fix only exposed flush valve complete including connections, adjustments and making good work disturbed.	No	59.41	
625) Ditto but concealed flush valve ditto.	No	72.80	
<u>URINALS</u>			
626) Supply and fix 'Inax U15' or equivalent size 330 x 290 x 525mm high white vitreous china urinal complete with wall flange, hanger, bolts and screen.	No	266.50	
627) Ditto 'Toto 104' or equivalent size 320 x 340 x 540mm high ditto.	No	319.80	
628) Ditto 'Armitage Shans Santor' or equivalent size 300 x 250 x 460mm high ditto.	No	234.00	
629) Supply and fix 'Inax 114' or equivalent size 330 x 310 x 605mm high white vitreous china urinal complete with wall flange, hanger, bolts and screen.	No	445.90	
630) Ditto 'Toto 57' or equivalent size 330 x 310 x 605mm high ditto.	No	399.62	
631) Ditto 'Armitage Shans Santana' or equivalent size 455 x 310 x 640mm high ditto.	No	391.24	
632) Ditto 'Inax 103' or equivalent size 320 x 330 x 850mm high ditto.	No	469.30	
633) Ditto 'Toto U53' or equivalent size 310 x 305 x 865mm high ditto.	No	811.59	
634) Supply and install `Armitage Shanks Sanura' or equivalent white glazed vitreous china single wall hung bowl urinal complete with wall hangers, spreaders and clips, stainless steel dome outlet grating, 30mm diameter with plastic tail and supporting brackets (Cistern and extra piping measured separately).	No	240.50	
635) Supply and install Protec Urini U-501 or equivalent Size 330 x 310 x 610mm white glazed vitreous China single wall hung bowl urinal complete with wall hangers, spreaders and clips, dome outlet grating and necessary fittings (cistern and extra piping measured separately).	No	235.30	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
636) Supply and install Protec Urini U502 or U503 or equivalent concealed outlet white glazed vitreous China single wall hung bowl urinal complete with wall hangers, spreaders and clips, dome outlet grating and necessary fittings (cistern and extra piping measured separately).	No	195.00	
637) Supply and install `Armitage Shanks Santana or equivalent 320mm x 315mm x 580mm white glazed vitreous china single wall hung bowl urinal complete with wall hangers, spreaders and clips, stainless steel dome outlet grating 30mm diameter with plastic tail and supporting brackets including Rigel AFS-201C concealed sensor urinal flush valve (extra piping measured separately).	No	728.00	
638) Ditto 'Inax U-114' or equivalent Size 330 x 310 x 610mm - ditto.	No	335.40	
639) Ditto 'Toto U140' or equivalent wall hung bowl urinal complete with A100 partition ditto.	No	221.00	
640) Ditto 'Toto U67' or equivalent wall hung bowl urinal ditto.	No	273.00	
641) Supply only `Armitage Shanks Naim' or equivalent white glazed vitreous china urinal (1200mm) complete with semi-circular urinals floor channels, chromium plated brass hinged domical grating, chromium plated sparge and flush pipes, etc. (Flushing cistern and step measured separately).	No	1664.00	
642) Fix only Armitage Shanks Naim' or equivalent white glazed vitreous china urinal (1200mm) complete including bedding and pointing slab and channel, making connections and adjustments making good work disturbed.	No	208.00	
643) Supply only `Armitage shanks' or equivalent white glazed fireclay urinal back slab 610mm wide x 1,065mm high (Flushing cistern and step measured separately) (Rate per piece).	No	409.50	
644) Supply only urinal end slab 305mm wide x 1,065mm high (Ditto).	No	260.00	
645) Ditto 150mm semi-circular white glazed fireclay urinal floor channels (Per piece of 600mm) (Ditto).	No	162.50	
646) Ditto channel outlet piece including chromium plated grating (Ditto).	No	184.60	
647) Supply only channel stop end piece (Ditto).	No	165.10	
648) Fix only urinal end slab or back slab including bedding in cement mortar (1:3) pointing in white cement, and making good work disturbed (Ditto).	No	80.34	
649) Fix only single bowl urinal complete including connections, adjustments and making good work disturbed.	No	119.08	
650) Fix only urinal channel, channel outlet piece including fixing grating, or channel stop end piece (per piece of 600mm).	No	7.15	
651) Supply only vitrified white clay treads/ steps 150 x 150mm plain or fluted.	No	28.60	
652) Clean urinal range, remove old cement pointing between slabs and between channels, etc. and repaint with new white cement pointing (Rate per 600mm in length).	No	32.50	
653) Take out existing urinal range, remove off site and make good work disturbed.	m	32.50	
654) Take out existing sparge pipe for urinal and replace with new 13mm diameter chromium plated copper sparge pipes with brackets to match and connection.	m	15.60	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
655) Ditto and replace with new 13mm diameter copper sparge pipes with ditto.	m	13.00	
656) Ditto and replace with 13mm diameter galvanised steel sparge pipes with ditto.	m	13.00	
657) Take out existing sparge pipe for urinal Ditto and replace with 13mm stainless steel sparge pipes with brackets to match and connection.	m	15.60	
658) Take out existing urinal flush pipe and replace with new 30mm chromium plated copper flush pipes including providing necessary tee connections.	No	49.40	
659) Take out existing urinal flush pipe and replace with new stainless steel flush pipes.	No	49.40	
660) Take out existing urinal flush pipe and replace with new UPVC flush pipe.	No	10.40	
661) Take out existing trap to urinal and remove off site.	No	1.95	
662) Supply and fix approved cast iron trap to urinal.	No	61.10	
663) Supply and fix brass waste and domical grating for urinal.	No	32.50	
664) Ditto but chromium plated.	No	26.00	
SUPPLY AND FIX "STEEL INDUSTRIES" OR OTHER EQUAL AND APPROVED 18/18 STAINLESS STEEL SLAB TYPE URINAL 1,060MM HIGH X 320MM WIDE IN ONE PIECE ASSEMBLY, COMPLETE WITH END RETURN, CHANNEL, 80MM DIAMETER DOMICAL OUTLET FITTING, STAINLESS STEEL FLUSH PIPE (CONCEALED) AND SPREADER NOZZLE, ETC. INCLUDING ALL NECESSARY CONNECTION AND ADJUSTMENT (FLUSHING CISTERN AND FLUSH PIPE MEASURED SEPARATELY)			
665) 600mm long single stall type.	No	715.00	
666) 1,200mm long slab type.	No	1105.00	
667) 1,800mm long ditto.	No	1352.00	
668) 2,400mm long ditto.	No	1630.20	
669) 3,000mm long ditto.	No	1820.00	
670) 3,600mm long but with two outlet fittings.	No	2275.00	
671) 4,200mm long ditto.	No	2574.00	
<u>MIRROR</u>			
672) Take out existing mirror, remove off site and make good work disturbed.	No	3.25	
673) Take out existing chromium plated brass mirror screw and refix including replace with new including plugging.	No	7.80	
674) Supply and fix 600mm x 450mm x 6mm thick first quality T&K's plate glass mirror with or without bevelled edges, plugged to wall with aluminium plated screws.	No	52.00	
675) Ditto but of any other size.	m²	159.90	
676) Supply and fix `U' shaped aluminium frame to mirror.	m	9.04	
677) 6mm thick clear mirror polished plate glass with copper backing plugged to wall including chromium plated mirror screws and felt washers.	m²	381.51	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
678) 6mm thick tinted mirror ditto.	m²	461.83	
679) 8mm wide bevelling to straight or circular edges including internal mitre and scallops.	m	74.75	
680) 10mm wide ditto.	m	83.42	
681) 12mm wide ditto.	m	92.82	
<u>TOILET ROLL HOLDER</u>			
682) Take out existing white glazed vitreous china toilet roll holder built in wall, remove off site and prepare to receive new or make good with wall tiles to match existing including cutting out wall tiles and making good work disturbed.	No	6.50	
683) Supply and fix 150mm x 150mm white glazed vitreous china semi-recessed or recessed type toilet roll holder built into new or existing wall and pointing around in white/ tinted cement including making good existing wall finish.	No	26.91	
684) Ditto but coloured.	No	29.90	
685) Ditto but screwed to wall type.	No	26.00	
686) Supply and fix approved chromium plated toilet roll holder with locking device, screwed or plugged to wall.	No	39.00	
687) Supply and fix approved chromium plated toilet roll holder recessed type overall size 300mm x 160mm x 55mm, built into new or existing wall.	No	32.50	
688) Ditto but of surface-mounted type with plastic roller, fixed or plugged to wall.	No	19.50	
689) Ditto but of plastic type.	No	7.80	
690) Supply and fix approved surface-mounted stainless steel single roller, fixed or plugged to wall.	No	2.60	
691) Ditto but of approved wooden roller fixed to existing brackets.	No	2.60	
<u>SOAP DISH</u>			
692) Take out existing white or coloured glazed vitreous china soap dish built in wall, remove off site and prepare to receive new or make good with wall tiles to match existing including cutting out wall tiles and making good work disturbed.	No	5.20	
693) Supply and fix 150mm x 150mm white glazed vitreous china semi-recessed or recessed type soap dish built into existing or new wall including cutting out wall tiles and making good work disturbed.	No	25.87	
694) Ditto but coloured.	No	29.12	
695) Supply and fix chromium plated soap dish (double type fixed to wall, long path, etc.	No	13.00	
696) Ditto Stainless steel soap holder.	No	52.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
<u>SOAP DISPENSER</u>			
697) Supply only `Initial' executive soap dispenser.	No	100.10	
698) Fix only soap dispenser including plugging and screwing to wall.	No	6.50	
699) Take out existing white/coloured glazed vitreous china soap dispenser built in wall, remove off site and prepare to receive new or make good with wall tiles to match existing including cutting out additional wall tiles and making good work disturbed (wall tiles measured separately).	No	3.90	
<u>TOWEL RAIL</u>			
700) Supply only `Armitage Shanks' or equivalent chromium plated towel rail 610mm long complete with chromium plated brass brackets.	No	33.80	
701) Ditto but of `MAP SAMSTAR 21.50' or equivalent plastic type, 532mm long.	No	26.00	
702) Fix only towel rail including plugging and screwing to wall.	No	5.20	
703) Take out existing towel rail including brackets, remove off site and make good work disturbed.	No	2.60	
704) Ditto but refix including supplying new chromium plated screws.	No	7.80	
705) Supply and fix 600mm long x 25mm diameter chromium plated brass towel rail complete with two brackets including plugging and screwing to wall.	No	14.30	
<u>GLASS SHELF</u>			
706) Supply and fix 6mm thick x 125mm wide x 600mm long glass shelf with edges ground complete with chromium plated brass brackets screwed to wall.	No	19.50	
707) Ditto but on existing brackets.	No	6.50	
708) Supply and fix in replacement chromium plated galvanised iron brackets for glass shelves.	Set	13.00	
709) Take out glass shelf and brackets, cart away and make good work disturbed.	No	2.60	
710) Take out existing chromium plated brackets, refix with new chromium plated screws and make good work disturbed.	No	2.60	
<u>SHOWER</u>			
711) Supply only `Kludi 60041' or equivalent fixed shower head with ball swivel arm and flange.	No	31.20	
712) Fix only ditto including connections and adjustments to piping.	No	6.50	
713) Take out existing shower rose and remove off site.	No	3.90	
<u>SHOWER</u>			
714) Supply and fix 50mm diameter chromium plated brass adjustable shower rose including connection.	No	59.80	
715) Take out adjustable shower rose and remove off site.	No	3.90	
716) Supply only `Kludi 26205' or equivalent chromium plated spray shower mixer with sliding rail, brackets and telephone shower attachment.	No	128.70	
717) Fix only shower mixer or spray shower complete including plugging and screwing to wall, making connections and adjustment to piping.	No	13.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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718) Take out shower mixer or spray shower complete and remove off site. No 3.90

STOPCOCKS OR BIB-COCKS, GATE VALVE, ETC. AS SPECIFIED (SUPPLY AND FIX)

	Types	Diameter (Rate Per No)							
		15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm
719)	Brass high pressure screw-down stop cocks or bib-cock with crutch handles	13.91	24.18	50.70	112.26	141.64	202.09	277.29	--
720)	Brass tap with hose nozzle	13.00	--	--	--	--	--	--	--
721)	Chromium plated easy clean stop-cock or bib-cock with crutch handles	16.90	---	---	---	---	---	---	--
722)	Brass gate valve	16.25	19.50	24.70	33.80	44.20	72.80	182.00	243.10
723)	Brass non-return valve/check valve	14.95	19.24	26.91	32.20	49.14	75.79	115.31	147.81
724)	Chromium plated Capstan head stop-cock or bib-cock	16.90	---	---	---	---	---	---	---
725)	Brass screw-down stop cocks with detachable handles	14.70	---	---	---	---	---	---	---

726) Supply and fix plastic telephone type shower including brackets and flexible metal tubing not exceeding 1.5m. No 28.60

727) Take out existing telephone shower including ditto and remove off site. No 3.90

TAPS AND VALVES

728) Supply and fix 13mm chromium plated pillar tap for basin or long bath including connections. No 26.00

729) Ditto but longer spout pillar tap. No 31.60

730) Supply and fix 13mm single elbow action pillar tap including connections for basin or sink. No 33.80

731) Supply and fix 13mm chromium plated hot and cold basin mixer tap complete with pop-up waste and including connections. Set 109.20

732) Ditto but of pillar or wall type with adjustable spout for stainless steel sink including connections. Set 91.00

733) Ditto 20mm chromium plated hot and cold long bath mixer tap complete with adjustable leg and including connection. Set 110.50

734) Ditto 13mm chromium plated single swanneck tap for stainless steel sink. No 45.50

735) Ditto 13mm chromium plated combined supply fitting with elbow action levers, anti-splash nozzle and extended inlets. No 104.00

736) Ditto 13mm single swanneck laboratory fitting (two-way). No 117.00

737) Ditto (one-way). No 117.00

738) Fix only spray mixing taps complete including connections. No 31.20

739) Supply and fix in replacement India rubber washer to stop cock or bib-cock. No 1.30

740) Take out existing tap, stop valve or bib-cock, etc. (any type), remove off site and make good work disturbed or prepare to receive new. No 5.20

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
741) Supply only 13mm "Presto P605" or equivalent self closing delayed action basin or bath tap.	No	143.00	
742) Supply only 13mm "Presto P50" or equivalent self closing delayed action shower tap.	No	130.00	
743) Supply only 13mm "Presto P504" or equivalent self closing delayed action bib tap.	No	130.00	
744) Supply only "Presto 605" Tete or equivalent.	No	74.75	
745) Supply only "Presto 29301" or equivalent shower head.	No	128.05	
746) Supply only "Presto 29201" or equivalent shower head.	No	128.05	
747) Supply only "Presto" or equivalent piston.	No	45.50	
748) Supply only 13mm GATTONI Art 400 or equivalent self closing delayed action pillar tap.	No	54.60	
749) Supply only 13mm GATTONI Art 420 or equivalent self7 closing delayed action bib tap.	No	49.40	
750) Supply only 13mm AS-89909 or equivalent self closing delayed action pillar tap.	No	62.40	
751) Supply only 13mm Armitage Shanks - Avon or equivalent self closing delayed action pillar tap.	No	58.50	
752) Supply only 13mm Delabie-745 or equivalent self closing delayed action pillar tap.	No	67.60	
753) Supply only 13mm Delabie-746 or equivalent self closing delayed action bib tap.	No	50.70	
754) Supply only 13mm Delabie-747 or equivalent self closing delayed action shower tap.	No	74.10	
755) Fix only taps, including self-closing delayed action tap to basin, shower or bath, shower tap, bath tap and pillar tap, including taking out existing pipes, taps and refix as necessary.	No	13.65	
756) Supply and fix 'Inax LF1' or equivalent pillar tap.	No	64.03	
757) Ditto 'Toto T205' or equivalent pillar tap.	No	71.90	
758) Ditto Inax Lf 901 or equivalent lever type pillar tap.	No	135.20	
759) Ditto Toto TL606a or equivalent lever type pillar tap.	No	187.60	
760) Ditto 'Inax LF-7-13' or equivalent wall mounted bib tap.	No	40.30	
761) Ditto 'Toto T23B13' or equivalent wall mounted bib tap.	No	41.60	
762) Ditto 'Inax LF2P or equivalent self-closing delay action tap.	No	192.08	
763) Ditto 'Toto T705V12 or equivalent self-closing delay action tap.	No	223.93	
764) Ditto Toto T31AS13 or equivalent wall mounted tap with goose-neck swivel spout.	No	90.74	
765) Supply and fix “ Presto 50” or equivalent self-closing shower valve including D37 shower rose & arm, riser pipe, fixing collar and all necessary fittings.	No	208.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
766) Take out existing gate valve, non-return valve, etc. remove off site and make good work disturbed or prepare to receive new.	No	6.50	
767) Supply only "Hattersley" or equivalent brass pressure relief valve 1600-1000 kpa (75-125 psi).	No	813.80	
768) Ditto 240-600 kpa (30-75 psi).	No	326.30	
769) Fix only pressure relief valve including tapping and all connection.	No	32.50	
770) Supply and fix 25mm diameter polyvinyl chloride ball valve.	No	58.50	
771) Ditto but of 50mm diameter.	No	104.00	
772) Supply and fix approved 100mm diameter brass gate valve.	No	257.40	
773) 80mm diameter cast iron sluice valve complying with BS 5163.	No	379.60	
774) 100mm ditto.	No	417.95	
775) 150mm ditto.	No	618.75	
776) 200mm ditto.	No	624.00	
777) 50mm brass non-return valve.	No	156.00	
778) 75mm ditto.	No	273.00	
779) Take out existing ball valve in tank and remove off site.	No	26.00	
780) Supply and install 75mm diameter high pressure brass valve complete with copper flush arm and copper ball float including all necessary connections.	No	650.00	
781) Ditto but of 100mm diameter.	No	845.00	
782) Replace existing ball valve with 13mm diameter high pressure lead valve complete with copper flush arm and copper ball float including all connections.	No	68.90	
783) Ditto but of 19mm diameter.	No	85.70	
784) Ditto but of 25mm diameter.	No	99.45	
785) Ditto but of 32mm diameter.	No	175.18	
786) Ditto but of 38mm diameter.	No	222.30	
787) Ditto but of 44mm diameter.	No	277.55	
788) Ditto but of 50mm diameter.	No	332.15	
789) Replace existing ball valve with 13mm diameter high pressure lead valve complete with copper flush arm and plastic ball float including all connections.	No	24.05	
790) Ditto but of 19mm diameter.	No	32.76	
791) Ditto but of 25mm diameter.	No	44.85	
792) Ditto but of 32mm diameter.	No	73.06	
793) Ditto but of 38mm diameter.	No	94.20	
794) Ditto but of 44mm diameter.	No	134.80	
795) Ditto but of 50mm diameter.	No	143.65	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

UNIT	\$	¢
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	PLUG AND CHAIN	Rate Per No				
		32mm	34mm	38mm	44mm	50mm
796)	Supply and fix waste fitting, rubber plug with chromium plated chain to existing fitting.	6.50	---	10.40	---	11.70
797)	Ditto rubber plug only to existing chain.	3.25	---	3.90	---	4.55

798)	Ditto chromium plated chain (excluding plug) including taking out existing and removing off site.	No	3.90
799)	Labour only for refixing sink plug or basin.	No	1.95
800)	Ditto chain and plug.	No	1.95

WASTE FITTINGS

801)	Supply and fix 32mm chromium plated waste fitting including all connections.	No	4.42
802)	Ditto but of 38mm.	No	5.20
803)	Ditto 32mm approved plastic waste fitting including all connections.	No	5.85
804)	Supply and fix 38mm approved plastic waste fitting including all connections.	No	7.15
805)	Disconnect and take out existing waste fitting, remove off site and prepare to receive new.	No	1.30

WASTE TRAP (SUPPLY AND FIX)

806)	32mm approved plastic bottle trap in new or replacement including providing tail piece connections and necessary fittings and adjustment to pipe.	No	20.80
807)	38mm ditto.	No	22.10
808)	32mm approved chromium plated brass bottle trap in new or replacement including all connections and adjustment to pipe.	No	18.20
809)	38mm ditto.	No	20.80
810)	30mm approved UPVC bottle trap in ditto.	No	13.00
811)	38mm ditto.	No	13.00
812)	32mm galvanised steel `P' or `S' trap with cleaning eye in ditto.	No	14.30
813)	38mm ditto.	No	15.60
814)	32mm brass trap ditto.	No	24.70
815)	38mm ditto.	No	26.00
816)	38mm diameter approved polyurethane anti . acid `P' or `S' trap in ditto.	No	32.50
817)	38mm diameter approved vulcathene trap in ditto.	No	68.90

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
<u>FLEXIBLE TUBE</u>			
818) Supply and fix 13mm diameter x 300mm stainless steel flexible tube complete with 2 Nos washers and connectors.	No	10.40	
819) Ditto chromium plated copper ditto.	No	7.80	
<u>COAT HANGER (SUPPLY AND FIX)</u>			
820) Chromium plated coat hanger (single).	No	4.55	
821) Ditto (double).	No	5.80	
822) 150mm stainless steel coat hook with rubber buffer.	No	7.54	
<u>STOPCOCK PIT</u>			
823) Supply and install cast iron stopcock pit 225mm x 225mm x 225mm with locking device of approved pattern including necessary excavation, concrete base and brickwork.	No	110.50	
<u>STOPCOCK BOX</u>			
824) Supply and install galvanised steel stopcock box 125mm x 125mm x 125mm with hinges and hooks to receive and including 25mm brass padlock.	No	58.50	
<u>VALVE CHAMBER</u>			
825) Supply and install approved cast iron valve chamber with cover and frame 225mm x 225mm x 400mm including 25mm brass padlock.	No	172.90	
<u>STOPCOCK CHAMBER</u>			
826) Supply and fix concrete chamber 225mm x 225mm x 225mm for stopcock including slab cover.	No	45.50	
827) Ditto but with cast iron cover 150mm x 150mm.	No	55.90	
<u>MIRROR CABINET</u>			
828) Supply only approved single door plastic mirror cabinet.	No	32.50	
829) Fix only mirror cabinet including plugging and screwing to wall.	No	13.00	
<u>SUNDRIES</u>			
SUPPLY LABOUR FOR CLEARING BLOCKAGE FOR THE FOLLOWING ITEMS			
830) Gulley or floor trap (ground floor).	No	19.50	
831) Soil and waste stack and branches (rate per job).	No	91.00	
832) Reuse stack and branches (rate per stack) (new material measured separately).	No	143.00	
833) Floor trap on upper floor.	No	26.00	
834) Water closet pan.	No	32.50	
835) Manhole not exceeding 1.25m deep (rate per job).	No	104.00	
836) Ditto exceeding 1.25m and not exceeding 2.50m deep (ditto).	No	130.00	
837) 100mm drain pipe (ditto).	No	117.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
838) 150mm main drain pipe (rate per job).	No	156.00	
839) Waste pipe to wash basin or sink (ditto).	No	13.00	
840) Ditto but for long bath (ditto).	No	26.00	
841) Labour only for fixing sanitary accessories such as wall mirrors, glass shelf, towel rails, etc.	No	6.50	
842) Hack and make good leak in concrete surround of floor trap on upper floor with waterproof cement mortar.	No	39.00	
843) Provide and form cement surround at base of water closet, flush pipe and squat pan joints to cure leak.	No	7.80	
844) Hack out existing pointing at joint between sink or basin and wall and repoint with white cement.	No	6.50	
845) Labour for clearing obstructions in traps of washhand basin or sink.	No	6.50	
846) Labour for clearing obstructions in floor and gulley traps.	No	13.00	
847) Labour for clearing obstruction in water closet.	No	13.00	
848) Labour for repairing leaking joints of galvanised steel, copper and other pipes (except asbestos) (number of joints measured).	No	19.50	
NOTE: All taking out items should include plugging existing water pipe and making good work disturbed.			
<u>MISCELLANEOUS</u>			
849) Supply and fix `FLOWFIX' or equivalent 13mm diameter constant flow regulator including cutting and adjusting pipes as necessary.	No	20.80	
850) Supply and install 100 x 100mm white glazed vitreous china semi recessed or recessed type soap dish built into new or existing wall including cutting out wall tiles and make good.	No	26.00	
851) Supply and install 150mm diameter cast iron foot valve.	No	205.40	
852) Servicing and repairing of sluice and gate valve inclusive of replacement of packing 100mm diameter.	No	70.20	
853) Ditto 150mm diameter.	No	78.00	
854) Ditto 200mm diameter.	No	91.00	
855) Ditto 300mm diameter.	No	105.30	
856) Break into existing gulley and make connections.	No	55.12	
857) Supply approved 13mm diameter constant flow regulator.	No	11.05	
858) Fix 13mm diameter constant flow regulator.	No	6.50	
859) Supply and fix 13mm Neoperl or equivalent flow limiter.	No	25.35	
860) Supply and fix 63mm fire hydrant laundry valves.	No	384.80	
861) Supply and fix 32mm diameter pressure reducing valve.	No	858.00	
862) Ditto 50mm diameter ditto.	No	1260.87	
863) Ditto 75mm diameter ditto.	No	2425.28	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
864) Supply and fix single bowl, single drainer overall size 600mm x 350mm x 250mm approved stainless steel commercial sink complete with waste fittings, chromium plated chain with plug and a set of painted brackets.	No	247.00	
865) Ditto but double bowls, double drainers overall size 1200mm x 350mm x 250mm ditto.	No	429.00	
866) Supply and fix of 13mm diameter mini ball valve.	No	13.00	
867) Supply and fix of "bossinni" or equivalent bidet spray including remove the existing.	No	41.60	
868) Labour and material for cutting and sealed off existing galvanised pipe from 13mm diameter to 50mm diameter including end cap.	No	26.00	
869) Ditto but exceeding 50mm diameter and above ditto.	No	45.50	
870) Supply and install 100mm diameter water meter.	No	910.00	
871) Supply only 250mm Balson or equivalent water filter Model (54-40) Including holder bracket.	No	339.30	
872) Supply only filter cartridge.	No	57.20	
873) Supply and install Ultimatic L-3 or equivalent Soap Dispenser.	No	57.20	
874) Supply and install Ultimatic P-12 or equivalent Towel Dispenser.	No	117.00	
875) Supply and install 3" x 300# pressure gauge on existing water pipe.	No	78.00	
876) Supply and install 13mm diameter stainless steel bar.	No	13.00	
877) Supply and fix anti-vandalism shower rose “Bestsaver” model E-6010 or equivalent.	No	65.00	
878) Supply and fix “Claytan Aquasaver” or equivalent 3.5 litres suite pedestal closed coupled type.	No	507.00	
879) Supply and fix syphon pump for Johnson Suisse or equivalent cistern.	Set	130.00	
880) Supply and fix WC senor (Rigel AFS-101E or equivalent) exposed type including necessary pipe fittings.	No	780.00	
881) Supply and fix (Rigel AFS-201E or equivalent) urinal senor.	No	585.00	
882) Supply of skill labour to repair flush value.	No	58.50	
883) Take out, wash , flushing nad install back urinal and WC (Servicing flushing sysytem) (part replacment is separate)			
<u>WATER METERS</u>			
884) 15mm diameter "Kent PSM" or other approved equivalent volumetric rotary piston water meter and including all necessary accessories.	No	162.50	
885) 20mm diameter ditto.	No	208.00	
886) 25mm diameter ditto.	No	260.00	
887) 40mm diameter "Kent Helix 2000" or other equal and approved high capacity helical vane type water meter and including all necessary accessories.	No	650.00	
888) 50mm ditto.	No	754.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>METAL HOSE REEL BOX</u>					
889)	Electro galvanised steel hose reel box with vision glass panels complete with door, lock and key, hinges and mounted on wall (surface or recess mounting type).	No		390.00	
<u>Fire Hosereel</u>					
890)	Wall mounted double swivel and recessed hosereel complying with BS 5274 complete with 30m long of 25mm diameter non-kinkable reinforced rubber hose, a jet or spray type shut-off- nozzle, gunmetal control valves, wall brackets and fittings including fixing to wall and painting.	No		533.00	
<u>Fire Hydrant</u>					
891)	100 mm diameter ductile iron hydrant complying with SS CP 29 with double screw outlets, flanged ends including pointing.	No		1878.05	
<u>Fire Extinguishers</u>					
892)	1.5 kg “Combat or equivalent “ABC Dry Chemical dioxide fire extinguisher complying with SS 232 including brackets, plugging and screwing to wall.	No		42.25	
893)	2.5kg ditto.	No		55.71	
894)	4.5kg ditto.	No		105.43	
<u>PIPES FOR STREET LIGHTING</u>					
<u>PIPE CROSSING COMPLETE WITH PILOT FISH WIRE INCLUDING ALL NECESSARY BENDS, ELBOWS, JUNCTIONS, TEES, BRACKETS ETC</u>					
895)	75mm diameter medium duty galvanised iron pipe.	m		23.14	
896)	75mm diameter Class AW heavy duty PVC pipe.	m		13.33	
897)	100mm diameter medium duty galvanised iron pipe.	m		34.06	
898)	100mm diameter Class AW heavy duty PVC pipe.	m		19.25	
<u>TOILET ACCESSORIES</u>					
899)	Supply and install “Calfarme SDW 800” or other approved equivalent soap dispenser.	No		39.00	
900)	Ditto “Calfarme MAD 3500WP” or other approved equivalent metered aerosol dispenser.	No		66.30	
901)	Ditto “Calfarme BCS 500W” or other approved equivalent autofoam sanitizer Dispenser c/w first fluid.	No		89.70	
902)	Supply and install “Calfarme MRT-4” or other approved equivalent multi roll tissue dispenser.	No		59.80	
903)	Ditto “Calfarme Ladybin” or other approved equivalent sanitary disposal unit.	No		66.30	
904)	Ditto “Calfarme Senior A-89 (automatic/die cast aluminium cover)” or other approved equivalent hand dryer.	No		387.40	
905)	Ditto “Calfarme Junior M-88A automatic/ ABS plastic cover)” or other approved equivalent hand dryer.	No		351.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
906) Ditto “Calfarme Junior M-88A (push bottom/ ABS plastic cover)” or other approved equivalent hand dryer.	No	312.00	
907) Ditto “ AWS-PH0788” stainless steel Jumbo Roll Holder for the multi-roll toilet paper holder or other approved equivalent.	No	104.00	
Supply and fix sanitary wares including all necessary fittings and accessories (excluding piping)			
908) Undercounter vanity basin “Johnson Suisse” York- or equivalent white.	No	286.00	
909) Wall hung urinal “Johnson Suisse” –Santana or equivalent.	No	299.00	
910) Squatting water closet “Johnson Suisse “or equivalent clay wood - white	No	273.00	
911) Floor mounted water closet “Johnson Suisse” or equivalent monaca - white complete with cistern and fittings.	No	409.50	
912) Wall hung basin “Boston 500” or equivalent.	No	136.50	
913) Recessed soap dish “Johnson Suisse” or equivalent.	No	45.50	
914.a) Supply and fix “ Rigel” or equivalent Urinal piston	No	52.00	
914.b) Supply and fix “ Rigel” or equivalent WC NB-type piston	No	65.00	
914.c) Supply and fix solenoid valve, 12v, 1/8inlet	No	110.50	
915) Laufen or equivalent toilet bowl	No	136.50	
916) Kitchen faucet tap	No	260.00	
917.a) Geberit or equivalent toilet sensor flushing valve	No	130.00	
917.b) Supply and fix WC Pan collar	No	78.00	
917.c) Push tap for open shower cartridge for SCT2016ck/crk	No	78.00	
917.d) Stainless steel Tap head C/W brass piston for basin self closing	No	39.00	
SEWER/SANITARY DRAINLINE REHABILITATION BY CURED IN PLACE LINING OR EQUIVALENT INCLUDING MOBILIZATION AND DEMOBILIZATION OF COMPLETE SET OF (EQUIPMENTFOR SEWER REHABILITATION WORK, PRE-LINING CLEANING/ CCTV, LINING, POST REHABILITATION CLEANING/ CCTV AND THE SUBMISSION OF REPORT & PHOTOGRAPHS AND OVER PUMPING WORK). NOTE: SOME REHABILITATION WORK ARE EXPECTED TO BE CARRIED OUT WITHIN PRIVATE COMPOUND AND THERE WILL BE RESTRICTIONS ON ACCESS AND WORKING HOURS			
<u>Epoxy Lining Compound</u>			
918) Allow for Type Testing as specified and as directed by the SDC	Item	3900.00	
919) Sewer/Sanitary Drainline epoxy lining of bore not exceeding 152mm dia (Rate shall include for compliance with the requirement for Quality Control and all other necessary measures to complete the lining work. Only this item is applicable for payment of lining work completed)	Lin m	149.50	
920) Ditto for bore exceeding 152mm but less than 300mm dia ditto	Lin m	175.50	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>Polyester Lining Compound</u>					
921)	Allow for Type Testing as specified and as directed by the SDC	Item		5200.00	
922)	Sewer polyester lining of bore 300mm but less than 400mm dia (Rate shall include for compliance with the requirement for Quality Control and all other necessary measures to complete the lining work. Only this item is applicable for payment of lining work completed)	Lin m		286.00	
923)	Ditto for bore 400mm but less than 500mm dia ditto	Lin m		377.00	
924)	Ditto for bore 500mm but less than 600mm dia ditto	Lin m		455.00	
<u>Spiral Wound Lining Compound</u>					
925)	Allow for Type Testing as specified and as directed by the SDC	Item		6500.00	
926)	Spiral Wound lining of bore 350mm but less than 450mm dia sewer (Rate shall include for compliance with the requirement for Quality Control and all other necessary measures to complete the lining work. Only this item is applicable for payment of lining work completed)	Lin m		520.00	
927)	Ditto for bore 450mm but less than 600mm dia ditto	Lin m		715.00	
<u>Lateral Connection Sealing by “Top-Hat” or Equivalent</u>					
928)	Remotely controlled “Top-Hat” or equivalent rehabilitation/repair to lateral connections up to 225mm diameter along lined sewers, including mobilisation of all equipment, cleaning, cutting, over- pumping facilities, Pre & Post CCTV inspection and report.	No		390.00	
<u>Re-expose of Laterals Connections</u>					
929)	Remotely controlled cutting off liner to re-expose lateral connections to lined / existing sewers including making good all disturbed or damaged areas for laterals of all sizes.	No		143.00	
<u>Mechanical Seal</u>					
930)	Supply and install permanent mechanical seal as specified in Contract Specifications.	No		520.00	
Rehabilitation by Local In-situ Pipe Repair (Patch Repair) (including mobilization and demobilization of equipments, pre-condition CCTV, Post CCTV and the submission of report & photographs and overpumping work).					
931)	Remotely controlled repair of sewer by Repair Element Type A.	No		650.00	
932)	Remotely controlled repair of sewer by Repair Element Type B	No		6500.00	
933)	Remotely controlled repair of sewer by robotic means as specified for area up to 0.25 (m2)	No		260.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

	UNIT	\$	¢
<u>Investigation & Rehabilitation of Sewer/Drainline CCTV Inspection</u>			
934) Initial cleaning, CCTV survey and condition evaluation for sewer of bore not exceeding 152mm inclusive of mobilization & demobilization of equipment, submission of CCTV inspection Report and over pumping work.	Lin m	15.60	
935) Ditto for bore exceeding 152mm but not exceeding 300mm ditto	Lin m	19.50	
936) Ditto for bore exceeding 300mm but not exceeding 400mm ditto	Lin m	23.40	
937) Ditto for bore exceeding 400mm but not exceeding 500mm ditto	Lin m	28.60	
938) Ditto for bore exceeding 500mm but not exceeding 600mm ditto	Lin m	37.70	
<u>Pipe Leakage Test</u>			
939) Conduct pipe leakage test (from I.C to manhole/I.C) in sewers / sanitary drain-lines of dia 100-200mm including mobilization of equipment and over pumping work.	Lin m	14.30	
940) Ditto of 225mm dia and up to 305mm dia ditto	Lin m	18.20	
<u>Manhole/I.C Leakage Test</u>			
941) Conduct leakage test in manhole / inspection chamber including mobilization of equipment and over pumping work)	No	130.00	
<u>Mobilisation of Equipment</u>			
942) Mobilisation of all necessary transport, plant, equipment and labour for the Replacement/ Repair/ laying of pipe by open excavation and demobilization upon completion of works.	No	325.00	
<u>Excavation by Mechanical Mean (Excavator)</u>			
943) Mobilisation of all necessary transport, plant, equipment and labour for the Replacement/ Repair/ laying of pipe by open excavation and demobilization upon completion of works.	No	325.00	
944) Supply all transport, plant, equipment & labour for bulk excavation to a depth not exceeding 1.5m from ground level to pipe invert level. (for jacking shaft, laying and repairing of new and existing sewerage pipes and construction and repair of new and existing manholes)	Cu m	88.40	
Rate of excavation including: • Excavation in all materials including reinforcement concrete metalled road, rock & car park which require the use of pneumatic • Adequate necessary timbering (sheet pile shall be measured separately) • Pump out water from trench • Remove, part return, fill in and ram including removing surplus excavated material off site or deposit, spread and level on site as directed by the • Removal of extra and unsuitable soil.			
945) Ditto exceeding 1.50m but not exceeding 3.00m ditto	Cu m	110.50	
946) Ditto exceeding 3.00m but not exceeding 4.50m ditto	Cu m	149.50	
947) Ditto exceeding 4.50m but not exceeding 6.00m ditto	Cu m	192.40	
948) Ditto exceeding 6.00m	Cu m	260.00	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>Backfilling</u>					
949)	Extra over for obtaining approved earth filling from Contractor's own sources, free from large stones and lumps, transport to site, deposit, spread, level and mechanically ram and consolidate in layers not exceeding 300mm thick in trench backfilling		Cu m	28.60	
950)	Ditto for approved quarry dust ditto		Cu m	66.30	
951)	Ditto for approved sand/recycled concrete waste ditto		Cu m	66.30	
952)	Ditto for cement/quarry dust mix (1:10 by weight) ditto		Cu m	88.40	
953)	Allow for timbering, planking, runners, wallings, struts, etc. to be left in the excavation as instructed by the SDC including cutting off and allowance for waste		Cu m	326.30	
<u>Laying Of Pipe</u>					
954)	Supply and lay up to 150mm dia. approved type vitrified clay pipe with flexible rubber ring joint and Grade 25 concrete bedding Type D Section including formwork & forming break in concrete bedding at joints and all necessary construction plant & equipment as specified. (Approx min. concrete qty. 0.198 cu m per lin m)		Lin m	162.50	
955)	Supply and lay 200mm dia. approved type vitrified clay pipe with flexible rubber ring joint and Grade 25 concrete bedding Type D Section including formwork & forming break in concrete bedding at joints and all necessary construction plant & equipment as specified. (Approx min. concrete qty. 0.220 cu m per lin m)		Lin m	192.40	
956)	Supply and lay 225mm dia. approved type vitrified clay pipe with flexible rubber ring joint and Grade 25 concrete bedding Type D Section including formwork & forming break in concrete bedding at joints and all necessary construction plant & equipment as specified. (Approx min. concrete qty. 0.231 cu m per lin m)		Lin m	208.00	
957)	Supply and lay 250mm dia. approved type vitrified clay pipe with flexible rubber ring joint and Grade 25 concrete bedding Type D Section including formwork & forming break in concrete bedding at joints and all necessary construction plant & equipment as specified (Approx min. concrete qty. 0.268 cu m per lin m)		Lin m	252.20	
958)	Ditto 300mm dia. Ditto. (Approx min. concrete qty. 0.268 cu m		Lin m	312.00	
959)	Ditto 350mm dia. Ditto. (Approx min. concrete qty. 0.362 cu m		Lin m	430.30	
960)	Ditto 375mm dia. Ditto. (Approx min. Concrete qty. 0.372 cu m		Lin m	474.50	
961)	Ditto 400mm dia. Ditto. (Approx min. Concrete qty. 0.380 cu m		Lin m	520.00	
962)	Ditto 450mm dia. Ditto. (Approx min. Concrete qty. 0.390 cu m		Lin m	608.40	
963)	Ditto 500mm dia. Ditto. (Approx min. Concrete qty. 0.540 cu m		Lin m	712.40	

FIXED SCHEDULE OF RATES

SECTION 9 - PLUMBING

			UNIT	\$	¢
<u>Ductile iron pipes</u>					
964)	20 Supply and lay up to 150mm dia. approved type K9 ductile iron pipe with flexible rubber ring joint and Grade 25 concrete bedding Type 'D' Section including formwork and forming break in concrete bedding at joints all as specified.	Lin m		236.60	
965)	Ditto 200 mm dia ditto	Lin m		296.40	
966)	Ditto 300 mm dia ditto	Lin m		326.30	
967)	Ditto 350 mm dia ditto	Lin m		370.50	
968)	Ditto 400 mm dia ditto	Lin m		460.20	
969)	Ditto 450 mm dia ditto	Lin m		534.30	
970)	Ditto 500 mm dia ditto	Lin m		608.40	
<u>Reinforced concrete pipe</u>					
<u>Y-junction</u>					
971)	Supply and lay 300mm dia. Class ‘H’ approved type reinforced concrete pipe with flexible rubber ring joint and Grade 25 concrete bedding Type ‘D’ section including formwork and forming break in concrete bedding at joints all as specified (Approx. min. Concrete qty. 0.342 cu m per lin m)	Lin m		296.40	
972)	Ditto 375mm dia. Ditto. (Approx. min. concrete qty. 0.372 cu m	Lin m		370.50	
973)	Ditto 450mm dia. Ditto. (Approx. min. concrete qty. 0.394 cu m	Lin m		444.60	
974)	Extra over supply and lay 150mm x 150mm x 150mm Vitrified clay Y- Junction	No		117.00	
975)	Ditto 525mm dia. Ditto.	Lin m		520.00	
976)	Ditto 225mm x 225mm x 150mm ditto	No		132.60	
977)	Ditto 225mm x 225mm x 225mm ditto	No		148.20	
978)	Ditto 300mm x 300mm x 300mm ditto	No		296.40	

Fixed Schedule of Rates
Section 10 – Glazing

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
<u>GLAZING</u>			
<u>ORDINARY GLAZING QUALITY SHEET GLASS CUT TO REQUIRED SIZE AND FIXED IN WOOD OR METAL (NEW BEADS MEASURED SEPARATELY)</u>			
1) 4mm thick in panes not exceeding 0.10m ² .	m ²	37.00	
2) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	32.00	
3) Ditto panes exceeding 0.50m ² .	m ²	29.00	
4) 5mm thick in panes not exceeding 0.10m ² .	m ²	42.00	
5) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	35.50	
6) Ditto panes exceeding 0.50m ² .	m ²	33.00	
7) 6mm thick in panes not exceeding 0.10m ² .	m ²	46.00	
8) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	40.30	
9) Ditto panes exceeding 0.50m ² .	m ²	37.40	
10) 8mm thick in panes not exceeding 0.10m ² .	m ²	47.50	
11) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	44.00	
12) Ditto panes exceeding 0.50m ² .	m ²	41.00	
<u>CLEAR FLOAT GLASS CUT TO REQUIRED SIZE AND FIXED IN WOOD OR METAL (NEW BEADS MEASURED SEPARATELY)</u>			
13) 5mm thick in panes not exceeding 0.10m ² .	m ²	50.00	
14) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	46.00	
15) Ditto panes exceeding 0.50m ² .	m ²	43.00	
16) 6mm thick in panes not exceeding 0.10m ² .	m ²	69.00	
17) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	55.00	
18) Ditto panes exceeding 0.50m ² .	m ²	51.00	
19) 8mm thick in panes not exceeding 0.10m ² .	m ²	79.00	
20) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	72.00	
21) 8mm thick in panes exceeding 0.50m ² .	m ²	71.00	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
22) 10mm thick in panes not exceeding 0.10m ² .	m ²	138.00	
23) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	132.00	
24) Ditto panes exceeding 0.50m ² .	m ²	124.00	
25) 12mm thick in panes not exceeding 0.10m ² .	m ²	173.00	
26) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	167.00	
27) Ditto panes exceeding 0.50m ² .	m ²	164.00	
<u>TINTED FLOAT GLASS CUT TO REQUIRED SIZE AND FIXED IN WOOD OR METAL (NEW BEADS MEASURED SEPARATELY)</u>			
28) 5mm thick in panes not exceeding 0.10m ² .	m ²	64.00	
29) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	60.00	
30) Ditto panes exceeding 0.50m ² .	m ²	58.00	
31) 6mm thick in panes not exceeding 0.10m ² .	m ²	72.00	
32) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	68.00	
33) Ditto panes exceeding 0.50m ² .	m ²	65.00	
34) 8mm thick in panes not exceeding 0.10m ² .	m ²	100.00	
35) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	94.00	
36) Ditto panes exceeding 0.50m ² .	m ²	91.00	
37) 10mm thick in panes not exceeding 0.10m ² .	m ²	244.00	
38) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	240.00	
39) Ditto panes exceeding 0.50m ² .	m ²	230.00	
40) 12mm thick in panes not exceeding 0.10m ² .	m ²	245.00	
41) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	252.00	
42) Ditto panes exceeding 0.50m ² .	m ²	246.00	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
<u>CLEAR LAMINATED FLOAT GLASS CUT TO REQUIRED SIZE AND FIXED IN WOOD OR METAL (NEW BEADS MEASURED SEPARATELY)</u>			
43) 6mm thick in panes not exceeding 0.10m ² .	m ²	117.00	
44) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	109.00	
45) Ditto panes exceeding 0.50m ² .	m ²	105.00	
46) 8mm thick in panes not exceeding 0.10m ² .	m ²	153.00	
47) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	148.00	
48) Ditto panes exceeding 0.50m ² .	m ²	137.00	
49) 10mm thick in panes not exceeding 0.10m ² .	m ²	205.00	
50) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	198.00	
51) Ditto panes exceeding 0.50m ² .	m ²	193.00	
52) 12mm thick in panes not exceeding 0.10m ² .	m ²	242.00	
53) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	230.00	
54) Ditto panes exceeding 0.50m ² .	m ²	221.00	
<u>TINTED LAMINATED FLOAT GLASS CUT TO REQUIRED SIZE AND FIXED IN WOOD OR METAL (NEW BEADS MEASURED SEPARATELY)</u>			
55) 6mm thick in panes not exceeding 0.10m ² .	m ²	150.00	
56) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	120.00	
57) Ditto panes exceeding 0.50m ² .	m ²	110.00	
58) 8mm thick in panes not exceeding 0.10m ² .	m ²	280.00	
59) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	152.00	
60) Ditto panes exceeding 0.50m ² .	m ²	147.00	
62) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	230.00	
63) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	221.00	
64) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	281.00	
65) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	271.00	
66) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	262.00	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

		UNIT	\$	¢
<u>OBSCURED GLASS IN LOUVRES WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>				
67)	100mm x 5mm thick.	m	5.10	
68)	100mm x 6mm thick.	m	6.50	
69)	150mm x 5mm thick.	m	7.00	
70)	150mm x 6mm thick.	m	8.70	
71)	Add or deduct for each 25mm variation in width of louvre 5mm thick.	m	1.00	
72)	Add or deduct for each 25mm variation in width of louvre 6mm thick.	m	1.50	
<u>CLEAR FLOAT GLASS IN LOUVRES WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>				
73)	100mm x 5mm thick.	m	4.70	
74)	100mm x 6mm thick.	m	6.50	
75)	150mm x 5mm thick.	m	6.70	
76)	150mm x 6mm thick.	m	7.70	
77)	Add or deduct for each 25mm variation in width of louvre 5mm thick.	m	1.00	
78)	Add or deduct for each 25mm variation in width of louvre 6mm thick.	m ²	1.20	
<u>TINTED FLOAT GLASS IN LOUVRES WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>				
79)	100mm x 5mm thick.	m	6.00	
80)	100mm x 6mm thick.	m	6.50	
81)	150mm x 5mm thick.	m	8.00	
82)	150mm x 6mm thick.	m	9.00	
83)	Add or deduct for each 25mm variation in width of louvre 5mm thick.	m	1.30	
84)	Add or deduct for each 25mm variation in width of louvre 6mm thick.	m	1.50	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
<u>CLEAR FLOAT TOUGHENED GLASS IN PANELS OR DOORS WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>			
85) 6mm thick in panes not exceeding 0.10m ² .	m ²	130.00	
86) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	104.00	
87) Ditto panes exceeding 0.50m ² .	m ²	100.00	
88) 8mm thick in panes not exceeding 0.10m ² .	m ²	215.00	
89) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	133.00	
90) Ditto panes exceeding 0.50m ² .	m ²	133.00	
91) 10mm thick in panes not exceeding 0.10m ² .	m ²	192.00	
92) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	186.00	
93) Ditto panes exceeding 0.50m ² .	m ²	182.00	
94) 12mm thick in panes not exceeding 0.10m ² .	m ²	240.00	
95) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	230.00	
96) Not in use			
<u>TINTED FLOAT TOUGHENED GLASS IN PANELS OR DOORS WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>			
97) 6mm thick in panes not exceeding 0.10m ² .	m ²	150.00	
98) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	120.00	
99) Ditto panes exceeding 0.50m ² .	m ²	120.00	
100) 8mm thick in panes not exceeding 0.10m ² .	m ²	270.00	
101) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	160.00	
102) Ditto panes exceeding 0.50m ² .	m ²	160.00	
103) 10mm thick in panes not exceeding 0.10m ² .	m ²	245.00	
104) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	235.00	
105) Ditto panes exceeding 0.50m ² .	m ²	220.00	
106) 12mm thick in panes not exceeding 0.10m ² .	m ²	285.00	
107) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	275.00	

FIXED SCHEDULE OF RATES

SECTION 10 – GLAZING

	UNIT	\$	¢
108) Ditto panes exceeding 0.50m ² .	m ²	265.00	
<u>CLEAR TEMPERED FLOAT GLASS IN PANELS OR DOORS WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>			
109) 6mm thick in panes not exceeding 0.10m ² .	m ²	130.00	
110) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	125.00	
111) Ditto panes exceeding 0.50m ² .	m ²	110.00	
112) 8mm thick in panes not exceeding 0.10m ² .	m ²	220.00	
113) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	165.00	
114) Ditto panes exceeding 0.50m ² .	m ²	165.00	
115) 10mm thick in panes not exceeding 0.10m ² .	m ²	280.00	
116) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	265.00	
117) Ditto panes exceeding 0.50m ² .	m ²	250.00	
118) 12mm thick in panes not exceeding 0.10m ² .	m ²	400.00	
119) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	385.00	
120) Ditto panes exceeding 0.50m ² .	m ²	370.00	
<u>TINTED TEMPERED FLOAT GLASS IN PANELS OR DOORS WITH ENDS HOUSED IN GROOVES OF TIMBER FRAME OR FIXED TO METAL CLIPS (NEW BEADS MEASURED SEPARATELY)</u>			
121) 6mm thick in panes not exceeding 0.10m ² .	m ²	155.00	
122) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	140.00	
123) Ditto panes exceeding 0.50m ² .	m ²	130.00	
124) 8mm thick in panes not exceeding 0.10m ² .	m ²	280.00	
125) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	260.00	
126) Ditto panes exceeding 0.50m ² .	m ²	245.00	
127) 10mm thick in panes not exceeding 0.10m ² .	m ²	430.00	
128) Ditto panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	415.00	
129) Ditto panes exceeding 0.50m ² .	m ²	400.00	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
130) 12mm thick in panes not exceeding 0.10m ² .	m ²	490.00	
131) 12mm thick in panes exceeding 0.10m ² and not exceeding 0.50m ² .	m ²	475.00	
132) Ditto panes exceeding 0.50m ² .	m ²	460.00	
MISCELLANEOUS			
133) Take out existing glass either whole or broken, in casements, doors, frames, etc. clear away debris, clean and prepare rebates and beads for reglazing.	m ²	5.00	
134) Take out existing glass louvres (any size) from doors, windows, vents, louvred frames, etc. and return to Store or cart away as directed to set aside for re-use.	No	1.00	
135) Cut out existing damaged putty from casements, doors, frames, asbestos cement or precast concrete vents, clear away debris, clean and prepare for new putty.	m	1.00	
136) Ditto and re-putty.	m	1.40	
137) Take from stock and refix existing glass to wood or metal frames with and including beads and/or putty.	m ²	60.00	
138) Ditto including cutting to required sizes.	m ²	12.00	
139) Cutting holes in glazing to form square openings irrespective of size to receive fitting.	No	14.00	
140) Ditto to form circular openings ditto.	No	16.00	
141) Tinting new or existing glass louvres, panes etc. with approved tinting film executed in accordance with manufacturer's instruction not exceeding 18.60m ² .	m ²	75.00	
142) Ditto exceeding 18.60m ² .	m ²	30.00	
143) Extra labour for polishing edges.	m	1.50	
144) Supply and line polyester film sheeting in accordance to manufacturer's instructions.	m ²	17.00	
145) Supply and apply silicon sealant to joint.	m	2.50	
146) Supply and fix rubber gaskets for glazing to edge of glass panes.	m	1.50	
147) Supply and install convex mirror 32" diameter complete with sun visor, heavy duty for outdoor use including 3" diameter galvanised pole.	No	495.00	

FIXED SCHEDULE OF RATES**SECTION 10 – GLAZING**

	UNIT	\$	¢
148) Supply and install 17.52mm laminated clear glass with two(2) side tempered including removal of existing broken glass.	m ²	1,800.00	
149) Supply and install 13.52mm tempered laminated clear glass including removal of existing broken glass.	m ²	750.00	
150) Supply and install 12.76mm tempered laminated clear glass including removal of existing broken glass.	m ²	520.00	
<u>SOLAR SUN-X OR EQUIVALENT</u>			
151) Supply and fix Solar" Sun-X film 8815W2 or equivalent Bronze/Sliver" film sheeting to glass surface.	m ²	50.00	
152) Supply and fix Solar" Sun-X film 9020.22 or equivalent Bronze/Sliver/Bronze" film sheeting to glass surface.	m ²	50.00	
153) Supply and fix Solar" Sun-X film 8815TI or equivalent Titanium-Grey" film sheeting to glass surface.	m ²	35.00	
154) Supply and install 20mm ceramic frit pattern glass panel including removal of existing broken glass.	m ²	3,250.00	

Fixed Schedule of Rates
Section 11 – Painting and Decorating

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

UNIT	\$	¢
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PAINTING & DECORATING (All paint referred to be SMART paint Eco-wash Odourless)**SURFACE PREPARATION AND TREATMENT****EXISTING PREVIOUSLY DECORATED/NON DECORATED CONCRETE, BRICK OR HOLLOW SURFACES, PLASTERED BLOCK SURFACES, PLAIN, PERFORATED OR GRILLED ASBESTOS SURFACES, PRECAST CONCRETE VENTS, ETC. (MEASURED FLAT OVERALL)**

- | | | |
|---|----------------|------|
| 1) Prepare surfaces as specified, wash down with water and chlorox or other approved detergent to remove all vegetable growth, loose paintwork and other surface contaminants, allow to dry and make good surfaces damaged to receive new painting. | m ² | 2.00 |
| 2) Prepare surfaces as specified, using high pressure water cleaner or other mechanical means to remove all existing paintwork and wash down all vegetable growths, dirt and other surface contaminants, allow to dry and make good damaged surfaces to receive new painting. | m ² | 8.00 |
| 3) Mechanically grind down to remove all existing paintwork to bare plaster, wash down, allow to dry and prepare surfaces as specified to receive new painting. | m ² | 7.50 |
| 4) Brush down and apply one coats of anti-fungus solution. | m ² | 1.50 |
| 5) Brush down and apply one base coat 20% dilution of acrylic emulsion paint used both interior and exterior decoration. | m ² | 2.00 |
| 6) Brush down and apply one coat of oil base wall sealer. | m ² | 2.00 |
| 7) Brush down and apply one coat of water base wall sealer. | m ² | 2.00 |
| 8) Brush down and apply one coat polyurethane clear coating (2 packs system) (dilution as recommended by paint manufacturer). | m ² | 3.00 |
| 9) Prepare wall, size and hang only wall paper including adhesive. | m ² | 2.00 |

NEW CONCRETE, BRICK OR HOLLOW BLOCK SURFACES, PLASTERED SURFACES, NEW FIBREBOARD SURFACES, PLAIN, PERFORATED OR GRILLED ASBESTOS SURFACES, PRECAST CONCRETE VENTS, ETC. (MEASURED FLAT OVERALL)

- | | | |
|---|----------------|------|
| 10) Prepare and apply one base coat of 20% dilution, one undercoat and one finishing coat of acrylic emulsion paint. | m ² | 4.00 |
| 11) Prepare and apply one base coat of cement paint, one undercoat and one finishing coat of acrylic emulsion paint. | m ² | 5.00 |
| 12) Prepare and apply one coat of anti-alkali sealer, one undercoat and one finishing coat of PVA based emulsion paint. | m ² | 5.00 |

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
13) Prepare and apply one coat of oil based anti-alkali sealer, one undercoat and one finishing coat of acrylic emulsion paint.	m ²	5.00	
14) Prepare and apply one coat of epoxy primer and two coats of polyurethane paint.	m ²	11.50	
15) Prepare and apply two coats of anti-fungus solution.	m ²	2.00	
16) Prepare as specified and apply one base coat 20% dilution of acrylic emulsion paint used for both interior decoration.	m ²	2.00	
17) Prepare and apply one base coat and one finishing coat of enamel paint to concrete or timber surface in camouflage pattern (applicable when the painting work is required to be carried out in stages).	m ²	5.00	
18) Prepare and apply one base coat and one finishing coat of enamel paint to wiremesh, expanded metal, BRC fabric etc in camouflage pattern and ditto.	m ²	7.00	
19) Prepare and apply one base coat and one finishing coat of enamel paint to metal gate or grille work etc in camouflage pattern (applicable when the painting work is required to be carried out in stages).	m ²	7.50	
20) Prepare as specified and apply one coat of oil base wall sealer.	m ²	2.00	
21) Prepare as specified and apply one coat of water base wall sealer.	m ²	2.00	
22) Prepare and apply one undercoat of enamel paint.	m ²	2.00	
23) Prepare and apply one finishing coat of enamel paint.	m ²	2.00	
<u>SURFACE APPLICATION</u>			
24) Brush down and apply one finishing coat of acrylic emulsion paint used for both interior and exterior decoration.	m ²	2.00	
25) Brush down and apply one finishing coat of synthetic emulsion paint used for interior decoration only.	m ²	2.00	
26) Brush down and apply one undercoat of enamel paint.	m ²	2.00	
27) Brush down and apply one finishing coat of enamel paint.	m ²	2.00	
28) Brush down and apply two finishing coats of "sandtex matt" or other approved equivalent.	m ²	15.00	
29) Brush down and apply three finishing coats of epoxy chemical resistant finish paint	m ²	6.00	
30) Brush down and apply two finishing coats of anti-fungus acrylic emulsion paint.	m ²	3.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
31) Brush down and apply two finishing coats of weathershield finished acrylic emulsion paint.	m ²	3.50	
(NOTE :Rates for more than one or two coats shall be pro-rata).			
<u>WOODWORK</u>			
<u>SURFACE PREPARATION AND TREATMENT</u>			
<u>NEW WORK</u>			
32) Apply one coat of wood preservative on surfaces of timber (All surfaces measured flat superficial).	m ²	2.50	
33) Apply two coats of ditto.	m ²	4.00	
34) Apply one coat of aluminium wood primer ditto	m ²	3.00	
35) Apply two coats of aluminium wood primer ditto.	m ²	9.00	
36) Apply two coats of stain and two coat of wax polish ditto.	m ²	6.50	
37) Apply two coats of varnish ditto	m ²	11.00	
38) Apply one coat aluminium wood primer, one undercoat and two finishing coats of gloss solid colour of synthetic enamel paint ditto.	m ²	10.00	
39) Apply one coat aluminium wood primer, and two finishing coats of semi-gloss solid colour of synthetic enamel paint ditto.	m ²	8.00	
40) Apply two coats of "Hickson wood stain" or other approved equivalent on surfaces of timber	m ²	6.00	
41) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.50	
42) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	3.00	
43) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.50	
44) Surfaces not exceeding 100mm girth.	m	0.50	
45) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.70	
46) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
47) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	3.00	
48) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	3.20	
49) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	3.00	
50) Surfaces not exceeding 100mm girth.	m	0.50	
51) Surfaces exceeding 100mm and not exceeding 200mm girth.	m	0.70	
52) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.00	
<u>RUB DOWN AND APPLY ONE COAT OF "DULUX TIMBERTONE" TRANSPARENT FINISH OR OTHER EQUAL AND APPROVED LACQUER OR POLYURETHANE WOOD SEAL VARNISH AND POLISH TO APPROVAL</u>			
53) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	3.50	
54) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	4.00	
55) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	3.00	
56) Surfaces not exceeding 100mm girth.	m	0.60	
57) Ditto exceeding 100mm and not exceeding 200mm girth.	m	1.20	
58) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.20	
<u>KNOT, STOP, SAND, CLEAN WITH WHITE SPIRIT AND APPLY ONE COAT OF VARNISH ON :</u>			
59) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.70	
60) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	3.00	
61) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of doors and windows).	m ²	2.50	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
62) Surfaces not exceeding 100mm girth.	m	0.40	
63) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.80	
64) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.10	
<u>EXISTING PAINTED SURFACES OF WOODWORK</u>			
65) Apply one coat of wood preservative on surfaces of timber (All surfaces measured flat superficial).	m ²	2.50	
66) Apply two coats of ditto.	m ²	3.70	
67) Apply one coat of aluminium wood primer ditto.	m ²	3.00	
68) Apply two coats of aluminium wood primer ditto.	m ²	4.00	
69) Apply two coats of stain and two coat of wax polish ditto.	m ²	7.00	
70) Apply two coats of varnish ditto.	m ²	6.00	
71) Apply one coat aluminium wood primer, one undercoat and two finishing coats of synthetic enamel paint ditto.	m ²	5.00	
72) Apply two coats of "Hickson wood stain" or other approved equivalent on surfaces of timber.	m ²	5.00	
<u>SANDPAPER, STOP AND PREPARE TO RECEIVE NEW PAINTWORK</u>			
73) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	0.60	
74) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	0.70	
75) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	0.60	
76) Surfaces not exceeding 100mm girth.	m	0.25	
77) Ditto exceeding 100mm and not exceeding 00mm girth.	m	0.30	
78) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.35	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>PREPARE, CLEAN WITH WHITE SPIRIT AND APPLY ONE COAT OF WOOD</u>			
79) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
80) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.50	
81) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
82) Surfaces not exceeding 100mm girth.	m	0.40	
83) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
84) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.00	
<u>SANDPAPER, STOP AND CLEAN WITH WHITE SPIRIT TO RECEIVE NEW PAINTWORK</u>			
85) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	0.70	
86) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	0.80	
87) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with two or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	0.60	
88) Surfaces not exceeding 100mm girth.	m	0.30	
89) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.40	
90) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.45	
<u>SANDPAPER, CLEAN WITH WHITE SPIRIT AND APPLY ONE COAT OF STAIN ON :</u>			
91) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
92) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.50	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
93) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.00	
94) Surfaces not exceeding 100mm girth.	m	0.40	
95) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
96) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.35	
<u>SURFACE APPLICATION</u>			
<u>RUB DOWN AND APPLY ONE UNDERCOAT OF ENAMEL PAINT ON :</u>			
97) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.00	
98) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	1.80	
99) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	1.70	
100) Surfaces not exceeding 100mm girth.	m	0.40	
101) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
102) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.90	
103) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
104) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.00	
105) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	1.85	
106) Surfaces not exceeding 100mm girth.	m	0.60	
107) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.70	
108) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.90	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>RUB DOWN AND APPLY ONE COAT OF STAIN ON :</u>			
109) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
110) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.20	
111) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	1.60	
112) Surfaces not exceeding 100mm girth.	m	0.50	
113) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
114) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.80	
<u>RUB DOWN AND APPLY ONE COAT OF VARNISH ON :</u>			
115) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	5.00	
116) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.00	
117) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	1.90	
118) Surfaces not exceeding 100mm girth.	m	0.50	
119) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.70	
120) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.90	
<u>RUB DOWN AND APPLY ONE COAT OF SHELLAC ON :</u>			
121) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
122) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.20	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
123) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	1.85	
124) Surfaces not exceeding 100mm girth.	m	0.50	
125) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
126) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.80	
<u>RUB DOWN AND APPLY ONE COAT OF WAX POLISH AND POLISH TO APPROVAL</u>			
127) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.30	
128) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	2.40	
129) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	2.00	
130) Surfaces not exceeding 100mm girth.	m	0.50	
131) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.60	
132) Ditto exceeding 200mm and not exceeding 300mm girth.	m	0.90	
<u>RUB DOWN AND APPLY TWO COAT OF "TIMBER COLOUR" ACRYLIC EMULSION PAINT TO WOOD SURFACES</u>			
133) General surfaces of chicks, doors, windows, fitments, partitions, etc. including frames, mullions and transoms (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	4.50	
134) General surfaces of wooden trelliswork (measured flat overall between external edges of frames).	m ²	5.00	
135) General surfaces of windows, doors, fanlights, partitions, etc. including frames, mullions and transoms, with one or more panels glazed (measured flat overall between external edges of frames or external edges of doors and windows).	m ²	4.40	
136) Surfaces not exceeding 100mm girth.	m	0.60	
137) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.90	
138) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.30	
139) Prepare and apply two coat of vanish.	m	12.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>METALWORK</u>			
<u>NEW SURFACES</u>			
140) Prepare and apply one coat primer sealer, one undercoat of and two finishing coats of synthetic enamel paint.	m ²	10.00	
141) Prepare and apply one primer sealer, and two finishing coats of polyurethane paint.	m ²	10.00	
142) Prepare and apply one coat of primer, and two finishing coats of epoxy paint.	m ²	11.00	
143) Prepare and apply two coats of zinc chromate primer, one undercoat of and two finishing coats of enamel paint.	m ²	15.00	
144) Prepare and apply one coat etching primer and two finishing coats of polyurethane paint.	m ²	10.00	
145) Prepare and apply one coat etching primer, one undercoat of and two finishing coats of synthetic enamel paint.	m ²	11.50	
146) Prepare and apply two coats zinc chromate primer , one undercoat of and two finishing coats of synthetic enamel paint.	m ²	14.00	
<u>NEW OR EXISTING PAINTED SURFACES OF METALWORK</u>			
<u>BRUSH DOWN WITH STEEL WIRE BRUSH TO REMOVE ALL RUST, PREPARE AND APPLY ONE COAT OF APPROVED RED LEAD PRIMER ON :</u>			
147) Glazed metal windows or doors and metal surround or jambs, head and cill (measured flat overall between external edges of frames).	m ²	2.00	
148) Collapsible gate, metal gate, grille work, etc. (measured flat overall and rate inclusive of painting to both sides).	m ²	4.40	
149) General surfaces (measured flat overall).	m ²	2.80	
150) Pipes, bars, angles, barbed wires, etc. not exceeding 100mm girth.	m	0.60	
151) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.80	
152) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.20	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>BRUSH DOWN WITH STEEL WIRE BRUSH TO REMOVE ALL RUST, PREPARE AND APPLY ONE COAT OF ZINC CHROMATE PRIMER ON :</u>			
153) Glazed metal windows or doors and metal surround or jambs, head and cill (measured flat overall between external edges of frames).	m ²	1.70	
154) Wiremesh, expanded metal, BRC fabric, etc. (measured flat overall and rate inclusive of painting to both sides).	m ²	3.80	
155) Collapsible gate, metal gate, grille work, etc. (ditto).	m ²	4.30	
156) General surfaces (measured flat overall).	m ²	2.90	
157) Pipes, bars, angles, barbed wires, etc. not exceeding 100mm girth.	m	0.65	
158) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.90	
159) Ditto exceeding 200mm and not exceeding . 300mm girth.	m	1.00	
<u>PREPARE PREVIOUS PAINTED SURFACES BY REMOVING ALL DEFECTIVE PAINT TO BARE METAL, CLEAN WITH APPROVED RUST REMOVER SOLUTION, WASH WITH WATER, LEAVE TO DRY AND THEN APPLY ONE COAT OF APPROVED RED LEAD PRIMER ON :</u>			
160) Glazed metal windows and metal surround or jambs, head and cill (measured flat overall between external edges of frames).	m ²	3.00	
161) Collapsible gate or grillwork, etc. (measured flat overall and rate inclusive of painting to both sides).	m ²	6.80	
162) General surfaces (measured flat overall).	m ²	5.30	
163) Pipes, bars, angles, adjustable louvred frames, etc. not exceeding 100mm girth.	m	0.80	
164) Ditto exceeding 100mm and not exceeding 200mm girth.	m	1.30	
165) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.80	
166) Glazed metal windows and metal surround or jambs, head and cill (measured flat overall between external edges of frames).	m ²	2.90	
167) Wiremesh, expanded metal, BRC fabric, etc. (measured flat overall and rate inclusive of painting to both sides).	m ²	5.70	
168) Collapsible gate or grillwork, etc. (ditto).	m ²	6.80	
169) General surfaces (measured flat overall).	m ²	5.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
170) Pipes, bars, angles, adjustable louvred frames, etc. not exceeding 100mm girth.	m	0.80	
171) Ditto exceeding 100mm and not exceeding 200mm girth.	m	1.30	
172) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.80	
Item no 173 – 211 (Not in Use)			
<u>RUB DOWN AND APPLY ONE COAT OF ETCH PRIMER ON :</u>			
212) Wiremesh, expanded metal, BRC fabric, etc. (measured flat overall and rate inclusive of painting to both sides).	m ²	2.90	
213) Collapsible gate or grillwork, etc. (ditto).	m ²	3.50	
214) General surfaces (measured flat overall).	m ²	2.00	
215) Pipes, etc. not exceeding 100mm girth.	m	0.60	
216) Ditto exceeding 100mm and not exceeding 200mm girth.	m	0.80	
217) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.20	
218) General surfaces (measured flat overall).	m ²	5.80	
<u>BRUSH DOWN WITH STEEL WIRE BRUSH TO REMOVE ALL RUST, PREPARE, TOUCH-UP WITH APPROVED PRIMER AND SPRAY PAINTING WITH ONE UNDERCOAT AND ONE FINISHING COAT OF GLOSS ENAMEL PAINT TO APPROVAL ON :</u>			
219) Pipes, bars, angles, etc. not exceeding 100mm girth.	m	1.20	
220) Ditto exceeding 100mm and not exceeding 200mm girth.	m	1.70	
221) Ditto exceeding 200mm and not exceeding 300mm girth.	m	2.30	
222) Prepare and apply one undercoat and one finishing coat of black synthetic enamel paint on surfaces of mild steel grating (measured flat overall and rate inclusive of painting to both sides).	m ²	7.00	
223) Ditto one undercoat and two finishing coats of ditto.	m ²	8.00	
224) Prepare and apply one undercoat and two coats of bituminous paint ditto.	m ²	5.80	
<u>MARINE PAINT ON GENERAL SURFACES</u>			
225) Brush down with steel wire brush to remove all rust, prepare and apply two coats of marine paint on steel surfaces.	m ²	5.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>RUST TRANSFORMER</u>			
226) Supply and apply rust transformer to metal surface including brushing down steelwork with steel brush to remove all rust where necessary.	m ²	15.00	
<u>SIGNWRITING ON WALL</u>			
227) Write or stencil alphabet, numeral, character, stop and similar items not exceeding 50mm high on wall.	No	2.00	
228) Add for each 25mm in height.	No	0.25	
<u>PREPARE AND APPLY 2 COATS OF APPROVED ROAD PAINT INCLUDING SETTING OUT, ALIGNMENT AND MARKING OUT TO THE REQUIRED DIMENSION AND CURVES ON NEW PREMIX/CONCRETE ROAD</u>			
229) Dividers, kerbs, pedestrian crossings and the like irrespective of width and girth.	No	7.00	
230) 100mm wide continuous or broken line.	m	1.50	
231) 150mm wide centre line.	m	1.50	
232) 200mm wide stop line.	m	2.00	
233) 230mm wide lorry lot line.	m	2.00	
234) Standard directional arrow (single).	No	29.00	
235) Ditto (double).	No	34.50	
236) Ditto (triple).	No	40.00	
237) Standard alphabet or numerical not exceeding 50mm high.	No	2.90	
238) Ditto for each additional 50mm in height.	No	0.60	
239) 1.2m x 1.2m cyclist logo or handicap logo.	No	34.50	
240) 300mm x 100mm footprint.	No	9.20	
<u>PREPARE AND APPLY 1 COAT OF APPROVED ROAD PAINT OVER EXISTING DIRECTIONAL SIGNS AND LINES</u>			
241) Dividers, kerbs, pedestrian crossings and the like irrespective of width and girth.	m ²	3.80	
242) 100mm wide continuous or broken lines.	m	0.70	
243) 150mm wide line.	m	0.80	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
244) 200mm wide line.	m	0.90	
245) 230mm wide line.	m	1.00	
246) Directional arrow (single).	No	10.00	
247) Ditto (double).	No	12.00	
248) Ditto (triple).	No	14.90	
249) Alphabet or numeral not exceeding 50mm high.	No	1.20	
250) Ditto for each additional 50mm in height.	No	0.40	
<u>ERASING ROAD MARKING LINES AND LETTERINGS</u>			
251) Erase 100mm wide marking lines on asphalt/ concrete surface	m	2.30	
252) Ditto 150mm wide line.	m	3.00	
253) Ditto 200mm wide line.	m	3.50	
254) Erase number/alphabet not exceeding 150mm high.	No	0.60	
255) Ditto exceeding 150mm high.	No	2.30	
256) Erasing standard single arrow directional sign on asphalt/ concrete surface.	No	4.00	
257) Ditto double arrow ditto.	m	5.20	
258) Erasing standard to triple arrow directional sign on asphalt/concrete surface.	No	7.00	
259) Erasing existing thermoplastic road lines or marking (1.5mm and 3.00mm thick) including clearing all shaving and making good.	m ²	12.00	
<u>SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 1.5MM THICKNESS INCLUDING PREPARATION OF ROAD SURFACE, SETTING OUT, ALIGNING ROAD MARKING ON ROAD PAVEMENT AS PER LTA STANDARD REQUIREMENTS</u>			
260) Mobilisation for painting of thermoplastic paint (per occasion).	No	115.00	
261) 100mm wide lines.	m	1.90	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 1.5MM THICKNESS INCLUDING PREPARATION OF ROAD SURFACE, SETTING OUT, ALIGNING ROAD MARKING ON ROAD PAVEMENT AS PER LTA STANDARD REQUIREMENTS</u>			
262) 150mm wide lines.	m	2.70	
263) 200mm wide lines.	m	4.00	
264) 300mm wide lines.	m	4.60	
265) Exceeding 300mm wide lines.	m	17.00	
<u>SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 3.0MM THICKNESS INCLUDING PREPARATION OF ROAD SURFACE, SETTING OUT, ALIGNING ROAD MARKING ON ROAD PAVEMENT AS PER LTA STANDARD REQUIREMENTS</u>			
266) SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 3.0MM THICKNESS - 150mm wide lines.	m	10.00	
267) SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 3.0MM THICKNESS - 200mm wide lines.	m	12.00	
268) SUPPLY ALL LABOUR, PLANT, AND MATERIALS TO LAY THERMOPLASTIC PAINT OF 3.0MM THICKNESS - 300mm wide lines	m	17.00	
269) 300mm wide lines.	m	7.50	
270) Exceeding 300mm wide lines.	m ²	21.00	
271) Go-straight arrow sign.	No	51.50	
272) Go-straight with right/left turn arrow.	No	65.00	
273) Right/left arrow.	No	55.00	
274) Merge arrow.	No	43.00	
275) Up to 300mm high standard numbers/alphabets in parking lot.	No	17.00	
276) Exceeding 300mm high but not exceeding 1200mm high number/alphabet/logo.	No	20.00	
277) Ditto, but not exceeding 2400mm high number/alphabet/logo.	No	40.00	
278) Ditto, but not exceeding 4800mm high number/alphabet/logo.	No	71.00	
279) Ditto, but exceeding 4800mm.	No	95.00	
Add \$0.50 per no. for additional 50mm in height.			
280) 300mm wide vibrate line.	m	21.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
<u>DIRECTIONAL SIGN</u>			
<u>MILD STEEL FRAME SUPPORT FOR DIRECTIONAL/ INFORMATIONAL SIGN INCLUDING PAINTING MILD STEEL FRAME WITH ONE COAT OF RED LEAD PRIMER , ONE UNDERCOAT AND TWO FINISHING COATS OF ENAMEL PAINT, CONCRETE FOUNDATION, EXCAVATION AND DISPOSAL OF EXCAVATED MATERIALS FROM SITE AS PER LTA STANDARD REQUIREMENTS SIZE OF SIGN PLATE</u>			
281) Not exceeding 1.4m ² .	No	555.00	
282) 1.4m ² to 2.8m ² .	No	980.00	
283) Exceeding 2.8m ² .	No	1635.00	
284) 14 SWG aluminium sheeting for directional/informational sign riveted to mild steel frame support.	m ²	60.00	
285) Approved engineer's grade retro-reflective sheeting pasted on any surface.	m ²	60.00	
286) Ditto but high intensity's grade.	m ²	110.00	
<u>STANDARD ROMAN LETTERS, FIGURE OR ARROWS USING APPROVED COLOUR " SCOTCH" LIGHT INK OR OTHER APPROVED TRANSPARENT INK ON RETRO-REFLECTIVE SHEETING SURFACE AS PER LTA STANDARD REQUIREMENTS</u>			
287) Capital letter, twice notional size.	No	4.00	
288) Capital letter, add for every increase in notional size.	No	7.50	
289) Small letter or numeral, add for every increase in notional size.	No	7.00	
290) Arrow, twice notional size.	No	7.50	
291) Arrow, add for every increase in notional size.	No	14.50	
<u>TRAFFIC SIGNS</u>			
<u>SINGLE-FACED SILK SCREEN TRAFFIC SIGNS COMPRISING OF 2.03MM THICK ALUMINIUM SHEETS, APPROVED ENGINEER'S GRADE REFLECTIVE SHEETINGS, VERTICAL SUPPORT FOR SIGN SET IN AND INCLUDING CONCRETE FOOTING, EXCAVATION AND DISPOSAL OF EXCAVATED MATERIALS FROM SITE</u>			
292) Regulatory signs of size 450 x 600mm.	No	301.00	
293) Regulatory signs of size 600 x 600mm.	No	310.00	
294) Regulatory signs of size 600 x 900mm.	No	330.00	
295) Regulatory signs of size 900 x 900mm.	No	350.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
296) Regulatory signs of circular/octagonal size 750mm diameter.	No	330.00	
<u>SUNDRIES</u>			
297) Prepare and apply 1 coat luminous paint on metal, wood or concrete surfaces of any description.	m ²	5.20	
298) Ditto not exceeding 100mm girth.	m	0.90	
299) Ditto exceeding 100mm and not exceeding 200mm girth.	m	1.40	
300) Ditto exceeding 200mm and not exceeding 300mm girth.	m	1.80	
301) Prepare and apply 2 coats luminous paint on metal, wood or concrete surfaces of any description.	m ²	8.00	
302) Ditto not exceeding 100mm girth.	m	1.20	
303) Ditto exceeding 100mm and not exceeding 200mm girth.	m	2.00	
304) Ditto exceeding 200mm and not exceeding 300mm girth.	m	2.70	
305) Prepare and apply one coat of approved polyurethane paint on timber, steel or plastered/unplastered surfaces not exceeding 100mm girth ditto.	m	1.40	
36) Ditto exceeding 100mm and not exceeding 200mm girth ditto.	m	2.00	
307) Ditto exceeding 200mm and not exceeding 300mm girth ditto.	m	2.50	
308) Prepare and apply two coat of approved polyurethane paint on timber, steel or plastered/unplastered surfaces not exceeding 100mm girth ditto.	m	1.40	
309) Ditto exceeding 100mm and not exceeding 200mm girth.	m	2.30	
310) Ditto exceeding 200mm and not exceeding 300mm girth ditto.	m	3.00	
311) Prepare and apply one coat of stain and one coat of "Vitacole" or other equal and approved high gloss polish on general surfaces of parquet flooring including skirtings and the like.	m ²	4.60	
312) Prepare and apply one undercoat of mirac 100 epoxy primer and 2 finishing coats of SK-PU polyurethane enamel or other approved equivalent on timber, steel or plastered/unplastered surface, etc.	m ²	12.00	
313) Prepare and apply one coat SK-PU or other approved equivalent polyurethane enamel or equivalent on timber, steel or plastered/unplastered surface, etc.	m ²	5.20	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
314) Prepare and apply one coat of NAC 3000 or other approved equivalent acrylic enamel ditto.	m ²	3.50	
315) Ditto one coat NAC 1000 or other approved equivalent acrylic enamel ditto.	m ²	3.50	
316) Grit blast steel surfaces to SA 2.5 (minimum quantity : 2m ²).	m ²	23.00	
317) Supply and lay 3M anti-skid thermoplastic tape 100mm wide.	m ²	11.50	
318) Ditto but 150mm wide.	m	17.00	
319) Ditto but 200mm wide.	m	23.00	
320) Supply labour, materials and equipment to apply Methyl Meth Acrylate (MMA) or other approved equivalent Coating.	m ²	92.00	
321) Supply labour, materials and equipment to apply E-Krete or other approved equivalent Coating.	m ²	30.00	
322) "Rockstone" or other approved equivalent texture finished consisting of one 'USK' or other approved equivalent plasticiser hand trowelled rough, one coat of sealer and two coats of emulsion paint.	m ²	14.00	
<u>PROVIDE AND SPRAY VERMICULITE TO WALLS BEAMS, CEILING, LINING BOARDS, ETC. IN ACCORDANCE TO THE MANUFACTURER'S INSTRUCTIONS</u>			
323) Half hour fire rated.	m ²	16.00	
324) One hour fire rated.	m ²	23.00	
325) Two hours fire rated.	m ²	32.00	
326) Four hours fire rated.	m ²	58.00	
327) Two coats intumescent paint to timber or metal surfaces.	m ²	6.00	
<u>ROVIDE AND APPLY "EMER-CLAD OR APPROVED EQUIVALENT WATERPROOFING COMPOUND MATERIAL TO CONCRETE SURFACE IN ACCORDANCE TO THE MANUFACTURER'S INSTRUCTIONS</u>			
328) Prepare, supply and apply one coat of Emer or other approved equivalent coat sealer, Emer Aquashield or other approved equivalent Sealer and multiple coats of Emer-clad or other approved equivalent water- proofing compound to the total dry film thickness of no less than 500 micron imbedded with Marglass or other approved equivalent fibreglass cloth (area not exceeding 60m ²).	m ²	44.00	
329) Ditto but area exceeding 60m ² .	m ²	42.00	
330) Remove existing damage water-proofing membrane.	m ²	0.60	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
331) Hack to form U-grooved and repair to crack concrete with hydraulic cement.	m	5.00	
332) Prepare and apply one coat of etch primer, one undercoat of heavy duty coseal primer and two finishing coats of heavy duty coseal liquid plastic coating (Pigmented and non-slip grade) on concrete surface (Heavy duty Coseal or other approved equivalent Primer - 40 micro dry film thickness, Heavy Duty Coseal or other approved equivalent Non-slip grade-125 micro dry film thickness).	m ²	33.50	
<u>PAINTING TO MARINE STRUCTURE</u>			
Note :The following rates apply to irrespective of girth or width of surfaces to be painted and inclusive of working under tidal condition.			
333) Prepare and apply one coat of plural component epoxy primer and sealer combination and two coats of plural component epoxy topcoat to areas of concrete surfaces, all as specified and as directed by the Superintending Officer.	m ²	28.80	
334) Prepare and apply one coat of plural component epoxy primer and sealer combination and one coat of solvent-free pigmented epoxy coating to areas of concrete surfaces, all as specified and as directed by the Superintending Officer.	m ²	34.50	
335) In-situ or off site Grit-blast to SA 2-1/2 and apply solvent-free pigmented epoxy coating to 250 microns DFT on steel surfaces.	m ²	40.00	
336) Prepare and apply one coat (250 micron DFT) of solvent-free pigmented epoxy coating on steel surfaces.	m ²	35.00	
337) In-situ or off site Grit-blast to SA 2-1/2 and apply one coat of Ethyl Silicate Inorganic Zinc Primer, one coat of plural component epoxy based material and one coat of plural component epoxy with coal tar pitch on steel surfaces.	m ²	35.00	
338) Prepare and apply one coat of Zinc Tetrahydroxychromate Brtyral or other approved equivalent Etch Primer and two coats of high solid self-priming topcoat epoxy coating to galvanised steel surfaces.	m ²	45.00	
339) Prepare and apply one coat of red lead (type C) primer, one undercoat and one finishing coat of approved marine enamel paint on steel surfaces.	m ²	16.00	
340) Prepare and apply one coat of approved anti-skid paint to concrete or steel surfaces.	m ²	14.00	
341) Prepare and apply one coat of wood preservative and two coat of bituminous paint to surface of timber balau fender.	m ²	7.00	
342) Prepare and apply one coat of high solid self-priming topcoat epoxy coating to steel surfaces 125 microns.	m ²	17.30	

FIXED SCHEDULE OF RATES

SECTION 11 - PAINTING & DECORATING

	UNIT	\$	¢
<u>PAINTING TO MARINE STRUCTURE (Cont'd)</u>			
Note: The following rates apply to irrespective of girth or width of surfaces to be painted and inclusive of working under tidal condition.			
343) Prepare and apply one coloured coat of solvent-free pigmented epoxy coating to 250 micron DFT on repaired and existing concrete surfaces.	m ²	17.30	
344) Prepare and apply 3 coats of liquid concrete hardener/dustproofer to concrete surfaces.	m ²	12.70	
345) Prepare and apply one sealer coat of two components epoxy primer amine adduct cured thinned down by 15% with thinner and one coat of two component high build coal tar epoxy polyamide cured aluminium to repaired/existing concrete to 350 micron.	m ²	15.50	
346) In-situ grit blast to SA 2 and apply a single coat of two pack epoxy resin modified with hydro carbon resin paint to 500 micron on steel surfaces under damp condition.	m ²	31.50	
347) Prepare and apply two coats of high build 3-pack epoxy copolymer paint to 175 micron DFT each. The paint shall contain 65% volume solids content with SG of 1.42 and capable of application on oily and damp concrete/steel surfaces.	m ²	12.60	
348) Prepare and apply one finishing coat of approved marine enamel paint on steel or timber surface.	m ²	2.50	
349) Prepare and apply 2 coats of epoxy paint to existing 20 mm to 25 mm diameter steel fender chain and two (2) number brackets per chain.	m	5.80	
350) Ditto 25 mm to 45 mm diameter ditto.	m	7.00	
351) Ditto 50 mm diameter ditto.	m	8.00	
352) Ditto, one coat of zinc etch primer and one coat of high solid self priming epoxy paint to 20 mm to 25 mm diameter new galvanised fender chains.	m	9.00	
353) Ditto 25 mm to 45 mm diameter ditto	m	9.70	
354) Ditto 50 mm diameter ditto.	m	11.50	
SUSTAINABLE PAINT			
355) Brush down and apply one coat of Solar Paint	m ²	8.00	
356) Brush down and apply two coat of Solar Paint	m ²	10.00	
357) Brush down and apply one coat of Cool Paint	m ²	8.00	

FIXED SCHEDULE OF RATES**SECTION 11 - PAINTING & DECORATING**

	UNIT	\$	¢
357) Brush down and apply two coat of cool Paint	m2	10.00	

Fixed Schedule of Rates
Section 12 – Drainage Work

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

UNIT	\$	¢
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DRAINAGE WORK**DRAIN EXCAVATION**

NOTE : For the purpose of computation of the volume of excavated material, the full width of the concrete bed shall be taken as the width of the trench.

- | | | |
|--|---|-------|
| 1) Excavate trench minimum 340mm wide for 100mm diameter pipe, not exceeding 2.00m deep average 600mm deep including backfilling and disposal of surplus excavated material. | m | 12.00 |
|--|---|-------|

CONCRETE BED, HAUNCHING, ETC.

- | | | |
|--|----------------|--------|
| 2) 150mm thick concrete (Grade 20) bed under 100mm diameter drain pipe, 340mm wide including haunching to half height of pipe carried up and splayed tangentially and all necessary formwork. | m | 23.00 |
| 3) Concrete (Grade 20) in bed and haunching or bed and surround to sewer line (for more than 150mm diameter pipe) including break joints as per PUB drawing No. PUB/WRN/STD/001B (measured with no adjustment made for voids). | m ³ | 120.00 |
| 4) 200mm thick concrete (Grade 20) in benching to bottom of manhole finished with 15mm thick cement and sand (1:3) rendering including shaping of inverts, channels, bends and working around walls and channels. | m ² | 42.00 |

SUBSOIL PIPE

SUPPLY AND LAY APPROVED PERFORATED VITRIFIED CLAY SUBSOIL DRAIN PIPES WITH RUBBER RING JOINTS AS SPECIFIED LAID IN TRENCH TO CORRECT GRADE AND LINE (EXCAVATION MEASURED SEPARATELY)

- | | | |
|--|----|-------|
| 5) 100mm diameter subsoil drain pipe. | m | 12.00 |
| 6) 150mm ditto. | m | 14.55 |
| 7) Extra over 100mm diameter pipe for bends. | No | 7.00 |
| 8) Ditto 150mm ditto. | No | 15.00 |
| 9) Ditto 100mm diameter for tee/junctions. | No | 10.00 |
| 10) Ditto 150mm ditto. | No | 25.50 |

SYNTHETIC GEOTENSILE FABRIC MEMBRANE

- | | | |
|---|----------------|------|
| 11) Supply and lay Grade 500 approved synthetic geotensile fabric membrane or equivalent for subsoil drainage system including wrapping around end of pipe. | m ² | 1.70 |
|---|----------------|------|

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	€
12) Ditto Grade 1000 ditto.	m ²	2.00	
13) Ditto Grade 2000 ditto.	m ²	3.50	
<u>SCUPPER DRAIN AND PIPE</u>			
14) Supply and lay 230mm diameter scupper pipe (without reinforcement) in trench and jointed together in butt-ended joint in cement and sand (1:3) mortar.	m	25.65	
15) Ditto but 300mm diameter ditto.	m	35.00	
SUPPLY AND LAY APPROVED UPVC DRAIN PIPES AND FITTINGS WITH FLEXIBLE JOINTS LAID IN TRENCH TO CORRECT LINE AND GRADE AND IN ACCORDANCE MANUFACTURER'S SPECIFICATION (TRENCH <u>MEASURED SEPARATELY</u>)			
16) 100mm diameter drain pipe.	m	29.00	
17) Ditto on 100mm thick by 455mm wide sand bed and including 100mm thick sand surround to pipe.	m	14.00	
APPROVED PRECAST CONCRETE PIPE CULVERTS CLASS "L" COMPLYING WITH SS 183 BUTT JOINTED IN CEMENT AND <u>SAND (1:1) MORTAR</u>			
18) 300mm diameter.	m	88.00	
19) 450mm diameter.	m	120.00	
HEAVY GRADE CAST IRON PIPES TO BS 416 WITH SPIGOTTED AND SOCKETTED JOINTS IN YARN AND <u>MOLTEN LEAD (TRENCH MEASURED SEPARATELY)</u>			
20) 75mm diameter coated cast-iron pipe laid and jointed in trench.	m	42.00	
21) 100mm diameter ditto.	m	53.00	
22) 150mm diameter ditto.	m	60.00	
23) 225mm diameter ditto.	m	104.00	
EXTRA OVER 75MM DIAMETER HEAVY GRADE CAST <u>IRON PIPE OF ANY DESCRIPTION FOR :</u>			
24) Cap or plug.	No	18.50	
25) Bend or elbow.	No	21.00	
26) Tee.	No	25.00	
27) Reducer.	No	28.00	
28) Junction.	No	25.00	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	€
29) Collars or Sockets.	No	16.00	
30) Take down fittings of any description and remove off site.	No	7.00	
EXTRA OVER 100MM DIAMETER HEAVY GRADE CAST <u>IRON PIPE OF ANY DESCRIPTION FOR :</u>			
31) Cap or plug.	No	21.00	
32) Bend or elbow.	No	22.00	
33) Tee.	No	30.00	
34) Reducer.	No	30.00	
35) Junction.	No	30.00	
36) Collars or Sockets.	No	21.00	
37) Take down fittings of any description and remove off site.	No	7.50	
EXTRA OVER 150MM DIAMETER HEAVY GRADE CAST <u>IRON PIPE OF ANY DESCRIPTION FOR :</u>			
38) Cap or plug.	No	23.00	
39) Bend or elbow.	No	28.00	
40) Tee.	No	40.00	
41) Reducer.	No	43.00	
42) Junction.	No	49.00	
43) Collars or Sockets.	No	23.00	
44) Take down fittings of any description and. Remove off site.	No	9.00	
HEAVY DUTY DUCTILE IRON PIPE COMPLYING WITH BS 4772 CLASS K9 INCLUDING SPIGOT AND SOCKET <u>RUBBER RING JOINTS</u>			
45) 100mm diameter.	m	52.00	
46) 150mm diameter.	m	72.00	
47) Extra over for 100mm diameter bend.	No	55.55	
48) Extra over for 150mm diameter bend.	No	101.00	
49) Extra over for 100mm x 100mm x 100mm diameter tee.	No	94.00	
50) Extra over for 150mm x 150mm x 150mm diameter tee.	No	170.00	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

		UNIT	\$	€
<u>GULLY</u>				
51)	Coated cast iron "P" or "S" trap for 50mm diameter urinal waste including joints.	No	29.00	
52)	150mm diameter UPVC floor trap with risers, inlets and outlets and hinged UPVC jointing and frame the whole set in and surrounded with concrete (1:3:6) including jointing and connection.	No	106.50	
53)	150mm diameter cast iron floor trap with inlets and outlets as directed and with chromium plated hinged grating and frame the whole set in and surrounded with concrete (1:3:6) including joints.	No	112.25	
54)	Salt glazed stoneware gully complete with coated cast iron hinged grating and frame the whole set in and surrounded with concrete (1:3:6) including joints.	No	44.00	
55)	Ditto but in repairs including removing existing and making good work disturbed.	No	46.00	
<u>GRATINGS</u>				
56)	150mm cast iron square hinged grating and frame and ditto.	No	13.00	
57)	150mm diameter circular hinged grating and frame and ditto.	No	12.00	
58)	100mm chromium plated brass hinged grating and frame and ditto.	No	11.00	
59)	150mm ditto.	No	13.35	
60)	100mm chromium plated metal perforated plate pattern grating ditto.	No	6.00	
61)	150mm ditto.	No	7.30	
62)	150mm square or circular plastic gully trap grating and frame ditto.	No	6.55	
63)	150mm diameter stainless steel hinged grating and frame ditto.	No	15.00	
64)	Provide loose cast iron square or circular gully grating 150mm square or diameter (supply new or in replacement).	No	8.00	
65)	Ditto but chromium plated ditto.	No	7.00	
66)	Ditto but UPVC ditto.	No	5.00	
67)	Fix only gully grating and frame irrespective of sizes to gully chamber.	No	1.80	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	€
<u>SURFACES WATER CHANNELS AND COVER</u>			
68) Average 200 - 300mm deep to invert, 300mm wide (internally) U-shaped reinforced concrete (Grade 25) surface water channel laid to fall, constructed of 150mm thick sides and base reinforced with BRC B 10 fabric reinforcement, all exposed surface trowelled smooth with 20mm thick cement and sand (1:3) mortar, including 150mmthick well compacted hardcore and 50mm thick lean concrete (Grade 15) bed and all necessary excavation, formwork, forming angles, ends, outlets, and junctions.	m	102.00	
69) Average 300 - 400mm deep to invert ditto.	m	135.00	
70) Average 400 - 500mm deep to invert ditto.	m	160.00	
71) 350 x 50mm thick removable precast concrete (Grade 20) cover slab over surface water channel cast in 600mm lengths with notched handholes at both ends and reinforced with BRC A 8 fabric reinforcement including forming 50 x 25mm rebate on both sides of channel.	m	11.00	
72) 640 x 270 x 75mm precast concrete Grade 30 cover slab all as detailed in Drawing Nos. LTA/SDRE14/2/DRA7 or LTA/SDRE14/2/DRA8.	m	14.50	
<u>MANHOLE COVER AND FRAME</u>			
73) Rectangular cast iron light duty manhole cover and frame to SS 30 weighing approximately 37kg (total weight) including bedding frame in cement and sand (1:3) and sealing cover in grease and sand.	No	90.00	
74) Ditto but weighing approximately 50kg ditto.	No	105.00	
75) Galvanised cast iron manhole cover and frame to SS 30, size 600mm x 450mm, light duty; weighing approximately 50kg (total weight) including bedding frame in cement and sand (1:3) and sealing cover in grease and sand.	No	120.00	
76) Galvanised cast iron manhole cover and frame to SS 30, size 750mm x 750mm, medium duty; weighing approximately 114kg (total weight) including bedding frame in cement and sand (1:3) and sealing cover in grease and sand. (as per drawing No. LTA/RD/SD99/Gra/6)	No	352.50	
77) Ditto but size 800mm x 800mm, heavy duty; weighing approximately 205kg (total weight) as per drawing No. PUB/WRN/STD/015A ditto.	No	530.00	
78) Standard coated ductile cast iron manhole cover size 850 x 850mm and frame complying with BS 497 including cement and sand (1:3) mortar and sealing cover in grease and sand ditto.	No	461.00	
79) Take out existing light duty manhole cover, remove off site and prepare surface to receive new or temporary cover up opening with 25mm thick used plywood.	No	12.00	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	¢
80) Take out existing medium duty (any type) manhole cover, remove off site and prepare surface to receive new or temporary cover up opening with 25mm thick used plywood.	No	17.25	
81) Take out existing heavy duty (any type) manhole cover, remove off site and prepare surface to receive new.	No	17.25	
82) Fix only manhole cover and frame irrespective of sizes.	No	5.80	
<u>PRECAST CONCRETE MANHOLES/SUMP</u>			
83) Supply and fix precast concrete rings not exceeding 675mm diameter as access shafts to manholes.	m	70.00	
84) Ditto exceeding 675mm but not exceeding 750mm diameter.	m	210.00	

SUPPLY AND FIX PRECAST REINFORCED CONCRETE MANHOLE CHAMBER RINGS AND COVER SLAB FOR MANHOLES (RATE EXCLUDES EXCAVATION)

Rate Per No					
	Nominal Diameter	0.91m to 1.50m length	0.61m to 0.90m length	Not Exceeding 0.60m length	Cover Slab
85)	1.05m	535	363	304	506
86)	1.05m to 1.20m	637	430	350	670
87)	1.21m to 1.35m	761	514	440	833
88)	1.36m to 1.50m	820	533	435	1230
89)	1.51m to 1.80m	1102	733	580	1580

NOTE :

- a. Cover slab 125mm thick for 1.05m to 1.35m diameter manholes.
- b. Cover slab 150mm thick for 1.50m to 1.80m diameter manholes.

CONCRETE SURROUND TO MANHOLE

90)	150mm thick Grade 20 concrete surround to precast concrete access shafts not exceeding 675mm diameter including all formwork.	m	157.00
91)	Ditto exceeding 675mm but not exceeding 750mm diameter.	m	166.00
92)	150mm thick Grade 20 concrete surround to 1.05m diameter precast concrete manhole chamber including all formwork.	m	270.00

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

		UNIT	\$	€
93)	150mm thick Grade 20 concrete surround to exceeding 1.05m but not exceeding 1.20m diameter precast concrete manhole chamber including all formwork.	m	280.00	
94)	Ditto exceeding 1.20m but not exceeding 1.35m diameter.	m	300.00	
95)	Ditto exceeding 1.35m but not exceeding 1.50m diameter precast concrete manhole chamber including all formwork.	m	330.00	
96)	Ditto exceeding 1.50m but not exceeding 1.80m diameter.	No	425.50	
<u>ACCESSORIES TO MANHOLE</u>				
97)	Provide and fix aluminium ladder 375mm wide including stringers, rungs, brackets and stiffeners.	m	74.50	
98)	Provide and fix aluminium hand railing 40mm external diameter, 900mm high including screwed bends, junctions and flanged bottom.	m	99.50	
99)	Provide and fix aluminium hand hold 30mm . external diameter 1.50m long with both ends bent.	No	35.25	
100)	Provide and fix aluminium safety link chain including hooks and end rings.	m	57.50	
<u>CONNECTION TO EXISTING INSPECTION CHAMBER</u>				
101)	Allow for connection for drain lines not exceeding 100mm diameter to existing inspection chamber including making good all work disturbed.	No	43.50	
102)	Ditto exceeding 100mm but not exceeding 150mm diameter ditto.	No	50.00	
<u>SUNDRIES</u>				
103)	Break up and remove existing drainpipe (any type and size) in trench, remove debris off site and prepare to receive new. (Excavation, concrete bed and new drainpipe measured separately but break up concrete surround (if any) inclusive.	m	43.50	
104)	Break into existing 100mm drainpipe, supply and insert similar diameter stoneware junction pipe fitting as specified including short length (not exceeding 0.30m length) of new drainpipe. (Excavation and concrete bed measured separately).	No	190.00	
105)	Ditto 150mm (Ditto).	No	250.00	
106)	Ditto but 100mm diameter heavy duty cast iron drain pipe (Ditto).	No	202.50	
107)	Ditto but 150mm diameter heavy duty cast iron drain pipe (Ditto).	No	270.00	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	€
108) Break into side of existing manhole, cut into benching and lay one new 100mm or 150mm half section salt glazed stoneware straight channel or bend channel, make good work disturbed and remove debris off site.	No	83.00	
109) Extend size of existing manhole (any depth) including excavation, breaking up concrete cover, brick sides, concrete benching as necessary, removing debris off site, provide new concrete bottom, new concrete benching, new brickwork with rendering, new concrete cover suitably reinforced in extension, hacking old concrete to form key, cutting tooth and bonding new to old brickwork. (Area of extension internal size only measured) (New channels measured separately).	m ²	1160.00	
110) Supply labour and materials to raise or lower existing manhole not exceeding 300mm deep including breaking concrete, brickwork, precast tube, re-concreting, refixing manhole cover and frame, making good work disturbed after completion, removing debris off site, etc. (irrespective of manhole sizes). <u>Add</u> or <u>Deduct</u> \$8.60 per no. for each additional stage of 25mm deep.	No	172.50	
111) Break into existing floor trap or gully, take out, remove off site and make good work disturbed.	No	22.00	
112) Allow for sewer connection in 150mm or 225mm diameter sewer pipe to tumbling bays, backdrops, etc. in any depth including excavation, planking and strutting, return, fill and ram and cart away surplus excavated material from site, including pipes, concrete, etc. and making good work disturbed.	No	372.00	
113) Ditto to 150mm or 225mm diameter pipe joint ditto.	No	190.00	
114) Supply and lay 225mm diameter half-round approved precast concrete invert channel jointed and pointed in cement mortar (1:3).	m	11.00	
115) Ditto 300mm ditto.	m	14.00	
116) Ditto 375mm ditto.	m	17.00	
117) Ditto 450mm ditto.	m	19.00	
118) Extra over surface water drains items for breaking up existing drain, temporarily diverting existing drain as directed and making good all work disturbed.	m	5.70	
119) 300 x 230 x 25mm diameter aluminium rung fixed to concrete wall in drain including drilling and grouting with cement mortar (1 : 3).	No	29.00	
120) Labour and material for hacking on existing concrete floor to form scupper drains not exceeding 150mm wide and 75mm deep including trowelling surfaces smooth and making good all works disturbed.	m	9.50	

FIXED SCHEDULE OF RATES**SECTION 12 - DRAINAGE WORK**

	UNIT	\$	€
121) 750mm x 275mm x 325mm precast concrete drop inlet chamber including mild steel framing and grating laid on the compact sub-base and including forming proper connection to scupper pipe.	No	138.00	
122) 750mm x 300mm x 325mm precast concrete drop inlet chamber ditto.	No	233.50	
123) 550mm x 550mm x 1300mm precast concrete sump for sub-soil drain including proper connections, concrete benching and precast concrete	No	422.00	
<u>GREASE INTERCEPTOR COVER</u>			
124) Supply and fix 1800mm diameter 15mm thick glass fibre reinforced plastic (GRP) cover complete.	No	1960.00	
125) Ditto but with 10mm thick m.s. chequered plate with angles skeleton frames with bituminous painted on both sides.	No	3050.00	
126) Take up existing precast concrete drain inverts not exceeding 450mm internal diameter, regrade ground under with earth if necessary and relay inverts jointed and pointed in cement and sand (1:3) mortar (New inverts measured separately).	m	5.70	
127) Remove inverts of existing 225mm internal width concrete drain make good to match existing.	m	8.70	
128) Ditto 300mm ditto.	m	10.00	
129) Ditto 375mm ditto.	m	12.00	
130) Ditto 450mm ditto.	m	15.00	

Fixed Schedule of Rates
Section 13 – Roadlayer

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

		UNIT	\$	¢
<u>ROADLAYER</u>				
<u>NOTE: All thicknesses specified are consolidated thicknesses.</u>				
1)	Excavate for roads, carpark, etc. to any depth including consolidation of formation with a powered roller and carting away surplus excavated material and deposit, spread and level or use for building up road formation within the Site.	m3	12.70	
2)	Break up existing road bed consisting of bituminous, surfacing and granite pitching not exceeding 500mm thick and remove.	m3	12.60	
3)	Selected excavated material obtained within Site used as filling to make up road formation including consolidation with a heavy roller.	m3	5.85	
4)	Hardcore bed, filling, etc. including blinding with granite dust and well rolled.	m3	44.20	
5)	Quarry dust, waste or granite fines bed, filling, etc. spread, levelled and well rolled.	m3	52.40	
6)	Granite chippings (3mm to 6mm) bed, filling, etc. spread, levelled and well rolled.	m3	38.90	
7)	Sub-base material including natural sand, crushed rock or crushed concrete or any other granular material (maximum size 75mm) approved by S.O.	m3	45.20	
8)	Granite spall/crusher run granite aggregate (maximum size 90mm) including blinded with fine aggregate.	m3	59.35	
9)	12-20mm granite aggregate in beds, fillings, etc. irrespective of thickness, deposited, spread, levelled and rammed with mechanical rammer or rolled with hand roller including blinding with quarry waste.	m3	49.00	
10)	Supply and spray tack coat of cold bituminous emulsion spread at the rate of 1.14 litre/m ² .	m3	1.60	

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

	UNIT	\$	¢
11) Supply and lay hot-mix asphalt concrete base, binder or wearing course mix specification type B1 (maximum size of stone 35mm; bitumen content (4.5% to 6%) laid to required falls	Tonne	176.40	
12) Ditto but mix specification type W1 (maximum size of stone 10mm; bitumen content 5.5% to 6.5%) ditto.	Tonne	136.00	
13) Ditto but mix specification type W3 (maximum size of stone 20mm; bitumen content 5.5% to 6.5%) ditto.	Tonne	136.00	
14) Ditto mix specification type B21, W1 and W3 (maximum size of stone 20mm; bitumen content 5.5% to 6.5%) ditto. (For Rate below 5 Tons for minor repairing works).	Tonne	202.00	

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

	UNIT	\$	¢
15) 50mm thick hot-mix asphalt concrete type B1 base course laid to required falls & chambers and well roll mix specification.	m ²	16.15	
16) 75mm thick hot-mix asphalt concrete type B1 base course laid to required falls & chambers and well roll mix specification.	m ²	22.30	
17) 25mm thick hot-mix asphalt concrete wearing course mix specification type W1 or W3 laid to required falls & chambers and well roll.	m ²	10.00	
18) Add or deduct for B1, W1 & W3 each 6mm variation in thickness for the asphalt concrete.	m ²	1.90	
19) Night-time mobilization and demobilization of machinery and equipment for asphalt re-surfacing works including roller, paving machine, lorries etc. (Rate per term contract order).	No	1840.00	
20) Rate for day-time mobilization	No	920.00	
21) Brush, sweep and thoroughly clean to remove all loose and superfluous materials and ensure a perfectly dry surface prior to the application of the tack coat and asphalt concrete to existing bitumen or concrete surfaces.	m ²	0.25	
22) Extra over item for the supply and mixing of a bitumen hardening agent 'Gilsonite' or equivalent in the asphalt concrete at the rate of 8% by weight of the total bitumen content in the mix. (Per tonne of asphalt concrete).	Ton	15.50	
<u>FILL POT HOLES IN MACADAM OR ASPHALT SURFACES INCLUDING CUTTING EDGES CLEAN, CLEANING OUT LOOSE MATERIAL AND MAKING GOOD UP TO EXISTING LEVEL</u>			
23) Area not exceeding 0.50m ² .	No	41.50	
24) Ditto exceeding 0.50m ² and not exceeding 1.00m ² .	No	64.50	
<u>MISCELLANEOUS</u>			
25) 25mm thick cement and sand (1:10) grout.	m ²	2.90	
26) Supply and lay one layer of 0.2mm thick polythene sheet on sand bed.	m ²	1.90	
27) Scarify macadam surfacing of any description not exceeding 50mm deep.	m ²	1.00	
28) Ditto exceeding 50mm and not exceeding 75mm deep.	m ²	1.50	
29) Cutting of premix road or concrete hardstanding by diamond cutter to achieve a straight edge up to 150mm deep.	m	10.50	
30) 125 x 300mm Type K7 precast concrete kerb including formwork, angles, intersections, ends laying in alignment, bedding, jointing, pointing in cement and sand (1:3) mortar and finishing fair on exposed surface.	m	12.50	

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

	UNIT	\$	¢
31) 200 x 380mm Type D4 divider ditto.	m	31.00	
32) Extra over for 125 x 300 x 980mm long kerb with scupper month.	m	8.00	
<u>MILLING OF DEFECTIVE ASPHALT PAVEMENTS</u>			
33) Mobilization and demobilization of machinery and equipment for milling works.	No	2880.00	
34) Internal Mobilization and demob of machinery aqnd eqipment for milling works.	No	1755.00	
35) Grind or cold mill down bituminous asphalt pavement to a depth of 41-60mm in a single pass, groove existing plant onto a tipper, transport and disposed off some at Contractor's source or designated locations as directed by the SDC, clean and sweep the roads immediately etc.	m ²	6.50	
36) Ditto as last but in lifts of 61-90mm thick profile to the required shape and fall, groove existing road, etc. ditto.	m ²	7.50	
Extra over for supply and mixing of bitumen additive which is high in asphaltenes (not less than 70%) and nitrogen compounds (not less than 3%) as pavings at the rate of 8% by weight of the total bitumen content in the mix.			
The additive should have the following typical property.			
Softening Point not more than 178 degree C.			
Specific Gravity not more than 1.05%.			
Flash Point more than or equal to 316 degree C.			
37) For bitumen Content of 6% in the mix ie. W1, W2 & W3A.	tonne	15.50	
38) For bitumen Content of 5% in the mix ie. B1, W3A & W5B.	tonne	13.50	

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

		UNIT	\$	¢
<u>MILLWASTE</u>				
39)	Supply, lay and compact mill waste to the average thickness of 75mm to 150mm.	tonne	15.00	
40)	Supply and lay non-woven polypropylene Class A geotextile fabric for repairing of asphalt concrete crack with a minimum grab tensile strength of 530N (ASTM method D-1682-64 Grab method).	m ²	3.50	
<u>ROAD HUMPS</u>				
41)	Supply all labour, materials, plant and everything necessary to construct LTA's standard road hump 3700mm wide x 75mm thick(average), including painting thermoplastic road hump hatching (all lettering measured separately) as shown drawing no. LTA/SDRE14/9/TMM6.	m	290.00	

FIXED SCHEDULE OF RATES**SECTION 13 - ROADLAYER**

	UNIT	\$	¢
42) Supply all labour, materials, plant and everything necessary for the removal of existing LTA's standard road hump and making good to the existing road surface to the satisfaction of S.O. (all lettering measured separately).	m	80.00	
43) Supply all labour, materials, plant and everything necessary to construct rubber road hump "Nipon C 50" or equivalent.	m	235.00	
44) Supply labour, materials and equipment to install asphalt pavement decorative system with COLOUR COATING ONLY (irrespective of areas) (any repair to the existing asphalt premix shall be measured separately). (Rate is for weekdays and normal working hours).	m ²	61.00	
45) Supply labour, materials and equipment to install asphalt pavement decorative system with IMPRINTING AND COLOUR COATING ONLY (irrespective of areas) (any repair to the existing asphalt premix shall be measured separately). (Rate is for weekdays and normal working hours).	m ²	82.00	
46) Mobilisation charge.	per Occasion	450.00	
47) Supply all labour, materials, plant and everything necessary to construct rubber road hump "Nipon C 50" or equivalent.	m	235.00	
48) Hot pour bitumen to fill road surface crack line.	m	3.00	
49) Supply labour and material to install 430mm x 50mm x 3000mm length Rubber hump complete with bolts and nuts including remove existing.	Set	1150.00	

Note: Rates for Road Resurfacing (hot-mix asphalt concrete) and milling Works are for the daywork only, if the works carry out at night from 6.00pm to next morning 6.00am, an additional 20% shall be added to these rates. These works must be instructed or approved by the S.O. and the decision of the S.O. shall be final and binding. There shall be no further claim for the time constraint and overnight works and Section 10 of requirement specification shall not be applied to Road Resurfacing Works and milling Works.

Fixed Schedule of Rates

Section 14 – Jacketing Guniting and Grouting

FIXED SCHEDULE OF RATES**SECTION 14 - JACKETING, GUNITING AND GROUTING**

UNIT	\$	¢
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JACKETING GUNITING AND GROUTING**(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)****JACKETING TO CONCRETE SURFACES, INCLUDING HACK OFF DAMAGED CONCRETE, STAGGING, PROPPING, FORMWORK, WIRE BRUSH REINFORCEMENT, REPLACEMENT OF REINFORCEMENT AND BONDING AGENT, ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER (MEASUREMENT BASED ON EXISTING SURFACE AREA OF CONCRETE BEFORE REPAIR)**

1) Vertical or raker rectangular pile.	m ²	345.00
2) Vertical or raker circular pile.	m ²	403.00
3) Cross bracing.	m ²	345.00
4) Sides and soffit beams, concrete slabs and pile cap.	m ²	460.00

GUNITING TO SURFACES, INCLUDING BACK OFF EXISTING DAMAGED CONCRETE, LOOSE MATERIAL, ETC. STAGGING, PROPPING, WIRE BRUSH REINFORCEMENT, REPLACEMENT OF REINFORCEMENT AND BONDING AGENT, ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER (MEASUREMENT BASED ON EXISTING SURFACE BEFORE REPAIR)

5) Slides and soffits of beams, deck slabs pilecaps, piles,	m ²	172.50
6) Ditto of existing seawall, quay/wharf wall and rock bund, etc.	m ²	230.00

EPOXY GROUTING TO CONCRETE SURFACES, INCLUDING STAGGING, AND PROPPING, ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER (MEASUREMENT BASED ON EXISTING LENGTH EXISTING OF CONCRETE CRACK LINE BEFORE REPAIR)

7) Sides of vertical or raker piles.	m	80.50
8) Sides and soffits of cross bracing.	m	80.50
9) Soffit of slabs.	m	92.00

NON-SHRINK CEMENT GROUTING TO CONCRETE SURFACE, INCLUDING HACK TO FORM GROOVE, STAGGINGS AND PROPPINGS, ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER (MEASUREMENT BASE ON LENGTH OF EXISTING CONCRETE CRACK LINE BEFORE REPAIR)

10) Sides of vertical or raker piles.	m	100.00
11) Sides and soffits of cross bracing.	m	106.00
12) Sides and soffit of pilecaps.	m	113.00

FIXED SCHEDULE OF RATES**SECTION 14 - JACKETING, GUNITING AND GROUTING**

	UNIT	\$	€
<u>LOCAL PATCHING</u>			
13) Hack off 50mm to 75mm thick concrete to remove stain on external surfaces of reinforced concrete members, expose and remove all rust on steel reinforcement and make good with approved non-shrink polyester resin mortar.	m ²	106.00	
<u>REPAIR WORKS</u>			
14) Repairs to damaged/deteriorated reinforced concrete structure overall size not exceeding 450 x 450 mm square and 100 mm thick of hack area at tidal/submerged zones using pumped non-shrink cementitious grout to BS 1881/BS 4551. Works include hacking off not exceeding 100 mm thick deteriorated concrete, clean rebars, and water tight formwork, etc.	m	930.00	
15) Repairs to cracked and spalled solid granite block, wharf wall etc. not exceeding 25 mm thick with high- build polymer modified concrete repair mortar with high strength acrylic primer bonding agent, include hacking spall surface to sound substrate.	m ²	290.00	
16) Ditto exceeding 25 mm but not exceeding 50 mm thick ditto.	m ²	345.00	
17) Ditto exceeding 50 mm but not exceeding 75 mm thick ditto.	m ²	403.00	
18) Ditto exceeding 75 mm but not exceeding 100 mm thick	m ²	460.00	
<u>JACKETING TO STEEL PIPE PILES, 'H' PILES, BOX PILES, ETC. FROM SOFFIT OF REINFORCED CONCRETE STRUCTURE TO +0.300 M ACD LEVEL, CONSISTING OF STAGING SUPPORTS, DERUST AND MECHANICALLY CLEAN EXISTING SURFACES, SUPPLY AND FIX LEFT-IN UPVC CIRCULAR MOULD OR EQUIVALENT, THE ANNULUS SPACE SHALL BE PUMPED AND FILLED WITH MINIMUM 100 MM THICK CEMENT MORTAR (1:1) MIX WITH AN APPROVED WATERPROOFING AGENT AND NON-SHRINK ADDITIVES, ACCORDING TO MANUFACTURER'S RECOMMENDATION, AND REINFORCED WITH HIGH TENSILE STRENGTH POLYMER GEOGRIDS (28 X 40 MM GRIDS), ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER.</u>			
19) Steel pipe piles, 'H' piles, box piles of overall diameter not exceeding 400 mm.	m	345.00	
20) Ditto exceeding 400 mm but not exceeding 500 mm.	m	403.00	
21) Ditto exceeding 500 mm but not exceeding 600 mm.	m	460.00	
22) Ditto exceeding 600 mm but not exceeding 700 mm.	m	580.00	
23) Ditto exceeding 700 mm but not exceeding 800 mm.	m	690.00	
24) Ditto exceeding 800 mm but not exceeding 900 mm.	m	750.00	

FIXED SCHEDULE OF RATES**SECTION 14 - JACKETING, GUNITING AND GROUTING**

UNIT	\$	¢
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JACKETING TO PONTOON COLUMN, CONSISTING OF STAGING SUPPORTS, MECHANICALLY CLEAN EXISTING SURFACES, SUPPLY AND FIX LEFT-IN UPVC CIRCULAR MOULD, THE ANNULUS SPACE SHALL BE PUMPED AND FILLED WITH MINIMUM 100MM THICK CEMENT MORTAR AND ADDITIVE OF THE RATIO 50 KG CEMENT : 50 KG CLEAN SAND : 227 GM NON-SHRINK ADDITIVE AND REINFORCED WITH HIGH TENSILE STRENGTH POLYMER GEOGRIDS (28 X 40 MM GRIDS) ALL AS SPECIFIED AND AS DIRECTED BY THE SUPERINTENDING OFFICER

25)	Pontoon column of overall diameter not exceeding 300 mm.	m	520.00
26)	Ditto exceeding 300 mm but not exceeding 400 mm.	m	575.00
27)	Ditto exceeding 400 mm but not exceeding 500 mm.	m	690.00
28)	Repairs to corner and edges of reinforced concrete members including spot repairs by removing defective, rust stained, damaged reinforced concrete beyond area of visible corrosion of steel reinforcement bars to sound concrete substate behind the rebars, and make good with Polymer modified structural repair mortar complete with acrylic emulsion cement modifier bonding agent and a single component zinc rich epoxy primer to BS 4652 (1971) or equivalent system (replacement of corroded rebars measured separately).	m	370.00

Fixed Schedule of Rates
Section 15 – Fender Work

FIXED SCHEDULE OF RATES**SECTION 15 - FENDER WORK**

	UNIT	\$	¢
<u>FENDER WORKS</u>			
(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)			
TIMBER BALAU FENDER			
1) Take down and remove off site, timber balau fender, including mild steel strap bracket, bolts and nuts, all as specified and directed by the Superintending Officer.	m ³	345.00	
2) Take delivery and fix or re-fix timber balau fender, including bolts and nuts mild steel strap bracket, bitumen sealing of notches, holes and grooves, etc., all as specified and directed by the Superintending Officer.	m ³	575.00	
3) Supply, fabricate and install wrot timber balau fender, cut to size, including forming notches, holes, grooves. etc. all as specified and as directed by the Superintending Officer (steel works and bolts measured separately).	m ³	2703.00	
<u>RUBBER FENDER</u>			
4) Take down and remove off site only arch shape rubber fender, overall size not exceeding 600 mm high (good condition fittings, accessories, etc. to be returned to SDC store).	m	115.00	
5) Ditto and take delivery, assemble and install similar fender not exceeding 600 mm high.	m	172.50	
6) Take delivery, assemble and install only arch shaped rubber fender, including manufacturer's fittings, accessories, stainless steel anchors, drilling of holes and grouting, overall size not exceeding 600 mm high.	m	287.50	
7) Take down and remove off site only polyethylene sliding fender, overall size not exceeding 400mm x 300mm high (good condition steelworks, fittings and accessories, etc. to be returned to SDC store).	m	57.50	
8) Take delivery, assemble and install only polyethylene sliding rubber fender, including manufacturer's fittings, accessories, stainless steel anchors, drilling of holes and grouting, overall size not exceeding 400 mm wide x 300 mm high (steelwork measured separately).	m	92.00	
9) Take down and remove off site cylindrical or 'DEE' shaped rubber fenders including all steel chains, bolts and nuts and fittings, etc. irregardless of sizes.	m	230.00	

FIXED SCHEDULE OF RATES**SECTION 15 - FENDER WORK**

	UNIT	\$	¢
10) Take delivery, assemble and install only cylindrical, square or 'DEE' shaped rubber fender, including fittings, accessories, galvanised chain, brackets, bolts and nuts, drilling of holes and grouting, all completed as directed outside diameter or square not exceeding 600mm.	m	150.00	
11) Ditto exceeding 600 mm but not exceeding 900 mm.	m	161.00	
12) Ditto exceeding 900 mm but not exceeding 1200 mm.	m	185.00	
13) Ditto exceeding 1200 mm but not exceeding 1500 mm.	m	195.50	
14) Take down and remove off site cylindrical, square or "DEE" shaped fender and take delivery similar fender and accessories and re-install on to the existing brackets with new chains not exceeding 600 mm diameter or square (good condition fender and fittings to return to SDC store).	m	207.00	
15) Ditto exceeding 600 mm but not exceeding 900 mm.	m	218.50	
16) Ditto exceeding 900 mm but not exceeding 1200 mm.	m	241.50	
17) Ditto exceeding 1200 mm but not exceeding 1500 mm.	m	253.00	
18) Labour only to take delivery and replace 20 mm to 50 mm diameter fender chains and bolts and nuts including removing, refixing and handling existing rubber fender (new fender chains and bolts to be provided by the SDC).	no	230.00	
<u>TAKE OUT AND REMOVE OFF SITE CIRCULAR, CONE OR CELL TYPE RUBBER FENDER WITH STEEL FRONTAL FRAME AND TAKE DELIVERS SIMILAR FENDERING SYSTEM AND ACCESSORIES AND RE-INSTALL ON TO EXISTING BRACKETS AND BOLTING POSITION. THE FENDERING SYSTEM COMPRISES A RUBBER FENDER FIXED TO THE CONCRETE WHARF FASCIA BEAM BY STAINLESS STEEL BOLTS, THE STEEL FRONTAL FRAME WITH RESIN PADS SECURED TO THE STEEL FRAME AND THE WHOLE UNIT FIXED TO THE RUBBER FENDERS AND STRUCTURE WITH STAINLESS STEEL BOLTS AND GALVANISED STEEL CHAINS. GOOD CONDITION FENDER FITTING AND ACCESSORIES TO BE RETURNED TO SDC STORE</u>			
19) Labour only to take delivery and replace 20 mm to 50 mm diameter fender chains and bolts and nuts including removing, refixing and handling existing rubber fender (new fender chains and bolts to be provided by the SDC).	No	575.00	
20) Rubber fender overall size 1850 mm diameter x 1450 mm long with steel frontal frame of overall size 3200 mm wide x 4600 mm long.	No	632.50	
21) Rubber fender overall size 1960 mm diameter x 1600 mm long with steel frontal frame of overall size 2000 mm wide x 4600 mm long.	No	690.00	

FIXED SCHEDULE OF RATES**SECTION 15 - FENDER WORK**

	UNIT	\$	¢
22) Take out and remove off site polyethylene resin pad from fender frontal frame and take delivery similar pad and accessories and re-install on the existing bolt holes and seal same with polyester resin. Pad size not exceeding 500 x 500 x 30 mm thick.	No	57.50	
23) Ditto pad size exceeding 500 x 500 x 30 mm thick but not exceeding 600 x 600 x 30 mm thick Reinforced Concrete Fender Diaphragm.	No	63.25	
24) Major repairs to reinforced concrete fender diaphragm. Works include replacement of rebars, drilling, hacking, jacking fender diaphragm to correct alignment and make good by jacketing including supply of all necessary tools and plants.	No	1265.00	
25) Supply and install 250mm x 250mm x 2600mm length solid rubber fender including drilling of holes etc.	No	1708.00	
26) Supply and install square-circular hollow rubber fender 250mm x 250mm x 2.60m length, including drilling of holes	No	2,720.00	
27) Supply and install 200mm diameter (external diameter) round rubber fender including drilling of holes.	m ²	350.00	
28) Supply and install 75mm x 50mm double 'D' (for 2 pieces) rubber fender including drilling of holes.	m ²	747.50	
29) Supply and install 100mm x 100mm double 'D' (for 2 pieces) rubber fender including drilling of holes.	m	977.50	
30) Supply and install 50mm x 150mm solid rubber fender including drilling of holes.	m	287.50	
31) Supply and install 100mm x 150mm solid rubber fender including drilling of holes.	m ²	345.00	
32) Supply and install 100mm x 175mm solid rubber fender including drilling of holes.	m	402.50	
33) Supply and install 100mm x 200mm solid rubber fender including drilling of holes.	m	506.00	
34) Supply and install 150mm x 200mm solid rubber fender including drilling of holes.	m	529.00	
35) Supply and install 200mm x 200mm solid rubber fender including drilling of holes.	m	575.00	
36) Supply and install 200mm x 300mm solid rubber fender including drilling of holes.	m	690.00	

FIXED SCHEDULE OF RATES**SECTION 15 - FENDER WORK**

	UNIT	\$	¢
37) Supply and install 300mm x 300mm solid rubber fender including drilling of holes.	m	870.00	
38) Supply and install 2600mm x 300mm x 75mm solid rubber fender including drilling of holes and removing of existing fender off site.	No	1092.50	

Fixed Schedule of Rates
Section 16 – Bollard

FIXED SCHEDULE OF RATES**SECTION 16 - BOLLARD**

		UNIT	\$	¢
<u>BOLLARD</u>				
(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)				
1)	Take out and remove off site, non-standard 230 mm diameter pipe bollard, including made good or prepare to receive new bollard.	No	46.00	
2)	Ditto, cope, mushroom or beam bollard exceeding 5 ton but not exceeding 25 ton capacity including hacking concrete to expose holding down bolts and make good to receive new bollard (hold down bolts not required to be removed).	No	13.80	
3)	Ditto, ditto exceeding 25 ton but not exceeding 50 ton capacity (ditto).	No	230.00	
4)	Ditto, ditto exceeding 50 ton but not exceeding 75 ton capacity (ditto).	No	402.50	
5)	Ditto, ditto exceeding 75 ton but not exceeding 100 ton capacity (ditto).	No	402.50	
6)	Supply and install non-standard pipe bollard not exceeding 230 mm diameter complete with mild steel anchor rebars, concrete infill and 2 coats of epoxy coating.	No	126.50	
7)	Ditto exceeding 230 mm and not exceeding 300 mm diameter ditto.	No	60.49	
8)	Take delivery, assemble and install mushroom, cope or bean bollard, not exceeding 25 ton capacity including accessories, bolts, nuts, bitumen cover sealing, mortar pads and cement mortar infilling and painting two coat of epoxy paint on existing holding down bolts and make good concrete works at base of bollard (existing hold downbolts not replaced).	No	402.50	
9)	Ditto exceeding 25 ton but not exceeding 50 ton capacity, (ditto).	No	460.00	
10)	Ditto exceeding 50 ton but not exceeding 75 ton, (ditto).	No	920.00	
11)	Ditto exceeding 75 ton but not exceeding 100 ton, (ditto).	No	1035.00	
12)	Mastic capping to bollard hold down bolts and nuts to dome shape (each bolt/nut).	No	2.30	
13)	Polymer Plastic Fixed Flexible Bollard with 3M Diamond grade or equivalent reflective strips and hot deep galvanised steel spring, chain and safety pin with Standard Righting Moment of 35Nm and Max. Impact Velocity of 100 km/h [1100(H) x 60mm(Dia)].	No	161.00	
14)	Polymer Plastic Removable Bollard with 3M Diamond grade or equivalent reflective strips and hot deep galvanised steel dual spring concept. Can be removed with locked-on pin system [1080(H) x 60mm(Dia)].	No	207.00	

FIXED SCHEDULE OF RATES**SECTION 16 - BOLLARD**

		UNIT	\$	¢
15)	Ditto with narrow series signage mounted.	No	218.50	
16)	Ditto with wide series signage mounted.	No	253.00	
17)	Urethane with Polymer compound Removable Bollard with 3M Diamond grade or equivalent reflective strips, 360 degree flexibility, un-screw anti-clockwise to remove post [1000(H) x 80mm(Dia)].	No	287.50	
18)	Polyurethane PVC Fixed Bollard with 3 bands of 3M Diamond grade or equivalent reflective strips [750(H) x 80mm(Dia)].	No	55.20	
19)	Ditto with 2 bands of 3M Diamond grade or equivalent reflective strips [860(H) x 215mm(Dia)].	No	230.00	
20)	Ditto with 3M Diamond grade or equivalent reflective Signage [990(H) x 225mm(W)].	No	242.00	
21)	Stainless Steel Removable Bollard with 3M Diamond grade or equivalent reflective strips, can be chain up from post to post and using padlock to secure post to base[1000(H) x 75mm(Dia) for Post and 200 x 200mm for Base plate].	No	437.00	
22)	Stainless Steel Fixed Bollard with 3M Diamond grade or equivalent reflective strips, can be chain up from post to post [1000(H) x 75mm(Dia)].	No	437.00	
23)	Stainless Steel Removable Bollard with 3M Diamond grade or equivalent reflective strips, easily unlock and remove using padlock [1000(H) x 154mm(Dia) x 3mm(Thk) for Post and 33(H) x 5mm(Thk) x 250(L) x 250mm(W) for Base plate].	No	2127.50	
24)	Stainless Steel Removable Bollard with 3M Diamond grade or equivalent reflective strips, base holder recessed on floor and easily unlock and remove using a special key [900(H) x 113mm(Dia)].	No	1380.00	
25)	Stainless Steel Removable Bollard with 3M Diamond grade or equivalent reflective strips, base holder recessed on floor and unscrew to remove post from base holder [925(H) x 63mm(Dia)].	No	1092.50	
26)	Stainless Steel Fixed Bollard with 3M Diamond grade or equivalent reflective strips, [900(H) x 114(Dia) x 3mm(thk) for pole and 180mm(Dia) for base capping].	No	1438.00	
27)	Ditto [900(H) x 168(Dia) x 3mm(thk) for post and 250mm(Dia) for base capping].	No	1553.00	

FIXED SCHEDULE OF RATES

SECTION 16 - BOLLARD

		UNIT	\$	¢
28)	Concrete filled steel Fixed Bollard with 3M Diamond grade or equivalent reflective strips, able to withstand up to 60/70 km/h impact [1000(H) x 168.3mm(Dia)].	No	748.00	
29)	Cast iron with rubber coating Fixed Steel Bollard with 3M Diamond grade or equivalent reflective strips [1000(H) x 80mm(Dia)].	No	575.00	
30)	Semi Automatic Retractable Stainless Steel Bollard with 3M Diamond grade or equivalent reflective strips, with built-in pneumatic system to push down to lower bollard and unlock key to auto raise [900(H) x 113mm(Dia) for post and 1160(H) x 160mm(Dia) for bottom housing].	No	1725.00	
31)	Manual Retractable Stainless Steel Bollard with 3M Diamond grade or equivalent reflective strips, with key to release and push down to lower bollard and pull to raise and lock automatically [900(H) x 113mm(Dia) for post and 1070(H) x 160mm(Dia) for bottom housing].	No	1380.00	

Fixed Schedule of Rates
Section 17 – Rock Bund and Shore Protection

FIXED SCHEDULE OF RATES**SECTION 17 - ROCK BUND AND SHORE PROTECTION**

UNIT	\$	¢
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ROCK BUND AND SHORE PROTECTION

(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)

1)	Supply and lay non-woven needle punched 100% polyester/polypropylene 1.6 mm thick geotextile, all to the requirements as specified and directed by the Superintending Officer (measured nett, no allowance provided for laps).	m ²	11.50
2)	Ditto 2.1 mm thick geotextile ditto.	m ²	13.00
3)	Ditto 2.6 mm thick geotextile ditto.	m ²	16.10
4)	Construction or repair of rock bund and shore protection, all to the requirements as specified and directed by the Superintending Officer using crushed granite size not exceeding 300 mm.	m ³	86.30
5)	Ditto exceeding 300 mm but not exceeding 600 mm.	m ³	98.00
6)	Ditto exceeding 600 mm but not exceeding 900 mm.	m ³	109.30
7)	Repair of rock bund and shore protection, as directed by the Superintending Officer using existing granite block on site.	m ³	46.00
8)	Concrete Grade 30 for construction or repair of rock bund and shore protection to fill into the gap of rock bund including joint pointing and trowel smooth.	m ³	170.20

Gabion Cages

9)	Supply, assemble and install 2m x 1m x 0.5 m height x 11.6 kg weight, PVC coated galvanised gabion cage for shore protection works, consisting of 8 cm x 10 cm mesh size and G16 wire, including filling with average 125 mm to 200 mm crushed granite.	No	166.75
10)	Ditto 2m x 1m x 1m height x 15.8 kg weight ditto.	No	265.00

Excavation

11)	Excavation to form gabion base, commencing from existing ground not exceeding 1.50 m deep and get out, including spread and level excavated material within site, level, trim and compact base of trench, ready for laying of gabion cage.	m ³	23.00
12)	Ditto exceeding 1.50 m but not exceeding 3.00 m deep ditto.	m ³	34.50
13)	Ditto exceeding 3.00 m but not exceeding 4.50 m deep ditto.	m ³	46.00
14)	Back fill selected excavated material along gabion cage including compaction.	m ³	11.50

Fixed Schedule of Rates

Section 18 – Upslipping and Installation of Pontoon

FIXED SCHEDULE OF RATES**SECTION 18 - UPSLIPPING AND INSTALLATION OF PONTOON**

UNIT	\$	¢
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UPSIPPING AND INSTALLATION OF PONTOON**(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)****UPSIPPING OF PONTOON****The work includes:-**

a) Securing the steel gang way and platform, gas cutting of bolted and welded joints of pontoon platform, guide jaws and stripping of related steel pontoon fenders fixtures in order to free the pontoon, opening of pontoon manhole covers for hotwork ventilation.

b) Provision of skilled and unskilled workers, tow boat, heavy duty welding motor complete with arc welding accessories, grass cutting equipment, chain blocks, wire ropes and all tools necessary for the complete upslipping operation.

c) Take delivery of material supplied by SDC for the preparation of pontoon upslipping operation.

- | | | | |
|----|---|------------------|--------|
| 1) | Provision of tugboat, skilled and unskilled workers and plants to carry out the upslipping of a jetty landing pontoon, move the pontoon out from the mooring position and to provide attendant to follow the towed pontoon and deliver it to the specified location in Singapore. | Per
Operation | 920.00 |
|----|---|------------------|--------|

INSTALLATION OF PONTOON**The work includes:-**

a) Lowering of the steel gang way on the pontoon, re-installing of all the guide jaws, steel platform and the necessary steel platform and the necessary steel steel works and bracketary by site fillet welding/ bolting, etc. opening/ closing of pontoon manhole covers for hotwork ventilation.

b) Provision of skilled and unskilled workers, tow boat, heavy duty welding motor complete with accessories, gas cutting equipment, chain blocks, wire ropes and all tools necessary for the complete installation of the pontoon to its' original position.

c) Take delivery of materials supplied by SDC for the preparation of pontoon installation.

- | | | | |
|----|---|------------------|---------|
| 2) | Provision of towboat, skilled and unskilled workers and plants, to take delivery of a pontoon from the specified location and to provide attendant to follow the towed pontoon back to the location and secure it to the original position of the mooring area. | Per
Operation | 1725.00 |
|----|---|------------------|---------|

Note : The rates given for the unslipping or pontoon installation operations shall include overtime charges and/or irregular working hour

Fixed Schedule of Rates
Section 19 – Underwater Repair Works

FIXED SCHEDULE OF RATES**SECTION 19 - UNDERWATER REPAIR WORKS**

UNIT	\$	¢
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UNDERWATER REPAIR WORKS**(ALL RATES IN THIS SECTION INCLUSIVE OF WORKING UNDER TIDAL CONDITION)****NOTE :**

Rates given for the repair work shall include the supply drivers, labours, transport, equipment and materials necessary for the satisfactory completion of the work.

The rates given shall also include overtime charges and /or irregular working hours.

Contractor to comply with the necessary safety and local regulations pertaining to the underwater cutting and welding work

The location of defects shall not exceeds 20 meter below water level

1)	Underwater cutting of steel piles or components of the piles including removal off site the unused material.	kg	0.90
2)	Underwater welding for fillet (6mm) or butt welds on existing steel piles.	m	517.50
3)	Supply and install steelwork of any description underwater including handling, easing, adjusting and straightening to correct alignment and profile and hoisting and fixing in position (welding will be paid separately).	kg	11.50
4)	Slickbar or equivalent Float (609mmL x 260 mmW x 120mmD) weight – app 10 kg/m. Solid molded fibre filled with polyurethane foam.	No	46.00
5)	Slickbar or equivalent Skirt Made of strong and rigid polyester with approx length 3.5m, 0.66mm width and 2.8mm thick.	No	822.25
6)	Slickbar or equivalent skirt– Made from strong and flexible 32 oz PVC reinforced polyester with approx length of 8 m, 0.66 m width and 0.85mm thick.	No	356.50
7)	Ballast-fiber.	No	31.65
8)	Connector - Universal type conforms to ASTM F-962.	No	316.25
9)	Anchor Point-SS 316.	No	28.75
10)	Bolt and nut-SS 316.	No	11.50
11)	Toggle pin-SS 316.	No	11.50
12)	Anchoring System equipment-SS316.	No	1897.50
13)	Track and Riser complete set-SS316/304.	No	3680.00

FIXED SCHEDULE OF RATES**SECTION 19 - UNDERWATER REPAIR WORKS**

	UNIT	\$	¢
14) Riser base-SS 316.	No	287.50	
15) Riser wheel- Nylon.	No	23.00	
16) Shaft Drive roll- SS 316.	No	46.00	
17) Snap ring- SS 316.	No	23.00	
18) Plain washer – SS 316.	No	11.50	
19) Rubber seal- rubber hydrocarbon.	No	23.00	
20) Plate washer – SS 316.	No	11.50	
21) Thrust –SS 316.	No	23.00	
22) Riser Float- Made of Fibre, dia 150 mm x 300mm. Colour : orange.	No	50.60	
23) Float clamp- SS 316.	No	11.50	
24) Concrete bolt- SS 316.	No	34.50	
25) Riser track- SS 304.	No.	1840.00	
26) Spring washer.	No	17.25	
27) Riser stopper- SS 316.	No	17.25	

Fixed Schedule of Rates
Section 20 – General Items

FIXED SCHEDULE OF RATES**SECTION 20 - GENERAL ITEMS**

	UNIT	\$	€
<u>GENERAL ITEMS</u>			
<u>URGENT TERM CONTRACT ORDER</u>			
1) Pursuant to Requirement Specifications 1, Clause 4 as specified - minimum payable sum.	No	300.00	
<u>STEEL SCAFFOLDING</u>			
2) Erect Putlog or framed tubular steel scaffolding for the first 100m ² , including base plates, scaffold boards, etc. removing scaffolding after used and clearing debris off site (rate is for per use for the entire duration of the work where specially order and instructed by S.O.) . (Rate inclusive of 2 layers of scaffolding) (Centre line measured).	m ²	20.00	
3) Ditto for the second and subsequent 100m ² (Ditto).	m ²	4.60	
4) Provide, erect, maintain tubular steel staging, including platform boards, swivel castors or base plate, etc., transporting to and from site, manoeuvring about site, removing staging after use and clearing debris off site (rate is for per use for the entire duration of the work where specially order and instructed by S.O. and per stage of not exceeding 2m high).	No	44.00	
5) Provide, erect, maintain tubular steel staging, including platform boards, swivel castors or base plate, etc. , transporting to and from site, manoeuvring about site, removing staging after use and clearing debris off site (rate is for per use for the entire duration of the work where specially order and instructed by S.O. and per stage of exceeding 2m high and not exceeding 4m high).	No	63.25	
6) Ditto (rate per stage of exceeding 4m high and not exceeding 6m high).	No	101.00	
<u>STEEL STAGING</u>			
7) Ditto (rate per stage of exceeding 6m high and not exceeding 8m high).	No	122.00	
8) Ditto (rate per stage of exceeding 8m high and not exceeding 10m high).	No	143.80	
9) Aluminum staging (rate is for per use for the entire duration of the work where specially order and instructed by S.O. and per stage of exceeding 2m high and not exceeding 4m high).	No	1150.00	
10) Certification of the metal staging for safe use for the entire duration of the work.	No	575.00	
11) Plastic Rasin and Urethane Wheel Stopper [750(L) x 120(H) x 150mm(W)].	No	46.00	
12) Rubber Wheel Stopper [500(L) x 115(H) x 165mm(W)].	No	69.00	
13) Rubber Corner Guard supported with metal retainer [1000(L) x 90(B) x 15mm(Thk)].	No	32.00	

FIXED SCHEDULE OF RATES**SECTION 20 - GENERAL ITEMS**

	UNIT	\$	€
14) Ditto [(1000(L) x 75(B) x 10mm(Thk)].	No	25.00	
15) Ditto [(1000(L) x 100(B) x 12mm(Thk)].	No	29.00	
16) Ditto [(800(L) x 100(B) x 8mm(Thk)].	No	29.00	
17) Ditto [(1200(L) x 50(B) x 9mm(Thk)].	No	25.00	
18) 40 inches diameter 70J (ASTM) Polycarbonate Outdoor Mirror 27.5 kg/cm2 of impact strength and 379 kg/cm2 for tensile strength.	No	300.00	
19) Ditto (32 inches).	No	290.00	
20) Ditto (26 inches).	No	280.00	
21) 32 inches diameter 70J (ASTM) Stainless steel Outdoor Mirror 27.5 kg/cm2 of impact strength and 379 kg/cm2 for tensile strength	No	350.00	
22) Ditto (12 inches).	No	190.00	
23) Rubber Road Hump with metal rod retainers, glass reflector elements of min. Shore A90 hardness, min. 420 kgf/cm2 of tensile strength, min. 640% elongation and min. 110 kg/cm2 tear resistance [500(L) x 430(W) x 50mm(H) for Centre piece].	No	85.00	
24) Rubber Road Hump with metal rod retainers, glass reflector elements of min. Shore A90 hardness, min. 420 kgf/cm2 of tensile strength, min. 640% elongation and min. 110 kg/cm2 tear resistance [215(L) x 430(W) x 50mm(H) for End piece].	No	46.00	
25) Wall Protection Bumper with min. Shore A70 hardness and 13 mpa tensile strength [1000(L) x 200(H) x 30mm(Thk)].	No	63.00	
26) Ditto but 16 mpa tensile strength [1000(L) x 140(H) x 25mm(Thk)].	No	52.00	
27) Wall Protection Bumper with min. Shore A87 hardness and 17 mpa tensile strength [300(L) x 330(H) x 100mm(Thk)].	No	80.00	
28) Ditto [250(L) x 450(H) x 100mm(Thk)].	No	84.00	
29) Heavy Duty Wall Protection Bumper with min. Shore A80 hardness and 190kg/cm2 tensile strength [600(L) x 200(H) x 100mm(Thk)].	No	103.00	
30) Ditto but Semi-round with Shore A70 hardness with 16 mpa tensile	No	130.00	
31) Ditto [1000(L) x 150(H) x 80mm(Dia)].	No	75.00	
32) ABS Plastic Wall Guard with aluminium supporting backing of Shore A95 and 30 mpa tensile strength [1000(L) x 200(H) x 25mm(Thk)].	No	97.80	

FIXED SCHEDULE OF RATES**SECTION 20 - GENERAL ITEMS**

	UNIT	\$	€
33) Marking Tape with glass beads reflective or chequered [4000(L) x 100(W) x 2.2mm(Thk)].	No	126.50	
34) Ditto [4000(L) x 50(W) x 2.2mm(Thk)].	No	104.00	
35) Anti-skid tape with L-shape aluminium backing [50(W) x 0.4mm(Thk)].	No	51.80	
36) Anti-skid tape with flat aluminium backing[50(W) x 0.4mm(Thk)].	No	46.00	
37) Anti-skid tape without aluminium [50(W) x 0.4mm(Thk)].	No	40.30	
38) Swareflex or other approved equivalent Aluminium Alloy Road Reflecting Stud [100(L) x 100(W) x 19.8mm(H)].	No	17.30	
39) Ditto[149(L) x 149(W) x 27mm(H)].	No	25.30	
40) Swareflex or other approved equivalent ABS Plastic (Base) Rubber Flap [220(L) x 150(W) x 285mm(H)].	No	74.80	
41) Swareflex or other approved equivalent Polymer Plastic Flap [120(L) x 300mm(H)].	No	63.30	
42) Swareflex or other approved equivalent ABS Plastic Globe Marker [100(L) x 100(B) x 17.9mm(H)].	No	15.00	
43) Swareflex or other approved equivalent ABS Plastic City Stud [200(L) x 100(B) x 40mm(H)].	No	17.25	
44) Solar SR LED Stud [50(H) x 145(Dia)] with 12mm protrusion above ground.	No	189.75	
45) Solar Linear Pointer 1 LED Stud [50(H) x 150(Dia)] with 5mm protrusion above ground.	No	212.75	
46) Solar Linear Pointer 3 LED Stud [25(H) x 150(Dia)] with 25mm protrusion above ground.	No	195.50	
47) Bandi or other approved equivalent Aluminium Alloy Road Stud [30(H) x 130(Dia)]	No	34.50	

FIXED SCHEDULE OF RATES**SECTION 20 - GENERAL ITEMS**

	UNIT	\$	€
<u>Landscape Items</u>			
Supply and plant new grass and maintenance until established including all labour, tools and equipment.			
48) Cow Grass (<i>Axonopus compressus</i>).	m ²	8.55	
49) Siglap Grass (<i>Zoysia matrella</i>).	m ²	18.50	
50) Pearl grass (<i>Pennisetum americanum</i>)	m ²	18.50	
51) Installation of New Life line	m	699.20	
52) To Maintain and recertified existing lifeline	m	150.00	
53) Rope Access Specialist	Perday	300.00	
54) Supply Drone servise	hours	150.00	

Fixed Schedule of Rates
Section 21 – Fixed Daywork Rates

FIXED SCHEDULE OF RATES**SECTION 21 - FIXED DAYWORK RATES**

Rate Per Day (8 Working Hours)	Hourly Rate For Overtime
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FIXED DAYWORK SCHEDULE

This Fixed Daywork Rates for labour and plants are subjected to the Tender Rate.

Where work cannot be measured or valued at the rates contained in the Fixed Schedule of Rates or rates analogues thereto, it may be executed by the Contractor under daywork prices subject to the discretion and approval of the Superintending Officer in writing.

The rates so set against each and every item include for all expenses to cover sea and land transportation, Sentosa vehicle entry permit charges, work pass charges to Sentosa, supervision, overheads, profits, use of tools, ordinary plants, insurances, working on Sunday and Public Holidays, rates for labour ferry charges and any other incidental expenses for works to be executed.

The following rates will form part of the Contract and shall be used as the basis of payment for daywork when ordered in writing by the Superintending Officer.

Where extra works executed under day work priced required the presence of labour or plant for four (4) hours or more (but not more than 8 hours) (excluding tea/lunch and travelling times) it shall be taken as one day; if less than four (4) hours (excluding tea/lunch and travelling times) it shall be taken as half day.

Working hours shall be calculated from the time reported at the place of work (i.e. excluding tea/lunch and travelling times) and recorded by the Superintending Officer's representative.

A. LABOUR SCHEDULE

1) Tradesmen (Male)	156.00	29.25
2) Male Unskilled Labourer	125.00	23.40
3) Diver including supervisor, diver gears, equipment, etc.	3640.00	455.00

B. MECHANICAL PLANT SCHEDULE

4) Mobile "KATO" crane 5- 10 tons including ditto.	1040.00	137.80
5) Lorry with 12 tons crane including ditto.	416.00	58.50
6) Lorry with 20 tons crane including ditto.	715.00	94.90
7) Dumper including ditto.	117.00	22.10
8) Pick-up including ditto.	117.00	22.10
9) 5-tons Tipper including ditto.	195.00	29.90
10) 10-tons Tipper including fuel and operator	520.00	67.60
11) Bulldozer (Type 950, 955, 960, 965, 920) including fuel and operator.	455.00	62.40

FIXED SCHEDULE OF RATES**SECTION 21 - FIXED DAYWORK RATES**

	Rate Per Day (8 Working Hours)	Hourly Rate For Overtime
12) Kobelco Backhoe or equivalent excavator 904 including ditto.	569.40	106.60
13) Kobelco Backhoe or equivalent excavator 907 long- arm including ditto.	819.00	153.40
14) Scissor Lift (6m) include mobilisation	400.00	75.00
15) P & H or equivalent Hydraulic Breaker including ditto.	910.00	119.60
16) 1-tonne roller including ditto.	130.00	19.50
17) 10-tonne roller including ditto.	260.00	37.70
18) Vibrator roller including ditto (20 tonne).	390.00	55.90
19) Welding set including gas (excluding operator).	78.00	N.A.
20) Boom lift -2 wheel drive slab model (18m platform height) including fuel and operators.	800.00	150.00
21) Boom lift -2 wheel drive slab model (24m platform height) including fuel and operators.	1500.00	281.00
22) Boom lift -2 wheel drive slab model (36m platform height) including fuel and operators.	2500.00	469.00
23) Mobilization and demobilization of boom-lift.	312.00	N.A.
24) Mini excavator/bulldozer including fuel, operator.	455.00	45.50
25) Concrete cutter including pneumatic tools, fuel and operative tool and hose (excluding operator).	52.00	N.A.
26) Generator set 100KVA including fuel and wire (ditto).	195.00	N.A.
27) Portable water pump capable of discharging 160 ltr/min	58.50	N.A.
28) Provide refuse disposal container for clearing of building material and debris including cost of dumping fee (rate is for per use for the entire duration of the work where specially order by S.O.)	871.00	per bin/ use

FIXED SCHEDULE OF RATES**SECTION 21 - FIXED DAYWORK RATES**

	Rate Per Day (8 Working Hours)	Hourly Rate For Overtime
Mobilization and demobilization of Mini excavator, P & H, bulldozer and road roller		
29) From mainland to Sentosa.	195.00	N.A.
30) From Sentosa to mainland.	195.00	N.A.
31) Within Sentosa.	97.50	per occasion
32) Standby plumber with handphone for Sunday and Public Holiday and rectify any urgent minor defect.	130.00	per day
33) Engage professional Structural Engineer to carry out a visual inspection of buildings and/or structures, safety lines, anchoring devices, etc. Prepare and submit a detail report of the result of the inspection and recommend type of repair work (if any) to be carried out to the buildings/structures.	300.00	per day
34) To get PE certified and endorsement	3000.00	per Job
35) Supply qualified personnel possessing certificate from MOM to conduct gas free test in deep chambers and confined places. (Minimum 1 hour work)	39.00	per hour
36) Supply a team of MOM- certified confined space accessor, certified supervisor/workers complete with rescue plan, rescue equipment ventilator,etc. required for working in confined space as in compliance with MOM-Workplace, Safety and Health regulation. (Minimum 2 hour work)	390.00	per hour
37) Urgent activation (after working Hours)	300.00	per occasion

C. MATERIAL.

Material shall be charged at current rates and the Contractor shall produce the relevant invoices. The Contractor is allowed to add Ten (10) per cent for the materials supplied to cover his overhead and handling charges.

The Contractor shall obtain competitive quotations from suppliers for any materials to be used under Daywork and submit to the Superintending Officer for approval before its acceptance.

FIXED SCHEDULE OF RATES**SECTION 21 - FIXED DAYWORK RATES**

Rate Per Day (8 Working Hours)	Hourly Rate For Overtime
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D. SAFETY DEVICES.

A thorough visual inspection and checks on equipment usage to ensure that the equipment is free from observable defects with endorsement from certified Professional Engineer. Equipment that have exceeded their serviceable life span or passed their expiry date should not be used.

Inspection includes but not limited to the followings:

- 1) Inspect all screw, bolts, nuts and any other fastening devices to ensure they are not loose or missing and making sure they haven't been altered in any way.
- 2) Look for rust, corrosion or any other deterioration of the metal components.
- 3) Inspect rope or tension lines for lose, broken wires (wire rope), broken threads (synthetic rope), or any other obvious damage.
- 4) Inspect all sleeves and connectors for distortion, cracks, dents and proper installation.
- 5) Inspect the system's impact detection such as it indicate that the lifeline was involved in a fall.
- 6) Inspect any other mechanisms on the specific lifeline, ensuring according to manufacturer's instructions.
- 7) Ensure no part of the system is compromised by sharp edges, abrasive structures, or other hazards.
- 8) Check Single Point Anchorages for looseness, structural damage or modification.
- 9) Check for structural damage to beam and all structural connections.